Unit 23 Planning Process

May 14-15, 2014

Background Information

Jim Dau

Unit 23: Land Ownership & G-O Areas

(map prepared by Sally Timp, ADF&G)
This Presentation

*Western Arctic Herd:*
- 2013 Census estimate
- Population projections: herd size & bull:cow ratios

*Harvest Data:*
- Hunters by species hunted
- Residence of visiting hunters
- Timing of nonlocal hunting effort
- Distribution of hunters among Guide-Outfitter areas
- Hunters by commercial services used

*WAH Movements During Fall 2013*

Western Arctic Caribou Herd Population Information
Western Arctic Caribou Herd Population Estimates

Management & Harvest Levels Relative to Population Size and Trend

Table 1

<table>
<thead>
<tr>
<th>Management Level and Harvest Level</th>
<th>Declining Low: 6%</th>
<th>Stable Med: 7%</th>
<th>Increasing High: 8%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Liberal</strong></td>
<td>Pop: 265,000+</td>
<td>Pop: 230,000+</td>
<td>Pop: 200,000+</td>
</tr>
<tr>
<td>Harvest: 18,550-24,850</td>
<td>Harvest: 16,100-21,700</td>
<td>Harvest: 16,000-21,600</td>
<td></td>
</tr>
<tr>
<td><strong>Conservative</strong></td>
<td>Pop: 200,000-265,000</td>
<td>Pop: 170,000-230,000</td>
<td>Pop: 150,000-200,000</td>
</tr>
<tr>
<td>Harvest: 14,000-18,550</td>
<td>Harvest: 11,900-16,100</td>
<td>Harvest: 12,000-16,000</td>
<td></td>
</tr>
<tr>
<td><strong>Preservator</strong></td>
<td>Pop: 130,000-200,000</td>
<td>Pop: 115,000-170,000</td>
<td>Pop: 100,000-150,000</td>
</tr>
<tr>
<td>Harvest: 8,000-12,000</td>
<td>Harvest: 8,000-12,000</td>
<td>Harvest: 8,000-12,000</td>
<td></td>
</tr>
<tr>
<td><strong>Critical</strong></td>
<td>Pop: &lt;130,000</td>
<td>Pop: &lt;115,000</td>
<td>Pop: &lt;100,000</td>
</tr>
<tr>
<td>Keep Bull: Cow ratio &gt;40:100 Cow</td>
<td>Harvest: 6,000-8,000</td>
<td>Harvest: 6,000-8,000</td>
<td>Harvest: 6,000-8,000</td>
</tr>
</tbody>
</table>

Taken from WAH Management Plan (revised 2011)
Western Arctic Caribou Herd Bull:Cow Ratios

Minimum bull:cow ratio identified in WAH management plan

Western Arctic Caribou Herd Bull & Cow Harvest Projections

- taken
- projected cow harvest
- history
- future

% of bulls or cows harvested

regulatory year
Western Arctic Caribou Herd Management Plan

The latest revision of the Plan was finalized in December 2011

There are 7 primary elements of the plan – Two are most relevant to user conflicts in Unit 23:

- Regulations
- Population Management

Regulations Element

**Strategies**

A. Support the existing regulatory process of state advisory committees & federal regional advisory councils
B. Acknowledge and provide for local caribou hunting and use patterns as well as opportunities for other users
C. Develop hunting regulations according to herd management strategies outlined in this plan
D. Simplify caribou hunting regulations

**Management actions**

1. Promote consistency between state and federal regulations
2. Encourage efficient, effective and consistent enforcement of regulations affecting caribou hunting
3. Support efforts such as the Unit 23 Working Group
4. Reevaluate the amount of caribou reasonably necessary for subsistence uses as needed (Note: The WAHANS was revised at the January 2014 BOG meeting to include the TCH)
5. Submit recommendations regarding hunting to the appropriate advisory committees and regional advisory councils
Population Management Element

Table 1 relates population size and trend to management actions and harvest levels.

Appendix 2 provides detailed recommendations regarding:

- population monitoring by agencies
- harvest management by BOG & FSB

NOTE: This section of the plan does not attempt to establish hard and fast rules or thresholds for managing the WAH. Instead, population values and recommendations are presented only as guidelines to help the agencies and regulatory boards adjust to changes in the biological status of this herd.

