Western Arctic Caribou Herd Working Group

December 14-15, 2016

8:30 am – 5:00 pm each day

Anchorage Marriott Downtown 829 West 7th Avenue, Anchorage, Alaska

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WACH WORKING GROUP - MEMBERSHIP LIST

December 14-15, 2016

Working Group Seat	Voting Member	Alternate
1. Anchorage Advisory Committee	Neil DeWitt	Kenny Rodgers
2. Buckland, Deering, Selawik	Ron Moto Sr	Percy Ballott
3. Anaktuvuk Pass, Nuiqsut	<mark>vacant</mark>	Esther Hugo
4. Elim, Golovin, White Mountain	Charles Saccheus	Morris Nakaruk
5. Fairbanks Hunters	Allen Barrette	Rod Arno
6. Hunting Guides	Phil Driver	Bob Hannon
7. Kivalina, Noatak	Enoch Mitchell	Daniel Foster, Sr.
8. Kotzebue	Cyrus Harris	Willie Goodwin
9. Koyukuk River	Pollock Simon, Sr	Jack Reakoff
10. Lower Kobuk River	Vern Cleveland, Sr (Chair)	<mark>Kirk Sampson</mark>
11. Middle Yukon River	Benedict Jones	Micky Stickman
12. Point Hope and Point Lay	Steve Oomituk	<mark>vacant</mark>
13. Nome	Charlie Lean	Jacob Martin
14. Conservationists	Tim Fullman	David Krause
15. Northern Seward Peninsula	Elmer Seetot, Jr	Christine Komanaseak
16. Reindeer Herders Association	Tom Gray	Alfred Karmun
17. Southern Seward Peninsula	Morris Nassuk	Leo Charles, Sr.
18. Transporters	Jared Cummings	Julie Owen
19. Upper Kobuk River	William Bernhardt	Oliver Griest, Sr .
20. Atqasuk, Utqiagvik, Wainwright		

Blue text = vacancies

Yellow text = need to confirm at 2016 meeting

 $strike-out\ text = excused$

Officers - Officers in the Working Group include a Chair and Vice-Chair elected by the membership. Each shall serve a staggered three-year term. In the event an officer cannot complete a term, the Working Group will elect a replacement.

Current Chair and Vice Chair terms:

Chair, Vern Cleveland, Sr. 2014-2016 Vice-Chair, Cyrus Harris 2016-2018

The following communities are the geographic areas represented by the Working Group seats. (These community groupings approved by Working Group in December 2012)

- 9. Koyukuk River: Huslia, Hughes, Allakaket, Bettles, Wiseman
- 10. Lower Kobuk River: Noorvik, Kiana
- 11. Middle Yukon River: Galena, Koyukuk, Nulato, Kaltag
- 15. Northern Seward Peninsula: Teller, Brevig Mission, Wales, Shishmaref
- 17. Southern Seward Peninsula: Koyuk, Shaktoolik, Unalakleet, Stebbins, St. Michael, Kotlik
- 19. Upper Kobuk River: Ambler, Shungnak, Kobuk

WACH WORKING GROUP - COMMITTEES

December 14-15, 2016

Name: Communications
Established: December 2011

Membership: 5 WG members, Agency publications staff

(The Communications Committee was created from the previous

Education/Newletter Committee and the Webpage Committee by action at

December 2011 meeting)

Members:

CWG Chair 05 Allen Barrette barrette@acsalaska.net

CWG Chair 10 Vern Cleveland (Ch.) vern_cleveland75@hotmail.com

CWG Chair 14 Tim Fullman tim_fullman@tws.org
CWG Chair 16 Tom Gray tomnbj@hughes.net
CWG Alt. Chair 18 Julie Owen natrophy@ptialaska.net
ADFG Kari Rasmussen Kari.Rasmussen@alaska.gov

BLM Laurie Thorpe lthorpe@blm.gov

FWS Brittany Sweeney Brittany_Sweeney@fws.gov

NPS Kyle Joly Kyle_Joly@nps.gov

Name: Executive
Established: January 2004

Membership: WG Chair, WG Vice Chair, 3 WG members, Agency Representative

Members:

CWG Chair 10 Vern Cleveland (Ch.) vern_cleveland75@hotmail.com

CWG Chair 8 Cyrus Harris (V-Ch.) charris@maniilaq.org
CWG Chair 5 Allen Barrette barrette@acsalaska.net
CWG Chair 16 Tom Gray tomnbj@hughes.net

CWG Chair 20 Oliver Peetook oliver.peetook@olgoonik.com

Name: Local Knowledge/User

Established: May 2004

Membership: 4 WG members, Selawik NWR staff

Members:

CWG Chair 8 Cyrus Harris charris@maniilaq.org

CWG Chair 11 Benedict Jones

CWG Chair 17 Morris Nassuk nassukm@yahoo.com

CWG Chair 19 William Bernhardt trapperbillkobuk@msn.com FWS Susan Georgette susan_georgette@fws.gov Name: Planning Established: December 2010

Membership: 4 WG members, assisted by Agency staff

(The functions of this committee were sunset by action at December 2011 meeting. Another Planning Committee will be established when the Cooperative Management Plan is revised,

in approximately five years).

Name: Resource Development

Established: May 2004 (formed as NPRA Committee; renamed in February 2006)

Membership: 12 WG members, Coordinator, Agency Representative, Agency lead staff

Revised: December 2011 – Increased from original 6 WG members to 7 WG members

December 2013 – Increased from 7 WG members to 12 WG members, to provide seats for members in area in vicinity of proposed road to the Ambler

Mining District.

Members:

CWG Chair 2 Ron Moto, Sr. ronmotosr@yahoo.com
CWG Chair 7 Enoch Mitchell fishandgamerep@nautaaq.org
CWG Chair 8 Cyrus Harris charris@maniilaq.org

CWG Chair 9 Pollock Simon, Sr.

CWG Chair 10 Vern Cleveland, Sr. vern_cleveland75@hotmail.com

CWG Chair 11 Benedict Jones CWG Chair 12 Steve Oomituk

CWG Chair 14 Tim Fullman (Ch.) tim_fullman@tws.org CWG Chair 16 Tom Grav tomnbi@hughes.net Morris Nassuk nassukm@yahoo.com CWG Chair 17 CWG Alt. Chair 18 Iulie Owen natrophy@ptialaska.net CWG Chair 19 William Bernhardt trapperbillkobuk@msn.gov Tony Gorn tony.gorn@alaska.gov ADFG BLM Allan Bittner abittner@blm.gov

FWS Susan Georgette susan_georgette@fws.gov NPS Maija Lukin maija_lukin@nps.gov NPS Greg Dudgeon greg_dudgeon@nps.gov

Name: Technical Established: January 2004

Membership: WG Chair, Vice-Chair, Chair 13 (Nome); Agency Representative, Agency staff.

Note that WG members who reside in community where TC meeting is held

may also attend.

(December 2012 WG meeting – determined by Chair Ashenfelter that travel/per diem would be paid only for Chair and Vice Chair to attend TC meetings. However, December 2014, WG decision to add Chair 13 to the TC)

WG Members (for December 2015 meeting in Anchorage)

CWG Chair 10 Vern Cleveland vern_cleveland75@hotmail.com

CWG Chair 8 Cyrus Harris charris@maniilaq.org
CWG Chair 13 Charlie Lean Charlie@nsedc.com

Agency TC members:

ADF&G Tony Gorn tony.gorn@alaska.gov ADF&G Lincoln Parrett Lincoln.parrett@alaska.gov ADF&G Brandon Saito brandon.saito@alaska.gov ADF&G Kari Rasmussen Kari.rasmussen@alaska.gov ADF&G **James Simon** james.simon@alaska.gov ADF&G Nicole Braem nicole.braem@alaska.gov BLM Alan Bittner abittner@blm.gov Robert Ellefson rellefso@blm.gov BLM BLM Dan Sharp dsharp@blm.gov BLM Laurie Thorpe laurie_thorpe@blm.gov Dave Yokel BLM Dave_yokel@blm.gov **BOEM** Chris Crews Christopher.crews@boem.gov NPS Maija Lukin maija.lukin@nps.gov NPS Pam Sousanes pam_sousanes@nps.gov NPS Kyle Joly kyle_joly@nps.gov NPS Hillary Robison Hillary_robison@nps.gov NPS Ken Adkisson ken_adkisson@nps.gov NPS Greg Dudgeon greg_dudgeon@nps.gov NPS Iim Lawler jim_lawler@nps.gov USFWS Bill Carter Bill_carter@fws.gov Susan_georgette@fws.gov **USFWS** Susan Georgette **USFWS** David Zabriskie David zabriskie@fws.gov **USFWS** Carl Johnson carl_johnson@fws.gov **USFWS** Donald Mike donald mike@fws.gov Kenton Moose Kenton_moos@fws.gov USFWS **USFWS** Karen Murphy karen_murphy@fws.gov **USFWS** Nathan Olson nathan olson@fws.gov **USFWS** Joel Reynolds joel_reynolds@fws.gov Dave Roseneau **USFWS** dave_roseneau@fws.gov **USFWS** Rvan Wilson rvan r wilson@fws.gov **USFWS OSM** Chris McKee Paul_mckee@fws.gov **USFWS OSM** Trevor Fox trevor_fox@fws.gov

Information about past Working Group Committees:

Education/Newsletter Committee – Established in January 2005. Functions were combined with Webpage Committee and renamed the Communication Committee by action at December 2011 meeting. The Education/Newsletter Committee no longer exists.

Funding Committee – Established in May 2004 as Tribal Grant Committee. Renamed in December 2009. The functions of this committee were moved to the Executive Committee by action at December 2011 meeting. The Funding Committee no longer exists.

Membership Committee – Established in December 2003. The functions of this committee were sunset by action at December 2011 meeting and work now accomplished by the Executive Committee. The Membership Committee no longer exists.

Webpage Committee – Established in December 2010. Functions were combined with Education/Newsletter Committee and renamed the Communication Committee by action at December 2011 meeting. The Webpage Committee no longer exists.

CHARTER

FOR THE WESTERN ARTIC CARIBOU HERD WORKING GROUP*

I. Authorities

- □ Public meeting laws of the United States and the State of Alaska
- □ Title 16 of the Alaska Statutes (management of fish and game)
- □ ANILCA (Section 809)

II. Purpose

The Western Arctic Caribou Herd (WACH) Working Group is a permanent regional organization of representative stakeholders that meets regularly to exchange traditional and western scientific knowledge and through a process of consensual decision making, the Working Group coordinates suggested management guidelines to both the Alaska Board of Game and the Federal Subsistence Board.

Through these activities, the Working Group intends to ensure the conservation of the Western Arctic Caribou Herd, safeguard the spiritual and cultural well being of Alaska Natives and the interests of all users of the herd and to integrate indigenous knowledge with western science.

III. Goals and Objectives

- *G1.* To insure health and conservation of the WACH
 - a. Emphasize protection of critical habitat (migration routes, calving grounds, winter and summer ranges).
 - b. Develop and implement a WACH management plan.
- G2. To provide a harvest consistent with the customs, traditions and spiritual needs of all consumptive users.
 - a. Explore opportunities for tribal self-regulation.
- G3. To involve federally recognized tribes, State and Federal agencies and all other users in making recommendations for research, monitoring, regulation, allocation and enforcement.
 - a. Establish communication with the reindeer industry, guides, transporters and other aircraft operators to minimize conflict.
- G4. To respect indigenous, traditional and scientific knowledge and integrate them into management decisions.

- G5. To emphasize indigenous, traditional and scientific education and foster communication among all caribou users.
 - a. Provide information and educational materials concerning the WACH and this charter to users, schools, communities, agencies and media services.

IV. Relationship to other organizations

The Working Group is not intended to function primarily as a political or lobbying institution. Nor is the Working Group intended to replace fish and game regulatory bodies such as the Alaska Board of Game and the Federal Subsistence Board.

The Working Group sees itself as a body that brings together all of the knowledge and concerns that people have in northwestern Alaska concerning the care and management of the Western Arctic Caribou Herd. It is a holistic approach intended to inform and educate all caribou users and to assist regulatory bodies with their work. Specifically this group collaborates and works cooperatively with all existing institutions including boroughs, land owners, regional, state, and federal subsistence advisory bodies to achieve consensus on care and management of the WACH.

*Drafted by Ken Adkisson, Earl Kingik, Dave Spirtes, John Trent and Pius Washington with assistance from Caleb Pungowiyi on June 27 at Kotzebue. The draft charter was subsequently modified and approved by consensus of the Working Group at Anaktuvuk Pass on August 2, 2000.

###

BYLAWS

FOR THE WESTERN ARCTIC CARIBOU HERD WORKING GROUP*

ARTICLE I. Name

The name of this organization is the Western Arctic Caribou Herd Working Group (Working Group).

ARTICLE II. Membership

Membership in the Working Group consists of representatives of stakeholders with a direct interest in the care and management of the WACH. The number of stakeholders in the Working Group is determined by the Working Group itself. Each stakeholder representative, however, is selected by his own constituency and serves at the pleasure of that constituency. In the event that a stakeholder representative cannot attend a function of the Working Group, there shall be a designated alternate representative.

A quorum of the Working Group will consist of greater than fifty percent (50%) of the existing Voting Chairs.

ARTICLE III. Voting

Each member in the Working Group has one vote. However the preferred method of decision making is by consensus process.

In the event that consensus cannot be reached on an issue, voting by majority will carry the issue. A minority report will also be recorded in the minutes of the meeting.

ARTICLE IV. Officers

Officers in the Working Group shall be a Chair and Vice-chair elected by the membership. Each shall serve a staggered three year term. In the event an officer cannot complete a term, a replacement will be elected by the Working Group.

ARTICLE V. Duties of Officers

The duties of the Chair shall consist of chairing meetings; representing the Working Group to other organizations, the public and the media; appointing special committees; consulting with and directing the resource agencies; and other duties consistent with the purpose and goals of the Working Group.

The duties of the Vice-chair are to assist the Chair and to fill in for the Chair when absent.

ARTICLE VI. Meetings

The Chair will convene two meetings per calendar year. Meeting locations will be rotated. Meetings will follow procedures described in Roberts Rules of Order.

ARTICLE VII. Relationship of resource management agencies to the Working Group

Resource agencies consist at this time of the USFWS, BLM, NPS, BIA, and ADF&G. Other agencies may join at a later date. Resource agencies serve as staff to the Working Group in a non-voting capacity. An agency representative will work closely with the Working Group Chair to provide professional services and support to the Working Group.

ARTICLE VIII. Funding

The resource agencies will work with the Working Group Chair to secure adequate long-term funding to support activities of the Working Group.

ARTICLE IX. Executive Committee

The Working Group shall establish an Executive Committee to make decisions when the Working Group is not in session. The voting members of the Executive Committee shall consist of the Chair, Vice Chair, and three additional Working Group voting chairs representing diversity on the Working Group. A quorum of the Executive Committee will consist of three voting members. Non-voting members on the Executive Committee will be the Working Group Coordinator and the Working Group Agency Representative. (Article IX adopted by unanimous vote on May 4, 2004, Girdwood, Alaska. Amended to establish a quorum for the Executive Committee by unanimous vote on December 17, 2015.)

*Drafted by Ken Adkisson, Joseph Ballot, Earl Kingik, Dave Spirtes, John Trent and Pius Washington with assistance from Caleb Pungowiyi June 27, 2000 at Kotzebue. The draft was subsequently modified and approved by consensus of the Working Group at Anaktuvuk Pass August 2, 2000. Bylaws amended on May 4, 2004 and December 17, 2015.

###

MEMORANDUM OF UNDERSTANDING

among

THE UNITED STATES DEPARTMENT OF THE INTERIOR
Bureau of Land Management - Alaska
U.S. Fish and Wildlife Service (USFWS)- Alaska Region
National Park Service (NPS) Alaska Region

And

THE STATE OF ALASKA
Department of Fish and Game (ADF&G)

concerning

The Western Arctic Caribou Working Group and Western Arctic Caribou Herd Cooperative Management Plan

<u>Purpose</u>. The purpose of this agreement is to provide inter-agency support for the cooperative management of the Western Arctic Caribou Herd and its habitat by the U.S. Department of Interior, Bureau of Land Management (BLM), U.S. Fish and Wildlife Service (USFWS) and National Park Service (NPS), and the State of Alaska, Department of Fish and Game (ADF&G). The signatory parties propose to work together within the scope of their respective authorities toward maintaining a sustainable, healthy ecosystem that supports a healthy and vibrant Western Arctic caribou herd throughout its range in northern and western Alaska.

- I. <u>Objectives.</u> This MOU sets forth general terms, conditions and criteria under which the four parties will cooperatively manage the Western Arctic Caribou herd and its habitat with the following objectives.
 - A. Develop stable, long-term funding to support the Western Arctic Caribou Working Group (Working Group) and implement actions outlined in the Western Arctic Caribou Herd Cooperative Management Plan (Cooperative Management Plan).
 - B. Work together to ensure the long-term conservation of the Western Arctic caribou herd and the ecosystem on which it depends.
- II. Authorities.

- A. BLM enters into this MOU under the authority provided in the Federal Land Policy and Management Act of 1976 (FLPMA), the Alaska National Interest Lands Conservation Act (ANILCA) and the Code of Federal Regulations, Title 43, Chapter II.
- B. ADF&G enters into this MOU under the authority provided in Article VIII of the Constitution of the State of Alaska, Section 16 of the Alaska Statutes, and Title 5 of the Alaska Administrative Code.
- C. NPS enters into this MOU under the authority provided in 16 USC Sections 1,2, and 3.
- D. USFWS enters into this MOU under the authority provided in Fish and Wildlife Coordination Act, 16 USC 661 to 666C.
- IV. Responsibilities and Procedures. According to both Federal statutory law and regulation, and State statutory law and regulation, the four parties signatory to this MOU are authorized to manage wildlife populations and/or manage wildlife habitat as outlined in the Cooperative Plan. The parties agree that the agencies signatory to this MOU shall support the continued maintenance of the Working Group and implementation of the Cooperative Management Plan. These actions will be advantageous to all parties involved in terms of improved coordination of management and research efforts, cost sharing, reduce duplicity of effort, and increased opportunity for public involvement in managing the herd and its habitat

A. Each agency agrees to the following:

- 1. Seek funding to support the Working Group consistent with the agency's authority. Any transfer or sharing of funds will be done through more specific Cooperative Agreements consistent with each party's respective authorities.
- 2. Assist in implementing the Western Arctic Caribou Herd Cooperative Management Plan, focusing their individual efforts on management actions consistent with their respective mandates and authorities.
- 3. Give other agencies opportunities to provide input on issues of mutual concern.
- 4. Share information pertaining to habitat assessment, caribou population status, future and proposed development, and other relevant information with the other parties.
- B. The parties will meet annually to review information reflecting on herd and habitat status plan and coordinate management activities, and prepare a brief annual status report, including recommendations, to the Working Group as described in the 2003 Western Arctic Herd Cooperative Management Plan.
- C. All parties understand that this agreement shall not create any contractual obligations, or impose any financial obligation by one upon the other.
 - 1. Each party accepts responsibility for its own costs resulting from participating in this agreement.
 - 2. In accordance with Bureau policy, this instrument (MOU) excludes any obligations o exchange of Federal funds.

 2016 WACH WG Page 10

V. Administration.

- A. Nothing in this MOU will be construed as affecting the authorities of the participants. Nothing will be construed as binding beyond the participants respective authorities, or to require participants to obligate or expend funds in excess of available appropriations.
- B. This MOU in no way restricts the participants from participating in similar activities or arrangements with other public or private agencies, organizations, or individuals.
- C. Conflicts between participants that cannot be resolved at the operational level (as a result of covenants stated in *IV. Responsibilities and Procedures*) will be referred to successively higher levels for resolution.
- D. Participants will review this agreement at least every five years to determine its adequacy, effectiveness and continuing need.
- E. Terms of this MOU may be renegotiated at any time following at least 30 days notice to the other participants.
- F. This MOU shall become effective when signed by all parties. The MOU shall continue until written termination by mutual agreement, or by any party giving 30 days prior written notice to the other parties.
- G. The points of contact for the signatory Agencies will be as follows:

The point of contact for ADF&G will be Management Coordinator, Region 5, Division of Wildlife Conservation.

The point of contact for the FWS will be the Refuge Manager of the Selawik National Wildlife Refuge.

The point of contact for the NPS will be the Superintendent for the Western Arctic National Park Lands.

The point of contact for the BLM will be Field Manager-BLM Central Yukon Field Office.

APPROVED:

Charles to Lat
Denby S. Lloyd
Commissioner
Alaska Department of Fish and Game
State of Alaska
T.C. Louie
Thomas P. Lonnie
Alaska State Director
Bureau of Land Management
U.Ş. Department of Interior
Ato 12
Sue Masica, Director
Alaska Region
BANGE CONTROL OF THE
National Park Service
U.S. Department of Interior
SAM SOM
Geoff Haskett
Alaska Regional Director
U.S. Fish and Wildlife Service

U.S. Department of Interior

13 July 09
Date

9-95-09
Date

8/14/09
Date

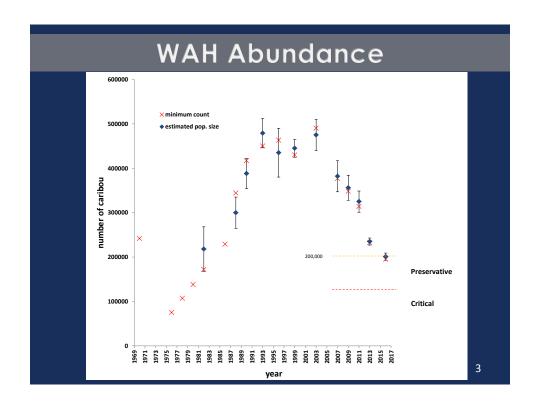
Western Arctic Caribou Herd

- Abundance/WAHWG Management Plan
- Historical Harvest
- Harvestable Surplus
- Additional Biological Data
- User Conflict Issues
- Summary

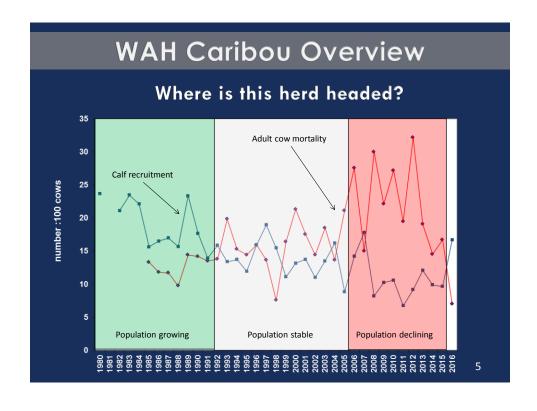


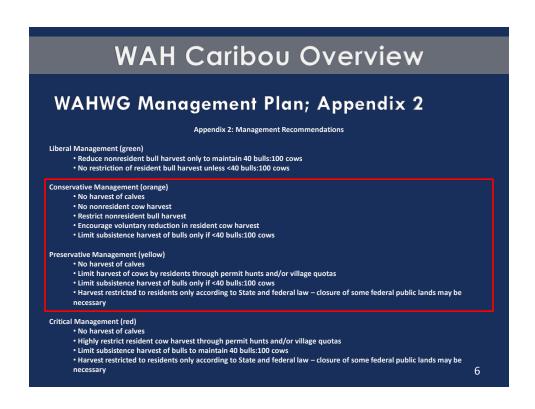
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Western Arctic Caribou Herd Seasonal Ranges Review My 2005 Point House Point Lay Point House Point Lay Point House SEA Database NOR TOO Seasonal Ranges Seasonal Ranges



WAHWG Management Plan; Table 1				
MARWG M	anagement i	Population Trend		
Management Level and	Declining	Stable	Increasing	
Harvest Level	Low: 6%	Med: 7%	High: 8%	
Liberal	Pop: 265,000+	Pop: 230,000+	Pop: 200,000+	
	Harvest: 16,000+	Harvest: 16,000+	Harvest: 16,000+	
Conservative	Pop: 200,000-265,000	Pop: 170,000-230,000	Pop: 150,000-200,000	
	Harvest: 12,000-16,000	Harvest: 12,000-16,000	Harvest: 12,000-16,000	
Preservative	Pop: 130,000-200,000	Pop: 115,000-170,000	Pop: 100,000-150,000	
	Harvest: 8,000-12,000	Harvest: 8,000-12,000	Harvest: 8,000-12,000	
Critical Keep Bull:Cow ratio >40 Bull:100 Cow	Pop: <130,000	Pop: <115,000	Pop: <100,000	
	Harvest: <8,000	Harvest: <8,000	Harvest: <8,000	





WAHWG Management Plan; Appendix 2

Appendix 2: Management Recommendations

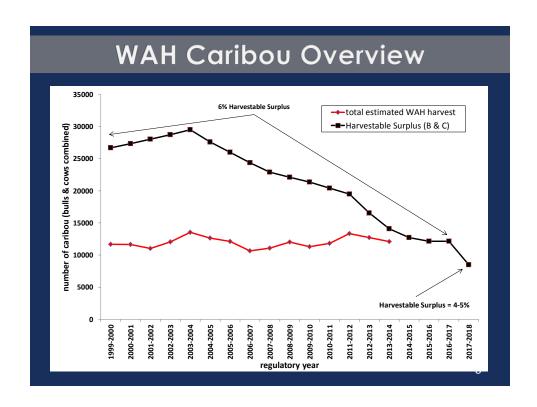
Conservative Management (orange)

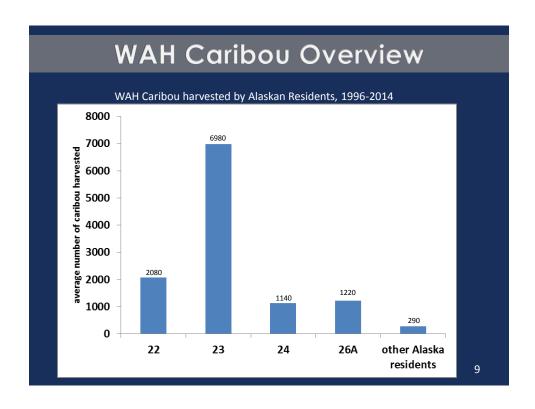
- · No harvest of calves
- No nonresident cow harvest
- Restrict nonresident bull harvest
- Encourage voluntary reduction in resident cow harvest
- Limit subsistence harvest of bulls only if <40 bulls:100 cows

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

Ī





Other Biological Data

- Adult Female Survival high (90%)
- Yearling Recruitment high (17:100 adults)
- Oct '15 –Jun '16 Calf Survival high (84%)
- Sep 2016 calf weights high (97#)
- Sep 2016 adult body condition high (8% skinny)
- Oct 2016 Herd Composition
 - 41 bulls:100 cows high
 - 54 calves:100 cows high

10

These pieces of data are a combination of good news and bad news

GOOD:

- · There are still a lot of caribou in the WAH
- The decline appears to have slowed
- · Other biological metrics look good

BAD:

- We are getting closer and closer to some critical values:
 - WAHWG preservative management threshold
 - Upper level of the Amount Necessary for Subsistence
 - State Intensive Management population and harvest objectives
 - When does Harvest > Harvestable Surplus? How will we know?

What happens if this herd continues down, even at a slow rate?

