

Trapper Questionnaire

**Statewide Annual Report
1993–1994**

**Alaska Department of Fish and Game
Division of Wildlife Conservation**

CODE OF ETHICS

A Trapper's Responsibility

- 1. Respect other trappers' grounds; particularly brushed, maintained trap lines with a history of use.**
- 2. Check traps regularly.**
- 3. Promote trapping methods that will reduce the possibility of catching nontarget animals.**
- 4. Obtain landowner's permission before trapping on private property.**
- 5. Know and use proper releasing and killing methods.**
- 6. Develop set location methods to prevent losses.**
- 7. Trap in the most humane way possible.**
- 8. Dispose of animal carcasses properly.**
- 9. Concentrate trapping in areas where animals are overabundant for the supporting habitat.**
- 10. Promptly report the presence of diseased animals to wildlife authorities.**
- 11. Assist landowners who are having problems with predators and other furbearers that have become a nuisance.**
- 12. Support and help train new trappers in trapping ethics, methods and means, conservation, fur handling and marketing.**
- 13. Obey all trapping regulations and support strict enforcement by reporting violations.**
- 14. Support and promote sound furbearer management.**

[This code of ethics was copied from the Alaska Trappers Manual. The manual was created through a joint effort between the Alaska Department of Fish and Game and the Alaska Trappers Association. The manual is available in Alaska book stores for approximately \$20.00.]

ALASKA TRAPPER QUESTIONNAIRE REPORT, 1993-94

INTRODUCTION

The trapper questionnaire report currently includes information contributed by southeast, southcentral, and interior Alaska trappers. Please refer to Table 1 for regional and area descriptions and Figures 1 and 2 for regional and game management unit boundaries. Questionnaire responses provide general information on how experienced our trappers are, how they run their trapline, how much effort they put into catching fur, what their primary target species are, and how abundant they believe furbearers are in their trapping area. Our mailing list for the 1993-94 season included 865 trappers. We received information back from 414 individuals (48%). Of these, 79 trapped in southeast, 202 trapped in southcentral, and 133 trapped in interior Alaska. This report summarizes the information provided by these trappers. Some area wildlife biologists prepared a summary of responses to questions they had specific to trappers in their area; these summaries are included in the report. In addition, this report contains summaries of current department furbearer management and research activities within the three regions. Trapper comments that were written on questionnaires are presented at the end of the report. Names of individuals and references to specific traplines are not included.

A PROFILE OF ALASKA'S TRAPPERS

Did you trap in 1993-94?

Sixty-eight percent of the trappers said they trapped during the 1993-94 season. Most of these trappers were working trap lines in the interior and southcentral regions.

How many total years of trapping experience do you have?

On the average, trappers have been catching fur for just over two decades (22 years, range = 1-70 years). Trappers in interior Alaska have trapped for an average of 27 years, whereas southcentral and southeast trappers each have been trapping for an average of about 20 years.

How many years have you trapped in Alaska?

Many of our trappers gained some trapping experience elsewhere before trapping in Alaska. The average number of years of trapping experience in Alaska was 16 years (range = 1-60 years), vs. 22 years of total trapping experience. Trappers in interior Alaska had an average of 22 years experience trapping in the state, whereas trappers in southcentral and southeast Alaska averaged 15 and 12 years, respectively.

Table 1. Regional and area descriptions for southeast, southcentral, and interior Alaska, Alaska Trapper Questionnaire, 1993-94.

Southeast Region:

<u>Area</u>	<u>Game Management Unit/Subunit(s)</u>	<u>Description</u>	<u>Fish & Game Area Office</u>
KPW	1A, 2	Ketchikan, Prince of Wales Island, and adjacent islands	Ketchikan
PWK	1B, 3	Petersburg-Wrangell, Kupreanof Island, and adjacent islands	Petersburg
JDY	1C, 1D, 5	Juneau-Douglas-Haines-Yakutat	Douglas
ABC	4	Admiralty, Baranof, and Chichagof Islands	Sitka

Southcentral Region:

<u>Area</u>	<u>Game Management Unit/Subunit(s)</u>	<u>Description</u>	<u>Fish & Game Area Office</u>
CUS	11, 13	Copper River and Upper Susitna River Basins	Glennallen
LSB	14, 16	Lower Susitna River Basin	Anchorage/Palmer
PWS	6	Prince William Sound and North Gulf Coast	Cordova
KEP	7, 15	Kenai Peninsula	Soldotna
KOI	8	Kodiak Archipelago	Kodiak
AKP	9, 10	Alaska Peninsula	King Salmon
BRB	17	Bristol Bay Area	Dillingham

Interior Region:

<u>Area</u>	<u>Game Management Unit/Subunit(s)</u>	<u>Description</u>	<u>Fish & Game Area Office</u>
LTB	20ABCDF, 25C	Lower Tanana River Basin	Fairbanks/Delta
UTB	12, 20E	Upper Tanana, Charlie, and Fortymile River Basins	Tok
MYK	21BCD, 24	Middle Yukon and Koyukuk River Basins	Galena
UYB	25ABD, 26BC	Upper Yukon River Basin	Fort Yukon

Game Management Regions

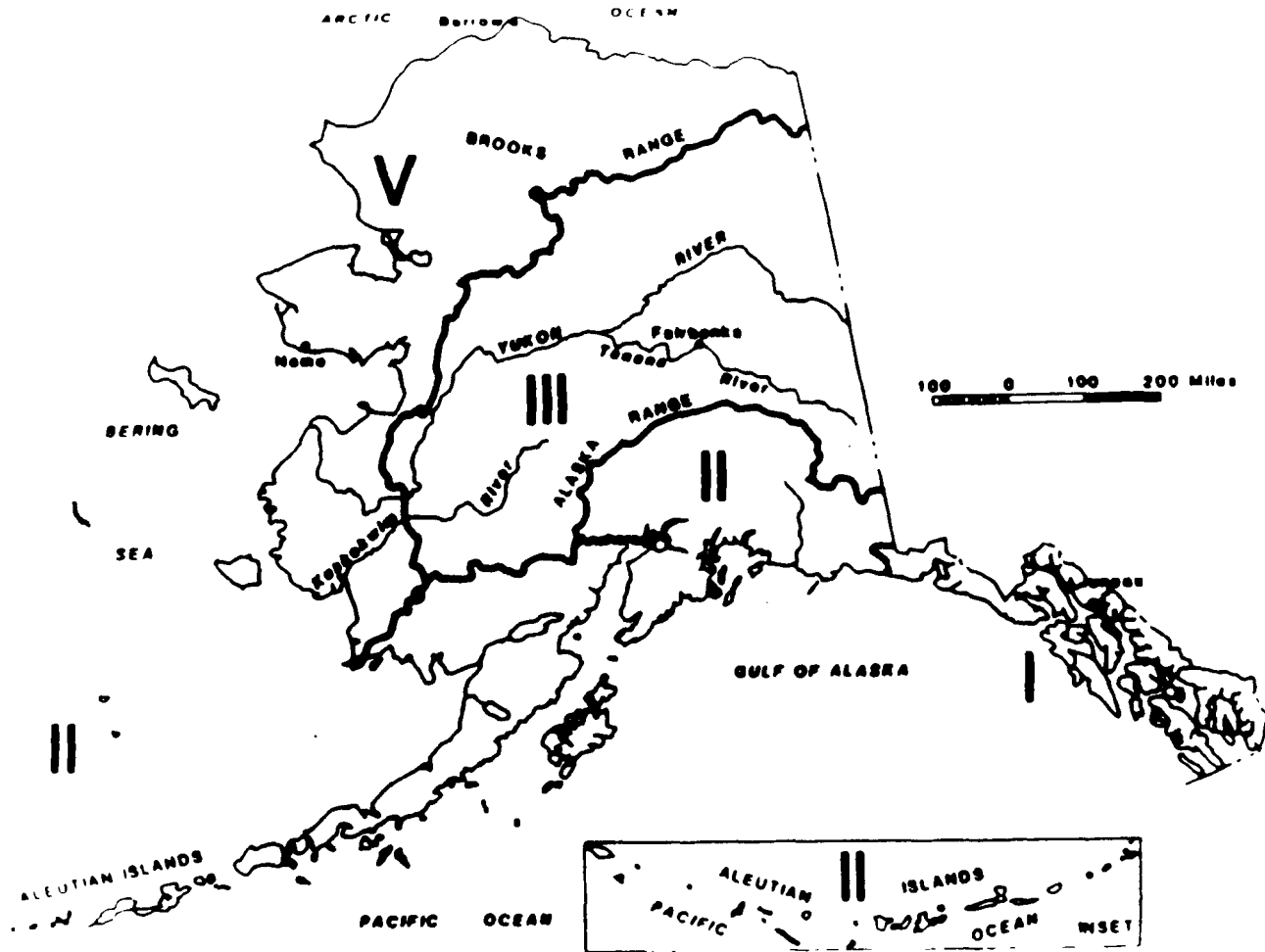


Figure 1. Alaska Department of Fish and Game - Game Management Regions

Game Management Units

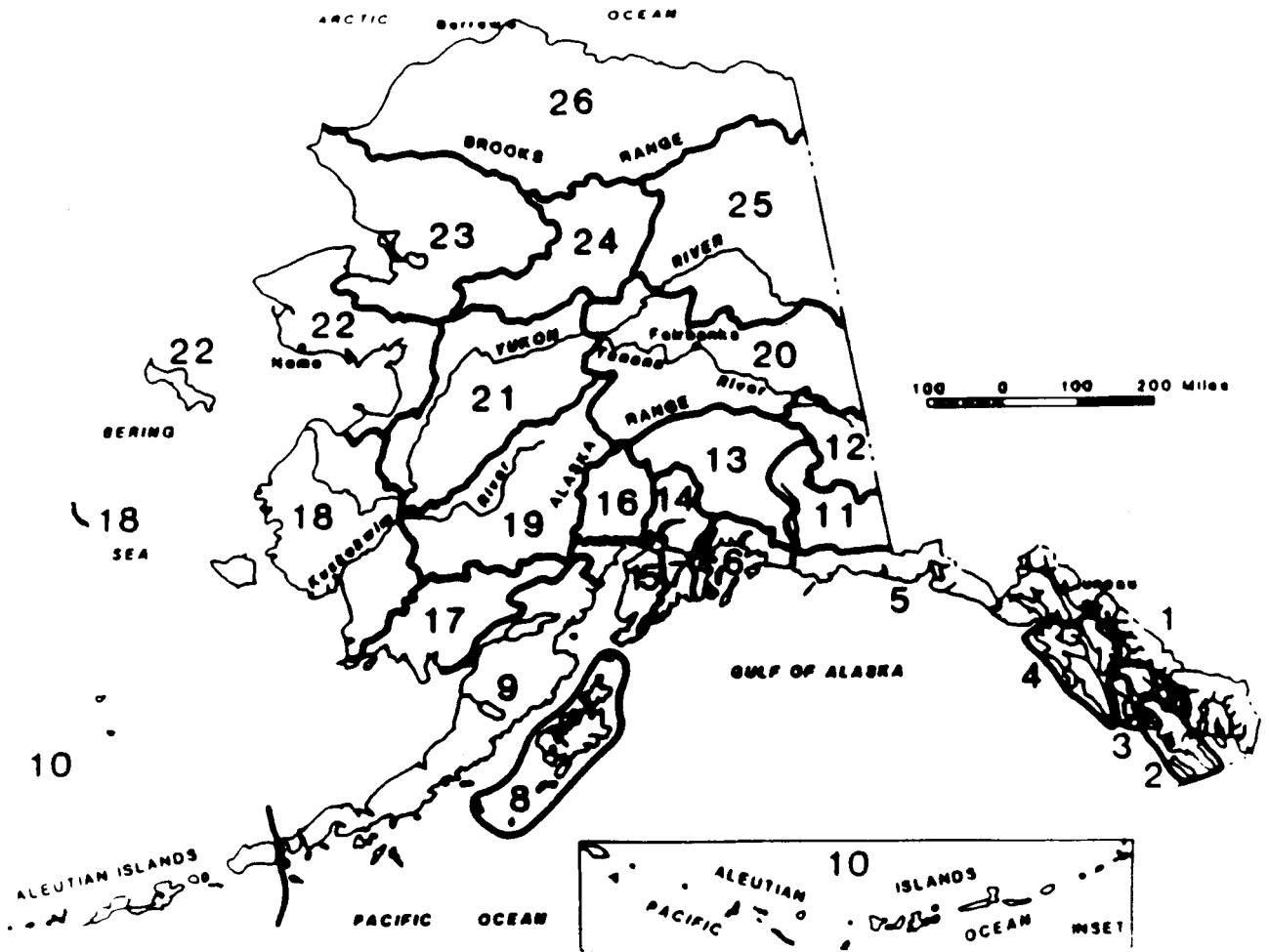


Figure 2. Alaska Department of Fish and Game - Game Management Units

What is your age?

The average age of Alaska trappers was 43 years; trappers ranged from 12 to 84 years old. On the average, southeast trappers were younger and had a greater percentage of trappers in the 25 or younger age group than either southcentral or interior trappers. The average age for southeast trappers was 39 years (16% were 25 or younger), the average age for southcentral trappers was 42 years (5% were 25 or younger), and the average age for interior trappers was 48 years (2% were 25 or younger). The majority of trappers in each of the three regions were between 26 and 50 years old. Interior trappers had the greatest percentage of trappers older than 50 years. Thirty-five percent of interior trappers, 24% of southcentral trappers, and 22% of southeast trappers were older than 50 years.

