

Western Arctic Caribou Herd Working Group Meeting

December 15, 2021 1:00pm – 5:30pm

Via Zoom (Video internet) and Teleconference Connections

Western Arctic Caribou Herd Working Group Mission

“To work together to ensure the long term conservation of the Western Arctic caribou herd and the ecosystem on which it depends, and to maintain traditional and other uses for the benefit of all people now and in the future.”

Agenda

1:00 Call to Order (15 min)

- Video (Zoom) & Teleconference Logistics
- WACH Working Group Roll Call / New WG Member Approvals / Quorum
- Review & Approve Agenda

1:15 Western Arctic Caribou Herd Status & Management Level (85 min)

- 1:15 Western Arctic Herd Overview and 2021 Census – including Technical Committee recommendation on the herd Management Level per the 2019 WACH Cooperative Management Plan (30 min) – Alex Hansen, Alaska Department of Fish and Game (ADFG) (*p. 13*)
- 1:45 National Park Service Caribou Monitoring (10 min) – Kyle Joly, National Park Service (NPS) (*p. 23*)
- 1:55 Western Arctic Herd Registration Permits (15 min) – Alex Hansen, ADFG (*p. 33*)
- 2:10 Working Group discussion and decision on herd Management Level per the 2019 WACH Cooperative Management Plan (30 min)

2:40 State of Alaska Wildlife Harvest Regulations (15 min)

- Statewide proposal 245 to eliminate requirement to salvage rib meat on the bone for caribou (includes Units 23 and 24) – Comments due to Alaska Board of Game on February 18, 2022 (*p. 43*)
- Working Group discussion & decision re: comment to Board of Game

2:55 Break (15 min)

3:10 Federal Wildlife Harvest Regulations (40 min) – Lisa Grediagin and Hannah Voorhees, US Fish and Wildlife Service, Office of Subsistence Management (OSM)

- Proposal WP22-47: Proposal to allow calf harvest on federal lands in Unit 22. (*NOTE: This proposal was submitted to the Federal Subsistence Board (FSB) by the WACH Working Group*) (*p. 45*)
- Wildlife Closure Review WCR22-45: FSB review of whether to retain current closure of portions of Unit 23 along the Noatak River to harvest of caribou by non-Federally qualified users. (*p. 47*)

WACH Working Group Meeting – Agenda (continued)

- Wildlife Special Action WSA 21-01: OSM discussion with Working Group members about proposed special action to close Federal public lands in Units 23 and 26A to harvest of caribou (and moose) by non-Federally qualified users. *(NOTE: The FSB deferred action on this special action request in 2021 and will reconsider prior to the 2022 hunting season.) (p. 49)*
- Working Group discussion & decisions re: comments to FSB

3:50 Working Group Committee Reports (40 min)

- Resource Development Committee Update (30 min) – Tim Fullman, Committee Chair *(p. 65)*
- Communication Committee Report & Questionnaire (10 min) – Heather Jameson, ADFG *(p. 83)*

4:30 Community Harvest Assessment Program (10 min) – Helen Cold, ADFG Subsistence Division *(p. 97)*

4:40 Announcements / Business Meeting (50 min)

- Conference Announcement: 2023 North American Caribou Workshop, to be held in Alaska – Kyle Joly, NPS *(p. 105)*
- Caribou Roundtable Form – Please complete and mail in!
- Approve 2020 WACH Working Group Meeting Summary *(p. 107)*
- Nominations for Vice Chair for 2022-2024 term (ballot to be mailed later to WG members to vote via mail)
- Action Items
- 2022 Working Group meeting – Date / Location

5:30 Adjourn

Western Arctic Caribou Herd Working Group

December 15, 2021

Meeting Packet – Table of Contents

FORMS in front binder pocket, please return in stamped envelope

- Caribou Roundtable 2021
 - Communication Questionnaire 2021
-

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(NOTE: The OSM staff analysis for WSA 21-01 is available online at this link:
https://www.doi.gov/sites/doi.gov/files/wsa21-01-fsb_0.pdf)

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**WESTERN ARCTIC CARIBOU HERD WORKING GROUP
MEMBERSHIP LIST
December 2021**

Working Group Seat	Primary Member	Alternate Member*
1. Anchorage Advisory Committee.....	Neil DeWitt.....	Matt Moore
2. Buckland, Deering, Selawik.....	Vida Coaltrain.....	Raymond Lee, Jr.
3. Anaktuvuk Pass, Nuiqsut	Eli Nukapigak	Mary Hugo
4. Elim, Golovin, White Mountain.....	Charles Saccheus	Morris Nakaruk
5. Fairbanks Hunters	David Kilbourn	John Siegfried
6. Hunting Guides	Jake Jacobson.....	John (Thor) Stacey
7. Kivalina, Noatak.....	Enoch Mitchell.....	Daniel Foster, Sr.
8. Kotzebue.....	Cyrus Harris (ViceChair).....	Willie Goodwin
9. Koyukuk River	Pollock Simon, Sr.	Jack Reakoff
10. Lower Kobuk River.....	Vern Cleveland, Sr (Chair)	Kirk Sampson
11. Middle Yukon River	Michael Stickman	Arnold Demoski
12. Point Hope and Point Lay	Steve Oomittuk	Caroline Cannon
13. Nome	Charlie Lean.....	Jacob Martin
14. Conservationists	Tim Fullman	Alex Johnson
15. Northern Seward Peninsula.....	Elmer Seetot, Jr.....	vacant
16. Reindeer Herders Association	Tom Gray.....	Harry Karmun
17. Southern Seward Peninsula.....	Morris Nassuk.....	Leo Charles, Sr.
18. Transporters.....	Brad Saalsaa.....	Brian Alberts
19. Upper Kobuk River	William Bernhardt	Oscar Griest, Sr.
20. Atkasuk, Utqiagvik, Wainwright	Wanda Kippi	vacant

yellow highlight = need to be confirmed at the 2021 meeting

* Alternate member attends when Primary member is not able to attend

Officers - Officers in the Working Group include a Chair and Vice-Chair elected by the membership. Each shall serve a staggered three-year term.

Current Chair and Vice Chair terms:

Chair, Vern Cleveland, Sr.	2020-2022
Vice-Chair, Cyrus Harris	2019-2021

The following communities are the geographic areas represented by the Working Group seats. (Community groupings were approved by the WACH 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 2021

Name: Communications

Established: December 2011

Membership: 5 WG members, Agency staff
(The Communications Committee was created from the previous Education/Newletter Committee and the Webpage Committee by action at December 2011 meeting)

Members:

WG Chair 05	David Kilbourn	dkilbourn@gci.net
WG Chair 10	Vern Cleveland (Ch.)	vernsr75@hotmail.com
WG Chair 14	Tim Fullman	tim_fullman@twos.org
WG Chair 16	Tom Gray	tom@akadventure.com
WG Chair 18	Brad Saalsaa	bsaalsaa@kpunet.net
ADFG	Heather Jameson	heather.jameson@alaska.gov
USFWS	Brittany Sweeney	Brittany_Sweeney@fws.gov
NPS	Kyle Joly	Kyle_Joly@nps.gov
BLM	Bruce Seppi	bseppi@blm.gov

Name: Executive

Established: January 2004

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

Members:

WG Chair 10	Vern Cleveland (Ch.)	vernsr75@hotmail.com
WG Chair 8	Cyrus Harris (V-Ch.)	charris@maniilaq.org
WG Chair 5	David Kilbourn	dkilbourn@gci.net
WG Chair 16	Tom Gray	tom@akadventure.com
WG Chair 20	Wanda Kippi	

Name: Local Knowledge/User

Established: May 2004

Membership: 4 WG members, Selawik NWR Manager

Members:

WG Chair 8	Cyrus Harris	charris@maniilaq.org
WG Chair 11	Michael Stickman	mickeystickman@gmail.com
WG Chair 17	Morris Nassuk	nassukm@yahoo.com
WG Chair 19	William Bernhardt	trapperbillkobuk@msn.com
USFWS	Susan Georgette	susan_georgette@fws.gov

Name: Resource Development

Established: May 2004 (formed as NPR-A Committee; renamed in February 2006)
Membership: 12 WG members, 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:

WG Chair 2	Vida Coaltrain	
WG Chair 7	Enoch Mitchell	fishandgamerep@nautaaq.org
WG Chair 8	Cyrus Harris	charris@maniilaq.org
WG Chair 9	Pollock Simon, Sr.	
WG Chair 10	Vern Cleveland, Sr.	vernsr75@hotmail.com
WG Chair 11	Michael Stickman	mickeystickman@gmail.com
WG Chair 12	Steve Oomittuk	steveoomittuk@hotmail.com
WG Chair 14	Tim Fullman (Ch.)	tim_fullman@tw.s.org
WG Chair 16	Tom Gray	tom@akadventure.com
WG Chair 17	Morris Nassuk	nassukm@yahoo.com
WG Chair 18	Brad Saalsaa	bsaalsaa@kpunet.net
WG Chair 19	William Bernhardt	trapperbillkobuk@msn.gov
ADFG	Tony Gorn	tony.gorn@alaska.gov
BLM	Bonnie Million	bmillion@blm.gov
USFWS	Susan Georgette	susan_georgette@fws.gov
NPS	Jeanette Koelsch	jeanette_koelsch@nps.gov

Name: Technical

Established: January 2004
Membership: WG Chair, Vice-Chair, 5 WG members (listed below); Agency staff.
(NOTE - December 2012 WG meeting – Decision that travel/per diem would be paid only for WG Chair and Vice Chair to attend TC meetings. December 2014 – WG decision to add Chair 13 to the TC. December 2016 – WG decision to add Chairs 1, 3, 7, 14 to TC.)

WG Members:

WG Chair 1	Neil DeWitt	neilfxrt84@msn.com
WG Chair 3	Eli Nukapigak	native.village@astacalaska.net
WG Chair 7	Enoch Mitchell	fishandgamerep@nautaaq.org
WG Chair 8	Cyrus Harris	charris@maniilaq.org
WG Chair 10	Vern Cleveland	vernsr75@hotmail.com
WG Chair 13	Charlie Lean	Charlie@nsedc.com
WG Chair 14	Tim Fullman	tim_fullman@tw.s.org

Agency TC members: Technical Committee agency membership is determined by the agency leads.

Information about past Working Group Committees:

Planning Committee – Established in December 2017 to work with agency leads to update the 2011 WACH Cooperative Management Plan. Committee sunset in 2019 following the Working Group’s approval to update the plan.

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

Purpose. 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. Objectives. 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 or exchange of Federal funds.

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:



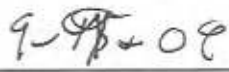
Denby S. Lloyd
Commissioner
Alaska Department of Fish and Game
State of Alaska



Date



Thomas P. Lonnie
Alaska State Director
Bureau of Land Management
U.S. Department of Interior



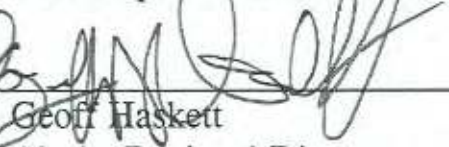
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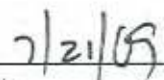
Sue Masica, Director
Alaska Region
National Park Service
U.S. Department of Interior



Date



Geoff Haskett
Alaska Regional Director
U.S. Fish and Wildlife Service
U.S. Department of Interior



Date

WAH Caribou Overview

Western Arctic Herd Working Group
December 2021
Alex Hansen – Wildlife Biologist ADF&G

- **Western Arctic Caribou Herd**
 - Abundance
 - Additional Biological Data
 - Capture
 - Management
 - Summary




1

WAH Abundance

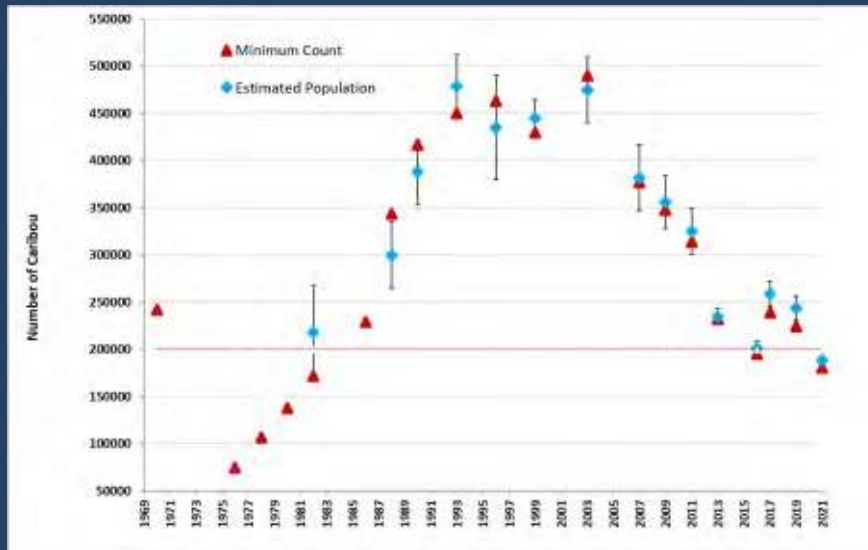
2021 Photocensus Results

- Rivest Estimate: **188,000**
- $\pm 11,855$ (95% CI)
 - Minimum Count: 180,374
- 2020 - no census
- 2019 - 244,000
- 2018 - no census
- 2017 - 259,000
- 2016 - 201,000



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WAH Abundance



3

Calving

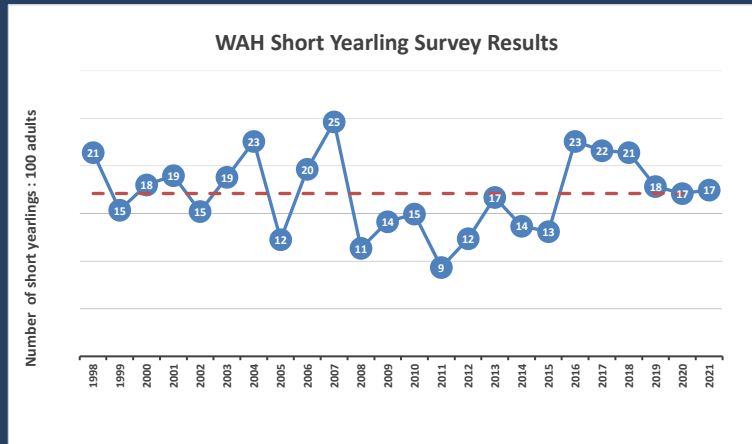
- 2021 Parturition - 68%
- Long-term average (70%)



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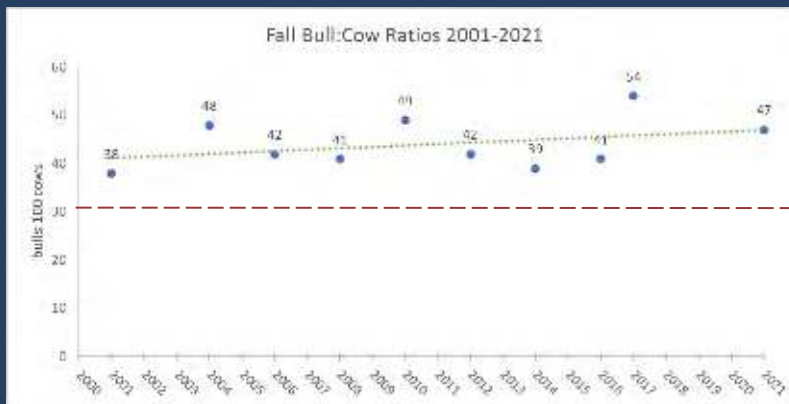
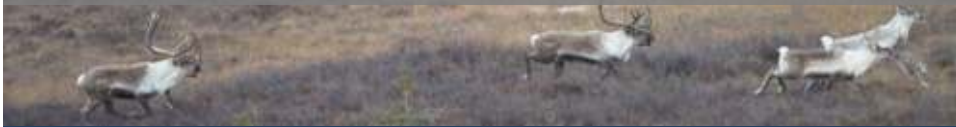
Recruitment