11

User Conflict Issues

Ongoing User Conflict Issues

- The WAH range has 2 Controlled Use Areas
- Unit 23 User conflict Working Group
- 2016 Unit 23 Federal Closure

12

User Conflict Issues

2016 Federal Closure in Unit 23

- Preliminary data suggest that the total number of visiting hunters was reduced by 50%
- Some hunters were displaced to large tracts of state lands; many others used state lands within federal tracts (i.e. gravel bars)
- Federal closure in 2016 seemed to have a large effect on the perception of conflict

13

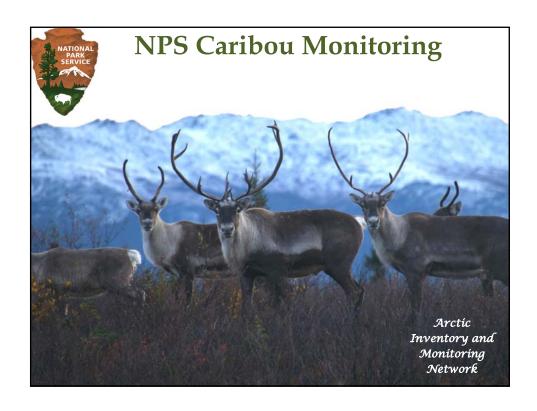
WAH Caribou Overview

Summary:

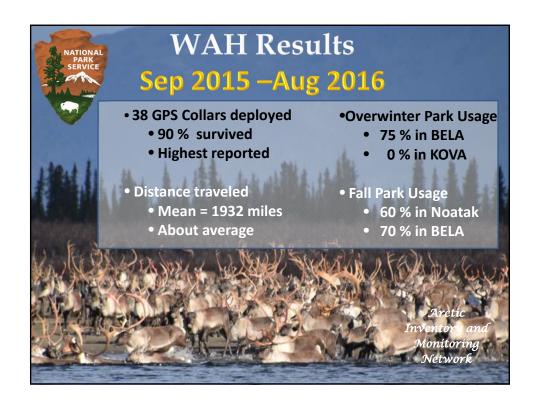
- Standing on the threshold of needing more active hunt management in both herds
- On the verge of state Intensive Management thresholds
- Some good signs biologically
- There are 6 caribou proposals at the 2017 BOG meeting; 3 related to hunt management, and 3 related to user conflicts

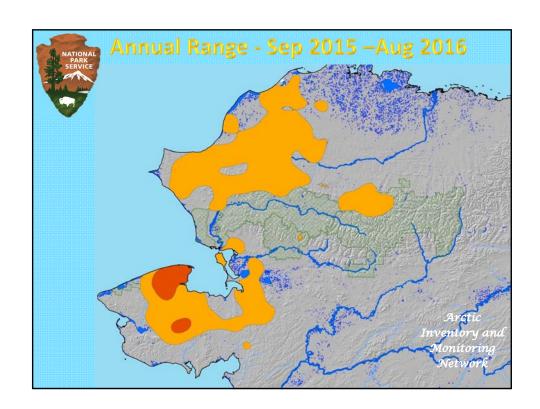
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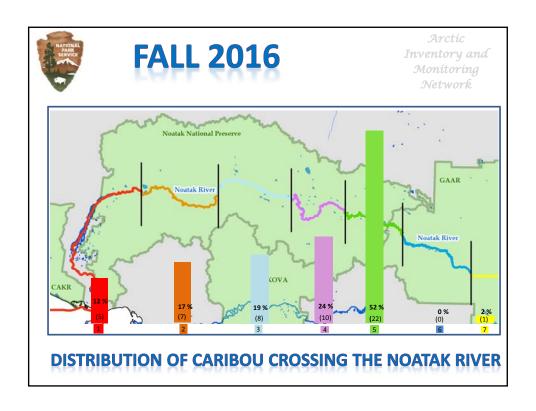
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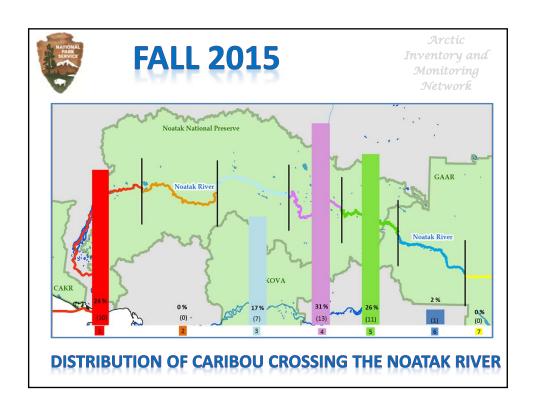


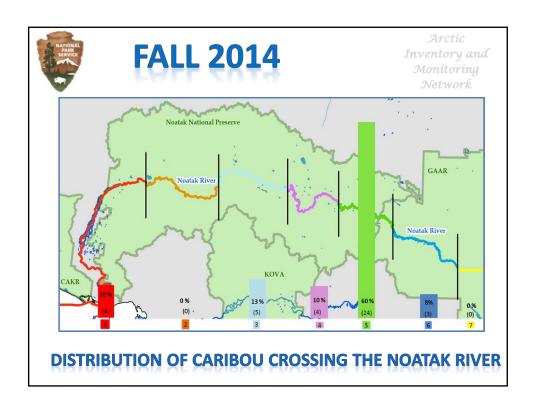


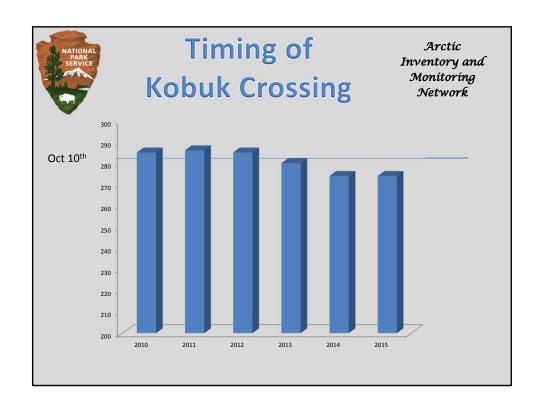


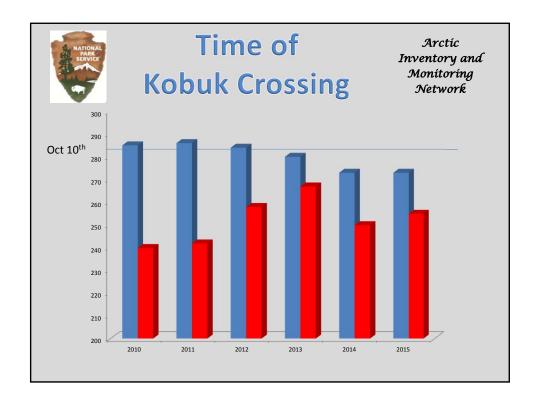


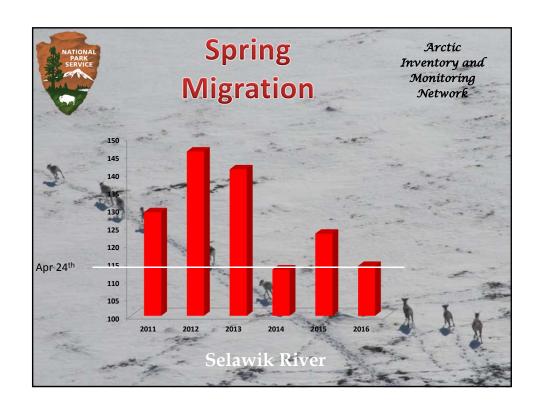


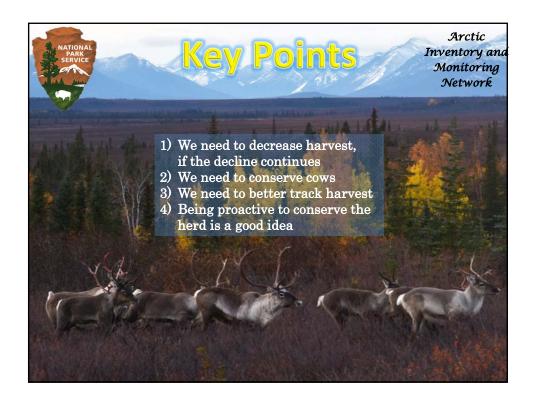














PLACEHOLDER

Technical Committee Report

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Why Are We Doing This?

What are the goals for this working group exercise?

- WAHWG Proposal ideas for BOG and FSB
- WAHWG comments for Proposal 2

Future Management Session

Slide: 2

If we need to reduce harvest by 20% how will we accomplish that?

- Non-residents account for ~2.5% of the WAH harvest
- Non-local residents account for ~2.5% of the WAH harvest
- Even if all non-local harvest were eliminated, the remaining 15% would need to come from local residents.
- The closure to non-federally qualified users doesn't necessarily reduce harvest – it may have just changed where harvest takes place

Future Management Session

If we need to reduce harvest by ~20% how will we accomplish that?

Assumptions for Small Group Discussion

- Non-residents account for ~2.5% of the WAH harvest
- The remaining ~17% would need to come from Alaska residents.
- Opportunity to harvest cows is important, especially in some areas
- Remember- The closure to non-federally qualified users doesn't necessarily reduce harvest – it may have just changed where harvest takes place

WAHWG Management Plan; Appendix 2

Appendix 2: Management Recommendations

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

Future Management Session Slide: 5

What Harvest Management Tools are Available?

Examples of tools used to reduce harvest in western and northwestern Alaska moose and muskox hunts include:

- Change (reduce) hunting season length (most harvest takes place in just 4 months for most communities.)
- Change (reduce) daily bag limit? Create an annual bag limit? (Unit 22 now has a 20 caribou annual bag limit, (20 per year)
- Range wide or Regional Quotas? Seasonal Quotas? (Quotas require timely harvest reporting)

The next several slides describe different regulatory options.

Future Management Session Slide: 6

Option 1- Daily Bag Limit Change

We've heard an idea to use 3 caribou per day (reduction from 5 per day)

Considerations:

- Hunters are used to using daily bag limits
- Not sure if this would reduce harvest (remember, we're working toward that goal)
- May inconvenience hunters by requiring additional hunting trips (Why take 3 when I can carry 5?)
- Potentially allows high harvest levels

Future Management Session

Option 2- Annual Bag Limit Change

• The Unit 22 AC's proposed this idea in spring 2016 and the BOG adopted this into regulation.

Considerations:

- Long hunting season (adaptive to variability of caribou migration patterns)
- 20 caribou per year will incrementally reduce harvest (good for a declining population)
- Improved harvest reporting (the more we know, the more we can hunt)
- Hunters required to pick-up permits for this to work

Future Management Session

Option 2- Annual Bag Limit Change

Car	ibou	continued				
R		in the Kuzitrin River	Twenty caribou total, up to 5 per day; however, calves may not be taken. Permit	Bulls	RC800	no closed season
R	22D	drainage (excluding the Pilgrim River	available online at http://hunt.alaska.gov or in person at Nome ADF&G, and license vendors within Unit 22 beginning June 15	Cows	RC800	July 1-Mar 31
N		drainage) and the Agiapuk River drainages	One bull however, calves may not be taken		НТ	Aug 1-Sept 30

- Hunters like the long seasons for flexibility
- Hunters like the high (n=5) daily bag limit
- Improved hunt reporting good for management

Future Management Session

Option 3- Shorten Hunting Seasons and 5 caribou per day bag limit

 Most caribou harvest (~80%) occurs during a 3-4 month time period

Considerations:

- Continued harvest opportunity during the historic peak harvest time periods (July, August, September, March, April)
- High (n=5) daily bag limit desired by hunters
- Caribou migration is variable and some time periods will be closed to hunting because we want to slowly reduce harvest
- Some hunters may feel pressure to harvest when they can, perhaps more than they want to (get while the getting is good).

Future Management Session

Slide: 1

Option 4- Community Harvest Limits

- Can be used in addition to, but not in lieu of, other hunts.
- Among other additional restrictions, this requires an extensive pre-season application.
- 25 people required to form a group, 1 representative acts as a secretary (applies for the group, reports for the group, etc.).
- Anyone in the group can harvest animals for the entire group (designated hunter).
- Participants can only belong to one group per species, must report harvest within 5 days of take.

Future Management Session

Why Are We Doing This?

What are the goals for this working group exercise?

- WAHWG Proposal ideas for BOG and FSB
- WAHWG comments for Proposal 2

Future Management Session

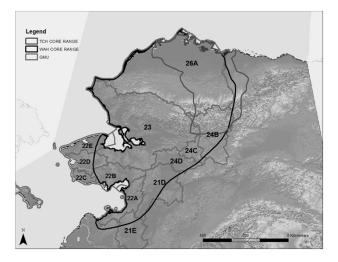
Slide: 12

Western Arctic Caribou Herd

Proposed changes to caribou regulations – Alaska Board of Game

1

Western Arctic and Teshekpuk Caribou Herds



Customary and Traditional Use Findings and Amount Necessary for Subsistence

- 1992
 - Units 21, 22, 23, 24, and 26 (Western Arctic herd)
 - Positive finding
 - ANS of 8,000 12,000
- 2014
 - Units 21, 22, 23, 24, and 26 (Western Arctic herd,
 - Positive finding

Teshekpuk Lake herd)

- ANS of 8,000 - 12,000

3

Seasons and Bag limits, Hunt Administration

- Prior to 2015 year-round seasons (vary by sex), daily bag limits, required registering with the department.
- After 2015 year-round seasons (vary by sex)
 - -Harvest tickets: Units 21, 24, daily bag limit
 - -Registration Permit: Unit 22, daily and annual bag limit
 - -Register with the Department: Units 23, 26A daily by bag limit

Definitions

- "Tier I" reasonable opportunity to engage in the subsistence use is open to all residents desiring to engage in the activity
- "Tier II" reasonable opportunity to engage in the subsistence use cannot be provided to all residents desiring to engage in the activity

5

The Proposals

- Proposal 1 (and 102) Create a separate Amount Necessary for Subsistence (ANS) for Teshekpuk Herd.
- Proposal 2 (and 103) Establish a registration permit for WAH/TCH
- Proposal 3 Require harvest tickets or permits for all caribou hunters north of the Yukon River.
- Proposal 4 (and 100) Restrict aircraft use.

Proposal 1 Create a separate ANS for Teshekpuk Herd

- Legally differentiate between the WAH and TCH
- Provides thresholds for allocating hunting opportunity if/when necessary
- Has the potential to change the ANS for the WAH
- Has the potential to complicate hunting regulations (Tier II)

7

Proposal 2 From Registering to a Registration Permit

- Needed to more closely monitor harvest
- Provides additional tools for the department to flexibly manage the hunt (in season and pre-season)
- Significant change, limited vendors, poor internet

Proposal 3 Remove the exception to Harvest Tickets and Reports for Caribou

- Harvest ticket in Units 21, 24, 26B
- Registration permit in Unit 22
- Proposal applies only to Units 23 and 26A
- Current administration does not work well
- Low participation has led to the department to abandon efforts to follow up in most areas
- Requiring harvest tickets may not improve participation

9

Proposal 4

Institute no-fly zones for caribou hunting in Units 21D, 22, 23, 24 and 26A

 2 places with the most persistent user conflicts already have controlled use areas that prohibit access by aircraft for caribou hunting (Anaktuvuk Pass in Unit 26A and the Noatak River in Unit 23)

Additional Controlled Use Area Proposals

- Proposal 44 to expand the Noatak CUA upriver by approximately 70 miles, changing the border from Sapun Creek to the Cutler River
- Proposal 45 requires big game hunting camps to be spaced three miles apart within the Noatak CUA, and along the Agashashok, Eli, and Squirrel rivers.

11

Questions?

Board of Game meetings/schedule

Arctic/Western Region January 6-9, 2017

Comments due: Thursday, December 22, 2016

Interior-Northeast Region February 17-25, 2017

Comments due: Friday, February 3, 2017

Federal Caribou Regulations Fact Sheet – 2016-2018

Unit 21D Federal Caribou Regulations 2016-2018

Unit 21D – Caribou

Unit 21D—north of the Yukon River and east of the Koyukuk River—caribou may be taken during a winter season to be announced

Winter season to be announced

Unit 21D remainder

5 caribou per day as follows: however calves may not be taken

Bulls may be harvested

July 1 − Oct. 14

Feb. 1 – June 30

Cows may be harvested

Sept. 1 – Mar. 31

Changes from previous Federal regulations include the following:

- 1. A shortening of the bull and cow seasons in Unit 21D remainder.
- 2. A prohibition on the take of calves.

Unit 22 Federal Caribou Regulations 2016-2018

Unit 22—Caribou

Unit 22B, that portion west of Golovnin Bay and west of a line along the west bank of the Fish and Niukluk Rivers to the mouth of the Libby River, and excluding all portions of the Niukluk River drainage upstream from and including the Libby River drainage

5 caribou per day: however calves may not be taken

Oct. 1 – Apr. 30

May 1 – Sept. 30, a

season may be announced

Units 22A, that portion north of the Golsovia River drainage, 22B remainder, that portion of Unit 22D in the Kuzitrin River drainage (excluding the Pilgrim River drainage), and the Agiapuk River Drainages, including the tributaries, and Unit 22E, that portion east of and including the Tin Creek drainage.

5 caribou per day: however calves may not be taken *July 1 – June 30*

Unit 22A remainder

5 caribou per day: however calves may not be taken July 1 – June 30, a season may be announced

Unit 22D, that portion in the Pilgrim River Drainage

5 caribou per day: however calves may not be taken *Oct.* 1 – *Apr.* 30

May 1 - Sept. 30, a

Unit 22C, 22D remainder, 22E

remainder howeve

5 caribou per day: however calves may not be taken July 1 – June 30, a season may be announced

season may be announced

Unit 22 Federal Caribou Regulations 2016-2018 (continued)

Changes from previous Federal regulations include the following:

- 1. There is now a Federal caribou season in all hunt areas in Unit 22.
- 2. Unit 22 split up into five hunt areas compared to three under previous regulations.
- 3. A prohibition on the harvest of calves.
- 4. A prohibition on the harvest of cows removed in Units 22A, 22B remainder, and 22E.

Unit 23 Federal Caribou Regulations 2016-2018

Unit 23 - Caribou

Unit 23 –that portion which includes all drainages north and west of and including the Singoalik River drainage 5 caribou per day as follows, however calves may not be taken:

Bulls may be harvested

July 1 – Oct. 14

Feb. 1 – June 30

Cows may be harvested,

eu,

July 15 – Apr. 30

however cows

accompanied by calves may not be taken July 15-

Oct. 14

Unit 23 remainder

5 caribou per day as

follows: however calves

may not be taken

Bulls may be harvested

July 1 – Oct. 31

Feb. 1 – June 30

July 31 – Mar. 31

Cows may be harvested;

however cows

accompanied by calves

may not be taken July 31-

Oct. 14

Changes from previous Federal regulations include the following:

- 1. Unit 23 split up into two hunt areas.
- 2. A reduction in the harvest limit from 15 to 5 caribou per day.
- 3. A prohibition on the harvest of calves.
- 4. A prohibition on the harvest of cows with calves.
- 5. A shortening of the bull and cow season.

Unit 24 Federal Caribou Regulations 2016-2018

Unit 24—Caribou

Unit 24A—south of the south bank of the Kanuti River— 1 Aug. 10 – Mar. 31 caribou

Unit 24B – that portion south of the south bank of the

Kanuti River, upstream from and including that portion of
the Kanuti–Kilolitna River drainage, bounded by the
southeast bank of the of the Kodosin–Nolitna Creek, then
downstream along the east bank of the Kanuti–Kilolitna
River to its confluence with the Kanuti River – 1 caribou

Unit 24A remainder 5 caribou per day as follows: and 24B remainder however calves may not be taken

> Bulls may be harvested July 1 – Oct. 14 Feb. 1 – June 30

Cows may be harvested July 15 – Apr. 30

Units 24C and 24D 5 caribou per day as follows: however calves may not be taken

Bulls may be harvested July 1 – Oct. 14

Feb. 1 – June 30

Cows may be harvested Sept. 1 – Mar. 31

Changes from previous regulations include the following:

- 1. A shortening of the bull and cow seasons.
- 2. A prohibition on the harvest of calves.
- 3. Caribou regulations for Unit 24 now split up into 4 hunt areas compared to 2 under previous regulations 1) 24A remainder and 24B remainder area mostly north of the north of the Kanuti R. Drainage; 2) 24A south of the Kanuti R. drainage; 3) 24B south of the Kanuti R. Drainage (Ray Mtns); 4) 24C and 24D.

Unit 26A Federal Caribou Regulations 2016-2018

Unit 26—Caribou

Unit 26A— that portion of the Colville River drainage upstream from the Anaktuvuk River, and drainages of the Chukchi Sea south and west of, and including the Utukok River drainage

Up to 5 caribou per day; however calves may not be taken

Bulls may be harvested

July 1 – Oct. 14

Dec. 6 – June 30

Cows may be

July 16 - Mar.15

harvested; however cows accompanied by calves may not be taken

July 16-Oct. 15

Unit 26A remainder

5 caribou per day; however calves may not

he taken

Bulls may be harvested

July 1 – Oct. 15

Dec. 6 – June 30

July 16 – Mar.15

Up to 3 cows per day

may be harvested; however cows

accompanied by calves may not be taken July

16-Oct. 15

Unit 26A Federal Caribou Regulations 2016-2018 (continued)

Changes from previous regulations include the following:

- 1. Unit 26A split up into two hunt areas in recognition of the seasonal use and migration patterns of the Western Arctic Caribou Herd and the Teshekpuk Caribou Herd. The north half (Unit 26A remainder) is the primary area for the Teshekpuk Caribou Herd and the south half (Unit 26A, Colville River drainage) is the primary area for the Western Arctic Caribou Herd.
- 2. A reduction in the harvest limit from 10 to 5 caribou per day.
- 3. A shortening of the bull and cow seasons.
- 4. A prohibition on the harvest of calves.
- 5. A prohibition on the harvest of cows with calves.

Unit 26B Federal Caribou Regulations 2016-2018

Unit 26B – that portion 5 caribou per day as south of 69°30' N. Lat. follows:

south of 69°30' N. Lat. f and west of the Dalton

Highway

Bulls may be harvested July 1 - Oct. 14

Dec. 10 – June. 30

Cows may be harvested July 1 - Apr. 30

Unit 26B remainder – 5 caribou per day

Bulls may be harvested July 1 – June 30

Cows may be harvested July 1 - May 15

You may not transport more than 5 caribou per regulatory year from Unit 26 except to the community of Anaktuvuk Pass.

Changes from previous regulations include the following:

- 1. Unit 26B was split up into two hunt areas.
- 2. A reduction in the harvest limit from 10 to 5 caribou per day.
- 3. A shortening of the bull and cow seasons in the hunt area south of 69°30' and west of the Dalton Hwy.
- 4. The cow season allows for the take from the Central Arctic Caribou Herd (June to mid-October) and Teshekpuk Caribou Herd (mid-October to May).
- 5. No prohibition on the take of calves because most of the calf harvest is likely to come from the Central Arctic Caribou Herd during the summer from August to September.

Caribou Harvest Regulation Summaries

for all units within the range of the Western Arctic Herd

Prepared for the Western Arctic Caribou Herd Working Group

Updated Dec. 2016

GMU 21D

Summary of Caribou Harvest Regulations

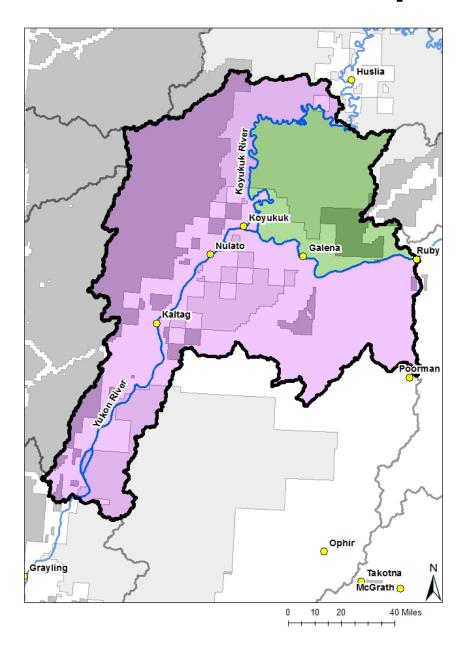
Note: color of table header lines up with color of areas on map, back side of page

	TABLE 21-1: MOST OF UNIT 21D				
	21D Remainder				
	State (Nonresident)	State (Resident)	Federal		
Bag Limit	1 bull	5 /day	5 /day		
Open Seasons	Bulls: Aug. 1 – Sept. 30	Bulls: Feb. 1 – Oct. 14 Cows: Sept. 1 – Mar. 31	Bulls: Feb. 1 – Oct. 14 Cows: Sept. 1 – Mar. 31		
Closures	Cows closed Calves closed	Bulls closed Oct. 15 – Jan. 31 Cows closed Apr. 1 – Aug. 31 Calves closed	Bulls closed Oct. 15 – Jan. 31 Cows closed Apr. 1 – Aug. 30 Calves closed		

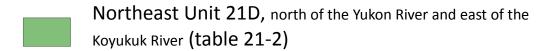
TABLE 21-2: NORTHEAST UNIT 21D North of Yukon River & east of Koyukuk River				
	State (Nonresident) State (Resident) Federal			
Bag Limit		2 caribou	ТВА	
Open	No open season	Winter season may be	Winter season may be	
Seasons		announced	announced	

GMU 21D

Caribou Hunt Areas Map







Summary of Caribou Harvest Regulations

Note: Color of table header lines up with color of areas on map, back side of page

TABLE 22-1: UNIT 22 EAST Northern part of 22A, eastern parts of 22B, 22D and 22E ¹					
	State (Nonresident) State (Resident) Federal				
Bag Limit	1 bull	5 / day; 20 total / year	5 / day		
Open Seasons	Bulls: Aug 1 – Sept. 30	Bulls: open year-round Cows: July 1 – March 31	Bulls & cows: open year-round		
Closures	Cows closed Calves closed	Cows closed April 1 – Aug. 31 Calves closed	Calves closed		

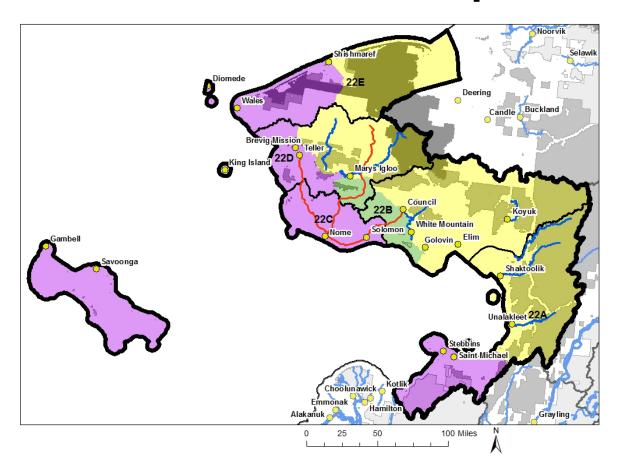
	TABLE 22-2: CENTRAL 22 Western 22B and 22D Pilgrim River				
	State (Nonresident)	State (Resident)	Federal		
Bag Limit	1 bull	5 / day; 20 total / year	5 / day		
Open Seasons	Bulls: May Be Announced	Bulls: Oct. 1 – Apr. 30 Cows: Oct. 1 – Mar. 31	Bulls & cows: Oct. 1 – Apr. 30		
		May Be Announced	May Be Announced May 1 – Sept. 30		
Closures	Cows closed Calves closed	Bulls closed May 1 – Sept. 30 Cows closed Apr. 1 – Sept. 30 Calves closed	Calves closed		

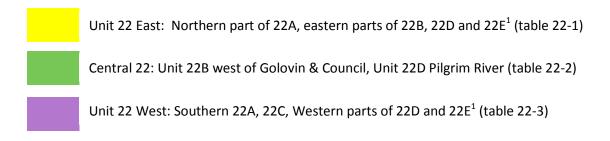
TABLE 22-3: UNIT 22 WEST Southern 22A, 22C, Western parts of 22D and 22E ¹					
	State (Nonresident) State (Resident)1 Federal				
Bag Limit	1 bull	5 / day; 20 total / year	5/day		
Open Seasons	Bulls: May Be Announced	May Be Announced	May Be Announced		
Closures	Cows closed Calves closed	Calves closed	Calves closed		

<u>All parts of Unit 22:</u> State hunts now require a registration permit, RC800, with mandatory harvest reporting within 15 days of taking the legal bag limit (20 caribou) or the end of the season (July 15).

1= State and Federal boundaries to subdivide unit 22E differ. See back of page for more info.

Caribou Hunt Areas Map





1= State and Federal hunt area boundaries differ in Unit 22E. State description of 22E east is "east of and including the Sanaguich River drainage." Federal description for 22E east is "that portion east of and including the Tin Creek drainage." Map above depicts State hunt areas.