Appendix 2: Management Recommendations

Liberal Management (green)
- Reduce nonresident bull harvest only to maintain 40 bulls:100 cows
- No restriction of resident bull harvest unless <40 bulls:100 cows

Conservative Management (orange)
- No harvest of calves
- No nonresident cow harvest
- Restrict nonresident bull harvest
- Encourage voluntary reduction in resident cow harvest
- Limit subsistence harvest of bulls only if <40 bulls:100 cows

Preservative Management (yellow)
- No harvest of calves
- Limit harvest of cows by residents through permit hunts and/or village quotas
- Limit subsistence harvest of bulls only if <40 bulls:100 cows
- Harvest restricted to residents only according to state and federal law – closure of some federal public lands may be necessary

Critical Management (red)
- No harvest of calves
- Highly restrict resident cow harvest through permit hunts and/or village quotas
- Limit subsistence harvest of bulls to maintain 40 bulls:100 cows
- Harvest restricted to residents only according to state and federal law – closure of some federal public lands may be necessary
State of Alaska Intensive Management Process
(Predator Control/Habitat Improvement)

Determine whether WAH is important for high levels of human consumption – Positive finding

Establish intensive management objectives

- There are 2 of them:
  - Population objective - ≥200,000 caribou
  - Harvest objective – 12,000-20,000 caribou

Determine harvestable surplus (harvest rate = 2% cows & 15% bulls)

- Current year
  - 235,000 caribou
  - harvestable surplus: 14,500 caribou

- Projected for 2014-2015
  - ~200,000 caribou
  - harvestable surplus: ~13,000 caribou

State of Alaska Intensive Management Process
(Cont.)

When harvestable surplus is <12,000 caribou:

- ADF&G conducts a ‘feasibility assessment’ - describes predator control and habitat improvement options to be considered
- BOG determines what options are feasible; if predator control is deemed feasible,
- ADF&G prepares an operational plan for a predator control program
- BOG reviews plan and either approves, disapproves or modifies it
- ADF&G considers implementation of the plan based on funding, staff, etc.

This process is set in statute: ADF&G & the BOG have to follow it when the WAH (or any wildlife population) goes below its population or harvest objective.

If current population & harvest trends continue, the WAH may be at or near its IM objectives in another year or two
Why spend so much time on WAH biology & management for a working group that is charged with minimizing conflicts among users in Unit 23?

• Sensitivities regarding competition and/or disturbance increase among all users, including local residents, visiting hunters and commercial operators, when caribou are not readily available.

• The overall decline in WAH abundance combined with a disproportionate decline of bulls will make it more difficult for people to harvest caribou in the near future (this, along with delayed timing of fall migrations, is probably already affecting some villages, e.g. Noatak).

• Increased sensitivities attributable to social factors may be offset somewhat if reduced availability of caribou (and moose) or regulatory restrictions cause fewer nonlocal hunters to come to Unit 23.

• However, even with reductions in wildlife, over the short term Unit 23 will still probably provide better hunting opportunities than most other parts of Alaska; the WAH is still one of the largest caribou herds in North America.

Harvest Data: All Species

• Data from harvest ticket, registration & drawing permit systems

• Data is only for hunters who live outside Unit 23
  
  • Nonresidents (including alien hunters)
  
  • Residents of Alaska who live outside Unit 23

• 1 Record per hunter: caribou, moose, brown bear & sheep hunters combined

• Data from Fall 1998 through Fall 2013
  
  • August 1-October 31
Numbers of Nonlocal Hunters by Species & Year
(Fall 1998-2013)

Categories are mutually exclusive; each hunter counted only once even if hunted >1 species
Average Annual Number of Nonlocal Hunters by Species (Fall 1998 thru 2013 combined)

Numbers of Nonresident & Nonlocal Alaskan Resident Hunters

‘Date of kill’ used to track chronology of effort; when >1 species taken, midpoint date was calculated.

Note: In recent years, an increasingly high proportion of hunters did not report the specific location where they hunted (2011-30%; 2012-51%; 2013-54%).
Average Annual Nonlocal Hunter Density (#/100 mi²) By G-O Area
(Fall 1998-2013)

Number of Fall Nonlocal Hunters by Commercial Services & Year

[Graph showing the number of nonlocal hunters by year and service (None, Guide, Transp)]
Number of Nonlocal Hunters by Commercial Services Through Time

- Transp
- Guide
- None

Number of Hunters

Year


Fall 2013 WAH Movements

69 satellite collared caribou

Collars provided by ADF&G and NPS
Questions?