- 2021 Short Yearling Recruitment = 17:100 adults (average)



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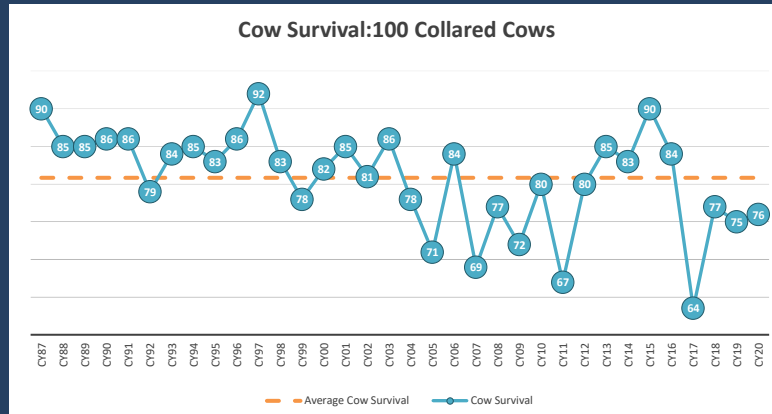
Fall Composition



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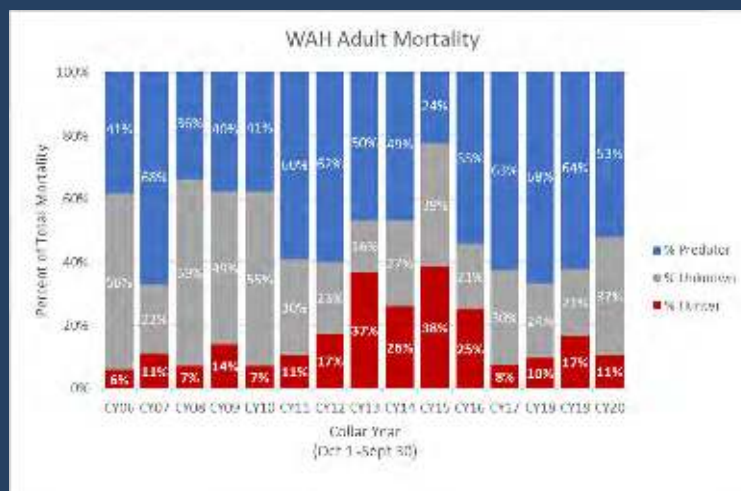
Adult Survival

- 2017-20 Adult Female Survival – 73% (below average)
- Long term average = 81%



7

Cause of Mortality



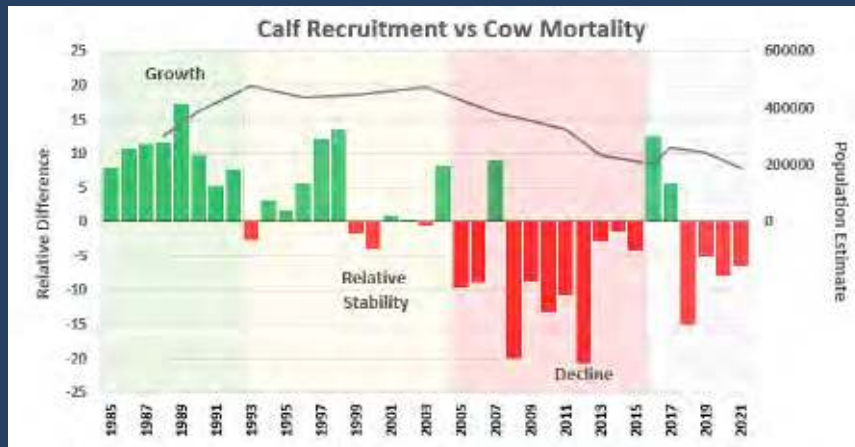
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Timing of Mortality



9

Population Trend



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Collaring

- Onion Portage, river capture (optional)
- Helicopter captures (primary)
 - 52 collars deployed Spring of 2021



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Management Level 2020

Management Level	Population Trend		
	Declining	Stable	Increasing
	Adult Cow Survival <80% Calf Recruitment <15:100	Adult Cow Survival 80%-88% Calf Recruitment 15-22:100	Adult Cow Survival >88% Calf Recruitment >22:100
Liberal	Pop: 265,000+ Harvest: 14,000+	Pop: 230,000+ Harvest: 14,000+	Pop: 200,000+ Harvest: 14,000+
Conservative	Pop: 200,000-265,000 Harvest: 10,000-14,000	Pop: 170,000-230,000 Harvest: 10,000-14,000	Pop: 150,000-200,000 Harvest: 10,000-14,000
Preservative	Pop: 130,000-200,000 Harvest: 6,000-10,000	Pop: 115,000-170,000 Harvest: 6,000-10,000	Pop: 100,000-150,000 Harvest: 6,000-10,000
Critical	Pop: <130,000 Harvest: <6,000	Pop: <115,000 Harvest: <6,000	Pop: <100,000 Harvest: <6,000

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Management Level 2021

Management Level	Population Trend		
	Declining	Stable	Increasing
	Adult Cow Survival <80% Calf Recruitment <15:100	Adult Cow Survival 80%-88% Calf Recruitment 15-22:100	Adult Cow Survival >88% Calf Recruitment >22:100
Liberal	Pop: 265,000+ Harvest: 14,000+	Pop: 230,000+ Harvest: 14,000+	Pop: 200,000+ Harvest: 14,000+
Conservative	Pop: 200,000-265,000 Harvest: 10,000-14,000	Pop: 170,000-230,000 Harvest: 10,000-14,000	Pop: 150,000-200,000 Harvest: 10,000-14,000
Preservative	Pop: 130,000-200,000 Harvest: 6,000-10,000	Pop: 115,000-170,000 Harvest: 6,000-10,000	Pop: 100,000-150,000 Harvest: 6,000-10,000
Critical	Pop: <130,000 Harvest: <6,000	Pop: <115,000 Harvest: <6,000	Pop: <100,000 Harvest: <5,000

13

Management Level

WAHWG Management Plan; Appendix 2

Appendix 2: Management Recommendations

Conservative Management (orange)

- Encourage voluntary reduction in calf harvest... ✓
- No nonresident cow harvest ✓
- Restrict nonresident bull harvest ✓
- Encourage voluntary reduction in resident cow harvest ✓
- Limit subsistence harvest of bulls only if < 30 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 < 30 bulls:100 cows
- Harvest restricted to residents only, according to State and federal law. Closure of some federal public lands may be necessary ✓

14

WAH Management

C&T Finding: Positive

ANS: 8,000-12,000, WAH and TCH

Annual Harvest: ~12,000 (+/- 1,750)*

- Includes a harvest of ~3,600 cows

Intensive Management Objectives:

Population: 200,000

Harvest: 12,000-20,000

Harvestable Surplus:

- Approximately 11,300 (Bull and Cow combined)
- At 6% harvest rate

15

WAH Management

RC907/800 participation is too low, to provide a clear picture of harvest

Harvest model is too coarse to provide meaningful data for management

Increased understanding of harvest is key to understanding human caused impacts

16

Summary

Concerns:

- Slightly below critical values
 - WAHWG preservative management threshold
 - Upper level of the Amount Necessary for Subsistence
 - State Intensive Management population and harvest objectives

Mixed Signs:

- Short-yearling recruitment – average
- Parturition – below average
- Adult cow survival – below average

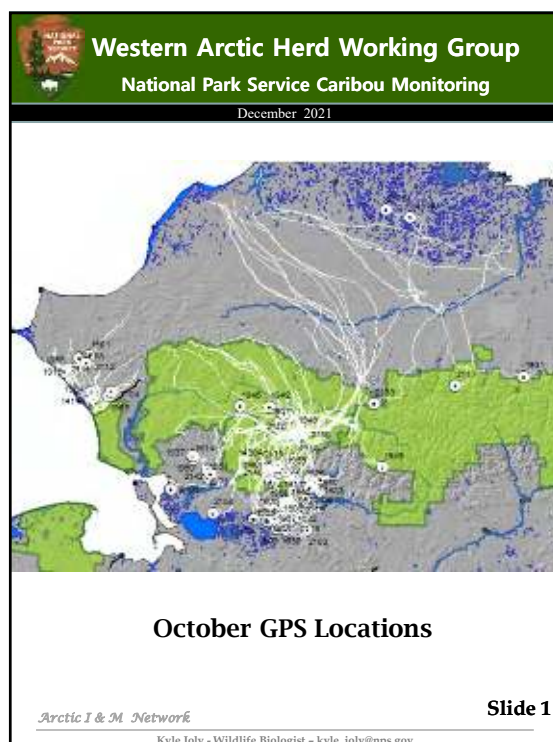
Cautious Optimism for the Future of the WAH

17

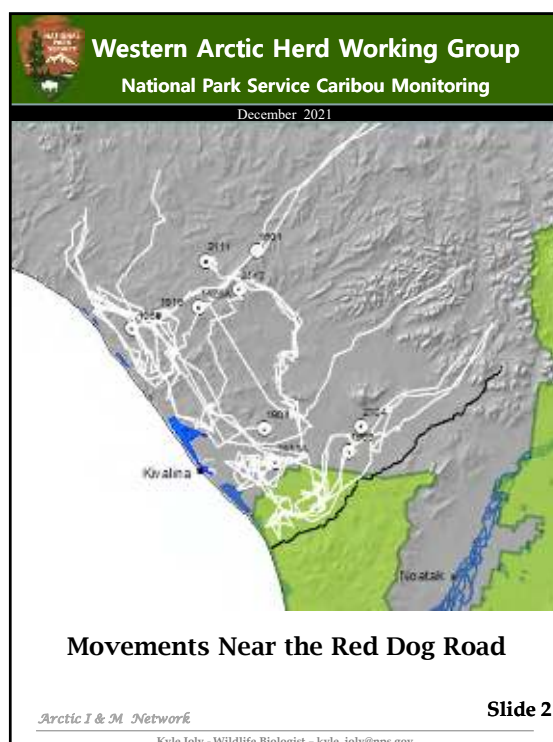


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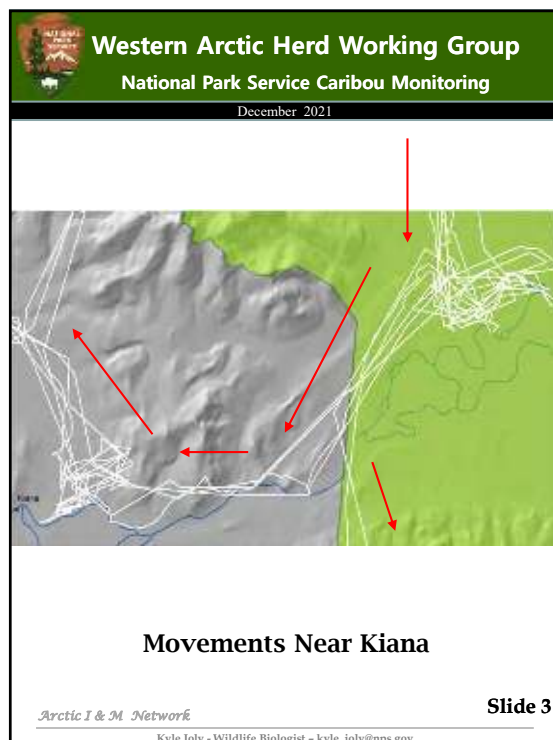
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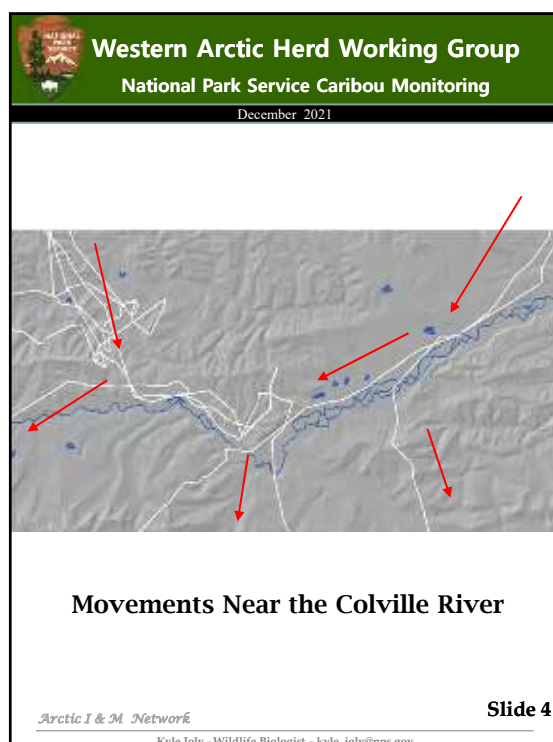
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Western Arctic Herd Working Group
National Park Service Caribou Monitoring
December 2021



**Movements Through
Noatak National Preserve**

Arctic I & M Network **Slide 5**
Kyle Ioly - Wildlife Biologist - kyle_ioly@nps.gov

5

Western Arctic Herd Working Group
National Park Service Caribou Monitoring
December 2021

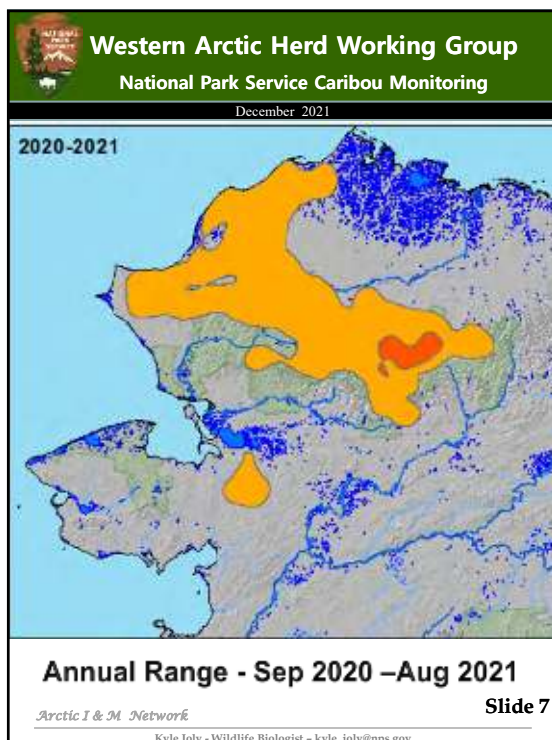


WAH Collar Results
Sep 2020 – Aug 2021

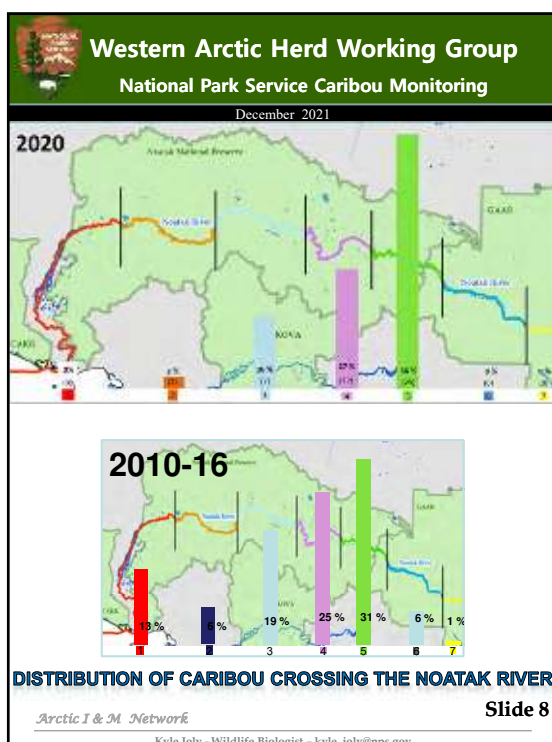
- 48 GPS Collars deployed
 - all netting, Apr 2021
 - None at OP 2020, 2021
- Distance traveled
 - Mean = 1691 miles
 - Higher than last year, but still low
- Overwinter Park Usage
 - 0 % in BELA
 - 71 % in GAAR
- Fall Park Usage
 - Mixed

