



STATE OF ALASKA  
**BOARD OF GAME**

REGION I  
SOUTHEAST ALASKA

FALL 2008

STAFF REPORTS  
PROPOSALS  
RECOMMENDATIONS  
PROPOSAL PRESENTATIONS

Alaska Department of Fish and Game  
Division of Wildlife Conservation

November 7 - 11, 2008

Juneau

## Table of Contents

1. Division General Reports 2. Gustavus Moose Research Summary	Staff Reports	<b>1</b>
Department Analysis and Recommendations		<b>2</b>
Region I Overview and Unit 4 Overview		<b>3</b>
Proposal Order: 43, 46, 45, 47, 36, 38, 39, 37, 41, 42, 5, 40, 34, 35, 33, 48	Region-wide	<b>4</b>
Proposal Order: 10, 11, 44, 29, 9, 12, 13, 14, 8	Petersburg Area (GMU 1B & 3)	<b>5</b>
Proposal Order: 3, 4, 6, 7, 1, 2	Ketchikan Area (GMU 1A & 2)	<b>6</b>
Proposal Order: 27, 28, 30, 26, 23, 25, 24, 15, 19, 20, 18, 21, 22, 31, 16, 17, 32	Juneau/Douglas Area (GMU 1C, 1D, & 5)	<b>7</b>
Subsistence		<b>8</b>

**DRAFT ROADMAP**  
**Board of Game Meeting**  
**Juneau, AK**  
**November 7 -- 11, 2008**

**ACTION NO. SUBJECT**

**Region I--Southeast**

**Region-wide**

- |       |    |   |
|-------|----|---|
| _____ | 43 | Allow deer to be bartered in Unit 1.  |
| _____ | 46 | Shorten wolf hunting season to Sept. 1 - Mar. 31 in Units 1, 3, 4, and 5.                               |
| _____ | 45 | Extend wolf hunting season to end on May 31 in Units 1 and 2.   |
| _____ | 47 | Modify waterfowl hunting season dates.  |
| _____ | 36 | Delay opening of nonresident black bear season to Sept. 15 in portion of Region.                        |
| _____ | 38 | Require black bear harvest ticket in Units 1-5.   |
| _____ | 39 | Require black bear harvest ticket in Units 1-5.   |
| _____ | 37 | Establish black bear registration hunts in Units 1-3.   |
| _____ | 41 | Clarify black bear bait conditions in Region I.   |
| _____ | 42 | Modify in person reporting requirements for bait site locations in Units 1-5.                           |
| _____ | 5  | Modify black bear baiting permits in Unit 2 to allow permits by mail and voluntary bait site locations. |
| _____ | 40 | Restrict black bear baiting to archers only in Units 1-5.   |
| _____ | 34 | Shorten wolverine trapping season in Region I.  |
| _____ | 35 | Eliminate trap tagging requirement in Units 1-5.  |
| _____ | 33 | Eliminate trap tagging requirement in Unit 5.   |
| _____ | 48 | Eliminate the use of 223 caliber full metal jacket bullets for big game in Units 1-4.                   |

**GMU's 1B and 3—Petersburg Area**

- |       |    |   |
|-------|----|---|
| _____ | 10 | Modify moose bag limit in Units 1B and 3 to allow moose with antlers having 2 brow tines on both sides. |
| _____ | 11 | Modify moose bag limit in Units 1B and 3 to allow moose with antlers having 2 brow tines on both sides. |

- \_\_\_\_\_ 44 Modify moose bag limit to allow 5 total points on any one side in Unit 1.
- \_\_\_\_\_ 29 Include small portion of Unit 1C in broken moose antler regulation.
- \_\_\_\_\_ 9 Alternate archery and rifle elk seasons on Etolin Island in Unit 3.
- \_\_\_\_\_ 12 Extend wolf hunting season to May 31 in Unit 3.
- \_\_\_\_\_ 13 Extend wolf hunting season to June 30 in Unit 3.
- \_\_\_\_\_ 14 Clarify Blind Slough Closed area in Unit 3.
- \_\_\_\_\_ 8 Restrict marten trapping on Kuiu Island in Unit 3.

**GMU's 1A and 2—Ketchikan Area**

- \_\_\_\_\_ 3 Reduce bag limit from 4 bucks to 2 bucks on portion of Cleveland Peninsula in Unit 1A.
- \_\_\_\_\_ 4 Increase bag limit to two goats in Unit 1A.
- \_\_\_\_\_ 6 Close fall black bear season in Unit 2.
- \_\_\_\_\_ 7 Close fall black bear season in portions of Unit 2.
- \_\_\_\_\_ 1 Open wolf trapping season Nov. 1 instead of Nov. 10 in Unit 1A.
- \_\_\_\_\_ 2 Raise management objectives for wolf in Unit 1A.

**GMU's 1C, 1D, and 5—Juneau/Douglas Area**

- \_\_\_\_\_ 27 Close antlerless moose hunts in Gustavus, Unit 1C.
- \_\_\_\_\_ 28 Change registration moose hunt in Gustavus from any bull to spike fork/50/3 brow tine.
- \_\_\_\_\_ 30 Eliminate points for Tier II hunt, open moose hunt in Unit 1D to Haines residents with bag limit of one moose every 2 years.
- \_\_\_\_\_ 26 Open goat archery hunt in Unit 1D area currently closed to goat hunting.
- \_\_\_\_\_ 23 Modify definition of white bear in Unit 1D.
- \_\_\_\_\_ 25 Create new hunting closure for bears in portion of Unit 1D.
- \_\_\_\_\_ 24 Modify brown bear bag limit to one per year, extend season to June 15 in Units 1C and 4.
- \_\_\_\_\_ 15 Open Unit 1C beaver trapping season Nov. 10.
- \_\_\_\_\_ 19 Open Unit 1C otter trapping season Nov. 10.
- \_\_\_\_\_ 20 Open Unit 1C marten trapping season Nov. 10.
- \_\_\_\_\_ 18 Open Unit 1C mink and weasel trapping season.
- \_\_\_\_\_ 21 Allow specific traps within 50 yards of trails in Unit 1C instead of 1/4 mile closure.



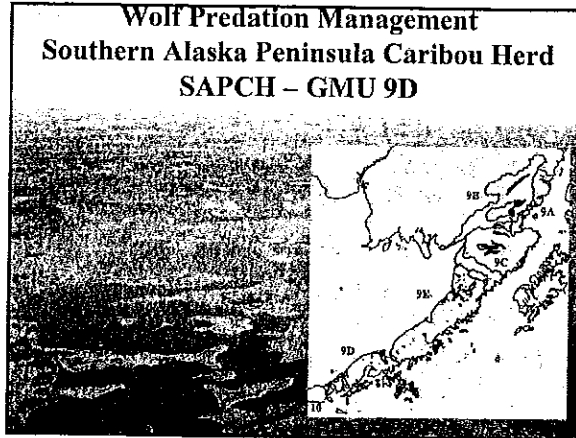
- \_\_\_\_\_ 22 Close additional trails in Unit 1C to trapping with 1/4 mile.
- \_\_\_\_\_ 31 Extend Unit 1D wolf hunting and trapping seasons Aug. 1 - May 15.
- \_\_\_\_\_ 16 Modify hunting and trapping seasons for beaver in Unit 1D to Sept. 1 - June 30.
- \_\_\_\_\_ 17 Establish bounty for beaver control in Unit 1D.
- \_\_\_\_\_ 32 Open Unit 5 lynx trapping season Nov. 10.

### **Region III-Interior**

- \_\_\_\_\_ 53 Establish season Sept. 25- May 1 for denning of black bears with the use of artificial light in Units 21 and 24.
- \_\_\_\_\_ 52 Establish season Sept. 25- May 1 for denning of black bears in Units 21 and 24.
- \_\_\_\_\_ 49 For black bear in Unit 25D, allow the harvest of sows and cubs, trapping of bears, and taking from a boat.
- \_\_\_\_\_ 51 Establish no closed season for denning of bears, and take of any bear, including cubs and sows with cubs in Unit 19.
- \_\_\_\_\_ 54 Modify predation control methods for brown bear in Unit 20E.
- \_\_\_\_\_ 50 Remove the prohibition on denning of wolves in Unit 19.


### **Statewide**

- \_\_\_\_\_ 55 Remove the prohibition on denning of wolves, allow take of any bear, including cubs and sows with cubs, extend wolf seasons and increase bag limits in intensive management areas where goals are not being met.
- \_\_\_\_\_ 56 Establish hunts for disabled veterans.




**SAPCH – GMU 9D**  
**Program Implementation**

- Department staff removed 28 wolves from the caribou calving grounds
  - 14 adults were members of 2 wolf packs
  - 14 pups located in 2 dens, belonging to 1 pack
  - In keeping with Board directive and existing division orphan animal protocols:
    - 9 pups euthanized inside the dens
    - 5 pups euthanized outside the dens
- Monitored the survival of 65 caribou calves and investigated causes of calf mortality




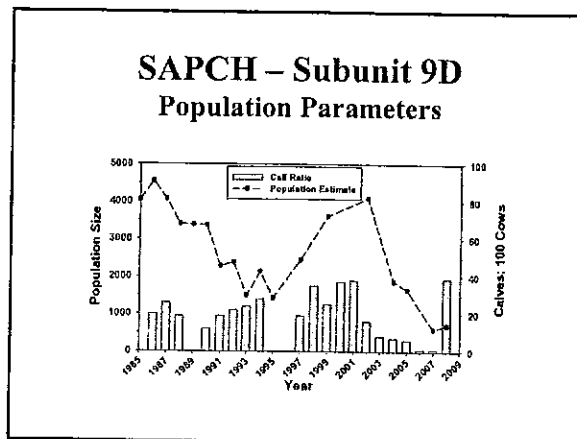
**SAPCH – GMU 9D**  
**Caribou Calving**



- Calving occurred on traditional calving areas for the SAPCH
- Adult female pregnancy rate was good
  - (86% of cows 2+ years of age were pregnant)
- Calves were born in good health
  - No still births detected
  - Good birth weights and mobility


**SAPCH – GMU 9D**  
**Caribou Calf Survival**

- Early-calf survival was excellent (69%)
- Late-calf survival was good (62%)
- Predation accounted for 80% of the noted calf mortalities

**SAPCH – GMU 9D**  
**Caribou Population Status**

	2007 Pre-Control	2008 Post-control
Calf Survival to 1 month	< 1%	57%
Fall Calf Ratio (calves/100 cows)	1	39
Current Population Size	600	700



## SAPCH – GMU 9D WOLF PUPS

- Existing protocol involves contact with approved AK facilities, but not with outside facilities
- AK facilities were contacted prior to 2008 effort; no wolf placements identified
- Concerns with department's 2008 actions prompted consideration of new protocols
- Draft protocols developed and available to Board



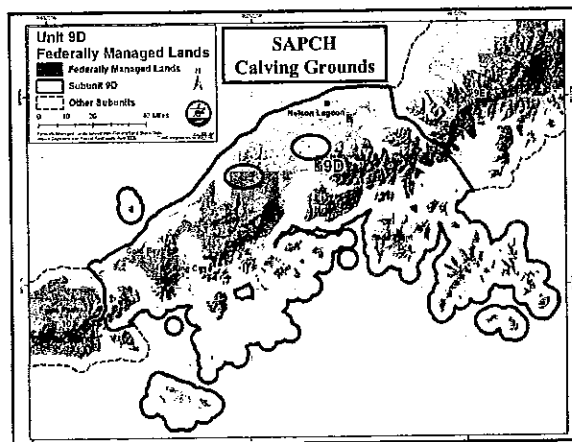
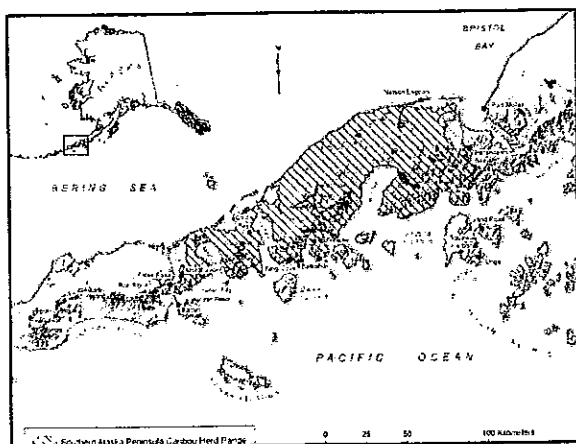
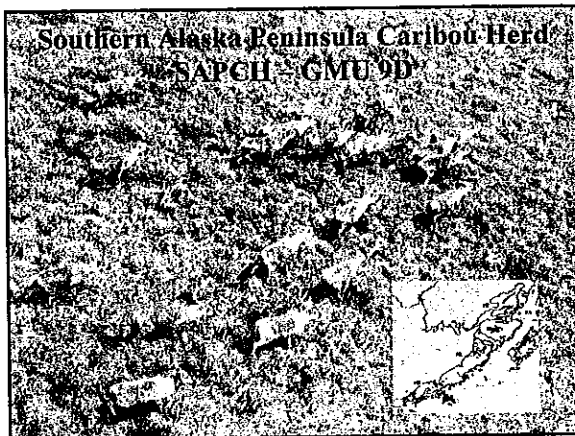
## SAPCH – GMU 9D Preliminary Findings

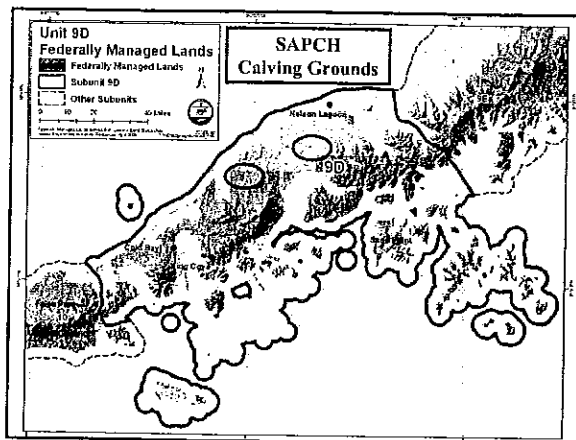
- Bear predation on caribou calves and nutrition were not important factors limiting population growth in the SAPCH
- Wolf reduction improved caribou calf survival
- Program should be continued to achieve full benefits for the caribou population
- Knowledge obtained in 2008 will be used to improve field protocols and procedures

## SAPCH – GMU 9D Plans for 2009

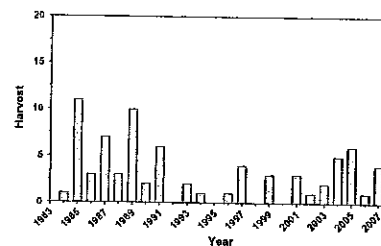
- Conduct March – April wolf reduction using department staff and helicopters
  - Prior to denning
  - Improve late winter survival
  - Assumes suitable weather and tracking capabilities
  - Less “surgical” (trade-off)
- Follow-up with calf mortality work during late May / early June, similar to 2008
  - Smaller crew; reduced costs and logistics issues
  - Less chance of encountering wolves, including pups
- Implement wolf pup protocols
- Initiate discussions with FWS about work on refuges

## Southern Alaska Peninsula Caribou Herd SAPCH – GMU 9D

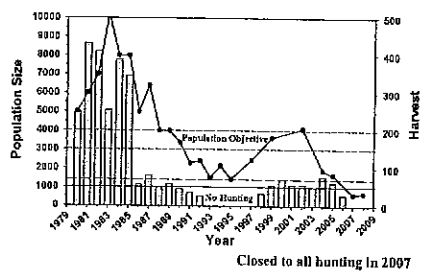




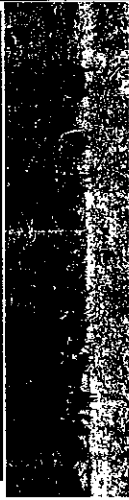
## Wolf – GMU 9D Hunting and Trapping Harvest



## SAPCH – GMU 9D Harvest and Management



## Gustavus Moose: Research and Management



Kevin White & Neil Barton  
Division of Wildlife Conservation  
Alaska Department of Fish and Game  
Douglas, AK



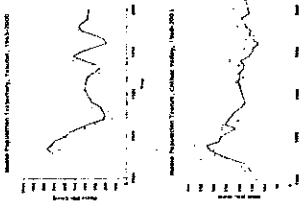
## Presentation Outline

- Gustavus Moose Research Overview
  - Population History
  - Population Monitoring
  - Comparison with other populations
- Management Applications
  - Effects of Harvest/Density Manipulations
  - Complications: Adult and Calf Survival



## Case Studies: Population Irruptions and Coastal Alaskan Moose

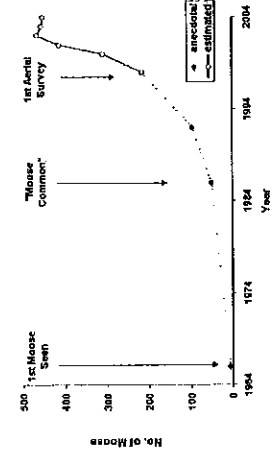
- Population irruptions have occurred with naturally colonizing populations.
- Population crash catalysts:
  - Overbrowsing
  - Harvest
  - Predation
- Ultimate cause: reduction in  $K$  due to persistent over-browsing (?)
- Eventually attain stable low-density population equilibrium
- What about Gustavus?



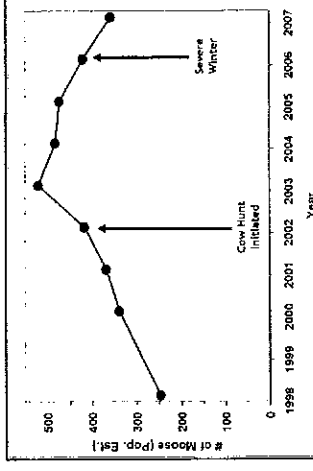
Gustavus Moose  
Hypobosomed Colonization Node

## Population History

### Moose Population Trends: Gustavus Forlands, 1966-2004\*



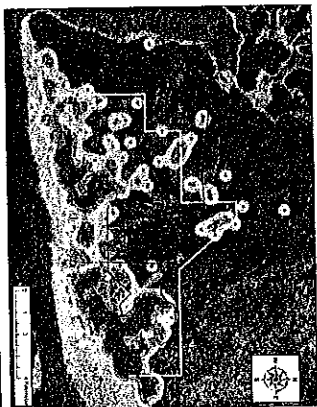
## Population History



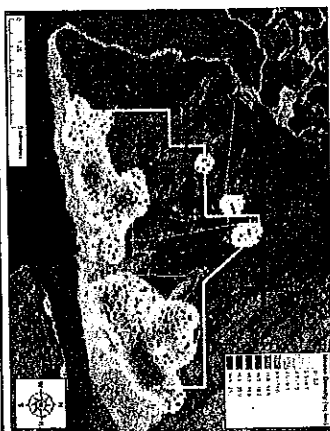
## Distribution and Movement Patterns: Migration



## Winter Moose Distribution



## Winter Moose Density

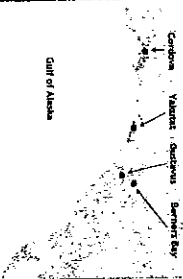


## Tools for Population Monitoring

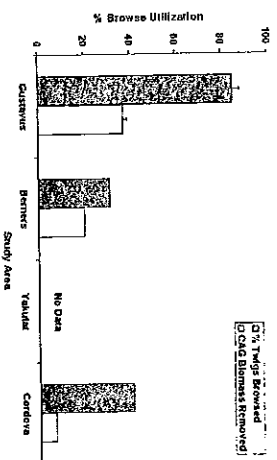
Parameter	Method	Advantages	Disadvantages
Population Density	Visual Census	Simple, direct	Time-consuming, requires high visibility
Population of Protected Species	Visual Census	Simple, direct	Time-consuming, requires high visibility
Population of Vulnerable Species	Visual Census	Simple, direct	Time-consuming, requires high visibility
Population of Endangered Species	Visual Census	Simple, direct	Time-consuming, requires high visibility
Population of Threatened Species	Visual Census	Simple, direct	Time-consuming, requires high visibility
Population of Rare Species	Visual Census	Simple, direct	Time-consuming, requires high visibility
Population of Common Species	Visual Census	Simple, direct	Time-consuming, requires high visibility
Population of Abundant Species	Visual Census	Simple, direct	Time-consuming, requires high visibility
Population of Scarce Species	Visual Census	Simple, direct	Time-consuming, requires high visibility
Population of Extinct Species	Visual Census	Simple, direct	Time-consuming, requires high visibility

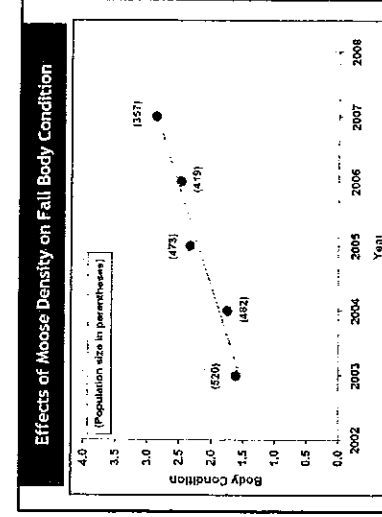
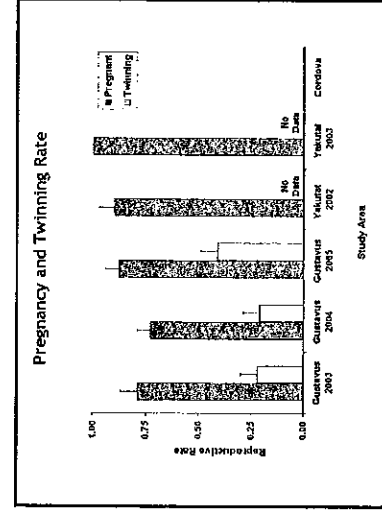
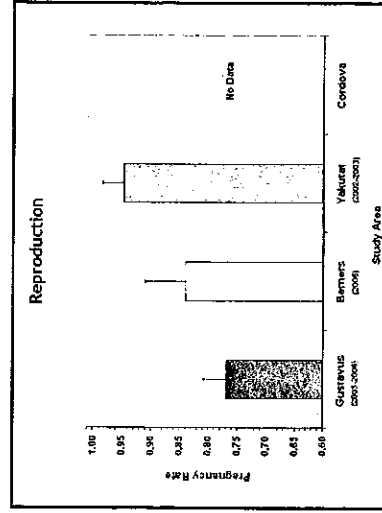
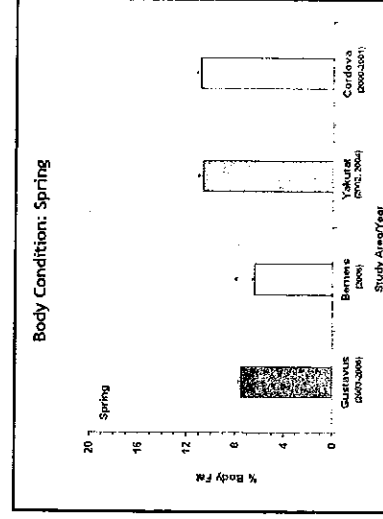
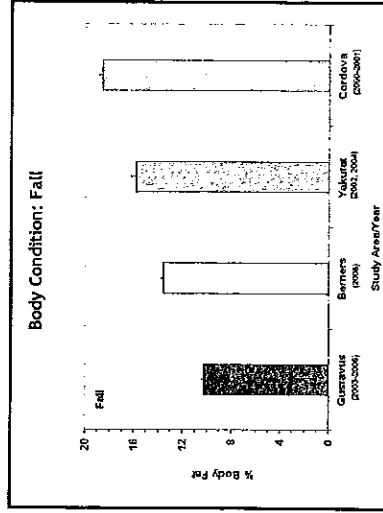
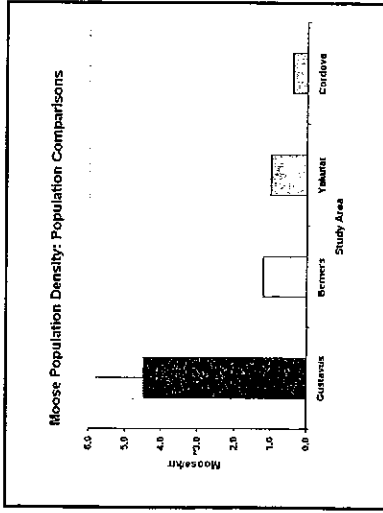
## Assessing Food-Limitation: A Comparative Perspective

- Gashaus Forelands
  - White et al. (this study)
- Berners Bay
  - White et al. (unpub.)
- Valurud Forelands
  - Crouse et al. (unpub.)
- Cordova
  - Stephenson 1995
  - MacKeracher et al. 1997
  - Meyers and Logan 2002
  - Crowley 2002

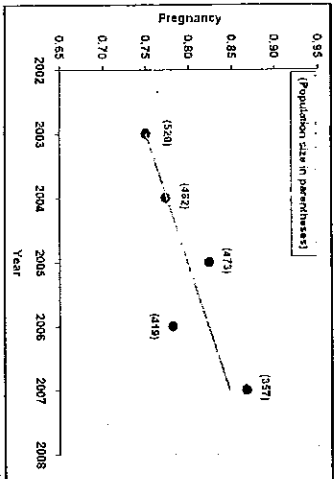


## Willow Browse Utilization: Population Comparisons





### Effects of Moose Density on Pregnancy



### Conclusion

- High density resulted in reduced fitness of moose and over-utilized habitat
- Antlerless hunts have been essential in lowering density of moose
- Body condition and reproductive indices are improving as we decrease moose density
- It is important to retain the antlerless hunts as they are an important part of the management strategy at Gustavus



**DRAFT  
RECOMMENDATIONS  
BOARD OF GAME PROPOSALS**

***Region I Proposals 1- 48***

**November 2008**

***Alaska Department of Fish & Game***

***Division of Wildlife Conservation***

***The department's recommendations are based on analysis of the proposals with available information. These recommendations may change after further analysis based on public comment or additional information.***

## **PROPOSAL 1**

EFFECT OF THE PROPOSAL: This proposal would change the starting date for trapping wolves in Unit 1A from November 10 to November 1.

DEPARTMENT RECOMMENDATION: **Amend and Adopt**

RATIONALE: The author's rationale for this proposal is that the wolf trapping season opened on November 1 prior to 1983 and should be returned to that starting date. He states that the earlier start date would allow hunters to begin trapping wolves while also hunting deer during the November deer rut, when he believes deer are very vulnerable to predation by wolves.

The Department recommends amending this proposal to include Units 1, 3 and 5, and adopting the season change. Most bears are in hibernation by late October so catching them in wolf traps during this period should not be a concern. Starting the season on November 1 will provide additional opportunity for those interested in trapping wolves, without presenting any obvious conservation concerns. The department supports a return to this earlier starting date.

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## **PROPOSAL 2**

EFFECT OF THE PROPOSAL: This proposal would change the management objective for wolves in Unit 1A from 20 per year to 25 per year.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: This proposal does not require action by the board. The department has the authority to change the guideline harvest level without a regulatory change.

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## **PROPOSAL 3**

EFFECT OF THE PROPOSAL: Reduce the bag limit for deer from 4 bucks to 2 bucks on the Cleveland Peninsula in Unit 2. The Cleveland Peninsula is split between Units 1A and 1B and this change would make the entire Cleveland Peninsula deer bag limit uniform at 2 bucks per hunter per year.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Staff proposal, see issue statement.

\*\*\*\*\*

## **PROPOSAL 4**

EFFECT OF THE PROPOSAL: This proposal would change the bag limit for mountain goats in Unit 1A from one goat to two goats.

DEPARTMENT RECOMMENDATION: **Do Not Adopt**

RATIONALE: The mountain goat bag limit in Unit 1A has varied between one and two goats during the past 20 years. Most recently the bag limit was changed from 2 goats to 1 at the 2004 board meeting. At that meeting the Cleveland Peninsula was closed to goat hunting due to conservation concerns, and the bag limit for goats in the remainder of Unit 1A was reduced. The justification to reduce the bag limit in all of Unit 1A was to avoid future closures in other locations of Unit 1A due to conservation concerns.

Although goats are widely distributed, harvest is often localized around access points. By limiting hunters to a single goat, we can distribute the allowable harvest across a greater number of hunters, thereby providing more hunters with the opportunity to harvest a goat.

\*\*\*\*\*  
**PROPOSAL 5**

EFFECT OF THE PROPOSAL: This proposal would reduce the discretionary authority for bear bait permit conditions.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: Refer to Proposal 41. The department will clarify the current language regarding discretionary authority relative to bear bait registration permits.

\*\*\*\*\*  
**PROPOSAL 6**

EFFECT OF THE PROPOSAL: This proposal would close the fall hunting season for black bears in Unit 2.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: The department has submitted two proposals that address concerns with black bear harvest and black bear management in Unit 2 along with other areas in Southeast Alaska. The department recommends the board take no action on this proposal and consider proposals 36 and 38.

\*\*\*\*\*  
**PROPOSAL 7**

EFFECT OF THE PROPOSAL: This proposal would close a portion of Unit 2 to black bear hunting in the vicinity of El Capitan passage and Dry Pass on Prince of Wales Island.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: This proposal addresses an overharvest of bears on a portion of Unit 2. The department recommends the board take no action on this proposal and consider proposal 36.  
\*\*\*\*\*

### **PROPOSAL 8**

EFFECT OF THE PROPOSAL: For Kuiu Island in Unit 3, shorten the marten trapping season for residents to Dec 1–[FEB. 15] **Dec 15**, close the nonresident marten trapping season and create a Kuiu Island Management Area that is closed to the use of motorized land vehicles for trapping marten.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Staff proposal, see issue statement.

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### **PROPOSAL 9**

EFFECT OF THE PROPOSAL: Modify the hunting season for elk on Etolin Island in Unit 3 to provide alternating bow and rifle drawing permit hunts during the September rut.

DEPARTMENT RECOMMENDATION: **Do Not Adopt**

RATIONALE: The department currently has a number of uncertainties regarding the status of the Unit 3 elk population. The rugged terrain and densely forested environment in Southeast Alaska precludes accurate aerial surveys of the Unit's elk population and limits our understanding of important elk population parameters such as status and trend, bull:cow ratios, productivity, and recruitment into the adult population. Despite liberal hunting seasons and several increases in the number of permits issued the Unit 3 elk harvest has declined in recent years.

Elk are particularly vulnerable to harvest during the rut. Therefore, hunters have been restricted to archery tackle. Allowing the use of high-powered rifles during the elk rut would risk overharvest of bulls and could disrupt breeding activity.

The department recently initiated a study in designed to obtain information about daily and seasonal elk activity and movement patterns, habitat use, and home range size. Staff biologists will also evaluate dietary overlap and potential interspecific competition between introduced elk and native Sitka black-tailed deer. Finally, we will attempt to use DNA extracted from elk fecal pellets to identify individual elk as part of a mark-recapture population estimation effort. Results from this ongoing work will be used to establish future elk hunting seasons and bag limits in the unit. The department recommends that until such time that we have additional information on important elk population parameters, we should continue to restrict hunting activity during the rut to archery-only.

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## **PROPOSAL 10**

EFFECT OF THE PROPOSAL: Modify the moose antler restriction in RM038 to allow the harvest of bulls with 2 brow tines on both sides in addition to the existing spike-fork, 3 or more brow tines on one side, or 50-inch antler criteria.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Staff proposal, see issue statement.

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## **PROPOSAL 11**

EFFECT OF THE PROPOSAL: Modify the moose antler restrictions in Units 1B and 3 to allow the harvest of bulls with spike, fork, 2 brow tines on both sides, or 50-inch spread. The intent of the proponent was to allow the harvest of bulls with 2 brow tines on both sides "in addition to," the existing spike, fork, 3 or more brow tines on one side, or 50-inch spread antler criteria. It was also the intent of the proponent to apply the new regulation to the entire RM038 hunt area which includes Units 1B, 3 and the extreme southern portion of 1C.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: See proposal 10.

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## **PROPOSAL 12**

EFFECT OF THE PROPOSAL: This proposal would extend the wolf hunting season in Unit 3 by 31 days, from August 1 – [APRIL 30] **May 31** and the season will close when 20 wolves are harvested.

DEPARTMENT RECOMMENDATION: **Do Not Adopt**

RATIONALE: The Unit 3 wolf harvest is typically incidental to other hunting activities, however, a small number of trappers focus efforts specifically on wolves and account for the majority of wolves taken. Hunters and trappers have harvested 203 wolves in Unit 3 over the last 5 years, with an average unit-wide harvest of 41 wolves annually.

While it is difficult from sealing records to differentiate between wolves harvested by hunters and those taken by trappers, sealing records indicate that 79 wolves were taken by ground shooting from 2003–2007, for an annual average of 16 wolves. Alaska residents harvested most (87%) of wolves taken in the unit, with local residents accounting for 74% of the Unit 3 wolf harvest.

An accurate population estimate is not available for Unit 3 wolves, but anecdotal information gathered from hunters, trappers, pilots, and department personnel suggests the population is stable. Unit 3 wolf hunting season dates have been adjusted by the board twice in the last 8 years

(2002 and 2004). The current Unit 3 wolf hunting and trapping season end date of April 30 is consistent for Units 1 and 3-5.

The department does not support this proposal because the additional 31 days would extend the hunting season into the peak of the wolf pupping season. The department believes the existing 9-month hunting season and 5-wolf bag limit provides ample opportunity to harvest wolves. Extending the season to May 31 will not significantly increase wolf harvest opportunities. Declines in pelt quality throughout the spring reduce pelt values, as well as interest in harvesting wolves. The department does not support a 20-wolves harvest limit in the unit as this would unnecessarily restrict opportunity and there is not a conservation concern for the current harvest.

Wolf populations in the unit are healthy and harvest during the later part of the season is typically low. It is anticipated that most harvest likely to occur during May would be by nonresidents who purchase a wolf tag, hoping for an opportunity to harvest a wolf incidental to spring black bear hunting.

\*\*\*\*\*

### **PROPOSAL 13**

**EFFECT OF THE PROPOSAL:** This proposal would extend the wolf hunting season in Unit 3 by 61-days, from August 1 – [APRIL 30] to **June 30**.

**DEPARTMENT RECOMMENDATION:** **Do Not Adopt**

**RATIONALE:** The Unit 3 wolf harvest is typically incidental to other hunting activities, however, a small number of trappers focus efforts specifically on wolves and account for the majority of wolves taken. Hunters and trappers have harvested 203 wolves in Unit 3 over the last 5 years, with an average unit-wide harvest of 41 wolves annually.

While it is difficult from sealing records to differentiate between wolves harvested by hunters and those taken by trappers, sealing records indicate that 79 wolves were taken by ground shooting from 2003-2007, for an annual average of 16 wolves. Alaska residents harvested most (87%) of wolves taken in the unit, with local residents accounting for 74% of the Unit 3 wolf harvest.

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The department does not support this proposal because the additional 61 days would extend the hunting season into the peak of the wolf pupping season. The department believes the existing 9-month hunting season and 5-wolf bag limit provides ample opportunity to harvest wolves. Extending the season to June 30 will not significantly increase wolf harvesting opportunities.

Declines in pelt quality throughout the spring reduce pelt values, as well as interest in harvesting wolves.

Wolf populations in the unit are healthy and harvest during the later part of the season is typically low. It is anticipated that most harvest likely to occur during May and June would be by nonresidents who purchase a wolf tag, hoping for an opportunity to harvest a wolf incidental to spring black bear hunting.

\*\*\*\*\*

#### **PROPOSAL 14**

EFFECT OF THE PROPOSAL: Clarify the boundaries of the Blind Slough Closed Area in Unit 3. This is a department housekeeping proposal.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Staff proposal, see issue statement.

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#### **PROPOSAL 15**

EFFECT OF THE PROPOSAL: This proposal would change the Unit 1C beaver trapping season opening date to November 10; the current trapping season is December 1-May 15.

DEPARTMENT RECOMMENDATION: **Do Not Adopt**

RATIONALE: The current seasons and bag limits for beaver in Unit 1C have been in place since the 1960s. The current season dates are appropriate to ensure beaver pelts are at peak quality when harvested, and season lengths are sufficient to allow ample trapping opportunity. Prime pelts are sold for a higher dollar amount which benefits trappers and is a sound use of the resource.

We have few data on beaver populations so information about trapper harvest and the trapper survey report is our best tool in determining beaver population status. Beaver harvest varies from year to year and the present seasons and bag limits in Unit 1C have demonstrated their effectiveness over time in providing opportunity for trappers, and assuring that beaver populations remain sustainable. The department recommends retaining the December 1 season opening date as it has been for the past 40 years.

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#### **PROPOSAL 16**

EFFECT OF THE PROPOSAL: This proposal would change the Unit 1D beaver trapping season to September 1 - June 30 and allow the use of firearms; the current trapping season is December 1 - May 15 and does not allow the use of firearms to harvest beaver.

Note: The original proposal asked to modify both hunting and trapping seasons for beaver in Unit 1D. The author intended to change methods and means to allow the use of firearms for taking beavers with a trapping license.

DEPARTMENT RECOMMENDATION: **Do Not Adopt**

RATIONALE: The proponent has concerns regarding the perceived increase in beavers in the Chilkat River Valley and their impacts on salmon resources. Detailed survey and inventory data is not available for beavers in this area, but anecdotal information from sportsmen and fisheries biologist suggest beaver numbers are increasing. Per conversations with fisheries personnel, beaver numbers appear to be increasing and can have both a positive and negative impact on salmon resources. Beaver activity may block passage for returning adults and emigrating juveniles but it also creates excellent juvenile salmon rearing habitat.

There is a resource-value concern when furbearers are taken outside prime-fur periods and the use of firearms increase the possibility beaver being lost after shooting. Shooting at an animal in the water also presents a safety concern. This proposal specifically identifies beavers as being detrimental to salmon which is a departure from historical attributes (currency, clothing, food, etc.) of trapping beaver. The concerns raised by the proposal may be able to be addressed through existing regulations by working with fisheries personnel to identify problem areas and issuing permits to local trappers to lethally remove beavers from those areas. These permits may be issued to allow for the take of beavers outside established seasons, bag limits, and methods and means.

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#### **PROPOSAL 17**

EFFECT OF THE PROPOSAL: This proposal would require the department to implement a state sponsored beaver control program, or implement a bounty on beavers in Unit 1D.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: See proposal 16.

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#### **PROPOSAL 18**

EFFECT OF THE PROPOSAL: This proposal would change the Unit 1C mink and weasel trapping season opening date to November 10; the current season dates are December 1 – February 15.

DEPARTMENT RECOMMENDATION: **Do Not Adopt**

RATIONALE: The current seasons and bag limits for mink and weasel in Unit 1C have been in place since the 1982. These dates are appropriate to ensure pelts are at peak quality when



harvested, and the season lengths are sufficient to allow ample trapping opportunity. Prime pelts are sold for a higher price which benefits trappers, and is a sound use of the resource.

The present seasons and bag limits in Unit 1C have demonstrated their effectiveness over time in providing opportunity for trappers, and assuring that these furbearer populations remain viable. The department recommends leaving the December 1 season opening date intact.

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#### **PROPOSAL 19**

EFFECT OF THE PROPOSAL: This proposal would change the Unit 1C river otter trapping season opening date to November 10; the current season dates are December 1 – February 15.

DEPARTMENT RECOMMENDATION: **Do Not Adopt**

RATIONALE: The current seasons and bag limits for otter in Unit 1C have been in place since the 1982. The current season dates are appropriate to ensure otter pelts are at peak quality when harvested, and the season lengths are sufficient to allow ample trapping opportunity. Prime pelts are sold for a higher dollar amount which benefits trappers, and is a sound use of the resource.

Because we have little data on furbearer populations, trapper harvest and the trapper survey reports are the best tools in determining population status. Harvest varies from year to year, and the present seasons and bag limits in Unit 1C have demonstrated their effectiveness over time in providing opportunity for trappers, and assuring that otter populations remain sustainable. The department recommends leaving the December 1 season opening date intact as it has been since 1982.

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#### **PROPOSAL 20**

EFFECT OF THE PROPOSAL: This proposal would change the Unit 1C marten trapping season opening date to November 10; the current season dates are December 1 – February 15.

DEPARTMENT RECOMMENDATION: **Do Not Adopt**

RATIONALE: The current seasons and bag limits for marten in Unit 1C have been in place since 1982. The current season dates are appropriate to ensure marten pelts are at peak quality when harvested, and the season lengths are sufficient to allow ample trapping opportunity. Prime pelts are sold for a higher dollar amount which benefits trappers and is a sound use of the resource.

Because we have few data on furbearer populations, trapper harvest and the trapper survey report are the best tools in determining population status. Marten are particularly vulnerable to overharvest if access to all available habitats is provided through roads and trails. In the case of Unit 1C, the area along the Juneau road system is especially accessible, and beginning the season earlier than the present date could have consequences of overharvesting marten in some of these

areas. Although the harvest can vary year to year, the present seasons and bag limits in Unit 1C have demonstrated their effectiveness over time in providing opportunity for trappers, and assuring that marten populations remain sustainable. The department recommends leaving the December 1 season opening date intact as it has been since 1982.

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## **PROPOSAL 21**

EFFECT OF THE PROPOSAL: This proposal would reduce the distance that traps may be set to Juneau area trails, and would require allowed traps be elevated three feet off the ground.

DEPARTMENT RECOMMENDATION: **Amend and Adopt**

RATIONALE: In 1987, a state regulation was adopted that closed trapping within ¼ mile of many Juneau area trails. The justification for the closure cited public safety concerns, the possibility of catching domestic pets, and the value of wildlife viewing along trails. This closure significantly reduces areas around Juneau that can be trapped. Accessible areas off the Juneau road system are fairly limited and many of those drainages have trails that restrict trapping. With many of these drainages being narrow and steep sided, getting ¼ mile from the trail is difficult and leaves very little area for trapping. Trapping is further restricted by a city ordinance that forbids setting traps or snares within ½ mile of any public or private street, road, right-of-way or highway within the City and Borough of Juneau.

As authored, this proposal would limit traps to jaw spreads of 6.25 inches or less, traps would have to be elevated at least 3 feet above the ground and traps must be at least 50 yards from the trail for all trails listed as closed in the current Alaska Trapping Regulations.

We support the concept of this proposal with the following amendments: traps must have a jaw spread of 4.5 inches or less, traps must be placed at least 5 feet above the ground, and traps must be placed at least 100 yards from a restricted trail. Other traps sets would still be allowed beyond the current ¼ mile restriction. This regulatory change still addresses the issues of public safety, protection of pets, and wildlife viewing along trails, while allowing for a practical compromise between trappers and other users of these trail systems.

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## **PROPOSAL 22**

EFFECT OF THE PROPOSAL: This proposal would add several Juneau area trails to those listed which are closed to trapping within ¼ mile of the trail.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: In 1987, a state regulation was adopted that closed trapping within ¼ mile of many Juneau area trails. The justification for the closure cited public safety concerns, the possibility of catching domestic pets, and the value of wildlife viewing along trails. Since the original promulgation of the regulation, additional trails have been developed and several have

been upgraded. In April 2008, a dog was killed in a #330 Conibear trap, and another dog was caught in a small leghold trap but was released unharmed. These incidents have highlighted the concerns listed in the 1987 proposal. The current state closure is in addition to the City and Borough of Juneau ordinance (see proposal 21).

This proposal is an allocation issue among user groups using Juneau area trails. This proposal would further restrict the area available for trapping in the Juneau area. State and other agency regulations require trap marking, and prohibit trapping in certain areas. Proposal 21 may mitigate the inclusion of additional trails being closed to trapping.

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### **PROPOSAL 23**

**EFFECT OF THE PROPOSAL:** This proposal would prohibit the harvest of white-phased black bears by defining coloration and establishing a percentage of pelt coverage.

**DEPARTMENT RECOMMENDATION:** **No Recommendation**

**RATIONALE:** In August 2007 the board passed an emergency regulation prohibiting the harvest of white-colored black bears in Unit 1D in response to a bear observed in Skagway, Alaska with this coloration. Public sentiment in Skagway to protect this animal prompted this request for action. The regulation became permanent in November 2007. In June 2008 a black bear, believed to be the same bear, was harvested. An investigation following the harvest determined that the bears' pelage did not meet the regulatory requirement of a white-colored bear. The hunter was not charged and the hide and skull of the bear was returned. Many Skagway residents were appalled with the inability of this regulation to protect the bear that it was designed to protect.

The department offers no recommendation on this proposal because it is an allocation among users. The department manages black bears at a population level; light-phased black bears are still black bears and are managed as such. Identifying and offering protection to an individual animal or a specifically colored cohort of a population is an allocation decision for the board.

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### **PROPOSAL 24**

**EFFECT OF THE PROPOSAL:** This proposal would extend the Unit 1C spring brown bear hunting season to June 15<sup>th</sup>, and change the bag limit to 1 bear every regulatory year.

**Note:** The proponent intended the proposal to address the Unit 1C brown bear hunting only; Unit 4 regulations are not part of the proposal. Although the author references Unit 1C in general, his intent is to address a specific portion of Unit 1C known as Berners Bay.

**DEPARTMENT RECOMMENDATION:** **Do Not Adopt**

RATIONALE: The author of this proposal recommends these changes to provide more hunting opportunity for bears by increasing the season length, and by allowing the harvest of a bear every year. He states the season in Unit 1 was set up for the ABC islands (Unit 4), which have milder weather that result in earlier den emergence for bears, and this changes their availability to hunting. This difference is already recognized in the present seasons, where much of Unit 4 closes on May 20, while the Unit 1 season extends to May 31.

During the past 3 years, a brown bear research study in the Berners Bay portion of Unit 1C has collected data on spring den emergence and habitat use by brown bears. GPS radiocollar results indicate that bears use the tidal flats and estuaries in the lower portion of the bay from mid to late May. Bears using these areas are available to hunters during the present season.

Brown bear harvest in Unit 1C is low. During the 10 year period 1998-2007, 46 bears (38M:8F) were taken. Harvest data from Berners Bay during this same 10 year period was 9 bears, with 5 of them being taken in mid to late May. The low harvest in Unit 1C is a reflection of the low bear density and a preference by many hunters to target the high bear densities of Unit 4.

The department does not support this proposal because there is adequate opportunity to harvest brown bears in Unit 1C under the present seasons and bag limits. The 1 bear every 4 years bag limit has been in place in Unit 1C since 1968, and is consistent with remainder of the region, and should remain unchanged.

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## **PROPOSAL 25**

EFFECT OF THE PROPOSAL: This proposal would close a portion of the Klehini River Drainage in Unit 1D, to the taking of brown and black bears.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: The author of this proposal would like have this area closed to bear hunting as a way of preventing conflicts between the hunters and bear viewers. As indicated in the proposal a public observation areas known as Marks Park overlooks this area and is very popular for wildlife viewing. This area in question is productive bear habitat consisting of extensive salmon streams and river bars and other forage for bears. Although few bears have been harvested in this area, the author suggests that any bear hunting from this location is problematic. During the period 1998-2007, a mean harvest of 2 brown bears and 3 black bears per year were taken in the vicinity of Marks Park.

Most of Unit 1D provides both excellent wildlife viewing and hunting. Viewing sites include the Chilkoot River, and a large portion of the Chilkat River and Bald Eagle Preserve. Nearly the entire unit is open to hunting. Existing regulations already address some of the concerns of the proposal; e.g. hunters must be off a road before shooting and wounded bears count against bag limits. This proposal is an allocation issue between various users of Marks Park rather than a conservation concern.

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## **PROPOSAL 26**

EFFECT OF THE PROPOSAL: This proposal would open an archery only mountain goat hunt in the area known as the "Skagway Pie" near Skagway, Alaska.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: The area east of Dyea and the Chilkoot Trail and west of the White Pass and Yukon Railroad has been closed to mountain goat hunting since 1985 due to conservation concerns. Department management reports list include the objective of opening this area to hunting when goat numbers are at a level that will allow for harvest. Aerial survey data collected during the period 1985-2003 did not enumerate enough goats to warrant opening the area to hunting. The department wants at least 100 goats in this area to allow a hunt. An aerial survey conducted on September 24, 2008 counted 118 goats (99 adults & 19 kids), achieving the desired threshold and demonstrating acceptable recruitment of juvenile goats.

Because of the close proximity of this area to Skagway, hunting pressure might preclude any open hunt unless it is archery only. Based on the number of goats counted, the allowable harvest would be 6 points (male goats = 1 point, female goats = 2 points). A firearm hunt would require this to be a drawing permit hunt, with very few permits allowed to assure sustainability. An archery only hunt would provide unlimited hunting opportunity while still allowing for a harvest rate that is slow enough to allow the department to monitor the season and prevent overharvest.

Southeast Alaska goat hunters are required to report successful hunts within 5 days of the kill, and horn check-in is required in Unit 1D. This will allow managers the ability to monitor the harvest. Emergency Orders can be used if necessary to close the hunt. This hunt can be opened concurrently with RG024 (September 15 – November 30) when personnel are available to issue permits and check-in harvested animals.

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## **PROPOSAL 27**

EFFECT OF THE PROPOSAL: This proposal would eliminate the three antlerless moose hunts (DM043, DM044, DM045) in that portion of Unit 1C north of Icy Straits and west of Excursion Inlet known as the Gustavus hunt area.

DEPARTMENT RECOMMENDATION: **Do Not Adopt**

RATIONALE: The antlerless moose hunt at Gustavus was first adopted in 2000 in response to the department's concern that the moose were in danger of exceeding the winter range carrying capacity. Moose densities were 7 moose/mi<sup>2</sup> and to increase through 2003 to approximately 13 moose/mi<sup>2</sup>. Density dependant effects were becoming evident in the condition of the range as well as the condition of moose using this area.

Browse studies indicated that the moose were browsing > 90% of the available willow twigs, and removing 35-40% of the available biomass. Both of these indices are extremely high when compared to other studies in Alaska. Biologists also determined through the capture of cow moose that they were very under nourished compared to moose in other populations. This low body fat content and generally poor body condition likely played a role in the depressed pregnancy and twinning rates recorded in cow moose in this area.

Antlerless hunts have lowered moose densities over the past 4 years. During this time our data indicate that cow moose using this area are becoming healthier as density declines. The rump fat index is increasing, meaning our sample of cow moose have a higher body fat than in the previous years. Productivity, measured by pregnancy rate, is increasing. Both of these factors indicate this moose herd is responding to lower densities of moose on this range, which is only possible through the implementation of the antlerless hunts.

As with all antlerless hunts, the Gustavus hunts need to be reauthorized by the board annually through a department re-authorization proposal. This allows the board to scrutinize the validity of the antlerless season on an annual basis.

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#### **PROPOSAL 28**

EFFECT OF THE PROPOSAL: This proposal would change the "any bull" registration permit hunt at Gustavus to a spike-fork/50 inch/3 brow tine antler restriction registration permit hunt.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Staff proposal, see issue statement.

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#### **PROPOSAL 29**

EFFECT OF THE PROPOSAL: Extend the damaged, broken, or altered moose antler regulation in effect for Units 1B and 3 to include the entire RM038 hunt area, including that portion located within Unit 1C south of Port Hobart, including all Port Houghton drainages. This is a department housekeeping proposal.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: In 2007 the board partially repealed a region-wide regulation stating that a damaged, broken or altered antler does not satisfy the spike-fork requirement in antler restricted moose hunts unless the opposing undamaged and unaltered antler meets the specified point requirements. The Board maintained, however, that there remained sufficient evidence of abuse indicating that the broken antler regulation should be retained in the RM038 hunt area. At the time the revised regulatory language was crafted a small portion of the RM038 hunt area located in subunit 1C was inadvertently omitted from the regulatory language. As a result the broken antler regulation applies to the Unit 1B and 3 portions of the RM038 hunt area, but does not

apply to the Unit 1C portion. The department requests that the regulatory language for the damaged, broken or altered moose antler regulation be amended to include the entire RM038 hunt area including that portion located within Unit 1C south of Port Hobart, including all Port Houghton drainages.

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### **PROPOSAL 30**

EFFECT OF THE PROPOSAL: This proposal would eliminate the current Tier II scoring system used to allocate TM059 Tier II moose hunting permits, and provide for a Haines resident-only hunt that restricts hunters to one moose per family every two years.

DEPARTMENT RECOMMENDATION: **Do Not Adopt**

RATIONALE: All Alaska residents qualify as subsistence users and are eligible to participate in Tier II hunts. TM059 permits cannot be awarded solely to Haines residents. The current Tier II scoring system provides a mechanism that awards permits to individuals who demonstrate, by application, their use of the Tier II population and subsistence activities in the hunt area. Historical permit allocation data indicates that Unit 1D residents that reside in Haines receive most TM059 permits. Unit 1D residents (Haines, Klukwan and Skagway) were awarded 88% – 94% of available permits from 2004 – 2008. Haines and Klukwan residents received nearly all of the permits, with a few (0% – 4%) being awarded to Skagway residents. Most remaining permits were awarded to Southeast Alaska residents with a few awarded to hunters in other communities. From 2004 – 2008, the number of TM059 applicants increased from 235 in 2004 to 297 in 2008. Because the number of applicants is increasing, the number of individuals who do not receive a permit is also increasing. However, Haines area residents continue receive the majority of permits.

Restricting hunters to one moose every two years appears to contradict the implied reliance on game resources for food that Tier II hunts are intended to provide. No other Tier II hunts are known to restrict game harvest to every two years.

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### **PROPOSAL 31**

EFFECT OF THE PROPOSAL: This proposal would extend the current wolf hunting season an additional 15 days to May 30<sup>th</sup>, and lengthen the trapping season 116 days by extending wolf trapping season to May 15<sup>th</sup> in Unit 1D. The current wolf hunting and trapping seasons end on April 30<sup>th</sup>.

DEPARTMENT RECOMMENDATION: **Do Not Adopt**

RATIONALE: Total wolf harvest for Unit 1D is 46 over the last 10 years, with a mean harvest of 4.6 wolves per year. Alaska residents, primarily from Haines, harvest most of the wolves (38) in Unit 1D. Wolf harvests are typically incidental to other hunting activities although a small number of trappers target wolves.

Wolf population size in Unit 1D is unknown and anecdotal information gathered from trappers, hunters, pilots and department personnel suggest the population is stable to increasing. Unit 1 wolf hunting season dates have been adjusted by the board twice in the last six years (2002 and 2004). The current Unit 1D wolf hunting and trapping season end date of April 30<sup>th</sup> is consistent with other Southeast Alaska subunits.

The department does not support this proposal because the later spring season would include the denning and pupping period for wolves, and harvest will provide animals with poor pelt quality. Expanding the existing trapping season may result in non-target species such as bears being caught. The existing 9 month hunting season and 5 ½ month trapping season provide abundant opportunity to harvest wolves.

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### **PROPOSAL 32**

EFFECT OF THE PROPOSAL: This proposal would open the Unit 5 lynx trapping season on November 10 rather than the present December 1.

DEPARTMENT RECOMMENDATION: **Do Not Adopt**

RATIONALE: The same proposal was submitted at the 2006 board meeting, along with two related proposals to change the fox and coyote trapping seasons from December 1 to November 10. The board adopted the fox and coyote proposals but followed the department's recommendation to keep the lynx trapping season opening date at December 1. The department's preference for the December 1 season opening was based on our understanding that lynx only reach peak fur quality in December. With the trapping being open to mid-February, the present season length provides ample opportunity to harvest lynx when their fur is most valuable.

During 1997-2007 only one lynx was caught incidentally prior to the season, so the problem identified by the author appears to be an uncommon occurrence. Therefore the department recommends leaving the lynx trapping season as it is, and keeping it synchronous with the remainder of the region.

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### **PROPOSAL 33**

EFFECT OF THE PROPOSAL: This proposal would eliminate the trap tagging requirements in Unit 5.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: See proposal 35.

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### **PROPOSAL 34**



EFFECT OF THE PROPOSAL: Shorten the wolverine trapping season in Units 1-5 by ending the season on February 15.

DEPARTMENT RECOMMENDATION: Adopt

RATIONALE: Staff proposal, see issue statement.

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### **PROPOSAL 35**

EFFECT OF THE PROPOSAL: This proposal would eliminate the trap tagging requirements in Units 1-5.

DEPARTMENT RECOMMENDATION: Do Not Adopt

RATIONALE: At the 2006 Southeast Region BOG meeting, a proposal to require trap tagging in Unit 1C was submitted by a member of the public. The department recommendation was to amend the proposal to include Units 1-5, and mirror the tagging regulation that was in place for large snares. The board adopted our amended version, and the trap tagging requirement became regulation in Units 1-5.

The author of this proposal would like to see the regulation eliminated because he believes the public had no opportunity to address the amended version of the original proposal. The department understands the authors reasoning; however we believe this regulation is a valuable tool to help protect trapping opportunity. The presence of tags on traps projects to the public a level of accountability that we believe is necessary for trappers to provide. During this past trapping season, several situations arose where the trap tag allowed the Department of Public Safety – Division of Wildlife Troopers and the department to contact the trapper and address a concern in an expedient manner. This action was only possible because of the trap tagging requirement, which we believe mitigated the concerns in these cases.

The flexibility in the regulation allows trappers to use an identification system which keeps their name and address confidential. It also allows trappers the option of marking traps in a way that does not require individual traps being tagged.

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### **PROPOSAL 36**

EFFECT OF THE PROPOSAL: This proposal would eliminate the September 1 – 14 fall black bear season for non-resident hunters for game management units 1A, 1B, 1C, 2, and 3.

DEPARTMENT RECOMMENDATION: Adopt

RATIONALE: Staff proposal, see issue statement.

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### **PROPOSAL 37**

EFFECT OF THE PROPOSAL: This proposal would require a registration permit for black bear hunters in game management Units 1, 2, and 3.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: See proposal 38. The department has submitted a similar proposal (Proposal 38) that will require a harvest ticket rather than a registration permit for all black bear hunters in Units 1-5. Although a registration permit can be used for the same purpose as a harvest ticket, we generally only make them available at department offices. This makes them more difficult for hunters to obtain, and creates an additional workload. Registration permits also require mandatory reporting, and penalize hunters who do not comply. Harvest tickets can be made available at license vendors and online, making them easy for hunters to acquire. We believe harvest tickets can be designed to gather the information we need to manage black bear hunting effort.

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### **PROPOSAL 38**

EFFECT OF THE PROPOSAL: This proposal would require a harvest ticket for all black bear hunters in game management Units 1-5.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Staff proposal, see issue statement.

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### **PROPOSAL 39**

EFFECT OF THE PROPOSAL: This proposal would require a harvest ticket for all black bear hunters in game management Units 1-3.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: See proposal 38, which is the same as the harvest ticket requirement of this proposal, but includes all of Region I rather than just Units 1-3.

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### **PROPOSAL 40**

EFFECT OF THE PROPOSAL: This proposal would restrict black bear hunters to "archery only" methods when hunting over bait, in Units 1-5.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: This is an allocation issue. The authors proposed change in methods and means is not related to a conservation issue, rather it would benefit archery hunters compared with hunters using other methods of take.

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#### **PROPOSAL 41**

EFFECT OF THE PROPOSAL: Clarify the use of discretionary conditions on black bear baiting permits.

DEPARTMENT RECOMMENDATION: **Adopt**

RATIONALE: Staff proposal, see issue statement.

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#### **PROPOSAL 42**

EFFECT OF THE PROPOSAL: Modify in-person reporting requirements for obtaining bait site locations.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: See proposal 41.

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#### **PROPOSAL 43**

EFFECT OF THE PROPOSAL: This proposal would allow deer to be bartered in Unit 1.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: The term "barter" is defined in statute 16.05.940 (2) as the exchange or trade of fish or game, or their parts, taken for subsistence uses, and is included in the statutory definition of subsistence uses in 16.05.940 (33). Thus "barter" is included in the broader context of patterns of customary and traditional uses, and is not a commercial activity, nor does it involve cash. However, unless specifically authorized, the barter of meat from a big game animal is prohibited by a statewide regulation (5 AAC 92.200 (b) (8)). This is in contrast to barter of fish harvested under subsistence regulations, which is not prohibited. Because the prohibition is in a statewide regulation, this regional proposal may not provide the means for the Board to evaluate this issue now, but there may be options to address this topic at a subsequent meeting. The department has very limited information at this time to evaluate the extent of customary and traditional barter of game meat taken for subsistence uses in Unit 1.

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## **PROPOSAL 44**

EFFECT OF THE PROPOSAL: Modify the antler restriction for moose in Unit 1 as follows:

**A legal bull is one that possesses a spike, fork, or 5 points or more of any kind on one side of his rack. In order for a point to be legal it has to be 1" long or longer and it has to be higher than it is wide. The type of point is irrelevant.**

A follow-up conversation has determined that the intent of the proponent was for Region-wide implementation of the proposed change in all moose hunts where the 3 or more brow tine and/or 50 inch spread requirements are currently in effect.

DEPARTMENT RECOMMENDATION: **Do Not Adopt**

RATIONALE: The antler restrictions currently in place in Region I were originally developed for Alaska-Yukon moose (*Alces alces gigas*) on the Kenai Peninsula and later applied to western Canada moose (*A. a. andersoni*) inhabiting the central Southeast Alaska. Speculation has long existed that the current moose antler restrictions are overly protective when applied to the smaller *andersoni* subspecies. Unlike *gigas* moose found elsewhere in the state *andersoni* moose typically have smaller antlers that do not develop predictable configurations that correlate well with age. While the current antler restrictions do not partition the harvest among various age classes exactly as intended, they have done a good job of constraining the moose harvest to sustainable levels.

The department remains interested in fine-tuning the existing antler restrictions, particularly in hunt area RM038, in order to maximize harvest opportunity while constraining the harvest within sustainable levels. To that end, in 2004 the board established a limited number of any-bull drawing permit hunts within the RM038 hunt area to allow the department to obtain additional age and antler data from the otherwise protected segment of the bull population. After three seasons of limited any-bull harvest, the department now has sufficient data with which to make inferences about the age structure of bulls possessing a wide variety of antler configurations. Analysis of antler and age data collected in Units 1B, 3 and southern 1C indicate that the median age of bulls possessing 5-points on either antler is 4 years of age ( $n = 51$ , range 2–10). Under the current selective harvest strategy (SHS) bulls with 5 points on either antler would typically fall within an age class the current SHS is intended to protect. As currently proposed (5 points on either antler) the proposed regulation would likely overharvest younger bulls the current SHS is designed to protect.

A preliminary analysis of antler architecture in Southeast Alaska indicates that moose antler characteristics vary across the Region (i.e. moose antler architecture in subunit 1B differs from that of subunit 1D). Therefore, a region-wide approach to antler restrictions may not be appropriate. The existing antler criteria in Southeast have been in place for many years and have been successful at limiting the bull harvest to sustainable levels. While some minor fine-tuning of the existing antler criteria might be appropriate in some areas, the department does not support a wholesale change to the current antler restrictions.

Contrary to the proponent's claim, we do not believe the recommend change would result in fewer illegal animals being harvested. Many illegal kills result from hunters mistaking 3-point antlers for

forked antlers and it is highly likely that hunters will similarly mistake 4-point antlers for 5-point antlers. The problem of distinguishing legal points from non-qualifying antler projections will not be eliminated as a result of the proposed change and therefore is unlikely to significantly reduce the number of sublegal bulls being harvested.

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#### **PROPOSAL 45**

**EFFECT OF THE PROPOSAL:** This proposal would extend the wolf hunting season in Units 1 and 2 to May 31. Presently the Unit 1 hunting season is August 1 - April 30, and Unit 2 is December 1 - March 31.

**DEPARTMENT RECOMMENDATION:** **Do Not Adopt**

**RATIONALE:** The department disagrees with the intent of this proposal. The author suggests aligning the wolf hunting season ending dates for Units 1 and 2. However, the department manages these areas with differing spring season lengths based on the differing circumstances regarding these populations.

The unit 1 season ends on April 30 which is consistent with the remainder of the region. This season ending date coincides with the denning season for wolves, as well as the time of year when pelt quality declines considerably from the winter months. In Unit 2, the hunting season ends on March 31. This earlier ending date was adopted to address concerns about overharvesting this wolf population that is extremely vulnerable due to its habitat being intersected with an exhaustive network of logging roads. Also, in the mid-1990s Unit 2 wolves were determined to be a separate subspecies and consideration was given to listing them under the Endangered Species Act. Although this didn't occur, a harvest cap of no more than 25% of the estimated population of wolves per year was adopted at the 1996 board meeting. This approach addresses conservation concerns and does not jeopardize this genetically distinct population, while allowing for a sustainable harvest.

Although the present seasons do not extend into May as the author desires, they do span 9 and 4 months for Units 1 and 2 respectively. The department recommends the season ending dates remain the same.

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#### **PROPOSAL 46**

**EFFECT OF THE PROPOSAL:** This proposal would shorten the wolf hunting seasons in Units 1, 3, 4 and 5 by 60 days. This change would be implemented by changing the starting date from August 1 to September 1, and changing the season ending date from April 30 to March 31.

**DEPARTMENT RECOMMENDATION:** **Do Not Adopt**

**RATIONALE:** The department recommends leaving the dates for the wolf hunting season unchanged. Wolf populations in Units 1, 3, and 5 are widely distributed and considered healthy and stable. Wolves occur rarely, if at all, in Unit 4. There is no indication that the wolf

populations in these areas are being negatively impacted by the present season. Shortening the fall season would take away opportunity from early season hunters who might want to harvest a wolf while deer or mountain goat hunting. The April wolf hunting season allows early season bear hunters a chance to harvest a wolf should they encounter one. Given that there is no conservation concern, the department doesn't believe shortening the season is necessary.

The author suggests that the 2004 BOG decision to lengthen the wolf season by 60 days resulted in a season that is excessively long, and unwarranted. However, the BOG change in 2004 was enacted to reinstate the wolf hunting season that was in place since 1992, but was shortened by 60 days at the 2002 BOG meeting.

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#### **PROPOSAL 47**

**EFFECT OF THE PROPOSAL:** This proposal would change the dates of the waterfowl hunting season in the Southeast Alaska Zone (Units 1-4) from September 1 – December 16 to begin in early October and end in mid-January.

**DEPARTMENT RECOMMENDATION:** **No Recommendation**

**RATIONALE:** The submission of this proposal, and similar proposals in previous years, indicate that some hunters prefer a change in the waterfowl hunting season dates to later in the year. Other waterfowl hunters have expressed opposition to a later season. A shift in season dates represents a tradeoff between harvest opportunity of September migrants (e.g., wigeon, pintail, and teal) versus wintering waterfowl (e.g., resident mallards and sea ducks).

In anticipation of a proposal again this year the department conducted a survey of resident waterfowl hunters in Southeast to determine their preferences for season dates and split seasons. Results show a pattern of preference for an earlier season in the northern portion of the region and later season in southern portions. Across the entire region hunters indicated a majority preference for some shift to later season dates than currently exist. Few (about 25%) waterfowl hunters preferred a split hunting season as a means to address hunting preferences to accommodate both early and late hunting.

The current U.S. Fish and Wildlife Service framework for the waterfowl season limit the season to a maximum of 107 consecutive days and the entire zone must use the same starting and ending dates. Proposals for split seasons or to subdivide the zone are only entertained by the USFWS every 5 years; the next proposal cycle will be in 2011. A proposal for two zones would need sufficient justification demonstrating that the two areas differ sufficiently in geography, climate, and bird migration to warrant different season dates.

\*\*\*\*\*

#### **PROPOSAL 48**

**EFFECT OF THE PROPOSAL:** This proposal would ban the use of .223 caliber full metal jacketed bullets for the taking of big game in Units 1, 2, 3 and 4.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: The department agrees with the author that wounding loss is something we should be concerned with, but we don't believe that this proposal is necessary to accomplish that objective. Wounding loss is a concern in Southeast Alaska where targeted species can escape quickly into thick forested habitats if ammunition doesn't have sufficient shock power. We use hunter education as an outreach tool to emphasize the need to achieve proficiency in the use of their firearms and to take only safe and effective shots at their target. Hunters must also be aware of the capability of their firearm and the choice of bullets they use, determined by the species of big game they are hunting. These principles are all important, and apply to any firearm regardless of the caliber or of the ammunition being used.

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**DRAFT  
RECOMMENDATIONS  
BOARD OF GAME PROPOSALS**

**November 2008**

*Proposals 49 - 56  
(Non Region I deferred proposals)*

*Alaska Department of Fish & Game*

*Division of Wildlife Conservation*

*The Department's recommendations are based on analysis of the proposals with available information. These recommendations may change after further analysis based on public comment or additional information.*



## **PROPOSAL 49**

**EFFECT OF THE PROPOSAL:** Allow harvest of black bears in Unit 25D using customary and traditional bag limit and methods including taking females, denning, snaring, and taking from a boat while bears are swimming.

**DEPARTMENT RECOMMENDATION:** **Amend and Adopt**

**RATIONALE:** Taking black bears from dens is currently allowed under hunting regulations, and there is no closed season with a bag limit of 3 bears in Unit 25D. However, females with cubs and cubs cannot be taken. The Department does not support taking any bear year-round. We recommend amending this proposal to allow taking of any bear at dens only during October 15 – May 1 and using artificial lights only at dens during this period to facilitate harvest. The Department does not recommend use of snares unless implemented and monitored under a predator control program.

The proponents would like to take black bears in Unit 25D using customary and traditional methods to help provide for long-standing practices for obtaining meat, as well as providing the associated benefit of helping manage black bear predation on moose calves in their hunting areas. The Board has made a positive customary and traditional use finding for black bears and set an amount necessary for subsistence in Unit 25 of 150–250 black bears. The Board has also identified the moose population as important for high levels of human consumption. The moose population is extremely low (0.2–0.3 moose/mi<sup>2</sup>) in the unit and black bear predation is an important source of moose calf mortality. In addition, black bears are abundant (3000–6800, based on extrapolations from other interior populations) and are lightly harvested (average 100/yr, based on Council of Athabascan Tribal Government household surveys during regulatory years 2004–06).

The requested regulatory changes would recognize traditional practices, thus harvest is likely to be similar to existing levels in 25D. To acknowledge the customary and traditional uses of bear for meat during the winter months, the Department recommends amendments to methods and means that would:

- restrict this type of method to residents only (5 AAC 85.015)
- allow the take of any bear from dens during October 15 – May 1 (5 AAC 92.085; 5 AAC, 5 AAC 92.260)
- allow the use of artificial light for such activity (5 AAC 92.080), and
- require the salvage of meat from any bear taken during this activity (5 AAC 92.200).

This traditional activity is based on local knowledge which generally focuses on known black bear dens. Crafting the regulation to allow the take of any bear would allow the occasional take of incidental brown bear if the den was misidentified. The use of artificial light would be allowed for safety reasons at dens, and since this is a meat gathering activity, meat salvage would be required.

Black bear harvest will be monitored using periodic household surveys in Unit 25D.

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### **PROPOSAL 50**

EFFECT OF THE PROPOSAL: Allow wolf denning in Unit 19

DEPARTMENT RECOMMENDATION: **Do Not Adopt**

RATIONALE: Taking wolves from dens is currently allowed under hunting regulations and the hunting season in Unit 19 is August 1–May 31, with a bag limit of 10 wolves. In addition, ongoing wolf control programs in Units 19D East and 19A have resulted in wolf population decreases.

\*\*\*\*\*

### **PROPOSAL 51**

EFFECT OF THE PROPOSAL: Allow harvest of any black bear from dens in Unit 19 intensive management areas by Alaska residents.

DEPARTMENT RECOMMENDATION: **Amend and Adopt**

RATIONALE: The Department recommends amending this proposal to allow taking of any bear using artificial lights only at den sites during October 15 – May 1 under hunting regulations. The Department also recommends this proposal apply only the Unit 19 D East and Unit 19A predator control areas. The proponents wish to take black bears using traditional practices for subsistence purposes, and also are concerned about the effectiveness of bear removal efforts in control areas. Black bears are abundant in both control areas (Unit 19D East=1750–2650, Unit 19A=2475–2970) and very few have been taken (Unit 19D East estimated average=5–6/yr; Unit 19A estimated average=41–56/yr).

Under hunting regulations, taking black bears from dens is currently allowed in both units, and there is no closed season with a bag limit of 5 bears. Under predator control regulations, taking black bears from dens is also allowed in the Experimental Micro Management Area in Unit 19D East, during July 1 – June 30 with no bag limit. However, females with cubs and cubs may not be taken under any current regulations.

To acknowledge the customary and traditional uses of bear for meat during the winter months, the Department recommends amendments to methods and means in Unit 19 predator control areas that would:

- restrict this type of method to residents only (5 AAC 85.015)
- allow the take of any bear from dens during October 15 – May 1 (5 AAC 92.085; 5 AAC, 5 AAC 92.260)
- allow the use of artificial light for such activity(5 AAC 92.080), and
- require the salvage of meat from any bear taken during this activity (5 AAC 92.200).
- 

This traditional activity is based on local knowledge, which generally focuses on known black bear dens. Crafting the regulation to allow the take of any bear would allow the occasional take

of incidental brown bear if the den was misidentified. The use of artificial light would be allowed for safety reasons at dens, and since this is a meat gathering activity, meat salvage would be required.

Adopting this proposal would provide for harvest of bears under traditionally practiced methods and time periods, and thus may result in similar or somewhat increased numbers of animals harvested, which could benefit predator management objectives. Unit 19D East harvest is monitored through the existing sealing requirement and Unit 19A harvest will be monitored using periodic household surveys.

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#### **PROPOSAL 52**

EFFECT OF THE PROPOSAL: Allow harvest of bears in Units 21B, 21C, 21D and 24 during September 25–May 1 using customary and traditional bag limit and methods including taking any bear, and denning.

DEPARTMENT RECOMMENDATION: **Take No Action**

RATIONALE: See analysis and recommendation for proposal 53.

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#### **PROPOSAL 53**

EFFECT OF THE PROPOSAL: Allow harvest of bears in Units 21B, 21C, 21D and 24 during September 25–May 1 using customary and traditional bag limit and methods including taking any bear, denning, and using artificial lights.

DEPARTMENT RECOMMENDATION: **Amend and Adopt**

RATIONALE: The Department recommends amending this proposal to allow taking of any bear using artificial lights only at den sites during October 15–May 1. Delaying the starting date will assure that most black bears are in dens.

The proponents would like to take any black bear using customary and traditional methods as part of a pattern of subsistence use in this area. The Board has made a positive customary and traditional use finding for black bears in these units, and black bears are likely abundant (2000–4000) and are lightly harvested (50–180 estimated annual take). Although taking black bears from dens is currently allowed under hunting regulations, and there is no closed season for black bears in these units, with a 3 bear bag limit, it is constrained by the prohibition against taking cubs or females with cubs and the prohibition against using artificial light. This proposal would recognize long-standing practices and thus the resulting harvest is likely to be largely similar to past levels. To acknowledge the customary and traditional uses of bear for meat during the winter months, the Department recommends amendments to methods and means in Units 21B, 21C, 21D, and 24 that would:

- restrict this type of method to residents only (5 AAC 85.015)

- allow the take of any bear from dens during October 15 – May 1 (5 AAC 92.085; 5 AAC, 5 AAC 92.260)
- allow the use of artificial light for such activity(5 AAC 92.080), and
- require the salvage of meat from any bear taken during this activity (5 AAC 92.200).

This traditional activity is based on local knowledge, which generally focuses on known black bear dens. Crafting the regulation to allow the take of any bear would allow the occasional take of incidental brown bear if the den was misidentified. The use of artificial light would be allowed for safety reasons at dens, and since this is a meat gathering activity, meat salvage would be required.

Black bear harvest can be monitored using periodic household surveys in the area, with sealing required if bears are transported out of the area.

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#### **PROPOSAL 54**

EFFECT OF THE PROPOSAL: Modify the Upper Yukon/Tanana predation control implementation plan to allow taking of any black or brown bear, use of snares, same-day-airborne, sale of tanned and untanned hides and skulls, and to establish a working group to develop recommendations for the bear portion of the control program.

DEPARTMENT RECOMMENDATION: **Defer**

RATIONALE: The Department recommends deferring this proposal until the March 2009 meeting in Anchorage when the predation control implementation plan is scheduled for reauthorization. More complete grizzly bear and moose information will be available at that time to help guide the decision-making process. That information is expected to include results of 1998–2008 moose population trend analyses and a preliminary assessment of how extensive wildfires that occurred in the control area during 2004 and 2005 may have influenced grizzly bear predation on moose calves. In addition, an intensive management plan that will serve as an overall guide for actions needed to increase moose and caribou populations will be presented to the Board.

\*\*\*\*\*

#### **PROPOSAL 55**

EFFECT OF THE PROPOSAL: Liberalize methods and means, seasons and bag limits for the taking of wolf, black bear and brown bear in areas with positive intensive management findings.

DEPARTMENT RECOMMENDATION: **Do Not Adopt**

RATIONALE: This proposal recommends comprehensive changes to methods and means and bag limits for allowing the take of wolves and bears across much of the Alaska. It suggests a two-step process for implementing predator control in intensive management areas, but doing so under general hunting regulations. The first step is to require advisory committee approval to

remove the prohibition on "denning" of wolves in the committee's area of jurisdiction. The second step would then implement a series of general hunting season extensions for wolves, and liberalizing the bag limits for black and grizzly bears. It would allow the take of any bear in any area identified as important for providing high levels of consumptive use of moose, caribou, or deer where the population or harvest objectives are not being met.

The Department does not support a regulation granting authority to advisory committees to suspend current wolf denning prohibitions in wolf predation control programs (5 AAC 92.110). Advisory committees serve a very important and useful advisory role to the Department and Board, and they are given special status in statute. However, the Department recommends that the Board process itself is the best public decision-making venue for evaluating controversial methods of managing wolves in Alaska.

Although taking wolves at/in dens is currently prohibited under trapping regulations (5 AAC 92.095 (a)(1)) and under wolf predation control regulations (92.110); it is not prohibited under hunting regulations (5 AAC 92.080, 5 AAC 92.085). This regulatory inconsistency confuses the public and blurs the distinction between trapping, hunting, and predator control regulations. The Board may wish to address this issue at the current or future meetings.

The Department supports case-by-case implementation of predator management programs methods in areas with high levels of predation. We support a thorough a full public process where plans are developed, predator, prey and habitat ecology are discussed and decisions are carefully made that are site-specific. This is especially important concerning the more controversial methods of taking predators.

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#### **PROPOSAL 56**

EFFECT OF THE PROPOSAL: Create special hunts for disabled veterans for big game species on all military lands and some federal and state lands.

DEPARTMENT RECOMMENDATION: **No Recommendation**

RATIONALE: Creation of special hunts for disabled veterans is an allocation issue. The Department recommends that if the Board desires to establish special hunts for disabled veterans, they should start with moose hunts on the road system, since these provide opportunities with suitable access and relatively high moose densities.

Example areas where these hunts could reasonably be accommodated include the following:

- Unit 14C Fort Richardson (DM422; currently a muzzleloader hunt with 20 permits available)
- Unit 14C Elmendorf Air Force Base (DM 428, DM429, DM430; currently certified bow hunts with 25 permits available)
- Unit 20B Fairbanks – Creamer's Field (DM789; currently a muzzleloader hunt with 10 permits available)

- Unit 20D Delta Junction (DM 798 and DM799; currently more than 500 antlerless permits available)
- Unit 20D, Delta Junction Management Area (Bull with spike-fork or 50-inch with 4 or more brow tines on at least one side; currently 10 permits available)

Next, the Board should establish the allocations among users. This could be a total number of permits or a percentage. Finally, the Board will have to establish criteria for qualifying for these hunts. In the case of restricted weapons hunts, this might include how to modify certification requirements to accommodate disabled veterans.

The Department suggests that the hunter possess a Disabled Veteran's hunting and fishing license as the measure for qualification, noting that these qualifications are in statute and differ from other disabled access programs that the Department currently uses.

The Department recommends developing criteria at the Juneau meeting to present a proposal for comment at the March 2009 Board meeting. This would allow adequate public notice and comment on the details of the proposed hunts. Deferring the final proposal details will not prevent the hunts from occurring next hunting season and allow for a specific proposal for public comment.

# Region I Overview

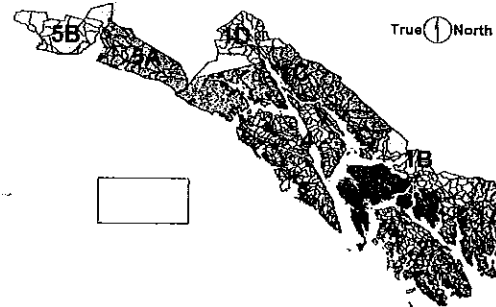
## Region I Overview

### ALASKA BOARD OF GAME

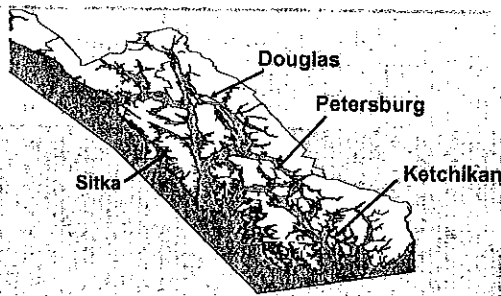
Juneau  
November 2008

Dale Rabe  
Regional Supervisor

## Game Management Units



## Area Offices



## Staffing

### 25 Full Time & Seasonal Staff

#### Management Coordinator

• Neil Barten (Douglas)

#### Area Biologists

- Boyd Porter (Ketchikan) / Steve Bethune (Craig) – Units 1A & 2
- Rich Lowell (Petersburg) – Units 1B & 3
- Phil Mooney (Sitka) – Unit 4
- Ryan Scott (Douglas) / vacant assistant AB – Units 1C, 1D, & 5

#### Research Biologists

- Dave Person (Ketchikan)
- Rod Flynn, Kevin White, Steve Lewis, Karin McCoy (Douglas)

#### Wildlife Technicians

- LaVern Beier, Chad Rice, Carl Koch, Jeff Jamison (Douglas)

## Budget

### FY09 - \$3.2 million

- Federal Aid / Fish and Game: \$2.1 million
- General Fund: \$0.5 million
- Special Project Funds (FWS, FS): \$0.2 million
- Juneau Access Funds (DOT): \$0.4 million

## Research

- Marten (Kuiu Island, Admiralty Island)...
- Wolverine (Units 1B & 1C)
- Brown bears (Units 1A, 1B, & 1C)
- Black bears (Unit 2)
- Elk (Unit 3)
- Deer
  - Population survey techniques (Unit 2)
  - Predation (Unit 2)
  - Habitat use (Unit 2 & 4)
- Moose (Gustavus, Berners Bay)
- Mountain goats (Berners Bay – Katzein River)
- Spruce grouse (Prince of Wales & Zarembo)



# Region I Overview

## Other Programs

Pack Creek (Brown Bear Viewing)  
Juneau HE Shooting Facility  
Nongame  
Marine Mammals  
Education & Outreach

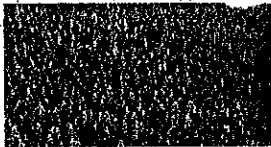


## Land Ownership

- Tongass National Forest
  - 69,000 km<sup>2</sup> (76%) of lands in Southeast
- Glacier Bay National Park
  - 13,300 km<sup>2</sup> (15%) of lands in Southeast
  - No hunting in park
- Remaining lands (~9%) in state or private ownership

## Forest Management

- Tongass Land Management Plan amendment (January 2008)
- Wildlife monitoring agreement
- New habitat biologist to coordinate with Forest Service



## Hunting Access

- Road systems associated with logging
  - Prince of Wales (Unit 2)
  - Mitkof, Wrangell, Kupreanof, Kuiu (Unit 3)
  - Northeast Chichagof (Unit 4)
- Boat and float plane access to coastal areas
- Limited float plane access to freshwater lakes

## Population Surveys

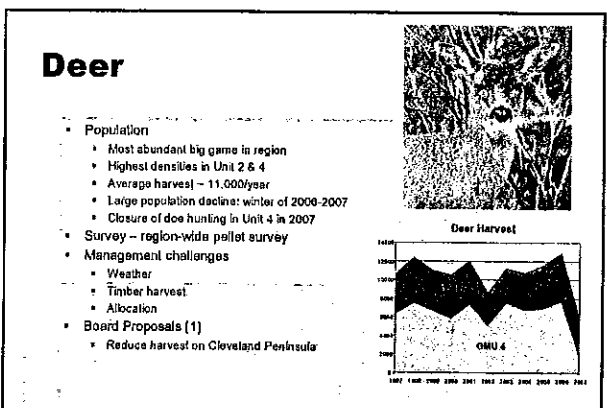
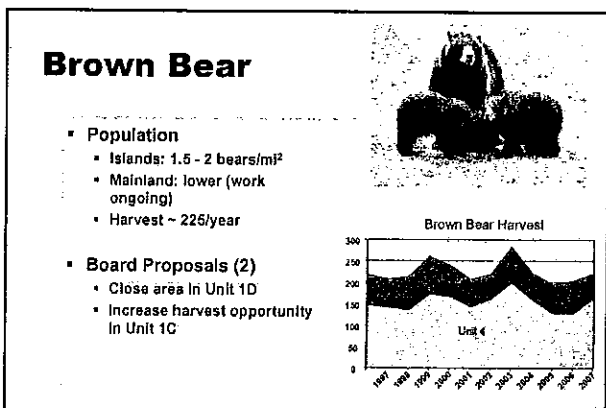
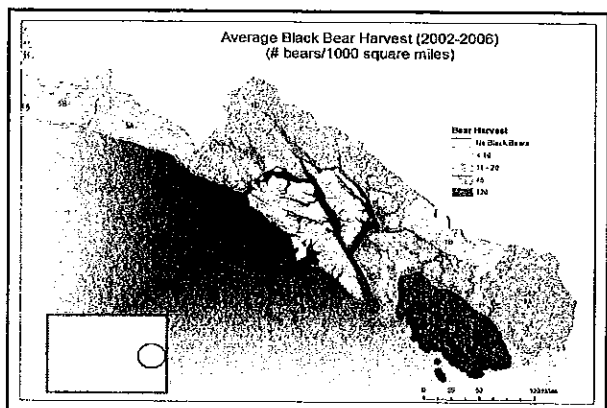
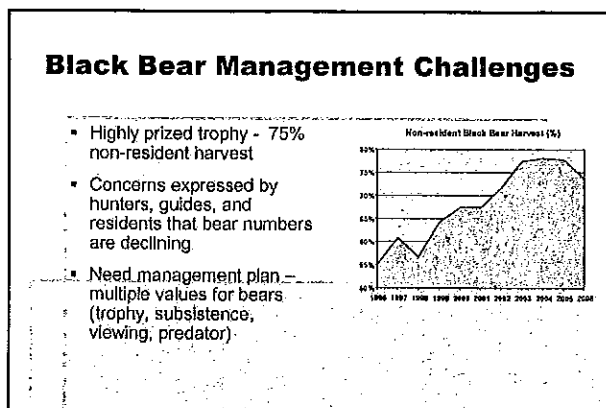
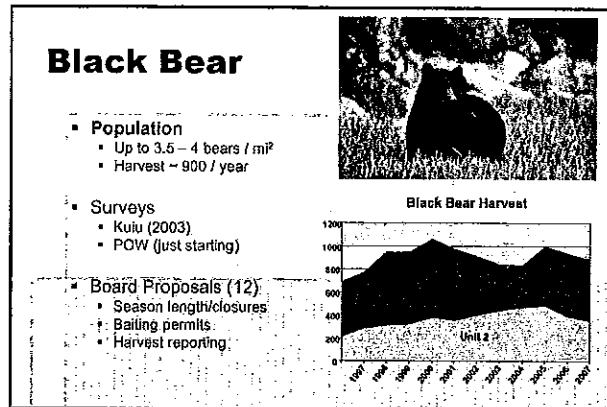
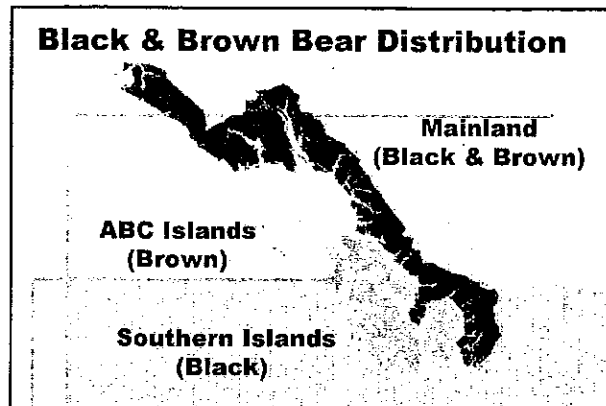
- Forest cover makes seeing animals difficult
- Aerial surveys (moose & goats)
  - Cost of flight time
  - Availability of aircraft
  - Weather related limitations
- Ground-based surveys
  - Pellet (deer)
  - Hair-snaring (brown & black bears)
- Little to no survey work (elk, wolves, & furbearers)

## Game Management

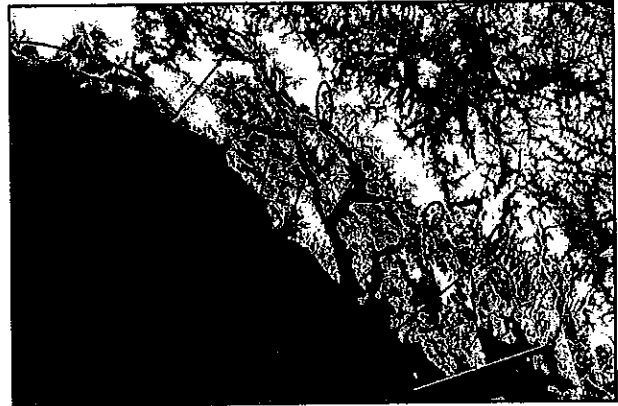
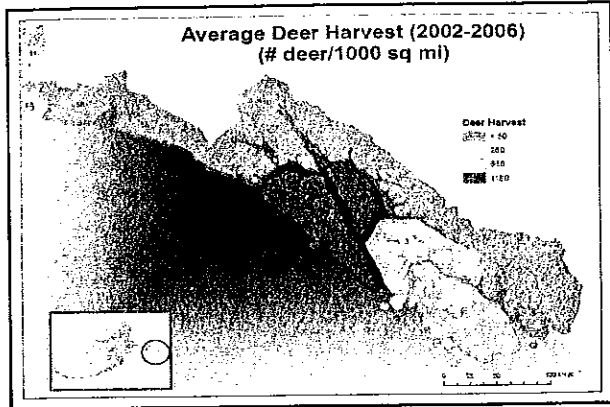
- Major hunted and trapped species in the region
  - Black bear
  - Brown bear
  - Deer
  - Moose
  - Goat
  - Wolf
  - Furbearers
- Focus on species with proposals before the Board



# Region I Overview

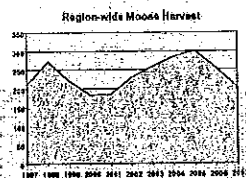


# Region I Overview



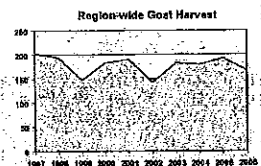
## Moose

- Population ~ 3,800
  - Occur in Units 1, 3, and 5
  - Harvest ~ 250/year
- Management challenges
  - Gustavus -- range expansion
  - Using antler configuration for harvest management
- Board proposals (7)
  - Antler configurations
  - Close antlerless season (Gustavus)
  - Change Title II (Haines)

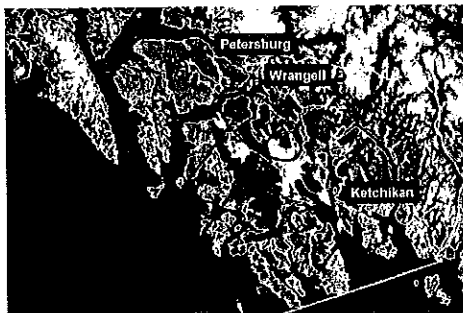


## Mountain Goat

- Population: 10,000 – 15,000
  - Occur in Units 1, 4, & 5
  - Transplanted to Baranof Island (Unit 4) and Revilla Island (Unit 1A)
  - Stable or increasing
  - Harvest ~ 175/year
  - Point system (male = 1; female = 2)
- Board proposals (2)
  - Increase bag limit (Unit 1A)
  - Open new area (Unit 1D)

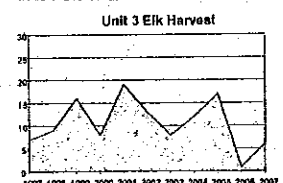


## Elk Distribution Map



## Elk

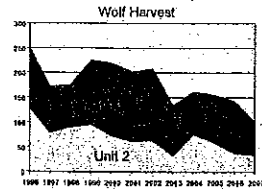
- Population ~ 400?
  - Primarily on Etolin and Zarembo Islands
  - Low harvest ~ 10/year
- Board Proposals (1)
  - Alternate archery and firearm method of hunt



# Region I Overview

## Wolf

- Population
  - Occur in Units 1, 2, 3, & 5
  - Highest densities in 2 & 3
  - Harvest ~ 180/year
- Management Challenges
  - Unique subspecies in Unit 2
- Board Proposals (7)
  - Expand hunting and trapping opportunity
  - Restrict harvest



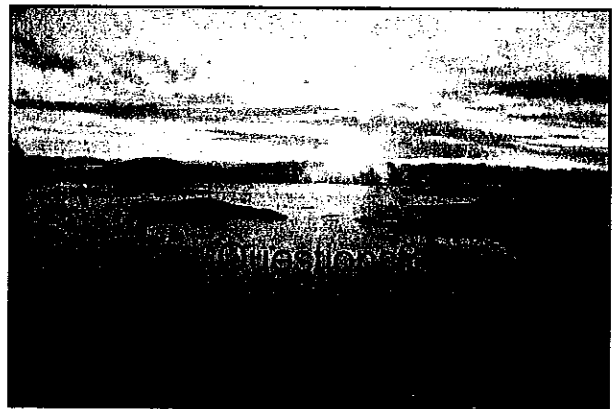
## Furbearers

- Average Harvest
  - Marten ~ 2,800
  - River Otter ~ 750
  - Beaver ~ 400
  - Wolverine ~ 20
  - Lynx ~ 3
- Board Proposals (12)
  - Season dates
  - Marking traps
  - Shooting beaver
  - Closures & buffers on hiking trails



## Other Management Issues

- Forest management: long-term implications for wildlife
- Federal Subsistence (dual regulatory system)
- Chilkoot River people-bear conflicts
  - State parks, Haines Borough, DOT, others
- Mendenhall Refuge
  - Accretion
  - Fewer user conflicts



## SITKA AREA OVERVIEW

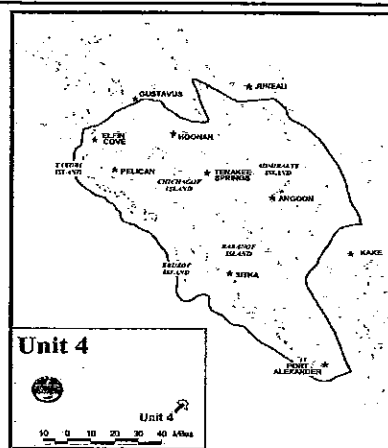
### GMU 4

BOARD OF GAME

NOVEMBER 2008

### GAME MANAGEMENT UNIT 4

- ~ 5,800 square miles
- Population ~ 14,000.
- Admiralty Is. (~1700 sq. mi.), Baranof Is. (~1870 sq. mi.), Chichagof Is. (~2220 sq. mi.) and ~5,000 miles of coastline
- Healthcare, government, seafood processing, services, education and tourism are the major forces in the economy.



### DWC PERSONNEL

#### • Area Biologist

– Phil Mooney



#### • Program Technician

– Holley Dennison



### Sitka Area Office



#### Sport Fish

- Monica Matz - Admin Clerk III

#### Commercial Fisheries

- Anne Davis -- Program Tech
- Kristen Case -- Admin Clerk III



## BROWN BEAR

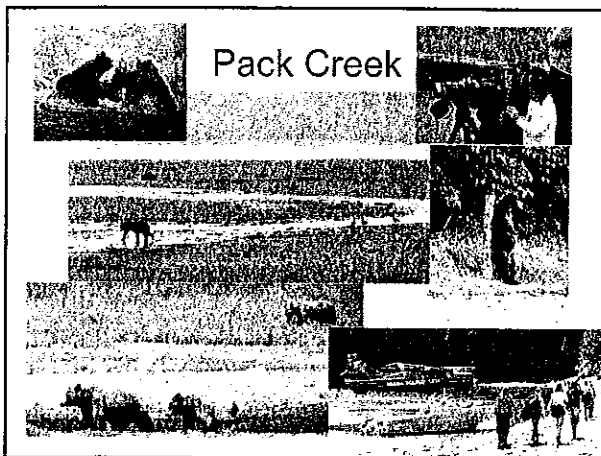


- Population density in excess of 1 bear/sq. mi.
- To date, harvest has been under 4% of population (~140-200 yearly)
- Nonconsumptive uses very important
- Problems / DLPs
- U4BBMT



Since 2000:

- Brown bear hunter harvest has averaged 153 bears/yr
- NR hunters averaged 100 bears/yr
- R hunters averaged 42 bears/yr
- DLP/illegal kills averaged 17 bears/ yr
- Average 752 permits issued/year



Pack Creek



## SITKA BLACK-TAILED DEER

- High subsistence use of meat
- Very important for recreation (~60% of SE harvest)
- Weather is population's limiting factor



•Winter of 2006-07 had record for snow depth. March 2007 snowfall cut the population from 45-80%

•Doe closure for NE Chichagof area Issued Nov 07 and Oct 08

•NE Chichagof deer project will begin spring 2009

Except for NE Chichagof, bulk of unit indicates a rebounding population.



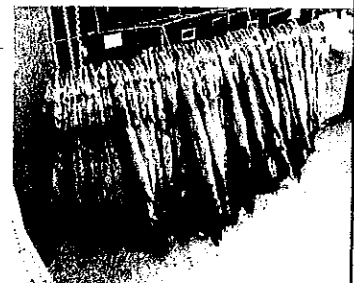
## MOUNTAIN GOAT



- Found only on Baranof Island - transplanted population (1923 - 18 animals)
- Important local species; estimated population 1,000-1,200
- Harvest 40-78 annually (~5%)

## MARTEN

- Annual harvest 250 - 2,225 animals (fur value 05-06 ~ \$258K - up from \$90K two yrs ago). 2007 values \$140/pelt.
- Populations have declined since 2006, but prices are up
- Habitat changes may reduce populations



## RIVER OTTER



- Populations stable and healthy
- Annual harvest has declined by 40% since 2006 (higher marten value affected trapper effort)

## MINK



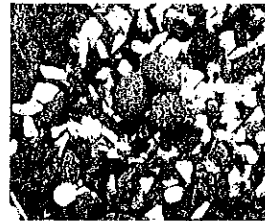
- Previous low pelt prices have risen to ~\$18
- No sealing required
- Populations generally at or near carrying capacity

## OTHER GAME / FUR SPECIES

- BEAVER / ERMINE
- PTARMIGAN / BLUE GROUSE
- WATERFOWL

## NONGAME

- Incidental observations and documentation



2006 Black Oystercatcher surveys



Programs

## MANAGEMENT CONCERNS



Habitat alteration due to logging – amount and location of 2<sup>nd</sup> growth stands and their treatment

- Second growth thinning
- Timber sale layout
- Small salvage timber sales, personal-use
- Road Issues –
  - New road development
  - Old road decommissioning
  - ATV use
  - Road maintenance (bridges, etc.)

## MANAGEMENT CONCERNS

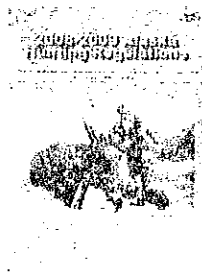
Brown  
bear/human  
interactions



## Management Concerns



## MANAGEMENT CONCERNS



Confusion over  
state/federal  
regulations



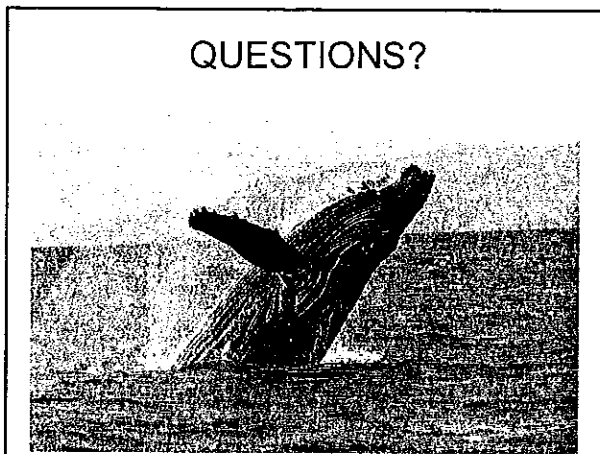
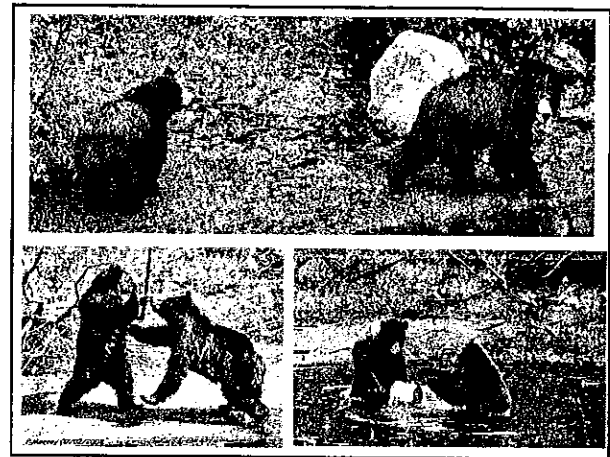


## Projects

- Collared bear locations mapped as High School project
- Sitka PD urban bear training
- Pack Creek collared bears
- Marbled murrelet surveys
- NE Chichagof deer collaring

### Fortress of the Bear

•Permitted in July 2007  
 •2 COY entered the facility (July 27 and Sept 20, 2007)



***Proposal 43***

Would allow deer to be bartered in Unit 1

Public Proposal

Department Recommendation

No Recommendation

Proposal 43

***Discussion***

- Barter is the exchange of fish or game, or their parts, taken for subsistence uses AS 16.05.940(2). It does not involve cash and is not a commercial activity.
- Unless specifically authorized, the barter of meat from a big game animal is prohibited by a statewide regulation (5 AAC 92.200 (b) (8)).
- This regional proposal may not provide the means for the Board to evaluate this issue now, but there may be options to address this topic at a subsequent meeting.
- The department has very limited information at this time to evaluate the extent of customary and traditional barter of game meat taken for subsistence uses in Unit 1.

Proposal 43

***Conclusion***

Department Recommendation

No Recommendation

Proposal 43

### ***Proposal 46***

This proposal would shorten wolf hunting seasons in Units 1, 3, 4, and 5, from (Aug. 1- April 30) to (Sept. 1-March 31)

Public Proposal

Department Recommendation

Do Not Adopt

Proposal 46

### ***Discussion***

- Authors of this proposal state that this simply returns the season back to pre-2004 dates
- They believe the 2004 BOG action that lengthened the season should be reversed

Proposal 46

### ***Discussion***

- A shorter season was adopted by the BOG for 2003-2004; this action was reversed by the Board in 2004
- The wolf hunting season is presently the same as it was from 1992-2002, and again since 2005

Proposal 46

### ***Discussion***

- Early season (August) deer or goat hunters can harvest a wolf
- The April wolf season allows bear hunters a chance to harvest a wolf
- Wolf populations in these units are widely distributed and healthy

Proposal 46

### ***Discussion***

- ADF&G Advisory committee votes
  - Juneau Douglas (Do Not Adopt)
  - Haines (Do Not Adopt)
  - Petersburg (Do Not Adopt)
  - Ketchikan (Do Not Adopt)

Proposal 46

### ***Conclusion***

The department does not believe shortening the season is necessary

Department recommendation

Do Not Adopt

Proposal 46

### ***Proposal 45***

- This proposal would extend the wolf hunting season in Units 1 and 2 to May 31
- Current season dates in Unit 1 are August 1 - April 30 and December 1 - March 31 in Unit 2

Public Proposal

Department Recommendation  
Do Not Adopt

Proposal 45

### ***Discussion***

- Author of proposal would like to extend the season to allow bear hunters opportunity to harvest wolves during May
- Department does not support lengthening the hunting seasons for wolves in these units
- Unit 1 ending date prevents harvest during pupping
- Unit 2 ending date was adopted to protect wolves from overexploitation in this heavily roaded area

Proposal 45

### ***Discussion***

- ADF&G Advisory committee votes
  - Juneau Douglas (Do Not Adopt)
  - Haines (Adopt)
  - Petersburg (Adopt)
  - Ketchikan (Take No Action)

Proposal 45

### ***Conclusion***

- Present season in Unit 1 is 9 months, providing ample opportunity
- Present season in Unit 2 provides protection from overharvest

Department recommendation

Do Not Adopt

Proposal 45

**Proposal 47**

This proposal would change the season dates in the Southeast Alaska waterfowl hunting zone (Units 1 – 4) from Sept 1 – Dec 16 to start in early October and end in mid-January

Public Proposal

Department Recommendation

No Recommendation

Proposal 47

**Federal Waterfowl Framework**

- Fish and Wildlife Service has authority for managing waterfowl
- Current state authority to structure waterfowl season:
  - Uniform season across zone
  - Maximum date range: Sept 1 – Jan 26
  - Maximum season length : 107 days
- Future options
  - Proposals to split the zone or to split season are eligible for consideration every five years (next in 2011)

Proposal 47

**Splitting Season or Zone**

- These changes require federal approval and must be justified on the basis of creating equitable opportunity – not just higher harvest
- Rationale should illustrate differences in migration paths, migration timing, habitat conditions, and weather/climate patterns.