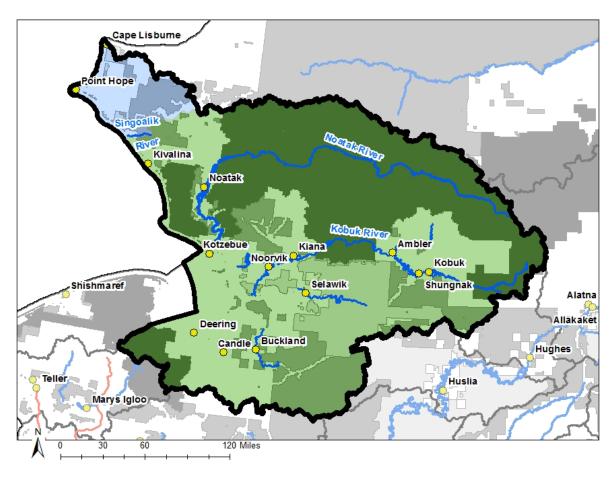
Summary of Caribou Harvest Regulations

Note: Color of table header lines up with color of areas on map, back side of page

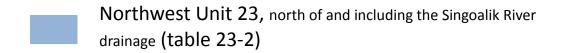
	TABLE 23-1: MOST OF UNIT 23 23 Remainder			
	State (Nonresident)	State (Resident)	Federal	
Bag Limit	1 bull	5 /day	5 /day	
Open Seasons	Bulls: Aug. 1 – Sept. 30	Bulls: Feb. 1 – Oct. 14 Cows: Sept. 1 – Mar. 31	Bulls: Feb. 1 – Oct. 31 Cows: July 31 – Mar. 31 Only cows without calves from July 31 – Oct. 14	
Closures	Cows closed Calves closed	Bulls closed Oct. 15 – Jan. 31 Cows closed Apr. 1 – Aug. 31 Calves closed	Bulls closed Nov. 1 – Jan. 31 Cows closed Apr. 1 – July 30 No take of cows with calves July 31 – Oct. 14 Calves closed	

	TABLE 23-2: NORTHWEST UNIT 23 Pt. Hope area; north of Singoalik River				
	State (Nonresident)	State (Resident)	Federal		
Bag Limit	1 bull	5 /day	5 /day		
Open Seasons	Bulls: Aug. 1 – Sept. 30	Bulls: Feb. 1 – Oct. 14 Cows: July 15 – Apr. 30	Bulls: Feb. 1 – Oct. 14 Cows: July 15 – April 30 Only cows without calves from July 15 – Oct. 14		
Closures	Cows closed Calves closed	Bulls closed Oct. 15 – Jan. 31 Cows closed May 1 – July 14 Calves closed	Bulls closed Oct. 15 – Jan. 31 Cows closed May 1 – July 14 No take of cows with calves July 15 – Oct. 14 Calves closed		

Caribou Hunt Areas Map







Summary of Caribou Harvest Regulations

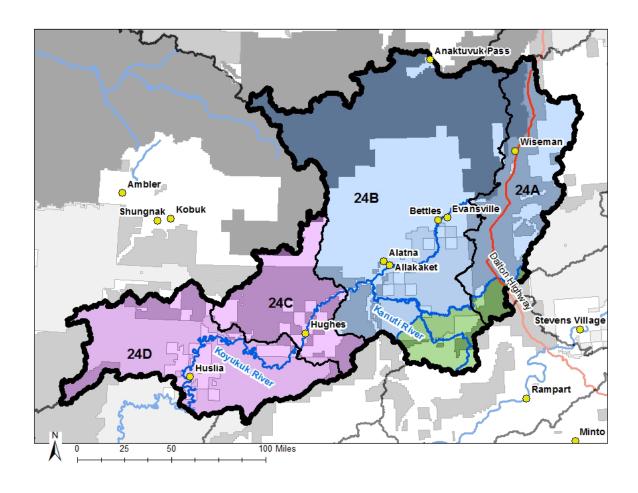
Note: Color of table header lines up with color of areas on map, back side of page

	TABLE 24-1: EASTERN UNIT 24				
	Unit 2	4A Remainder; Unit 24B Remaind	er		
	State (Nonresident) State (Resident) Federal				
Bag Limit	1 bull	5 /day	5 /day		
Open Seasons	Bulls: Aug. 1 – Sept. 30	Bulls: Feb. 1 – Oct. 14 Cows: July 15 – Apr. 30	Bulls: Feb. 1 – Oct. 14 Cows: July 15 – Apr. 30		
Closures	Cows closed Calves closed	Bulls closed Oct. 15 – Jan. 31 Cows closed May 1 – July 14 Calves closed	Bulls closed Oct. 15 – Jan. 31 Cows closed May 1 – July 14 Calves closed		

TABLE 24-2: EASTERN UNIT 24 SOUTH OF KANUTI RIVER Southern parts of 24A and 24B, Ray Mountain Herd hunt area				
	State (Nonresidents) State (Residents) Federal			
Bag Limit	1 caribou	1 caribou	1 caribou	
Open Seasons	Aug. 10 – Sept. 30	Aug. 10 – March 31	Aug. 10 – March 31	

TABLE 24-3: WESTERN UNIT 24					
	Units 24C and 24D				
	State (Nonresident)	State (Resident)	Federal		
Bag Limit	1 bull	5 /day	5 /day		
Open Seasons	Bulls: Aug. 1 – Sept. 30	Bulls: Feb. 1 – Oct. 14 Cows: Sept. 1 – Mar. 31	Bulls: Feb. 1 – Oct. 14 Cows: Sept. 1 –Mar. 31		
Closures	Cows closed Calves closed	Bulls closed Oct. 15 – Jan. 31 Cows closed Apr. 1 – Aug. 31 Calves closed	Bulls closed Oct. 15 – Jan. 31 Cows closed Apr. 1 – Aug. 31 Calves closed		

Caribou Hunt Areas Map



- Eastern Unit 24: 24A and 24B remainder (table 24-1)
- Eastern Units 24A & 24B South of Kanuti River (table 24-2)
- Western Unit 24: 24C and 24D (table 24-3)

GMU 26A

Summary of Caribou Harvest Regulations

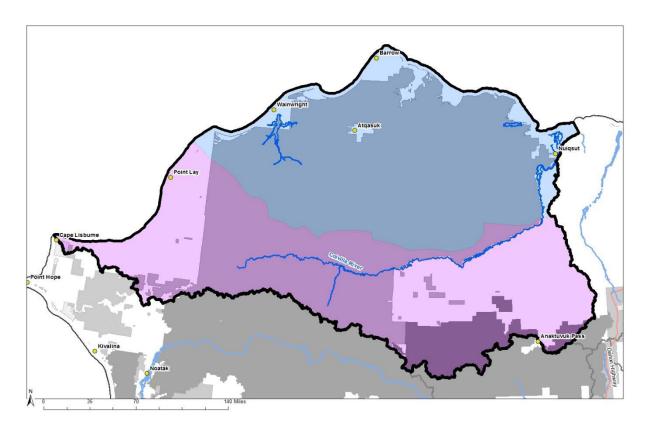
Note: Color of table header lines up with color of areas on map, back side of page

	TABLE 26A-1: SOUTHERN UNIT 26A Upper Colville River & Chukchi drainages (mainly Western Arctic Herd area)				
	State (Nonresident)	State (Resident)	Federal		
Bag Limit	1 bull	5 /day	5 /day		
Open Seasons	Bulls: July 15 – Sept. 30	Bulls: Feb. 1 – Oct. 14 Cows: July 15 – Apr. 30	Bulls: Dec. 6 – Oct. 14 Cows: July 16 – Mar. 15 Only cows without calves from July 16 – Oct. 15		
Closures	Cows closed Calves closed	Bulls closed Oct. 15 – Jan. 31 Cows closed May 1 – July 14 Calves closed	Bulls closed Oct. 15 – Dec. 5 Cows closed Mar. 16 – July 15 No take of cows with calves July 16 – Oct. 15 Calves closed		

	TABLE 26A-2: NORTHERN UNIT 26A Unit 26A Remainder (mainly Teshekpuk Lake Herd area)				
	State (Nonresidents)	State (Residents)	Federal		
Bag Limit	1 bull	5 caribou/day, 3 cows/day max., Jan. 1 – Mar. 15 5 bulls/day Mar. 16 – July 15	5/day; no more than 3 cows/day		
		5 caribou/day, 3 cows/day max., no cows w/ calves Jul. 16 – Oct. 15 3 cows/day Oct. 16 – Dec. 31			
Open	Bulls: July 15 – Sept. 30	Bulls: Jan. 1 – Oct. 15	Bulls: Dec. 6 – Oct. 15		
Seasons		Cows: July 16 – March 15 Only cows without calves from July 16 – Oct. 15	Cows: July 16 – Mar. 15 Only cows without calves from July 16 – Oct. 15		
Seasonal	Cows closed	Bulls closed Oct. 16 – Dec. 31	Bulls closed Oct. 16 – Dec. 5		
Closures	Calves closed	Cows closed Mar. 16 – July 15 No take of cows with calves July 16 – Oct. 15 Calves closed	Cows closed Mar. 16 – July 15 No take of cows with calves July 16 – Oct. 15 Calves closed		

GMU 26A

Caribou Hunt Areas Map





Southern Unit 26A: Colville River drainage upstream from the Anaktuvuk River, and drainages of the Chukchi Sea south and west of, and including the Utukok River (table 26A-1)



Northern Unit 26A: 26A remainder (table 26A-2)

GMU 26B

Summary of Caribou Harvest Regulations

Note: Color of table header lines up with color of areas on map, back side of page

TABLE 26B-1: 26B SOUTHWEST South of 69° 30'N. and west of Dalton Highway					
	State (Residents and Nonresidents)	Federal			
Bag Limit	5 caribou total / year	5 /day			
Open	Bulls: May 16 – Oct. 10	Bulls: Dec. 10 – Oct. 14			
Seasons	Cows: July 1 – Oct. 10	Cows: July 1 – April 30			
Closures	Bulls closed Oct. 11 – May 15	Bulls closed Oct. 15 – Dec. 9			
	Cows closed Oct. 11 – June 30	Cows closed May 1 – June 30			

TABLE 26B-2: 26B SOUTHEAST South of 69° 30'N. and east of Dalton Highway				
	State (Residents and Nonresidents)	Federal ¹		
Bag Limit	5 caribou total / year	5 / day		
Open	Bulls: open year-round	Bulls: open year-round		
Seasons	Cows: July 1 – May 15	Cows: July 1 – May 15		
Closures	Cows closed May 16 – June 30	Cows closed May 16 – June 30		

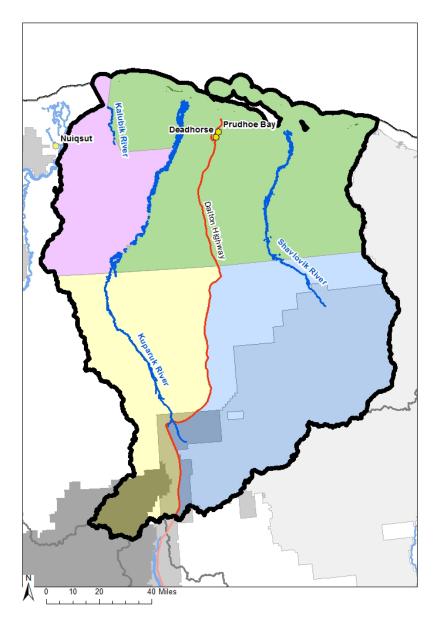
TABLE 26B-3: 26B NORTHWEST North of 69° 30'N. and west of Kuparuk River/Kalubik Creek					
	State (Nonresident)	State (Resident)	Federal ¹		
Bag Limit	5 caribou total / year	5 / day	5 / day		
Open Seasons	July 1 – Apr. 30	Bulls: open year-round Cows: July 1 – May 15	Bulls: open year-round Cows: July 1 – May 15		
Closures		Cows closed May 16 – June 30	Cows closed May 16 – June 30		

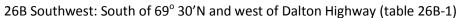
TABLE 26B-4: 26B NORTHEAST					
26B remainder					
	State (Resident and Nonresident)	Federal ¹			
Bag Limit	5 caribou total / year	5 / day			
Open	July 1 – April 30	Bulls: open year-round			
Seasons		Cows: July 1 – May 15			
Closures		Cows closed May 16 – June 30			

1 = Under Federal regulations, 26B southeast, northwest and northeast are all in the same hunt area with the same regulations. Tables 2, 3 and 4 here describe the different State hunt areas with the same Federal info copied into each.

GMU 26B

Caribou Hunt Areas Map





26B Southeast: South of 69° 30'N and east of Dalton Highway (table 26B-2)

26B Northwest: North of 69° 30'N and west of Kuparuk River to $70^{\circ}10'$ N $149^{\circ}04'$ W, then west 22 miles to $70^{\circ}10'$ N $149^{\circ}56'$ W, then following the east bank of Kalubik Creek to the Arctic Ocean (table 26B-3)

26B Northeast: 26B remainder (state definition) (table 26B-4)

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Western Arctic Caribou Herd Working Group – Executive Committee Report December 14-15, 2016 Anchorage, AK

The Western Arctic Caribou Herd Working Group (WG) Executive Committee acted on several items on behalf of the full WG since the December 2015 meeting:

- 1. February 17, 2016. Submitted comments to Alaska Board of Game regarding Proposal 73, indicating that the WACH Working Group did not support establishing a minimum caliber of .243 for caribou. (Letter attached)
- 2. June 2016. Approved the *Caribou Trails* newsletter for printing and distribution.
- 3. October 26, 2016. Met via teleconference to discuss and identify topics for the 2016 Working Group meeting agenda. In addition, selected alternate Working Group members for the Lower Kobuk River and Upper Kobuk River seats, based on recommendations received from entities in those communities.

Western Arctic Caribou Herd Working Group

Goal: To work together to ensure the long-term conservation of the Western Arctic Caribou Herd and the ecosystem on which it depends, to maintain traditional and other uses for the benefit of all people now and in the future.

Chair: Vern Cleveland, Sr.

Vice-Chair: Cyrus Harris

P.O. Box 175, Nome, AK 99762

February 17, 2016

ATTN: Board of Game Comments Alaska Department of Fish and Game Boards Support Section P.O. Box 115526 Juneau, AK 99811-5526

SUBJECT: **Board of Game Proposal 73 – 5 AAC 92.085 Unlawful methods of taking big game; exceptions.** Establish minimum caliber ammunition for caribou hunts as follows: Must use any caliber .243 or larger for caribou.

To the Alaska Board of Game:

At the December 15-16, 2015 meeting of the Western Arctic Caribou Herd Working Group, the working group members voted unanimously to submit a comment to the Board of Game opposing regulatory proposal 73.

The Working Group does not support establishing a minimum caliber of .243 for caribou. Hunters in the region customarily and successfully use smaller caliber ammunition to harvest caribou. Requiring .243 caliber ammunition would cause excessive damage to the meat and would place an unnecessary hardship on hunters, many of whom would have to purchase new rifles and ammunition. The Working Group does not see a reason for this regulatory change and opposes the proposal.

Thank you for this opportunity to comment.

On behalf of the Western Arctic Caribou Herd Working Group,

Vern Cleveland, Sr., Chair

Vern Cleveland Sr.

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Resource Development Committee Report

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Communications Committee Report

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ADFG Agency Report: Western Arctic Caribou Herd Working Group

• The Alaska Department of Fish and Game (ADFG) Division of Wildlife Conservation (Region 5: Arctic/Western Region) currently allocates 36% of our operating budget for arctic caribou herd management and research. We have recently rehired our full-time Wildlife Biologist based in Kotzebue who is assigned to conduct Western Arctic Herd (WAH) research and management activities. Biologists from our Nome, Kotzebue, Barrow and Fairbanks offices also assist with caribou fieldwork and data analyses. Lincoln Parrett, is our Region 5 Research Coordinator and is assigned coordination of research and management activities for both the Teshekpuk Lake and Western Arctic Caribou herds. Adam Craig, is our Region 5 biometrician based in Anchorage who assists with management and research programs throughout western and northwestern Alaska, and has enhanced our capacity for project design and data analyses.

Region 5 is recruiting for several new positions that will enhance our biological programs. These positions include an Intensive Management Research Biologist, a Moose Research Biologist, and a Muskox Research Biologist. These positions will be supervised by Lincoln Parrett and will work on projects in Unit 26A, Unit 23, Unit 22, and Unit 18.

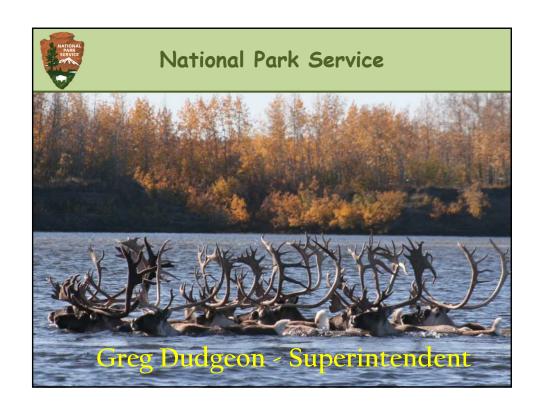
- Field activities in our WAH program include a biennial (currently annual) photo census, fall composition surveys, spring recruitment surveys, caribou collaring at Onion Portage, animal collection for disease and body condition assessment, range-wide radio telemetry surveys and harvest assessment surveys.
- Our Education Associate for Region 5, Kari Rasmussen, is based in Nome and is assigned
 to assist with WAH caribou wildlife education efforts. These include school visits,
 preparation of the WAH Working Group's annual *Caribou Trails* newsletter, and
 coordinating school student participation at the Onion Portage caribou collaring effort.
- A significant activity of our staff is providing comments to Alaska Department of Transportation and Public Facilities, Bureau of Land Management, and other agencies regarding the potential impacts that road and development projects may have on caribou movements and distribution.

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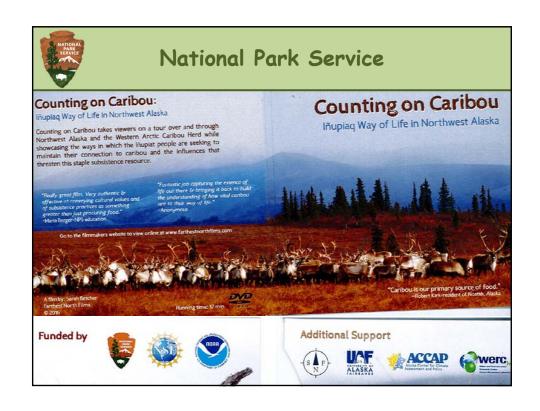
BLM Management Agency Report

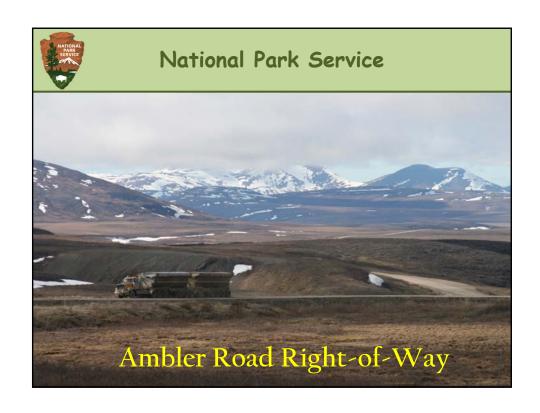
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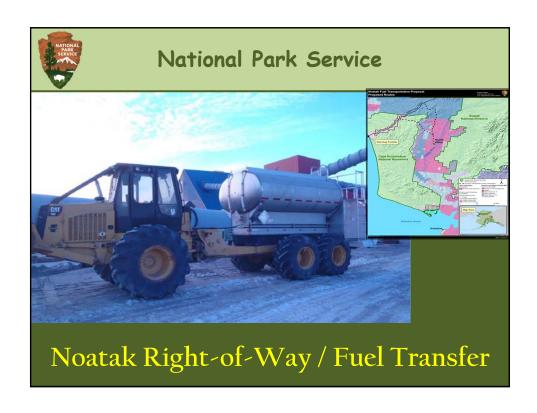














U.S. Fish and Wildlife: Selawik National Wildlife Refuge Agency Report to the Western Arctic Caribou Herd Working Group December 2016

Refuge Personnel Changes:

• Martha *Siikauraq* Whiting joined Selawik Refuge as our Environmental Educator in early 2016. We are thrilled to have her!

Refuge Activities and Projects related to Western Arctic Caribou Herd:

- Coordinated with other federal agencies to produce fact sheets on current regulations and closure of federal public lands to caribou hunting by non-federally qualified users (see attached)
- Extensive outreach efforts to tribes, subsistence users, commercial operators, and others on closure of federal public lands to caribou hunting by non-federally qualified users, including radio PSAs in Inupiaq and English
- Visited four villages (Noorvik, Selawik, Buckland, and Deering) to explain closure of federal public lands to caribou hunting by non-federally qualified users
- Produced a series of posts for the Selawik Refuge Facebook page on caribou and hunting regulations (see attached)
- Supported Selawik Science-Culture Camp where students learn to hunt caribou
- Provided funding for and accompanied Selawik School students to ADF&G's Onion Portage caribou collaring project for four days
- Assisted ADF&G with the Working Group's web page and newsletter
- Updated a database to record Working Group member's comments on the status of the herd
- Provided \$28K in funding for Working Group annual meeting



Selawik students at Onion Portage for caribou collaring, Sept 2016.



U.S. Fish & Wildlife Service

Caribou Hunting Regulations For Residents of Unit 23

What You Need to Know

Updated August 2016

Regulations for caribou harvest have recently changed because of a decline in our region's caribou herd. Hunters need to be aware of the following rules.

This is a summary of caribou hunting regulations for most of Northwest Alaska (Game Management Unit 23). Some parts of Unit 23 (Point Hope area) have slightly different regulations. Call us or look in the full regulation booklets for details.

State Resident Hunting Regulations (All Alaska Residents)	Federal Subsistence Hunting Regulations (Permanent Residents of Unit 23)			
5 caribou per day				
No harvest of calves (any caribou under 12 months old)				
Bulls CLOSED Oct. 15 - Jan. 31	Bulls CLOSED Nov. 1 - Jan. 31			
Cows CLOSED April 1 - Aug. 31	Cows CLOSED April 1 - July 30; No taking of cows with calves July 31 - Oct. 14			

Please Note: Hunting regulations vary somewhat depending on the land ownership status.

- You must follow State regulations on State, private, and Native-owned lands.
- You must follow Federal regulations on Cape Krusenstern National Monument and Kobuk Valley National Park (where only residents of the NANA Region may hunt).
- Both sets of regulations apply on other Federal public lands.

Have Questions? Yes, this is complicated. Please feel free to contact us for more information:

Selawik National Wildlife Refuge U.S. Fish & Wildlife Service Kotzebue, AK (907) 442-3799 or (800) 492-8848 email: susan_georgette@fws.gov Alaska Department of Fish & Game Kotzebue, AK (907) 442-3420 or (800) 478-3420 email: esther.slaathaug@alaska.gov National Park Service Kotzebue, AK (907) 442-3890 or (800) 478-7252 www.nps.gov/noat/contacts.htm

This fact sheet is a publication of the Selawik National Wildlife Refuge in Kotzebue, in consultation with the Alaska Department of Fish and Game and the National Park Service.

Changes in Caribou Hunting Regulations in Unit 23

Frequently Asked Questions on Closure of Federal Public Lands to Non-Federally Qualified Users
July 2016



Caribou hunting regulations have CHANGED in Game Management Unit 23 for some hunters for the current regulatory year. Beginning July 1, 2016, Federal public lands in Unit 23 are CLOSED to caribou hunting by non-Federally qualified users for one year. This is the result of the Federal Subsistence Board approving Wildlife Special Action WSA16-01 in April 2016, a request submitted by the Northwest Arctic Subsistence Regional Advisory Council.

This fact sheet answers common questions about this closure. The main highlights are:

- Only "Federally qualified users" (see FAQs below for more info) are allowed to hunt caribou on Federal public lands during this closure.
- "Federal public lands" in Unit 23 are lands and waters managed by the National Park Service, U.S. Fish & Wildlife Service, and Bureau of Land Management. Other State and private lands, including Alaska Native corporation lands (NANA and KIC lands) are NOT subject to this closure.
- This ONLY applies to caribou hunting.
- This ONLY applies to Game Management Unit 23.
- This closure is in effect for one regulatory year (July 1, 2016 through June 30, 2017).
- National Park Service lands have additional restrictions on eligibility to hunt on Cape Krusenstern National Monument, Kobuk Valley National Park and Gates of the Arctic National Park (see #2 below for more information).

For more information, please contact the appropriate land manager below:

National Park Service	U.S. Fish & Wildlife Service	Bureau of Land Management
Lois Dalle-Molle	Susan Georgette	Bruce Seppi
Acting Superintendent	Refuge Manager	Biologist
(907) 442-3890	(907) 442-3799	(907) 267-1282
lois_dalle-molle@nps.gov	susan_georgette@fws.gov	bseppi@blm.gov



1. Who is eligible to hunt caribou on federal public lands in Unit 23?

Beginning July 1, 2016, ONLY "Federally qualified users" are eligible to hunt caribou on Federal public lands in Game Management Unit 23. "Federally qualified users" are rural residents who have been determined by the Federal Subsistence Board to have a customary and traditional use of caribou in Unit 23 (see #2 for more information).

2. Who is a "Federally qualified user" for caribou in Unit 23?

You must have your primary, permanent place of residence in one of the following units or communities to be a "Federally qualified user" eligible to hunt caribou on Federal public lands in Unit 23:

Eligible Game Management Units	This includes but is not limited to these communities:	
Unit 21D (west of the Koyukuk and	Galena, Kaltag, Koyukuk, and Nulato	
Yukon Rivers and Galena)		
Unit 22	Brevig Mission, Council, Elim, Gambell, Golovin, Koyuk, Little	
	Diomede, Nome, Saint Michael, Savoonga, Shaktoolik,	
	Shishmaref, Stebbins, Teller, Unalakleet, Wales, and White	
	Mountain	
Unit 23	Ambler, Buckland, Deering, Kiana, Kivalina, Kobuk, Kotzebue,	
	Noatak, Noorvik, Point Hope, Selawik, and Shungnak	
Unit 24 (including residents of Wiseman	Alatna, Allakaket, Anaktuvuk Pass, Bettles, Evansville,	
but not including other residents of the	Hughes, Huslia, Wiseman	
Dalton Highway Corridor Management		
Area)		
Unit 26A	Atqasuk, Barrow, Nuiqsut, Point Lay, and Wainwright	

Anyone permanently residing in a Game Management Unit NOT on this list, including areas such as Anchorage, Fairbanks, Mat-Su Valley, Kenai Peninsula, Juneau, etc., is a "non-Federally qualified user" and is NOT eligible to hunt caribou on Federal public lands in Unit 23 beginning July 1, 2016. This includes former residents (both Alaska Native and non-Native) of the units listed above, even if they grew up in those units. Non-Federally qualified users may still hunt caribou in Unit 23 on Statemanaged lands and private lands.

IMPORTANT NOTE: The National Park Service has additional restrictions on who can hunt for any species in Cape Krusenstern National Monument, Kobuk Valley National Park, and Gates of the Arctic National Park. These areas are open ONLY to subsistence hunters who reside in "resident zone communities." For Cape Krusenstern National Monument and Kobuk Valley National Park, "resident zone communities" include all communities within the NANA region. For Gates of the Arctic National Park, "resident zone communities" include the communities of Ambler, Kobuk, Shungnak, Anaktuvuk Pass, Nuiqsut, Wiseman, Bettles/Evansville, Alatna, Allakaket, and Hughes.

3. Where does this closure apply?

This closure applies to "Federal public lands." Under Federal law, Federal public lands in Unit 23



include: 1) all Federal land, and 2) **all waters** within and adjacent to the external boundaries of national wildlife refuges (Selawik National Wildlife Refuge) and National Park Service units (Cape Krusenstern National Monument, Kobuk Valley National Park, Noatak National Preserve, and the portions of Gates of the Arctic National Park and Preserve and Bering Land Bridge National Preserve within Unit 23).

On Bureau of Land Management (BLM) lands, the closure applies to BLM lands and to non-navigable waters adjacent to BLM lands. Please see the enclosed map for general location of Federal public lands in Unit 23; contact the respective land manager for information about specific areas.

4. How long will this closure be in effect?

Unless rescinded earlier, this closure of caribou hunting to non-Federally qualified users is in effect for one regulatory year beginning July 1, 2016 through June 30, 2017.

5. If I am NOT eligible to hunt caribou, can I help someone who is eligible?

If you are not eligible to hunt caribou, you can be present but CANNOT participate in the taking of caribou on Federal public lands in Unit 23. Once the take is complete, you may assist the hunter with the cleaning, salvage, or processing of a legally harvested animal. Please see the definitions section at the end of this fact sheet for the definition of "taking" or consult with the appropriate Federal land manager.