Arctic I & M Network **Slide 6**
Kyle Ioly - Wildlife Biologist - kyle_ioly@nps.gov

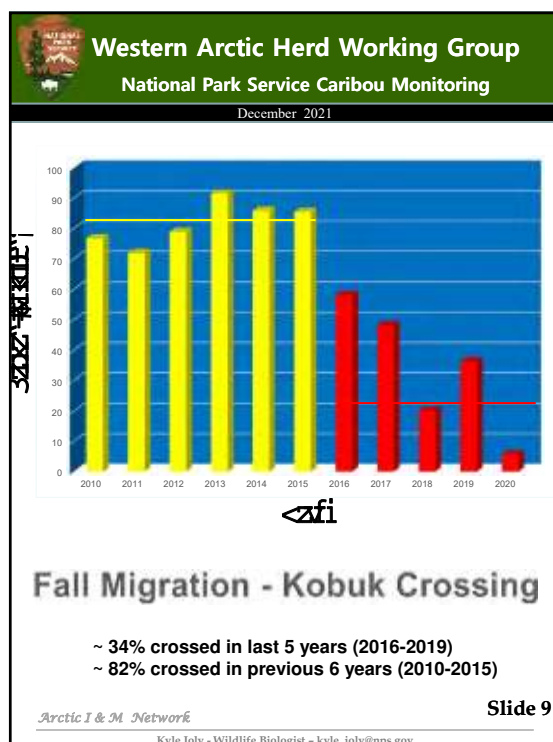
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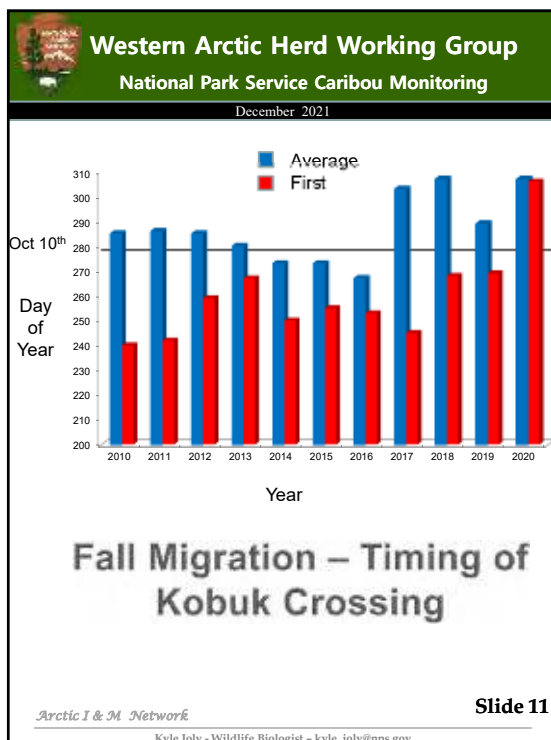
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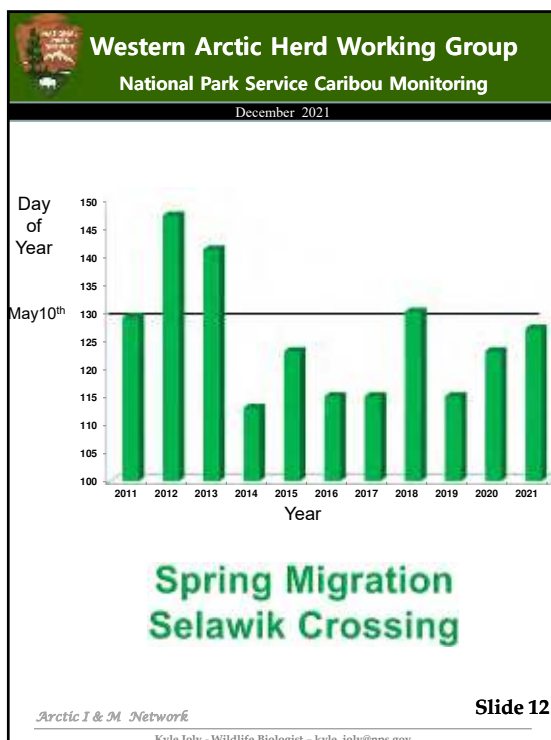
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Western Arctic Herd Working Group

National Park Service Caribou Monitoring

December 2021

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g#wl#xw#rçq#lqg#p r#yhp hq#w# #h#p l#j#w#rwl| #çq#j x#lwh?

Figure 1: Overview of the study area. (a) Overview of the study area. (b) Overview of the study area. (c) Overview of the study area. (d) Overview of the study area. (e) Overview of the study area. (f) Overview of the study area. (g) Overview of the study area. (h) Overview of the study area. (i) Overview of the study area. (j) Overview of the study area. (k) Overview of the study area. (l) Overview of the study area. (m) Overview of the study area. (n) Overview of the study area. (o) Overview of the study area. (p) Overview of the study area. (q) Overview of the study area. (r) Overview of the study area. (s) Overview of the study area. (t) Overview of the study area. (u) Overview of the study area. (v) Overview of the study area. (w) Overview of the study area. (x) Overview of the study area. (y) Overview of the study area. (z) Overview of the study area.

- Analyzed if WAH caribou re-used seasonal ranges and migration routes
- Fidelity was greatest to insect relief and calving areas
- Calving locations of an individual were, on average, 35 miles apart from one year to the next
- 90% of females calved within 1 week from previous year
- Fall migration was more variable than spring migration
- Publicly-accessible version: <https://www.nps.gov/articles/000/houseasonalfidelity.htm>

Arctic I & M Network

Slide 14

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Western Arctic Herd Working Group
National Park Service Caribou Monitoring

December 2021

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frqghfwy|w| #ru#k#j#kq# #re#h#chue#yrh#v#qj# #ufxw#kchr|²

➤ Collaboration with TWS and FWS, led by Tim Fullman

➤ Analyzed flow of caribou spring and fall migrations

➤ Assess impact of proposed ASTAR roads

➤ Caribou avoided dense vegetation, rugged terrain, major rivers, and existing roads in both spring and fall.

➤ Proposed road system could impact migrations and subsistence

➤ Publicly-accessible version: <https://www.nps.gov/articles/000/toolstoassessimpacts.htm>

Arctic I & M Network **Slide 15**

Kyle Joly - Wildlife Biologist - kyle_joly@nps.gov

15

Western Arctic Herd Working Group
National Park Service Caribou Monitoring

December 2021

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hfr#rj lfdghfhfw#i#ghyha#sp hq#tlohuqdw#hv²

➤ Collaboration with TWS and Audubon Alaska, led by Tim Fullman

➤ Analyzed potential impacts of NPRA development on caribou and birds

➤ Identified areas where develop could impact wildlife

➤ Models suggest alternatives that could result in less impacts

➤ Publicly-accessible version: <https://www.nps.gov/articles/000/toolstoassessimpacts.htm>

Arctic I & M Network **Slide 16**

Kyle Joly - Wildlife Biologist - kyle_joly@nps.gov

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WAH Registration Permits

Western Arctic Herd Working Group – December 2021

Alex Hansen – Wildlife Biologist ADF&G

- Western Arctic Caribou Herd
 - RC 907
 - RC 800
 - Harvest Model
 - Composition
 - Summary

1

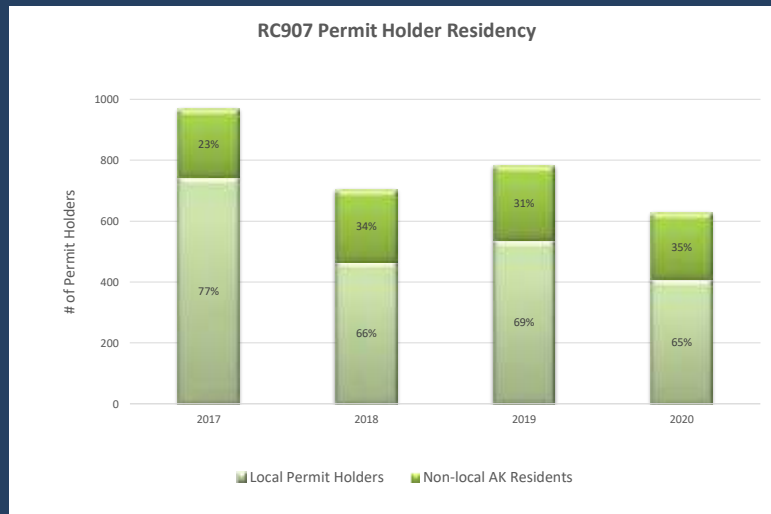
RC907-Issuance By Year



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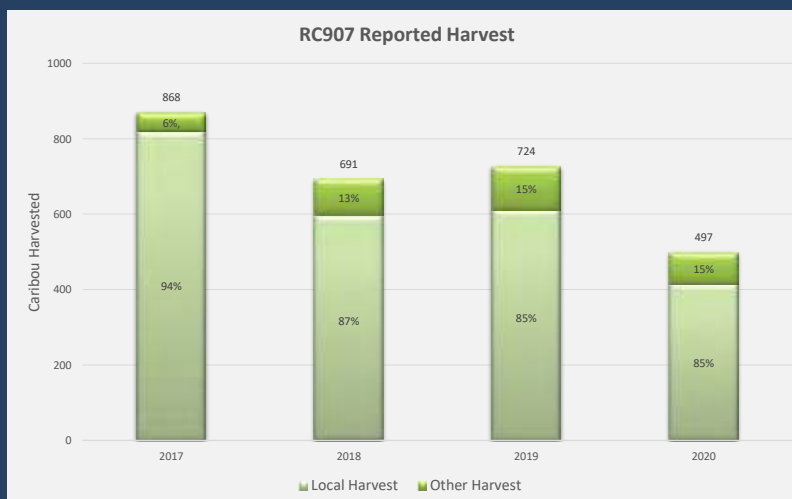
RC907-Participation



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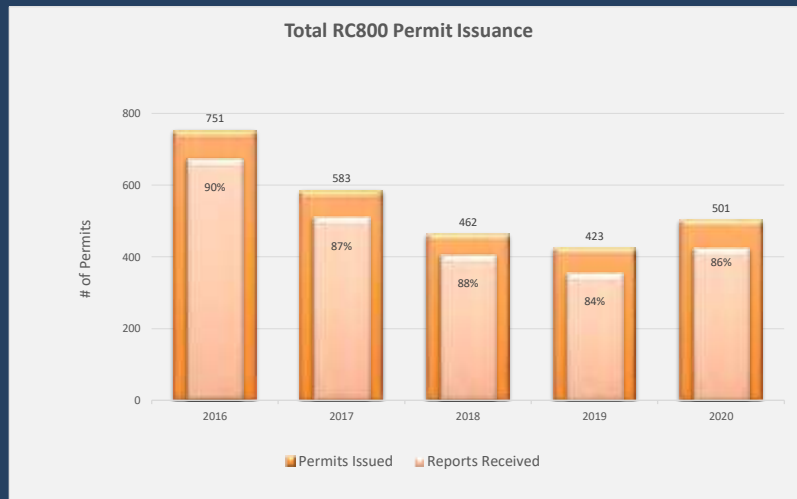
RC907-Reported Harvest



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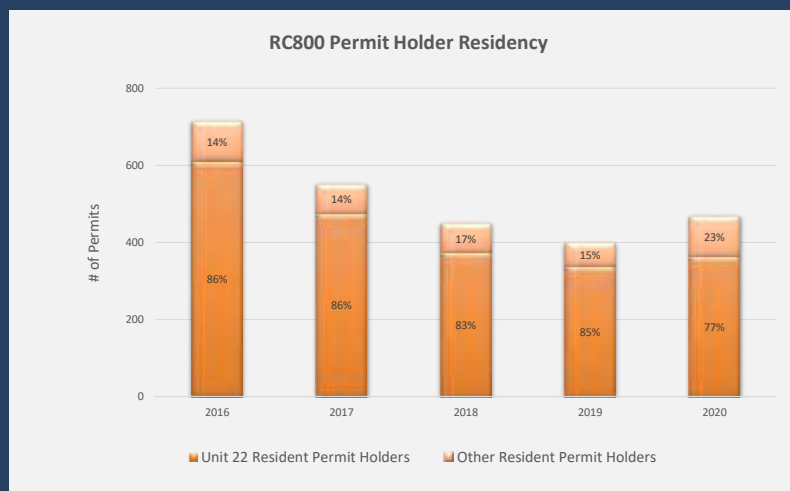
RC800-Issuance By Year



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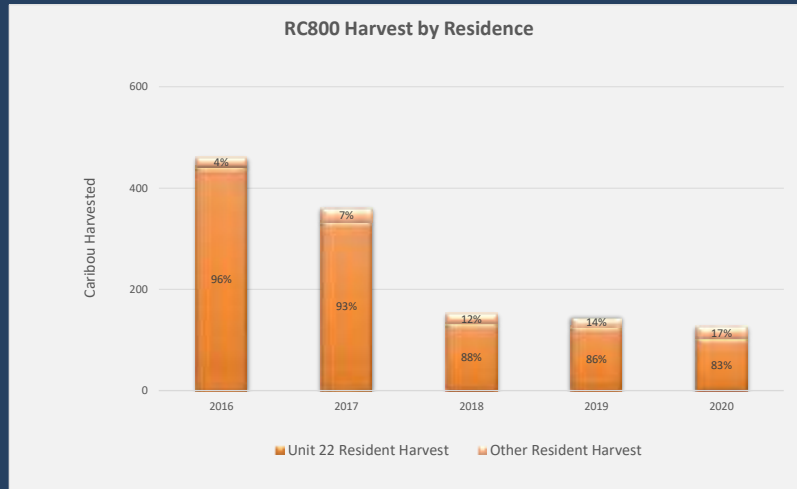
RC800-Participation