Proposal 47

**Background - 1996**

- Proposal to shift season to Oct 8 – Jan 22 in Unit 4
- AC Support
  - Icy Straits: Opposed
  - Gastineau Channel: Opposed
- Board failed to support proposal
  - State does not have authority to enact multiple season dates within a hunting zone

Proposal 47

**Background - 1998**

- Proposal to shift season to Oct 8 – Jan 22 in Unit 4
- AC Support
  - Sitka: Support
  - Edna Bay: Opposed
  - Petersburg: Opposed
- Board discussed other options and voted to request a zone split from the Flyway Council
- Fish and Wildlife Service did not allow a zone split at that time

Proposal 47

**Background - 2000**

- Proposal to shift season to Oct 8 – Jan 22 in Units 1 – 4
- AC Support
  - Edna Bay: Support
  - Juneau/Douglas: Opposed
- Board discussion also considered zone and season splits
- Board failed to support any changes (0-7)

Proposal 47

BOG-Juneau-Nov 2008

### Background - 2006

- Proposals to shift season to Sept 15 – Dec 31 in Units 1 – 4
- Informal polling of hunter preference by staff suggested some preference for change
- AC Support
  - Juneau AC: Neutral
  - Upper Lynn Canal AC: Opposed
  - Wrangell AC: Support
- Board failed to support any changes (split vote, 2-4)
- Department committed to conduct a comprehensive survey of hunter preferences for next board cycle

Proposal 47

### 2008 Survey of Hunter Preferences

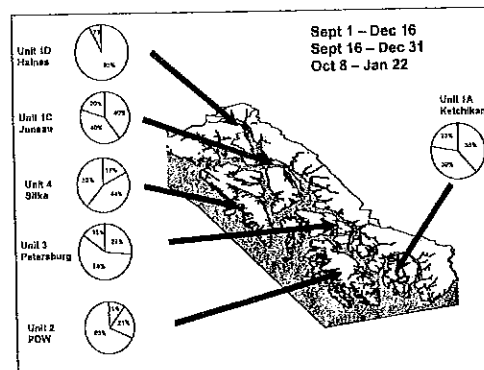
- Random survey of 2006 waterfowl hunters living in Southeast Alaska
- Two question survey
  - Preference of starting dates
    - Sept 1 – Dec 16 (current season)
    - Sept 16 – Dec 31 (two weeks later)
    - Oct 8 – Jan 22 (five weeks later)
  - Desire to have split season

Proposal 47

### SE Waterfowl Hunter Statistics

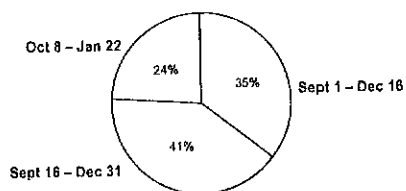
GMU (Town)	Waterfowl Hunters	# Sampled	# Responded
1A (KTN)	168 (12%)	84 (50%)	31 (37%)
2 (POW)	91 (7%)	46 (50%)	19 (41%)
3 (FSG)	263 (19%)	127 (50%)	43 (34%)
4 (SIT)	154 (11%)	77 (50%)	26 (34%)
1C (JNU)	605 (46%)	126 (20%)	49 (39%)
1D (HAI)	75 (6%)	38 (50%)	16 (42%)
	1346	498 (37%)	184 (37%)

Proposal 47



Proposal 47

### Overall Weighted Preference



- The majority (65%) of respondents expressed interest in some shift in season dates to a later start
- Only 25% preferred splitting season dates

Proposal 47

### Pros and Cons

- Pros
  - Better opportunity for late-season ducks
    - Late migrating dabblers & wintering mallards
    - Better ability to select males
    - Sea ducks
  - Hunting during year-end holidays
- Cons
  - Reduces opportunity for harvest of early migrants (small and medium dabblers)
  - May increase harvest of local wintering ducks and geese
  - Poorer weather and shorter daylight hours later in the year

Proposal 47

***AC Support for Proposal***

- **Advisory Committees**
  - Haines – Do not adopt
  - Juneau – Do not adopt
  - Petersburg AC – Amend to mid-Sept to end of Dec.
  - Sitka AC – Support season start on Sept 16

Proposal 47

***Recommendation***

- This is an allocation issue – no biological effects are anticipated

**Department Recommendation**  
**No Recommendation**

Proposal 47

***Current Seasons by Zone***

- North (Interior) – Sept 1 to Dec 16
- Gulf Coast – Sept 1 to Dec 16
- Southeast – Sept 1 to Dec 16
  
- Pribilof/Aleutian – Oct 8 to Jan 22
- Kodiak – Oct 8 to Jan 22

Proposal 47

## Proposal 36

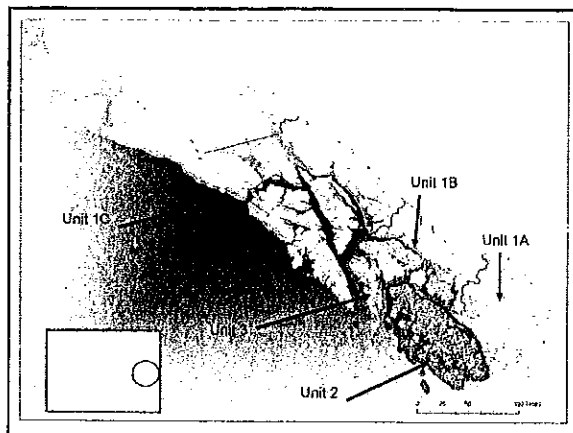
Would close the Sept. 1-14 Fall black bear season for non-residents in Units 2, 1A, B, C, and 3

Staff Proposal

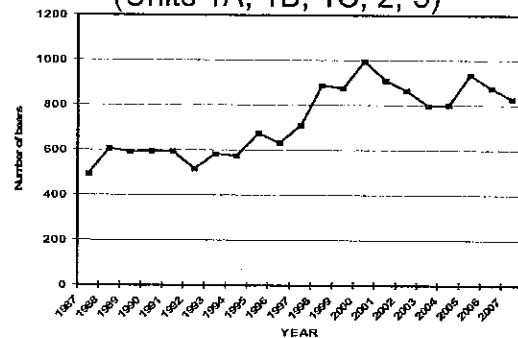
Department Recommendation:  
Adopt

## Introduction

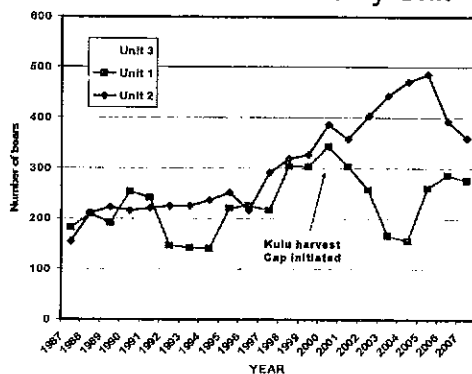
- Geographical location of GMU's in proposal
- Historical black bear harvest across the region
- Potential shift in harvest
- Kuiu Island portion of Unit 3-management history
  - Implementation of a nonresident harvest quota
  - Research findings on black bear population
- Focus on Unit 2 (Prince of Wales Island, POW)
  - Historical harvest
  - Harvest chronology and demography
  - Department proposal rationale (nonres-fall season)
  - Biological data from harvested black bears
  - Kuiu insight into Unit 2
- Domino-effect (a shifting of harvest pressure)
  - Why Units 1A, 1B, 1C, and 3 are areas of concern
- Summary of proposal



## Southeast Black Bear Harvest (Units 1A, 1B, 1C, 2, 3)



## Black Bear Harvest By Unit

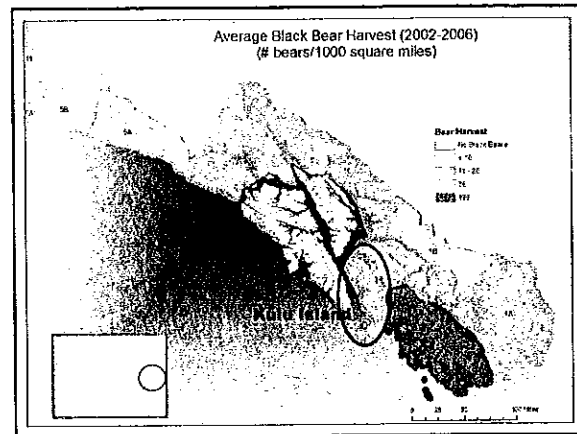


## Management Issue

- Complaints from guides, transporters, local hunters, lodges and other public about low bear numbers
- Few black bear population or bear demographic data

## Outline

- Geographical location of GMU's in proposal
- Historical black bear harvest across the region
- Potential shift in harvest
- Kuiu Island portion of Unit 3-management history
  - Implementation of a nonresident harvest quota
  - Research findings on black bear population
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  - Biological data from harvested black bears
  - Kuiu insight into Unit 2
- Domino-effect (a shifting of harvest pressure)
  - Why Units 1A, 1B, 1C, and 3 are areas of concern
- Summary of proposal



## Background

- During the 1990s, the department had concerns with bear harvest on Kuiu Island
- Rapidly increasing harvest led to Board action initiating a Kuiu harvest cap for nonresident hunters
- Harvest cap was successful in lowering Kuiu harvest, but Unit 2 continued to rise
- Displaced hunter effort is suspected in part for increasing Unit 2 harvest

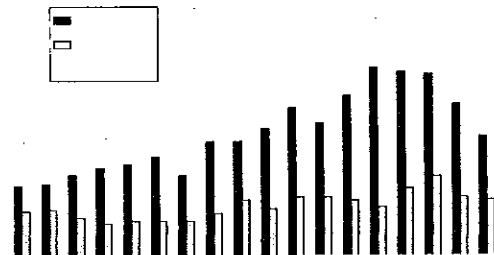
## Kuiu Island

- Implementation of the harvest cap for NR
- Research supported our guideline harvest level

## Introduction

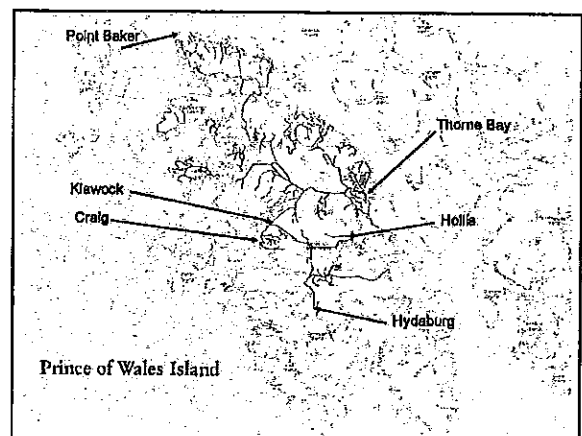
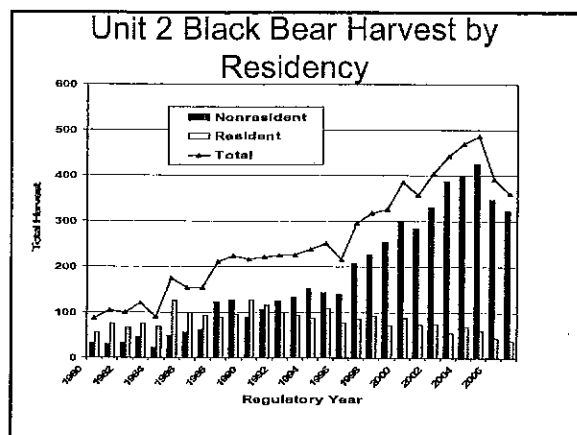
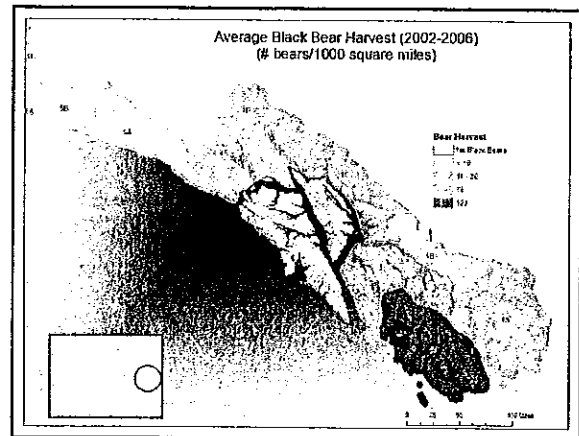
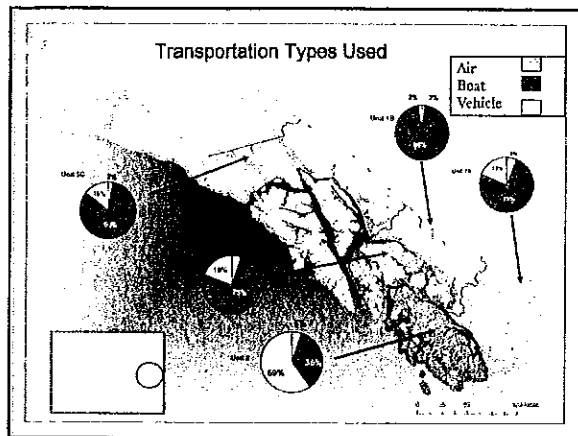
- Geographical location of GMU's in proposal
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  - Historical harvest
  - Harvest chronology and demography
  - Department proposal rationale (nonresident-fall season)
  - Biological data from harvested black bears
  - Kuiu insight into Unit 2
- Domino-effect (a shifting of harvest pressure)
  - Why Units 1A, 1B, 1C, and 3 are areas of concern
- Summary of proposal

## Unit 2 Black Bear Harvest (1990-2007)



Proposal J3





## Unit 2 Road System

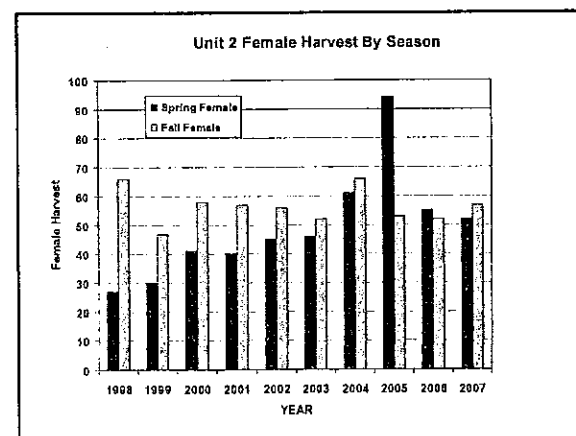
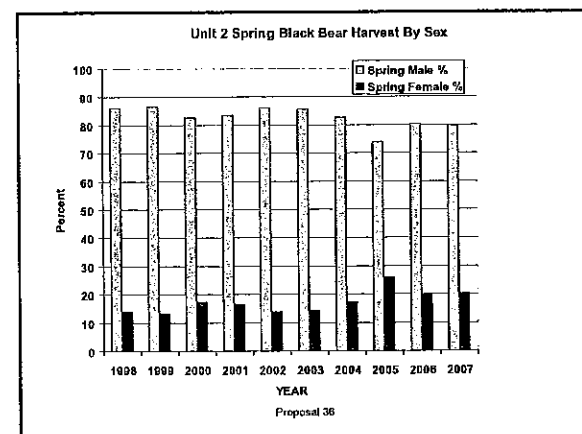
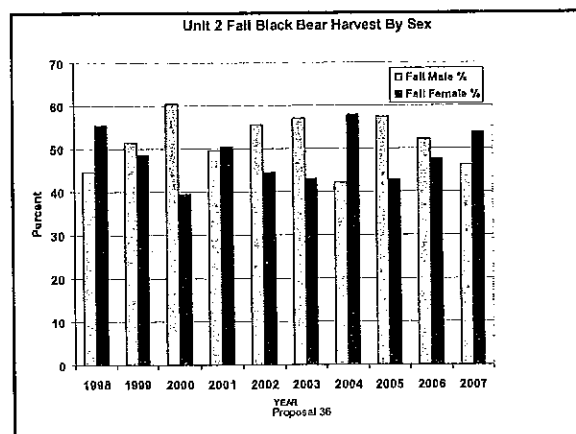
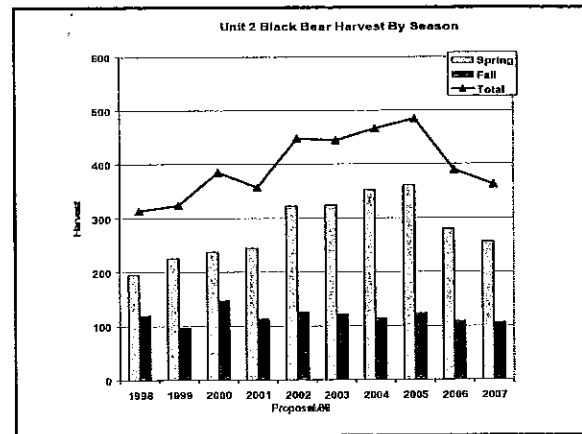
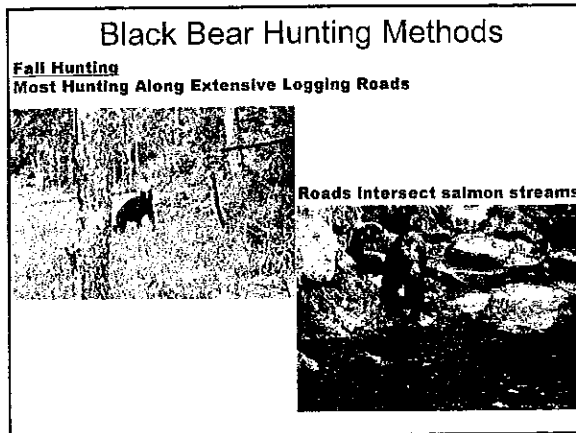
- Over 2,500 miles of roads
- Easy access
- Roads cross streams
- Bears are vulnerable



## Black Bear Hunting Methods

### Spring Hunting





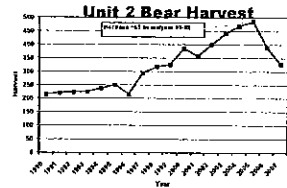
- ### Unit 2 Hunting Summary
- Extensive road system and shoreline and numerous lodges provide nonresidents with world class bear hunting opportunity
  - Nonresidents harvest ~80% of bears in Unit 2
  - Female bears are more heavily harvested in early fall

### Justification For Proposal 36 (Unit 2-Nonresident season restriction)

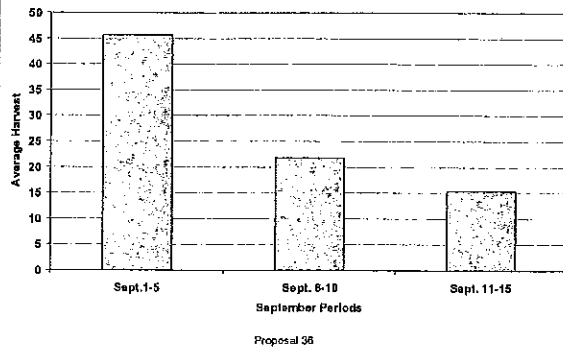
- Female harvest is highest during Sept. 1-15
- Eliminating the early fall nonresident hunt will reduce female and overall harvest
- This regulatory change would still allow nonresident opportunity during spring and after Sept. 14

### Unit 2 Black Bear Harvest (1990-2007)

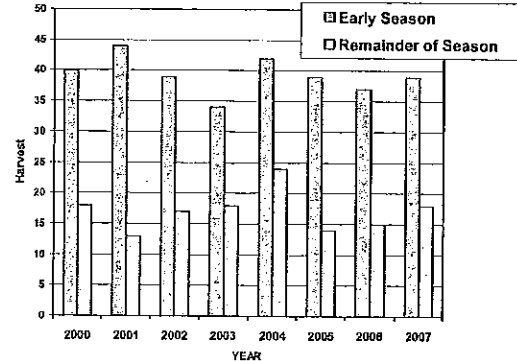
- Harvest increased by ~31 bears annually during 1999-2005
- Decline in harvest during 2006 and 2007 causes concern
- Unit-specific complaints about low bear numbers from guides, transporters, local hunters, etc.



Unit 2 Black Bear Average Harvest By Period  
(1999-2007)



Unit 2 Fall Harvest of Female Black Bears During Sept. 1-15  
and Remainder of Fall Season

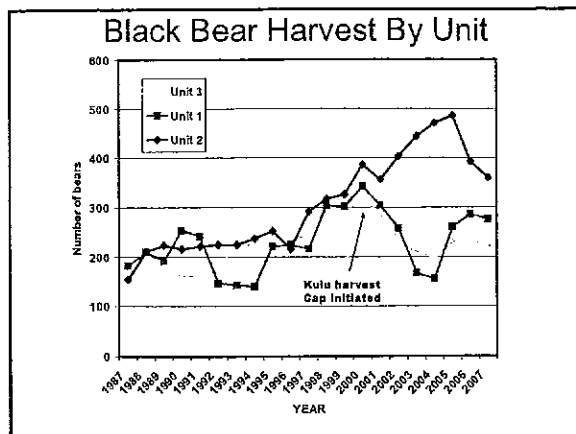


### Unit 2 Short Term Objectives

- Reduce female harvest and total harvest
- Gather additional harvest information (harvest ticket)
- Gather Additional Black Bear Demographics and Life History Information
  - Complete Current Black Bear Pilot Research
  - Implement Larger Scale Unit 2 Research Project And Combine With Fawn Mortality Study

### Justification For Proposal 36 (Units 1A, 1B, 1C, 3)

- Why include these units in addition to Unit 2?
- Harvest increased substantially in these areas until 2000
- Department is concerned about a shift in bear hunting pressure to these areas (problem is moved-not solved – "domino effect")
- Three types of nonresident (NR) hunters
- Transporters and independent NR hunters could shift to areas with open seasons, putting additional hunting pressure in areas that we believe are already maxed out
- In 2001 when the Kulu quota was established, Unit 2 continued to increase



### Justification For Proposal 36 (Units 1A, 1B, 1C, 3)

- Harvest has undergone changing trend in past 8 years-what does this mean?
- Decline in harvest during 2001-2005 raises concern about overharvest
- Complaints from guides, transporters, local hunters and other public about low bear #'s exacerbates concern about decline in bear numbers

### Summary

- Unit 2 is our area of highest concern
- Units 1A, B, C, and 3 are also experiencing high harvest levels
- Reports of fewer bears by many of our constituents support this concern
- We believe this comprehensive approach is necessary to prevent a "domino effect" in hunting pressure from Unit 2 to the other areas

### Alternatives Considered

- Nonresident Harvest Cap
- Fall drawing Hunt For Nonresidents
- Close Nonresident Fall Season Odd Years
- Make No Changes
- Collect More Information and Monitor For 2 More Years
- Close Nonresident Fall Bear Hunting Season
- Control Use Area For Central POW
  - No Motorized Vehicle Use For Nonresident Fall Bear Hunting

### Discussion

- 1) Except for Kuiu Island (2002), no black bear population estimate and associated demographic data
- 2) No quantification of hunter effort
- 3) No hunter success rate

### Recommendation

- Staff Proposal

#### Department Position

- Adopt

## **Analysis of GMU 2 Black Bear Harvest Data 1999–2007**

Submitted by Dave Person

### Objectives

I examined black bear sealing data from 1999–2007 for game management unit 2 to address the following questions:

1. Has there been a significant decline in harvest and are changes unit wide or confined to specific areas, particularly those that are easily accessible?
2. Have harvest rates effected skull sizes, age structure, and sex ratio of bears in the harvest? Are any of those parameters indicators of harvest intensity?
3. What is the influence of accessibility, particularly use of roads, on harvest parameters and does accessibility bias those parameters?

### Study Area and Methods

I used black bear harvest data available on WINFONET but aggregated the data by major harvest units. Scale is an important issue with respect to harvest and biological parameters and I chose major harvest units because they represented a scale at which biological parameters were more likely to characterize discrete population segments than smaller scale units such as WAAs. Further, changes in harvest and hunter effort occur at scales larger than WAAs and are more easily captured at the level of major harvest units. There are 7 major harvest units in GMU 2 (Fig. 1). Major units 9 (Western Outside Islands) and 10 (Heceta Island) were not hunted with sufficient frequency to be included in my analysis. In general, the southern units (11 and 12) have lower density of roads and less timber harvest than the northern units. Nonetheless, both units have substantial density of roads on private timber lands and to a lesser extent on federal lands. The northern portions of both units are accessible from the Inter-island Ferry Authority terminal in Hollis, however, large portions of the units are only accessible by boat or aircraft even though logging roads were built within some of those areas. Major harvest units 13, 14, and 15 encompass the most heavily roaded portion of GMU 2 with most of the area accessible via the Hollis ferry terminal. Those units also are the most heavily logged in the GMU and most roads were built for logging. They also contain almost all of the major towns or settlements in GMU 2. The exception is the village of Hydaburg, which is in unit 11.

I used standard methods of multiple linear regression, logistic regression, cross tabulation, time-series analysis, and graphing to analyze the data. I used average skull sizes adjusted for age and sex and median ages adjusted for sex as measures of central tendency in those parameters when summarizing data within major harvest units. Harvest numbers for males, females, and total harvest were converted to harvest rates per 100 km<sup>2</sup>. All harvest data used to examine trends were first analyzed for serial

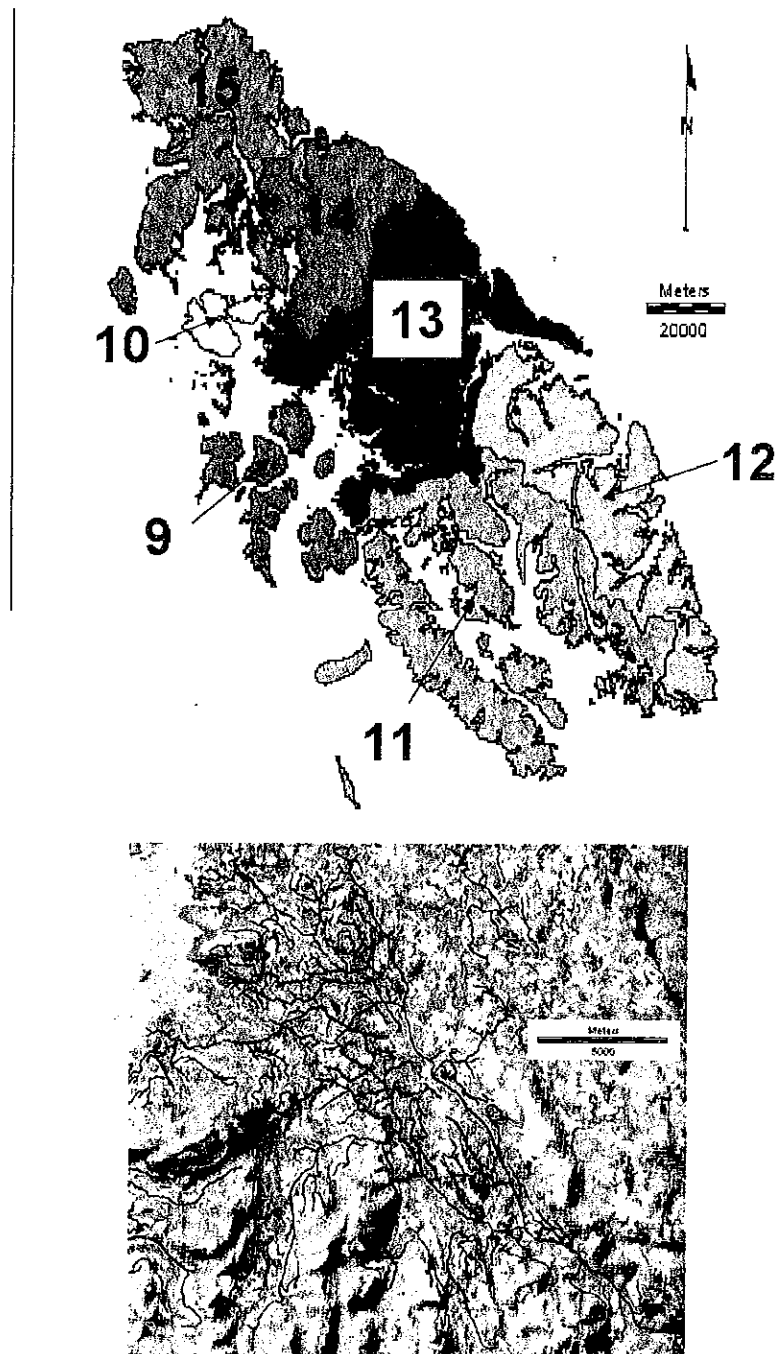


Figure 1. Major harvest units in GMU 2. Lower picture illustrates typical landscape on north-central Prince of Wales Island showing roads and extensive timber harvest (light-dark brown areas).

correlation. If autocorrelation existed in the data, I used linear mixed regression to model the covariance structure and remove the effects of serial correlation. If no serial correlation was found, I used simple multiple regression to model trends.

## Results

*Harvest Trends.*— Harvest of black bears increased from 1999–2007, however, all of the increase occurred during the spring season (Fig. 2). Regression of harvest during autumn 1999–2004 indicated that the slope was not different from 0 ( $F = 0.047$ ,  $P = 0.832$ ) but negative after 2004 ( $F = 109.15$ ,  $P < 0.001$ ). Similar analysis for spring harvest indicated a strong positive trend until 2005 ( $F = 226.84$ ,  $P < 0.001$ ) and a strong negative trend after 2004 ( $F = 22.08$ ,  $P = 0.005$ ). Total harvest steadily declined after 2005 but most of that was due to a decline in the spring harvest. Most of the change from 1999–2007 was accounted for by harvests in units 11, 12 and 13 (Fig. 3). Indeed, harvest in major unit 12 doubled between 1999 and 2006 and then declined significantly, which accounted for much of the increase in total GMU harvest from 1999–2005 and the decline after 2005.

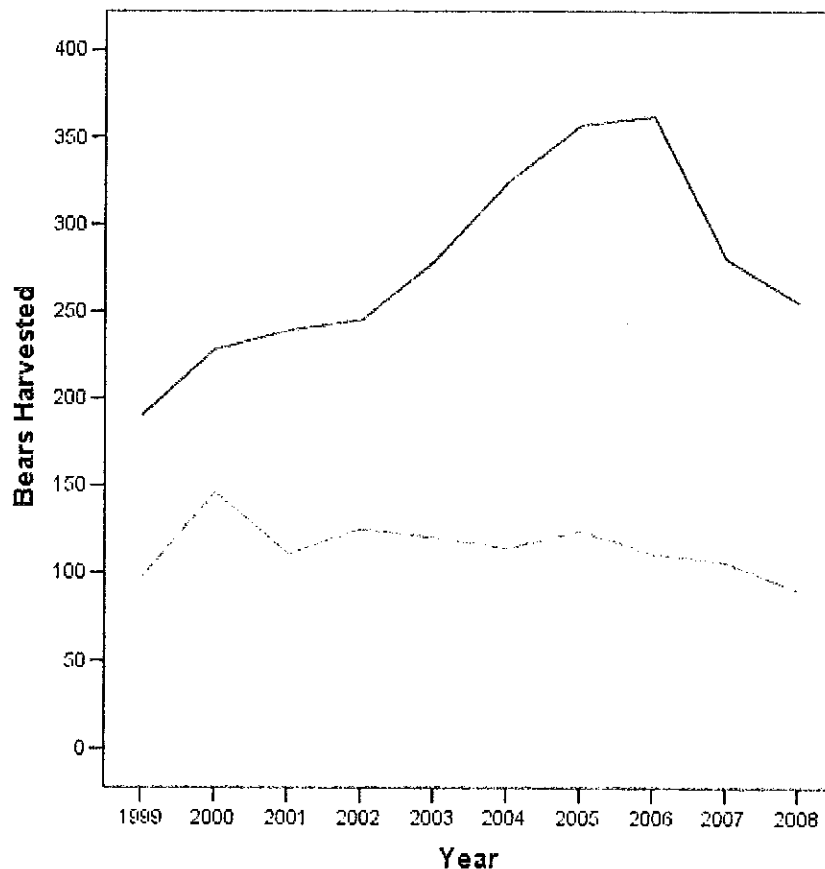


Figure 2. Black bear harvest in GMU 2 by season, 1999–2008. Blue line indicates the spring season and green line represents the autumn season. Data for 2008 are preliminary.

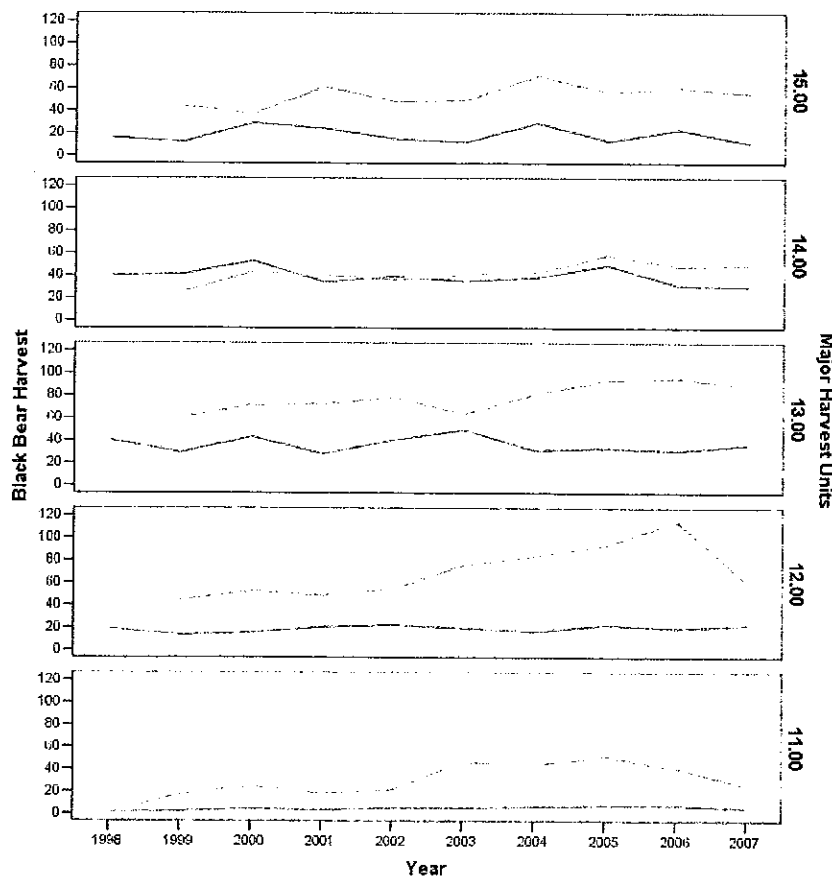


Figure 3. Harvest of black bears by major harvest units in GMU 2 1999–2007. Green line represents harvest during autumn season and blue line represents harvest during spring.

The rate of harvest of females increased in most major harvest units except units 14 and 15 (Fig. 4). Indeed, slopes of regression lines of female rates of harvest in major harvest units versus year were positive ( $P < 0.1$ ) for units 11, 12, and 13. In addition, the proportion of females in the total harvest increased during the last decade in major units 11, 12, and 15 but has not changed significantly in units 13 and 14. I examined some landscape and harvest parameters that could be associated with the female harvest rate and proportion of females in the harvest using multiple linear regression. For both parameters, total rate of harvest, average distance from towns or villages, and proportion of major unit composed of beaver and estuarine meadows were strong explanatory variables (Table 1). For proportion of females in the harvest, the proportion of a major unit composed of alpine habitat was also important. All of the landscape covariates indicate that accessibility and detection of bears likely were the major factors influencing the number and proportion of females in the harvest.



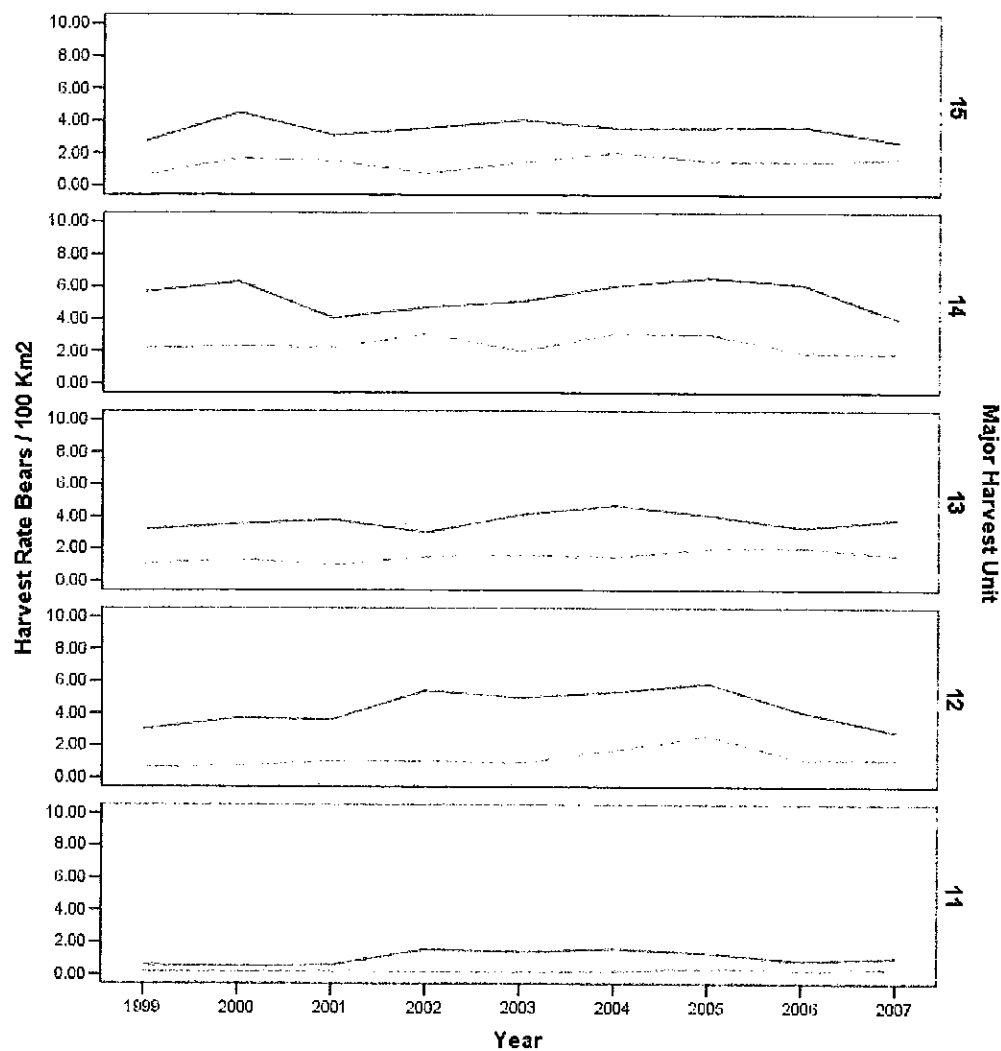


Figure 4. Black bear harvest rates for total harvest (tan), males (blue) and females (green) for major harvest units in GMU 2 1999–2007.

Table 1. Results of multiple linear regression of female harvest rate and proportion of females in the harvest for major harvest units in GMU 2, 1999–2007.

<i>Female harvest rate</i>			
Covariate	<i>B</i>	SE	<i>P</i>
Constant	0.207	0.114	0.080
Total harvest rate	0.237	0.014	<0.001
Percent meadow	1.547	0.416	0.001
Distance from town	-0.010	0.003	0.006

*Proportion of females in harvest*

Covariate	<i>B</i>	SE	<i>P</i>
Constant	0.290	0.113	0.016
Total harvest rate	0.245	0.013	<0.001
Percent meadow	1.341	0.398	0.002
Percent alpine	-0.099	0.045	0.036
Distance from town	-0.011	0.003	0.002

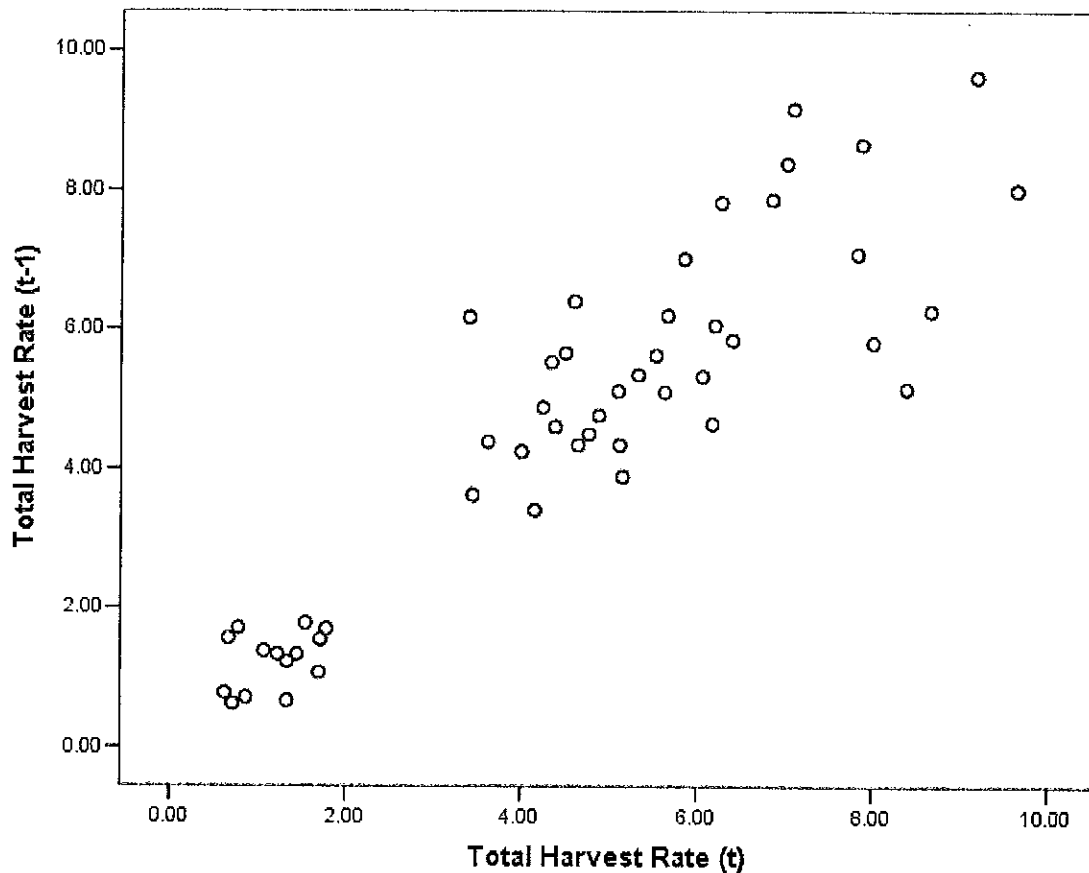


Figure 5. Lagged (t-1 year) total harvest rate plotted against total harvest rate for all major harvest units in GMU 2, 1999–2007.

I plotted total harvest rate (THR) against THR lagged by 1 year (Fig. 5). The slope of the line through the points appears to flatten out at a harvest rate of 6–8 bears/ 100 km<sup>2</sup>. The slope of the line is significant over the range of 0–6 ( $F = 187.147$ ,  $P < 0.001$ ,  $B = 1.016$ ) but is not different than 0 for  $THR > 6$  ( $F = 1.832$ ,  $P = 0.199$ ,  $B = 0.475$ ). The analysis suggests that a total harvest rate of 6–8 bears may be an asymptote representing either an upper limit to hunter effort (saturation of hunters) or an upper biological limit of harvest.

Total harvest rate exceeded 8 bears/ 100 km<sup>2</sup> in a major unit 5 times between 1999–2007 and in 4 of those cases harvest declined the next year.

*Trends in Biological Parameters and Effects of Harvest.*— The median age of males harvested increased during 1999–2007 in major units 11 ( $F=4.932$ ,  $P=0.062$ ,  $B_{year}=0.317$ ) and 13 ( $F=7.118$ ,  $P=0.032$ ,  $B_{year}=0.183$ ) but showed no trend for units 12, 14, and 15. Age was positively correlated with male harvest rates in units 11 ( $F=4.416$ ,  $P=0.074$ ,  $B_{mhr}=1.918$ ) and 12 ( $F=25.430$ ,  $P=0.001$ ,  $B_{mhr}=0.718$ ) and negatively correlated in units 14 ( $F=5.603$ ,  $P=0.042$ ,  $B_{mhr}=-0.878$ ) and 15 ( $F=3.983$ ,  $P=0.088$ ,  $B_{mhr}=-1.035$ ). There was no relation between median age and male harvest rate in unit 13. The median age of females increased during 1999–2007 in units 12 ( $F=5.189$ ,  $P=0.057$ ,  $B_{year}=0.408$ ), and 14 ( $F=5.770$ ,  $P=0.047$ ,  $B_{year}=0.225$ ). There was no trend in the other units and there was no relation between age and female harvest rates in any unit.

Major harvest units 11 and 12 experienced increases in harvest rates from very low levels to moderate and very high levels during the last decade. Units 13, 14, and 15 have had moderately high to very high rates of harvest throughout the decade. I divided the units into those that increased from low levels and those that were already at chronic high levels of harvest and compared median ages of harvested bears. Male bears harvested in the increasing units were older (median = 7.2 years) than bears in the chronic high harvest units (median = 5.8 years, Mann-Whitney Test  $Z=-3.350$ ,  $P=0.001$ ). Female bears were also older in the increasing units (median = 9.1 compared to 7.0, Mann-Whitney  $Z=-2.872$ ,  $P=0.004$ )

Skull size is strongly correlated with age and must be age adjusted to be meaningful. In GMU 2, skull size reaches asymptotic growth at about 8 years for both males and females (Fig. 6). A comparison of full grown bears (age >7 years) of both sexes by harvest level and year indicated no trends or relations in any unit. Any differences in average skull sizes for all bears (regardless of age) harvested in units were simply a reflection of differences in age structure of harvested bears.

None of the biological parameters such as age structure, skull size, or proportion of females in the harvest were leading indicators of future harvest levels. Cross-correlation functions derived for each parameter indicated no lagged correlations.

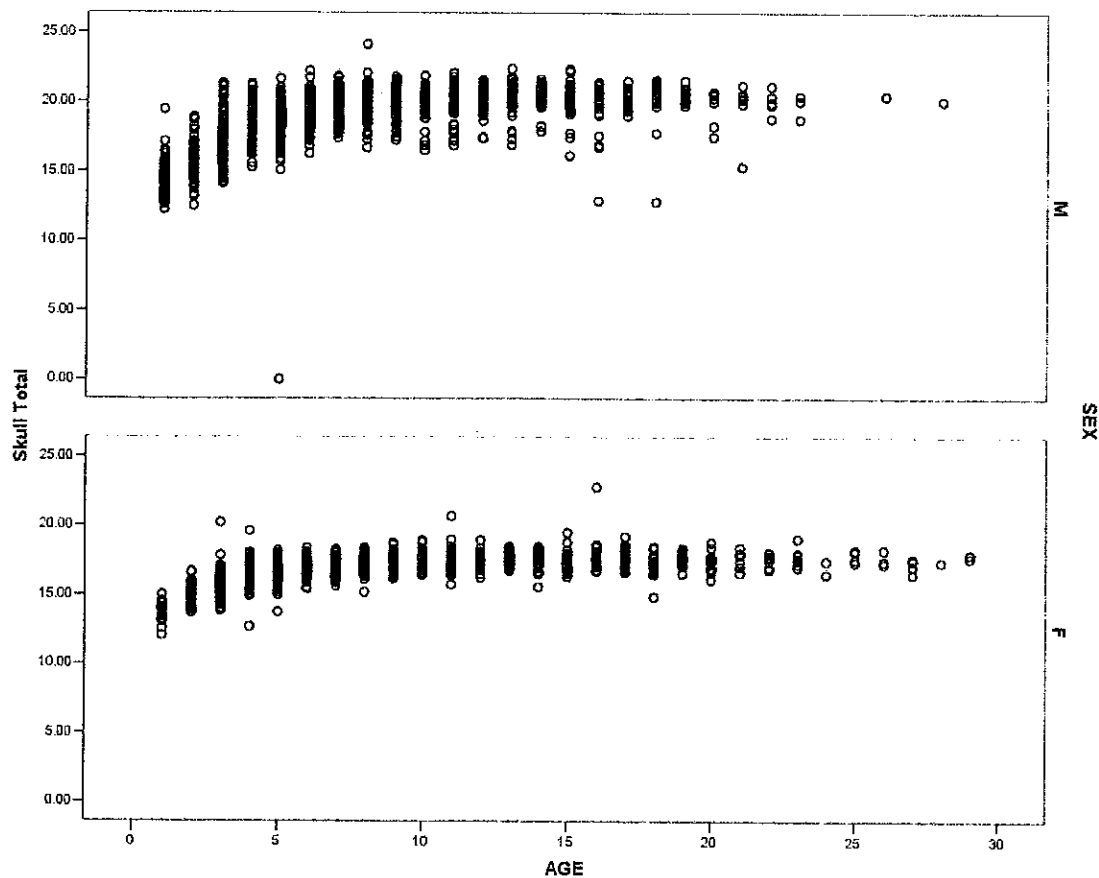


Figure 6. Total skull size by age for black bears harvested in GMU 2, 1999–2007. Asymptotic growth is achieved at about 8 years for both males and females.

*Effects of Accessibility and Roads on Harvest Parameters.*— As I examined the harvest data, I noticed that major harvest units 13 and 14 had the smallest proportions of older bears in the harvest (Table 2). Those units also contain the highest density of roads and are the closest to towns and villages on Prince of Wales Island. Therefore, I hypothesized that roads and accessibility likely would have an important influence on harvest parameters particularly when compared for bears harvested from roads versus bears taken using other means of transportation and access. I compared major units by harvest from roads versus other means (Table 3). Clearly, units 13 and 14 stand out as having many more bears killed from the road system (Chi-square = 699.944,  $df = 4$ ,  $P < 0.001$ ). I then compared median age of males and females harvested from roads with those not harvested from roads. The median age of male bears was about 2 years younger for bears killed from the road system (median = 6.0) compared to bears that were not (median = 7.9, Mann-Whitney  $Z = -12.336$ ,  $P < 0.001$ ). Female bears harvested from the road system were about 1.5 years younger (median = 8.1) versus those not taken from roads (median = 8.1, Mann-Whitney  $Z = -3.971$ ,  $P < 0.001$ ). Moreover, 58.9% of females harvested were taken from the road system versus 45.9% of males. Analysis of variance

Table 2. Grouped ages of male bears harvested within major harvest units in GMU 2, 1999–2007. Age group 1 included bear 1–2 years old, group 2 included bears 3–5 years old, and group 3 included bears >5 years old.

Major Harvest Unit	Age Group (%)		
	1	2	3
11	13 (5.0)	67 (26.0)	178 (69.0)
12	29 (4.8)	165 (27.3)	411 (67.9)
13	115 (15.8)	260 (35.7)	353 (48.5)
14	96 (19.3)	171 (34.3)	231 (46.4)
15	33 (7.3)	139 (30.6)	282 (62.1)

Table 3. Comparison of bears harvested from roads versus other means of access for major harvest units in GMU 2, 1999–2007.

Major Harvest Unit	Means of Access (%)	
	Road	Other
11	48 (18.2)	216 (81.8)
12	124 (19.8)	503 (80.2)
13	495 (65.8)	257 (34.2)
14	422 (81.3)	97 (18.7)
15	130 (27.5)	343 (72.5)

Table 4. Comparison of median age of males harvested by hunters using roads and those who did not use roads to hunt for bears. Data are tabulated by major harvest units in GMU 2 1999–2007. The superscript \* indicates units that are significantly different ( $P = 0.05$ ) from units without the superscript.

Major Harvest Unit	Median Age	
	Other	Road
11	8.8 <sup>*</sup>	6.7
12	8.6 <sup>*</sup>	5.5
13	6.4	6.1
14	6.4	5.9
15	7.8	6.3

Table 5. Number of harvested male bears with skulls size >20 inches by major harvest units and year in GMU 2, 1999–2007. Proportion (%) of large bears in total male harvest is also shown.

Major	Year								
	1999	2000	2001	2002	2003	2004	2005	2006	2007
11	7	3	8	7	18	23	21	14	11
%	50.0	13.0	53.3	36.8	38.3	57.5	42.9	43.6	45.8
12	19	22	20	24	31	34	44	29	25
%	39.6	42.3	36.4	38.7	39.7	41.0	50.5	32.2	40.3
13	17	30	21	29	21	26	27	31	32
%	23.0	35.7	28.4	33.7	26.9	31.3	27.8	37.3	41.0
14	8	15	14	17	16	15	21	13	18
%	22.2	21.4	28.6	35.4	32.0	29.4	27.6	22.0	39.1
15	10	8	10	16	12	23	19	12	20
%	24.4	15.4	16.9	23.5	26.7	35.4	35.8	21.0	43.5

indicated that the proportion of females in the harvest was higher in major units 13, 14, and 15 than in 11 or 12 (Least Significant Difference tests  $P < 0.05$ ). Clearly, hunters are less selective when hunting along roads. The effect can be seen comparing median ages of male bears killed in major harvest units (Table 4). Nonetheless, median ages of males harvested in units 13–15 are younger than units 11 and 12 regardless of means of transportation or access. That suggests that the age structure of bears is younger in the northern units where harvest has been intense for more than a decade. Moreover, examination of the numbers and proportion of large males harvested in major units showed that male bears with skull sizes  $>20$  inches generally constituted a smaller proportion of the males harvested in units 13–15 than units 11 and 12 (Table 5).

### Discussion

Harvest of black bears in GMU 2 increased between 1999–2004 and then declined. Most of those changes were the result of the rapid increase and decline of harvest in major harvest units 11 and 12. Abnormal weather during the spring seasons of 2006 and 2007 may have contributed to the decline in harvest, however, the autumn harvest declined during the same period. That indicates the effect was not simply weather related and could point to a population decline if hunter effort remained constant.

None of the biological parameters that we measure such as harvest numbers, proportion of females in the harvest, skull size, and age are sensitive leading indicators of future harvest, intensity of harvest, or population. There is some evidence that high numbers of bears killed in units 13–15 over a decade may have reduced the median ages of bears in the harvested population. Moreover, it appears that there may be fewer large bears proportionally in the harvested male population in those units. Intense harvest may have reduced the number of big bears and increased the proportion of younger animals in the population. Nonetheless it is not clear from the data if those indicators point to a decline in bear population.

A serious confounding factor is that skull size, age, and proportion of females in the harvest are at least as much due to hunter selectivity as any characteristic of population. Hunters using roads appear to be much less selective about bears they shoot. That effect is consistent in all major harvest units and must be considered before trying to use those indicators to evaluate population. Moreover, my analysis also showed that accessibility, nearness to towns or villages and open habitats such as meadow are factors that influence female harvest rates and proportion of females in the harvest. Those factors could easily confound interpretation of harvest rates.

Unfortunately, none of our data clearly indicate a decline in bear population in GMU 2. They do suggest that harvest may be changing some characteristics of the population such as age structure, which could have long-term consequences for bears. We really need to evaluate hunter effort and survey hunters to find out how many are unsuccessful to help us assess the harvest data. It goes without saying that we also need to estimate population.

### ***Proposal 38***

- Would require a harvest ticket for all black bear hunters in Units 1-5

Department Proposal

Department Recommendation

Adopt

Proposal 38

### ***Discussion***

- Only successful hunters report hunting effort at time of sealing
- Data collected includes hunter contact info, hunt area, days hunted, transportation used, commercial services used, number of bears seen

Proposal 38

### ***Discussion***

- Valuable information is lost when unsuccessful hunters aren't required to report their hunt
- Information about the hunters as well as their hunt will help guide management strategy

Proposal 38

### ***Discussion***

- Harvest ticket is easy for ADF&G to administer and for hunters to acquire
- Would allow for quantification of all hunting effort, whether successful or unsuccessful
- Would provide contact information for all hunters
- This is important information for drafting management plan

Proposal 38

### ***Discussion***

- ADF&G Advisory committee votes
  - Juneau Douglas (Adopt)
  - Haines (Adopt)
  - Petersburg (Adopt)
  - Ketchikan (Adopt)
  - Sitka (Adopt)

Proposal 38

### ***Conclusion***

- Harvest ticket will lead to comprehensive data base on hunter effort
- Harvest ticket will allow department to identify all black bear hunters in Southeast for surveys and other planning needs

The department recommendation

Adopt

Proposal 38



***Proposal 39***

- Would require a harvest ticket for all black bear hunters in Units 1-5

Public Proposal

Department Recommendation

Take No Action

(See presentation for Proposal 38)

Proposal 39

### ***Proposal 37***

- Would require a registration permit for all black bear hunters in Units 1, 2, and 3

Public Proposal

Department Recommendation:

Take No Action

(See presentation for Proposal 38)

Proposal 37

### ***Discussion***

- ADF&G Advisory committee votes
  - Juneau Douglas (Take No Action-38)
  - Haines (No Vote)
  - Petersburg (Take No Action-38)
  - Ketchikan (Adopt)
  - Sitka (No Vote)

Proposal 37

### ***Conclusion***

- Department believes a harvest ticket will accomplish data needs
- Harvest ticket is less burdensome on hunter as well as ADF&G
- Therefore the department recommends  
Take No Action

(See presentation for Proposal 38)

Proposal 37

## Proposal 41

Would clarify the Board's intent regarding the use of discretionary conditions when issuing black bear bait registration permits in Units 1 - 5

Department Proposal

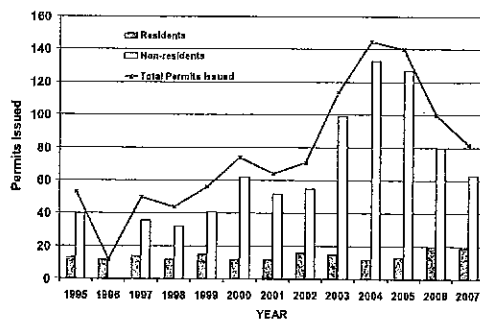
Department Recommendation  
Adopt

## Questions

- Three questions the department and public would like to have answered:
  - Does the Board intend that elements of 5 AAC 92.052 (Discretionary permit hunt conditions and procedures) can be used along with authority of 5 AAC 92.044 (Permit for hunting black bear with the use of bait or scent lures) when developing discretionary requirements for issuing black bear registration bait permits?
  - Are all the elements of the current black bear bait permit used in Unit 2 authorized in either 5 AAC 92.062 or 5 AAC 92.044?
  - Are the current Unit 2 black bear bait permit requirements reasonable and necessary to ensure proper use and compliance of these permits?

(A copy of the current requirements and application process is included in your board book.)

Unit 2 Bear Bait Permit History



## Enforcement Problems

- Enforcement Problems
  - Public and Forest Service have expressed concerns about failing to clean-up bait sites after the season
  - Location of bait sites too close to roads and structures
  - Illegal use of bait permits by lodge guests
  - Transporters providing bait stations for clients
  - Monitoring hunter use of bait stations
  - Failure to return permits at the end of the season
- These problems have led to the additional requirement for providing specific bait site locations and notification when bait sites are moved

## Delinquent Permits

(Failed to mail site permits)

Year	AK. Res.	Non. Res.	Total
2006	8	30	38
2007	6	3	9

## Regulatory Questions

- One hunter has recently insisted the department does not have the authority to apply certain permit conditions because they are not explicitly listed in 5 AAC 92.044
- Also, the individual believes the department is extending discretionary permit requirements beyond those explicitly authorized in 5 AAC 92.044 or 5 AAC 92.052.

### **Discretionary permit conditions derived from 5AAC 92.052**

- (General instructions) Permits will only be issued in Ketchikan or Craig offices - 5 AAC 92.052 (1)
- (11) Hunter must provide a bait site location, either GPS coordinates or dot marked on USGS quad map - 5 AAC 92.052 (14)
- (12) Bait station permits must be returned by close of business July 15 - 5 AAC 92.052 (14)
- (13) If you change your bait station to another location you must notify Fish and Game office in Ketchikan (or Craig) - 5 AAC 92.052 (1)

### **Recommendation**

- This proposal is intended to clarify discretionary authority of the Department when issuing bear bait registration permits in Units 1 - 5

Department Position

Adopt

## **Attention**

### **Southeast Alaska Bear Bait Hunters**

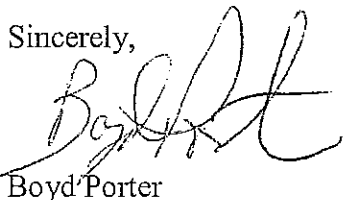
If you plan to register for a bear bait permit during the 2009 season in Game Management Unit 2 please be aware there will be some changes to the registration permit conditions. In an effort to obtain more accurate black bear bait registration information bait site permits will not be faxed or mailed prior to the 2009 spring hunting season.

Starting in April these permits will only be available from either the Ketchikan, or the Craig Fish and Game offices. Other Alaska Fish and Game offices will not issue bait permits for Unit 2. Consistent with the past several years in Unit 2 we will require a specific location be provided at the time of application. This will include either GPS coordinates in NAD27 Datum, or a dot on a USGS map before the bait permit will be issued. Similar to other areas in the state, this location must be specific enough to enable someone to find the bait site while on the ground. Hunters should plan their trips accordingly to insure they are able to visit one of the Fish and Game offices after they select a bait location to obtain a bait permit

We will also require that the black bear bait station permit be mailed to our office to the address below within 30 days after the close of the season. That form is the actual numbered permit you posted at the trailhead, or near the registered bait site and includes hunting license numbers of all hunters who have hunted at your site. This gives us an accurate tally of all hunters using bait sites. If this document is not received after the spring hunting season, similar to all other registration permits, you will not be allowed to register for a permit the following year.

Thank you in advance for your cooperation and participation in this important black bear management effort. If you have any questions please feel free to call the Ketchikan ADF&G office (907 225-2475).

Sincerely,



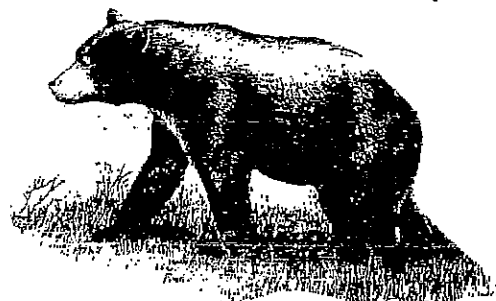
Boyd Porter  
Wildlife Management Biologist  
Alaska Department of Fish and Game  
Division of Wildlife Conservation  
2030 Sea Level Drive Suite 211  
Ketchikan, Alaska 99901  
(907) 225-2475

ALASKA DEPARTMENT OF FISH AND GAME  
Division of Wildlife Conservation  
2030 Sea Level Drive, Suite 205  
Ketchikan, Alaska 99901  
907-225-2475 phone  
907-225-2771 fax

Permit No. \_\_\_\_\_  
Date Issued \_\_\_\_\_  
Issuing Officer \_\_\_\_\_

APPLICATION FORM ONLY  
(This is not a permit)

BLACK BEAR BAIT STATION REGISTRATION  
April 15 - June 15



Please read and complete this application form in its entirety.

Hunter's Name \_\_\_\_\_

Address \_\_\_\_\_  
(Street or Box Number)

(City) \_\_\_\_\_ (State) \_\_\_\_\_ (Zip) \_\_\_\_\_

Community you live in \_\_\_\_\_ Phone \_\_\_\_\_  
(City or town) (Area Code and Number)

Hunting License No. \_\_\_\_\_ (Resident) \_\_\_\_\_ (Nonresident) \_\_\_\_\_

Nonresident Metal Locking Tag No. \_\_\_\_\_

Did you attend a Bear Clinic: Yes \_\_\_\_\_ No \_\_\_\_\_ Bow Hunt Ed # \_\_\_\_\_

D/L:

DOB:

LOCATION OF BAIT SITE

Site No. 1:	Site No. 2:
Date Registered _____	Date Registered _____
GMU/Subunit _____	GMU/Subunit _____
Specific Location _____	Specific Location _____
_____ Bag Limit _____	_____ Bag Limit _____

BLACK BEAR BAIT SITE REGISTRATION CONDITIONS

The following conditions apply to baiting black bears (5AAC 92.085):

- 1) Only biodegradable material may be used for bait. The only parts of fish and game which can legally be used as bait are heads, bones, guts and skin;
- 2) No person may use bait within one-quarter mile of a publicly maintained road or trail. (All roads on Prince of Wales Island are considered publicly maintained);

continued

- 3) No person may use bait within one mile of a house or other permanent dwelling, or within one mile of a developed campground or developed recreation facility;
- 4) A person using bait shall clearly mark the bait station with a sign reading "Black Bear Bait Station". The permit must include the hunter's license number, and the license number of anyone using the bait;
- 5) It is the responsibility of the registered bear bait permittee to remove all bait, litter and equipment from the bait site including all contaminated soil no later than June 15<sup>th</sup>.
- 6) No person may give or receive remuneration for use of a bait station, including barter or exchange of goods; however, this does not apply to licensed guides who personally accompany clients to a bait station.
- 7) No person may have more than two (2) bait stations established (bait present) at any one time;
- 8) All edible bear meat must be salvaged. (See current regulations for definition);
- 9) Some areas may be prohibited from use of bait stations. Check your hunting regulations booklet or with Fish and Game for further information;
- 10) It is the hunter's responsibility to know and follow all current application regulations;
- 11) This permit is not **VALID** or **ACTIVATED** until hunters in Units 1A and Unit 2 provided a site location, either a GPS coordinates, or a dot on a USGS map to the Fish and Game office in Ketchikan.
- 12) All bait stations permits must be returned by close of business July 15<sup>th</sup>. *If this permit is not returned you will not be eligible for a bait permit next year;*
- 13) If you change your bait station to another location, you must notify the Fish and Game office in Ketchikan. You will be allowed one station move per permit per year.

*By signing this form, I agree to all the conditions listed above.*

Hunter's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

(must be signed by applicant before permit is issued)

Daytime phone: \_\_\_\_\_

"False Statements are Punishable by Law" (Rev.0307)

;

**Proposal 42**

Would remove the "in person"  
GPS location requirement for  
bait sites in Unit 2

**Proposal from the public**

**Department Recommendation**

**Take No Action**

(See Proposal 41)

Proposal 42



### **Proposal 5**

**Would liberalize the options  
available for obtaining Unit 2  
black bear bait permits**

**Proposal from the public**

**Department Recommendation**

**Take No Action**

**(See Department Proposal 41)**

Proposal 5

### **Advisory Committees Vote**

- Ketchikan AC- 0/7 Oppose
- East Prince of Wales AC- 0/7 Oppose

Proposal 5

**Department Recommendation:**

**Take No Action  
(See Proposal 41)**

Proposal 5

### **Proposal 40**

**Would restrict hunting black  
bear over bait to archery  
only**

**Proposal from the public**

**Department  
Recommendation  
No Recommendation**

Proposal 40

### **Discussion**

- This is not a conservation issue
- The department sees this as an allocation issue
- Therefore we do not have a recommendation

Proposal 40

### **Discussion**

#### **Advisory Committee Votes**

- Ketchikan AC- 0/7 Oppose
- East Prince of Wales AC- 0/7 Oppose

Proposal 40

### **Conclusion**

**Department Recommendation:**

**No Recommendation**

Proposal 40

**Region 1 Wolverine****PROPOSAL 34**

Reduce the trapping season for  
wolverine in Units 1-5

Nov 10 – [APR 30] Feb 15

Department Proposal

Dept. Recommendation

**ADOPT**

**REGION 1 WOLVERINE  
TRAPPING SEASON**

- Prior to 1985: wolverine trapping season ranged from
  - Dec 1-Jan 31
  - Nov 10-Feb 15
- Since 1985
  - Nov 10 - April 30

Proposal 34

**WOLVERINE  
TRAPPING SEASON**

- In 1985 end date aligned with wolf season to accommodate incidental wolverine catch in wolf sets

*However ...*

- extended season exposes reproductive females to harvest & sacrifices dependent young

Proposal 34

**DISCUSSION**

- Wolverine kits born Feb-Mar
- Some adult females are taken in March and April when they still have dependant young in dens
- Loss of litter = reduced recruitment  
*"Killing our chickens before they hatch"*
- Fewer animals available for harvest

Proposal 34

**Percent Females by Month  
(1984 – 2007)**

NOV	64%
DEC	35%
JAN	39%
FEB	39%
MAR	43%
APR	42%

Proposal 34

**DISCUSSION**

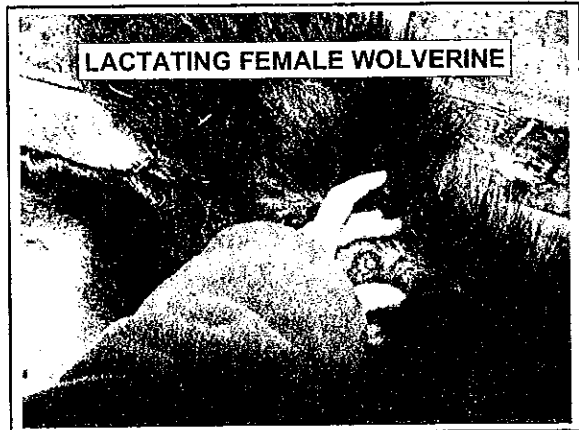
- For Region I wolverine ...
- Trapping season is longest in state (172-days).
- Hunting season is 2<sup>nd</sup> longest in state (168-days)
- Combined hunting and trapping seasons longest in state (242- days)

Proposal 34

## DISCUSSION

- Incidental wolverine catch in wolf sets is believed to be relatively low
- Most wolf sets are pulled by April to avoid catching black bears

Proposal 34



*Lactating female wolverine at camera bait station in April*

Proposal 34

## Trapper Survey Info

- 19 (25%) of 76 trappers who responded to a R-1 questionnaire targeted wolverine in RY-2006
  - All 19 made sets from Nov to Feb
  - 6 continued sets into March
  - 2 continued sets into April

Proposal 34

## DISCUSSION

- Protecting denning females will reduce opportunity for a few late-season trappers

*However, it will ...*

- Increase reproductive success
- Increase recruitment
- Increase trapper success
- Align wolverine end date with most furbearers

Proposal 34

## RECOMMENDATION

### Proposal 34

Shorten R-1 wolverine trapping season

Upper Lynn Canal	Support
Juneau AC	Oppose
Petersburg AC	Support
Ketchikan AC	Oppose
Sitka AC	Support

ADOPT

***Proposal 35***

- This proposal would eliminate the trap tagging requirement in Units 1-5

Public Proposal

Department Recommendation  
Do Not Adopt

Proposal 35

***Discussion***

- Trap tagging requirement was adopted at 2006 SE BOG meeting for Units 1-5
- Proposal was submitted by public to address Unit 1C only
- ADF&G amended proposal to Units 1-5

Proposal 35

***Discussion***

- Author of this proposal is frustrated with region-wide decision
- States that public didn't have opportunity to comment on region-wide proposal

Proposal 35

***Discussion***

- ADF&G and the Dept. of Public Safety see this as a valuable tool to contact trappers
- Several problematic situations during past year were addressed by contacting trappers through the use of a trap tag
- Provides public and other trappers with greater assurance of trapper accountability

Proposal 35

***Discussion***

- Trappers can opt to use a sign within 50 meters of trap instead of individual trap tags
- Most trappers use drivers license # as ID
- Cost of tags is reasonable (100 @ \$15.00)

Proposal 35

***Discussion***

- ADF&G Advisory committee votes
  - Juneau Douglas (Do Not Adopt)
  - Petersburg (Do Not Adopt)
  - Ketchikan (Do Not Adopt)
  - Sitka (Adopt)

Proposal 35

***Conclusion***

- Department believes this regulation benefits trappers and trapping
- Many trappers support this regulation

Department recommends

Do Not Adopt

Proposal 35

***Proposal 33***

- This proposal would eliminate the trap tagging requirement in Unit 5

Public Proposal

Department Recommendation

Take No Action

(See presentation for Proposal 35)

Proposal 33

***Proposal 48***

- This proposal would prohibit the use of full metal jacket .223 caliber bullets for the taking of big game in units 1, 2, 3 and 4

Public Proposal

Department Recommendation

No Recommendation

Proposal 48

***Discussion***

- Author suggests full metal jacket bullets result in high wounding loss
- Full metal jacket prevents bullet from expanding, which produces less shock power
- Leads to wounds that are not immediately fatal

Proposal 48

***Discussion***

- The department agrees that wounding loss is a concern
- Hunter education is an outreach tool used by the department to emphasize only safe and effective shots should be taken
- Regardless of weapon and ammunition, only good bullet placement assures a clean kill

Proposal 48

***Discussion***

- ADF&G Advisory committee votes
  - Juneau Douglas (Take No Action)
  - Haines (Adopt for all calibers)
  - Petersburg (Adopt for Military ammo)
  - Ketchikan (Adopt for all calibers)
  - Sitka (Adopt)

Proposal 48

***Conclusion***

- Department sees this as an ethical issue rather than a conservation concern

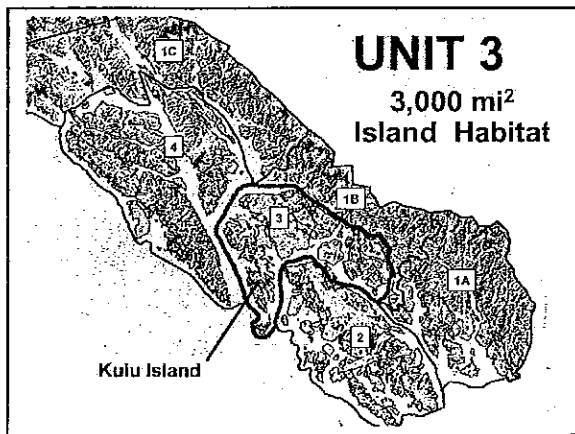
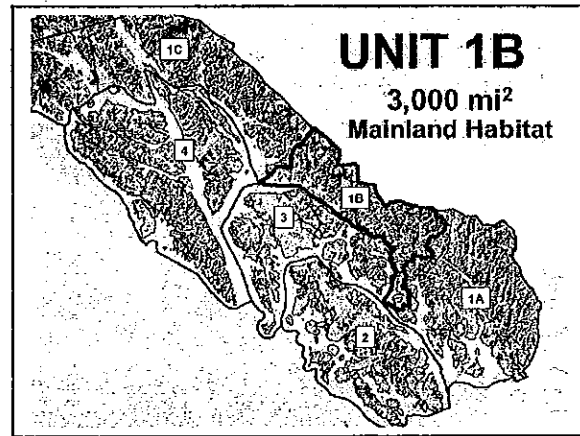
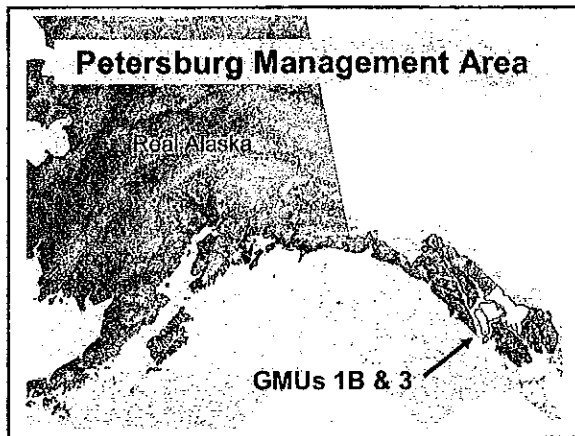
Department recommendation

No Recommendation

Proposal 48



## Petersburg Area Overview-Units 1B & 3



### MAJOR COMMUNITIES

		Trend
-Petersburg	pop. ~ 3,000	↓
-Wrangell	pop. ~ 2,300	↓
-Kake	pop. ~ 700	↓

- Area Office located in Petersburg  
small satellite office in Wrangell

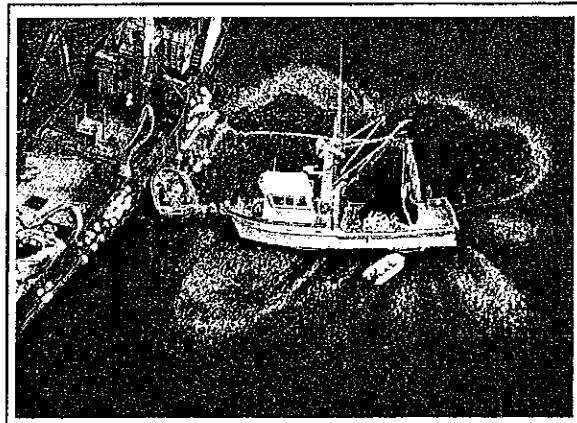
### PETERSBURG AREA STAFF



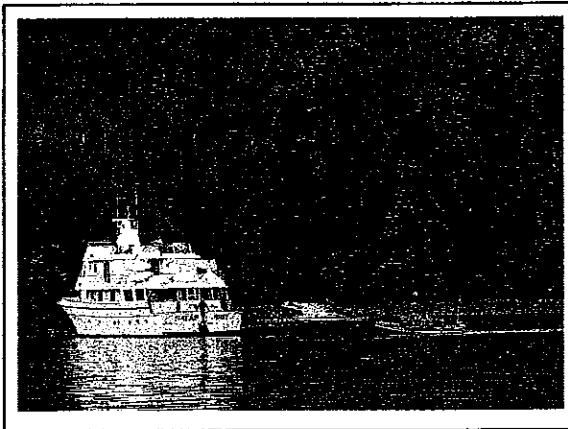
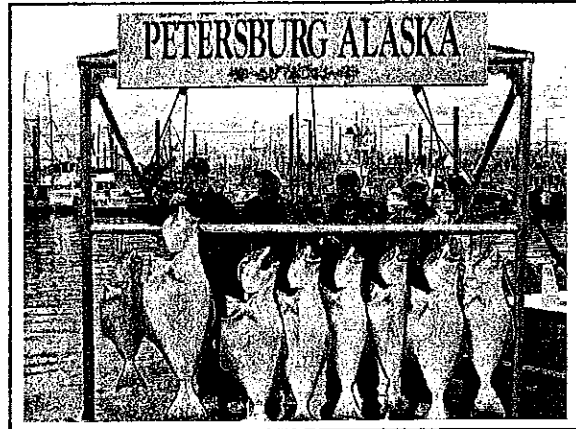
Mary Meucci - PSG



Kim Fisher - WRG



## Petersburg Area Overview-Units 1B & 3



### LOCAL GAME SPECIES

- Deer
- Moose
- Mountain Goat
- Elk
- Black Bear
- Brown Bear
- Wolf
- Grouse/Ptarmigan
- Waterfowl



### FURBEARERS

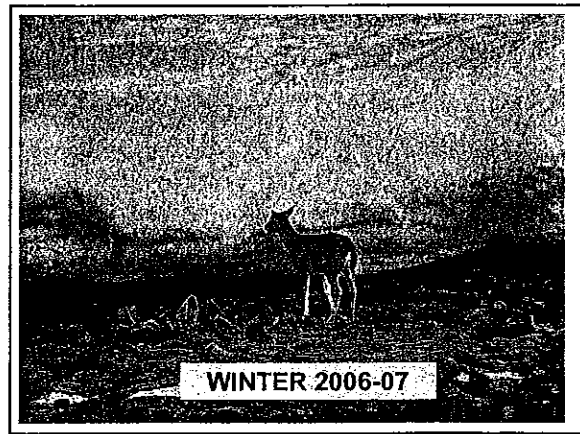
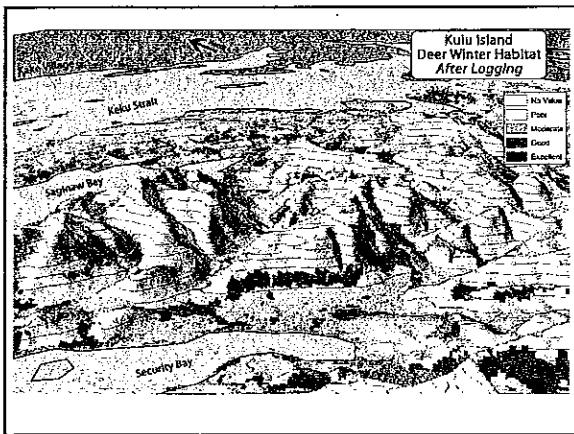
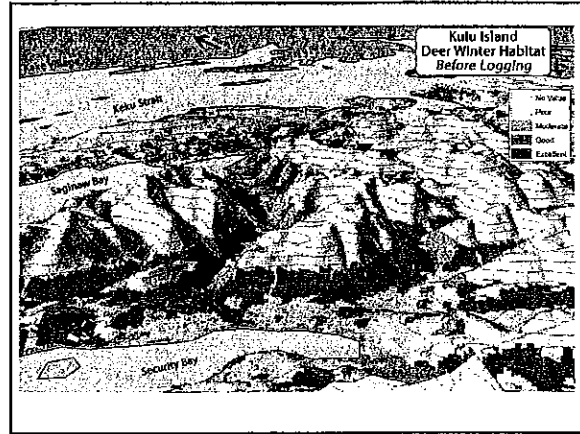
- Marten \*
- Wolves \*
- River\* & Sea Otter
- Beaver
- Mink
- Ermine
- Wolverine



### Management Issues



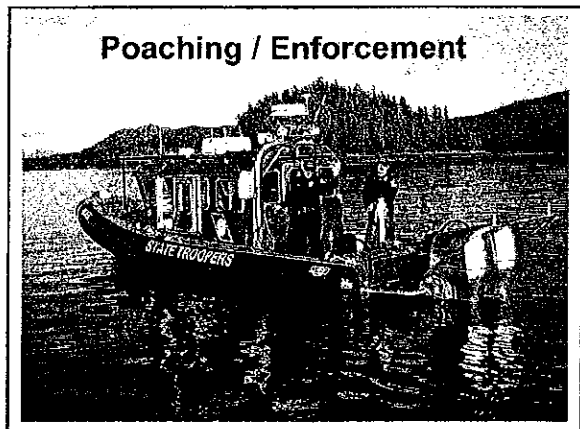
## Petersburg Area Overview-Units 1B & 3



### Guide & Transporter Issues

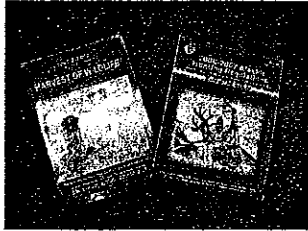


### Poaching / Enforcement



## Petersburg Area Overview-Units 1B & 3

### Dual Regulations

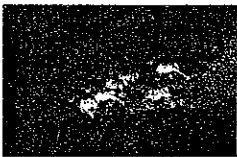
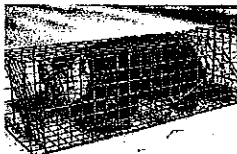


- Regulatory confusion
- Federal Designated Hunter Provision
- Emergency Closures Difficult

### Nuisance Wildlife



### RESEARCH ACTIVITY



### AREA SPECIFIC PROPOSALS

- # 8 Marten Trapping Season on Kuiu
- # 9 Elk season on Etolin Island
- # 10 Modify Moose Antler Restrictions
- 12-13 Extend the Wolf Hunting Season
- # 14 Closed Area Boundary Clarification
- # 29 Moose Broken Antler Regulation



*Sunshine Terrorizes Southeast Alaska Residents*

## UNIT 3 - MOOSE

### PROPOSAL 10

- Modify the antler restrictions for moose in the RM038 hunt area
- Suspend or eliminate any-bull drawing permit hunts within the RM038 hunt area

Department Proposal  
Dept. Recommendation:  
Adopt

## PROPOSED REGULATION

1 bull with spike-fork antlers, or 50-inch antlers or 3 or more brow lines on 1 side, or 2 brow lines on both sides

Proposal 10

## REGULATION HISTORY

1980 - Moose antler restrictions originally developed as a SHS in B.C.  
1987 - modified and adopted for *gigas* moose on Kenai Peninsula.  
1988 - Thomas Bay (S-F only)  
1990 - (S-F-50")  
1993 - (S-F-50"- 3 BTs)  
1990 - All of Unit 3 islands  
1995 - All of RM038, including Stikine River

Proposal 10

## DISCUSSION

Proposal 10

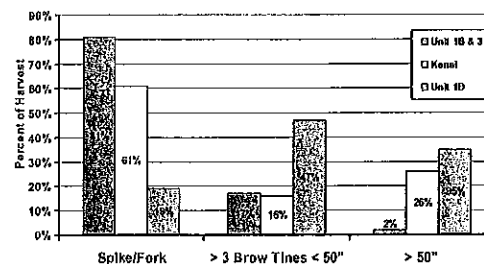
- In RM038 uncertainties exist concerning effectiveness of current restrictions
- Arguably overly protective!
- *andersoni* moose have different antler characteristics than *gigas* moose
  - smaller body and antler size
  - somewhat less predictable antler configurations relative to age
  - only occasionally achieve 3 brow lines
  - almost never achieve 50-inch spreads



~ 16 months of age

Proposal 10

## HARVEST BY ANTLER TYPE RM038, KENAI, and UNIT 1D



Proposal 10

## DISCUSSION

- Until recently ...lacked info on how best to modify the antler restrictions w/o risking overharvest
- Any-bull drawing hunts (since 2005) provided info to make data driven changes
- Recommended change based on local antler/age data

Proposal 10

## DISCUSSION

- 2 X 2 BT and 3 BT bulls are not so different from each another
  - Median age = 5 YOA for both
  - $\geq 3$  BT Average spread = 39 inches
  - 2x2 BT Average spread = 40 inches

Proposal 10



2 x 2 brow tines  
44-inch spread  
7-years of age

Proposal 10



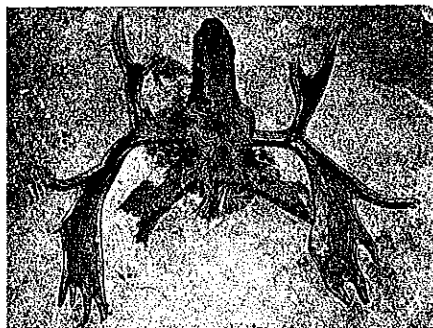
7 YOA 44" SPREAD

Proposal 10



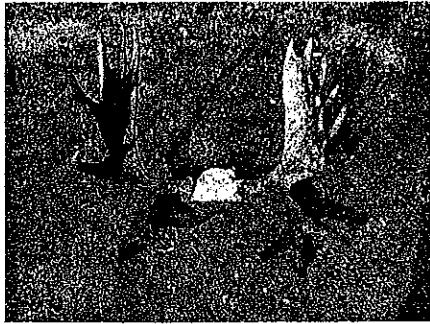
5 YOA 41" SPREAD

Proposal 10



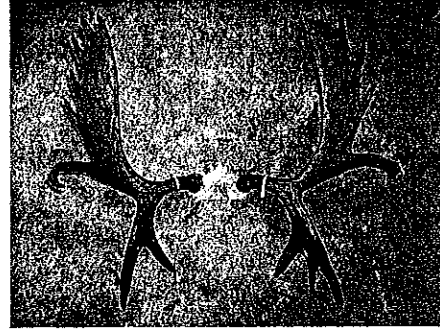
7 YOA 38" SPREAD

Proposal 10



7 YOA 37.5" SPREAD

Proposal 10



8 YOA 39 INCH SPREAD

Proposal 10



6 YOA 40.5" SPREAD

Proposal 10

### Vulnerability to Harvest

- Sightability is poor in Southeast AK
- Lots of remote inaccessible habitat
- Access limited to roaded areas and a few navigable rivers
- Lots of refugia from hunters
- Plenty of "escapees"

Proposal 10

### SEX & AGE COMPOSITION STIKINE RIVER SURVEY (Dec. 2005)

- Moose Observed 199
- Bull:Cow Ratio 30:100
- Calf:Cow Ratio 58:100
- Twinning Rate 30%

Proposal 10

### DISCUSSION

- Dept. favors changing antler restrictions, provided we suspend any-bull drawing hunts
- Doing so will ...
  - Counter slight 2x2 BT harvest increase
  - Resume protection of mid-aged bulls

Proposal 10

## RECOMMENDATION

### Proposal 10

- **Modify RM038 moose antler restrictions**
- **Suspend any-bull drawing hunts**

Petersburg AC	Oppose (however ...)
Sitka AC	Support
Ketchikan AC	Support

### Adopt



## UNIT 3 - MOOSE

### PROPOSAL 11

- Would liberalize antler restrictions for moose in Units 1B and 3

Public Proposal  
Dept. Recommendation:

Take No Action

Antler restrictions for RM038 moose would read ...

1 bull with spike-fork antlers, or 50-inch antlers, or antlers with 2 brow tines on both sides", [3 OR MORE BROW TINES ON 1-SIDE] or 50-inch spread.

Proposal 11

See Department Proposal 10

2 potential problems with the proposal as submitted

- Would apply to only Units 1B and 3, and excluded the southern 1C portion of the RM038 hunt area.
- Disallow bulls with 3 or more brow tines on 1 side

Proponents intent was to add the 2x2 brow tine provision to existing antler criteria and apply entire RM038 hunt area, including southern 1C

Proposal 11

***Refer to Proposal 10 for discussion and graphics***

Proposal 11

## UNIT 1 - MOOSE

### PROPOSAL 44

Would completely revise the moose antler restrictions in Unit 1

Public Proposal  
Dept. Recommendation

DO NOT ADOPT or TAKE NO ACTION

## *Proposal Clarification*

Proponent's intent is to apply a new antler criteria region-wide in any moose hunts currently managed under 3+ brow tine or 50" restrictions

Proposal would change the antler restrictions for moose in Region 1 to read ...

1-bull with spike-fork antlers, or 5 or more points on one side [or 50-INCH ANTLERS OR ANTLERS WITH 3 OR MORE BROW TINES ON 1-SIDE] by registration permit only

Proposal 44

## Regulation History

- Moose antler restrictions were developed as a SHS in B.C. in 1980
- Later modified and adopted for moose on the Kenai Peninsula in 1987.
  - Thomas Bay (Unit 1B) in 1987
  - Unit 3 in 1990
  - All Unit 1B in 1995
  - Unit 1D (TM-059) in 1993

Proposal 44

## DISCUSSION

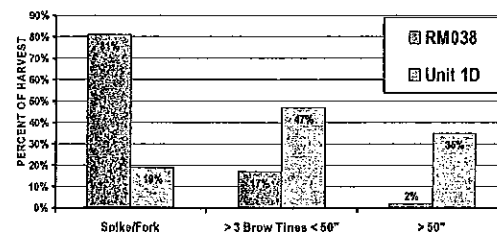
- Moose antlers vary across Region
- RM038 moose antler characteristics different than moose in Unit 1(D) & 1(C)

*Simply put ...*

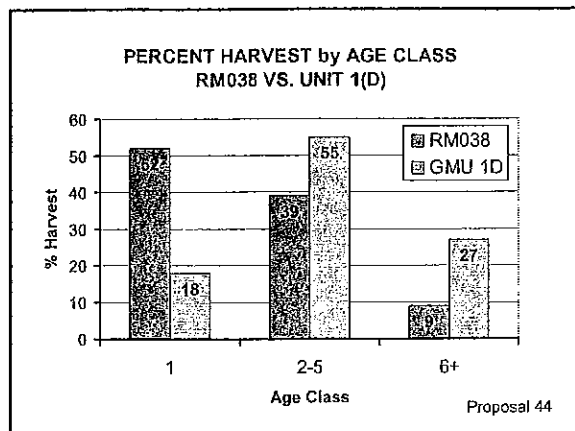
*"One-size does not fit all"*

Proposal 44

## HARVEST BY ANTLER TYPE RMO38 vs. UNIT 1D



Proposal 44



## DISCUSSION

- 5-point bull in RM038 averages 4 YOA
- Would heavily harvest middle age "breeders"
- Wholesale change in SHS undesirable when attempting to "fine tune" existing antler criteria (Proposal 10)
- Unlikely to reduce illegal harvest

Proposal 44



*How many legitimate points ?*

## RECOMMENDATION

### Proposal 44

**Completely revise moose antler restrictions in Region 1**

Lynn Canal AC      Oppose  
PSG AC recommendation:    Oppose  
Other ACs              TNA

**Do Not Adopt**

## Region I - MOOSE

### PROPOSAL 29

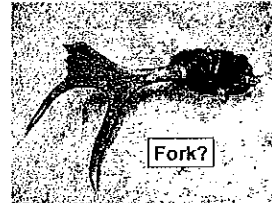
Extend the Unit 1B & 3 damaged, broken or altered antler regulation to include the entire RM038 hunt area.

Department Proposal  
Recommendation

ADOPT

## Regulation History

- Sub-legal bulls were being harvested in RM038 and antlers subsequently altered to meet the point requirements



Proposal 29

## Regulation History

- In 2006, BOG adopted a Region-wide broken antler regulation.

5AAC 92.150 (c) ... *In Units 1 – 5, a damaged, broken or altered antler is not considered a spike-fork antler ...*

Proposal 29

## Regulation History

- In 2007 an ACR resulted in repeal of region-wide application

*However ...*

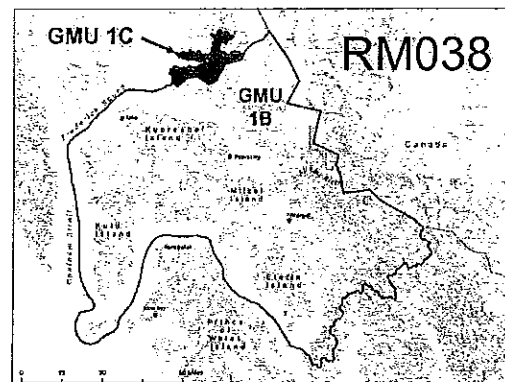
- Board maintained there was sufficient evidence of abuse in RM038, that the regulation should be retained in Units 1(B) & 3.

Proposal 29

## Regulation History

- RM038 hunt area includes Units 1(B), 3, and the extreme southern portion of 1(C).
- When the reg. language was revised in 2007, the 1(C) portion of the RM038 hunt area was omitted, creating a loophole.

Proposal 29



### **Revised Reg. Language**

5 AAC 92.150

(c) ... In Units 1(B), 1(C) that portion south of Point Hobart, including all Port Houghton drainages, and 3, a **damaged, broken, or altered antler is not considered a spike-fork antler as defined in 5 AAC 92.990**

Proposal 29

### **RECOMMENDATION**

#### **Proposal 29**

**Extend the broken antler regulation to the entire RM038 hunt area.**

PSG AC	Support
Other ACs	TNA

**Adopt**

## UNIT 3 - ELK

### PROPOSAL 9

- Provide alternating archery and rifle drawing permit hunts for Etolin Island elk during the Sept rut

Public Proposal  
Dept. Recommendation

Do Not Adopt

## DISCUSSION

Not entirely clear what the proponent wants

*Presumably...*

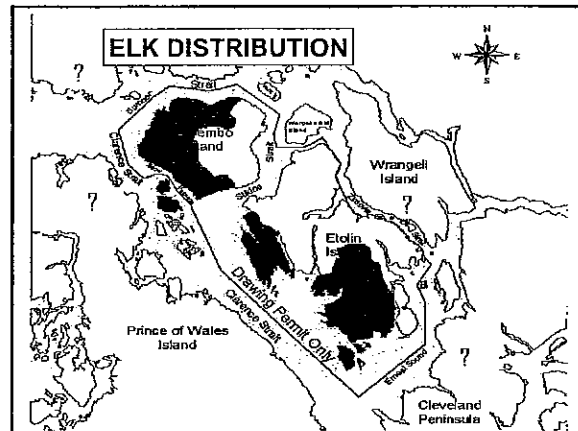
- Establish alternating (year to year?) archery and rifle drawing hunts for Etolin elk during Sept rut.

Proposal 9

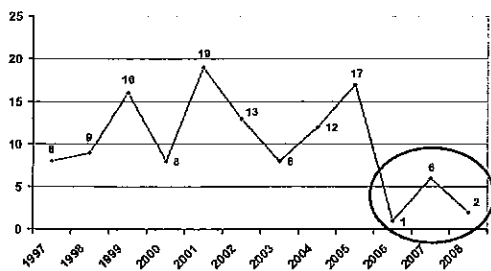
## DISCUSSION

- Elk are particularly vulnerable to harvest during the rut
- We currently allow archery-only hunt during Sept rut
- Modern firearms too effective during rut
- Potential to disrupt breeding activity

Proposal 9



Unit 3 Elk Harvest  
1997- 2008



Proposal 9

## Existing Hunt Structure

- DE-318 Archery-only season  
– Sept 1 - 30 (25 permits)
- DE-321 early-rifle season  
– Oct 1 - 15 (50 permits)
- DE-323 late-rifle season  
– Oct 16 - 31 (50 permits)
- RE-325 Registration hunt  
– Nov 15 - 30 (unlimited)

Proposal 9

## DISCUSSION

### Uncertainties regarding status of Unit 3 elk herd

- No reliable population estimate  
Harvest guidelines???
- Population trajectory unknown  
Assumed to be increasing?
- Bull:Cow ratios unknown
- Recruitment rate unknown

Proposal 9

## Elk Research

- Region has been allocating 30K annually for elk research
- Rocky Mt. Elk Foundation has contributed funding
- Administrative hurdles exist

Proposal 9

## RECOMMENDATION

### *Given ...*

- Current level of elk hunting opportunity
- Declining harvest trend
- Unknowns regarding status of Unit 3 elk

### *We believe ...*

- The existing hunt structure provides an appropriate level of opportunity.

Proposal 9

## RECOMMENDATION

### Proposal 9

### Alternate elk archery and rifle seasons

Petersburg AC	Oppose
Ketchikan AC	Adopt
Other ACs	TNA

### Do Not Adopt

## UNIT 3 WOLF HUNTING

### PROPOSAL 12

- Extend the Unit 3 wolf hunting season by 31-days  
Aug 1 - [APRIL 30] May 31
- Close season when 20 wolves are taken

Public Proposal  
Dept. Recommendation:  
Do Not Adopt

## DISCUSSION

- Current Unit 3 wolf seasons:
  - Hunting: Aug. 1 – Apr. 30 (5 wolf bag)
  - Trapping: Nov. 10 – Apr. 30 (no bag limit)
- Region-wide consistency (except Unit 2)
- Current season dates adjusted by the BOG twice in last 6 years (2002 & 2004)

Proposal 12

## DISCUSSION

- Liberal wolf hunting seasons already
  - 9-month season
  - 5 wolf bag limit
- Late season harvest would pose a risk to adult dependent-pups
- Little additional harvest anticipated (a few would be taken by nonresident bear hunters)

Proposal 12

## DISCUSSION

### *Provision 2*

*"Close season when 20 wolves are taken ..."*

- Unit 3 wolf harvest has averaged 48 wolves annually over last 10-years
- The proposed action would unnecessarily restrict the Unit 3 wolf harvest

Proposal 12

## DISCUSSION

- *Note that Proposal 1 (to extend the Unit 1A wolf trapping season), if amended and adopted as recommended by the Dept. will provide additional wolf harvest opportunity region-wide.*

Proposal 12

## RECOMMENDATION

### Proposal 12

Extend the Unit 3 wolf hunting season by 31-days  
Close season when 20 wolves are taken

Lynn Canal AC	Support via Prop. 13
Petersburg AC	Support
Sitka AC	Support
Other ACs	TNA

Do Not Adopt



## UNIT 3 - WOLF

### PROPOSAL 13

Extend the Unit 3 wolf hunting season by 61-days

Aug 1 - [APRIL 30] June 31

**Public Proposal**

**Dept. Recommendation:**

**DO NOT ADOPT**

## DISCUSSION

- Current Unit 3 wolf seasons:
  - Hunting: Aug. 1 – Apr. 30, 5 wolf bag
  - Trapping: Nov. 10 – Apr. 30, no bag
- Region-wide consistency (except GMU 2)
- Current season dates adjusted by BOG twice in last 6 regulatory years (2002 & 2004)

Proposal 13

## DISCUSSION

- Liberal wolf hunting seasons already
  - 9-month season
  - 5 wolf bag limit
- Late season harvest would pose a risk to adult dependent-pups
- Little additional harvest anticipated (a few would be taken by NR bear hunters)

Proposal 13

## DISCUSSION

- *Note that Proposal 1 (to extend the Unit 1A wolf trapping season), if amended and adopted as recommended by the Dept. will provide additional wolf harvest opportunity region-wide.*

Proposal 13

## Recommendation

### Proposal 13

Extend the Unit 3 wolf hunting season by 61-days

Lynn Canal AC	Support
Petersburg AC	Support
Sitka AC	Oppose
Other ACs	TNA

Do Not Adopt

## UNIT 3 – CLOSED AREA

### PROPOSAL 14

Clarify the boundaries of the Blind Slough Closed Area

Department Proposal  
Dept. Recommendation:

ADOPT

## BLIND SLOUGH CLOSED AREA

- Current regulatory language for the Blind Slough Closed Area is confusing for hunters and enforcement

Proposal 14

## BLIND SLOUGH CLOSED AREA

CENTRAL MITKOF IS.

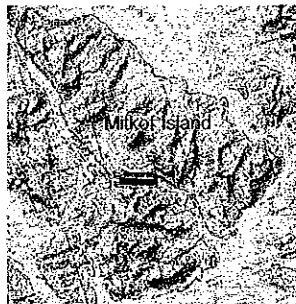
2.1 mi.<sup>2</sup> AREA

ESTABLISHED 1984

PROTECT SWAN  
WINTERING AREA  
& OBSERVATORY

ALSO PUBLIC SAFETY  
CONCERNS

"AREA CLOSED TO  
ALL HUNTING"



Proposal 14

## BLIND SLOUGH CLOSED AREA

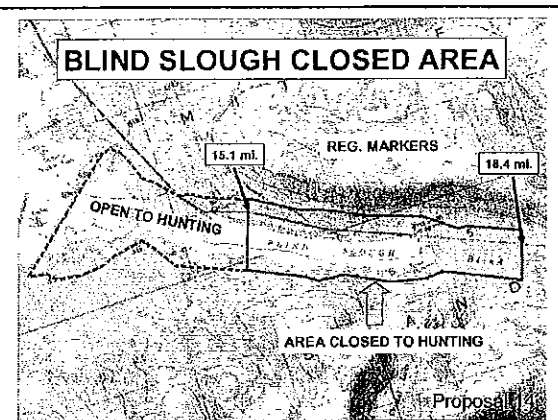
- Confusion results from [BLIND SLOUGH DRAINING INTO WRANGELL NARROWS AND] a strip ¼ mile wide ...
- Intent of reg. language was to indicate that a closed area existed "within" the section of Blind Slough flowing into Wrangell Narrows

Proposal 14

5 AAC 92.510

- (a) (5) (D) [BLIND SLOUGH DRAINING INTO WRANGELL NARROWS AND] a strip ¼ mile wide on each side of Blind Slough, from the hunting closure markers at approximately mile 15.1[4] to the hunting closure markers at approximately mile 18.4 of Mitkof Highway, including the waters of Blind Slough between those hunting closure markers, are [IS] closed to all hunting.

Proposal 14



## **Recommendation**

### **Proposal 14**

**Clarify the boundaries of the Blind  
Slough Closed Area**

Petersburg AC	Support
Sitka AC	Support
Other ACs	TNA

**Adopt**

## KUIU ISLAND MARTEN

### Proposal 8

- Reduce resident marten trapping season on Kuiu Island to 2-weeks (Dec. 1 – 15)
- Close nonresident marten trapping season
- Close the Kuiu road system to motorized land vehicles for marten trapping

Department Proposal  
Dept. Recommendation

Amend and Adopt

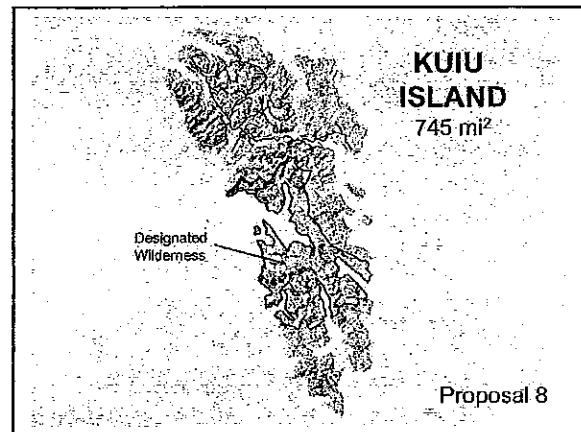
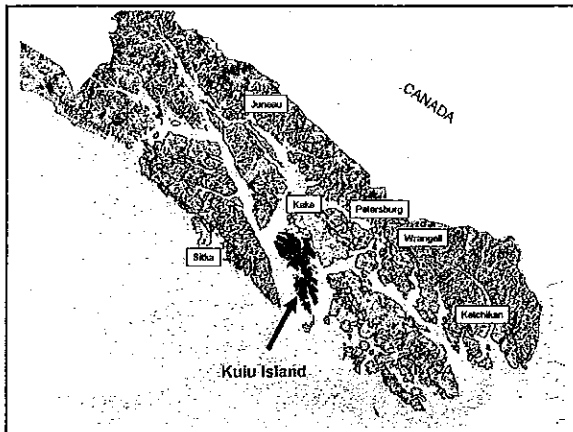
## Amendment

Had hoped to preserve some limited trapping opportunity on Kuiu via original proposal

*However...*

We now recommend the marten trapping season on Kuiu Island be closed until the population increases.

Proposal 8



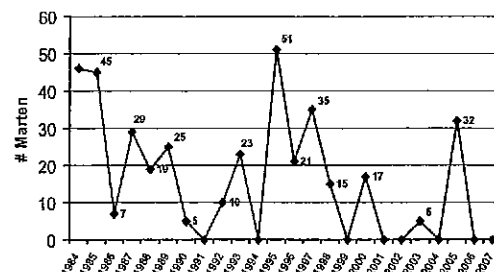
## Overview of Kuiu Island

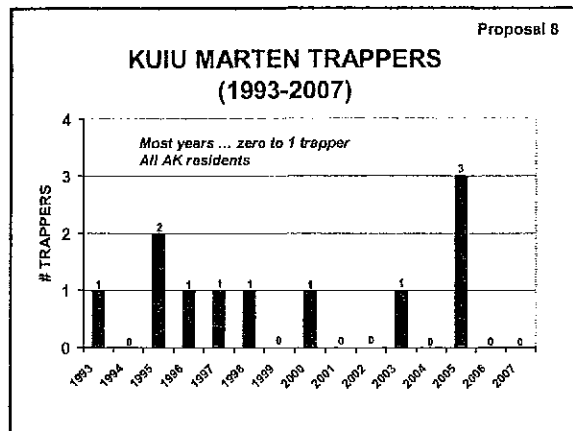
- 745 mi<sup>2</sup> – 7<sup>th</sup> largest island in SE
- Among lowest documented marten densities in SE
- Extensive timber harvest and road system on northern Kuiu (more planned)
- Portion of S. Kuiu designated Wilderness
- High black bear densities
- Very low deer densities

Proposal 8

Proposal 8

### Kuiu Marten Harvest (1984- 2007)

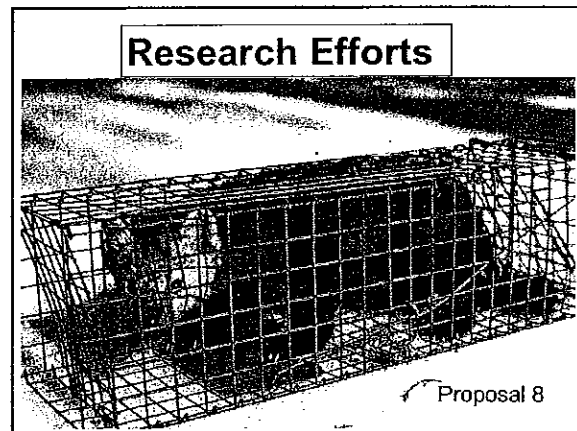
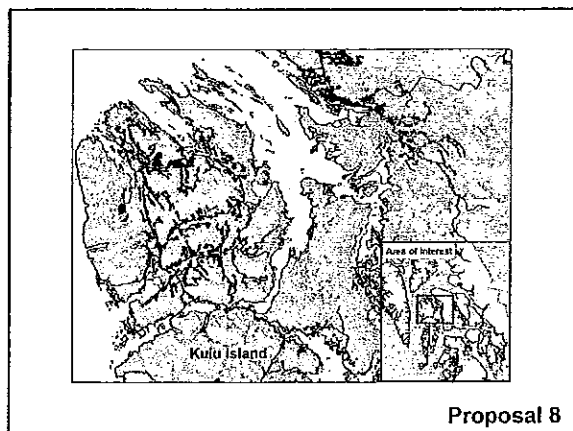




### Habitat issues

- Marten are an old growth associated species
- Clearcut logging = habitat loss for marten
- > 28,000 acres logged to date (more planned)
- Extensive road system (more planned)
- Roads = Increased vulnerability to trapping

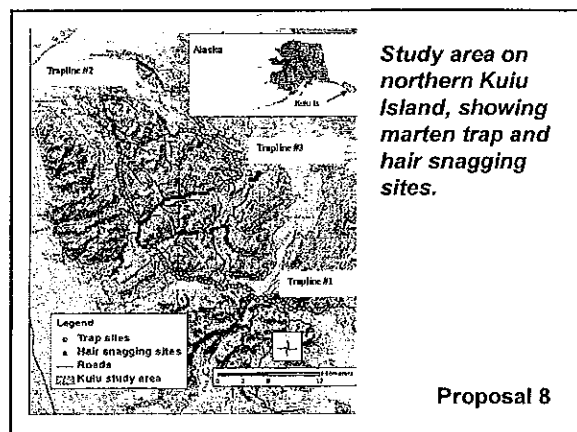
Proposal 8



### Research Objectives

1. Estimate population size and trend
2. Document geographic distribution of *M. caurina* clade
3. Measure annual survival rate of martens
4. Estimate relative small mammal (prey) abundance

Proposal 8



## Methods

- Marten capture efforts (multiple years)
  - Live captures 4-years
  - Hair snaring 2-years
- Radiocollaring 2007 & 2008
- Survival
- Prey abundance
- DNA analysis: species or subspecies?

Proposal 8

## Marten Captures

- 2007 – 27 captures (15 M & 12 F)
    - 19 Radiocollared (11 M & 8 F)
  - 2008 – 18 captures (includes 3 recaptures)
    - 17 Radiocollared
- 23 currently on air

Proposal 8

## Marten Capture Rates in SE

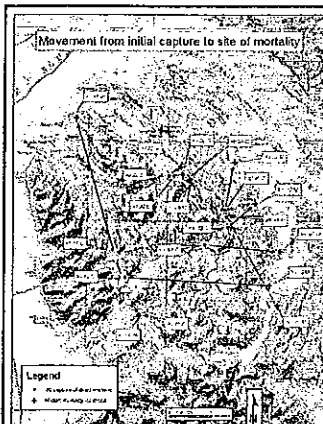
Study Area	Year	# Captures	Trap Nights (TN)	Captures per 100 TN
Chichagof Is.	2002	14	239	5.8
	2003	10	178	5.6
Thomas Bay	2001	9	281	3.2
	2002	12	265	4.5
Point Courverden	2003	5	291	2.9
Prince of Wales	2001	5	338	1.5
	2002	5	225	2.2
	2003	5	212	2.3
Kupreanof Is.	2002	5	272	1.9
	2003	6	249	2.4
Kuiu Is.	2001	3	279	1.1
	2002	2	298	0.8
	2007	27	1490	1.8
	2008	18	1613	1.1
Etolin Is.	2002	1	223	0.4

Proposal 8

## Hair Snaring Efforts

Study Area	Year	# Captures	Trap Nights (TN)	Captures per 100 TN
Kuiu Is.	2005	3	938	0.3
	2006	11	1367	0.8
Admiralty Is.	2005	35	1057	3.7

Proposal 8



May 2008 relocations showing movements of most marten to near beaches.

High natural mortality

10 of 18 died between Jan 1 and March 29

7 animals still active.

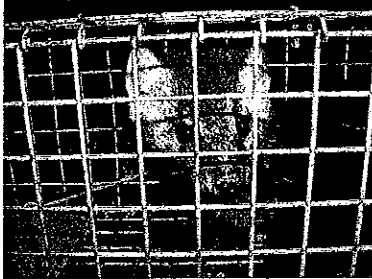
Proposal 8

## Survival Rates of Collared Marten

Study Area	Natural Mortality	With Trapping Mortality
Chichagof Is.	0.75	.66
Kuiu Is.	.44	N/A

Proposal 8

## PREY ABUNDANCE



Proposal 8

Table 6. Mean capture rates for mice and voles in old growth forest at all study areas in Southeast Alaska, fall 2001-2003. For each target at each location, 2 Muskrat Special trap traps were set at 25 stations evenly spaced along a 360 m long line and checked for 3 consecutive nights (150 trap nights). Capture are expressed as number per 100 trap nights.

Location	Year	n	Kew's mice		Long-tailed voles		Red-backed voles	
				SE		SE		SE
Chikof Island	2002	2	4.7	0.0	9.3	0.6	-	-
	2003	3	3.3	1.0	3.8	1.2	-	-
Etolin Island	2002	2	3.7	3.6	0.0	-	3.4	3.4
Kuiu Island	2001	2	4.7	0.7	0.4	0.3	-	-
	2002	2	7.7	2.3	0.0	-	-	-
	2003	5	1.7	-	0.1	-	-	-
Kupremuk Island	2002	2	4.7	4.6	0.0	-	-	-
	2003	3	3.5	1.8	0.0	-	-	-
Pot Cove/Admiralty	2003	4	0.2	0.2	0.0	-	15.9	2.9
Prince of Wales Island	2001	2	6.7	2.7	0.0	-	-	-
	2002	2	3.7	0.3	0.0	-	-	-
	2003	4	7.0	1.7	0.2	0.2	-	-
Thomas Bay	2001	2	0.4	0.3	0.4	0.3	4.4	2.3
	2002	2	1.0	0.3	0.0	-	4.7	1.4
Yakutat	2003	2	0.0	-	0.7	0.7	12.7	2.0

## Supplemental Food Sources

- Kuiu has among lowest deer densities in SE ... possibly responsible for low marten numbers (few spring carcasses)
- Black bear carcasses – too late in spring
- Salmon (mid-summer & fall only)

Proposal 8

## Marten species issue

- History (species vs. subspecies)
- Kuiu one of 2 contact zones for (*Martes americana* and *Martes caurina*)
- SE Distribution - Kuiu & Admiralty Is. only
- Hybridization on Kuiu
- Endemic species issue

Proposal 8

## USFS Response to Concerns

- Despite expressing concern about habitat loss, road densities and Kuiu marten the USFS has failed to react

From 2008 TLMP planning record ...

- "ADF&G needs to step up to the plate. If they are unwilling to change hunting and trapping regulations then why should we limit access?" (Doc. 1265)

Proposal 8

## State vs. Federal Regulations

- Note: closing the State marten trapping season on Kuiu will be ineffective unless the Federal Subsistence Board follows suit

Proposal 8

## RECOMMENDATION

### Proposal 8

As Amended:

Close the marten trapping season on Kuiu Is.