What transportation did you use to get to your main trapping area?

As might be expected, most southeast trappers used boats (62%) or a highway vehicle (22%) to get to their trapping area. In contrast, most of southcentral and interior trappers used snowmachines (southcentral trappers = 42%, interior trappers = 51%), a highway vehicle (southcentral trappers = 35%, interior trappers = 31%), or an airplane (southcentral trappers = 9%, interior trappers = 12%) to get to their trapping area.

What transportation did you use to run your trapline?

In southeast Alaska, most trappers ran their trap lines using a boat (51%) or they walked their lines (38%). Most trappers in the southcentral region used snowmachines (62%), walked (13%), or used skis/snowshoes (10%) to run their lines. In interior Alaska, almost all trappers ran their trap lines using snowmachines (87%).

How long was your main trapline in 1993-94?

Traplines averaged 31 miles long, and trapline length varied from less than 1 mile to 250 miles. The average trapline length of southeast trappers was 16 miles (range = 1 to 102 miles); trapline length of southcentral trappers averaged 26 miles (range = 0.2 to 225 miles); and trapline length of interior trappers averaged 52 miles (range = 2 to 250 miles). In each of the three regions, most trappers (86% of southeast trappers, 69% of southcentral trappers, and 36% of interior trappers) had trap lines up to 25 miles long. A considerable number of trappers in southcentral and interior Alaska had trap lines from 26 to 50 miles long (21% of southcentral trappers and 31% of interior trappers) and greater than 50 miles long (10% of southcentral trappers and 33% of interior trappers). Three interior trap lines and one southcentral trap line were greater than 200 miles long.

How many years have you been trapping in the same place?

On the average, trappers have been trapping the same area for a little over a decade (11 years), ranging from 1 year to 50 years. The length of time trappers worked the same

area averaged about 6.5 years for southeast trappers, 10 years for southcentral trappers, and 16.5 years for interior trappers.

How many sets did you make on your line in 1993-94?

Most trappers (75% of southeast trappers, 72% of southcentral trappers, and 43% of interior trappers) put out up to 50 sets on their trapline. Eleven percent of southeast trappers, 18% of southcentral trappers, and 23% of interior trappers made between 51 and 100 sets; 14% of southeast trappers, 10% of southcentral trappers, and 34% of interior trappers made more than 100 sets.

What were the most important species you were trying to catch in 1993-94?

Marten, mink, otter, and wolf were the primary target species for trappers in southeast Alaska. Trappers in southcentral Alaska primarily targeted marten, beaver, wolf, fox, wolverine, and otter; mink, lynx, and coyote were commonly listed as target species. In interior Alaska, marten, wolf, and lynx were the primary target species; wolverine and fox were commonly listed as target animals.

How many weeks did you trap during the 1993-94 season?

On the average, trappers worked their trap lines for about 10 weeks, ranging from 1 to 28 weeks. Trappers in southeast and southcentral Alaska worked their lines for an average of 8 weeks (range = 1-20 weeks) and 9.5 weeks (range = 1-25 weeks), respectively. Trappers in interior Alaska kept their lines active for an average of 13 weeks (range = 1-28 weeks). Seventy-three percent of southeast trappers, 60% of southcentral trappers, and 29% of interior trappers worked their lines from 1 to 10 weeks. In contrast, 27% percent of southeast trappers, 37% of southcentral trappers, and 64% of interior trappers kept their lines active from 11 to 20 weeks. A few southcentral trappers (3%) and interior trappers (7%) worked their lines for more than 20 weeks.

Was your trapping effort during the 1993-94 season less, the same, or more than the last season you trapped?

Most trappers (43%) indicated that their trapping effort was less than the last season they trapped. Thirty percent said their trapping effort was more than their last season and 27% said their effort was the same as their last season. Trapper response to this question was similar among the three regions.

If you did change your trapping effort for the 1993-94 season, did you change your effort to a different species; did you trap in a new area; and/or did you increase or decrease the following: the length of your trapline, the number of sets on your line, and/or the number of weeks you trapped?

Of those trappers that changed their effort in 1993-94 from the last season they trapped, 25% focused their trapping efforts on another species, 30% trapped in a new area, 55%

changed the length of their trapline (23% increased and 32% decreased the length), 68% changed the number of sets on their trap line (25% increased and 43% decreased the number of sets), and 60% changed the number of weeks they trapped (20% increased and 40% decreased the number of weeks). Trapper response to this question was similar among the three regions.

If you increased your trapping effort, did the increase result in a higher catch?

As noted earlier, 30% of the trappers said that their trapping effort was greater during the 1993-94 season than the last season they trapped. Of these, 84% indicated that their increased efforts resulted in a higher catch. Trapper response to this question was similar among the three regions.

What were trapping conditions like on your trapline?

Most trappers in each of the three regions indicated that trapping conditions were fair or good.

Did last year's fur prices or the 1993-94 pre-season advertised prices affect your trapping effort in 1993-94?

Although most trappers in each region responded that neither the previous year's fur prices nor the pre-season advertised prices affected their trapping effort, 32% of interior trappers, 21% of southcentral trappers, and 14% of southeast trappers said that prices did affect their effort.

Did the presence of other trappers in the area that you trap affect your trapping effort in 1993-94?

Most trappers (about 75% of the trappers in each of the three regions) indicated that the presence of other trappers did not affect their trapping effort.

ALASKA'S FURBEARER POPULATIONS - WHAT'S HAPPENING

Only 5 of the 15 species defined as furbearers (i.e., species subject to taking with a trapping license) require sealing statewide. Consequently, information on the numbers, distribution, and utilization of many furbearer species is limited. Through past experience, we have found that many trappers are not comfortable providing furbearer harvest information on the questionnaire. However, because many trappers have a pretty good understanding of how fur populations are doing in their trapping area, we routinely ask trappers to at least provide their interpretation of species abundance and trend along their lines. Unfortunately, there are many factors that can affect a trapper's judgement when interpreting abundance of and trends in local furbearer populations, including unusually cold or warm temperatures, the amount of snow, the experience of the trapper, and actual changes in the numbers of animals. In addition, every trapper has his/her own standards

for deciding if a species is scarce, common, or abundant and whether species numbers have decreased, remained the same, or increased from the last season they trapped. These standards also may change from year to year. Therefore, our biologists generally do not use the abundance/trend data by itself. This information is very helpful when interpreted in conjunction with other indicators (e.g., sealing reports (if available), fur export reports, fur acquisition reports, and field observations) and can be used as a guide for management decisions and reports. Ideally, we would like trappers to provide their local area wildlife biologists, either directly or through the trapper questionnaire, with harvest information for each species they trapped.

In this report, the information on species abundance is summarized by calculating a numerical index derived from values assigned to each response: scarce=1, common=2, and abundant=3. The index ranges from 0% to 100%. Index values of 0-19% are interpreted as indicating animal numbers are scarce, values from 20-50% indicate numbers are common, and values greater than 50% indicate numbers are abundant. Please refer to Appendix 1 for information on how the abundance index is calculated. Similarly, the trend data is summarized by calculating an index derived from values assigned to each response: fewer=1, same=2, more=3. This index is derived by calculating the average of the values for a given area, and the index can range from 1 to 3. A trend index value of 1-1.66 represents fewer animal numbers, values from 1.67-2.33 represent the same number of animals, and values of 2.34-3.00 represent greater animal numbers. Tables presenting the 1993-94 index values for species abundance and trend for areas in the southeast, southcentral, and interior regions are located in Appendix 2, 3, and 4, respectively.

Species Relative Abundance:

An overview of species abundance from 1991-92 through 1993-94

Southeast Alaska

During 1991-92, 1992-93, and 1993-94, trappers generally reported that beavers, otters, and wolves were common to abundant in the southeast region. Martens and mink were reported to be abundant in 1991-92 and common to abundant in 1992-93 and 1993-94. Wolverines were reported to be scarce in 1991-92 and scarce to common in 1992-93 and 1993-94.

Southcentral Alaska

For purposes of this summary, areas within the southcentral region were grouped into three larger areas: the Copper River and Upper Susitna River Basins were combined with the Lower Susitna River Basin area; the Prince William Sound and North Gulf Coast

area was combined with the Kenai Peninsula area; and the Kodiak Archipelago, Alaska Peninsula, and Bristol Bay areas were combined.

During 1991-92, 1992-93, and 1993-94, trappers generally reported that beavers were abundant and martens were common in the three southcentral areas. Trappers from the three areas reported that lynx were scarce in 1991-92, common in 1992-93, and scarce to common in 1993-94. During each of the three years, trappers reported that foxes were common in the Copper River/Susitna River area, scarce in the Prince William Sound and North Gulf Coast/Kenai Peninsula area, and abundant in the Kodiak Archipelago/Alaska Peninsula/Bristol Bay area. During the three years, wolves were reported to be common in the southcentral areas and coyotes were reported to be abundant to common.

Interior Alaska

During 1991-92, 1992-93, and 1993-94, trappers reported that beavers were abundant in the Lower Tanana and Middle Yukon-Koyukuk River areas, common in the Upper Tanana-Charlie-Fortymile River area, and abundant to common in the Upper Yukon River area. During these three years, trappers reported that martens were common to scarce in the Lower Tanana and Upper Tanana-Charlie-Fortymile River areas and common to abundant in the Middle Yukon-Koyukuk and Upper Yukon River areas. During these years, wolverines were reported to be scarce in the Lower Tanana River area, scarce to common in the Upper Tanana-Charlie-Fortymile River area, and common in the Middle Yukon-Koyukuk and Upper Yukon River areas. Trappers from all four interior areas reported that lynx were common in 1991-92 and 1992-93; in 1993-94, trappers reported that lynx were scarce in the Lower Tanana and Upper Tanana-Charlie-Fortymile River areas and common in the Middle Yukon-Koyukuk and Upper Yukon River areas. Trappers from the four areas generally reported that foxes were abundant in 1991-92 and common in 1992-93 and 1993-94. During the three years, wolves were reported to be abundant to common in the Lower Tanana River area, common in the Upper Tanana-Charlie-Fortymile River area, abundant in the Middle Yukon-Koyukuk area, and common to abundant in the Upper Yukon River area.

METHODS OF TAKING FURBEARERS

Trappers were asked to provide, for each furbearer species taken, the approximate percentage of animals taken with leghold traps, conibears, snares, a gun, or other types of traps. About 45% of the furbearers taken in the southeast region were trapped in legholds, 43% were trapped in conibears, 7% were snared, and 5% were shot. In the southcentral region, about 53% of the furbearers taken were trapped in legholds, 26% were trapped in conibears, 15% were snared, and 5% were shot. About 60% of the furbearers taken in the interior region were trapped in legholds, 13% were trapped in conibears, 26% were snared, and 1% were shot.

The reason we asked this question is related to the increasing pressure from animal rights activists to require more humane trapping methods. We want to document the

current extent that Alaska's trappers are using leghold traps, conibears, etc., and as time goes on, what changes (if any) occur in the trapping methods we use (e.g., a shift towards greater use of killing traps). Please refer to my update on the European Economic Community ban on furs and the development of international trap standards for more discussion regarding the status of the ban.

- - - Update - - -

European Economic Community Fur Ban and Development of International Trap Standards

The European Economic Community ban (now called the European Union or "EU" ban) on the importation of furs from countries that have not banned the leghold trap, or adopted internationally recognized humane trapping standards, has been postponed until January 1, 1996. The word I received from reliable sources was that the EU granted the extension because they were not ready to take on enforcement of the ban and there was some disagreement within the EU over the impact of the proposed ISO standards on their own traps.

A year ago, I felt that the EU legislation was pretty well "set in concrete" and could not, or would not, be changed. I still feel this is the case, but there is a remote possibility the ban may be delayed. I say this because the person responsible for drafting or changing legislation in this field has recently changed. Up until January 1, 1995, Willem Wijnstekers of the European Commission was in charge of the section that deals with this subject. Now, however, Rit Bjerregaard, from Denmark, is the new commissioner of the section. Denmark has a close relationship to Greenland, and many indigenous people there not only trap foxes but also net seals. Whereas Willem Wijnstekers exhibited a definite dislike for trappers (especially those individuals who used "steel-jawed" leghold traps) and the taking of wild fur, Rit Bjerregaard should show a better appreciation for the needs of indigenous people and the role of trapping in wildlife management. There is still a possibility that the law might be changed to something more reasonable that the U.S., Canada, and Russia could tolerate without losing the European market. We should know more on this by September 1, 1995, but as of mid-April, it does not look good for Alaskan furs going to Europe after January 1, 1996.

On a related subject, the USTAG has been continuing to work on a draft of the international trap standards. Two major meetings have been held during the past year: one in New Zealand and one in the Netherlands. I did not attend either meeting, but I was informed by other members of the group that the New Zealand meeting went very well (primarily because those who attended were scientists, veterinarians, or wildlife managers who understood the problems and worked together effectively). The Netherlands meeting, however, was another complete disaster dominated by Europeans who were absolutely opposed to any reasonable trapping standard, let alone a modified leghold trap that might make the standard. A new draft standard is out, and the USTAG

will meet in September to prepare comments on the draft. I don't know where all this is going to lead us, but if I had to guess, I would say it does not look very good for getting an international trap standard passed in the near future that the U.S. and Canada can live with. How all this fits into the EU ban is unclear at this time because the European law also may change.