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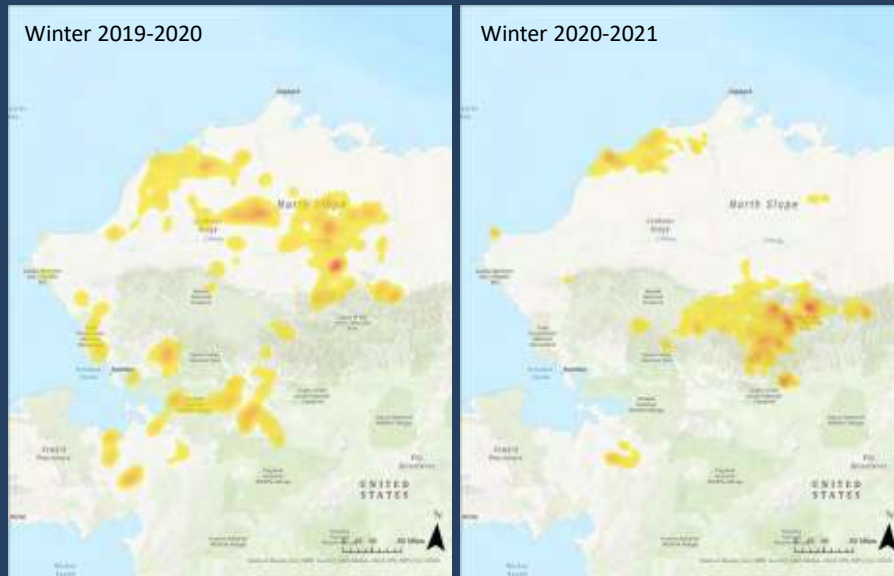
RC800-Reported Harvest



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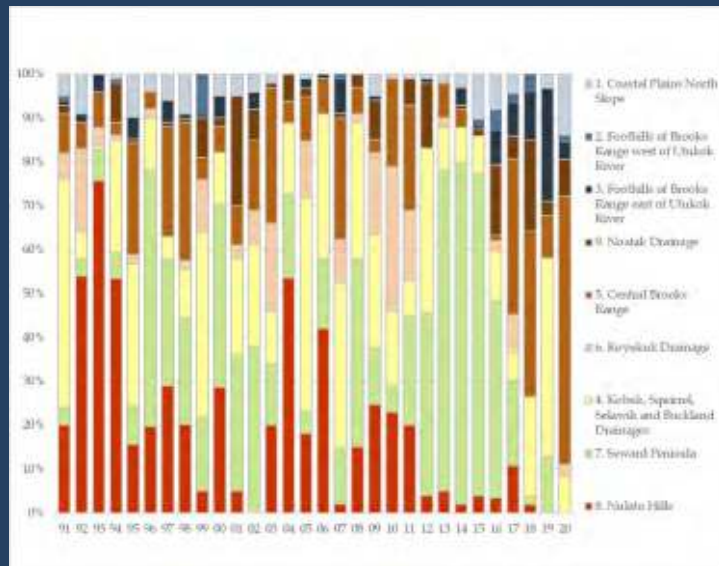
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Availability



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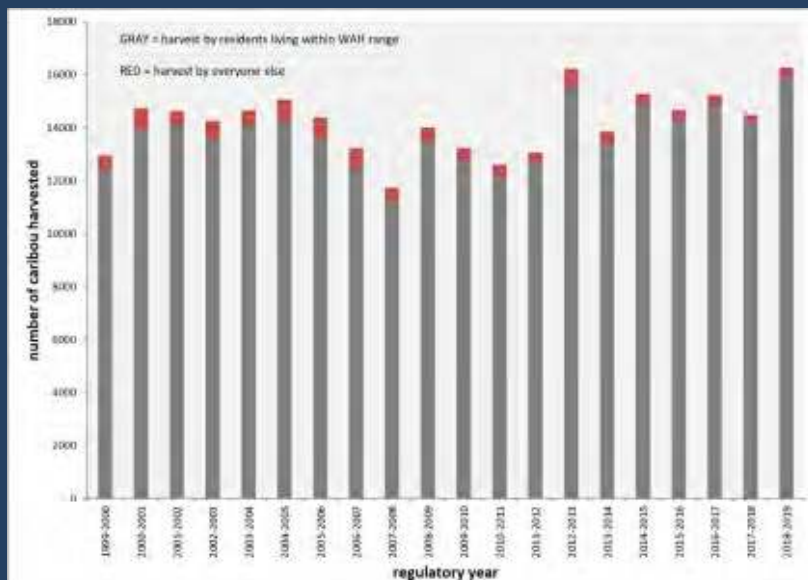
Annual Variation



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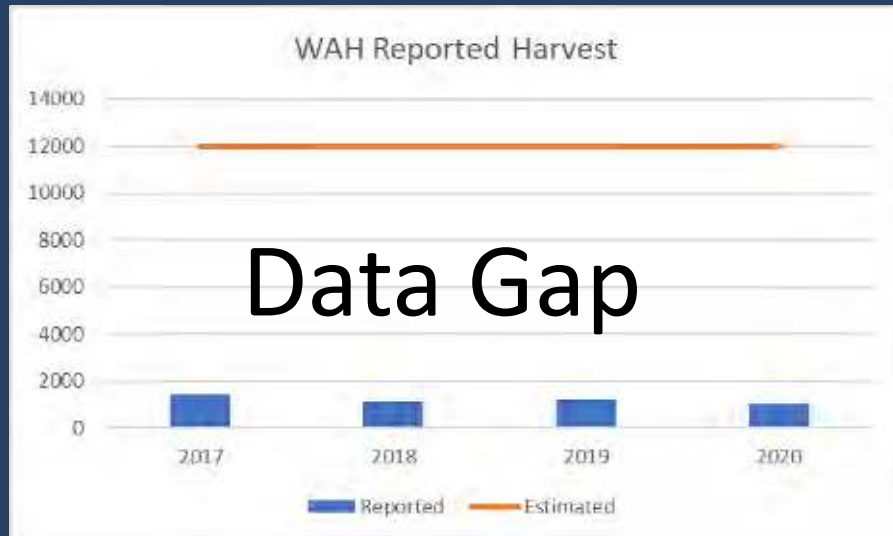
Harvest Model



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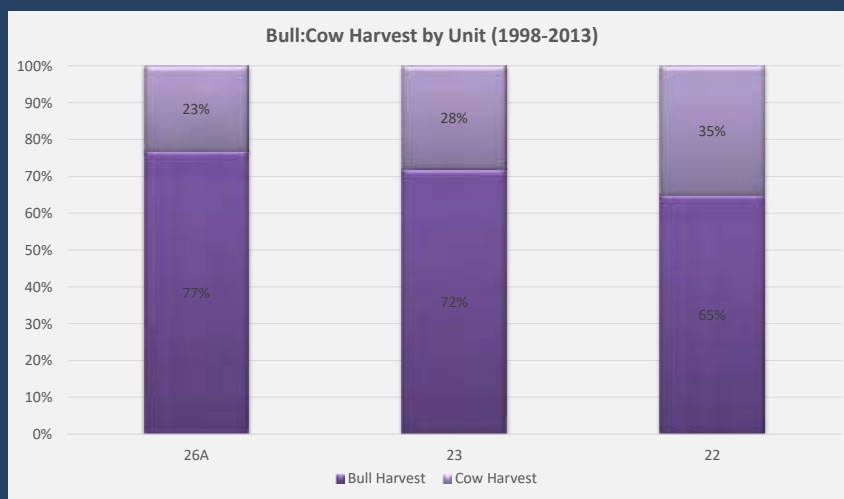
Harvest Reporting



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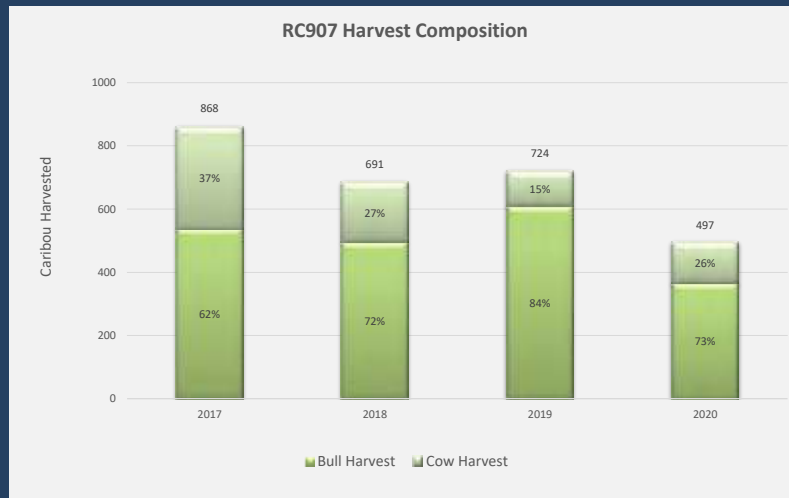
Total WAH Harvest Composition



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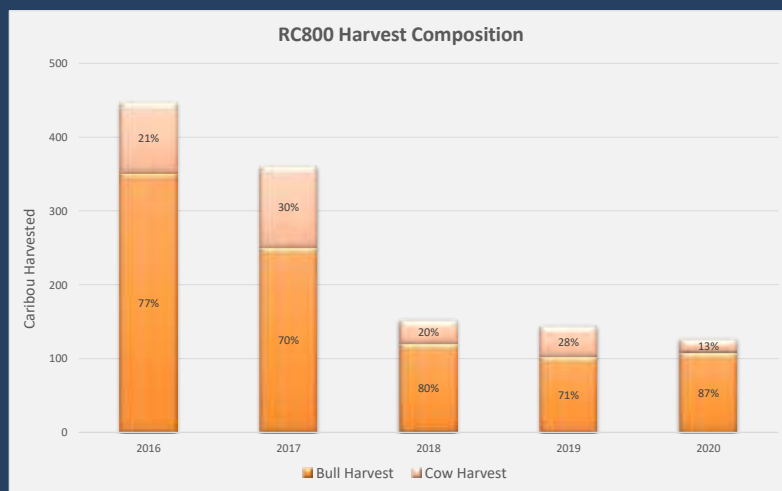
RC907-Composition



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RC800-Composition



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Statewide Wildlife Proposal to Alaska Board of Game

PROPOSAL 245

5 AAC 92.220. Salvage of game meat, furs, and hides.

Eliminate the requirement to salvage rib meat on the bone for moose, caribou, and bison as follows:

The intent of this proposal is to make the salvage requirements regarding rib meat consistent statewide for moose, caribou, and bison, notwithstanding the requirements for the community subsistence harvest permit under 5 AAC 92.220(6).

One solution would be to remove “and ribs” from 92.220(d)(3) as follows:

(d)(3) for moose taken before October 1 in Units 13, 19, 21, 23, 24, and 25 for caribou taken before October 1 in Units 13, 19, 21(A), 21(E), 23, 24, and 25(A), and ~~for~~ bison taken before October 1 in Units 19, 21(A), and 21(E), the edible meat of the front quarters, **and** hindquarters, [AND RIBS] must remain naturally attached to the bone until the meat has been transported from the field or is processed for human consumption.

What is the issue you would like the board to address and why? Requirement to salvage rib meat on the bone for moose and caribou in various units.

Meat on bone requirements for moose and caribou in several game management units were put into effect over concerns with meat spoilage, and in part so wildlife enforcement could better ensure salvage requirements were met. But these salvage requirements are not consistent statewide. Only Units 13, 21, 23, 24, and 25 have the requirement that the rib meat of moose and caribou (and bison) must be salvaged naturally attached to the bone.

Hunters are fully capable of salvaging the rib meat without leaving it attached to the bone, and without it spoiling, as is evident that this requirement does not apply statewide. As to identifying that the rib meat was completely salvaged, again the requirement does not apply statewide to other moose, caribou, and bison hunts in high-use areas or off the road system.

It is both difficult and cumbersome to leave rib meat attached to the bone, and we don't see the removal of this salvage requirement having any negative effects on overall meat salvage, spoilage, or on enforcement efforts. Rib meat dries out fast when attached to the bone and “rolling” or filleting the ribs is an optimum way to salvage and keep rib meat from spoiling or drying out. Many hunters on longer hunts, or when the harvest happens at the beginning of a hunt, choose to eat the rib meat in the field so the extra weight and space of the rib bones is not such a factor. Aircraft hunters would like to be able to legally remove the rib meat from the bones before loading into the airplane to save space and weight.

PROPOSED BY: Fairbanks Fish and Game Advisory Committee

(HQ-F21-008)

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WP22-47

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

Proposal to Change Federal Subsistence Regulations (Wildlife)

Name and contact information

Vern Cleveland, Chair

Western Arctic Caribou Herd Working Group

Submitted on behalf of the WACH Working Group by:

Jan Caulfield, Coordinator

525 W. 9th St.

Juneau, AK 99801

907-209-8604

janc@gci.net

Organization

Western Arctic Caribou Herd Working Group

What regulations you wish to change. Include management unit number and species.

Unit 22 – Caribou

Change regulations to allow calf harvest on federal lands in Unit 22.


Write the regulation the way you would like to see it written in the regulations.

Delete the sentence, “Calves may not be taken”, from each of the regulations related to Unit 22 caribou harvest on federal lands.

Explain why these regulations change should be made.

The Western Arctic Caribou Herd Working Group unanimously approved a Motion on December 9, 2020, to submit this regulatory proposal to the Federal Subsistence Board. The intent of removing the calf harvest prohibition is to allow for calves to be harvested in those circumstances where they have lost their mothers and are wandering unattached to the herd. This regulation change will also resolve the current situation, in which it is legal to take caribou calves on state land in Unit 22, but not on federal land in that Unit.

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CUSTOMARY & TRADITIONAL USE DETERMINATION (continued)	HARVEST LIMITS	OPEN SEASONS
CARIBOU <ul style="list-style-type: none"> Unit 23—Residents of Units 21D (west of the Koyukuk and Yukon rivers), Galena, 22, 23, 24 (including residents of Wiseman, but not other residents of the Dalton Highway Corridor Management Area) and 26A. <p><i>Refer to State Hunting Regulations for State registration permit details.</i></p>		
	Unit 23—that portion which includes all drainages north and west of, and including, the Singoalik River drainage—5 caribou per day by State registration permit as follows:	
	Bulls may be harvested.	July 1 - June 30
	Cows may be harvested. However, cows accompanied by calves may not be taken July 15–Oct. 14.	July 15 - Apr. 30
	Unit 23, remainder—5 caribou per day by State registration permit as follows:	
	Bulls may be harvested.	July 1 - June 30
	Cows may be harvested. However, cows accompanied by calves may not be taken July 31–Oct. 14. <i>Federal public lands within a 10-mile wide corridor (5 miles either side) along the Noatak River from the western boundary of Noatak National Preserve upstream to the confluence with the Cutler River; within the northern and southern boundaries of the Eli and Agashashok River drainages, respectively; and within the Squirrel River drainage are closed to caribou hunting except by Federally qualified subsistence users.</i>	July 31 - Mar. 31
MOOSE <ul style="list-style-type: none"> Unit 23—Residents of Unit 23 		
	Unit 23—that portion north and west of and including the Singoalik River drainage, and all lands draining into the Kukpuk and Ipewik rivers—1 antlered bull. No person may take a calf.	July 1 - Dec. 31
	Unit 23 remainder—1 antlered bull. No person may take a calf.	Aug. 1 - Dec. 31
MUSKOX  <ul style="list-style-type: none"> Unit 23 south of Kotzebue Sound and west of and including the Buckland River drainage—Residents of Unit 23 south of Kotzebue Sound and west of and including the Buckland River drainage. Unit 23 remainder—Residents of Unit 23 east and north of the Buckland River drainage. <p><i>Refer to State Hunting Regulations for State registration permit details.</i></p>		
	Unit 23 south of Kotzebue Sound and west of and including the Buckland River drainage—1 bull by State or Federal registration permit (FX2302) <i>Federal public lands are closed to the taking of muskox except by Federally qualified subsistence users hunting under these regulations.</i>	Aug. 1 - Mar. 15

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Federal Subsistence Board News Release



U.S. Fish and Wildlife Service
Bureau of Land Management
National Park Service
Bureau of Indian Affairs

Forest Service

For Immediate Release:
June 16, 2021

Contact: Robbin La Vine
(907) 786-3353 or (800) 478-1456
robbin_lavine@fws.gov

Federal Subsistence Board defers action on Temporary Wildlife Special Action Request WSA21-01 (Units 23 and 26A caribou and moose)

In a June 16, 2021 public teleconference, the Federal Subsistence Board (Board) discussed Temporary Wildlife Special Action Request WSA21-01. Temporary Special Action Request WSA21-01, submitted by the Northwest Arctic Subsistence Regional Advisory Council, asked to close Federal public lands in Units 23 and 26A to the harvest of caribou and moose by non-Federally qualified users from August 1 through September 30, 2021. This meeting was open to the public to listen in; however, a comment session was not provided since the Board previously had a public hearing and a written public comment period open for the public to address this special action.