PSG AC	Adopt
Other ACs:	TNA

Amend and Adopt



# Ketchikan Area Overview-Unit 1A

## Game Management Unit 1A

### Important Game Species

- Moose
- Goats
- Deer
- Black Bear
- Brown Bear
- Furbearers
- Waterfowl

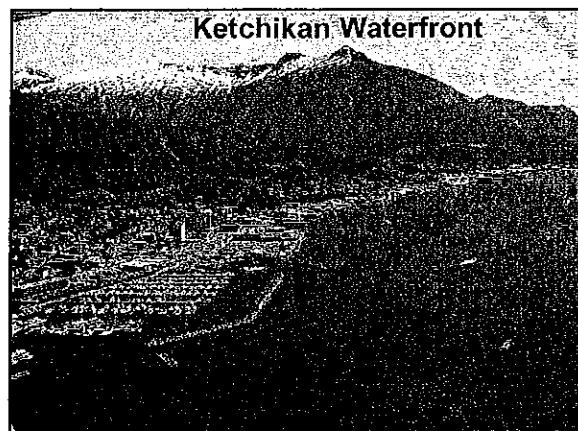
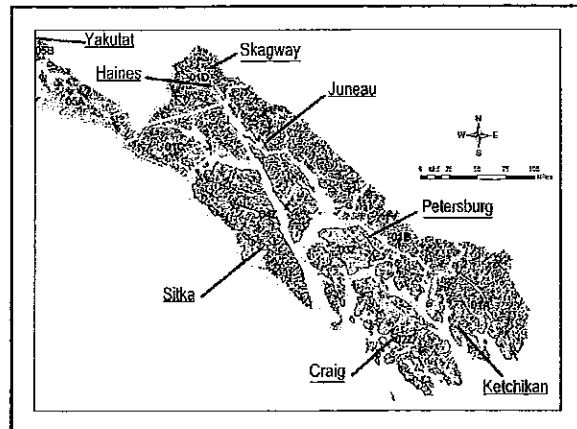
## MAJOR COMMUNITIES

- KETCHIKAN pop. ~7,900
- Metlakatla pop. ~ 600
- Others pop. ~ 450

- Area Office located in Ketchikan  
small satellite office in Craig

## Ketchikan Management Area

- Unit 1A - Mainland and Islands
  - ~ 5,300 Square Miles
  - Includes 2,400 Square Miles Misty Fjords National Monument
- Unit 2 - Prince of Wales and other Islands
  - ~ 3,600 Square Miles
  - 3<sup>rd</sup> Largest Island in North America



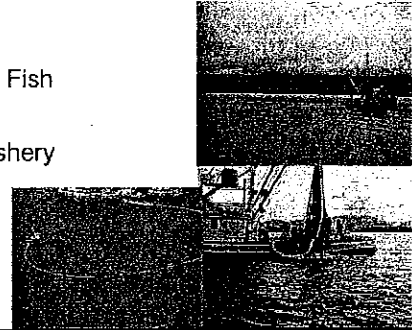
# Ketchikan Area Overview-Unit 1A

## Logging

- Mental Health Sales
- University Sales
- State Offerings
- Federal Sales

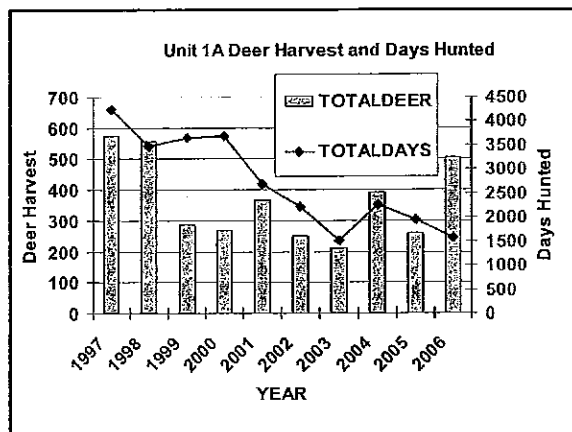
## Commercial Fishing

- Seine
- Gill Net
- Ground Fish
- Trolling
- Dive Fishery
- Shrimp



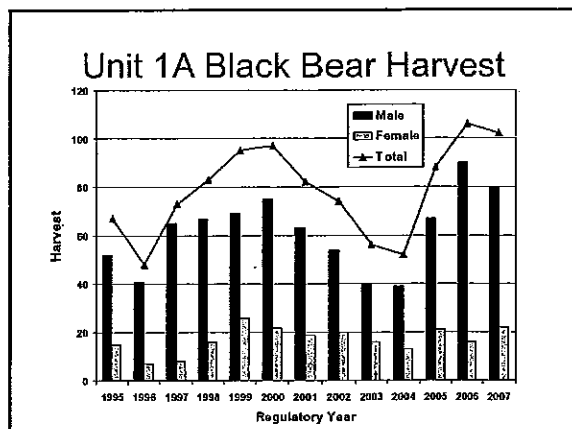
## Unit 1A Deer

- Population Stable at Moderate to Low Level
- Winters Are Limiting
- Second Growth Issues
- Predation by Black Bears, Brown Bears, Wolves, and Mountain Lions



## Unit 1A Black Bears

- Wide Distribution
- Healthy Population
- Harvest Fluctuates
- Spring Hunting Along Extensive Shoreline
- Color Phase on Mainland Includes Blue, Cinnamon, and White



# Ketchikan Area Overview-Unit 1A

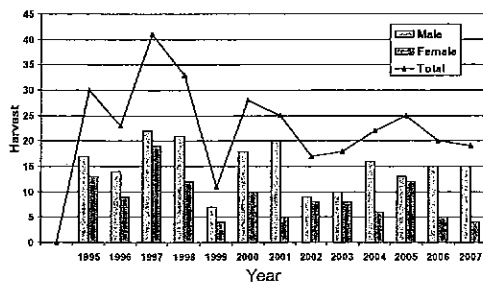
## Unit 1A Goat Status

- Healthy goat population
- One of the highest goat densities in state
- Several goats each year make B&C
- 1999 harvest low due to poor weather
- Several trend count areas showing low counts
- Both Transplants Showing Rapid Horn Growth Patterns
- Proposal to Increase Bag Unit 1A Bag Limit

## Our Goat Management Approach

- Registration permits
- Hunter Comments
- Aerial Composition Surveys
  - Manage for 2-6 points/hundred goats surveyed
  - 2 points if poor survey conditions, bad winter, high harvest, or other concerns

## Unit 1A Goat Harvest

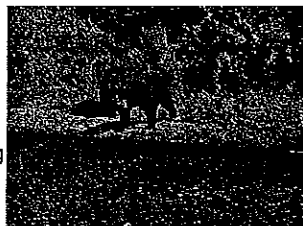


## Unit 1A Trophy Goats

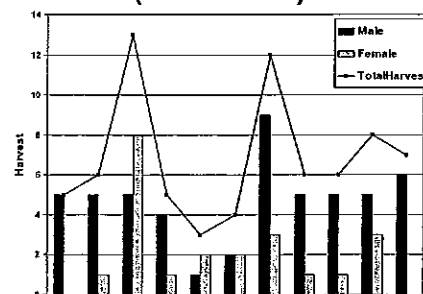


## Unit 1A Brown Bear

- Distribution on Mainland, Cleveland, and Revilla Island
- Estimated Population 150-300
- Distribution Expanding
- Harvest Stable
- Important for Viewing and Hunting



## Unit 1A Brown Bear Harvest (1997-2007)



# Ketchikan Area Overview-Unit 1A

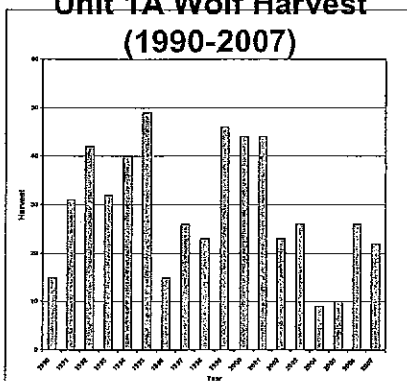
## Mainland Brown Bear Research

- GPS Collars Providing Movement and Habitat Use
- Hair Snares For Mark Recapture Population Estimate

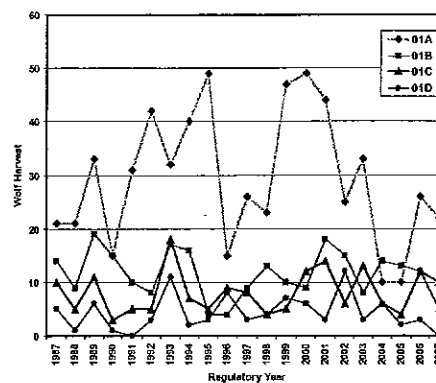
## Unit 1A Wolves

- Wolf Population Appears Stable
- Trapping Effort Fluctuates
- Most Trapping Along Beaches
- Trophy Species for Nonresidents
- Hunting Season Extended to include August and April
- Proposal to Extend Trapping Season

## Unit 1A Wolf Harvest (1990-2007)



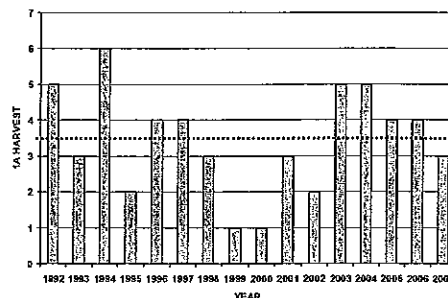
All Unit 1 Wolf Harvest By SubUnit



## Unit 1A Moose

- Concentrated Mostly along the Unuk River
- Population and Harvest Low
- Any Bull by Registration Permit
- Season: Sept.15–Oct. 15
- Issue 40-70 Registration Permits Annually
- Harvest Variable (1–6 bulls)
- Federal Registration Hunt Starts 10 Days Early (Sept. 6)

## Unit 1A Moose Harvest (1992-2007)

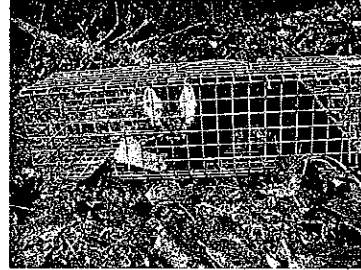


## Ketchikan Area Overview-Unit 1A

### Unit 1A Furbearers

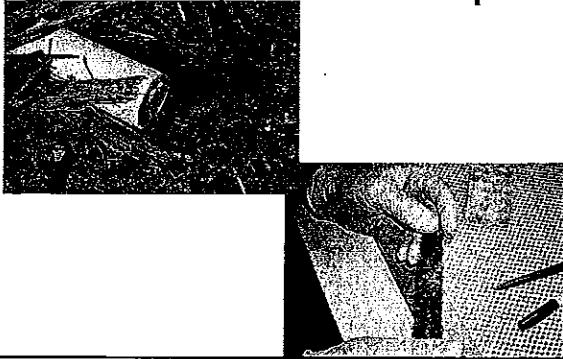
- Marten average 167 (range 42-654)
- River Otter average 104 (range 45-185)
- Beaver average 35 (range 7-50)
- Wolverine average 3 (range 1-7)

### MARTEN RESEARCH



Unit 2 and Mainland Marten

### Marten Trap and Hair Sample

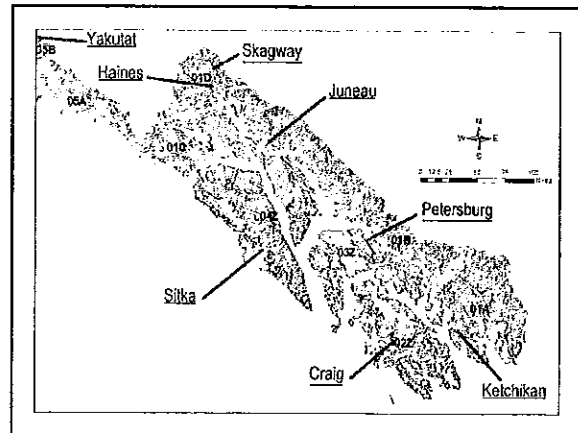


## Ketchikan Area Overview-Unit 2

### Unit 2

#### ▪ Important Species

- Deer
- Black Bear
- Furbearers
- Upland Birds
- Waterfowl



### MAJOR COMMUNITIES

- Craig pop. ~ 1,500
- Thorne Bay pop. ~ 500
- Other POW pop. ~ 4,000

- New satellite office in Craig

### Small Lumber Mills



- Small Lumber Mills on Prince of Wales Island
- 4-5 Million Board Feet of Lumber Annually
- Mostly Specialty Wood Construction Products

### Major Industry

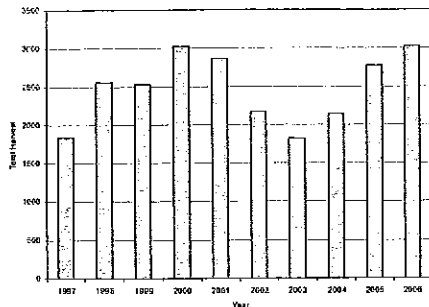
- Tourism
- Charter Fishing
- Commercial Fishing
- Lumber Mills
- Timber Harvest
- Most Large Scale Logging Camps Closed
  - Some Native Corporation Timber Export

### Unit 2 Deer Harvest

- Federal Subsistence Season July 24 – Dec 31
  - Bag 5 Deer (Doe Season Oct 15 – Dec 31)
- State Season Aug 1 – Dec 31, Bag 4 Bucks
- Healthy Deer Population
- Mild Winters
- Large Tracts of Second Growth Reaching Stem Exclusion Stage

## Ketchikan Area Overview-Unit 2

### Unit 2 Deer Harvest (1997-2006)



### Lung Worm Parasites

- 2007 First Documentation on POW
- Collecting Additional Lung Samples
- Parallel with Hair Loss Observations



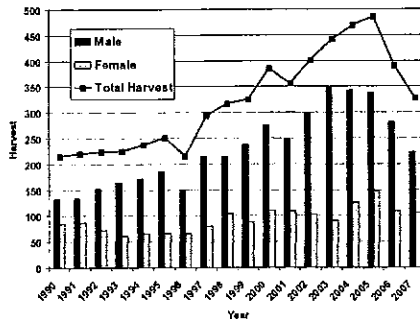
### Unit 2 Deer Research

- 4-Year UAF Ph.D. Graduate Student Study
- Relationships Between Deer, Deer Hunters, and Forest Change on POW
- DNA Population Density Estimate
  - Sex Ratio of Population
- Extracting DNA From Fresh Pellets
- Testing New Trail Transects Technique for Point Estimates and Trends
  - Compare to Traditional Pellet Trend Transects

### Unit 2 Black Bears

- No Demographic or Population Data
- Harvest Steadily Increasing
- Hunters Complaining About Female Kill and Reduced Bear Numbers Recently
- Local Residents Complaining About Low Bear Numbers
- Most Hunting Along Extensive Road System and Beaches
- Color Phase Only Black
- Increasing Transporters and Guides
- Currently FS Moratorium on Big Game Guide Permits
- Some Areas Getting Crowded
- Proposals 5, 6, 7 and 36

### Unit 2 Black Bear Harvest (1990-2007)

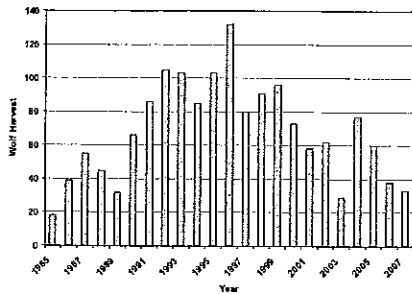


### Unit 2 Wolf Harvest

- Wolf Population Stable
- Less Trapping Effort
- Federal Imposed Harvest Cap 30%
- Closed By Emergency Order 1999
- Difficult To Track Population or Current Harvest

## Ketchikan Area Overview-Unit 2

### Unit 2 Wolf Harvest (1985-2007)



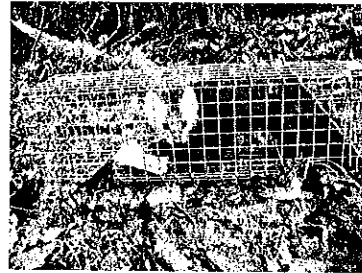
### Unit 2 Furbearers

- Most trapper transport by road vehicle
- Marten average 764 (range 320-1000)
- River Otter average 216 (range 40-616)
- Beaver average 180 (range 44-310)

### FRANKLIN GROUSE RESEARCH AND SURVEY



### MARTEN RESEARCH



Unit 2 and Mainland Marten



## Proposal 3

**Would change the deer bag limit from 4 bucks to 2 bucks on the Unit 1A portion of the Cleveland Peninsula**

**Department Proposal**

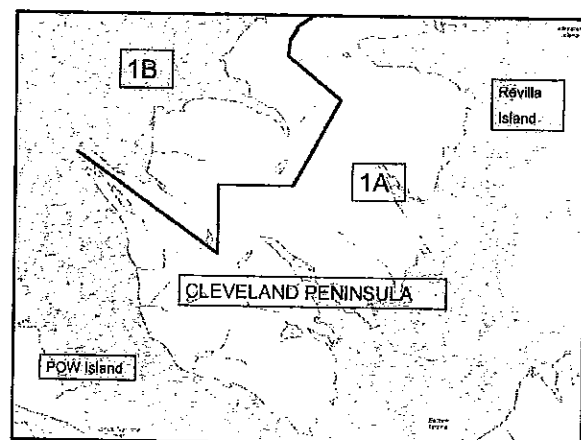
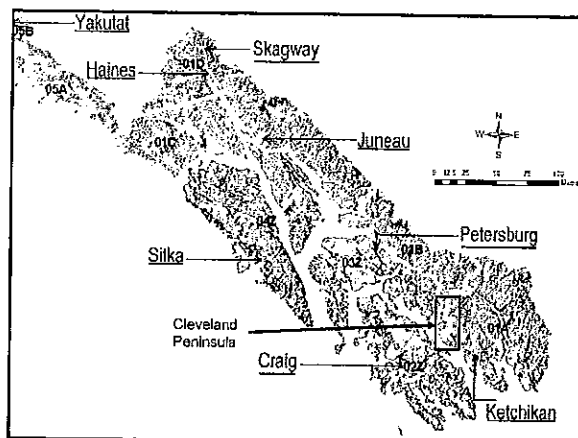
**Department Recommendation:**  
**Adopt**

Proposal 3

## Justification

- The Unit 1B portion of the Cleveland is already a 2 Buck Bag Limit
- Align Units 1A and 1B deer bag limit
- Will help this slowly recovering deer population
- Prevent over harvest of deer that are clumped in distribution

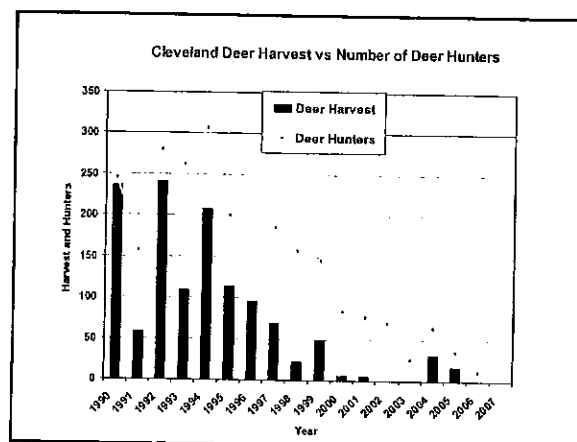
Proposal 3

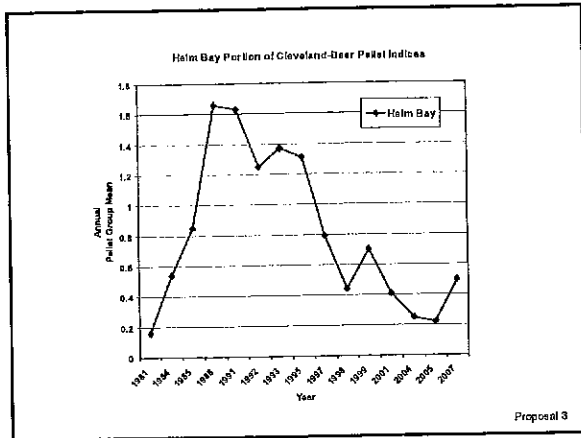


## State Subsistence Review

- Is there Customary and Traditional Use of deer in Unit 1A?  
-Yes, a positive finding for Unit 1A, outside the Nonsubsistence area.
- Is there a "Harvestable Surplus" of deer in this Unit?  
-Yes
- What is the Amount Reasonably Necessary for Subsistence? (225-250)
- Does the harvestable surplus allow for all or only some uses?  
-This is a Board determination.

Proposal 3





### Discussion

- Reasons for the decline are not well understood
- Lower bag limit should lessen the pressure on this population
- Available deer will be distributed amongst a greater number of hunters

Proposal 3

### ADF&G Advisory Committees

- Ketchikan - 6/0 Support
- East Prince of Wales - 7/0 Support

Proposal 3

### Proposal 3

#### Staff Proposal

**Department Recommendation:**  
**Adopt**

Proposal 3

## Proposal 4

Would change the goat bag limit for Unit 1A from one goat to two goats

**Proposal from the Public**

**Department Recommendation**  
**Do Not Adopt**

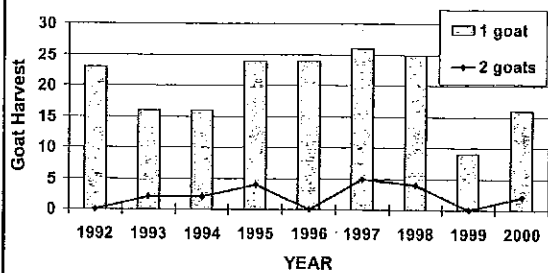
Proposal 4

## Justification

- Allocation Issue
- Competition in high use areas
- One goat bag limit consistent with all areas
- Very Poor Aerial Survey Data Most Years

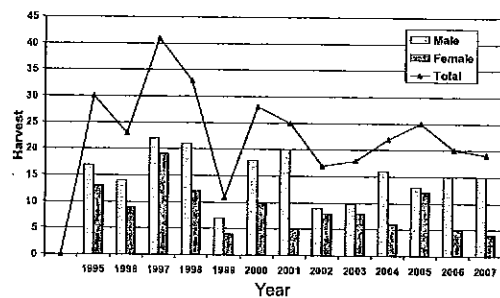
Proposal 4

## Unit 1A Two Goat Harvest



Proposal 4

## Unit 1A Goat Harvest



Proposal 4

## Local Advisory Votes

- Ketchikan AC- 5/1 Oppose
- East Prince of Wales AC- 7/0 TNA

Proposal 4

## Department Recommendation

- **Do Not Adopt**

Proposal 4

### **Proposal 6**

This Proposal Would Close Fall  
black bear season in Unit 2

Public Proposal

Department Recommendation:

**Take No Action**  
(See Proposal 36)

Proposal 6

### ADF&G Advisory Committee Votes

#### Proposal 6

- Ketchikan AC- 7/0 Oppose
- East Prince of Wales AC- 4/3 Oppose

Proposal 6

### **Proposal 6**

- The proponent of this proposal is concerned with a decline in black bear numbers
- Department proposal #36 addresses black bear conservation

Department Recommendation

Take No Action  
(See Proposal 36)

Proposal 6

### **Proposal 7**

This Proposal Would Close Fall Black  
Bear Season in a Portion of Unit 2

Public Proposal

Department Recommendation:

**Take No Action**  
(See Proposal 36)

Proposal 7

### **ADF&G Advisory Committee Votes**

- Ketchikan AC- 7/0 Oppose
- East Prince of Wales AC- Tabled see  
Proposal 6

Proposal 7

### **Proposal 7**

- The proponent of this proposal is concerned with a  
decline in black bear numbers
- Department proposal #36 addresses black bear  
conservation

Department Recommendation

Take No Action  
(See Proposal 36)

Proposal 7

## Proposal 1

**Would change the season for wolf trapping in Unit 1A**  
(Start date of Nov. 1 vs Nov. 10)

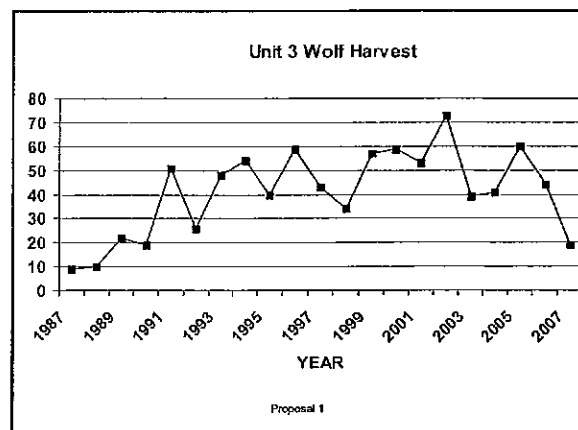
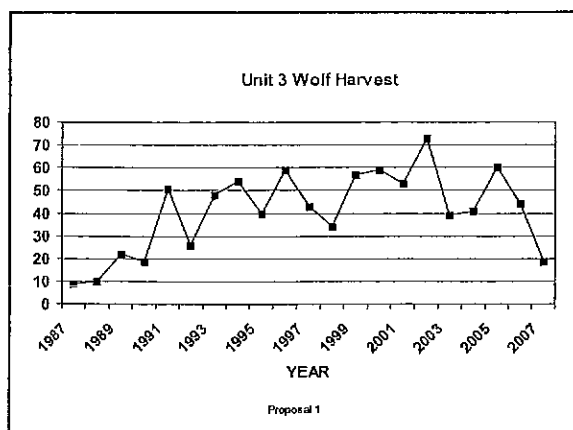
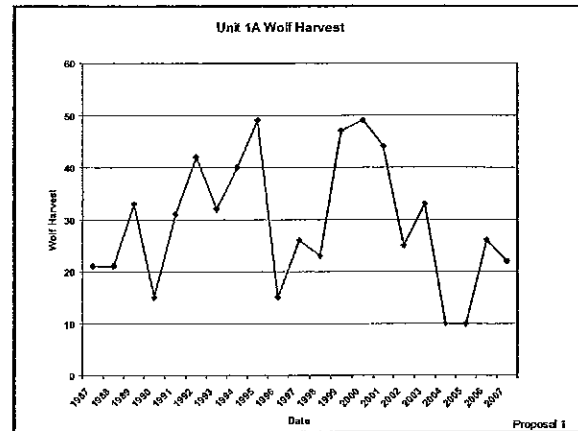
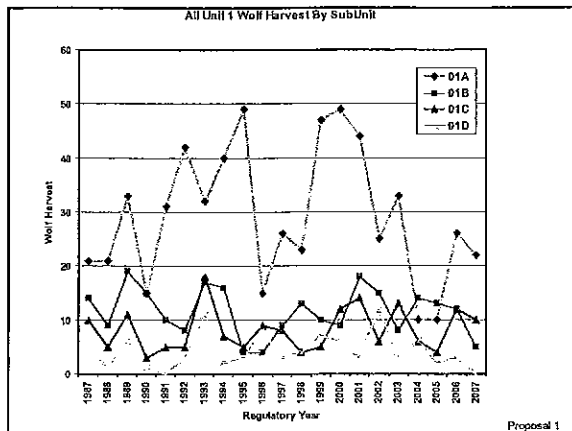
**Public Proposal**  
**Department Recommendation**  
**Amend and Adopt**

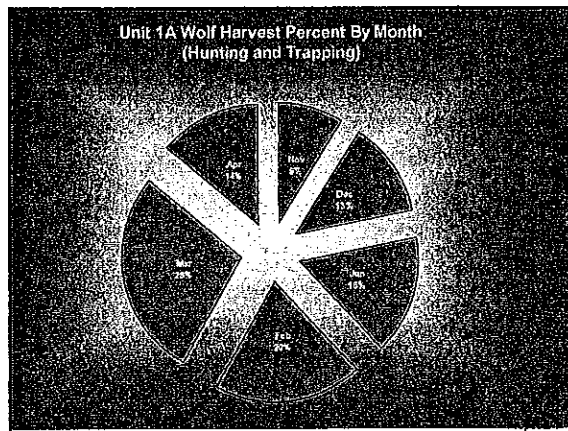
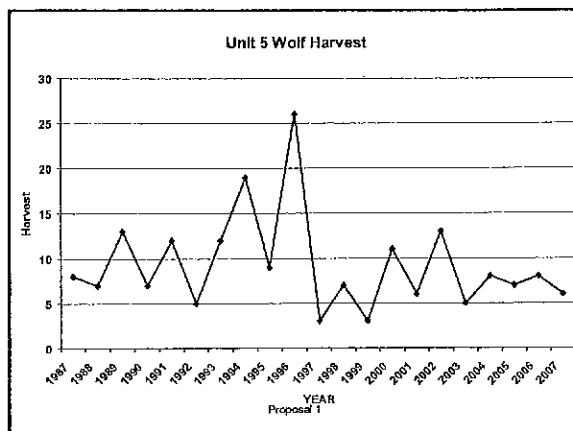
Proposal 1

## Discussion

- Prior to 1983 trapping season started November 1<sup>st</sup> in Southeast Alaska
- No negative effects
- Possible Concern
- Some Bears Still Active

Proposal 1





## Discussion

### ADF&G Advisory Committee Votes

- Ketchikan Advisory- 6/0 Support
- East Prince of Wales Advisory- 7/0 Support

Proposal 1

## Recommendation

- Amend and Adopt
- Region Wide (Except Unit 2)

Proposal 1

**Proposal 2**

**This proposal would increase the  
management objective for wolves in  
Unit 1A**

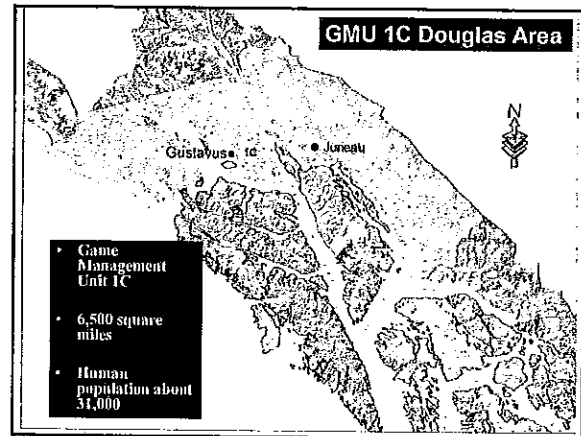
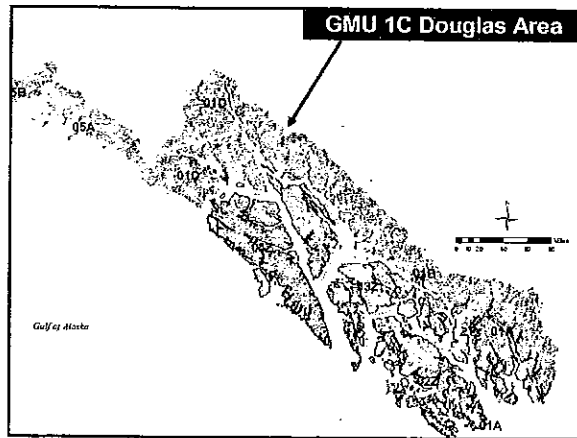
**Proposal from the Public**

**Department Recommendation  
Take No Action**

Proposal 2



# Douglas Area Overview – Unit 1C

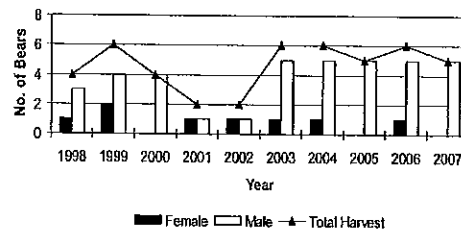


## BROWN BEAR

- Variable distribution in Unit
- Restricted almost entirely to mainland
- Sightings near Juneau still "news", but more common than in past
- Berner's Bay research project
- Mean annual harvest: 4.6 bears (1998-2007)
- 72% taken by residents
- 76% bears taken during Spring season
- Proposal 24



Unit 1C Brown Bear Harvest (1998-2007)

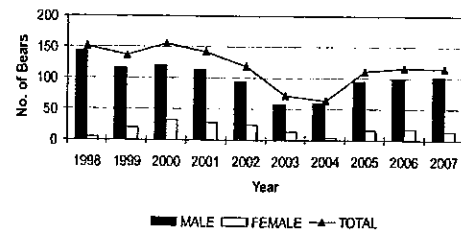


## BLACK BEAR



- Common throughout Unit 1C
- Cooperative GPS collaring project
- Bear/human conflicts
- Mean annual harvest: 118 (1998-2007)
- 44% taken by nonresidents
- 81% of harvest during spring season
- Conservation concern in southern portion of Unit 1C
- Proposal 38

Unit 1C Black Bear Harvest (1998-2007)



# Douglas Area Overview – Unit 1C

## SITKA BLACK-TAILED DEER

- Most abundant on islands; present on mainland
- Significant winter mortality 2006-2007
- Doe season closure 2007
- Mean annual harvest: 409 (1997-2006)



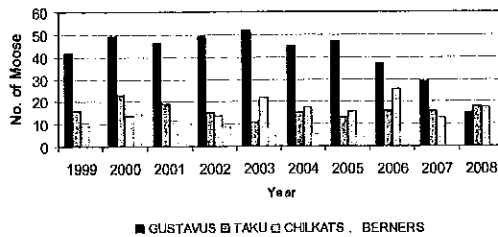
## MOOSE

### Four management populations

- Gustavus
  - Registration permit/any bull
  - Drawing permit/any/lerless moose
- Chilkat Range
  - Registration permit/any bull
- Taku River
  - Registration permit/any bull
- Berners Bay
  - Drawing permit/bull
  - Drawing permit/any/lerless



Unit 1C Bull Moose Harvest 1999-2008

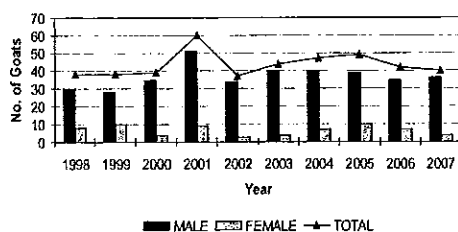


## MOUNTAIN GOAT

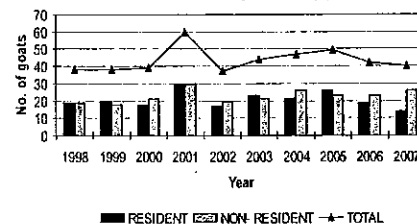
- Found only on mainland
- Mean annual harvest during 1998-2007 (43)
- Nonresidents harvest nearly 52%
- Goat hunting becoming increasingly popular
- Helicopter flight seeing pressures
- Mountain goat research project underway



Unit 1C Mt. Goat Harvest (1998-2007)



Unit 1C Mt. Goat Harvest by Residency (1998-2007)



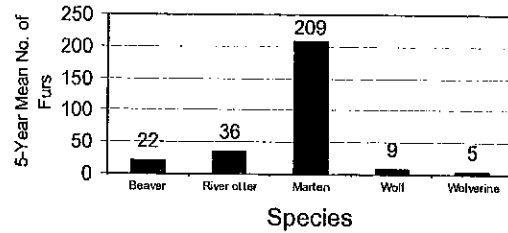
## Douglas Area Overview – Unit 1C

### FURBEARERS

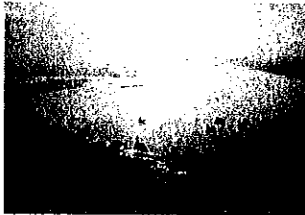
- Consumptive and non-consumptive
- Beavers and wolves are popular for viewing in some areas
- Furbearer harvest: mainly recreational trappers
- Nuisance permits issued to reduce beaver caused flooding in no-trapping zones



Unit 1C Fur Sealing (2003-2007)



### WATERFOWL

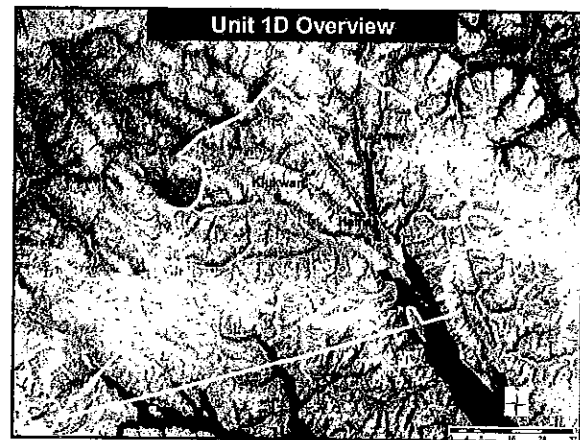
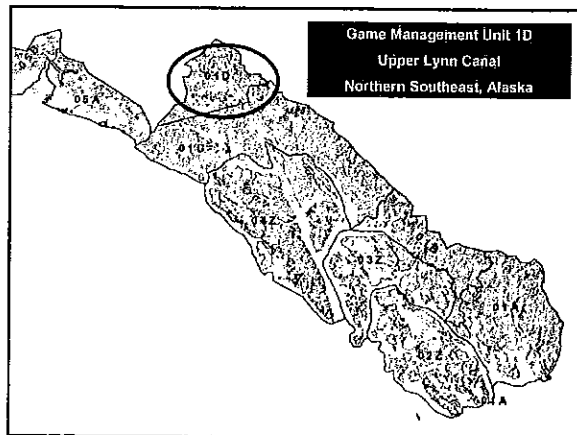


- Hunting very popular on Mendenhall Wetlands State Game Refuge (520 permits in 2007)
- Education and regulations are reducing conflicts
- Avian Influenza Sampling

### OTHER MANAGEMENT CONCERNS

- Road construction: Juneau Access Project
- Mining: Kensington Mine Project
- Hydro-electric: Lake Dorothy
- Housing developments: fragmentation of habitat-urban wildlife concerns

# Douglas Area Overview-Unit 1D



## GAME MANAGEMENT UNIT 1D

- Subunit bounded by public lands and Canada
- Approx. 2670 mi<sup>2</sup>
- Accessible by road
- Human population is about 2,500  
Haines~1,474  
Klukwan~101  
Skagway~846

## DEER



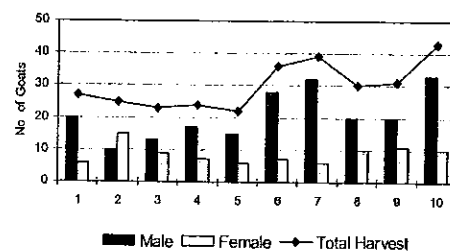
- No open season
- Sullivan Island (1C) is closest open area
- Moose and goat are major source of meat in unit

## MOUNTAIN GOAT

- Stable numbers overall
- Skagway Pie Proposal
- Helisking operations increasing
- Goats available through various conveyance
- East Lynn Canal Research



Unit 1D Mt. Goat Harvest (1998-2007)



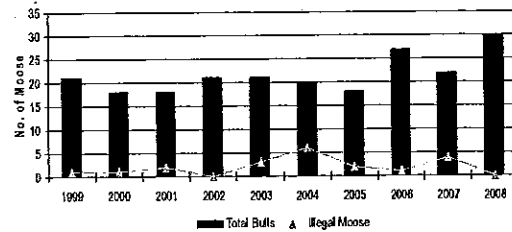
# Douglas Area Overview-Unit 1D

## MOOSE

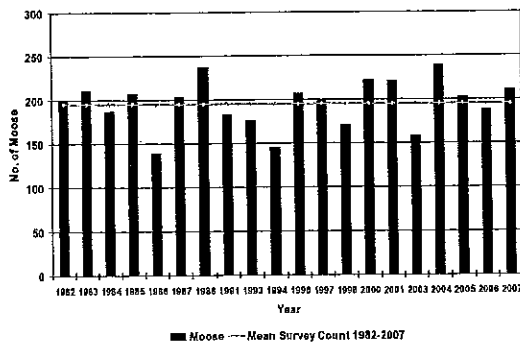


- Tier II hunt with antler restriction
- Some local concern about status of herd & dissatisfaction with permit allocation
- Public meetings and education programs have reduced illegal bull harvest
- Surveys indicate stable population

Unit 1D Tier II Moose Harvest



Unit 1D Historical Moose Survey Data

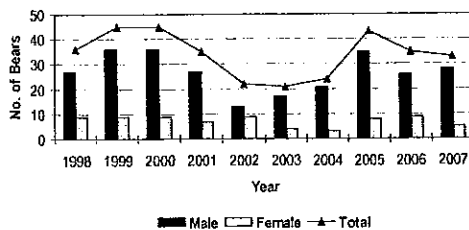


## BLACK BEAR



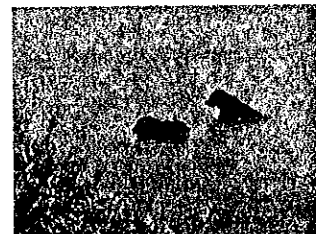
- 81% of total black bear harvest taken by residents
- 34% of black bears reported taken over bait
- Important food source

Unit 1D Black Bear Harvest (1998-2007)



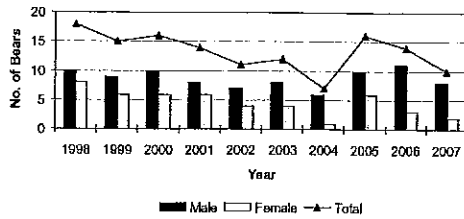
## BROWN BEAR

- 62% of total brown bear harvest taken By nonresidents
- Non-hunter killed bears
- Variety of public perceptions about bear population



# Douglas Area Overview-Unit 1D

Unit 1D Brown Bear Harvest (1998-2007)

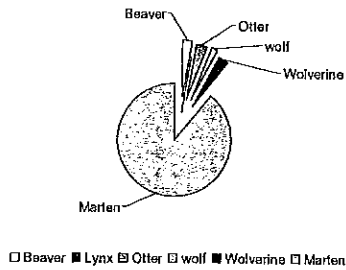


## FURBEARERS

- Variety of furbearer species
- 11-18 individual trappers sealed furs in each of the previous 5 years
- <10 furs per species sealed each year (2003-2007), excepting marten (avg. 127/yr.)
- Low trapper effort
- Concerns with beaver activity and impact to salmon



Unit 1D Mean Fur Sealed (2003-2007)

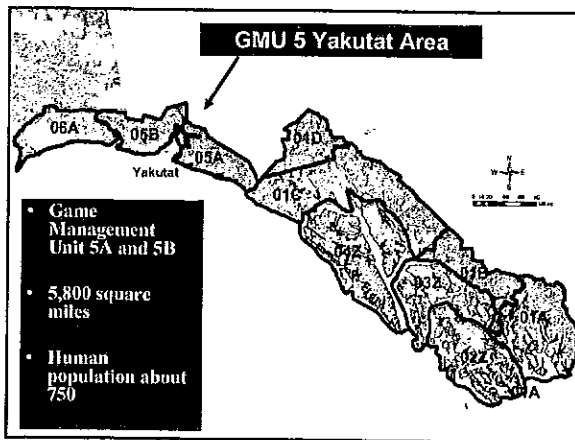


## OTHER CONCERNS

- Chilkoot bear interactions
- Nuisance bears
- Helicopter tour operations
- Highway changes and monitoring



# Douglas Area Overview – Unit 5

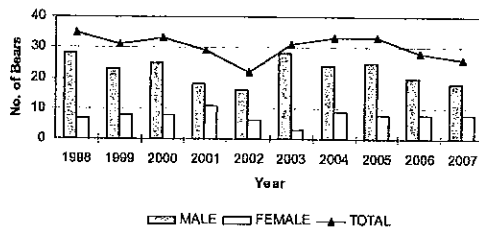


## BROWN BEAR

- Population density about 0.5 bear/mi<sup>2</sup>
- Mean annual harvest (1998-2007)
  - Unit 5A: 21
  - Unit 5B: 7
- 79% harvest by nonresidents
- High non-hunting mortality (1-14 bears/year)
- Landfill concerns
- Community refuse
- Fishing: commercial and recreational activities lead to mortalities



Unit 5 Brown Bear Harvest

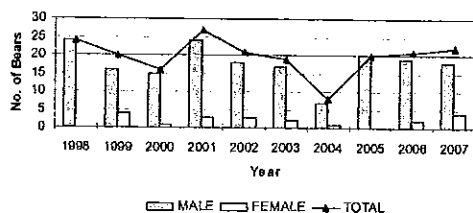


## BLACK BEAR



- Mean annual harvest: 20 (1998-2007)
- Nearly 100% from 5A
- Approx. 50:50 resident vs. nonresident harvest
- Annual Glacier bear harvest: 2-3

Unit 5 Black Bear Harvest (1998-2007)



## SITKA BLACK-TAILED DEER

- Once uncommon on mainland-now more widely distributed
- Mean annual harvest: 15 (1998-2007)
  - \* 1 month, bucks only season
- Deep snow and wolf predation limit deer



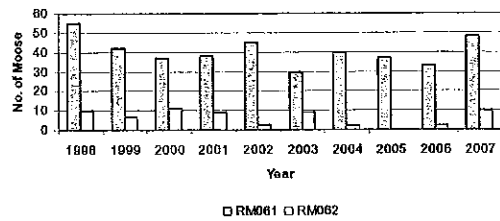
# Douglas Area Overview – Unit 5

## MOOSE

- State and Federal seasons
- Three registration permit hunts
- Mean annual harvest (1998-2007)
  - Unit 5A: 41
  - Unit 5B: 7



Unit 5 Moose Harvest (1998-2007)

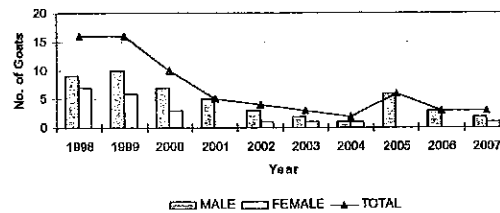


## MOUNTAIN GOAT

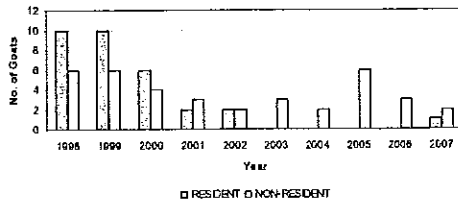


- State and Federal seasons
- Separate registration permits
- Mean annual harvest: 6.5 (1996 - 2007)

Unit 5 Mt. Goat Harvest (1998-2007)

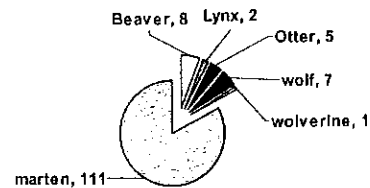


Unit 5 Mt. Goat Harvest by Residency (1998-2007)



## FURBEARERS

Unit 5 Mean Fur Harvest (2003-2007)





## Douglas Area Overview – Unit 5

### **FURBEARERS**

- Proposal 32- Lynx trapping season change
- Proposal 33- Remove trap tagging requirement

### ***Proposal 27***

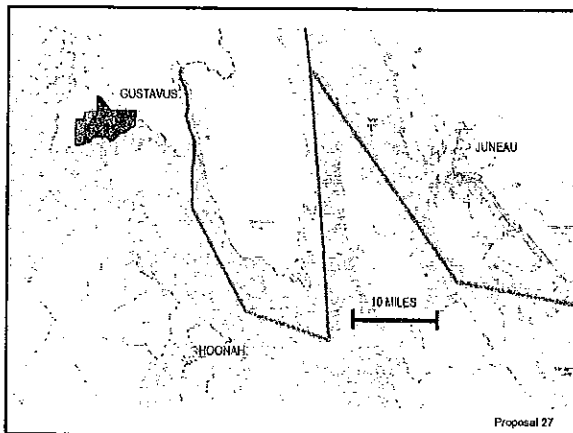
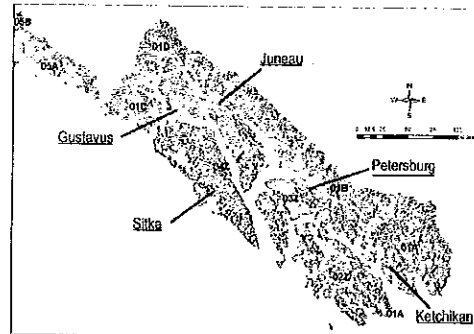
- Eliminate antlerless moose hunts at Gustavus (DM043, DM044, DM045)

Public Proposal

Department Recommendation

Do Not Adopt

Proposal 27



Proposal 27

### ***Discussion***

- Author's justification for proposal: antlerless hunt will kill off moose herd at Gustavus
- Department considers the antlerless hunt a necessary management tool at Gustavus

Proposal 27

### ***Discussion***

- Department's concern: population beyond carrying capacity of winter habitat
- Winter range density of 13 moose/mi<sup>2</sup> in 2003, very high compared to other Southeast Alaska coastal moose populations

Proposal 27

### ***Discussion***

- Antlerless moose hunt at Gustavus adopted at 2000 BOG meeting
- First years hunt in 2001 cancelled due to local opposition
- First antlerless hunt held in 2002, 10 cows harvested

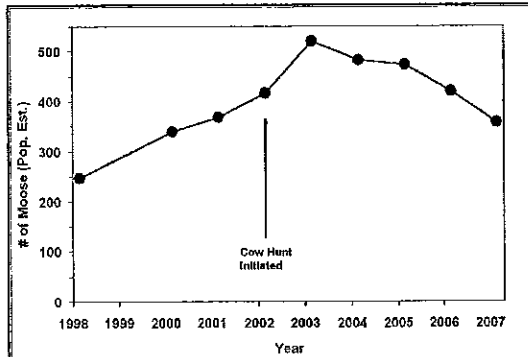
Proposal 27

### Discussion

- Antlerless hunts were held in each year from 2002-2006
- Fall 2007 antlerless hunt was cancelled due to cow mortality from previous winter
- Fall 2008, 15 antlerless permits have been issued

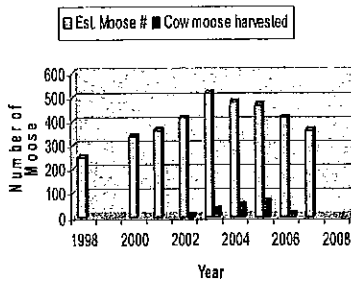
Proposal 27

Gustavus Moose Population History 1998-2007



Proposal 27

Est. Population vs Cows harvested



Proposal 27

### Discussion

- Antlerless hunts have lowered the moose density on winter range
- Density has been reduced from ~13/mi<sup>2</sup> to ~8 mi<sup>2</sup>
- Body condition and reproductive indices improving

Proposal 27

### Discussion

- ADF&G Advisory committee votes
  - Juneau Douglas (Do Not Adopt)
  - Petersburg (Do Not Adopt)
  - Sitka (Do Not Adopt)
  - Icy Straits (No Vote)

Proposal 27

### Conclusion

- Management strategy appears successful in providing for a healthier moose herd at Gustavus
- Board reauthorizes all antlerless moose hunts annually-allowing for yearly review of justification

Department recommendation

Do Not Adopt

Proposal 27

**Proposal 28**

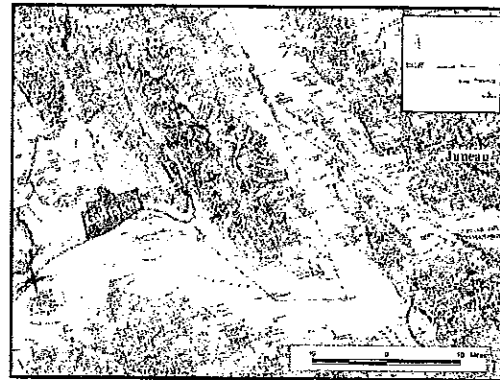
- Establish a spike-fork/50" or 3 brow tine antler restriction hunt for bull moose at Gustavus

Department Proposal

Department Recommendation

**Adopt**

Proposal 28



Proposal 28

**Discussion**

- "Any bull" hunt has been in place since 1988 when 1<sup>st</sup> bull killed at Gustavus
  - Registration permit Sept. 15-Oct. 15
  - During 1990s-2001 this was an effective strategy
- "Any bull" hunt necessary to assure enough bulls were harvested

Proposal 28

**Discussion**

- Popularity led to 150-200 hunters/year
- Density of hunters >15-20 mi<sup>2</sup>
- Hunt duration began declining as hunter participation increased
- Concerns for overharvest, public safety, and hunt quality have overshadowed hunt

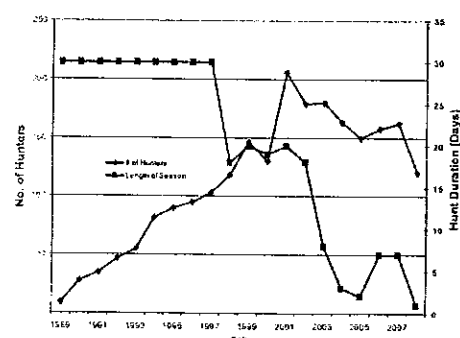
Proposal 28

**DISCUSSION**Hunt duration 1988-2008

1988-1998 (10 year period):	30 days
1999-2001 (3 year period):	20 days
2002-2003 (2 year period):	7 days
2004 (1 year):	3 days
2005 (1 year):	2 days (Tues-Fri only)
2006-2007 (2 year period):	6.5 days (6 am to 12 noon)
2008 (1 year):	6 hours

Proposal 28

Hunt Duration (Days) vs No. of Hunters at Gustavus 1988-2008



Proposal 28

### Discussion

- Derby hunt poses concerns for moose conservation, public safety, and hunt quality
- New hunt strategy needs to be employed that accomplishes 3 goals:
  - 1) Assures a healthy population of bulls
  - 2) Provides for hunter opportunity
  - 3) Provides for a safe hunt

Proposal 28

### Discussion

What are our options?

- Limit registration permits and include further restrictions
- Draw hunt
- Primitive weapons hunt
- Selective harvest strategy

Proposal 28

### Discussion

Selective Harvest Strategy

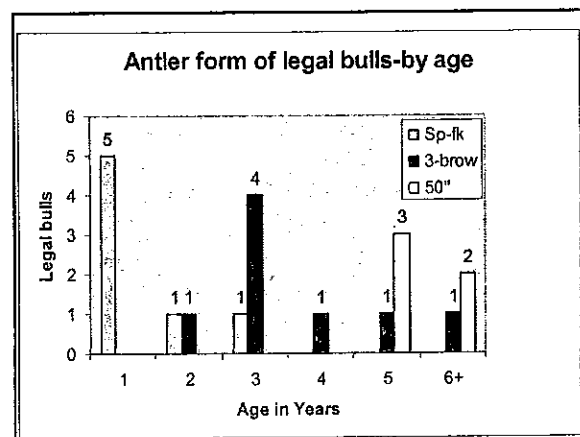
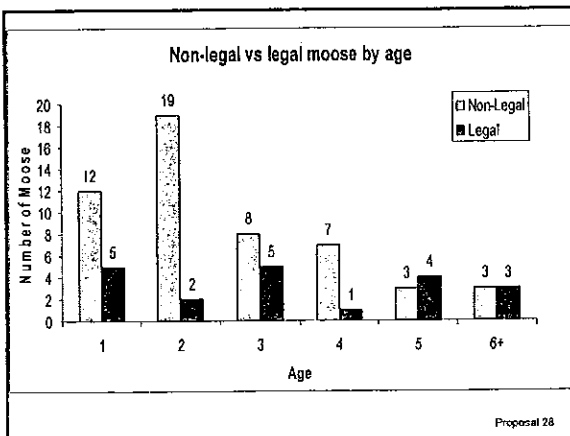
- Would an antler configuration strategy be successful at Gustavus?
- Would enough bulls be protected?
- Would the hunt provide harvest opportunity?

Proposal 28

### Discussion

- Photos of antlers during 2002-2008 hunts provide insight into antler configuration
- 72 sets of antlers categorized within the configurations of spike-fork/3 brow tine or 50" regulation

Proposal 28



***Discussion***

- Based on antler data collected, this hunt strategy has potential at Gustavus
- Data from antler photos suggest:
  - approximately 30% of the yearlings are spike-fork
  - few 2 year olds would be legal for harvest
  - some 3-4 year olds will meet 3-brow tine requirement, though most will be protected
  - at 5 years of age, approximately 50% of the bulls were either 50" or 3 brow tine

Proposal 28

***Discussion***

- Concern: many 4-5 year old bulls are 45-49"
- Most that do reach 50" are just barely...
- Data from adjacent hunt area suggests bulls do get large (>55") antlers, but generally at 6-10 years

Proposal 28

***Discussion***

- ADF&G Advisory committee votes
  - Juneau Douglas (Adopt)
  - Petersburg (Adopt)
  - Sitka (Adopt)
  - Icy Straits (No Vote)

Proposal 28

***Conclusion***

Department Recommendation

Adopt

Proposal 28

### Proposal 30

Would eliminate the current Tier II application scoring system for TM059, and restrict permit holders to one moose every two years

Public Proposal

Department Recommendation:

Do Not Adopt

Proposal 30

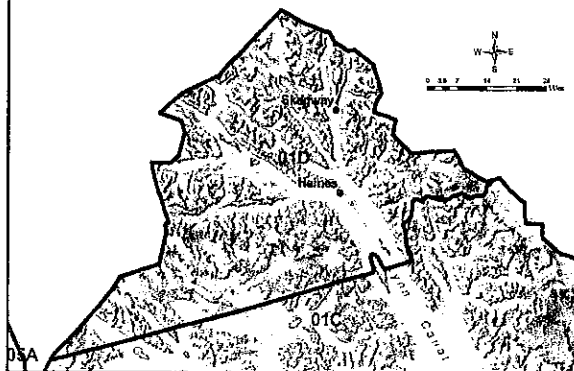
### Advisory Committees

Upper Lynn Canal AC recommendation:

Take No Action

Proposal 30

Unit 1D Upper Lynn Canal



### State Subsistence Procedures

- Is there Customary and Traditional Use for moose in GMU 1 (D)? Yes
- Is there a "Harvestable Surplus" of moose in GMU 1(D)? No
- Amount Reasonably Necessary for Subsistence, 100% of the allowable harvest (5 AAC 99.025)
- Does the harvestable surplus allow for all or only some uses? Allows only for subsistence harvest at Tier II level

Proposal 30

### Discussion

#### TM059 Moose Hunting

##### Tier II

- 220 Permits (up to 250 authorized)
- 100% subscribed
- Spike/Fork, 3-Brow Tine, or  $\geq 50"$
- Three Week Season (Sept. 15-Oct. 7)
- Most seasons below guideline harvest level

Proposal 30

### Discussion

#### TM059 Permit Allocation (2003-2008)

- 88%-94% permits awarded to Unit 1D residents
  - Haines & Klukwan: 81% - 94%
  - Skagway: 0.5% - 4%
- Majority of remaining permits awarded to Southeast residents (range: 11-16 permits)
- All Alaskans qualify for Tier II permits

Proposal 30

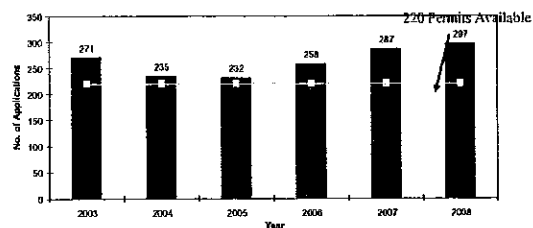
### Discussion

#### TM059 Permit Allocation (2003-2008)

- Number of applications change each year and is currently increasing
- Results in longtime permit holders not receiving a permit
- Applicant attrition

Proposal 30

TM058 Permits Vs. Applications 2003-2008



Proposal 30

### Conclusion

- Current scoring system provides ample opportunity to Unit 1D residents
- Most moose are taken by Unit 1D residents

Department Recommendation:

Do Not Adopt

Proposal 30



## Proposal 26

Will open the area known as the "Skagway Pie" to mountain goat hunting by bow only

- Upper Lynn Canal Advisory Committee Proposal

### Department Recommendation:

**Adopt**

Proposal 26

## Discussion

- Area closed to goat hunting since 1985 for conservation concerns
- Subsequent aerial surveys (1985-2003) did not support hunt
- Aerial survey September 2008
  - 118 total goats
  - 99 Adults & 19 Kids (19%) kids

Proposal 26

## Discussion

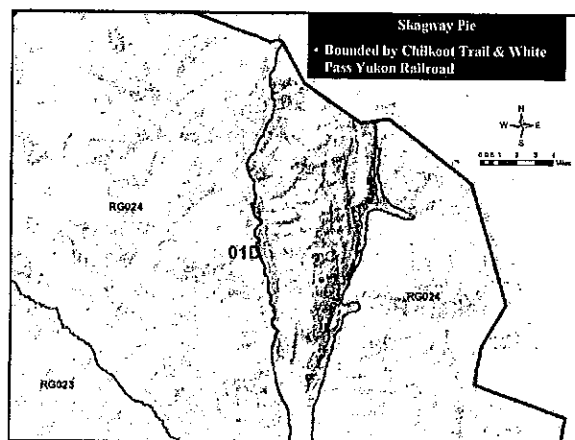
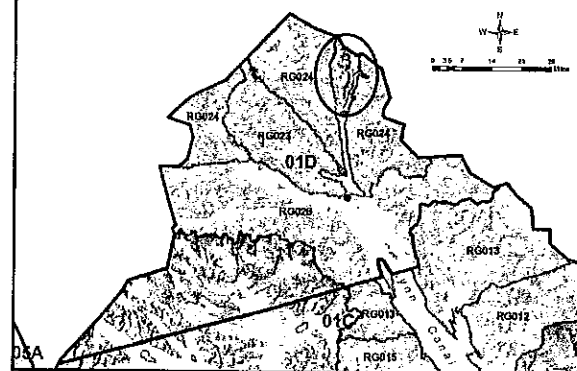
### Unit 1D mountain goat Hunting

Registration Hunts RG023, RG024, RG026

- Hunts managed by point system for small geographic areas
  - Male=1 point & Female=2 points
- 5 day reporting requirement for successful hunters
- Horn check-in for successful hunters
- Unsuccessful hunters required by regulation to return permit hunt report

Proposal 26

### Unit 1D Registration Mt. Goat Hunts

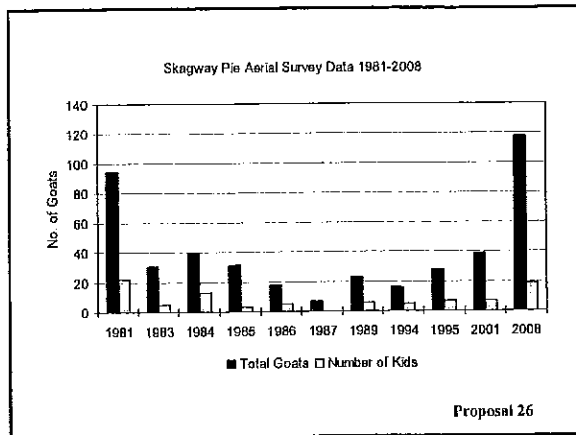


## Discussion

### Unit 1D Mountain Goat Harvest

- 10-year mean harvest: 30 goats/year
- 21 male & 9 female goats per year

Proposal 26



### Conclusion

- Survey data supports providing hunting opportunity
- Bow only hunt will allow for slow harvest and close management
- Bow hunting certification required
  - Certification course can be provided

Department Recommendation:

Adopt

Proposal 26

### Proposal 23

Requires ADFG to develop regulatory language to define color phases and percent pelage coverage to restrict the harvest of white-phased black bears in Unit 1D

- Public Proposal

Department Recommendation:

No Recommendation

Proposal 23

### Proposal 23

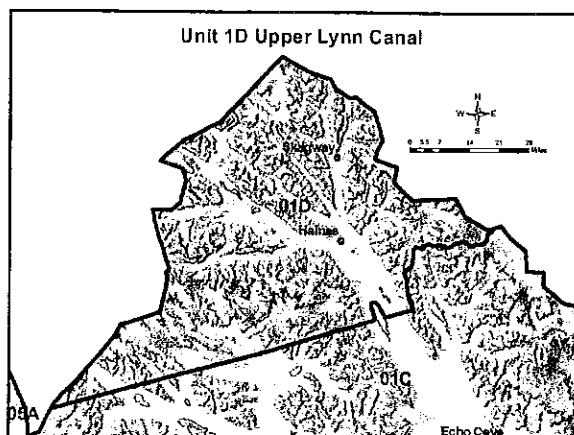
Upper Lynn Canal AC recommendation:

Do Not Adopt

Juneau-Douglas AC recommendation:

Do Not Adopt

Proposal 23



### Seasons & Bag Limits

#### Current Black Bear Hunting Season and Bag Limit

Residents & Nonresidents September 1-June 30

- Resident Bag Limit: Two bears; only one of which may be a blue or glacier bear
- Nonresident Bag Limit: One bear

Proposal 23

### Skagway Area Black Bear Harvest 1998-2007

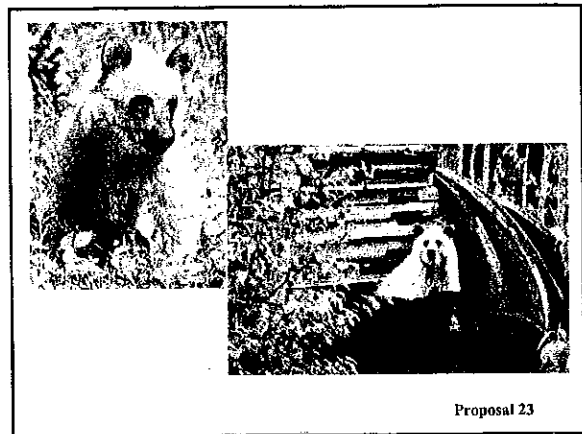
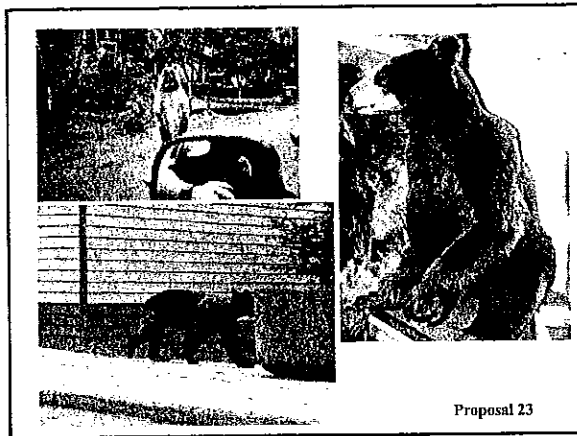
- 26 bears taken (25M:3F)
- One glacier bear taken
- 20 black hair color; 5 cinnamon hair color

Proposal 23

### Discussion

- Black bears come in many colors
  - Managed on a population level
- Defining a % pelage coverage is an unrealistic burden to hunters
- There is little hunting pressure on black bears in the Skagway area of Unit 1D

Proposal 23



DEPARTMENT RECOMMENDATION:

No recommendation

ADF&G sees this as an allocation issue  
between consumptive and nonconsumptive  
user groups

Proposal 23

### Proposal 25

Would close the portion of Unit 1D between Porcupine Crossing and Muncaster Creek on the Klehini River to the taking of bears

Public Proposal

**Department Recommendation:**

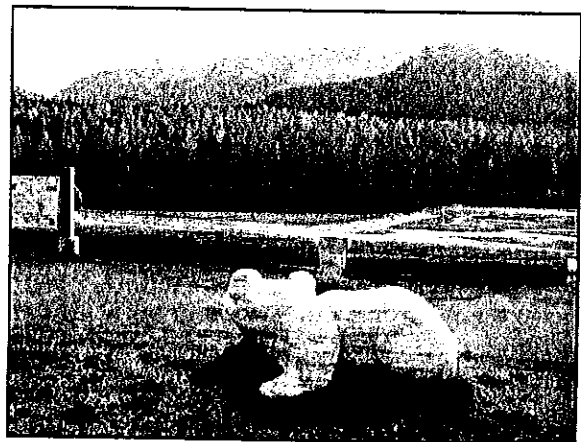
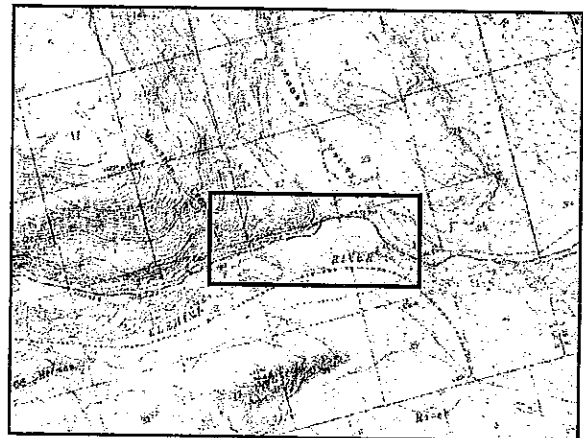
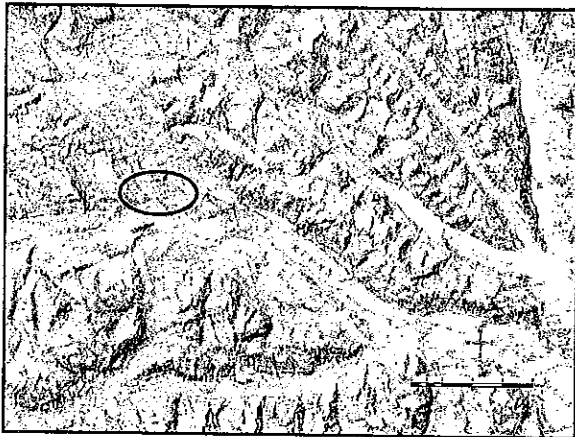
**No Recommendation**

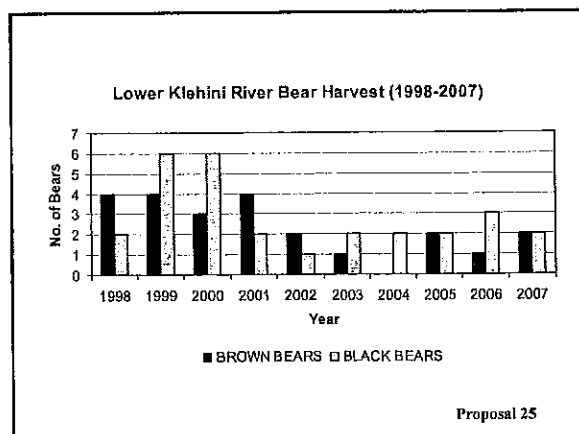
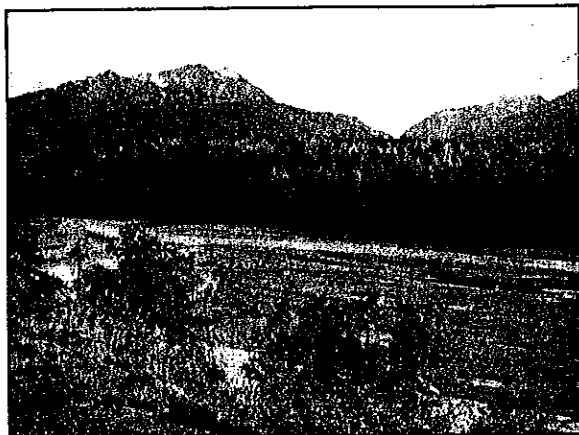
Proposal 25

Upper Lynn Canal AC verbal recommendation:

Do Not Adopt

Proposal 25





### *Discussion*

#### Bear Harvest (1998-2007)

##### Unit 1D

- Brown Bear: Mean Harvest 13 bears/yr. (range: 7-18)
- Black Bear: Mean Harvest 34 bears/yr. (range 21-45)

##### Mark's Park Area

- Brown Bears: Mean Harvest 2 bears/yr. (range: 0-4)
  - Black Bear: Mean Harvest 3 bears/yr. (range 1-6)
- Proposal 25

### *Discussion*

- Several areas are available to view wildlife near Haines
    - Chilkoot River Corridor
    - Bald Eagle Preserve
  - Few bears taken from area
  - Existing regulations address shooting from a road & bear wounding loss
- Proposal 25

### *Conclusion*

#### Department Recommendation:

**No Recommendation**

Proposal 25

## Proposal 24

Would extend the Unit 1C spring brown bear hunting season to June 15<sup>th</sup> and allow hunters to take a brown bear every regulatory year in Unit 1C

\*Note: Original proposal included Unit 4; proponent did not intend to include Unit 4.

- Public Proposal

### Department Recommendation:

**Do Not Adopt**

Proposal 24

## AC Recommendations

Juneau-Douglas AC  
recommendation:

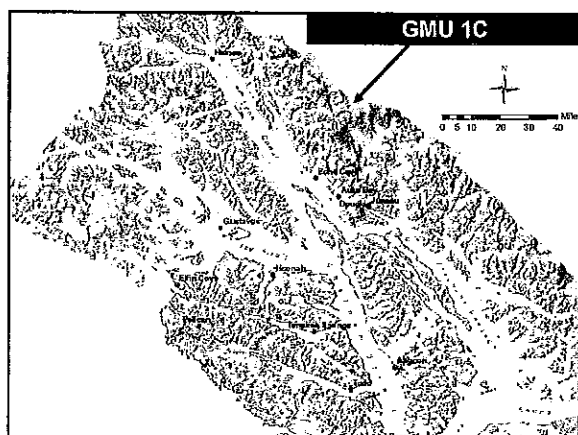
Do Not Adopt (vote: 3-4, 3 abstain)

Upper Lynn Canal AC  
recommendation:

Amend and Adopt

Provide additional guide permits for the area

Proposal 24



## Discussion

### Unit 1C Brown Bear Hunting

- Resident and Nonresident bag Limit: 1 bear every 4 regulatory years
- Registration Permit RB062 (Sept. 15 - Dec. 31) and RB072 (March 15 - May 31)
- 10 day reporting requirement for successful hunters
- 30 sealing requirement for successful hunters
- Unsuccessful hunters required by regulation to return permit hunt report

Proposal 24

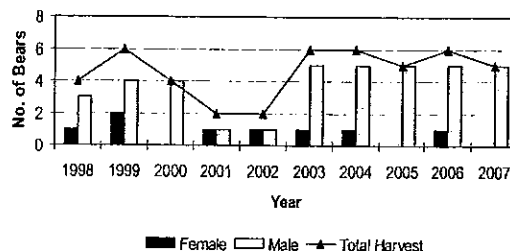
## Discussion

### Unit 1C Brown Bear Harvest

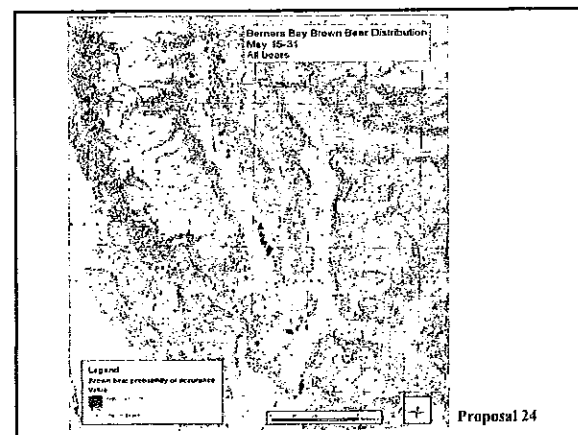
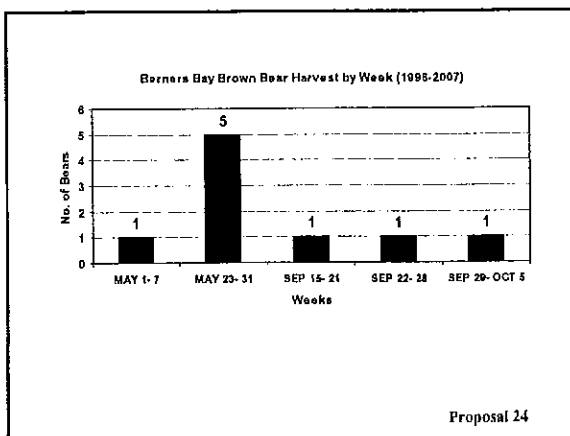
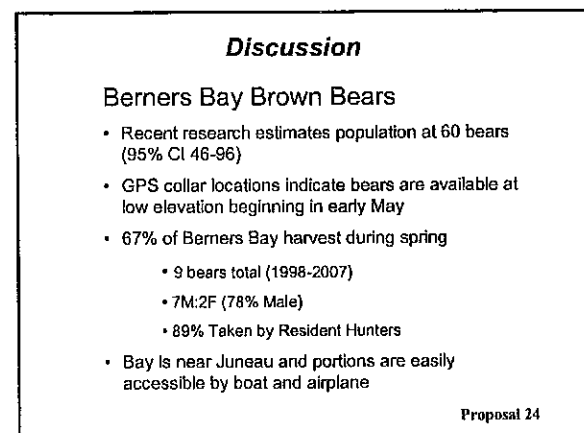
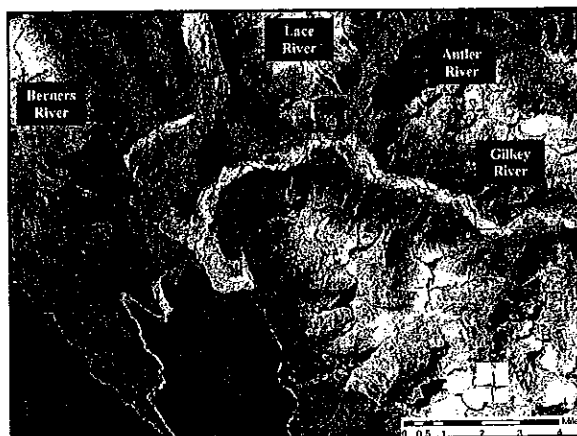
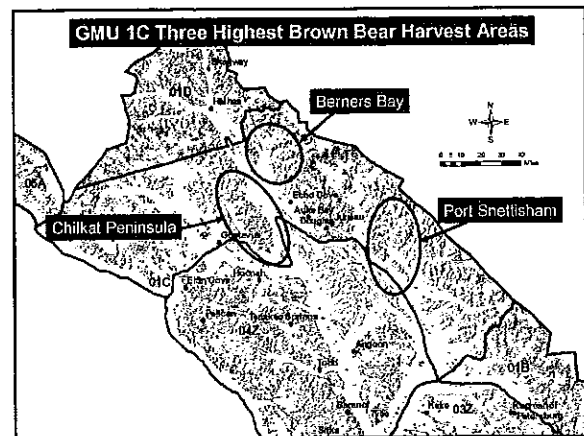
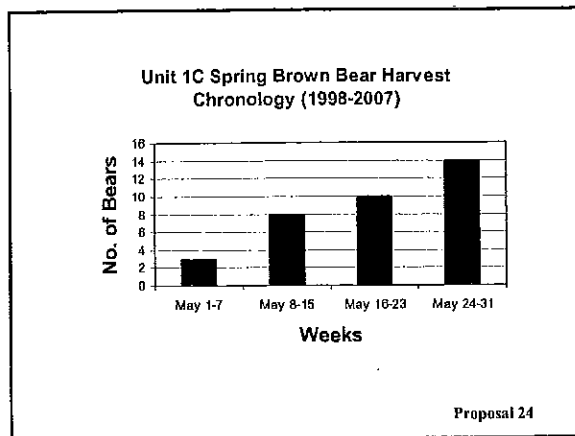
- 4.6 bears/year (10-year mean hunter harvest)
- 46 hunter-killed bears
  - 38M:8F
  - 76% harvest occurs in spring
  - 72% Resident & 28% Nonresident
- 10-year total bear mortality = 53 bears
  - 43M:10F

Proposal 24

### Unit 1C Brown Bear Harvest (1998-2007)



Proposal 24





***Discussion***

2008 Berners Bay Brown Bear Status

- 6 Bears ~10 % Harvest Level
  - 5F:1M
- Harvest level and female component are concerns
- ADFG reviewing options for spring season
  - 3-year mean harvest level
  - Guideline harvest level review
  - Emergency order closure

Proposal 24

***Conclusion***

- Current season dates and bag limit provides adequate opportunity
- Bears are accessible and vulnerable during spring season
- Current season end date accounts for environmental conditions on mainland vs. islands (spring season is 10 days longer)
- Extending the season into June will increase the vulnerability of bears
- Department able to adjust GHL to provide additional brown bear harvest

Department Recommendation:

Do Not Adopt

Proposal 24

### Proposal 15

Would lengthen the current beaver trapping season Unit 1C by 20 days

- Public proposal

Department Recommendation:

Do Not Adopt

Proposal 15

### Advisory Committees

Juneau Douglas AC Recommendation:

Do Not Adopt

Proposal 15

### Seasons & Bag Limits

Current Beaver Trapping Season and Bag Limit

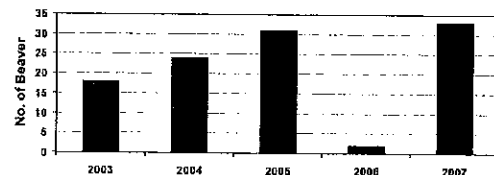
- December 1-May 15 (No Bag Limit)

Proposed Trapping Season and Bag Limit

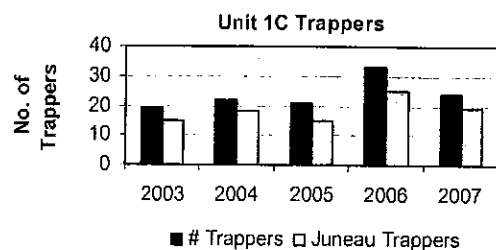
- Nov. 10-May 15 (No Bag Limit)

Proposal 15

Units 1C Beaver Harvest (2003-2007)



Proposal 15



Proposal 15

### Discussion

- Unit 1C beaver harvest is low due to fur prices and few trappers
- Proponent believes additional 20 days will provide an increase in fur value
- Beaver numbers are not quantified
- Additional harvest is not anticipated to negatively impact beavers

Proposal 15

***Conclusion***

- Current seasons in place since 1960s
  - Prime fur
  - Regional Consistency

Proposal 15

**Proposal 15**

Department Recommendation:

Do Not Adopt

Proposal 15

### Proposal 19

Would lengthen the current Unit 1C river otter trapping season by 20 days

- Public proposal

Department Recommendation:

Do Not Adopt

Proposal 19

### Advisory Committees

Juneau Douglas AC Recommendation:

Do Not Adopt

Proposal 19

### Seasons & Bag Limits

Current river otter Trapping Season and Bag Limit

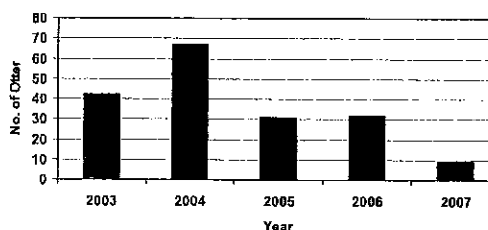
- December 1-Feb 15 (No Bag Limit)

Proposed Trapping Season and Bag Limit

- Nov. 10-Feb. 15 (No Bag Limit)

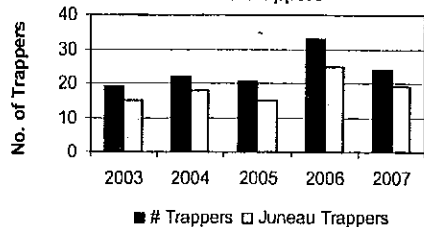
Proposal 19

Unit 1C River Otter Harvest (2003-2007)



Proposal 19

Unit 1C Trappers



Proposal 19

### Discussion

- Unit 1C river otter harvest is low due to fur prices and few trappers
- Proponent believes additional 20 days will provide an increase in fur value
- Otter numbers are not quantified
- Additional harvest is not anticipated to negatively impact otters

Proposal 19

***Conclusion***

- Current seasons in place since 1982
  - Prime fur
  - Regional Consistency

Proposal 19

**Proposal 19**

Department Recommendation:

Do Not Adopt

Proposal 19

### Proposal 20

Would lengthen the current Unit 1C marten trapping season by 20 days

- Public proposal

Department Recommendation:

Do Not Adopt

Proposal 20

### Advisory Committees

Juneau-Douglas AC Recommendation:

Do Not Adopt

Proposal 20

### Seasons & Bag Limits

Current Marten Trapping Season and Bag Limit

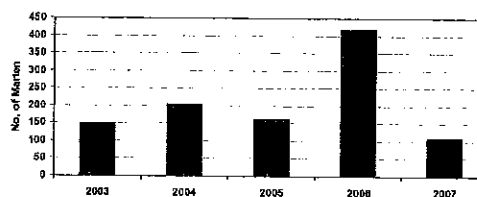
- Dec. 1-Feb. 15 (No Bag Limit)

Proposed Trapping Season and Bag Limit

- Nov. 10-Feb. 15 (No Bag Limit)

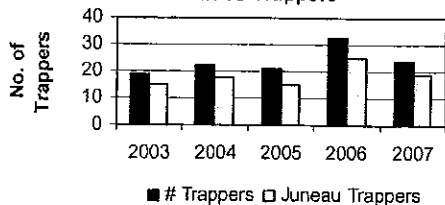
Proposal 20

Units 1C Marten Harvest (2003-2007)



Proposal 20

Unit 1C Trappers



Proposal 20

### Discussion

- Moderate marten harvest in Unit 1C
- Proponent believes additional 20 days will provide an increase in fur value
- marten numbers are not quantified except by sealing data
- Current fur price could result in additional harvest

Proposal 20

***Conclusion***

- Current seasons in place since 1982
  - Prime fur
  - Regional Consistency

Proposal 20

**Proposal 20**

Department Recommendation:

Do Not Adopt

Proposal 20

### **Proposal 18**

Would lengthen the current mink and weasel Unit 1C trapping season by 20 days

- Public proposal

Department Recommendation:

Do Not Adopt

Proposal 18

### **Advisory Committees**

Juneau-Douglas AC Recommendation:

Do Not Adopt

Proposal 18

### **Seasons & Bag Limits**

Current mink & weasel Trapping Season and Bag Limit

- December 1-Feb 15 (No Bag Limit)

Proposed Trapping Season and Bag Limit

- Nov. 10-Feb. 15 (No Bag Limit)

Proposal 18

### **Discussion**

- Unit 1C mink & weasel harvest is low due to fur prices and few trappers
- Proponent believes additional 20 days will provide an increase in fur value
- Mink & weasel numbers are not quantified

Proposal 18

### **Conclusion**

- Current seasons in place since 1982
  - Prime fur
  - Regional Consistency

Proposal 18

### **Proposal 18**

Department Recommendation:

Do Not Adopt

Proposal 18



## Proposal 21

Would allow trapping within 50 yards of trails currently closed to trapping in the Juneau area if traps are elevated and trap jaw spreads do not exceed 6 ¼ inches

- Public Proposal

### Department Recommendation:

Amend and Adopt

Require traps be elevated above surface, restrict jaw spread to 4 ½ inches, and increase distance from trail to 100 yards

Proposal 21

## Advisory Committees & Boards

Juneau-Douglas AC recommendation:

Amend and Adopt

\*AC asked that language clarifying larger traps and ground sets are legal beyond ¼ mile be included

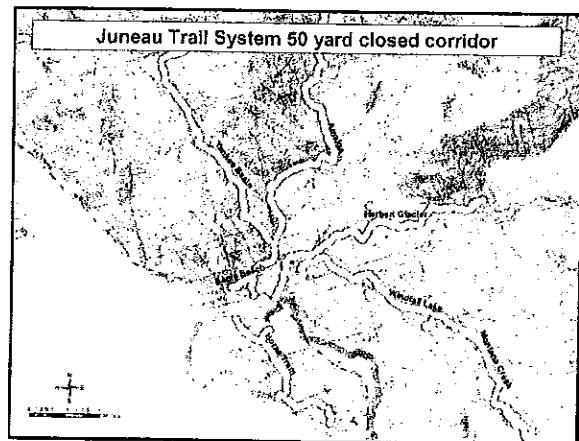
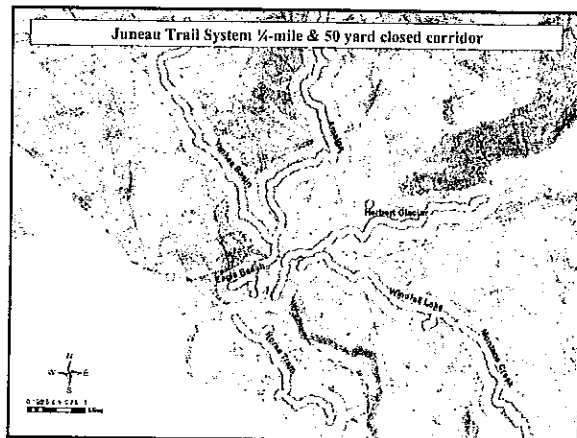
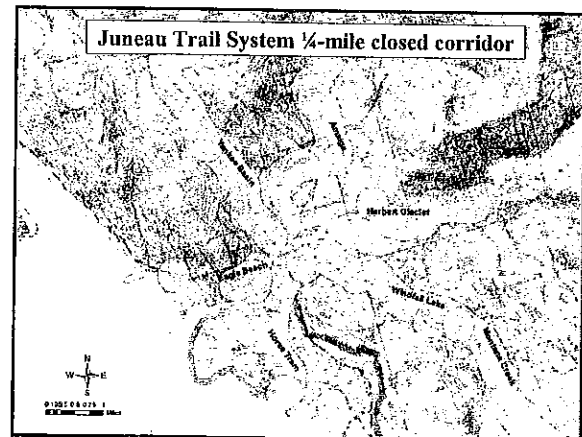
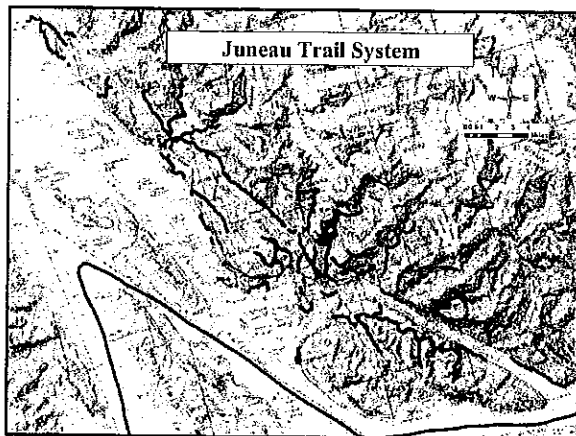
Upper Lynn Canal AC recommendation:

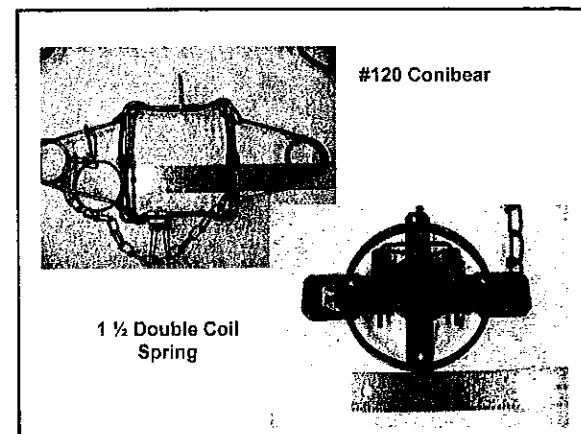
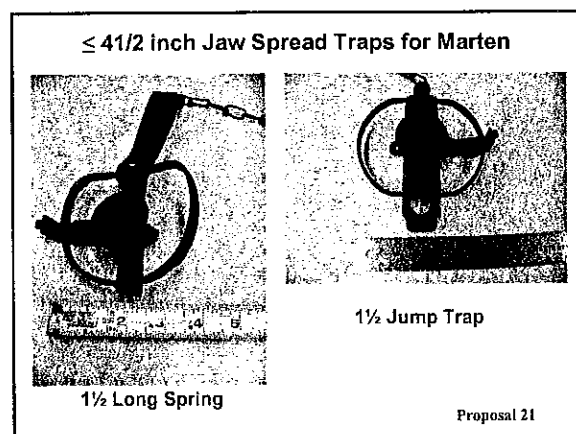
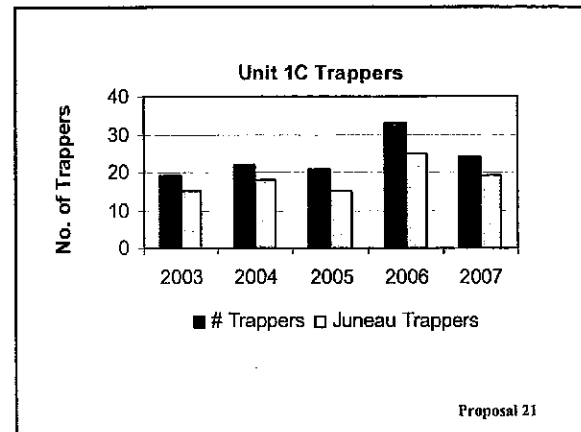
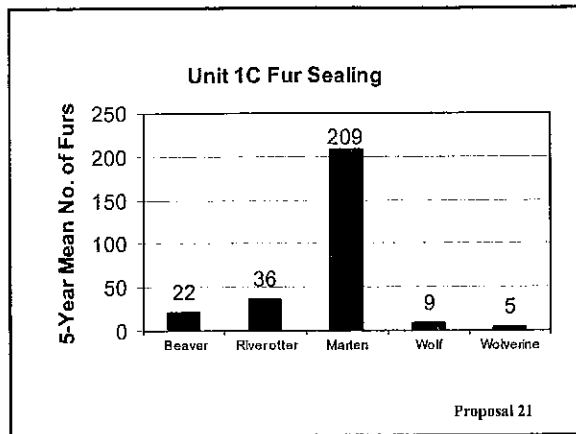
Adopt

Juneau State Parks Advisory Board recommendation:

No Recommendation

Proposal 21





### Discussion

- Available trapping area restricted due to current 1/4-mile closed area around many trails
- Additional trail closures will restrict trapping area further
- Traps must be marked

Proposal 21

### Discussion

- Proposal provides protection from traps
  - Traps are elevated
  - Jaw spread restriction
  - 100 yards closed to trapping
- Provide additional area to trap
  - Young trappers especially will benefit

Proposal 21

***Conclusion***

- Juneau has an extensive trail system that is used by many user groups
- Many trails have trapping restrictions
- Regulations exist to identify trappers should the need arise
- Juneau area trapping regulated by state, federal and municipal regulations

Department Recommendation:

Amend and Adopt

Proposal 21

### Proposal 22

Would add five trails to those listed as closed to trapping in the Juneau Area

- Public Proposal

#### Department Recommendation:

No Recommendation

Proposal 22

### Proposal 22

Juneau-Douglas AC recommendation:

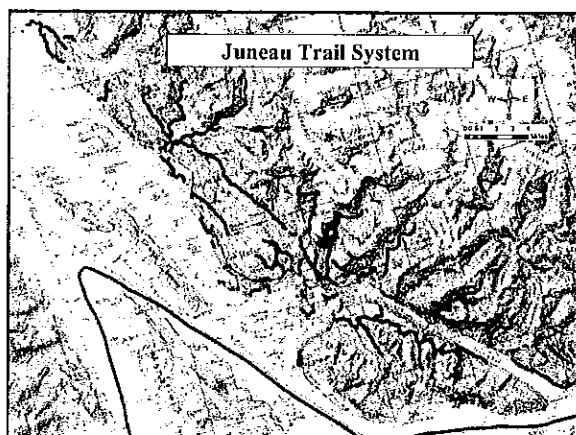
Amend and Adopt

\*Include language from proposal 21

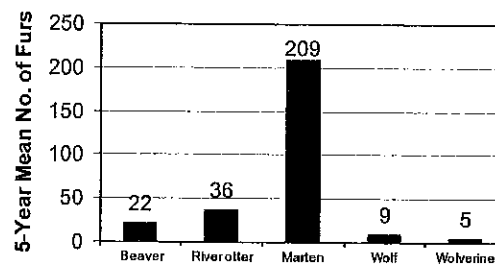
Upper Lynn Canal AC recommendation:

Do Not Adopt

Proposal 22

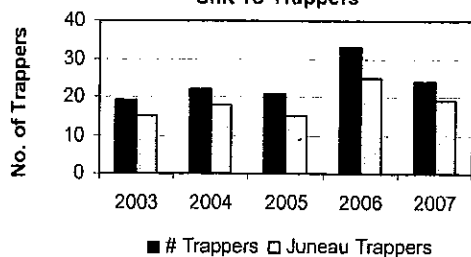


#### Unit 1C Fur Sealing



Proposal 22

#### Unit 1C Trappers



Proposal 22

#### Discussion

- Original regulation promulgated in 1987
- Concerns with an increasing number of trail users and conflicts with trappers
- Safety concerns with children and pets
- New trails have been developed
- Many trails have been upgraded

Proposal 22

***Discussion***

- Available trapping area restricted due to current ¼ mile closed area around many trails
- Additional trail closures will restrict trapping area further
- Proposal 21 mitigates loss of trapping area

Proposal 22

***Conclusion***

- Juneau has an extensive trail system
- Many trails have trapping restrictions
- Regulations exist to identify trappers should the need arise
- Juneau area trapping regulated by state, federal and municipal regulations

Department Recommendation:

No Recommendation

Proposal 22

### Proposal 31

Would change the Unit 1D wolf hunting and trapping season dates to August 1 - May 15

Upper Lynn Canal AC Proposal

Department Recommendation:

Do Not Adopt

Proposal 31

### Discussion

Current Unit 1D wolf hunting & trapping seasons:

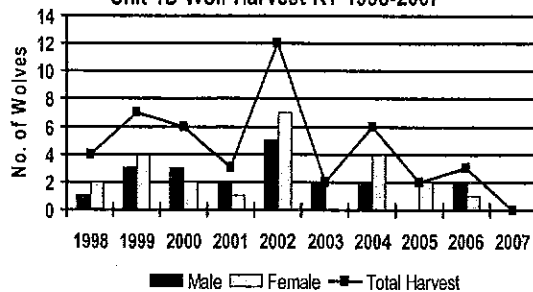
Hunting Season: Aug. 1-Apr. 30, 5 wolf bag limit

Trapping Season: Nov. 10-Apr. 30, no bag limit

- Seasons consistent with other Southeast Units
- Current season dates have been adjusted by BOG action twice in last six regulatory years (2002 & 2004)

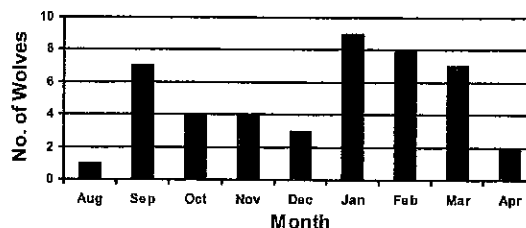
Proposal 31

Unit 1D Wolf Harvest RY 1998-2007



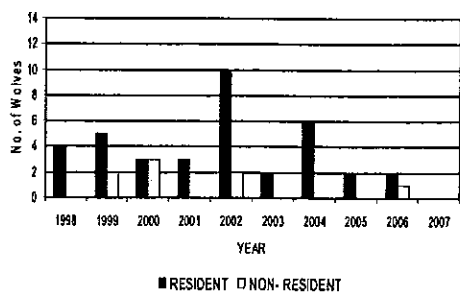
Proposal 31

Unit 1D Wolf Harvest by Month (1998-2007)



Proposal 31

WOLF HARVEST BY RESIDENCY FOR UNIT 1D 1998- 2007



Proposal 31

### Conclusion

- Moose herd is stable
- Liberal wolf hunting and trapping seasons
- Extended trapping season may increase the number non-target species being caught
- Late season harvest may pose a risk to adult dependent-pups

Department Recommendation:

Do Not Adopt

Proposal 31

### Proposal 16

Would lengthen the current trapping season and allow the use of firearms to harvest beavers in Unit 1D

- Upper Lynn Canal Advisory Committee proposal

Department Recommendation:

Do Not Adopt

Proposal 16

### Proposal 16

The Upper Lynn Canal Advisory Committee has proposed changes to the Unit 1D beaver trapping season several times:

- AC is concerned about impacts beaver activity has on local salmon populations
- Extending the season and allowing the use of firearms may increase the harvest and mitigate impacts to salmon

Proposal 16

### Seasons & Bag Limits

#### Current Beaver Trapping Season and Bag Limit

- December 1-May 15 (No Bag Limit)

#### Proposed Trapping Season and Bag Limit

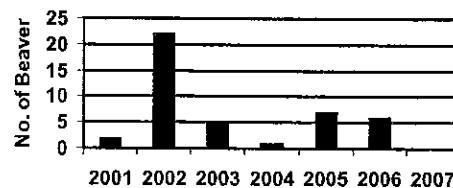
- September 1-June 30 (No Bag Limit)

#### Historical Season Information

- Season closed since 1975-76
- Opened 2001

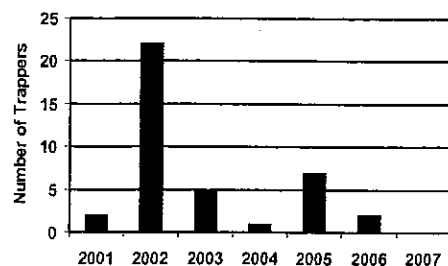
Proposal 16

Unit 1D Beaver Harvest RY 2001-2007



Proposal 16

Unit 1D Beaver Trappers



Proposal 16

### Discussion

- Fisheries personnel have provided anecdotal information for Unit 1D beaver population
- Beaver impacts are both beneficial and negative for salmon
- Wildlife Conservation personnel visited areas in Chilkat River valley
- Firearms generally used to gather food & clothing
- Waste

Proposal 16

***Conclusion***

- Low beaver trapping effort
- Beaver pelt quality degrades into spring
- Regional consistency in beaver trapping seasons and bag limits
- Beaver population can withstand additional harvest

Proposal 16

***Conclusion***

**Possible solution**

- Nuisance permit authority
  - ID problematic areas
  - Local trappers
- Manually remove dams
- Habitat permits to remove dams

Proposal 16

**Proposal 16**

Department Recommendation:

Do Not Adopt

Proposal 16



### Proposal 17

Would require the department to hire a beaver control position or offer bounties for beavers

- Upper Lynn Canal Advisory Committee proposal

Department Recommendation:

Take No Action

\*See Proposal 16

Proposal 17

### Seasons & Bag Limits

Current Beaver Trapping Season and Bag Limit

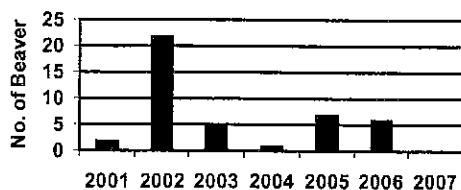
- December 1-May 15 (No Bag Limit)

Historical Season Information

- Season closed since 1975-76
- Opened 2001

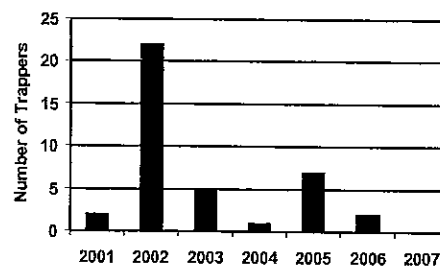
Proposal 17

Unit 1D Beaver Harvest RY 2001-2007



Proposal 17

Unit 1D Beaver Trappers



Proposal 17

### Discussion

- Regulations exist to allow the harvest of beavers
  - Trapping & Nuisance Wildlife Permits
- Bounties are not currently offered for any species

Proposal 17

### Proposal 17

Department Recommendation:

Take No Action

Proposal 17

**Proposal 32**

- Would change the opening date of lynx trapping season in Unit 5 from December 1 to November 10

Public Proposal

Department Recommendation

Do Not Adopt

Proposal 32

**Discussion**

- Author's justification for proposal:

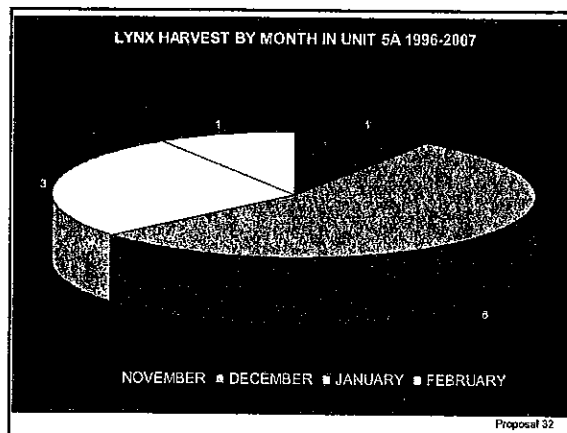
Trappers are forced to give up incidentally caught lynx that are trapped before December 1

Proposal 32

**Discussion**

- During 1996-2007, 11 lynx were caught and sealed in Unit 5
- Only one caught incidentally in November

Proposal 32

**Advisory committee votes**

- Yakutat (No Vote)

Proposal 32

**Conclusion**

- Remainder of Region 1 has December 1 opening for lynx
- Present season dates reflect the timing of fur primeness

The department recommends

Do Not Adopt

Proposal 32

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## Division of Subsistence

### Materials for the 2008 Alaska Board of Game meeting in Juneau, Alaska

- Tab A Customary and traditional use worksheet, wolves, Game Management Units 1, 3, 4, and 5, Southeast Alaska.
- Tab B Options for Alaska Board of Game findings of amounts necessary for subsistence in Southeast Alaska: black bears, mountain goats, and brown bears.
- Tab C Division Staff PowerPoint presentations.
- Tab D Customary and traditional use worksheet, black bears, Game Management Unit 25.
- Tab E Customary and traditional use worksheet, black bears, Game Management Units 12, 19, 20, 21, and 24 (Interior Alaska).

November 2008

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Alaska Department of Fish and Game

Division of Subsistence



**Customary and Traditional Use Worksheet,  
Wolves, Game Management Units 1, 3, 4, and 5,  
Southeast Alaska**

Prepared by

Michael F. Turek,

Nancy C. Ratner,

and

William E. Simeone

for the November 2008 Juneau Board of Game meeting

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November 2008

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Alaska Department of Fish and Game

Division of Subsistence



## Symbols and Abbreviations

The following symbols and abbreviations, and others approved for the *Système International d'Unités* (SI), are used without definition in the reports by the Division of Subsistence. All others, including deviations from definitions listed below, are noted in the text at first mention, as well as in the titles or footnotes of tables, and in figure or figure captions.

### Weights and measures (metric)

centimeter	cm
deciliter	dL
gram	g
hectare	ha
kilogram	kg
kilometer	km
liter	L
meter	m
milliliter	mL
millimeter	mm

### Weights and measures (English)

cubic feet per second	ft <sup>3</sup> /s
foot	ft
gallon	gal
inch	in
mile	mi
nautical mile	nmi
ounce	oz
pound	lb
quart	qt
yard	yd

### Time and temperature

day	d
degrees Celsius	°C
degrees Fahrenheit	°F
degrees kelvin	K
hour	h
minute	min
second	s

### Physics and chemistry

*all atomic symbols*

alternating current	AC
ampere	A
calorie	cal
direct current	DC
hertz	Hz
horsepower	hp
hydrogen ion activity (negative log of)	pH
parts per million	ppm
parts per thousand	ppt, ‰
volts	V
watts	W

## General

*all commonly-accepted abbreviations*

e.g., Mr., Mrs., AM, PM, etc.

all commonly-accepted professional

titles e.g., Dr., Ph.D., R.N., etc.

Alaska Administrative Code	AAC
at	@
compass directions:	
east	E
north	N
south	S
west	W
copyright	©
corporate suffixes:	
Company	Co.
Corporation	Corp.
Incorporated	Inc.
Limited	Ltd.
District of Columbia	D.C.
et alii (and others)	et al.
et cetera (and so forth)	etc.
exempli gratia (for example)	e.g.
Federal Information Code	FIC
id est (that is)	i.e.
latitude or longitude	lat. or long.
monetary symbols (U.S.)	\$, ¢
months (tables and figures):	first three letters (Jan., ..., Dec.)
registered trademark	®
trademark	™
United States (adjective)	U.S.
United States of America (noun)	USA
U.S.C.	United States Code
U.S. state	use two-letter abbreviations (e.g., AK, WA)

**Measures (fisheries)**

fork length	FL
mideye-to-fork	MEF
mideye-to-tail-fork	METF
standard length	SL
total length	TL

## Mathematics, statistics

all standard mathematical signs, symbols

*and abbreviations*

alternate hypothesis	$H_A$
base of natural logarithm	e
catch per unit effort	CPUE
coefficient of variation	CV
common test statistics	(F, t, $\chi^2$ , etc.)
confidence interval	CI
correlation coefficient (multiple)	R
correlation coefficient (simple)	r
covariance	cov
degree (angular)	°
degrees of freedom	df
expected value	E
greater than	>
greater than or equal to	≥
harvest per unit effort	HPUE
less than	<
less than or equal to	≤
logarithm (natural)	ln
logarithm (base 10)	log
logarithm (specify base)	log <sub>2</sub> , etc.
minute (angular)	'
not significant	NS
null hypothesis	$H_0$
percent	%
probability	P
probability of a type I error (rejection of the null hypothesis when true)	$\alpha$
probability of a type II error (acceptance of the null hypothesis when false)	$\beta$
second (angular)	"
standard deviation	SD
standard error	SE
variance	
population	Var
sample	var

***SPECIAL PUBLICATION NO. BOG 2008-09***

**CUSTOMARY AND TRADITIONAL USE WORKSHEET, WOLVES,  
GAME MANAGEMENT UNITS 1, 3, 4, AND 5, SOUTHEAST ALASKA**

by

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Alaska Department of Fish and Game  
Division of Subsistence  
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November 2008

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Special Publications are available through the Alaska State Library and on the Internet: <http://www.subsistence.adfg.state.ak.us>. This publication has undergone editorial and professional review.

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*This document should be cited as:*

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# TABLE OF CONTENTS

	Page
LIST OF TABLES.....	ii
LIST OF FIGURES .....	ii
INTRODUCTION.....	1
THE EIGHT CRITERIA .....	1
Criterion 1: Length and Consistency of Use.....	1
Historical Use Patterns .....	1
Contemporary Use Patterns .....	2
Criterion 2: Seasonality .....	2
Criterion 3: Means and Methods of Harvest.....	3
Criterion 4: Geographic Areas.....	4
Criterion 5: Means of Handling, Preparing, Preserving, and Storing .....	5
Criterion 6: Intergenerational Transmission of Knowledge, Skills, Values, and Lore .....	6
Criterion 7: Distribution and Exchange.....	6
Criterion 8: Diversity of Resources in an Area; Economic, Cultural, Social, and Nutritional Elements.....	7
REFERENCES CITED .....	8
TABLES AND FIGURES.....	9



## LIST OF TABLES

Table	Page
1. Wolf harvests and uses in Unit 1, 3, and 5 communities, ADF&G Division of Subsistence surveys, 1983, 1984, 1996, and 2000. ....	13
2. Calendar of wolf harvests by Alaska residents in all regulatory years 1997-2007, subunits 1A, 1B, and 1C, by method. ....	13
3. Calendar of wolf harvests by Alaska residents in all regulatory years 1997-2007, GMU 3, by method. ....	14
4. Calendar of wolf harvests by Alaska residents in all regulatory years 1997-2007, GMU 5, by method. ....	14
5. Method of wolf harvest by Alaska residents in regulatory years 1997-2007, subunits 1A, 1B, and 1C. ....	15
6. Method of wolf harvest by Alaska residents in regulatory years 1997-2007, GMU 3. ....	15
7. Method of wolf harvest by Alaska residents in regulatory years 1997-2007, GMU 5. ....	16
8. Number of wolves shot by Alaska residents in regulatory years 1997-2007, GMUs 1, 3, and 5. ....	16
9. Transportation used by Alaska residents to harvest wolves, subunits 1A, 1B, and 1C, regulatory years 1997-2007. ....	17
10. Transportation used by Alaska residents to harvest wolves, GMU 3, regulatory years 1997-2007. ....	17
11. Transportation used by Alaska residents to harvest wolves, GMU 5, regulatory years 1997-2007. ....	18
12. Wolf harvest chronology, by community, subunits 1A, 1B, and 1C, 1997-2007. ....	19
13. Wolf harvest chronology, by community, GMU 3, 1997-2007. ....	20
14. Wolf harvest chronology, by community, GMU 5, 1997-2007. ....	21

## LIST OF FIGURES

Figure	Page
1. Seasonal pattern in subunits 1A, 1B, and 1C and methods of harvest by Alaska residents, by month, 1997-2007. ....	10
2. Seasonal pattern in Game Management Unit 3 and methods of harvest by Alaska residents, by month, 1997-2007. ....	11
3. Seasonal pattern in Game Management Unit 5 and methods of harvest by Alaska residents, by month, 1997-2007. ....	12

## INTRODUCTION

This worksheet has been prepared to address issues raised by a proposal submitted to the Alaska Board of Game for their consideration during their November 2008 deliberations in Juneau. If adopted as submitted, Proposal 46 would shorten the wolf *Canis lupus* hunting seasons in Game Management Units (GMUs) 1, 3, 4, and 5 by 60 days. The Alaska Board of Game made a positive customary and traditional use finding for wolves in subunit 1D in November 2006 (5 AAC 99.025 (11)), but no findings have been made for wolves in subunits 1A, 1B, 1C, or GMUs 3 or 5. Wolves occur rarely, if at all, in GMU 4. Pursuant to Alaska Statute 16.05.258 (Subsistence use and allocation of fish and game) and Alaska regulation 5 AAC 99.010 (Boards of fisheries and game subsistence procedures), a customary and traditional use finding is the first step in the regulatory process.