On top of all this, the U.S. and Canada are seriously considering a challenge to the European fur ban law on the basis of another international law called "GATT," which is the General Agreement on Tariff and Trade. The U.S., Canada, and Europe are parties to the agreement. Without going into detail, GATT says that countries cannot set up barriers to trade based on ideological differences. What this means regarding the shipment of fur is that a country cannot prevent shipment of those goods just because the importing country does not like how those goods were taken (e.g., taking animals in leghold traps). Most people who know much about GATT agree that the European fur ban law is a clear violation of GATT. However, even if the law does violate GATT, Europe could still say "too bad, leave the law on the books and we'll just pay a tariff on some of the commodities exported to the U.S."

There is no doubt that things are changing rapidly, and what seems clear today will probably be muddy tomorrow. I still feel that what I told the Board of Game two years ago applies today: "By the year 2000, things will be different regarding the harvest of wild furbearers." How and to what extent things will change remains to be seen, but your life as a trapper is going to change. Even if the European ban goes away, and we do not get an international trap standard passed, we would be foolish to not continue with pursuing a national or North American trap standard. Public pressure for change in the traps and snares we use today simply will overwhelm us. It behooves us to take the initiative and improve our lot before the general public intervenes. If we don't, I am convinced they will take our trapping privileges away, or the market will fade to the point where the demand for wild fur will not be there.

ALASKA'S FURBEARER HARVEST

The following five furbearers require sealing statewide: beaver, lynx, river otter, wolf, and wolverine. In addition, marten are required to be sealed in Game Management Units 1-5, 7, 13E, and 14-16. Harvest estimates for these species are determined from sealing records (we do not have a reliable method to estimate harvests of the remaining furbearer species). Please refer to Table 2 for a summary of furbearer harvest estimates (for species that require sealing) from 1991-92 through 1993-94. Over the three year period, a statewide average of 5,002 beavers, 1,553 lynx, 1,269 river otters, 1,265 wolves, and 500 wolverines were sealed annually. For all these species, except wolves, the reported harvest during 1991-92 was higher than during either 1992-93 or 1993-94; the wolf harvest was greatest during 1993-94. In general, beaver harvests were greatest in Regions II, III, and V; lynx harvests were greatest in Region III; river otter harvests were greatest in Regions I, II, and V; wolf harvests were greatest in Region III; and wolverine harvests were greatest in Regions II and III.

Table 2. Reported furbearer harvest totals in Alaska, 1991-92, 1992-93, and 1993-94.

Species	Region	Reported Harvest 1991-92	Reported Harvest 1992-93	Reported Harvest 1993-94
Beaver	I	413	145	324
	II	2418	1517	1720
	III	1929	956	1886
	V	2391	621	685
	Total Statewide	7151	3239	4615
Lynx	I	9	29	22
	II	277	268	188
	III	1778	1047	999
	V	10	22	11
	Total Statewide	2074	1366	1220
River Otter	I	345	327	409
	II	592	449	449
	III	118	79	139
	V	430	353	118
	Total Statewide	1485	1208	1115
Wolf	I	196	193	226
	II	296	218	368
	III	545	527	840
	V	125	113	149
	Total Statewide	1162	1051	1583
Wolverine	I	18	22	25
	II	246	151	186
	III	258	143	242
	V	69	79	61
	Total Statewide	591	395	514
Marten*	I	4315	1393	1560
	II	87	192	159
	Total	4402	1585	1719

*Marten sealing is required in Region I and II (GMU's 1-5, 7, 13E, 14-16) only.

COMMERCIAL TRANSACTIONS INVOLVING FURS

We also have records of commercial transactions involving furs. Individuals who engage in fur dealing and who purchase, or acquire through consignment or barter, raw skins of furbearers must report the transactions on department fur acquisition forms. Each transaction report shows the species, number of each species, and location in which the furs were trapped. A table of the numbers of raw furs purchased, or acquired through consignment or barter, by Alaska's fur dealers (based on fur acquisition reports) from 1991-92 to 1993-94 is presented in Appendix 5. The average numbers of furbearer pelts purchased or acquired annually by fur dealers from 1991-92 to 1993-94 are as follows: marten=8,173, mink=5,419, beaver=1,238, muskrat=834, fox=692, lynx=680, squirrel=544, river otter=266, wolf=219, wolverine=71, weasel=70, and coyote=53. The average prices paid for raw furs by two fur dealers in interior Alaska are listed below:

<u>Species</u>	1991-92 (\$)	1992-93 (\$)	1993-94 (\$)
Beaver	17.50	17.50	26.00
Coyote	25.00	25.00	25.00
Fox	17.50	17.50	17.50
Lynx	105.00	70.00	85.00
Marten	50.00	35.00	42.50
Mink (wild)	16.50	15.50	17.00
Muskrat	1.25	1.25	1.25
River Otter	35.00	35.00	60.00
Squirrel	1.00	1.00	1.00
Weasel	1.25	1.75	1.75
Wolf	275.00	275.00	235.00
Wolverine	235.00	235.00	235.00

Raw fur export reports are filled out when an individual sends raw furs outside of Alaska. The same information is collected for these reports as for the acquisition reports. A table of the reported numbers of raw furs exported from Alaska by trappers/hunters and fur dealers from 1991-92 through 1993-94 is presented in Appendix 6. The average numbers of furbearer pelts exported annually from 1991-92 to 1993-94 are as follows: (the number of pelts exported by trappers/hunters is listed first, followed in brackets by the number of pelts exported by fur dealers): marten=3,426 [10,669], mink=858 [7,196], beaver=634 [4,669], muskrat= 564 [6,993], fox=451 [3,464], river otter=273 [793], lynx=155 [1,018], wolf=118 [572], coyote=118 [288], weasel=109 [328], squirrel=81 [619], wolverine=49 [427].

For each furbearer, if we multiply the average price paid for raw furs (listed in the above table) by the number of raw furs exported from Alaska, we can determine the approximate monetary value of furbearer pelts exported from the state. The approximate values of raw furs exported from Alaska from 1991-92 to 1993-94 are presented in Appendix 7. For all furbearer species combined, the approximate monetary value of raw

furs exported during 1991-92 was \$2,177,474, compared to \$857,103 during 1992-93 and \$1,160,804 during 1993-94. In 1991-92, the value of pelts exported from the state was greatest for marten (\$1,175,450), wolverine (\$219,960), and wolf (\$195,525). In 1992-93, the value of exported pelts was greatest for marten (\$240,975), mink (\$172,453), and wolf (\$170,225). The value of exported pelts in 1993-94 was greatest for marten (\$505,282), wolf (\$173,430), and beaver (\$129,870).

NOTE: The fur acquisition and raw fur export reports are not actual records of furbearer numbers harvested in a given regulatory year. Both reports may include furs taken in previous years, and many trappers keep their furs for tanning and use at home. In addition, some individuals may not fill out the required forms. Consequently, these transaction reports are used only as a general indicator of harvest trends.

SUMMARIES OF TRAPPER RESPONSES TO AREA SPECIFIC QUESTIONS

SOUTHEAST REGION

Area: Ketchikan, Prince of Wales Island, & Adjacent Islands (GMUs 1A,2)

by

Ketchikan Area Wildlife Biologist, Doug Larsen

Question asked by Doug Larsen:

Do you think any trapping regulations should be changed at this time? If yes, which one(s)?

Trapper #1 reply: Beaver should be shortened at least in southeast Alaska. It should end at least by the end of March. The hides get matted up and rubbed by then. Most people quit by then, but a few don't. I think it's a shame to waste a great animal for a number count. Three years ago, I caught 97 beaver (and quit in March) using 12-24 traps at a time, so no need for a long season. Just the effort is needed to get furs. Actually, I would prefer a Nov. 1 to Feb 30 for beaver in GMU 2 especially.

Doug Larsen's response to Trapper #1: Historically, about 85% of the annual Unit 2 beaver harvest has occurred during December through March. As you note, pelt quality certainly tends to deteriorate as the season progresses. However, the extent to which pelt quality deteriorates has been found to vary from area to area. For instance, pelts from beavers residing in areas with relatively mild climates tend to lose quality sooner than pelts from beavers inhabiting colder areas. This may account for the higher quality of pelts taken from the Subunit 1A mainland during May than from Unit 2 during the same time period. Because of these noted differences, we would not oppose shortening the Unit 2 season if the overall consensus among trappers is to do so. However, because we do not have biological concerns about beaver populations at this time, we are not inclined to recommend this change without public input and support. If you and other Unit 2 trappers agree that this change should be made, we suggest you plan to submit a proposal to the State Board of Game for their consideration. Furbearer proposals will next be considered by the Board at its spring 1998 meeting, and proposals should be received in the Division of Boards office during October and November 1997. If you have questions about how to submit proposals, please contact your Area Wildlife Biologist.

Trapper #2 reply: Make it legal to shoot beaver.

Doug Larsen's response to Trapper #2: In looking at existing trapping regulations, beaver may be shot only in Units 8, 18, 21E, 22, and 23. These units coincide with areas where people have complained about beavers being nuisances. In some instances, the beavers have blocked anadromous fish streams. The rationale for allowing beavers to be shot has therefore been to allow greater opportunity for harvests. However, numbers of beavers which are shot in these areas tend to constitute a small part of the overall

harvests, and harvests have not been shown to increase noticeably in areas where shooting has been implemented.

If a proposal for allowing beavers to be shot in southern southeast Alaska was submitted to the Board of Game, we do not anticipate any biological concerns which would cause us to oppose it. However, unless we receive overwhelming support and desire from trappers to implement this change, we are inclined to stay with the status quo.

Trapper #3 reply: Lobby to get our wolf bounty back.

Doug Larsen's response to Trapper #3: As trappers are aware, wolf bounties were discontinued several years ago. Political realities in today's world certainly suggest that bounties will remain a thing of the past; however, at the time of this writing, the legislature is reviewing a proposed bill which, if promulgated, would pay trappers or hunters up to \$200 for each wolf taken. Action on this legislation will be interesting and should give us a more definitive perspective on political realities.

Trapper #4 reply: The length of the muskrat trapping season should be changed to correspond with the length of the beaver trapping season so the trapper doesn't have to change sets or move sets to avoid the accidental catch of muskrats.

Doug Larsen's response to Trapper #4: Whenever seasons differ for species having similar life histories, the possibility exists for inadvertently catching a nontargeted species. River otters, for instance, are sometimes caught in beaver sets after the otter season has ended, although we do not believe this occurs frequently enough to make it a concern. Muskrats, unlike otters and beavers, are relatively scarce in southern southeast Alaska, and the chance of catching them is therefore considered pretty slim. Regardless, given the scarcity and inconsequential harvest levels of muskrats, we do not presently have any biological concerns which would cause us to oppose extending the muskrat season to coincide with the beaver season if it was proposed.

SOUTHCENTRAL REGION

**Area: Lower Susitna River Basin (GMUs 14,16)
by
Palmer Assistant Area Wildlife Biologist, Mark Masteller**

Question asked by Mark Masteller:

The Board of Game will consider changes to trapping regulations during the Spring 1995 meeting. Do you have suggestions for changes?

Eleven trappers commented that the marten season should be lengthened (primarily in GMU 16), three trappers wanted the beaver season lengthened, three trappers wanted

the beaver season shortened, and two trappers wanted the trapping season to begin November 1. As most of you know, the Board of Game discusses changes to trapping seasons every three years, so it is important to make your wishes known at those times. Based partly on your responses, the department supported proposals to lengthen marten (in GMU 16) and beaver seasons. Here's a short list of some of the changes the board made to trapping seasons in/near our area: **(These changes will not take effect until the fall of 1995)**

Extend marten season in GMU 16, north of Beluga River : Nov. 10 - Dec. 31.
Extend marten season in GMU 16, south of Beluga River : Nov. 10 - Jan. 31.
Extend marten season in GMUs 11 and 13 (except 13E) : Nov. 10 - Feb. 28.
Extend beaver season in GMUs 13, 14, and 16 : Nov. 10 - May 15.
Remove bag limit for beaver in GMUs 13, 14, and 16 : No limit.

The board rejected specific proposals to open certain seasons on Nov. 1 (e.g., coyote in GMU 16), but these proposals generated a lot of discussion as to why southcentral and interior Alaska have different opening dates. The board also debated a proposal that traps and snares be labelled, either with the trapper's name or some identifying mark. We'd like to be able to let the board know how you feel on this issue. Trapping issues are scheduled again for Spring of 1998.

INTERIOR REGION

Area: Lower Tanana River Basin (GMUs 20A,B,C,F and 25C)
by
Fairbanks Assistant Area Wildlife Biologist, Toby Boudreau

Question #1 asked by Toby Boudreau:

Has your marten catch changed this year, and if so, how? Do you have any ideas why this change would occur?

In Subunit 20A, four of eight trappers said their marten harvests were the lowest they had experienced and feared populations were going lower. The other four trappers said they experienced high marten harvests and felt that marten populations were strong. In Subunit 20B, six of ten trappers said marten harvests were higher in 1993-94, three of the trappers indicated their harvests had not changed, and one trapper said his harvest had been falling every year. In Subunit 20C, three of six trappers said their marten harvests had decreased, two of the trappers said their harvests were stable, and one trapper said his harvest increased. Two trappers in Subunit 20F and 25C said their marten harvests were lower in 1993-94.

