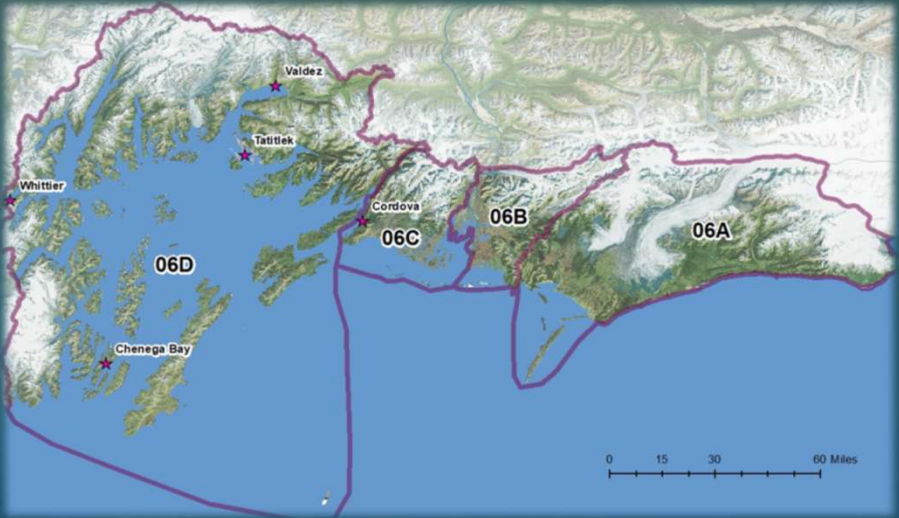


Unit 6 Survey and Inventory Activities



Charlotte Westing-Area Biologist
Samantha Stevenson-Renner-Program Technician

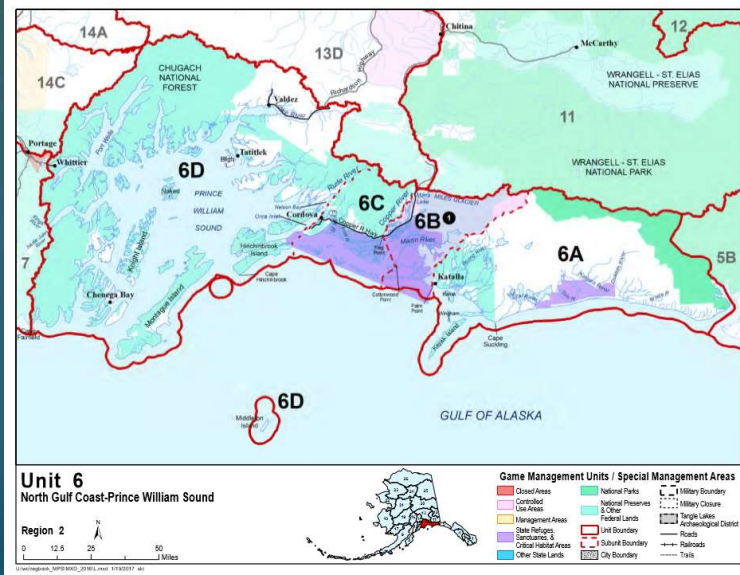
1

People

- ↳ About 6,800 year-around residents of Prince William Sound
 - ∞ Valdez (60% of the Unit 6 population)
 - ∞ Cordova (34% of the Unit 6 population)
 - ∞ Tatitlek
 - ∞ Chenega Bay
 - ∞ Whittier
- ↳ Whittier -“Gateway” to Prince William Sound
 - ∞ Within an hour of the state’s biggest population center
 - ∞ \$7 million+ spent on wildlife viewing and hunting

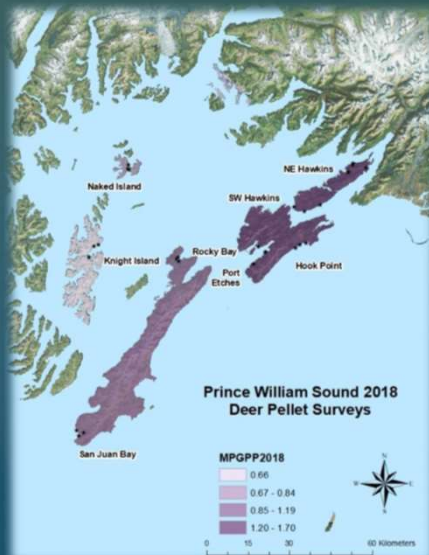
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Land Ownership