The following communities show a history of use of the population area:

**Subunit 1A:** Ketchikan, Saxman, Metlakatla, Meyers Chuck.

**Subunit 1B:** Petersburg, Wrangell, Meyers Chuck.

**Subunit 1C:** Juneau, Gustavus, Hoonah, Petersburg.

**GMU 3:** Petersburg, Wrangell, Kake.

**GMU 5:** Yakutat, Juneau.

## THE EIGHT CRITERIA

### CRITERION 1: LENGTH AND CONSISTENCY OF USE

**A long-term consistent pattern of noncommercial taking, use, and reliance on the fish stock or game population that has been established over a reasonable period of time of not less than one generation, excluding interruption by circumstances beyond the user's control, such as unavailability of the fish or game caused by migratory patterns.**

#### Historical Use Patterns

Where they occurred in Southeast Alaska, wolves were traditionally harvested as a source of furs and hides. During pre-contact times, wolf fur was used to trim ceremonial masks and blankets and to make robes and outer clothing. Trade in wolf furs and hides existed not only between Southeast groups but also between Southeast groups and Interior Natives (De Laguna 1972; Oberg 1973; Petroff 1884).

In addition to its utilitarian use as hide and fur, the wolf occupied an important symbolic role in Tlingit society. Tlingit society is divided into 2 groups or moieties: the Raven and the Wolf/Eagle. The moieties define traditional social responsibilities and obligations, particularly those concerning marriage, death, and house building. Clans on the Raven side generally have prey species as their clan emblem. Clans on the Wolf/Eagle side generally have predator species as their clan emblem (Kamenskii 1985).

Several Southeast Alaskan clans have adopted the wolf as their symbol or crest (Swanton 1909). Tlingits of the Wolf Clan have traditionally ceremonially addressed wolves as

relatives because they believed the wolves to be their ancestors; this practice continues to this day. In 1946, a member of the Kaagwaantaan (wolf) Clan reported that he was the caretaker of 2 wolf heads which originally came from an ancient village near the mouth of Excursion Inlet and which had been passed down to him from his forefathers (Goldschmidt and Haas 1998:138).

Historically, the clans were property-claiming or -owning organizations. Each clan held claim to defined hunting, fishing, trapping, and gathering areas, special carvings and other artwork used for totems, clan crests, house poles, as well as songs. Trappers' cabins were built in areas of high furbearer abundance according to the clans' possessory rights; however, by the mid-1900s, Tlingit people in the region could not use their former trapping territories due to government land use policies, fur farmers, and homesteaders. In 1946, Henry Denny Sr. testified in Saxman:

My people owned the area at the mouth of the Unuk River. I have used that area all my life, and before me, my father and uncles hunted and trapped and fished in that area. Now, however, it is closed to me because there are homesteaders in there. This homesteader tells me he has wolf traps out, and makes me go away. I have four boys, and they don't go there either. The cabin I have there is deteriorating, and I haven't been there for about five years because this homesteader won't let me. (Goldschmidt and Haas 1998:162)

Fur prices fell in the 1950s, but trappers continued to earn money from the furs and bounties placed on wolves (Smythe 1988). The bounty was discontinued in the 1970s (Lowell 2006a) and wolf trapping ceased in some areas (Smythe 1988).

### **Contemporary Use Patterns**

In subunit 1A, the management objective of the Alaska Department of Fish and Game (ADF&G) is to "maintain an annual harvest of at least 20 wolves" (Porter 2006). In units 3 and 5 and the remainder of Unit 1, there are no formal management goals, but general objectives are to maintain healthy wolf populations in their historical ranges for viewing and harvest (Barten 2006a, 2006b; Lowell 2006a, 2006b; Porter 2006). Wolf harvest is monitored through a mandatory pelt-sealing program.

The ADF&G Division of Subsistence household surveys conducted in 1983, 1984, 1996, and 2000 reported wolf harvests in communities in units 1, 3 and 5 (Table 1). In addition to these household surveys, harvest data in this report are from the pelt sealing records maintained by the ADF&G Division of Wildlife Conservation.<sup>1</sup> The years presented in this worksheet represent regulatory years, which begin July 1 and end the following June 30. The data are from 11 regulatory years, 1997 through 2007 (July 1, 1997, through June 30, 2008). In the following discussion, "area" refers to subunits 1A, 1B, and 1C, GMU 3, and GMU 5, combined.

### **CRITERION 2: SEASONALITY**

**A pattern of taking or use recurring in specific seasons of each year.**

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<sup>1</sup> ADF&G Division of Wildlife Conservation WinfoNet 2008.

Traditionally, the Tlingit harvested wolves in late fall and early winter because wolf fur was at its prime during these seasons, and there was no deep snow to restrict travel. Although wolves were probably harvested at other times of the year, when they were available and if they possessed quality fur, the annual subsistence trapping cycle usually began in November and continued through December (De Laguna 1972; Goldschmidt and Haas 1998). In the early to mid-1900s, trapping was a source of winter income for salmon *Oncorhynchus* fishers in the area (Smythe 1988).

In Region I in 1991, the wolf hunting season and bag limit was reduced from year-round and no limit to August 1 through April 30, with a limit of 5 wolves. In regulatory year 2003-2004, the season was further reduced to September through March, then restored to the August 1 through April 30 season in 2004.

Figure 1 shows the seasonal pattern in subunits 1A, 1B, and 1C, based on the number of wolves taken by shooting, trapping, or snaring by Alaska residents each month for the 11 years from 1997 to 2007. Most wolves were trapped during the winter and spring, December through April. Most wolves were shot in the fall, especially in September and October (Table 2). Lowell (2006) suggests that wolf harvest in the fall generally happened opportunistically, when hunters were targeting other species.

In GMU 3 during the 11-year period from 1997 to 2007, most wolves were shot in October, followed by November, and few wolves were shot in the spring (Table 3, Figure 2). In GMU 5, most wolves were also shot in October, but more wolves were shot in September than in November, a pattern similar to that in subunits 1A, 1B, and 1C (Table 4, Figure 3). Anecdotal evidence gathered by ADF&G area management biologists suggests that most wolves were shot by harvesters incidental to their big game hunting, especially when deer and moose hunting in the fall, and occasionally when bear hunting in the spring.

### **CRITERION 3: MEANS AND METHODS OF HARVEST**

**A pattern of taking or use consisting of methods and means of harvest that are characterized by efficiency and economy of effort and cost.**

Traditionally, wolves were harvested by snares and deadfalls that were set across game trails frequently traveled by wolves (De Laguna 1972; Goldschmidt and Haas n.d. [1946]; Hessing 2003; Oberg 1973). Currently, with the exception of GMU 5, more wolves were shot or trapped in the area from 1997 to 2007 than were snared (Tables 5, 6, and 7).

In subunits 1A, 1B and 1C, nearly half the wolves (244, 48%) were trapped during the 11-year period. Hunters shot 131 wolves, 26% of the total harvest. Fewer wolves were snared (109, 21%) than trapped or shot (Table 5).

In GMU 3, trappers harvested the most wolves during the 11-year period. Over half of the wolves (239, 53%) were trapped from 1997 to 2007. Hunters shot 132 wolves, 29% of the total harvest, while fewer wolves were snared: 73 or 16% of the total harvest (Table 6)

The pattern shifted in GMU 5, where the highest number of wolves were shot (21 wolves or 40% of the total 52 wolves taken during the 11-year period), followed by snaring (19 wolves, 37%). Fewer wolves were trapped (12, 23%) than the other 2 methods of

harvest (Table 7). However, of the 21 wolves shot by Alaskan residents, only 7 were harvested by Yakutat residents, which suggests that Yakutat residents follow more traditional methods, or that they trap, and that the shooting of wolves is conducted largely by Alaskan residents from other communities, such as Juneau or several communities in Southcentral and Interior Alaska.

Table 8 summarizes the numbers of wolves shot from 1997 to 2007 in GMUs 1, 3, and 5. It includes the number of wolves shot in 1D, a subunit in which the Alaska Board of Game has made a customary and traditional use finding for wolves and which encompasses the communities of Haines and Klukwan. A total of 306 wolves were shot in the 3 GMUs during the 11-year period. In GMU 1, most wolves were shot in 1A, the subunit encompassing Ketchikan. Few wolves were shot in GMU 5 (21 wolves) compared with GMU 1 (153 wolves) and GMU 3 (132 wolves). Only 22 wolves were shot in subunit 1D, the subunit of GMU 1 not addressed in this worksheet.

In subunits 1A, 1B, and 1C, and in GMU 3 from 1997 to 2007, most wolves (83% and 72%) were taken by residents using boats for transportation (Tables 9 and 10). In GMU 5, most wolves were taken using aircraft as well as highway vehicles, with only 10% taken using boats (Table 11). The construction of new logging roads near Yakutat opened access to hunting areas and resulted in a decline of the use of boats (Mills and Firman 1986). Other transport methods used to harvest wolves during the 11-year period were 3- and 4-wheeled vehicles, off-road-vehicles, snowmachines, and skis or snowshoes.

#### **CRITERION 4: GEOGRAPHIC AREAS**

**The area in which the noncommercial, long-term, and consistent pattern of taking, use, and reliance upon the fish stock and game population has been established.**

Tlingit families traditionally built and maintained trapping cabins in the remote areas of high furbearer abundance, and placed them in accordance with clan ownership rights (Goldschmidt and Haas 1998).

Ketchikan residents harvested the majority of wolves (62% of resident harvest and 60% of total harvest) taken in subunits 1A, 1B, and 1C during the 11-year period, followed by Petersburg residents (11%) and Juneau residents (8%) (Table 12). The number of wolves harvested in Juneau and Ketchikan nonsubsistence areas is unknown. The pelt sealing records provide location of harvest only to the subunit level, which encompasses a larger area than the Juneau nonsubsistence<sup>2</sup> area in subunit 1C and the Ketchikan nonsubsistence area in subunit 1A.

Historically, the area encompassed by subunit 1A was hunted and fished by the Tongass Tlingits, many of whom now live in Ketchikan, and the Cape Fox Tlingits, many of whom were from Saxman (Goldschmidt and Haas 1998). Tlingit testimony taken in Saxman in 1946 specified wolf harvests from the Unuk River.

Historically, the area encompassed by GMU 1B was hunted and fished by Tlingit clans from the Wrangell territory (Goldschmidt and Haas 1998).

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<sup>2</sup> At the time of publication, there are 5 geographical areas in Alaska that the Alaska Joint Board of Fisheries and Game has determined are nonsubsistence areas in which dependence on subsistence is not a principal characteristic of the economy, culture, and way of life of the community. See 5 AAC 99.015 for a description of nonsubsistence areas and 5 AAC 99.016 for activities permitted in nonsubsistence areas.

Historically, the area encompassed by GMU 1C was hunted and fished by the Auk, Taku, and Hoonah Tlingits (Goldschmidt and Haas 1998). Tlingit testimony taken in Juneau and Hoonah in 1946 specified wolf harvests from the Taku inlet and river as well as from Glacier Bay. Other general Hoonah trapping areas included Excursion Inlet and the Couverden area.

Historically, the area encompassed by GMU 3 was hunted and fished by several Tlingit groups. The Kake Tlingit hunted and fished the northwestern half of Unit 3, while the southeastern half was hunted and fished by Wrangell Tlingits (Goldschmidt and Haas 1998). Petersburg and Wrangell residents harvested the most wolves from GMU 3 between 1997 and 2007 (79% of the resident harvest and 67% of the total harvest) (Table 13)

In GMU 5, the harvest of wolves traditionally took place mainly in the uplands, near remote hunting and trapping cabins along rivers and large bays. Testimony cited by Goldschmidt and Haas (1998) gave the Situk River, Ahrnklin River, Akwe River, and Dry Bay as areas where respondents reported harvesting wolves.

Mills and Firman (1986) describe areas used for trapping by Yakutat residents during their lifetimes. The areas include the eastern shore of Yakutat Bay near river outlets, the islands of Yakutat Bay, the Ankau slough system, along the Situk River and Situk Lake, near the mouth of the Seal River, off Black Sand Island, along the Akwe River and beach from Akwe Slough to Dry Bay, and the entire length of the Ahrnklin River. Trapping was also reported along the coastal areas of the Malaspina Forelands south of Sitkagi Bluffs, the southeast shoreline of Icy Bay, and south to Yana Stream.

Yakutat residents continue to be the main harvesters of wolves in GMU 5, taking 69% of the resident harvest and 47% of the total harvest. Juneau residents follow with 14% of the Alaska resident harvest (Table 14)

## **CRITERION 5: MEANS OF HANDLING, PREPARING, PRESERVING, AND STORING**

**A means of handling, preparing, preserving, and storing fish or game that has been traditionally used by past generations, but not excluding recent technological advances where appropriate.**

The preparation of animal skins was done by Tlingit women. There were 2 general methods of skinning game (Emmons 1991). Heavier skins, such as those from bears, deer, goats, beavers, seals, and sea lions, were removed by making a cut on the underside of the animal from the head to the tail and along the inside of the legs. The skin was rolled off each cut and the flat "green" skin was laced to a frame and stretched. The "more valuable and delicate skins," such as those from river and sea otters, lynxes, foxes, mink, martens, muskrats, and wolves, were removed by cutting the skin on the rear of the animal and then pulling the skin off the body and over the head, which resulted in a bag-shaped green skin that had the fur on the inside. The green skin was then stretched by placing it over a flat, pointed board or 2 stout, rounded poles angled at the top. A short stick was used to hold the forepaws away from the body and the tail was straightened and then tied with cord to one of the poles. The flesh and grease were removed from the skin

and the skin was softened. Wolf skins were treated in this manner although they were not thin or tender like the other furbearers included in this group (Emmons 1991).

Great care and respect may have been shown to the living wolf as well as to the harvested wolf, because of its mythical and symbolic importance within Tlingit culture. Wolf meat was not normally eaten by Tlingits, except in time of extreme need. Presently, wolf fur is used in Native handicrafts such as blankets, ceremonial robes, and winter coat ruffs, and in works of art. Furs are also sold to commercial fur traders.

## **CRITERION 6: INTERGENERATIONAL TRANSMISSION OF KNOWLEDGE, SKILLS, VALUES, AND LORE**

**A pattern of taking or use that includes the handing down of knowledge of fishing or hunting skills, values, and lore from generation to generation.**

Harvest areas for wolves traditionally used by Tlingit residents were "owned" in the Tlingit family-clan sense and conveyed or inherited through family lines. These customary rights were recognized and respected by those within the community. New generations of harvesters learned the skills needed to harvest, process, and prepare game and fish species by observing others and by participating, with elder relatives or community residents, in subsistence activities. Much was taught and learned in both Native and non-Native communities through stories describing game lore and hunting skills. In traditional Tlingit culture, young boys learned most of their hunting and fishing skills from their mother's brothers and other older members of their own clan (Oberg 1973). Hunting skills and locations continue to be learned from uncles, as well as from other relatives and elders in contemporary Native society.

## **CRITERION 7: DISTRIBUTION AND EXCHANGE**

**A pattern of taking, use, and reliance where the harvest effort or products of that harvest are distributed or shared, including customary trade, barter, and gift-giving.**

Traditionally, wolf pelts imported from Interior regions or harvested locally were traded throughout Southeast Alaska. The exchange value of wolf pelts was determined in terms of articles placed against it in barter. Before contact, the most valued furs for clothing were sea otter, wolf, beaver, and marten (De Laguna 1972). According to Oberg (1973), the most-valued furs were sea otter, followed by marten, beaver, river otter, black fox, mink, wolverine, wolf, and bear, in that order. The practice of distributing wildlife resources continues in the present time. Wolf harvest, sharing, and use was recorded in several communities during Division of Subsistence household surveys conducted in the mid-1980s and 1990s.<sup>3</sup>

In GMU 5, Mills and Firman (1986) reported 10% of Yakutat households used wolves and 10% of Yakutat households harvested wolves in 1984, suggesting there was little sharing of wolves among the residents of Yakutat in that data year. Wolf pelts were probably sold commercially.

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<sup>3</sup> Data are available in the ADF&G Division of Subsistence Community Subsistence Information System (CSIS) at <http://www.subsistence.adfg.state.ak.us/CSIS>

## **CRITERION 8: DIVERSITY OF RESOURCES IN AN AREA; ECONOMIC, CULTURAL, SOCIAL, AND NUTRITIONAL ELEMENTS**

**A pattern that includes taking, use, and reliance for subsistence purposes upon a wide variety of fish and game resources and that provides substantial economic, cultural, social, and nutritional elements of the subsistence way of life.**

GMUs 1, 3, and 5 are part of a region that has a diversity of resources available for harvest. These include marine and intertidal resources as well as upland game species including birds, goats, deer, and black and brown bears. Moose is an important food resource in areas where it is available. Division of Subsistence baseline harvest studies reveal a wide range of terrestrial and marine resources are used by communities in the area.<sup>4</sup> Wolves are taken incidentally by hunters engaged in big game hunting, especially deer and moose hunting. The common use of boats by wolf harvesters (77%) in GMUs 1 and 3 illustrates the marine-based harvest patterns in GMUs 1 and 3 (Tables 9 and 10). In GMU 5, Yakutat households reported using 70 types of resources during a 1984 survey (Mills and Firman 1986).

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<sup>4</sup> See the CSIS.



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## **TABLES AND FIGURES**

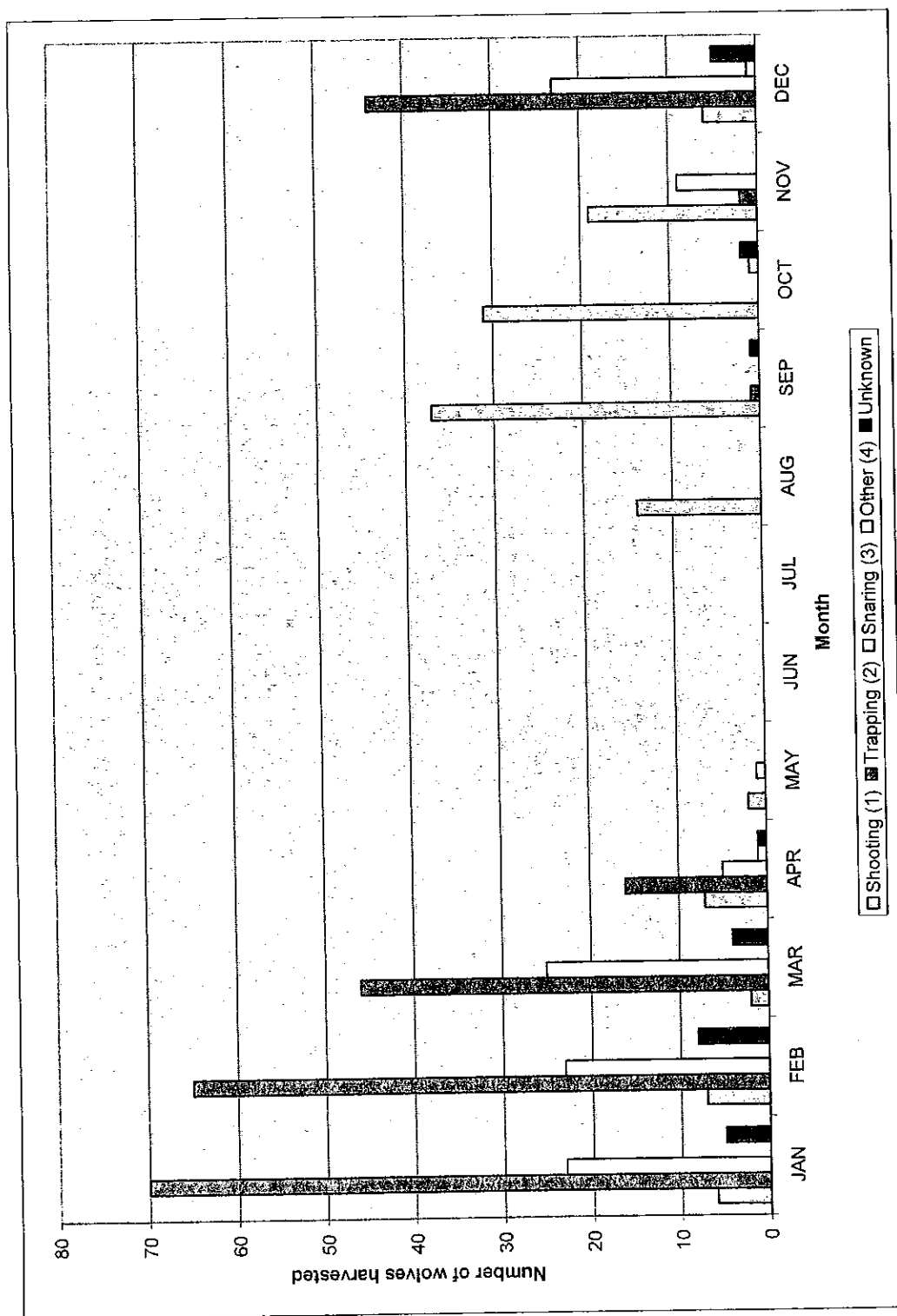


Figure 1.-Seasonal pattern in subunits 1A, 1B, and 1C and methods of harvest by Alaska residents, by month, 1997-2007.

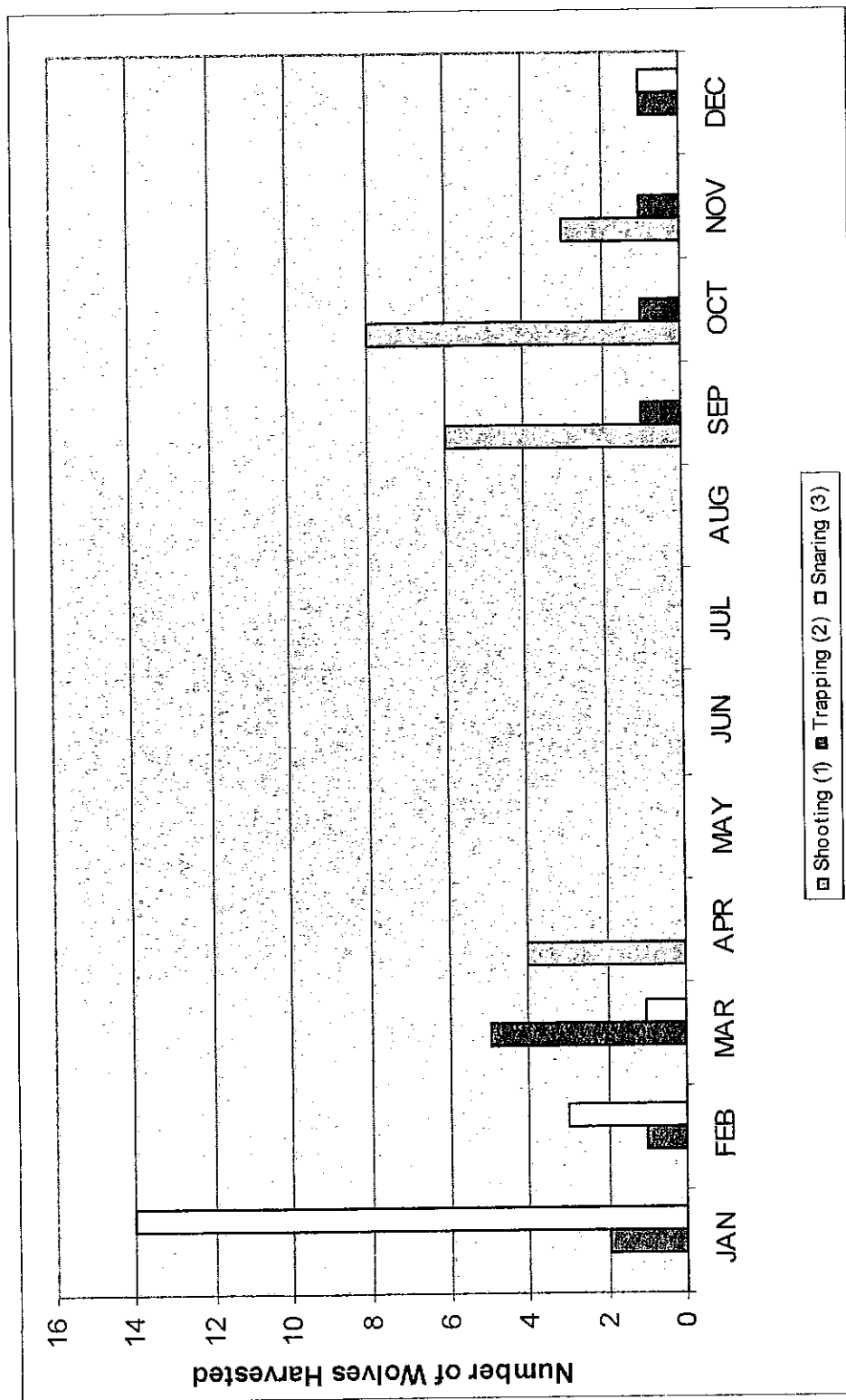


Figure 3.-Seasonal pattern in Game Management Unit 5 and methods of harvest by Alaska residents, by month, 1997-2007.

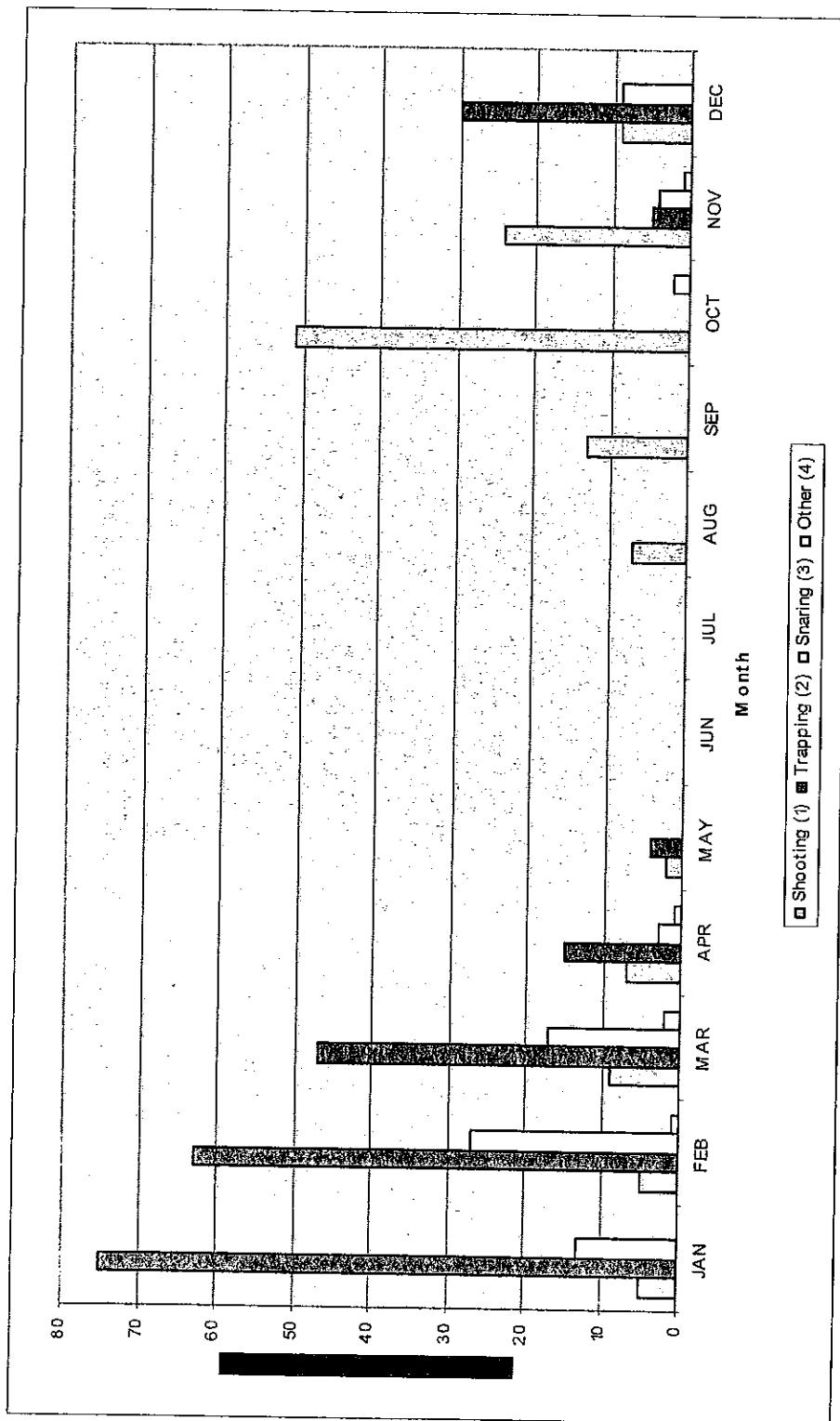


Figure 2.-Seasonal pattern in Game Management Unit 3 and methods of harvest by Alaska residents, by month, 1997-2007.

Table 1.—Wolf harvests and uses in Unit 1, 3, and 5 communities, ADF&G Division of Subsistence surveys, 1983, 1984, 1996, and 2000.

GMU	Community, year	Percentage of households				Amount harvested	
		Use	Att	Harv	Recd	Give	Mean HH
1D	Haines, 1983	0.70%	6.80%	0.70%	0.0%		9
1D	Haines, 1996	2.2%	2.2%	2.2%	0.0%	0.0%	17
3	Wrangell, 2000	3.1%	2.0%	2.0%	1.0%	1.0%	46
3	Petersburg, 2000	1.6%	2.4%	1.6%	0.0%	0.8%	86
5	Yakutat, 1984	10.0%	10.0%	10.0%	0.0%	2.0%	69
5	Yakutat, 2000	2.2%	5.0%	2.2%	0.0%	0.7%	10

Table 2.—Calendar of wolf harvests by Alaska residents in all regulatory years 1997–2007, subunits 1A, 1B, and 1C, by method.

Harvest method	JAN <sup>a</sup>	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	Percentage
Shooting (1)	13	12	5	15	8	0	0	24	50	55	41	13	236	28%
Trapping (2)	104	110	94	42	0	0	0	0	1	0	7	73	431	50%
Snaring (3)	31	29	42	9	1	0	0	0	0	0	10	31	153	18%
Other (4) <sup>b</sup>	0	0	0	1	0	0	0	0	0	1	3	1	6	1%
Unknown	5	8	7	1	0	0	0	0	1	2	0	5	29	3%
<b>Total</b>	<b>153</b>	<b>159</b>	<b>148</b>	<b>68</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>52</b>	<b>58</b>	<b>61</b>	<b>123</b>	<b>855</b>	<b>100%</b>

Source ADF&G Division of Wildlife Conservation WinfoNet, accessed October 7, 2008. Data from wolf pelt sealing records.

<sup>a</sup> Regulatory year = July 1 through June 30.

<sup>b</sup> Such as hit by a vehicle.

Table 3.-Calendar of wolf harvests by Alaska residents in all regulatory years 1997-2007, GMU 3, by method.

Harvest method	JAN <sup>a</sup>	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	Percentage
Shooting (1)	5	5	9	7	2	0	0	7	13	51	24	9	132	29%
Trapping (2)	75	63	47	15	4	0	0	0	0	0	5	30	239	53%
Snaring (3)	13	27	17	3	0	0	0	0	0	0	4	9	73	16%
Other (4) <sup>b</sup>	0	1	2	1	0	0	0	0	0	2	1	0	7	2%
Unknown	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
<b>Total</b>	<b>93</b>	<b>96</b>	<b>75</b>	<b>26</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>13</b>	<b>53</b>	<b>34</b>	<b>48</b>	<b>451</b>	<b>100%</b>

Source ADF&G Division of Wildlife Conservation WinfoNet, accessed October 7, 2008. Data from wolf pelt sealing records.

<sup>a</sup> Regulatory year = July 1 through June 30.

<sup>b</sup> Such as hit by a vehicle.

Table 4.- Calendar of wolf harvests by Alaska residents in all regulatory years 1997-2007, GMU 5, by method.

Harvest method	JAN <sup>a</sup>	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	Percentage
Shooting (1)	0	0	0	4	0	0	0	0	6	8	3	0	21	40%
Trapping (2)	2	1	5	0	0	0	0	0	1	1	1	1	12	23%
Snaring (3)	14	3	1	0	0	0	0	0	0	0	0	1	19	37%
Other (4) <sup>b</sup>	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
Unknown	0	0	0	0	0	0	0	0	0	0	0	0	0	0%
<b>Total</b>	<b>16</b>	<b>4</b>	<b>6</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>9</b>	<b>4</b>	<b>2</b>	<b>52</b>	<b>100%</b>

Source ADF&G Division of Wildlife Conservation WinfoNet, accessed October 7, 2008. Data from wolf pelt sealing records.

<sup>a</sup> Regulatory year = July 1 through June 30.

<sup>b</sup> Such as hit by a vehicle.

Table 5.—Method of wolf harvest by Alaska residents in regulatory years 1997-2007, subunits 1A, 1B, and 1C.

Harvest method	1997 <sup>a</sup>	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	TOTAL	Percentage
Shooting (1)	7	17	19	12	16	12	14	9	8	4	13	131	25.5%
Trapping (2)	22	16	20	35	42	22	26	15	15	12	19	244	47.6%
Snaring (3)	12	7	20	21	14	8	13	4	3	3	4	109	21.2%
Other (4) <sup>b</sup>	0	0	1	0	1	1	0	0	0	0	0	3	0.6%
Unknown	1	0	0	0	1	0	0	0	0	24	0	26	5.1%
<b>Total</b>	<b>42</b>	<b>40</b>	<b>60</b>	<b>68</b>	<b>74</b>	<b>43</b>	<b>53</b>	<b>28</b>	<b>26</b>	<b>43</b>	<b>36</b>	<b>513</b>	<b>100%</b>

Source ADF&G Division of Wildlife Conservation WinfoNet, accessed October 7, 2008. Data from wolf pelt sealing records.

<sup>a</sup> Regulatory year = July 1 through June 30.

<sup>b</sup> Such as hit by a vehicle.

Table 6.—Method of wolf harvest by Alaska residents in regulatory years 1997-2007, GMU 3.

Harvest method	1997 <sup>a</sup>	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	TOTAL	Percentage
Shooting (1)	7	14	18	9	13	18	17	8	14	6	8	132	29.3%
Trapping (2)	22	15	28	30	28	37	12	14	24	23	6	239	53.0%
Snaring (3)	7	1	6	8	5	2	7	15	12	10	0	73	16.2%
Other (4) <sup>b</sup>	0	0	0	1	2	3	0	1	0	0	0	7	1.6%
Unknown	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
<b>Total</b>	<b>36</b>	<b>30</b>	<b>52</b>	<b>48</b>	<b>48</b>	<b>60</b>	<b>36</b>	<b>38</b>	<b>50</b>	<b>39</b>	<b>14</b>	<b>451</b>	<b>100%</b>

Source ADF&G Division of Wildlife Conservation WinfoNet, accessed October 7, 2008. Data from wolf pelt sealing records.

<sup>a</sup> Regulatory year = July 1 through June 30.

<sup>b</sup> Such as hit by a vehicle.



Table 7.—Method of wolf harvest by Alaska residents in regulatory years 1997-2007, GMU 5.

Harvest method <sup>a</sup>	1997 <sup>b</sup>	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	TOTAL	Percentage
Shooting (1)	2	0	1	3	2	3	1	3	3	0	3	21	40%
Trapping (2)	0	0	1	3	2	1	0	1	1	3	0	12	23%
Snaring (3)	1	0	0	2	0	6	2	4	0	2	2	19	37%
Other (4) <sup>c</sup>	0	0	0	0	0	0	0	0	0	0	0	0	0%
Unknown	0	0	0	0	0	0	0	0	0	0	0	0	0%
<b>Total</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>8</b>	<b>4</b>	<b>10</b>	<b>3</b>	<b>8</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>52</b>	<b>100%</b>

Source ADF&G Division of Wildlife Conservation WinfoNet, accessed October 7, 2008. Data from wolf pelt sealing records.

<sup>a</sup> All wolves were trapped and snared by Yakutat residents, except one trapped wolf and one snared wolf. Yakutat residents shot 7 of the 21 wolves shot by hunters. The others were shot by residents of Fort Richardson, Juneau, North Pole, Soldotna, and Wasilla.

<sup>b</sup> For all columns, regulatory year = July 1 through June 30.

<sup>c</sup> Such as hit by a vehicle.

Table 8.—Number of wolves shot by Alaska residents in regulatory years 1997-2007, GMUs 1, 3, and 5.

Game Management Unit	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	TOTAL
1a	6	12	11	7	9	6	12	1	6	0	6	76
1b	0	5	6	4	4	3	0	6	0	1	3	32
1c	1	0	2	1	3	3	2	2	2	3	4	23
1d	3	3	4	1	2	2	2	2	1	2	0	22
GMU-1	10	20	23	13	18	14	16	11	9	6	13	153
GMU-3	7	14	18	9	13	18	17	8	14	6	8	132
GMU-5	2	0	1	3	2	3	1	3	3	0	3	21
<b>Total</b>	<b>19</b>	<b>34</b>	<b>42</b>	<b>25</b>	<b>33</b>	<b>35</b>	<b>34</b>	<b>22</b>	<b>26</b>	<b>12</b>	<b>24</b>	<b>306</b>

Source ADF&G Division of Wildlife Conservation WinfoNet, accessed October 7, 2008. Data from wolf pelt sealing records.

<sup>a</sup> Regulatory year = July 1 through June 30.

<sup>b</sup> Such as hit by a vehicle.

Table 9.—Transportation used by Alaska residents to harvest wolves, subunits 1A, 1B, and 1C, regulatory years 1997-2007.

Transportation method	1997 <sup>a</sup>	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	TOTAL	Percentage
Aircraft (1)	0	3	0	0	0	0	0	1	0	1	3	8	2%
Horse or dog team (2)	0	0	0	0	0	0	0	0	0	0	0	0	0%
Boat (3)	40	34	50	52	63	34	45	19	21	40	28	426	83%
3- or 4-wheeler (4)	0	1	0	1	7	2	1	4	2	1	1	20	4%
Snowmachine (5)	0	0	0	3	0	0	0	0	0	0	2	5	1%
Off-road vehicle (6)	0	0	5	3	0	4	0	0	0	0	0	12	2%
Highway vehicle (7)	2	2	2	5	3	2	7	2	3	1	2	31	6%
Skis or snowshoes (8)	0	0	3	4	0	0	0	1	0	0	0	8	2%
Other (9)	0	0	0	0	0	0	0	1	0	0	0	1	0%
Unknown	0	0	0	0	1	1	0	0	0	0	0	2	0%
<b>Total</b>	<b>42</b>	<b>40</b>	<b>60</b>	<b>68</b>	<b>74</b>	<b>43</b>	<b>53</b>	<b>28</b>	<b>26</b>	<b>43</b>	<b>36</b>	<b>513</b>	<b>100%</b>

Source ADF&G Division of Wildlife Conservation WinfoNet, accessed October 7, 2008. Data from wolf pelt sealing records.

<sup>a</sup> Regulatory year = July 1 through June 30.

Table 10.—Transportation used by Alaska residents to harvest wolves, GMU 3, regulatory years 1997-2007.

Transportation method	1997 <sup>a</sup>	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	TOTAL	Percentage
Aircraft (1)	0	0	2	1	0	0	0	0	0	0	0	3	1%
Horse or dog team (2)	0	0	0	0	0	0	0	0	0	0	0	0	0%
Boat (3)	30	23	37	32	33	40	17	27	37	36	11	323	72%
3- or 4-wheeler (4)	1	0	0	3	1	0	1	0	3	1	0	10	2%
Snowmachine (5)	0	0	0	0	0	0	0	0	0	0	0	0	0%
Off-road vehicle (6)	1	0	3	1	0	2	0	0	2	0	0	9	2%
Highway vehicle (7)	4	7	10	10	13	14	18	11	7	2	1	97	22%
Skis or snowshoes (8)	0	0	0	0	0	2	0	0	0	0	1	3	1%
Other (9)	0	0	0	0	1	1	0	0	1	0	1	4	1%
Unknown	0	0	0	1	0	1	0	0	0	0	0	2	0%
<b>Total</b>	<b>36</b>	<b>30</b>	<b>52</b>	<b>48</b>	<b>48</b>	<b>60</b>	<b>36</b>	<b>38</b>	<b>50</b>	<b>39</b>	<b>14</b>	<b>451</b>	<b>100%</b>

Source ADF&G Division of Wildlife Conservation WinfoNet, accessed October 7, 2008. Data from wolf pelt sealing records.

<sup>a</sup> Regulatory year = July 1 through June 30.

Table 11.— Transportation used by Alaska residents to harvest wolves, GMU 5, regulatory years 1997-2007.

Transportation method	1997 <sup>a</sup>	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	TOTAL	Percentage
Aircraft (1)	1	0	1	3	1	2	1	3	3	1	4	20	38%
Horse or dog team (2)	0	0	0	0	0	0	0	0	0	0	0	0	0%
Boat (3)	1	0	0	0	2	0	0	1	0	0	1	5	10%
3- or 4-wheeler (4)	0	0	0	1	1	0	1	0	0	0	0	3	6%
Snowmachine (5)	0	0	0	0	0	0	0	0	0	3	0	3	6%
Off-road vehicle (6)	0	0	0	1	0	0	0	0	0	0	0	1	2%
Highway vehicle (7)	1	0	1	2	0	8	1	4	1	1	0	19	37%
Skis or snowshoes (8)	0	0	0	1	0	0	0	0	0	0	0	1	2%
Other (9)	0	0	0	0	0	0	0	0	0	0	0	0	0%
Unknown	0	0	0	0	0	0	0	0	0	0	0	0	0%
<b>Total</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>8</b>	<b>4</b>	<b>10</b>	<b>3</b>	<b>8</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>52</b>	<b>100%</b>

Source ADF&G Division of Wildlife Conservation WinfoNet, accessed October 7, 2008. Data from wolf pelt sealing records.

<sup>a</sup> Regulatory year = July 1 through June 30.

Table 12.-- Wolf harvest chronology, by community, subunits 1A, 1B, and 1C, 1997-2007.

Alaskan community	Year													TOTAL	Percentage	Percentage of total harvest
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007					
Ketchikan - Ward Cove	21	20	36	32	32	18	27	5	5	21	20	440	61.5%	59.6%		
Petersburg	5	10	10	3	14	8	4	9	10	3	2	78	10.9%	10.6%		
Juneau - Auke B. - Douglas	7	4	3	8	11	5	6	4	0	3	5	56	7.8%	7.6%		
Wrangell	2	1	1	3	6	8	5	4	1	4	3	38	5.3%	5.1%		
Tok	0	0	4	7	10	4	1	3	4	3	0	36	5.0%	4.9%		
Metlakatla	1	1	4	7	0	0	2	2	1	0	2	20	2.8%	2.7%		
Meyers Chuck	2	1	0	3	0	0	3	0	2	3	0	14	2.0%	1.9%		
Hoonah	0	0	0	0	1	0	2	0	0	5	4	12	1.7%	1.6%		
Gustavus	0	1	1	4	0	0	1	1	1	0	0	9	1.3%	1.2%		
Sitka	0	1	1	0	0	0	2	0	1	1	0	6	0.8%	0.8%		
Haines	2	0	0	0	0	0	0	0	0	0	0	2	0.3%	0.3%		
Anchorage	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0.0%		
Coffman Cove	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0.0%		
Excursion Inlet	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0.0%		
Fairbanks	0	0	0	0	0	0	0	0	1	0	0	1	0.1%	0.1%		
Homer	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0.0%		
Hyder	1	0	0	1	0	0	0	0	0	0	0	1	0.1%	0.1%		
Soldotna	1	0	0	0	0	0	0	0	0	0	0	1	0.1%	0.1%		
Thorne Bay	0	1	0	0	0	0	0	0	0	0	0	1	0.1%	0.1%		
Subtotal	42	40	60	68	74	43	53	28	26	43	36	716	100.0%	97.0%		
Unknown	0	0	1	0	0	0	0	0	0	1	0	2	0.3%			
Nonresident	1	0	1	2	2	3	1	2	1	6	1	20	2.7%			
<b>Total subunit 1A, 1B, and 1C wolf harvest</b>	<b>43</b>	<b>40</b>	<b>62</b>	<b>70</b>	<b>76</b>	<b>46</b>	<b>54</b>	<b>30</b>	<b>27</b>	<b>50</b>	<b>37</b>	<b>738</b>	<b>100%</b>			

Source ADF&G Division of Wildlife Conservation WinfoNet, accessed October 7, 2008. Data from wolf pelt sealing records.

Source: ADF&G Division of Wildlife Conservation WinfoNet, accessed October 7, 2008. Data from wolf pelt sealing records.

Table 13.- Wolf harvest chronology, by community, GMU 3, 1997-2007.

Alaskan community	Year														Percentage of	
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	TOTAL	Percentage	total harvest		
Petersburg	22	17	28	26	27	28	6	18	21	27	7	227	50.3%	43%		
Wrangell	11	7	12	15	13	19	11	18	10	5	6	127	28.2%	24%		
Kake	2	1	3	3	6	5	14	1	4	1		40	8.9%	8%		
Ketchikan/ Ward Cove	0	1	3	0	1	0	0	1	4	1	1	12	2.7%	2%		
Juneau/ Douglas	0	1	3	3	0	3	1	0	0	0	0	11	2.4%	2%		
Hydaburg	0	0	0	0	0	0	0	0	8	0	0	8	1.8%	2%		
Tok	0	0	0	1	1	1	3	0	0	2	0	8	1.8%	2%		
Klawock	0	0	0	0	0	2	0	0	0	2	0	4	0.9%	1%		
Thorne Bay	1	1	0	0	0	0	0	0	2	0	0	4	0.9%	1%		
Point Baker	0	1	1	0	0	1	0	0	0	0	0	3	0.7%	1%		
Sitka	0	0	1	0	0	0	0	0	1	1	0	3	0.7%	1%		
Anchorage	0	0	0	0	0	1	1	0	0	0	0	2	0.4%	0%		
Port Alexander	0	0	1	0	0	0	0	0	0	0	0	1	0.2%	0%		
Prudhoe Bay	0	1	0	0	0	0	0	0	0	0	0	1	0.2%	0%		
Subtotal	36	30	52	48	48	60	36	38	50	39	14	451	100.0%	86%		
Total resident													86.4%			
Nonresident	7	4	5	11	5	13	3	3	10	5	5	71	13.6%			
<b>Total GMU 3 wolf harvest</b>	<b>43</b>	<b>34</b>	<b>57</b>	<b>59</b>	<b>53</b>	<b>73</b>	<b>39</b>	<b>41</b>	<b>60</b>	<b>44</b>	<b>19</b>	<b>522</b>	<b>100%</b>			

Source ADF&G Division of Wildlife Conservation WinfoNet, accessed October 7, 2008. Data from wolf pelt sealing records.

Table 14.— Wolf harvest chronology, by community, GMU 5, 1997-2007.

Alaskan community	Year													Percentage of total harvest
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	TOTAL	Percentage	
Yakutat	1	0	0	5	3	9	2	5	3	5	3	36	69.2%	47%
Juneau	1	0	2	0	0	0	1	2	0	0	1	7	13.5%	9%
Wasilla	1	0	0	2	0	1	0	0	0	0	0	4	7.7%	5%
North Pole	0	0	0	0	0	0	0	0	1	0	1	2	3.8%	3%
Soldotna	0	0	0	1	1	0	0	0	0	0	0	2	3.8%	3%
Anchorage/Fort Richardson	0	0	0	0	0	0	0	1	0	0	0	1	1.9%	1%
Subtotal	3	0	2	8	4	10	3	8	4	5	5	52	100.0%	68%
Total resident												52	67.5%	
Nonresident	0	7	1	3	2	3	2	0	3	3	1	25	32.5%	
<b>Total GMU 5</b>														
<b>wolf harvest</b>	<b>3</b>	<b>7</b>	<b>3</b>	<b>11</b>	<b>6</b>	<b>13</b>	<b>5</b>	<b>8</b>	<b>7</b>	<b>8</b>	<b>6</b>	<b>77</b>	<b>100%</b>	

Source ADF&G Division of Wildlife Conservation WinfoNet, accessed October 7, 2008. Data from wolf pelt sealing records.

**Options for Alaska Board of Game Findings of  
Amounts Necessary for Subsistence in Southeast Alaska:  
Black Bears, Mountain Goats, and Brown Bears**

by

The Alaska Department of Fish and Game,

Division of Subsistence

for the November 2008 Juneau Board of Game Meeting

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November 2008

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Alaska Department of Fish and Game

Division of Subsistence



## Symbols and Abbreviations

The following symbols and abbreviations, and others approved for the Système International d'Unités (SI), are used without definition in the reports by the Division of Subsistence. All others, including deviations from definitions listed below, are noted in the text at first mention, as well as in the titles or footnotes of tables, and in figure or figure captions.

<b>Weights and measures (metric)</b>		<b>General</b>		<b>Measures (fisheries)</b>	
centimeter	cm	<i>all commonly-accepted abbreviations</i>		fork length	FL
deciliter	dL	<i>e.g., Mr., Mrs., AM, PM, etc.</i>		mid-eye-to-fork	MEF
gram	g	<i>all commonly-accepted professional</i>		mid-eye-to-tail-fork	METF
hectare	ha	<i>titles e.g., Dr., Ph.D., R.N., etc.</i>		standard length	SL
kilogram	kg	Alaska Administrative Code	AAC	total length	TL
kilometer	km	at	@		
liter	L	compass directions:		<b>Mathematics, statistics</b>	
meter	m	east	E	<i>all standard mathematical signs, symbols</i>	
milliliter	mL	north	N	<i>and abbreviations</i>	
millimeter	mm	south	S	alternate hypothesis	H <sub>A</sub>
		west	W	base of natural logarithm	e
		copyright	©	catch per unit effort	CPUE
<b>Weights and measures (English)</b>		corporate suffixes:		coefficient of variation	CV
cubic feet per second	ft <sup>3</sup> /s	Company	Co.	common test statistics (F, t, $\chi^2$ , etc.)	
foot	ft	Corporation	Corp.	confidence interval	CI
gallon	gal	Incorporated	Inc.	correlation coefficient (multiple)	R
inch	in	Limited	Ltd.	correlation coefficient (simple)	r
mile	mi	District of Columbia	D.C.	covariance	cov
nautical mile	nmi	et alii (and others)	et al.	degree (angular)	°
ounce	oz	et cetera (and so forth)	etc.	degrees of freedom	df
pound	lb	exempli gratia (for example)	e.g.	expected value	E
quart	qt	Federal Information Code	FIC	greater than	>
yard	yd	id est (that is)	i.e.	greater than or equal to	≥
		latitude or longitude	lat. or long.	harvest per unit effort	HPUE
<b>Time and temperature</b>		monetary symbols (U.S.)	\$, ¢	less than	<
day	d	months (tables and figures):	first three letters (Jan,...,Dec)	less than or equal to	≤
degrees Celsius	°C	registered trademark	®	logarithm (natural)	ln
degrees Fahrenheit	°F	trademark	™	logarithm (base 10)	log
degrees kelvin	K	United States (adjective)	U.S.	logarithm (specify base)	log <sub>2</sub> , etc.
hour	h	United States of America (noun)	USA	minute (angular)	'
minute	min	U.S.C.	United States Code	not significant	NS
second	s	U.S. state	use two-letter abbreviations (e.g., AK, WA)	null hypothesis	H <sub>0</sub>
<b>Physics and chemistry</b>				percent	%
<i>all atomic symbols</i>				probability	P
alternating current	AC			probability of a type I error (rejection of the null hypothesis when true)	α
ampere	A			probability of a type II error (acceptance of the null hypothesis when false)	β
calorie	cal			second (angular)	"
direct current	DC			standard deviation	SD
hertz	Hz			standard error	SE
horsepower	hp			variance	
hydrogen ion activity (negative log of) pH				population	Var
parts per million	ppm			sample	var
parts per thousand	ppt, ‰				
volts	V				
watts	W				



***SPECIAL PUBLICATION NO. BOG 2008-10***

**OPTIONS FOR ALASKA BOARD OF GAME FINDINGS OF  
AMOUNTS NECESSARY FOR SUBSISTENCE IN SOUTHEAST ALASKA:  
BLACK BEARS, MOUNTAIN GOATS, AND BROWN BEARS**

by

Alaska Department of Fish and Game, Division of Subsistence, Juneau

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Division of Subsistence  
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November 2008

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## TABLE OF CONTENTS

	Page
LIST OF TABLES.....	I
BLACK BEARS.....	1
Appendix Tables–Black Bears .....	3
MOUNTAIN GOATS .....	6
Appendix Tables–Mountain Goats .....	8
BROWN BEARS .....	11
Appendix Tables–Brown Bears .....	13

## LIST OF TABLES

Table	Page
BB Table 1.–Mean harvests of black bears by Alaska residents in Units 1A, 1B, 1D, 2, and 3, 1990-2007.....	1
BB Table 2.–Black bear ANS Option A: Based on harvests by Southeast Alaska GMU residents. ....	2
BB Table 3.–Black bear ANS Option B: Based on harvests by all Alaska residents. ....	2
BB Appendix Table 1.–Black bear harvests in GMU subunit 1A, excluding nonsubsistence area.....	3
BB Appendix Table 2.–Black bear harvests in GMU subunit 1B. ....	4
BB Appendix Table 3.–Black bear harvests in GMU subunit 1D. ....	4
BB Appendix Table 4.–Black bear harvests in GMU 2.....	5
BB Appendix Table 5.–Black bear harvests in GMU 3.....	5
MG Table 1.–Mean harvests of mountain goats by Alaska residents in Subunits 1A, 1B, 1D, and GMU 5, 1990-2007.....	6
MG Table 2.–Mountain goats ANS Option A: Based on harvests by Southeast Alaska GMU residents. ....	7
MG Table 3.–Mountain goat ANS Option B: Based on harvests by all Alaska residents. ....	7
MG Appendix Table 1.–Mountain goat harvests in GMU subunit 1A, excluding nonsubsistence area.....	8
MG Appendix Table 2.–Mountain goat harvests in GMU subunit 1B. ....	9
MG Appendix Table 3.–Mountain goat harvests in GMU subunit 1D.....	9
MG Appendix Table 4.–Mountain goat harvests in GMU 5. ....	10
BrB Table 1.–Mean harvests of brown bears by Alaska residents in Subunits 1A, 1B, 1C, and 1D, 1990-2007.....	11
BrB Table 2.–Brown bear ANS Option A: Based on harvests by Southeast Alaska GMU residents. ....	12
BrB Table 3.–Brown bear ANS Option B: Based on harvests by all Alaska residents. ....	12
BrB Appendix Table 1.–Brown bear harvests in GMU subunit 1A, outside nonsubsistence area. ....	13
BrB Appendix Table 2.–Brown bear harvests in GMU subunit 1B. ....	14
BrB Appendix Table 3.–Brown bear harvests in GMU subunit 1C, outside nonsubsistence area. ....	14
BrB Appendix Table 4.–Brown bear harvests in GMU subunit 1D. ....	15
BrB Appendix Table 5.–Brown bear harvests in GMU 1, outside nonsubsistence area.....	15

## BLACK BEARS

### Options for Amount Necessary for Subsistence (ANS) Findings for Black Bears, GMU subunits 1A, 1B, 1D, and GMUs 2 and 3

Background: the Alaska Board of Game has determined that black bear *Ursus americanus* populations in Game Management Unit (GMU) subunits 1A, 1B, 1C, 1D, and GMUs 2 and 3 support customary and traditional uses. However, the Board has determined the amount reasonably necessary for subsistence harvest of black bears (an ANS finding) only for subunit 1C. The ANS finding for black bears in subunit 1C is 50 to 70 bears (5 AAC 99.025).

The following provides options for the Board to consider if it chooses to make ANS findings for black bears in GMU subunits 1A (outside of the Ketchikan Nonsubsistence Area), 1B, 1D, as well as GMUs 2 and 3, as directed by AS 16.05.258(b).

Table 1 reports the mean annual harvests of black bears by GMU or subunit (except within the Ketchikan Nonsubsistence area) by residents of the GMUs of Southeast Alaska (GMUs 1, 2, 3, 4, and 5), and other Alaska residents for the years 1990 through 2007. It also reports the year with the lowest and the highest harvest, by residency category, and by GMU. Black Bear Appendix Tables 1 through 5 report black bear harvests for each year from 1990 through 2007, including harvests by non-Alaska residents.

Table 1. Mean Harvests of Black Bears by Alaska Residents in Units 1A, 1B, 1D, 2, and 3, 1990 - 2007

Subunit	Harvests by Residents of GMUs 1 - 5					Harvests by All Alaska Residents				
	Mean	Low	(year)	High	(year)	Mean	Low	(year)	High	(year)
1A <sup>1</sup>	11	3	1991	23	2006	13	4	1992	25	2006
1B	6	1	2005	12	1991	6	1	2005	12	1991
1D	24	14	2002	36	1999	28	16	2002	42	1999
2	56	28	2007	94	1990	79	37	2007	117	1990
3	51	21	2004	81	1993	64	30	2004	102	1993
All 5 units	148	87	2003	218	1990	191	116	2003	268	1990

<sup>1</sup> Excludes harvests within the Ketchikan Nonsubsistence Area.

Source: Prepared by ADF&G, Division of Subsistence, based on harvest data compiled by ADF&G, Division of Wildlife Conservation

Tables 2 and 3 provide 2 options for the Board to consider for ANS findings for black bears in each subunit and GMU. In Option A (Table 2), the ANS range is based on the mean annual harvest of black bears by residents of the GMUs of Southeast Alaska. The low end of the range is the mean harvest minus 25% of the mean; the high end of the range is the mean harvest plus 25% of the mean.

Table 2. Black Bear ANS Option A: Based on harvests by southeast Alaska GMU residents

Unit	Mean Harvest, 1990 to 2007	Suggested ANS Range, +/- 25% of mean
1A <sup>1</sup>	11 bears	8 to 14 bears
1B	6 bears	5 to 8 bears
1D	24 bears	18 to 30 bears
2	56 bears	42 to 70 bears
3	51 bears	38 to 64 bears

<sup>1</sup> Excluding the Ketchikan Nonsubsistence Area

In Option B (Table 3), the ANS range is based on the mean annual harvest of black bears by all residents of Alaska. The low end of the range is the mean harvest minus 25% of the mean; the high end of the range is the mean harvest plus 25% of the mean.

Table 3. Black Bear ANS Option B: Based on harvests by all Alaska residents

Unit	Mean Harvest, 1990 to 2007	Suggested ANS Range, +/- 25% of mean
1A <sup>1</sup>	13 bears	10 to 16 bears
1B	6 bears	5 to 8 bears
1D	28 bears	21 to 35 bears
2	79 bears	59 to 99 bears
3	64 bears	48 to 80 bears

<sup>1</sup> Excluding the Ketchikan Nonsubsistence Area

## APPENDIX TABLES—BLACK BEARS

Appendix Table 1. Black Bear Harvests in GMU 1A (excluding nonsubsistence area)

Year	Total Number of Black Bears Harvested				Grand Total
	Southeast Alaska Residents	Other Alaska Residents	Total Alaska Residents	Non- Residents	
1990	19	8	27	5	32
1991	3	5	8	7	15
1992	4	0	4	3	7
1993	4	1	5	7	12
1994	4	4	8	5	13
1995	8	3	11	5	16
1996	9	1	10	10	20
1997	17	1	18	16	34
1998	8	1	9	8	17
1999	15	2	17	26	43
2000	21	3	24	32	56
2001	14	3	17	33	50
2002	4	2	6	15	21
2003	9	1	10	15	25
2004	8	1	9	11	20
2005	13	0	13	20	33
2006	23	2	25	35	60
2007	12	0	12	19	31
Annual Average	11	2	13	15	28
Total Harvest	195	38	233	272	505

Source: ADF&G, Division of Wildlife Conservation

Appendix Table 2. Black Bear Harvests in GMU 1B

Year	Total Number of Black Bears Harvested				
	Southeast Alaska Residents	Other Alaska Residents	Total Alaska Residents	Non- Residents	Grand Total
1990	12	0	12	1	13
1991	12	0	12	4	16
1992	8	2	10	4	14
1993	4	1	5	8	13
1994	4	1	5	7	12
1995	8	1	9	20	29
1996	7	0	7	15	22
1997	5	0	5	7	12
1998	7	1	8	15	23
1999	3	0	3	10	13
2000	8	0	8	14	22
2001	4	1	5	25	30
2002	4	0	4	14	18
2003	3	1	4	3	7
2004	5	0	5	6	11
2005	1	0	1	7	8
2006	5	1	6	12	18
2007	7	0	7	11	18
Annual Average	6	1	6	10	17
Total Harvest	107	9	116	183	299

Source: ADF&amp;G, Division of Wildlife Conservation

Appendix Table 3. Black Bear Harvests in GMU 1D

Year	Total Number of Black Bears Harvested				
	Southeast Alaska Residents	Other Alaska Residents	Total Alaska Residents	Non- Residents	Grand Total
1990	29	3	32	2	34
1991	24	4	28	4	32
1992	25	3	28	1	29
1993	16	3	19	3	22
1994	15	2	17	3	20
1995	24	5	29	4	33
1996	35	2	37	3	40
1997	31	3	34	7	41
1998	28	2	30	6	36
1999	36	6	42	3	45
2000	29	8	37	8	45
2001	27	0	27	8	35
2002	14	2	16	6	22
2003	16	1	17	4	21
2004	17	3	20	4	24
2005	25	3	28	15	43
2006	25	3	28	7	35
2007	24	3	27	6	33
Annual Average	24	3	28	5	33
Total Harvest	440	56	496	94	590

Source: ADF&amp;G, Division of Wildlife Conservation

Appendix Table 4. Black Bear Harvests in GMU 2

Year	Total Number of Black Bears Harvested				
	Southeast Alaska Residents	Other Alaska Residents	Total Alaska Residents	Non- Residents	Grand Total
1990	94	23	117	90	207
1991	74	39	113	105	218
1992	63	32	95	128	223
1993	63	32	95	130	225
1994	63	22	85	149	234
1995	89	18	107	143	250
1996	64	12	76	138	214
1997	56	26	82	208	290
1998	68	20	88	228	316
1999	43	29	72	252	324
2000	49	34	83	298	381
2001	41	20	61	289	350
2002	49	28	77	290	367
2003	37	18	55	381	436
2004	48	26	74	397	471
2005	40	24	64	418	482
2006	35	12	47	345	392
2007	28	9	37	323	360
Annual Average	56	24	79	240	319
Total Harvest	1,004	424	1,428	4,312	5,740

Source: ADF&amp;G, Division of Wildlife Conservation

Appendix Table 5. Black Bear Harvests in GMU 3

Year	Total Number of Black Bears Harvested				
	Southeast Alaska Residents	Other Alaska Residents	Total Alaska Residents	Non- Residents	Grand Total
1990	64	16	80	77	157
1991	54	8	62	98	160
1992	54	10	64	100	164
1993	81	21	102	130	232
1994	75	21	96	119	215
1995	71	10	81	151	232
1996	73	10	83	149	232
1997	58	11	69	172	241
1998	70	17	87	205	292
1999	43	13	56	231	287
2000	53	10	63	246	309
2001	55	19	74	212	286
2002	40	12	52	173	225
2003	22	8	30	174	204
2004	21	9	30	168	198
2005	25	7	32	196	228
2006	27	22	49	183	232
2007	35	12	47	177	224
Annual Average	51	13	64	165	229
Total Harvest	921	236	1,157	2,961	4,118

Source: ADF&amp;G, Division of Wildlife Conservation



## MOUNTAIN GOATS

### Options for Amount Necessary for Subsistence (ANS) Findings for Mountain Goats, GMU Subunits 1A, 1B, 1D, and 5

Background: the Alaska Board of Game has determined that mountain goat populations *Oreamnos americanus* in Game Management Unit (GMU) subunits 1A (outside the Ketchikan Nonsubsistence Area), 1B, 1C (outside the Juneau Nonsubsistence Area), 1D, and GMU 5 support customary and traditional uses. However, the Board has determined an amount reasonably necessary for subsistence harvest of mountain goats (an ANS finding) only for subunit 1C outside the nonsubsistence area. The ANS finding for mountain goats in subunit 1C outside the nonsubsistence area is 25 to 30 goats (5 AAC 99.025).

The following provides options for the Board to consider if it chooses to make ANS findings for mountain goats in GMU subunits 1A (outside of the Ketchikan Nonsubsistence Area), 1B, 1D, and GMU 5, as directed by AS 16.05.258(b).

Table 1 reports the mean annual harvests of mountain goats, by GMU 1 subunits (except within the Ketchikan Nonsubsistence area) and GMU 5, harvested by residents of the GMUs of Southeast Alaska (GMUs 1, 2, 3, 4, and 5), as well as other Alaska residents for the years 1990 through 2007. It also reports the year with the lowest and the highest harvest, by residency category, and by GMU subunit. Mountain Goat Appendix Tables 1 through 4 report mountain goat harvests for each year from 1990 through 2007, including harvests by non-Alaska residents.

Table 1. Mean Harvests of Mountain Goats by Alaska Residents in Units 1A, 1B, 1D and 5, 1990 - 2007

Subunit	Harvests by Residents of GMUs 1 - 5					Harvests by All Alaska Residents				
	Mean	Low	(year)	High	(year)	Mean	Low	(year)	High	(year)
1A <sup>1</sup>	14	0	1992	31	1993	16	0	1992	34	1997
1B	16	6	2002	47	1990	18	6	2002	48	1990
1D	18	13	1996	30	2007	21	13	1996	33	2007
<hr/>										
All 3 GMU 1 subunits	48	27	2002	88	1990	55	30	2002	92	1990
GMU 5	2	0	2006	8	1994	3	0	2006	11	1994

<sup>1</sup> Excludes harvests within the Ketchikan Nonsubsistence Area.

Source: Prepared by ADF&G, Division of Subsistence, based on harvest data compiled by ADF&G, Division of Wildlife Conservation

Tables 2 and 3 provide 2 options for the Board to consider for ANS findings for mountain goats in each subunit of GMU 1 and in GMU 5. In Option A (Table 2), the ANS range is based on the mean annual harvest of mountain goats by residents of the GMUs of Southeast Alaska. The low end of the range is the mean harvest minus 25% of the mean; the high end of the range is the mean harvest plus 25% of the mean.

Table 2. Mountain Goat ANS Option A: Based on harvests by southeast Alaska GMU residents

Unit	Mean Harvest, 1990 to 2007	Suggested ANS Range, +/- 25% of mean
1A <sup>1</sup>	14 goats	11 to 18 goats
1B	16 goats	12 to 20 goats
1D	18 goats	14 to 23 goats
5	2 goats	2 to 3 goats

<sup>1</sup> Excluding the Ketchikan Nonsubsistence Area

In Option B (Table 3), the ANS range is based on the mean annual harvest of mountain goats by all residents of Alaska. The low end of the range is the mean harvest minus 25% of the mean; the high end of the range is the mean harvest plus 25% of the mean.

Table 3. Mountain Goat ANS Option B: Based on harvests by all Alaska residents

Unit	Mean Harvest, 1990 to 2007	Suggested ANS Range, +/- 25% of mean
1A <sup>1</sup>	16 goats	12 to 20 goats
1B	18 goats	14 to 23 goats
1D	21 goats	16 to 26 goats
5	3 goats	2 to 4 goats

<sup>1</sup> Excluding the Ketchikan Nonsubsistence Area

## APPENDIX TABLES—MOUNTAIN GOATS

Appendix Table 1. Mountain Goat Harvests in GMU 1A (excluding nonsubsistence area)

Year	Total Number of Mountain Goats Harvested				
	Southeast Alaska Residents	Other Alaska Residents	Total Alaska Residents	Non- Residents	Grand Total
1990	20	0	20	0	20
1991	16	0	16	0	16
1992	0	0	0	0	0
1993	31	1	32	0	32
1994	16	2	18	2	20
1995	22	2	24	0	24
1996	19	1	20	0	20
1997	24	10	34	2	36
1998	20	3	23	3	26
1999	2	3	5	2	7
2000	11	2	13	10	23
2001	12	2	14	9	23
2002	5	1	6	7	13
2003	6	3	9	6	15
2004	11	1	12	7	19
2005	14	6	20	5	25
2006	11	0	11	5	16
2007	7	1	8	9	17
Annual Average	14	2	16	4	20
Total Harvest	247	38	285	67	352

Source: ADF&G, Division of Wildlife Conservation

Appendix Table 2. Mountain Goat Harvests in GMU 1B

Year	Total Number of Mountain Goats Harvested				
	Southeast Alaska Residents	Other Alaska Residents	Total Alaska Residents	Non- Residents	Grand Total
1990	47	1	48	1	49
1991	13	2	15	3	18
1992	21	1	22	4	26
1993	32	3	35	2	37
1994	21	1	22	5	27
1995	18	3	21	8	29
1996	11	3	14	6	20
1997	26	0	26	5	31
1998	13	0	13	5	18
1999	13	0	13	8	21
2000	13	1	14	4	18
2001	8	0	8	11	19
2002	6	0	6	6	12
2003	13	2	15	2	17
2004	11	2	13	6	19
2005	12	2	14	8	22
2006	11	1	12	3	15
2007	7	0	7	2	9
Annual Average	16	1	18	5	23
Total Harvest	296	22	318	89	407

Source: ADF&amp;G, Division of Wildlife Conservation

Appendix Table 3. Mountain Goat Harvests in GMU 1D

Year	Total Number of Mountain Goats Harvested				
	Southeast Alaska Residents	Other Alaska Residents	Total Alaska Residents	Non- Residents	Grand Total
1990	21	3	24	2	26
1991	19	3	22	0	22
1992	17	1	18	0	18
1993	15	3	18	2	20
1994	13	5	18	1	19
1995	14	6	20	2	22
1996	13	0	13	3	16
1997	16	9	25	1	26
1998	24	2	26	1	27
1999	21	2	23	0	23
2000	17	2	19	2	21
2001	15	4	19	4	23
2002	16	2	18	3	21
2003	18	4	22	3	25
2004	22	3	25	9	34
2005	15	4	19	6	25
2006	15	2	17	4	21
2007	30	3	33	5	38
Annual Average	18	3	21	3	24
Total Harvest	321	58	379	48	427

Source: ADF&amp;G, Division of Wildlife Conservation

Appendix Table 4. Mountain Goat Harvests in GMU 5

Year	Total Number of Mountain Goats Harvested				
	Southeast Alaska Residents	Other Alaska Residents	Total Alaska Residents	Non- Residents	Grand Total
1990	0	0	0	0	0
1991	3	4	7	1	8
1992	2	0	2	2	4
1993	0	0	0	6	6
1994	8	3	11	1	12
1995	2	0	2	4	6
1996	3	1	4	3	7
1997	3	2	5	0	5
1998	6	3	9	7	16
1999	7	3	10	5	15
2000	1	5	6	4	10
2001	2	0	2	3	5
2002	1	1	2	2	4
2003	0	0	0	3	3
2004	0	0	0	2	2
2005	0	0	0	6	6
2006	0	0	0	3	3
2007	1	0	1	2	3
Annual Average	2	1	3	3	6
Total Harvest	39	22	61	54	115

Source: ADF&G, Division of Wildlife Conservation

## BROWN BEARS

### Options for Amount Necessary for Subsistence (ANS) Findings for Brown Bears, GMU Subunits 1A, 1B, 1C, and 1D

Background: the Alaska Board of Game has determined that brown bear *Ursus arctos* populations in Game Management Unit (GMU) subunits 1A, 1B, 1C, and 1D (outside of nonsubsistence areas) support customary and traditional uses. However, the board has not determined the amount reasonably necessary for subsistence harvest of brown bears (an ANS finding) (5 AAC 99.025).

The following provides options for the Board to consider if it chooses to make ANS findings for brown bears in subunits 1A, 1B, 1C, and 1D, as directed by AS 16.05.258(b).

Table 1 reports the mean annual harvests of brown bears by GMU subunit, for GMU 1, by residents of the GMUs of Southeast Alaska (GMUs 1, 2, 3, 4, and 5), as well as other Alaska residents for the years 1990 through 2007. It also reports the year with the lowest and the highest harvest by each residence category in each GMU subunit. (A "+" next to the year indicates multiple years with that value. The most recent year appears in the table.) Brown Bear Appendix Tables 1 through 5 report brown bear harvests for each year from 1990 through 2007, including harvests by non-Alaska residents.

Table 1. Mean Harvests of Brown Bears by Alaska Residents in Units 1A, 1B, 1C, and 1D 1990 - 2007

Subunit	Harvests by Residents of GMUs 1 - 5					Harvests by All Alaska Residents				
	Mean	Low	(year)	High	(year)	Mean	Low	(year)	High	(year)
1A <sup>1</sup>	3	0	1997	8	1994	3	0	1997	8	1994
1B	2	0	2005+	5	1991	2	0	2005+	5	1991+
1C <sup>2</sup>	1	0	2005+	4	2006	1	0	2005+	4	2006
1D	5	1	2004+	8	1999+	7	1	2004	14	1997
Unit GMU 1 <sup>3</sup>	10	4	2004	20	2006	13	4	2004	21	2006

<sup>1</sup> Does not include harvests within the Ketchikan nonsubsistence area.

<sup>2</sup> Does not include harvests within the Juneau nonsubsistence area.

<sup>3</sup> Does not include harvests within the Ketchikan and Juneau nonsubsistence areas.

Source: Prepared by ADF&G, Division of Subsistence, based on harvest data compiled by ADF&G, Division of Wildlife Conservation

Tables 2 and 3 provide 2 options for the Board to consider for ANS findings for brown bears in each subunit or in the GMU as a whole. In Option A (Table 2), the ANS range is based on the mean annual harvest of brown bears by residents of the GMUs of Southeast Alaska. The low end of the range is the mean harvest minus 25% of the mean; the high end of the range is the mean harvest plus 25% of the mean. The Board could choose to establish an ANS range for each subunit separately or establish a single ANS range for the entire GMU.

Table 2. Brown Bear ANS Option A: Based on harvests by southeast Alaska GMU residents

Note: within this option, the board could establish an ANS range for each subunit, or establish one ANS range for the entire GMU.

Unit	Mean Harvest, 1990 to 2007	Suggested ANS Range, +/- 25% of mean
1A	3 bears	2 to 4 bears
1B	2 bears	2 to 3 bears
1C	1 bear	1 bear
1D	5 bears	4 to 6 bears
1 ALL	10 bears	10 to 13 bears

In Option B (Table 3), the ANS range is based on the mean annual harvest of brown bears by all residents of Alaska. The low end of the range is the mean harvest minus 25% of the mean; the high end of the range is the mean harvest plus 25% of the mean. The Board could choose to establish an ANS range for each subunit separately or establish a single ANS range for the entire GMU.

Table 3. Brown Bear ANS Option B: Based on harvests by all Alaska residents

Note: within this option, the board could establish an ANS range for each subunit, or establish one ANS range for the entire GMU.

Unit	Mean Harvest, 1990 to 2007	Suggested ANS Range, +/- 25% of mean
1A	3 bears	2 to 4 bears
1B	2 bears	2 to 3 bears
1C	1 bear	1 bear
1D	7 bears	5 to 9 bears
1 ALL	13 bears	10 to 16 bears

## APPENDIX TABLES—BROWN BEARS

Appendix Table 1. Brown Bear Harvests in GMU 1A (outside nonsubsistence area)

Year	Total Number of Brown Bears Harvested				Grand Total
	Southeast Alaska Residents	Other Alaska Residents	Total Alaska Residents	Non- Residents	
1990	5	0	5	0	5
1991	3	0	3	0	3
1992	6	0	6	1	7
1993	4	0	4	0	4
1994	8	0	8	0	8
1995	1	0	1	1	2
1996	1	0	1	3	4
1997	0	0	0	5	5
1998	2	0	2	4	6
1999	1	1	2	11	13
2000	1	0	1	3	4
2001	1	0	1	2	3
2002	1	1	2	3	5
2003	5	2	7	5	12
2004	3	0	3	3	6
2005	2	0	2	4	6
2006	7	0	7	1	8
2007	1	0	1	5	6
Annual Average	3	0	3	3	6
Total Harvest	52	4	56	51	107

Source: ADF&G, Division of Wildlife Conservation



Appendix Table 2. Brown Bear Harvests in GMU 1B

Year	Total Number of Brown Bears Harvested				
	Southeast Alaska Residents	Other Alaska Residents	Total Alaska Residents	Non- Residents	Grand Total
1990	4	1	5	0	5
1991	5	0	5	4	9
1992	4	0	4	1	5
1993	2	0	2	5	7
1994	0	0	0	1	1
1995	1	0	1	7	8
1996	1	0	1	3	4
1997	0	0	0	4	4
1998	3	1	4	3	7
1999	1	0	1	5	6
2000	3	0	3	6	9
2001	2	0	2	7	9
2002	0	0	0	6	6
2003	0	0	0	6	6
2004	0	0	0	4	4
2005	0	0	0	3	3
2006	3	0	3	4	7
2007	2	0	2	3	5
Annual Average	2	0	2	4	6
Total Harvest	31	2	33	72	105

Source: ADF&amp;G, Division of Wildlife Conservation

Appendix Table 3. Brown Bear Harvests in GMU 1C (outside nonsubsistence area)

Year	Total Number of Brown Bears Harvested				
	Southeast Alaska Residents	Other Alaska Residents	Total Alaska Residents	Non- Residents	Grand Total
1990	0	0	0	3	3
1991	1	0	1	0	1
1992	0	0	0	1	1
1993	1	0	1	1	2
1994	0	0	0	1	1
1995	1	0	1	0	1
1996	2	0	2	1	3
1997	3	0	3	1	4
1998	1	0	1	0	1
1999	0	0	0	3	3
2000	1	0	1	0	1
2001	1	0	1	0	1
2002	1	0	1	1	2
2003	2	0	2	1	3
2004	0	0	0	1	1
2005	0	0	0	0	0
2006	4	0	4	0	4
2007	3	0	3	1	4
Annual Average	1	0	1	1	2
Total Harvest	21	0	21	15	36

Source: ADF&amp;G, Division of Wildlife Conservation

Appendix Table 4. Brown Bear Harvests in GMU 1D

Year	Total Number of Brown Bears Harvested				Grand Total
	Southeast Alaska Residents	Other Alaska Residents	Total Alaska Residents	Non-Residents	
1990	8	2	10	3	13
1991	6	1	7	5	12
1992	7	2	9	9	18
1993	2	4	6	4	10
1994	4	5	9	6	15
1995	4	2	6	2	8
1996	3	3	6	10	16
1997	6	8	14	7	21
1998	6	4	10	8	18
1999	8	2	10	5	15
2000	1	0	1	15	16
2001	3	0	3	11	14
2002	2	1	3	8	11
2003	4	1	5	7	12
2004	1	0	1	6	7
2005	7	1	8	8	16
2006	6	1	7	10	17
2007	5	0	5	5	10
Annual Average	5	2	7	7	14
Total Harvest	83	37	120	129	249

Source: ADF&amp;G, Division of Wildlife Conservation

Appendix Table 5. Brown Bear Harvests in GMU 1 (outside nonsubsistence area)

Year	Total Number of Brown Bears Harvested				Grand Total
	Southeast Alaska Residents	Other Alaska Residents	Total Alaska Residents	Non-Residents	
1990	17	3	20	6	26
1991	15	1	16	9	25
1992	17	2	19	12	31
1993	9	4	13	10	23
1994	12	5	17	8	25
1995	7	2	9	10	19
1996	7	3	10	17	27
1997	9	8	17	17	34
1998	12	5	17	15	32
1999	10	3	13	24	37
2000	6	0	6	24	30
2001	7	0	7	20	27
2002	4	2	6	18	24
2003	11	3	14	19	33
2004	4	0	4	14	18
2005	9	1	10	15	25
2006	20	1	21	15	36
2007	11	0	11	14	25
Annual Average	10	2	13	15	28
Total Harvest	187	43	230	267	497

Source: ADF&amp;G, Division of Wildlife Conservation

## **Proposal 46**

### *Shorten Wolf Hunting Seasons in Units 1, 3, 4, and 5*

Prepared by the  
ADF&G Division of Subsistence  
for the  
Alaska Board of Game  
November 2008



Proposal 46

1

## **Proposal 46**

- This proposal would shorten wolf hunting seasons in Units 1, 3, 4, and 5 by 60 days.

Department Recommendation:  
Do Not Adopt

Proposal 46

2

# State Subsistence Procedures

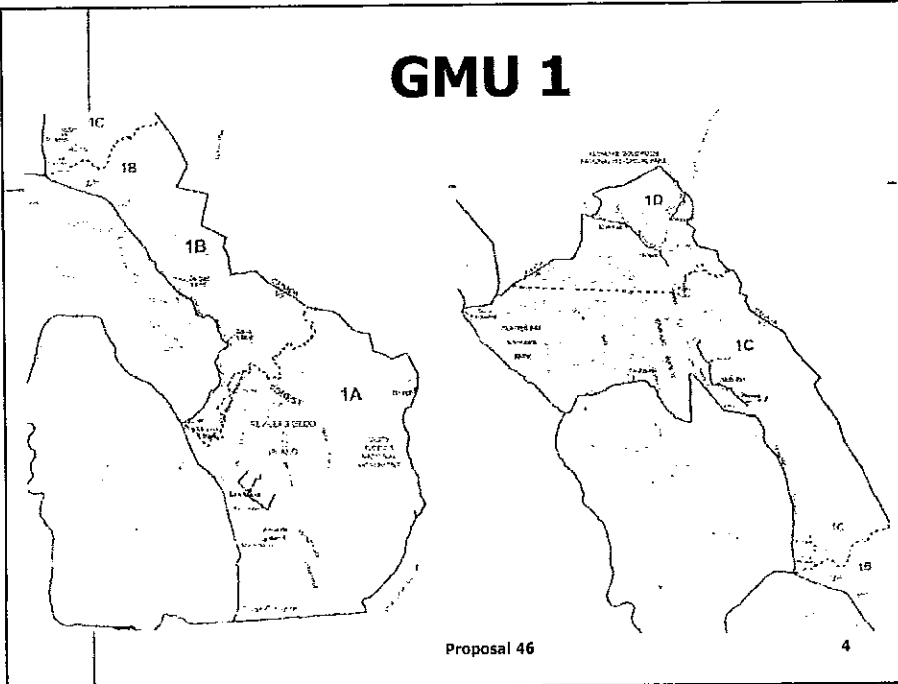
## Board Findings on Wolves in Region I.

- Is there Customary and Traditional Use of Wolves in Units 1, 3, 4, and 5?
  - Yes, a positive finding for wolves in 1 D, 2006.
  - No findings for wolves in Units 1 (A) (B) (C) 3, or 5.
  - Wolves occur rarely, if at all, in Unit 4.
- Is there a "Harvestable Surplus" of for wolves in these units?
  - Yes
- What is the amount reasonably Necessary for Subsistence?
  - There are no ANS findings for Wolves in Units 1, 3, or 5.
- Does the harvestable surplus allow for all or only some uses?
  - This is a Board determination.

Proposal 46

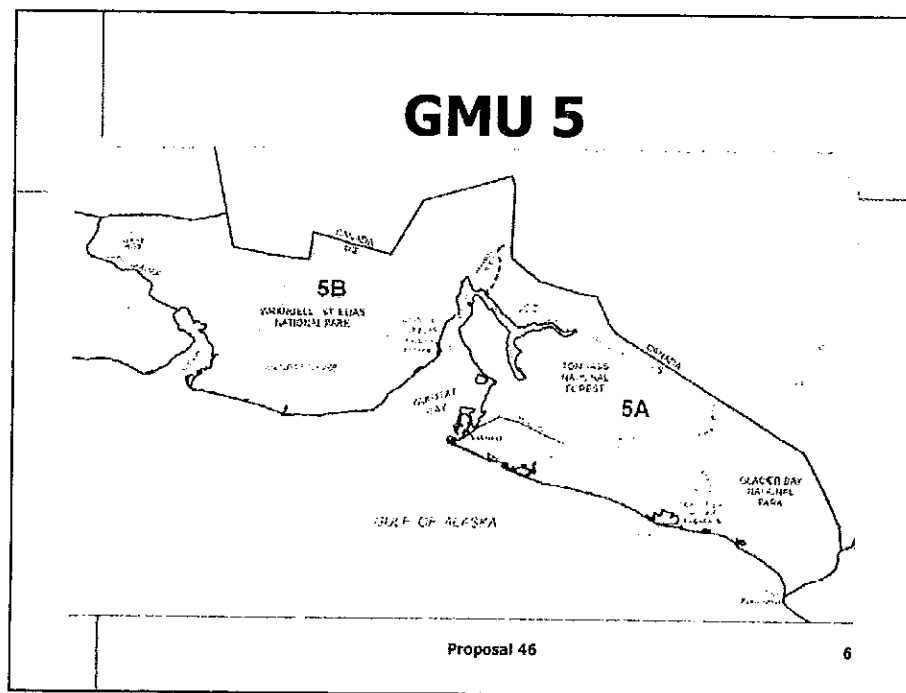
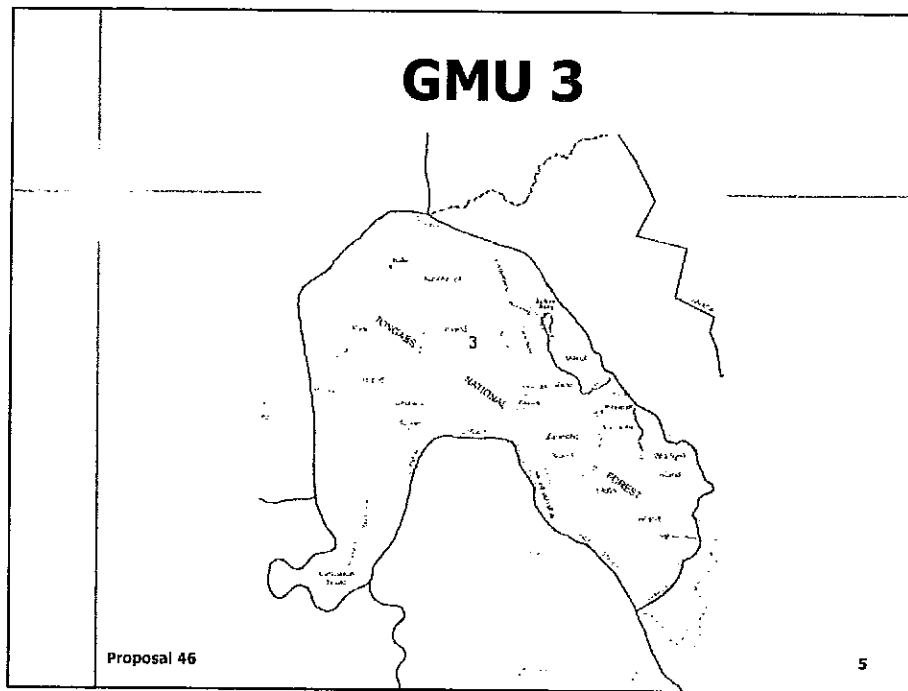
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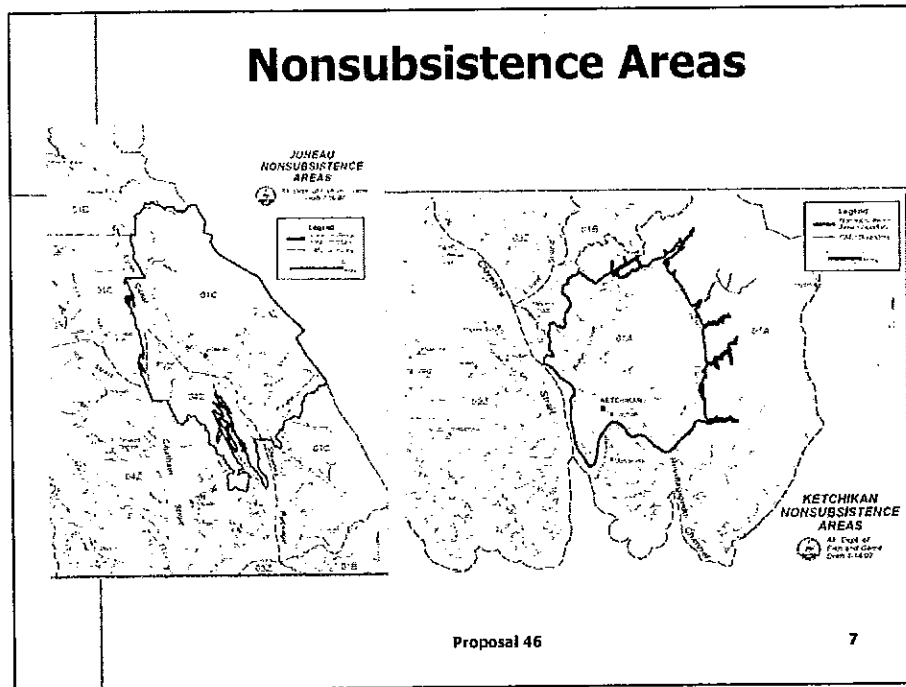
## GMU 1



Proposal 46

4





## Why is a C&T finding necessary?

- **Sec. 16.05.258** Subsistence use and allocation
- **5 AAC 99.010** Joint Boards of Fisheries and Game subsistence procedures
- Both state law and board procedure identify making a C&T finding a *first* step in the regulatory process

## Customary & Traditional Findings

- Positive C&T Finding for Wolves in Unit 1 (D)
- Positive C&T Finding for Wolves in Unit 2
- No ANS Findings for Wolves in Southeast Alaska

## Method of Wolf Harvest by Alaskan Residents in Units 1A,B,C in regulatory years 1990-2007

Harvest Method	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	TOTAL	Per.
Shooting (1)	17	19	13	14	16	20	6	7	17	19	12	16	12	14	9	8	4	13	236	27.6%
Trapping (2)	14	26	26	40	42	25	14	22	16	20	35	42	22	26	15	15	12	19	431	50.4%
Snaring (3)	1	0	14	8	4	9	8	12	7	20	21	14	8	13	4	3	3	4	153	17.9%
Other (4)	0	0	0	0	0	3	0	0	0	1	0	1	1	0	0	0	0	0	6	0.7%
Unknown	1	0	2	0	0	0	0	1	0	0	0	1	0	0	0	0	24	0	29	3.4%
Total	33	45	55	62	62	57	28	42	40	60	68	74	43	53	28	26	43	36	855	100%

### Method of Wolf Harvest by Alaskan Residents in Unit 3 in regulatory years 1997-2007

Harvest Method	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	TOTAL	Per.
Shooting (1)	7	14	18	9	13	18	17	8	14	6	8	132	29.3%
Trapping (2)	22	15	28	30	28	37	12	14	24	23	6	239	53.0%
Snaring (3)	7	1	6	8	5	2	7	15	12	10	0	73	16.2%
Other (4)	0	0	0	1	2	3	0	1	0	0	0	7	1.6%
Unknown	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
<b>Total</b>	<b>36</b>	<b>30</b>	<b>52</b>	<b>48</b>	<b>48</b>	<b>60</b>	<b>36</b>	<b>38</b>	<b>50</b>	<b>39</b>	<b>14</b>	<b>451</b>	<b>100%</b>

Proposal 46

11

### Method of Wolf Harvest by Alaskan Residents in Unit 5 in regulatory years 1997-2007

Harvest Method	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	TOTAL	Per.
Shooting (1)	2	0	1	3	2	3	1	3	3	0	3	21	40.4%
Trapping (2)	0	0	1	3	2	1	0	1	1	3	0	12	23.1%
Snaring (3)	1	0	0	2	0	6	2	4	0	2	2	19	36.5%
Other (4)	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Unknown	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
<b>Total</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>8</b>	<b>4</b>	<b>10</b>	<b>3</b>	<b>8</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>52</b>	<b>100%</b>

Proposal 46

12



## Wolf Harvest & Use GMUs 1, 3, & 5

GMU	Community & Year	Percentage of Households					Amount Harvested	
		Use	Att	Harv	Recv	Give	Total	Mean HH
1D	Haines 1983	0.70	6.80	0.70	0.00		9	
1D	Haines 1996	2.2	2.2	2.2	0.0	0.0	17	0.02
3	Wrangell 2000	3.1	2.0	2.0	1.0	1.0	46	0.06
3	Petersburg 2000	1.6	2.4	1.6	0.0	0.8	86	0.08
5	Yakutat 1984	10.0	10.0	10.0	0.0	2.0	69	
5	Yakutat 2000	2.2	5.0	2.2	0.0	0.7	10	0.04

## Current State Wolf Hunting Regulations

- 5 AAC 85.056. Hunting seasons and bag limits for wolf. Units 1, 3 and 5
- Resident and Nonresident Open Season:  
August 1 – April 30
- Bag – 5 Wolves
- Hides must be sealed within 30 days of kill
- Wolves taken on Douglas Island must be reported within 48 hours and sealed within 5 days

## Proposed Regulations

- Shorten wolf hunting seasons in Units 1, 3, 4, and 5 by 60 days.
- Change starting date from August 1 to September 1
- Change season ending date from April 30 to March 31

## GMUs 1, 3-5 Wolf Hunting Regulation History

Year	Resident	Resident Bag	Nonresident	Nonresident Bag
2006-2007	Aug 1 - Apr 30	5	Aug 1 - Apr 30	5
2005-2006	Aug 1 - Apr 30	5	Aug 1 - Apr 30	5
2004-2005	Sept 1 - Mar 31	5	Sept 1 - Mar 31	5
2003-2004	Sept 1 - Mar 31	5	Sept 1 - Mar 31	5
2002-2003	Aug 1 - Apr 30	5	Aug 1 - Apr 30	5
2001-2002	Aug 1 - Apr 30	5	Aug 1 - Apr 30	5
2000-2001	Aug 1 - Apr 30	5	Aug 1 - Apr 30	5
1999-2000	Aug 1 - Apr 30	5	Aug 1 - Apr 30	5
1998-1999	Aug 1 - Apr 30	5	Aug 1 - Apr 30	5
1997-1998	Aug 1 - Apr 30	5	Aug 1 - Apr 30	5
1996-1997	Aug 1 - Apr 30	5	Aug 1 - Apr 30	5

## Harvest and Use Patterns

### ■ 5 AAC 99.010 "Eight Criteria"

#### Key Elements

1. Length and consistency of use
2. Seasonality
3. Means and methods of harvest
4. Geographic areas
5. Means of handling, preparing, preserving, and storing
6. Transmission of knowledge, skills, and lore
7. Distribution and exchange
8. Diversity of resources in area

Proposal 46

17

## 1. Length and consistency of use

- Wolves were traditionally harvested as source of fur and hides where they occur in Southeast Alaska.
- In addition to strictly utilitarian uses of hide and fur, the wolf occupies an important symbolic role in Tlingit society.



Proposal 46

18

## **2. Seasonality**

- Traditionally, Tlingits harvested wolves in late fall and early winter before deep snow restricted travel and wolf fur was at its prime.
- Data from 1997 – 2007 reveal that most wolves were shot from August through November.
- Wolves harvested in the fall are likely taken opportunistically when hunters are targeting other species, bears and deer.

## **3. Means and methods of harvest**

- Traditionally, wolves were harvested with snares and deadfalls.
- Snaring still occurs in the area, but more wolves are trapped and shot than snared in GMUs 1 and 3.

## **4. Geographic areas**

- Tlingit testimony taken in Saxman, Juneau, and Hoonah in 1946 reported wolf harvests from the Unuk River, Taku Inlet and River, and Glacier Bay. Other general Hoonah Tlingit trapping areas included Excursion Inlet and the Couverden area.
- Currently, the majority of wolves taken in Units 1 and 3 are taken by trappers and hunters from Ketchikan, Juneau, Petersburg and Wrangell. The records provide location of harvest only to the game management subunit level.

## **5. Means of handling, preparing, preserving, and storing**

- Great care and respect was shown the living wolf as well as the harvested wolf because of its mythical and symbolic importance within Tlingit culture.
- Wolf meat was not normally eaten by Tlingits, except in time of extreme need.
- Presently wolf fur is used in Native handicrafts (blankets, ceremonial robes, winter coat ruffs) and artworks. Furs are also sold to commercial fur traders.

## **6. Transmission of knowledge, skills, and lore**

- Traditional hunting grounds were "owned" in the Tlingit family-clan sense
- "Ownership" was conveyed or inherited
- Knowledge transferred from uncle to nephew
- Tlingit stories

Proposal 46

23

## **7. Distribution and exchange**

- Traditionally: harvested locally or traded from Interior
- Important trade item throughout Southeast
- Used for clothing and regalia

Proposal 46

24

## **8. Diversity of resources in area**

- Region I communities use a wide variety of subsistence resources
  - Furbearers
  - Big game species
  - Small game species
  - Fish
  - Marine mammals
  - Plants

## **Effect of the Proposal:**

- This proposal would shorten wolf hunting seasons in Units 1, 3, 4, and 5 by 60 days. This change would be implemented by changing starting date from August 1 to September 1, and changing the season ending date from April 30 to March 31.
- Department Recommendation:  
Do Not Adopt

## Considerations:

- The dept. recommends leaving the dates for the wolf hunting season unchanged.
- Wolf populations in these units are widely distributed and considered healthy and stable.
- No indication that the wolf populations in these areas are being negatively impacted by the present season.
- Shortening the fall season would take away opportunity from hunters who want to harvest a wolf while deer or mountain goat hunting. The April season allows bear hunters to harvest a wolf.

Proposal 46

27

## Proposal 46

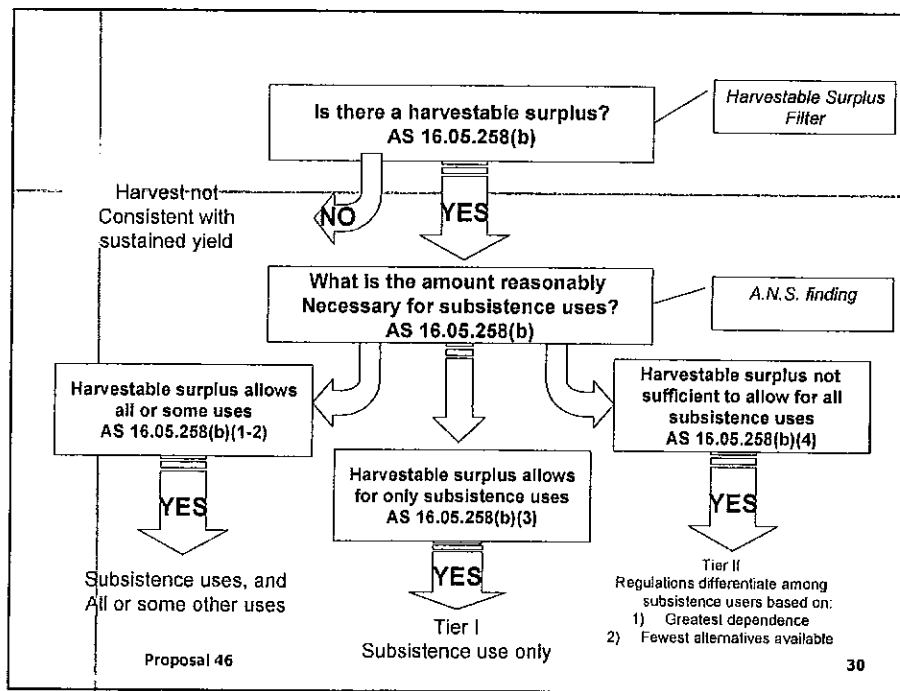
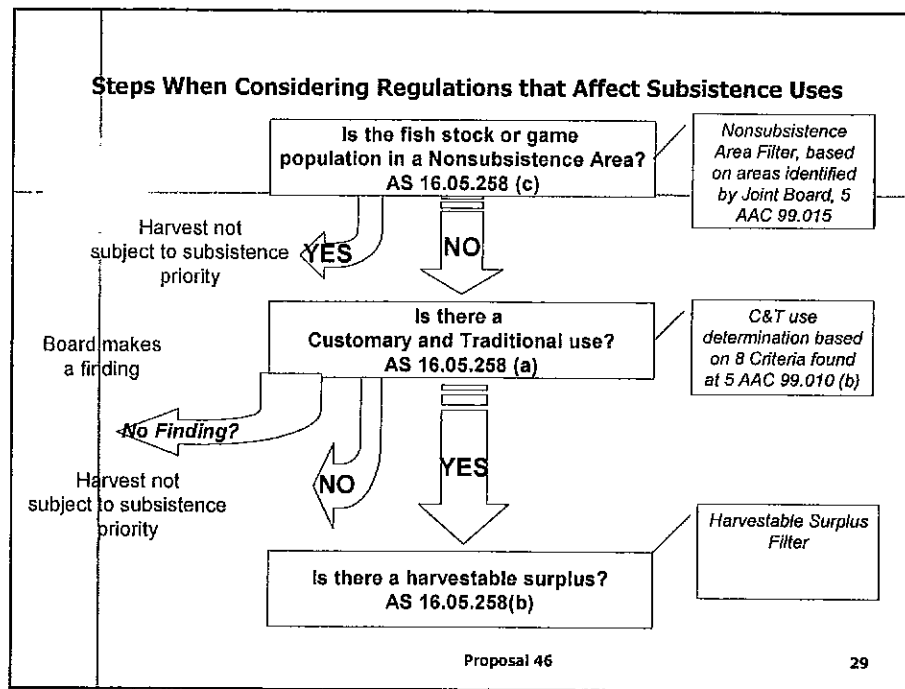
### Summary:

- This proposal would shorten wolf hunting seasons in Units 1, 3, 4, and 5 by 60 days.
- **Department Recommendation:**  
Do Not Adopt

Proposal 46

28





## Proposal 36

*Eliminate the September 1 – 14  
fall black bear Hunting Season  
for non-residents in Units  
1A,B,D, 2 & 3*

Prepared by the  
ADF&G Division of Subsistence  
for the  
Alaska Board of Game  
November 2008



## State Subsistence Procedures

### Board Findings on Black Bears in GMU 1.

- Is there Customary and Traditional Use of Black Bears in Units 1A, 1B, 1C, 1D, 2 and 3?
  - Yes, a positive finding for Black Bears in Units 1A, 1B, 1C, 1D, 2 and 3.
- Is there a "Harvestable Surplus" for Black Bears in these units?
  - Yes
- What is the amount reasonably Necessary for Subsistence?
  - The ANS finding for black bears in GMU 1C is 50 to 70 bears (5 AAC 99.025).
  - There are no ANS findings for Black Bears in Units 1 A, 1B, 1D , 2 and 3.
- Does the harvestable surplus allow for all or only some uses?
  - This is a Board determination.

**GMU 2**

TONGUE

PRINCE

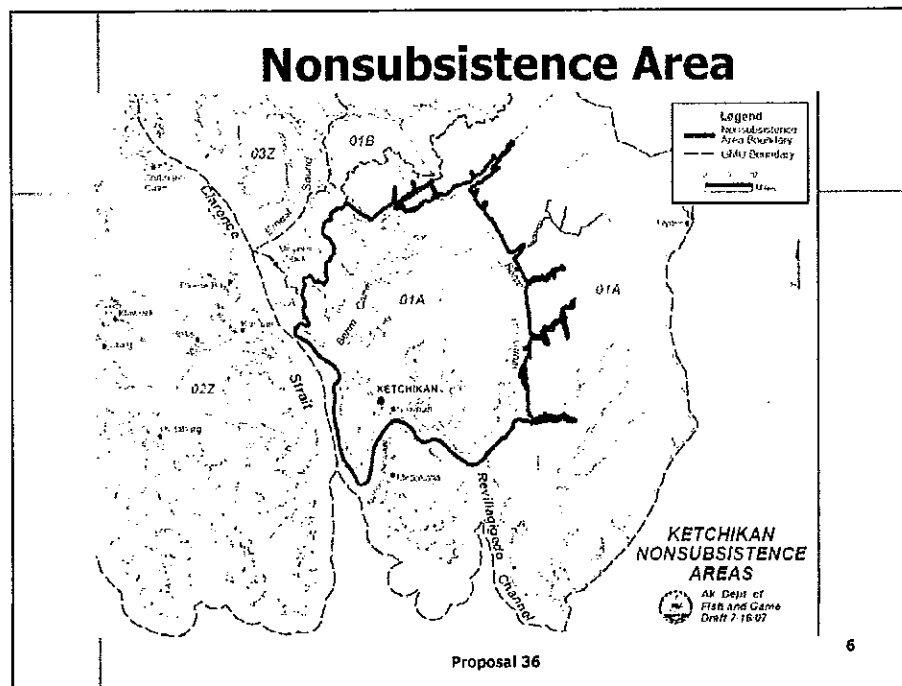
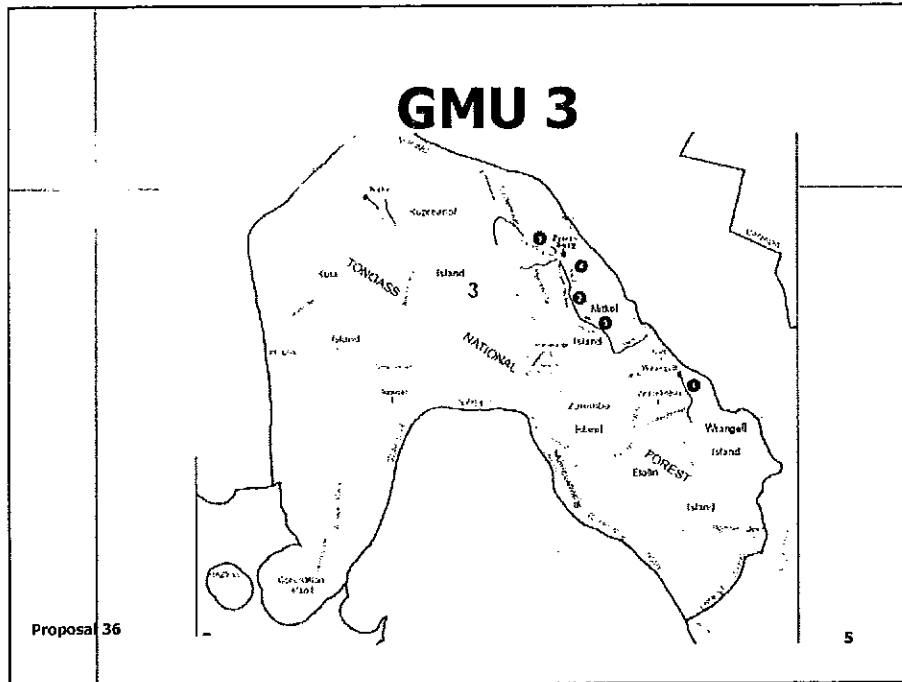
2

ARCHIPELAGO

FOREST

Proposal 36

4



## Why is a C&T finding necessary?

- **Sec. 16.05.258** Subsistence use and allocation
- **5 AAC 99.010** Joint Boards of Fisheries and Game subsistence procedures
- Both state law and board procedure identify making a C&T finding a *first* step in the regulatory process

Proposal 36

7

## Customary & Traditional Findings

- Positive C&T Finding for Black Bears in Units 1, 2, 3, and 5.
- ANS Findings for Black Bears in Unit 1C.

Proposal 36

8

## Options for Amount Necessary for Subsistence (ANS) Findings for Black Bears, GMUs 1A, 1B, 1D, 2 and 3.

- The Alaska Board of Game has determined that black bear populations in GMUs 1 (outside of nonsubsistence areas) 2, & 3 support customary and traditional uses. However, the board has not determined the amount of the black bear populations reasonably necessary for subsistence GMUs 1A, 1B, 1D, 2, and 3.

Department Recommendation:

Review available data and consider making an ANS finding.

Proposal 36

9

## Table 1. Mean Annual Harvests of Black Bears by GMU subunit, residents of Southeast Alaska

Table 1. Mean Harvests of Black Bears by Alaska Residents in Units 1A, 1B, 1D, 2, and 3, 1990 - 2007

Subunit	Harvests by Residents of GMUs 1 - 5					Harvests by All Alaska Residents				
	Mean	Low	(year)	High	(year)	Mean	Low	(year)	High	(year)
1A <sup>1</sup>	11	3	1991	23	2008	13	4	1992	25	2006
1B	6	1	2005	12	1991	6	1	2005	12	1991
1D	24	14	2002	36	1999	28	16	2002	42	1999
2	56	28	2007	94	1990	79	37	2007	117	1990
3	51	21	2004	81	1993	64	30	2004	102	1993
All 5 units	148	87	2003	218	1990	191	116	2003	268	1990

<sup>1</sup> Excludes harvests within the Ketchikan Nonsubsistence Area.