Trappers speculated that marten populations were fluctuating due to changes in food availability and lynx density. There is no doubt that the amount of food available has a

great deal of influence on marten populations. Lynx predation might be a factor where the two species coexist, however, marten populations continue to cycle even in areas where lynx are not found (e.g., McGrath). Some biologists believe that spring weather plays a major role in marten population fluctuations. They believe that warm, dry springs foster high marten populations and cool, wet springs depress populations. In the McGrath area, there is evidence to support this idea. It would be interesting to determine if there is a long-term relationship between marten sales/export data and historic weather data.

Question #2 asked by Toby Boudreau:

Did the forecasted prices from last year influence your trapping efforts towards any species? If so, what species did you concentrate on trapping?

Six of ten trappers in Subunit 20A said fur prices did not affect their trapping efforts; the other four trappers said prices did influence their trapping effort, and they concentrated on trapping marten, lynx and wolves. Eight of eleven trappers from Subunit 20B said fur prices did not affect their trapping effort; the other three trappers said prices gave them incentive to increase their effort trapping wolves and decrease their effort trapping marten. In Subunit 20C, four of six trappers reported that fur prices had no affect on their trapping effort; the other two trappers reported that prices swayed them to increase their effort trapping wolves and decrease their effort trapping marten. In Subunit 20F, only two trappers answered this question. One trapper said fur prices did not affect his trapping effort and the other said prices did affect his effort.

INTERIOR REGION

Area: Upper Tanana, Charlie, and Fortymile River Basins (GMUs 12, 20E)

by

Tok Area Wildlife Biologist, Craig Gardner

Question #1 asked by Craig Gardner:

Would you be willing to give up leghold traps in order to keep the European market?

Fifteen trappers (88% of the respondents) said they would not give up the use of legholds just to save the European market; two trappers (12%) said they would consider changing to conibears but were unhappy that outsiders were having a say in how we conduct our trapping. All trappers felt that we need to develop new markets to minimize the effect of the ban. Many trappers indicated they would be willing to try conibears for marten and mink but felt they needed legholds for the canid species, especially if there were a lot of caribou present on the trapline.

Questions #2 and #3 asked by Craig Gardner:

#2 - Did you take advantage of the March leghold trapping season for wolves and #3 - what percentage of your March wolf sets were visited by wolverines?

I asked these questions because there is some concern that the wolverine population may be affected by the March extension of the wolf leghold trapping season. Most wolverines in interior Alaska have their kits during March, and we have found that female wolverines are more prone to being trapped during that period. Seventeen trappers responded to my questions. Of these, ten (59%) trappers said they took advantage of the March season. In Subunit 20E, 0-1% of the March wolf sets were visited by wolverines. In certain areas of Unit 12, however, up to 20% of the wolf sets were visited by wolverines. The wolverine population is larger in Unit 12 than in Subunit 20E.

Responding area trappers felt that wolverines were scarce in both Unit 12 and Subunit 20E. I plan to do a wolverine census within the next two years; this census information combined with harvest data should give me a good idea of population status and trend. Once I have this information, we can discuss which management options are best for the wolverine population and for the area trappers.

INTERIOR REGION

**Area: Upper Yukon River Basin (GMUs 25A,B,D and 26B,C)
by
Fort Yukon Area Wildlife Biologist, Bob Stephenson**

Question #1 asked by Bob Stephenson:

Have you noticed a change in muskrat, mink, or beaver numbers since the high water in 1992?

Ten trappers on the Yukon Flats reported that there were more muskrats and mink in the last couple of years. Two trappers said there were more beaver, but most trappers have not seen much change in the already high beaver population.

Question #2 asked by Bob Stephenson:

Have you noticed any change in moose numbers during the past several years in areas you hunt or trap?

Seven trappers thought there were more moose, three saw no change in moose numbers, and five said there were fewer moose in the areas where they trap. Several trappers thought wolf numbers had increased in recent years and were concerned about the number of moose killed by wolves.

We are presently working with the Yukon Flats Refuge staff and with communities on the Flats to design a study that will tell us why moose are so scarce in the western part of the Flats. This study probably would involve putting radio collars on up to 40 cows and 40 newborn calves over a two year period to find out the most important causes of mortality. We also hope to develop a cooperative management plan that will increase moose numbers over the long term.

SUMMARIES OF FURBEARER MANAGEMENT AND RESEARCH ACTIVITIES

SOUTHEAST REGION

by

Southeast Regional Furbearer Coordinator, Rod Flynn

The furbearer research and management program in southeast Alaska focused on martens in 1993-94. The marten research program consisted of two major activities. A fourth year of field work was completed on an ecological study of martens on northeast Chichagof Island. Also, marten carcasses were collected from trappers in several areas of southeast Alaska to monitor the sex and age composition of the harvest and provide information on female productivity.

Department staff have studied marten habitat use and demographics in southeast Alaska since 1990 through a cooperative project among the Alaska Department of Fish and Game, the USDA Forest Service, and the University of Alaska Fairbanks. Wildlife management agencies in southeast Alaska became interested in marten ecology because land management activities were expected to affect long-term population abundance. Although most of the original forested land in southeast Alaska was old growth, industrial-scale logging is converting large areas into clearcuts and second growth. Associated logging roads are greatly changing human access patterns. The biogeography of the Alexander Archipelago presents additional management challenges. Initially, the study focused on marten habitat use in relationship to land management activities, primarily logging and road building. After the first year, it became apparent that an understanding of marten population biology was necessary to provide a better interpretation of the habitat information. Also, marten demographics appeared to be strongly influenced by changing environmental factors, especially food availability. Subsequently, the project evolved into a broader, long-term study of marten ecology in southeast Alaska. Additional information on the study can be found in annual progress reports prepared by the Alaska Department of Fish and Game.

Each year, we live trap martens in the primary study area on northeastern Chichagof Island at least once each season to identify, measure, and tag the martens present. Altogether, 193 martens have been captured, of which 161 have been radio collared. We locate the radio-collared martens periodically, usually by aircraft, to record habitat use, movements, and survival. Some individuals have been tracked for more than three years now. In addition, we have been working with a graduate student from the University of Alaska-Fairbanks, Merav Ben-David, to examine marten diets through traditional scat analysis and by looking at the concentrations of the stable isotopes of nitrogen and carbon in blood samples. Her Ph.D. dissertation will present information on individual diet variation by season and landscape position of home ranges.

Marten harvests by trappers have been monitored by collecting nearly all of the carcasses taken on northern Chichagof Island since 1991. We also have collected a region-wide sample of marten carcasses since 1992. Over 1,600 marten carcasses have been

examined, and information on cementum age, sex, stomach parasites, and body morphology of each carcass has been recorded. The number of corpora lutea present in the ovaries of female marten also was recorded to provide a measure of productivity. Much of this information stills needs to be analyzed.

In 1993-94, we monitored 62 radio-collared martens (38 males and 24 females). Sixteen martens (26%) with active collars died during the year. Eleven deaths (seven males and four females) resulted from natural causes (probably a combination of predation and starvation), and three males were trapped off the study area. The mortality rate was substantially lower than the past two years (compared with 75% mortality in 1991-92 and 43% in 1992-93). We estimated the marten density on the study area during late winter at 0.7 martens/mi², an increase of 43% from 1993. The higher density resulted from increased recruitment and survival of young martens (juveniles and yearlings). The number of mice and voles on the study area increased for the first time since the study began. Because mice and voles are important food sources for martens, their higher abundance probably contributed to the higher recruitment and survival. Also, restrictions on marten trapping probably greatly reduced trapping mortality.

With additional information to be gathered over the next couple of years, we anticipate developing a good understanding of marten populations in southeast Alaska. This information will be used to better manage marten populations and their habitats.

SOUTHCENTRAL REGION
by
Southcentral Regional Furbearer Coordinator, Howard Golden

Furbearer management activities in southcentral Alaska have expanded in recent years to improve our ability to monitor furbearer populations and harvests. We increased the number and extent of our track surveys; began collecting and analyzing carcasses for age, sex, and reproductive activity; widened our contact with trappers and fur buyers; and made better use of models to improve population management. We geared our research projects to meet the most pressing management needs in the region. They focus mainly on testing and developing new monitoring techniques for lynx, hares, martens, wolverines, wolves, and river otters. We also cooperate wherever possible with federal and Canadian biologists to share resources and expand the scope of our research.

MANAGEMENT ACTIVITIES

Population Monitoring

Furbearer populations are notoriously difficult to monitor. Counting individual animals as we do with moose and caribou is not possible with furbearers. Because of this limitation, we have to rely on counting tracks or other sign to get an index of furbearer abundance and trend. ADF&G biologists use one or more of the following methods to monitor the status, trend, and distribution of furbearer populations in southcentral Alaska:

Relative Abundance Trend Counts – In several GMUs, we use ground and aerial counts of tracks in snow to monitor the trend in relative abundance of lynx, marten, snowshoe hare, coyote, and fox populations. We are always trying to improve these survey techniques. Please see Track Index Testing and Development under the RESEARCH section.

Beaver Food-Cache Counts -- Trends in beaver population size and distribution are relatively easy to monitor through counts of their food caches located in front of lodges or dens on lakes and rivers. These food caches are the biggest and easiest to count after leaf-fall in early autumn. Cache counts are not reliable for estimating beaver density but they are useful in measuring changes in relative abundance.

Muskrat Pushup Counts -- These counts, conducted either from the air or ground in spring, are a good way of measuring muskrat activity in an area. Like beaver cache counts, we use them as indices of relative abundance rather than estimates of density.

Carcass Analysis -- A few years ago we began purchasing lynx, marten, and wolverine carcasses in a few areas of southcentral Alaska. We are doing this to learn more about the sex and age structure and reproductive history of those species. This information allows us to better determine the status of harvested populations. This effort will continue over the next several years, particularly for lynx and wolverine.

Trapper Questionnaire -- Trapper responses to questionnaires regarding their harvest, effort, and observations of furbearers and their prey are important information for area management biologists and researchers. These reports help us evaluate the current status and trend of furbearer populations and harvest pressure over a wide area.

Harvest Monitoring

We use the following four harvest-reporting sources to help us assess harvest patterns and intensities compared to trapper effort:

1. Pelt sealing certificates
2. Fur export reports
3. Fur-dealer acquisition reports
4. Trapper questionnaires

We use pelt sealing to monitor harvest of six species with high management importance in southcentral Alaska. These species are beaver, wolverine, marten (in GMUs 7, 15, 13E, 14, and 16), lynx, river otter, and wolf. Fur export and fur dealer acquisition reports gather harvest data on all furbearer species from individuals exporting raw furs from Alaska and from fur dealers who acquire raw furs from trappers. We send trapper questionnaires annually to a sample of trappers who report their harvests, efforts, and observations.

The reliability and utility of data vary tremendously among the harvest-reporting sources and among regions of Alaska. Sealing records are the most reliable, specific, and sensitive indicators of harvest, whereas fur export and acquisition reports provide general trend information over large areas. Each type of report provides data on the trapper or hunter, the furbearer species and number caught, and the GMU of harvest. However, sealing certificates also report the specific area of harvest, date taken, method of take and transportation, sex, and pelt characteristics. Despite some lack of accuracy and detail in information, we find the combination of the four harvest sources gives us a pretty good view of harvest levels and trends. We are constantly trying to improve this information and its collection, and we greatly appreciate the cooperation of trappers in making this system work.

Lynx Tracking Harvest Strategy

The lynx population in most of Alaska was at its cyclic low in the late 1980s. At the same time, pelt prices and harvests were exceptionally high. This situation created concern about potential overharvest. As a result, the Board of Game authorized ADF&G in 1988 to establish the lynx tracking harvest strategy (THS) in the road-connected areas of southcentral and interior Alaska. This strategy responds to population levels of lynx and their prey by modifying season lengths to ensure that sustainable harvest limits are not exceeded. This approach allows for long seasons during the higher portion of the lynx cycle and short or no seasons during population lows. By adjusting harvests to track lynx population changes, we can provide trappers more overall opportunity to take lynx without risking overharvest. Since we implemented the THS, the lynx population cycle statewide reached its peak in the early 1990s and began its decline about two years ago. Lynx numbers are now nearing the low point in the cycle. Last year was the first rigorous use of the THS, resulting in season reductions throughout southcentral Alaska, including closures in GMUs 6, 7, 14, 15, and 16. We expect to have reduced seasons for a couple more years, followed by gradual increases as lynx populations increase. It is important not to lengthen seasons and increase harvests too quickly after the cyclic low in order to give populations adequate opportunity to rebound. To make the THS work, we use all sources of population and harvest data available to us.

RESEARCH ACTIVITIES

Lynx Management Model Development

To assist us in following the lynx tracking harvest strategy, we are developing a computer model that standardizes our decision-making process. This computer model is a rule-based expert system. It uses IF-THEN rules in helping us reach decisions, much the same way we make decisions about our individual lives on a daily basis. For example, suppose you want to buy a car. You will likely have a set of criteria you use to buy it, and if those criteria are met then you will choose to buy the car. Your decision-making process may go something like this: IF a certain car will meet your needs best, and IF it is the right color, and IF you can afford it, THEN you choose to buy the car. Of course, it is a much more complicated process to manage lynx populations and harvests. This

is why we use the knowledge of experts to make sure we consider all of the important criteria needed to make informed, logical, and consistent decisions. The experts are ADF&G biologists, biologists from other agencies, trappers, and literature sources. We will update the model annually to make sure our decisions are based on current information. This modeling approach is NOT a substitute for the decision-making process but another tool to help us in that process. We look forward to receiving input from trappers as we develop and refine this model.