The Board deferred action on this request, and will reconsider it prior to the 2022 hunting season. The Board requested that Office of Subsistence Management (OSM) staff seek additional input on concerns related to caribou from the Western Arctic Caribou Herd Working Group, Federal land-managing agencies, local Fish and Game Advisory Committees, the Alaska Department of Fish and Game, Regional Advisory Councils, commercial guides and transporters, and subsistence users in the area. The Board also asked OSM staff to include comparisons of moose harvest by survey area within Unit 23 in their analysis. The Board will further discuss and take action on this request in 2022, and the public will be informed in advance of the Board's meeting to take action.

The Board's deferral of this temporary special action request means that at this time, there are no changes to Federal regulations for moose or caribou in Units 23 or 26A for the 2021 season. Existing regulations, published prior to this request, are still in effect.

Information about the Federal Subsistence Management Program may be found on the web at www.doi.gov/subsistence or by visiting www.facebook.com/subsistencealaska.

Missing out on the latest Federal subsistence issues? If you'd like to receive emails and notifications on the Federal Subsistence Management Program you may subscribe for regular updates by emailing fws-fsb-subsistence-request@lists.fws.gov.

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WSA21-01 WACHWG members phone calls

Conducted by Office of Subsistence Management staff 10/19/21 to 11/2/21

N = 16 (People contacted for interview = 19)

5 non-local (Anchorage, Fairbanks, Hunting Guides, Transporters, Conservationist)

11 local (3 NWA, 2 NS, 5 SP, 1 WI)

Note: under respondent category (e.g. Unit 26), respondents are numbered. These numbers stand in for the speaker's identity. When a respondent did not give a reply for a particular question, numbers are not consecutive.

1. Do you have any general comments on the closure request? Would you support or not support this request, and why?

Non-local hunters/transporters/guides/conservation

1: If the population stays around 250,000, then there is no reason to close. Take by Non-Federally Qualified Users (NFQUs) is very minor. NFQUs rent boats from locals (and boats create noise and traffic too). People may not know that they need to camp on a certain side of the river. An ADF&G educational pamphlet would be helpful. In some areas that would be closed, only hunters with planes can get there anyway.

2: I don't support it. I object to Federal subsistence rules on principle. Creates unfair advantages and doesn't benefit regular people. This closure request is misguided. I don't like the idea of separating people out based on race.

3: I definitely don't support. There is no justification for closing. I don't think there is any evidence that transporters and guides are affecting caribou migration. The period proposed for closure is the only two months when non-locals can feasibly hunt in the unit. We don't know why caribou do what they do. This is an attempt to give exclusive use to subsistence users, and it's unjustified.

4: Already had closure and corridors, so if aircraft were an issue, caribou would be coming through these areas that are already closed to NFQUs, so obviously the migration change has nothing to do with non-local hunters and caribou are still not migrating south like they have historically. This is not a population issue so there is no way there should be a closure because of migration.

5: In general, I tend to be in favor of Federal public lands being open to the full public. As my base stance, that's where I come down. But on issues that are subsistence related, that have potential big impacts on local people using the resource, I would defer to those in the region.

While I'm not certain that transport and non-local hunters is going to have an impact on caribou, conflict and perception impacts hunters.

Unit 23

1: Yes I would support. It's very unfortunate it didn't make it last year. The main focus is the over-abundance of air traffic in sensitive areas. The State is not going to agree to that. We've had lots of meeting with ADF&G, Feds. We've shared with them what we were taught by our Elders about the behavior of caribou. The most important thing is not to disturb lead caribou. It goes into one ear and out the other. They don't honor that. The only thing they have in mind is money. They don't see how the indigenous people, out in communities, how we were raised and how we choose to live. The caribou is one of the most important mammals that we live on.

2: Support. The Noatak Closure really helped and is still helping today. Caribou have been coming through and the community has been able to get caribou, and Elders are getting caribou again. I would support the closure.

3: If there's enough for everyone, they should all be able to try and get them. Outboard motors make as much noise or more [as planes]. They're the biggest noise maker of them all.

Unit 26

1: Support (for both moose and caribou). Because the caribou numbers are so low, and increased numbers of non-residential hunters coming in. We've lived in our areas for thousands of years. We were always taught to wait for the animals, and the animals will come to you. They've fed and clothed us and given us our identities from time immemorial, clothing, food source, and a bond we have with the animals. Without the animals we wouldn't be who we are today. They're our identity. They've sheltered us. We see that migration route changing, the numbers declining. Sickness is happening. We're very observant. We want to ensure that our way of life continues to the next generation. We want to close to get the population back up to a level where we don't feel so concerned. Less than half of what it used to be.

2: Support

Unit 22

1: I don't support and don't believe this is a conservation action, people don't like it when people intrude into their territory. I identify with that, it's frustrating. But this action closes Federal but not State land. I think there's a real problem: just upstream of the range of hills separating Squirrel River and Caribou River, caribou cross the Kobuk River to continue south. There's a gauntlet there with boats from Kotzebue and Kiana. Animals turn around, move further east. That ends up deflecting migration and delays it. And so this action would just exacerbate that

issue. At Onion Portage upstream is also a problem. The Squirrel River crossing upstream of Kiana has a similar problem. The issue is further south than where the proposers were focusing. This broad swipe of the brush is not the right action.

2: I would support.

4: Not sure if I will support. If the population is sustainable to where we can allow all user groups to harvest what they need, then I think that's still in line with the Working Group plan. The resource is there for all. But it seems like the numbers are a little unclarified in terms of moose and caribou.

5: I do not support this proposal in any way, shape or form. I believe it is solely a political move and not based on any biological issue or conservation concern.

Unit 21

1: I agree with some of the reasoning, but the non-local hunters, they bring a lot of money and the guides make a lot of money, and I think that everyone has a right to make their living as they choose, but when the resource is on the decline, I believe that the non-local hunters should be the first to not allowed to hunt. Before there was a State the people were living off the caribou. I think they should be the last people to be affected by the decline in numbers. If they feel that the decline in numbers is due to non-locals, non-locals are changing the herd migration route. Around here, a lot of the large bulls were killed by large game hunters, you can see now where the younger bulls are actually becoming part of the breeding process. We never used to see those young bulls with cows in the fall time.

With the no-fishing, you have to look at the other side. A lot of those communities are going to have no fish, so the caribou resource is going to be that much more important to them. That's the resource they have left besides the sheefish. On the Yukon we were not allowed to put in our nets this summer, everyone had to get by on what they could get last year. With the caribou herd declining... We don't want the herd to decline to where you have to get a permit just to hunt. Because like I said, the villages depend on those caribou.

2. What would be the potential benefits of the closure? [If not already addressed]. Do you have any concerns about unintended effects of the closure?

Non-local hunters/transporters/guides/conservation

1: One side effect of the closure would be increasing dislike and prejudice between user groups. I feel for locals that need to travel farther and pay more because fuel is expensive. However, don't see a benefit to this closure (education may be a better solution).

2: My understanding is that one unintended consequence of the 2016/2017 closure is that it pushed people onto State lands where local populations hunt, creating more conflict. Caribou are migratory and go where they want (so there would be no benefit). The herd is smaller than in the past, the population is cyclical. In the future with population growth they will expand their range. This closure will not solve the problem. I've watched caribou most of my life, and they crossroads where people hunt.

3: Benefits would go to the local people who would not have any competition from non-locals (but that competition is pretty minimal). It would put me out of business.

4: The 2016 closure forced everyone onto State lands and rivers. The closure created way more user conflicts. I could still hunt bears in Unit 23 if closed, but a lot of clients come up for the combination. So the closure would absolutely be detrimental to me. Air taxis have spent millions to transport hunters and they'd lose their livelihoods and business. The closure would cause loss of millions of revenue, and a lot of that money goes back into the village (food/lodging/donated meat).

5: The real benefit would be relationships, not exacerbating user conflict. Food security, way of life, culture are very important. Protection of them would be the benefit. Unintended consequences would be the implications of closure [to those shut out].

Unit 23

1: Let's take for example that five mile corridor along the Noatak river, that little part of the map, helped for Noatak to get some of that caribou.

2: Benefits of the Unit 23 closure would be that local residents would get caribou again and Elders would be able to get caribou. Elders don't have the means to travel so far to hunt and don't have the boat and gas resources it takes to travel so far to get caribou. The caribou meat is good food and protein needed by Elders and everyone – important to have caribou meat so the Elders and others do not get sick – very important for Elders and everyone to have traditional subsistence foods and caribou – the young are raised up on it. It feeds people all year round. I got two caribou from my son [this year] and am grateful for that, but it is not enough to get by for the year. I hope to get two bulls in the winter hunt, which would be enough to hang on for food through the winter. With the Noatak closure caribou are coming around in the fall again like they used to and there are no conflicts now like there use to be. They still see some planes fly overhead but not landing.

3: Basically what I'm saying is by closing all the lands on the lower Kobuk, to satisfy people there. The closure will bundle people on State lands. At least when the lands are open, it kind of filters people into different areas. I can't really agree with all the closure, they are just going to

go where it's open. They have planes. People might not see [transporters and non-local hunters] there, but they could still be affecting the [local caribou availability]. There are plenty enough caribou out there for everyone. We got a late migration of caribou, right before the rut, people got smaller bulls and cows. They came in late, in the last part of September, and first part of October. Everyone who wanted caribou got caribou, but later. I feel for people who can't go out on the National Park Lands from Anchorage [i.e. people who have moved out of the region]. Has anyone done a study of the 2017 shutdown?

Unit 26

1: A benefit would be that sport hunters would have to wait until caribou pass through Federal lands in 26A. The caribou do not have a time frame, they come and go.

2: If Unit 23 only was closed, this might push hunters north.

Unit 22

1: This will focus outsiders in several locations, near Kivalina, near Kiana, Upper Kobuk, each of those is on the migratory corridor. And some of those places are over-exploited already. This action may reduce migration further south to the Seward Peninsula, where I live. We are on the southern range of caribou here. Sometimes the caribou go through the Nulato hills to Unalakleet. Sometimes they go along the spine of the Seward Peninsula towards Nome. Some years if we wanted caribou we had to travel almost to Buckland, on snow machine. A decade ago they were coming close to Nome, now it seems like they are even east of Buckland. There is a big tuft of state land over towards Buckland, and north of Nome. Those are the areas where alternatives [would send people]. You close one door, people use another door. That's what's going to happen.

3: We have not seen adverse reactions to closing areas. I would think it would provide more opportunity for those who live closer to that unit. Unit 23 is a corridor for everything that comes into the Seward Peninsula.

4: The closure could have a domino effect and cause more groups to request that areas be closed. Not sure if there would be significant side effects in the Southern Norton Sound region.

5: Absolutely no benefit from this proposal being adopted, other than to strengthen the self-regard of NWA residents and to embolden them to ask for even more next time. Every resident of the United States has a right to hunt in the United States. This would eliminate that right for over 99% of the population for the direct benefit of very few residents of NWA.

3. In your view, what is the problem in Unit 23?

Non-local hunters/transporters/guides/conservation

2: Not enough caribou. The herd used to number 400,000 animals and now there are only 200,000 [244,000]. Kobuk hunters used to sit on the river with their boats and shoot them, and the caribou still crossed the river. Now caribou have stopped coming. I don't know why but I doubt it has anything to do with human activity. Caribou will still keep crossing a river even if they are being shot. I suspect with warmer climate, plants are growing better, and there might be some change in forage (changing routes).

3: The problem is that we don't understand caribou and why they do what they do. This is a complex system. To take one small part out of the system (non-local hunters) and expecting that to have a major effect on the system is nonsensical.

4: Migration changes have to do with weather and the falls being wet and windy instead of cold and clear like they used to be. False rumors [about guides and transporters' impact] is another problem. Regarding moose, there are still pockets of a lot of moose. And not allowing NFQUs to harvest moose will not affect the population b/c they're just harvesting mature bulls. We need to protect cows/calves. The moose issue is a predator problem.

Unit 23

1: Both the air traffic and hunters on the ground, drop offs; these are all part of the problem. It's not so much about how much is taken. That's not the point. The point is the disturbance of sensitive areas. We usually target the adult bull, for the amount of meat and healthy fat. Unfortunately due to those changes, we're not able to get those bulls. We try to educate transporters. There is lots of disrespect from outside hunters coming in. We are nothing to them. They don't handle their meat properly. They handle the horns, racks, nice and clean, they don't give much thought about how they handle the meat. You can't tell when it comes in because it's in game bags, but people had to throw it away because it wasn't handled properly.

2: Across Unit 23, I hear from other communities about planes dipping down too low to caribou (fewer complaints now in the Noatak area).

Unit 26

1: Sport hunters are being dropped off in front of the herd. Since 2000 the migration has been changing. We see airplanes that come through. Seems like they're herding the caribou more towards the east when they should be going to the west.

2: There is no user conflict of note in my area.

Unit 22

2: There is no problem [in my area] with non-locals.

3: Due to the habitat in these areas, the moose would thrive in that area at the start of the Seward peninsula moving westward because of timber. It would depend on whatever habitat is enough to feed all the species.

5: Only a political one. I feel it is locals and tribes flexing their muscles and trying to ban anyone else from using the area.

4: Can you tell me more about the recent success—or lack of success—of communities in your region that harvest from the Western Arctic Caribou Herd? Are you expending more or less effort to harvest than in past? Do you have to go further than in the past?

Non-local hunters/transporters/guides/conservation

3: This year, the caribou were going north in August and September. I heard the same thing from others. This was very unusual movement.

4: Yes – for sure I’ve had to go further than in the past and expend more effort. I saw the fewest number of caribou that I have ever seen this year.

Unit 23

1: I haven’t gotten any caribou yet [fall 2021], got a few donations. I normally would hunt around Sisolak, back hills, along the river systems. None. I thought about heading over there this weekend but there’s no point. Historically, the caribou is at Wulik River, then wait until the sound freezes before coming over this way. They should have been trickling through now, or a month ago. Very disturbing.