Source: Prepared by ADF&G, Division of Subsistence, based on harvest data compiled by ADF&G, Division of Wildlife Conservation

Proposal 36

10

## Options for the Board to consider for ANS findings for Black Bears in each GMU subunit or the GMU as a whole

Table 2. Black Bear ANS Option A: Based on harvests by southeast Alaska GMU residents

Unit	Mean Harvest, 1990 to 2007	Suggested ANS Range, +/- 25% of mean
1A <sup>1</sup>	11 bears	8 to 14 bears
1B	6 bears	5 to 8 bears
1D	24 bears	18 to 30 bears
2	56 bears	42 to 70 bears
3	51 bears	38 to 64 bears

<sup>1</sup> Excluding the Ketchikan Nonsubsistence Area

## Option B Table 3

Table 3. Black Bear ANS Option B: Based on harvests by all Alaska residents

Unit	Mean Harvest, 1990 to 2007	Suggested ANS Range, +/- 25% of mean
1A <sup>1</sup>	13 bears	10 to 16 bears
1B	6 bears	5 to 8 bears
1D	28 bears	21 to 35 bears
2	79 bears	59 to 99 bears
3	64 bears	48 to 80 bears

<sup>1</sup> Excluding the Ketchikan Nonsubsistence Area

## Appendix Table 1.

Appendix Table 1. Black Bear Harvests in GMU 1A (excluding nonsubsistence area)

Year	Total Number of Black Bears Harvested				Grand Total
	Southeast Alaska Residents	Other Alaska Residents	Total Alaska Residents	Non-Residents	
1990	19	8	27	5	32
1991	3	5	8	7	15
1992	4	0	4	3	7
1993	4	1	5	7	12
1994	4	4	8	5	13
1995	8	3	11	5	16
1996	9	1	10	10	20
1997	17	1	18	16	34
1998	8	1	9	8	17
1999	15	2	17	28	45
2000	21	3	24	32	56
2001	14	3	17	33	50
2002	4	2	6	15	21
2003	9	1	10	15	25
2004	8	1	9	11	20
2005	13	0	13	20	33
2006	23	2	25	35	60
2007	12	0	12	19	31
Annual Average	11	2	13	15	28
Total Harvest	195	35	233	272	505

Source: ADF&G, Division of Wildlife Conservation

## Appendix Table 2.

Appendix Table 2. Black Bear Harvests in GMU 1B

Year	Total Number of Black Bears Harvested				Grand Total
	Southeast Alaska Residents	Other Alaska Residents	Total Alaska Residents	Non-Residents	
1990	12	0	12	1	13
1991	12	0	12	4	16
1992	8	2	10	4	14
1993	4	1	5	8	13
1994	4	1	5	7	12
1995	8	1	9	20	29
1996	7	0	7	15	22
1997	5	0	5	7	12
1998	7	1	8	15	23
1999	3	0	3	10	13
2000	8	0	8	14	22
2001	4	1	5	25	30
2002	4	0	4	14	18
2003	3	1	4	3	7
2004	5	0	5	8	13
2005	1	0	1	7	8
2006	5	1	6	12	18
2007	7	0	7	11	18
Annual Average	5	1	6	10	17
Total Harvest	107	9	116	183	299

Source: ADF&G, Division of Wildlife Conservation



## Appendix Table 3.

Appendix Table 3. Black Bear Harvests in GMU 1D

Year	Total Number of Black Bears Harvested				Grand Total
	Southeast Alaska Residents	Other Alaska Residents	Total Alaska Residents	Non-Residents	
1990	29	3	32	2	34
1991	24	4	28	4	32
1992	25	3	28	1	29
1993	16	3	19	3	22
1994	15	2	17	3	20
1995	24	5	29	4	33
1996	35	2	37	3	40
1997	31	3	34	7	41
1998	28	2	30	6	36
1999	36	6	42	3	45
2000	29	6	37	8	45
2001	27	0	27	8	35
2002	14	2	16	6	22
2003	16	1	17	4	21
2004	17	3	20	4	24
2005	25	3	28	15	43
2006	25	3	28	7	35
2007	24	3	27	6	33
Annual Average	24	3	28	5	33
Total Harvest	440	56	496	94	590

Source: ADF&G, Division of Wildlife Conservation

## Appendix Table 4.

Appendix Table 4. Black Bear Harvests in GMU 2

Year	Total Number of Black Bears Harvested				Grand Total
	Southeast Alaska Residents	Other Alaska Residents	Total Alaska Residents	Non-Residents	
1990	94	23	117	90	207
1991	74	39	113	105	218
1992	63	32	95	128	223
1993	63	32	95	130	225
1994	63	22	85	149	234
1995	89	18	107	143	250
1996	54	12	76	138	214
1997	56	26	82	208	290
1998	66	20	86	228	314
1999	43	29	72	252	324
2000	49	34	83	298	381
2001	41	20	61	289	350
2002	49	28	77	290	367
2003	37	16	53	361	418
2004	46	26	72	397	471
2005	40	24	64	418	482
2006	35	12	47	345	392
2007	28	9	37	323	360
Annual Average	56	24	79	240	319
Total Harvest	1,004	424	1,428	4,312	5,740

Source: ADF&G, Division of Wildlife Conservation

## Appendix Table 5.

Appendix Table 5. Black Bear Harvests in GMU 3

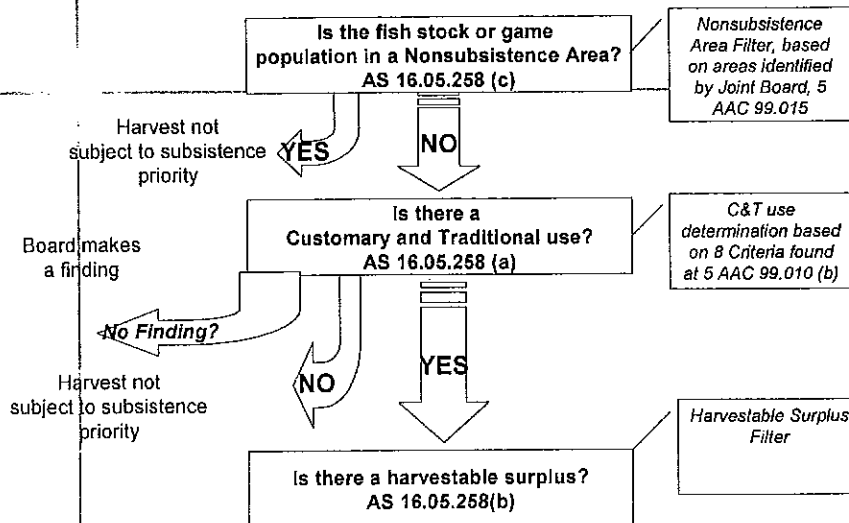
Year	Total Number of Black Bears Harvested				Grand Total
	Southeast Alaska Residents	Other Alaska Residents	Total Alaska Residents	Non-Residents	
1980	84	16	80	77	157
1981	54	8	62	98	160
1982	54	10	64	100	164
1983	81	21	102	130	232
1984	75	21	96	119	215
1985	71	10	81	151	232
1986	73	10	83	149	232
1987	58	11	69	172	241
1988	70	17	87	205	292
1989	43	13	56	231	287
1990	53	10	63	246	309
1991	55	19	74	212	286
1992	40	12	52	173	225
1993	22	8	30	174	204
1994	21	9	30	168	198
1995	25	7	32	196	228
1996	27	22	49	183	232
1997	35	12	47	177	224
Annual Average	51	13	64	165	229
Total Harvest	921	236	1,157	2,061	4,118

Source: ADF&G, Division of Wildlife Conservation

Proposal 36

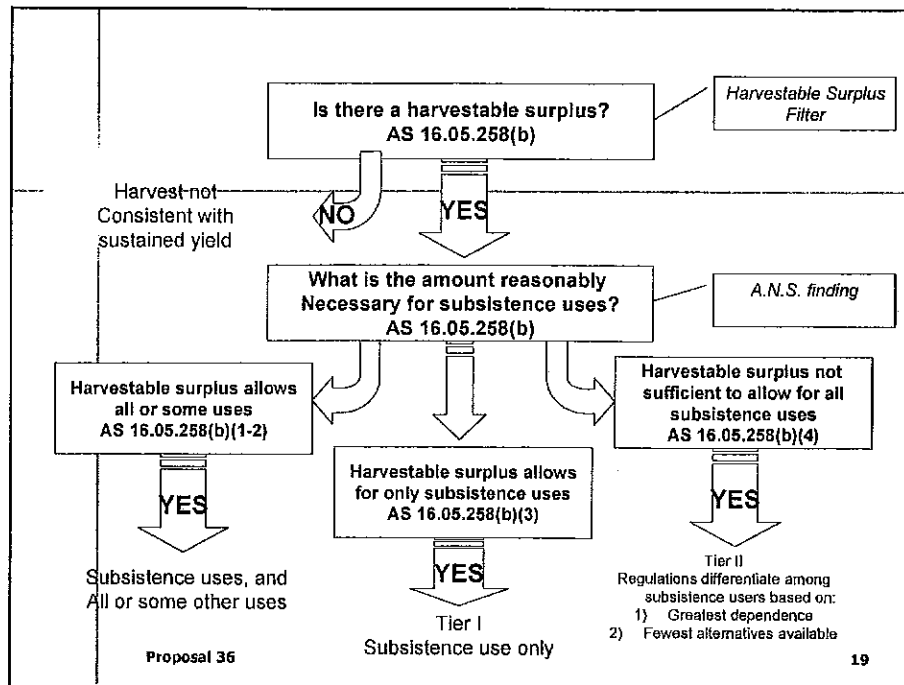
17

### Steps When Considering Regulations that Affect Subsistence Uses



Proposal 36

18



## **Proposal 4**

*Change the bag limit for  
Mountain Goats in Unit 1A*

Prepared by the  
ADF&G Division of Subsistence  
for the  
Alaska Board of Game  
November 2008



Proposal 4

1

## **State Subsistence Procedures**

Board Findings on Mountain Goats in GMU 1 & 5.

- Is there Customary and Traditional Use of Mountain Goats in Units 1A, 1B, 1D and 5?
  - *Yes, a positive finding for Mountain Goats in Units 1 A, 1B, 1C, 1D and 5.*
- Is there a "Harvestable Surplus" for Mountain Goats in these units?
  - *Yes*
- What is the amount reasonably Necessary for Subsistence?
  - *There are no ANS findings for Mountain Goats in Units 1 A, 1B, 1D and 5.*
- Does the harvestable surplus allow for all or only some uses?
  - *This is a Board determination.*

Proposal 4

2

[illegible][illegible]

**Nonsubsistence Area 1A**

**KETCHIKAN NONSUBSISTENCE AREAS**

Ak. Dept. of Fish and Game  
Draft 7/18/07

Legend  
 — Non-subsistence Area Boundary  
 - - - AMU Boundary

0 5 10  
Miles

01B  
01A  
02Z  
03Z

Ketchikan  
Salsiah  
Uetkanaka

Ketchikan Bay  
Klaskanine River  
Klaskanine Sound  
Klaskanine Strait  
Klaskanine Channel

Clarence  
Entire  
Wagner's Creek  
Bloom Canal  
Petersen  
Hysteria

Proposal 4

5

- **Sec. 16.05.258** Subsistence use and allocation
- **5 AAC 99.010** Joint Boards of Fisheries and Game subsistence procedures
- Both state law and board procedure identify making a C&T finding a *first* step in the regulatory process

## **Customary & Traditional Findings**

- Positive C&T Finding for Mountain Goats in Units 1 & 5.
- No ANS Findings for Mountain Goats in Units 1 A, 1 B, 1D & 5

Proposal 4

7

## **Options for Amount Necessary for Subsistence (ANS) Findings for Mountain Goats, GMUs 1A, 1B, 1D and 5**

- The Alaska Board of Game has determined that mountain goat populations in GMU subunits 1A (outside the Ketchikan Nonsubsistence Area), 1B, 1C (outside the Juneau Nonsubsistence Area), 1D, and 5 support customary and traditional uses. However, the Board has determined an amount reasonably necessary for subsistence harvest of mountain goats (an ANS finding) only for subunit 1C outside the nonsubsistence area.

Department Recommendation:

Review available data and consider making an ANS finding.

Proposal 4

8

## Table 1. Mean Annual Harvests of Mountain Goats by GMUs & subunits, residents of Southeast Alaska

Table 1. Mean Harvests of Mountain Goats by Alaska Residents in Units 1A, 1B, 1D and 5, 1990 - 2007

Subunit	Harvests by Residents of GMUs 1 - 5					Harvests by All Alaska Residents				
	Mean	Low	(year)	High	(year)	Mean	Low	(year)	High	(year)
1A <sup>1</sup>	14	0	1992	31	1993	16	0	1992	34	1997
1B	16	6	2002	47	1990	18	6	2002	48	1990
1D	18	13	1996	30	2007	21	13	1996	33	2007
All 3 GMU										
1 subunits	48	27	2002	88	1990	55	30	2002	92	1990
GMU 5	2	0	2006	8	1994	3	0	2006	11	1994

<sup>1</sup> Excludes harvests within the Ketchikan Nonsubsistence Area.

Source: Prepared by ADF&G, Division of Subsistence, based on harvest data compiled by ADF&G, Division of Wildlife Conservation

## Options for the Board to consider for ANS findings for Mountain Goats in each GMU subunit or the GMU as a whole

Table 2. Mountain Goat ANS Option A: Based on harvests by southeast Alaska GMU residents

Unit	Mean Harvest, 1990 to 2007	Suggested ANS Range, +/- 25% of mean
1A <sup>1</sup>	14 goats	11 to 18 goats
1B	16 goats	12 to 20 goats
1D	18 goats	14 to 23 goats
5	2 goats	2 to 3 goats

<sup>1</sup> Excluding the Ketchikan Nonsubsistence Area



## Option B Table 3

Table 3. Mountain Goat ANS Option B: Based on harvests by all Alaska residents

Unit	Mean Harvest, 1990 to 2007	Suggested ANS Range, +/- 25% of mean
1A <sup>1</sup>	16 goats	12 to 20 goats
1B	18 goats	14 to 23 goats
1D	21 goats	16 to 26 goats
5	3 goats	2 to 4 goats

<sup>1</sup> Excluding the Ketchikan Nonsubsistence Area

Proposal 4

11

## Appendix Table 1.

Appendix Table 1. Mountain Goat Harvests in GMU 1A (excluding nonsubsistence area)

Year	Total Number of Mountain Goats Harvested				Grand Total
	Southeast Alaska Residents	Other Alaska Residents	Total Alaska Residents	Non-Residents	
1990	20	0	20	0	20
1991	16	0	16	0	16
1992	0	0	0	0	0
1993	31	1	32	0	32
1994	16	2	18	2	20
1995	22	2	24	0	24
1996	19	1	20	0	20
1997	24	10	34	2	36
1998	20	3	23	3	26
1999	2	3	5	2	7
2000	11	2	13	10	23
2001	12	2	14	9	23
2002	5	1	6	7	13
2003	6	3	9	6	15
2004	11	1	12	7	19
2005	14	6	20	5	25
2006	11	0	11	5	16
2007	7	1	8	9	17
Annual Average	14	2	16	4	20
Total Harvest	247	38	285	67	352

Source: ADF&G, Division of Wildlife Conservation

Proposal 4

12

## Appendix Table 2.

Appendix Table 2. Mountain Goat Harvests in GMU 18

Year	Total Number of Mountain Goats Harvested				Grand Total
	Southeast Alaska Residents	Other Alaska Residents	Total Alaska Residents	Non-Residents	
1990	47	1	48	1	49
1991	13	2	15	3	18
1992	21	1	22	4	26
1993	32	3	35	2	37
1994	21	1	22	5	27
1995	18	3	21	8	29
1996	11	3	14	6	20
1997	26	0	26	5	31
1998	13	0	13	5	18
1999	13	0	13	8	21
2000	13	1	14	4	18
2001	8	0	8	11	19
2002	6	0	6	6	12
2003	13	2	15	2	17
2004	11	2	13	6	19
2005	12	2	14	8	22
2006	11	1	12	3	15
2007	7	0	7	2	9
Annual Average	16	1	18	5	23
Total Harvest	296	22	318	89	407

Source: ADF&G, Division of Wildlife Conservation

Proposal 4

13

## Appendix Table 3.

Appendix Table 3. Mountain Goat Harvests in GMU 1D

Year	Total Number of Mountain Goats Harvested				Grand Total
	Southeast Alaska Residents	Other Alaska Residents	Total Alaska Residents	Non-Residents	
1990	21	3	24	2	26
1991	19	3	22	0	22
1992	17	1	18	0	18
1993	15	3	18	2	20
1994	13	5	18	1	19
1995	14	6	20	2	22
1996	13	0	13	3	16
1997	16	9	25	1	26
1998	24	2	26	1	27
1999	21	2	23	0	23
2000	17	2	19	2	21
2001	15	4	19	4	23
2002	16	2	18	3	21
2003	16	4	22	3	25
2004	22	3	25	9	34
2005	15	4	19	6	25
2006	15	2	17	4	21
2007	30	3	33	5	38
Annual Average	18	3	21	3	24
Total Harvest	321	58	379	48	427

Source: ADF&G, Division of Wildlife Conservation

Proposal 4

14

## Appendix Table 4.

Appendix Table 4. Mountain Goat Harvests in GMU 5

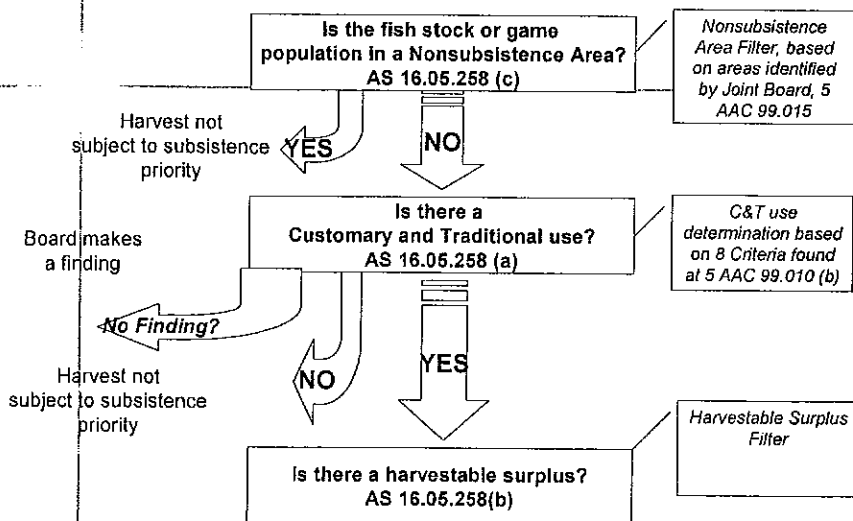
Year	Total Number of Mountain Goats Harvested				Grand Total
	Southeast Alaska Residents	Other Alaska Residents	Total Alaska Residents	Non-Residents	
1990	0	0	0	0	0
1991	3	4	7	1	8
1992	2	0	2	2	4
1993	0	0	0	6	6
1994	8	3	11	1	12
1995	2	0	2	4	6
1996	3	1	4	3	7
1997	3	2	5	0	5
1998	6	3	9	7	16
1999	7	3	10	5	15
2000	1	5	6	4	10
2001	2	0	2	3	5
2002	1	1	2	2	4
2003	0	0	0	3	3
2004	0	0	0	2	2
2005	0	0	0	6	6
2006	0	0	0	3	3
2007	1	0	1	2	3
Annual Average	2	1	3	3	6
Total Harvest	39	22	61	54	115

Source: ADF&G, Division of Wildlife Conservation

Proposal 4

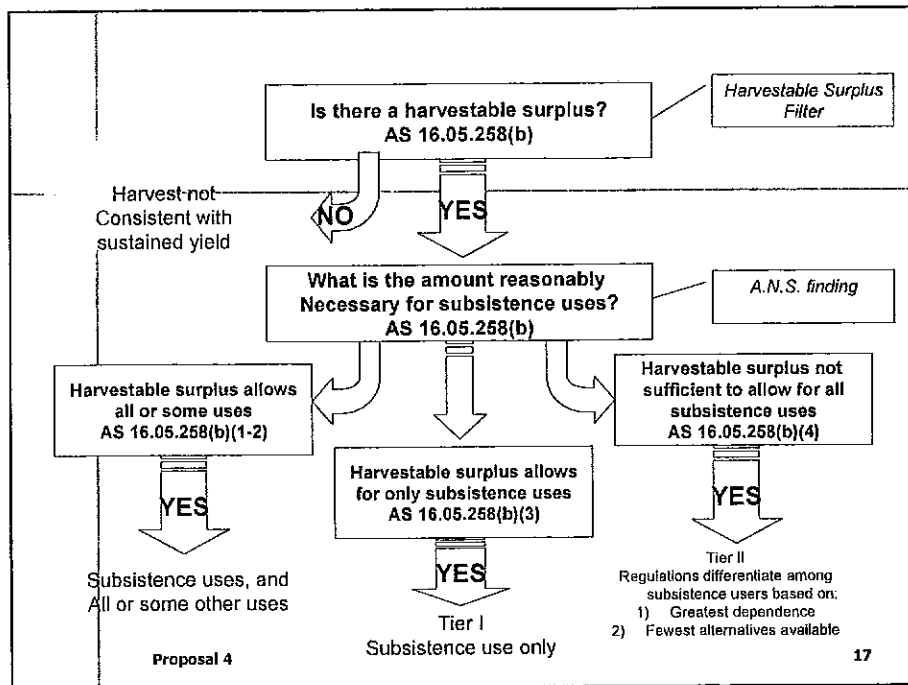
15

### Steps When Considering Regulations that Affect Subsistence Uses



Proposal 4

16



## **Proposal 24**

### *Extend spring Brown Bear Hunting Season in Unit 1C*

Prepared by the  
ADF&G Division of Subsistence  
for the  
Alaska Board of Game  
November 2008



Proposal 24

1

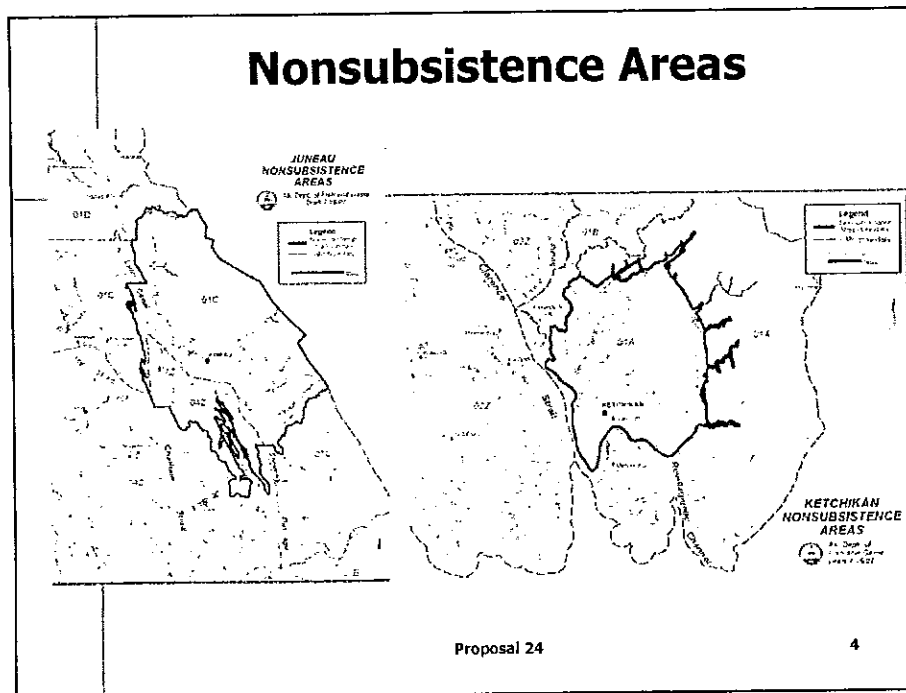
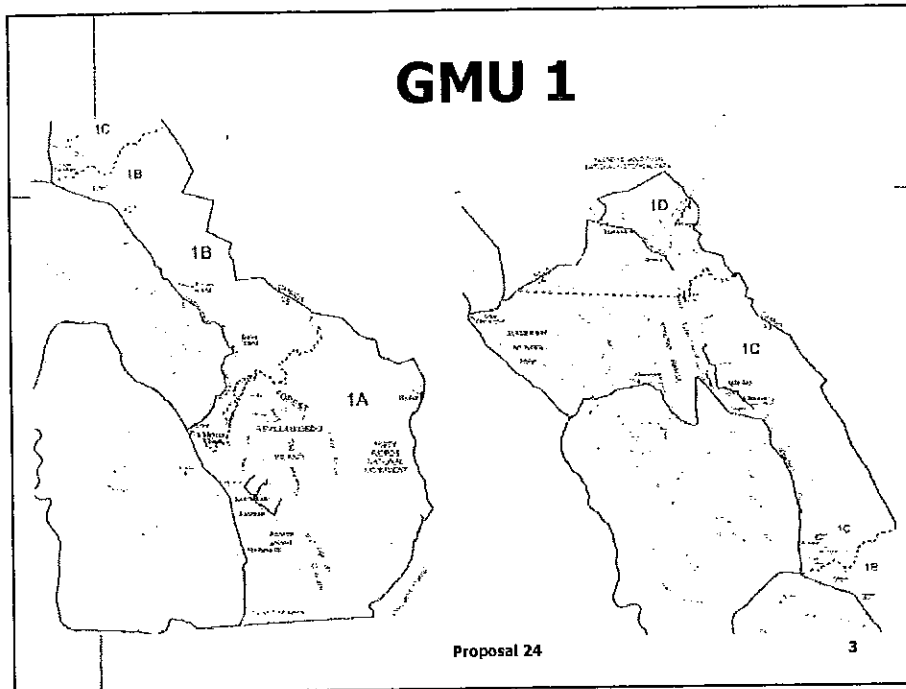
## **State Subsistence Procedures**

### Board Findings on Brown Bears in GMU 1.

- Is there Customary and Traditional Use of Brown Bears in Units 1 A, 1B, 1C, and 1D?
  - *Yes, a positive finding for Brown Bears in Units 1 A, 1B, 1C, and 1D.*
- Is there a "Harvestable Surplus" for Brown Bears in these units?
  - *Yes*
- What is the amount reasonably Necessary for Subsistence?
  - *There are no ANS findings for Brown Bears in Units 1 A, 1B, 1C, and 1D.*
- Does the harvestable surplus allow for all or only some uses?
  - *This is a Board determination.*

Proposal 24

2



## Why is a C&T finding necessary?

- **Sec. 16.05.258** Subsistence use and allocation
- **5 AAC 99.010** Joint Boards of Fisheries and Game subsistence procedures
- Both state law and board procedure identify making a C&T finding a *first* step in the regulatory process

Proposal 24

5

## Customary & Traditional Findings

- Positive C&T Finding for Brown Bears in Unit 1
- No ANS Findings for Brown Bears in Unit 1

Proposal 24

6

## Options for Amount Necessary for Subsistence (ANS) Findings for Brown Bears, GMUs 1A, 1B, 1C, and 1D

- The Alaska Board of Game has determined that brown bear populations in GMUs 1A, 1B, 1C, and 1D (outside of nonsubsistence areas) support customary and traditional uses. However, the board has not determined the amount of the brown bear populations reasonably necessary for subsistence (an ANS finding) (5 AAC 99.025).

Department Recommendation:

Do Not Adopt

Proposal 24

7

## Table 1. Mean Annual Harvests of Brown Bears by GMU subunit, residents of Southeast Alaska

Table 1. Mean Harvests of Brown Bears by Alaska Residents in Units 1A, 1B, 1C, and 1D 1990 - 2007

Subunit	Harvests by Residents of GMUs 1 - 5					Harvests by All Alaska Residents				
	Mean	Low	(year)	High	(year)	Mean	Low	(year)	High	(year)
1A <sup>1</sup>	3	0	1997	8	1994	3	0	1997	8	1994
1B	2	0	2005+	5	1991	2	0	2005+	5	1991+
1C <sup>2</sup>	1	0	2005+	4	2006	1	0	2005+	4	2006
1D	5	1	2004+	8	1999+	7	1	2004	14	1997
Unit GMU 1 <sup>3</sup>	10	4	2004	20	2006	13	4	2004	21	2006

<sup>1</sup> Does not include harvests within the Ketchikan nonsubsistence area.

<sup>2</sup> Does not include harvests within the Juneau nonsubsistence area.

<sup>3</sup> Does not include harvests within the Ketchikan and Juneau nonsubsistence areas.

Source: Prepared by ADF&G, Division of Subsistence, based on harvest data compiled by ADF&G, Division of Wildlife Conservation.

Proposal 24

8



## Options for the Board to consider for ANS findings for brown bears in each GMU subunit or the GMU as a whole

Table 2. Brown Bear ANS Option A: Based on harvests by southeast Alaska GMU residents

Note: within this option, the board could establish an ANS range for each subunit, or establish one ANS range for the entire GMU.

Unit	Mean Harvest, 1990 to 2007	Suggested ANS Range, +/- 25% of mean
1A	3 bears	2 to 4 bears
1B	2 bears	2 to 3 bears
1C	1 bear	1 bear
1D	5 bears	4 to 6 bears
1 ALL	10 bears	10 to 13 bears

Proposal 24

9

## Option B Table 3

Table 3. Brown Bear ANS Option B: Based on harvests by all Alaska residents

Note: within this option, the board could establish an ANS range for each subunit, or establish one ANS range for the entire GMU.

Unit	Mean Harvest, 1990 to 2007	Suggested ANS Range, +/- 25% of mean
1A	3 bears	2 to 4 bears
1B	2 bears	2 to 3 bears
1C	1 bear	1 bear
1D	7 bears	5 to 9 bears
1 ALL	13 bears	10 to 16 bears

Proposal 24

10

## Appendix Table 1.

Appendix Table 1. Brown Bear Harvests in GMU 1A (outside nonsubsistence area)

Year	Total Number of Brown Bears Harvested				Grand Total
	Southeast Alaska Residents	Other Alaska Residents	Total Alaska Residents	Non-Residents	
1990	5	0	5	0	5
1991	3	0	3	0	3
1992	6	0	6	1	7
1993	4	0	4	0	4
1994	8	0	8	0	8
1995	1	0	1	1	2
1996	1	0	1	3	4
1997	0	0	0	5	5
1998	2	0	2	4	6
1999	1	1	2	11	13
2000	1	0	1	3	4
2001	1	0	1	2	3
2002	1	1	2	3	5
2003	5	2	7	5	12
2004	3	0	3	3	6
2005	2	0	2	4	6
2006	7	0	7	1	8
2007	1	0	1	5	6
Annual Average	3	0	3	3	6
Total Harvest	52	4	56	51	107

Proposal 24

Source: ADF&G, Division of Wildlife Conservation

11

## Appendix Table 2.

Appendix Table 2. Brown Bear Harvests in GMU 1B

Year	Total Number of Brown Bears Harvested				Grand Total
	Southeast Alaska Residents	Other Alaska Residents	Total Alaska Residents	Non-Residents	
1990	4	1	5	0	5
1991	5	0	5	4	9
1992	4	0	4	1	5
1993	2	0	2	5	7
1994	0	0	0	1	1
1995	1	0	1	7	8
1996	1	0	1	3	4
1997	0	0	0	4	4
1998	3	1	4	3	7
1999	1	0	1	5	6
2000	3	0	3	6	9
2001	2	0	2	7	9
2002	0	0	0	8	8
2003	0	0	0	6	6
2004	0	0	0	4	4
2005	0	0	0	3	3
2006	3	0	3	4	7
2007	2	0	2	3	5
Annual Average	2	0	2	4	6
Total Harvest	31	2	33	72	105

Proposal 24

Source: ADF&G, Division of Wildlife Conservation

12

## Appendix Table 3.

Appendix Table 3. Brown Bear Harvests in GMU 1C (outside nonsubsistence area)

Year	Total Number of Brown Bears Harvested				Grand Total
	Southeast Alaska Residents	Other Alaska Residents	Total Alaska Residents	Non-Residents	
1990	0	0	0	3	3
1991	1	0	1	0	1
1992	0	0	0	1	1
1993	1	0	1	1	2
1994	0	0	0	1	1
1995	1	0	1	0	1
1996	2	0	2	1	3
1997	3	0	3	1	4
1998	1	0	1	0	1
1999	0	0	0	3	3
2000	1	0	1	0	1
2001	1	0	1	0	1
2002	1	0	1	1	2
2003	2	0	2	1	3
2004	0	0	0	1	1
2005	0	0	0	0	0
2006	4	0	4	0	4
2007	3	0	3	1	4
Annual Average	1	0	1	1	2
Total Harvest	21	0	21	15	36

Proposal 24

Source: ADF&G, Division of Wildlife Conservation

13

## Appendix Table 4.

Appendix Table 4. Brown Bear Harvests in GMU 1D

Year	Total Number of Brown Bears Harvested				Grand Total
	Southeast Alaska Residents	Other Alaska Residents	Total Alaska Residents	Non-Residents	
1990	8	2	10	3	13
1991	6	1	7	5	12
1992	7	2	9	9	18
1993	2	4	6	4	10
1994	4	5	9	6	15
1995	4	2	6	2	8
1996	3	3	6	10	16
1997	6	8	14	7	21
1998	6	4	10	8	18
1999	8	2	10	5	15
2000	1	0	1	15	16
2001	3	0	3	11	14
2002	2	1	3	8	11
2003	4	1	5	7	12
2004	1	0	1	6	7
2005	7	1	8	8	16
2006	8	1	9	10	19
2007	5	0	5	5	10
Annual Average	5	2	7	7	14
Total Harvest	83	37	120	129	249

Proposal 24

Source: ADF&G, Division of Wildlife Conservation

14

## Appendix Table 5.

Appendix Table 5. Brown Bear Harvests in GMU 1 (outside nonsubsistence area)

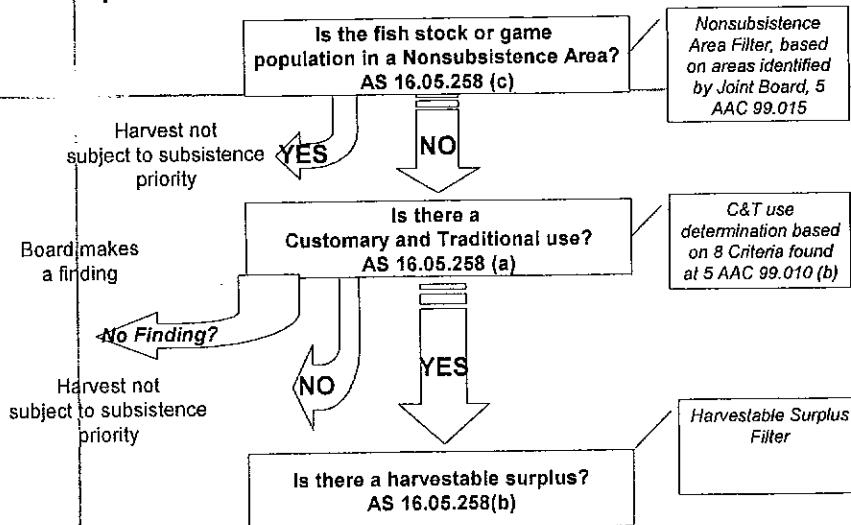
Year	Total Number of Brown Bears Harvested				Grand Total
	Southeast Alaska Residents	Other Alaska Residents	Total Alaska Residents	Non-Residents	
1990	17	3	20	6	28
1991	15	1	16	9	25
1992	17	2	19	12	31
1993	9	4	13	10	23
1994	12	5	17	8	25
1995	7	2	9	10	19
1996	7	3	10	17	27
1997	9	8	17	17	34
1998	12	5	17	15	32
1999	10	3	13	24	37
2000	6	0	6	24	30
2001	7	0	7	20	27
2002	4	2	6	18	24
2003	11	3	14	19	33
2004	4	0	4	14	18
2005	9	1	10	15	25
2006	20	1	21	15	36
2007	11	0	11	14	25
Annual Average	10	2	13	15	28
Total Harvest	187	43	230	287	497

Source: ADF&G, Division of Wildlife Conservation

Proposal 24

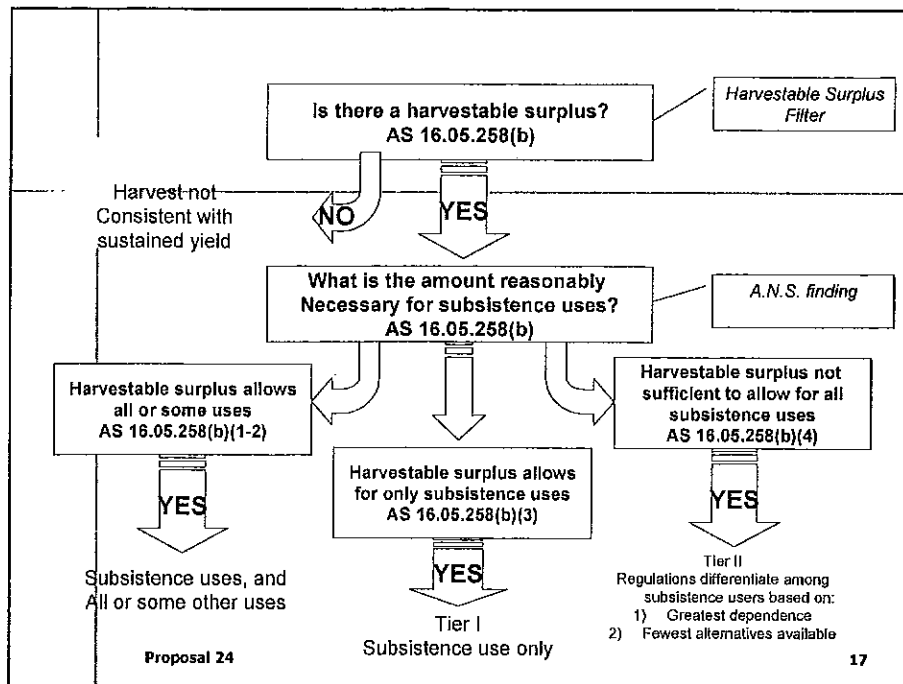
15

### Steps When Considering Regulations that Affect Subsistence Uses



Proposal 24

16



## **Customary and Traditional Use Worksheet, Black Bears, Game Management Unit 25**

**Prepared by**

**James J. Simon**

**for the November 2008 Juneau Board of Game meeting**

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November 2008

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Alaska Department of Fish and Game

Division of Subsistence



## Symbols and Abbreviations

The following symbols and abbreviations, and others approved for the *Système International d'Unités* (SI), are used without definition in the following reports by the Division of Subsistence. All others, including deviations from definitions listed below, are noted in the text at first mention, as well as in the titles or footnotes of tables, and in figure or figure captions.

Weights and measures (metric)		General		Measures (fisheries)	
centimeter	cm	Alaska Department of		fork length	FL
deciliter	dL	Fish and Game	ADF&G	mid-eye-to-fork	MEF
gram	g	Alaska Administrative		mid-eye-to-tail-fork	METF
hectare	ha	Code	AAC	standard length	SL
kilogram	kg	all commonly accepted		total length	TL
kilometer	km	abbreviations	e.g., Mr.,		
liter	L		Mrs., AM,		
meter	m		PM, etc.		
milliliter	mL				
millimeter	mm				
Weights and measures (English)		all commonly accepted		Mathematics, statistics	
cubic feet per second	ft <sup>3</sup> /s	professional titles	e.g., Dr.,	all standard mathematical	
foot	ft		Ph.D.,	signs, symbols and	
gallon	gal		R.N., etc.	abbreviations	
inch	in		@	alternate hypothesis	HA
mile	mi	at		base of natural logarithm	e
nautical mile	nmi	compass directions:		catch per unit effort	CPUE
ounce	oz	east	E	coefficient of variation	CV
pound	lb	north	N	common test statistics	(F, t, $\chi^2$ , etc.)
quart	qt	south	S	confidence interval	CI
yard	yd	west	W	correlation coefficient	
		copyright	©	(multiple)	R
		corporate suffixes:		correlation coefficient	
		Company	Co.	(simple)	r
		Corporation	Corp.	covariance	cov
		Incorporated	Inc.	degree (angular)	°
		Limited	Ltd.	degrees of freedom	df
		District of Columbia	D.C.	expected value	E
		et alii (and others)	et al.	greater than	>
		et cetera (and so forth)	etc.	greater than or equal to	≥
		exempli gratia		harvest per unit effort	HPUE
		(for example)	e.g.	less than	<
		Federal Information		less than or equal to	≤
		Code	FIC	logarithm (natural)	ln
		id est (that is)	i.e.	logarithm (base 10)	log
		latitude or longitude	lat. or long.	logarithm (specify base)	log <sub>2</sub> , etc.
		monetary symbols		minute (angular)	'
		(U.S.)	\$, ¢	not significant	NS
		months (tables and		null hypothesis	HO
		figures): first three		percent	%
		letters	Jan., ..., Dec	probability	P
		registered trademark	®	probability of a type I error	
		trademark	™	(rejection of the null	
		United States		hypothesis when true)	$\alpha$
		(adjective)	U.S.	probability of a type II error	
		United States of		(acceptance of the null	
		America (noun)	USA	hypothesis when false)	$\beta$
		U.S.C.	United States Code	second (angular)	"
		U.S. state	use two-	standard deviation	SD
			letter	standard error	SE
			abbreviations	variance	
			(e.g., AK,	population	Var
			WA)	sample	var
Physics and chemistry					
all atomic symbols					
alternating current	AC				
ampere	A				
calorie	cal				
direct current	DC				
hertz	Hz				
horsepower	hp				
hydrogen ion activity	pH				
(negative log of)					
parts per million	ppm				
parts per thousand	ppt,				
	‰				
volts	V				
watts	W				

***SPECIAL PUBLICATION NO. BOG 2008-08***

**CUSTOMARY AND TRADITIONAL USE WORKSHEET, BLACK BEARS,  
GAME MANAGEMENT UNIT 25**

by

James J Simon,  
Division of Subsistence, Fairbanks

Alaska Department of Fish and Game  
Division of Subsistence  
1300 College Road, Fairbanks, Alaska, 99701-1599  
November 2008



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## TABLE OF CONTENTS

LIST OF TABLES.....	ii
LIST OF FIGURES .....	ii
LIST OF APPENDIXES .....	ii
INTRODUCTION .....	1
Background.....	1
THE EIGHT CRITERIA .....	1
Criterion 1: Length and Consistency of Use.....	1
Criterion 2: Seasonality .....	2
Criterion 3: Means and Methods of Harvest.....	2
Criterion 4: Geographic Areas .....	4
Criterion 5: Means of Handling, Preparing, Preserving, and Storing .....	4
Criterion 6: Intergenerational Transmission of Knowledge, Skills, Values, and Lore .....	5
Criterion 7: Distribution and Exchange .....	5
Criterion 8: Diversity of Resources in an Area; Economic, Cultural, Social, and Nutritional Elements .....	5
REFERENCES CITED .....	7
TABLES AND FIGURES .....	8

## **List of Tables**

<b>Table</b>	<b>Page</b>
1. Black bear harvests, Game Management Unit 25, 1984-1987 .....	8

## **List of Figures**

<b>Figure</b>	<b>Page</b>
1. Areas used by Stevens Village residents for black bear hunting, 1974-1984.....	9
2. Areas used by Beaver residents for resource harvest activities, ca. 1930-1986. ....	10

## **List of Appendixes**

<b>Appendix</b>	<b>Page</b>
A. Literature Excerpts Pertaining to Customary and Traditional Black Bear Hunting and Use Patterns in Game Management Unit 25 .....	11

# INTRODUCTION

## BACKGROUND

The Alaska Board of Game made a positive customary and traditional use finding for black bears *Ursus americanus* in Game Management Unit (GMU) 25 on March 17, 2002, and established an amount reasonably necessary for subsistence of 150 to 250 black bears pursuant to Alaska Statute 16.05.258 (Subsistence use and allocation of fish and game) and Alaska regulation 5 AAC 99.010 (Boards of fisheries and game subsistence procedures)(Alaska Board of Game 2002).<sup>1</sup>

At its March 2008 Interior Region regulatory meeting, the Alaska Board of Game requested that the ADF&G Division of Subsistence provide more detail on the customary and traditional uses of black bears in Unit 25, specifically with reference to methods and means of black bear harvests in Unit 25 (Criterion 3, 5 AAC 99.010(b)(3)). The additional information was requested so as to better evaluate a deferred proposal submitted by the Yukon Flats Fish and Game Advisory Committee and the Council of Athabaskan Tribal Governments to recognize in regulation customary and traditional harvest practices of black bear.

This revised customary and traditional use summary for black bears in Unit 25 provides an expanded description of customary and traditional harvest and use practices for black bears from the ethnographic and ethnohistorical literature of this region of Interior Alaska. Appendix A is included at the end of this report to provide pertinent quotations related to customary and traditional uses of black bears from the literature.

## THE EIGHT CRITERIA

### CRITERION 1: LENGTH AND CONSISTENCY OF USE

**A long-term consistent pattern of noncommercial taking, use, and reliance on the fish stock or game population that has been established over a reasonable period of time of not less than one generation, excluding interruption by circumstances beyond the user's control, such as unavailability of the fish or game caused by migratory patterns.**

Black bears have been a valued source of food and fur in Interior Alaska from the prehistoric period to the present (Hosley 1981; Osgood 1970). Among Gwich'in<sup>2</sup> Athabascans residing in the Upper Yukon-Porcupine river area of Alaska (GMU 25), various longstanding cultural traditions and beliefs surrounding the proper use and treatment of harvested bears speak to the length and consistency of black bear use (Caulfield 1983; Cruikshank 1986; Nelson 1973; Peter 1981; Slobodin 1981). Historical sources from the early contact period in the 19th century mention the use of bears by residents of the region (Schwatka 1900). Today, black bears continue to be an important commonly harvested subsistence resource in all Yukon Flats communities, except in Arctic Village, where they are rarely found (e.g., Hadleigh-West

---

<sup>1</sup> In 2002, the Alaska Board of Game established an amount reasonably necessary for subsistence uses by taking the average number of black bears harvested per capita from Division of Subsistence studies in Beaver, Fort Yukon, and Stevens Village (0.155 black bears per person) and multiplying this by the total human population of the Yukon Flats, minus Arctic Village, and then bracketing the point estimate of 203 black bears by 25%, which resulted in 152 to 254 black bears (Alaska Board of Game 2002).

<sup>2</sup> "Gwich'in" is now the commonly-accepted spelling, replacing "Kutchin."

1963:140-141). Division of Subsistence studies show that it is not uncommon for 30% to 40% of the households in Yukon Flats communities to be involved in the harvesting of black bears (Table 1; see also the ADF&G Community Subsistence Information System (CSIS)<sup>3</sup>; Sumida 1988; Sumida 1989; Sumida and Andersen 1990).

## **CRITERION 2: SEASONALITY**

**A pattern of taking or use recurring in specific seasons of each year.**

In GMU 25, black bears are hunted primarily in the spring, fall, and early winter (e.g., Caulfield 1983; Nelson 1973; Nelson et al. 1982; Sumida 1988; Sumida 1989; Sumida and Andersen 1990). "Although bear hunting significantly declines after mid-winter, it does not cease entirely. When traveling overland via snowshoes, dog team, or snowmachine, a Native hunter is always alert to signs of possible bear dens" (Nelson et al. 1982:48). In areas within or near black bear habitat, black bear hunting continues after bears begin to emerge from their dens in April and extends through May. They are a notable resource in this area, often being the only large animal available at a time when winter food stores have been depleted and fresh meat is welcome.

In the fall, from late August through October, black bears are hunted in conjunction with or incidental to moose and caribou. Snaring of black bears was a particularly useful method of harvest during the fall (Nelson et al. 1982:44). The quality of black bear flesh is often mentioned as a factor in the timing of the harvest. Black bears "retire to their dens by late September, but remain fat and tasty through the winter" (Nelson 1973:116). Immediately after emerging from dens in the spring, black bears have some fat for a short period of time. The flesh of black bears is considered best in the fall and early winter, when they have been feeding primarily on berries and when they have built up a thick layer of fat in preparation for the winter hibernation. Den hunting, or "denning," of black bears is still practiced; using this method, the harvest of bears continues through the winter (Caulfield 1983; Nelson 1973:115-116; Nelson et al. 1982:48; Sumida 1988; Sumida 1989; Sumida and Andersen 1990).

## **CRITERION 3: MEANS AND METHODS OF HARVEST**

**A pattern of taking or use consisting of methods and means of harvest that are characterized by efficiency and economy of effort and cost.**

Traditional and historical methods of taking black bears include the use of spears, lances, bow and arrows, clubs, deadfalls, snares<sup>4</sup> along trails, snares in trees, rifles, and the use of nooses to take swimming bears from boats (Hadleigh-West 1959; McKennan 1965:32-34; Nelson 1973; Osgood 1970; VanStone 1974). Dogs were sometimes used to track bears or locate dens (McKennan 1959:49). Bears were also called by imitating the call of a raven (e.g., McKennan 1965:33). Today, bears are commonly taken with large-caliber rifles or sometimes with snares (Nelson 1973).

Black bears are either specifically sought or harvested in conjunction with other harvesting activities (e.g., moose or caribou hunting, duck hunting in the spring). After the spring breakup, bears found along the edge of a river near muskrat camps are often taken from boats, or while spring waterfowl hunting, during open-water seasons near fish camps, during fall moose hunts,

---

<sup>3</sup> [www.subsistence.adfg.state.ak.us/CSIS](http://www.subsistence.adfg.state.ak.us/CSIS)

<sup>4</sup> Black bear snaring in Interior Alaska is well-documented in the ethnohistorical literature (e.g., Nelson 1973:116-117; Nelson et al. 1982:44; see also McKennan 1965:33; Sumida 1988:141; Sumida and Andersen 1990).

and during wood cutting (e.g., Caulfield 1983:69; Nelson 1973:122,123; Nelson et al. 1982:48). Hunters typically access hunting areas by boat, all-terrain vehicle (ATV), snowmachine, or on foot. Formerly, snowshoes and dog teams were common means of access.

Black bears are also harvested by taking bears from the den<sup>5</sup>. Known denning sites are checked for signs of occupancy in the late fall and early winter. Many hunters know from the size of the den and signs around it if the occupant is a single animal or a female with cubs, but "to find a den obligates the hunter to harvest its occupants" (Nelson et al. 1982:48).

From time to time, one may discover a den occupied by a sow bear and one or two yearling cubs. These cubs are often two-thirds the size of a full adult. It is the obligation of the hunter to take all occupants of a den. If the bears did not wish to be taken they would not have revealed themselves, and to not take them would be an act of disrespect. (Nelson et al. 1982:47)

Once an occupied den is located, the bear is either shot through a hole in the top of the den or through the entrance. Sometimes the bear is disturbed and then shot as it exits the den. Occasionally, the entrance is blocked so as to slow the exit of the bear (e.g., McKennan 1959:49). Bears taken in dens are typically butchered away from the den site to maintain the productivity of the den and to ensure its use by bears the following year (Nelson 1973; Sumida 1988:141-142; Sumida 1989).

Black bears are also harvested by using snares<sup>6</sup>, which is typically done during the fall "when they are fat and seem to wander along well-defined trails" (Nelson 1973:116-117). Specific bear snaring techniques are discussed at length in Nelson (1973:116-117) and Nelson et al. (1982:44). For example, one technique involves placing the snare in a tall, straight spruce tree near a well-traveled black bear trail. The tree is stripped of branches on one side up to a height of approximately 12 feet. A basket of fish is hung on a branch just above the trimmed area and the rawhide line of the snare forms a noose approximately 18 inches in diameter and approximately 9 feet above the ground.

A bear smelling the fish and seeing the basket hung in the tree would climb up the trimmed area, pushing his head through the willow loop and its supported rawhide noose. As it descended, the noose, tied with a special non-slip knot, would tighten and kill it. Bear snares were set in the latter part of August and were checked each day by the owner. (Nelson et al. 1982:44)

Black bears are often attracted to fish camps during the summer months when fish are being processed and stored. In major fishing areas, fish scraps are sometimes placed on sand bars away from the fish cutting site in an effort to divert bears away from the processing area. Occasionally, these bears are intentionally taken, although such bears are considered less desirable for human consumption due to the flavor of the meat during that time of year. Nuisance bears found near villages or fish camps are shot or snared as a safety measure (e.g., Nelson 1973; Sumida 1988:141; Sumida 1989).

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<sup>5</sup> Brown bears were also harvested from dens in times past (Case and Halpin 1990:84,87; Hadleigh-West 1963:140-141,343; McKennan 1965:144-145).

<sup>6</sup> Hadleigh-West (Hadleigh-West 1963:162) observed that black bears were rarely present and therefore seldom used by the Netsi Gwich'in of the Arctic Village area, but did point out that snares were used to harvest bears, presumably referring to brown bears.

#### **CRITERION 4: GEOGRAPHIC AREAS**

**The area in which the noncommercial, long-term, and consistent pattern of taking, use, and reliance upon the fish stock and game population has been established.**

Community use areas for black bears tend to fall into 2 categories: 1) specific near-community areas where black bear hunting is known to be productive at specific times of the year; and 2) river corridor areas where fishing and moose hunting activities take place and black bears are hunted in conjunction with or incidental to these other activities. Residents familiar with the use of black bears report that they have caught black bears in regularly-hunted areas as long as elders in their communities can recall and can recount stories of uses by previous generations. Hunting areas for black bears have been mapped for many individual communities (e.g., Caulfield 1983; Sumida 1988; Sumida 1989; Sumida and Andersen 1990).

#### **CRITERION 5: MEANS OF HANDLING, PREPARING, PRESERVING, AND STORING**

**A means of handling, preparing, preserving, and storing fish or game that has been traditionally used by past generations, but not excluding recent technological advances where appropriate.**

Black bears provide an important source of meat, fat, and fur. Depending on particular customs, bear meat is eaten in the household, in the context of community gatherings, or in special celebrations.

Black bears are commonly butchered in the field and processed like other large game. The meat is shared with relatives, especially if fresh meat has been scarce. The meat is frozen, smoked, or canned for later use. The meat is also made into dry-meat by cutting thin strips of meat and allowing it to air dry. Bear meat is typically prepared by boiling, frying, broiling, barbecuing, or roasting. Black bear fat is highly valued, and is often rendered into bear grease or tallow. The grease is then used for cooking and making "Native ice cream" (a mixture of berries, sugar, fat, and sometimes dried fish). Bear fat is also eaten with dried meat or dried fish. The fat is often shared with other households, especially elders.

Some sources report patterns of butchering and sharing that depend upon the number in the hunting party, the hunter who made the kill, and the age of the hunters. The choicest parts, such as the hindquarters or organs (heart, kidneys, and intestines), are often given to elders.

The first 3 or 4 feet of the intestines [of black or brown bears *Ursus arctos*] are discarded, and the rest is turned inside-out so the fat is inside, then it is placed on a fire to roast. The result is a sausage-like delicacy. Only hibernating bears are used this way, because their intestines are empty. (Nelson et al. 1982:350)

If the meat has to be transported some distance, or if return to the village is not imminent, the meat may be dried in the field in order to decrease its weight and prevent spoilage.

According to custom, the man who actually kills a bear retains very little of the meat for himself, perhaps only a forearm or hindquarter. The ribs, fat, and other choice cuts are usually frozen and preserved for village potlatches. It is particularly important to have large quantities of bear meat for memorial potlatches. (Nelson et al. 1982:47-48)

Bear skins are sometimes used for ruffs, mukluks, mittens, and camp or cabin bedding. The furs are also used as insulation around doors (cf. Nelson 1973). Black bears are considered to have the most waterproof skins (Sumida 1988; Sumida 1989).

#### **CRITERION 6: INTERGENERATIONAL TRANSMISSION OF KNOWLEDGE, SKILLS, VALUES, AND LORE**

**A pattern of taking or use that includes the handing down of knowledge of fishing or hunting skills, values, and lore from generation to generation.**

Gwich'in Athabascan tradition attributed great spiritual power to bears; there is an elaborate set of beliefs and values surrounding their harvest and use (Caulfield 1983; Cruikshank 1986; McKennan 1965:84,144-145; Mishler 1995; Nelson 1973; Peter 1981). For example, residents in some villages follow rules that prescribe who may eat bear meat, what portions may be eaten, how it is prepared, what should be done with the inedible parts such as the claws and skull, and proper ways of referring to or speaking about bears (Nelson 1973).

As with many subsistence activities, teaching young men how to track, hunt, and butcher black bears, and young women how to process and preserve bear meat and handle its products, is accomplished through participation in these activities under the oversight of those more experienced. Children are included in many activities and are expected to show interest and eventually participate in the activities, depending upon their age and acquired skills. Most hunting is done in family-based groups, so that the learning and proficiency of younger participants can be monitored.

#### **CRITERION 7: DISTRIBUTION AND EXCHANGE**

**A pattern of taking, use, and reliance where the harvest effort or products of that harvest are distributed or shared, including customary trade, barter, and gift-giving.**

Typically, black bear meat is widely shared within hunting parties, families, communities, and even between communities. Often, a small number of select hunters are involved in the hunting of bears and provide bear meat to a large portion of the households in the community. Bear fat is highly prized and commonly shared between households.

Certain prized black bear parts, such as the hindquarters, the organ meats, and the fat, are often given to elders. Bear meat is often considered a specialty food and served at special communal gatherings and ceremonial potlatches (e.g., Nelson et al. 1982:47-48). Traditional beliefs in some Interior regions restrict the eating of bear meat to men and elderly women. These beliefs tend to limit or structure the sharing and distribution practices for this resource.

#### **CRITERION 8: DIVERSITY OF RESOURCES IN AN AREA; ECONOMIC, CULTURAL, SOCIAL, AND NUTRITIONAL ELEMENTS**

**A pattern that includes taking, use, and reliance for subsistence purposes upon a wide variety of fish and game resources and that provides substantial economic, cultural, social, and nutritional elements of the subsistence way of life.**

Black bears are just one of the many wild resources that are typically harvested for subsistence uses by GMU 25 residents. As large game animals that are widely distributed throughout the Interior, and that have relatively liberal hunting seasons and bag limits, black bears often



rank among the top resources harvested by hunters in terms of pounds of meat per household. Other major resources harvested for subsistence in the interior include salmon *Oncorhynchus*, moose *Alces alces*, caribou *Rangifer tarandus*, various species of whitefishes, northern pike *Esox lucius*, burbot *Lota lota*, and a variety of small game, waterfowl, plants, and berries (see the ADF&G CSIS).

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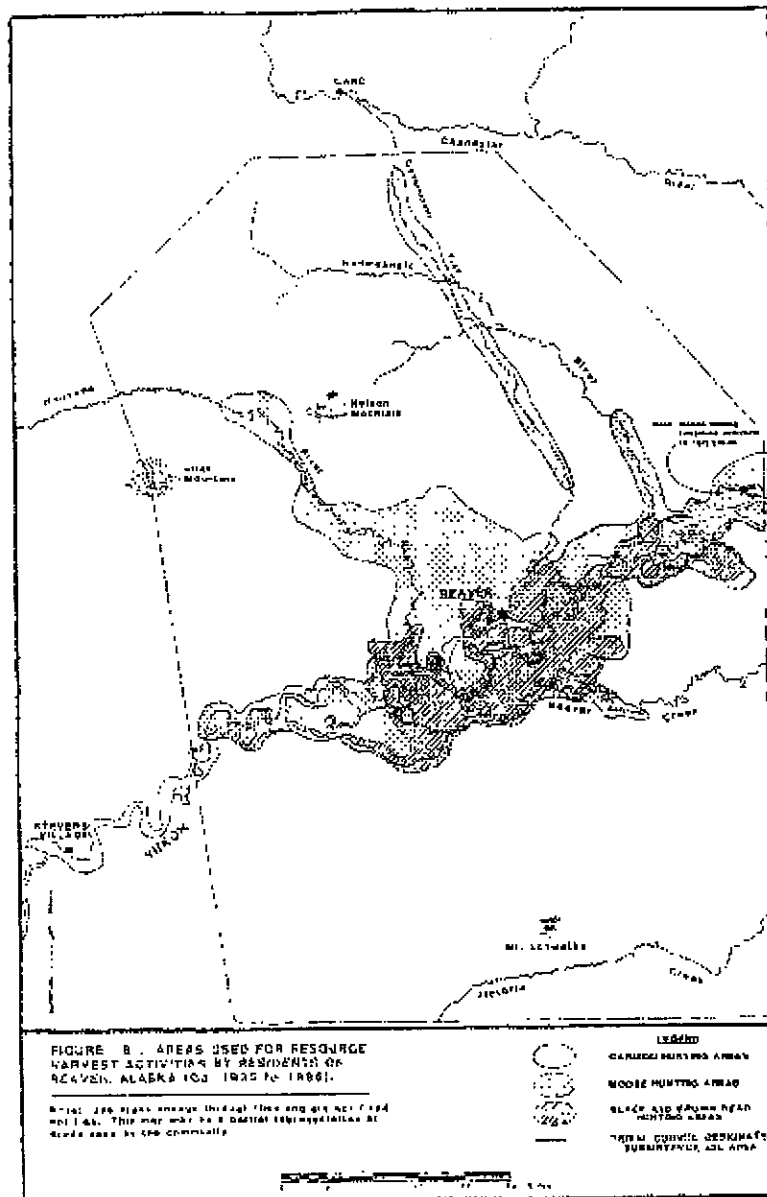
## TABLES AND FIGURES

Table 1. – Black bear harvests, Game Management Unit 25, 1984-1987.

Community	Year	Percentage of households harvesting	Estimated total number harvested	Lbs per capita harvest
Beaver	1985	10	10	4
Fort Yukon	1987	31	150	7
Stevens Village	1984	40	17	19

*Source* ADF&G Division of Subsistence survey data.





44

Figure 2.—Areas used by Beaver residents for resource harvest activities, ca. 1930-1986.

**APPENDIX A.—LITERATURE EXCERPTS PERTAINING TO  
CUSTOMARY AND TRADITIONAL BLACK BEAR HUNTING  
AND USE PATTERNS IN GAME MANAGEMENT UNIT 25**

Following are quotations from selected literature pertaining to customary and traditional black bear hunting and use patterns in Game Management Unit 25, Alaska.

**Caulfield, R. A. 1983. Subsistence land use in Upper Yukon Porcupine communities, Alaska: Dinjii Nats'aa Nan Kak Adagwaandaii. Alaska Department of Fish and Game, Division of Subsistence, Technical Paper No. 16, Fairbanks.**  
<http://www.subsistence.adfg.state.ak.us/TechPap/tp016.pdf>

Black bears (shoh zhraii) are utilized by all Upper Yukon-Porcupine communities except Arctic Village, where they are rarely found. Bears are common in the Yukon Flats and are a frequent sight along riverbanks and near fishcamps. Generally, the Gwich'in<sup>[1]</sup> do not consider them dangerous, except perhaps in the spring (Caulfield 1983:69).

Hunting of black bear takes place primarily in the spring and fall. In late April and early May, bears emerge from their dens and are easily hunted because they are less shy of humans than later in the fall. The meat at this time is desirable because bears still retain some of their winter fat. Spring is particularly 'lean' time of year for human food, and bear meat can often be an important food source until waterfowl arrive. Often bears are spotted along rivers after breakup near muskrat and fishing camps. At one such camp on Beaver Creek in spring of 1980, five bears, including two cubs, were encountered by Fort Yukon residents and two adult bears were killed. Both were shot in or near the camp and the meat was used for human and dog food.

In fall, usually September, black bear meat is fat and desirable. Often bears are killed in conjunction with moose hunting along rivers. Furthermore, den hunting, described by Nelson (1973:118-122), is still occasionally undertaken today. Bear meat is generally frozen or used fresh. It is usually boiled or fried, but in either case it must be fat to be considered suitable for human consumption. Hides are sometimes sold or are used for insulation around doors (Caulfield 1983:69)

**Hosley, E. H. 1981. Environment and culture in the Alaska Plateau. Pages 533-545 in Sturtevant, W. C., editor. Handbook of the North American Indians, volume 6: Subarctic. Smithsonian Institution, Washington, D.C.**

[With respect to the Athabascan Indians of the Alaska Plateau region] Snares were used to take a variety of other game [other than caribou], from hares to grizzly bears and Dall sheep. In its several variations – spring pole, tossing pole, and tether snares – the snare was one of the most sophisticated and widely applied hunting devices of the Alaskan Athapaskans. Deadfalls and the bow...were also used to take a variety of animals, and the lance or spear...was widely used to kill denned bears and to stab moose and caribou from a canoe...as they crossed lakes or streams. (Hosley 1981:535)

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<sup>[1]</sup> "Gwich'in" is the more recent spelling of the Athabascan people of the Yukon Flats. Given the historical nature of the literature, readers will see that "Kutchin" was more commonly used in the past.

**McKenna, R. A. 1959. The Upper Tanana Indians. Yale University Department of Anthropology, New Haven.**

Bears were formerly hunted much more than they are today. The combat was largely a hand-to-hand one, and the killing of a bear brought great honor to the hunter. In the summer the animals were brought to bay, often with the aid of dogs, and dispatched by spears; and the Indians maintain that the bravest hunters sometimes killed them with heavy clubs of caribou horn (cf. Weapons). Such hand-to-hand encounters were accepted methods of acquiring prestige among a number of the western tribes, including the Han (Schmitter 1910:8), Peel River Kutchin (Osgood 1936b:27), Ten'a [Koyukon-speaking people] (Jette 1909:482); Ingalik [Deg Hi'tan, or Deg Xinag-speaking people of Unit 21E] (Osgood 1940:200,207), Tanaina (Osgood 1937:32-33), Eyak (Birket-Smith and de Laguna 1938:100), and Tahtan (Emmons 1911:72). (McKenna 1959:49)

A bear is sometimes lured to his death by the hunter's imitating the call of the raven. The bear responds thinking that some carrion is near and is promptly shot. In the winter, bears are poked from their dens and shot as they emerge. In the old days another interesting method was used when a bear was roused from his winter den. As he broke out through the snow two strong men would pinch him between two poles, and while they held him the other hunters would dispatch him with clubs or spears. This unusual device was also used by the Chipewyan (Birket-Smith 1930:24). (McKenna 1959:49)

**Mishler, C., and W. E. Simeone, editors. 2006. Tanana and Chandalar: The Alaska field journals of Robert A. McKenna. University of Alaska Press, Fairbanks.**

Old Joseph...reports killing a monstrous silver tip 'as big-as a moose.' He poked it out of its winter den and then shot it. The bear pretty nearly got Joseph and was only about ten feet from him when it finally went down. I [Robert A. McKenna] saw the skin and it was a monster. (Mishler and Simeone 2006:100)

**Nelson, R. K. 1973. Hunters of the northern forest: Designs for survival among the Alaskan Kutchin. University of Chicago Press, Chicago.**

Bears are of course seasonal animals, hibernating for several months during the winter. Even during the seasons when they are active and therefore readily hunted there are only certain periods when the Kutchin consider them fit for eating. Black bears are hunted especially during the fall, when they build up their thickest fat. They retire to their dens by late September, but remain fat and tasty through the winter. After they emerge from their dens between mid-April and early May, food is scarce and they become lean. By June they are thin, and the Indians do not hunt them. (Nelson 1973:115-116)

[With respect to bear snaring] It takes little more than the thought of facing a bear at close range with a bow and arrow or spear to make one understand why snares were an important method for killing these animals in aboriginal times. Snares were highly effective and required almost no risk to the hunter. Today's adult Kutchin are all familiar with bear snaring techniques, but if they still catch bears this way they do not consider it a matter of public information. The best time for snaring bears is during the fall, when they are fat and seem to wander along well-defined trails. They could be



snared during the spring as well, but no one ever mentioned doing this. (Nelson 1973:116-117)

The aboriginal Kutchin made their snares from braided strands of babiche, but in recent times 1/8-inch or 1/4-inch aviation cable was found to be more effective. A homemade cable snare works well unless the bear does not pull it tight and is able to slip it off with its claws. Commercial snares are provided with one-way choking locks and cannot be removed. The human scent is eliminated from a cable snare by boiling it with willow bark or by rubbing it with the tips of spruce boughs.

The bear snare is usually set in a trail, either a man-made trail intended for winter travel or a natural game trail. It is generally placed where a constriction is created by bushes or trees, so that the snare fills the whole trail, so that the bear is forced to go underneath. A snare set under a log is very effective, and is easily tethered to the log itself. Instead of using a fixed toggle or anchorage, a bear snare is attached to a flexible young tree, to a sizable log, or to a log placed between the crotches of two trees on opposite sides of the trail. In the last case the anchor is a crosspiece which cannot be dragged off, but the bear may simply chew the log in half and escape. The loose log toggle is dragged away into the brush until the bear finally chokes itself. Many a snare has been broken, however, leaving the bear with a snare collar as a memento of this escape.

A typical snare set for black or grizzly bear would be made along the lines described earlier for moose snares. After finding a suitable place on a trail and selecting a fixed or loose toggle, the Indian tethers his snare so that it hangs in the middle of the pathway. It is opened to a loop varying from 20 to 24 inches in diameter, with its bottom edge 24 to 30 inches above the ground. The cable snare is held open by tying it in several places to slender sticks pushed in the ground beside it. Short pieces of grass or thread are used to make the ties. (Nelson 1973:117)

The trail is usually wider than the snare's loop, and so a few sticks 4 or 5 feet long are set up on either side of it to block the way around. One or more sticks are also pushed into the ground right under the snare, reaching almost to its lower edge, to keep the animal from going under it. (Nelson 1973:117)

[With respect to den hunting] Black bears spend approximately seven months of the year hibernating, and grizzlies occupy their dens for four to five months. It is not surprising that over the centuries northern Athapaskans have amassed great knowledge of the bears' denning habits and have developed effective methods of hunting them in their winter quarters. Northern Athapaskans are masters of den hunting, just as they are expert hunters of moose. The Koyukon Indians point out that these are the two skills in which they surpass their neighbors, the Kobuk Eskimos.

Den hunting must have been very important in the aboriginal past, when it afforded an easy means of killing bears with only a spear or bow and arrow. Rifles have replaced traditional methods, but den hunting is still important. This is especially true among the Koyukon, who live in a country rich in bears. They are highly skilled in den-hunting techniques and enjoy bear meat so much that they put considerable effort into the early winter hunts. Den-killed bears are the fattest and best tasting of all; so it is little wonder that the people want them.

As was noted earlier, black bears go into their dens by late September. The date is variable, depending on the weather. They start working on the dens sometime in September, and occupy them intermittently until really cold weather signals the time for uninterrupted hibernation. Grizzly bears enter their dens much later, in November or December, and may become active during midwinter warm spells. They seem to take hibernation much less seriously than do black bears.

The Koyukon and Kutchin Athapaskans often find bear dens by accident, stumbling onto them when they are traveling through the brush at any time of the year. Once they have discovered a den they check it each fall. The Koyukon usually consider each den a sort of property, 'owned' by the man who discovered it or learned of it from his father. Thus people speak of 'Sam's den,' 'Henry's den,' and so on (G. R. Bane, personal communication). The Chalkyitsik Kutchin do not formalize ownership in this way. Each hunter knows the location of many dens, and they are hunted on a first-come, first-served basis. The only kind of 'ownership' here is established by men who find dens and keep their locations secret, thus ensuring themselves a private potential resource. (Nelson 1973:118)

Each fall or early winter a hunter is likely to go out and check the dens he 'owns' or knows about to see if any are occupied. There are several ways to find previously undiscovered dens or to pinpoint known dens once their general location has been ascertained. In the early fall, when bears have selected a hibernating site but are still active, they will remain in the immediate area digging up the moss and dirt searching for roots. When an Indian comes across this kind of sign in September, he knows that a bear is probably going to hibernate in that area. This is the best indicator that a denning site is nearby, but of course much searching may be required to find the site itself.

Black bears like to make their dens in places where they get some help from nature. Most dens are under partly overturned trees, whose roots have lifted the earth and moss to create a bear-sized cavern underneath. They also like to dig dens in banks, such as along a steep-sided creek bed. Another good place for denning is a sandy knoll or ridge, where caverns are easily dug out. In general, holes beneath upturned spruce trees seem the most likely den sites, and these are perhaps the easiest kind to locate. One such den that I saw was about 5 feet long, 4 feet wide, and 2 ½ feet high.

A black bear prepares its den by gathering moss and grass from the surrounding areas and lining the interior with it. The entrance will be plugged with the same material later on. Thus, if a hunter comes across a place where the moss and grass are freshly dug up and scraped away it is a sure sign that a bear den is nearby. If such a place is discovered before snow falls the bear is likely to be away foraging, and so the hunter remembers its location and returns later. When snow covers the ground, dens are much harder to find. A small hole usually remains open in the snow above a den, however, and heavy frost covers the surface and any vegetation around its opening. The frost is formed by condensation from the bear's moist breath. (Nelson 1973:119)

Sometimes very special knowledge and alertness leads to the discovery of a bear den. For example, Simon Edwards of Huslia once came upon a set of tracks from a running fox. He followed them a short distance and found a place where the fox had sat down for a while, looking back over its trail. Simon wondered what had frightened it, and why

it sat watching back the way it had come, so he followed the trail the opposite way. He found shortly that the fox had encountered a bear den and was frightened away by its occupant. Simon got the bear. (Nelson 1973:119-120)

Another time this same man was walking along on snowshoes and came to a place where a marten track crossed the trail. Thinking he might find the marten in a burrow, he sidetracked and followed it. At one point he noticed that the animal had dug into the snow before moving on, and next to the hole he found a single blade of grass the marten had pulled up onto the snow. The grass was a kind that bears use for bedding in their dens, and so he poked around further and discovered that the marten had dug right into an occupied bear den. The reward for his effort was fat black bear. (Nelson 1973:120)

The Koyukon and Kutchin use different techniques for bear den hunting. The following account of the Koyukon method is based largely on information supplied by G. R. Bane, who has lived among these people for several years.

Having located a denning site, the Koyukon hunter first needs to learn if it is occupied or empty. He finds a long stick which he can shove into the den's opening. It should be curved because bear holes have a tendency to go down, then turn off to one side. He pokes around inside until the stick touches the bear, disturbing it enough so its movement can be felt. If the hunter is not sure, he holds the stick against what he thinks is the bear and its breathing will move the stick back and forth. Listening closely, the hunter may also hear the animal's breathing. Once he has ascertained that a bear is inside, the Indian puts his stick to another use. He takes note of the exact direction the passageway runs, and just how far in the stick goes before it touches the bear. Then he pulls it out and lays it on the ground or snow. Its end should mark a point right above the animal.

After he knows the bear's location, the hunter finds several large poles or logs and plugs the entrance with them. These may be tied securely in place to be sure that the animal cannot escape. This done, he uses his ax to chop into the roof of the den so he will have an opening through which to shoot. This can be quite a job, since he wants an opening about 6 inches in diameter and may have to chop through 2 feet of frozen ground. If it is too dark in the den, he can toss a handful of snow on the bear so that a white dusting makes it clearly visible. Once he sees it well, the Indian shoots it in the head. In former times he would kill it with a spear. After a bear is killed in its den, a rope is used to pull it up through the entrance. (Nelson 1973:120-121)

The Black River Kutchin use a simpler but more dangerous method of killing bears in their winter dens. Once they are certain a bear is inside, they start poking and jabbing at it with a long stick. Eventually the animal becomes unsettled enough to come out after whatever is tormenting it. When it starts moving up the entryway the hunters stand ready with their rifles. Black bears come out slowly and are either shot in the head when they first emerge or shot in the heart after they get about halfway out.

This method is much simpler than the Koyukon technique. It requires less physical labor, since there are no holes to chop and the dead bear does not have to be dragged out of the hole. And the method can be used when a den is dug into a bank, where there is no way to chop down into it. It does involve a somewhat greater risk, but so long as the animal is a black bear the Kutchin feel that there is no danger. Herbert John said he

once knelt on top of a den and killed the emerging bear with his knife. (Nelson 1973:121)

Grizzly bears can be killed by driving them from their winter quarters, but the Indians treat them in a different way. Whereas a black bear comes out slowly, not looking for a fight, the grizzly angrily charges out, trying to get anyone it can. The Kutchin say that grizzlies do not really hibernate; 'Maybe he don't even go to sleep in there.' Thus if a grizzly den is found, the hunter must expect trouble unless he decides to be prudent and leave it alone. One of the first things a Kutchin will do upon locating a den, therefore, is decide whether it belongs to a black bear or a grizzly bear.

Black bear dens have fairly small openings, about 2 feet high and 3 feet wide, whereas grizzly dens are higher and wider by about a foot. There is also a tendency for the black bear to plug the opening of its quarters, or at least narrow its size considerably, whereas grizzly bears leave the opening wide enough to move in and out. A grizzly is also likely to growl when anyone walks near its hole, which black bears apparently never do. (Nelson 1973:121)

The Chalkyitsik Kutchin say that it is often unnecessary to coax a grizzly from its den, because the animal may charge out before a hunter has a chance to do anything. Otherwise, a grizzly would be hunted in much the same way as a black bear. Actually, the Kutchin fear the grizzly and rarely eat its flesh, and so they seldom take the risk of hunting this animal from its den. (Nelson 1973:121-122)

[With respect to spring and summer hunting] Most bears are killed when encountered by hunters traveling overland during the early spring or going along the river in boats during the summer and fall, or when the animals appear close to an occupied camp or village. Spring is the best season for bears because they still retain some fat from the winter and they are almost completely unafraid of people. In the fall they run if they sense a man nearby.

The black bear usually leaves his hibernating place after the snow disappears in late April. If he is not well fattened when he enters his den, hunger drives him out earlier. During May and June an Indian never goes anywhere without a rifle or shotgun because he knows a bear could turn up unexpectedly. A number of black bears were sighted within 200 yards of Chalkyitsik in the spring of 1970. When the people lived in muskrat-hunting camps during the spring, they could count on frequent visits from bears attracted by the smell of meat. The Indians also know of many areas that are especially good for bears during the spring, and they sometimes go to these places to hunt for them.

Some bears run when they see a snowmachine or dog team, but others will merely stand and watch. The snowmobile hunter can stop and take a shot if he gets within range, but with a dog team things are not so simple. If there is no snow on the lakes, a hunter cruising the ice looking for bears cannot hope to stop his team once the dogs spot an animal. All he can do is let them chase the bear, then jump off the sled and try to shoot before his dogs reach it. When an Indian finds very fresh bear sign but there is not enough snow to track the animal, he may try to attract the animal by using an old technique. He conceals himself and imitates the call of a raven. If the bear is nearby it

may think a raven has discovered carrion and come straight to the sound, expecting to find a free meal. (Nelson 1973:122)

Dogs are sometimes used to run down a bear that escapes into the brush and cannot be caught in any other way. They might be released from the team after a bear is spotted, or a hunter might go out from the village on foot, taking his dogs along to help him. In the old days a man would take several dogs when he hunted, and they would course through the woods searching for a scent. When dogs catch up to a black bear it will climb a tree to escape them. Grizzlies stay on the ground and always stop to defend themselves against the biting dogs. If a hunter hears all of his dogs barking at one place, he knows they have found a bear, moose, or porcupine, and he goes quickly to get whatever game they have brought to bay. (Nelson 1973:122-123)

Bears are also hunted from boats during the open-water season. A number are usually taken during the fall moose hunt, when the Indians see them along the river. Some bears are wary enough to run when they see a boat coming, but others are unafraid. Bears are also shot by hunters traveling on the river in spring, often by duck hunters in their little canoes. (Nelson 1973:123)

The Chalkyitsik Kutchin prefer to shoot bears in the heart, perhaps because this was always the best shot with a bow and arrow. Heart shots can be very dangerous, however, because when an animal is hit in the heart it often runs a fair distance before dying. This could mean a charge at the hunter. The Eskimos and the Koyukon Athapaskans warn against shooting bears in the heart, preferring shoulder or neck shots, which instantly incapacitate the animal. They advise heart shots only if a light rifle such as a .22 is being used, when there is no chance of shattering the animal's shoulder or neck bones.

The Kutchin are aware that neck and head shots are deadly, but correctly point out that these are very small targets. If they are close to a bear, they may shoot for the neck vertebrae or the occipital condyle (where the head and neck join). But only an expert takes these shots, because if they miss the bone the animal is wounded and enraged. If a bear charges or comes straight toward a hunter, he shoots it in the chest between the forelegs, or in the head. The Kutchin prefer heavy rifles, such as .30-06 caliber, for shooting bears. Black bears can be killed with a .22 rifle, but this requires a perfect hit in the occipital condyle or heart. Shotguns afford good protection from bears if they are used a close range and are aimed for the animal's eyes, but they are not good for ordinary hunting. (Nelson 1973:123)

The Koyukon suggest that the best shot for a big bear angles from the shoulder to the hip. This gives maximum crippling potential and is likely to do considerable internal damage. Like the Eskimos, they prefer shoulder, backbone, or neck shots. They advise shooting a black bear in the ear if a .22 rifle is used. Eskimos prefer ear or heart shots with a .22, and have killed both grizzly bears and polar bears in this way.

It is difficult to understand why the Kutchin prefer heart shots over hits which are more deadly and crippling, particularly in view of the dangers involved. They never mention shoulder shots as the correct way to shoot any animal, and apparently consider them poor because they damage some of the meat. Needless to say, Kutchin hunters must always be alert for a charge, especially if they shoot a grizzly. The Indians say that if a

bear charges it is best to stand still and aim at the bear, waiting until it is close enough for a certain shot. Both the Kutchin and Koyukon warn that a wounded black bear or grizzly bear may wait in concealment for a hunter to follow, then attack when he comes along. (Nelson 1973:124)

**Nelson, R. K., K. H. Mautner, and G. R. Bane. 1982. Tracks in the wildland: A portrayal of Koyukon and Nunamiut subsistence. University of Alaska Cooperative Park Studies Unit Anthropology and Historic Preservation, Fairbanks.**

Before the introduction of firearms, bears were hunted and killed with spears (*pana* in Eskimo). It required a particularly brave man, armed only with a spear, to rush an adult bear and then to taunt the bear into attacking. As the bear rose up to lunge on his tormentor, the hunter planted the butt of the spear in the ground and aimed its point so that it would enter near the collar bone of the bear. As the bear fell onto the spear the hunter rolled away, hoping the bear would be unable to continue the attack. Occasionally a party of men would attack a bear, thereby increasing the chance of success. The last known killing of bear with a primitive spear in the Koyukuk Valley area occurred during the late 1800s, according to an elderly Native informant.

The Koyukuk Athabaskans of the past employed a special snaring technique for the harvesting of black bears. This technique was used primarily by men too old to participate in the more active means of taking bears. The bear snare (*gaabeelh*) consisted of a rawhide line made from bearded seal skin obtained from Kobuk Eskimos, a willow loop, and a special birch bark basket with seams overlapping in a clockwise pattern.

The snare was placed in a tall straight spruce tree near a well-traveled bear trail. All branches of the spruce tree were cut off of one side flush with the trunk to a height of approximately 12 feet. The birch bark basket full of fish was hung on a branch just above the trimmed area. The rawhide line was secured at one end around the tree trunk under the basket with the other end extending down to an elongated willow loop which held it out horizontally from the trunk. The rawhide line formed a noose of approximately 18 inches in diameter, which was supported by the willow loop. This snare was set approximately 9 feet above the ground.

A bear smelling the fish and seeing the basket hung in the tree would climb up the trimmed area, pushing his head through the willow loop and its supported rawhide noose. As it descended, the noose, tied with a special non-slip knot, would tighten and kill it. Bear snares were set in the latter part of August and were checked each day by the owner. (Nelson et al. 1982:44)

Bear hunting among the Koyukuk Athabaskans is an activity that far transcends the meeting of simple biological needs. To these people the bear is invested with particularly powerful spiritual powers and, when carried out by culturally prescribed methods, the killing, treatment, and consumption of a bear is literally a religious act. Thus it is impossible to accurately describe Koyukuk bear hunting without including supernatural beliefs and prescribed behavior.

According to Native custom, a man planning to hunt a bear must not verbalize his plans. He must also never speak in a boasting manner about his successes in such hunts or in

any way demean the bears he has killed. To do so would insult the bears and the hunter would soon lose all of his luck, possibly going for years without finding another bear. According to Koyukon belief, a bear must favor a hunter before it allows him the opportunity to kill it.

In all elements of subsistence, but particularly in bear hunting, luck plays a very large part in the eyes of the Koyukuk Athabaskans (see chapter 12). Without luck, or the proper relationship with the environment, skill is worthless in bear hunting. The bear will reveal himself only to those it favors. One man may walk right by a bear and never see it while another will easily spot it as though drawn to the spot. According to the Koyukuk Athabaskans the difference is summed up in the word 'luck'. (Nelson et al. 1982:45)

The fall bear hunt immediately after freeze-up is the high point of the male seasonal activities. Parties of several men leave the village on foot carrying packs containing their necessary camp gear. Very little food will be taken, as the hunters expect to live off the land. Light tarps are carried in place of bulky tents. The bear hunting party roams the flats and foothills, camping in particularly promising areas and spending two or three days carefully searching the local terrain for bear dens or signs of recent bear activity. (Nelson et al. 1982:45-46)

Bear dens may occur in a variety of places, but Native hunters have learned that bears tend to den on dry well-drained land. The exposed roots of large spruce, thick patches of diamond willow, and sandy banks are particularly favored by bears. As the hunters search, they watch for patches of moss that have been pulled from the earth or tall grass that has been torn away. They also look for crude nests which bears often make near a den they are excavating. All of these signs indicate that there is an occupied den in the nearby vicinity.

Over the years a great many bear dens have been discovered by Koyukuk hunters. When a man discovers a new bear hole and takes a bear from it, it becomes known as his den: that is, 'Joe's bear hole.' Other hunters usually allow the 'owner' of a known bear den the opportunity to be first to check it each fall. The locations of particularly productive bear holes are passed from father to son. As men search for bears in the fall they characteristically check all known bear dens in the vicinity. Usually, a great many old dens must be checked before one is found that is occupied.

As two or more hunters progress separately through an area, they maintain contact by occasionally striking a tree with a stick. It is forbidden to yell back and forth as this will frighten off any bears in the vicinity. The only time one should cry out is when discovering an occupied den.

Once a den is discovered, and its entrance appears to be purposely plugged up, the hunter will sometimes cut a long curving rod to poke back into its tunnel. Most den tunnels curve before the nest area is reached. When the stick strikes something soft the hunter will hold it against the obstruction and try to detect any breathing movement. If the bear is not completely asleep it may rush out of the den, in which case the hunter must be ready to quickly respond and shoot it. If the bear does not leave the end, the hunter will carefully withdraw the rod and lay it on the roof of the end at the same angle

it was injected into the hole. The end of the rod should be resting directly over the sleeping bear. (Nelson et al. 1982:46)

With the hibernating bear located, the hunter and his companions will sometimes cut heavy poles and brush and securely plug up the entrance of the den to prevent their prey from escaping. At the spot above the den nest, they will chop and dig a hole perhaps 6 inches in diameter. If enough light can filter through the hole, it may be possible to see the bear and to allow the hunter to shoot it in the head. Otherwise, a rod will be lowered to 'feel' for the bear. Once the bear is located, one hunter may hold the rod steady while another aims and fires his rifle along its length. (Nelson et al. 1982:47)

Often bears can be hunted in their dens by a much simpler method. The hunter simply disturbs the animal until it comes up into the den tunnel or pokes its head out the entrance, and then he shoots it. Or in many cases a hunter looks into the den tunnel, using a flashlight or torch to locate the animal inside. If he can see it clearly, he is able to aim and shoot effectively from the den entrance.

From time to time, one may discover a den occupied by a sow bear and one or two yearling cubs. These cubs are often two-thirds the size of a full adult. It is the obligation of the hunter to take all occupants of a den. If the bears did not wish to be taken they would not have revealed themselves, and to not take them would be an act of disrespect.

The slain bear or bears will be removed from the den and skinned on the spot. The small bone just under the tongue will be discarded. The intestines, heart, lungs, and any bone or other parts not to be taken should be burned to prevent other animals from defiling them. The hide may be kept, although it usually is not. A bear hide continues to have 'life' for three years, and so it cannot be used for clothing or anything else until this time has passed. Only women who have experienced menopause may scrape and tan a bear hide.

If a man or hunting party is some distance from the village and takes several bears, they will cache the meat and pack back only a small percentage of their kill. Later they will use dog teams-and, lately, snowmachines - to retrieve the meat. (Nelson et al. 1982:47)

According to custom, the man who actually kills a bear retains very little of the meat for himself, perhaps only a forearm or hindquarter. The ribs, fat, and other choice cuts are usually frozen and preserved for village potlatches. It is particularly important to have large quantities of bear meat for memorial potlatches. Other parts of the bear such as the neck, forearms, head, and paws are used to host a bear party in honor of the bear that has been killed. Bear parties, by tradition, are attended by males only and are usually held outside the village limits soon after the bear meat has been returned to the community. (Nelson et al. 1982:47-48)

Although bear hunting significantly declines after mid-winter, it does not cease entirely. When traveling overland via snowshoes, dog team, or snowmachine, a Native hunter is always alert to signs of possible bear dens. An air hole often forms in the snow covering a bear den. The snow around the hole is usually stained yellow. If a man sees such a sign, he will dig out the den and harvest its occupant. As a man travels along a trail with his dog team he notes the dogs' behavior. The writer [Ray Bane] drove his team of dogs along a well-packed trail daily for over a week and noticed the team sniffing the air and



glancing off into a patch of birch trees each time a certain point was passed. This observation was discussed with a local Native hunter who then spent several days searching around the area until he found and killed a bear in a snow-concealed den. Small predators, such as marten, weasels, and foxes, are often drawn to a bear hole by its odor and may walk up to it and circle it out of curiosity. A hunter, seeing where such creatures have deviated from their general path of travel and circled such a spot, will suspect a bear den. As mentioned earlier, to find a bear den obligates the hunter to harvest its occupants. (Nelson et al. 1982:48)<sup>2</sup>

Summer bear harvest usually consists of simple chance encounters with bears while carrying out other activities such as checking fish nets, cutting wood, or traveling by boat. There seems to be less emphasis on the taking of bears at this time. (Nelson et al. 1982:48)

[T]he brown bear is the one animal that is killed both for use as food and for self protection, being considered too dangerous to have in areas where people regularly camp or travel. It is also disliked for its habit of killing black bears in their dens. (Nelson et al. 1982:227)

If a bear is taken from its den, the men eat certain parts together and save others for a later 'bear party' outside the village. Some highly preferred portions are set aside for village potlatch feasts. The successful hunter keeps only a small amount for use in his own household. Sometimes the successful hunter in a group keeps nothing at all for himself. (cf. Loyens 1966:41; cited in Nelson et al. 1982:235)

The Koyukon have greatly elaborated their knowledge of bears, which in some past times were the only big game animal available to them. Their fund of information on bear denning is especially remarkable. This knowledge is used to locate dens by recognizing subtle clues, to learn if dens are occupied and by what sort of animal, and to succeed in taking these animals when they are found.

Expert hunters are able to find dens by detecting bear tracks in the frozen moss beneath as much as 2 feet of undisturbed snow, and by spotting miniscule disturbances, such as incongruous bits of grass or cracked twigs. If a den is located (and this may require days of searching), there are equally sophisticated means of investigating its occupant and eventually making a kill. Careful studies are made of the den and its surroundings, but sometimes the hunter must enter an inhabited den to accomplish his task. By putting his head just inside a den's entrance and listening carefully, he may hear the bear licking its chops or breathing, or he may detect its heartbeat growing steadily louder and faster. In the latter case, he knows that he has found a young animal, its pounding heart registering fear. Older bears do not react this way because they are unafraid. Knowing that young animals are more likely to flee a den after disturbance, hunters keep a close watch on the entrance until the hunt is over. (Nelson et al. 1982:246)

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<sup>2</sup> "It has been noted that the Koyukuk people are particularly conservation-conscious in the harvest of most furbearers, particularly those species which are non-migratory. Beaver are considered to be especially vulnerable to over-harvest, and most trappers will pull their sets from a beaver house after two adults have been taken. Wolf, wolverine, and fox are considered to be less affected by trapping, and little effort is made to limit the take of these predators. The custom of recognized traplines encourages men to practice conservation so as to maintain a sustained yield from their territories" (Nelson et al. 1982:60).

Some other rules for proper behavior toward animals can be exemplified by listing a few of the regulations for the treatment of bears. There are rules for proper butchering: a bear's eyes are always removed and the eyeballs slit so that it will not see if the hunter errs in following any taboos; rules for the proper care of the meat: dogs must never eat bear meat because it is disrespectful and because it would make the dogs mean; and the rules governing who eats the animal or parts of it: bear brains are never eaten, because it would cause a person to anger easily. Women cannot eat from the front quarters of black bear, and are completely forbidden to eat brown bear meat.

There are also rules for the disposing of unusable portions: edible parts of the animals must be used, to begin with, because waste is profoundly disrespectful. Bear bones should be burned or hung in a tree out in the woods. There are rules for using hides: bear skins should never be stepped on or over by women and are often disposed of in the woods to prevent all female contact. Another set of rules pertain to a 'bear party' which is similar to a funeral and must be held by men, outside the village, whenever these animals are taken. Bear meat should be safely cached for several days or weeks so that it is fully and completely dead before being brought to a settlement (living things die slowly, not at the moment when normal life processes stop). Killed bears should never be dragged over the ground, or pulled from dens with snowmachines. (Nelson et al. 1982:260)

Spirit vengeance can be severe. For relatively minor offenses, bears become aloof or somehow invisible to the hunter. One man did not kill a single bear for 12 years following an infraction, another hunted unsuccessfully for 20 years. Still another man who kicked a bear neck across the floor and spoke badly of the animal was mauled to death soon afterward. (Nelson et al. 1982:260-261)

Taboos are often tested individually to see if they must be followed, although this is usually limited to the less spiritually powerful animals. Six men who were bear hunting together decided to test the taboo on eating a certain part of the bear's stomach. Elders warned that if young men ate this organ their moccasins would be slippery as they trekked through the woods in search of dens. Three young men ate the tabooed part, and three abstained. Next day the three violators had a terrible time, slipping and falling repeatedly, while the others had no trouble at all. Seeing that the taboo was right, they carefully followed it thereafter. (Nelson et al. 1982:263)

Implements such as sleds, fishnets, rifles, or snowshoes are also infused with luck. A man lamented to me the troubles he had with one of his rifles, saying that it would shoot a bear coming out of a den, at point blank range, but it only made a wound despite his high caliber rating. Another gun had to be used to make the kill. None of these problems were caused by malfunctioning, he explained, the gun was simply 'out of luck.' He said he suspected a young woman had stepped over it, rendering it useless. (Nelson et al. 1982:265)

Koyukuk people also know the landscape through a profusion of names. Some of these names are used primarily for location, as we use street signs. Others have special meanings derived from personal or traditional history. Hundreds of bear dens, for example, are known throughout Koyukon country, and many of these have special names. All of the dens that have been known for some time have personal associations,

and when hunters stop to check them each fall, they often recall past experiences there. Some of these stories go back even to previous generations, and so the dens have become much more than just hunting places. (Nelson et al. 1982:299)

The first 3 or 4 feet of the intestines [of black bears or brown bears] are discarded, and the rest is turned inside-out so the fat is inside, then it is placed on a fire to roast. The result is a sausage-like delicacy. Only hibernating bears are used this way, because their intestines are empty. (Nelson et al. 1982:350)

**Osgood, C. 1970. Contributions to the ethnography of the Kutchin. Reprint of the 1936 edition, Volume No. 14, Yale University Publications in Anthropology. Human Relations Area Files Press, New Haven.**

Bears are common in the Peel River<sup>[3]</sup> country. The Indians either shoot them with bows and arrows as the occasion offers, pull them out of their holes in winter and club them to death, snare them, or in times of rare courage, spear them. It is said that when a man discovers a bear hole, he kills the bear but tells no one. Later he may be seen to put a little hair in the fire whereupon some smart old man says, 'Oh, I know you found a bear hole.' Naturally the killing of black bears most frequently occurs as they are less ferocious and more numerous than either the brown bear or the grizzly. Grizzly bears meet with respect because of their strength and hunters exercise more than usual care in attacking them, but the method is the same. Dogs are not used for hunting bears. (Osgood 1970:27)

**Osgood, C. 1971. The Han Indians: A compilation of ethnographic and historical data on the Alaska-Yukon boundary area. Yale University Department of Anthropology, New Haven.**

Schmitter (1910:10) writes of the Han: 'One of their most useful weapons, the spear, was made by binding a hunting knife of caribou-horn to the end of a pole about 6 feet long.' This is an almost identical description of the lance described by Jones (1872:323). Jonathan Wood at Moosehide spoke of a very similar weapon which he called a *t'at*, and said that it consisted of a birch pole five to six feet long, and of a convenient diameter to hold. At one end was a point made of caribou horn which he guessed to be about eight inches long, but he was not sure. This implement served to attack a bear that had been aroused from its den. Walter also knew of such a lance.

Then he [Wilson in Schwatka 1900] says of the Han of Eagle: 'In Winter these Indians leave the river and scatter out in different directions in quest of game, principally moose and caribou, which, in reality, provide them with their only food. Besides these, however, great numbers of bears are found, particularly the black variety; also deer, mountain sheep, and rabbits. (Osgood 1971:103)

Black bears, their brown variation, and grizzlies are reported to have been killed and eaten in the Han area. Schmitter (1910:8) provides a clear account of the classic Athapaskan technique of killing bears with a lance. 'A pike or spear is nearly always

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<sup>[3]</sup> Osgood conducted fieldwork in summer 1932 among the Kutchin of Alaska and of the Yukon Territory, Canada. Information specific to hunting of bears in this excerpt is from the Peel River, which is in Canada, but is otherwise corroborated by other literature sources from Alaska. In short, customary and traditional uses of black bears by Peel River Kutchin are likely very similar to those of the Kutchin peoples located a little downriver, in Alaska.

used in hunting bears. The hunter attracts the bear by making a raven-like noise, causing the bear, as the Indians say, to think the raven has discovered a dead moose. They also further explain that the big bears only would come, as the little bears would not know what the croaking meant. As the bear approaches the Indian holds the spear in position, facing the bear as it draws near to him, and as the bear springs the Indian sticks the spear into its throat at the top of the breast-bone, at the same time shoving the handle of the pole into the ground, thus causing the bear to spear himself with his own weight. Sometimes three men hunt in this manner, two of them attacking the bear on either side as it rushed forward. The meat of the young bear killed in the fall, when they feed on huckleberries, is considered a great luxury'. (Osgood 1971:110 citing Schmitter 1910:8)

**Sumida, V. A. 1988. Land and resource use patterns in Stevens Village, Alaska. Alaska Department of Fish and Game Technical Paper No. 129, Juneau.**  
<http://www.subsistence.state.ak.us/TechPap/tp129.pdf>

Certain areas of band territories were used by all members while other areas such as beaver houses and ponds, muskrat swamps, fishing sites, bear dens, big game fences, berrying areas adjacent to fish camps, and some bird hunting areas were considered family-held property. (Clark 1981:585 cited in Sumida 1988:22)

Although bears were not actively hunted in the summer [by residents of Stevens Village], they were readily spotted along the rivers and creeks and in the hill country of the Yukon River canyon. During this season bears were harvested in the course of travel or during pursuit of other activities. 'Nuisance' bears found near the village or fish camps were shot or snared as a safety measure. (Sumida 1988:141)

Bears were considered especially good in the fall, after accumulating a thick layer of fat for their winter dormancy, the result of a diet consisting primarily of berries. At times, up to four inches of fat develops along their backs. Den hunting was sometimes undertaken during fall and early winter though not as frequently as in the past when hunters used to do more overland travel on foot both before and after freeze-up and were more likely to come across bear dens. (Sumida 1988:141)

When bears prepare their dens during September and October, hunters can locate denning sites before the first snowfall by noting disturbed areas where the ground has been dug up and where leaves, grass, and moss have been scraped and removed. Dens are excavated from the ground or in riverbanks but can also be natural shelters created by fallen trees or the tree roots of partially downed trees. Dens are lined with grass, moss, leaves, and other materials, and once the bear enters the den for the duration of the winter, the entrance is closed off with similar materials. (Sumida 1988:141-142)

Although snow camouflages evidence of dens, often after an early snowfall, bears can be tracked to their denning sites. 'Old-timers' reportedly searched for bear dens along riverbanks during fall and early winter, looking for the steam from the bear's breath which emanated from the air hole in the roof of the den. (Sumida 1988:142)

When an occupied den was found the hunter noted the location and returned later with others. Hunters blocked the entrance to the den with poles and brush, leaving a small opening. If the bear could be seen from the entrance it was shot through the opening in the blocked entrance. Otherwise, the bear was disturbed by prodding it with a stick and

was shot as its head appeared at the entrance. Another method was to securely block the entrance and chop a hole above the bear in its den, shooting it from that position. A detailed description of Koyukon bear hunting methods is presented in Nelson et al. (1982:46-47). (Sumida 1988:142)

After a bear has been killed, the den must be thoroughly cleaned out and the grass and other materials used to line the interior of the den were removed. This was done so that the den appeared unused and assured that another bear would occupy it the following year. Marking or disturbing the area in any way resulted in future avoidance of the site by other animals. (Sumida 1988:142)

**Sumida, V. A. 1989. Patterns of fish and wildlife harvest and use in Beaver, Alaska. Alaska Department of Fish and Game Division of Subsistence Technical Paper No. 140, Fairbanks. <http://www.subsistence.adfg.state.ak.us/TechPap/tp140.pdf>**

The harvest and use of bear was more common in the past when families resided in seasonal camps. At that time, den hunting was regularly undertaken during fall. A good description of this activity is provided in Nelson et al. (1982:46-47). Currently, bear hunting is more opportunistic and usually incidental to other activities undertaken during open water seasons, although den hunting is still conducted on occasion. Late summer and early fall are considered the best time to harvest bear since they have developed a thick layer of fat for their winter hibernation.

Black bear is the species most commonly taken. A few households hunt for brown bear although some residents considered these bears to be inedible. During the survey year three households each reported harvesting one black bear and no brown bear were taken. Bear meat is eaten and their fat is sometimes rendered for use in cooking or when eating dried fish or meat. Bear hides were kept by some households. (Sumida 1989:60)

**Sumida, V. A., and D. B. Andersen. 1990. Patterns of fish and wildlife use for subsistence in Fort Yukon, Alaska. Alaska Department of Fish and Game Division of Subsistence Technical Paper No. 179, Fairbanks. <http://www.subsistence.adfg.state.ak.us/TechPap/tp179.pdf>**

In the past, snares were used to harvest both large and small mammals including moose, caribou, bear, and snowshoe hare. (Osgood 1970:36; McKennan 1959:48)

**Customary and Traditional Use Worksheet,  
Black Bears, Game Management Units  
12, 19, 20, 21, and 24 (Interior Alaska)**

**Prepared by**

**James J. Simon**

**for the November 2008 Juneau Board of Game meeting**

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November 2008

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Alaska Department of Fish and Game

Division of Subsistence



## Symbols and Abbreviations

The following symbols and abbreviations, and others approved for the *Système International d'Unités* (SI), are used without definition in the following reports by the Division of Subsistence. All others, including deviations from definitions listed below, are noted in the text at first mention, as well as in the titles or footnotes of tables, and in figure or figure captions.

Weights and measures (metric)		General		Measures (fisheries)	
centimeter	cm	Alaska Department of		fork length	FL
deciliter	dL	Fish and Game	ADF&G	mid-eye-to-fork	MEF
gram	g	Alaska Administrative		mid-eye-to-tail-fork	METF
hectare	ha	Code	AAC	standard length	SL
kilogram	kg	all commonly accepted		total length	TL
kilometer	km	abbreviations	e.g., Mr.,		
liter	L		Mrs., AM,		
meter	m		PM, etc.		
milliliter	mL	all commonly accepted			
millimeter	mm	professional titles	e.g., Dr.,		
			Ph.D.,		
			R.N., etc.		
			@		
Weights and measures (English)				Mathematics, statistics	
cubic feet per second	ft <sup>3</sup> /s	at		all standard mathematical	
foot	ft	compass directions:		signs, symbols and	
gallon	gal	east	E	abbreviations	
inch	in	north	N	alternate hypothesis	HA
mile	mi	south	S	base of natural logarithm	c
nautical mile	nmi	west	W	catch per unit effort	CPUE
ounce	oz	copyright	©	coefficient of variation	CV
pound	lb	corporate suffixes:		common test statistics	(F, t, $\chi^2$ , etc.)
quart	qt	Company	Co.	confidence interval	CI
yard	yd	Corporation	Corp.	correlation coefficient	
		Incorporated	Inc.	(multiple)	R
		Limited	Ltd.	correlation coefficient	
		District of Columbia	D.C.	(simple)	r
		et alii (and others)	et al.	covariance	cov
		et cetera (and so forth)	etc.	degree (angular)	°
		exempli gratia		degrees of freedom	df
		(for example)	e.g.	expected value	E
		Federal Information		greater than	>
		Code	FIC	greater than or equal to	≥
		id est (that is)	i.e.	harvest per unit effort	HPUE
		latitude or longitude	lat. or long.	less than	<
		monetary symbols		less than or equal to	≤
		(U.S.)	\$, ¢	logarithm (natural)	ln
		months (tables and	Jan., ..., Dec	logarithm (base 10)	log
		figures): first three	®	logarithm (specify base)	log <sub>2</sub> , etc.
		letters	™	minute (angular)	'
		registered trademark		not significant	NS
		trademark		null hypothesis	HO
		United States	U.S.	percent	%
		(adjective)		probability	P
		United States of		probability of a type I error	
		America (noun)	USA	(rejection of the null	
		U.S.C.	United States Code	hypothesis when true)	α
		U.S. state	use two-	probability of a type II error	
			letter	(acceptance of the null	
			abbreviations	hypothesis when false)	β
			(e.g., AK,	second (angular)	"
			WA)	standard deviation	SD
				standard error	SE
				variance	
				population	Var
				sample	var
Physics and chemistry					
all atomic symbols					
alternating current	AC				
ampere	A				
calorie	cal				
direct current	DC				
hertz	Hz				
horsepower	hp				
hydrogen ion activity	pH				
(negative log of)					
parts per million	ppm				
parts per thousand	ppt,				
	‰				
volts	V				
watts	W				

***SPECIAL PUBLICATION NO. BOG 2008-07***

**CUSTOMARY AND TRADITIONAL USE WORKSHEET, BLACK BEARS,  
GAME MANAGEMENT UNITS 12, 19, 20, 21, AND 24  
(INTERIOR ALASKA)**

by

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November 2008



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# TABLE OF CONTENTS

	Page
LIST OF TABLES.....	ii
LIST OF FIGURES .....	ii
LIST OF APPENDIXES .....	ii
INTRODUCTION .....	1
Background.....	1
THE EIGHT CRITERIA .....	1
Criterion 1: Length and consistency of Use.....	1
Criterion 2: Seasonality .....	2
Criterion 3: Means and Methods of Harvest.....	2
Criterion 4: Geographic Areas.....	4
Criterion 5: Means of Handling, Preparing, Preserving, and Storing .....	5
Criterion 6: Intergenerational Transmission of Knowledge, Skills, Values, and Lore .....	6
Criterion 7: Distribution and Exchange .....	6
Criterion 8: Diversity of Resources in an Area; Economic, Cultural, Social, and Nutritional Elements.....	7
REFERENCES CITED .....	9
TABLES AND FIGURES.....	11

## List of Tables

<b>Table</b>		<b>Page</b>
1.	Black bear harvests, Interior Region, 1982-1987.....	11

## List of Figures

<b>Figure</b>		<b>Page</b>
1.	Areas used for black bear hunting during the lifetimes of Stony River residents as reported in 1983-1984.....	12
2.	Areas used by Sleetmute residents for hunting bears prior to the use of snowmachines.....	13
3.	Areas used by Sleetmute residents for hunting bears since the use of snowmachines, through 1983.....	14
4.	Areas used by Chuathbaluk residents for hunting bears since moving to Chuathbaluk, through 1983.....	15
5.	Areas used by Nikolai, Telida, Takotna, and McGrath black and brown bear hunters, 1967-1983.....	16
6.	Minto bear hunting areas, 1960-1984.....	17
7.	Tok bear and caribou hunting areas, 1968-1988.....	18
8.	Tanacross bear and caribou hunting areas, 1968-1988.....	19
9.	Galena moose, black bear, waterfowl, and caribou hunting areas, 1971-1986.....	20
10.	Huslia moose, black bear, and caribou hunting areas, 1981-1983.....	21
11.	Areas used by Allakaket and Alatna residents for moose and black bear hunting, January 1981-December 1982.....	22
12.	Areas used by Hughes residents for moose hunting, January 1981-December 1982.....	23

## List of Appendixes

<b>Appendix</b>		<b>Page</b>
A.	Literature ExceRpts pertaining to customary and traditional black bear hunting and use patterns in Interior Alaska.....	24

## INTRODUCTION

### BACKGROUND

Pursuant to Alaska Statute 16.05.258 (Subsistence use and allocation of fish and game) and 5 AAC 99.010 (Boards of fisheries and game subsistence procedures), the Alaska Board of Game made a positive customary and traditional use finding for black bears *Ursus americanus* in Game Management units (GMUs) 12, 19, 20, 21, and 24 at its March 2008 regulatory meeting (ADF&G 2008a; ADF&G 2008b; ADF&G 2008c). At that time the board established an amount reasonably necessary for subsistence (ANS) of 30 to 50 black bears for Game Management Unit 19, and concluded that the lack of information on harvest levels precluded making ANS findings for the customary and traditional harvest and use of black bears in units 12, 20, 21, and 24.<sup>1</sup>

At its March 2008 Interior Region regulatory meeting, the Alaska Board of Game requested that the ADF&G Division of Subsistence provide more detail on the customary and traditional uses of black bears in Interior Alaska, specifically with reference to methods and means of black bear harvests in units 12, 19, 20, 21, and 24 (Criterion 3, 5 AAC 99.010(b)(3)). The additional information was requested so as to better evaluate a number of deferred proposals to recognize in regulation customary and traditional harvest practices of black bears.

The revised customary and traditional use summary for black bears in units 12, 19, 20, 21, and 24 found below provides an expanded description of customary and traditional harvest and use practices for black bears from the ethnographic and ethnohistorical literature of this region of Interior Alaska. Appendix A is included at the end of this report to provide pertinent quotations related to customary and traditional uses of black bears from the literature.

## THE EIGHT CRITERIA

### CRITERION 1: LENGTH AND CONSISTENCY OF USE

**A long-term, consistent pattern of noncommercial taking, use, and reliance on the fish stock or game population that has been established over a reasonable period of time of not less than one generation, excluding interruption by circumstances beyond the user's control, such as unavailability of the fish or game caused by migratory patterns.**

Historically, black bears have been harvested by residents of the Interior of Alaska as an important source of meat, fat, and fur. Today, black bears remain an important subsistence resource (e.g., Andersen et al. 1998; Andersen et al. 2001; Case and Halpin 1990; McKennan 1959; Mishler and Simeone 2004; Nelson 1973; Nelson et al. 1982; Osgood 1959; Osgood 1971; VanStone 1979). In several communities, over 1/3 of the households successfully harvested black bears (Table 1), according to recent Division of Subsistence surveys.

In communities within or near spruce woodlands, such as Lime Village, Stony River, Sleetmute, Chuathbaluk, Hughes, Huslia, Galena, Minto, and Tanacross to name a few, hunting and use of black bears is a well-established pattern. In other communities, black bears are most often taken

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<sup>1</sup> In 2008, the Alaska Board of Game established an amount reasonably necessary for subsistence uses of black bears in Unit 19 based upon Division of Wildlife harvest ticket reports and Division of Subsistence household surveys. According to the ADF&G harvest database, an annual average of 29 black bears was reported harvested in Unit 19 since 1986. Division of Subsistence household surveys documented an average of 32 black bears annually by Unit 19A residents alone from 2003 to 2006 (ADF&G 2008b).

opportunistically when targeting other animals, such as moose *Alces alces* or small game; however, their use is common. Most residents familiar with the use of black bears report that they have harvested black bears in regularly-hunted areas as long as elders in their communities can recall, and can recount stories of uses by previous generations (e.g., Charnley 1984; Kari 1983, Kari 1985). Historical sources from the 19<sup>th</sup> century mention use of bears by residents of this region.

## **CRITERION 2: SEASONALITY**

### **A pattern of taking or use recurring in specific seasons of each year.**

Black bears are hunted primarily in the spring, fall, and throughout the winter (e.g., Andersen et al. 1998:25; Andersen et al. 2001:5; Case and Halpin 1990:88; McKennan 1959:49; Mishler and Simeone 2004:100; Nelson 1973:115-121). In areas within or near black bear habitat, black bear hunting continues after bears begin venturing from their dens in April and extends through May; or when the salmon fishing season starts. Black bears are a notable resource in these areas, often being the only large animal reasonably available during late winter when food stores are depleted.

In the fall, from late August through October, black bears are hunted in conjunction with or incidental to moose and caribou *Rangifer tarandus*. Snaring of black bears was a particularly useful and efficient method of harvest during the fall (Nelson et al. 1982:44). The quality of black bear flesh is often mentioned as a factor in the timing of targeted hunting. Black bears "retire to their dens by late September, but remain fat and tasty through the winter" (Nelson 1973:116). Den hunting ("denning") of black bears is still practiced throughout the winter (e.g., Andersen et al. 1998; Andersen et al. 2001; Nelson 1973:115-116; Nelson et al. 1982:48). The flesh of black bears is considered best, fat and palatable, in the fall and early winter, when the bears have been feeding primarily on berries. However, food stores are often diminished in the spring, and any fresh meat is welcome. Also, immediately after coming out of hibernation in the spring, black bears have some fat for a short period of time.

## **CRITERION 3: MEANS AND METHODS OF HARVEST**

### **A pattern of taking or use consisting of methods and means of harvest that are characterized by efficiency and economy of effort and cost.**

Traditional and historical methods of taking black bears include the use of spears, lances, bow and arrows, clubs, deadfalls, snares along trails, snares in trees, rifles, and the use of nooses to take swimming bears from boats (McKennan 1959:49; Nelson 1973:116-117,120-121,122; Nelson et al. 1982:44; Osgood 1958; Osgood 1971; VanStone 1974). Dogs were sometimes used to track bears or locate dens (McKennan 1959:49). Today, black bears are commonly taken with large caliber rifles or sometimes with snares (Nelson 1973:116-117,118; Nelson et al. 1982).