Track Index Testing and Development

As any trapper knows, the number of tracks a furbearer makes during a given time period depends on many factors. These factors may include food availability, population density, reproductive activity, temperature, weather, snow depth, and more. Still, we need to have some reliable way to monitor furbearer populations. Three years ago, we began a long-term cooperative project to test and develop track-count techniques to help us measure changes in numbers of furbearers over time. We are focusing our efforts on lynx, marten, and snowshoe hare in the Nelchina Basin. So far, we have spent most of our time trying to assess how big the problem of using track counts to monitor trend is and deciding what aspects we should study next. This is a difficult problem to address but one we hope will eventually lead to useful techniques. To help us in our research, we are cooperating with other researchers in Alaska and Canada who are conducting studies on (1) snowshoe hare in Wrangell-St. Elias National Park and Preserve, (2) marten and lynx in Koyukuk/Nowitna National Wildlife Refuge, (3) lynx in Tetlin National Wildlife Refuge, (4) lynx and hare in the Yukon Territory, and (5) lynx and hare in the Northwest Territories.

Wolf and Wolverine Density and Trend Technique Development

Recent research projects have made great progress in the development of techniques to estimate the density of wolves and wolverines through aerial surveys of tracks in snow. So far, we have used these surveys to estimate densities of wolves in GMUs 7, 11, 13, 14, 15, and 16 and wolverines in GMUs 7, 11, 13, 14, and 15. The techniques appear to be quite reliable when conducted under favorable survey conditions where snow is fresh and forest cover is not too thick. More research is underway to verify the accuracy of these techniques, which we will soon use on a regular basis in trend areas across the state. In addition to the above research on density estimation, we are investigating the distribution, movements, habitat use, and harvest patterns of wolverines in three areas of southcentral Alaska. We spend most of our effort in the eastern Talkeetna Mountains, where we have several radio-collared wolverines. We are cooperating with the National Park Service in the Wrangell Mountains and the U.S. Fish and Wildlife Service, National Park Service, and U.S. Forest Service on the Kenai Peninsula. One of our most important objectives is to use the data we gather and information from previous studies of wolverines to improve our ability to determine sustainable harvest levels.

River Otter Population-Indexing Technique Development

This spring we will begin a study of river otters in Kachemak Bay on the Kenai Peninsula

to try to develop a technique for monitoring river otter populations. We will base the study on the coastal river otter's habit of using latrine sites near shore to estimate their abundance. We are conducting this project in cooperation with researchers from the University of Alaska - Fairbanks.

Coyote Density, Movements, and Ecology on Fort Richardson

Plans are underway to study the coyote population in the Fort Richardson area near Anchorage. This will be a cooperative study among ADF&G, the U.S. Army, and the University of Arizona. An ADF&G technician in graduate school at the U of A will be the principal investigator.

Additional Information

For more information (including copies of reports) on any of the topics discussed above, please write or call Howard Golden, Furbearer Biologist, Alaska Department of Fish and Game, 333 Raspberry Rd., Anchorage, AK 99518-1599; (907) 267-2177.

INTERIOR REGION by Interior Regional Furbearer Coordinator, Mark McNay

Wolves and lynx topped the interior furbearer management and research agendas during the 1993-94 regulatory year. Beginning in October 1993, Alaska Department of Fish and Game personnel conducted a snaring and trapping program to reduce wolf numbers in GMU 20A. Department trappers took 98 wolves and public trappers took 62 wolves from the fall population of 250-300 wolves.

During the program, we developed and tested several types of snare locks designed to hold wolves but release moose and caribou. One of the most promising and practical designs is a simple modification of the Thompson 3xx snare and lock. In several cases, this modified snare released moose and caribou, but only one wolf escaped from this lock. For those of you who use Thompson locks on your wolf snares, you can make the modification by simply using a hack saw to make a cut in the lock. A Thompson lock is formed roughly in a "V" shape, and the hacksaw cut is made at the point of the "V" so that the round sliding hole is connected to the sliding slot by the hacksaw cut which is only about 1/4" long. You can see that when sufficient force is applied by the snare cable on the hacksaw cut, the lock will bend open and release the snare loop. Our experience has been that moose will be able to breakaway about 50% of the time, but less than 5% of the wolves will be able to get away.

Most trappers are familiar with the 10 year cycle of the lynx. The occurrence of this cycle has been recorded by harvest records in Canada for over 200 years and for over 80 years in Alaska. Throughout most of interior Alaska, the last peak in lynx numbers occurred in 1991-92. The 1991-92 peak, as reflected in the harvest, was very low

compared to most of the lynx peaks recorded during this century. Despite its weakness, the 1991-92 lynx peak occurred right on schedule, 10 years after the peak in the early 80's, which occurred 10 years after the peak in the early 70's, etc. Interior trappers took more lynx during 1991-92 than during either the year before or the year after; the trapper questionnaire also showed that, on average, interior trappers considered lynx to be more abundant during the 1991-92 season than during the year before or after.

Game managers have more of an opportunity to optimize the harvest of lynx than for other furbearers because lynx populations follow a consistent cycle that is more predictable than for other fur animals. Recognizing that opportunity, the Alaska Board of Game approved a harvest strategy for lynx that "tracks" the lynx cycle. When lynx numbers are high, seasons should be long and trappers should be allowed to trap high numbers of lynx. When lynx numbers are low, seasons will be short or closed to protect the breeding stock for the next cycle.

During 1993 and 1994, biologists in interior and southcentral Alaska developed plans for putting this Tracking Harvest Strategy to work. In areas that are not road accessible and where trapper numbers are low, there is little need to shorten lynx seasons during the low part of the cycle. Harvests in those areas have little or no affect on lynx populations. However, where trapping pressure is high and traplines reach into most of the lynx habitat, game managers will need to review the trapping regulations each year and, if necessary, make changes in seasons or bag limits. To make the best decisions, game managers need to gather as much information as possible about trapping distribution, lynx population trends, and lynx condition and reproductive success. Beginning in the 1994-95 season, biologists will conduct aerial surveys in interior Game Management Units 12 and 20. We also will purchase lynx carcasses from trappers to determine lynx condition, age, and reproductive success. We will review the available information (including responses on the trapper questionnaires) and consult with local trappers prior to setting the lynx seasons for the following regulatory year. Through this process, we believe we can "track" the lynx cycle for optimum harvests.

APPENDICES

Appendix 1. Species Relative Abundance Index

The species relative abundance numerical index is based on work done with snowshoe hares in Alberta, Canada by Lloyd Keith and his student Christopher Brand. They compared the results of responses to a trapper questionnaire with their estimates of snowshoe hare densities based on their own field work and found there was a good relationship between these two measures. Based on this work, they developed an index for the responses received from trappers on the questionnaire. A numerical value was assigned to each of three responses: 1=scarce, 2=common, and 3=abundant. The value of the abundance index then was derived from a mathematical equation that expresses the cumulative response value of trappers in a given region as a percentage of the range of possible values:

$$I = \left[\left(\sum_{i=1}^n R_i - n \right) / 2n \right] \times 100$$

where **I** = abundance index

R = numerical value (1=scarce, 2=common, 3=abundant)

n = number of trappers

The abundance index (I) ranges from 0% to 100%. Index values of 0% through 19% were interpreted as indicating hares were scarce, values from 20% through 50% indicated hares were at intermediate levels, and values greater than 50% indicated that hares were abundant.

We do not know if the same ranges of percentages are appropriate for snowshoe hare in Alaska or for any other Alaskan species. However, as was indicated in the text, this index does provide a way to **generally** compare trappers' interpretations of species abundance in a given area over time and can be very helpful when used in conjunction with other abundance indicators and sources of information.

Appendix 2. Indices of relative abundance and trend of furbearer populations in southeast Alaska, 1993-94.

	<u>Relative Abundance Index (%)</u>				<u>Trend Index</u>			
	<u>Area</u>				<u>Area</u>			
	KPW	PWK	JDY	ABC	KPW	PWK	JDY	ABC
Furbearers:								
Beaver	25	67	62	0	2.13	2.17	2.50	-
Coyote	-	-	33	NP	-	-	2.00	NP
Lynx	NP	NP	12	NP	NP	NP	1.67	NP
Marten	20	56	67	31	1.80	2.00	2.25	1.83
Mink	44	69	67	56	1.75	2.00	2.20	2.17
Muskrat	0	0	0	NP	3.00	2.00	2.00	NP
Red Fox	NP	NP	0	NP	NP	NP	2.33	NP
Red Squirrel	57	100	83	80	2.17	2.60	1.67	2.00
River Otter	50	81	42	62	2.09	2.38	2.20	2.40
Weasel	14	56	67	50	2.00	2.00	2.00	2.00
Wolf	50	88	50	NP	2.00	2.75	2.75	NP
Wolverine	0	8	38	NP	2.00	2.20	2.00	NP
Prey:								
Hare	-	-	25	NP	-	-	1.00	NP
Grouse	50	50	20	0	2.33	2.50	2.00	2.00
Ptarmigan	50	50	20	0	2.00	3.00	2.00	2.00
Mice/Rodents	50	79	50	30	2.25	2.20	1.33	2.00

Abundance: Index Values
 Scarce = 0 through 19
 Common = 20 through 50
 Abundant = Greater than 50
 NP = Not Present

Trend: Index Values
 Fewer = 1 through 1.66
 Same = 1.67 through 2.33
 More = Greater than 2.33
 NP = Not Present

Southeast Areas:
 KPW = Ketchikan, Prince of Whales Is.
 PWK = Petersburg-Wrangell, Kupreanof Is.
 JDY = Juneau-Douglas-Haines-Yakutat
 ABC = Admiralty, Baranof, & Chichagof Is.

Appendix 3. Indices of relative abundance and trend of furbearer populations in southcentral AK, 1993-94.

	<u>Relative Abundance Index (%)</u>							<u>Trend Index</u>						
	<u>Area</u>							<u>Area</u>						
	CUS	LSB	PWS	KEP	KOI	AKP	BRB	CUS	LSB	PWS	KEP	KOI	AKP	BRB
Furbearers:														
Beaver	51	54	58	50	36	69	81	2.05	1.91	2.20	1.82	1.60	1.80	2.33
Coyote	46	50	75	63	NP	44	38	2.14	2.04	1.86	2.17	NP	2.20	2.00
Lynx	23	0	0	14	NP	31	25	2.12	2.28	2.00	2.44	NP	2.17	1.00
Marten	28	32	43	38	-	33	17	1.93	2.11	1.83	2.20	-	2.00	1.50
Mink	33	36	56	53	-	56	33	1.89	1.84	2.14	2.00	-	1.80	2.00
Muskrat	25	37	33	22	0	25	0	1.89	1.86	2.00	2.00	2.33	2.33	-
Red Fox	47	46	0	0	81	75	50	1.98	2.29	2.00	2.00	2.00	2.33	2.00
Red Squirrel	61	52	30	77	33	33	25	2.10	1.82	2.00	2.00	2.00	1.00	-
River Otter	35	45	50	54	50	62	70	2.02	2.05	1.88	2.08	2.00	2.40	1.00
Weasel	48	43	21	54	50	42	67	1.95	1.73	1.67	2.20	2.00	1.75	1.00
Wolf	33	18	17	47	NP	62	33	2.00	2.25	2.20	2.00	NP	2.00	2.00
Wolverine	18	22	8	30	NP	31	30	1.95	2.12	2.20	2.14	NP	1.67	1.00
Prey:														
Hare	22	18	25	31	33	21	50	1.88	2.00	1.86	2.50	2.00	1.50	1.00
Grouse	22	41	20	50	NP	14	38	1.87	1.83	1.80	2.00	NP	2.00	-
Ptarmigan	37	39	10	40	17	50	20	1.92	1.89	1.60	2.00	1.00	1.50	1.00
Mice/rodents	57	46	42	54	80	71	33	1.98	1.79	2.17	2.00	2.67	2.25	-

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Abundance: Index Values
 Scarce = 0 through 19
 Common = 20 through 50
 Abundant = Greater than 50
 NP = Not Present

Trend: Index Values
 Fewer = 1 through 1.66
 Same = 1.67 through 2.33
 More = Greater than 2.33
 NP = Not Present

Southcentral Areas:
 CUS = Copper R. and Upper Susitna R. Basin
 LSB = Lower Susitna Basin
 PWS = Prince William Sd. & N. Gulf Coast
 KEP = Kenai Peninsula
 KOI = Kodiak Archipelago
 AKP = Alaska Peninsula
 BRB = Bristol Bay Area

Appendix 4. Indices of relative abundance and trend of furbearer populations in interior Alaska, 1993-94.