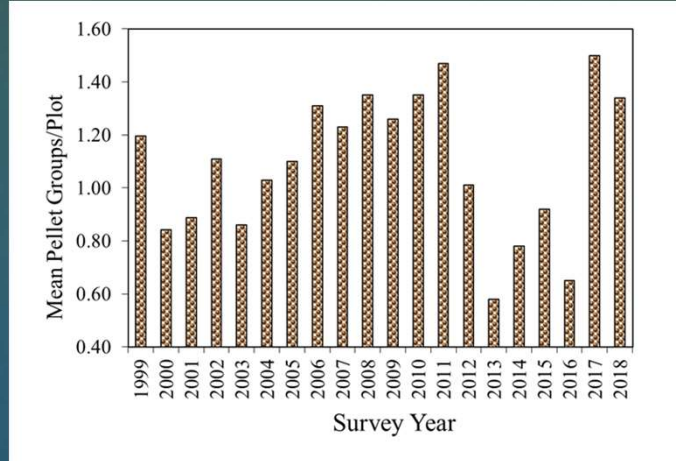
3

PWS Deer Update



4

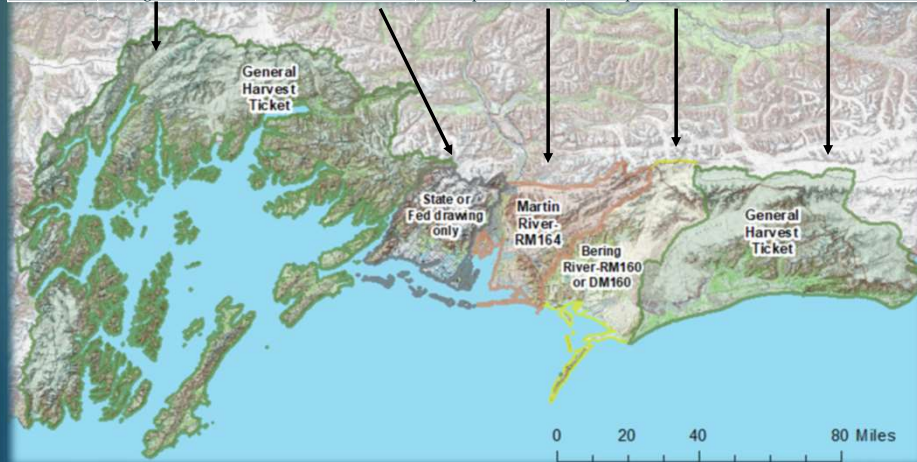
Deer Pellet Survey Results



- ⊗ RY11-12 extreme winter
- ⊗ Mild winters many of the years since
- ⊗ Indices appear to have returned to pre-crash levels

Moose

	Unit 6D	Unit 6C	Unit 6B	Unit 6A West	Unit 6A East
Permit	Harvest Ticket	Drawing (25%Bull) and Federal (75% Bull 100% Cow)	Registration	Registration (Res)/ Drawing (Nonres)	Harvest Ticket
Regulations	Any Bull	Any Bull or Cow (Federal)	Any Bull	Any Bull	Antler Restricted
Population	Unknown	677 (RY17)	420 (RY17)	269 (RY16)	200 (RY07)
Objective	None	600-800	300-350	300-350	300-350
Harvest	Average of 5	60 Bulls 35 Cows	Up to 28	Up to 20	Less than 20



Goats



7



In Summary

- ⌘ High counts in almost all surveys during last 5 years
- ⌘ Large gaps in survey data
- ⌘ Lower kid production observed in 2018 than in recent years
- ⌘ Mandatory goat orientation in road system based hunts
- ⌘ Nanny harvest regulation

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Brown Bears

⌘ Regulations:

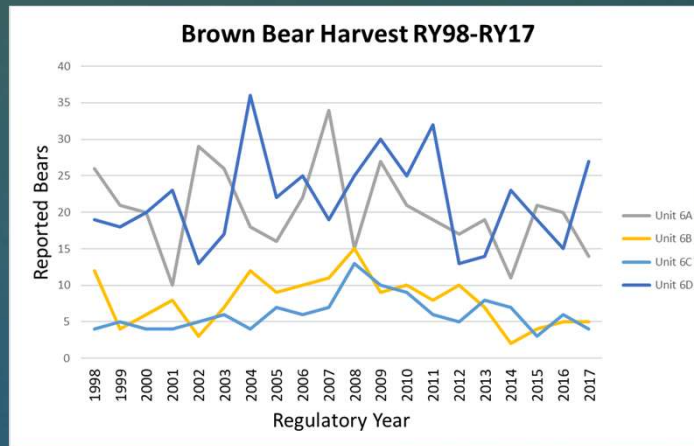
- ⌘ Units 6A, 6B, and 6C- one bear every regulatory year
- ⌘ Unit 6D- one bear every 4 years
 - ⌘ Montague Island-Registration permit

⌘ Methods:

- ⌘ Track and den surveys
- ⌘ Monitoring harvest



Brown Bears



Ten-year average bear harvest

- ⌘ Unit 6A – 18
- ⌘ Unit 6B – 8

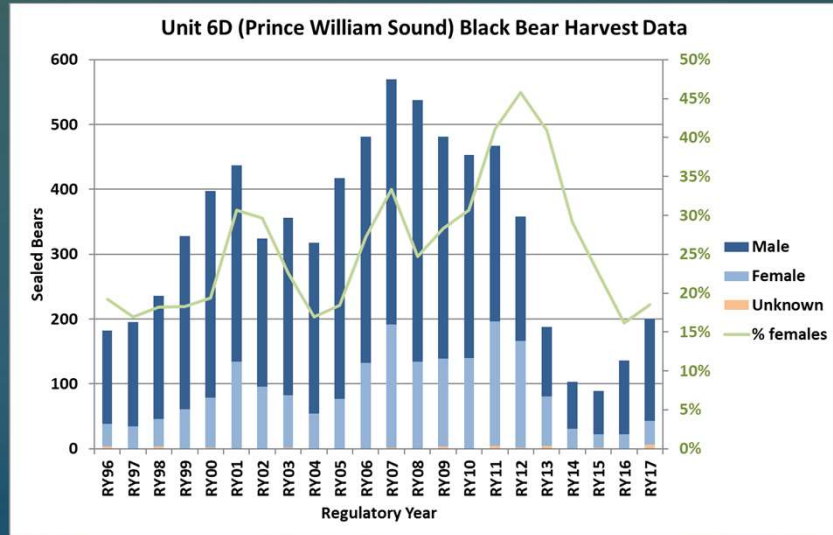
- ⌘ Unit 6C – 7
- ⌘ Unit 6D – 22

Black Bear

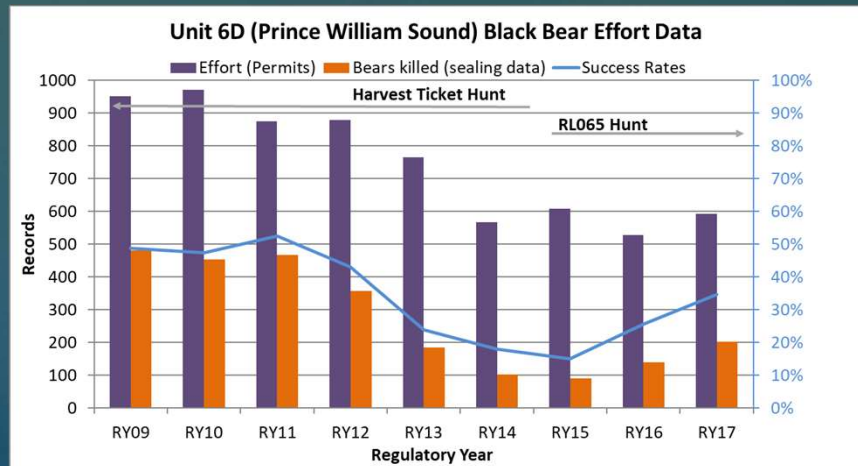
Population Information

- ⌘ Without a population estimate, what are the red flags?
 - ⌘ Harvest steadily declined
 - ⌘ Harvest of females increased (over 40% for 3 years)
 - ⌘ Success rates declined
 - ⌘ Widespread public concern from diverse parties

Unit 6D-Black Bears



Background: Effort



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Background: Potential causes of harvest changes

- ⊗ Weather could have affected:
 - ⊗ Bear abundance
 - ⊗ Bear distribution
- ⊗ Behavior changes – risk avoidance
- ⊗ Effort changes
- ⊗ Overharvest
- ⊗ Some combination of the above