Black bears are either specifically sought after or harvested incidental to other activities, such as fishing, berry-picking, or hunting for moose or waterfowl. Hunters typically access hunting areas by boat in the summer and fall and by snowmachine in the winter. Near some communities, walking to harvest areas is common, such as in the Kuskokwim area where residents hike to the mountains for bear hunting. All-terrain vehicles (ATVs) are also used occasionally. Formerly, snowshoes and dog teams were a common means of access. Black bears are often attracted to fish camps during the summer months, when fish are processed and stored. In the upper

Kuskokwim (GMU 19D) area, fish scraps are sometimes placed on distant sand bars in an effort to divert bears from the fish processing area. Occasionally, these bears are intentionally taken, although such bears are considered less desirable for human consumption because of the flavor of their meat during that time of year.

Taking black bears from their dens, or "denning," is still commonly practiced today (Andersen et al. 1998:25; Andersen et al. 2001:5; Case and Halpin 1990:21, 88; Nelson 1973:115-116, 118)<sup>2</sup>. Known "denning" sites are checked for signs of occupancy in the late fall and early winter.

Once they have discovered a den they check it each fall. The Koyukon usually consider each den a sort of property, 'owned' by the man who discovered it or learned of it from his father. (Nelson et al. 1982:118)

Hunters take note of grass piles and other likely denning sites in the fall. In the winter, the dens are located by examining the areas for scratch marks and bits of fur on trees (e.g., Nelson 1973:118-121; Nelson et al. 1982:45-47). Many hunters know from the size of the den and signs around it if a single animal or a female with cubs occupies it, but "to find a den obligates the hunter to harvest its occupants" (Nelson et al. 1982:48).

From time to time, one may discover a den occupied by a sow bear and one or two yearling cubs. These cubs are often two-thirds the size of a full adult. It is the obligation of the hunter to take all occupants of a den. If the bears did not wish to be taken they would not have revealed themselves, and to not take them would be an act of disrespect. (Nelson et al. 1982:47)

Once an occupied den is located, the bear is either shot through a hole in the top of the den or through the entrance. Sometimes the bear is disturbed and shot upon its exit from the den.

Often bears can be hunted in their dens by a much simpler method. The hunter simply disturbs the animal until it comes up into the den tunnel or pokes its head out the entrance, and then he shoots it. Or in many cases a hunter looks into the den tunnel, using a flashlight or torch to locate the animal inside. If he can see it clearly, he is able to aim and shoot effectively from the den entrance. (Nelson et al. 1982:47)

Occasionally the entrance is blocked to slow exiting bears (e.g., McKennan 1959:49). Bears taken in dens are typically butchered away from the den site to maintain the productivity of the den and to ensure its use by bears the following year (Nelson 1973; Sumida 1988:141-142, Sumida 1989).

Black bears are also harvested by using snares, which is typically done during the fall "when they are fat and seem to wander along well-defined trails" (Nelson 1973:116-117). In Chuathbaluk, Sleetmute, Lime Village, and Stony River, wire snares have been set in or near smokehouses in recent years to capture troublesome bears. Specific bear snaring techniques are discussed at length in Nelson (1973:116-117) and Nelson et al. (1982:44). For example, one technique involved placing the snare in a tall straight spruce tree near a well-traveled black bear trail. The tree is stripped of branches on one side up to a height of approximately 12 feet. A basket of fish is hung on a branch just above the trimmed area and the rawhide line of the snare forms a noose approximately 18 inches in diameter and approximately 9 feet above the ground.

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<sup>2</sup> Brown bears *U. arctos* were also harvested from dens in times past (Case and Halpin 1990:84,87; Hadleigh-West 1963:140-141,343; McKennan 1965:144-145).

A bear smelling the fish and seeing the basket hung in the tree would climb up the trimmed area, pushing his head through the willow loop and its supported rawhide noose. As it descended, the noose, tied with a special non-slip knot, would tighten and kill it. Bear snares were set in the latter part of August and were checked each day by the owner. (Nelson et al. 1982:44)

People in the Anvik area (GMU 21) set snares along a tree that was felled at an incline. Fish entrails and eggs, used as bait to attract the bears, were placed in a birch bark basket tied to the upper end of the tree. The name of this snaring method, *deoako'n*, literally means "fish guts up in the air." Kuskokwim (GMU 19D) hunters report dragging bear carcasses away from dens before butchering in an effort to maintain the productivity of the dens. Stevens Village residents (GMU 25) report that they thoroughly clean dens to help ensure their use the following year.

The harvest of bears found swimming in the water is described in the Kuskokwim area (GMU 19) and other parts of Interior Alaska (e.g., Nelson et al. 1982:48). A noose is looped around its neck and the animal pulled to shore. This method was reportedly used in the Lime Village area as late as the 1950s. It is also reported that bears in the water are taken by spear in the Upper Tanana area (GMU 12).

Bears are also hunted from boats during the open-water season. A number are usually taken during the fall moose hunt, when the Indians see them along the river. Some bears are wary enough to run when they see a boat coming, but others are unafraid. Bears are also shot by hunters traveling on the river in spring, often by duck hunters in their little canoes. (Nelson 1973:123)

Hunters in Tok use bait stations to attract and harvest black bears.

#### **CRITERION 4: GEOGRAPHIC AREAS**

**The area in which the noncommercial, long-term, and consistent pattern of taking, use, and reliance upon the fish stock or game population has been established.**

Each community typically hunts black bears in areas known to be productive. In many cases, areas used to hunt black bears are similar to those used to hunt moose and both activities often occur together. Information specific to black bear hunting areas does not exist for most communities; depiction of black bear hunting areas is often combined with brown bear or moose hunting areas. However, Figures 1 through 12 provide maps representing some of the documented areas used for black bear hunting in Interior Alaska.

Lime Village residents hunt moose, caribou, and black bears in river flats throughout their land use area. They hunt moose intensively along the Stony River and its side streams, including the Stink River and Hungry Creek. They also use Caribou Snare Creek and other streams that drain into Tundra Lake. Can Creek is an important hunting ground for both moose and black bears (Kari 1983).

Stony River residents hunt black bears along the Kuskokwim River about 70 miles upstream and 20 miles downstream of the village; as well as along the Swift and Stony rivers and their tributaries; and along the Tatlawiksuk, Holitna, and Big rivers (Kari 1985). Chuathbaluk residents have hunted black bears along the Kuskokwim River from just downstream of their community, to upstream of McGrath. Areas along the Aniak, Holokuk, and Oskawalik rivers, as well as the lower tributaries of the Holitna River have also been hunted (Charnley 1984).

Sleetmute hunters primarily use the Holitna drainage, along with the lower reaches of the George River, to hunt black bears (Charnley 1984).

Kwethluk hunters (from GMU 18) have used the Holokuk River drainage, especially since the 1940s, to hunt black bears. Areas of use include the Kuskokwim River as far upstream as McGrath, and the Holitna River upstream to its headwaters (Coffing 1991).

Tuluksak residents (from GMU 18) have hunted bears along the Kuskokwim River from the village upriver to the mouth of the Holitna River, as well as in a few areas near the Johnson River, between the Yukon and Kuskokwim rivers. Tributaries of the Kuskokwim River between the village and the Holitna River have also been hunted for bears. These include the Tuluksak River drainage upstream to the Risher Dome area; Bogus and Ophir creeks and the area around Whitefish Lake; the Aniak River approximately 10 miles upstream of the Kolmakof and Holokuk rivers; the Holitna River upstream as far as Kasheglok; and the first 10 river miles of the Hoholitna River (Andrews and Peterson 1983).

Nunapitchuk residents (from GMU 18) hunt black bears at the same time as moose. They hunt north and east of their village, upstream to the headwaters of the Pikmiktalik, Kvichavak, and Johnson rivers, including adjacent lakes and tributaries. They sometimes portage from the Johnson River to the Yukon River and hunt along the Yukon River as far upstream as Paimiut Slough. They also hunt along the Kuskokwim River as far upriver as the Stony River, 320 miles distant (Andrews 1989).

Black bear hunting areas used by Russian Mission residents (from GMU 18) include the Yukon River corridor from Ohogamiut upstream to the outlet of the Bonasila River; the lower reaches of the Bonasila River; and the Innoko River upstream to its confluence with the Shageluk River. Northern and eastern hills along the north bank of the Yukon River were hunted as well. Areas along the lower Atchuelinguk River are recent additions to regular black bear hunting areas, with hunting in that area occurring while residents are at their fish camps.

## **CRITERION 5: MEANS OF HANDLING, PREPARING, PRESERVING, AND STORING**

**A means of handling, preparing, preserving, and storing fish or game which has been traditionally used by past generations, but not excluding recent technological advances where appropriate.**

Black bears provide an important source of meat, fat, and fur. Depending on the particular custom, bear meat is eaten in the household in the context of community celebrations or during feasts for special occasions, such as the "bear party" practiced along the Koyukuk River. Valuable parts, such as the ribs and hind quarters, are saved for potlatches.

Butchering practices follow culturally-established beliefs and values. In many communities, the skull is left in the field; either buried, as is the practice along the Kuskokwim River; hung upon a small tree near the kill; or burned in a clean fire, as is the practice along the Koyukuk River. In any case, it is not brought back to the village so as to show proper respect toward the animal. The hunter cuts the eyes of the bear so that its spirit cannot see a possible violation of butchering taboos.

Black bears are butchered in the field and processed like other large game. The meat is shared with relatives, especially if fresh meat has been scarce. Some sources report patterns of



butchering and sharing that are dependent upon the number in the hunting party, the hunter who made the kill, and the age of the hunters. The meat is prepared in many ways: frozen, dried, smoked, canned for later use, or cooked by boiling, frying, broiling, barbecuing, or roasting. In some communities, the fat is rendered for use in cooking, and for making "Native ice cream." The choicest parts, such as the hindquarters or organs (heart, kidneys, and intestines), are often given to elders. If the meat has to be transported some distance, or if return to the village is not imminent, the meat may be dried in the field in order to decrease its weight and prevent spoilage.

Bear skins are used in the Tanana area (GMU 20) for ruffs, mukluks, and cabin bedding. Their use to insulate doors is described in the Yukon Flats area (GMU 25). In Koyukuk River communities, precautions are taken to ensure that bear hides do not come in contact with young women.

### **CRITERION 6: INTERGENERATIONAL TRANSMISSION OF KNOWLEDGE, SKILLS, VALUES, AND LORE**

**A pattern of taking or use that includes the handing down of knowledge of fishing or hunting skills, values, and lore from generation to generation.**

Athabascan tradition attributes great spiritual power to the bear. Bears feature prominently in Interior Athabascan oral traditions and mythology (e.g., Osgood 1959:146). There is an elaborate set of beliefs and values surrounding their harvest and use, and bear meat is often taboo for women. For example, residents in Koyukuk River villages (GMU 24) follow proscriptions on who may eat bears, what portions may be eaten, how they are prepared, uses of the inedible parts, such as claws and skulls, and the ways to refer to bears.

Bear hunting among the Koyukuk Athabaskans is an activity that far transcends the meeting of simple biological needs. To these people the [black] bear is invested with particularly powerful spiritual powers and, when carried out by culturally prescribed methods, the killing, treatment, and consumption of a bear is literally a religious act. (Nelson et al. 1982:45)

An example is the "bear party" practiced along the Koyukuk River (GMU 24). It is held in the forest, away from the village, and may be attended only by men as a way of showing proper respect to the animal after its death. In Allakaket, bear parties include cooking meat from the head, neck, feet, and backbone; dancing; and singing special bear songs.

The knowledge of the medicinal uses of bear "grease" and other bear parts has been handed down, but is generally not in use today.

As with many subsistence activities, teaching young men how to track, hunt, and butcher black bears, and young women how to process and preserve bear meat and other products, is through participant observation. Children are included in many activities, and are expected to show interest and eventually participate in the activities, depending upon their age and acquired skills. Most hunting is done in family-based groups, so that the learning and proficiency of younger participants is monitored.

### **CRITERION 7: DISTRIBUTION AND EXCHANGE**

**A pattern of taking, use, and reliance where the harvest effort or products of that harvest are distributed or shared, including customary trade, barter, and gift-giving.**

Black bear meat is widely shared within and between communities, particularly when it is the only fresh meat available during lean times, such as late winter. Certain parts, such as the hindquarters, heart, and kidneys, are normally given to elders.

Bear meat is often considered a specialty food and served at funeral and memorial potlatches (e.g., Minto, where the backbone, ribs and brisket are served). The fat and meat from fall hunts is served at community-wide meals, often held on Christmas Day and New Year's Eve (e.g., Minto).

The common pattern in the Native use of black bear meat is that only the men and the elder women should eat it. This pattern is perhaps less observed in the Kuskokwim area. In Minto, the limbs of harvested black bears apparently merit special attention as they are reportedly cut into three pieces and each piece given to a different household.

#### **CRITERION 8: DIVERSITY OF RESOURCES IN AN AREA; ECONOMIC, CULTURAL, SOCIAL, AND NUTRITIONAL ELEMENTS**

**A pattern that includes taking, use, and reliance for subsistence purposes upon a wide variety of the fish and game resources and that provides substantial economic, cultural, social, and nutritional elements of the subsistence way of life.**

Black bears are one of several large game species used for food by residents of these GMUs. Although the numbers harvested annually are fewer than those of moose or caribou, black bears are an important food source, particularly in late spring and early summer.

In some parts of these GMUs, nonlocal foods and equipment are often very costly, and the means of generating cash are not widely available. Residents of these communities harvest a large variety and considerable amounts of fish and game resources, including:

1. the 5 species of Pacific salmon *Oncorhynchus* found in Alaska
2. whitefishes *Prosopium* or *Coregonus*
3. northern pike *Esox lucius*
4. burbot *Lota lota*
5. Alaska blackfish *Dallia pectoralis*
6. smelt *Thaleichthys pacificus*
7. trout *O. mykiss* and *Salvelinus*
8. Arctic lampreys *Lampetra japonica*
9. moose
10. caribou
11. black bears
12. brown bears
13. hares *Lepus*
14. ptarmigan *Lagopus*
15. porcupines *Erethizon dorsatum*

16. grouse *Bonasa*, *Dendragapus*, *Tympanuchus*

17. numerous species of waterfowl

18. furbearers, including:

- a. beavers *Castor canadensis*
- b. mink *Mustela vison*
- c. river otters *Lutra canadensis*
- d. muskrats *Ondatra zibethicus*
- e. wolverines *Gulo gulo*
- f. wolves *Canus lupus*
- g. red foxes *Vulpes vulpes*
- h. lynx *Lynx canadensis*
- i. martens *Martes americana*

Residents also harvest many varieties of plants and berries.

Much of the wild resources harvested are salmon and freshwater fishes. However, communities further inland depend more heavily on land mammals, such as black bears. Kari (1983) reported that Lime Village residents prefer fresh animal meat as a staple over fish and birds. Caribou, moose, and beavers provided the most meat for Lime Village residents; in some years, black bears may have equaled beavers in pounds consumed.

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## TABLES AND FIGURES

Table 1.—Black bear harvests, Interior Region, 1982-1987.

Community	Year	Percentage of households harvesting	Estimated total number harvested	Lbs per capita harvest
Allakaket	1982	37	23	9
Anderson	1987	7	10	4
Beaver	1985	10	10	4
Bettles	1982	25	3	5
Dot Lake	1987	8	1	1
Fort Yukon	1987	31	150	7
Galena	1985	18	36	5
Healy	1987	2	7	1
Hughes	1982	53	17	11
Huslia	1983	37	41	32
McGrath	1984	n/a	15	2
McKinley Park	1987	2	1	0.8
Minto	1984	20	16	16
Nikolai	1984	n/a	6	3
Northway	1987	9	10	2
Stevens Village	1984	40	17	19
Tanacross	1987	4	3	1
Tanana	1987	14	38	28
Tok	1987	8	40	2

*Source* ADF&G Division of Subsistence survey data.

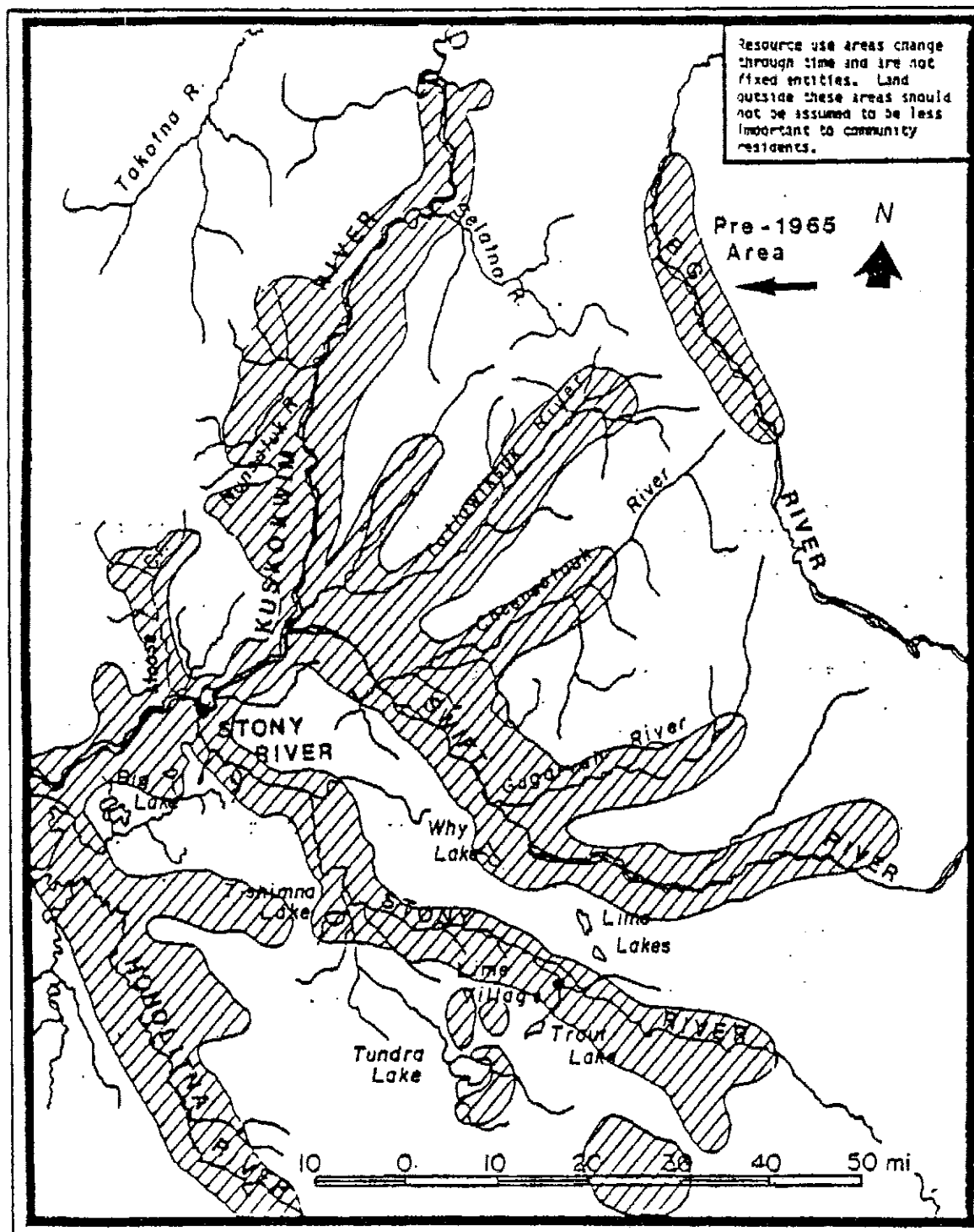


Figure 1.—Areas used for black bear hunting during the lifetimes of Stony River residents as reported in 1983-1984.

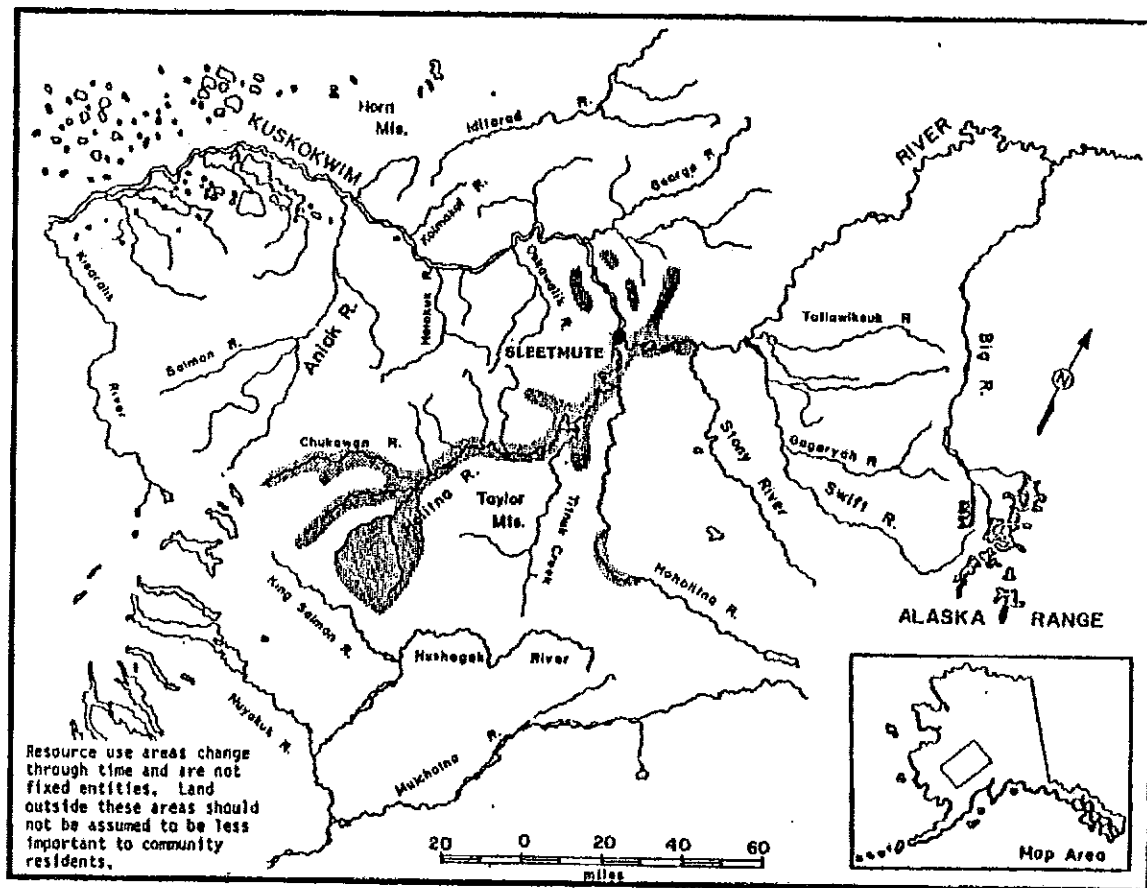


Figure 2.—Areas used by Sleetmute residents for hunting bears prior to the use of snowmachines.



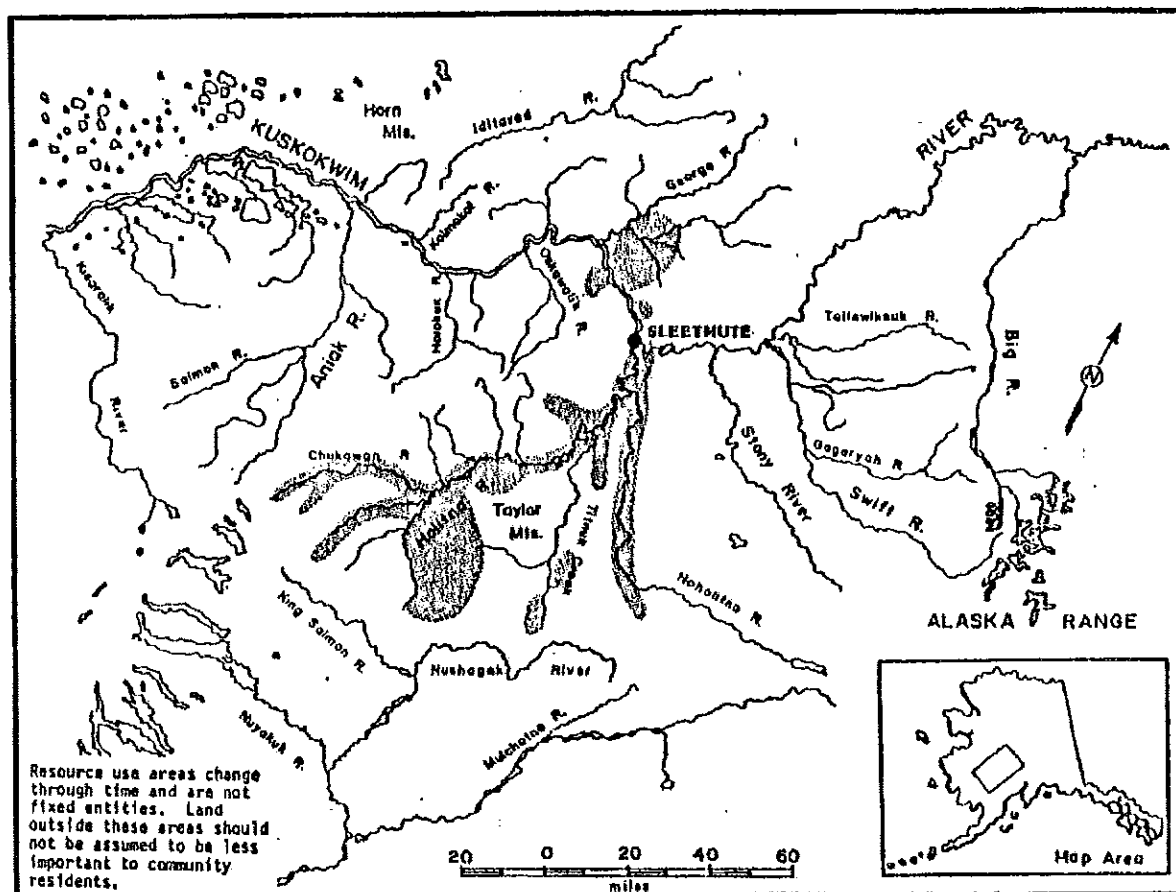


Figure 3.—Areas used by Sleetmute residents for hunting bears since the use of snowmachines, through 1983.

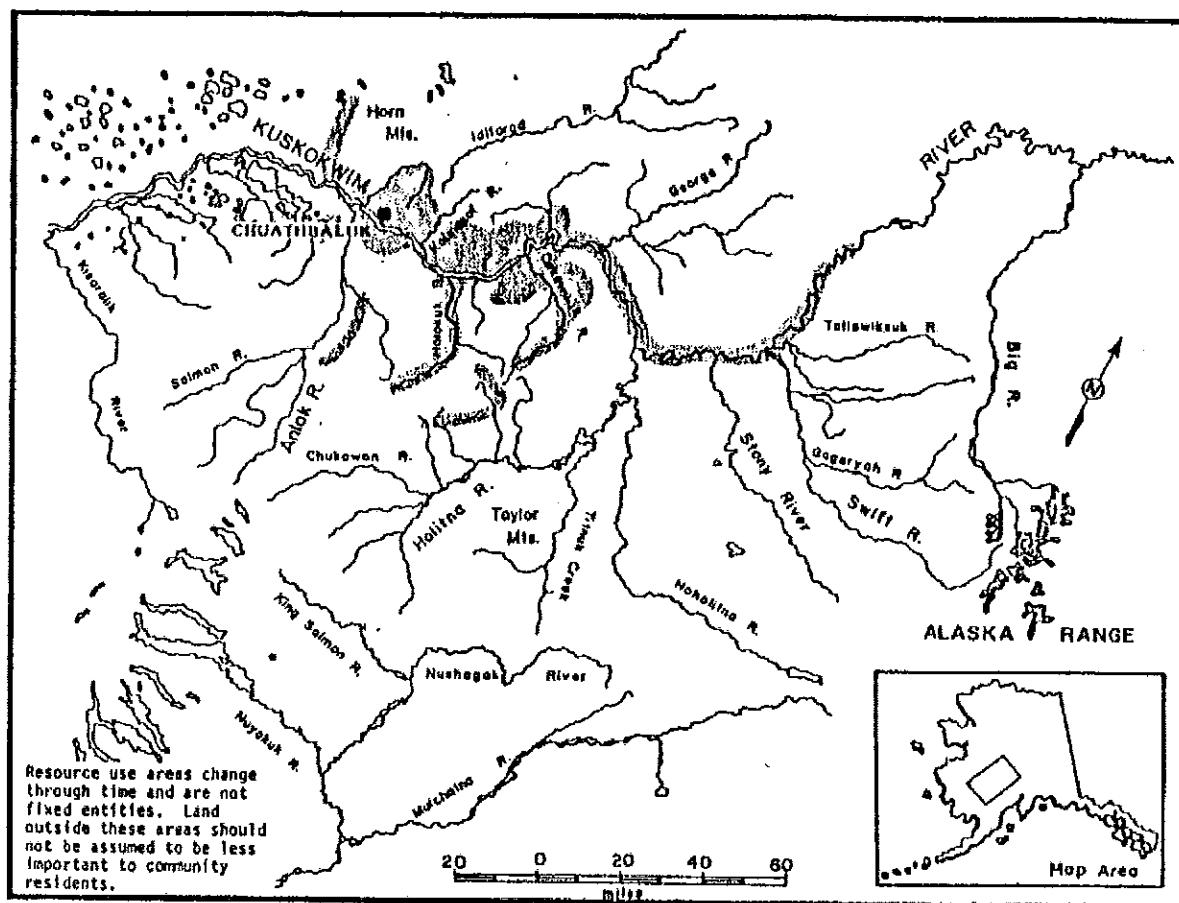


Figure 4.—Areas used by Chuathbaluk residents for hunting bears since moving to Chuathbaluk, through 1983.

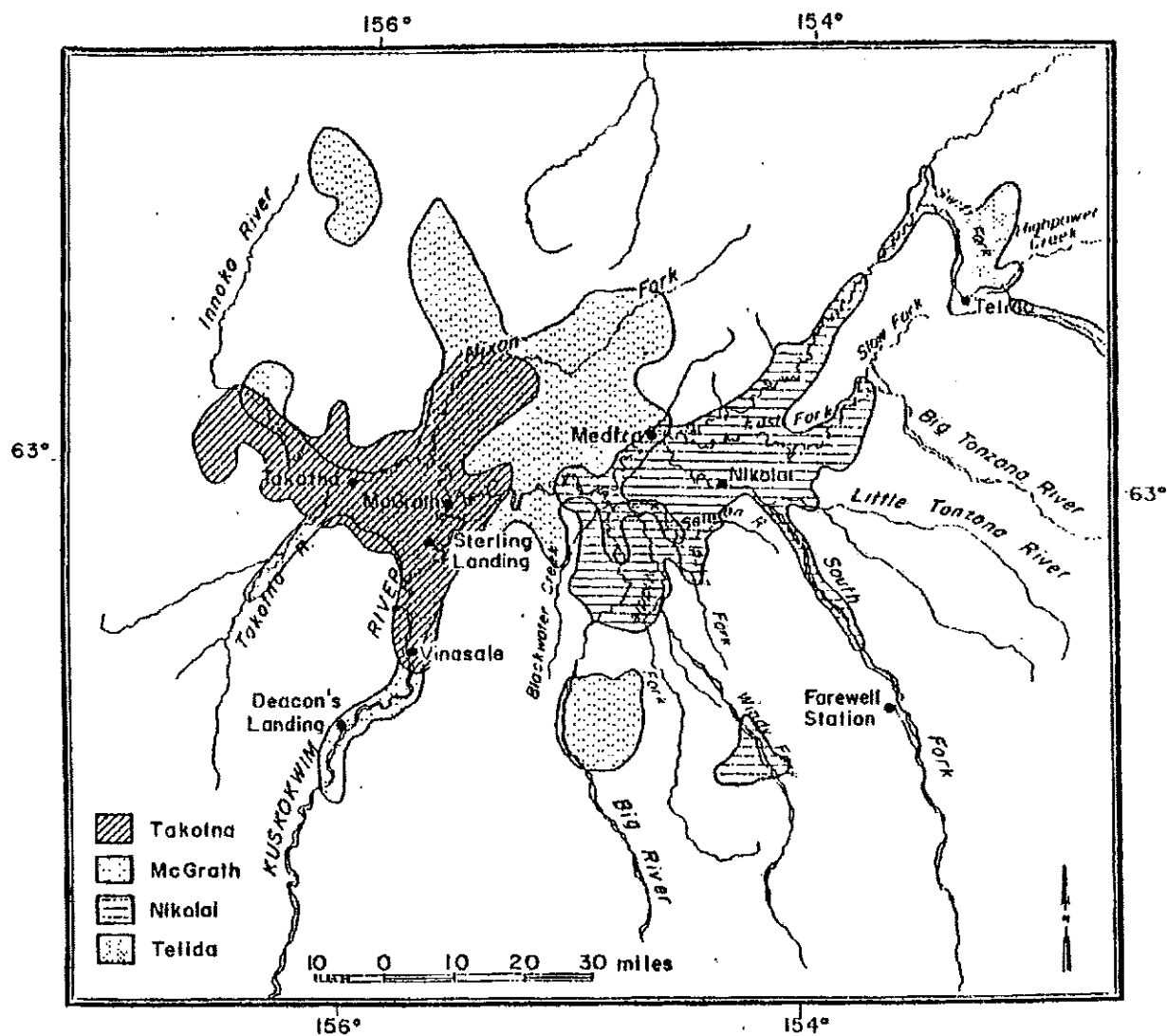


Figure 5.—Areas used by Nikolai, Telida, Takotna, and McGrath black and brown bear hunters, 1967-1983.





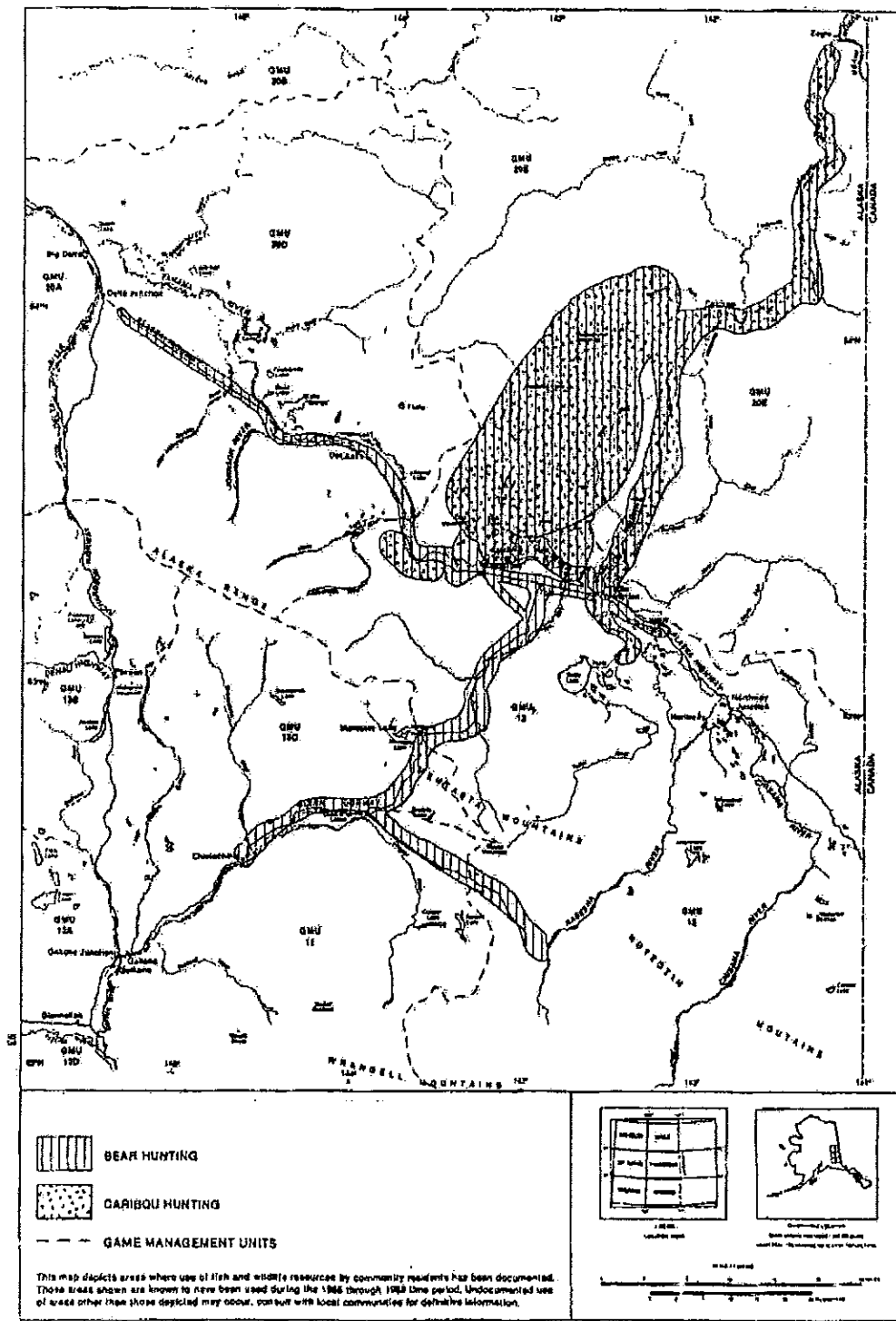


Figure 8.—Tanacross bear and caribou hunting areas, 1968-1988.

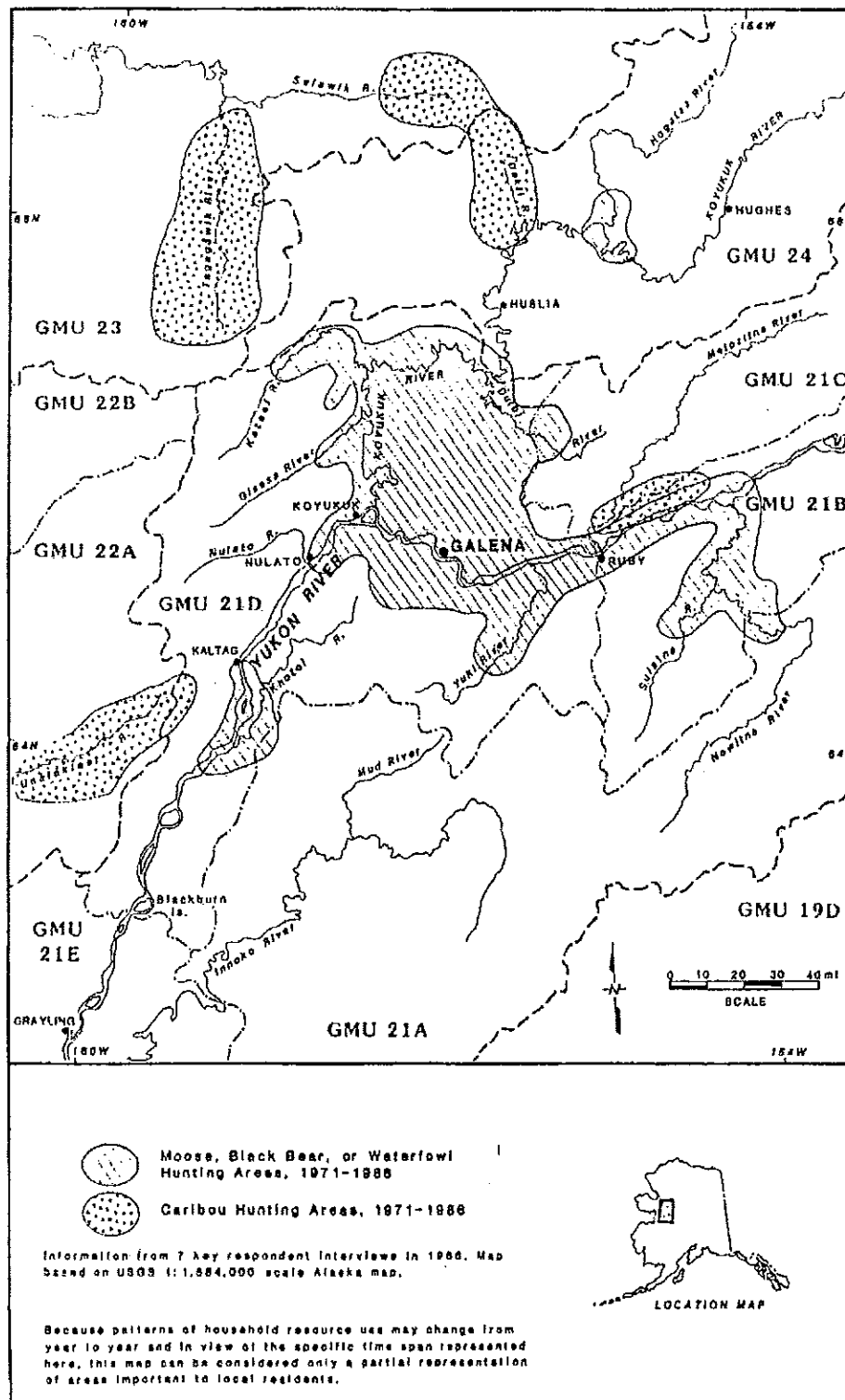


Figure 9.—Galena moose, black bear, waterfowl, and caribou hunting areas, 1971-1986.

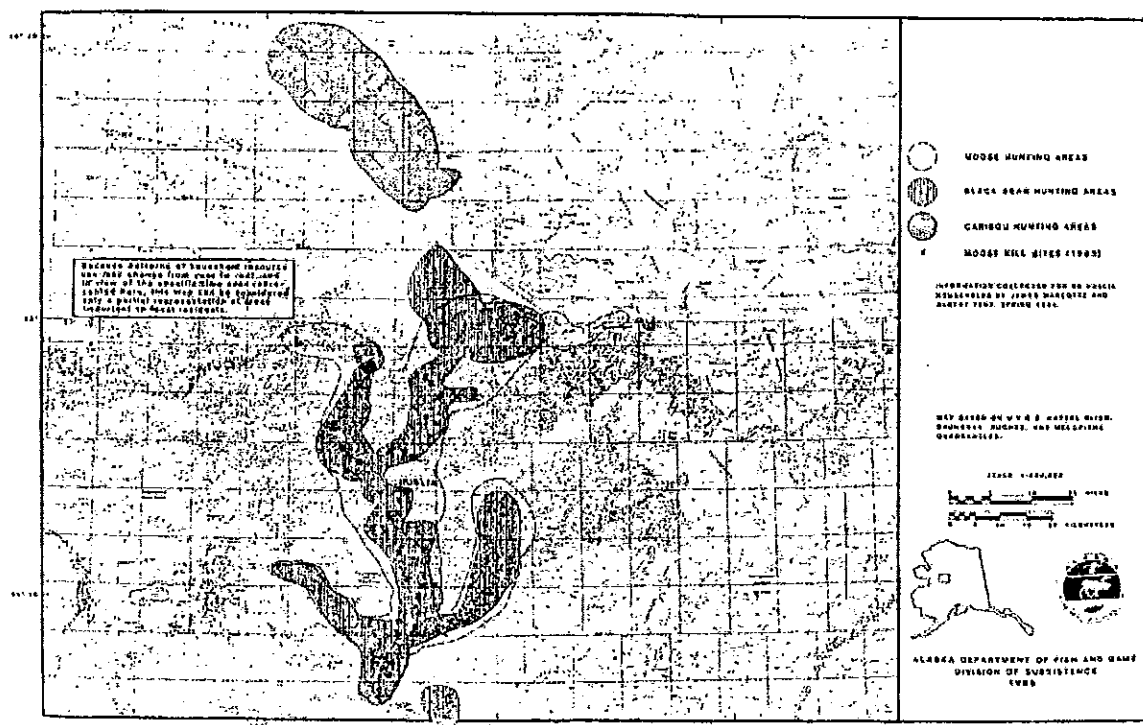


Figure 10.—Huslia moose, black bear, and caribou hunting areas, 1981-1983.



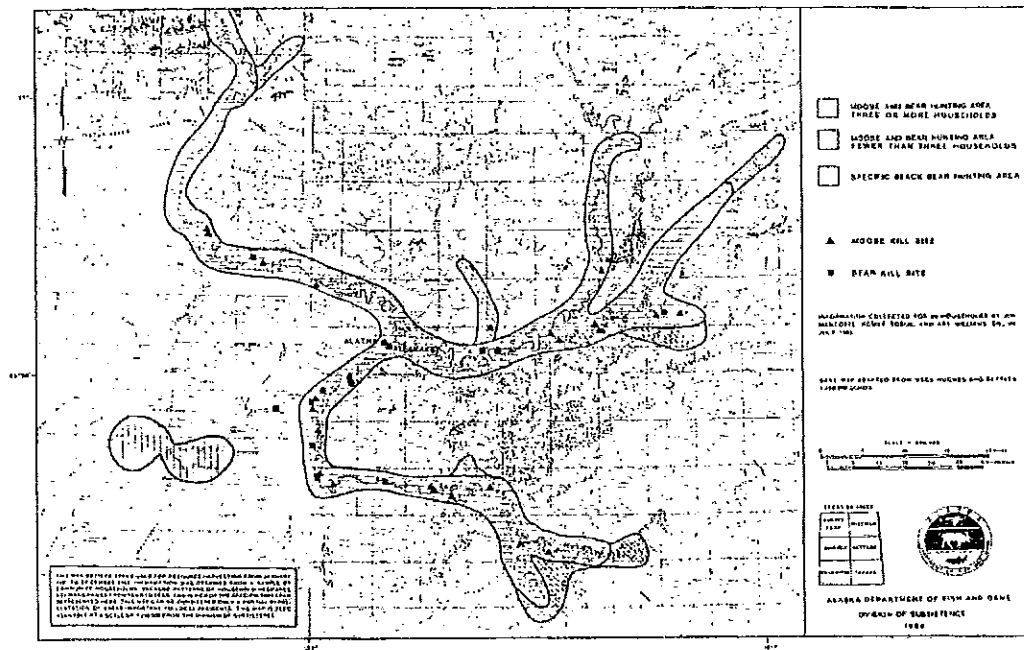


Figure 11.—Areas used by Allakaket and Alatna residents for moose and black bear hunting, January 1981-December 1982.

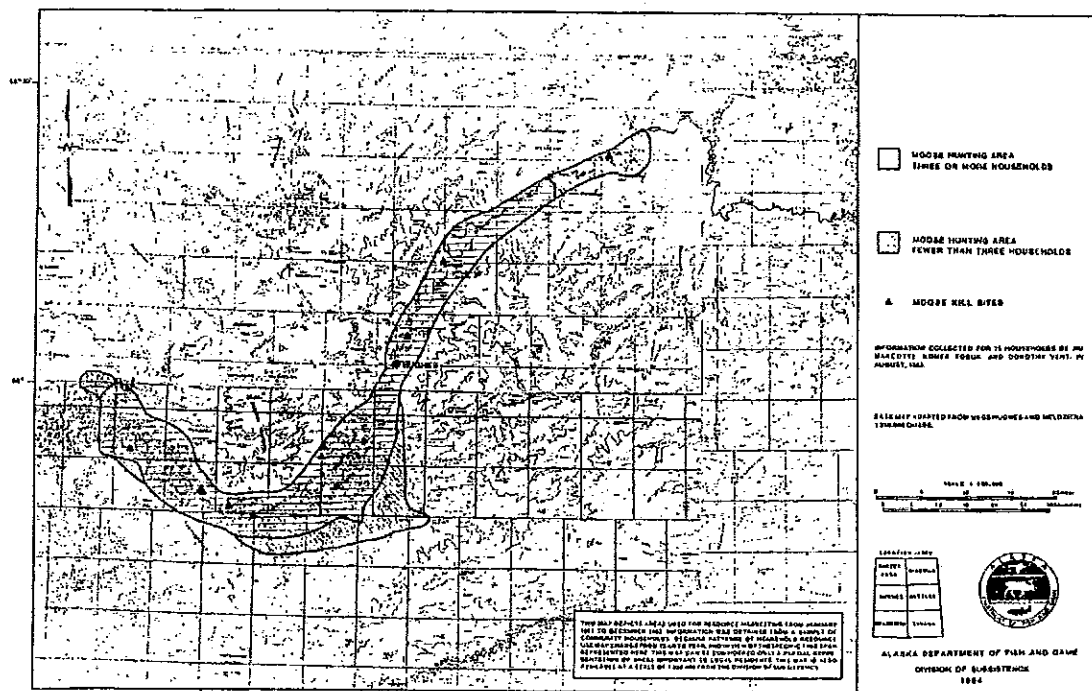


Figure 12.—Areas used by Hughes residents for moose hunting, January 1981-December 1982.

**APPENDIX A.—LITERATURE EXCERPTS PERTAINING TO  
CUSTOMARY AND TRADITIONAL BLACK BEAR HUNTING  
AND USE PATTERNS IN INTERIOR ALASKA**

Following are quotations from selected literature pertaining to customary and traditional black bear hunting and use patterns in Interior Alaska.

**Andersen, D. B., C. J. Utermohle, and L. Brown. 1998. The 1997-98 harvest of moose, caribou, and bear in middle Yukon and Koyukuk river communities, Alaska. Alaska Department of Fish and Game Division of Subsistence Technical Paper No. 245, Juneau. <http://www.subsistence.adfg.state.ak.us/TechPap/tp245.pdf>**

There is significant annual and individual variability in denning dates for bears. However, in interior Alaska, most black bears enter their winter dens by mid-October and emerge from dens by mid April (J. Hechtel, ADF&G, Pers. Comm). This being the case, it is likely that some of the bears harvested in October, and most of the bears taken in November, December, and March, represent bears taken in dens, a practice still common among Koyukon Athabaskan<sup>1</sup> hunters. (Andersen et al. 1998:25)

**Andersen, D. B., C. J. Utermohle, and G. Jennings. 2001. The 1999-2000 harvest of moose, caribou, and bear in ten middle Yukon and Koyukuk river communities. Alaska Department of Fish and Game Division of Subsistence Technical Paper No. 262, Juneau. <http://www.subsistence.adfg.state.ak.us/TechPap/tp262.pdf>**

An estimated total of 68 black bears were taken by hunters in the 10 survey communities (Table 9). Of these, Huslia hunters took 27 bears or 40% of the overall harvest. Black bear harvests consisted of 45 males (67%), 18 females (26%), and 5 black bears of unreported sex (Table 10). While black bear harvests were reported in all months except December, January, and March, the 4-month period August through November accounts for 88% of the black bear harvest (Fig. 4). Bears taken in November and February, and perhaps some of the October harvest, can be attributed to the regional practice of hunting bears in their dens. (Andersen et al. 2001:5)

**Case, M., and L. Halpin. 1990. Contemporary wild resource use patterns in Tanana, Alaska, 1987. Alaska Department of Fish and Game Division of Subsistence Technical Paper No. 178, Juneau.**

Black and brown bear were occasionally hunted in their dens in the late fall, when the animals were still fat. (Case and Halpin 1990:21)

At camps or in town, black bear were harvested if they became nuisances, but generally there was little hunting of black bear at this time of year [April and early May]. (Case and Halpin 1990:33)

Black and brown (or grizzly) bear occur in the Tanana area. Residents noted that black bear were more numerous and visible along the river corridors and bottomlands, proving themselves nuisances at fish camps, while brown bear occurred more often in the uplands, and were considered to be more unpredictable and dangerous than black bear. Athabaskan (sic.) tradition attributes to the bear much spiritual power, and local men challenged themselves in former years by coaxing brown bear out of dens in the spring to hunt them with spears. Certain behaviors that would involve bear, such as

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<sup>1</sup> Delegates representing the member tribes of the Tanana Chiefs Conference passed a resolution regarding the variety of spellings of the term chose "Athabaskan" as the preferred spelling. Various spellings will be found in this report due to the historical nature of the literature.

women in their child-bearing years looking at or consuming bear meat, are traditionally hootlaanee (taboo). Both black and brown bear were hunted locally by those with a taste for the meat and grease, and use for the fur. The latter was used as ruffs and as bedding in trapping cabins. (Case and Halpin 1990:84,87)

Both black and brown bear were hunted primarily in fall, after light snowfall had covered the ground and tracking was feasible, but prior to denning. Fall black bear were preferred for their high fat content, and hunting usually occurred in late October, although some bear hunting coincided with moose hunting somewhat earlier. Some hunting was done in winter by coaxing bears out of their dens, and in spring, especially if meat for dogs was needed. The fur was considered prime in spring by some. Bears were occasionally harvested during summer if they were bothering fishing operations. (Case and Halpin 1990:88)

**Hosley, E. H. 1981. Environment and culture in the Alaska Plateau. Pages 533-545 in Sturtevant, W. C., editor, Handbook of the North American Indians, volume 6: Subarctic. Smithsonian Institution, Washington, D.C.**

[With respect to the Athabascan Indians of the Alaska Plateau region] Snares were used to take a variety of other game [other than caribou], from hares to grizzly bears and Dall sheep. In its several variations – spring pole, tossing pole, and tether snares – the snare was one of the most sophisticated and widely applied hunting devices of the Alaskan Athapaskans. Deadfalls and the bow...were also used to take a variety of animals, and the lance or spear...was widely used to kill denned bears and to stab moose and caribou from a canoe...as they crossed lakes or streams" (Hosley 1981:535).

**McKenna, R. A. 1959. The Upper Tanana Indians. Yale University Department of Anthropology, New Haven.**

Bears were formerly hunted much more than they are today. The combat was largely a hand-to-hand one, and the killing of a bear brought great honor to the hunter. In the summer the animals were brought to bay, often with the aid of dogs, and dispatched by spears; and the Indians maintain that the bravest hunters sometimes killed them with heavy clubs of caribou horn (cf. Weapons). Such hand-to-hand encounters were accepted methods of acquiring prestige among a number of the western tribes, including the Han (Schmitter, 1910:8), Peel River Kutchin (Osgood 1936b:27), Ten'a [Koyukon-speaking people] (Jette 1909:482); Ingalik [Deg Hi'tan, or Deg Xinag-speaking people of Unit 21E] (Osgood 1940:200,207), Tanaina (Osgood 1937:32-33), Eyak (Birket-Smith and de Laguna 1938:100), and Tahtan (Emmons 1911:72). (McKenna 1959:49)

A bear is sometimes lured to his death by the hunter's imitating the call of the raven. The bear responds thinking that some carrion is near and is promptly shot. In the winter, bears are poked from their dens and shot as they emerge. In the old days another interesting method was used when a bear was roused from his winter den. As he broke out through the snow two strong men would pinch him between two poles, and while they held him the other hunters would dispatch him with clubs or spears. This unusual device was also used by the Chipewyan (Birket-Smith 1930:24). (McKenna 1959:49)

**Mishler, C., and W. E. Simeone, editors. 2006. Tanana and Chandalar: The Alaska field journals of Robert A. McKennan. University of Alaska Press, Fairbanks.**

Old Joseph...reports killing a monstrous silver tip 'as big-as a moose.' He poked it out of its winter den and then shot it. The bear pretty nearly got Joseph and was only about ten feet from him when it finally went down. I [Robert A. McKennan] saw the skin and it was a monster. (Mishler and Simeone 2006:100)

**Nelson, R. K. 1973. Hunters of the northern forest: Designs for survival among the Alaskan Kutchin. University of Chicago Press, Chicago.**

Bears are of course seasonal animals, hibernating for several months during the winter. Even during the seasons when they are active and therefore readily hunted there are only certain periods when the Kutchin consider them fit for eating. Black bears are hunted especially during the fall, when they build up their thickest fat. They retire to their dens by late September, but remain fat and tasty through the winter. After they emerge from their dens between mid-April and early May, food is scarce and they become lean. By June they are thin, and the Indians do not hunt them. (Nelson 1973:115-116)

[With respect to bear snaring] It takes little more than the thought of facing a bear at close range with a bow and arrow or spear to make one understand why snares were an important method for killing these animals in aboriginal times. Snares were highly effective and required almost no risk to the hunter. Today's adult Kutchin are all familiar with bear snaring techniques, but if they still catch bears this way they do not consider it a matter of public information. The best time for snaring bears is during the fall, when they are fat and seem to wander along well-defined trails. They could be snared during the spring as well, but no one every mentioned doing this. (Nelson 1973:116-117)

The aboriginal Kutchin made their snares from braided strands of babiche, but in recent times 1/8-inch or 1/4-inch aviation cable was found to be more effective. A homemade cable snare works well unless the bear does not pull it tight and is able to slip it off with its claws. Commercial snares are provided with one-way choking locks and cannot be removed. The human scent is eliminated from a cable snare by boiling it with willow bark or by rubbing it with the tips of spruce boughs. (Nelson 1973:116-117)

The bear snare is usually set in a trail, either a man-made trail intended for winter travel or a natural game trail. It is generally placed where a constriction is created by bushes or trees, so that the snare fills the whole trail, so that the bear is forced to go underneath. A snare set under a log is very effective, and is easily tethered to the log itself. Instead of using a fixed toggle or anchorage, a bear snare is attached to a flexible young tree, to a sizable log, or to a log placed between the crotches of two trees on opposite sides of the trail. In the last case the anchor is a crosspiece which cannot be dragged off, but the bear may simply chew the log in half and escape. The loose log toggle is dragged away into the brush until the bear finally chokes itself. Many a snare has been broken, however, leaving the bear with a snare collar as a memento of this escape. (Nelson 1973:116-117)

A typical snare set for black or grizzly bear would be made along the lines described earlier for moose snares. After finding a suitable place on a trail and selecting a fixed or loose toggle, the Indian tethers his snare so that it hangs in the middle of the pathway. It is opened to a loop varying from 20 to 24 inches in diameter, with its bottom edge 24 to 30 inches above the ground. The cable snare is held open by tying it in several places to slender sticks pushed in the ground beside it. Short pieces of grass or thread are used to make the ties. (Nelson 1973:117)

The trail is usually wider than the snare's loop, and so a few sticks 4 or 5 feet long are set up on either side of it to block the way around. One or more sticks are also pushed into the ground right under the snare, reaching almost to its lower edge, to keep the animal from going under it. (Nelson 1973:117)

[With respect to den hunting] Black bears spend approximately seven months of the year hibernating, and grizzlies occupy their dens for four to five months. It is not surprising that over the centuries northern Athapaskans have amassed great knowledge of the bears' denning habits and have developed effective methods of hunting them in their winter quarters. Northern Athapaskans are masters of den hunting, just as they are expert hunters of moose. The Koyukon Indians point out that these are the two skills in which they surpass their neighbors, the Kobuk Eskimos.

Den hunting must have been very important in the aboriginal past, when it afforded an easy means of killing bears with only a spear or bow and arrow. Rifles have replaced traditional methods, but den hunting is still important. This is especially true among the Koyukon, who live in a country rich in bears. They are highly skilled in den-hunting techniques and enjoy bear meat so much that they put considerable effort into the early winter hunts. Den-killed bears are the fattest and best tasting of all; so it is little wonder that the people want them.

As was noted earlier, black bears go into their dens by late September. The date is variable, depending on the weather. They start working on the dens sometime in September, and occupy them intermittently until really cold weather signals the time for uninterrupted hibernation. Grizzly bears enter their dens much later, in November or December, and may become active during midwinter warm spells. They seem to take hibernation much less seriously than do black bears.

The Koyukon and Kutchin Athapaskans often find bear dens by accident, stumbling onto them when they are traveling through the brush at any time of the year. Once they have discovered a den they check it each fall. The Koyukon usually consider each den a sort of property, 'owned' by the man who discovered it or learned of it from his father. Thus people speak of 'Sam's den,' 'Henry's den,' and so on (G. R. Bane, personal communication). The Chalkyitsik Kutchin do not formalize ownership in this way. Each hunter knows the location of many dens, and they are hunted on a first-come, first-served basis. The only kind of 'ownership' here is established by men who find dens and keep their locations secret, thus ensuring themselves a private potential resource. (Nelson 1973:118)

Each fall or early winter a hunter is likely to go out and check the dens he 'owns' or knows about to see if any are occupied. There are several ways to find previously undiscovered dens or to pinpoint known dens once their general location has been

ascertained. In the early fall, when bears have selected a hibernating site but are still active, they will remain in the immediate area digging up the moss and dirt searching for roots. When an Indian comes across this kind of sign in September, he knows that a bear is probably going to hibernate in that area. This is the best indicator that a denning site is nearby, but of course much searching may be required to find the site itself.

Black bears like to make their dens in places where they get some help from nature. Most dens are under partly overturned trees, whose roots have lifted the earth and moss to create a bear-sized cavern underneath. They also like to dig dens in banks, such as along a steep-sided creek bed. Another good place for denning is a sandy knoll or ridge, where caverns are easily dug out. In general, holes beneath upturned spruce trees seem the most likely den sites, and these are perhaps the easiest kind to locate. One such den that I saw was about 5 feet long, 4 feet wide, and 2 ½ feet high.

A black bear prepares its den by gathering moss and grass from the surrounding areas and lining the interior with it. The entrance will be plugged with the same material later on. Thus, if a hunter comes across a place where the moss and grass are freshly dug up and scraped away it is a sure sign that a bear den is nearby. If such a place is discovered before snow falls the bear is likely to be away foraging, and so the hunter remembers its location and returns later. When snow covers the ground, dens are much harder to find. A small hole usually remains open in the snow above a den, however, and heavy frost covers the surface and any vegetation around its opening. The frost is formed by condensation from the bear's moist breath. (Nelson 1973:119)

Sometimes very special knowledge and alertness leads to the discovery of a bear den. For example, Simon Edwards of Huslia once came upon a set of tracks from a running fox. He followed them a short distance and found a place where the fox had sat down for a while, looking back over its trail. Simon wondered what had frightened it, and why it sat watching back the way it had come, so he followed the trail the opposite way. He found shortly that the fox had encountered a bear den and was frightened away by its occupant. Simon got the bear. (Nelson 1973:119-120)

Another time this same man was walking along on snowshoes and came to a place where a marten track crossed the trail. Thinking he might find the marten in a burrow, he sidetracked and followed it. At one point he noticed that the animal had dug into the snow before moving on, and next to the hole he found a single blade of grass the marten had pulled up onto the snow. The grass was a kind that bears use for bedding in their dens, and so he poked around further and discovered that the marten had dug right into an occupied bear den. The reward for his effort was fat black bear. (Nelson 1973:120)

The Koyukon and Kutchin use different techniques for bear den hunting. The following account of the Koyukon method is based largely on information supplied by G. R. Bane, who has lived among these people for several years.

Having located a denning site, the Koyukon hunter first needs to learn if it is occupied or empty. He finds a long stick which he can shove into the den's opening. It should be curved because bear holes have a tendency to go down, then turn off to one side. He pokes around inside until the stick touches the bear, disturbing it enough so its movement can be felt. If the hunter is not sure, he holds the stick against what he thinks is the bear and its breathing will move the stick back and forth. Listening closely, the



hunter may also hear the animal's breathing. Once he has ascertained that a bear is inside, the Indian puts his stick to another use. He takes note of the exact direction the passageway runs, and just how far in the stick goes before it touches the bear. Then he pulls it out and lays it on the ground or snow. Its end should mark a point right above the animal.

After he knows the bear's location, the hunter finds several large poles or logs and plugs the entrance with them. These may be tied securely in place to be sure that the animal cannot escape. This done, he uses his ax to chop into the roof of the den so he will have an opening through which to shoot. This can be quite a job, since he wants an opening about 6 inches in diameter and may have to chop through 2 feet of frozen ground. If it is too dark in the den, he can toss a handful of snow on the bear so that a white dusting makes it clearly visible. Once he sees it well, the Indian shoots it in the head. In former times he would kill it with a spear. After a bear is killed in its den, a rope is used to pull it up through the entrance. (Nelson 1973:120-121)

The Black River Kutchin use a simpler but more dangerous method of killing bears in their winter dens. Once they are certain a bear is inside, they start poking and jabbing at it with a long stick. Eventually the animal becomes unsettled enough to come out after whatever is tormenting it. When it starts moving up the entryway the hunters stand ready with their rifles. Black bears come out slowly and are either shot in the head when they first emerge or shot in the heart after they get about halfway out.

This method is much simpler than the Koyukon technique. It requires less physical labor, since there are no holes to chop and the dead bear does not have to be dragged out of the hole. And the method can be used when a den is dug into a bank, where there is no way to chop down into it. It does involve a somewhat greater risk, but so long as the animal is a black bear the Kutchin feel that there is no danger. Herbert John said he once knelt on top of a den and killed the emerging bear with his knife. (Nelson 1973:121)

Grizzly bears can be killed by driving them from their winter quarters, but the Indians treat them in a different way. Whereas a black bear comes out slowly, not looking for a fight, the grizzly angrily charges out, trying to get anyone it can. The Kutchin say that grizzlies do not really hibernate; 'Maybe he don't even go to sleep in there.' Thus if a grizzly den is found, the hunter must expect trouble unless he decides to be prudent and leave it alone. One of the first things a Kutchin will do upon locating a den, therefore, is decide whether it belongs to a black bear or a grizzly bear.

Black bear dens have fairly small openings, about 2 feet high and 3 feet wide, whereas grizzly dens are higher and wider by about a foot. There is also a tendency for the black bear to plug the opening of its quarters, or at least narrow its size considerably, whereas grizzly bears leave the opening wide enough to move in and out. A grizzly is also likely to growl when anyone walks near its hole, which black bears apparently never do. (Nelson 1973:121)

The Chalkyitsik Kutchin say that it is often unnecessary to coax a grizzly from its den, because the animal may charge out before a hunter has a chance to do anything. Otherwise, a grizzly would be hunted in much the same way as a black bear. Actually,

the Kutchin fear the grizzly and rarely eat its flesh, and so they seldom take the risk of hunting this animal from its den. (Nelson 1973:121-122)

[With respect to spring and summer hunting] Most bears are killed when encountered by hunters traveling overland during the early spring or going along the river in boats during the summer and fall, or when the animals appear close to an occupied camp or village. Spring is the best season for bears because they still retain some fat from the winter and they are almost completely unafraid of people. In the fall they run if they sense a man nearby.

The black bear usually leaves his hibernating place after the snow disappears in late April. If he is not well fattened when he enters his den, hunger drives him out earlier. During May and June an Indian never goes anywhere without a rifle or shotgun because he knows a bear could turn up unexpectedly. A number of black bears were sighted within 200 yards of Chalkyitsik in the spring of 1970. When the people lived in muskrat-hunting camps during the spring, they could count on frequent visits from bears attracted by the smell of meat. The Indians also know of many areas that are especially good for bears during the spring, and they sometimes go to these places to hunt for them.

Some bears run when they see a snowmachine or dog team, but others will merely stand and watch. The snowmobile hunter can stop and take a shot if he gets within range, but with a dog team things are not so simple. If there is no snow on the lakes, a hunter cruising the ice looking for bears cannot hope to stop his team once the dogs spot an animal. All he can do is let them chase the bear, then jump off the sled and try to shoot before his dogs reach it. When an Indian finds very fresh bear sign but there is not enough snow to track the animal, he may try to attract the animal by using an old technique. He conceals himself and imitates the call of a raven. If the bear is nearby it may think a raven has discovered carrion and come straight to the sound, expecting to find a free meal. (Nelson 1973:122)

Dogs are sometimes used to run down a bear that escapes into the brush and cannot be caught in any other way. They might be released from the team after a bear is spotted, or a hunter might go out from the village on foot, taking his dogs along to help him. In the old days a man would take several dogs when he hunted, and they would course through the woods searching for a scent. When dogs catch up to a black bear it will climb a tree to escape them. Grizzlies stay on the ground and always stop to defend themselves against the biting dogs. If a hunter hears all of his dogs barking at one place, he knows they have found a bear, moose, or porcupine, and he goes quickly to get whatever game they have brought to bay. (Nelson 1973:122-123)

Bears are also hunted from boats during the open-water season. A number are usually taken during the fall moose hunt, when the Indians see them along the river. Some bears are wary enough to run when they see a boat coming, but others are unafraid. Bears are also shot by hunters traveling on the river in spring, often by duck hunters in their little canoes. (Nelson 1973:123)

The Chalkyitsik Kutchin prefer to shoot bears in the heart, perhaps because this was always the best shot with a bow and arrow. Heart shots can be very dangerous, however, because when an animal is hit in the heart it often runs a fair distance before

dying. This could mean a charge at the hunter. The Eskimos and the Koyukon Athapaskans warn against shooting bears in the heart, preferring shoulder or neck shots, which instantly incapacitate the animal. They advise heart shots only if a light rifle such as a .22 is being used, when there is no chance of shattering the animal's shoulder or neck bones.

The Kutchin are aware that neck and head shots are deadly, but correctly point out that these are very small targets. If they are close to a bear, they may shoot for the neck vertebrae or the occipital condyle (where the head and neck join). But only an expert takes these shots, because if they miss the bone the animal is wounded and enraged. If a bear charges or comes straight toward a hunter, he shoots it in the chest between the forelegs, or in the head. The Kutchin prefer heavy rifles, such as .30-06 caliber, for shooting bears. Black bears can be killed with a .22 rifle, but this requires a perfect hit in the occipital condyle or heart. Shotguns afford good protection from bears if they are used a close range and are aimed for the animal's eyes, but they are not good for ordinary hunting. (Nelson 1973:123)

The Koyukon suggest that the best shot for a big bear angles from the shoulder to the hip. This gives maximum crippling potential and is likely to do considerable internal damage. Like the Eskimos, they prefer shoulder, backbone, or neck shots. They advise shooting a black bear in the ear if a .22 rifle is used. Eskimos prefer ear or heart shots with a .22, and have killed both grizzly bears and polar bears in this way.

It is difficult to understand why the Kutchin prefer heart shots over hits which are more deadly and crippling, particularly in view of the dangers involved. They never mention shoulder shots as the correct way to shoot any animal, and apparently consider them poor because they damage some of the meat. Needless to say, Kutchin hunters must always be alert for a charge, especially if they shoot a grizzly. The Indians say that if a bear charges it is best to stand still and aim at the bear, waiting until it is close enough for a certain shot. Both the Kutchin and Koyukon warn that a wounded black bear or grizzly bear may wait in concealment for a hunter to follow, then attack when he comes along. (Nelson 1973:124)

**Nelson, R. K., K. H. Mautner, and G. R. Bane. 1982. Tracks in the wildland: A portrayal of Koyukon and Nunamiut subsistence. University of Alaska Cooperative Park Studies Unit Anthropology and Historic Preservation, Fairbanks.**

Before the introduction of firearms, bears were hunted and killed with spears (pana in Eskimo). It required a particularly brave man, armed only with a spear, to rush an adult bear and then to taunt the bear into attacking. As the bear rose up to lunge on his tormentor, the hunter planted the butt of the spear in the ground and aimed its point so that it would enter near the collar bone of the bear. As the bear fell onto the spear the hunter rolled away, hoping the bear would be unable to continue the attack. Occasionally a party of men would attack a bear, thereby increasing the chance of success. The last known killing of bear with a primitive spear in the Koyukuk Valley area occurred during the late 1800s, according to an elderly Native informant.

The Koyukuk Athabaskans of the past employed a special snaring technique for the harvesting of black bears. This technique was used primarily by men too old to participate in the more active means of taking bears. The bear snare (gaabeelh)

consisted of a rawhide line made from bearded seal skin obtained from Kobuk Eskimos, a willow loop, and a special birch bark basket with seams overlapping in a clockwise pattern.

The snare was placed in a tall straight spruce tree near a well-traveled bear trail. All branches of the spruce tree were cut off of one side flush with the trunk to a height of approximately 12 feet. The birch bark basket full of fish was hung on a branch just above the trimmed area. The rawhide line was secured at one end around the tree trunk under the basket with the other end extending down to an elongated willow loop which held it out horizontally from the trunk. The rawhide line formed a noose of approximately 18 inches in diameter, which was supported by the willow loop. This snare was set approximately 9 feet above the ground.

A bear smelling the fish and seeing the basket hung in the tree would climb up the trimmed area, pushing his head through the willow loop and its supported rawhide noose. As it descended, the noose, tied with a special non-slip knot, would tighten and kill it. Bear snares were set in the latter part of August and were checked each day by the owner. (Nelson et al. 1982:44)

Bear hunting among the Koyukuk Athabaskans is an activity that far transcends the meeting of simple biological needs. To these people the bear is invested with particularly powerful spiritual powers and, when carried out by culturally prescribed methods, the killing, treatment, and consumption of a bear is literally a religious act. Thus it is impossible to accurately describe Koyukuk bear hunting without including supernatural beliefs and prescribed behavior.

According to Native custom, a man planning to hunt a bear must not verbalize his plans. He must also never speak in a boasting manner about his successes in such hunts or in any way demean the bears he has killed. To do so would insult the bears and the hunter would soon lose all of his luck, possibly going for years without finding another bear. According to Koyukon belief, a bear must favor a hunter before it allows him the opportunity to kill it.

In all elements of subsistence, but particularly in bear hunting, luck plays a very large part in the eyes of the Koyukuk Athabaskans (see chapter 12). Without luck, or the proper relationship with the environment, skill is worthless in bear hunting. The bear will reveal himself only to those it favors. One man may walk right by a bear and never see it while another will easily spot it as though drawn to the spot. According to the Koyukuk Athabaskans the difference is summed up in the word 'luck'. (Nelson et al. 1982:45)

The fall bear hunt immediately after freeze-up is the high point of the male seasonal activities. Parties of several men leave the village on foot carrying packs containing their necessary camp gear. Very little food will be taken, as the hunters expect to live off the land. Light tarps are carried in place of bulky tents. The bear hunting party roams the flats and foothills, camping in particularly promising areas and spending two or three days carefully searching the local terrain for bear dens or signs of recent bear activity. (Nelson et al. 1982:45-46)

Bear dens may occur in a variety of places, but Native hunters have learned that bears tend to den on dry well-drained land. The exposed roots of large spruce, thick patches of diamond willow, and sandy banks are particularly favored by bears. As the hunters search, they watch for patches of moss that have been pulled from the earth or tall grass that has been torn away. They also look for crude nests which bears often make near a den they are excavating. All of these signs indicate that there is an occupied den in the nearby vicinity.

Over the years a great many bear dens have been discovered by Koyukuk hunters. When a man discovers a new bear hole and takes a bear from it, it becomes known as his den: that is, 'Joe's bear hole.' Other hunters usually allow the 'owner' of a known bear den the opportunity to be first to check it each fall. The locations of particularly productive bear holes are passed from father to son. As men search for bears in the fall they characteristically check all known bear dens in the vicinity. Usually, a great many old dens must be checked before one is found that is occupied.

As two or more hunters progress separately through an area, they maintain contact by occasionally striking a tree with a stick. It is forbidden to yell back and forth as this will frighten off any bears in the vicinity. The only time one should cry out is when discovering an occupied den.

Once a den is discovered, and its entrance appears to be purposely plugged up, the hunter will sometimes cut a long curving rod to poke back into its tunnel. Most den tunnels curve before the nest area is reached. When the stick strikes something soft the hunter will hold it against the obstruction and try to detect any breathing movement. If the bear is not completely asleep it may rush out of the den, in which case the hunter must be ready to quickly respond and shoot it. If the bear does not leave the den, the hunter will carefully withdraw the rod and lay it on the roof of the end at the same angle it was injected into the hole. The end of the rod should be resting directly over the sleeping bear. (Nelson et al. 1982:46)

With the hibernating bear located, the hunter and his companions will sometimes cut heavy poles and brush and securely plug up the entrance of the den to prevent their prey from escaping. At the spot above the den nest, they will chop and dig a hole perhaps 6 inches in diameter. If enough light can filter through the hole, it may be possible to see the bear and to allow the hunter to shoot it in the head. Otherwise, a rod will be lowered to 'feel' for the bear. Once the bear is located, one hunter may hold the rod steady while another aims and fires his rifle along its length. (Nelson et al. 1982:47)

Often bears can be hunted in their dens by a much simpler method. The hunter simply disturbs the animal until it comes up into the den tunnel or pokes its head out the entrance, and then he shoots it. Or in many cases a hunter looks into the den tunnel, using a flashlight or torch to locate the animal inside. If he can see it clearly, he is able to aim and shoot effectively from the den entrance.

From time to time, one may discover a den occupied by a sow bear and one or two yearling cubs. These cubs are often two-thirds the size of a full adult. It is the obligation of the hunter to take all occupants of a den. If the bears did not wish to be taken they would not have revealed themselves, and to not take them would be an act of disrespect.

The slain bear or bears will be removed from the den and skinned on the spot. The small bone just under the tongue will be discarded. The intestines, heart, lungs, and any bone or other parts not to be taken should be burned to prevent other animals from defiling them. The hide may be kept, although it usually is not. A bear hide continues to have 'life' for three years, and so it cannot be used for clothing or anything else until this time has passed. Only women who have experienced menopause may scrape and tan a bear hide.

If a man or hunting party is some distance from the village and takes several bears, they will cache the meat and pack back only a small percentage of their kill. Later they will use dog teams-and, lately, snowmachines - to retrieve the meat. (Nelson et al. 1982:47)

According to custom, the man who actually kills a bear retains very little of the meat for himself, perhaps only a forearm or hindquarter. The ribs, fat, and other choice cuts are usually frozen and preserved for village potlatches. It is particularly important to have large quantities of bear meat for memorial potlatches. Other parts of the bear such as the neck, forearms, head, and paws are used to host a bear party in honor of the bear that has been killed. Bear parties, by tradition, are attended by males only and are usually held outside the village limits soon after the bear meat has been returned to the community. (Nelson et al. 1982:47-48)

Although bear hunting significantly declines after mid-winter, it does not cease entirely. When traveling overland via snowshoes, dog team, or snowmachine, a Native hunter is always alert to signs of possible bear dens. An air hole often forms in the snow covering a bear den. The snow around the hole is usually stained yellow. If a man sees such a sign, he will dig out the den and harvest its occupant. As a man travels along a trail with his dog team he notes the dogs' behavior. The writer [Ray Bane] drove his team of dogs along a well-packed trail daily for over a week and noticed the team sniffing the air and glancing off into a patch of birch trees each time a certain point was passed. This observation was discussed with a local Native hunter who then spent several days searching around the area until he found and killed a bear in a snow-concealed den. Small predators, such as marten, weasels, and foxes, are often drawn to a bear hole by its odor and may walk up to it and circle it out of curiosity. A hunter, seeing where such creatures have deviated from their general path of travel and circled such a spot, will suspect a bear den. As mentioned earlier, to find a bear den obligates the hunter to harvest its occupants. (Nelson et al. 1982:48)<sup>2</sup>

Summer bear harvest usually consists of simple chance encounters with bears while carrying out other activities such as checking fish nets, cutting wood, or traveling by boat. There seems to be less emphasis on the taking of bears at this time. (Nelson et al. 1982:48)

[T]he brown bear is the one animal that is killed both for use as food and for self protection, being considered too dangerous to have in areas where people regularly

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<sup>2</sup> "It has been noted that the Koyukuk people are particularly conservation-conscious in the harvest of most furbearers, particularly those species which are non-migratory. Beaver are considered to be especially vulnerable to over-harvest, and most trappers will pull their sets from a beaver house after two adults have been taken. Wolf, wolverine, and fox are considered to be less affected by trapping, and little effort is made to limit the take of these predators. The custom of recognized traplines encourages men to practice conservation so as to maintain a sustained yield from their territories" (Nelson et al. 1982:60).

camp or travel. It is also disliked for its habit of killing black bears in their dens. (Nelson et al. 1982:227)

If a bear is taken from its den, the men eat certain parts together and save others for a later 'bear party' outside the village. Some highly preferred portions are set aside for village potlatch feasts. The successful hunter keeps only a small amount for use in his own household. Sometimes the successful hunter in a group keeps nothing at all for himself. (cf. Loyens 1966:41; cited in Nelson et al. 1982:235)

The Koyukon have greatly elaborated their knowledge of bears, which in some past times were the only big game animal available to them. Their fund of information on bear denning is especially remarkable. This knowledge is used to locate dens by recognizing subtle clues, to learn if dens are occupied and by what sort of animal, and to succeed in taking these animals when they are found.

Expert hunters are able to find dens by detecting bear tracks in the frozen moss beneath as much as 2 feet of undisturbed snow, and by spotting miniscule disturbances, such as incongruous bits of grass or cracked twigs. If a den is located (and this may require days of searching), there are equally sophisticated means of investigating its occupant and eventually making a kill. Careful studies are made of the den and its surroundings, but sometime the hunter must enter an inhabited den to accomplish his task. By putting his head just inside a den's entrance and listening carefully, he may hear the bear licking its chops or breathing, or he may detect its heartbeat growing steadily louder and faster. In the latter case, he knows that he has found a young animal, its pounding heart registering fear. Older bears do not react this way because they are unafraid. Knowing that young animals are more likely to flee a den after disturbance, hunters keep a close watch on the entrance until the hunt is over. (Nelson et al. 1982:246)

Some other rules for proper behavior toward animals can be exemplified by listing a few of the regulations for the treatment of bears. There are rules for proper butchering: a bear's eyes are always removed and the eyeballs slit so that it will not see if the hunter errs in following any taboos; rules for the proper care of the meat: dogs must never eat bear meat because it is disrespectful and because it would make the dogs mean; and the rules governing who eats the animal or parts of it: bear brains are never eaten, because it would cause a person to anger easily. Women cannot eat from the front quarters of black bear, and are completely forbidden to eat brown bear meat.

There are also rules for the disposing of unusable portions: edible parts of the animals must be used, to begin with, because waste is profoundly disrespectful. Bear bones should be burned or hung in a tree out in the woods. There are rules for using hides: bear skins should never be stepped on or over by women and are often disposed of in the woods to prevent all female contact. Another set of rules pertain to a 'bear party' which is similar to a funeral and must be held by men, outside the village, whenever these animals are taken. Bear meat should be safely cached for several days or weeks so that it is fully and completely dead before being brought to a settlement (living things die slowly, not at the moment when normal life processes stop). Killed bears should never be dragged over the ground, or pulled from dens with snowmachines. (Nelson et al. 1982:260)

Spirit vengeance can be severe. For relatively minor offenses, bears become aloof or somehow invisible to the hunter. One man did not kill a single bear for 12 years following an infraction, another hunted unsuccessfully for 20 years. Still another man who kicked a bear neck across the floor and spoke badly of the animal was mauled to death soon afterward. (Nelson et al. 1982:260-261)

Taboos are often tested individually to see if they must be followed, although this is usually limited to the less spiritually powerful animals. Six men who were bear hunting together decided to test the taboo on eating a certain part of the bear's stomach. Elders warned that if young men ate this organ their moccasins would be slippery as they trekked through the woods in search of dens. Three young men ate the tabooed part, and three abstained. Next day the three violators had a terrible time, slipping and falling repeatedly, while the others had no trouble at all. Seeing that the taboo was right, they carefully followed it thereafter. (Nelson et al. 1982:263)

Implements such as sleds, fishnets, rifles, or snowshoes are also infused with luck. A man lamented to me the troubles he had with one of his rifles, saying that it would shoot a bear coming out of a den, at point blank range, but it only made a wound despite his high caliber rating. Another gun had to be used to make the kill. None of these problems were caused by malfunctioning, he explained, the gun was simply 'out of luck.' He said he suspected a young woman had stepped over it, rendering it useless. (Nelson et al. 1982:265)

Koyukuk people also know the landscape through a profusion of names. Some of these names are used primarily for location, as we use street signs. Others have special meanings derived from personal or traditional history. Hundreds of bear dens, for example, are known throughout Koyukon country, and many of these have special names. All of the dens that have been known for some time have personal associations, and when hunters stop to check them each fall, they often recall past experiences there. Some of these stories go back even to previous generations, and so the dens have become much more than just hunting places. (Nelson et al. 1982:299)

The first 3 or 4 feet of the intestines [of black bears or brown bears] are discarded, and the rest is turned inside-out so the fat is inside, then it is placed on a fire to roast. The result is a sausage-like delicacy. Only hibernating bears are used this way, because their intestines are empty. (Nelson et al. 1982:350)

**Osgood, C. 1959. Ingalik mental culture. Yale University Department of Anthropology, New Haven.**

**The Man Who Slept in a Bear Hole:** Once a man went out in the fall just before the first snow to hunt for a bear. The weather was cold. He found a bear hole at last, killing the bear and skinning it. Then because it was too cold he crawled into the bear hole which seemed like a nice place to stay overnight. He piled grass over the opening to keep out the air and went to sleep. When he woke up from time to time, he turned over. At last he woke up, but he felt strange. The flesh of his face was drawn tightly over his cheekbones. He listened a moment and could hear flies at the door. It was spring. 'Did I sleep all winter?' he asked himself. Then he went out. He found the remnants of his bear meat with flies all over it. He felt very weak and it took him a long time to walk home. The people were surprised to see him. They had hunted for him all winter.



Someone asked, 'Didn't your father tell you not to sleep in a bear hole?' That is why people do not go into bear holes. (Osgood 1959:146)

**Osgood, C. 1971. The Han Indians: A compilation of ethnographic and historical data on the Alaska-Yukon boundary area. Yale University Department of Anthropology, New Haven.**

Schmitter (1910:10) writes of the Han: 'One of their most useful weapons, the spear, was made by binding a hunting knife of caribou-horn to the end of a pole about 6 feet long.' This is an almost identical description of the lance described by Jones (1872:323). Jonathan Wood at Moosehide spoke of a very similar weapon which he called a *t'at*, and said that it consisted of a birch pole five to six feet long, and of a convenient diameter to hold. At one end was a point made of caribou horn which he guessed to be about eight inches long, but he was not sure. This implement served to attack a bear that had been aroused from its den. Walter also knew of such a lance.

Then he [Wilson in Schwatka 1900] says of the Han of Eagle: 'In Winter these Indians leave the river and scatter out in different directions in quest of game, principally moose and caribou, which, in reality, provide them with their only food. Besides these, however, great numbers of bears are found, particularly the black variety; also deer, mountain sheep, and rabbits. (Osgood 1971:103)

Black bears, their brown variation, and grizzlies are reported to have been killed and eaten in the Han area. Schmitter (1910:8) provides a clear account of the classic Athapaskan technique of killing bears with a lance. 'A pike or spear is nearly always used in hunting bears. The hunter attracts the bear by making a raven-like noise, causing the bear, as the Indians say, to think the raven has discovered a dead moose. They also further explain that the big bears only would come, as the little bears would not know what the croaking meant. As the bear approaches the Indian holds the spear in position, facing the bear as it draws near to him, and as the bear springs the Indian sticks the spear into its throat at the top of the breast-bone, at the same time shoving the handle of the pole into the ground, thus causing the bear to spear himself with his own weight. Sometimes three men hunt in this manner, two of them attacking the bear on either side as it rushed forward. The meat of the young bear killed in the fall, when they feed on huckleberries, is considered a great luxury'. (Osgood 1971:110 citing Schmitter 1910:8)

**VanStone, J. W. 1979. Ingalik contact ecology: an ethnohistory of the lower-middle Yukon, 1790-1935. Field Museum of Natural History, Fieldiana, Anthropology, Chicago.**

[With respect to the Anvik-Shageluk area of Unit 21] Black bears were taken in snares or with deadfalls during the summer. (VanStone 1979:28)

Division of Wildlife Conservation  
Wolf Pup Protocols

The Alaska Department of Fish & Game (ADF&G) implemented predator control during spring 2008 to increase early calf survival and restore the declining Southern Alaska Peninsula (SAP) caribou herd. Over the last six years, this herd had dropped from 4,100 to approximately 600 animals. During the last two years, calf survival through the fall was less than one percent. In response to this extreme situation, the department implemented a targeted wolf control program during the 2008 calving season. This program was the first in many years to be conducted by department staff using helicopters and the first to be conducted in the spring during the wolf denning season. Twenty-eight wolves were taken, including 14 pups orphaned when their mothers were killed. In response to public concern about the handling and fate of the wolf pups and in an effort to mitigate those concerns in future control efforts whenever logistically feasible to humanely do so, the department has implemented the following protocols. These protocols will apply to all wolf control operations implemented directly by ADF&G staff during spring calving and pupping seasons. For the purposes of these protocols, pups are considered to be wolves that are young of the year and at or in the immediate vicinity of den sites.

1. When spring wolf control operations are being contemplated, involved Division of Wildlife Conservation (DWC) staff will contact DWC's Permit Section (Permit Section) staff at headquarters to inform them of the possible need for orphaned pup placement.
2. Upon notification of a contemplated spring control operation, Permit Section staff will investigate and evaluate placement options for orphaned wolf pups as follows:
  - a. Investigate placement options:
    - i. Check availability of placements at Alaska zoos.
    - ii. Request that the Alaska Zoo (AZ) and Alaska Wildlife Conservation Center (AWCC) make inquiries on ADF&G's behalf to zoos in other states.
    - iii. Contact the Canid Taxon Advisory Group of the Association of Zoos and Aquariums for additional placement options.
  - b. Solicit permit applications from all interested and qualifying zoos and compile and maintain a list of those whose applications are approved, along with the number of pups each facility is authorized to receive.
  - c. Contact listed zoos to confirm interest and space availability.
  - d. Confirm with the AZ and AWCC that they can serve as temporary holding facilities for wolf pups.
3. DWC staff will provide Permit Section staff with copies of proposed spring control plans submitted for Board of Game (BOG) consideration.
4. Actions taken by the BOG on spring control plans will be related to Permit Section staff as soon as outcomes are known.
5. Prior to initiation of spring control activities, Permit Section staff will notify the appropriate DWC staff of the number of wolf pups that can be placed and develop

plans for dealing with logistics of transferring and transporting pups from the field to holding facilities.

6. Involved DWC field staff will make every effort to humanely live capture and transfer orphaned pups to authorized facilities rather than euthanize them in the field, as long as such efforts will not interfere with their other duties, activities, and responsibilities.
7. If no placement facilities are available (or if more orphaned pups are encountered than facilities can accommodate), and if orphaned pups can be humanely retrieved, they will be euthanized in the field using the protocols recommended by the American Veterinary Medical Association.
8. Pups encountered away from dens during aerial control activities will be treated in the same manner as adults.

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Doug Larsen, Director

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Date

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## DIVISION OF HABITAT

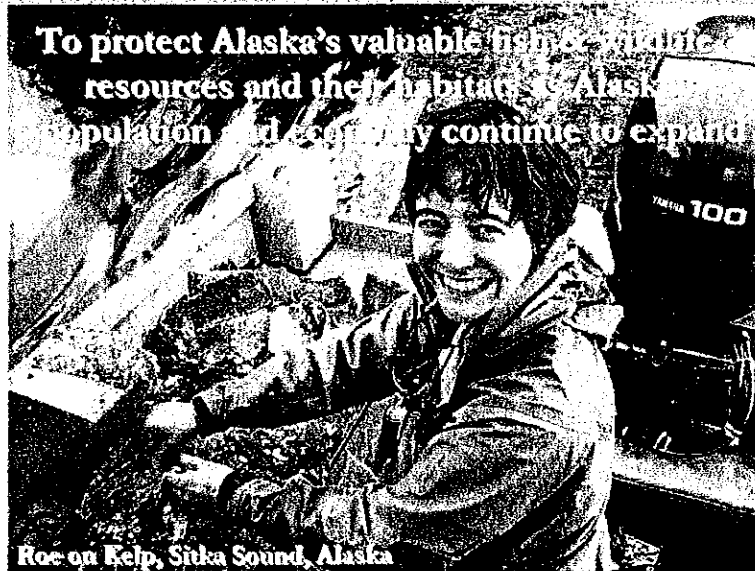


Kerry Howard, Director

<http://www.habitat.adfg.alaska.gov/>

## Mission Statement

To protect Alaska's valuable fish & wildlife resources and their habitats so Alaska's population and economy continue to expand



Roe on Kelp, Sitka Sound, Alaska

## Habitat Statutory Authorities

© AS 16.05.841  
Fish Passage

© AS 16.05.871  
Fish Habitat



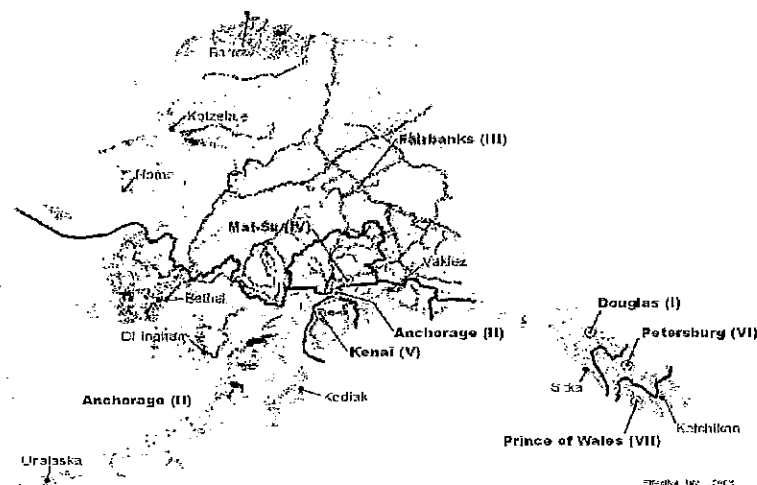
Sockeye Salmon, Steep Creek, Juneau, Alaska

## Habitat Workload Priorities



- ◆ Anadromous Waters Catalog
- ◆ Title 16 Fish Habitat and Special Area Permits
- ◆ Alaska Coastal Management Consistency Reviews
  - ◆ Emphasis on Title 16 Permits or important habitat issues not addressed by other authorities
- ◆ Forest Resources and Practices Act implementation
- ◆ Large Projects of importance to the State
- ◆ Special Area Planning, and
- ◆ Research to aid in permitting decisions

## Habitat Offices



Habitat decisions are made  
uniformly Statewide

## *Catalog of Waters Important for Spawning, Rearing, or Migration of Anadromous Fishes*



Caroline Creek, Juneau, Alaska



## Catalog & Atlas Updates

### Yearly Updates to 5 AAC 95.011

- ▣ Nominations
- ▣ Additions
- ▣ Deletions
- ▣ Definitions



### Historical Database

- ▣ Define the extent of .871 permitting authority

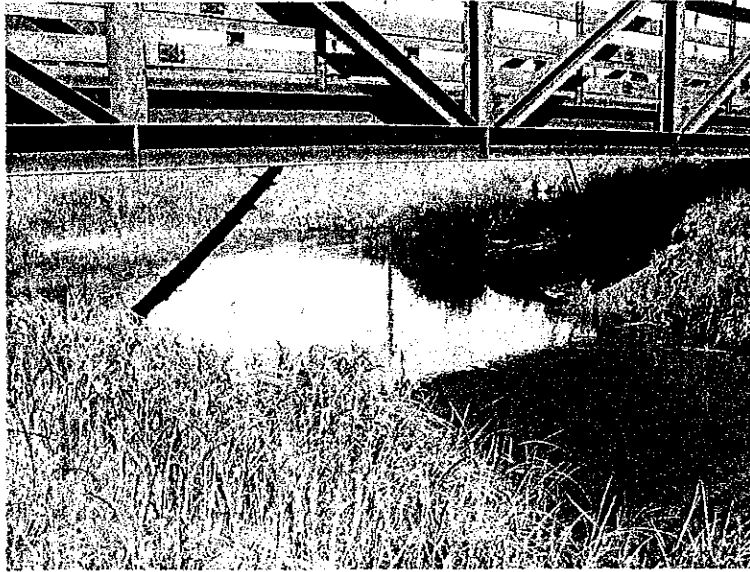
Airport Ditch,  
Gustavus, Alaska

## How do we use the Catalog?

The central map shows a river system with various points of interest marked. Surrounding the map are several small inset images showing different types of land use and activities, each with a caption:

- Top Left:** Logging and agriculture, freshwater reservoir
- Top Right:** Stream cataloging survey
- Middle Left:** Logging and agriculture, known mine
- Middle Right:** Stream cataloging survey
- Bottom Left:** Logging and agriculture, known mine
- Bottom Right:** Stream cataloging survey

## Title 16 Fish Habitat Permits



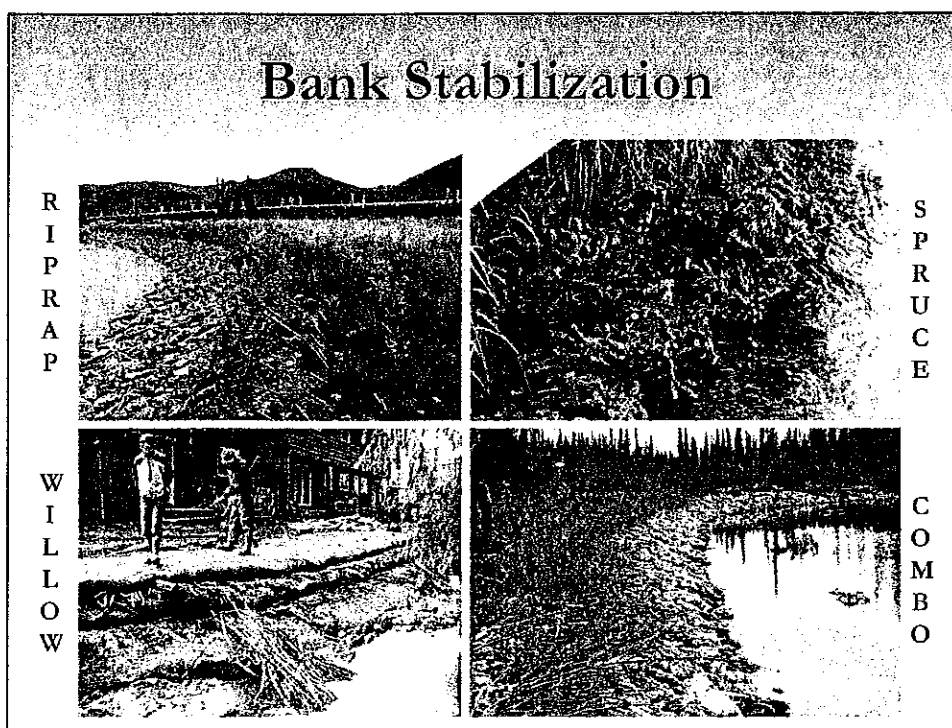
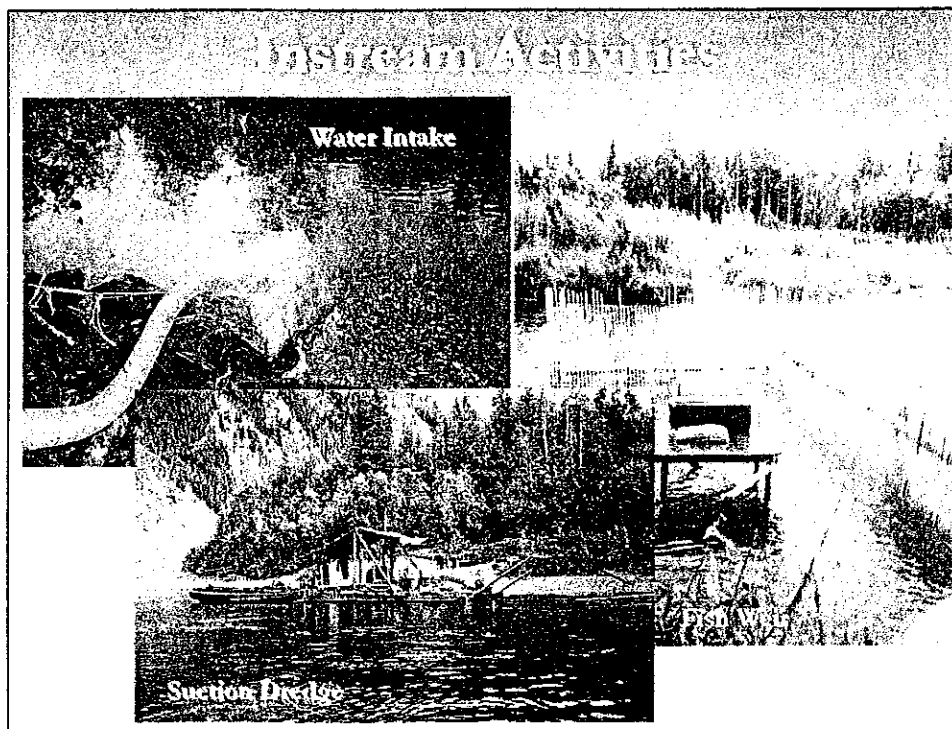
Multi-use trail bridge, Tidewater Slough, Girdwood, Alaska

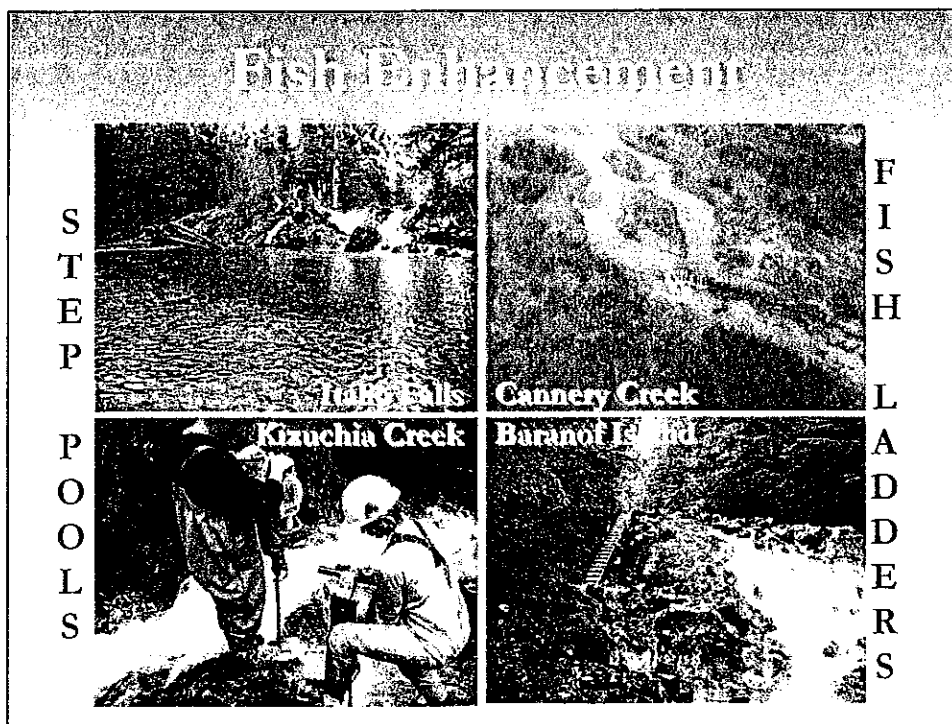
## Protect Anadromous Fish Habitat

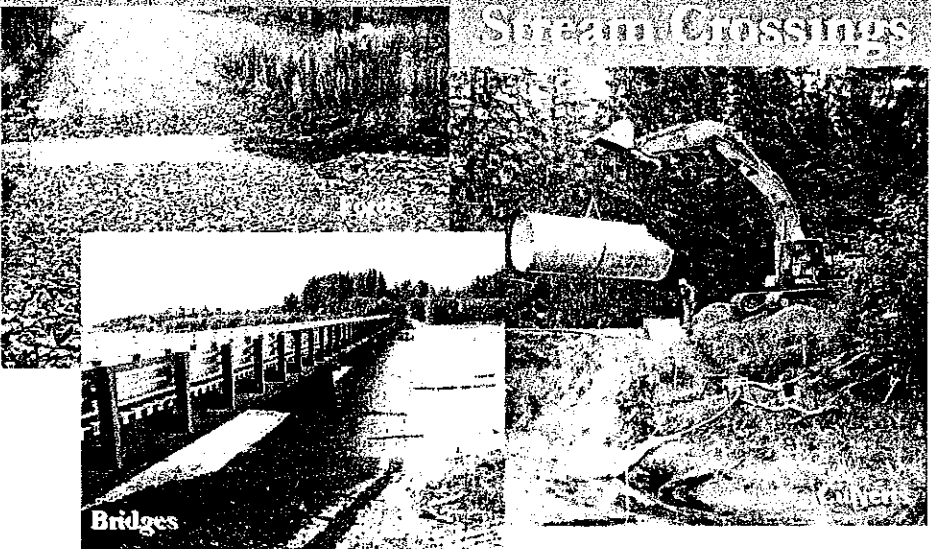


Unauthorized Activities









- Most activities that require a T16 Fish Habitat Permit are generally consistent with the Alaska Coastal Management Program

## Special Area Permitting

- A Special Area Permit is required for many land and water use activities conducted in one of these legislatively designated areas.