	<u>Relative Abundance Index (%)</u>				<u>Trend Index</u>			
	<u>Area</u>				<u>Area</u>			
	LTB	UTB	MYK	UYB	LTB	UTB	MYK	UYB
Furbearers:								
Arctic Fox	NP	NP	NP	33	NP	NP	NP	2.33
Beaver	52	42	67	42	2.05	2.33	2.00	2.00
Coyote	34	11	0	0	2.03	2.08	2.00	2.00
Lynx	18	16	33	27	1.81	1.74	2.13	2.29
Marten	36	32	50	47	1.86	1.89	2.33	2.18
Mink	15	16	10	4	1.76	2.00	1.80	1.93
Muskrat	16	38	20	36	1.91	2.09	2.00	2.53
Red Fox	38	34	44	50	1.69	1.72	1.71	1.87
Red Squirrel	67	67	67	57	2.02	2.24	1.60	2.00
River Otter	22	19	42	11	2.09	2.25	1.83	1.93
Weasel	46	42	57	40	2.07	2.00	2.14	2.21
Wolf	53	47	56	50	2.31	2.33	2.29	2.31
Wolverine	12	11	38	29	1.76	2.05	1.71	1.86
Prey:								
Hare	12	5	25	31	1.89	1.67	2.17	1.94
Grouse	24	18	36	38	2.00	2.11	1.67	2.25
Ptarmigan	16	13	50	25	1.74	1.78	2.33	1.93
Mice/Rodents	51	39	62	53	2.05	2.00	2.50	2.13

Abundance: Index Values
 Scarce = 0 through 19
 Common = 20 through 50
 Abundant = Greater than 50
 NP = Not Present

Trend: Index Values
 Fewer = 1 through 1.66
 Same = 1.67 through 2.33
 More = Greater than 2.33
 NP = Not Present

Interior Areas:
 LTB = Lower Tanana R. Basin
 UTB = Upper Tanana R. Basin,
 Charlie and Fortymile R.
 MYK = Middle Yukon and Koyukuk
 UYB = Upper Yukon R. Basin

Appendix 5. Reported numbers of raw furs purchased, or acquired through consignment or barter, by fur dealers in Alaska, 1991-1994.

REGION / YEAR		SPECIES											
		Beaver	Coyote	Fox	Lynx	Marten	Mink	Muskrat	Otter	Squirrel	Weasel	Wolf	Wolverine
I	1991-92	10	-	-	-	638	360	-	2	-	3	-	2
	1992-93	2	1	3	-	105	24	3	10	-	-	-	-
	1993-94	9	-	-	-	168	99	-	40	-	-	-	4
II	1991-92	46	11	63	43	531	87	1	9	1	4	4	9
	1992-93	16	11	10	7	108	45	11	16	-	4	6	1
	1993-94	50	37	62	7	351	77	3	51	4	44	30	4
III	1991-92	467	38	676	954	10,342	301	962	27	356	33	142	78
	1992-93	279	13	73	246	3,022	141	33	30	531	19	141	27
	1993-94	779	27	323	589	5,884	276	1,235	48	440	75	221	69
V	1991-92	494	-	193	-	135	936	68	100	135	-	10	2
	1992-93	253	-	236	6	80	4,211	13	87	-	-	25	1
	1993-94	164	8	165	7	174	647	8	43	-	-	28	5
REGION UNKNOWN	1991-92	364	4	79	108	1,837	2,488	98	135	66	21	3	6
	1992-93	472	2	122	44	96	5,992	48	137	-	2	32	3
	1993-94	310	8	71	29	1,048	573	19	62	100	4	15	2
STATEWIDE TOTAL	1991-92	1,381	53	1,011	1,105	13,483	4,172	1,129	273	558	61	159	97
	1992-93	1,022	27	444	303	3,411	10,413	108	280	531	25	204	32
	1993-94	1,312	80	621	632	7,625	1,672	1,265	244	544	123	294	84

Appendix 6. Reported numbers of raw furs exported from Alaska by trappers/hunters and fur dealers, 1991-1994.

EXPORT BY TRAPPERS/HUNTERS:

REGION / YEAR		SPECIES											
		Beaver	Coyote	Fox	Lynx	Marten	Mink	Muskrat	Otter	Squirrel	Weasel	Wolf	Wolverine
I	1991-92	114	1	1	5	2,245	753	-	120	19	34	30	6
	1992-93	24	1	-	2	761	258	-	157	22	36	14	5
	1993-94	42	-	1	-	529	371	12	123	7	11	23	2
II	1991-92	189	63	116	23	520	168	198	145	51	19	29	12
	1992-93	178	48	142	55	190	156	143	75	2	17	19	18
	1993-94	170	73	105	12	165	156	297	34	10	33	26	14
III	1991-92	325	18	337	124	1,469	65	356	33	17	18	43	18
	1992-93	182	22	100	102	901	46	139	15	64	35	34	19
	1993-94	189	79	151	44	1,154	35	12	8	29	14	62	28
V	1991-92	25	-	34	-	146	-	-	3	-	1	8	3
	1992-93	7	-	18	1	299	21	-	7	-	-	11	1
	1993-94	65	-	103	-	94	1	1	5	-	2	6	3
REGION UNKNOWN	1991-92	192	6	99	39	793	195	513	35	4	44	8	5
	1992-93	48	18	54	31	271	137	13	16	-	10	12	4
	1993-94	151	24	92	27	740	211	7	43	18	52	28	9
STATEWIDE TOTAL	1991-92	845	88	587	191	5,173	1,181	1,067	336	91	116	118	44
	1992-93	439	89	314	191	2,422	618	295	270	88	98	90	47
	1993-94	617	176	452	83	2,682	774	329	213	64	112	145	56

STATEWIDE EXPORT BY FUR DEALERS:

1991-92	6,539	396	4,204	1,737	18,336	7,660	6,788	919	381	562	593	892
1992-93	3,091	175	2,477	556	4,463	10,508	4,418	719	817	185	529	217
1993-94	4,378	292	3,711	760	9,207	3,420	9,772	740	658	236	593	172

Appendix 7. Approximate Value (in American dollars) of raw furs exported from Alaska by trappers/hunters and fur dealers, 1991-1994.

SPECIES	EXPORTED BY	VALUE IN AMERICAN DOLLARS (\$) *		
		YEAR EXPORTED		
		1991-92	1992-93	1993-94
Beaver	Trappers/Hunters	14,787	7,682	16,042
	Fur Dealers	<u>114,432</u>	<u>54,092</u>	<u>113,828</u>
	Total	<u>129,219</u>	<u>61,774</u>	<u>129,870</u>
Coyote	Trappers/Hunters	2,200	2,225	4,400
	Fur Dealers	<u>9,900</u>	<u>4,375</u>	<u>7,300</u>
	Total	<u>12,100</u>	<u>6,600</u>	<u>11,700</u>
Fox	Trappers/Hunters	10,272	5,495	7,910
	Fur Dealers	<u>73,570</u>	<u>43,347</u>	<u>64,942</u>
	Total	<u>83,842</u>	<u>48,842</u>	<u>72,852</u>
Lynx	Trappers/Hunters	20,055	13,370	7,055
	Fur Dealers	<u>140,385</u>	<u>38,920</u>	<u>64,600</u>
	Total	<u>160,440</u>	<u>52,290</u>	<u>71,655</u>
Marten	Trappers/Hunters	258,650	84,770	113,985
	Fur Dealers	<u>916,800</u>	<u>156,205</u>	<u>391,297</u>
	Total	<u>1,175,450</u>	<u>240,975</u>	<u>505,282</u>
Mink	Trappers/Hunters	19,486	9,579	13,158
	Fur Dealers	<u>126,390</u>	<u>162,874</u>	<u>58,140</u>
	Total	<u>145,876</u>	<u>172,453</u>	<u>71,298</u>
Muskrat	Trappers/Hunters	1,333	368	411
	Fur Dealers	<u>8,485</u>	<u>5,522</u>	<u>12,215</u>
	Total	<u>9,818</u>	<u>5,890</u>	<u>12,626</u>
Otter	Trappers/Hunters	11,760	9,450	12,780
	Fur Dealers	<u>32,165</u>	<u>25,165</u>	<u>44,400</u>
	Total	<u>43,925</u>	<u>34,615</u>	<u>57,180</u>
Squirrel	Trappers/Hunters	91	88	64
	Fur Dealers	<u>381</u>	<u>817</u>	<u>658</u>
	Total	<u>472</u>	<u>905</u>	<u>722</u>
Weasel	Trappers/Hunters	145	171	196
	Fur Dealers	<u>702</u>	<u>323</u>	<u>413</u>
	Total	<u>847</u>	<u>494</u>	<u>609</u>
Wolf	Trappers/Hunters	32,450	24,750	34,075
	Fur Dealers	<u>163,075</u>	<u>145,475</u>	<u>139,355</u>
	Total	<u>195,525</u>	<u>170,225</u>	<u>173,430</u>
Wolverine	Trappers/Hunters	10,340	11,045	13,160
	Fur Dealers	<u>209,620</u>	<u>50,995</u>	<u>40,420</u>
	Total	<u>219,960</u>	<u>62,040</u>	<u>53,580</u>
All Species Combined	Trappers/Hunters	381,569	168,993	223,236
	Fur Dealers	<u>1,795,905</u>	<u>688,110</u>	<u>937,568</u>
	Grand Total	<u>2,177,474</u>	<u>857,103</u>	<u>1,160,804</u>

* Monetary value of furs exported is derived by multiplying the average price paid for raw fur in Alaska (page 13) by the number of raw furs exported from the state (Appendix 6).

Appendix 8. Trapper Comments, 1993-94.

SOUTHEAST REGION

- I was at college for most of this season and didn't trap much. I tanned most of the few mink that I did catch this year as pre-season prices were low. I was quite surprised by the price I received for the ones I did sell though. Having shoreline and trails closed to trapping eliminates a lot of prime habitat and concentrates the pressure on the remaining area. It seems that opening those areas to mink/marten sized traps would be reasonable as 110's, 1-1/2's, etc. are not a real threat to people, dogs, etc. Many of the trails and remote beach areas are rarely used in the winter anyway.
- I will be trapping again soon. I hope to this fall and winter, time permitting.
- Don't enact a law forcing trappers to use conibear - type traps. If conibear types work that well, trappers will adjust to them. Too much has happened to the industry because of emotions. Suffering is a part of life. It is the degree of suffering that counts. Leghold traps do their part and the overall effect is positive for all species trapped. Check the east coast's problem - the antis have caused more harm to the species trapped than trappers. Too much emotional input from non-users. "Trapping Forever".
- Open more roadside areas i.e., beach front, etc. along the Juneau road system. I believe most trappers are smart enough to set to avoid people and dogs.
- Thanks for taking the time and effort to compile this important information. As for the EEC ban, I think we should take a "wait and see" approach. Just because they want to be particular about how their fur is doesn't mean all the other countries in the world do. Maybe new markets will emerge in other parts of the world or even in our own country.
- The engine in the air boat went out around December 20. I didn't do any more trapping.
- Don't put wolf on the endangered list. Thank you.
- Your questions leave little room for any variables which of course traplines are full of. So I tried to answer the best I could. This was my first year using snares for otter. Consequently, I made a lot of mistakes and for every otter I caught in a snare I had 5 snares hit. I know there is much room for improvement. I feel snares might even be more humane than conibears, for when one was caught, there was no sign of a struggle at all. The fur was clean. Unfortunately, snares might only be efficient on steep slides, which limits their use by about half. Hence, conibears fill in the rest of the locations. I feel foot traps have no place on my line.

They are not humane on otters. Besides, too much maintenance on them (traps). It is taking a while, but I am almost as efficient with conibears as I was with foot traps. I don't care what other trappers here say, fact is, many marten taken in foot traps have broken legs. 120 conibears are so much more humane, but you have to use 120's not 110's. It seems to me that most southeast trappers are pretty ignorant about modern means and methods of humane trapping. Most people I talk to change their tune about trapping when they hear about modern humane methods.

- Since I started a tourism business in 1990-91, I haven't had much time to trap. Also fur prices have been low. I did start to gather up and work on gear in the hope of returning to the trapline for 94-95 season. Spent a few days out at the cabin and went out scouting for sign. the most interesting sign I came across was the one on the front door of a recently built cabin. This sign eliminated trapping in years when I know better. Interior trappers may not have this problem, but here in S.E. we may as well trap our lines to death. If we don't, somebody else will. This is game management at its worst. I would like to see registered traplines.
- Maybe could trade some of our wolves for elk. They are killing quite a few goats in our area.
- You have probably heard it a thousand times but I would like to suggest going to some form of registered trap line. There is no way that I can regulate how many animals of each species I take out of certain areas if other people move in on me as soon as I pull my sets out. Example: On a couple of packs of wolves, I only take 3 wolves out of the same pack then I pull my sets. Two weeks later I go by and see somebody else has moved in there.
- I feel a drowning set is the most humane way of killing an animal. We watched a program on TV called, "That's Incredible." It showed a man who nearly drowns himself for science and money. He stated that there was absolutely no pain but its the fear of drowning that most people experience. This should be pointed out to the anti's. There is no pain regardless if it is a leghold or a conibear or snare in that type of set.
You did a good job on your report.
- I would like to see local ADF&G pay a little more attention to what the trappers and hunters in our area have to say. Just because we haven't all been to some fancy school to learn about the animals doesn't mean we know nothing about our area and the animals in it. My two sons are fifth generation of my family to trap this area. I am showing them what my Pa and Grandpa showed me. It is a good way of life and it keeps a 7 year old and a 13 year old off the streets of so called progress. I don't trap much my self because I get more enjoyment out of watching my boys or their friends walk up to their sets and see their first otter or wolf or marten, watch their faces light up. It is worth more to me than all the thousands of furs I have taken.