6. If I'm eligible to hunt, can I send or give caribou to people not eligible to hunt?

Yes. You can share legally taken caribou with whoever you want.

7. Can a non-Federally qualified user take caribou from a boat or while caribou are swimming?

A non-Federally qualified user CANNOT take caribou in or from the water in places where rivers and water bodies are subject to Federal subsistence regulations (see #3). This includes **all waters** within the exterior boundaries of national parks, national preserves, national monuments, and national wildlife refuges in Unit 23. These waters are considered "Federal public lands" and are closed to the taking of caribou beginning July 1, 2016 by non-Federally qualified users.

The regulations are different for Bureau of Land Management (BLM) lands. The closure applies to BLM lands and to non-navigable waters adjacent to BLM lands. In areas generally under BLM management, such as the Squirrel River drainage, rivers or water bodies adjacent to lands owned or selected by the State of Alaska or Alaska Native corporations or other private lands are not subject to this closure. This includes much of the lower Squirrel River corridor. This means that non-Federally qualified users are not prohibited from hunting swimming caribou in waters adjacent to State or Alaska Native corporation lands in the Squirrel River area, if they otherwise would be allowed to do so. Please contact BLM for more details.

8. Can a non-Federally qualified user take caribou on gravel bars along navigable waters below the "mean (or ordinary) high water mark" when the adjacent uplands are Federal public lands?



When the adjacent uplands are Federal public lands, the strip of land—often a gravel or mud bar—between the edge of a river and the "mean high water mark" is open **in some areas** to caribou hunting by non-Federally qualified users. The following are general guidelines; non-Federally qualified users are strongly encouraged to contact the respective Federal agency for more information prior to hunting.

- National parks and monuments (including waters and gravel bars) are closed to all hunting except by those eligible under National Park Service and Federal subsistence regulations.
- Non-Federally qualified users are allowed to hunt caribou between the edge of a river and the mean high water mark along navigable waters in the following areas during this closure:
 - Noatak National Preserve
 - o Bering Land Bridge National Preserve within Unit 23
 - o Gates of the Arctic National Preserve within Unit 23
 - Selawik National Wildlife Refuge
 - Bureau of Land Management lands

PLEASE NOTE: In the places listed above where non-Federally qualified users are allowed to hunt caribou between the edge of a river and the mean high water mark, both the hunter AND the caribou must be above the actual water line but below the mean high water mark for the harvest to be legal. Hunters are strongly urged to use caution and extremely good judgment if hunting in this narrow strip of land to avoid the risk of violating the law.

9. How do I know where the "mean high water mark" is?

In the field, the "mean (or ordinary) high water mark" generally means where vegetation starts along a water body. The technical definition of mean (or ordinary) high water mark is defined at the end of this fact sheet.

<u>10. Can a non-Federally qualified user who legally takes a caribou below the mean high water</u> mark bring their game back to a camp on Federal public lands above the mean high water mark?

Yes, but the hunter should have proof that the caribou was taken below the mean high water mark. A cell phone photo of the kill site is one way to do this.

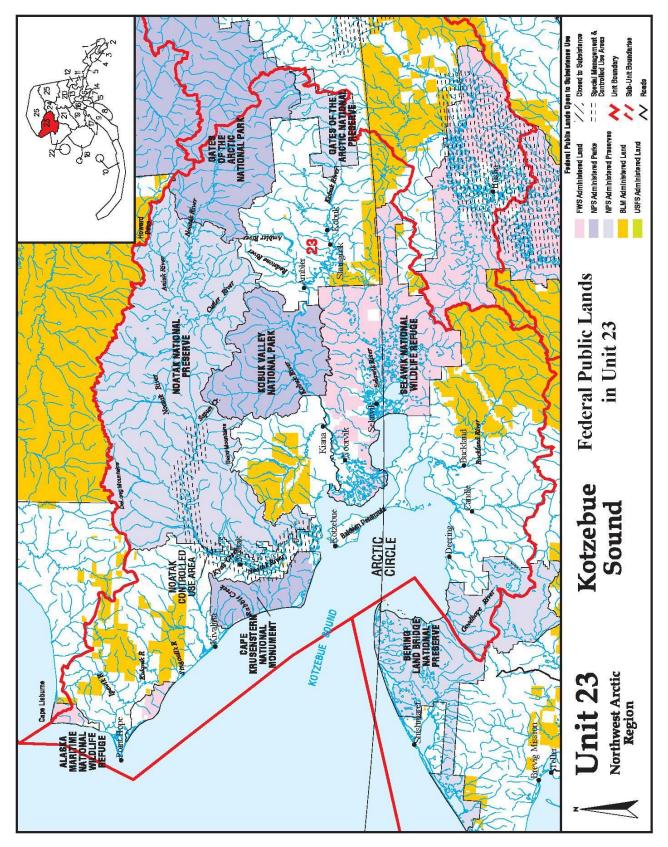
DEFINITIONS

Family means all persons related by blood, marriage, or adoption or any other person living within the household on a permanent basis (from 50 CFR 100.4).

Take or taking as used with respect to fish or wildlife, means to pursue, hunt, shoot, trap, net, capture, collect, kill, harm, or attempt to engage in any such conduct (from 50 CFR 100.4).

The *ordinary high water mark* on a non-tidal river is the line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impression on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation; the presence of litter and debris; or other appropriate means that consider the characteristics of the surrounding areas [from 33 CFR 329.11(a)(1)].







Selawik National Wildlife Refuge

Facebook Posts on Caribou, Dec. 2015 – Nov. 2016

Date	Post	Reach	Likes/ Shares
11/22	Heard about the herd? Join in Dec. 14th and 15th as hunters, biologists, and others from Atqasuk and Anaktuvuk down to Shaktoolik and Shishmaref - across the range of the Western Arctic Caribou Herd - meet in Anchorage to discuss this amazing resource and how to conserve and manage for present and future use. Location, agenda and more at https://westernarcticcaribou.net//working-group-meeting-2/	721	28
10/19	Northwest Arctic Caribou Hunters: season is now CLOSED for bull caribou on State and private lands in Unit 23 (including Native Corporation lands), as of Oct. 15. Hunting for bull caribou on Federal Lands will close Nov. 1. Bull caribou are not preferred for food during this time due to physical changes during rut ("going stink"). Cow caribou are open for harvest, bag limit of 5 per day, but as the herd is still in decline all hunters are asked to take only what they need and conserve the cows if possible. See a caribou regulations summary at https://www.fws.gov//Selaw/PDF/caribou.fact.sheet.2016.pdf	1284	24
9/30	This September, Selawik High School students were able to travel to Onion Portage on the Kobuk River to take part in caribou collaring. These radio/satellite collars are essential tools for biologists to study the Western Arctic Herd as they move across their immense home range. Thank you to Alaska Department of Fish and Game - Official for hosting the students. Selawik Refuge Outreach Specialist Brittany Sweeney handled logistics for the trip and was behind the camera. The kids did a great job representing #SelawikStrong and made the most of the hands-on learning!	628	60

8/30	New caribou count number for western arctic herd: 201,000 animals. Read the press release from the Alaska Department of Fish & Game, who conducted the survey: http://www.adfg.alaska.gov/index.cfm July Survey Suggests Western Arctic Caribou Herd Decline is Leveling Out, Alaska Department of Fish and Game July Survey Suggests Western Arctic Caribou Herd Decline is Leveling Out; Alaska		14
	Department of Fish and Game Press Release. ADFG.ALASKA.GOV BY DFG.WEBMASTER@ALASKA.GOV		
8/26	Greetings Ipnatchiaq! Selawik Refuge staff will be in Deering on Monday, August 29 to share updates on caribou hunting regulations. We will bring our ivory tagging kit too for anyone who needs tusks tagged. Find us at the IRA office, see you soon!	1725	11
8/15	Noorvik Caribou Update! We will be in Noorvik on Thursday, the 18th, to give updates on recent caribou regulatory changes and to answer questions. Anyone interested can find us at the IRA building, listen for announcements on VHF.	1623	19
8/5	We had a great visit to Buckland yesterday to spread the word and answer questions on caribou regulations and updates. Thanks for the great hospitality! Photo courtesy Northwest Arctic Borough School District	917	13

8/3	closure. Contact details are on page 1 if you have further questions. - On-Tederal paids leads 'in cut 23 are used and use 'one of the page of any power of any	so on Closure rally Qualified Users we CHANDED in Games be handstar for the convent 1, 2016, Fedoral public contribution for the convent 1, 2016, Fedoral public contribution for the state of the convent 1, 2016, Fedoral public contribution for the convent agencies (Walded Special Regional Admisory Council, seen: The main impligites anxi: remore info) are alsowed to hund man managed by the National Pink. Land Management Chorte State on lands (NANA and NCC lands) 1, 2016 through June 30, 2017, Jones on eligibility to hund on Cape manager bellow: Survey of Land Management Walded State	393	16
7/13	Caribou hunting by " The Federal Subsiste closed caribou hunting public lands for non-qualified users in Uni July 1, 2016. The Stathas requested that cathunting be re-opened be a hearing on the S July 19 in Kotzebue, assembly chambers, sis your chance to give seven the seven of	ence Board ag on federal federally at 23 starting te of Alaska ribou l. There will tate's request NWAB 3-6 pm, which e input to the	703	23
4/19	This Just In: Cari on Federal Lands will be closed for qualified users stated for a period of 1 y request came from Northwest Arctic Advisory Council passed by the Fed Subsistence Board More at https://www.doi.gov//federal-subsistence-board-closes-federal-subs	in Unit 23 non-federally arting July 1, ear. This a the Regional and was eral l last week.	1830	87
3/28	New video "Counting on Caribou" tells the story of the import to the people of Northwest Alaska: https://youtu.be/EX_JBoICOUNTING ON CARIBOU COUNTING ON CARIBOU: Iñupiaq Way of Life in Northwest Alaska: showcases the ways in which the Iñupiat people of Northwest Alaska a	3o3Dw	577	15

3/18	Caribou Hunters: April 1, cow caribou season closes in Unit 23 (NANA Region). Conserve the pregnant cows as we approach calving season; cows and calf survival are important in this time of declining caribou numbers. Thanks for your cooperation and please help spread the word. Photo credit: Carla Stanley/USFWS (May 2010).	5132	179
2/24	Update from yesterday's public meeting on Alaska Federal Subsistence Management Program proposed caribou closure for non-local residents: we heard a mix of public comments both for and against the proposal, from local residents as well as from around the state via teleconference. Thank you to everyone who took the time to participate in the process. Next steps for this "special action request" include a tribal consultation later this week, then another public meeting at the Northwest Arctic Regional Subsistence Advisory Council meeting in Anchorage on March 10. Find info about that meeting here: https://edit.doi.gov/subsistence/all_councils (link to draft schedule at bottom of page)	449	20
2/18	Mark Your Calendars: public meeting in Kotzebue on whether to close Federal public lands in Unit 23 to caribou hunting by most non-local hunters ("non-federally qualified users") for one year. Tuesday February 23, 3-6 pm, see flyer below. This meeting is being held by the Alaska Federal Subsistence Management Program; we are working to get the word out.	1895	111
2/5	How does the Red Dog haul road impact caribou migration? Important to consider in light of other roads that have been proposed for the region. http://www.adn.com/ar/20160204/why-don-t-caribou-cross-road Why don't the caribou cross the road? A new decade-long study reveals that about a quarter of the caribou that encounter the Red Dog Mine road in Northwest Alaska balk at crossing it during their fall migration, causing them to delay their walk south. ADN.COM	515	13

1/14/16	FOR HUN -Caribou: I closed thro re-open on Cow harve through A at http://I -Moose: Fo season for through M	VINTER UPDATE NTERS:** Bull caribou season ough Jan. 31; bulls will in the 1st of February. est is open now april 1. More 1.usa.gov/22ZQHkd dederal subsistence moose is open March 31 (on federal in refuge, park, or	346	8
12/29/15	Can Grean An the this art arc 52r s	ribou Herd Working roup recently held its nual meeting in achorage. Check out a meeting highlights in a Arctic Sounder ricle: http://www.theoticsounder.com//15 management_question Many thanks to the posistence hunters and anagement group for	220	14

Western Arctic Caribou Herd Working Group DRAFT – 2014 Meeting Summary

December 16-17, 2015

Anchorage, AK

<u>Draf</u>t for review & approval by WACH Working Group at December 2016 meeting

The Western Arctic Caribou Herd (WACH) Working Group (WG) met in Anchorage on December 16-17, 2015 (agenda, Attachment 1). The WG's Technical Committee met in Anchorage on December 15, 2015 (Attachment 2). The following is a summary of meeting presentations and discussion. Motions passed at the meeting are shaded in gray below and listed in Attachment 3. Assignments are highlighted in yellow below and listed in Attachment 4.

Wednesday, December 16, 2015

I. Call to Order – 8:30 a.m.

A. <u>Invocation</u>: Roland Booth offered the opening invocation, at the request of Working Group Chair Vern Cleveland.

B. WACH WG Roll Call / Establish Quorum

Working Group Seat	Voting Chair	Alternate		
1. Anchorage Advisory Committee	Neil DeWitt	. Kenny Rodgers		
2. Buckland, Deering, Selawik	Ron Moto Sr	. Percy Ballott		
3. Anaktuvuk Pass, Nuiqsut	Isaac Kaigelak	. Esther Hugo		
4. Elim, Golovin, White Mountain	Charles Saccheus	. Morris Nakaruk		
5. Fairbanks Hunters	Allen Barrette	. Rod Arno		
6. Hunting Guides	Phil Driver	. Bob Hannon		
7. Kivalina, Noatak	Enoch Mitchell	. Daniel Foster, Sr.		
8. Kotzebue	Cyrus Harris (Vice Chair)	. Willie Goodwin		
9. Koyukuk River	Pollock Simon, Sr	. Jack Reakoff		
(Huslia, Hughes, Allakaket, Bettles, V	Wiseman)			
10. Lower Kobuk River	Vern Cleveland, Sr (Chair)	. <mark>vacant</mark>		
(Noorvik, Kiana)				
11. Middle Yukon River	Benedict Jones	. Micky Stickman		
(Galena, Koyukuk, Nulato, Kaltag)				
12. Point Hope and Point Lay	Steve Oomituk	. <mark>vacant</mark>		
13. Nome	Charlie Lean	. Jacob Martin		
14. Conservationists	Tim Fullman	. David Krause		
15. Northern Seward Peninsula	Elmer Seetot, Jr. (Day 2 only)	. Christine Komanaseak		
(Teller, Brevig Mission, Wales, Shis				
16. Reindeer Herders Association	Tom Gray	. Alfred Karmun		
17. Southern Seward Peninsula	Morris Nassuk (Day 1 only)	. Leo Charles, Sr.		
(Koyuk, Shaktoolik, Unalakleet, Stebbins, St. Michael, Kotlik)				
18. Transporters	Jared Cummings	.Julie Owen		
19. Upper Kobuk River	William Bernhardt	. <mark>vacant</mark>		
(Ambler, Shungnak, Kobuk)				
20. Atqasuk, Barrow, Wainwright				

Italic print indicates members or officers voted in at the 2015 meeting (see Motion below)

Blue text = vacancies Strike-out text = not present

Initial roll call on Day 1 showed 15 members present; quorum of >50% was met. Final attendance was 15 out of 20 Working Group members on both Day 1 and Day 2 (Voting Chair for seats 15 and 17 each attended only one day). Inclement weather was a factor in attendance for seats 15 and 20.

- C. <u>Audience Attendance</u>: Audience attendance is listed in Attachment 5. Noted that prior to the lunch break on the first day of the WG meeting, Commissioner Sam Cotton of the Alaska Department of Fish and Game (ADF&G) introduced himself to the Working Group and expressed his appreciation for their work.
- D. <u>Approval of Agenda</u>: MOTION to approve agenda as presented, by Tom Gray, seconded by Allen Barrette. Motion carried unanimously.
- E. Member Appointment: MOTION by Allen Barrette, second by Neil DeWitt, to accept nomination of the following Working Group Voting Chairs and Alternates: Seat 1 Neil DeWitt and Alternate Kenny Rodgers; Seat 7 Voting Chair Enoch Mitchell and Alternate Daniel Foster, Sr.; Seat 13 Voting Chair Charlie Lean and Alternate Jacob Martin; Seat 14 Voting Chair Tim Fullman and Alternate David Krause; Seat 18 Alternate Julie Owen. Motion carried unanimously.

II. Guest Elder – Mr. Roland Booth, Noatak, Alaska (verbatim remarks)

I am a subsistence user, but as you live life you can't hunt and expect to be able to sustain your livelihood without a job anymore. So it's interesting as to how things have developed or evolved up to this moment as far as subsistence use areas are concerned, caribou being one of them. We're also concerned about the salmon, the fish that we thrive on; the pollock that are on the Wulik River just west of our village where I'm from.

As far as caribou are concerned, ever since I came home from having been to high school, trade school and the service in 1967... when I came home, the life that I kind of got accustomed to was to trade. You get home and there is no trade that you are accustomed to doing. So when you come home to that kind of environment or predicament, however way you want to put it, you have to do what you've got to do to survive.

So after a while I became a commercial fisherman, a seasonal tradesman, and also a trapper to some degree. Not any of them particularly professionally, but good enough to be able to survive in the environment that I live in. With that having been said, the issues that concern me as far as this Working Group is concerned is caribou and I think that is the reason why we are gathered here this morning.

Having looked at the presenters that have been before me, I just can't imagine what more I can add and give to the Working Group – as far as what they do with the caribou, why it interests us so much, this particular breed of animal.

It's because they have so many uses that we have become accustomed to, not only for our sustenance, as far as food is concerned, but for those that were in the past, those who were before me, it was their major source of clothing. And you know if you've ever lived in our region, for those of us that live in the north, it is cold. And from what I know it's still cold like what it was when I was growing up – but I tell you, you never get used to cold. It still freezes you if you are not prepared to do what you got to do to survive. It's still that kind of cold. So for that reason our folks were accustomed to gathering the hides of caribou for their clothing. Not only was it good for clothing but I tell you, you cannot find any mattress that is as warm, that cold doesn't

permeate through, you can't find any better mattress than caribou hide. Whatever properties that are on it keeps the cold from passing right through the fur. You tell me, maybe you know the, scientific reasons why it does that but I tell you, you can't find any better mattress than a caribou hide.

Beyond the skin, the legs were also used. You don't see those very much anymore. We've kind of got accustomed to the bunny boots and all the Sorels that are downtown in the shops. And we've kind of gotten accustomed to wearing those kinds of clothing rather than mukluks that I grew up with for the cold weather. [The mukluks] were made for different seasons – some for summer use, some for winter, some for cold weather use. So there were differences in the making of each one of those mukluks that I was accustomed to seeing when I was growing up.

Not only that, but they make good socks. I've never seen any kind of socks that are still being made today that compare anywhere close to the caribou pair of socks that would keep you from freezing your feet. You can get them wet and still be able to survive in cold weather. Lot of the socks you find anymore, you get them wet and a few minutes later you are frozen. And they've got no heat properties as far as keeping you warm. But a pair of caribou socks, you get them wet, you take them off and flip them over, you turn them inside out, wipe them on snow and they will dry out. That's totally against the thinking of the mind, right? You get socks wet and you rub them on snow and they are supposed to dry out? But surprise, a guy does that, he flips his socks inside out, rub on the snow, flip the snow off, put the socks back inside out, put them on, and go on with your life. You can't find any better socks. I don't see them anymore. If you know who makes them let me know, I'd like to have a pair.

But I tell you, those are some of the uses – every single one you've heard about from the presenters that have been before me.

As far as caribou itself is concerned, I tell you again, for those of us who are accustomed to eating it – some of you might prefer moose because that's what you grew up with – but for those of us in my village, caribou has always been our preference. I get a moose tag every seaon, but by the time caribou shows up, I just kind of put my moose tag away, and deal with for caribou. If I don't get caribou I suppose I'll probably get interested in the moose and do what I've got to do. But it is that kind of a lifestyle that I've kind of gotten accustomed to. Not only as far as the subsistence use of it is concerned.

And subsistence, mind you, is not limited to caribou – you've got moose, fish, and you kind of evolve around this amazing thing. If you ever have to eat one meat consistently, day in day out, breakfast, lunch and dinner, what would your choice be if you were limited to that? I'm sure that some of you would prefer to have what you are accustomed to having, but if any changes were to happen and I have a choice of one meal that would sustain me for the rest of my life, it would be caribou meat. Because not only do you dry it and eat it, you cut it up and fry it up on your pan and make yourself a steak; you can grind it and make yourself a burger (meat patty). Of all the things that will sustain me, that would be my preference as far as a choice of meat is concerned. Maybe for some of you it is prime beef, because you've gotten accustomed to that, but for me personally it would again be caribou, for some of you it would be moose.

It has been kind of an interesting life – I don't know how many of you in here are 70 or more years. In my 76 years of my life, pushing 77 now, it has been interesting as far as subsistence with caribou is concerned. This, out of all those years that I've been home since 1967, this is the first time that I missed out on fall caribou hunting, for the very simple reason the caribou herd did not migrate right through my village for the first time. Until just recently during the latter part of

September and the early part of October is when they pass by and by the time you know about it, and you get a little leery about even looking at bulls by that time of the season.

So, for the first time in all the years that I've been out there, I never got myself a bull caribou. Not that I didn't get to eat some, because in a Native community like mine, we got sharing folks that shared their catches. For me personally, my freezer is still okay as far as a caribou is concerned, because even though I didn't catch any there are still a lot of folks that do get them. In our native village of Noatak, I'm just one of the Booths there. To start I had a lot of brothers, we're down to three now, but we are still the Booths, and we still share what we catch. But then I've got lots of nieces and nephews that do know me and make sure that I get three meals a day. Besides, my wife would not allow me to go hungry anyways. Even though I'm look thin to a lot of you, it's not because I've been lacking in food or have missed a few meals. It's just the way some of us are made I suppose. I still get three meals a day.

That is how life is been, but it's changing I tell you. You hear a lot about climate change, if that's something that interests you. For those of us that live there, you don't have to add two and two to make something else. We know the changes that are occurring. It doesn't have to be what scientists might be telling you are the reasons for climate change. It could be something else. It's just a matter of things that are supposed to be changing that are occurring.

Everyone wants to know what's the reasoning for it. I'll tell you what the reasoning for it is: the Creator of this earth knows exactly what is going on. He created the way that it was, and it still is the way he created it to be. And there is no change that occurs in it that will surprise him one iota of a bit. You might want to point a finger at the reasons why climate changes are happening and the issues that might be of importance to you, might be the reasons that you are saying that is the reason that the climate change is happening. But I tell you, my older brother who is 90 will tell you the first time in all of his life, several years ago, before climate change issue became something of an interest to a lot of folks, he does a lot of jigging for fish and he's out there jigging for fish, and he makes his hole on the river and lo and behold for the first time in his life he saw algae on our river. Our river is pretty swift. The Noatak River has always had a swift current. He made his hole on the river to do his jigging and he looks in the hole, and just below, on the bottom on the river on the gravel was some algae. That totally surprised him. And he made that to be known to some of us. And he said, 'Never seen anything like it. There are some things are changing.' Not only was that an issue, but just a few years after that our beaches kind of showed some of the algae that was beginning to show on the river on the gravel.

A lot of things are happening, as far as our caribou herds are concerned, which I'm interested in, and still have interest in. A lot of things are occurring to cause the change and decline. You and I might want to allude to something that we thought it might be but I tell you it's something that our Creator knows exactly what is going on. You can list the things about why it might be declining, but it's good to know what might be the causes. There are many factors – I'm one of the factors. I go out hunting them and my way of hunting might be a little different than the way that my fathers and forefathers were accustomed to hunting. Their way of hunting were always very primitive to the way that you and I would think. Their bow and arrow would kind of be primitive to me. I wouldn't even know how to shoot one. My way would be a high-powered rifle, and I'm accustomed to doing that. I'm accustomed to hunting with a snowmachine. I don't do it just like they do. And if not a snowmachine, in fall-time I have a boat that will take me upriver a lot quicker than my dad – he would take several days or a week maybe to go up to where is his favorite hunting spot that only takes me a few hours to get there. So the changes are a factor.

So, when you factor everything into the very issue that you and I have been talking about –

caribou – they are a not a species that are totally strange to human beings or any predator that may be hunting them. Not only is it me, a subsistence user, but there's also game hunters that are out there. If you look out through your binoculars almost every hill is covered with some human being that would totally surprise you. What in the world are they doing out in the country nowhere? Well they are hunting the same thing that I am interested in. That's why they're out there in nowhere.

Just a few years ago, for the first time I saw some wolves that were chasing caribou in fall time that I'm kind of accustomed to hunting. Wolves that are hunting, they're predators but I've never seen them hunting during fall season. Maybe they do it somewhere else, but for the area that I'm talking about it's the first time I've seen them doing that.

So we've got a lot of predators that are vying for the same game. So it's kind of interesting to know that all of us are interested and I'm glad you are talking about these issues, and I am sure you will come up with some protective measures to make sure they are sustained to a number where all of us can continue to gather them in a way that we are accustomed to gathering them.

Thank you for the privilege and honor to be present.

Vern Cleveland – Roland, before Red Dog was built, how far did you have to go hunt?

Roland Booth – A lot of things are causing the migration routes to be changed. Maybe the road is probably one of them. I wouldn't consider it to be the major one. [Where we hunt has] always been somewhere close by depending on where they happen to be fall time. It could be just a few hour trip from the village in the fall time. When the lakes freeze is when we would start to hunt. Usually don't get them in fall time except for those of us who are fortunate enough to go way up there to get them.

But he folks that were before me, the only time they would get them would be up the river if they happened to be come by when they happened to be seining for the fish they were trying to catch. Never used to be too far for me, but for them, for the way they traveled, I suppose it would be quite a ways. And I am talking about the Kuguruk River and the Kelly River right around that area. It's only a couple of hours drive for me personally, but for those that were before me, that would be a long trip if you don't have the current means of travel. Later on after freeze up, it would be a lot closer - either in the flats right across from the village or up in the mountains just behind the village is where they generally would hunt.

Vern Cleveland - For first time this year, the Red Dog road was completely closed for two days for caribou to cross. And they did cross. During the night. I don't know if they went through Noatak or not. It was complete silence, there was nobody on the road for two days.

Roland Booth - Thank you for that very herd that crossed the road system this fall. It's always good to have folks that know and understand and would always call someone in the village that a certain amount or number of caribou has crossed the road and what area they crossed so we'd always be aware. And some folks when they cross and head up the river, make sure they were able to pick where they might cross.

So our hunting is not always really the same. Some of us are a little more patient than some of the younger folks. Over the years we learn some of us are patient and some are not. Some of us are trigger-happy, some of us try not to be. So, it varies again, if you happen to know and understand the caribou, if you cut them off before they cross somewhere they always go somewhere else. So if you hunt the first ones that show up, so it's going to be pretty hard for the next bunch of groups

that shows up to try to hunt in the same area.

That caribou group, some of them showed up right behind the village and they just worked their way right to the coast.

Simon Pollack Sr. – Question about caribou habitat change in your area due to climate change. Caribou feed like the lichens. Are they decreasing due to the permafrost thawing and bleaching in the summer time?

Roland Booth – I'll tell you about some changes that have occurred, depending upon the fall seasons how they occur. After it rains, if it freezes it hampers the feeding area of the caribou. And if it snows a lot and if the snow gets too deep, which it hasn't in our area for quite some time now, that probably affects the growth of the feeding areas. It could be because of the snow that the growth of the feeding grounds are not conducive to the caribou herd that are migrating through. So whatever the reasons might be, personally, I don't know to answer you directly. Some of the folks that are present might be able to tell you that.

Enoch Mitchell – We have had some fires this year in June and the past few years. We had one big one two years ago, way up river, and that took a lot of lichen. It takes about 50 years for them to grow back. Maybe that's why caribou are moving kind of further out this year.

We had snow and rain this fall again, so I guess they'll have trouble feeding on the lichen but overall the hunt for the caribou was good. We had plenty of healthy caribou.

Roland Booth – We had some fires on the river on the upper Noatak too in just recent years so it might be a factor to some degree.

Steve Oomituk – In the old days they used to let the first herd of caribou go through so they would have a trail. They told us not to get the first ones. In the last 20 years we see so many sport hunters go out in front with their airplanes and drop them off in front of the caribou, they are changing the migration route and stuff. You live right there in Noatak, do you see a lot changes from sport hunters being dropped off in front of the herd before they make it through? That's always been a big concern for us. They don't make it to Point Hope as often as they used to because they're changing the migration now. Do you see a lot of that in Noatak?