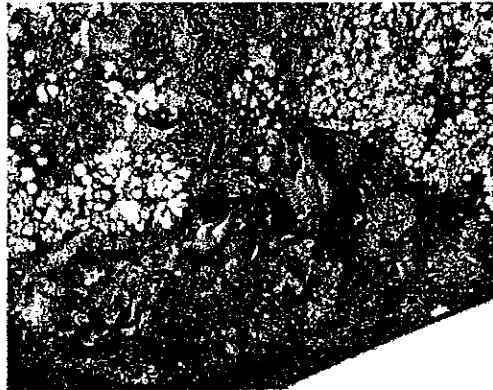
Mendenhall Wetlands State Game Refuge

RC4

## Alaska Coastal Management Program Consistency Review

• Any combination of these are reviewed for consistency with ACMP State Standards

- State permitted activities
- Federally permitted activities
- Federal Actions



Regulatory Standards that address an array of uses and activities

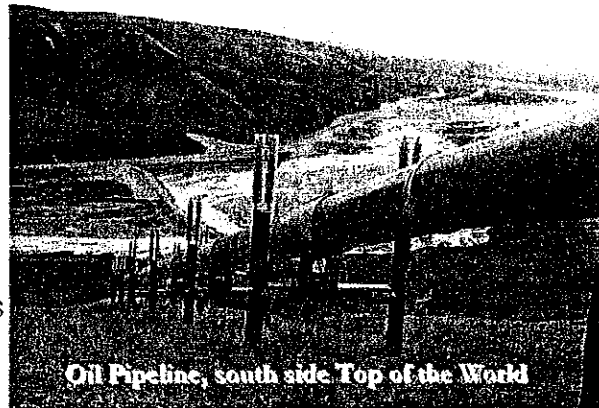


Pump Truck on the North Slope

- Coastal Development
- Coastal Access
- Air, Land & Water Quality
- Natural Hazard Areas
- Historic, Prehistoric, & Archeological Resources

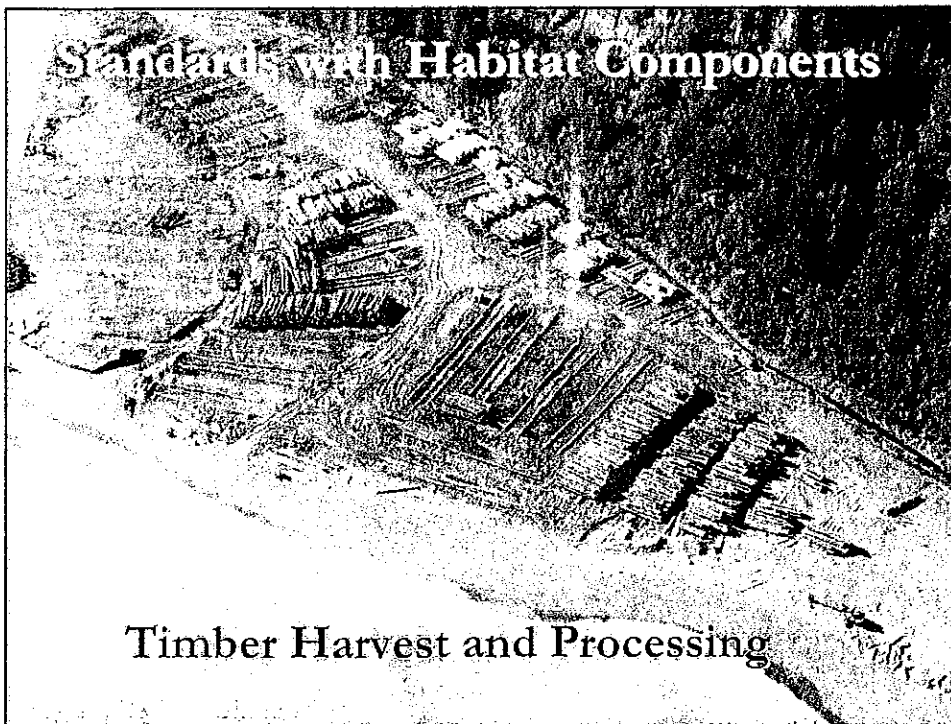
## Standards with Habitat Components

- Energy Facilities
- Utility Routes and Facilities
- Sand and Gravel Extraction
- Transportation routes and facilities



Oil Pipeline, south side Top of the World

## Standards with Habitat Components



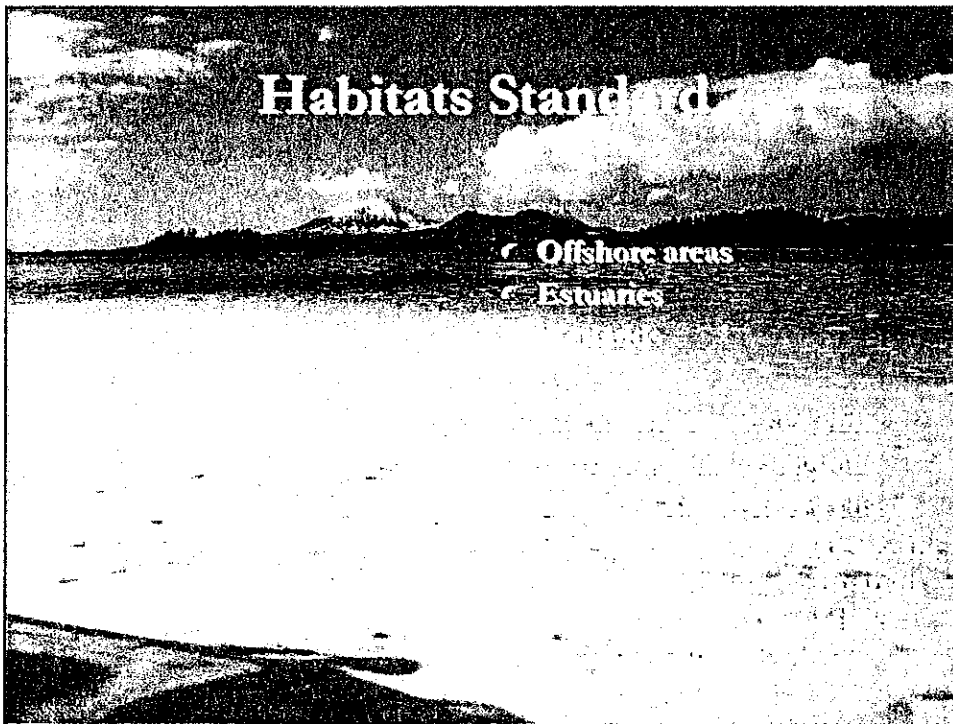
Timber Harvest and Processing

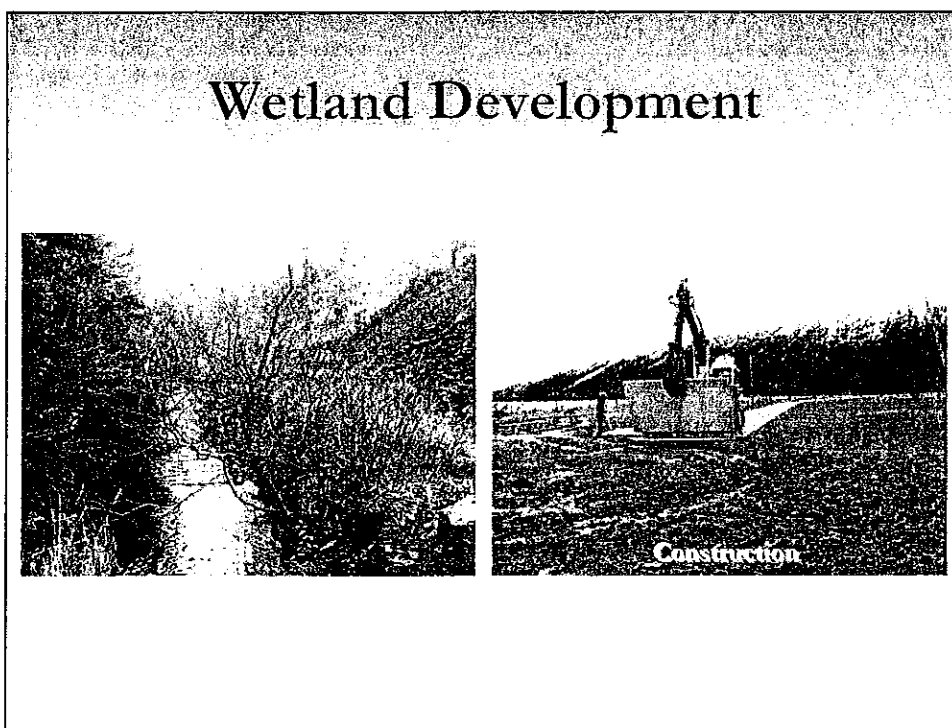
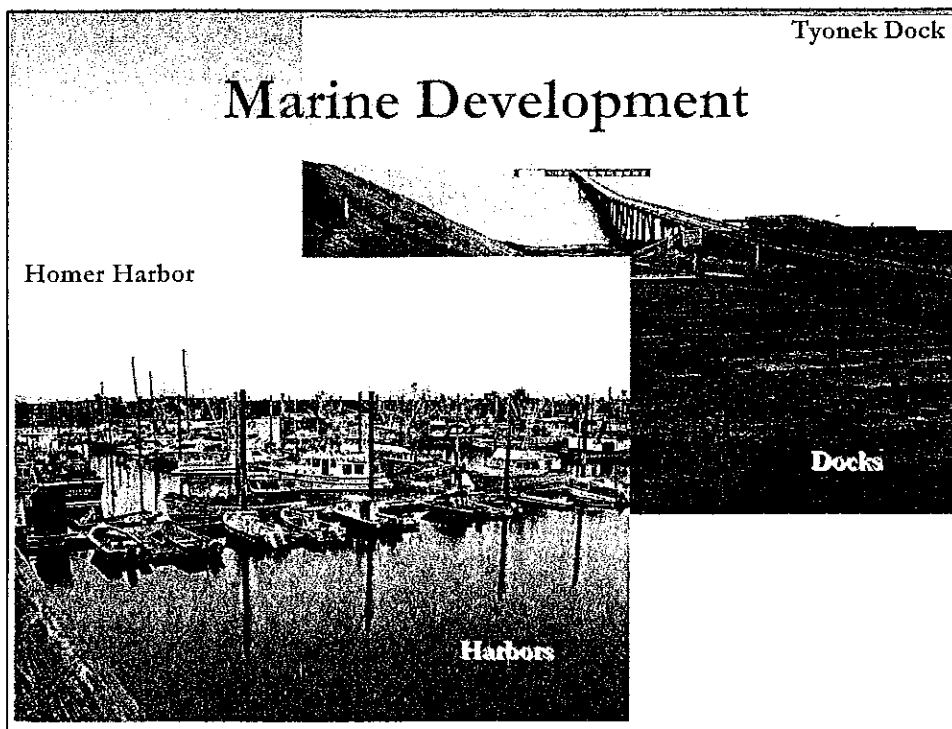
## Title 16 plus FRPA



Jackie Timothy and John Hillman ID Fish near Hoonah, Alaska

## Habitats Standard



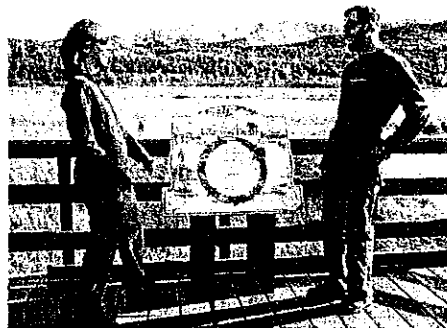


## Large Projects of Importance to the State



## Special Area Planning

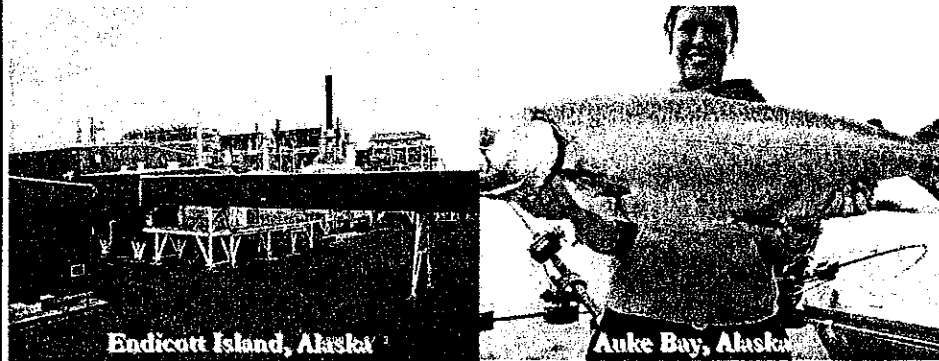
- As mentioned before, there are 32 areas statewide. A plan is developed for each, which provides further detail on how the area is to be managed.
- Plans underway are Izembek and the Bristol Bay CHAs



Potter Marsh, Anchorage Coastal Wildlife Refuge



## Alaska State Constitution Article VIII, Natural Resources



- Section 1 encourages the development of land and utilization of resources recognizing the collective interests of the public

## Alaska State Constitution Article VIII, Natural Resources



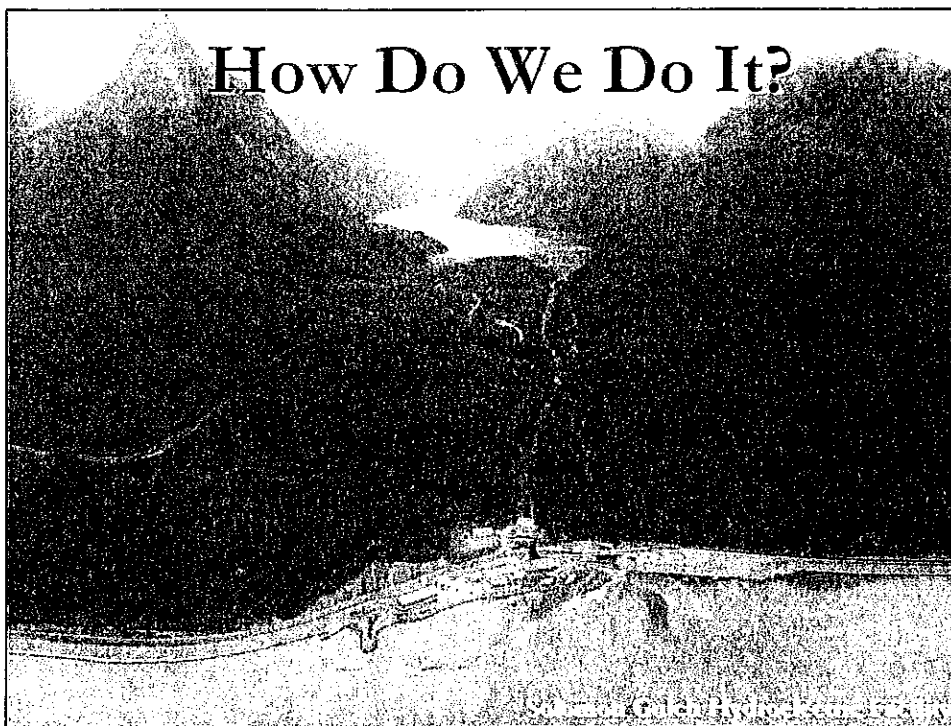
- ~ In addition to development and utilization, conservation is a resource management objective in Section 2

## Alaska State Constitution Article VIII, Natural Resources

- ✓ Habitat Biologists are tasked to find the often delicate balance between resource development and resource protection



## How Do We Do It?



RC4

## Get Involved Early in Process

- Assist applicants during project planning phases to identify and resolve issues up front



Duffield Peninsula Habitat Enhancement



## Solve Problems During Review

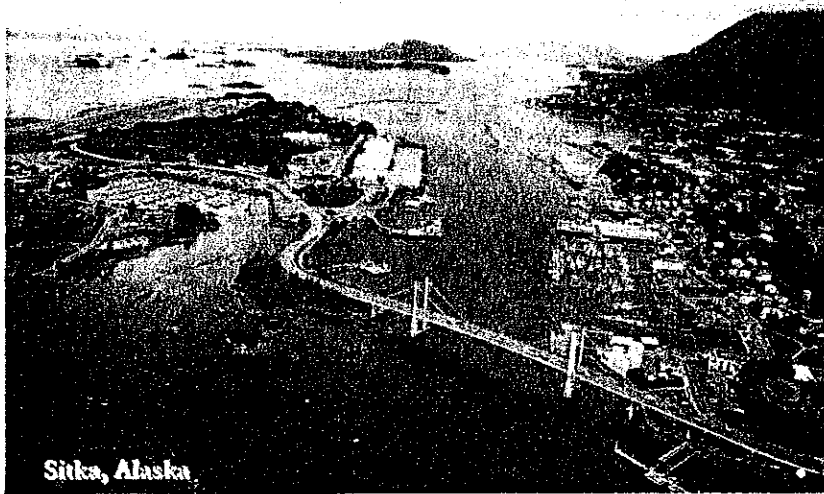
Consider site-specific conditions and develop alternatives to resolve existing issues

57 Mile Creek, Haines Alaska

## Be Realistic

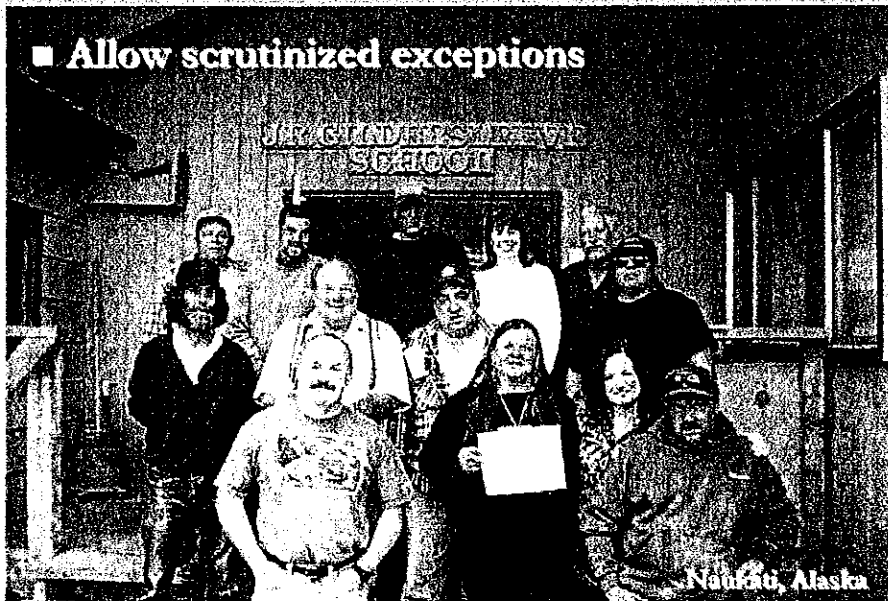
- \* Anticipate community and economic growth

P. Mooney ADF&G -08/01/05



## Be Flexible

- Allow scrutinized exceptions

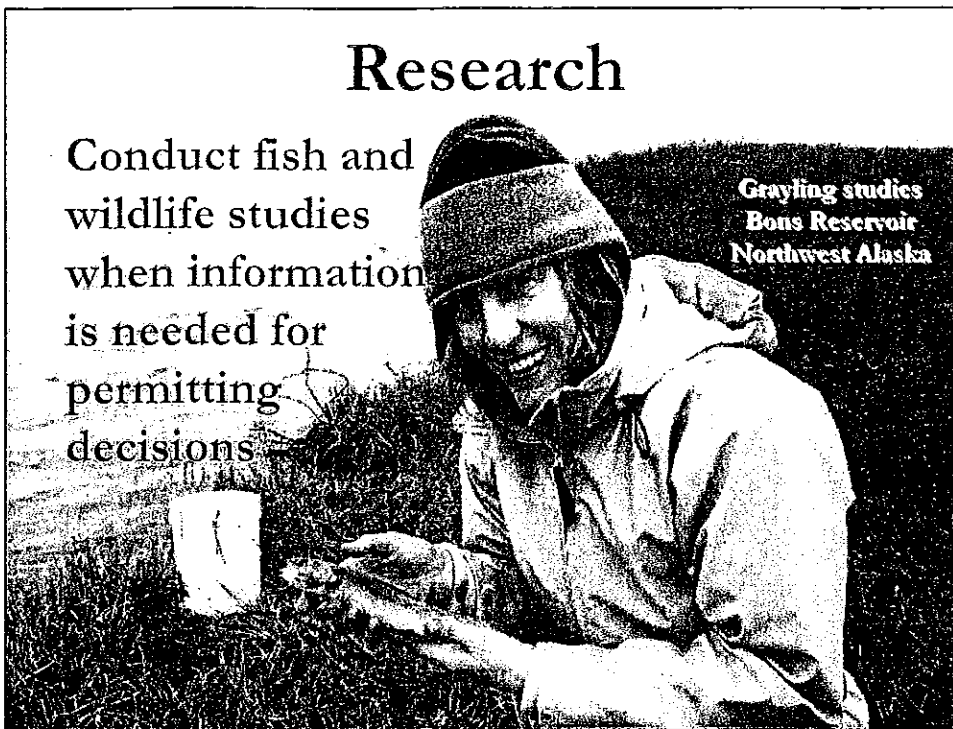


RC4

## Research

Conduct fish and  
wildlife studies  
when information  
is needed for  
permitting  
decisions

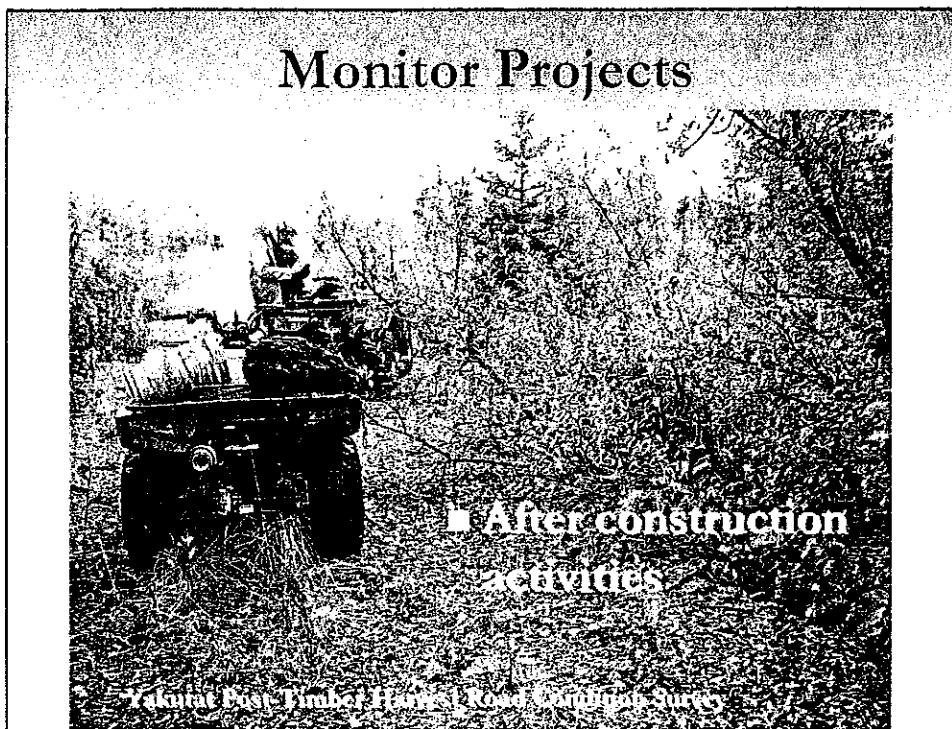
Grayling studies  
Bons Reservoir  
Northwest Alaska



## C-EMAP Monitor Projects

Before & during  
construction activities

Heading out to measure the health of river  
systems and fish populations in northwest Alaska



Questions?



# SITKA AC

RECEIVED TIME NOV. 6. 10:40AM

RC5

186

Post-it® Fax Note 7671		Date 11/4/9	# of pages 5
To Scott	From		
Co/Dept.	Co.		
Phone #	Phone #		
Fax #	Fax #		

Meeting > Oct. 23 2008 - NSRAA -

1. Ken Ash
2. John Murray - Sec -
3. Karen Johnson
4. Tad Fugoly
5. Jebb Favour
6. Dick Curran
7. Jerry Barber - Chair
8. Pete Roddy
9. Mo Johnson

ADEG

TROY

MIKE

RECEIVED

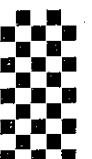
Pro

Pro 185 - Pete moved Second = Pete  
F O A 9 Spoke against

Pro 186 moved Pete Second - Jeff Tad  
Pete good for resource -  
F 9 A 0

Pro 187 NC

Pro 188, 189, 190, 191 - MOVE TO TABLE Jeff  
F 8 0 1





PRO 192 - MUVED John Second TAD  
F-9 0-0

PRO 193 (M) Pete (2) M  
F-9 0-0

PRO 194 (M) TAD Second Pete Q TAD  
F-9 0-

PRO 195 - NC

PRO 196 - NC

PRO 197 - NC

PRO 198 - M - Pete 2ND John Q - Jeff  
APFC Need Commercial permit to have shrimp & Octo  
aboard F-9 0-

## Hunting

PRO 8 → NC

PRO 9 → NC

PRO 10 → M - TAD 2ND Pete  
B 8 0-0 1-4

PRO 11 - NC

PRO 12 M-Jerry 2ND-TAD  
 Bradley - spoke to proposal - NO way  
 the <sup>in</sup> predatory control → yearly  
 harvest 7 to 15 wolves - good discussion -  
 S 8 0 - 0 OB 1

OBSTAIN - NEED INFO

PRO 13 M-Pete 2ND - MO  
 Peter Not in favor of predatory control.  
 S - 0 0 - 8 OB - 1

OBSTAIN - NEED INFO

PRO 14 M-Pete 2ND MO  
 house keeping  
 S - 9 0 - 0

PRO 24 - M-TAD - 2ND - Jerry  
 S - 0 0 - 10

PRO 27 - M-TAD - 2ND John  
 S - 0 0 - 10

PRO 28 - M-TAD - 2ND John

→ Eric confusion about count time - and on  
 50 in antlers...

→ TAD - 2 + 2 Brew time - refer to  
 proposal 10 -

→ S - 0 0 - 1 OB - 1

→ needs work to make it manageable

PRO 34 - M-John Second - Dick  
TAD - caught Marten during wolverine  
season -

S - 10

O - 0

PRO 35 - M-TAD

2ND - Jerry

S - 9

O -

OB - 1

OB - Need info

PRO 36 - M-Peter

2ND - John

S - 9

O - 0

OB - 1

PRO 38 M-John

2ND - Ken

S - 8

O - 1 - 0

PRO 39 - SKIP NC

PRO 40 - NC

PRO 41 NO

PRO 42 NC

PRO 43 - M-ERIC

2ND - John

Inadional

S 0

O - 9

PRO 44 M-TAD

2ND - Jerry

F 2

O 4

OB 3

RC5

PR 46 M - Pete Second TAD  
S - 1 O - 5 OB - 2

PR 47 M - TAD 2ND - John  
alot of locals in favor of this -

NIKE (AOTG) 65? delayed 45 - Sept 16  
(Survey) Season season  
(Season)

Eric - moved to Amend Sept 18 to Dec 30  
moved + 2ND on amendment  
good discussion S - 9 - 0 - 0  
as amend S - 9 - 0 - 0

PR 48 M - Ken 2ND - John  
Eric - conservation issue -  
S - 9 O - 0  
Jerry - Somewhat oppose to banning in general  
Eric -

PR 56 M - John 2ND TAD  
Not very well written -  
problematic - need to be  
fleshed out -  
S - 2 O - 06 OB - 1

RC 6

November 6, 2008

FAXED

Alaska Board of Game  
1255 W. 8<sup>th</sup> Street  
Juneau, Alaska 99811-5526

RECEIVED  
NOV 7 2008  
BOARD

To Whom It May Concern:

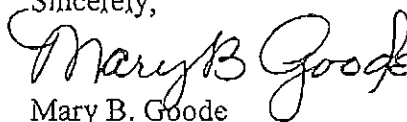
I am sending these comments because I am compelled, out of shock and disbelief to express my strong opposition to the possibility that the Board will legalize "denning", that is, the killing of newborn wolf pups, bear cubs and mothers while they rest in their dens, along with measures to sell bear parts, allow snaring of bears and same-day airborne hunting of bears.

I have no interest in imposing on the rights of hunters to enjoy the freedom to take wildlife in the State of Alaska *within reasonable boundaries of human decency and respect for these animals as both integral components of Alaska's ecosystem and sentient beings that will be subjected to unnecessary suffering at the hands of these proposed measures*. I appeal to the Board of Game, to show some respect and consideration for these animals. Denning, snaring and same-day airborne hunting are simply barbaric practices that could further lead to overharvesting of wolves and bears. The selling of bear parts would introduce an especially dangerous incentive to the overharvesting of bear populations.

With greater attention to wildlife policies in Alaska brought by the recent national election, taking such actions could also damage the state's reputation and tourism industry. Do we really want this to become a national issue?

I hope you will consider how wildlife should be treated in this state as valid as any other Alaska citizen's. I ask you to oppose these measures.

Sincerely,



Mary B. Goode  
P O Box 21084  
Juneau, AK 99802

465-RECEIVED TIME NOV. 6. 1:34PM

RC7

November 6, 2008

FAXED  
RECEIVED

Alaska Board of Game  
1255 W. 8<sup>th</sup> Street  
Juneau, Alaska 99811-5526

BOARD

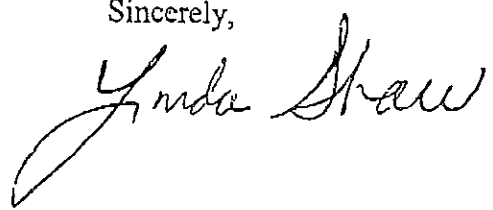
To Whom It May Concern:

With all due respect to the Alaska Board of Game, I am sending these comments because I am absolutely compelled out of shock and disbelief to express my strong opposition to the possibility that the Board is considering legalizing "denning", that is, the killing of newborn wolf pups, bear cubs and mothers while they rest in their dens, along with measures to sell bear parts, allow snaring of bears and same-day airborne hunting of bears.

I am not a hunter, and have no interest in imposing on the rights of hunters to enjoy the freedom to take wildlife in the State of Alaska *within reasonable boundaries of human decency and respect for these animals as both integral components of Alaska's ecosystem and sentient beings that will be subjected to unnecessary suffering at the hands of these proposed measures.* I appeal to the Board of Game, that the interests of Alaska citizen's who choose not to consume the State's wildlife resources in a direct manner, but enjoy occasionally viewing these animals and appreciating their vital presence in the State nonetheless, deserve some respect and consideration as well. Denning, snaring and same-day airborne hunting are simply barbaric practices that could further lead to overharvesting of wolves and bears, and the selling of bear parts would introduce an especially dangerous incentive to the overharvesting of bear populations. With greater attention to wildlife policies in Alaska brought by the recent national election, taking such actions could also damage the State's reputation and tourism industry.

I hope you will consider my views on how wildlife should be treated in this State as valid as any other Alaska citizen's. I ask you to oppose these measures. Thank you for the opportunity to comment.

Sincerely,



Linda Shaw  
9684 Moraine Way  
Juneau, AK 99801

RECEIVED TIME NOV. 6. 1:05PM

RC 8

FAX 907-465-6094

Alaska Board of Game  
Juneau, AK

November 6, 2008

Dear Board Members:



I am a hunter and long time resident of Alaska. I am concerned with some of the proposals being considered by the upcoming meeting of the Board of Game.

-I am opposed to any proposals that allow the killing of wolf pups and/or bear cubs while these animals are in their dens.

-I am opposed to same day airborne hunting of any species in Alaska, particularly wolves and bears.

Both of the above proposals promote barbaric human behavior toward wild animals and unethical fair chase standards. Modern day society expects more of our human race. Furthermore, the practice of same day airborne hunting of game animals has been illegal in all States since the passage of the federal Airborne Hunting Act (1972). Same day airborne hunting of bears/wolves would also promote illegal hunting of protected species; as would the sale of bear parts.

Numerous individuals have been prosecuted in both State and Federal Courts in the past for illegal airborne hunting and the illegal sale of bear parts in Alaska. Allowing this practice now is not only based on poor biological and scientific evidence, but also would be promoting unethical hunter behavior and illegal hunting practices.

Thanks you for your consideration,

A handwritten signature in cursive script, appearing to read 'Bob Standish', with a long horizontal line extending to the right.

Bob Standish  
P.O. Box 1106  
Kenai, AK 99611  
907-283-7594

RECEIVED  
NOV 11 2008  
FBI/DOJ  
RC 9

Dear Alaska Board of Game:

November 6, 2008

During the next five days (7-11) you will at some point be deliberating over the killing of wolves and bear through an illegal predator process know as "Denning"

Please understand that this procedure not only is against Alaska State law but furthermore is totally abhorred by a vast majority of Alaskans and wildlife propagation and protection advocates worldwide. Your advisory and implementation authority, within the Alaska Department of Game, does not place your board actions above State law.

Therefore, I feel quite confident your collective good judgement, in general, will prevail in canceling this repugnant practice of killing large Alaskan predator species. Also, importantly, the practice is not supported by current scientific information.

May I thank you all for your serious attention to this highly sensitive public issue.

Sincerely,

Alan R. Munro, 120 W. 9th St.  
Juneau, Alaska 99801  
586-3694

Cc: robert.hale@juneauempire.com; Mike Tobin Jenny Pursell; cmunro@gci.net;  
sarah\_palin@alaska.gov



RC 10



1170 Black Bear Road  
Ketchikan, Alaska 99901  
November 6, 2008

State of Alaska  
Fish and Game Department  
Alaska Board of Game  
Juneau, Alaska 99801

Re: Opposition to the proposal to kill bear cubs and wolf pups in their dens or 'DENNING'

Dear Sirs/Madam:

I'm writing this letter to state my concerns and opposition to the proposal to implement a DENNING program through the Fish and Game to kill bear and wolf cubs in their dens. As caretakers not only of our lands but of the creatures that live upon it I implore you to use your influence to deny this proposal.

I'm Alaska Native. I use subsistence foods, but I still don't think that we need to kill wolves or bear just because they may be our competition.

Please accept this letter as my opposition to this barbaric proposal to kill baby wolves and bears in their dens. OR ANY OTHER ANIMALS FOR THAT MATTER. These animals are in our care, its because of humans infringing on their habitat that some people feel they need to be 'thinned'.

I also oppose Sara Palins killing of wolves and bear by aerial hunting. How much killing needs to go on just so people can sport hunt or fish? This is unnecessary and as citizens of the United States of America we should be setting examples for the care of our animals rather than exemplifying barbaric behavior.

Please do not pass this proposal to slaughter wolf pups and bear cubs. Rise above this and set an example to the rest of the world.

Thank you.

Sincerely,

\* Shinghet Hyt'gin otherwise known as Cheryl Haven

\* (Stand Strong)



RC 11

November 6, 2008

RECEIVED

Alaska Board of Game  
1255 W. 8<sup>th</sup> Street  
Juneau, Alaska 99811-5526

NOV 6 2008

11:00 AM

To Whom It May Concern:

I am writing to you to express my strong opposition to the possibility that the Board is considering legalizing the appalling practice of "denning", that is, the killing of newborn wolf pups, bear cubs and mothers while they rest in their dens, as well as measures to allow the sale of bear parts, snaring of bears and same-day airborne hunting of bears.

I do not wish to impose upon the rights of hunters to enjoy the freedom to take wildlife in the State of Alaska *within reasonable boundaries of human decency sportsmanship and respect for these animals as both integral components of Alaska's ecosystem and sentient beings that will be subjected to unnecessary suffering at the hands of these proposed measures.* Denning, snaring and same-day airborne hunting are barbaric practices that could lead to overharvesting of wolves and bears; and the selling of bear parts would introduce an especially dangerous incentive to the overharvesting of bear populations. With greater attention to wildlife policies in Alaska brought by the recent national election, taking such actions could also damage the State's reputation and tourism industry. I appeal to the Board of Game in the interests of those Alaskan citizens who choose to enjoy viewing these animals and who appreciate their vital presence in the State, but also in the interests of an economy that is largely dependent on tourists who come to this state to experience the wonder of our wilderness and its creatures.

I hope you will give as much weight to my views on how wildlife should be treated in this State as you would any other Alaska citizen's and that you will oppose these measures.

Thank you for the opportunity to comment.  
Sincerely,

Linda Randall  
P.O. Box 35265  
Juneau AK 99803-5265



RC 12

1170 Black Bear Road  
Ketchikan, Alaska 99901  
November 6, 2008

RECEIVED  
NOV 6 2008  
BOARD

State of Alaska  
Fish and Game Department  
Alaska Board of Game  
Juneau, Alaska 99801

*fax 465-6094*

Re: Opposition to the proposal to kill bear cubs and wolf pups in their dens or 'DENNING'

Dear Sirs/Madam:

I'm writing this letter to state my concerns and opposition to the proposal to implement a 'denning' program through the Alaska Board of Game to kill bear cubs and wolf pups in their dens. As caretakers not only of our lands but of the creatures that live upon it I implore you to use your influence to reject this proposal and concentrate on finding a better solution.

I'm Alaska Native. I use subsistence foods, but I still don't think that we need to kill wolves or bear just because they may be our competition or that they bother humans.

Please accept this letter as my opposition to this barbaric proposal to kill baby wolves and bears in their dens. OR ANY OTHER ANIMALS FOR THAT MATTER. These animals are in our care, its because of humans infringing on their habitat that some people feel they need to be 'thinned'.

Please do not pass this proposal to slaughter wolf pups and bear cubs.

Thank you.

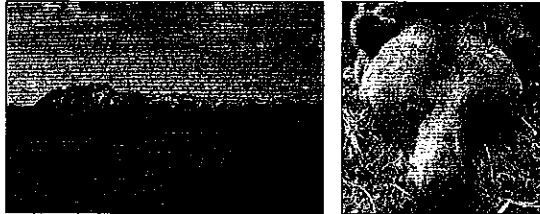
Sincerely,

*Forest Haven*

Forest Haven

RC13

## Brown Bear Research and Monitoring in Berners Bay



Rodney Flynn, Stephen Lewis, Lavern Beier, and Grey Pendleton



Alaska Department of Fish and Game  
Division of Wildlife Conservation  
Douglas

## Presentation Outline

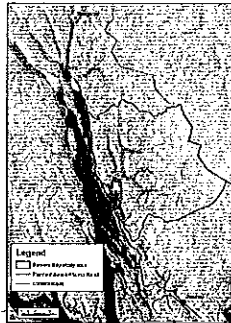
- Overview of study
- Movement and spatial relations of bears
- Brown bear population estimation
- Genetic comparison among bear populations
- Management Implications



## Berners Bay Brown Bear Project

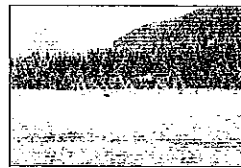
Collect ecological information on brown bears useful for our management after the Juneau Access road is constructed.

1. Determine movements and spatial relationships;
2. Estimate the number of brown bears in the area;
3. Compare the genetic structure of this population with others in the region.



## Brown Bear Captures

- Combination of helicopter darting & foot snares during spring and fall.
- 42 brown bears captured over 59 events; 54 GPS collars deployed.
- 33 collars recovered; 21 in field on bears.



## GPS Collar Results

- 25 collars, 21 bears
- Fixes range from 5 to >6000
- ~73,000 location
- Collars require retrieval once dropped by bear



## Bear #401

- Adult Female
- 6 yr. old
- 2006
  - Captured on 6/10/06
  - Died on 1/19/07
  - 4,452 fixes



# Southeast Alaska Mainland Brown Bear Research

## Bear #410

- Adult Male
- 13 yr. old
- 2006
  - Captured on 6/29/06
  - Collar stopped on 11/20/06
  - 3,952 fixes
- 2007
  - Captured on 7/06/07
  - Collar recovered on 11/7/06 upon recapture
  - 1,971 fixes



## Bear #411

- Adult Female
- 15 yr. old
- 2006
  - Captured on 6/29/06
  - Collar stopped on 10/24/06
  - 2,873 fixes
- 2007
  - Recaptured on 6/19/07
  - Collar still on bear



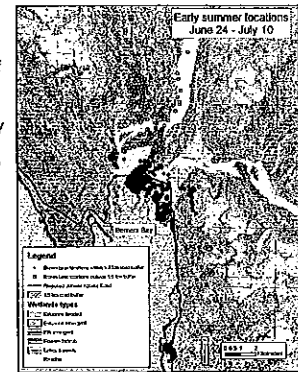
## Bear #433

- Adult Male
- 5 yr. old
- 2007
  - Captured on 11/02/07
  - Collar dropped on 9/01/08
  - 4,660 fixes



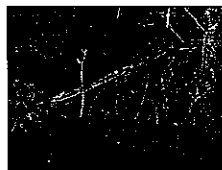
## Spatial Use

- During early summer 75% of all locations within 1.5 km of road
- All brown bears using estuary
- Very little use of areas > 800' elevation



## Population Estimation

- DNA-based population estimates
  - Individual bears ID based on DNA analysis
  - DNA collected from hair follicles or tissue
  - Nuclear microsatellites (7-marker system)
- Modified neck snare to collect hair
  - Single catch = no duplicate samples
  - Easy to set and transport
  - No lure or bait; uses salmon as attractant



## Hair Collection Results

### Berners Bay Hair Snaring

- 7/20/06 - 8/20/06
- 9 hair sites through out Berners Bay
- 4 "capture" sessions, or 364 snare-days

Underside Bears			
No. hair samples	# of 1's	# Brown	# Black
172	115 (67%)	90	27
47% of animals had hair			



### Capture-Mark-Recapture Analysis

Lincoln-Peterson estimator with sessions grouped into 1 capture and 1 recapture session including July and November live-capture sessions.

Capture probability = 0.28



# Southeast Alaska Mainland Brown Bear Research

## Population Estimates 2006

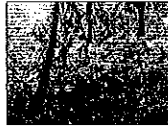
Brown bears

- 60 bears (95% CI = 47 – 96)
- 19 males, 41 females

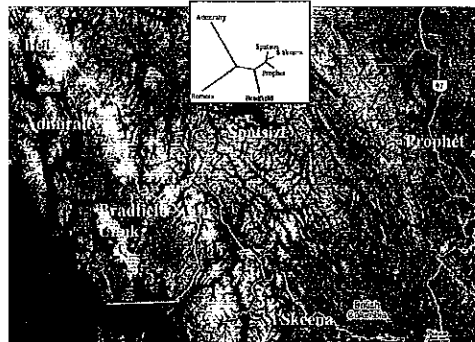


Black bears

- 48 bears (95% CI = 40 – 71)
- 35 males, 15 females



## Brown Bear Populations



### Important Point

- Isolated population
  - Little gene flow with adjacent brown bear populations
  - Demographically closed



## Management Implications

- Potentially vulnerable during both spring and fall hunting seasons
  - Very little use of areas > 800' elevation
  - concentration of bears on estuarine flats during spring and fall
- Estimate of 60 bears at relatively low density
- Genetically unique population



## Acknowledgments

Funding provided by Alaska Department of Fish & Game and Alaska Department of Transportation & Public Facilities

John B. Batten, Lynn Bennett, Kent Crabtree, Erni Flynn,  
 Rodney Galt, Horton Michelle, Kossling, Gahrke, Doug  
 M. Green, Mark Morris, Ryan Scott,  
 Jim Smith, Kelly Woodford and

# Appendix A Proposal Action

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EPOW Advisory Committee

October 15, 2008

**Table 1.** Summary of proposals EPOW Advisory Committee acted on October 15, 2008 meeting in shaded rows. Proposals in non-shaded rows were acted on the meeting of October 24, 2008.

Proposal	Support	Oppose	Abstain	Chair calls...
3	7	0	0	Support for proposal carried <a href="#">2008 Proposal 3.pdf</a>
5	0	7	0	Opposition to proposal carried <a href="#">2008 Proposal 5.pdf</a>
6	3	4	0	Opposition to proposal carried <a href="#">2008 Proposal 6.pdf</a>
7	-	-	-	No Action; see position for proposition 6 <a href="#">2008 Proposal 7.pdf</a>
8	0	7	0	Opposition to proposal carried <a href="#">2008 Proposal 8.pdf</a>
9	0	7	0	Opposition to proposal carried <a href="#">2008 Proposal 9.pdf</a>
10	7	0	0	Support for proposal carried <a href="#">2008 Proposal 10.pdf</a>
34	7	0	0	Support for proposal carried <a href="#">2008 Proposal 34.pdf</a>
35	0	7	0	Opposition to proposal carried <a href="#">2008 Proposal 35.pdf</a>
36	7	0	0	Support for proposal carried <a href="#">2008 Proposal 36.pdf</a>
37	2	5	0	Opposition for proposal carried <a href="#">2008 Proposal 37.pdf</a>
38	7	0	0	Support for proposal carried <a href="#">2008 Proposal 38.pdf</a>
39	7	0	0	Support for proposal carried (October 15, 2008) <a href="#">2008 Proposal 39.pdf</a>
40	0	7	0	Opposition for proposal carried <a href="#">2008 Proposal 40.pdf</a>
41	7	0	0	Support for proposal carried <a href="#">2008 Proposal 41.pdf</a>
42	1	6	0	Opposition for proposal carried <a href="#">2008 Proposal 42.pdf</a>
43	0	7	0	Opposition for proposal carried <a href="#">2008 Proposal 43.pdf</a>
44	0	7	0	Opposition for proposal carried <a href="#">2008 Proposal 44.pdf</a>
45	1	5	1	Opposition for proposal carried <a href="#">2008 Proposal 45.pdf</a>
46	3	2	2	Support for proposal carried <a href="#">2008 Proposal 46.pdf</a>
47	6	1	0	Support for proposal carried <a href="#">2008 Proposal 47.pdf</a>
48	0	7	0	Opposition for proposal carried <a href="#">2008 Proposal 48.pdf</a>
56	-	-	-	No Action: waiting for specifics <a href="#">2008 Proposal 56.pdf</a>



## VOTER RECORD/COMMENTS

Advisory Committee: EPOW

Date: 09/24/08

Proposal: 3

3	85.030 (a)(1)	1A	Reduce the bag limit for deer to 2 bucks in that portion of Unit 1(A) on the Cleveland Peninsula.	Alaska Department of Fish and Game	Support
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SUPPORT	OPPOSE	ABSTAIN
Jim Beard		
Ray Slayton		
Lavenia Sylvia		
Bryce Brucker		
Jana Carpenter		
Doug Black		
Jim McFarland		

Support:

Base on information provided by Boyd Porter, ADF&G wildlife biologist and information provided in proposal, EPOW members decided to take a conservative approach to taking of deer in Unit 1A.

Oppose

None.

## VOTER RECORD/COMMENTS

Advisory Committee: EPOW

Date: 09/24/08

Proposal: 5

5	92.044 & 92.052	2	Modify the black bear baiting permit conditions in Unit 2.	Ken Vorisek	Oppose
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SUPPORT	OPPOSE	ABSTAIN
	Jim Beard	
	Ray Slayton	
	Lavenia Sylvia	
	Bryce Brucker	
	Jana Carpenter	
	Doug Black	
	Jim McFarland	

Support

None

Oppose

The AC felt that the proposal to make voluntary the provision of bear bait station locations to ADF&G was unjustified. Further, following discussions with Boyd Porter regarding the need to have permits filed in person rather than by mail, the AC felt stronger bait station management regulations are required; the proposal lacked merit.

## VOTER RECORD/COMMENTS

Advisory Committee: EPOW

Date: 09/24/08

Proposal: 6

6	85.015	2	Close the black bear fall hunting season in Unit 2.	Karen Peterson	Oppose
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SUPPORT	OPPOSE	ABSTAIN
	Jim Beard	
Ray Slayton		
Lavenia Sylvia		
	Bryce Brucker	
Jana Carpenter		
	Doug Black	
	Jim McFarland	

## Support

Based on AC members anecdotal experience and the presentation given by ADF&G, AC members felt that draconian measures were HIGHLY warranted to allow the black bear population in Unit 2 time to rebound.

## Oppose

The AC members who opposed were convinced by ADF&G's presentation in support of ADF&G sponsored proposal 36. These members agreed that a severe problem exists, but felt that proposal 36 should be tried **first** rather than eliminating the hunt entirely.

## VOTER RECORD/COMMENTS

Advisory Committee: EPOW

Date: 09/24/08

Proposal: 7

7	85.015	2	Close the black bear fall hunting season in Unit 2.	Glenn and Kay Kellen	No Action
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SUPPORT	OPPOSE	ABSTAIN

After discussion, this AC decided to take no action as they felt this proposal was similar in content and intent to proposal 6 where the majority voted to oppose the proposal.

## VOTER RECORD/COMMENTS

Advisory Committee: EPOW

Date: 10/15/08

Proposal: 8

8	84.270(6)	3	For Kuiu Island in Unit 3 shorten the marten trapping season for residents, close the nonresident marten trapping season, and create a management area that is closed to the use of motorized vehicles for trapping marten.	Alaska Department of Fish and Game	Oppose
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SUPPORT	OPPOSE	ABSTAIN
	Jim Beard	
	Ray Slayton	
	Lavenia Sylvia	
	Bryce Brucker	
	Jana Carpenter	
	Doug Black	
	Jim McFarland	

Support

None

Oppose

AC opposed adoption of this proposal for Unit 3 only. Their concerns are base on the following;

- If hunting period of only 1 unit is shortened, the hunters will move to the adjoining units. This occurred with the black bears in 2006; this resulted in an increase in Unit 2's harvest. The impact on adjoining units need to be considered.
- The high percentage of areas inaccessible to hunters in UNIT 3 ensure areas where martens can thrive in a protected environment.

## VOTER RECORD/COMMENTS

Advisory Committee: EPOW

Date: 10/15/08

Proposal: 9

9	85.035	3	Modify the hunting season for elk in Unit 3 to provide alternate bow and rifle seasons for elk on Etolin Island.	Richard Olmstead	Oppose
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SUPPORT	OPPOSE	ABSTAIN
	Jim Beard	
	Ray Slayton	
	Lavenia Sylvia	
	Bryce Brucker	
	Jana Carpenter	
	Doug Black	
	Jim McFarland	

Support

None

Oppose

The AC realizes that the intent of proposal 9 is fair access for all hunters, however, all members felt that the language was not clear as to whether the proposal is referring to alternate seasons or alternate years.

## VOTER RECORD/COMMENTS

Advisory Committee: EPOW

Date: 10/15/08

Proposal: 10

10	85.045(a)(1)	1B & 3	Modify the moose antler restriction in RM038 to allow the harvest of bulls with 2 brow tines on both sides in addition to the existing spike-fork 3 or more brow tines on one side, or 50-inch antler bag limit.	Alaska Department of Fish and Game	Support
----	--------------	--------	--	------------------------------------	---------

SUPPORT	OPPOSE	ABSTAIN
Jim Beard		
Ray Slayton		
Lavenia Sylvia		
Bryce Brucker		
Jana Carpenter		
Doug Black		
Jim McFarland		

## Support

ADF&G's wildlife biologist described the physiognomy of the antlers of the moose; the AC agreed with the proposal's intent to allow quick visual recognition of harvestable moose.

## Oppose

None

## VOTER RECORD/COMMENTS

Advisory Committee: EPOW

Date: 09/24/08

Proposal: 34

34	84.270(14)	Regionwide	Shorten the wolverine trapping season.	Alaska Department of Fish and Game	Support
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SUPPORT	OPPOSE	ABSTAIN
Jim Beard		
Ray Slayton		
Lavenia Sylvia		
Bryce Brucker		
Jana Carpenter		
Doug Black		
Jim McFarland		

Support

Due to ADF&G's concerns for the maintenance of sustainable populations of wolverines in the region AC members agreed to minimizing the harvest by shortening the season.

Oppose

None



## VOTER RECORD/COMMENTS

Advisory Committee: EPOW

Date: 09/24/08

Proposal: 35

35	92.095 (17)	Regionwide	Eliminate the trap identification requirement for Units 1-5.	Robert Jahnke	Oppose
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SUPPORT	OPPOSE	ABSTAIN
	Jim Beard	
	Ray Slayton	
	Lavenia Sylvia	
	Bryce Brucker	
	Jana Carpenter	
	Doug Black	
	Jim McFarland	

Support

None

Oppose

EPOW AC view trap identification as a means to increased accountability and safety; in other words as contributive to strong and fair management practices that benefit the hunters, resource, the public, and ADF&G.

## VOTER RECORD/COMMENTS

Advisory Committee: EPOW

Date: 09/24/08

Proposal: 36

36	85.015(1)	1, 2 & 3	Delay the nonresident black bear hunting season in Units 1A, 1B, 1C, 2 and 3.	Alaska Department of Fish and Game	Support
----	-----------	----------	---	------------------------------------	---------

SUPPORT	OPPOSE	ABSTAIN
Jim Beard		
Ray Slayton		
Lavenia Sylvia		
Bryce Brucker		
Jana Carpenter		
Doug Black		
Jim McFarland		

## Support

AC members felt that the overharvest of sows and cubs has negatively affected the black bear population on Unit 2. Hopefully, by following the ADF&G's proposal, harvest of sows and cubs should be reduced giving the black bear population the chance to rebound.

## Oppose

None

## VOTER RECORD/COMMENTS

Advisory Committee: EPOW

Date: 09/24/08

Proposal: 37

37	85.015 & 92.052	1, 2 & 3	Establish registration hunt requirements for black bear in Units 1, 2 and 3.	Jimmie C. Rosenbruch	Oppose
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SUPPORT	OPPOSE	ABSTAIN
	Jim Beard	
Ray Slayton		
Lavenia Sylvia		
	Bryce Brucker	
	Jana Carpenter	
	Doug Black	
	Jim McFarland	

## Support

The ADF&G is unable to get a good count on the number of black bears harvested as those with permits do not always tender a report. This inability to track hunter success rates does not lead to best resource management practices, but reduces the ADF&G to making hard and fast decisions base on "gut feeling".

## Oppose

The AC members who opposed this proposal did so because this is one of two proposals which address this issue, proposals 37 and 38. This proposal would impose the burden of additional administrative overhead on the ADF&G, where as it is hope that proposal 38 will be just as efficient in the process of data acquisition for this resource management task.

## VOTER RECORD/COMMENTS

Advisory Committee: EPOW

Date: 09/24/08

Proposal: 38

38	85.015(1)	Regionwide	In units 1-5, individuals will be required to obtain a black bear harvest ticket prior to hunting black bears.	Alaska Department of Fish and Game	Support
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SUPPORT	OPPOSE	ABSTAIN
Jim Beard		
Ray Slayton		
Lavenia Sylvia		
Bryce Brucker		
Jana Carpenter		
Doug Black		
Jim McFarland		

## Support

After extensive discussion with the ADF&G Biologist, AC members felt that this proposal will provide needed information of hunter harvest success rates of black bear. The use of harvest tickets and reports will provide less of an adverse burden on the hunters than hunt registrations proposed in #37

## Oppose

None

## VOTER RECORD/COMMENTS

Advisory Committee: EPOW

Date: 09/24/08

Proposal: 39

39	92.010	1, 2, & 3	In Units 1-3: Prior to hunting black bears individuals will be required to first obtain a black bear harvest ticket.	Alaska Professional Hunters Association	Support
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SUPPORT	OPPOSE	ABSTAIN
Jim Beard		
Jim McFarland		
Doug Black		
Jana Carpenter		
Bryce Brucker		
Lavenia Sylvia		
Ray Slayton		

## Support

The AC members initially voted to take no action; this proposal is similar to the regionwide proposal 37. However, on revisiting this proposal on the October 15, 2008 AC meeting it was decided to act on this proposal for the identical reasons stated in support of proposal 37.

## Oppose

None

## VOTER RECORD/COMMENTS

Advisory Committee: EPOW

Date: 09/24/08

Proposal: 40

40	92.044	Regionwide	Modify the black bear baiting permit requirements for Units 1-5.	Marlin E. Benedict	Oppose
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SUPPORT	OPPOSE	ABSTAIN
	Jim Beard	
	Ray Slayton	
	Lavenia Sylvia	
	Bryce Brucker	
	Jana Carpenter	
	Doug Black	
	Jim McFarland	

Support

None

Oppose

The AC felt that the use of bear bait stations should not be restricted to just archers.

## VOTER RECORD/COMMENTS

Advisory Committee: EPOW

Date: 10/15/08

Proposal: 41

41	92.052	Regionwide	Modify the current language to provide clarification regarding the intended authority of this section relative to the issuing bear baiting permits in GMU 1-5.	Alaska Department of Fish and Game	
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SUPPORT	OPPOSE	ABSTAIN
Jim Beard		
Ray Slayton		
Lavenia Sylvia		
Bryce Brucker		
Jana Carpenter		
Doug Black		
Jim McFarland		

## Support

The AC felt that this proposal allows consistency in regulating the issuance and enforcement of bear bait permits by identifying the State ADF&G as the definitive authority in interpreting the regulations.

## Oppose

None

## VOTER RECORD/COMMENTS

Advisory Committee: EPOW

Date: 09/24/08

Proposal: 42

42	92.044 & 92.052	Regionwide	Modify the black bear baiting permit requirements for Units 1-5.	Allen Barrette	Oppose
----	-----------------	------------	--	----------------	--------

SUPPORT	OPPOSE	ABSTAIN
Jim Beard		
	Ray Slayton	
	Lavenia Sylvia	
	Bryce Brucker	
	Doug Black	
	Jim McFarland	

## Support

The AC member felt that once a hunter established bait station they should not be inconvenienced to continually update the bait station information in person (They should be able to call or mail in changes to their bait station )

## Oppose

The majority of the AC members felt that proper management of the black bear resource is of paramount importance, and that updated bait station data contributes towards healthy management practices , and reduces irresponsible or abusive bait station usage or setup.



## VOTER RECORD/COMMENTS

Advisory Committee: EPOW

Date: 10/15/08

Proposal: 43

43	92.200	1	Allow deer to be bartered in Unit 1.	Gary Miller	Oppose
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SUPPORT	OPPOSE	ABSTAIN
	Jim Beard	
	Ray Slayton	
	Lavenia Sylvia	
	Bryce Brucker	
	Jana Carpenter	
	Doug Black	
	Jim McFarland	

Support

None

Oppose

The AC discussed merits of bartering sports kills, came to the conclusion that there was little, therefore unanimously opposed the proposal.

## VOTER RECORD/COMMENTS

Advisory Committee: EPOW

Date: 10/15/08

Proposal: 44

44	85.045	1	Modify the antler restriction for moose in Unit 1.	Brian Merritt	Oppose
----	--------	---	--	---------------	--------

SUPPORT	OPPOSE	ABSTAIN
	Jim Beard	
	Ray Slayton	
	Lavenia Sylvia	
	Bryce Brucker	
	Jana Carpenter	
	Doug Black	
	Jim McFarland	

Support

None

Oppose

AC opposed this proposal on the grounds that it served to counter proposal 10 which AC supports.

## VOTER RECORD/COMMENTS

Advisory Committee: EPOW

Date: 09/24/08

Proposal: 45

45	85.056	1 & 2	Extend the wolf hunting season dates for Units 1 and 2.	Brian Warmuth	Oppose
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SUPPORT	OPPOSE	ABSTAIN
		Jim Beard
	Ray Slayton	
	Lavenia Sylvia	
	Bryce Brucker	
	Jana Carpenter	
	Doug Black	
Jim McFarland		

## Support

The AC member who supported felt that extending the wolf season would allow hunters to exercise the option of hunting wolves in lieu of black bears on their black bear permit.

## Oppose

Majority of AC members opposed this proposition as the extended hunt would carry into a period where the quality of wolf fur declines; this would place the wolf kills into the sports kill category where the wolves become "varmints"; the end result, as with the black bears during the Fall hunt season, is a negative impact on pool of harvestable resources.

## VOTER RECORD/COMMENTS

Advisory Committee: EPOW

Date: 10/15/08

Proposal: 46

46	85.056	1, 3, 4 & 5	Shorten the wolf hunting season dates for Units 1, 3, 4, and 5.	Defenders of Wildlife., Alaska Wildlife Alliance, Alaska Center for the Environment, Tongass Conservation Society	Support
----	--------	-------------	---	---	---------

SUPPORT	OPPOSE	ABSTAIN
		Jim Beard
Ray Slayton		
Lavenia Sylvia		
	Bryce Brucker	
Jana Carpenter		
	Doug Black	
		McFarland

## Support:

AC members who support this proposal question the motivations of the environmental groups who formulate this proposal, but support the intent and argument of the proposal.

## Oppose:

Those who oppose strongly question the motivations of the environmental groups and feel closer scrutiny should be applied to the wording of the proposal, motivations of the, and possible negative impact.

## Abstain:

The AC abstainers had mixed reasons for abstaining. This was overall a tough proposal.

## VOTER RECORD/COMMENTS

Advisory Committee: EPOW

Date: 09/24/08

Proposal: 47

47	85.065	Regionwide	Modify the season dates for hunting waterfowl in Southeast Alaska.	Kyle Ferguson	Support
----	--------	------------	--	---------------	---------

SUPPORT	OPPOSE	ABSTAIN
Jim Beard		
Ray Slayton		
Lavenia Sylvia		
Bryce Brucker		
Jana Carpenter		
Doug Black		
Jim McFarland		

## Support

The consensus among the AC members who hunt water fowl is that the current season does not cover the period when water fowl are at their : greater numbers of waterfowl are present. There are not many birds present between Sept 1 and Oct 1, but large numbers of birds present between Dec 16 and Jan 16.

## Oppose

None

## VOTER RECORD/COMMENTS

Advisory Committee: EPOW

Date: 09/24/08

Proposal: 48

48	92.085	1, 2, 3 & 4	Prohibit the use of 223 caliber full metal jacket bullets for taking big game in Units 1,2,3,4	Bradley Shaffer	Oppose
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SUPPORT	OPPOSE	ABSTAIN
	Jim Beard	
	Ray Slayton	
	Lavenia Sylvia	
	Bryce Brucker	
	Jana Carpenter	
	Doug Black	
	Jim McFarland	

Support

None

Oppose

AC members felt that the proposal does not explain why only the 223 full metal jacket caliber bullets are the only caliber facing prohibition.

## VOTER RECORD/COMMENTS

Advisory Committee: EPOW

Date: 09/24/08

Proposal: 56

56		Statewide	Establish special hunts for each big game species on all military and some national and state lands.	Bruce D. Frady	NO ACTION: Waiting for specifics
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SUPPORT	OPPOSE	ABSTAIN

No Action:

The AC strongly supports the proposal in concept, but find the vagueness of the language to be troubling; we are waiting for specifics. For example , is hunting from the road in a vehicle allowed and under what circumstances?

## Selectivity of the Trap-Trapper Unit

A trap is a mechanical device that, once set, will close only on objects heavy enough to release the trigger. Observing this, those unfamiliar with trapping may assume that traps are not selective; that they will catch anything. This is not a correct assumption unless the trapper — the person required to set the inanimate device in the first place — is removed from consideration. Trap and trapper are part of the same equation; one cannot function without the other. Once this relationship is acknowledged, it is recognized that the trap-trapper unit is actually very selective in terms of what it will catch. Regulated trappers and wildlife researchers invariably set their traps in such a way that only the species (or sometimes even only the *individual* animal) they are targeting is likely to be captured. The numerous techniques trappers use to ensure their trap sets are selective include the following:

- ❖ **Location:** Where a trap is located determines to a great extent what animals are likely to enter it. Traps may be located underwater, in trees, near den sites, travel routes and loafing areas, or within other specific habitat types where nontarget species are never found or are unlikely to be found.
- ❖ **Type of Trap:** The use of certain types of traps virtually eliminates the chance that certain species will be captured. Foxes and coyotes, for instance, will rarely enter cage or kill-type traps.
- ❖ **Size of Trap:** The size of the trap determines to some extent what size animals it will capture.
- ❖ **Pan Tension:** Pan or trigger tension is adjustable on many traps. As a result, traps are often set so that only relatively heavy animals (such as beavers or coyotes) can spring them.
- ❖ **Lure or Bait:** Specific baits and lures, often used in conjunction with trap sets, are attractive to specific species of animals. Sweet corn, for instance, is attractive to raccoons, but not to bobcats. Lures in the form of urine or scent gland extracts are particularly attractive to the species from which the scent is derived; may even repel other species.
- ❖ **Position of Trigger:** Trigger configuration on kill-type traps can be set to allow nontarget species to pass through without setting off the trap.
- ❖ **Trap Set:** How a trap is handled or placed influences what animals can be captured. Wary species will avoid any trace of human scent, while others such as raccoons and skunks may be attracted to it. Fencing or other obstructions placed around a trap can prevent some species from approaching the trap.
- ❖ **Timing:** The timing of when traps are set during the trapping season can influence which gender and what age class of animals will be captured.

These same elements, all of which make traps highly selective in terms of what animals they will capture, are used not only in fur harvest trapping, but also in the live capture of animals for research and conservation programs, and for problem animal control and property damage situations.

proper trap in the appropriate manner and catch the intended animal. Certainly trappers are continually learning, but there is a base level of knowledge that is much easier to learn from an experienced trapper than by trial and error on one's own. Trapper education programs have been instituted in many states and all Canadian provinces and territories to ensure that beginning trappers acquire this fundamental knowledge before they set traps on their own.

Trapper education programs teach basic trapping techniques in both field and classroom situations with a strong focus on the responsible treatment of animals, trapping regulations, the avoid-

ance of nontarget animals, safety, selective trapping, trespass laws and ethical trapper behavior. Trappers are taught how to select and set the smallest and most effective traps for whatever furbearer species they wish to target. These programs are strongly supported by experienced trappers who often teach the courses in conjunction with wildlife agency personnel. The ethical and even spiritual ideals of trapping — to take every animal with dignity, admiration and respect — are widely embraced. Information taught to beginning trappers provides them with a larger view of their role and the importance of trapping in an effective, responsible, and ethical manner.

## Trapping and Public Safety

Opponents of trapping frequently charge that people, especially children, are in danger of being caught and injured in traps. These charges naturally tend to heighten public concern about trapping. However, a nationwide search for all recorded incidents of human injuries resulting from traps during the past 20 years documented only three that were associated with legal fur trapping.<sup>(21)</sup> None resulted in serious injury. Trapping does not threaten public safety because the size, placement and use of traps are regulated to ensure the safety of humans and animals (see box, page 20).



# North American Fur Auctions

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\* January 12, 2009

March 30, 2009

June 1, 2009

**SALES DATES**

January 6-7, 2009

February 17-23, 2009 — *RANCH FURS, WILD FUR*May 15-20, 2009 — *RANCH FUR, REMAINING UN-SOLD WILD FUR*

To Be Announced

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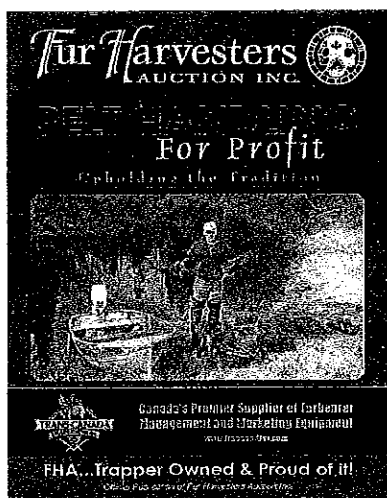
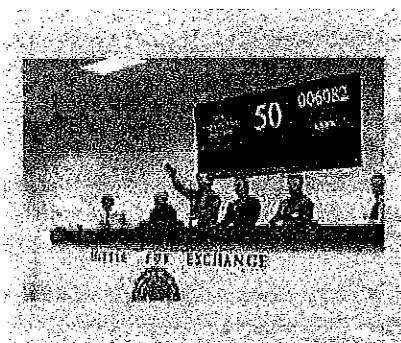


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April 12, 2009	* May 24, 2009
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**Juneau Audubon Society Oral Comments on Proposal 47**  
**Board of Game**  
**November 7-11, 2008**  
**Juneau Alaska**

Mr. Chairman and members of the Board of Game. My name is Meg Cartwright and I come before you as a representative of the Juneau Audubon Society. This local community-based conservation group promotes sustainability of healthy ecosystems with a focus on birds and their habitats.

The Juneau Audubon Society urges you to vote against Proposal 47 which seeks to change the Southeast Alaska waterfowl hunting season from Sept 1 through Dec. 15<sup>th</sup> to early Oct. through mid-January. As intended by the author of this proposal, a region-wide shift in the hunting season to a later season would change the hunting pressure from a mix of migrant and resident birds to mostly resident birds. A sweeping region-wide change in the hunting regulations without considering the specific biological and ecosystem dynamics unique to each of waterfowl hunting area would be irresponsible in our opinion. Before any change in the hunting season is considered, we would like to see game managers 1) identify popular waterfowl hunting areas in the region, 2) determine if resident bird populations are healthy and can withstand additional hunting pressure in the winter, 3) identify and protect no-hunting areas near-by, and 4) identify other users that may be negatively impacted by additional hunting activities.

The Juneau Audubon Society is concerned about the impact a season shift would have on the resident bird populations in the Mendenhall Wetland State Game Refuge in Juneau. The later season will obviously miss some of the migrant waterfowl but will increase the hunting pressure on mallards and Canada geese—the two main resident bird species using the Mendenhall Wetlands in the winter. Currently these two bird populations use the near-by Auke Lake as a refuge from hunters during the daytime as long as the lake remains ice-free. During the hunting season, residence who live under the flight path of these birds have recorded a daily migration of about 500 mallards and 500 geese to the lake in the morning and returning to the wetlands to feed in the evening. Once Auke Lake freezes, the birds are forced to fly further away from the Refuge or remain in the wetlands. Consequently a shift to a later hunting season would place additional energetic costs and stress on these resident bird populations during the winter.

The Mendenhall Wetland State Game Refuge was recently designated as an Important Bird Area of international significance. The fact that less than 5% of the Important Bird Areas of the world are elevated to this globally significant status indicates how special this area is to bird populations and to birders—just one of many other recreational groups that also use the Mendenhall wetlands during the winter.

Therefore, we strongly urge you to leave the area-wide waterfowl hunting season as is: September 1 through December 15. We encourage the author of this proposal to submit requests to change the hunting season for specific waterfowl areas in his vicinity to the US Fish and Wildlife Service.

PC 19



United States  
Department of  
Agriculture

Forest  
Service

Alaska Region  
Tongass National Forest

648 Mission Street  
Ketchikan, AK 99901  
Phone: (907) 225-3101  
Fax: (907) 228-6215

File Code: 2610

Date: November 5, 2008

Cliff Judkins  
Chairman  
Alaska Department of Fish and Game, Boards Support  
Section  
P.O. Box 115526  
ATTN: BOG COMMENTS  
Juneau, AK 99811-5526

Dear Mr. Judkins:

My staff reviewed regulatory proposals for the Alaska Board of Game and in general, support the recommendations from the Alaska Department of Fish and Game (ADFG). However, we do have specific comments on three proposals.

#### **Proposal 5**

We support the need to know the GPS locations of bear baiting stations and support flexibility in how users report them. Making this reporting easier is certainly in the public's best interest. We do not believe it is necessary to go in person to the ADFG office to register the bait station. Registering by phone, letter or over the Internet should be sufficient. This will reduce the costs to residents hunting on Prince of Wales Island especially during this time of increased fuel costs.

However, we oppose making this voluntary and believe both the ADFG and our agency need to have specific locations of these stations. Therefore, we oppose this part of this proposal.

#### **Proposal 8**

We agree with the ADFG that there appears to be enough concern for the population of marten on Kuiu Island to warrant consideration in a change in regulation. The reasoning is compelling; however, the small number of trappers using this 500,000 acre remote island does not seem to warrant such immediate drastic changes in the regulations. We are particularly concerned about the closure of the road system to trapping, especially since the ADFG did not work with the Forest Service to identify whether there were other management options that could be considered before they proposed this closure. The proposal states that the majority of trapping occurs via salt water access, not roads. Only the eastern portion of Kuiu Island (Rocky Pass) is accessible during the trapping season because of the dramatic weather oscillations along Chatham Straits on the west side of Kuiu Island. The Forest Service opposes the closure of the road system without compelling data that proves this closure necessary. This seems unnecessary with the "no limit" season prescribed for residents, the most likely trappers to use Kuiu Island and who are also likely to trap via beach access.



The Forest Service favors changing the existing regulations to put protective measures in place on Kuiu Island for the benefit of the marten population. However, we are not yet convinced that there is a long term marten concern on Kuiu and do not agree with some of the issues raised by ADFG, in particular the concerns regarding the impacts of future timber harvest on Kuiu, speculation that non-resident trapping on Kuiu Island would be a problem if a logging camp were to re-open and implying that there are two species of marten on Kuiu. Currently, 90% of the high volume productive old growth (which is considered high value marten habitat) that existed before the onset of timber harvest is still present on Kuiu Island. While we acknowledge that planned timber harvest will reduce this habitat, we do not believe that this will be a significant factor affecting marten conservation on Kuiu. We also believe that there is not universal agreement that there are two species of marten in Southeast Alaska and believe more information is needed before management changes are proposed based on uncertain taxonomy.

We believe the proposal indicates that a more conservative approach is needed with monitoring incorporated and the judicious use of the emergency closure in lieu of road closures until more data can be collected to provide a better understanding of what is needed to ameliorate the problem. I would ask that the Department work with my staff on a Marten Management Plan to document the problems on Kuiu Island and develop other management options.

#### **Proposal 36**

We support most of this proposal and believe that concerns about black bear populations warrant the reduction in the non-resident season. However, we do not see compelling evidence for this season limit on Kuiu Island and indeed, believe that the non-resident cap on Kuiu is adequate.

I look forward to working more closely with the ADFG on joint management issues.

Sincerely,

/s/ Forrest Cole  
FORREST COLE  
Forest Supervisor

cc: Jim Brainard  
David M Johnson  
Steve Kessler  
Winifred B Kessler

RC 17

**Ken**

**From:** Porter, Boyd (DFG) [boyd.porter@alaska.gov]  
**Sent:** Friday, February 15, 2008 4:29 PM  
**To:** timberwf@gci.net  
**Cc:** Rabe, Dale L (DFG)  
**Subject:** Resending email dated January 18, 2008 to Ken Vorisek

Ken, This is a copy of the email I sent back to you addressing your 2008 season Unit 2 bear baiting questions. At the time I sent this note back I did not send a letter of response as I felt this email was sufficient. If for some reason you did not receive this email response I apologize. Please let me know if you would like this response in official letter form.

After I had a discussion with you on the phone 1/21/2008 I thought your bear baiting concerns had been addressed, but when I received your additional letter dated 2/13/2008 I decided to resend this original email for clarification. I have also had discussions with the Fish and Game folks in Fairbanks and I understand you have taken the issue up with them. When you spoke with Jackie Kephart in the Fairbanks Fish and Game office (1/24/2008) she correctly suggested you contact my office if you have further questions. Staff in the other Area offices will not be able to issue Unit 2 bait permits during the 2008 season nor will the office staff be well versed in our local baiting issues. Consequently, questions or concerns regarding Unit 2 should be addressed directly to the Ketchikan Fish and Game office.

You are correct the 5 AAC 92.044 code does not provide discretionary authority for registration permits. Our discretionary authority comes under Title 16 Section 16 05 225 in the Alaska State Statutes. Under Administrative Code 5 AAC 92.020 provides for the conditions and procedures for permit hunts. If we were going to completely stop baiting in all or part of Unit 2 that would require a public process through the BOG, but we are simply using our discretionary authority for this permit. The next step, if this and some of our other attempts fail to resolve the issues surrounding baiting in Unit 2, may be to close the Unit to bear baiting. The Forest Service is already concerned about the difficulty of administering bear bait permit conditions on National Forest Land. If the Forest Service were to take over bait permits it would likely become much more restrictive or stopped completely. We are doing everything we can to insure we do not lose this method of hunting.

We know that hunters are currently planning for the upcoming season and the early letter we sent to you and to all hunters providing these new permit changes is part of our effort to prevent any undo hardships during the spring 2008. If you have hunted in Unit 2 for many years you know that we have concerns about the bear population in some areas, and obtaining better hunter effort and harvest information is essential. With your history of hunting on POW and using bait permits since 1989 I am sure you have followed our efforts during the past few years to obtain better information regarding bait permits. I am not sure why you feel this change will prevent you from continuing to hunt over bait in Unit 2. Unit 2 bait permits will be available over the counter in the Craig office once you find your bait location. With the recent road improvement and pavement projects on POW the road trip to Craig is not the several hour ordeal it once was. The Craig office will be open 8am - 4:30pm Monday through Friday. We realize this change will require advanced planning by anyone traveling to POW to hunt over bait, and that is why we are giving everyone with Unit 2 bait history advanced notice.

If you have been involved with baiting in Unit 2 for many years you may know some of the problems we are facing with increasing demand, administrative work load, failure to obtain accurate bait site locations from permit applications, difficulty determining the number of bears killed over bait, and bait sites used for commercial purposes are just a few of the recent challenges. One other effort you could help with is to make sure to accurately note when you kill a bear over bait. During the BOG several years ago when there was a statewide Ballot Initiative to ban bear baiting. At that time we were asked how many bears are harvested over bait from Unit 2. During that period our harvest records indicated only a handful (less than 10 bears) and it was impossible to determine if that was lack of reporting, or truly low harvest over bait. Our harvest records indicate you killed a bear in Unit 2 in 1992 and none since, yet you have registered bait sites during 5 other years since 1989. Please, if you or your hunting partner harvest a bear over bait be sure to indicate that information on the sealing certificate at the time of sealing.

These efforts are to address problems we have had with over 75% of the bait permits in Unit 2. If you have

2/16/2008

# STATE OF ALASKA

## DEPARTMENT OF FISH AND GAME

### DIVISION OF WILDLIFE CONSERVATION

**SARAH PALIN, GOVERNOR**

2030 Sea Level Drive  
Ketchikan, Ak. 99901  
PHONE: (907) 225-2475  
FAX: (907) 225-2771  
Email: [boyd.porter@alaska.gov](mailto:boyd.porter@alaska.gov)

October 16, 2008

Ken and Anna Vorisek  
427 Crestmont Dr.  
Fairbanks, AK 99709

Dear Mr. and Mrs. Vorisek:

I am responding to your October 8, 2008 letter referencing a comment I made regarding Unit 2 bait permits. There is no state data base that references the information you have requested. My comment referred to a combination of poor bait site location information and poor compliance with permit conditions.

Sincerely,



Boyd Porter  
Area Management Biologist

RL 18



United States  
Department of  
Agriculture

Forest  
Service

Alaska Region  
Tongass National Forest

648 Mission Street  
Ketchikan, AK 99901  
Phone: (907) 225-3101  
Fax: (907) 228-6215

File Code: 2610

Date: November 5, 2008

Cliff Judkins  
Chairman  
Alaska Department of Fish and Game, Boards Support  
Section  
P.O. Box 115526  
ATTN: BOG COMMENTS  
Juneau, AK 99811-5526

Dear Mr. Judkins:

My staff reviewed regulatory proposals for the Alaska Board of Game and in general, support the recommendations from the Alaska Department of Fish and Game (ADFG). However, we do have specific comments on three proposals.

#### **Proposal 5**

We support the need to know the GPS locations of bear baiting stations and support flexibility in how users report them. Making this reporting easier is certainly in the public's best interest. We do not believe it is necessary to go in person to the ADFG office to register the bait station. Registering by phone, letter or over the Internet should be sufficient. This will reduce the costs to residents hunting on Prince of Wales Island especially during this time of increased fuel costs.

However, we oppose making this voluntary and believe both the ADFG and our agency need to have specific locations of these stations. Therefore, we oppose this part of this proposal.

#### **Proposal 8**

We agree with the ADFG that there appears to be enough concern for the population of marten on Kuiu Island to warrant consideration in a change in regulation. The reasoning is compelling; however, the small number of trappers using this 500,000 acre remote island does not seem to warrant such immediate drastic changes in the regulations. We are particularly concerned about the closure of the road system to trapping, especially since the ADFG did not work with the Forest Service to identify whether there were other management options that could be considered before they proposed this closure. The proposal states that the majority of trapping occurs via salt water access, not roads. Only the eastern portion of Kuiu Island (Rocky Pass) is accessible during the trapping season because of the dramatic weather oscillations along Chatham Straits on the west side of Kuiu Island. The Forest Service opposes the closure of the road system without compelling data that proves this closure necessary. This seems unnecessary with the "no limit" season prescribed for residents, the most likely trappers to use Kuiu Island and who are also likely to trap via beach access.





The Forest Service favors changing the existing regulations to put protective measures in place on Kuiu Island for the benefit of the marten population. However, we are not yet convinced that there is a long term marten concern on Kuiu and do not agree with some of the issues raised by ADFG, in particular the concerns regarding the impacts of future timber harvest on Kuiu, speculation that non-resident trapping on Kuiu Island would be a problem if a logging camp were to re-open and implying that there are two species of marten on Kuiu. Currently, 90% of the high volume productive old growth (which is considered high value marten habitat) that existed before the onset of timber harvest is still present on Kuiu Island. While we acknowledge that planned timber harvest will reduce this habitat, we do not believe that this will be a significant factor affecting marten conservation on Kuiu. We also believe that there is not universal agreement that there are two species of marten in Southeast Alaska and believe more information is needed before management changes are proposed based on uncertain taxonomy.

We believe the proposal indicates that a more conservative approach is needed with monitoring incorporated and the judicious use of the emergency closure in lieu of road closures until more data can be collected to provide a better understanding of what is needed to ameliorate the problem. I would ask that the Department work with my staff on a Marten Management Plan to document the problems on Kuiu Island and develop other management options.

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We support most of this proposal and believe that concerns about black bear populations warrant the reduction in the non-resident season. However, we do not see compelling evidence for this season limit on Kuiu Island and indeed, believe that the non-resident cap on Kuiu is adequate.

I look forward to working more closely with the ADFG on joint management issues.

Sincerely,

/s/ Forrest Cole  
FORREST COLE  
Forest Supervisor

cc: Jim Brainard  
David M Johnson  
Steve Kessler  
Winifred B Kessler

RC 19

Years ago, when I sat down in front of the computer to decide where to spend the rest of my life, I focused on Juneau. One of the first things I looked at was the wildlife here.

Having vacationed in Alaska almost yearly for over thirty years, I was not completely ignorant of its wildlife. I knew, for example, that Juneau was in bear country, and I knew there were no caribou here. I was, however, surprised at the lack of moose in Juneau. The one deciding factor in Juneau's favor was an obscure website stating that there were wolves on an island near Juneau. It was enough for me to be close to wolves, so here I am - no small feat because my husband and I moved here all the way from Atlanta, Georgia, about as far away as you can get and still be in the US.

I have lived here for two and a half years. Because of the way my husband and I speak of Alaska's scenery and wildlife, six groups of people have vacationed here already, some of whom will return, and more are on the way. And these people do not limit their visits to Juneau. One group last summer, for example, spent three weeks in Alaska, visiting many parts of the state.

None of them come to see denning. None of them come to see aerial hunting. In fact, many express concern over spending their money in a state that fosters aerial hunting (and it IS hunting). They come to see the wilderness and the animals in it. We all know, for example, about the Denali animal checklist, the big five.

You can call me a tree hugger and you can call me a leaf licker (both of which I've been called here before, I'm proud to say, and many other things, too, I am sure), but how many people are moving TO Juneau rather than away from it? And how many are responsible for so many tourist dollars being spent here?

We all know that every year, fewer and fewer people nationwide hunt. And we all know that more and more people nationwide are choosing ecotourism. Without our wildlife, all Alaska will have to offer is a cold, remote, hard-to-get-to place that people will not want to visit, much less live in. We must preserve and guard our wildlife. There is no sound reason for denning or aerial hunting.

**B**

Tina Brown  
19400 Beardsley Way  
Juneau, AK 99801-8218

Tina M. Brown  
19400 Beardsley Way  
Juneau, AK 99801  
907-523-5402

**SUPPORT 46:**

This would shorten the season for the taking of wolves and reduce the bag limit. The current season is excessive and allows wolf pups to be orphaned in summer and early fall, letting them starve and die inhumanely, which is unethical.

**OPPOSE 1, 2, 12, 13, 31, 45:**

These proposals are designed to extend the season for wolves and would allow wolf pups to be orphaned and die from starvation, which is unethical and immoral.

**OPPOSE 50 and 55:**

These proposals would allow wolf denning, which is illegal, immoral, and unethical. Additionally, an argument in favor of this practice because it is a traditional method of limiting wolf numbers has little, if any, veracity. Too, people around the world abhor denning, with good reason.

**OPPOSE 51 and 52:**

These proposals would allow bear denning, which is illegal, immoral, and unethical. Additionally, an argument in favor of this practice because it is a traditional method of limiting bear numbers has little, if any, veracity. Too, people around the world abhor denning, with good reason.

**OPPOSE 53:**

This proposal would allow bear denning, which is illegal, immoral, and unethical. Additionally, people around the world abhor denning, with good reason. The use of flashlights is irrelevant.

**OPPOSE 54:**

This proposal allows taking of bears same-day-airborne. This proposal ignores hunting ethics and sensible bear conservation practices. The proposal states that "tourists will have a greater chance of viewing moose and caribou" with this proposal. Tourists come to see bears, too.

RW

Greg R. Brown  
19400 Beardsley Way  
Juneau, AK 99801  
907-523-5402

**SUPPORT 23:**

This would protect cream-colored bears from hunting. These bears are an important wildlife resource because they provide enjoyment for all user groups.

**SUPPORT 46:**

This would shorten the season for the taking of wolves and reduce the bag limit. The current season is excessive and allows wolf pups to be orphaned in summer and early fall, letting them starve and die inhumanely, which is unethical and immoral.

**OPPOSE 4:**

The proponent states: "With a two goat bag limit maybe a few more people would go." This reasoning is not based on the health of wildlife populations, which should be the management objective.

**OPPOSE 15:**

This proposition endeavors to extend beaver trapping by three weeks. There is no biological justification given. The only justification given is increased profit. This proposition could be detrimental to the beaver population.

**OPPOSE 17:**

This would allow "bounties" on beaver in Unit 1D. Bounties are difficult to regulate and can negatively affect beaver populations. Too, who will pay for the beaver bounties?

**OPPOSE 18:**

This would lengthen the trapping season for land otter in Unit 1C. No biological justification is given. The only justification given is increased profit.

**OPPOSE 24:**

This would extend spring brown bear hunting season by two weeks in Unit 1C. Bears are vulnerable to hunters in the spring as they frequent intertidal/coastal areas where they can be easily seen and shot. This would be unethical and would be detrimental to the brown bear population.

**OPPOSE 32:**

This proposal concerns incidental catches where the wolf and wolverine seasons open up earlier than the lynx season. There is no biological justification to make this change.

**OPPOSE 49:**

This proposal would allow the snaring of bears and the taking of bears in the dens. This is unethical and

immoral.

OPPOSE 54:

This proposal allows taking of bears same-day-airborne. This proposal ignores hunting ethics and sensible bear conservation practices. The proposal states that "tourists will have a greater chance of viewing moose and caribou" with the implementation of this proposal, but tourists come to see bears, too.

RC 21

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## Facsimile Cover Sheet

To: BOARD OF GAME  
Company: ALASKA DEPT OF FISH & GAME, JUNEAU  
Phone: 907-465-4110  
Fax: 907-586-5342

From: Len Betts  
Company:  
Phone: 907-373-5413  
Fax: 907-373-2413

Christine Betts

WASILLA, AK

Date: 11-7-08

Pages including this  
cover page:

Comments: I understand that the Alaska Board of Game is poised to legalize the unsportsmanlike and unethical practice of "denning" - Killing of Wolf Pups, Bear Cubs and Mothers while in their dens, and that this would authorize other unsportsmanlike methods such as selling of bear parts, ~~snare~~ snaring and same-day airborne hunting of bears.

I strongly protest and such legalization.

Ethical conduct during hunting and/or game management MUST be high. We are blessed to have these wonderful animals among us, they deserve better than these barbaric practices. AK should not have yet another black eye because of these proposals. Thank you. Christine Betts.

RC22

3501 Halibut Pt. Hwy.  
Sitka, AK 99835  
Nov. 7, 2008

State of Alaska  
Board of Game

Comments:

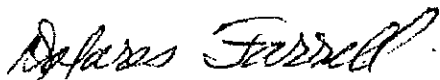
I am troubled to read that the Board of Game is considering efforts to continue and expand the practice of "denning" of newborn wolves and bears. I consider this to be an inhumane and primitive method of species control.

I also question whether the Board either invites testimony from or gives sufficient weight to the advice of naturalists or scientists when deciding on wise species control methods.

And finally, the entire issue of species control in Alaska seems to be oblivious to the long term effects of poorly researched methods; i.e., what will be the results of over culling, which may only be apparent after a species is so severely decimated that it will not recover? How does that affect the entire chain of species? Are we going to eradicate a species before we realize it is too late?

Please reconsider the denning of any species!

Sincerely,



Dolores Farrell

Email: [dorrief2001@yahoo.com](mailto:dorrief2001@yahoo.com)



7705 GLACIER HWY.

JUNEAU, ALASKA 99801

(907) 789-0260

2623  
FAX (907) 789-1795

WEBSITE: [www.ghspets.org](http://www.ghspets.org)

E-MAIL: [customerservice-ghs@gci.net](mailto:customerservice-ghs@gci.net)

My name is Chava Lee  
I live at 17725 Pt. Lena Loop  
Juneau, AK 99801

I am the Executive Director of the Gastineau Humane Society and as such am the Director of Animal Control for the City and Borough of Juneau.

I am testifying on Proposal 21 5 AAC 92.095 and Proposal 22 5 AAC 92.550. I am in support of closing trapping within ¼ mile of all existing trails within the City and Borough of Juneau. Doing so will provide a greater understanding of where trapping is allowed for both hikers and their pets as well as to people engaged in trappers. Trapping within ¼ mile of an existing trail poses a serious public safety hazard. During a study by a UAS class conducting a statistical analysis of pet owners in Juneau, it was determined there are over 8,000 dogs in Juneau. Those 8,000 plus dogs and their owners represent a large user group.

Proposal 21: Traps such as the one listed here are designed to maim or kill. To set these traps within ¼ mile of trails frequented by hikers and dog walkers guarantees that domestic animals and humans will be adversely affected. As trails in and around Juneau continue to experience more frequent human and domestic animal use, the potential for disaster if traps are set close to trails is inevitable. During my 18 months as a member of the CBJ Dogs on Trails Task Force, testimony from hundreds of individuals who walked and hiked Juneau trails showed that the major user group for all trails was people who walked dogs on these trails. It should be noted that during that testimony there were complaints about irresponsible dog owners and out of control dogs on trails. We do not advocate by any means that dog owners should behave irresponsibly or allow their dogs to behave that way. However, the duties, responsibilities and consequences of dogs and dog owners are addressed under CBJ ordinances and there is a method of redress for individuals who have problems with dogs or their owners.



Proposal 22:

The trail system in Juneau is extensive. The original trail list requiring trapping to be outside of a ¼ mile corridor was enacted before many of the trails now in use were even developed and/or maintained. Each year trails throughout the borough draw more and more people and domestic animals to them. I can not speak directly to how many domestic animals are hurt or killed by trapping. Though Animal Control does receive calls about illegally set traps, and animals (both dogs and cats), who have been hurt or maimed in those traps, the authority to investigate and cite if necessary falls to Alaska State Fish and Game (with the exception of traps set specifically to hurt, maim or kill a domestic animal and that is not the issue here. ).

The Gastineau Humane Society runs a program for dogs that includes hiking and training. On one outing one of the dogs in the program was killed in a conibear trap. It took three grown men to remove the trap. As you know, removing a conibear trap can be hazardous in and of itself and if not done correctly can cause injury to those trying to remove the trap. In this case the dog was dead and mercifully was killed instantly. However, had the dog been alive and in a moment of panic people were trying to remove the trap, the consequences could have been disastrous.

The confusion in the regulations of where traps are allowed and where they are not came up during the investigation. Initially, the investigating state trooper and state wildlife biologist both determined the trap was illegally set as it was not ¼ mile from the trail. In fact it was within 50 feet of the trail and a few feet from where cross country skiers had recently been. After some research, it was determined there was not a 1/4 mile trapping restriction on that particular portion of the trail. Though it may not have been the wisest placement of the trap (especially one of this size and this much killing power) it was not illegally set. Regardless, the potential for a dog or a person stepping into the trap did occur with disastrous results. Literally dozens of people called us to say they frequented that trail and this could have easily happened to them.

In conclusion:

Having uniform trapping regulations makes it easier for both trappers and trail users to have a better understanding of where traps may be located. Closing trapping within a ¼ mile of trails provides for greater safety to the public and their pets and makes sense for all concerned.

Thank you for your time.

**BOG SOUTHEAST REGION MEETING  
NOVEMBER 7-11, 2008  
PUBLIC TESTIMONY ROSTER**

1	Wade Willis	Defenders of Wildlife	Denning
2	Gary Miller	Juneau State Parks Advisory Board	Proposals 21,22, and 43
3	Mavis Henriksen	Personal	Area 1D, proposals 23, 36
4	Meg Cartwright	Juneau Audubon Society	Proposal 47
5	Greg R. Brown	Personal	Proposals
6	Tina Brown	Personal	Proposals
7	Calvin H. Casipit	Personal	Gustavus Moose, Proposals 27 &28. PC 19
8	Ken Vorisek	ABA-Alaskan Bowhunters Assoc.	Proposals 5 and 41
9	Ken Vorisek	Personal	Proposals 5 and 41
10	Bryce Brucker	EPOW AG	Proposals 3,5-10, 34-48, 56, RC14
11	Barry Brokken	Personal	Unit 1C, Proposal 15, 18-21, RC 15
12	Jake Miller	Personal	Trapping Proposals
13	Chava Lee 1 <sup>st</sup> call	Gastineau Humane Society	Proposals 21 and 22, RC23 (1 <sup>ST</sup> call)
14	George Schaaf 1 <sup>st</sup> call	Trail Mix, Inc.	Proposal 21-22 (1 <sup>ST</sup> call)
15	Jenny Pursell	Voices for Douglas Island Wildlife	Proposals 15-17, 23, 24, 31, 45-47
16	Tim Bourey	Personal	Proposal 23-5AAC 85.015
17	Jimmie G Rosenbrunch	Personal	Wolf and Black Bear in GMU-1-3
18	Clay Slanaker	Ketchikan AG	Proposals 3,4, and 9
19	Jenny Pursell	Alaska Wildlife Alliance	Proposals 22, 76, 13, 1,2,12,31,45,49-51, 54, 55
20	Charles A. Buckhart	Personal	Gustavus-moose hunt and subsistence and taking of cow moose.

21	Bethany Vanderzanden	Personal	The direction of moose hunting in Gustavus
22	Jimmie L. Rosenbrch	Personal	Black bear season. Wolf and black bear management.
23	Brad Dennison	Personal	Proposal 36-39
24	Carly Casipit	Personal	Gustavus moose hunt
25	Dale Adams	Personal	Proposal 36
26	Bobby Fithian	Alaska professional Hunters Association	General SE black bear predator proposals
27	Bobby Fithian	Personal	General SE black bear predator proposals
28	Tom Nelson	Personal	Gustavus moose, proposal 27 and 28
29	Dustin Hammer	Safari Club International Southern Utah Chapter	Proposal 36 and 13
30	Dustin Hammer	Personal	Proposal 36 and 13
31	Wendy Nelson	Personal	PC 27 and 28
32	Alex Simon	Personal	Denning of wolves and bears
33	Scott Parry	Personal	Proposal 36
34	Gary Hess	Upper Lynn Canal AC	Proposal 16,17, 26, 30, 31

RC 25

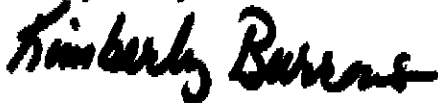
November 7, 2008

Board of Game:

The Defenders of Wildlife asked us to call the Board of Game to declare our outrage at "denning". I did so, but was then directed to fax my concerns directly to the Board.

Outrage doesn't do my emotions justice at this damnable practice. I am an Alaskan resident and I am vehemently stating that I DO NOT WANT DENNING TO BE PRACTICED IN THE STATE OF ALASKA AT ALL. And, furthermore, I want whomever is caught denning not only be fined, but have to serve time in jail as well.

Thank you very much.



Kimberly Burrows  
873 Linda Ct. #3  
Homer, AK 99603

RC 26

November 7, 2008  
To: State of Alaska Board of Game  
Fax: 907-586-5342  
From Kevin Murphy 907-842-3524

I have been an Alaska resident since 1972. I am strongly opposed to the process of "denning." Killing wolf pups and bear cubs in their dens is an inhumane act and should not be approved within the state of Alaska. I believe it is a breach of federal law.

RC 27

7 November 2008

TO: Board of Game

FR: Marybeth Holleman  
Anchorage, AK

RE: Proposals for Nov 8-9 Board Meeting in Juneau

I urge the Board of Game to vote against any and all proposals that include;

- Denning (for wolves and bears)
- Selling bear parts
- Snaring of bears
- Same-day airborne hunting of bears
- Bounties on wolves

These methods are unethical and unnecessary. Please DO NOT pass any proposals containing these methods.

Also, I urge the Board of Game to vote for a buffer on state lands to protect the wolf packs within and around Denali National Park.

Thank you.



Marybeth Holleman  
Anchorage, AK 99507  
marybeth.holleman@gmail.com

**Mavis Irene Henricksen**  
**.5 Mile Dyea Rd.**  
**P. O. Box 152**  
**Skagway, Alaska 99840**

75 year resident of Southeast Alaska

17 years in Ketchikan

The rest of the time in Skagway, where I was born and raised.

**Number 23, 25 and 26, Area 1D**

I strongly object to the protection or the changing the season for hunting bear beyond the regulations that existed year ending June 2007. Bear were never a problem in Skagway prior to 1990. Today, this late in the season a sow bear and her three cubs visit Skagway every night. She is a garbage bear and is raising at her second litter to be garbage bears also. I believe once a garbage bear or a fed bear there is only one solution---destroy the bears and enforce the laws governing care of peoples garbage. The City has recently passed laws on how garbage should be handled and I feel you should give the City the chance to clean up the situation. Sadly the present garbage bear has color phase babies, which are very attractive, but dangerous--they are bears, NOT TEDDY BEARS!

I feel our present problem is caused by a combination of circumstances. The area between Taiya River to the Skagway River has been closed to goat hunting for several years. I am told that your research has shown an overpopulation of about 300% of the wildlife that the area should sustain. If this area was opened to goat, maybe the predators, bear and wolf would be hunted also. Wolf are also new to our area and the cayote which existed seem to have disappeared. Wolf were devastating to the goat in the Upper Dewey Lake area last year.

I understand the Taiya River/Skagway River area is referred to as the pie. I would suggest that you split the pie and allow three goats to be taken by bow in the east half, which would be the easier half to access and three goats be taken in the west half by firearms. The pie should be opened to goat hunting and other hunting usually allowed in the area.

John Warder submitted the proposal for modifying the definition of white bear in Unit 1D. He is a retired Park Service employee and the Park Service are determined to OWN the area. I was on the Skagway City Council when the Klondike Gold Rush Historical Park was created. We were promised that this was a "different kind of park". The National Park Service own very little of the area and this park is a HISTORICAL PARK, the history of the Klondike Gold Rush being the focus of the park. It was never intended to be a wildlife park, but career Parkies do not understand a different kind of park. I hope the State of Alaska will protect the residents of Skagway from giving the Park Service their way and taking us over, which they spend 24/7 trying to accomplish.

People that encourage bears to stick around are also the problem. Evidently some people think they are teddy bears and of course the old greed that goes with a gold rush boom town also exists still in the summer boom that happens each year with the tourists. Tour bus drivers have baited the bears being along the Dyea Road, in order to get more tips from the tourists that see wildlife. We all like wildlife, but I like predators wild, not in my yard and house. I cannot enjoy feeding birds, because bears like bird food also. They don't seem to like my flowers, unless it is to take five lying down in them.

For the safety of everybody we need some common sense balance, which I feel Alaska Fish & Game do a pretty good job of if they are allowed to scientifically do their job.



586-5342

RC 29

8 November 2008

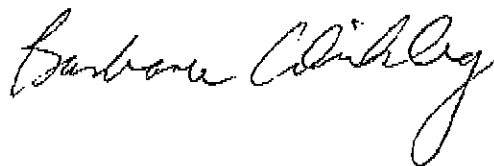
8120 Rabbit Creek Road  
Anchorage, Alaska 99516

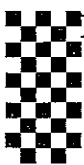
BOG---Juneau

I was shocked to see that the BOG is proposing killing wolf pups and bear cubs in dens.

In addition to protecting these animals, protection should also be given to wolves that inhabit the border of the NE portion of Denali. Most visitors to Denali National Park like to see wolves as well as other animals.

Barbara Winkley

A handwritten signature in cursive script, appearing to read "Barbara Winkley", written in dark ink.



RL 30

Dear Alaska Board of Game,

11/7/2008

Proposal # 23 **"OPPOSED"**RECEIVED  
NOV 7 2008  
BOARDS

I am strongly opposed to the any changes to the existing regulation and the existing regulation itself is flawed and unenforceable and should be changed back to reflect the traditional color phase of black bears, black, brown, and glacier, the latter of which this light colored bear in question actually was.

I had initially supported the issue but after rethinking the issue I now believe that was a mistake.

In my opinion the effort to protect that single animal because of its color is the sole reason for its demise. The bear in question had been habituated to garbage and people and there is evidence that people where feeding this bear in Skagway and habituated it into staying in the locality as a problem bear resulting in this young bear not moving away into new territory and away from people. The quality of the resource was diminished.

The light colored glacier bear in question had absolutely no fear of the hunter who took it.

Skagway is currently having a serious bear problem that affects public safety and not long ago Skagway addressed it in a similar way Juneau has addressed their bear issues. The problem is not yet under control, there is work still needed to be done. The local Skagway police have been very active on hazing bears "in town" this year, and literally hazing every night for about the last week. There a high probability that the sow that produced the light colored glacier bear in question, has yet another glacier bear cub (along with two black cubs) that is now a fully habituated to garbage and humans and is the same bear the police are now hazing. So we could have a single sow that has produced light colored glacier bears in Skagway that is habituated to garbage and the people that think it needs protection. The garbage sow and cubs will quite likely have to be destroyed not by hunters, but in the interest of public safety.

Does a person wanting to view it have more right than one wanting to hunt?

Banning hunting on any black bear that is not black or brown would unnaturally upset the balance of the natural color phases bears by providing a bias for more light colored bears.

The premise that the genes are eliminated from the gene pool is inaccurate, as this is a recessive gene that resides in the relative population in the region. Remember the sow was black.

The quality of the resource will be diminished for hunters, trophy, sport, meat or subsistence alike by eliminating these bears from the hunt. We are talking about hunting regulations.

Typically the viewing opportunities would not be good for the visitors who come to the locality, unless there are bears that have been influenced to stay visible and habituated to humans because there natural habits would take them to inaccessible places and keep them away from people.

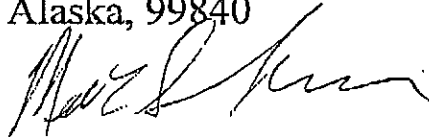
The claim that this light colored glacier bear is sacred to the native community in my belief inaccurate.

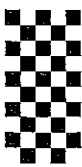
There also may be a conflict regarding Federal Subsistence regulations.

The local Upper Lynn Canal Board of Game Advisory committee "opposes" this.

Sincerely,

Mark Schaefer, Po box 297, 3.2 Mile Klondike Hiway, Skagway, Alaska, 99840





RC31

## Spirit bears

RECEIVED

NOV 7 2008

BOARD

Board of Game  
Fax # (907)465-6094

Re: " Spirit bears" (White color phased black bears or glacier bears)

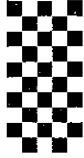
I am strongly opposed to the protection of the white color phased black bears from legal harvest. "Spirit bears", as they have been dubbed, are not a species in and of themselves and have no special qualities that separate them from the existing gene pool of all other light color phased black bears in southeast Alaska. If they were a separate species, there would be a distinct population of white bears here. There is no such population in this region. One can only conclude that the genetic makeup that caused this color phase to surface is inherent in the existing black bear / glacier bear population and therefore has an equal chance of manifesting itself again in future white color phased black bears.

I feel that the initial protection of this color phase was erroneous and inspired by activism and not science. Because of the "touchy, feely" rants of anti-hunting proponents and the sway they exerted on the Board of Game, a legal harvest was denied to hunters. I can accept having them classified as a glacier bear (a color phase of the black bear as well) which would allow the taking of one per regulatory year. I personally think any color phase of black bears should be considered equally, making it legal to harvest two per regulatory year here in game management unit 1C. I doubt the glacier bear will be de-classified as it has been classified for a number of years. However, the white color phase should be classified as a glacier bear and not protected. It is merely a lighter colored glacier bear which is a lighter colored black bear as is the cinnamon bear which has no such protection or restricted status.

I strongly urge the Board of game to remove the protected status that white color phased black bears have been granted and allow licensed hunters to legally harvest these game animals within the regulatory season.

Thank you,  
Kirk Ziegenfuss

Kirk Ziegenfuss  
P.O. Box 22412  
Juneau, Alaska 99802  
(907)723-0898



PC 32

Dear Alaska Board of Game,

11/7/2008

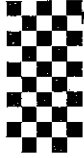
Proposal # 23 **"OPPOSED"**

RECEIVED  
NOV 07 2008  
BOARD

Regulation of any animal should be based on the "herd health," not a particular trait such as color. This is not only unenforceable, but absolutely ridiculous.

Sincerely,

Robert Murphy  
PO Box 176  
Skagway, Ak 99840  
(907) 983-3771



PC33


November 7, 2008

To: Alaska Board of Game Members  
Via Fax 465-6099/ 6094

RECEIVED

Re: Proposed Regulations Change

07 2008

From:   
Margaret Weaver  
224 Behrends Ave.  
Juneau AK 99801

ALASKA

I urge the Board of Game to not authorize and legalize the practice of killing bear cubs, wolf pups, and their mothers in their dens. I find the proposed snaring of bears and same-day aerial hunting of bears, as well as the plan to sell bear body parts equally repugnant, unethical, and unnecessary.

Surely the Board can develop management plans that respect our animal neighbors and their intrinsic rights and value to Alaskans, and lessen your focus on the "needs" of (often out-of-state) sport and trophy hunters. Outdated management models that prioritize wildlife as lucrative targets need to be replaced in light of the new century's realities. Our wildlife is too valuable to us in too many ways now for these misguided proposals and inhumane practices to be adopted by our state.

Please don't embarrass us ~ do the ethical thing and vote against these brutal proposals!

Thanks.

RL 34

November 8, 2008

PO Box MXY McCarthy #20  
Glennallen AK 99588

Board of Game:

I strongly oppose the killing of wolf and bear pups, cubs, and mothers in dens.

Sincerely,

Jeremy Pataky  
Executive Director  
Wrangell Mountains Center  
jnpataky@yahoo.com

RL 35

DATE: November 8, 2008

RE: BOG Meeting 7,8,9 November, 2008  
SUBJECT: DENNING OPPOSITION

TO: Alaska Board of Game Members  
Juneau, Alaska

FROM: Cheri A. Murphy  
PO Box 6974  
Ketchikan, AK. 99901  
907-225-6974

It has come to my attention that you are having a board meeting and one of the issues up for discussion is the practice of, "denning." I am adamantly opposed to this barbaric practice.

I have lived in Alaska almost my entire adult life, and I am now 57 years old. I have lived all over this great State from Pt. Barrow, to Anchorage, to Soldotna (where my children were born and raised) to now living in Ketchikan. I love this beautiful State and all of Alaska's wildlife. So much so, that I am a strict vegetarian and I do not hunt nor ever kill animals. Our Alaska Wildlife represents a rare and beautiful thing, for not only the enjoyment of Alaskans, but for the world, overall. Alaska represents one of the very last wild places left in the world. Why on earth wouldn't we want to be the best stewards of our land and wildlife that is possible? Why would we not want to protect such a valuable resource for not only our enjoyment, but generations to come?

The State Constitution mandates that Alaskans manage our wildlife for ALL ALASKANS. I would assume this means for even people like me that wish our wildlife no harm. I love taking pictures of live animals, not during a post mortem interval.

Please, when making your decisions on this very important matter, I urge you, beg you to consider not allowing this practice to occur in Alaska, not now, not ever. Help protect Alaska's resources, which not only include our land, air and water, but the most valued of all, our beautiful wildlife.

Thank you for listening, and I will hope for the best outcome.

A handwritten signature in black ink, appearing to read "Cheri A. Murphy". The signature is fluid and cursive, with a large, stylized loop at the end.



To: Skagway Residents  
From: Mayor Tom Cochran  
Subject: Public Notice

November 7, 2008

Once again we are approaching November and have a family of black bears roaming our community on an almost daily basis. These bears are looking for food and have a penchant for garbage. Hopefully, the weather will soon convince them to lay up for the winter. In the meantime, I want to stress to everyone to be aware and vigilant. Our police department has been actively engaging these unwanted visitors on a fairly regular basis in an effort to persuade them to leave. It is unfortunate that this particular family has grown accustomed to and comfortable with people. Rarely, can this type of behaviour be reversed in these animals. Hopefully, we can resolve this issue without resorting to destroying these animals. But public safety is more important than these animals and it may come to that. Everyone needs to be aware that these animals are roaming the alleys and yards from 1<sup>st</sup> street to the Skagway River bridge. Please be careful until we are satisfied that they have left the area.

Dear Alaska Board of Game,

11/7/2008

Proposal # 23 **"OPPOSED"**

I am strongly opposed to the any changes to the existing regulation and the existing regulation itself is flawed and unenforceable and should be changed back to reflect the traditional color phase of black bears, black, brown, and glacier, the latter of which this light colored bear in question actually was.

I had initially supported the issue but after rethinking the issue I now believe that was a mistake.

In my opinion the effort to protect that single animal because of its color is the sole reason for its demise. The bear in question had been habituated to garbage and people and there is evidence that people were feeding this bear in Skagway and habituated it into staying in the locality as a problem bear resulting in this young bear not moving away into new territory and away from people. The quality of the resource was diminished.

The light colored glacier bear in question had absolutely no fear of the hunter who took it.

Skagway is currently having a serious bear problem that affects public safety and not long ago Skagway addressed it in a similar way Juneau has addressed their bear issues. The problem is not yet under control, there is work still needed to be done. The local Skagway police have been very active on hazing bears "in town" this year, and literally hazing every night for about the last week. There a high probability that the sow that produced the light colored glacier bear in question, has yet another glacier bear cub (along with two black cubs) that is now a fully habituated to garbage and humans and is the same bear the police are now hazing. So we could have a single sow that has produced light colored glacier bears in Skagway that is habituated to garbage and the people that think it needs protection. The garbage sow and cubs will quite likely have to be destroyed not by hunters, but in the interest of public safety.

Does a person wanting to view it have more right than one wanting to hunt?

Banning hunting on any black bear that is not black or brown would unnaturally upset the balance of the natural color phases bears by providing a bias for more light colored bears.

The premise that the genes are eliminated from the gene pool is inaccurate, as this is a recessive gene that resides in the relative population in the region. Remember the sow was black.

The quality of the resource will be diminished for hunters, trophy, sport, meat or subsistence alike by eliminating these bears from the hunt. We are talking about hunting regulations.

Typically the viewing opportunities would not be good for the visitors who come to the locality, unless there are bears that have been influenced to stay visible and habituated to humans because their natural habits would take them to inaccessible places and keep them away from people.

The claim that this light colored glacier bear is sacred to the native community in my belief inaccurate.

There also may be a conflict regarding Federal Subsistence regulations.

The local Upper Lynn Canal Board of Game Advisory committee "opposes" this.

Sincerely,

Mark Schaefer, Po box 297, 3.2 Mile Klondike Hiway, Skagway, Alaska, 99840



# SKAGWAY NEWS CO. FAX

SERVING SKAGWAY SINCE 1978

PL 38

TO: Board of Game

DATE:

FROM: Jeff Brady, ed.

PAGES: 14 (4 stories  
Skagway News)

## MESSAGE

Just making sure you have these RE,  
incident last summer ~~at~~ Prop. 23 discussion  
for

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Covering here  
via weblink  
thanks!

# Game board to address new 'cream-colored' bear proposal

## Skagway resident files proposal to better protect 'Spirit Bears'

By JEFF BRADY

Among the more than 50 proposals before the Alaska Board of Game next month is one from a Skagway resident seeking a better definition of protected white-colored black bears to prevent the kind of shooting incident that occurred last summer.

The board will be meeting in Juneau on Nov. 7-11, but written comments on the proposals must be submitted by 5 p.m. today, Oct. 24, to be included in the board packets. Comments may be faxed to (907) 465-6094, according to a press release issued last week. Public testimony on the proposals also will be taken at the beginning of the first day of meetings, which starts at 8:30 a.m. on Nov. 7 in Juneau's Centennial Hall.

After the testimony, the board will spend the next three days addressing proposals in order. A complete list of proposals is available at: <http://www.boards.adfg.state.ak.us/gameinfo/index.php>

Number 23 is the Skagway bear proposal and was submitted by Dyea Road resident John Warder. It seeks to "modify the regulation restricting the taking of white-phase black bear in Unit 1D as follows: We strongly recommend the Board of Game to direct the Department of Fish and Game to work with legal and regulatory staff to develop language which will be enforceable in a court of law to the effect of 'A light-phase black bear that has cream coloration (or lighter) over more than 30% of its body may not be taken regardless of any other coloration.'"

The regulation on the books, approved a year ago by the board, stated that only "white-colored black bears" in Unit 1D were to be protected. This was the result of a request from the City of Skagway to protect the "white-phase black bear" known locally as the Skagway "Spirit Bear."

The issue, the proposal declares, is that "efforts to protect the cream-colored black bear known as the Skagway 'Spirit Bear' failed this spring when the department's regulation for protection of white-colored black bears in Unit 1D proved unenforceable."

On June 5, 2008, Dyea Road resident Thor Henriksen shot what he believed was a cinnamon bear that stared him down after snooping around a rabbit hutch on his property. It was shot in season, but many thought it was the Spirit Bear, and the hide was initially seized by an Alaska Fish and Wildlife trooper. However, after an inspection by the trooper and several Alaska Fish and Game biologists in Juneau, none would definitively conclude that the dead bear was "white." They said it had multiple colors, including cinnamon and black. Because Henriksen had a hunting license and shot the bear in season, no charges were filed and the hide was released to him.

Photos circulated of the Spirit Bear when it was alive attested to its multiple coloration, but photos of the hide were never released to the public for comparison and remain sealed by the troopers. But because the Spirit Bear was never seen again, even biologists said the "light-colored" dead bear was "probably" the one intended to be protected.

The officials decided to come to Skagway on July 17 to clear the air. They admitted that the regulation was not enforceable on the bear that was shot. They had no explanation why the Board of Game changed the Skagway request last year from "white-phase" to "white-colored."

They outlined steps for taking the matter up with the Board of Game, and also said they would file a report on the incident for the Nov. meeting and would look into how the white-colored Kermode bears in British Columbia are protected.

Reached this week, Warder said he was upset with the officials at the meeting for shirking their "responsibility to protect the bear." He said that the regulation language needs to be changed, because similar language could not be enforced for a protected bear in Unit 1C near Juneau, nor for an albino moose near Fairbanks.

"Basically, the people need to know that the language the board came up with to protect our bear locally did not work," Warder said. "Somebody shot it. I was so pissed off I felt it was important to do something." He said he filed the proposal request soon after the meeting.



Skagway resident Jan Wrentmore holds up photos of the "Spirit Bear" at the July meeting. She and others planned to send comments to the Board of Game. *Jeff Brady*

Warder said his proposed language basically gives the state something to protect that's "eggshell white or whiter," he said.

The proposal states it would give "a higher survivability rate to the unusually colored spirit bears, thereby protecting significant viewing opportunities for the more than 1 million people who visit Skagway each year. Without this regulation, these bears are selected against by individual trophy hunters and the genes are eliminated from the gene pool, to the detriment of the far greater majority who would enjoy viewing and photographing them."

It states that those likely benefiting from the proposal would be "the native community who consider spirit bears to be sacred, school children, visitors on tour, tour operators, professional photographers, independent travelers, and local residents."

It states that those likely to suffer from the proposed language would be "trophy hunters looking for odd colored black bear hides." It concludes that the only other solution to consider would be "banning the

hunting of any black bear that is not black or very dark brown," but when interviewed, Warder said he does not want to see that happen.

He added that the municipality could take action by moving the line banning the discharge of firearms to 300 yards west of the Dyea Road. Right now the line is on the east side of the road. The bear shot on June 5 was west of the road. Anyone who shoots a bear legally in defense of life and property in that zone would not be able to keep the hide and meat, he said.

Another proposal of interest to Skagway residents is number 26, which would establish an archery hunt for one mountain goat Sept. 15 to Nov. 15 in Unit 1D between Taiya Inlet/River and the WP&YR railroad. This would allow bow hunters access to an area of high goat density, says the proposal, which was submitted by the Upper Lynn Canal Fish and Game Advisory Committee.

# Dyea emergency measures explored

## Bridge options dwindle

By JEFF BRADY

While the borough assembly is preparing to make replacing the derated Taiya River bridge its top priority for the governor's upcoming budget (see borough digest), local emergency services and others are planning for two years or more of reduced access in Dyea for their big equipment.

The bridge has been rated for 5 tons per axle — half of its original rating — but the results of a July inspection may derate it further. A final state report is due this week.

During a Public Safety Committee meeting at the Skagway Fire Hall on Monday, Fire Chief Mark Kirko unveiled a proposal for fire and ambulance calls across the bridge.

Kirko and Deputy Chief Wayne Greenstreet toured the area last week and did a head and building count in Dyea. They also looked under the bridge, and did not like what they saw — half-inch thick I-beams that had corroded to a depth of just an eighth inch in places.

Kirko said anyone who drives a heavy rig over the bridge is taking a big risk and could be liable if the span failed and if fuel got into the river and caused environmental damage.

Right now, only the chief's command vehicle and a pick-up are legal, so the department is looking at these alternatives for fire suppression:

- provide smoke detectors and a 20-pound extinguisher for each dwelling. There are about 24 structures in Dyea, and 16 residents.
- use the forestry trailer with a pick-up with 200 gallons of water for an attack vehicle.
- place pumps at specified drafting (water intake) sites, and do their best in timing a consistent shuttle of water to fire scenes.
- extend summertime use of fire protection trailers used by the National Park Service.
- acquire the Webb property through lease or purchase to house a pumper (Engine 19) and water tanks that could also draft water from nearby West Creek.