- How can marten be classified as a subsistence species in GMU 4, and be regulated as such when marten in GMU's 2 & 3 would be likely candidates for marten trapping closures? Does the state Fish and Game Department manage and regulate any wildlife species in Southeast Alaska anymore? Federal subsistence intervention has encouraged the lack of young trappers and hunters to participate. I believe hunting and trapping is doomed in S.E. much to the credit of subsistence and the U.S. Forest Service.
- How many problems would opening marten season a month earlier, create?
- I still believe, as I said last year in my comments, that the marten season needs to be shortened to the first month of the regular season in Southeast. I think that this would help decrease the number of female marten trapped. If you have any other questions you would like to ask me about the area I trap, you can get ahold of me.
- Add question, as 4A. Did you have at anytime a youngster with you on the trapline (unlicensed). I have, but you have no way of collecting this data for under 16 year olds accompanied by adults. Slight increase in marten this year, other than around clear cut logging.
- My particular trapline here in Southeast has maybe one or two more years of trapping left to go. The forest service wants to completely clear cut the whole area, which I feel would be devastating to the marten population. Not to mention what will happen to the abundant population of big game that also lives there. In my opinion they are harvesting these trees at way too fast a pace, and to completely take an area this size is wrong.
- Please do not buckle under to pressure from the Europeans. If they learn they can control us by simply passing laws, we will be bombarded with legislation that attempts to control our lives. I read a report by UAS that said the only species that we depend on the Europeans to purchase is mink, which is excluded from the ban. I would rather see a drop in fur prices than buy all new traps or try to trap using just conibears. It would also be interesting to tell them if they want to play that game we won't sell them any more. You would see fur prices in Europe sky rocket and public pressure would lead to a repeal of the law. That is my two cent's. Thanks.
- Obviously, the pressure is on to ban the leghold for taking Marten. I would suggest satisfying the Euro-Ban by making a regulation that makes it illegal to target a specific species with a leghold, but if a fur banned species happens to be caught incidentally, it can be kept. Screw the Euro-Ban and create a loophole. We are experts at creating laws so let's not kiss their " ". They are crazy anyway. The Italians are about to put the fascists back in power, and German industrialists are controlling the European Community with strong support! Set it up for us fellows so we can trap the way we want to and still satisfy their stupidity.

- Thank you for the opportunity to comment. "Let the natural law of supply and demand regulate the fur market and ignore the European Union." Bring sanctions against the importation of all European synthetics. Ban importation of all foreign synthetic nonbiodegradable fur garments and leather goods. Could we not boycott those nations in kind with the expertise in American technology they crave from us? Let us trappers learn how to prepare our fur for our own use. It is not difficult and one could be proud of a set of sable seat covers for that old 4 by 4. If you can't sell it, wear it, it is the best garment for its price there is. Fur. Thank you again.

SOUTHCENTRAL REGION

- The wolves this year stayed low after the moose this winter due to the conditions. I saw enough of kills. Also more wolverine wandered down in the valley. Not many cats, so I tried not to trap them. Marten seem to be on the rise. A lot of moose. A lot of coyotes. No fox. Too many coyotes.
- Lynx appear to be fairly common, and hare cycles seem to be up. Why is the lynx season so short in Unit 11 and 13? I think the resource could withstand more effort.
- Wolves are hitting the sheep-HARD!
- Marten are nearly gone.
- The coyotes have moved in, and of course the fox have moved out.
- Wolverine season should be extended by 30 days, as should lynx, to March 1st- For Units 11, 13, and 14A & B. Wolverine populations are strong.
- Wolves are abundant. I believe if we could have a Wolf Trapping Seminar for 1 day in each small community like Cantwell, more wolves could be harvested when populations are high like now.
- I went to the wolf trapping school in Fairbanks, and I got a lot out of it, Thank you.
- Not in regard to trapping, but in regards to the subsistence Caribou hunts, they should be bull only. Stop the killing of pregnant cows in the late hunt.
- I also like the longer moose seasons in Unit 13 this past year. It cuts down some of the hunting pressure or at least spreads it out. I hope to see the longer seasons continue.

- Try to open unit 13 for wolverine trapping for all people. I don't think the take would go up much because of the work in catching them.
- While hiking, I have observed air craft diving on caribou and other game. Also caught a wolverine; looked like it had a real old buckshot pellet wound.
- The winter caribou hunters run trapline trails and can ruin a good wolf set and other sets.
- We need protection from people who steal traps and animals. Also, I observed several people taking animals out of season and it angers me!
- I saw and heard of more wolverine being caught or leaving tracks in the flats, and this could have been a food shortage movement, but hopefully a good sign, though there's still a long ways to go. Keep the season and bag limit the same for 13B.
- The upcoming lynx season is a tough one to call. A few trappers had good numbers of adults and kittens while other areas had none. The rabbit cycle seems non existent the past 13 years, so it's hard to say. If the season in 13B has to be shortened, I would favor having December left open. This one month would reduce numbers taken but would also benefit the trapper with prime fur and ease of travel. So instead of November 10 - January 31, have December 1 - January 31. I don't envy your job, but keep up the good work!
- Lengthen the marten season in 16B.
- Like to see something done with the marten season in 16B. Also interested in knowing why the muskrats have been declining in this area.
- I believe that we should not comply to the European Community's regulations and shift our business over to China and other Pacific Rim countries that want our business. I love trapping for sport and recreation and the enjoyment of being outside. The price on fur has no bearing on the amount of trapping I do. Keep up the good work.
- Don't make us register our trap lines. This is public land for all users not just a trapper. Urban trappers have the right to go out and trap just like a person who lives remote. Many urban trappers help support trapping also with licensing and don't hardly trap. Public land is public land not just for a certain person. It is for we the people. In Unit 13-11, open up wolverine trapping to all people not just rural people with a limit you can control the take. Thanks.
- Wolves are increasing throughout Subunit 16B. At least 3 individual packs.
- I did very little trapping this year. Marten season is still too short to make it worth my while. I will probably only trap from now on for myself for sport.

- Snowshoe hare are coming on strong. Every drainage I was in seemed to have a lynx or two in it.
- I gave up trapping; the martens, wolverines, etc., have enough problems without me harassing them.
- Marten season is too short in 16B. This 1993-94 season was poor because of abnormal conditions, and I was unable to get my best marten lines out. Marten were scarce in the portion of my lines I was able to reach because of a shortage of mice. But, after the season in other areas of my lines, I found abundant marten sign and rabbit and ptarmigan were in fair numbers. It was an easy winter for moose. My Tier II moose had nearly 3 inches of fat on the rump and I gathered a large amount of intestinal fat. The fattest I have seen on a late hunt. Prices on my fur were much better than expected and it looks encouraging for next year, so will be back on the lines full season.
- I saw the first lynx tracks ever, this last winter. Still not many marten or wolverine. It seems more and more trappers are working close around me in the same area. Hope this doesn't hurt populations. I think it will for certain species. Marten especially. The newer trappers care little about one's area or the ethics of it. They just barge in. It makes a guy have to work pretty hard to keep, or for that matter share, an area. I don't agree with the wolf kill program.
- The State of Alaska should have mandatory trapper reports that each trapper has to fill out at the end of the season, telling what they caught and which GMU they caught it in. Other questions could be asked on it also. It would be a good way to gather information as long as it was mandatory. If someone didn't fill it out then they would not be able to get a trapping license the following year.
- Tell the EEC to go fly a kite. Maybe the U.S. should consider bans on all alcoholic beverages imported from Europe as they have destroyed wildlife habitat with fields of grapes and hops in order to produce such beverages.
- Lots of wolf activity. But had transport problems. They really hit the moose in my area hard and sheep too. I suspect very few caribou then went north and east. Moderate increases in grouse and a few more rabbits than last year. Seemed to be an increase in wolverine as well. Keep up the good work.
- Did not trap this year due to previous years' poor harvest. As I was still out and about with the dogs, I included species abundance data.
- Coyotes are very active predators of nesting birds in the Hartney Bay area.
- Didn't trap too hard in the 1993-94 season. Hope to see the Fish and Game decision to kill off some wolves go through. Damn Hickel is politically too wishy washy. Who needs the tourists or stateside people making laws for Alaska. We

get enough tourists as it is. Would like to see the deer season closed in Unit 6 by December 15, as too many boat hunters (when heavy snows drive the deer to the beaches) shoot them when they are defenseless. Shouldn't keep the moose season open in the Yakataga Area (Kolaki River to Icy Bay) after the adjoining areas close as the moose are just getting established in that area.

- I feel that the mink and marten season are too short, should run through the end of February. Also wolverine should run through the end of March.
- I would like to see more studies on why fur bearing animals are still declining.
- I support 100% what the Fish and Game Department is doing in regards to management of animals in this state. I have been here 23 years. There have been lots of changes. I believe all for the best. I enjoy sharing my information with the biologists. Keep up the good work you guys, and don't let politics interfere with your decision making process. I am seeing lots of wolverine sign - but only up high. Seems like over the past ten years, they have changed their movements somewhat. It is very evident they are trying to stay away from popular snow machine and skiing areas.
- Seasons: lynx and wolverine should end at the same time. Many cats will be caught in sets made for wolverine. I have been trapping a different area each season but I will probably trap the same area next season. Because of my age, it probably isn't too safe to trap without a partner for backup.
- Again, this year as I scouted the area hard, I saw not enough sign to merit setting any traps! All year long I saw 2 wolverine tracks, 1 lynx track, and a few wolf tracks. Rabbits staying at all time low. Seasons need to be shut to let stock build up. Thirty-three year Valdez resident.
- I would like to see the beaver season in Area 6 open for an additional 2 weeks. Any more and I think you would see damage to pelt due to fighting. In the area I trap, I saw a decline in the wolf population. I am not aware of any taken by shooting or trapping. Perhaps they have moved out of the area for some reason. A lot of coyotes but they are just as smart as ever, and it looks like they are smarter than I because my fur shed only has one. The higher fur prices were nice.
- The 93/94 trapping season was somewhat difficult this year due to the rigid weather changes. I can only believe that the lack of "critter" sign observed was primarily due to lack of snow cover, thawing to a point that tracks were not easily observed.
- Allowed most of my Delta trapline to rest as I have trapped the area hard for several years. Already have increased beaver activity, otter and mink seem to be doing well also. Trapping from the boat seems easiest as I can cover many miles

of shoreline without leaving a lot of scent or making trails.

- I only made 2 conibear sets for wolverine. Fewer marten sign than I have seen in past years.
- I would like to see a longer wolf and coyote season in Unit 15. It seems like they just start moving around a lot when seasons end. I think we should be able to use the 3/32nd inch snares to catch wolves on the Wildlife Refuge and qualify for the 7-day trap check. It is a cheaper and faster snare for wolves and proven by a majority of trappers in this state. It is also advantageous to use for trapping of both coyote and wolves at the same time. I think we should ignore the EEC ban on leghold traps. What will be left, conibears that inject novocaine first? We can find other markets for our furs - the Orient, Asia, tourists and the taxidermy market. Wish it was legal to take beaver in spring shooting as is in many other areas. Noticed much more rabbit sign and lynx tracks this year than in many years. Hope we get a lynx opener soon. Like to see more state sponsored trapping seminars and videos. We need to promote this way of life to young people.
- I hadn't trapped in the last 10 years or so. A friend's 12 year old boy nagged me into teaching him. We set a dozen traps for a month and didn't hurt many critters. My answers may not help your statistics much. We will be more serious next year.
- Keep up the good work. Thanks for your support.
- Enjoy the questionnaire and other trappers comments. Would like to see beaver season in Unit 7 and 15 to April 30th and be permitted to take beaver by shooting. Only, if you have a trapping license.
- You are going to have to start taking more wolves in so they don't destroy the moose population. I have seen more tracks in one mile that I have seen in 50 miles. The population has grown a lot in the snow river drainage.
- Limit of 20 beaver in Unit 7 is too low.
- Extend wolf trapping through March in 15A. Legalize land-and-shoot for wolves.
- The worst year I have ever seen. Ice didn't make up till late and snow cover was light. Would like to see a limit of 3 on wolverine and the season start December 1 and end March 15.
- The price of fur was down. I saw 25 fox and lots of land otter on 5/6/94. Lots of beaver also.
- Baring leghold traps is one giant step towards baring trapping. Leghold taps are as much a part of trapping as the critters.

- River otter in GMU 8 closes too early. Pelts are just prime. Population in my area is high. Sea otter is becoming over-abundant in many places on west side of Atognak. Check into it.
- The "soft catch" is also a leghold. There should be provisions in the humane trap standards of Europe for this.
- Another frustrating year of theft here. Wolves are very abundant. Appreciate all your efforts in so many directions. Everyone in Alaska and the rest of the world should boycott the lower 48 until there are 100 million bison on the plains and wolf, grizzly and the elk, bighorn sheep etc. etc. Too bad politics regulate species instead of biologists. I think we should have a season on sea otter and utilize them as a resource, doubt that will ever happen. Have some young kids interested in trapping - first in many years.
- I enjoyed my first trapping experience and would definitely recommend this character building experience to other outdoor enthusiasts. Thanks for the opportunity.
- In my area, my 30 beaver I am allowed is just enough to take care of the problem beaver. There is an over-abundance of beaver on Kodiak. Since there are not many others trapping these days, the beaver population is huge. I would like to see the limit lifted or increased dramatically. I believe the otter season should run a month longer. I picked up some otter trapping beaver. So far I haven't trapped any otter after the season has closed. Most of my beaver trapping takes place in January and February. Since my beaver traps are all killing rigs, any mistaken otter are also dispatched. I would not want to take any otter by mistake but it happens. If the season ran one month longer, I could concentrate harder on beaver and otter when they are the primmest. The river otter is very common and lengthening the season would not deplete the resource. Thank you.
- We enjoy the chance to contribute and reading the results. We sell our wolverine and cats to our clients in the guiding business and make hats out of beavers and otter so our economy is bolstered somewhat. Why close wolverine and lynx early?
- In game Unit 9, I would like to see the trapping season closed on March 15 of each year because the weather is still cold and the furbearers are still prime. Also an increase of beaver from 40 to 50 per season. Too many beaver houses. Also, I think I got ripped off from the fur buyer who said that the furbearers weren't prime; my catch was in winter and my furs were fully prime.
- Two reasons for me not trapping anymore!
 1. Low prices
 2. Too much competition from illegal shooting from A/C.