Roland Booth – Yes, that is one of the factors that has always been a concern for us. Over the years I've seen some game hunters dropped off, usually it's way up in the upper Noatak, the Ambler area. The herd that pass way up on the Noatak, that bunch probably would be affected a lot more than the ones ... that would be one of the factors that would occur usually in the past. Lately, in recent years, there have been a lot more of the game hunters that are vying for the same bunch of caribou that we are hunting, so that has to be factored in to, to what's been going on.

Thank you again for having me. I appreciate the trip to Anchorage and it is nice meeting all of you.

III. Caribou Roundtable (p. 13 in WG Binder)

The WG divided into four small regional groups for Caribou Roundtable discussions and then came back in a large group to share what they had discussed. The notes from each small group are included in Attachment 6 and were summarized in presentations to the full group. The US Fish and Wildlife Service (USFWS) Selawik Refuge staff enters the roundtable notes into a database each year to document this shared traditional and local knowledge. The Caribou

Roundtable questions are sent to Working Group members in advance of the meeting each year, so they can circulate them to others in their communities and collect additional traditional and local knowledge to share during the roundtable.

IV. School Presentations - Noorvik School

Students from the Noorvik school participated in five-day trip to radio collar caribou at Onion Portage in September 2014. Noorvik students Mae Howarth and Marie Howarth presented a slide show of their activities and expressed thanks to the Working Group and agency staff for the opportunity. They talked about their experiences camping and holding and collaring the caribou.

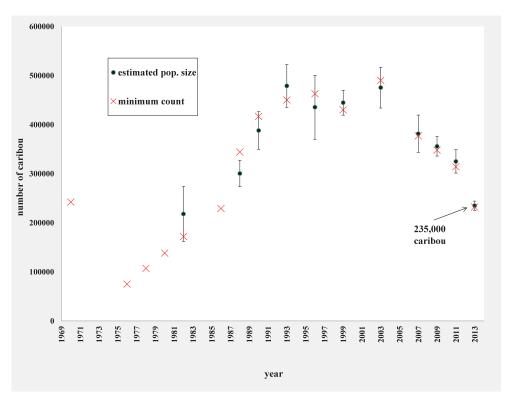
V. Herd Population Status (p. 27 in WG Binder)

Report by Lincoln Parrett, ADF&G, Division of Wildlife Conservation. Key points in presentation included:

- <u>Seasonal distribution and movements</u> Satellite tracking of collared caribou show they are widely distributed within their range. The PowerPoint presentation (WG binder p. 27) show distribution and movements for 1988-2014 within their range. There is some comingling with the Teshekpuk Caribou Herd in their range.
- Population size and herd condition The most recent count in July 2013 is 235,000 caribou in the WAH (see slide below for census results). An aerial census attempted in July 2015 was not successful due to poor weather and low light conditions, and ADF&G will conduct a new census in summer 2016 (see ADF&G memo on pages 45-46 of WG binder). ADF&G estimates that the herd is now at 200,000 animals, based on the 2013 census number, mortality, and modeling (using calf births, adult female mortality, and overall mortality as model input data). In 2015, the caribou were observed at Onion Portage (and by local hunters) to be in very good condition no disease, fat. Calves in 2015 were the biggest ADF&G has weighed in the eight years of data.
- <u>Population trend</u> The herd peaked at 490,000 in 2003, declined by 4-6% per year, to 325,000 in July 2011, and then has declined more steeply to the 2013 level, then less steeply from 2013-2015. Previously, there had been 13% annual population growth in the 1980's, followed by 1-3% annual growth from 1990-2003. The long-term data (1969-2013) demonstrates that the herd size fluctuates.
- The population is now below 265,000 and is declining, which means that it is in the "Conservative Management Level" in the 2011 WAH Cooperative Management Plan (see Table 1 of the Plan). The Technical Committee is recommending to the Working Group that the herd be considered to be in the Conservative Management Level. Appendix 2 of the plan provides recommended guidelines regarding population monitoring by agencies and harvest management by the Board of Game and Federal Subsistence Board. (Prior to the 2013 census count, the WAH was in the "Liberal Management Level.) The Plan can be found online at www.westernarcticcaribo.org under "The Group" tab).
- <u>Forecasted population trend</u> ADF&G estimates that the herd is currently at 200,000 animals, and is forecasting that the herd will continue to decline, but at a lower rate than that seen in the years 2011-2013, where hard weather conditions and other factors contributed to 30% decline each year. There is no model that can predict the herd's future population. Generally, adult cow mortality has exceeded female calf survival since 2003, which has led to the declining population.
- <u>Adult cow mortality</u> Since 1985 there has been a trend of increasing adult cow mortality. However, the last three years cow mortality has been lower due to easier winters.

• <u>Female calf survival</u> – Since 1985, there has also been a trend of decreased survival for female calves (although there is a lot of year to year variability). In the past three years, calf survival has been better than in the five years prior to that.

Census Results



Red 'X' = minimum counts of population size

Black dots = population estimates based only on collared caribou

Vertical bars = $\pm 95\%$ confidence intervals for the population estimates

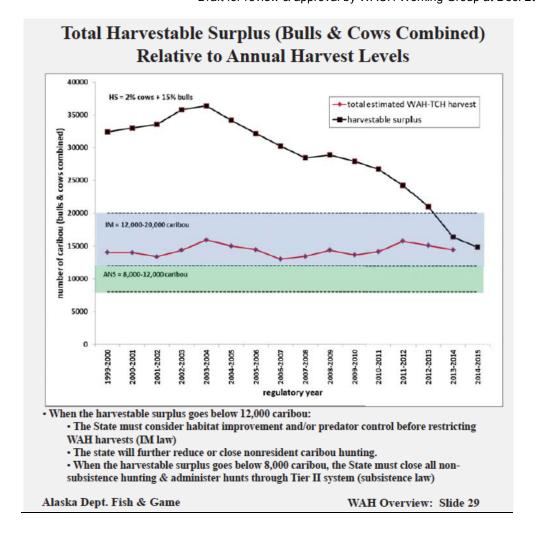
Alaska Dept. Fish & Game

WAH Overview: Slide 4

- <u>Fall Bull-Cow Ratio</u> The 2011 WAH Management Plan recommends a bull:cow ratio of 40:100 be maintained for the herd. The herd is at that level now (2014, 2015).
- <u>Proportion of Bulls & Cows Harvested</u> Harvests have not declined as the herd size has declined. The proportion of bulls harvested has been increasing. Cow harvest is increasing at a much slower rate, but can still have an effect on the population.
- Factors driving WAH decline Lincoln Parrett reviewed the many factors that affect the herd's population. He noted that Jim Dau (retired ADF&G caribou biologist) thinks that weather and predators are the main factors. Jim suggests that severe icing events started the herd into decline; predator populations are still going up, so are putting pressure on the herd size. Other factors are not evidently contributing to the population decline. For example: Calf production is fairly high and stable, but there may be a long-term reduced calf survival rate, with cause unknown. Winter range has changed since the early 1980s, but summer range

seems adequate to support the herd. Noted that size of the caribou are now smaller on average than they were in the 1980s, when the herd was increasing in size. Not sure if range is affecting the body size. Caribou are healthy – no indications of disease, inflammation, parasites. Range is largely intact (not fragmented by development). Harvest has played a very small role in the herd demographics – not affecting abundance.

- Harvest data— Characteristics of harvest are shown in the PowerPoint slides on pages 36-38 of the WG binder. 95% of the harvest is by subsistence users; 5% by non-local hunters, including nonresidents of Alaska. Subsistence harvests over the past 25 years in the range of the WACH have been quite stable, at a long-term average of approximately 13,900 per year, with 10,000 of those animals harvested in Game Management Unit 23. Of these 13,900 caribou, approximately 2,350 each year are actually animals from the Teshekpuk Caribou Herd. The percentage of the herd that is being harvested each year is rising from the long-term average of about 2.8%, to about 4.6% of the herd in 2013 and 2014.
- <u>Harvestable Surplus</u> As shown in the graph below (from p. 40 of the WG binder), the harvestable surplus of caribou from the WAH is declining and is converging with the usual average harvest level. Cow harvests have likely already exceeded the harvestable surplus for several years. Bull harvests will probably exceed the harvestable surplus in 2015-16. Federal law requires federal public lands to be closed to all non-subsistence hunting when the harvestable surplus cannot meet federally qualified subsistence users' needs.
- Management / Regulation Changes To date, in March 2015, the Board of Game adopted regulations that changed some seasons and bag limits for caribou hunting, including no harvest of calves and no cow harvest by non-residents of Alaska.
- Amount Necessary for Subsistence for the WAH is 8,000-12,000 caribou. When the WAH harvestable surplus goes below 12,000 caribou:
 - The State of Alaska must consider habitat improvement and/or predator control before restricting WAH harvests (Intensive Management [IM] law). However, this does not guarantee that predator control will be implemented. (ADF&G has started to draft IM feasibility assessment; required to do this and present to Board of Game.)
 - The State will further reduce or close nonresident caribou hunting.
 - When the harvestable surplus goes below 8,000 caribou, the State must close all non-subsistence hunting & administer hunts through a Tier II system (Subsistence law). This would be in the form of individual permits.
- Summary ADF&G is asking hunters to voluntarily reduce their harvests of WAH caribou, especially cows, and has been talking about this with Advisory Committees. Reducing harvests will not necessarily stop or reverse the decline, since other factors (weather, predators) are also influences. However, reducing harvest is necessary to avoid making the decline even worse. State and federal caribou regulations are now very complicated. Making the regulations as simple as possible, and consistent across the state and federal systems, will help hunters, avoid hunter mistakes, and will help reduce WAH harvests if people trust and believe in the value of the regulatory change.



Working Group discussion and Q/A regarding the ADF&G presentation:

- This is the first year that ADF&G has collared calves, to try to learn more about their overwinter mortality. We do not know when and why calves are dying.
- For adult caribou, the vast majority of the mortality that ADF&G can determine is from predation.
- Recommend that the graphs for WACH and TCH be separated so can understand the
 populations separately, when we are this close to having to make regulatory decisions
 affecting harvest of the herds.
- Essential to have a new population number (census) as soon as possible.

VI. National Park Service (NPS) Caribou Monitoring (p. 47 in WG Binder)

Kyle Joly, NPS, presented information on the movements of caribou the NPS has collared, including the range in Sept. 2014-Aug. 2015, the distribution of caribou as they cross the Noatak River in the fall (2013-2015), the timing of the fall crossing of the Kobuk River, and the timing of the spring migration crossing of the Selawik, Kobuk and Noatak Rivers. He noted that the NPS is also studying predators in the Gates of the Arctic National Park & Preserve. They have collared 35 grizzly bears, and have also looked for other predators.

Working Group discussion and Q/A regarding this presentation:

- The Reindeer Herders Association (RHA) is interested in any information they can get about caribou on the Seward Peninsula. Very difficult to separate reindeer out of the caribou herd.
- Noted that there are a lot of wolves on the Seward Peninsula.
- Concern about wolf predation interest in wolf collaring project.

Hillary Robison, NPS Western Arctic Parklands, asked the Working Group for their input and recommendation regarding whether there should be a study of calf mortality on the calving grounds, watching for mortality in the days after their birth. This has been done (by other agency biologists) for the TCH, Porcupine herd, and the Denali herd to collect data on and better understand causes of calf mortality in those herds. However, it hasn't been seriously considered by the agencies for the WAH, because it has been thought that residents would not want the herd disturbed on the calving grounds.

MOTION by Neil DeWitt, seconded by Tom Gray, to support NPS in going forward with a calf mortality study and bring the results back to the WG at its next meeting.

The Working Group discussed that the study would not be completed this quickly, in time for report at the next annual meeting. The question is, would the Working Group be supportive of the NPS planning for and initiating a calf mortality study. It would take time to get funding, design the project, and conduct the research.

Lincoln Parrett, ADF&G, described how a calf mortality study was done for the TCH. ADF&G handled about 70 calves/year. Placed expandable collars on calves (collars weigh about 165g) – placing about 25 collars per day. Must use helicopters to catch the calves (about two weeks with helicopter on the calving grounds). Important to minimize capture time because of risk of abandonment by the cow – for each calf, collar it, weigh it, sex it. Of the research and management activities Lincoln has been involved in, this is on the disturbing end of things. You handle 70 calves, but are disturbing many more animals than that. The key question is, is the information you are gaining worth the disturbance? Focus on the calving grounds, gives information about whether predator control at that area would be effective. If we are interested in the annual cycle, it also makes sense to start on the calving ground. When we approach an Intensive Management (IM) threshold, we would usually consider doing a calving study.

Working Group, agency, and audience members offered the following points:

- Lincoln Parrett For the TCH, Lincoln Parrett (ADF&G) found that calves survived into the wintertime. But there is a different predation regime for that herd than there is for the WAH. For the Denali herd, there is intense predator regime and the calf mortality study there showed that 43% of the calves didn't make it past 8 days, and on to the first 30 days of life. It is different for each herd.
- Discussion of whether it is more effective to study the predators (e.g., wolves), rather than the prey (caribou calves).
- Cyrus Harris Concern about disturbance of calving; discussion of use of remote tools.
- Allen Barrette Would be important that information about predation be used. Question the
 federal agency's interest in better understanding predation, but being unwilling to use this
 information in predator management on federal lands.
- Charlie Lean, Morris Nassuk, Tom Gray possible predators also include foxes, wolverine, eagles, bears
- Harry Brower concern about cumulative effects of research activities on the herd.

MOTION to TABLE the prior motion, by Tom Gray, seconded by Cyrus Harris. Motion to table carried unanimously.

VII. State & Federal Caribou Hunting Regulations and Proposals (begins on p. 57 in WG Binder)

A. Current State Regulations, 2015-2016, WAH and TCH

Brandon Saito, Area Biologist, ADF&G Division of Wildlife Conservation, presented a summary of current State of Alaska caribou hunting regulations relevant to the Western Arctic Caribou Herd and Teshekpuk Caribou Herd. The information in the WG meeting binder (pages 57-82) explains the complex State caribou harvest regulations and provides maps. Pages 83-94 present summaries and maps of both the State and federal caribou harvest regulations for GMUs 21D, 22, 23, 24, 26A and 26B.

Reminder that the Board of Game adopted regulatory changes related to the WAH at the March 2015 meeting.

Points raised in WG discussion:

- Q Charlie Lean: Why is the recommended bull:cow ratio of 40:100 so high for the WAH? Other herds in the state, the ratio is 20 to 30:100. A The WG Cooperative Management Plan recommended the 40:100 ratio. It could be lowered.
- Q Tom Gray: What is the lowest bull:cow ratio biologists would want to see? A- Would not want to see as low as 20:100 because change can happen quickly. Would feel comfortable with 30:100. Working with that ratio would not cause any change in harvest at this time, but could make a difference in the future.

B. Proposals to Federal Subsistence Board

Chris McKee, USFWS Office of Subsistence Management (OSM), presented the ten regulatory proposals and one Special Action Request for federal regulation changes related to the WAH (see WG meeting binder, pages 95-128). The Federal Subsistence Board (FSB) will consider these proposals at the April 2016 meeting. It was noted that there will be public meeting held in Kotzebue prior to the FSB meeting, regarding the Special Action Request made by the Northwest Arctic Subsistence Regional Advisory Council, to close federal lands in Unit 23 to non-Federally qualified users.

Thursday, December 17, 2015

- **I.** Call to Order The meeting was called to order at 8:30 a.m. Quorum confirmed.
- II. State & Federal Caribou Hunting Regulations and Proposals (Continued from Day One)

Tony Gorn, Area Biologist, ADF&G Division of Wildlife Conservation, summarized the seven regulatory proposals made to the Alaska Board of Game for State regulation changes related to harvest of the WAH (see WG meeting binder, pages 129-136). The Board of Game at their March 18-28 meeting in Fairbanks will consider the proposals. Public comments are due by March 4.

Tony also reported on the Board's future schedule: Region 5 Board of Game meeting will be January or February 2017 in Bethel. The deadline for proposals to be considered at that meeting is April 29, 2016.

(NOTE – During the Business Meeting, the Working Group passed a motion regarding regulatory proposal 73, which would establish a minimum caliber ammunition for caribou hunts of .243 or larger. See p. 20 for this motion and the WG's discussion on this proposal.)

III. Community Harvest Assessments (begins at p. 137 in WG Binder)

Nikki Braem from the ADF&G Division of Subsistence presented preliminary estimates of 2014 caribou harvest by the communities of Shishmaref, Kotzebue, Point Hope, Barrow, Nuiqsut, and Anaktuvuk Pass. Community surveys were conducted between January and May 2015. The Subsistence Division contacts Tribal and local governments in each community before they begin a study. They hire local residents to work with them on the surveys; surveys are anonymous and confidential.

For each community, the <u>preliminary data for 2014</u> shows harvest survey results (estimated total and per person harvest), patterns of use (#bulls/cows, % households harvesting, comparison to previous years), and the % of the total subsistence harvest that is caribou:

- Shishmaref In 2014, Shishmaref harvested 487 caribou (54% bulls, 33% cows, 13% unknown). Residents harvested 0.8 caribou (107 pounds of meat) per person/year. Caribou makes up 17% of the community's total subsistence harvest (by weight).
- Kotzebue In 2014, Kotzebue harvested 1,278 caribou (75% bulls, 17% cows, 8% unknown). Residents harvested 0.4 caribou (58 pounds of meat) per person/year. Caribou makes up 25% of the community's total subsistence harvest (by weight).
- Point Hope In 2014, Point Hope harvested 185 caribou (62% bulls, 24% cows, 14% unknown). Residents harvested 0.3 caribou (34 pounds of meat) per person/year. Caribou makes up 6% of the community's total subsistence harvest (by weight).
- Barrow In 2014, Barrow harvested 4,231 caribou (47% bulls, 30% cows, 23% unknown). Residents harvested 0.8 caribou (103 pounds of meat) per person/year. Caribou makes up 31% of the community's total subsistence harvest (by weight).
- Nuiqsut In 2014, Nuiqsut harvested 773 caribou (73% bulls, 21% cows, 6% unknown). Residents harvested 1.9 caribou (242 pounds of meat) per person/year. Caribou makes up 29% of the community's total subsistence harvest (by weight).
- Anaktuvuk Pass In 2014, Anaktuvuk Pass harvested 770 caribou (51% bulls, 39% cows, 10% unknown). Residents harvested 2.4 caribou (315 pounds of meat) per person/year. Caribou makes up 88% of the community's total subsistence harvest (by weight).

Jim Simon, ADF&G Subsistence Division, clarified that this is preliminary data for 2014. ADF&G hasn't taken the data back to the villages yet for their help in interpreting the data, but felt it was important to share with the Working Group at this time, because of the declining herd. ADF&G has collected data over the years from almost all communities that use the WAH. Will see that in next presentation by Jim Magdanz (30 year community harvest data review).

The following points were raised in discussion:

- Concern that harvested cows may be pregnant. (ADFG response Yes, a lot of them are, but we don't think that small percentage would affect the population trend.)
- Noted that Barrow responses had a high percentage where gender of harvested caribou was unknown. (ADFG noted that the gender was certainly known at the time of the hunt, but was not recollected during the interview. Sometimes spouse of hunter is interviewed, rather than the hunter.)
- Appreciate that local people are hired to do the interviews in communities.
- One audience member (Harry Brower) expressed concern that the preliminary data were shared, before reviewed by the communities.

IV. Caribou Management in the Future: WACH Cooperative Management Plan (2011) and Table 1 (p. 139 in WG Binder)

Jim Simon (ADF&G Subsistence Division), Jim Magdanz, UAF researcher (formerly with ADF&G Subsistence Division) and Lincoln Parrett (ADF&G Wildlife Conservation Division) presented information to the Working Group related to anticipating potential effects of a continued WAH decline on harvest, herd population trend, and future regulations.

Jim Magdanz's presented information about household caribou harvest patterns, sharing of caribou within a community, and exploring how harvests *might* change in the future under current herd population trend. Data includes:

- 146 community estimates of caribou subsistence harvest (in 37 communities, conducted 1989-2013, in GMU 21, 22,23,24 & 26))
- 3,500 households surveyed (in 25 communities in the WAH range, conducted 1998-2013), in GMU 22,23 & 26)

Take home messages from analysis of this data:

- People living in the range of the WAH have been meeting their needs with about 13,000 caribou annually (even when more were available to harvest).
- This overall level of harvest appears to have been pretty steady over the past 25 years, but there are regional differences.
- Looking to the future we may not have 13,000 caribou/year to harvest.
- Average harvest is 3.6 caribou/household but this varies among regions
- Community, household, and sharing data show that there are super-households and super-hunters that specialist in the production and wide-distribution (sharing) of caribou. A community is most productive and food secure if the most capable people harvest and process each kind of subsistence food.
- When caribou become scarce we expect communities to harvest fewer, but our surveys are not yet showing that change.

The following points were raised in Working Group discussion:

- In regional centers, cannot survey every household. (ADF&G noted that the confidence intervals are bigger for results in these larger communities, where not every household is surveyed.)
- Noted that community harvest would be affected by where the caribou are moving when resource is not available to a community, they cannot harvest them.
- This data are key to evaluating what to do with the herd in the future.
- Concern that the Nome harvest level shown is too low (avg. of 92 caribou per year). Is there an on-going effort to update surveys so that data is useful to the Advisory Committees (AC) and the Regional Advisory Council (RAC)? (Jim Simon mentioned

funding issues for surveys in the regional centers – would like to have updated survey information for Nome, but do not have funding for that project.)

- Non-local Alaska resident hunters are not surveyed. Should they be surveyed, but treated as their own "community"? (ADF&G responded that individual household surveys would not be feasible in the larger communities where these hunters live. Generally, the State has high confidence that urban/non-local hunters are reporting their harvest.)
- Noted that when a hunter gives away a caribou, ADF&G records that as a caribou taken by that hunter (not by the household that received it through sharing).

Lincoln Parrett presented information about what may be the future for caribou harvest and regulations, under the WAH's declining population trend. Key points:

- ADF&G will conduct a photo census of the herd in 2016. Expect the count to be available by December 2016.
- Models indicate that the herd has probably continued to decline since it was last successfully surveyed at 235,000 in 20-13. ADF&G expects the herd is currently about 200,000 animals.
- New State regulations went into effect in July 2015 The regulations mostly conform to current hunting practices and it is not yet certain how those new regulations will affect harvest.
- The future is uncertain If population projects are accurate, we will have been harvesting over the recommended harvest level since 2014. The combined WAH and Teshekpuk Caribou Herd (TCH) harvestable surplus will fall before the intensive management (IM) objective for the WAH and the upper Amount Necessary for Subsistence (ANS) threshold for both herds starting in 2017. Noted that ADF&G is starting to look at an IM feasibility study.
- By 2017, compared to current harvest, we would need to reduce harvest by 20%.
- The key questions are What regulations would work best to reduce harvest? And, how can we better track the harvest?

The following points were raised in Working Group discussion:

- Future regulations need to consider the regional differences when communities harvest and how much they take. Need to have more localized regulations, based on local ACs and RACs.
- If this herd keeps declining, we will need to reduce our overall harvest but how?
- Question whether the 200,000 caribou are mingled with reindeer? A- Random sampling indicates fairly low on reindeer in that herd count.
- Concern that the new State regulations that eliminated bull harvest during the rut had unintended consequence of increasing cow harvest in October-November.
- There is interest in collaring caribou that stay on the Seward Peninsula.
- Suggestion that there needs to be harvest tickets for all harvest to ensure more timely and accurate information regarding number harvested, sex, etc.
- When WG member make recommendations to the State on the best way forward, you need to consider the constituencies, the communities, the ACs, the RACs. Also, need to consider management and use of the WAH in the context of the other caribou herds that people would use for subsistence. Need to think outside the box, not so focused on regulatory processes. Maybe lessen the take of this herd, and increasing use of others?

The Working Group brought back up the tabled motion regarding conducting a WAH calf mortality survey. Hillary Robison, NPS, indicated the agency could do a calving mortality study, as has been done on other herds – to determine if early calf mortality is an impact on the WAH

population. Lincoln Parrett, ADF&G, said that the calving herd would usually be observed every day for two weeks. If dead calves are observed, biologists need to get to them quickly and determine the cause of mortality. After the first intensive two weeks, biologists would return two weeks later, and then every month after that. Lincoln emphasized that this work would be very proactive – and noted that the State does not have funding for this project.

Working Group members raised the following:

- Important to understand predation.
- Important to understand the time in life history that have potential for higher mortality.
- Important to have both state and federal biologists involved in this project.
- Concern that environmental change such as weather systems, pollution of tundra range are not being studied.
- Need the calf mortality study, since the population is already so near to the Amount Necessary for Subsistence threshold. This data will be needed for future management decisions.

MOTION by Neil DeWitt to support NPS conduct of a calf mortality study for the WAH, seconded by Tom Gray. Motion carried 13:1.

V. Executive Committee Report (p. 141 in WG Binder)

The Executive Committee report in the WG binder listed five actions in 2015, regarding: representing the WG in public comment opportunities related to Alaska Board of Game and Federal Subsistence Board regulatory proposals, approval of the *Caribou Trails* newsletter, development of the 2015 WG meeting agenda, and selection of main and alternate members for the Nome and Kivalina WG seats (recommended to full WG for their approval). Copies of letters written to the Board of Game and Federal Subsistence Board are in the WG Binder. All Executive Committee work was done via email or teleconference.

VI. Resource Development Committee (p. 144-A in WG Binder)

Working Group member Tim Fullman described the work of the Resource Development Committee in 2015 (chaired by Darcie Warden that year, who is no longer on the WG). Tim noted that the Committee had no actions in 2015. However, upcoming issues in 2016 that may require attention include:

- Wind farm proposal near Red Dog (very early stages)
- Bureau of Land Management (BLM) Regional Mitigation Strategy for the Northeastern NPR-A (although this is likely to the west of the range of the WAH)
- Application for right-of-way through the NPS Cape Krusenstern National Monument for a fuel access road to Noatak
- Ambler District Industrial Access Road request for right-of-way through NPS Gates of the Arctic and initiation of scoping for the Environmental Impact Statement (EIS).

VII. 2015 Technical Committee Report

Jan Caulfield reviewed the report from the Technical Committee, which met on December 15, 2015. The report is provided in Attachment 2. The Technical Committee recommended that the Working Group take action to fix errors in Table 1 (see revised Table 1 in Attachment 2).

MOTION by Neil DeWitt, seconded by Bill Bernhardt, to approve the changes to Table 1 in the 2011 Western Arctic Caribou Herd Cooperative Management Plan. Motion approved unanimously.

Assignment – Prepare errata sheet for Table 1 & insert into electronic copies of the Cooperative Management Plan. Post on website. (Jan Caulfield)

VIII. Communication Committee Report (p. 145 in WG Binder)

Kari Rasmussen, ADF&G staff to the Communication Committee, addressed the following points:

- The Education management actions in the 2011 WACH Cooperative Management Plan are all underway. ADF&G, BLM, USFWS and NPS all contribute to outreach and education efforts. Vern Cleveland chairs the Communication Committee.
- Major activities for 2015 (ADF&G and USFWS staff)
 - Caribou Trails newsletter published in June 2015. Next issue in summer 2016.
 - Started production of Caribou Gender ID quiz
 - Visited villages with ADF&G caribou biologist for outreach regarding new State hunting regulations
 - Coordinated student trip to Onion Portage (September 2015)
 - School visits education activities about caribou and their habitat
 - WACH WG website upkeep
 - Use of Facebook page to communicate regulation and conservation issues

In WG comments, Elmer Sectot said that traditional ecological knowledge said that the caribou would return, and last year was the first time he's seem them west of the Kuzitrin River and beyond. What the elders said would happen, is happening. Don't dismiss what the elders say.

Suggested that Caribou Trails include an article about Jim Dau and Peter Bente, who are retiring. Both were involved in the formation of the Working Group – before it formed, local people weren't involved in these kind of discussions.

Suggested newsletter article about caribou as an ecological driver in the region. They are a subsistence food security item and are the primary prey species in the region – and when they are unavailable, hunters move on to secondary species (musk ox, moose).

IX. Management Agency Reports - ADF&G, BLM, NPS, USFWS

The text of the agency reports is provided in Attachment 7. Key points are summarized here.