2: In the past before the closure, we were scrambling to get any kind of caribou. But recently the first local hunters went up by boat and got caribou and shared that with the whole village. Everyone got a piece of caribou meat to cook. And then another boat went up the river and more people are getting caribou this year. It is important to not to have to travel so far – the cost of gas is so expensive people cannot afford to go out to hunt and not be successful. Before the closure people had to travel farther and stay out and camp and camp for a long time to hope to get caribou because you could not afford to make another trip. The boats are back now and the river is freezing up and people are waiting for snow to be able to hunt caribou by snow machine. It does not take as much gas. The caribou are not as big and fat in winter and we have to get young bulls.

Unit 26

1: These last few years the caribou have been coming closer than normal [to my community], though not in big numbers. We’re still down at about 200,000 [244,000]. You don’t see the high numbers that used to come through.

Unit 22

1: It's been much more difficult to get caribou because the caribou are further away. I'm almost 70 now. It's kind of eliminated me. It's a weeklong effort now. The variability is kind of cyclic. They've been nowhere close to Nome the last two years.

2: Our caribou from Darby Mountains hardly go anywhere. They always hang out southside of the Darby mountains. If we get no snow they don't move. If there is a lot of snow, they do move. They move around quite a bit when there's no feed south of the Darby mountains. No non-local hunters because of the mountains. When the caribou get north of Darby mountains, there's a lot of rocks but we catch them up there. Hardly any snow. They come down one time and we got them near the hot springs and then they cross the hot springs and head west. We always get our share of the caribou when they first come down. They usually lay around for a while and move out when the snow gets deep.

3: In the past we'd go to the American drainage system because they do migrate westward. Most of the harvest in the past has been in 22E or towards the lava beds. This past spring we went out to the mountains on the southside, caribou were on the lower side mingling with reindeer. We did see genuine caribou in there with reindeer. Usually we see caribou towards Shishmaref. I think they were travelling through the hills to our coastal mountains. It was easier on our part, but we mostly went for young buck. I heard from local guide/transporter in Shishmaref that caribou were migrating back and forth over the coastal mountains over the past few years. This is new to us. We didn't really travel that far for caribou. Mostly due to snow conditions late in the springtime. Bulls have more meat, fatten up for the upcoming fall season and the rut.

4: In regard to caribou being less available in Unit 22, I'm not sure if it's a normal cycle or why they haven't passed through. I'm not sure how many used to pass through. One time many passed through along the Norton Sound coastal area. People get some in the Nulato Hills area. A few used to pass through here towards Nulato. Last year they were harvested [in his area] by hunters from Nome, Golovin, and Unalakleet, but I'm not sure how many there were or how many were taken. Caribou hunters from Nome and Unalakleet go up to Buckland by snow machine (for caribou). It's a long haul. In January they pass through Buckland, go through Granite and Nome area. We take them by snow machine. You see trails and herds on the hills. Sometimes the trails get covered up by snow. They are sometimes around Granite in March. There are a number of factors that can make them difficult to access. Conditions of weather, lack of ice, freezing headwaters.

5: There has been an increased expense associated with caribou hunting in Unit 22. From longer distances travelled to more time out hunting. I feel this is more due to climate change and the decline of population of the WACH. 200 non-resident hunters are not making that big of a difference to anyone's success or defeat in harvesting caribou.

Unit 21

1: For WACH, we have to go to Hughes and Allakaket to get to it.

5. Are there other possible reasons for delayed caribou migration or difficulty of subsistence users harvesting from the Western Arctic Caribou Herd?

Non-local hunters/transporters/guides/conservation

1: Machinery, vehicles can affect the caribou migration. Caribou are not crossing at Onion Portage anymore. Not sure if this is due to predators, weather, or past collaring activity.

2: Not enough caribou, and they migrate differently every year. Who knows why migration patterns change. Caribou want to make sure they have enough to eat. They acclimate to people being around.

3: The greatest experts in the world couldn't answer this question.

4: Caribou change their migration, probably because of predators. There are lots of wolves and bears in Unit 23. The weather may also be having a role. It rained every day in September. It's wetter and warmer. In July this year, caribou were far northeast and never migrated southwest due to the weather. There were very few caribou south of the Noatak River this year. All the caribou were northeast of the Anisak River. Last year the caribou came west of Kukpuk and then when the wind changed direction 180 degrees, they turned around and went back northeast and crossed the Cutler River. The change in wind direction may be a factor. Caribou are staying north longer and longer, still north of the Brooks Range. That doesn't have anything to do with airplanes or non-local hunters. There is no difference between local boats and non-local airplanes in terms of noise and its effect on caribou. I have been guiding in Unit 23 for 30 years and have never seen caribou react from airplanes at the altitude we fly at.

5: I don't know what is causing it—but it might be some of the shifts in climate and year to year variability. The fact that caribou haven't been crossing at Onion Portage of late—that's more likely due to caribou variability than because hunters are there. I would be surprised if hunters were the only cause. But even if there are other primary causes, might also make sense to reduce secondary causes.

Unit 23

1: We've looked at many different things, and we've always leaned towards the air traffic and disturbance. Of course we have climate change, that could be a factor. High population of predators. It could be many things. But you know one of the most important factors is humans. Disturbance from air traffic in sensitive areas.

2: The weather and migration play a big role – when the weather gets warmer the caribou do not move as much, but with the fall and cold weather then the caribou start moving north and to the east. The caribou migration pattern was a little more back to normal this year but the caribou are not in a big group like they used to be – now the herd has been scattered and moving in smaller groups – a little here and a little there crossing the river in different locations at different times a few days apart. There were three main river crossing areas where the caribou were seen this year.

3: The caribou migration path is on a change now. Like last winter 10% of the herd made it to Buckland there, to their winter grazing ground. The rest were scattered through Brooks Range and this area. People expect the migration route to be the same every year. Caribou are just following the food.

Unit 26

1: We've always kept an eye on the weather and how the certain winds bring certain animals. When it should be the coolest time in January and February, now it rains and freezes. The caribou get their feet stuck. The numbers of muskox have gone up pretty high. They were reintroduced on the North Slope back in the 70s. We're still not allowed to hunt them, and their population is very high, in the hundreds. The muskox stand their ground [and can deflect caribou].

Unit 22

1: The other thing that's changing is the hunting patterns on the Kobuk River. There's gauntlets. Hunters storm them. Truncates migration. I was a fisheries biologist, managed fisheries north of Yukon starting in 1985. My father hunted in Prospect in the late 40s and 50s, what's now the Kobuk National Park. My family has at least two generations of people who have hunted this herd. We've ranged as far north as the headwaters of the salmon and squirrel rivers. What's changed is the technology—people have big boats—camp out on the river, wait for the caribou. There's a more intense effort on the Kobuk River than there used to be. I've also watched the evolution of snow machines. Boat hunters on the Kobuk are the most significant change.

3: I have seen where the moose populations have been decimated by wolves. Maybe the population increases where they aren't harassed by hunters or being chased by predators. Caribou herds have scouts, then when they run into good habitat to browse on that's where they will go. I would think food availability is an issue and wildfires and predation would get some of these animals moving around. With the fires in the interior, they may not be able to find food.

5: I feel this is more due to climate change and the decline of population of the WACH. 200 non-resident hunters are not making that big of a difference to anyone's success or defeat in harvesting caribou.

Unit 21

1: Seventy years between the time that caribou went away [from village area] and they came back. In 1993 they woke up and it was full of caribou, crossing the river. In a site that they always used when they came before. Below Nulato and by Koyukuk, came back and followed natural route. Keep praying that it doesn't snow—it's the snow depth that keeps them from coming back. Not only the snow depth, but 70 years of forest fires. The fire it destroyed caribou food for 20 years. When there is a forest fire on their migration routes.

6. Are there areas of particular concern where user conflict is high, which could be closed, to avoid closing all of Units 23 and 26A? If so can you describe those areas?

Non-local hunters/transporters/guides/conservation

4: No locals hunt caribou in the squirrel river. Most local caribou hunters are going up the Anisak and Kougarok Rivers and can't get to where NFQUs are hunting. So in the field, there are no user conflicts. I can't come up with a NFQU who's seen a local hunter in their camp. I used to base camp along the Squirrel river for 15 years and never saw a local there hunting [BLM lands around Squirrel River now closed in Unit 23 for caribou hunting by NFQU]. People out of Kiana that go hunting usually get caribou around the village or run boats up the Kobuk for caribou; they don't boat up the Squirrel river to hunt caribou.

Unit 23

1: If I were visualizing between the upper Noatak and Anaktuvuk pass, they funnel through that area, along the Coast past Point Hope, Kivalina, upper Noatak, and traditional migration crossings on the river systems, which doesn't happen so much today anymore.

2: Enoch has heard from other communities about ongoing user conflict concerns. Kivalina in particular has had some issues with road access 10 miles inland and the Red Dog mine road. His has heard they are having user conflicts on the Kulik and Kivalina River and conflict with sport hunters in the Kobuk area.

Unit 22

5: Smaller areas should be considered, rather than large swaths of Federal land. Places like Onion Portage, that have a historic use by Federally qualified subsistence users should be off limits to guides and transporters.

7. Do you have ideas about the alternative ways to address to the problem in Unit 23, that don't go as far as closing both units?

Non-local hunters/transporters/guides/conservation

2: I am a little surprised by the lack of information sharing with local folks about where the caribou are. For the 40 mile herd, you can call an ADF&G hotline and find out where the animals are. This makes it so that locals have to spend a lot on gas and effort to find the caribou. Sharing this information probably wouldn't increase the harvest but would make a difference to local hunters. Overall, I'm concerned about the closure request because it pushes ppl to other areas, and I think the whole thing is counterproductive.

3: Closing would be devastating to NFQUs and any positive effects would be minimal. The closure should not be tried out for one year, because it would be hard for businesses to come back. The impact of NFQUs has never been measured. If you measure by the number of animals they take, that is very insignificant. The 2016 closure was devastating.

4: If it's a population issue, than how about a draw permit?

Unit 23

1: They could come in and hunt on south side of the Kobuk and Noatak. We made that rule on our own self, just because it made sense. The other alternative that I was thinking about is that: We know that we're not going to stop transporters from accessing sensitive areas. But which of the transporters are going to honor that [avoiding migration route]. They want their hunters to be successful. They can see tens of miles away, they know where the caribou are, they're just going to land right in front of them. What about dropping hunters off at the village and letting the village deal with it. Whether it be as local hires. I wouldn't be able to speak for the village level. In the long run you'd think it would be a great alternative. But it would be an eye sore. State and Feds don't work together. We are one people, one land, one resource. State and Federal driven. Maybe those departments should be brought to the local people.

2: Just closing the river corridor areas where subsistence hunters traditionally hunt will help.

3: An altitude requirement for places needs to be enforced.

Unit 26

1: Get numbers on planes, so we can know who these people are.

Unit 22

1: I see the proposal as a run around the working group concept. The stakeholders wanted to get together and have a plan for when the population is low. So there's those biological trigger points. The population has not fallen to the point where we were to cut off non-residents. The complaint is not population, it's about affecting how the animals move. So not to dismiss that as a valid concern, but people want to spike the plan. We're trying to stick to the scheme. This is an issue we didn't prepare ourselves for. Establishing migration corridors, maintaining those

corridors, so the population can move from calving grounds to wintering grounds and back. I see that as the main problem.

3: We do have a limited number of sport hunters that come late in the season. We have had closures for fish or wildlife and it doesn't really hurt to let the animals recover and grow. We have lived with closures on and off and we just ask that you stick it out and bear with us.

5: All involved parties (Federal and State agencies, residents, non-residents, guides, transporters) need to sit down at the table and compromise to end this. It is not fair to either side of the debate to bear the burden of restrictions, everyone should share in it. If locals want transporters to be restricted to one side of the river, fine, but do not change that opinion next year and try to keep them off both sides of the river. He also suggested to ban everyone from hunting in Unit 23 and 26A if a compromise could not be reached.

Unit 21

1: Hopefully the Federal Subsistence Board can come up with a compromise to actually please everyone, because not everybody who grew up in the villages disagrees with big game hunting. Lots of big game guides. Doesn't seem like it affected the local harvest.

We have a no-fly zone in our area. The one way they've solved it on the Koyukuk River, intensive moose management plan. Then they said the moose population can handle this many hunters. When you did the numbers, the moose population couldn't maintain a very high harvest over time, so they put a permit system in that you have to apply for, and so there's only like 50 permits available for non-local hunters. 250 permits for local hunters.

Let the non-locals hunt when they are at the end of their migration. When they have gone through all those communities. They're not really hunting for the meat like the villages are, they are looking for big horns. Right at the very end of the migration, maybe even during the breeding period would be the best time.

8. Other

Unit 26

1: There is only one state employee on the North Slope. BLM flies around doing surveys right on the migration routes. Fish and Game is not doing their job. We feel like tribal governments need to hire their own wildlife biologists. Federal Subsistence Board members don't live on the North Slope and make decisions on our behalf. That doesn't sound right. We're given limited time to testify. We have people calling from out of state, outside of our region in high numbers. Hard for our own people to call in. Whether they are residents within the State, or lower 48. We get a lot of calls from outside of Alaska to testify on hunting within our lands. We don't have that population here. We're looking at our food source, our way of life. We have high unemployment

rates. We're concerned about feeding our families. People pay money for charters and planes and boats. For their sport.

Resource Development Committee Update

1) Ambler Road and Mining District

- a. Comments submitted to the new Secretary of the Interior
- b. Comments submitted to AIDEA
- c. Updates on road and mining development plans
- d. New mining exploration to the east

2) NPR-A Integrated Activity Plan (IAP) Revision

- a. Record of Decision issued January 2021
- b. Review of the plan is expected

3) Noatak – Red Dog Road

- a. Little change from last year

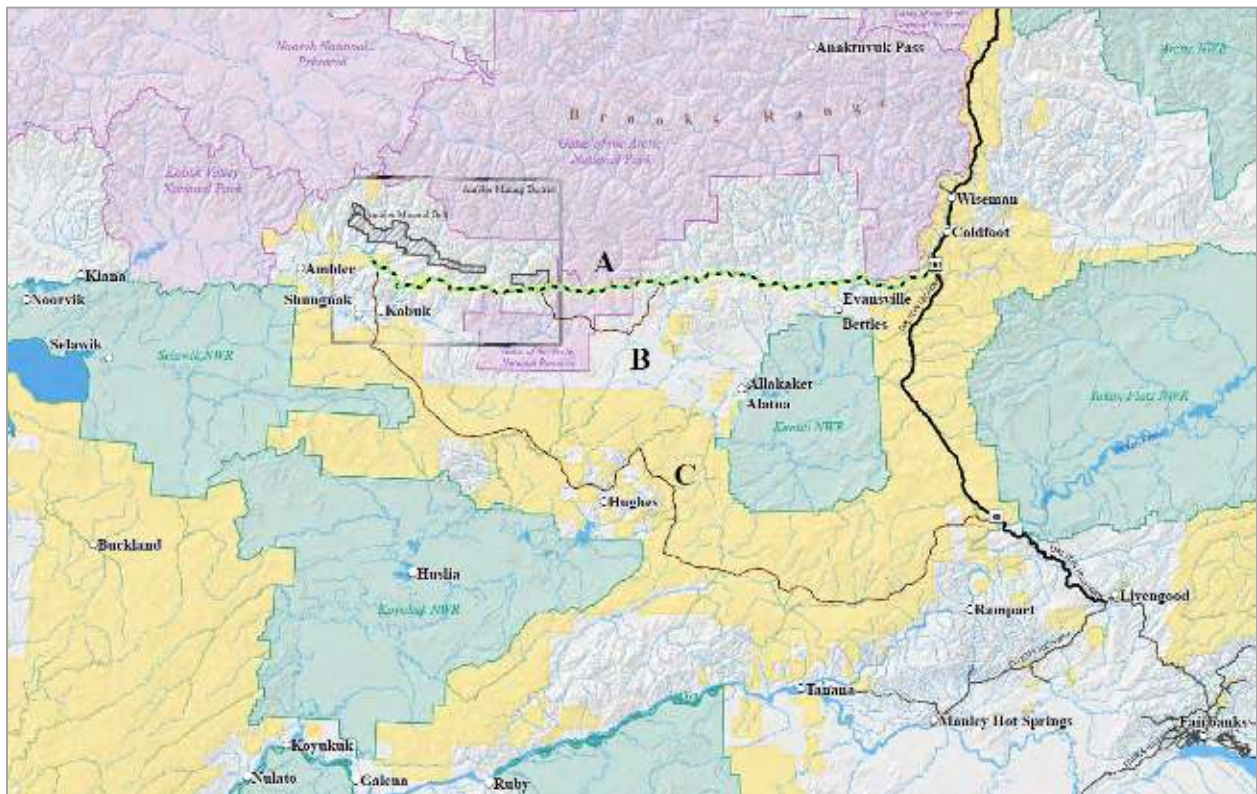
4) Willow Master Development Plan EIS

- a. Development approved then halted by the courts
- b. Revision of approved plan likely

5) Anarraaq-Aktigiruk exploration

- a. Teck interested in reopening application

1) Ambler Road Project



Taken from Figure 1 in the Ambler Road Record of Decision

Records of Decision for the Bureau of Land Management (BLM) Environmental Impact Statement (EIS) and the National Park Service (NPS) Environmental and Economic Analysis (EEA) were released in July 2020. These approved permitting of a road, following route A.