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Feasibility of ground captures for the assessment of home range, habitat use, and movements of black bears *Ursus americanus* in relation to hunting pressure in Prince William Sound, AK

Charlotte Westing
Area Wildlife Biologist
Alaska Department of Fish and Game



Milo Burcham
Wildlife Biologist
Chugach National Forest



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Study Objectives

1. Ground-based capture feasibility
2. Habitat selection during the hunting season, comparing two islands
3. Home range use
4. Relative harvest risk



Photo by Steve Moffitt

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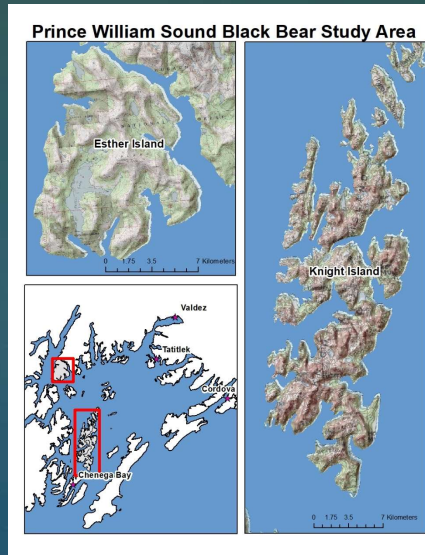
Study Area

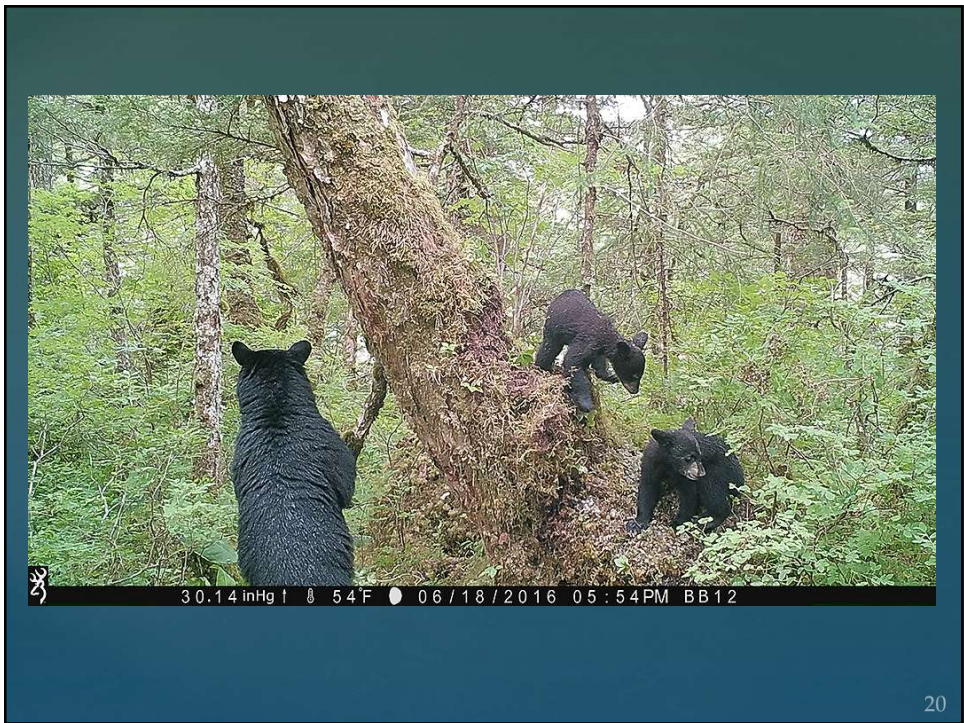
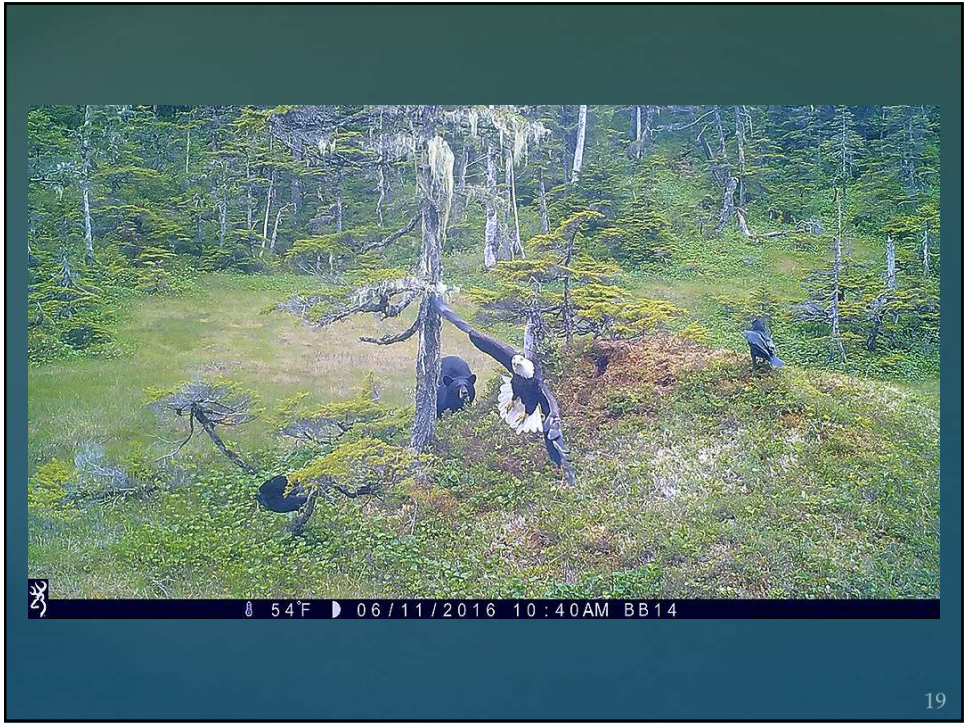
↳ Esther Island