<u>ADF&G</u> (p. 147 in WG Binder) – Steve Machida, ADF&G Regional Supervisor, acknowledged three retirements: Jim Dau, Peter Bente, Geoff Carroll. ADF&G would like to see improvement in their capability to do more wildlife research – in 2015 hired a biometrician. Would like to put another research position in place. State if facing severe budget concerns, but most of the Division's budget is not from General Funds. Steve indicated that in Region 5 approximately 30% of the budget goes toward caribou management and research for the Teshekpuk and Western Arctic herds. Field activities include biennial photo census, fall composition surveys, spring recruitment surveys, caribou collaring at Onion Portage, animal collection for disease and body condition assessment, range-wide telemetry surveys, and harvest assessment surveys. ADF&G's Education Associate for Region 5 based in Nome is assigned to assist with WACH caribou wildlife education efforts (see section VIII, above). A significant activity of staff is providing

comments to agencies about potential impacts road and development projects may have on caribou movements and distribution. The next Region 5 Board of Game meeting is scheduled for January 2017.

<u>BLM</u> (p. 149 in WG Binder) – Douglas Baloo, BLM Assistant Anchorage Field Office Manager, noted that the Anchorage field office now has management responsibility for Northwest Alaska (lands around the Nulato Hills and within the NANA Corporation boundary). The BLM report addressed a variety of land management plans and Rapid Ecological Assessments that BLM is preparing or has completed in the herd range. The BLM agency report also addresses reindeer grazing, wildlife projects, recreation, mining, and realty work done by the agency.

Topics raised in Working Group comments:

- Question about installation of cell phone towers. A Permits went through review under the National Environmental Policy Act (NEPA) and public process.
- Questions about BLM work with WACH habitat, fire suppression, permafrost, Ambler Road:
 - BLM Central Yukon Field Office is doing habitat / winter range research. Between 1995-2005, had seen diminishing habitat quality. Still seeing some decrease in forage lichens (>2005), but not as drastic a change. Lichen mapping is important to decisions about where to suppress wild fires (to protect WAH food source).
 - BLM is monitoring active soil layer depth at 35 sites (related to changes in permafrost). The BLM Rapid Ecoregional Assessment (REA) program has maps of permafrost (http://www.blm.gov/wo/st/en/prog/more/Landscape Approach/reas.html)
 - BLM will be contributing to the NEPA analysis of the proposed Ambler Road.
- Pollock Simon spoke to concerns about road impacts, and importance of fire suppression in caribou winter range.
- Question about reindeer grazing permits. A (Bruce Davis, Reindeer Herders Association: There are seven reindeer ranges with reindeer on them; seven others are permitted but no reindeer at this time.)

<u>NPS</u> – (p. 151 in WG Binder) – Greg Dudgeon, Gates of the Arctic National Park & Preserve Superintendent, addressed the following:

- In 2015-2016, the park will continue to manage transporters through commercial use authorizations (CUA). CUA holders are authorized to transport hunters seeking caribou into specified areas in the western Noatak after September 15, unless authorized by the Superintendent to provide services earlier (based on the status of caribou migration). Noted that most of the herd migrated farther east of this zone in Fall 2015. NPS will reassess this zone in 2016.
- Noatak IRA has requested a right-of-way through NPS-managed lands to bring fuel to the community (proposing 17 trips/year).
- NPS received an application from the Alaska Industrial Development and Export Authority (AIDEA) for a right-of-way through Gates of the Arctic National Park and Preserve for the Ambler District Industrial Access Road. The Secretary of the Interior must respond within nine months.
- Recent published studies include: Noatak Traditional Ecological Knowledge, Noatak National Preserve Sport Hunter Survey (2010-2013), and Acoustic (sound) Monitoring in Noatak National Preserve (2013-2014).

• NPS hosted a youth archaeology camp near Nome in summer 2015. Archaeological work is continuing at Lake Matcharak on the upper Noatak River (begun in 2010).

In comments, Pollock Simon spoke to concerns about the Ambler Road and impacts on way of life on the Koyukuk River. Concern about public access for hunting, fishing, trapping. Tom Gray spoke to not wanting public access into Nome from this or future road.

Noatak's Enoch Mitchell said that the delayed entry zone has not worked well for the past few years. Would like to extend the State's Controlled Use Area (CUA) farther east, since caribou are migrating farther east. NPS's Greg Dudgeon reiterated commitment to working with Noatak on these concerns.

<u>USFWS</u> (p. 159 in WG Binder) – Susan Georgette, Selawik National Wildlife Refuge Manager, described the Refuge's activities and projects related to caribou (snow and climate monitoring; culture camps; communication about new GMU 23 caribou regulations; WG web page, Facebook, and newsletter), teacher training, meeting in Selawik regarding WAH population status, school presentations, Caribou Roundtable database (additions from 2013 WG meeting), funding support for the WG's annual meeting.

X. Business Meeting

<u>Approval of Meeting Summary – December 2014 (p. 169 in WG Binder)</u>: MOTION to approve the complete minutes for the December 2014 WACH Working Group meeting, by Allen Barrette and seconded by Neil DeWitt. Motion carried unanimously.

Election of Vice Chair – Allen Barrette nominated Cyrus Harris to continue to serve as Vice Chair (for 2016-2018), with second by Tom Gray. MOTION by Tom Gray to close nominations, with second by Enoch Mitchell. With no objection, Cyrus Harris was reappointed Vice Chair and expressed his appreciation to the group.

Membership/Committees: The following actions were taken to update WG committees:

- Committees Jan Caulfield reviewed the WG committee lists (p. 2 of WG Binder) to determine if any need for changes. The new members above will take their respective seats on the committees. The following committee changes were made:
 - Executive Committee Allen Barrette assumed Phil Driver's seat on the Executive Committee. (Appointed by Vern Cleveland; no motion or WG action.)
 - Resource Development MOTION by Neil DeWitt with second by Charlie Lean for Tim Fullman to serve as Chair; passed without objection. Enoch Mitchell to assume Phil Driver's seat. (Appointed by Vern Cleveland; no motion or WG action.)

<u>Process to Fill Member Vacancies</u> – Jan Caulfield reviewed the proposed process (p. 187 of WG Binder). This process does not require a bylaws change. Staff will use this process, in consultation with the Executive Committee, when soliciting new Working Group members. (No WG comments on or objections to this process.)

Bylaws Change, Executive Committee Quorum (p. 188 WG Binder) – MOTION by Neil DeWitt, second by Allen Barrette, to approve the bylaws change to establish a quorum for the Executive Committee. Passed unanimously.

Assignment – Staff update Update WACH WG Bylaws with change to Executive Committee quorum.

New Business – Comments on Board of Game Proposal 73 (p. 132 in WG Binder) – MOTION by Allen Barrette to adopt proposal 73, to establish a minimum caliber of .243 for ammunition for caribou. Second by Neil DeWitt. WG Discussion – Allen Barrette spoke against the motion, indicating that the proposal is not needed; it would impair hunters, especially along the Kobuk River. Hunters would have to purchase new rifles. Allen suggested that the Working Group not support the proposal and submit comments to the Board of Game. Vern Cleveland noted that the larger ammunition would damage the meat. Charlie Lean sits on the Northern Norton Sound Advisory Committee (AC), which came out strongly in opposition to this proposal. He noted that people customarily used smaller caliber ammunition. Cyrus Harris sits on the Kotzebue AC, which also opposed this proposal. Enoch Mitchell noted that people from Noatak usually use a 22, which causes less damage to the meat. Tom Gray sites on the federal Resource Advisory Committee (RAC), which also opposed this proposal. Neil DeWitt indicated that he would vote against the motion. Elmer Sectot said that .243 caliber ammunition mushrooms when it exits the animal (damaging the meat) and travels the longest distance; he opposes the proposal. Vote on the motion – None in favor; unanimous opposition to this motion (and to BOG proposal 73).

<u>Assignment</u> – Staff work with Chair to submit comment to BOG in opposition to proposal 73.

New Business – Comments on Board of Game Proposal 85 (p. 132 in WG Binder) – MOTION by Allen Barrette to adopt proposal 85, to delete the exception in 5 AAC 92.010(g) that allows the harvest of caribou without requiring a harvest ticket or harvest report for residents residing north of the Yukon River. Seconded by Neil DeWitt. WG Discussion – Allen Barrette spoke to the importance of having timely harvest data, in addition to the community harvest surveys. Neil DeWitt noted that requiring harvest tickets of all resident hunters would give better data (numbers, bull:cow), but understand it would be difficult for hunters not used to this requirement. Tony Gorn, ADF&G Area Biologist noted that the Department is recommending against this proposal at this time; they would like more time to think about how the system would work. There are numerous examples in rural Alaska of where using harvest tickets would be very challenging. Cyrus Harris spoke to the potential hardship on rural people. Charlie Lean spoke to his experience as a fisheries manager. It is hard to get good information from harvest reports; better to have a list of harvesters and then survey them. He recommends that action on the proposal be deferred. After discussion, MOTION by Neil DeWitt to Table the original motion until the next WACH WG meeting. Seconded by Allen Barrette. Motion to Table passed unanimously. (Noted that the BOG may take action on proposal 85 in the interim.)

Assignments: List of assignments made during meeting, see Attachment 4.

Next Meeting Date: MOTION by Tom Gray, seconded by Allen Barrette, to schedule next WG meeting on December 14-15, 2016 in Anchorage, with Technical Committee meeting on December 13. Motion carried unanimously. Vern Cleveland encouraged members to come on Day 2, even if they miss Day 1 due to weather or other travel impediments.

XIII. Closing Comments: WG members offered the following brief closing comments:

- Elmer Sectot Caribou is within 20 miles of his village for the first time in 20 years. We have been very active with wolf management in my area. In order to protect our subsistence food, we need to harvest wolf.
- Tim Fullman Thanks to all; looking forward to our work together in the future.
- Simon Pollock, Sr. Good meeting; good work by the staff.
- Bill Bernhardt Merry Christmas; be safe.
- Enoch Mitchell Thank you. My first time, thank you for accepting me onto the group.

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DRAFT Meeting Summary – 2015
Draft for review & approval by WACH Working Group at Dec. 2016 meeting

- Benedict Jones Thank you.
- Charlie Lean Thank you; will have a teleconference with his AC to share what we've heard here.
- Charles Saccheus We will miss Jim Dau. Hope we take good care of our caribou.
- Steve Oomituk Thank you; happy holidays; safe travel.
- Tom Gray Thank you to agency staff who put together the presentations.
- Cyrus Harris Good meeting; Welcome new members; Thank you for voting me in as Vice Chair.
- Vern Cleveland Thanks to all for making the effort to come down here; thank you to agencies for reports and to staff for meeting organization.

XIV. Adjournment: Meeting adjourned at 4:43 p.m. on December 17, 2015.

Western Arctic Caribou Herd (WACH) Working Group Meeting

December 16-17, 2015

8:30 am – 5:00 pm each day

Anchorage Marriott Downtown Juneau/Haines Room 820 West 7th Avenue, Anchorage, Alaska

DAY 1 - WACH Working Group, December 16

8:30 Call to Order

Invocation

WACH Working Group Roll Call / Establish Quorum

Introduction of Working Group members

Approval of Agenda – Preview Meeting Binder

New Member & Alternate appointments

Thank you's

8:50 Guest Elder - Mr. Roland Booth, Noatak

9:40 BREAK

10:00 Caribou Roundtable

- Small group discussions by region (60 minutes)
- Full Working Group open discussion What have Working Group members noticed about caribou availability, harvest, and health in 2015?
 Other observations related to the herd or their habitat? (45 minutes)

11:45 - 1:00 LUNCH

1:00 Noorvik School Presentation (40 minutes)

1:40 Herd Summary Information

- **1:40 Population Status** Lincoln Parrett and Brandon Saito, Alaska Department of Fish and Game (ADF&G), Division of Wildlife Conservation (50 min)
- **2:30** Monitoring Caribou Movements and Distribution Kyle Joly, National Park Service (20 min)

2:50 Technical Committee recommendation on herd status and management level, per the 2011 Cooperative Management Plan (Table 1) (20 min)

Note that the morning of Day 2 provides time for Working Group discussion of herd status and management level.

The 2011 Cooperative Management Plan (p. 17) states that each year, the Working Group "will review the Technical Committee's recommendations [on herd management], consider traditional ecological knowledge and knowledge of all users, and seek consensus on the appropriate management strategy to recommend" for the herd (see Management Levels in Table 1 and Appendix 2 of the Plan).

3:10 Working Group Photo / BREAK

3:30 State & Federal Caribou Hunting Regulations and Proposals

The 2011 Cooperative Management Plan (p. 17) states the Working Group will develop recommendations for regulatory changes following the normal state and federal board processes involving advisory committees, regional advisory councils, and public review before board actions.

Current State and Federal Regulations (20 min)

State hunting regulations, *Brandon Saito and Lincoln Parrett, ADF&G* Federal subsistence hunting regulations, *Chris McKee, FWS*

Proposals to Federal Subsistence Board (FSB) (20 min)

Caribou related proposals, *Chris McKee, FWS* FSB Meeting: April 11-15, 2016

Proposals at Statewide Board of Game Meeting, March 2016 (15 min)

Caribou related proposals, *Tony Gorn, ADF&G* Comment deadline: March 4, 2016

Call for Board of Game Proposals, Arctic & Western Regions, 2017

(5 min)

Meeting information, *Tony Gorn, ADF&G* Proposal deadline: April 29, 2016

4:30 Working Group Discussion - Regulations, Proposals, Recommendations

5:00 ADJOURN DAY 1

Day 2 - WACH Working Group, December 17

- 8:30 Call to Order / Announcements
- 8:40 Community Harvest Assessments: Kotzebue, Shishmaref, Point Hope, Barrow, Anaktuvuk Pass, Nuiqsut Nikki Braem, ADF&G, Subsistence Division (30 minutes)
- 9:10 Caribou Herd Management in the Future: WACH Cooperative Management Plan (2011) Table 1

Working Group discussion of the potential to enter the "Preservative" Management Level, if the herd size continues to decline in the future. Discussion of potential effects on harvest, how to prepare, and how to communicate to the public.

10:15 BREAK

- 10:30 Continue Working Group Discussion of Future Management of the Herd
- 11:45 1:00 LUNCH
- 1:00 Working Group Committee Reports
 - 1:00 **Executive Committee** (10 min) Jan Caulfield
 - 1:10 **Resource Development Committee** (10 min) Tim Fullman
 - 1:20 **Technical Committee** (10 min) Jan Caulfield
 - 1:30 **Communication Committee** *Caribou Trails*, website, other outreach efforts related to Cooperative Management Plan and caribou management issues Kari Rasmussen, ADF&G (15 min)
- 1:45 Management Agency Reports regarding WAH-related topics
 - 1:45 Alaska Department of Fish and Game Steve Machida
 - 2:00 Bureau of Land Management Alan Bittner
 - 2:15 National Park Service Greg Dudgeon
 - 2:30 US Fish and Wildlife Service Susan Georgette
- 2:45 BREAK

3:05 Business Meeting

Approval of 2014 WG Meeting Summary

Election of Vice-Chair for 2016-2018 term

Committee Membership – Review & reconfirm

Draft Process to Fill Member Vacancies

Proposed Bylaws Change –Executive Committee Quorum

New Business (Action Items)

Assignments

Which WG Members want to receive flash drive with all meeting materials?

Next Meeting – Proposed December 14-15, 2016, Anchorage

4:40 Closing Comments - Working Group members

5:00 ADJOURN

2015 WACH WG Technical Committee Report

The Technical Committee (TC) met on December 15, 2015 at the Anchorage Marriott Downtown in Anchorage. Present were the Working Group (WG) Chair and Co-Chair, several other WG members, and agency staff to discuss technical issues related to conservation and management of the Western Arctic Caribou Herd. The following is a list of meeting highlights and TC recommendations for consideration by the WG.

Technical Committee Recommendations

1. Status and Condition of the Western Arctic Caribou Herd (WACH)

The 2011 WACH Cooperative Management Plan (p. 17) asks the TC to "evaluate the status of the herd and develop recommendations on herd management level for the Working Group", based on Table 1 in the plan. On December 15, the TC discussed the following regarding herd status:

- The last herd census in July 2013 counted 235,000 caribou. The July 2015 aerial census was not successful due to weather and poor light conditions that hampered the quality of the photographs.
- The next census will be conducted in 2016.
- The herd experienced high mortality rates in the years 2011-2013. Based on observations, mortality rate has recently been lower.
- ADF&G's current estimate for the herd size, based on available data and modeling, is approximately 200,000 animals.
- Observations from fall/winter 2015 are that caribou are fat and healthy. If they experience a favorable winter, biologists would expect more stability in the population number.

The herd size is at the low end of the "Conservative" Management population range (of 200,000-265,000), and is declining (see WACH Cooperative Management Plan 2011, Table 1, pg. 17).

While the population is at the low end of that population range, the TC recommends that it still be considered to be in the "Conservative" management range (rather than the "Preservative" range) because the recent mortality rate appears to be lower, and because we have not yet seen the population effects of changes in harvest regulations adopted by the Board of Game in 2015. The result of the 2016 census is very important and completing that count will be a priority.

The herd may drop to the "Preservative" Management and Harvest Level within the next several years.

ADF&G put collars on the caribou calves that were weighed at Onion Portage in September and will track them through the winter, to find out more about their winter mortality.

It is important to continue to educate the public about the herd status and to listen to the public about possible solutions. The agencies will continue with education and listening

sessions – and also recommend that the Working Group members communicate directly with local hunters.

Corrections to Table 1 (p. 17) – Table 1 in the Cooperative Management Plan contains some mathematical errors and rounding errors. The TC recommends that Table 1 be corrected in the on-line version of the plan, through an errata sheet when the plan's are distributed, and corrected in future printings. The corrected table is attached. Note that Table 1 provides general guidance for herd management, but the numbers in the table are not regulatory numbers and do not affect calculations of the harvestable surplus.

2. Weather and Climate Data

A TC subgroup has been meeting to consider effects of snow/weather/climate on the Western Arctic Herd. The group is looking at what weather data are being collected and analyzed in the herd's range, what key research questions and data needs should be addressed in the future, and whether modeling could help predict future conditions and effects. The Bureau of Land Management (BLM) is coordinating the work of this subgroup. It was suggested to the subgroup that local people could be contracted with to take more regular weather observations, read snow depth at stations, etc. It was also noted that during the yearly Caribou Roundtable session, Working Group members comment on weather/climate observations, and their responses are in a database posted on the Working Group's website.

3. Prioritize Top Research Needs related to WACH

The TC reaffirmed that the top priorities for research are the following (unchanged from the list identified in 2014):

- Continue to use satellite collars (or other improved technology) to collect data about the herd's movements
- Subsistence harvest information
- Snow/weather/climate data and effects of these factors on the herd
- Effect of predation on the herd
- Cumulative effects of roads and other infrastructure development on the herd and its habitat

4. WACH Research and Management Projects and Bibliography

At the request of the Working Group, the Technical Committee maintains a list of research and management projects related to the herd, and a bibliography of publications regarding the herd. These lists will be updated in January 2016 and posted to the WACH WG website.

5. Research Reports

The Technical Committee heard presentations about two research projects:

- Tundra in Transition: Unraveling the dynamics of western Alaska caribou tundra ecosystems presented by Dr. Don Spalinger, University of Alaska Anchorage
- Persistence of Subsistence: Factors Affecting Wild-Food Harvests in Rural Alaska, 1982-2013 presented by Jim Magdanz, University of Alaska Fairbanks

Plan Element 2: POPULATION MANAGEMENT

VERSION B

Table 1. Existing

Population Trend			
Declining	Stable	Increasing	
Low: 6%	Med: 7%	High: 8%	
Pop: 265,000+ Harvest: 18,550-24,850	Pop: 230,000+ Harvest: 16,100-21,700	Pop: 200,000+ Harvest:16,000-21,600	
Pop: 200,000-265,000 Harvest: 14,000-18,550	Pop: 170,000-230,000 Harvest: 11,900-16,100	Pop: 150,000-200,000 Harvest: 12,000-16,000	
Preservative		Pop: 100,000-150,000 Harvest: 8,000-12,000	
<130,000	<115,000	<100,000 Harvest: 6,000-8,000	
	Low: 6% Pop: 265,000+ Harvest: 18,550-24,850 Pop: 200,000-265,000 Harvest: 14,000-18,550 Pop: 130,000-200,000 Harvest: 8,000-12,000	Declining Stable Low: 6% Med: 7% Pop: 265,000+ Pop: 230,000+ Harvest: 18,550-24,850 Harvest: 16,100-21,700 Pop: 200,000-265,000 Pop: 170,000-230,000 Harvest: 14,000-18,550 Harvest: 11,900-16,100 Pop: 130,000-200,000 Pop: 115,000-170,000 Harvest: 8,000-12,000 Harvest: 8,000-12,000	

Table 1. Proposed Fixes

	Population Trend		
Management Level and	Declining	Stable	Increasing
Harvest Level	Low: 6%	Med: 7%	High: 8%
Liberal	Pop: 265,000+ Harvest: 16,000-22,000	Pop: 230,000+ Harvest: 16,000-22,000	Pop: 200,000+ Harvest:16,000-22,000
Conservative	Pop: 200,000-265,000 Harvest: 12,000-16,000	Pop: 170,000-230,000 Harvest: 12,000-16,000	Pop: 150,000-200,000 Harvest: 12,000-16,000
Preservative	Pop: 130,000-200,000 Harvest: 8,000-12,000	Pop: 115,000-170,000 Harvest: 8,000-12,000	Pop: 100,000-150,000 Harvest: 8,000-12,000
Critical	<130,000	<115,000	<100,000
Keep B:C ratio ≥40 Bull:100 Cow	Harvest: 6,000-8,000	Harvest: 6,000-8,000	Harvest: 6,000-8,000

WACH Cooperative Management Plan 2011 Proposed Revisions 12/10/2015 page 1 of 1

Motions Acted Upon at WACH WG Meeting

December 16-17, 2015

Call to Order & Introductory Sections

- <u>Approval of Agenda</u>: Motion to approve agenda as presented, by Tom Gray, seconded by Allen Barrette. Motion carried unanimously.
- Member Appointment: Motion by Allen Barrette, second by Neil DeWitt, to accept
 nomination of the following Working Group Voting Chairs and Alternates: Seat 1 Neil
 DeWitt and Alternate Kenny Rodgers, Seat 7 Voting Chair Enoch Mitchell and Alternate
 Daniel Foster, Sr., Seat 13 Voting Chair Charlie Lean and Alternate Jacob Martin, Seat 14
 Voting Chair Tim Fullman and Alternate David Krause, Seat 18 Alternate Julie Owen.
 Motion carried unanimously.

National Park Service Caribou Monitoring

- WACH Calf Mortality Study (Tabled) Motion by Neil DeWitt, seconded by Tom Gray, to support NPS in going forward with a calf mortality study and bring the results back to the WG at its next meeting. After discussion, motion by Tom Gray, seconded by Cyrus Harris, to Table consideration of this motion. Motion to Table passed unanimously.
- WACH Calf Mortality Study MOTION by Neil DeWitt to support NPS conduct of a calf mortality study for the WAH, seconded by Tom Gray. Motion carried 13:1.

Technical Committee Report

• <u>2011 WACH CMP, Table 1</u> – MOTION by Neil DeWitt, seconded by Bill Bernhardt, to approve the changes to Table 1 in the 2011 Western Arctic Caribou Herd Cooperative Management Plan. Motion approved unanimously.

Business Meeting

- Approval of 2014 Meeting Summary Motion to approve the complete minutes for the December 2014 WACH Working Group meeting, by Allen Barrette and seconded by Neil DeWitt. Motion carried unanimously.
- <u>Election of Vice Chair</u> Allen Barrette nominated Cyrus Harris to continue to serve as Vice-Chair (for 2016-2018), with second by Tom Gray. Tom Gray moved to close nominations, with second by Enoch Mitchell. With no objection, Cyrus Harris was reappointed Vice Chair.
- Resource Development Committee Chair Motion by Neil DeWitt with second by Charlie Lean for Tim Fullman to serve as Chair; passed without objection.
- Bylaws Change, Executive Committee Quorum Motion by Neil DeWitt, second by Allen Barrette, to approve the bylaws change to establish a quorum for the Executive Committee.
- New Business Comments on Board of Game Proposal 73 Motion by Allen Barrette to adopt proposal 73, to establish a minimum caliber of .243 for ammunition for caribou. Second by Neil DeWitt. Vote on the motion None in favor; unanimous opposition to this motion (and to BOG proposal 73).

Western Arctic Caribou Herd Working Group DRAFT Meeting Summary - 2015 Attachment 3

- New Business Comments on Board of Game Proposal 85 Motion by Allen Barrette to adopt proposal 85, to delete the exception in 5 AAC 92.010(g) that allows the harvest of caribou without requiring a harvest ticket or harvest report for residents residing north of the Yukon River. Seconded by Neil DeWitt. After discussion, motion by Neil DeWitt to amend the original motion to Table its consideration until the next WACH WG meeting. Seconded by Allen Barrette. Motion to Table passed unanimously.
- Next Meeting Date: Motion by Tom Gray, seconded by Allen Barrette, to schedule next WG meeting on December 14-15, 2016 in Anchorage, with Technical Committee meeting on December 13. Motion carried unanimously.

Assignments Made at WACH WG Meeting

December 16-17, 2015

Proposed Regulation Changes related to Wildlife Harvest and Management

- Staff to work with the Chair to submit comment to BOG in opposition to proposal 73.
- Staff to prepare errata sheet for Table 1, to insert in 2011 WAH Cooperative Management Plan. Post on website.
- Update WACH WG Bylaws with change to Executive Committee quorum.
- Use identified process (p. 187 of WG Binder, to fill vacancies (alternates for Lower Kobuk River, Point Hope/Point Lay, Upper Kobuk River, Ataqsuk/Barrow/Wainwright).

