Game Management
Units 9 and 10

OVERVIEW

Units 9 and 10

King Salmon Area Office Staff
- Dave Crowley, Area Biologist
- Alicia Carson, F & G Program Technician
Unit 9

- Area: 34,000 mi²
- Length: 600 miles
- Population: 4,000
- Villages: 20
- Active volcanoes: 13

7 State Special Areas
- McNeill River SGR and SGS
- Izembek SGR
- Egegik CHA
- Pilot Point CHA
- Cinder River CHA
- Port Heiden CHA
- Port Moller CHA
Unit 10
Aleutian Island Archipelago

Area: 1,600 mi²
Length: 970 miles
Islands: 70
Population: 4,500
Villages: 6
Active volcanoes: 3
Adak Island: Caribou
Unimak Island: Caribou, brown bear, wolf, furbearers

Unit 9 Brown Bear

Population: 7,000 - 8,000
Status: Stable
Harvest: 400-500 every other year
Issues: Nuisance bears

Proposals 28, 197, 206, 207, 208
### Units 9 & 10 Brown bear abundance


<table>
<thead>
<tr>
<th>Year(s)</th>
<th>GMU</th>
<th>Method*</th>
<th>Study area</th>
<th>Area (km²)</th>
<th>Abundance estimate</th>
<th>Density /1000 km²</th>
<th>Harvest rate (%)</th>
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*CMR: Capture mark recapture using collared bears
DCDS: Aerial double count, distance sampling
MRDS: Aerial mark recapture, distance sampling

### Brown bear composition

Brown bear composition stream surveys: 1960s – Present

- 15 – 20 sets of replicates on dozens of streams, some for decades
- Comp. counts ongoing Units 9D & 10 (Unimak Island), resumed in 9E.
- Indicate age/sex structure of the population
- Repeated 3–5 times, multiple streams, within the same week
- Late August, salmon must be present

**Composition parameter**

- Single bears (%)
- Maternal females (%)
- Coy (%)
- Older cubs (%)
- Ave COY litter size
- Older cub litter size
- Bears observed
- Average bear count
- Bears per hour
- # surveys
**Unit 9 Moose**

Population: 5,500
Status: Stable at low density
Harvest: 80 – 110 bulls per year
ANS: 100 – 140 moose per year
Issues: Unreported hunting

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**Unit 9 Moose**

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<td>2020</td>
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Proposal 204
- Management objective: 40 bulls:100 cows, medium high density, 25 bulls:100 cows, low density

Moose Composition
Moose Composition Surveys Unit 9C, 1992 2020

Moose Composition Surveys Unit 9E, 1979 2019
Caribou Herds

Northern Alaska Peninsula Caribou Herd

Population: 3,000 – 4,500
Status: Increasing (about 7.3%)
Pop. Objective: 12,000 – 15,000, 35 bulls: 100 cows
Harvest: 80 – 100 caribou per year, Tier II
ANS: 1,200 – 1,900
Issues: None

Proposal 27
Southern Alaska Peninsula Caribou Herd

Population: ~3,600  
Status: Increasing  
Pop. Objective: 3,000 – 4,000, 35 bulls:100 cows  
Harvest: 60 – 90 caribou per year  
ANS: 100 – 150 w/ UCH  
IM: 2008 – 2010  
Issues: Low harvest level

Proposal 205

Unimak Island Caribou Herd

Population: 420 – 460  
Status: Increasing  
Recommended Objectives (2018 SMRP):  
800 – 1,000 caribou, 35 bulls:100 cows  
Harvest: 0 – 3 federal subsistence  
ANS: 100 – 150 w/ SAP  
Issues: None

Proposals 25, 26, 230
Adak Island Caribou Herd

Population: 1,220
Status: Declining
Pop. objective: 150 (1980 ADFG & USFWS)
Harvest: 250 – 300 per year
ANS: None
Issues: Habitat degradation
Movement to Kagalaska Is.

No proposals
No closed season, no cow limit; no more than 2 bulls and no bulls Jan 1 – Aug 9

Adak Caribou Population
1958 – 2019

Number of caribou

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Reported Harvest</th>
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<tbody>
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<td>1963</td>
<td>2600</td>
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<td>1998</td>
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Adak Caribou history

- ADFG and USFWS initial population objective of 1,000 caribou in 1960’s.
  - Objective lowered to 150 by 1980.
- 5 AAC 92.255. Reduction of the ACH, 1994: the commissioner may dispose of the Adak caribou herd
- 1994 USFWS and ADFG produced EA for caribou reduction
- 2011: ACH declared by ADFG to be surplus and unnecessary
- 2016: USFWS denied funding to remove invasive caribou from Kagalaska Island.

Adak caribou harvest

Reported harvest

- Reported harvest from 1997 to 2019.
- Graph showing fluctuations in reported harvest.
- Highest reported harvest in 2019.
Adak caribou harvest

Factors affecting introduced ungulates on oceanic islands

- No or few predators
- Few parasites or insect harassment
- Too remote for hunting control
- Limited range (Adak is 290 mi²)
- Exceed carrying capacity
- Long term habitat damage
- Impact native wildlife species
- Decreased species diversity
- Invasion of neighboring islands

Reindeer/caribou introductions
- Adak (3,000 to 1,220)
- St. Matthew (6,000 to 0)
- St. Paul (2,000 to 200)
- St George (500 to 250)
- Hagemeister (1,500 to 0)
- Unalaska (failed)
- Atka (2,000 to 300)
- St. Lawrence (10,000 to 200)
- Nunivak (30,000 to 2,000?)
- Kagalaska (20<)
Unit 9 Wolf

Density: 5 – 10 / 1,000 km²
Status: Probably stable
Harvest: 25 – 53 per year
Issues: Declining trappers

Proposal 30

Unit 9 Wolf harvest

Unit 9 Cumulative Reported Wolf Harvest by Month, Regulatory Years 2016-2020

Total Reported harvest RY2016-RY2020 = 181 wolves.
Proportion of harvest by month indicated by %.
Unit 10 Wolf harvest

Unit 10 Cumulative Reported Wolf Harvest by Month, Regulatory Years 2016-2020

<table>
<thead>
<tr>
<th>Month</th>
<th>Number of Wolves harvested</th>
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<td>7</td>
</tr>
<tr>
<td>Aug</td>
<td>6</td>
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<tr>
<td>Sep</td>
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<td>Nov</td>
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<td>Dec</td>
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<tr>
<td>May</td>
<td>0</td>
</tr>
<tr>
<td>Jun</td>
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</table>

Total Reported harvest RY2016 – RY2020 = 7 wolves.
Proportion of harvest by month indicated by %. 100%

Furbearers

Average Annual Harvest (2015 – 2020)

- 80 Beaver
- 17 Lynx
- 42 Otter
- 16 Wolverine

Proposals 8 (coyote), 10, 11, 29 (beaver)
Unit 9 successful trappers
1979 – 2020

Successful trappers

Questions?