- ⊘ 124 km²
- ⊘ High harvest density (0.22 bears harvested per km² at peak)

↳ Knight Island

- ⊘ 272 km²
- ⊘ Low harvest density (0.03-0.06 bears harvested per km² at peak)





Trapping

- ⌘ M-15 bucket snare sets
- ⌘ Aldrich snare trail sets
- ⌘ Transmitters on all sets
- ⌘ Sets checked visually at least once a day



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Methods



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Collar details

- ⌘ Data collection for up to 3 years
- ⌘ 68% resolved or high quality fixes
- ⌘ 5 locations per day-over 44,000 quality locations
 - ⌘ Ancillary data-temperature, activity



	Esther Island	Knight Island	Total
Captures (unique bears)	48	48	96
Collars deployed	32	21	53
Collars lost (mortality)	8	1	9
Collars lost (unknown)	3	1	4
Active collars	21	19	40

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Analysis- So far. . .

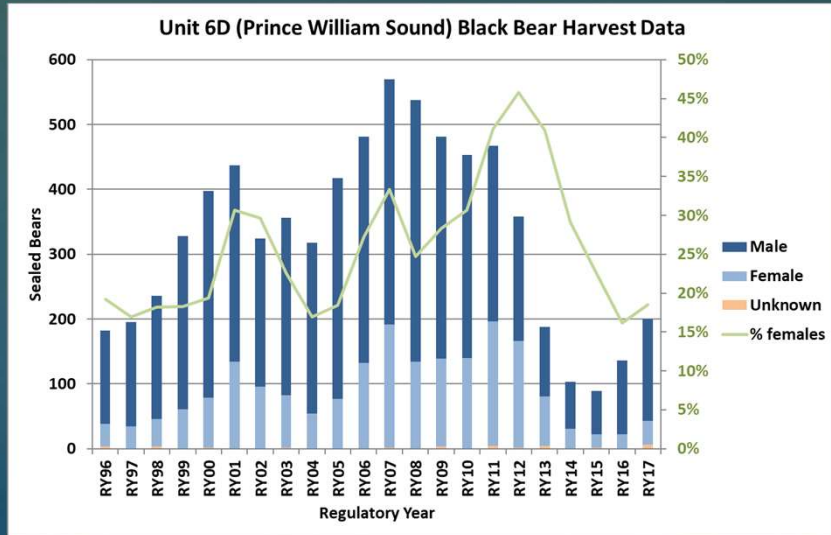
- ⌘ Examining collected data for differences in habitat use by:
 - ⌘ Sex
 - ⌘ Season
 - ⌘ Winter severity
 - ⌘ Year