The latter is the most expensive, but the most viable, Kirko said. It would give Dyea residents their own little fire hall, and could be watched by volunteers, Greenstreet added.

# Top Derby Chinook Catch



Dusty Fredricksen caught this 31.85-pound king salmon on the first day of the Pat Moore Memorial Gamefish Derby on July 10. The catch held up through the weekend and won him a lot of cash and prizes. See complete winners list and more fish pictures in Features at bottom of this page.

*Photo by Andrew Cremata*

## BEAR SHOOTING BRIEFING

### State game biologists, trooper discuss what went wrong

State changed regulation wording from 'white phase' to 'white color', still no positive identification it was



## the 'Skagway Spirit Bear'

By JEFF BRADY

Biologists with the Department of Fish and Game and the trooper involved in the investigation of the light-colored black bear shot in Skagway last month met with local residents in a public forum on July 17. After being grilled by many in the audience, the state officials apologized that the so-called "Skagway Spirit Bear" was not protected better. They said they thought the regulation adopted by the Board of Game last fall was adequate – until the bear was shot.

Now there is concern that without a broader definition of a white-colored bear by the Board of Game, then a similar bear seen north of Juneau in Unit 1C could also be hunted legally.

There still has been no positive identification that the bear shot June 5 by Dyce Road resident Thor Henriksen was the "Spirit Bear" that was given protection at the request of the Municipality of Skagway. A team of biologists and troopers inspected the hide and compared it with photos submitted by several residents, but could not come to a conclusion, other than saying it was a light-colored cinnamon black bear. Henriksen was not at the meeting, but has said in media interviews that he thought it was a cinnamon bear, and shot it on his property because it was a possible threat to his family. He had a hunting license and the bear was taken in season. No charges were filed against him.

The fact that the "Spirit Bear" has not been seen since the shooting has many, including state officials, concluding that it was probably the bear that was intended to be protected. The Skagway News last week filed a public records request to view the photos taken by troopers of the shot bear, and then have local "Spirit Bear" observers give their opinion, since none of the state officials had actually seen the bear alive. The request was forwarded to the commissioner this week, but there had been no word as of press time. At the meeting, Division of Wildlife Conservation biologists Ryan Scott and Neil Barten of Juneau-Douglas said several officials were involved in viewing the bear. Fish and Wildlife Trooper Rick Merritt of Haines said they looked at the hide in several lighting conditions, both inside and outside.

"Bottom line, we could not call it white," Scott said. "It upsets a lot of people and makes a lot of people frustrated."

Merritt agreed, saying he could not call the bear "white," since it had multiple colors including cinnamon and black. He added that his job was to "enforce the regulation, and the regulation said a white-colored bear."

A photo of the bear taken on John and Barb Brodersen's property (about a mile south of Henriksen's property) on the day it was shot was circulated. It showed a mostly off-white bear with black ears and touches of blonde, cinnamon and black on its side and hindquarters. After looking at the photo, Merritt said he could not be 100 percent, but "the photo looks different than the hide I saw."



**This photo of the "Spirit Bear" is believed to have been the last one taken before it was allegedly shot. It was taken at 11:30 a.m. on June 5, about one mile south of the Henricksen property, where a light-colored bear was killed at 4 p.m. Caylee Anne Redford, courtesy of Barb Brodersen**

When asked by Mayor Tom Cochran who invited the officials to come up to Skagway, Scott said they did it on their own after it was suggested they come up. Former mayor Tim Bourcy, who helped draft the original letter of request for protection last June, said he made the call, and Scott said he volunteered.

"We could let it fester or we could talk about it," Scott said.

Jan Wrentmore passed out Bourcy's letter to the Board of Game, which specified protection for the "white-phase black bear" seen around Skagway since it was a cub in 2005. She said the Board of Game changed the language in the regulation to "white-colored."

"Nothing personal, but someone in the department needs to take responsibility for failing this bear and this community," she said.

Scott said he did not know how the wording got changed. He said the team of ADF&G biologists offered no recommendation on the request, leaving it up to the Board of Game. An emergency 120-day regulation was put into place last August, and the board adopted a permanent regulation protecting the "white colored black bear" in Unit 1D at its Southeast meeting in November.

Several times during the meeting, Barten described the situation as an "allocation issue" that could only be addressed again by the Board of Game. A big problem inherent in the issue, he said, was the question, "Is it a white bear?", how they look in certain lighting conditions, and how they can change colors as they get older. He said they have heard that the Kermode bears in British Columbia have a broader definition, and they are checking into it.

Barten said anyone could petition the board for a change in regulation. Proposals are due Aug. 15 for consideration at the board's Nov. 7-11 meeting in Juneau.

Several in the audience suggested the department could have done a better job identifying the bear so a hunter would not shoot it. Ginny Sorrell, who had viewed and photographed the "ghost bear" several times near her home on the Dyea Road, said the bear could have been tagged.

Barten and Scott said individual identification and protection was possible, but said some people don't like taking photos of bears with orange tags in their ears.

They said the community also could take action by broadening the no discharge of firearms boundaries, but a few in the audience did not like that suggestion. The current boundary stops at the Dyea Road, leaving the west side okay for discharging a firearm.

Cochran said there was a broader issue with the community's "bear problem" and that broadening protection could preserve a problem. He said there are people with children on the hillside who were concerned about the bear. "As it gets older and older, it fears less," he said.

This drew a sharp reaction from some in the audience. "You are calling it a problem, it was not a problem," said Nola Lamken. "This bear was very special to a lot of people and there was no consequence," she added later.

Sorrell said the white bear always ran away when there was any noise made. She said the problem is with people who leave garbage out and attract bears. Several wondered why warning shots were not fired when the bear got near Henricksen's daughter's rabbit hutch and allegedly stared him down.

Tom Soucek wondered why the bear was released back to the hunter if it was a case of protecting life and property. That question drew a smattering of applause.

Merritt replied, "He told me he shot it in hunting season."

Another former mayor, Stan Selmer, said he has two grandchildren living in the Liarsville area, and said bears do not belong in town. While he said he had favored protection for the "Spirit Bear," he said he had obtained a hunter's license and would shoot any bear.

"Don't diminish hunting altogether," he said. "That's not the answer."

Bourcy said the public interest was not protected in this case, but wanted the state to focus on how to do better next time.

"If a bear is a nuisance and becomes a problem, get it out of here," he said. "If it is a threat to life and property, then it can be shot."

Kelth Knorr said that whether it was or wasn't the "Spirit Bear", the only way it could have been protected was to dart it and take it to a zoo. "There are hunters out there who see it as a predator coming in their house," he said.

When asked if they could have removed the bear if it became a problem, the biologists said the department does not typically capture adult bears, and shies away from tagging individual animals.

Barten said they would file a report to the Board of Game on the incident and investigate the Kermode bear regulation.

"Voice your concerns to the Board of Game, say this is what happened, and you're mad at Fish and Game," he said. "Ultimately it's in the Board of Game's lap."

Merritt then issued an apology.

"I apologize for this bear incident," he said. "After listening to you about the problem, there are some things that could be changed."

He said he hoped the incident would not stop people from contacting him about fish and wildlife issues.

**UPDATE:** *The News' request for release of the photos of the bear's hide was denied by the Dept. of Public Safety, citing that the release could constitute an "unwarranted invasion of the personal privacy of the suspect" and possibly "endanger the life of the suspect." We are now going through an administrative appeal process to still have the photos released, arguing that a) privacy was never an issue in this case since the suspect made public statements to print and radio media about the bear and the color of its hide, which are now published, broadcast, and posted on the worldwide web; b) admissions in Skagway by state authorities that there was a problem with the "white bear" regulation which will be brought up to the Board of Game at a public meeting in November; c) a new photo emerged of the bear on the day it was shot that state officials had not seen when they made their determination that the bear was not "white"; d) None of the state officials in the case had seen the "Spirit Bear" alive. The News does not intend to publish the photos of this dead bear, however we feel that a team of local bear observers who have seen and photographed the "white" bear should be allowed to view the photos and see if they agree with the conclusions of the state officials. - Jeff Brady, editor*

## Skagway harbor subject to state, federal water quality studies from EPA ship Bold

By MOLLY DISCHNER

The Environmental Protection Agency's premier ocean survey vessel Bold is studying water quality in Skagway during its first visit to Alaska.

Bold was in the Skagway area until July 21, according to a state Department of Environmental Conservation statement.

Two different studies were conducted on the ship, said Tim Hoffman, from DEC's Division of Water, which partnered with the EPA on the studies.

Denise Koch, manager of the DEC's cruise ship program, said the EPA is spearheading a study looking at nutrients, while the DEC is working on a water dilution study. The two agencies split the cost, with each

# LINGÌT AANÌ



Klukwan elder Joe Hotch 'kills money' over the head of Andrea Parent, as gatherers recite her new Tlingit name four times during a ceremony that also named interpretive signs on what has always been Lingit Aani or Tlingit Land. See our feature on the Tlingit Sign Dedication.

*Photo by Jeff Brady*

## State says bear shot June 5 was a light-colored cinnamon

No charges filed, 'Spirit Bear' has not turned up and many believe it was same bear

By JEFF BRADY

On June 17, the state announced it would not be charging the man who shot a black bear outside his home on June 5, saying it was a light-colored cinnamon phased type bear – not a white bear that was under a protection order.

"It was a light color, but it also had a lot of black and brown around the face, paws, all over it," said Fish and Wildlife Officer Ricky Merritt of Haines.

Thor Henriksen, who lives off the Dyca Road, said the bear he shot by his daughter's rabbit hutch was a cinnamon bear, not the white-phased bear that won state protection last fall.

Many in the town still believe it was the so called "Spirit Bear," (see sidebar) but the state will not say for sure if it is the same light-colored bear that was photographed around the area over the past two years. As of June 22, there had been no reported sightings of that bear.

Henriksen was relieved to not be charged and did not wish to discuss the incident further, though he said the days following the incident have been very rough on him.

Merritt said that the bear that was shot "was not close to the color white," but he could not say for sure if it was the bear people in Skagway considered as the "Spirit Bear" since he had not seen it in person.

"There's probably not a lot of white-colored bears in Skagway, so it is a possibility," Merritt said.

Merritt flew over to Skagway on June 13 and seized the hide and skull of the harvested bear. Division of Wildlife Conservation biologists and wildlife troopers examined the hide of the bear to determine if the animal met the regulatory requirements prohibiting the harvest of white-colored black bears in Unit 1D, according to a press release.

"Based on both photographs and physical examination of the hide, it was determined that the color of the bear is not white, the release said. "The bear in question has a multicolored pelt including white, black and blonde-cinnamon. Neither enforcement, nor biological staff can definitively say if the harvested bear is, or is not, the same light colored bear known to frequent the area."

Ryan Scott, a biologist with the Department of Fish and Game, was part of the team that inspected the bear. When asked if it was the bear in photos provided to him by the News and other sources, he replied, "I can't tell you for sure. I'm not comfortable guessing. But it's realistic that since we knew about a light-colored bear in that area, then it could be the same bear."

Scott noted the state was protecting a "white bear" based on a proposal from the Municipality of Skagway last fall. At the time, he said, his department made no recommendation, but the request was granted by the Board of Game based on the viewing pleasure of people in Skagway. A 120-day temporary order against taking a white bear in Unit 1D was granted in August, and then made permanent in November.

"We never looked at it as a 'Spirit Bear,'" Scott said. "We approached it from the biology aspect. We heard it called 'Spirit Bear'."

When asked what the definition of a white bear is, or if the protection order was in error, Scott said there isn't one definition in state law about white bears. "The bear we looked at it was not a white bear."

He said that he believed there had never been a case like this in the state.

"It's an interesting development..." he said. "There was a concern with this type of regulation: What happens when the bear shows up and it's not white?"

The state's June 19 press release said the bear was taken in an area open to bear hunting, during an open bear hunting season, and that the hunter possessed the necessary license to hunt and harvest bears.

"Based on the available information, the harvest was determined to be legal and the hide and skull of the bear will be returned to the hunter," the release concluded.



The 'Spirit Bear' had black on his ears, face and paws in this photo taken last summer. But the state won't say if it was the bear killed June 5, and they have not released photos of the dead bear. *Andrew Cremata*

## Spirit Bear gets a name

By ANDREW CREMATA

Residents and visitors to Skagway have had intimate encounters with a "Spirit Bear" along the Dyea Road for the previous two summers. The unusual coloration of the bear, which some have described as white or cream-colored, made the bear an attraction of its own for locals and tourists alike.

The disappearance of the Spirit Bear at the time a light-colored bear was shot by Thor Henriksen on his Dyea Road property, prompted members of the Skagway Traditional Council to hold a naming ceremony at the tribal building on June 18.

Lance Twitchell presided over the ceremony which attracted approximately two dozen people from the community on short notice.

Twitchell said it was as yet unclear if the bear in question was the Spirit Bear, but hoped the ceremony would help bring peace to the entire community.

Twitchell sang two ceremonial songs to start the proceedings, both based on Tlingit folklore. The second told the story of a man wrongly imprisoned who years later reenters a world which has changed to the point of being unrecognizable.

Twitchell made the comparison to the loss of the Spirit Bear, and how the lives of persons who cherished the animal would be different if it were indeed gone.

Everyone in attendance was given a chance to speak about their own personal feelings regarding the matter. Some expressed anger toward Henriksen and how they worked through a desire for vengeance. Others wanted direct information from the Alaska Department of Fish and Game clarifying if the bear in question was the bear referred to by Skagwegians as the Spirit Bear.

Some suggested Henriksen donate the bear hide to the Traditional Council when it is returned from F&G. More than a few people said more education and enforcement was needed to prevent people from keeping items on their property which could attract bears. Many broke down in tears.

Twitchell said there was a disturbing trend of late for the dispatching of bears in Skagway, or as he put it "ancestors."

Twitchell suggested those in attendance donate and "kill money" over a photo of the bear and offer it to Henricksen in an effort to bring peace and harmony back to Skagway.

Henricksen would then be obligated to use the money and some additional offering to make peace with a community that those in attendance felt he wronged. In a year's time he could hold a potlatch for the entire community.

Twitchell made it clear there was still no firm evidence the bear shot by Henricksen was the Spirit Bear, but the naming of the bear could proceed.

The name given the animal is Xoon Taak Yeigi Seegi, which means "Black Bear Spirit in the North Wind." Twitchell closed with a song of loss and ended the proceedings.

## Permit in hand: Juneau Access Road gets go-ahead from feds

The U.S. Army Corps of Engineers issued a permit to the Alaska Department of Transportation June 18 authorizing discharge of fill material into U.S. waters to construct the Juneau Access Improvements project. According to a Dept. of Army press release, the permit authorizes placing up to 1.7 million cubic yards of dredged and fill material into approximately 110 acres of waters, including forested wetlands, stream channels, deep water habitat, vegetated shallows, and navigable waters in conjunction with construction of a 50.8 mile long two-lane highway.

The authorized route starts at the end of the Glacier Highway at Echo Cove and goes around Berners Bay and along the eastern coast of Lynn Canal to a point immediately north of the Katzehin River delta. Associated infrastructure includes roadway fill, roadway slope stabilization, channel work, marine roadway fill, marine rock disposal, ferry terminal and ferry breakwaters.

The permit authorizes what is identified as Alternative 2B in the permit application, which was the state's preferred alternative. The Corps of Engineers issued the permit under its regulatory authority in Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. During the evaluation and public interest review, the Corps considered a number of alternatives and considered the state's application of avoidance and minimization to reduce impact to aquatic resources, pursuant to these laws, the release stated. The issuing of the permit met mixed reaction in the region.

Dick Knapp of Citizens Pro Road in Juneau told the Juneau Empire, "We've been holding our breath for at least four or five months."

However a coalition of anti-road groups who are challenging the project in court quickly issued a press release condemning the permit. The Alaska Transportation Priorities Project, Friends of Berners Bay, Lynn Canal Conservation, Skagway Marine Access Commission, and Southeast Alaska Conservation Council hammered away at the costs of the project and incomplete geotechnical data.

"The Juneau Road and ferry project, literally a 'road to nowhere,' has very expensive, technically-complex construction challenges," said Lois Epstein, an engineer with the Alaska Transportation Priorities Project in Anchorage. "The state should not begin construction until the governor and the legislature have a worst-case cost estimate. DOT's current low-ball estimate is not realistic because staff stopped the geotechnical contractor from completing its work. Governor Palin wisely expressed fiscal concerns with the project in a note to the DOT Commissioner in early May."

As of June 22, the governor had not weighed in on the permit. The latest cost estimate for the project is \$374 million, which DOT says would come mostly from federal funds, though it may take until 2020 to

# SUNBURST OF SPEED



The action has been hot at the ball fields this summer, even if nature's thermostat has been turned down a notch of late. See more Little League shots on the Sports and Rec. page.

*Jeff Brady*

## The bears are back

State: bear shot June 5 was a light-colored cinnamon bear

Web Updated June 17, 2008

<http://www.skagwaynews.com/0613085Nstories.html>

Page 1 of 10

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**By JEFF BRADY**

A black bear was shot outside a hillside residence in Skagway on June 5, a day before the borough and the state sent out notices warning people about bears in the area.

The warning noted that the "spirit bear (white phased black bear) has been spotted in several spots along the Dyea Road. Please remember this bear is still protected."

This warning and the light color of the bear that was shot had prompted some in Skagway to draw conclusions, which local police said was wrong until the state inspected the bear's hide and remains. A Fish and Wildlife officer showed up on June 13 and took the bear over to Haines, and then it was inspected Monday June 16 by a state Fish and Game biologist from Douglas.

On June 17, the state announced it would not be charging the shooter, saying it was a light-colored cinnamon phased type bear and not a white-phased bear as defined by state regulations.

"It was a light color, but it also had a lot of black and brown around the face, paws, all over it," said Fish and Wildlife Officer Ricky Merritt of Haines.

Thor Henriksen, who lives off the Dyea Road, said the bear he shot was hanging out by his daughter's rabbit hutch and acted aggressively toward him. But he believed it was a cinnamon bear, not the white-phased bear that won state protection last fall after lobbying by the community.

"It startled me and stared right at me, and put its head down," he said. "That's not a good sign."

He said last summer he was scared by bears, and more and more kept coming around. He said he made up his mind that he would shoot one in hunting season if one showed causing trouble on his property. Hunting season for spring bears ends June 30.

"I feel just awful (about the reactions in town)," he added. "I don't know what it is. It looks to me like a cinnamon bear... It's not blue and it's not white."



**SPIRIT BEAR** — This photo of the protected white-phased Skagway black bear was taken on the AB Mountain hillside outside a residence on May 31. If you see this bear, call police. *Ginny Sorrell*

Ginny Sorrell, who lives a little further up the hill, wrote in an e-mail that she usually sees the small "spirit bear" with the black ear tips every few days. On May 31, she sent The Skagway News photos of the bear from that weekend, but as of June 11 said she had not seen it for a while and was worried. She initially said it had been four days, but then e-mailed back that it may have been a week since she had seen it.

**Proposal 36A**

**RC39**

**5 AAC 92.540 Controlled Use Areas.** In the following areas, access for hunting is controlled as specified:

(12) Units 2 and 3

(i) the area consists of all of Units 2 and 3;

(ii) the area is closed to the use of any motorized land vehicle for black bear hunting Sept. 1 - 15, including the transportation of black bear hunters, their hunting gear, or parts of black bears;

**Proposal 1A**

**RC40**

**5 AAC 84.270(14). Furbearer trapping.**

<b>Species and Units</b>	<b>Open Season</b>	<b>Bag Limit</b>
(13) Wolf		
Units 1 and 3 - 5	<u><b>Nov. 1</b></u> - Apr. 30 [NOV. 10]	No limit.

**5 AAC 92.550. Areas closed to trapping.**

The following areas are closed to the trapping of furbearers as indicated:

(1) Unit 1(C) (Juneau area):

...

(F) a strip within one - quarter mile of the following trails as designated on United States Geological Survey maps: Herbert Glacier Trail, Windfall Lake Trail, Peterson Lake Trail, Spaulding Meadows Trail (including the loop trail), Nugget Creek Trail, Outer Point Trail, Dan Moller Trail, Perseverance Trail, Granite Creek Trail, Mt. Roberts Trail and the Nelson Water Supply Trail, Sheep Creek Trail, and Point Bishop Trail, **however, in a strip between 100 yards and one - quarter mile from the trail, traps with jaw spreads of 4.5 inches or less which are set at least 5 feet above the ground and/or snow are allowed;**

**5 AAC 92.080. Unlawful methods of taking game; exceptions.** The following methods of taking game are prohibited:

...

(7) with the aid of a pit, fire, artificial light, laser sight, electronically enhanced night vision scope, radio communication, cellular or satellite telephone, artificial salt lick, explosive, expanding gas arrow, bomb, smoke, chemical (excluding scent lures), or a conventional steel trap with an inside jaw spread over nine inches, except that

(A) a rangefinder may be used;

(B) a killer style trap with a jaw spread of less than 13 inches may be used;

(C) artificial light may be used

(i) for the purpose of taking furbearers under a trapping license during an open season from November 1 – March 31 in Units 7 and 9 – 26;

(ii) by a tracking dog handler with one leashed dog to aid in tracking and dispatching a wounded big game animal;

(iii) to aid in tracking, recovering, and dispatching a wounded game animal without the use of a motorized vehicle;

(iv) by resident hunters under customary and traditional use activities at a den site in Units 21B, 21C, 21D, or 24 during Oct. 15 – April 30.

(D) repealed 7/1/2008;

...

**5 AAC 92.220. Salvage of game meat, furs, and hides.** (a) Subject to additional requirements in 5 AAC 84 - 5 AAC 85, a person taking game shall salvage the following parts for human use:

...

(4) from January 1 through May 31, the edible meat, and from June 1 through December 31, either the hide, or the edible meat as defined in 5 AAC 92.990 , of a black bear taken in any game management unit in which sealing is not required; however, from June 1 through December 31, the edible meat of a black bear taken by resident hunters under customary and traditional use activities at a den site in Units 21B, 21C, 21D, or 24 must be salvaged.

**5 AAC 92.260. TAKING CUB BEARS AND FEMALE BEARS WITH CUBS PROHIBITED.** No person may take a cub bear or a female bear accompanied by a cub bear; however, a cub bear or a female bear accompanied by a cub bear may be taken by resident hunters under customary and traditional use activities at a den site in Units 21B, 21C, 21D, or 24 during Oct. 15 – April 30.

**5 AAC 92.080. Unlawful methods of taking game; exceptions.** The following methods of taking game are prohibited:

...

(7) with the aid of a pit, fire, artificial light, laser sight, electronically enhanced night vision scope, radio communication, cellular or satellite telephone, artificial salt lick, explosive, expanding gas arrow, bomb, smoke, chemical (excluding scent lures), or a conventional steel trap with an inside jaw spread over nine inches, except that

(A) a rangefinder may be used;

(B) a killer style trap with a jaw spread of less than 13 inches may be used;

(C) artificial light may be used

(i) for the purpose of taking furbearers under a trapping license during an open season from November 1 – March 31 in Units 7 and 9 – 26;

(ii) by a tracking dog handler with one leashed dog to aid in tracking and dispatching a wounded big game animal;

(iii) to aid in tracking, recovering, and dispatching a wounded game animal without the use of a motorized vehicle;

(iv) by resident hunters under customary and traditional use activities at a den site in Unit 25D during Oct. 15 – April 30.

(D) repealed 7/1/2008;

...

**5 AAC 92.220. Salvage of game meat, furs, and hides.** (a) Subject to additional requirements in 5 AAC 84 - 5 AAC 85, a person taking game shall salvage the following parts for human use:

...

(4) from January 1 through May 31, the edible meat, and from June 1 through December 31, either the hide, or the edible meat as defined in 5 AAC 92.990 , of a black bear taken in any game management unit in which sealing is not required; however, from June 1 through December 31, the edible meat of a black bear taken by resident hunters under customary and traditional use activities at a den site in Unit 25D must be salvaged.

**5 AAC 92.260. TAKING CUB BEARS AND FEMALE BEARS WITH CUBS**

**PROHIBITED.** No person may take a cub bear or a female bear accompanied by a cub bear; however, a cub bear or a female bear accompanied by a cub bear may be taken by resident hunters under customary and traditional use activities at a den site in Unit 25D during Oct. 15 – April 30.

**5 AAC 92.080. Unlawful methods of taking game; exceptions.** The following methods of taking game are prohibited:

...

(7) with the aid of a pit, fire, artificial light, laser sight, electronically enhanced night vision scope, radio communication, cellular or satellite telephone, artificial salt lick, explosive, expanding gas arrow, bomb, smoke, chemical (excluding scent lures), or a conventional steel trap with an inside jaw spread over nine inches, except that

(A) a rangefinder may be used;

(B) a killer style trap with a jaw spread of less than 13 inches may be used;

(C) artificial light may be used

(i) for the purpose of taking furbearers under a trapping license during an open season from November 1 – March 31 in Units 7 and 9 – 26;

(ii) by a tracking dog handler with one leashed dog to aid in tracking and dispatching a wounded big game animal;

(iii) to aid in tracking, recovering, and dispatching a wounded game animal without the use of a motorized vehicle;

(iv) by resident hunters under customary and traditional use activities at a den site in Units 19A or 19D-East, during Oct. 15 – April 30.

(D) repealed 7/1/2008;

...

**5 AAC 92.220. Salvage of game meat, furs, and hides.** (a) Subject to additional requirements in 5 AAC 84 - 5 AAC 85, a person taking game shall salvage the following parts for human use:

...

(4) from January 1 through May 31, the edible meat, and from June 1 through December 31, either the hide, or the edible meat as defined in 5 AAC 92.990 , of a black bear taken in any game management unit in which sealing is not required; however, from June 1 through December 31, the edible meat of a black bear taken by resident hunters under customary and traditional use activities at a den site in Units 19A or 19D-East, must be salvaged.

**5 AAC 92.260. TAKING CUB BEARS AND FEMALE BEARS WITH CUBS**

**PROHIBITED.** No person may take a cub bear or a female bear accompanied by a cub bear; however, a cub bear or a female bear accompanied by a cub bear may be taken by resident hunters under customary and traditional use activities at a den site in Units 19A or 19D-East, during Oct. 15 – April 30.

	<p>Customary and Traditional Use Overview: Black Bear, GMU 21 &amp; 24</p> <p>Prepared for Alaska Board of Game November 2008</p> <p>RC <u>45</u></p>

	<p>Proposals 52 and 53</p>
	<p>5 AAC 92.085(6). Unlawful methods of taking big game; exceptions.</p> <p>5 AAC 92.260. Taking cub bears and female bears with cubs prohibited.</p> <p>Allow the harvest of any bear from a den in Units 21 &amp; 24.</p> <p>52 – Allow taking of any bear from dens.</p> <p>53 – Allow taking of any bear from dens with artificial light.</p> <p>Department Recommendation: Amend &amp; Adopt Proposal 53; Take No Action on Proposal 52.</p> <p>2</p>



	<h2>Current State Regulations, Unit 21 &amp; 24 Black Bear</h2>
	<ul style="list-style-type: none"><li>■ Positive C&amp;T finding for black bear in Units 21 &amp; 24.</li><li>■ No closed season</li><li>■ Annual limit of 3 bears in Unit 21 &amp; 24</li></ul> <p>3</p>



	<h2>State Subsistence Procedures</h2>
	<p>Board Findings on black bears in Units 21 &amp; 24:</p> <ul style="list-style-type: none"><li>■ Is there Customary and Traditional Use of black bears in Units 21 &amp; 24?<ul style="list-style-type: none"><li>– Yes, the Board made a positive C&amp;T finding in March 2008.</li></ul></li><li>■ Is there a "Harvestable Surplus" of black bears in Units 21 &amp; 24?<ul style="list-style-type: none"><li>– Yes, based on biological information.</li></ul></li><li>■ What is the Amount reasonably Necessary for Subsistence uses (ANS)?<ul style="list-style-type: none"><li>– No finding has been made due to the lack of harvest data.</li></ul></li><li>■ Does the harvestable surplus allow for all or only some uses?<ul style="list-style-type: none"><li>– This is a Board of Game determination.</li></ul></li></ul> <p>4</p>

## C&T Harvest and Use Patterns

### *Criterion 1. Long-term, consistent pattern of use.*

- Black bears have been harvested for food and raw materials by people living in Units 21 & 24 since before historic contact up to the present.
- Limited black bear harvest represented in ADF&G harvest ticket database (an average annual harvest of 6 black bears in Unit 21 from 1986 – 2006 and 4 from Unit 24; sealing is not required).
- Documented harvests and uses by residents of local communities in department household surveys (e.g., Galena, Kaltag, Nulato, Tanana, Ruby, Huslia, Allakaket, Koyukuk, GASH communities reported an estimated 73 black bears harvested in 2002-03).

5

## C&T Harvest and Use Patterns

### *Criterion 1. Long-term, consistent pattern of use, cont'd.*

#### **Black Bear Harvests (ADF&G, CSIS 2007)**

<b>Community</b>	<b>Year</b>	<b>Harvest Estimate</b>
Huslia	1983	40
Galena	1985	36
Huslia	2003	20
Grayling	2003	9

6

	<h2>C&amp;T Harvest and Use Patterns</h2>
	<p><i>Criterion 2. A use pattern recurring in specific seasons of each year.</i></p> <ul style="list-style-type: none"> <li>■ Black bear are hunted primarily in the spring when bears begin emerging from their dens, opportunistically in the fall during other hunting, fishing, or gathering activities, and in early winter when meat is considered prime.</li> </ul> <p>7</p>

	<h2>C&amp;T Harvest and Use Patterns</h2>
	<p><i>Criterion 3. Methods and means of harvest characterized by efficiency and economy of effort and cost.</i></p> <ul style="list-style-type: none"> <li>■ Traditionally taken with deadfalls, snares, and pitfalls, spearing, shooting with bows and arrows, smoking out of den, lassoing and drowning while swimming, using dogs to track and find dens, and baiting them with coiled baleen.</li> <li>■ Today, taken largely with large caliber rifles, often during moose hunts and using other methods.</li> <li>■ Access to hunting areas for local residents is by snowmachine, dog team, boat, and walking.</li> </ul> <p>8</p>

## C&T Harvest and Use Patterns

*Criterion 4. The area in which the pattern of use has been established.*

- For local residents, black bear hunting areas are generally the same as those for moose hunting.
- Most black bear hunting occurs along river drainages in the productive areas around villages in GMUs 21 & 24.
- Maps of some community black bear hunting areas used in Units 21 & 24 are found in supporting RC 3 from the March 2008 regulatory meeting.

9

## C&T Harvest and Use Patterns

*Criterion 5. Means of handling, preserving, and storing game that have been traditionally used by past generations, but not excluding recent technological advances.*

- Traditionally, Unit 21 & 24 hunters treated black bears with high regard due to their physical and spiritual power. Skull often hung in a tree or burned in a clean fire. Meat is shared. Social taboos associated with young women are found in the Koyukuk River area.
- Black bear meat is used for food and often included in special events such as potlatch or "bear parties" in the Koyukuk River area.
- Historically, bear products were used as door coverings, clothing, gut rain jackets, and medicine. Presently, black bear meat and hide are most commonly used for food and rugs or wall hangings, respectively; the fat sometimes used for cooking, e.g. baking pastries or making "Eskimo ice cream."

10

	<h2>C&amp;T Harvest and Use Patterns</h2>
	<p><i>Criterion 6. The handing down of knowledge of hunting skills, values, and lore from generation to generation.</i></p> <ul style="list-style-type: none"> <li>■ Communities existed in Units 21 &amp; 24 from before historic contact until the present. Knowledge of hunting passed generationally usually through families.</li> <li>■ Local oral traditions feature stories about bear hunting and the spiritual aspects of bears.</li> <li>■ Young men and women learn how to hunt and process black bear meat by observing beginning in childhood.</li> </ul> <p>11</p>

	<h2>C&amp;T Harvest and Use Patterns</h2>
	<p><i>Criterion 7. The harvest effort or the products of that harvest are distributed or shared.</i></p> <ul style="list-style-type: none"> <li>■ Bear meat is shared widely between Units 21 &amp; 24 communities, particularly if it is harvested during lean times.</li> <li>■ In addition to general community patterns of sharing black bear, the first black bear killed by young hunters often is shared throughout the community.</li> <li>■ Bear meat is often served at funeral and memorial potlatches and certain parts, such as hindquarters, heart and kidneys are normally given to community elders. In Unit 24 and parts of Unit 21, the common practice is for only men and older women to eat bear meat.</li> </ul> <p>12</p>

	<h2>C&amp;T Harvest and Use Patterns</h2>
	<p><i>Criterion 8. A pattern that includes taking, use, and reliance for subsistence purposes upon a wide diversity of the fish and game resources.</i></p> <ul style="list-style-type: none"><li>■ Units 21 &amp; 24 residents harvest on average 850 lbs of wild resources per capita annually, representing some of the most subsistence-dependent communities statewide.</li><li>■ In 2001, for example, Huslia households used at least 32 individual resources, ranging from salmon, other fish, land mammals, migratory birds, and various plants and berries, including 31 lbs per capita of black bear.</li></ul> <p>13</p>



	<h2>Considerations</h2>
	<ul style="list-style-type: none"><li>■ In March 2008, the Board of Game asked for additional detail be provided in the Customary and Traditional Use Worksheets for Interior Alaska black bear for the November 2008 meeting. This information is provided in RC2, Tab E.</li></ul> <p>14</p>

	<h2>Proposals 52 and 53</h2>
	<p><u>Summary:</u></p> <ul style="list-style-type: none"><li>■ These proposals would allow customary and traditional harvest of any black bear from a den using artificial light in Units 21 &amp; 24.</li></ul> <p>Department Recommendation: Amend &amp; Adopt</p> <p>Board may:</p> <ul style="list-style-type: none"><li>■ Establish an amount reasonably necessary for subsistence uses (ANS) in Units 21 &amp; 24, but there is little harvest information upon which to base a finding.</li></ul> <p>15</p>

	<p>Customary and Traditional Use Overview: Black Bear, GMU 25</p> <p>Prepared for Alaska Board of Game November 2008</p> <p>RC <u>46</u></p>

	<p>Proposals 49</p>
	<p>5 AAC 92.085. Unlawful methods of taking big game; exceptions.</p> <p>5 AAC 92.260. Taking cub bears and female bears with cubs prohibited.</p> <p>Allow the harvest of any bear from a den in Unit 25D, from a boat, and allow the use of a trap or snare.</p> <p>Department Recommendation: Amend &amp; Adopt</p> <p>2</p>



	<h2>Current State Regulations, Unit 25 Black Bear</h2>
	<ul style="list-style-type: none"><li>■ Positive C&amp;T finding for black bear in Unit 25.</li><li>■ No closed season</li><li>■ Annual limit of 3 bears in Unit 21 &amp; 24</li></ul> <p style="text-align: right;">3</p>



	<h2>State Subsistence Procedures</h2>
	<p>Board Findings on black bears in Unit 25:</p> <ul style="list-style-type: none"><li>■ Is there Customary and Traditional Use of black bears in Units 21 &amp; 24?<ul style="list-style-type: none"><li>– Yes, the Board made a positive C&amp;T finding in March 2002.</li></ul></li><li>■ Is there a "Harvestable Surplus" of black bears in Units 25?<ul style="list-style-type: none"><li>– Yes, based on biological information.</li></ul></li><li>■ What is the Amount reasonably Necessary for Subsistence uses (ANS)?<ul style="list-style-type: none"><li>– The Board established an ANS of 150-250 black bears in Unit 25.</li></ul></li><li>■ Does the harvestable surplus allow for all or only some uses?<ul style="list-style-type: none"><li>– This is a Board of Game determination.</li></ul></li></ul> <p style="text-align: right;">4</p>

## C&T Harvest and Use Patterns

### *Criterion 1. Long-term, consistent pattern of use.*

- Black bears have been harvested for food and raw materials by people living in Unit 25 since before historic contact up to the present.
- Limited black bear harvest represented in ADF&G harvest ticket database; sealing is not required.
- Various long-standing cultural traditions and beliefs surround the proper use and treatment of harvested black bears speaks to the length and consistency of black bear uses.
- Today, black bear continue to be an important and commonly harvested subsistence resource in Unit 25D communities. It is not uncommon for 30% to 40% of households to be involved in the hunting and harvesting of black bears

5

## C&T Harvest and Use Patterns

### *Criterion 1. Long-term, consistent pattern of use, cont'd.*

#### **Black Bear Harvests (ADF&G, CSIS 2008)**

<b>Community</b>	<b>Year</b>	<b>Harvest Estimate</b>	<b>% HH harvesting</b>
Beaver	1985	10	10%
Fort Yukon	1987	150	31%
Stevens Village	1984	17	40%

6

	<h2>C&amp;T Harvest and Use Patterns</h2>
	<p><i>Criterion 2. A use pattern recurring in specific seasons of each year.</i></p> <ul style="list-style-type: none"> <li>■ Black bear are hunted primarily in the spring when bears begin emerging from their dens, opportunistically in the fall during other hunting, fishing, or gathering activities, and through the winter from dens when meat is considered prime.</li> </ul> <p>7</p>

	<h2>C&amp;T Harvest and Use Patterns</h2>
	<p><i>Criterion 3. Methods and means of harvest characterized by efficiency and economy of effort and cost.</i></p> <ul style="list-style-type: none"> <li>■ Traditionally taken with deadfalls, lances, snares along bear trails and in tress, pitfall traps, spearing, shooting with bows and arrows, out of dens, lassoing and drowning while swimming, using dogs to track and find dens, and baiting them with coiled baleen or baskets of fish. Bears were also called by imitating the call of a raven.</li> <li>■ Today, taken largely with large caliber rifles, often during moose hunts and using other methods.</li> </ul> <p>8</p>

## C&T Harvest and Use Patterns

*Criterion 3. Methods and means of harvest characterized by efficiency and economy of effort and cost, continued.*

- Access to hunting areas for local residents is by snowmachine, dog team, boat, and walking.
- "From time to time, one may discover a den occupied by a sow bear and one or two yearling cubs. These cubs are often two-thirds the size of a full adult. It is the obligation of the hunter to take all occupants of a den. If the bears did not wish to be taken they would not have revealed themselves, and to not take them would be an act of disrespect" (Richard Nelson et al. 1982:47).

9

## C&T Harvest and Use Patterns

*Criterion 4. The area in which the pattern of use has been established.*

- For local residents, black bear hunting areas are generally the same as those for moose hunting as well as known bear denning sites.
- Most black bear hunting occurs along river drainages in the productive areas around villages in Unit 25D.

10

## C&T Harvest and Use Patterns

*Criterion 5. Means of handling, preserving, and storing game that have been traditionally used by past generations, but not excluding recent technological advances.*

- Black bear provides an important source of meat, fat, and fur. Depending on particular circumstances, bear meat is eaten in the household, in the context of community gatherings, and in special celebrations.
- Black bear are commonly butchered in the field and processed like other large game. The meat is shared with relatives, especially if fresh meat has been scarce.
- The meat is frozen, dried, smoked, or canned for later use. The meat is also made into dry-meat, but cutting thin strips of meat and allowing it to air-dry.

11

## C&T Harvest and Use Patterns

*Criterion 5. Means of handling, preserving, and storing game that have been traditionally used by past generations, but not excluding recent technological advances, continued.*

- Preparation is typically by boiling, frying, broiling, barbecuing, or roasting.
- Black bear fat is highly valued, and is often rendered into bear grease or tallow. The grease is then used for cooking, making Native ice cream, and eaten with dry-meat or dried fish. Bear fat is also shared with other households, especially elders.
- "According to custom, the man who actually kills a bear retains very little of the meat for himself, perhaps only a forearm or hindquarter. The ribs, fat, and other choice cuts are usually frozen and preserved for village potlatches. It is particularly important to have large quantities of bear meat for memorial potlatches" (Nelson et al. 1982:47-48).

12

	<h2>C&amp;T Harvest and Use Patterns</h2>
	<p><i>Criterion 6. The handing down of knowledge of hunting skills, values, and lore from generation to generation.</i></p> <ul style="list-style-type: none"> <li>■ Gwich'in Athabascan traditions attribute great spiritual power to the bear, and there is an elaborate set of beliefs and values surrounding their harvest and use (see citations in RC 2, Tab D).</li> <li>■ Local oral traditions feature stories about bear hunting and the spiritual aspects of bears. For example, residents in some villages follow rules that prescribe who may eat bear, what portions may be eaten, how it is prepared, and what should be done with the inedible parts such as the claws and skull, and proper ways of referring to or speaking about bears.</li> <li>■ Young men and women learn how to hunt and process black bear meat by observing beginning in childhood<sup>13</sup></li> </ul>

	<h2>C&amp;T Harvest and Use Patterns</h2>
	<p><i>Criterion 6. The handing down of knowledge of hunting skills, values, and lore from generation to generation, continued.</i></p> <ul style="list-style-type: none"> <li>■ Young men and women learn how to hunt and process black bear meat by observing beginning in childhood. Children are included in many activities and are expected to show interest and eventually participate in the activities depending upon their age and acquired skill.</li> <li>■ Most hunting is done in family-based groups, so the learning and proficiency of younger participants is observed and monitored.</li> </ul> <p style="text-align: right;">14</p>

## C&T Harvest and Use Patterns

*Criterion 7. The harvest effort or the products of that harvest are distributed or shared.*

- Bear meat is typically shared widely within hunting parties, families, communities, and even between communities. It is often a small number of select hunters that are involved in the hunting of bears and provide bear meat to a large proportion of the households in a community.
- Bear fat is highly prized and commonly shared between households.
- Bear meat is often served at funeral and memorial potlatches and certain parts, such as hindquarters, heart and kidneys, and fat are normally given to community elders.

15

## C&T Harvest and Use Patterns

*Criterion 8. A pattern that includes taking, use, and reliance for subsistence purposes upon a wide diversity of the fish and game resources.*

- Black bear is just one of a whole list of wild resources that are typically harvested for subsistence uses by Unit 25 residents.
- Black bear often ranks among the top resources harvested by hunters in terms of pounds of meat per household because of its large size and relatively liberal hunting seasons and bag limits.
- Other major resources harvested for subsistence in Unit 25 include salmon, moose, caribou, whitefish, pike, burbot, a variety of small game, waterfowl, and plants and berries.

16

	<h2>Considerations</h2>
	<ul style="list-style-type: none"> <li>■ In March 2008, the Board of Game asked for additional detail be provided in the Customary and Traditional Use Worksheets for Unit 25 black bear for the November 2008 meeting. This information is provided in RC2, Tab D.</li> </ul> <p>17</p>

	<h2>Proposal 49</h2>
	<p><u>Summary:</u></p> <ul style="list-style-type: none"> <li>■ This proposal would allow customary and traditional harvest of any black bear from a den in Unit 25D, from a boat, and allow the use of a trap or snare.</li> </ul> <p>Department Recommendation: Amend &amp; Adopt</p> <p>18</p>



	<p>Customary and Traditional Use Overview: Black Bear, GMU 19</p> <p>Prepared for Alaska Board of Game November 2008</p> <p>RC <u>47</u></p>

	<p>Proposal 51</p>
	<p>5 AAC 92.260. Taking cub bears and female bears with cubs prohibited.</p> <p>5 AAC 92.125. Predation control areas implementation plans</p> <p>Allow the harvest of any bear from a den in intensive management areas in Unit 19 for Alaska residents with no closed season.</p> <p>Department Recommendation: Amend and Adopt.</p> <p>2</p>

	<h2>Current State Regulations, Unit 19 Black Bear</h2>
	<ul style="list-style-type: none"> <li>■ Positive C&amp;T finding</li> <li>■ No closed season</li> <li>■ Annual limit of 3 bears in 19B and C</li> <li>■ Annual limit of 5 bears in 19A and D</li> <li>■ Black bears taken in portion of GMU 19D upstream of the Selatna and Black River drainages must be sealed.</li> </ul> <p style="text-align: right;">3</p>

	<h2>State Subsistence Procedures</h2>
	<p>Board Findings on black bears in Unit 19:</p> <ul style="list-style-type: none"> <li>■ Is there Customary and Traditional Use of black bears in Unit 19? <ul style="list-style-type: none"> <li>– Yes, positive finding made by the Board in March 2008.</li> </ul> </li> <li>■ Is there a "Harvestable Surplus" of black bears in Unit 19? <ul style="list-style-type: none"> <li>– Yes, based on biological information.</li> </ul> </li> <li>■ What is the Amount reasonably Necessary for Subsistence uses (ANS)? <ul style="list-style-type: none"> <li>– Board established an ANS of 30-50 black bears in Unit 19.</li> </ul> </li> <li>■ Does the harvestable surplus allow for all or only some uses? <ul style="list-style-type: none"> <li>– This is a Board of Game determination.</li> </ul> </li> </ul> <p style="text-align: right;">4</p>

## C&T Harvest and Use Patterns

### *Criterion 1. Long-term, consistent pattern of use.*

- Black bears have been harvested for food and raw materials by people living in Unit 19 since before historic contact up to the present.
- An average annual harvest of 29 black bears were reported in ADF&G harvest ticket database in Unit 19 between 1986 and 2006.
- Department household surveys documented an average 32 black bears annually harvested by Unit 19(A) residents alone, 2003-2006 (Aniak, Kalskag, Red Devil, Stony River, Chuathbaluk, Crooked Creek, Sleetmute).

5

## C&T Harvest and Use Patterns

### *Criterion 1. Long-term, consistent pattern of use, cont'd.*

#### **Black Bear Harvests (ADF&G, CSIS 2007)**

<b>Community</b>	<b>Year</b>	<b>Harvest Estimate</b>
Chuathbaluk	1983	6
McGrath	1984	15
Nikolai	1984	6
Crooked Creek	2003	8

6

## C&T Harvest and Use Patterns

*Criterion 2. A use pattern recurring in specific seasons of each year.*

- Black bears are hunted primarily in the spring when bears begin emerging from their dens, opportunistically in the fall during other hunting, fishing, or gathering activities, and in early winter when meat is considered prime.
- Some communities also hunt black bears in the late winter, especially when moose and caribou harvests were low the preceding winter.

7

## C&T Harvest and Use Patterns

*Criterion 3. Methods and means of harvest characterized by efficiency and economy of effort and cost.*

- Traditionally taken with deadfalls, snares, and pitfalls, spearing, shooting with bows and arrows, smoking out of den, lassoing and drowning while swimming, using dogs to track and find dens, and baiting them with coiled baleen.
- Today, taken largely with large caliber rifles, often during moose hunts and using other methods.
- Access to hunting areas for local residents is by snowmachine, dog team, boat, and walking.

8

## C&T Harvest and Use Patterns

*Criterion 4. The area in which the pattern of use has been established.*

- For local residents, black bear hunting areas are generally the same as those for moose hunting.
- Most black bear hunting occurs along river drainages in the productive areas around villages in GMU 19, including the Stony, Stink, Swift, Tatlawiksuk, Kuskokwim, Holitna, George, Aniak, Holokuk, Big, and Oskawalik Rivers and their tributaries.
- Maps of some community black bear hunting areas used in Unit 19 are found in supporting RC 3 from the March 2008 Board of Game meeting.

9

## C&T Harvest and Use Patterns

*Criterion 5. Means of handling, preserving, and storing game that have been traditionally used by past generations, but not excluding recent technological advances.*

- Traditionally, Unit 19 hunters treated black bears with high regard due to their physical and spiritual power. Skull often buried in field. Meat shared.
- Black bear meat is prepared by drying, boiling, baking, and roasting.
- Historically, bear products were used as door coverings, clothing, gut rain jackets, and medicine. Presently, black bear meat and hide are most commonly used for food and rugs or wall hangings, respectively; the fat sometimes used for cooking, e.g. baking pastries or making "Eskimo ice cream."

10

## C&T Harvest and Use Patterns

*Criterion 6. The handing down of knowledge of hunting skills, values, and lore from generation to generation.*

- Communities existed in Unit 19 from before historic contact until the present. Knowledge of hunting passed generationally usually through families.
- Local oral traditions feature stories about bear hunting and the spiritual aspects of bears.
- Young men and women learn how to hunt and process black bear meat by observing beginning in childhood.

11

## C&T Harvest and Use Patterns

*Criterion 7. The harvest effort or the products of that harvest are distributed or shared.*

- Bear meat is shared widely between Unit 19 communities, particularly if it is harvested during lean times.
- In addition to general community patterns of sharing black bear, the first black bear killed by young hunters often is shared throughout the community.
- Bear meat is often served at funeral and memorial potlatches and certain parts, such as hindquarters, heart and kidneys are normally given to community elders.

12

	<h2>C&amp;T Harvest and Use Patterns</h2>
	<p><i>Criterion 8. A pattern that includes taking, use, and reliance for subsistence purposes upon a wide diversity of the fish and game resources.</i></p> <ul style="list-style-type: none"> <li>■ Baseline surveys conducted in 2 communities in Unit 19 (Nikolai and McGrath). Based on these, residents harvest on average 484 lbs of wild resources per capita annually.</li> <li>■ In 2001, for example, Nikolai households used at least 53 individual resources with a household average of 14 resources used, ranging from salmon, other fish, land mammals, migratory birds, and various plants and berries.</li> </ul> <p>13</p>

	<h2>Considerations</h2>
	<ul style="list-style-type: none"> <li>■ In March 2008, the Board of Game asked for additional detail be provided in the Customary and Traditional Use Worksheets for Interior Alaska black bear for the November 2008 meeting. This information is provided in RC2, Tab E.</li> </ul> <p>14</p>

	<h2>Proposal 51</h2>
	<p><u>Summary:</u></p> <p>This proposal would allow the customary and traditional harvest of any bear from a den in intensive management areas in Unit 19 for Alaska residents with no closed season.</p> <p>Department Recommendation: Amend and Adopt</p> <p>15</p>



RC 48

**TO:**

Alaska Department of Fish and Game  
Boards Support Section  
P.O. Box 115526  
Juneau Alaska 99811-5526  
FAX: 907-465-6094

**FROM:**

Al Gilliam  
P.O. Box 124  
Haines, Alaska 99827  
PH: 907-767-5522

RECEIVED  
FEB 2009  
ALASKA

RE: In Support of Proposal # 25

November 7, 2008

Page 1 of 2

**In regards to Proposal # 25, this was submitted by me:**

Please consider that nine homes directly overlook the small area affected by my proposal, plus the park area mentioned in the proposal. Two additional homes that will overlook this location are in the planning stages.

Also the State of Alaska is very strong on promoting "Watchable Wildlife" and because the area affected is part of the location of the fall gathering of the largest concentration of eagles in the world, proposal # 25 will add a great deal of viewing pleasure for our non hunting visitors that travel from all over the world to visit that area. Many of these people are world class professional and amateur photographers that would rather photograph eagles and bears at the same time when the eagles are not feeding on a bear carcass in view of the highway.

This location is prime salmon, eagle, and bear habitat. It has enough cover for the bears to sleep close to their food source and they do not present a problem to the safety of the nearby residents.

Hunting guides have been known to ask photographers to vacate the area because they consider it to be their "Territory"; this has even happened at the area where the picnic tables are located.

It is my opinion the Upper Lynn Canal Fish and Game advisory Committee is self serving and broken at that the BOG should impose more restrictions for membership which would not allow dominance by family or employee status and a tougher ethical clause should be added.

In reviewing my proposal I am requesting that the BOG to consider the self serving and combative nature of the Upper Lynn Canal Advisory Committee and cast their vote based on their own commitment to ethical hunting standards for the State of Alaska.

**In Regards to the Upper Lynn Canal Fish and Game Advisory Committee:**

By regulation all advisory committees must publically advertise their next meeting ten days in advance of the meeting. When the Upper Lynn Canal Advisory Committee met in Haines on October 10 for the explicit purpose of discussing proposals the only public notification was provided one day prior in the Chilkat Valley News.

Al Gilliam In Support of Proposal # 25

I submitted Proposal # 25 (which was a key element of that meeting) yet no member of the committee attempted to contact me in person or by telephone so that I could testify in support.

Other individuals that were opposed to proposal # 25 and actually conduct guided hunts in the area affected by proposal # 25 were contacted and encouraged to attend the committee meeting. They are, in fact, two of three brothers that are also voting members of the committee. I was publically criticized by Chair Person Gary Hess for not attending the meeting to discuss my proposal, even though he had an obligation as chairperson to inform me of the meeting.

The day after the meeting I learned that my proposal was treated more as a joke by the committee members present and it was only superficially discussed. No reference to a conflict of user groups or hunting ethics was mentioned.

Members of advisory committees are supposed to represent strong ethical standards for the community they reside in and their personal backgrounds should reflect those standards.

Unfortunately the Upper Lynn Canal Advisory Committee is dominated by some individuals that are often at odds with laws of the State of Alaska in relation to hunting and guiding violations and activities that negatively impact habitat.

One Registered Hunting Guide has been able to retain his seat on the committee in spite of numerous and frequent convictions, which include reckless endangerment of other hunters with the use of aircraft and suspension of guide license because of other illegal activities.

The committee member was also convicted of poaching sheep in the Yukon Kluane National Park at one time and has recently taken advantage of a loophole which allows him to interpret a grey area of Canadian laws to his advantage. Evidently because of the required amount of ancestry he now claims the right to hunt sheep in Kluane National Park with the use of a helicopter and has done so according to law enforcement personnel.

Another person on the committee basically became a member in order to support his brother's position as a tour operator that is in litigation against the State of Alaska and has a history of conflict with environmental organizations in relation to habitat. In general that tour company gets as many of its employees as possible on the committee.

For the most part these people all belong to the same club and network to support each other. The local advisory committee has such a poor reputation that members of the public rarely attend meetings.

October 27, 2008

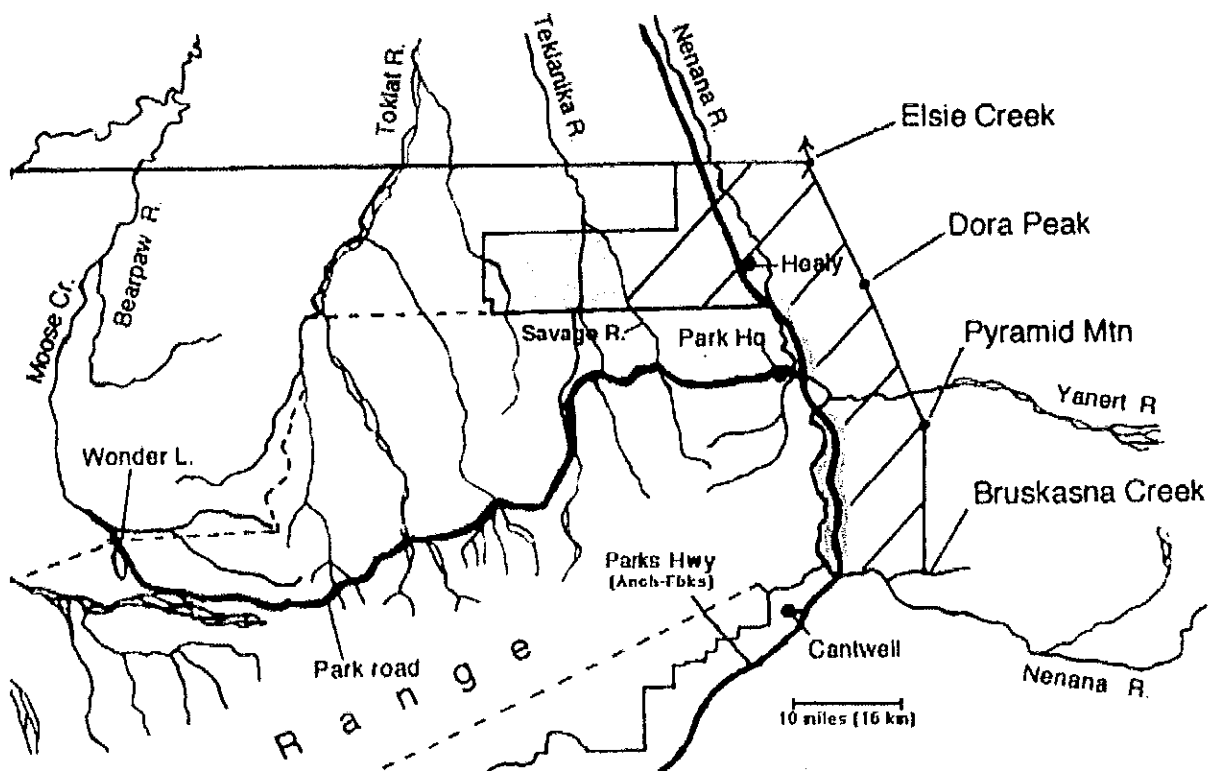
Denby Lloyd, Commissioner  
Alaska Department of Fish and Game  
Juneau, Alaska 99802-5526

Sent via email

Re: Request for trapping/hunting closure to protect Denali wolves

Dear Commissioner Lloyd:

We are writing to ask you for an immediate wolf and coyote trapping/hunting administrative closure on state lands just outside the northeast boundary of Denali National Park, to protect the highly valued Denali wolves from further human killing in this area as of the beginning of the trapping season in November. This closure should be followed by a strong effort from your department to convince the Board of Game to adopt the closure as a regulation. The requested closure is shown below in red, along with the present state wolf protection ("buffer zone") areas, shown in green. It would extend eastward from the west bank of Savage River (the east side of the present north boundary closure) to the east bank of the Nenana River. We are including coyotes in the request because it appears that some of the wolves killed in this area are being taken in coyote snares and/or for other reasons related to mistaking wolves for coyotes. The Denali wolves need additional protection in the remainder of the cross-hatched areas as well; however, other approaches might suffice in these areas (e.g., see "Mobile protection," pp. 9-10 of the Oct. 2002 report on the Reports page of [www.alaskawolves.org](http://www.alaskawolves.org)).



The red area is largely within the eastern portion of Stampede Flats, a major wintering area for park ungulates, especially caribou. Established groups of wolves are thus attracted to the area for varying winter intervals, and trappers target them accordingly. These groups of wolves come from adjacent areas of the park but also from as far as 60-70 miles or more away, most notably in the Wonder Lake area and beyond. In short, the northeast park boundary area is integral to the park ecosystem, but the present park and buffer zone boundaries are almost irrelevant to the appropriate ecological boundaries. Current management is not working. The requested wolf-coyote trapping/hunting closure would provide a reasonable and relatively simple way to help fix this problem.

Last winter, at least 11 and as many as 18-19 wolves from five radio-collared Denali study groups – including the famous Toklat/East Fork family (e.g., June 17, 2008 blog entry and elsewhere at [www.alaskawolves.org](http://www.alaskawolves.org)) – were snared, trapped, and shot in the red map area, beginning in late October or early November 2007. Since 2003, when the present state buffer zone areas were finalized, at least seven of the nine radio collared Denali study groups known to have spent time in that area suffered trapping and shooting losses while there. Since 1987, when wolves were first radio-collared in Denali, 19-20 collared wolves (among others without collars) from 11-12 Denali study groups have been snared, trapped, or shot in the northeast boundary area. The 11-12 groups included 3-4 groups from areas west and northwest of Wonder lake, seven from areas within and adjacent to the state area, and one from an area between.

The Denali wolves are highly valued by Alaskans and around the world for biological, scientific, viewing, and other reasons. Their value to Alaskans from an economic standpoint alone is enormous, because of Denali's importance as the state's top tourism attraction and the importance of wolves as one of the park's top attractions. The aforementioned losses, which included key wolves of the most visitor-accessible groups (e.g., alpha male of the Margaret family in 2004, alpha female of the Toklat family in 2005), have translated into major impacts on all of these values.

Further details are available at [www.alaskawolves.org](http://www.alaskawolves.org) , especially the Blog section. We are also attaching a July 2008 brief to the Alaska Department of Natural Resources. This provides pertinent details and data sources, in the context of other problems in the Denali north-east and east boundary areas.

The wolf killing in this area is done mainly by 2-3 trappers as a sideline to other sources of income. There is no justification whatsoever for allowing such an obviously parasitic activity along the park boundary, especially given the high importance of these wolves. Alaska

Department of Fish and Game biologists should be at the forefront in putting an end to this killing but instead have tried to defend it with inapposite arguments about healthy "populations" and the like (e.g., at [www.alaskawolves.org](http://www.alaskawolves.org), see last 8 paragraphs in Dec 2, 2007 blog entry, January 19, 2008 blog entry, and December 2007 paper on Reports2 page).

The Board of Game has said that it will not consider this issue until 2010 at the earliest. We think the board will act much sooner and decide to protect these wolves if you and the other ADF&G biologist-managers with whom line authority is vested provide appropriate, strong enough guidance. The other biologist-managers are Doug Larsen, director of the Division of Wildlife Conservation, David James, the Region III supervisor in Fairbanks, and Don Young, the Fairbanks area biologist; your deputy commissioner for wildlife should be included, once this position is filled.

We ask that you please apply an immediate closure as indicated here and take these follow-up actions. The problem is serious, urgent, and the stakes are high. Alaskans and many others will be grateful for your actions in providing this long overdue protection for the Denali wolves.

We would be glad to meet with you and your staff to discuss this if you desire.

Sincerely,

Gordon C. Haber, Ph.D.  
P.O. Box 64  
Denali Park, Alaska 99755

Rick Steiner, Professor, University of Alaska  
2221 E. Northern Lights Blvd, #118  
Anchorage, Alaska 99508

Attachment

**Proposed State Tanana Basin Area Plan Amendments  
and Land Conveyances Near Denali National Park:  
Comments regarding wildlife and other values**

Gordon C. Haber  
July 2008

The Alaska Department of Natural Resources proposes to amend the Tanana Basin Area Plan (TBAP) and convey 24,821 acres of state land in the Anderson-Cantwell area to the Denali Borough. Here I comment on some of the values of certain portions of this acreage near Denali National Park that argue for continued classification as wildlife habitat and against conveyance. It is in the state's best interest to prevent these areas from becoming residential subdivisions and to protect them from other development. Declassification from wildlife habitat in the TBAP would allow various forms of development, including settlement, via conveyance, sale, and leasing.

The areas involved are valuable to the state on their own, as wildlife habitat. They are also of high value to the state via their importance to the Denali ecosystem. Denali National Park is one of Alaska's, and the Denali Borough's, most important assets, including from an economic standpoint as the state's top tourism attraction. Visitors to Denali are drawn largely by the opportunity to see wolves, bears, caribou, moose, and mountain sheep. Denali caribou, moose, and thus wolves depend heavily on wildlife habitat in state areas outside the park. As one of the world's longest-running and most comprehensive sources of research on the dynamics of wolf-ungulate systems, Denali also provides scientific insights for quality management of wildlife throughout the state and elsewhere.

**Otto Lake and Panguingue A**

The proposed declassifications from wildlife habitat, conveyances to the Borough, and resulting higher likelihood of development would be especially problematic for two parcels with exceptionally high wildlife values: (a), "Otto Lake" (ADL 415801), consisting of 1,501 acres in section 27 and portions of sections 26, 35 in the Dry Creek area, and (b), "Panguingue A" (ADL 415809, 415810), consisting of 1,565 acres in section 11 and portions of sections 13, 14, 18 in the Eightmile Lake area.

Figure 1 (on p. 6) identifies an area west of Healy between the Outer and Outer-Outer foothills ranges known as Stampede Flats, arguably the Denali wildlife system's most important wintering area since at least the 1960s and one of the highest intensity wildlife-use areas identified anywhere in Alaska. The wildlife patterns and values of this area and nearby areas have been studied for more than 43 years to date (e.g., Haber 1977, 2002, 2007a, 2007b; Mech et al 1998; Meier et al 2006).

The proposed Otto Lake and Panguingue A declassifications and conveyances are within eastern Stampede Flats. Denali caribou migrate northeastward to this area from central areas of the park in most winters; see Figures 2-3 (on pp. 7-8). Use as a wintering area by Denali caribou dates to at least the 1960s and appears to be related to wind patterns that reduce snow depths relative to other areas (Haber 1977: Fig. 27, Appendix II). In deep snow winters, there are also major northward shifts of moose and sheep into the area, particularly the eastern half (Haber 1977: e.g., Figs. 17, 19). Dry Creek becomes especially important as a wintering area for moose that migrate right over the top of the Outer Range from road-corridor areas of Denali National Park (Haber 1977: Fig. 17).

Groups of wolves from adjacent areas of the park and northward hunt these wintering ungulates, as do two resident groups and groups that migrate at least 60-70 miles from central areas of the park and elsewhere (Haber 1977: Fig. 4, 2002: Figs. 2, 4, 6, 2007a: Figs. 2-3, 2007b: Fig. 2; Mech et al 1998; Meier et al 2006: Figs. 5, 6, 9); see also Figure 4 (on p. 9). This results in high levels of winter wolf activity in and near the Otto Lake/Dry Creek and Panguingue A/Eightmile Lake areas. There is at least one established natal den and at least one rendezvous site in upper Dry Creek (including within the proposed conveyance), used by wolves in May-September. Wolves denned and raised pups in this area as recently as summers 2002 and 2003 and are likely denning in the area again this summer, based on localized GPS radio collar signals (T. Meier, pers. comm.).

Another way to understand the importance of the area for wintering ungulates and the wolves that hunt them is by considering the level of wolf trapping. For example, since 2003 nine radio-collared Denali wolf study groups are known to have spent time in the northeast park boundary area. Wolves were trapped or shot from at least seven of these groups while they were in this area, between Savage River and Nenana River. During winter 2007-08 alone, up to 18-19 wolves from five radio-collared groups were

trapped in the same area, mostly in the Dry Creek watershed (see various entries in the Blog section of [www.alaskawolves.org](http://www.alaskawolves.org) for details).

Since 1987, when wolves were first radio-collared in Denali, 19-20 radio-collared wolves (among others without collars) from 11-12 Denali study groups have been trapped or shot outside the northeast park boundary on state lands bounded by the park on the north, west, and south. The 11-12 groups included 3-4 groups from areas west and northwest of Wonder Lake, seven from areas in and adjacent to the state area, and one from an area between (NPS data base, T. Meier, pers. commun., updated with the above information).

The long-term wildlife importance of the area is further illustrated by a prominent hunting lookout/camp along Dry Creek that has been used since the late Pleistocene, 11,000 years ago. This is one of the most important archaeological sites in Alaska and was designated a National Landmark in 1978.

#### **Other areas**

Five other proposed wildlife habitat declassifications and conveyances should be rejected because of similar high wildlife values: "Yanert" (ADL 415803, 415811 – 2,278 acres), "Montana Creek" (ADL 415802, 415804 – 460 acres), "Nenana Canyon" (ADL 415636 – 1,737 acres), "Panguingue B" (ADL 415809 – 5,025 acres declassification, 2,465 conveyance), and "West" (ADL 417601 – 5,760 acres).

Yanert, Montana Creek, Nenana Canyon, and Panguingue B are within areas used heavily by eastern Denali wolves and wolves that range primarily outside the park (e.g., Fig. 4; Haber 2002: Figs. 2-6; Meier et al 2006: Figs. 5, 6, 9). This activity and sporadic visits by groups of wolves from 60-70 miles away (Haber 2007b: Fig. 2) are also indicative of important caribou, moose, sheep, and habitat values. Not as much is known about West, although the substantial use that area receives from radio-collared caribou (Fig. 3) and wolves (Fig. 4; Meier et al 2006: Fig. 5; Haber 2007a: Fig. 2) implies a range of wildlife and habitat values.

The Yanert River and Montana Creek valleys provide major natural corridors for wildlife movements to and from the eastern park, movements that are essential for maintaining genetic and other vital exchanges among populations, subpopulations, and systems. This is an important consideration for the long-term viability of the Denali wildlife system given the already heavy and increasing development along other segments of



the east park boundary (see affidavits and related testimony in *Haber v State of Alaska et al*, Superior Court for the State of Alaska, 3AN85-17375 Civil, regarding previous state proposals for land transfers in the Yanert River and Montana Creek areas).

Denali Borough officials have indicated they would like to use conveyances in at least the Montana Creek area for hotels and other commercial development, to generate revenue (e.g., *Fairbanks Daily News-Miner*, 5/21/00). The direct, secondary, and cumulative impacts of such development would hinder if not block cross-boundary wildlife movements and degrade the area's capacity to support resident wildlife. More hotel rooms along the east side of the park would mean more demand for access into the heart of the park via relaxed bus quotas, a loop road, and/or a railroad with more demand for accommodations in the Kantishna-Wonder Lake area. What would be the long-term wildlife and other consequences in these distant areas?

Apart from wildlife considerations, declassification and conveyance of the Yanert, Montana Creek, and Nenana Canyon parcels would likely generate viewshed impacts detrimental to the state's tourism interests. Visitor facilities and other infrastructure are important for these interests, but there are already major visitor facilities throughout the area and large tracts of private land where further development is likely. Yanert and Montana Creek lie within the *premier* mountain vista that Denali visitors see, directly ahead, as they exit the last 6-7 miles of the park road. It is the *premier* mountain scene that travelers who drive the Parks Highway, without entering interior areas of the park, view for 6-7 miles. Dedicated scenic pullouts feature this view from both the park road and Parks Highway, and photographs frequently appear in calendars and other publications. It is also a featured view for the thousands of rafters and kayakers who annually float the Nenana River, one of the state's most important recreational rivers.

Nenana Canyon lies outside the park-road viewshed but is the major view for visitors entering or leaving the north side of the park via the Parks Highway and Alaska Railroad. It is not difficult to visualize a northward extension of the present "Glitter Gulch" strip development if this area is declassified and conveyed, sold, or leased (the state is proposing to declassify the entire parcel from wildlife habitat even though the Borough has requested conveyance of only the portions *east* of the Parks Highway).

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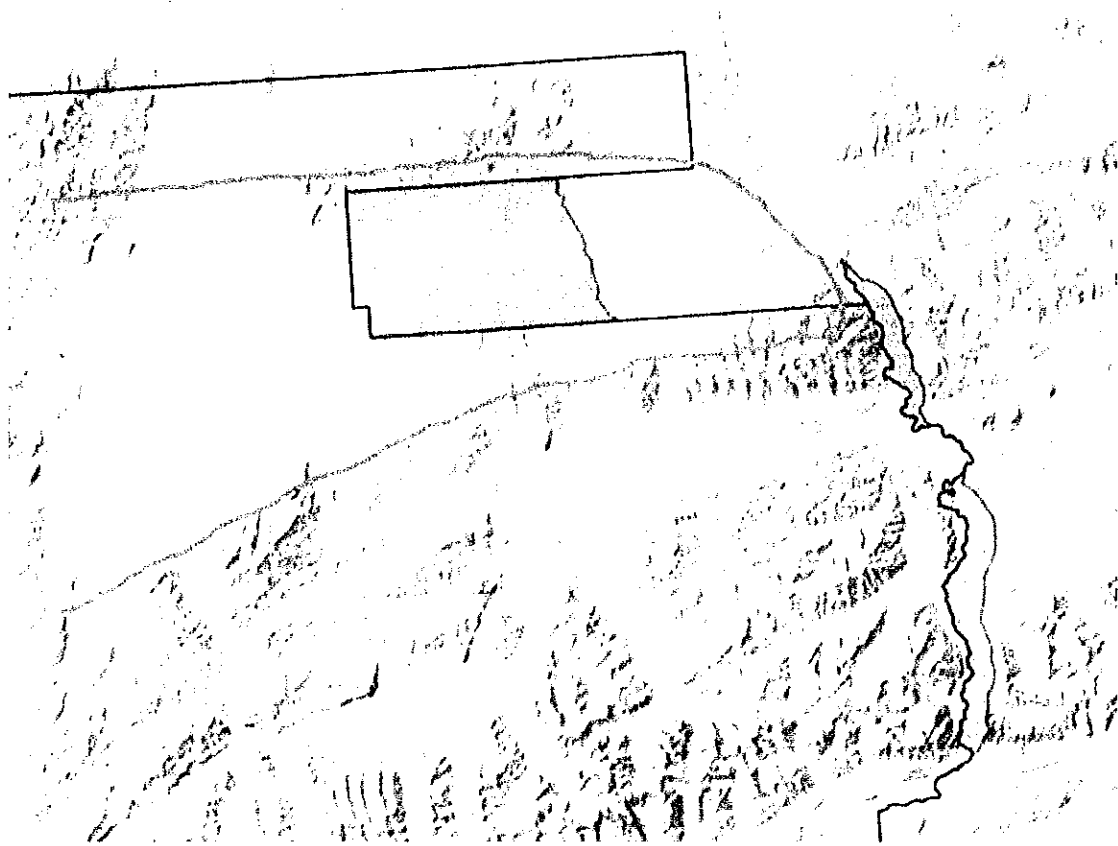
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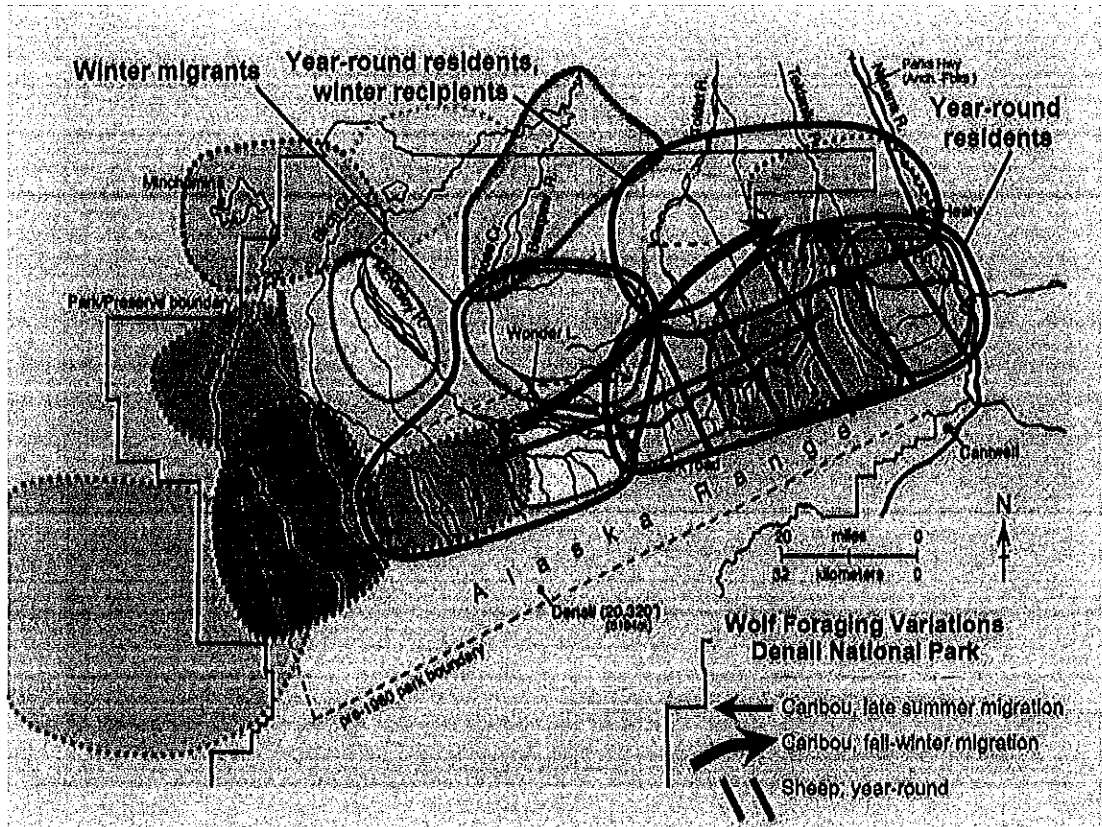
**Meier, T.J., J. Burch, and L. Adams. 2006.** Tracking the movements of Denali's wolves. Alaska Park Science 5(1): 30-35.

Figures 1-4 are on the next four pages.

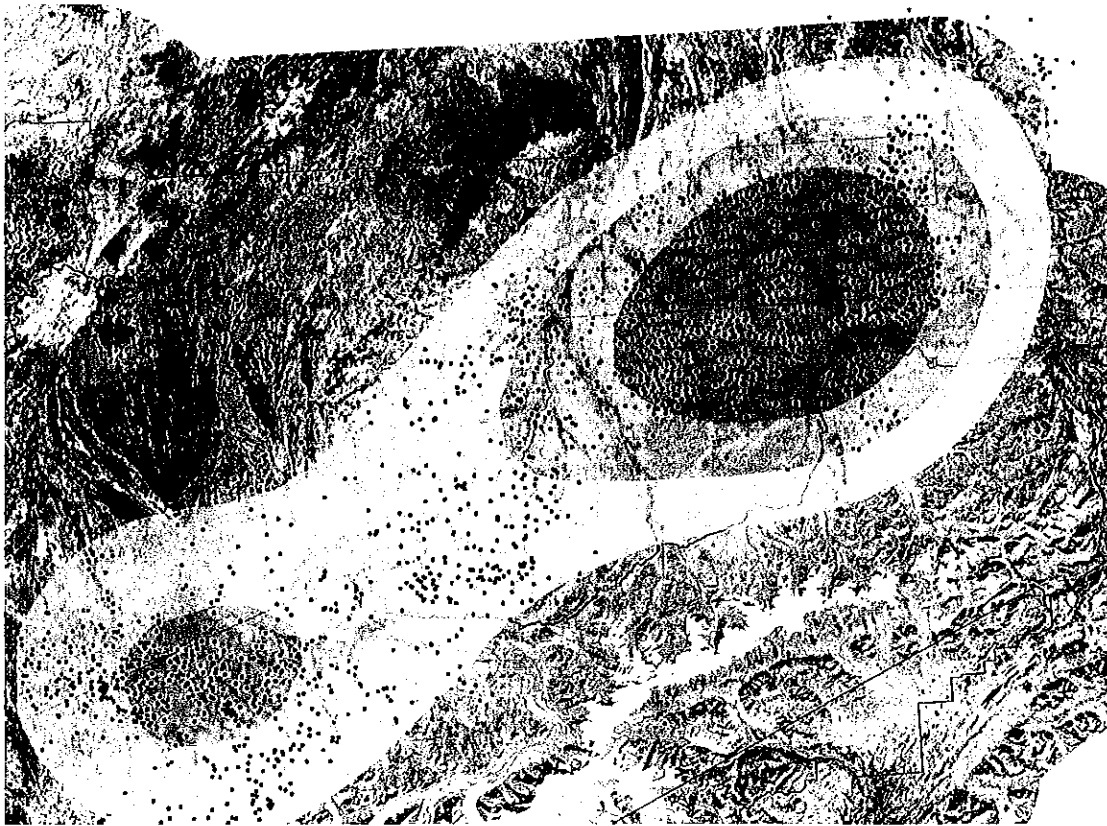
**Figure 1.** Eastern Denali National Park (green boundaries), adjacent state wolf-protection areas (blue), and other state lands (map courtesy of National Park Service). The gray-brown line (my addition) delineates arguably the most important ungulate (caribou, moose, sheep) wintering area of the Denali ecosystem, where wolves from near and far areas come to hunt at varying intervals and usually two resident groups of wolves hunt year-round. The general southwest-to-northeast orientation of the mountain ranges and foothills largely determines habitat and wildlife-use patterns. However, the park and state boundaries are oriented east-west and exclude much of the wintering area from full protection. Two of the proposed land conveyances – Otto Lake and Panguingue A – are within this core wintering area and others are nearby (see Fig. 4).



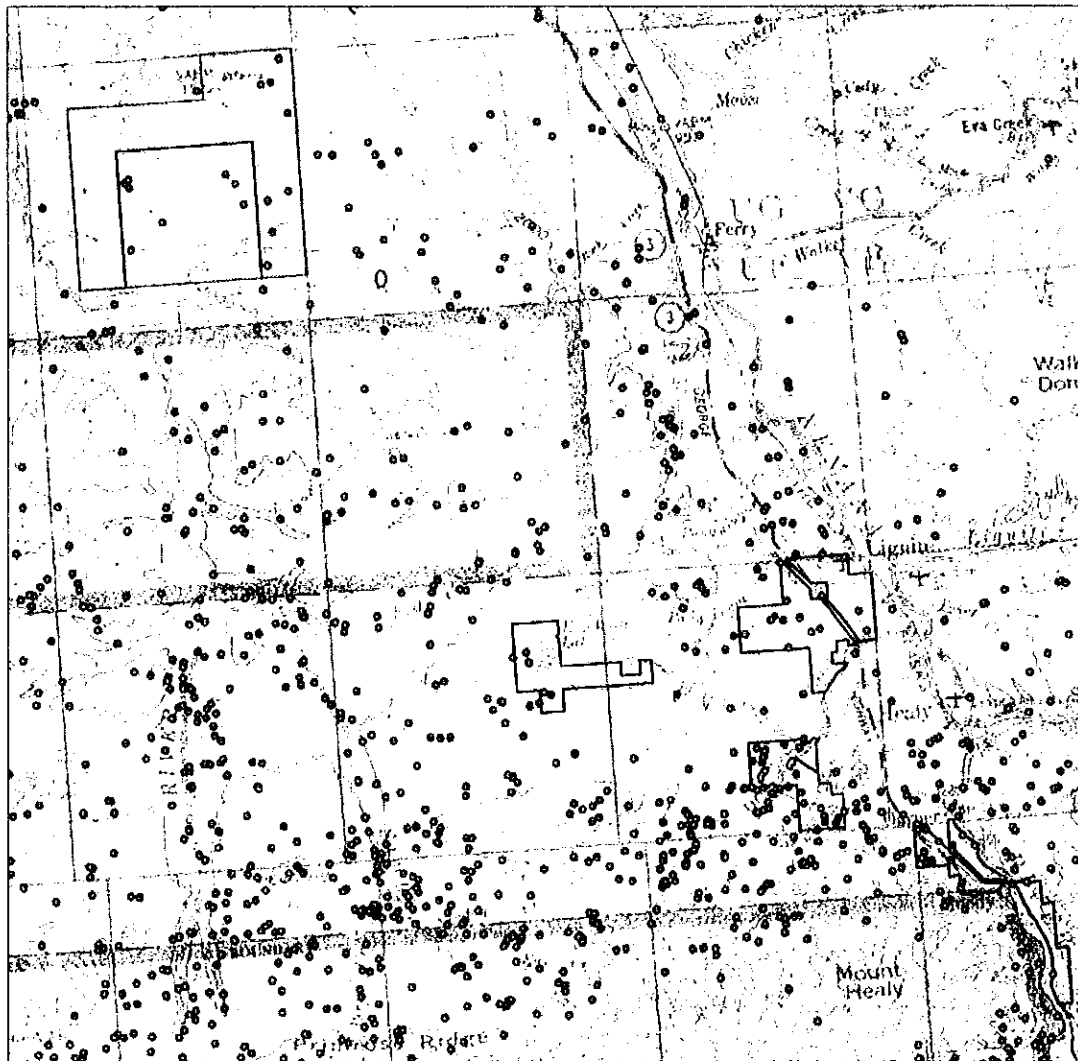
**Figure 2.** Distribution of caribou (red arrows) and sheep (blue slanted lines) and related wolf foraging variations (black). The colored areas represent the territories of 15 groups of wolves as of late April 2006. From Haber (2007b).



**Figure 3.** Distribution of Denali caribou radio collar locations (black dots) in and near central and northeastern areas of Denali National Park. The darkest contoured areas are most likely to be used by Denali caribou based on these locations. Areas at upper right primarily represent winter activity, centered in the area delineated by the gray-brown line in Figure 1. Note, as in Figures 1-2, the basic southwest-to-northeast orientation, from movements between seasonal ranges. At least two of the proposed state land conveyances are within high-use northeastern caribou areas. Map courtesy of National Park Service.



### Locations of Radio-collared wolves, 1986-2008



### Legend

Denali Borough Selections • Wolf Telemetry Locations • 1986 - 2008

# STATE OF ALASKA

## DEPARTMENT OF FISH AND GAME

### DIVISION OF WILDLIFE CONSERVATION

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PHONE: (907) 465-4190  
FAX: (907) 465-6142

November 4, 2008

Gordon Haber  
PO Box 64  
Denali Park, AK 99755

Rick Steiner  
University of Alaska  
2221 E. Northern Lights Blvd, #118  
Anchorage, AK 99508

Dear Dr. Haber and Professor Steiner:

I am responding to your request to Commissioner Lloyd seeking an administrative emergency closure for the wolf and coyote trapping seasons just outside the northeast boundary of Denali National Park (park). The emergency closure you requested "would extend eastward from the west bank of Savage River (the east side of the present north boundary closure) to the east bank of the Nenana River." The purpose of your request is to provide additional protection for the highly valued Denali wolves from further human killing. You also requested that the Alaska Department of Fish and Game (department) convince the Board of Game (board) to make the closure permanent in regulation.

Given the messages from Professor Steiner to Commissioner Lloyd about this matter I had my Deputy Director – Kim Titus, contact Mr. Steiner via phone on 30 October. At that time Dr. Titus indicated that the department would not grant your request for an emergency closure. The Division of Wildlife Conservation does not issue emergency closures for reasons other than the population-based conservation concerns for hunted or trapped species. Your request does not meet that criterion. The packs you propose to protect are part of a population that is not a conservation concern because management objectives are being met.

As you know, there has been extensive public discussion of the size and shape of the areas closed to the taking of wolves along the eastern edges of the park boundary. The Board created wolf hunting/trapping closures on state lands in the western end of the "wolf townships" in recognition of the value of certain packs within the park and the tendency for some packs and individual wolves to travel outside of the closed area and onto state-managed lands west of the Savage River. The board also made it clear on the record that it did not feel it was appropriate to implement additional closures to protect members of a particular pack when undertaking long-range excursions beyond lands closed to the taking of wolves. Like your request in 2007 to close the taking of wolves by emergency order, the present request would clearly be in conflict with the board's stated reasoning behind the establishment of the wolf closure west of the Savage River.

Your request would have us close lands that are currently open to the taking of wolves when there is no population-based reason to do so. Numerous studies of Interior Alaska wolves

November 4, 2008

indicate that there is a high rate of exchange of individuals between packs and a tendency for new individuals to establish territories that have been vacated. It is not appropriate to use emergency closure authority in the absence of a credible biological emergency. Past discussions between the board and public resulted in the board recognizing the value of park wolves for viewing and the board used their best judgment in establishing the present size of the closed areas.

As a result, the department is declining to take the emergency action you have requested. I have forwarded your petition to the board, and I believe it will discuss this request under miscellaneous business during its November 7-11 meeting in Juneau.

Sincerely,



Doug Larsen  
Director

cc: Denby Lloyd  
Kristy Tibbles  
Board of Game Members  
David James  
Philip Hooge  
Paul Anderson  
Paula Cullenberg  
Denis Weisenberg



# STATE OF ALASKA

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Cliff Judkins, Chairman  
Alaska Board of Game  
P. O. Box 115526  
Juneau, AK 99811

March 8, 2008

re: Joint Board consideration of nonsubsistence areas

Dear Cliff,

The Board of Fisheries appreciates the recent opportunity to coordinate with the Board of Game in discussing the rationale for another Joint Board meeting.

However, the Board of Fisheries still has questions regarding the basis for a second meeting to consider nonsubsistence areas and the assertion that the Joint Board had insufficient information for evaluating a nonsubsistence area proposal during the October 2007 meeting. The Joint Board was provided a significant amount of information from a variety of sources including recent harvest statistics, recent Department of Labor data, 2000 federal census data, Subsistence Division studies, and public testimony.

At this time, the Board of Fisheries is not able to conclude that a second Joint Board meeting is needed without answers to a number of questions. We would also like to gain a better understanding of the practical regulatory implications of establishing a new nonsubsistence area in a portion of Unit 13. Some of the management scenarios outlined by the Board of Game appear to be incongruent with the subsistence law.

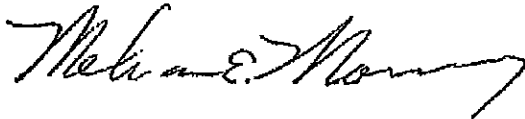
- 1) Would the Board of Game please identify what new information is now available for a second review of the 12 factors as they pertain to a potential nonsubsistence area Game Management Unit 13?
- 2) Would the board please identify what information it considers was lacking from the recent Joint Board review of the 12 factors as they pertain to a potential nonsubsistence area Game Management Unit 13?
- 3) Are there reasons to believe that such additional information could be compiled for use by the boards to fill these information gaps?
- 4) How would closing a portion of the Nelchina caribou range to subsistence hunting expand subsistence hunting opportunity for state residents?

- 5) How could uses other than subsistence uses be allowed on a game population that has an Amount Necessary for Subsistence (ANS) set at 100 percent of the allowable harvest?
- 6) Why would closing a portion of the current hunt area to subsistence hunting not concentrate hunting effort into a smaller geographic area?
- 7) What other methods and means restrictions or Tier II scoring changes could be applied to accomplish the BOG's objectives?
- 8) What are the implications of eliminating the subsistence priority for the use of resources other than caribou.

Having a more complete accounting of what specific information was missing from the previous Joint Board examination of nonsubsistence areas and having a better understanding of the availability of information for addressing those gaps are both needed for an evaluation of whether to revisit the topic of nonsubsistence areas. Similarly, having a better understanding the regulatory consequences of establishing a new nonsubsistence area in Unit 13 would also be helpful.

Thank you in advance for the effort in providing answers to these additional questions.

Best regards,

A handwritten signature in cursive script, appearing to read "Mel Morris".

Mel Morris

cc Denby Lloyd, Commissioner ADF&G  
Lance Nelson, Department of Law

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**Supplement: Additional Options for Alaska Board of Game  
Findings of Amounts Necessary for Subsistence in Southeast Alaska:  
Black Bears, Mountain Goats, and Brown Bears**

by

The Alaska Department of Fish and Game,

Division of Subsistence

for the November 2008 Juneau Board of Game Meeting

November 2008

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Alaska Department of Fish and Game

Division of Subsistence



Figure 1. Schematic representation of the experimental design. The subjects were divided into two groups: the control group and the experimental group. The control group was divided into two subgroups: the control group and the experimental group. The experimental group was divided into two subgroups: the control group and the experimental group. The control group was divided into two subgroups: the control group and the experimental group. The experimental group was divided into two subgroups: the control group and the experimental group.

captions.

## General

<i>all commonly-accepted abbreviations</i> <i>e.g., Mr., Mrs., AM, PM, etc.</i>	
<i>all commonly-accepted professional</i> <i>titles e.g., Dr., Ph.D., R.N., etc.</i>	
Alaska Administrative Code	AAC
at	@
compass directions:	
east	E
north	N
south	S
west	W
copyright	©

corporate suffixes:

Company	Co.
Corporation	Corp.
Incorporated	Inc.
Limited	Ltd.
District of Columbia	D.C.
et alii (and others)	et al.
et cetera (and so forth)	etc.
exempli gratia (for example)	e.g.
Federal Information Code	FIC
id est (that is)	i.e.
latitude or longitude	lat. or long.
monetary symbols (U.S.)	\$, ¢
months (tables and figures):	first three letters (Jan., ..., Dec)
registered trademark	®
trademark	TM
United States (adjective)	U.S.
United States of America (noun)	USA
U.S.C.	United States Code
U.S. state	use two-letter abbreviations (e.g., AK, WA)

fork length	FL
mid-eye-to-fork	MEF
mid-eye-to-tail-fork	METF
standard length	SL
total length	TL

all standard mathematical signs, symbols  
and abbreviations

alternate hypothesis	H <sub>A</sub>
base of natural logarithm	e
catch per unit effort	CPUE
coefficient of variation	CV
common test statistics	(F, t, $\chi^2$ , etc.)
confidence interval	CI
correlation coefficient (multiple)	R
correlation coefficient (simple)	r
covariance	cov
degree (angular)	°
degrees of freedom	df
expected value	E
greater than	>
greater than or equal to	≥
harvest per unit effort	HPUE
less than	<
less than or equal to	≤
logarithm (natural)	ln
logarithm (base 10)	log
logarithm (specify base)	log <sub>2</sub> , etc.
minute (angular)	'
not significant	NS
null hypothesis	H <sub>0</sub>
percent	%
probability	P
probability of a type I error (rejection of the null hypothesis when true)	$\alpha$
probability of a type II error (acceptance of the null hypothesis when false)	$\beta$
second (angular)	"
standard deviation	SD
standard error	SE
variance	
population	Var
sample	var

***SUPPLEMENT TO SP BOG 2008-10***

**SUPPLEMENT: ADDITIONAL OPTIONS FOR ALASKA BOARD OF  
GAME FINDINGS OF AMOUNTS NECESSARY FOR SUBSISTENCE IN  
SOUTHEAST ALASKA: BLACK BEARS, MOUNTAIN GOATS, AND  
BROWN BEARS**

by

Alaska Department of Fish and Game, Division of Subsistence, Juneau

Alaska Department of Fish and Game  
Division of Subsistence  
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November 2008

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## TABLE OF CONTENTS

	Page
LIST OF TABLES.....	i
INTRODUCTION.....	1
BLACK BEARS - Revised.....	1
MOUNTAIN GOATS - Revised.....	3
BROWN BEARS - Revised.....	5

## LIST OF TABLES

Table	Page
BB Table 1.—Mean harvests of black bears in spring by Southeast Alaska residents in GMUs 1A, 1B, 1D, 2, 3, and 5, 1998-2007.....	1
BB Table 2.—Black bear ANS Option C: Recent 5-year average harvests in spring by Southeast Alaska GMU residents.....	2
BB Table 3.—Black bear ANS Option D: Recent 10-year average harvests in spring by Southeast Alaska GMU residents.....	2
BB Appendix Table 1.—Harvests of black bears in spring by residents of GMUs 1, 2, 3, 4, and 5.....	3
MG Table 1.—Mean harvests of mountain goats, units 1A, 1B, 1D, and 5, by local residents, 1998-2007.....	3
MG Table 2.—Mountain goats ANS Option C: Recent 5-year average based on harvests by Southeast Alaska GMU residents.....	4
MG Table 3.—Mountain goats ANS Option D: Recent 10-year average based on harvests by Southeast Alaska GMU residents.....	4
BrB Table 1.—Mean harvests of brown bears in GMU subunits 1A, 1B, 1C, and 1D by local residents 1998-2007.....	5
BrB Table 2.—Brown bear ANS Option C: Recent 5-year averages based on harvests by Southeast Alaska GMU residents.....	6
BrB Table 3.—Brown bear ANS Option D: Recent 10-year averages based on harvests by Southeast Alaska GMU residents.....	6

## INTRODUCTION

This supplement to Alaska Department of Fish and Game Division of Subsistence Special Publication No. BOG 2008-10 was prepared at the request of the Alaska Board of Game (Board). During their November 2008 deliberations, the Board requested additional options for determining amounts necessary for subsistence (ANS) for black bears, mountain goats, and brown bears in Southeast Alaska.

### BLACK BEARS - REVISED

#### Additional Options for Amount Necessary for Subsistence Findings for Black Bears, GMU subunits 1A, 1B, 1D, and GMUs 2, 3, and 5

Following are 2 additional options for ANS findings for black bear *Ursus americanus* populations in Game Management Unit (GMU) subunits 1A, 1B, 1D, and GMUs 2, 3, and 5. These options are based on the recent 5-year and 10-year average harvests of black bears in the spring seasons only in these GMUs by residents of Southeast Alaska (GMUs 1, 2, 3, 4, and 5). See Special Publication No. BOG 2008-10 (RC 2 Tab B) for additional background, and for Options A and B. Appendix Table 1 reports spring harvests, by GMU, by Southeast Alaska residents from 1990 to 2007.

Table 1 reports the recent 5-year (2003–2007) and 10-year (1998–2007) mean annual harvests of black bears in the spring seasons only in GMUs 1A, 1B, 1D, 2, 3, and 5 by residents of the GMUs of Southeast Alaska (GMUs 1, 2, 3, 4, and 5 ).

Table 1. Mean Harvests of Black Bears in Spring by Southeast Alaska Residents in Units 1A, 1B, 1D, 2, 3, and 5, 1998 - 2007

Subunit	Recent Five-Years (2003 - 2007)					Recent 10-years (1998 - 2007)				
	Mean	Low	(year)	High	(year)	Mean	Low	(year)	High	(year)
1A <sup>1</sup>	9	4	2004	17	2006	9	2	2002	17	2006
1B	4	1	2005	7	2007	4	1	2005	7	2007
1D	18	13	2003	22	2006	20	10	2002	27	1999
2	23	19	2007	32	2004	26	19	2007	44	1998
3	19	13	2004	31	2007	30	13	2004	50	2001
5	7	3	2004	10	2005	7	1	1998	13	2001

<sup>1</sup> Excludes harvests within the Ketchikan Nonsubsistence Area.

Source: Prepared by ADF&G, Division of Subsistence, based on harvest data compiled by ADF&G, Division of Wildlife Conservation

Tables 2 and 3 provide 2 additional options for the Board to consider for ANS findings for black bears in each subunit of GMU 1 and in GMUs 2, 3, and 5. In Option C (Table 2), the ANS range is based on the recent 5-year (2003–2007) mean annual harvest of black bears in the spring seasons only by residents of the GMUs of Southeast Alaska. The low end of the range is the mean harvest minus 25% of the mean; the high end of the range is the mean harvest plus 25% of the mean.



Table 2. Black Bear ANS Option C: Recent 5-year average harvests in spring  
by southeast Alaska GMU residents

Unit	Mean harvest in spring, 2003 - 2007	Suggested ANS Range, +/- 25% of mean
1A <sup>1</sup>	9 bears	7 to 11 bears
1B	4 bears	3 to 5 bears
1D	18 bears	14 to 23 bears
2	23 bears	17 to 29 bears
3	19 bears	14 to 24 bears
5	7 bears	5 to 9 bears

<sup>1</sup> Excluding the Ketchikan Nonsubsistence Area

In Option D (Table 3), the ANS range is based on the recent 10-year (1998–2007) mean annual harvest of black bears in the spring seasons only by residents of the GMUs of Southeast Alaska. The low end of the range is the mean harvest minus 25% of the mean; the high end of the range is the mean harvest plus 25% of the mean.

Table 3. Black Bear ANS Option D: recent 10-year average harvests in spring  
by southeast Alaska GMU residents

Unit	Mean Harvest in spring, 1998 - 2007	Suggested ANS Range, +/- 25% of mean
1A <sup>1</sup>	9 bears	7 to 11 bears
1B	4 bears	3 to 5 bears
1D	20 bears	15 to 25 bears
2	26 bears	20 to 33 bears
3	30 bears	23 to 38 bears
5	7 bears	5 to 9 bears

<sup>1</sup> Excluding the Ketchikan Nonsubsistence Area

## BLACK BEAR APPENDIX TABLE

Appendix Table 1. Harvests of Black Bears in spring by Residents of GMUs 1, 2, 3,4, and 5

Year	Number of Black Bears Harvested					
	1A <sup>1</sup>	1B	1D	2	3	5
1990	15	4	20	56	57	1
1991	2	8	12	34	35	0
1992	3	6	12	31	29	2
1993	3	2	14	32	72	0
1994	1	4	11	33	67	4
1995	7	5	24	55	59	1
1996	5	3	33	38	47	1
1997	15	5	22	34	48	4
1998	6	6	25	44	44	1
1999	11	1	27	26	37	6
2000	16	6	24	24	45	2
2001	12	3	23	27	50	13
2002	2	2	10	26	27	9
2003	7	2	13	21	18	6
2004	4	3	16	32	13	3
2005	11	1	21	23	15	10
2006	17	5	22	20	17	6
2007	5	7	20	19	31	9
All years average	8	4	19	32	40	4
Recent 5-year	9	4	18	23	19	7
Recent 10-year	9	4	20	26	30	7
Total harvest	142	73	349	575	711	78

<sup>1</sup> Does not include harvests within the Ketchikan Nonsubsistence Area

Source: prepared by Division of Subsistence, ADF&G, based upon data from the Division of Wildlife Conservation

## MOUNTAIN GOATS - REVISED

### Additional Options for Amount Necessary for Subsistence Findings for Mountain Goats, GMU Subunits 1A, 1B, 1D, and GMU 5

Following are 2 additional options for ANS findings for mountain goat *Oreamnos americanus* populations in GMU subunits 1A, 1B, 1D, and GMU 5. These options are based on the recent 5-year and 10-year average harvests of goats in these GMUs by residents of Southeast Alaska (GMUs 1, 2, 3, 4, and 5). See Special Publication No. BOG 2008-10 (RC 2 Tab B) for additional background, and for Options A and B.

Table 1 reports the recent 5-year (2003 – 2007) and 10-year (1998 – 2007) mean annual harvests of mountain goats by GMU 1 subunit (except within the Ketchikan Nonsubsistence area) and GMU 5 by residents of the GMUs of Southeast Alaska (GMUs 1, 2, 3, 4, and 5 ).

Table 1. Mean Harvests of Mountain Goats Units 1A, 1B, 1D, and 5 by Local Residents, 1998 - 2007

Subunit	Recent Five-Years (2003 - 2007)					Recent 10-Years (1998 - 2007)				
	Mean	Low	(year)	High	(year)	Mean	Low	(year)	High	(year)
1A <sup>1</sup>	10	6	2003	14	2005	10	2	1999	20	1998
1B	11	7	2007	13	2003	11	6	2002	13	2000
1D	20	15	2006	30	2007	19	15	2006	30	2007
GMU 5	0.2	0	2006	1	2007	2	0	2006	7	1999

<sup>1</sup> Excludes harvests within the Ketchikan Nonsubsistence Area.

Source: Prepared by ADF&G, Division of Subsistence, based on harvest data compiled by ADF&G, Division of Wildlife Conservation

Tables 2 and 3 provide 2 additional options for the Board to consider for ANS findings for mountain goats in each subunit of GMU 1 and in GMU 5. In Option A (Table 2), the ANS range is based on the recent 5-year (2003–2007) mean annual harvest of mountain goats by residents of the GMUs of Southeast Alaska. The low end of the range is the mean harvest minus 25% of the mean; the high end of the range is the mean harvest plus 25% of the mean.

Table 2. Mountain Goat ANS Option C: Recent 5-year Average  
Based on harvests by southeast Alaska GMU residents

Unit	Mean Harvest, 2003 to 2007	Suggested ANS Range, +/- 25% of mean
1A <sup>1</sup>	10 goats	8 to 13 goats
1B	11 goats	8 to 14 goats
1D	20 goats	15 to 25 goats
5	0.2 goats	1 goat

<sup>1</sup> Excluding the Ketchikan Nonsubsistence Area

In Option D (Table 3), the ANS range is based on the recent 10-year (1998–2007) mean annual harvest of mountain goats by residents of the GMUs of Southeast Alaska. The low end of the range is the mean harvest minus 25% of the mean; the high end of the range is the mean harvest plus 25% of the mean.

Table 3. Mountain Goat ANS Option D: Recent 10-year Average  
Based on harvests by southeast Alaska GMU residents

Unit	Mean Harvest, 1998 to 2007	Suggested ANS Range, +/- 25% of mean
1A <sup>1</sup>	10 goats	8 to 13 goats
1B	11 goats	8 to 14 goats
1D	19 goats	14 to 24 goats
5	2 goats	2 to 3 goats

<sup>1</sup> Excluding the Ketchikan Nonsubsistence Area

## BROWN BEARS - REVISED

### Additional Options for Amount Necessary for Subsistence Findings for Brown Bears, GMU Subunits 1A, 1B, 1C, and 1D

Following are 2 additional options for ANS findings for brown bear *Ursus arctos* populations in GMU subunits 1A, 1B, 1C, and 1D. These options are based on the recent 5-year and 10-year average harvests of brown bears in these subunits residents of Southeast Alaska (GMUs 1, 2, 3, 4, and 5). See Special Publication No. BOG 2008-10 (RC 2 Tab B) for additional background, and for Options A and B.

Table 1 reports the recent 5-year (2003–2007) and 10-year (1998–2007) mean annual harvests of brown bears in GMU subunits 1A, 1B, 1C, and 1D by residents of the GMUs of Southeast Alaska (GMUs 1, 2, 3, 4, and 5 ).

Table 1. Mean Harvests of Brown Bears in Units 1A, 1B, 1C, and 1D by Local Residents 1998 - 2007

Subunit	Recent 5-years (2003 - 2007)					Recent 10-years (1998 - 2007)				
	Mean	Low	(year)	High	(year)	Mean	Low	(year)	High	(year)
1A <sup>1</sup>	4	1	2007	7	2006	2	1	2007+	7	2006
1B	1	0	2005+	3	2006	1	0	2005+	3	2006+
1C <sup>2</sup>	2	0	2005+	4	2006	1	0	2005+	4	2006
1D	5	1	2004	7	2005	4	1	2004+	8	1999
Unit GMU 1 <sup>3</sup>	11	4	2004+	20	2006	9	4	2004+	20	2006

<sup>1</sup> Does not include harvests within the Ketchikan nonsubsistence area.

<sup>2</sup> Does not include harvests within the Juneau nonsubsistence area.

<sup>3</sup> Does not include harvests within the Ketchikan and Juneau nonsubsistence areas.

Source: Prepared by ADF&G, Division of Subsistence, based on harvest data compiled by ADF&G, Division of Wildlife Conservation

Tables 2 and 3 provide 2 additional options for the Board to consider for ANS findings for brown bears in GMU subunits 1A, 1B, 1C, and 1D. In Option C (Table 2), the ANS range is

based on the recent 5-year (2003–2007) mean annual harvest of brown bears by residents of the GMUs of Southeast Alaska. The low end of the range is the mean harvest minus 25% of the mean; the high end of the range is the mean harvest plus 25% of the mean.

Table 2. Brown Bear ANS Option C: recent 5-year averages  
based on harvests by southeast Alaska GMU residents

Note: within this option, the board could establish an ANS range for each subunit, or establish one ANS range for the entire GMU.

Unit	Mean Harvest, 2003 to 2007	Suggested ANS Range, +/- 25% of mean
1A	4 bears	3 to 5 bears
1B	1 bear	1 bear
1C	2 bears	2 to 3 bears
1D	5 bears	4 to 6 bears
1 ALL	11 bears	8 to 14 bears

In Option D (Table 3), the ANS range is based on the recent 10-year (1998 – 2007) mean annual harvest of brown bears by residents of the GMUs of Southeast Alaska. The low end of the range is the mean harvest minus 25% of the mean; the high end of the range is the mean harvest plus 25% of the mean.

Table 3. Brown Bear ANS Option D: recent 10-year averages  
based on harvests by southeast Alaska GMU residents

Note: within this option, the board could establish an ANS range for each subunit, or establish one ANS range for the entire GMU.

Unit	Mean Harvest, 1998 to 2007	Suggested ANS Range, +/- 25% of mean
1A	2 bears	2 to 3 bears
1B	1 bear	1 bear
1C	1 bear	1 bear
1D	4 bears	3 to 5 bears
1 ALL	9 bears	7 to 11 bears

## **PROPOSAL 54**

**EFFECT OF THE PROPOSAL:** Modify the Upper Yukon/Tanana predation control implementation plan to allow taking of any black or brown bear, use of snares, same-day-airborne, sale of tanned and untanned hides and skulls, and to establish a working group to develop recommendations for the bear portion of the control program.

**DEPARTMENT RECOMMENDATION:** **AMEND AND ADOPT**

**RATIONALE:** Current grizzly bear control methods have not been effective. The grizzly bear control objective to reduce the population by 60% has not been achieved. Take has averaged 3 bears per regulatory year (range 1–6) since the program began in 2004. Permittees are currently allowed to take an unlimited number of bears during July 1–June 30. Permittees may also use baiting and same day airborne at bait sites during August 1–October 31 and April 1–June 30, provided the permittee is at least 300 ft from the airplane at the time of taking. Sale of untanned hides and skulls is also allowed. However, taking of females with cubs and cubs is prohibited.

The department recommends adopting all the modifications proposed, except creation of a working group. Given the ineffectiveness of the current program, substantial changes will be required to achieve objectives. Snaring at bait sites is expected to substantially increase take. However, use of this method will require authorization to take any sex and age of black and grizzly bear because snares are not selective. Because black bears are likely a minor source of moose calf mortality, the department recommends that adult take be limited to no more than 12% of the estimated population in the control area (16 adult black bears from an estimated population of 135). All snaring would be suspended if this limit is exceeded. Also, only "bucket" type snares would be allowed to reduce incidental capture of animals other than bears. The department also recommends that same-day-airborne take be allowed only if permittees are at least 300 ft from their aircraft at the time of taking. The department does not recommend establishing a working group because we feel the existing fish and game advisory committee/Board of Game process provides sufficient guidance for the control program.

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**Intra-departmental Coordination** (other area offices, Subsistence, Habitat, etc.):

**Inter-departmental Coordination** (Protection, federal agencies, etc.):

**5 AAC 92.540 Controlled Use Areas.** In the following areas, access for hunting is controlled as specified:

(12) Units 2 and 3

(i) the area consists of all of Units 2 and 3;

(ii) the area is closed to the use of any motorized land vehicle for black bear hunting Sept. 1 - 30, including the transportation of black bear hunters, their hunting gear, or parts of black bears; however, this prohibition does not apply to the transportation of black bear hunters, their hunting gear, or parts of black bears directly to or from publicly owned airports, boat launches, or Alaska State Ferry terminals.

# **RC 54**

## **ALASKA BOARD OF GAME Southeast Region Meeting November 7-11, 2008 Juneau, Alaska**

### **MISCELLANEOUS BUSINESS AGENDA**

Predator Management Information Program

Unit 20A Moose Management Plan – Appointment of Board Member

Denali National Park Area Wolf Hunting Closure – RC 49

Unit 13 Nonsubsistence Area/Letter from Board of Fisheries – RC 51

Bonus Point System for Permit Hunts

License and Drawing Hunt Fee Structures – Letter from Board of Game

Future meeting schedules



## Bonus Point Overview

### Allocation items for the Board to Consider

### Necessary Allocation Decisions

1. Establish hunts for inclusion
  - a. Delta Bison
  - b. Tok Management Area Sheep
  - c. Other Sheep hunts?
  - d. Moose hunts
    - i. Any bull hunts?
    - ii. Cow hunts/urban/local hunts?
2. Is system "coupled" or "de-coupled" from other drawing hunts?
3. Establish Number of Permits included in bonus point system
  - a. Based on Number of permits
  - b. Based on Percentage of permits
4. Need to establish separate hunts for residents vs. nonresidents
  - a. Keep all hunts the same
  - b. Separate hunts into sub-hunts
5. Point Accumulation – how are points managed?
  - a. Accumulate points by hunt
  - b. Accumulate points by species
    1. If points accumulated by species, what if not all hunts have bonus points?
  - c. Accumulate points by hunter
6. Point Accumulation – how are points accumulated?
  - a. One point added per year for unsuccessful draw
  - b. Square of points per year for unsuccessful draw
  - c. Other system
7. Point Loss
  - a. How are points maintained?
    - i. Points lost after being drawn?
    - ii. Points lost only if hunt?
    - iii. Points lost for species?
    - iv. Points lost for hunt?
  - b. Points lost for failing to apply
    - i. Does hunter need to apply annually?
    - ii. Can hunter merely apply to keep accumulating points but not for a hunt?
    - iii. Will department maintain points even if hunter does not apply?
      1. One year?
      2. Two years?
8. Party hunts and party applications?

- a. Are party hunters allowed to accumulated bonus points?
    - i. Are points accumulated by party?
  - b. Can residents and nonresidents co-mingle bonus points?
- 9. Fiscal/monetary issues
  - a. Can bonus points be purchased? (*current BOG recommendation is no*)
  - b. Is there an additional fee for this system; e.g., annual fee?

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Add a proposal to change the number of hunts per species that an applicant can apply for from 3 to 5.