There are two ongoing lawsuits associated with the road permits, one submitted by the Tanana Chiefs Conference and several villages in the region, the other by conservation groups. It is unclear whether the Biden Administration will defend the issued permits or cancel them and conduct a new environmental and cultural review.

As approved at last year's annual meeting, the Working Group submitted a letter to the new Secretary of the Department of the Interior upon the change of Administration, reaffirming the Working Group's position on the Ambler Road and asking for review of the road approval process. A copy of these comments is included on the following pages.

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

April 2, 2021

Secretary Debra Haaland
U.S. Department of the Interior
1849 C Street NW
Washington, DC 20240

Dear Secretary Haaland,

Congratulations on your recent appointment as Secretary of the Department of the Interior. As you begin the work of leading the Interior Department in its management and conservation of America's natural resources and cultural heritage, I want to bring to your attention the Western Arctic Caribou Herd Working Group's (Working Group) position and concerns regarding the Ambler Mining District Industrial Access Road Project (Ambler Road) Environmental Impact Statement (EIS) process recently conducted by the Bureau of Land Management (BLM) in Alaska, and BLM's Record of Decision for this project.

The Working Group is a permanent organization of stakeholders that works to ensure conservation of the Western Arctic Caribou Herd (WACH) and to maintain traditional and other uses of the herd now and into the future. The WACH is the largest caribou herd in the United States, with 244,000 animals as of 2019. The Working Group includes Alaska Native subsistence users from communities within the range of the herd, other Alaskan hunters, guides, transporters, conservationists, and reindeer herders. Since its formation in 1997, the Working Group has submitted many advisory recommendations to government agencies, regulatory boards, and other bodies to support decisions that will ensure the long-term conservation of the WACH.

The proposed Ambler Road would be a 211-mile private industrial access road constructed across tribal, state, and federal lands including Gates of the Arctic National Preserve. The permitted route crosses the migration and wintering range of the WACH. The Working Group actively participated in the Ambler Road EIS process, met multiple times with BLM staff, and submitted comments during the scoping and Draft EIS comment periods. We are very concerned about detrimental effects a road would have on caribou, their habitat, and people who rely upon them for food security and customary and traditional ways of life. For example, habitat fragmentation due to the road could disrupt herd movements and hinder subsistence opportunities. We are also concerned that though the road system is described as industrial-only it may not stay that way, based on past experience with other roads in Alaska that were originally industrial-only but later opened to public use. Increased access by hunters using the road system may increase conflicts between hunters and the potential for overharvest of the herd. Construction of the Ambler Road would also likely facilitate further development, with additional detrimental impacts on caribou and people.

In light of these issues, **the Working Group passed a motion at our annual meeting in December 2018 with a nearly unanimous vote opposing creation of the Ambler Road.** In 2019, we requested that BLM change its preferred alternative in the Final EIS to the No Action Alternative and not approve the Alaska Industrial Development and Export Authority's (AIDEA) application for a right-of-way authorization across federal land. Unfortunately, BLM did not accommodate this request and in July 2020 approved AIDEA's proposed route for the road.

Working Group stakeholders represent forty communities within the range of the WACH, as well as many others who rely on caribou for their livelihoods or other reasons, as described above. Throughout the EIS process we repeatedly asked BLM to provide additional time and effort to adequately engage all stakeholders and communities, especially those living in more remote villages where communication is a challenge due to limited internet and phone access. During scoping, we asked BLM to give the public more than 45 days to comment on the Draft EIS, so there would be sufficient time to inform our members of the proposed alternatives and to organize discussion and feedback that would facilitate a robust comment process. When the deadline was announced however, BLM kept a 45-day limit. This was later extended for two additional weeks; however, this still was insufficient for full engagement of all communities, especially as the comment period fell during the busy fall subsistence harvest season. Taking the time and effort to ensure that input from all stakeholders is valued in decision making processes is crucial under the National Environmental Policy Act, especially for a decision with such far reaching effects.

The Record of Decision for the Ambler Road has been signed, but the decision continues to be litigated, further indicating that there are serious problems with the EIS process. We hope the Interior Department will thoroughly review the Ambler Road EIS and its Record of Decision and proceed in a manner that better protects the Western Arctic Caribou Herd, its users, and its habitat.

Thank you for your time and consideration of our position and request. We appreciate your efforts on behalf of our nation and look forward to your response.

On behalf of the Working Group,

A handwritten signature in black ink that reads "Vern Cleveland Sr." in a cursive script.

Vern Cleveland, Sr., Chair

cc:

Nada Culver, Senior Advisor to the Secretary of the Department of the Interior
Western Arctic Caribou Herd Working Group Members & Alternates

The Alaska Industrial Development and Export Authority (AIDEA), which is funding initial construction of the Ambler Road, held a meeting on April 14, 2021, where they considered a resolution regarding the 2021 field season and plans. Opportunity for public comment was announced four days before this meeting, leaving insufficient time for a robust response from the Working Group. However, we did submit brief comments pointing out the insufficient stakeholder engagement and requesting more meaningful opportunities moving forward.

A copy of the submitted comments is included on the following pages.

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

April 13, 2021

Alaska Industrial Development and Export Authority
813 W Northern Lights Blvd
Anchorage, AK 99503

Dear AIDEA Board Members,

At your 14 April 2021 meeting you will be considering Resolution G21-09 about the Ambler Access Project 2021 Field Season and Plan. The Western Arctic Caribou Herd Working Group (Working Group) is concerned about the Ambler Mining District Industrial Access Road Project (Ambler Road) and the effects that it may have on caribou, habitat, and the people who rely upon them. The Working Group is a permanent organization of stakeholders that works to ensure conservation of the Western Arctic Caribou Herd (WACH) and to maintain traditional and other uses of the herd now and into the future. The Working Group consists of subsistence users from communities within the range of the herd, other Alaskan hunters, guides, transporters, conservationists, and reindeer herders. Since its formation in 1997, the Working Group has submitted numerous advisory recommendations to government agencies, regulatory boards, and other bodies to support decisions that will ensure the long-term conservation of the WACH. The Working Group has been involved with the Ambler Road issue for many years. At our 2018 annual meeting, the Working Group passed a motion with a nearly unanimous vote opposing creation of the Ambler Road. We will continue to remain involved with this project in the future.

Considering our desire to remain engaged as stakeholders in the Ambler Road process, it is disturbing that the AIDEA Board meeting agenda and opportunity for comment were only announced last Friday, with just four days to organize public comments. The Working Group includes representatives of forty remote communities spread across the range of the WACH, as well as many others who rely on caribou for their livelihoods or other reasons, as described above. It takes time to adequately engage our members, especially those living in some of the more remote villages where communication can be a challenge due to limited internet and phone access. We believe it is important to analyze and comment on proposed actions that may disturb caribou, their habitat, and their users. The timing for comment offered by the AIDEA Board did not allow for this in regard to Resolution G21-09. This is especially striking as one component of the Project Plan for 2021 is "Stakeholder Outreach," including relationship building with stakeholders (Resolution G-21-09 Exhibit A). The lack of meaningful opportunity for public comment on the 2021 project plan does not bode well for AIDEA's concern for such engagement. Taking the time and effort to ensure that input from all stakeholders is valued in decision-making processes is crucial. We strongly urge AIDEA to make meaningful efforts to engage people, including making proposed plans available with sufficient time for the public to provide thoughtful and informed comments.

Thank you for your time and consideration of our position. We look forward to your response.

On behalf of the Working Group,

A handwritten signature in cursive script that reads "Vern Cleveland Sr.".

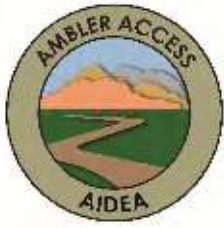
Vern Cleveland, Sr., Chair
Western Arctic Caribou Herd Working Group

cc:
Western Arctic Caribou Herd Working Group Members

Pre-construction activities for the Ambler Road are now underway. These primarily consist of environmental and cultural surveys to support engineering and design.

AIDEA will likely need to conduct several years of pre-construction activities due to the scale of the project and the limited existing cultural and environmental data. AIDEA has also stated that it will only begin construction of the road after securing legal agreements on from the mining companies that would use the road. If AIDEA does securing such agreements, it will likely require several years to accomplish, since only the Arctic mine has completed a feasibility study to date and no mine permitting applications have been submitted.

The letter from AIDEA on the following pages describes plans moving forward for the [Ambler Access Project](#). It mentions that data collection is planned for the next few years, with a goal of making a final decision about whether to invest in the road by 2024.



AMBLER ACCESS

813 W. Northern Lights Boulevard

Anchorage, AK 99503

T: 907-771-3000

E: ambler@aidea.org

W: <https://ambleraccess.org/>

November 3, 2021

Tim Fullman, Ph.D.

Senior Ecologist

The Wilderness Society

705 Christensen Drive

Anchorage, Alaska 99501

Dear Dr. Fullman,

I appreciate your interest in the Ambler Access Project (AAP). The following information will provide you with a report on the efforts for the summer field season and the plans for the AAP.

Project activities conducted during the 2021 field season fell within the Pre-Construction Phase of the Project. They consisted of activities that will allow for completing the Project's front-end engineering and design (FEED). During its first field season, AAP's team of contractors and local hires conducted Cultural Resources, Hydrology, Fish Habitat, and Land Surveys at over 50 component sites, mostly related to water crossings. This 2021 summer field season ended mid-October.

AAP had 22 shareholder hires for the Project, including 20 Doyon, Limited shareholders, 1 NANA, and 1 ASRC shareholder. The total wages paid to date are approximately \$190,000 for the limited 2021 field season.

AAP continues to coordinate with agencies, consulting parties, and Tribes about project planning for the 2022 field season activities and to meet Programmatic Agreement requirements. The project team will be gathering the fieldwork data for the next few years in the hopes of making a final investment decision by 2024.

In addition, the Project is creating a Subsistence Advisory Committee (SAC) and has enlisted help through the formation of a working group. Members of the SAC Working Group include Fred Bifelt (Huslia) Co-chair, Larry Westlake, Sr. (Kiana) Co-chair, Wilmer Beetus (Hughes), Nellie Greist (Shungnak), Henry Horner (Kobuk), Liz Cravalho (NANA), Jamie Marunde (Doyon, Limited), Dave Heimke (AIDEA), and Kevin Torpy (Ambler Metals). The working group will establish the framework for the committee, including membership, terms of service, policies, procedures, and frequency of meetings.

The goals of the SAC are:

1. Consider potential impacts on the subsistence resources associated with AAP's actions.
2. Act as representatives for the directly affected, local subsistence communities, and ANCSA Regional Corporations, as landowners, where information can flow from the communities to the Project and vice versa.

3. Provide recommendations and guidance on the project design as it relates to subsistence issues.

Please note and pass along to the Western Arctic Caribou Herd working group the following information:

AAP is soliciting applications from residents of communities along the access corridor of the road to serve on the SAC. The communities are Alatna, Allakaket, Ambler, Evansville, Hughes, Huslia, Kiana, Kobuk, Noorvik, and Shungnak. The application period closes at 5 p.m. on November 12, 2021.

Please feel free to contact me if you have any questions.

Kindest regards,

A handwritten signature in black ink, appearing to read 'C. Ostbloom', with a stylized flourish at the end.