Photo by Milo Burcham

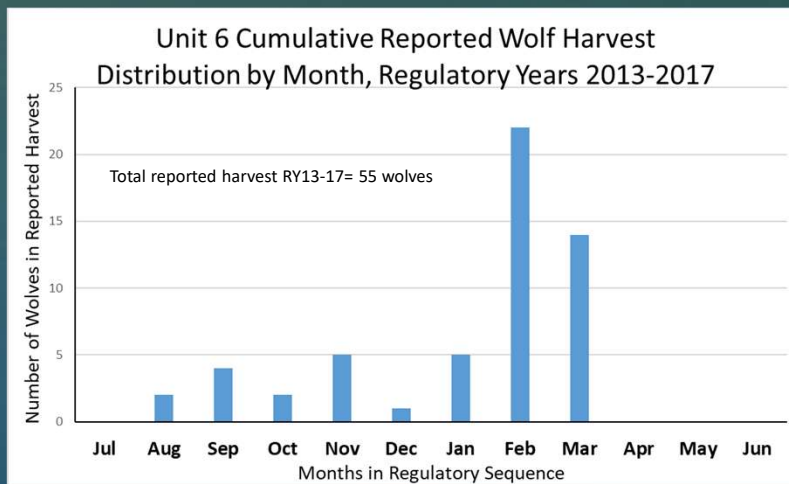
24

Unit 6D-Black Bears



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Wolf



Hunting season- Aug 10 to Apr 30
Bag limit- 5 wolves

Trapping season- Nov 10 to Mar 31
No bag limit

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Other species of interest

- ↳ River Otters
 - ↳ Marten
 - ↳ Beaver
 - ↳ Wolverine
 - ↳ Lynx

 - ↳ Coyotes
 - ↳ Porcupines
 - ↳ Snowshoe Hares
 - ↳ Ptarmigan and grouse
 - ↳ Muskrats
 - ↳ Marmots
 - ↳ Weasels
- ↳ Dusky Canada Geese -ADFG Waterfowl program involved in cooperative research and management programs
 - ↳ Mink- USFWS predator control program in place on Naked Island to protect Pigeon Guillemot rookeries



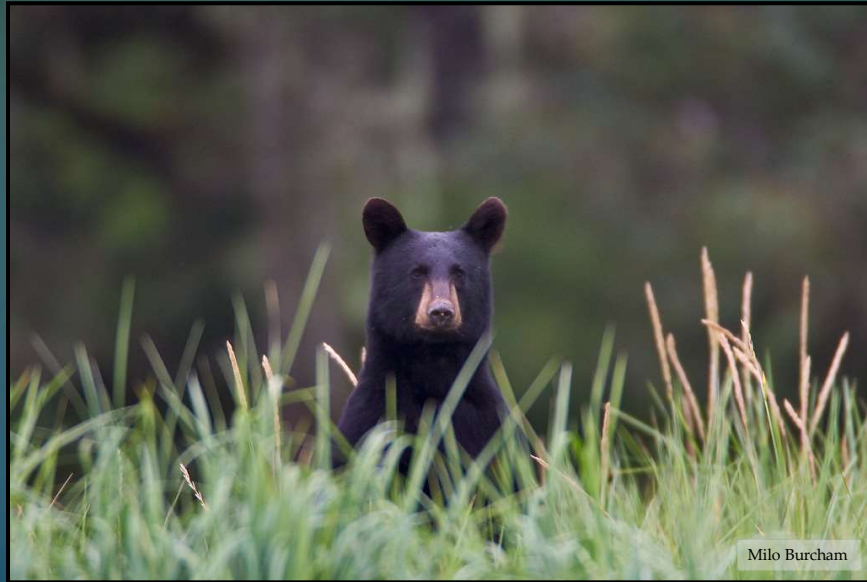
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Outreach

- ↳ Community presentations
 - ⌘ Research updates
 - ⌘ Newcomer's meeting
 - ⌘ Coast Guard Spouse's Association
- ↳ School outreach
 - ⌘ Hunter education
 - ⌘ Science Fair mentorship
 - ⌘ Applied science and statistics
- ↳ Bear awareness
 - ⌘ Public Service Announcements
 - ⌘ Cordova Times articles
 - ⌘ Electric fence loan program
 - ⌘ Fisherman contacts
 - ⌘ Classroom visits and presentations



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Milo Burcham

Questions?