WACH Working Group Meeting Attendance - 2015

List	First	Last	Organization	
Agency Sam	Sam	Cotten	Alaska Department of Fish and Game	
			(ADF&G), Commissioner	
Agency	Drew	Crawford	ADF&G Commercial Fisheries Division	
Agency	Nicole	Braem	ADF&G Subsistence Division	
Agency	James	Simon	ADF&G Subsistence Division	
Agency	Bruce	Dale	ADF&G Wildlife Division	
Agency	Maria	Gladziszewski	ADF&G Wildlife Division	
Agency	Tony	Gorn	ADF&G Wildlife Division	
Agency	Ryan	Klimstra	ADF&G Wildlife Division	
Agency	Steve	Machida	ADF&G Wildlife Division	
Agency	Karen	Mitchell	ADF&G Wildlife Division	
Agency	Lincoln	Parrett	ADF&G Wildlife Division	
Agency	Kari	Rasmussen	ADF&G Wildlife Division	
Agency	Brandon	Saito	ADF&G Wildlife Division	
Agency	Patricia	Petrivelli	Bureau of Indian Affairs	
Aganari	Davia	Ballou	Bureau of Land Management (BLM),	
Agency	Doug	Ballou	Anchorage Field Office	
Agency	Casey	Burns	BLM	
Agency	Jennifer	McMillan	BLM, Central Interior Field Office	
Agency	Aliza	Segal	BLM	
Agency	Bruce	Seppi	BLM, Anchorage Field Office	
Agency	Laurie	Thorpe	BLM	
Agency	Dave	Yokel	BLM, Arctic Field Office	
Agency	Hannah	Atkinson	National Park Service (NPS)	
Agency	Matt	Cameron	NPS	
Agency	Greg	Dudgeon	NPS	
Agency	Kyle	Joly	NPS	
Agency	Peter	Kirchner	NPS	
Agency	Randy	Larson	NPS	
Agency	Jim	Lawler	NPS	
Agency	Jeff	Rasic	NPS	
Agency	Bud	Rice	NPS	
Agency	Hillary	Robison	NPS	
Agency	Bill	Carter	US Fish and Wildlife Service (USFWS), Selawik National Wildlife Refuge	
Agency	Susan	Georgette	USFWS, Selawik National Wildlife Refuge	
Agency	Brittany	Sweeney	USFWS, Selawik National Wildlife Refuge	
Agency	David	Zabriskie	USFWS, Selawik National Wildlife Refuge	
Agency	Myra	Harris	USFWS, Koyukuk/Nowitna/Innoko National	

List	First	Last	Organization	
Agency	Kenton	Moos	USFWS, Koyukuk/Nowitna/Innoko National Wildlife Refuge	
Agency	Karen	Deatherage	USFWS, Office of Subsistence Management (OSM)	
Agency	Tom	Evans	USFWS, OSM	
Agency	Lisa	Maas	USFWS. OSM	
Agency	Chris	McKee	USFWS, OSM	
Agency	Eva	Patton	USFWS, OSM	
Alaska Native Corporation	Elia	Gomez	NANA Corporation	
Alaska Native Corporation	Lance	Kramer	NANA Corporation	
Facilitator	Jan	Caulfield	Jan Caulfield Consulting	
Local Govt	Harry	Brower	North Slope Borough	
Local Govt	Mike	Pederson	North Slope Borough	
Local Govt	Charlie	Gregg	Northwest Arctic Borough, Planning Dept.	
Media	Casey	Restino	Arctic Sounder	
Media	Yereth	Rosen	Alaska Dispatch	
Organization	Bruce	Davis	Alaska Reindeer Council	
Organization	Katie	Christie	Alaska SeaLife Center	
Organization	Maggie	Massey	Alaska Wilderness League	
Organization	Lindsey	Hajduk	Conservation Lands Foundation	
Organization	Bonnie	Davis	Reindeer Herders Association	
Organization	Lois	Epstein	The Wilderness Society	
Organization	David	Krause	The Wilderness Society	
Organization	Nicole	Whittington- Evans	The Wilderness Society	
Public	Ron	Yarnell		
Public	Robert	White		
University	Jim	Magdanz	University of Alaska Fairbanks	
University	Molly	Murphy	University of Alaska Fairbanks	

WACH WG Meeting 2015 Caribou Roundtable Discussion Responses to Questionnaire on Observations about Caribou

WACH WG Meeting 2015 Caribou Roundtable Discussion Responses to Questionnaire on Observations about Caribou

North Slope Region

Working Group members: Steve Oomituk (Point Hope)

Others providing local knowledge on these questions: Harry Brower (Barrow)

Facilitation/Notes: Lincoln Parrett (ADF&G), Ryan Klimstra (ADF&G), Dave Yokel (BLM)

Physical Environment

- 1. When did freeze-up occur? How does this compare with past years? How about the first snowfall? How about break-up?
 - Point Hope Celebrate the first slush ice connecting to land, getting later into October-November. Froze up in mid-November 2015, whales tale celebration. Up river, should freeze in October, but it is occurring in November now.
- 2. What did you notice about snow depth and icing?
 - Point Hope A lot of deep snow lately (drifting). Snow started October 31, 2015 this winter.
- 3. What were winds like in winter? In summer?
 - Point Hope High winds (generally) in 2015.
- 4. Has there been any unusual weather this year? If so, what kind? (For example, strong winds, storms, much/little rain or snow, etc.)
 - Point Hope Rains in January and February 2015. Temperatures were 30-40 deg. F, with rain. Rain made everything icy, up in mountains also. Maybe more rain during the summer and fall 2015 than previous.
 - Barrow A lot of rain in summer 2015. A lot of overflow in rivers inland.
- 5. Has there been anything else noteworthy this year regarding the air, rivers and lakes, or land? (For example, occurrences of fire that may have impacted caribou range, good/poor vegetation growth, late/early freeze, erosion, etc.)
 - Point Hope A good salmon berry year. Used to get them in August, but this year (2015) came in July. Spring came early, whales harvested in early April 2015. Ice lead, half mile out rather than 10-15 miles like normal. Ice very thin by late April and early May. Not safe for pulling up whale.

Caribou

- 6. When were caribou present in your area? When did they first arrive? When were they last seen? How does this compare with past years?
 - Point Hope In 2015, caribou came to Point Hope later than early July (as was usual). In fall 2015, caribou were five miles out from town in late October and early November, so

that was great. Good fall season for Point Hope. First time hunters giving away their first catch. Been a long time (10 years or more) since caribou wintered around Point Hope. Caribou still hanging around right now (December 2015). Folks are up river right now ice fishing and able to get caribou right now.

- 7. How many caribou were in your area? What was the composition of the herd like (calves, males/females)? How does this compare with past years?
 - Point Hope Lots of calves with the cows.
- 8. If you harvested caribou, how did the meat and skins compare with past years? What did you notice about fat? Parasites?
 - Point Hope Caribou came by in November; were nice and fat. Very happy there was meat to eat. All kinds were harvested. No mention of parasites from community. Healthy animals!
- 9. Were there any other notable changes regarding caribou compared with past years?
 - No response.

Other Animals

- 10. What did you notice about bears and wolves in your area?
 - Point Hope Catching a lot of wolves past several years, with 4-5 wolves taken maybe in a single trip. Seeing a lot of wolf sign. Few wolverines around as well.
- 10-A. How did these predators affect caribou in your area? (New question in 2013)
 - Point Hope Possible that wolf harvest is allowing caribou to stay close to town or wolves are keeping caribou pinned down close to town. Still a lot of wolf sign around even though harvest is high.
- 11. Have there been any notable changes regarding other animals in your area, compared with past years? (For example, new animals arriving in your area, or animals that you do not see much of any more, or changes in behavior or body condition)
 - **Point Hope** More and more moose showing up. Possible that fires from inland means more moose. There were some smoke issues this summer. Smelly and hazy. Often pushes animals towards the coast.

Other Comments

- 12. How do people in the communities use caribou, other than for meat (e.g., clothing)?
 - Point Hope Mainly an ocean people, but rely on tutu for clothing and other uses. Fall time and winter time clothing.
- 13. What types of exploration and development or other activity have you noticed in the region that may be impacting caribou?
 - Point Hope Concern that research activities on the North Slope are diverting some resources away from some communities.
- 14. What have you noticed regarding any conflicts between local and non-local hunting in the area of your community? Do you have suggestions for how to reduce conflicts?
 - Point Hope A lot of planes flying around in early July, August, September.

15. Is there anything else that you have seen this year that you would like to mention?

- Snow machines allowing folks to make more day trips for hunting rather than a two or three week trip. Machines are more reliable.
- Still an effort to teach young hunters the old ways, e.g., letting first group of caribou pass through.
- Climate change is affecting access to animals and areas.
- Local hunters are impacted by climate change, research activities, caribou decline, regulation change.
- Regulations:
 - Point Hope Don't think about the regulations that much, because they have to get caribou when they are there.
 - Barrow Regulations are a problem, specifically the bag limit. Hunters want to take more because sometimes the animals are only around for a limited time.

Seward Peninsula

Working Group members: Morris Nassuk (Koyuk), Charlie Lean (Nome), Tom Gray (Nome, Reindeer Herders Assn.), Charles Saccheus (Elim)

Facilitation/Notes: Kyle Joly (NPS), Matt Cameron (NPS), Tony Gorn (ADF&G)

Physical Environment

1. When did freeze-up occur? How does this compare with past years? How about the first snowfall? How about break-up?

Winter 2014-2015 / Spring 2015

- No snow through most of winter 2014-2015. Finally got snow in the first week of March 2015. (ADF&G didn't get snow to do musk ox survey until first week of March.)
- Then, break-up began in April 2015.
- This makes three years in a row of short window of snow.

Winter 2015-2016

- Nome Windier, stormier fall. Ocean ice hasn't set up yet this winter (as of December 2015). Seen a few recent pictures, but might not stick. Ice went out, them came back.
- Koyuk Freeze up occurred the month of November 2015. Prior years, from what I can recall, it usually occurred late September to October.

2. What did you notice about snow depth and icing?

- Southern Seward Peninsula 62" average of snow per year. Late 2000's, average 80" of snow per year. But since then, it has been dismal. Remarkably little snow.
- Koyuk Break up was in May for most of the years I can remember. This year (2015) for this time snow is deeper and icing or ice thickness may be not too thick a foot and a couple inches.

3. What were winds like in winter? In summer?

- Stronger winds.
- October 2015 on was pretty windy.
- Koyuk The winds were from the east and south for the most part. We had rainy weather and some strong east and southwest winds last summer.

4. Has there been any unusual weather this year? If so, what kind? (For example, strong winds, storms, much/little rain or snow, etc.)

- There was rain in January 2015.
- Koyuk Rainy fall in 2015, coming in from the east.
- Nome Last 20 years has had rain mid-winter. Easterly side of mountains gets more snow than west, rain on snow with snow on top of it harder.

5. Has there been anything else noteworthy this year regarding the air, rivers and lakes, or land? (For example, occurrences of fire that may have impacted caribou range, good/poor vegetation growth, late/early freeze, erosion, etc.)

- Koyuk Fires came early and seemed to me a little more spots here and the in the Norton Sound area.
- Koyuk Willows seemed to bud earlier this year. Salmon berries and black berries hard to find in 2015. Used to be many salmon berries, but think they have moved south. Saw a bunch of cranberries. Saw blueberries, but not much.
- Nome Last several years had good blueberry crop, but 2015 wasn't as good in Nome.

Caribou

- 6. When were caribou present in your area? When did they first arrive? When were they last seen? How does this compare with past years?
 - Nome Spring 2015 Thousands of caribou above Bunker Hill in April 2015. Fall 2015
 Caribou in the flats now (December 2015). Usually when there's a big snow, that's where they stay the rest of the winter. As long as wolves don't harass them, they'll be there.
 - Koyuk Spring 2015 Some caribou seen up Koyuk River in April 2015. Fall 2015 First caribou seen in early November 2015. This has been pretty consistent for the last six
 years.
 - Elim Spring, 2015 March 2015, 20 miles northwest of Elim, people catching caribou. Those weren't caribou, they were reindeer. Caribou were gone by then. They had Merlin and ear tags. Caribou leave in January, maybe it's the reindeer that are around. Fall, 2015 First caribou in October 2015.
- 7. How many caribou were in your area? What was the composition of the herd like (calves, males/females)? How does this compare with past years?
 - Nome Overwhelmed with Caribou this year. A few weeks ago (December 2015) still a lot. More so than in the recent past. Thousands and thousands. Fall 2015 had more caribou on the Nome road system than 2014. This year was the first year in memory of having so many caribou show up.
 - Koyuk Biggest group Morris saw was a couple of hundred. Hunters said there were more dispersed small groups. The number of caribou in our area for me is hard to estimate. From what I seen and heard there seems to be about almost an equal or close to equal number of bulls and females and calves were around some females, not sure about percentage.
 - ADF&G survey observations (Tony Gorn) Dec. 4-5, 2015, flew Game Management Unit (GMU) 22C. Saw caribou on doorstep of Casa, American Creek flows into GMU 22B, caribou there. Did not see thousands, but saw dozens at mouth of Casa. Group of six headed southwest and turned around at snow. Headed back and near Council runway. Didn't see thousands of thousands. Flew GMU 22C all day, didn't see many more. This seems like the time of year when they're not pushing further, they're pushing back.
- 8. If you harvested caribou, how did the meat and skins compare with past years? What did you notice about fat? Parasites?
 - Nome Helped someone skin recently, most like jackrabbits. Only one had fat.
 - Nome Caribou harvested this fall 2015 had a couple inches of fat, they were eating good before snow. No snow until late October, got to feed a lot.
 - Koyuk Hunters said they had little fat, mostly lean. Just a little fat. Some hunters say some were lean and some said they got some with some fat. Not too much seen or heard of parasites to my knowledge.
 - No diseases or parasites mentioned.
- 9. Were there any other notable changes regarding caribou compared with past years?
 - Nothing mentioned.

Other Animals

10. What did you notice about bears and wolves in your area?

Wolves

- Wolves are hard on the caribou. When snow is high, they get a bunch.
- ADF&G observation Dec. 4-5, 2015 flight, saw wolves around Casa. People in Southern Penn (GMU 22) villages say they are seeing more wolves.
- Nome Growing up didn't have resident wolves. As a kid, wolves were rare, dad didn't know what a wolf was when they saw it. Now they have wolves set up on the Seward Penn, resident wolves. Officially ok'd to kill young wolves. Someone near Council saw 18 wolves in one day.
- Shishmaref is similar they are killing wolves.
- Southern villages have similar stories.
- Koyuk More sign of smaller wolves, hunters reporting seeing more wolves. Recently coyote harvested. I saw wolf kills not too far from home and the wolf sign indicates that young wolves are in the pack of the predators here but not like the previous years where larger packs signs were seen. In my opinion the wolves keep the caribou on their hooves and ready to run with any noise.
- Elim Someone got 5 wolves a day. Got a secret way to do it, but get 5 a day.

Bears

- Koyuk There's a good number of bears. They're a part of caribou harvest too. In spring they saw two bears fight over a caribou carcass. In his opinion, the bears are at a good number for harvest, maybe 20-30 a year. Can't compare them historically.
- Koyuk November 2015 was latest they saw bear tracks. Not sure on denning timing changes. March or May they come out. Saw a bear in 1980's come out at end of March.
- Elim Saw bears out near Elim in November 2015 (as guide).
- Elim Lots of bears at home. Eat salmon all summer long. Bears on the south side of the mountains eating berries as far as you could see. Counted 40 bears one time. Quit counting. Told story of helping a teacher shoot a huge bear up in the headwaters of a river. Bear was 7 ft tall, so old didn't have teeth, tons of scars.
- Seward peninsula generally Seeing fewer and fewer bears now; 15-20 years ago would see 15-20 bears. Now only see one on a river float. In past, could get two bears in seven days; now, harder to make successful bear hunt. Don't think they have the bear numbers now that they did 20 years ago. Big skulls are less common. Now the bears are smaller. Thinks the road system has hurt the bears.
- ADF&G observation Saw a brown bear during Dec. 4-5, 2015 over flight. Discussion of ADF&G brown bear surveys (with Tony Gorn): There is a difference between counting the bears that you see and *surveying* the bear population. What's a repeatable, reliable method to use to get an accurate population count? We have some areas where bears congregate, but we don't have enough data that we can base bear management decisions on. NPS biologists tried aerial surveys in Unit 22 and out of Kotzebue. This effort worked to teach them things, but it didn't produce an estimate for bear populations. Last year, ADF&G flew the middle third of the Seward Peninsula, north shore to south shore, and the technique worked. Biometrician said that from the first time it was surveyed for bears in the 1990's to last year's survey, the results show only a little increase in bear population. It may have Maybe it fluctuated in the time between these two survey counts, but we can't know.
- 10-A. How did these predators affect caribou in your area? (New question in 2013)
 - No specific responses on effects of predation.
- 11. Have there been any notable changes regarding other animals in your area, compared with past years? (For example, new animals arriving in your area, or animals that you

do not see much of any more, or changes in behavior or body condition)

- Elim Pigeons. Come from Nome.
- Elim Bowhead whale in front of Elim in first week of January 2015.
- Koyuk Coyotes moving into their area. Unusual. Hunters have gotten several coyotes so far. (They use the meat for drying, frying, baking, stew, and uqaq.

Other Comments

12. How do people in the communities use caribou, other than for meat (e.g., clothing)?

• No comments.

13. What types of exploration and development or other activity have you noticed in the region that may be impacting caribou?

- Nome Always a new mine.
- Koyuk Cell towers put up last year. Don't seem to impact anything. To date I don't think that any exploration or development impacted the caribou around our area yet.
- Elim Worried about proposed road to the Ambler Mining District. Worried about effects on caribou migration if that road is constructed.

14. What have you noticed regarding any conflicts between local and non-local hunting in the area of your community? Do you have suggestions for how to reduce conflicts?

- Nome No conflicts.
- Koyuk No user conflicts that he's heard of. I haven't seen or heard of foreign or domestic battles been fought over caribou yet.

15. Is there anything else that you have seen this year that you would like to mention?

Regulations

- Just wishes the Alaska Board of Game would be more subsistence friendly.
- Discussion and concern about the changes in bull regulation. People are upset bout not being able to shoot bulls. People are getting cited for taking a bull; this is needless, since we are not in a critical management stage for the herd. Villages are saying that this is a big concern. It is a hard regulation to follow (hard to distinguish cow/bull in winter. Number of bulls typically harvested on Seward Peninsula (maybe 900?) is not enough to affect the population.

Change in how Caribou Roundtable is conducted?

• Would like elder historians to be a part of this discussion. They have stories of climate change and animal movements, and predators.

Koyukuk and Middle Yukon Region

Working Group members: Benedict Jones (Koyukuk), Pollock Simon, Sr. (Allakaket), Allen Barrette (Fairbanks).

Facilitation/Notes: Jennifer McMillan (BLM), Nikki Braem (ADF&G), Greg Dudgeon (NPS)

Physical Environment

- 1. When did freeze-up occur? How does this compare with past years? How about the first snowfall? How about break-up?
 - Fall 2015 Freeze up was late this year. Ice froze smooth (like it used to be), not jumbled ice.
 - Winter 2014-2015 was mild.
 - Spring 2015 Breakup was early. Very dry early on.
- 2. What did you notice about snow depth and icing?
 - Interior –Allakaket had snow early (September dump)... it didn't melt in Allakaket, as it did in Fairbanks. Got about a foot and half in Upper Koyukuk last week (December 2015).
- 3. What were winds like in winter? In summer?
 - No comments about wind conditions.
- 4. Has there been any unusual weather this year? If so, what kind? (For example, strong winds, storms, much/little rain or snow, etc.)
 - Rain in late January 2015, rained on snow, created sheet of ice, made travel difficult.
 - Rained July, August, September 2015. Lots of rain, rivers high going into freeze-up.
- 5. Has there been anything else noteworthy this year regarding the air, rivers and lakes, or land? (For example, occurrences of fire that may have impacted caribou range, good/poor vegetation growth, late/early freeze, erosion, etc.)
 - Temperatures not that high this summer at all. General observation that water temperature in Koyukuk River has risen over time.
 - Lots of fires. 2015 significant fire year; 80,000 acre right by sand dunes, foothills of Nulato Hills; big fires around Hughes as well possible long lasting impact to caribou habitat (food). Some talk about fire and the desire for protection of caribou habitat (food) through more fire suppression. Noted the need to know where the important lichen / food source areas are (e.g., studies to map lichen). (BLM staff noted that the agency is working on mapping.)

Caribou

- 6. When were caribou present in your area? When did they first arrive? When were they last seen? How does this compare with past years?
 - Haven't had caribou present in Upper Koyukuk or Alatna/Allakaket area for a decade, except for one year.
 - There have been caribou within 50 miles, but difficult to get to. Cost of gas is very high.
 - Prior to 1974, caribou were just a few miles out of Allakaket, but they don't come back anymore. (In 1974 the haul road was pushed north for the Trans-Alaska Pipeline; after completed, don't see anymore due to traffic on road; almost parallel to caribou migration route.)

- 7. How many caribou were in your area? What was the composition of the herd like (calves, males/females)? How does this compare with past years?
 - Some discussion of the Ray Mountain herd, which numbers less than 2,000 animals.
- 8. If you harvested caribou, how did the meat and skins compare with past years? What did you notice about fat? Parasites?
 - Noted that Hughes and Huslia are only communities that harvest.
 - Noted that caribou from tundra not as good, but ones from woodlands better.
 - Fairbanks (non-local) hunters (hunting not in the Middle Yukon area, but near Ambler, Dahl Creek, Kobuk River) came back with very good, very large caribou with good antlers and a lot of fat on hides.
- 9. Were there any other notable changes regarding caribou compared with past years?
 - Historic perspective on WAH Late 1800's, guys working on steamboat, about 12 miles above Galena relayed story that the WAH was migrating in the thousands and crossing river. Steamboat had to tie up for one week, couldn't go. The steamboat then had to go back downriver and pick up more wood. By the time it came back 10 days later, the WAH had cleared out. They said that where the herd had been crossing the river, the trail was about 300 feet wide and 10 feet down.

Other Animals

- 10. What did you notice about bears and wolves in your area?
 - Seeing lots of grizzlies. Noted that grizzlies migrated from Canada within last 30 years; 50 years ago there were no grizzlies around. Brown bears didn't come to river area, stayed mostly in mountains. People used to hunt brown bear in late November, December, before they migrated (in Nulato Hills). This spring (2015) had a low harvest of bears, but when fall came, lot of grizzly bears. Bears that came in were in good shape, long hair, fat... even older bears were really good skins, large bears got killed this year.
 - Black bear that were hunted had no fat on them (Huslia area) and wouldn't have survived the winter.
- 10-A. How did these predators affect caribou in your area? (New question in 2013)
 - Predator control in the area has seemed to help with regard to moose population.
- 11. Have there been any notable changes regarding other animals in your area, compared with past years? (For example, new animals arriving in your area, or animals that you do not see much of any more, or changes in behavior or body condition)
 - Low insect year.
 - Rarely see coyotes, usually one or two a year on the haul road.

Other Comments

- 12. How do people in the communities use caribou, other than for meat (e.g., clothing)?
 - No response to this question.
- 13. What types of exploration and development or other activity have you noticed in the region that may be impacting caribou?

- Some Working Group members expressed concern that the proposed road to the Ambler mining district will also impact caribou movement, as well as other subsistence and community lifestyle. Vehicle traffic will be a problem.
- Ambler Road would go east and west; concern with caribou crossing. Concern that historically roads have affected the big herds in Alaska.
- Some concerned that Ambler road would bring non-local people into the country; cause conflicts. tell us that we would get cheaper groceries and gas; but feel would have to sacrifice way of life for that, give up for cheaper groceries, gas.
- Others in group have a different view about the road doesn't think that development has impacted caribou (even the Red Dog Road).

14. What have you noticed regarding any conflicts between local and non-local hunting in the area of your community? Do you have suggestions for how to reduce conflicts?

- In past, hunters did <u>not</u> throw bones into the river.
- Concerned that sport hunters in Gates of the Arctic are changing the caribou migration, by disturbing the leaders of the migration ("chase them back west"). Very few caribou coming through Atigun Pass in recent years.
- Wildlife managers need to listen to elders.
- Don't leave caribou meat to rot or caribou won't come back through that way.

15. Is there anything else that you have seen this year that you would like to mention?

- All caribou herds are down in numbers.
- Moose numbers are down in numbers.
- Furbearers are down in numbers.
- Can't explain it all think its habitat related.

Kotzebue Sound / GMU 23 Region

Working Group members: Vern Cleveland (Noorvik/Kiana), Cyrus Harris (Kotzebue), Enoch Mitchell (Kivalina/Noatak), Billy Bernhardt (Kobuk/Shungnak), Neil DeWitt (Anchorage)

Many other group participants (names not recorded)

Facilitation/Notes: Susan Georgette (USFWS), Hannah Atkinson (NPS), Brandon Saito (ADF&G)

Physical Environment

1. When did freeze-up occur? How does this compare with past years? How about the first snowfall? How about break-up?

- Noorvik Freeze up late. Just 2-3 weeks ago (late November 2015). Very difficult for hunters to go on ice. Would go on ice and it was thin. Different with climate change. Lost two guys this fall under the ice. Winters shorter, warmer than usual.
- Kotzebue Along the coast it is freezing up later than normal, seems to start freezing at a normal time but then the weather changes to SE and warms up. This seems to be a trend these past few years at least. It seems to start cooling off on time and then it warms back up.
- Noatak September 28th we pull our boats up. The river is pretty shallow. Freeze up was pretty early compared to the last three or four years in Noatak. This year it was early. But, conditions change quickly. Weather shifted quickly from hot to cold. Trout and white fish were present right before freeze up. Freeze up for two days and then warmed up again for a week.
- Kotzebue Sound Warm, cold, warm, cold fall. Past five years it's been like that. It is effecting the way people hunt and the way animals come in.
- Kobuk Fall was normal. I was up at camp and living there, we come back at freeze up.

2. What did you notice about snow depth and icing?

- Noorvik Finally got a little bit of snow a couple of weeks ago (late November 2015) with the storm that came in. Not much snow, after snow it rained, snow was hard in our area in Noorvik.
- Kotzebue- Too much snow up there so far this winter. Past five years we haven't had any snow. This is the first year. We have more SW wind, not quite a storm, blowing snow, constant southwest wind.
- Kotzebue Still a bit of punchy snow, can't go to fast on snowmachine or you'll hit tussocks underneath.
- Kotzebue Took video of the caribou and seals on November 10, 2015. It had frozen up and we thought we were done seal hunting and then the ice picked up and took it out and all the seals were out there and they caribou were wondering where's the ice? Got snow on top of ice and it insulated the ice so the ice isn't very thick right now, can't do night riders race, not safe for trucks. I'm trapping too, and the snow is blowing and drifting into willow valleys. Can't take trucks up the Noatak for the first time up the river because of the snow depth and drifts, first time in about five years.
- Noatak It is snowing more; we had a couple of snowstorms. We usually have a big snowstorm right before Christmas. Last three four years we didn't have too much snow we couldn't use snowmachines, we used ATVs. Now everyone is using snowmachines. Ice is not that thick.

- Noorvik Thought freeze up is going to be normal then you have extended periods of warm, and it causes ice to be really unsafe. One day you are driving on the ice and the next you have to stop because it's too warm.
- Kobuk It snowed again, been a good year for snow.

3. What were winds like in winter? In summer?

- Kotzebue Frequent SE and SW winds, but SE wind is bringing the storms.
- 4. Has there been any unusual weather this year? If so, what kind? (For example, strong winds, storms, much/little rain or snow, etc.)
 - Noatak Hot to cold and too hot, and the berries aren't good.
- 5. Has there been anything else noteworthy this year regarding the air, rivers and lakes, or land? (For example, occurrences of fire that may have impacted caribou range, good/poor vegetation growth, late/early freeze, erosion, etc.)
 - Noatak Berries weren't good.
 - Sisualik It was a really dry summer in Sisualik, no water in the wells. Blueberries were in the trenches where there was wells, but outside of that the vegetation was really crunchy. But, blackberries at Sisualik were good.
 - Kotzebue Blueberries, but no salmonberries
 - Upper Kobuk Lots of lingon berries (low bush cranberries), but not other berries. It is because we had a warm May and then snow in June. And the June snow killed the berries.
 - Kobuk We didn't have wildfires in 2015. It was smoky, not from a close fire, they were way off.

Caribou

- 6. When were caribou present in your area? When did they first arrive? When were they last seen? How does this compare with past years?
 - Kotzebue Coastal route, indigenous knowledge states that caribou camp out above Cape Krustenstern area until it really cools off. In fall 2015, they started moving when it cooled off, but they made a right hand turn to where they dead-ended by the NANA building in Kotzebue and they had to run around to go back to around Lockhart.
 - Kotzebue First time in a long time they were by Francis Ballot slough and area by Sivu.
 - Kotzebue USFWS took kids out hunting during the 4th week of September when we had snow and it was the first time in years when there were caribou around for the kids to hunt.
 - Noorvik got a lot of caribou. They were late. The ones that crossed on the road system, some of them went through the upper part of the village and the recent ones went up through the mountains.
 - Upper Kobuk Caribou didn't make it up to Kobuk this Fall 2015 until after it snowed. At first, they couldn't cross the river and then when it did freeze we got caribou. Caribou were above Kobuk; crossing between Shungnak and Ambler. There are few caribou around right now (mid-December 2015) near the hot springs. All in all, the migration is later.
 - Upper Kobuk There were not many caribou in Spring 2015.
 - Noatak Caribou were pretty scattered this year. Got one up by the Aggie River on August 8, 2015. Got one up by camp September 1, 2015. Looked for one week for the main migration, but couldn't find it, had already passed by. When they closed Red Dog Road (in mid-September 2015), watched the caribou cross for hours. But, they didn't

- reach Noatak. There's few that come down to the river. Don't get a five a day like we used to, getting two or three a day. It's getting worse. They used to cross closer to Noatak.
- Red Dog Road They were a bit late by the Red Dog Road. This year the migration has been spread out. They are still coming; recently saw 3,000 down by Aqqaluk.
- 7. How many caribou were in your area? What was the composition of the herd like (calves, males/females)? How does this compare with past years?
 - No response to this question.
- 8. If you harvested caribou, how did the meat and skins compare with past years? What did you notice about fat? Parasites?
 - Noorvik Caribou were fat. Never seen it except for this Fall (2015); they were very healthy caribou. Caribou are very healthy. Even in the Spring, when they were migrating back, they were very healthy.
 - Kotzebue Caribou conditions were really great this fall, hair was shiny, really good shape caribou.
 - Bulls and cows were both fat and healthy.
 - Upper Kobuk Different in upper Kobuk, we don't get those good Spring caribou. In the Fall, by the time they get to the upper Kobuk they are damn skinny because they've been traveling a long ways.
- 9. Were there any other notable changes regarding caribou compared with past years?