- Part time trapline. Took no furs this season.
- Arrest me now for intent, or arrest me later for actual use, but if the leghold is banned, I will continue to use it as the majority of my furs are for subsistence uses and not generally sold to fur buyers. You want a test case, I am it! P.S. I hope it doesn't all come to this but if the ISO wants to make trappers criminals, then I will oblige them.
- More beavers added to limit. Plenty of animals to support.

INTERIOR REGION

- I have four boys all under the age of 16. All four trapped with me this year for fox and mink. They are being taught proper care of furs and respect for the outdoors. Each one has their own traps to practice with setting and are learning very quickly. Also, I did an hour long talk with the K-1-2 grades at Anderson on the history of trapping and the current methods and types of traps and snares used. Thanks to Dean Wilson for sharing his knowledge with me so I could teach others correctly.
- My main trapline has had wildfires the last three years. I snow machined the line this winter and saw a good number of marten tracks so I expect to have a successful year in 94/95. Lynx numbers have never really recovered from the early sixties. I suspect this is a contributing factor as to why the marten numbers have remained pretty steady for the last 20 years or so. Public education through videos, brochures and the like would be greatly appreciated by trappers. Tourism, salmon, timber and mining seem to receive their fair share of support by our state but the fur industry receives very little.
- For marten, trapping a year on and a year off seems to be effective on my line. I have had steady harvests since going to this method compared to consecutive years of decreasing harvests trapping year after year.
- I run a small trapline. My line is not really big enough to detect major changes in furbearer abundances.
- I am very worried about the sheep population. I firmly believe that coyotes are mainly responsible. There has been a steady decline in sheep populations for many years. Sheep are 1/4 to 1/3 of what they used to be. Coyotes are 10 times what they were in early 70's. Many coyotes on my line only come down to cross and head right back to the top. I have found many coyote kills over the years. They are hard to trap because of our ever present wind. What can we do about them? Also would like to see this wolf pack reduced. They only came down my line once and I was only able to catch one. There must be 20 or more. Rabbits are almost non-existent this year.

- Maybe every person who has a trapping license could be sent a ballot to vote on the leghold ban and a 2/3 majority would pass the ban. Wolf numbers are still very high here but are down some from last year. The packs seemed to be numerous but smaller. We caught 3 wolves and 2 pelts were unusually unhealthy and rubbed, but they did not seem especially thin. All 3 were adults - no pups this year. Caribou were unusually common. Marten were scarce during cold spells and especially active in warm weather. Population and activity levels of scientists is unusually high this year. Marten study, cabin study, etc. Perhaps a longer season and no bag limit?...
- Do not accommodate the EEC for any reason. Throwing a bone to those dogs will do nothing and will appease no one. Stand strong for AK trappers and do not cow down. It would be better to lose that market than to lick their boots.
- Most furbearers are easily caught in conibears, particularly marten. These traps are effective, humane, and fairly cheap. In combination with snares for the harder to catch (in conibears) furbearers, good catches can be made. If a few less animals are caught by these methods it just leaves more animals for breeding, often increasing the fur populations in following seasons as well as the catch. Change is always hard, but I think we should make the changes necessary to keep the very important European market open to us. It doesn't take an economist to realize that losing a major market is much more of a threat to our livelihood than having to try a bunch of new traps, or catching a few less animals. Very low prices for our fur will kill trapping, trying new traps won't.
- I do not get the feeling ADF&G backs the trappers. Wolves are taken at tax payers expense...true, trappers are not at present taking care of a surplus problem but they could if, for example, the \$100 traps could be subsidized, and/or cheap classes on wolf trapping were offered and/or a bounty were put on wolves (or offer the wolf as a "big game" animal and charge people to hunt them). Likewise, "we" make no stand on the leghold ban in Europe, no effort to get a definition of an acceptable trap (we do not even know if the conibear will pass). Trappers have no legal rights to their trapline. Some "studies" are being done but we need conclusions and actions too.
- I am still not convinced that the summary "statistics" presented on pages 9-11 of the statewide report are valid. I am concerned that these numbers will be mis-used by well-intentioned number crunchers. Please re-think this process of converting subjective opinions into numerical data.
- The number of grouse was up from last year, because we didn't get the large influx of lynx like the 1992-93 season. The coyotes have taken over the farmland from the fox, but the fox are holding their own in the woods. There are small pockets of them here and there, mainly near houses and along highways where coyotes don't like to hang out. The wolves were hard on the moose this last year. In the area we hunt we only saw one bull and 3-4 cow moose during the season,

while the year before we saw lots of cows and calves and 20 or so different bulls.

- Forget about the European market for selling furs!
- I do not see any great reductions in demand of furs due to European ban on furs - due to China - Korea making up the difference in demand. It seems the orient is taking over the fur dressing and manufacturing fur garments. Also the Russian demand for furs is great despite they produce a great deal of fur.
- We need an education program for the ignorant " " who think every cabin in the woods is abandoned and up for grabs and that the traps left at sets year-round are old lost stuff to steal. Increase penalties for stealing fur out of traps, if such penalties even exist. Maybe teach the recreational snowmobiler how to read my signs.
- Would like to see beaver season open sooner in 20D so they could be trapped before the (near) end of other species seasons. Also carcasses could be sold easier to mushers since it would still be in their racing season and castors could be used during that season for bait.
- Lack of snow and very high winds limited my areas of trapping and several trappers of my area. I was very cautious of time and money invested into my life because of fur prices. I gambled wrong, prices increased, but my line has been damaged by fires 2 times in three years. So grass growth was limited in 91-92 but it really got killed again in 1993. So the red back voles, marten's main diet, was virtually wiped out. Squirrels also left the area. One increased numbers are porcupines. Several sightings this fall and winter, and now spring. Lynx numbers are up also. Any other questions, feel free to call. Thank you.
- Sorry, I made a few mistakes on this. Didn't mean to mess it up. My effort was less this year because when I checked several areas where I usually trap, there was very little sign, so I let them go. I usually set a lot more traps but didn't this year. I usually am successful catching coyotes but I guess they are getting smarter. Maybe I will have to change my ways. (Ha) Anyway, I trap mostly to keep busy and because I really enjoy being out in the wilderness. I would probably open my line every year even if I did not set a trap just to be there.
- There were about 4 times as many hares in the area this year as last year. Saw only 2 moose calf tracks.
- The state should make road kills legal for trappers to get started in October. This will allow wolf sets to be made for the opening of wolf season. Kills should not be given to Department of Fish and Game for state use. The state wolf control program killed enough moose and caribou to provide their own meat.

- Why isn't anyone defending the leghold trap? In the north, it is the most humane trap we have. Freezing is one of the best anesthetics known to man. I have had too many conibear body catches that didn't kill. I never use them anymore (except for whiskey, jays in my fish racks). But a jaw trap with teeth is like a hypodermic full of novocain. By the time the shock wears off, the leg is numb. Last year, my dogs got into 10-12 porkies (one in November!) and this spring they have already been into six. Is this local or are they high everywhere? If my dogs keep bringing in quills like they have been, all the porkies around here are going to be naked.
- Beware of the registered trapline idea. It won't solve encroachment complaints and it denies other trappers the opportunity to extend or change their lines. Many lines that would be registered have been unused for years. You may want to include Alaska Trappers Association code of ethics with your next survey - some trappers may want to comment on that.
- Elect a governor who isn't an Anchorage hotel owner. Chide Kelleyhouse about being a bureaucrat. Keep up your excellent work here. It is appreciated. It is nice to know the people here know and understand what we are facing. Let me know how I can help.
- Furbearer abundance was about the same. Fewer wolves this year - no doubt due to the fact of no caribou wintering here. Very few rabbits, grouse or ptarmigan.
- Through the ice, there is no other way to trap muskrat except with leghold traps. If you wait till spring when they can be shot or gotten with conibears they are too chewed up and not as good eating then.
- There are getting to be too many snow machines and park rangers running the trails to do much trapping any more. It is almost impossible to make a trail set. Make your season's more clear in the law book. I pulled all my traps the end of February.
- If the European countries are going to be reasonable at all, then we could start snaring marten. I have been experimenting with marten snares and snaring for 15 years and have found that it definitely works. But snares don't work as efficiently as leghold traps. I have had better success with snares than with conibears for everything. A proper size snare set properly on a limb or pole set kills a marten very quickly.
- Snares and leghold traps are by far the most effective and efficient method for major predators: wolves, cats, fox, coyote, wolverine and marten.
- ADF&G should not be killing anything. Efforts should be directed to increase resources especially the grizzly which seems to be in trouble in many areas. Leave the wolves alone, the trappers can handle any excess if there is any. The only over population of anything that I can see are the whiners that blame

wolf/grizzly or the gods for their hunting success, unless of course, they get a mouse or caribou.

- The European market is a scary thing. Allowing them to control trapping methods is wrong. Besides, I think Alaska should be the VERY LAST state that gives up leghold traps. If we give it up and one other state doesn't, Alaska still loses Europe's sales. Alaska depends on trapping probably greater than most states so we should be the last state - no state should give up trapping methods unless all 50 states do the same. There is too much work that needs to be done before we or anyone gives up our traps. All 50 U.S. States need to be "united". All 50 states oh yeah. "UNITED" states.
- The EU can shove it. They don't want humane trapping, they want no trapping - my understanding is every 5 years they can change the regulations to be stricter or to outlaw anything they don't like. Lets let the reasonable people in the world buy our product at whatever rate the market produces.
- I make all my living from trapping and 80% of the money comes out of conibears, a trap the EU doesn't accept. I'm not interested in retooling now or every couple years because some jerk wants to financially choke me out of the business.
- If conibear taken marten would be allowed to be sold in Europe, trappers who wish to trap marten should switch to conibear traps. Marten are easily taken in conibears, and a strong European market for this species would be easily offset by the cost of new traps.
- Overall, wolf abundance is very high in our areas. I would say numbers are increasing due to the booming caribou herds up here.
- Did not see very many signs of wolverine this winter, although caribou herds were quite abundant along with ptarmigan too. Maybe I didn't get high enough up the mountains.
- Wolverine signs were much better and frequently crossed valleys often further north, but never did get my sets in for them like I wanted to.
- Hares and voles are up quite a bit over last year. Deep early snow provided excellent habitat for voles over wintering with warmer than usual ground temperature. This winter is similar, with early snow capping heat in the ground.
- Many of the marten we got this year were young, probably resulting from high vole numbers.
- The hare population continues to grow steadily. Many lynx had kits following in November, but they were very small sized and died after the first cold snap in the middle of November. I feel they were born late as, based on the tracks, the litters

following were 2-4 kits, and the kits were the size of house cats.

- Beaver declined drastically as many houses did not put up enough feed in the fall of '92 with the early freeze up (13th of September here). High water from record snow and overly thawed ground caused excessive bank erosion, and many dens were taken out in the spring - kits lost. I did not trap beaver this year accordingly.
- We have had Arctic fox coming south this winter again. I saw the tracks of four. They're always headed south, I've never seen them come back up.
- Wolves were at stable numbers and seem to work mostly on Caribou that came in October and sheep. I only found two moose kills.
- The moose did pretty well this winter. A much higher average temperature in December and January with three feet of snow allowed them to stay in good shape. I know of only one moose that was killed on the Law road this winter compared to over fifteen last year in the Middle Fork Koynurkuk area.
- My feelings on the EEC Fur Ban are that we should continue to use foothold traps as they have been, and still are, the most effective method of take. I do not feel that we should continue to allow non-resident, ill informed people from the other side of the world to dictate our way of life.
- If they do not want our marten, lynx, etc., then let them freeze.
- If we give up the foot trap, the anti's will work on banning the snare and conibear. So let's stop here and "stonewall" the anti's. We are facing a generation of whimps and they will outlaw trapping soon enough.
- First year we used 110 conibear for marten. To our amazement, it was very effective. We had 120 on one line plus 50 leghold. Next year we will use only 110 on the line for marten. Lynx showed an increase. Wolves are in larger packs. Few more coyotes showing up. Marten also on slight increase. Grizzlies getting bolder than ever. Had two follow my line in -40 degree weather. They hung around all winter. I also saw strange tracks in the snow. Could be muskox. Never saw anything like it before. (Muskox was spotted below the border this past fall).
- I catch so few animals, my survey should be discounted. It is something to do as I live in the bush.
- Open up aerial greenie hunting! You guys are doing a good job though. Just do not kiss the greenies " " though.
- I like the woods - the fur price affected me some - but I like to trap. I enjoy going out into the woods. That is how I was raised and I don't think I will ever stop going

out there no matter what happens to the tapping industry. I can always use the fur myself or sell it to the sewers in the village. They make good garments with it.

- Keep trapping season same. November 1 - February 28 or 29.
- Thanks for the information concerning the leghold traps.
- Lynx season should be closed in November and be kept open longer in the spring. Example: December 1 through March 30. Reason is lynx are not really prime in November and best price in March.

EDITOR'S NOTE:

If you have questions pertaining to your specific area, please let your local area biologist know that you would like to hear from him/her regarding your concerns. Thank you all for your comments. We appreciate hearing from you, and I am sure that other trappers enjoy reading about what's going on in areas outside of their trapping grounds.

Sincerely,

**Steve Peterson
Statewide Furbearer Coordinator**

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