Other Animals

- 10. What did you notice about bears and wolves in your area?
 - Noorvik We have a lot of predators, a lot of wolves.
 - Bears, wolves. Bears are predators for fish and caribou. Wolves are predators for caribou.
 - Wolves, took a trip to Kotzebue on snowmachine was going to cross a creek on the river trail and stopped on the ridge and smelled wolves. Saw fresh wolf tracks where they veered into the woods.
 - Our people used to hunt bears. They used to like to fall hunt bears. My uncles would go every fall during the night.
- 10-A. How did these predators affect caribou in your area? (New question in 2013)
 - No response
- 11. Have there been any notable changes regarding other animals in your area, compared with past years? (For example, new animals arriving in your area, or animals that you do not see much of any more, or changes in behavior or body condition)
 - Bumblebees in May when the ice was moving.
 - Bad year for mosquitoes in Sisualik, never felt it in town.
 - People aren't hunting beavers anymore.

Other Comments

- 12. How do people in the communities use caribou, other than for meat (e.g., clothing)?
 - No response to this question.
- 13. What types of exploration and development or other activity have you noticed in the

region that may be impacting caribou?

- Shared information about closure of Red Dog Road from September 15-21. Early in this period, there was local disagreement whether road needed to be closed. A lot of elders and other hunters wanted it closed; group of young hunters were fighting it. Caribou were coming from the east side of Jarvis Mountain. Young hunters were shooting them on the north side of the road. Concerned that this made them avoid crossing and turn back to Jarvis Mountain.
- A lot more marine shipping traffic, more vessels in Kotzebue.

14. What have you noticed regarding any conflicts between local and non-local hunting in the area of your community? Do you have suggestions for how to reduce conflicts?

- Concern about conflicts between local hunters on the rivers. In Fall 2015, there was a lot of combat hunting (was not as big a problem in 2014). Concern about wild shooting; safety issue. When you are out there with 20 or 30 boats in one area and a herd comes out all the boats are taking off. The main place is right above Kiana on the Kobuk River. Even gets boat from Noatak.
- Local combat hunting making noise and shooting first of caribou is just as bad as sport hunters. It is aggressive. People think that if you don't shoot the first caribou you are going to go hungry because someone else is going to shoot them.
- You can't blame it all on young hunters, it's everybody. Everyone wants to get enough to feed their families.
- Noorvik A lot of non-local hunters in our area. We had one trespass hunter (on NANA lands). Nothing happened in terms of enforcement follow-up. They reported they were getting moose [moose carcasses with no horns].
- People are leaving meat out there. They are going to do it again this fall if we don't stop them.
- Discussion about native allotment holders letting people (in some cases, non-local hunters) hunt on their land.

15. Is there anything else that you have seen this year that you would like to mention?

• No response to this question.

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Management Reports to the WACH Working Group, presented at the December 2015 meeting:

- Alaska Department of Fish and Game
- Bureau of Land Management
- National Park Service
- US Fish and Wildlife Service

ADFG Agency Report: Western Arctic Caribou Herd Working Group

- The Division of Wildlife Conservation (Region 5: Arctic/Western Region) within ADFG currently allocates about 30% of our operating budget for arctic caribou herd management and research. We have one full-time Wildlife Biologist based at Kotzebue who is assigned to conduct Western Arctic Herd (WACH) research and management activities. This position will soon be vacant and we are in the process of recruiting for new biologist. Biologists from our Nome, Kotzebue, Barrow and Fairbanks offices assist with the field work and data analyses. Region 5 also has one full-time Wildlife Biologist based at Fairbanks who is assigned to conduct research and management activities for the Teshekpuk Lake caribou herd on the North Slope. Earlier this year, we hired a new biometrician to assist with our caribou research activities, greatly enhancing our capacity for project design and data analyses.
- Field activities in our WACH program include a biennial photo census, fall composition surveys, spring recruitment surveys, caribou collaring at Onion Portage, animal collections for disease and body condition assessment, range-wide radio telemetry surveys and harvest assessment surveys. A review of this work is provided more in-depth in a separate report.
- Our Education Associate for Region 5 based at Nome is assigned to assist with WACH
 caribou wildlife education efforts. These include school visits, preparation of the Working
 Group newsletter and coordinating high school student participation at the Onion Portage
 collaring effort.
- A significant activity of our staff is providing comments to DOT, BLM and other agencies regarding the potential impacts that road and development projects may have on caribou movements and distribution.
- The next Region 5 Board of Game meeting is scheduled for January 2017. A more in-depth review of regulatory proposals will be covered in a separate discussion.

BLM Report to the Western Arctic Caribou Herd Working Group Winter 2015

Planning (Anchorage Field Office contact, Alan Bittner: 267-1246; Arctic Field Office contact, Donna Wixon: 474-2301; Central Yukon Field Office contact, Jeanie Cole: 474-2340)

- The proposed plan to change the administrative office boundaries in Northwest Alaska discussed at last year's meeting was finalized on January 9, 2015 by the BLM Washington DC Office. The BLM Anchorage Field Office has now assumed management responsibilities for lands around the Nulato Hills and within the NANA Corporation boundary.
- The Arctic Field Office has completed a Final Supplemental Environmental Impact Statement (EIS) for the Greater Moose's Tooth Unit 1 (GMT1) petroleum development in the National Petroleum Reserve (NPR) just west of Nuiqsut. This development would consist of a single drill pad and a road connection to the Alpine oil field facilities in the Colville River delta. The Record of Decision (ROD) was issued February 13, 2015. The impacts of the proposed development on the WACH ranges from none to negligible since the development is in the "outer range" of use by that herd. ConocoPhillips has also submitted an application for permit to drill a second oil and gas development called GMT2. Much like GMT1, GMT2 is located in the zone of overlap between the Teshekpuk and Central Arctic herds, and therefore this development is unlikely to impact the WACH. For more information on GMT1 please visit http://www.blm.gov/ak/st/en/prog/energy/oil gas/npra/GMTU proposed development
- BLM is in the alternative development phase of two Resource Management Plans (RMP) for the Bering Sea/Western Interior (BSWI) and the Central Yukon (CYRMP) Planning Areas. These plans will provide for future management of approximately 27 million acres of BLM-managed public lands in western, central and northern Alaska. These lands include the Nulato Hills, Dalton Highway Corridor and lands in the central Yukon River and central Kuskokwim watersheds. We hope to present the draft alternatives to the public in the spring of 2015. Both plans are at the mid-point of the approximately four year process. There will be additional opportunities for public input as the plan progresses. For additional information please visit http://www.blm.gov/ak/st/en/prog/planning.html (Contact: Jorjena Daly: 267-1317 or jdaly@blm.gov for BSWI and Jeanie Cole: 474-2340 or j05cole@blm.gov for the CYRMP)

Reindeer Grazing (Anchorage Field Office contact, Laurie Thorpe: 267-1208)

- The Anchorage Field Office and the University of Alaska Fairbanks (UAF) Reindeer Research Program have completed installation of 23 range exclosure structures in the active grazing ranges of the Seward Peninsula on State and Federal lands. A long-range plan to monitor and read the enclosures is now in place and will future generate range health and climate change scientific information.
- The Anchorage Field Office, UAF and the Natural Resources Conservation Service (NRCS) developed a unified monitoring protocol to assess rangeland health for land managing agencies; this is being used at the new grazing exclosures and will provide useful information to reindeer herders for both short and long term range management needs. The data will also be valuable in assessing climate change dynamics on the tundra vegetation.
- The Anchorage Field Office is working with the UAF and reindeer herders to generate grazing management plans for the active reindeer ranges. These plans are currently under development as part of the High Latitude Range Management Curriculum at the UAF. A plan has been completed for the Davis range and a grazing management plan for the proposed Katcheak range in the Stebbins/St. Michael area is close to completion.

Bruce Davis has been elected as the new president of the Reindeeer Herder's Association.

Wildlife (Anchorage Field Office contact, Bruce Seppi: 267-1282 or Aliza Segal: 267-1398; Arctic Field Office contact, Dave Yokel: 474-2314; Central Yukon Field Office contact, Erin Julianus: 474-2358 or Jennifer McMillan: 474-2308)

• The BLM continues to contribute to the monitoring of collared caribou in the Western Arctic Caribou Herd in cooperation with ADF&G, NPS, and USFWS.

- BLM biologist McMillan contributed to the annual collaring effort for the herd at Onion Portage in 2015. The collaring effort was completed in record time, three days, compared to the average of greater than one week. Eight students traveled from Noorvik to Onion Portage where they were able to spend three days with biologists and assist with the collaring project on the river. BLM secured funding for four_students to attend the WACH Working Group annual meeting in December where they will share their field experiences with the Group.
- The most recent round of Western Arctic Caribou Herd (WACH) winter habitat monitoring was completed in July, 2013; habitat monitoring will occur again in ~4 years. Data archiving and preliminary analyses and reports are available and will be presented at this year's Working Group. The Anchorage Field Office has assumed responsibility for the WACH winter habitat monitoring (including data archiving, data management, field data collection, and reporting).
- The BLM has conducted scoping to inform the development of a WACH Caribou Winter Range Habitat Management Plan. The BLM is investigating additional research to aid in lichen/winter-range habitat identification to better inform the Habitat Management Plan.
- In 2015 CYFO assigned Jennifer McMillan to spear-head an Interagency Weather Subgroup (NPS, BLM, dedicated to addressing questions related to weather/climate; particularly the impacts of rain-on-snow events on caribou populations. The group met twice before the Working Group meeting and will verbally present the current status of their working knowledge and make recommendations on proposed future efforts to the Technical Committee.
- The BLM Anchorage Field Office continues to be a partner in the GMU 23 Working Group.

Fire

• See handout on fire perimeters within the WACH range.

Recreation (Central Yukon Field Office contact, Kelly Egger: 474-2242; Anchorage Field Office contact, Tom Sparks: 443-2177, Arctic Field Office contact, Donna Wixon: 474-2301)

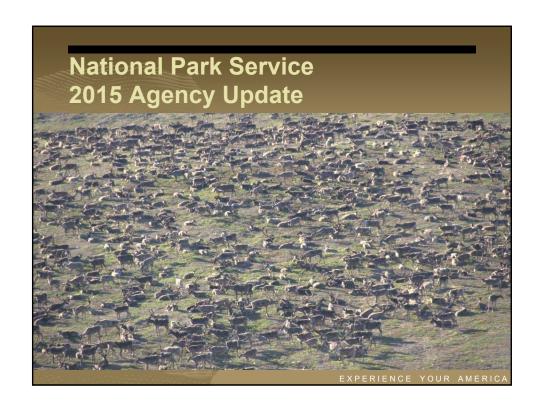
- A draft Recreation Area Management Plan for the Squirrel River Special Recreation Management Area is being developed by Anchorage Field Office specialists. This draft should be available for public review and comment in 2016.
- Anchorage Field Office personnel conducted compliance inspections on over 20 outfitter/guide locations in September, 2015.
- The Anchorage Field Office renewed a total of 10 existing outfitter/guide and transporter Special Recreation Permits in 2015. The field office did not authorize any new permit applications and does not plan to do so until a final Squirrel River SRMA Plan is completed.

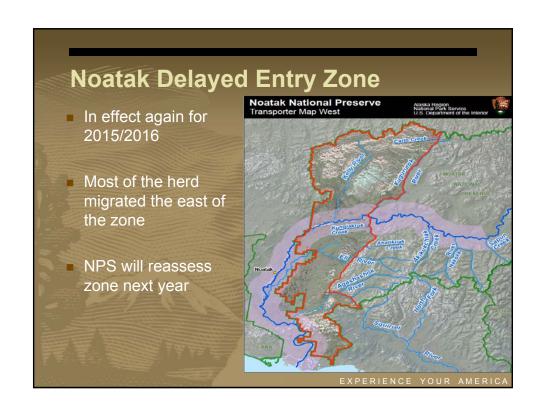
Mining (CYFO contact, Darrel VandeWeg: 474-2325, AFO contact, James Whitlock: 267-1284, Richard Tankersley: 267-1256)

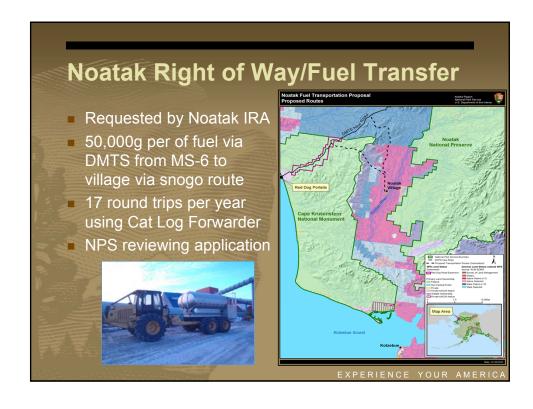
• Notice level exploration continues at the Graphite One prospect on the Seward Peninsula north of the Kigluaik mountain range. No mining plan has been submitted.

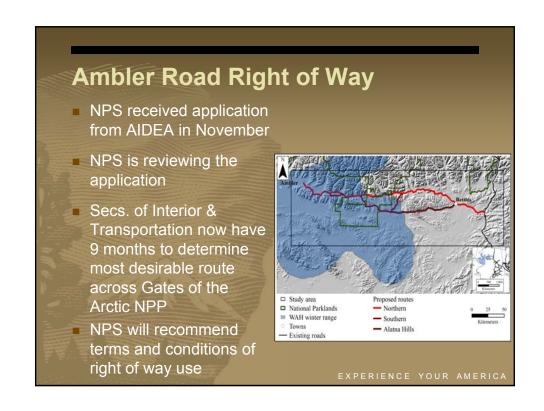
Realty (Anchorage Field Office contact, Tom Sparks: 443-2177; CYFO contact, Robin Walthour: 474-2304)

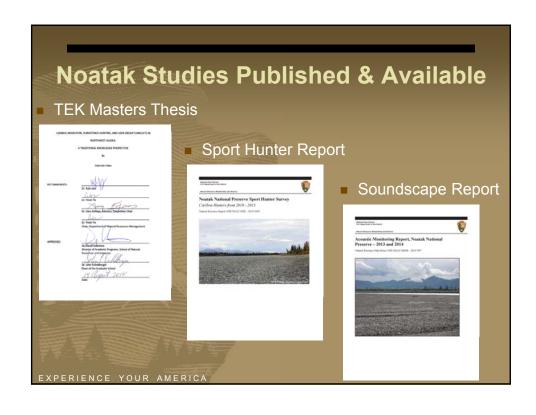
• We are processing a right-of-way application from the GCI/Unicom Terra Yukon project to erect six (6) new towers connecting to their existing network.

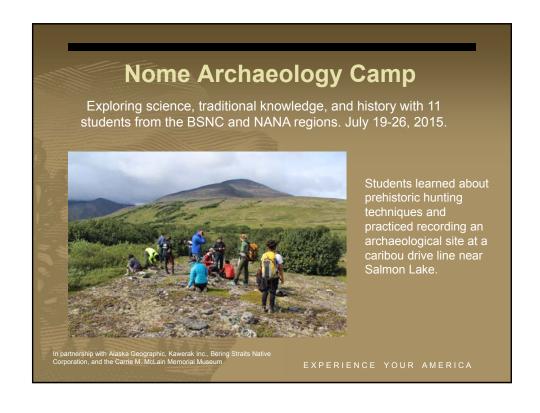


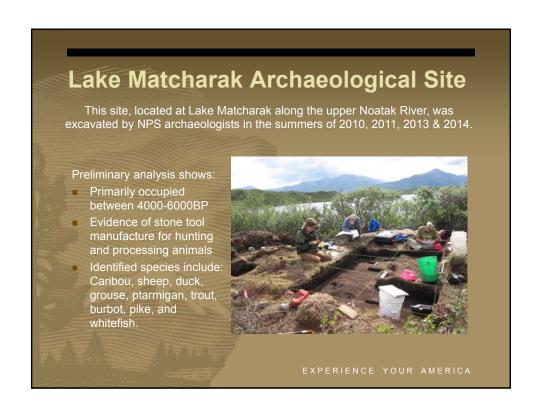












U.S. Fish and Wildlife: Selawik National Wildlife Refuge Agency Report to the Western Arctic Caribou Herd Working Group December 2015

Refuge Personnel Changes:

- David Zabriskie is now our deputy refuge manager, arriving in Kotzebue in April from Tennessee.
- Brittany Sweeney has moved to the outreach specialist position, having spent 5 years as the environmental educator for Selawik Refuge.
- We are currently in the process of hiring the environmental educator position.

Refuge Activities and Projects related to Western Arctic Caribou Herd:

- Renewed efforts to monitor snow conditions on the herd's winter range (see attached)
- Installed NOAA Climate Reference Network station on refuge
- Produced and distributed fact sheet on new GMU23 caribou regulations in consultation with ADF&G and National Park Service (see attached)
- Produced a series of posts for the Selawik Refuge Facebook page on caribou and new hunting regulations (see attached)
- Supported Selawik Science-Culture Camp where students learn to hunt, butcher, and process caribou
- Assisted ADF&G with the Working Group's web page and newsletter
- Updated a database to record Working Group member's comments on the status of the herd with assistance from Marci Johnson, National Park Service
- Provided \$28K in funding for Working Group annual meeting



Selawik students work on a caribou during the Science-Culture Camp, Sept 2015.

Presentations and handouts distributed at the December 16-17, 2015, Working Group meeting (not included in meeting binder, but distributed to WG members at the meeting – and included in the Flash Drive sent to members in January 2016):

- Technical Committee Report (December 15, 2015) See Attachment 2.
- PowerPoint presentation Caribou Harvest Assessment Program: 2015 –Preliminary estimates of 2014 caribou harvest by the communities of Shishmaref, Kotzebue, Point Hope, Barrow, Nuiqsut, and Anaktuvuk Pass (Nikki Braem, ADF&G Subsistence Division, December 17, 2015)
- PowerPoint presentation Household harvests in the range of the Western Arctic Caribou Herd (Jim Magdanz, University of Alaska Fairbanks, December 17, 2015)
- PowerPoint presentation What Happens Next? Harvest and Regulations in the Future (Lincoln Parrett, ADF&G Wildlife Conservation Division, December 17, 2015)
- Handout Resource Development Committee Update 2015 (Tim Fullman, WG Resource Development Committee Chair)

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Northwest Arctic Borough Science Program North Slope Borough Baseline Studies Program

Caribou ecosystem workshop Wedgewood Resort, Fairbanks, Alaska Friday, March 11, 2016

Agenda (Draft,	19	February	2016))
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8:00 Breakfast available in meeting room

8:30-9:00 Invocation, Introductions

• Why are caribou important to you? What would you like to learn here?

9:00-9:15 Review of Meeting Goals, Agenda

- To assess the state of knowledge about caribou and the ecosystem that supports them in northwestern Alaska (encompassing the Western Arctic and Teshekpuk caribou herds)
- To identify potential causes of the population declines of these caribou herds, especially in regard to overall ecosystem health and function, including climate
- Advise the Northwest Arctic Borough and North Slope Borough on research and action that can help sustain the health of caribou herds in northwestern Alaska and the communities that rely on them

9:15-Noon What matters to caribou? Discussion about key components of the caribou ecosystem of northwestern Alaska, including:

- Caribou: abundance, distributions, health, changes
- Subsistence: people's well-being, hunting success, health, changes
- Plants: caribou forage, range quality, vegetation patterns, changes
- Predators: abundance, role, changes
- Insects: effects on caribou, abundance, changes
- Climate: snow, wind, temperature, rain, ice, changes
- Landscape: rivers and lakes, ground cover, permafrost, changes
- Disturbance: noise, infrastructure, other human activities, changes

Noon-1:00 Lunch (on your own)

1:00-3:00 Continued discussion, emphasizing interactions among ecosystem components

3:00-5:00 What comes next? Conclusions and outcomes of the workshop, such as:

- Research recommendations for further study?
- Action recommendations, including regulations and sharing information?
- Report of the workshop?
- Paper about what we have learned and what we need to do?
- Other outcomes, ideas?

Preparation

The format of the workshop is an extended discussion, in which we hope all will participate throughout the day. As you prepare for the workshop, please think about what you know about caribou and their ecosystem and what you would like to know, from others and from further research. Please also think about actions that can be taken to sustain the caribou herds and the communities that rely on them.

We will not have formal presentations. If you have information to share, please consider bringing handouts to distribute during the workshop. The handouts can include maps, graphs, key points to consider, or other clear and concise material. If you make a handout, please bring 30 copies to make sure everyone gets one. When the discussion turns to the topic of your handout, you may distribute them and tell everyone what you are showing them, to stimulate further discussion.

"Caribou is our main meal" Workshop Report Northwest Arctic Borough/North Slope Borough Fairbanks, Alaska 11 March 2016

Henry Huntington, Ted Rockwell, Noah Naylor, Chris Hess, and Robert Suydam April 2016

Caribou are an essential part of Iñupiaq society in northwestern Alaska. They provide food, skins, sinew, and more. Sharing of caribou helps connect families and communities throughout the region. It is important for people to be good stewards of caribou.

Caribou are also an essential part of the ecosystem and a sign of ecosystem health. They depend on the food that plants provide and they in turn feed predators. They are already being affected by climate change and by human activity. Their migration connects and serves to integrate what the animals are experiencing throughout the range of the herds.

The Western Arctic Caribou Herd and the Teshekpuk Lake Caribou Herd are declining in numbers. This is a major concern for hunters, communities, managers, scientists, and others interested in the sustainable health of northwestern Arctic Alaska. Everyone shares the goal of abundant, healthy caribou that are accessible to those who rely on them.

Much work is already being done by the Western Arctic Caribou Herd Working Group and others to address the declining herd population numbers and to figure out how people should respond. The Northwest Arctic Borough and North Slope Borough held a joint workshop to seek ideas on how the Boroughs' science programs can be more helpful, including identifying further actions the Boroughs and others could take to better understand the population declines, better prepare for the consequences of those declines, and better communicate these matters to Arctic residents and others who may be affected.

Here is a summary of the main ideas for action that were discussed at the workshop, as heard by the organizers. These ideas do not necessarily represent the views of any individual participant, nor is either Borough committed to carrying out any of the items listed. The list is intended simply as a reference for those seeking ideas for further research and action, based on the workshop discussions.

Support existing work

- Support the efforts of the Western Arctic Caribou Herd Working Group, including its management plan, and help the group improve its efforts where possible
- Support on-going research about caribou and their ecosystem in northwestern Alaska

Advocate for hunters' interests

• Write to the Western Arctic Caribou Herd Working Group to encourage more research and action to understand and protect lead caribou

- Attend meetings of hunting guides and transporters to explain the role they have minimizing
 disturbance of caribou, cleaning up their camps when they leave, and making sure caribou
 meat is not wasted but is delivered in good condition to community organizations that can
 distribute it
- Work on a public PR campaign with our partners about not diverting the lead caribou
- Explore the potential for using Borough permits to require guides and transporters to meet the standards and procedures of local hunters and the Boroughs, including facilitating search and rescue
- Examine FAA regulations to see how they can be used to limit disturbance of caribou by aircraft, for example by filing flight plans or issuing notices to aviators
- Propose extending the spring wolf season into May to allow for more hunting when pelts are still good
- Propose the expansion of closed areas for sport hunters; for example, the controlled use area
 north of Anaktuvuk Pass could be extended to the Colville River and the results monitored to
 assess how interception affects caribou availability for Anaktuvuk Pass residents
- Explore the implications of different harvest management approaches on community wellbeing and the total caribou harvest, including the possibility of the Boroughs helping residents with paperwork associated with a Tier 2 harvest if that is imposed
- Explore the potential for a subsistence hunt quota that must be met before any nonsubsistence hunt can proceed
- Explore the implications of changing land use regulations to determine if problems are merely shifted from one location to another
- Explore and identify the potential to amend hunting and land use regulations to provide flexibility for hunters and fishers to meet their needs with what is available instead of being constrained by seasons and limits applied to individual resources that were not developed with consideration of overall community well-being
- If harvest restrictions are imposed, avoid criminalizing people who are only trying to feed their families

Develop a local observing system

- Evaluate existing platforms such as LEO (Local Environmental Observers; http://www.leonetwork.org/leo/about)
- Evaluate monitoring tools such as tablet computers for recording observations in the field
- Explore cooperation with existing regional efforts, such as NANA's Trespass Officers
- Identify a few parameters to start with, such as snow, predators, etc.
- Determine how local observers would like information returned to them and their communities

Improve the use of traditional knowledge

- Document hunters' knowledge about the role of lead caribou and the ways caribou are intercepted or deflected, during a season and across the years, as well as locally and regionally
- Document hunters' knowledge about predators and their role in caribou herd health
- Document hunters' knowledge about freezing rain and other icing events and their impacts to caribou and vegetation
- Document hunters' knowledge about vegetation and how it is changing across the landscape

• Document hunters' knowledge about the factors that affect caribou, individually and as herds

Improve scientific collaboration

- Hold a joint science meeting each year to discuss what has been learned and what needs to be done
- Develop better ways for scientists to engage with communities and schools, during the development of project ideas as well as during and after research
- Invite scientists to speak on local radio programs
- Use satellite tagging, traditional knowledge, and remote sensing to explore further the role of lead caribou and interception/deflection
- Study the role of predation and the dynamics of predator populations, using scientific and traditional methods
- Develop a model of caribou population dynamics that draws on scientific and traditional knowledge about the ways caribou interact with their surroundings
- Combine local observations and remote sensing to increase confidence in data and identify any needed changes to scientific data collection activities
- Explore ways to better communicate scientific findings to Borough leaders and residents
- Explore ways to better communicate caribou herd and ecosystem health beyond the Boroughs' leaders and residents to help foster support from outside the herds' ranges
- Develop ways to compare scientific and local observations of vegetation, including for example growth rates, recovery from fires, and impacts of foraging by caribou

Involve schools

- Explore the potential for an education project, for example with NSF and NASA and the Borough school districts, to better involve local knowledge holders and visiting scientists in the classroom and to involve students in monitoring and research
- Teach students about hunting practices and local stewardship of the ecosystem
- Restore Iñupiat Days to the school curriculum

Improve communication

- Encourage scientists, managers, and Borough officials to speak on KOTZ and KBRW
- Use social media to help reach Borough residents with news, information, updates, etc., and to get input from Borough residents such as environmental observations or evidence of poor practices by outside hunters
- Present the results of the workshop to the Western Arctic Caribou Herd Working Group
- Share our ideas with Native corporations (as landholders), Tribal Councils, Borough permitting and planning departments, and others as a start to developing broad strategies for sustaining caribou herds and communities

Participants

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Acroynyms

AC State Fish and Game Advisory Committee

ACR Agenda Change Request (related to Board of Game process)

ADF&G Alaska Department of Fish and Game

ADNR Alaska Department of Natural Resources

AIDEA Alaska Industrial Development and Export Authority

ANS Amount Reasonably Necessary for Subsistence

BLM US Bureau of Land Management

BOG Board of Game

C&T Customary and Traditional Use

CUA State Controlled Use Area

FA Feasibility Assessment (related to Intensive Management, Board of Game)

FSB Federal Subsistence Board

FWS US Fish and Wildlife Service

GIS Geographic Information System

IM State of Alaska Intensive Management

NPS US National Park Service

RAC Federal Regional Subsistence Advisory Council

RHA Reindeer Herders Association

RMP Resource Management Plan

TC Technical Committee

TCH Teshekpuk Caribou Herd

UAF University of Alaska Fairbanks

WAH Western Arctic Herd

WACH Western Arctic Caribou Herd

WG Working Group

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Thomas Jefferson's Birthday

Easter Sunday

Apr 13 Apr 16 Oct 9

Oct 31

Columbus Day (Most regions)

Halloween

Calendar for Year 2017 (United States)

January	February	March		
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Jan 1 New Year's Day	May 14 Mother's Day	Nov 11 Veterans Day		
Jan 2 'New Year's Day' observed Jan 16 Martin Luther King Day	May 29 Memorial Day Jun 18 Father's Day	Nov 23 Thanksgiving Day Dec 24 Christmas Eve		
Feb 14 Valentine's Day	Jul 4 Independence Day	Dec 25 Christmas Day		
Feb 20 Presidents' Day	Sep 4 Labor Day	Dec 31 New Year's Eve		

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