Charlene Ostbloom
Communications Manager
Amber Access Project

Mine exploration and development

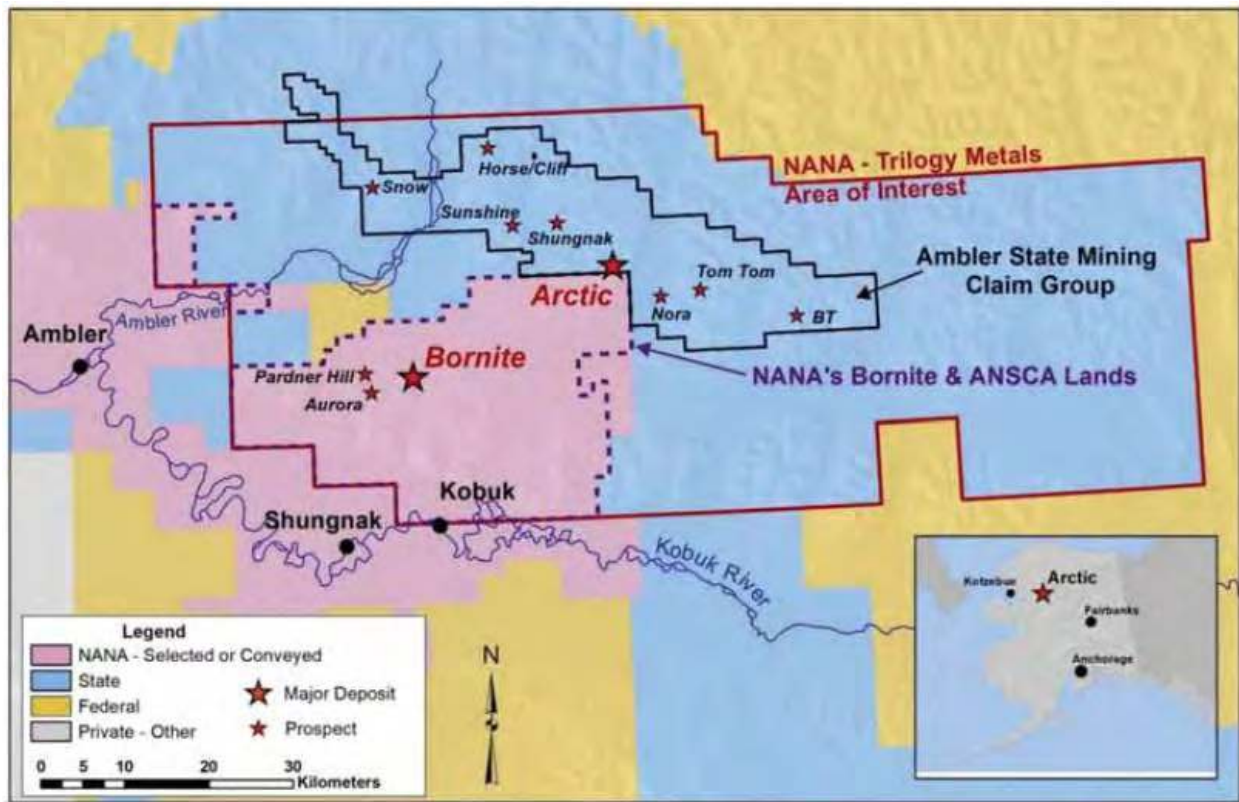


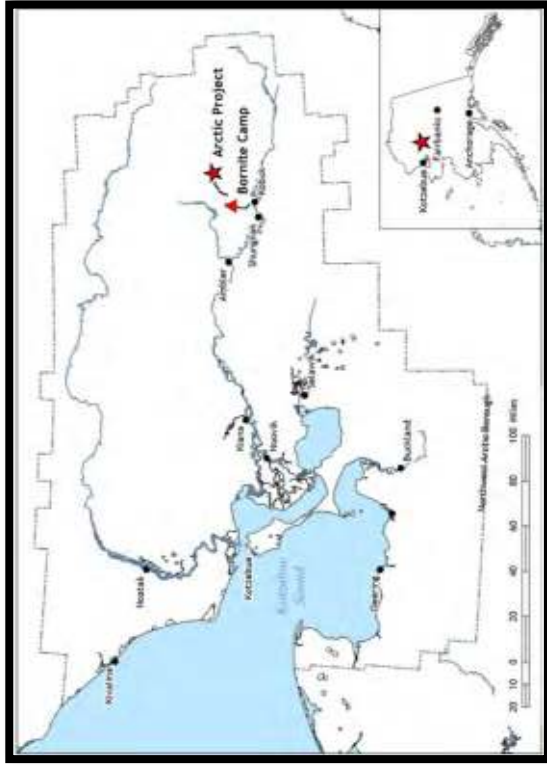
Figure 4-1 from [Arctic Feasibility Study](#)

[Ambler Metals](#) is an independently operated LLC formed from a partnership of Trilogy Metals and South32 for development of the Upper Kobuk Minerals Projects in the Ambler Mining District.

The following page, provided by Ambler Metals, describes field plans for 2022.

2022 SEASONAL PLANS

- Anticipate seasonal operations at Bormite Camp and surrounding prospects between April and October 2022.
- 3 diamond drills and supporting helicopter activity focused on mineral exploration
- 1 drill for geotechnical characterization to support Arctic Project engineering
- Regional soil sampling and geologic mapping programs
- Camp expansion to increase capacity to >100 beds
- Ongoing environmental baseline studies (water, air, wildlife, fish)
- Personnel and freight in/out of Dahl Creek Airstrip
- Continued compliance with NWAB's Title 9 permits including avoiding disturbance to the caribou herd migration
- Ongoing support of UKMP Subsistence Committee
- Continued focus on local shareholder hiring



In addition to the exploration projects within the Ambler Mining District, both Trilogy Metals and South32 have staked claims outside of the district. The map below shows additional claims (outlined in green and in red) that lie east of the Ambler Mining District, extending from the proposed Ambler Road.

While exploration of these claims is in earlier stages than the Arctic and Bornite projects described above, they provide an idea of the additional potential for development in the region.

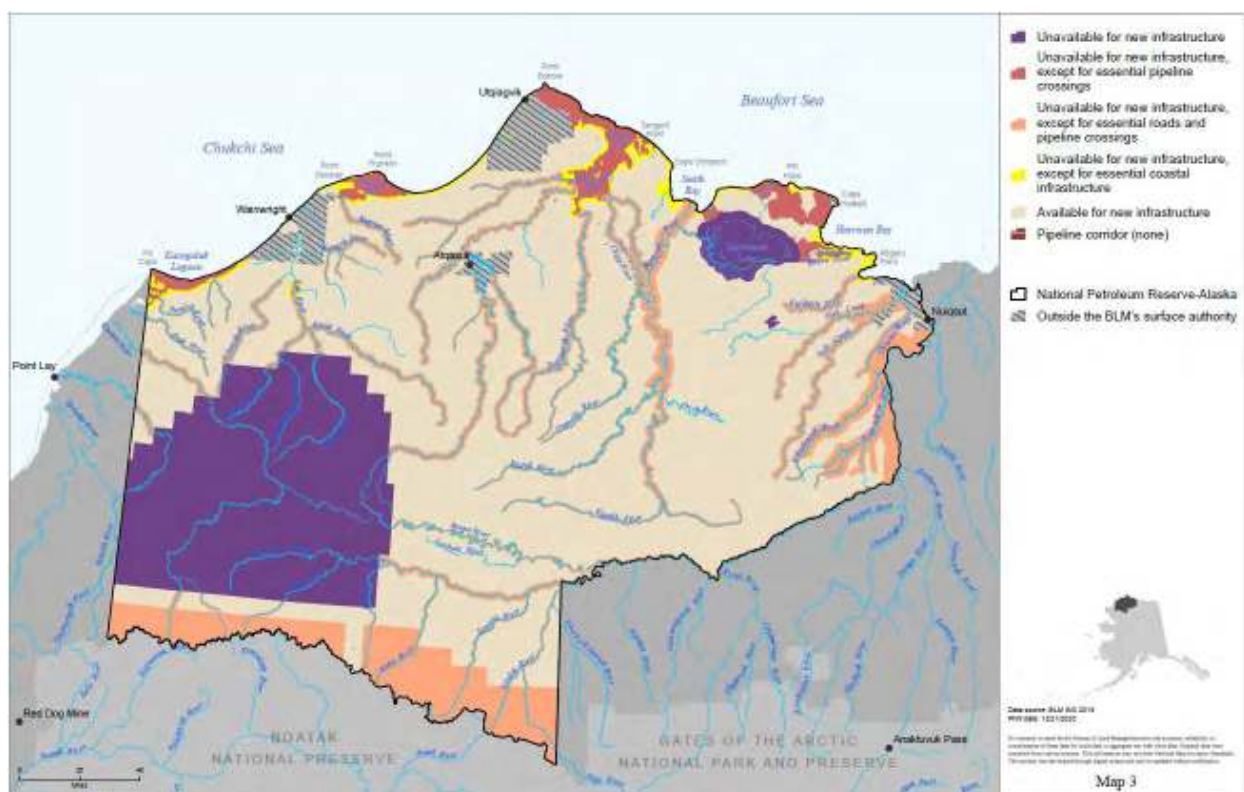


Figure 1 in a [news release](#) from Trilogy Metals, dated 2021-10-04.

2) NPR-A Integrated Activity Plan Revision

Management of land use and development activities within the National Petroleum Reserve – Alaska (NPR-A) is governed by an Integrated Activity Plan (IAP) that sets aside some areas while making others available for leasing and development. A process began in 2017 to revise the previous IAP. The Working Group submitted comments in late 2019 asking BLM to maintain existing protections and stipulations for caribou habitat and other areas (comments included in last year’s binder). BLM did not follow this request.

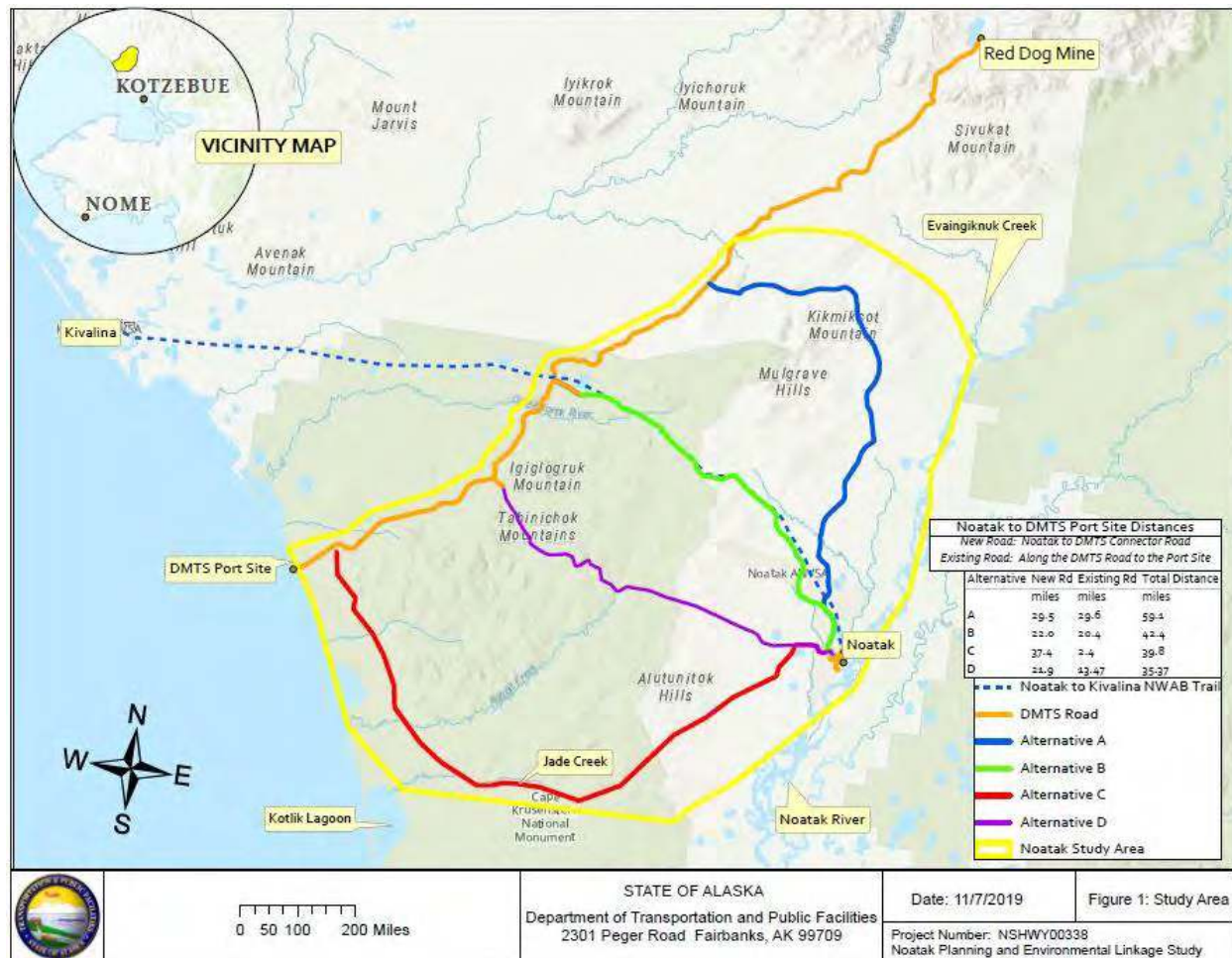
In January 2021, BLM issued a Record of Decision (ROD) finalizing revision of the IAP. The new plan, seen below, greatly reduced the area unavailable for leasing, from about 50% under the 2013 IAP to about 20% under the new IAP. This includes shrinking the area unavailable for leasing or infrastructure around the core Western Arctic Herd calving grounds and insect relief areas and opening all Teshekpuk Caribou Herd calving and insect relief areas for leasing.



Taken from Map 3 in the 2021 IAP ROD

In September, BLM was directed to review the new IAP for compliance with the Biden Administration's climate goals. While this review is pending, no oil and gas leases will be offered under the 2021 plan. It is currently unclear what form this review will take nor what the avenues will be to provide input. We will keep an eye on opportunities for commenting.

3) Noatak – Red Dog Road



Map obtained from [PEL website](#) on 10/30/20

In 2019, the Alaska Department of Transportation and Public Facilities (DOT&PF) announced it was partnering with the Northwest Arctic Borough and Native Village of Noatak to look into building a permanent gravel road connecting the Delong Mountain Transportation System (DMTS, i.e., the Red Dog road) and Noatak.

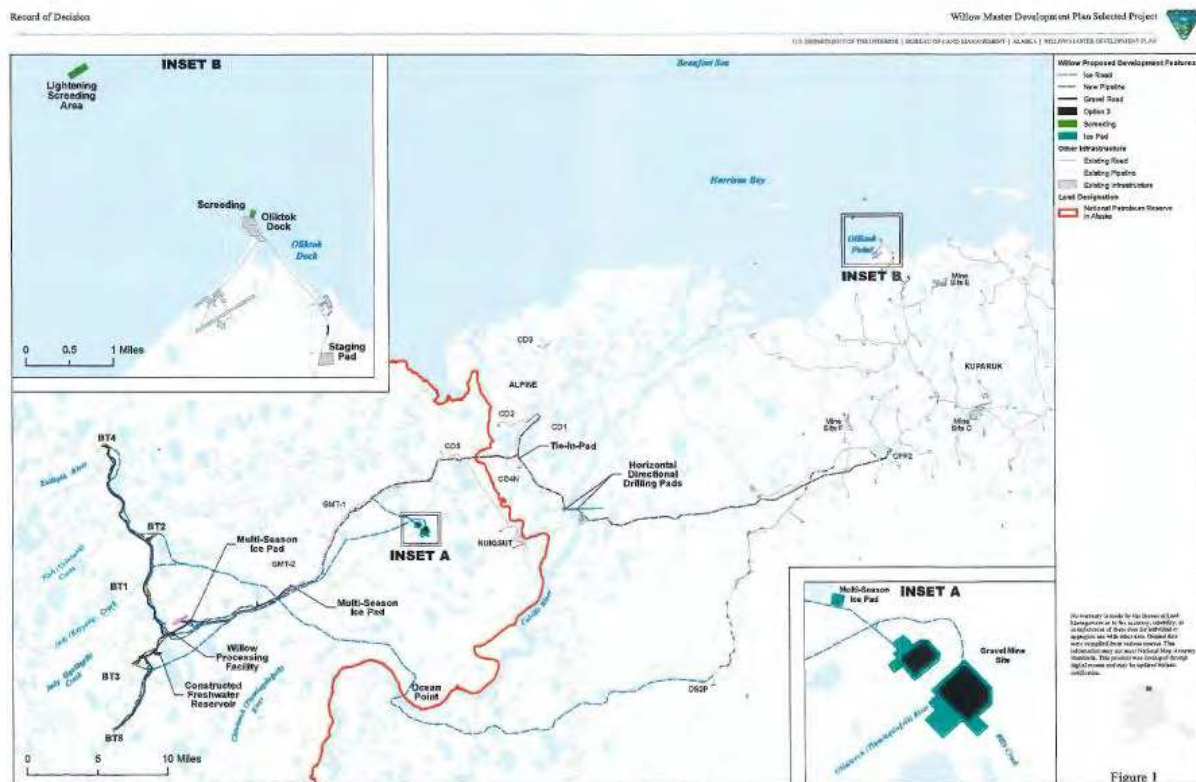
The Working Group previously submitted comments raising issues we would like considered as the planning process moves forward. DOT&PF say that since that time the Northwest Arctic Borough Assembly asked DOT&PF to consider another alternative, but the agency has not completed this process. There is not currently an avenue for further engagement.

4) Willow Master Development Plan

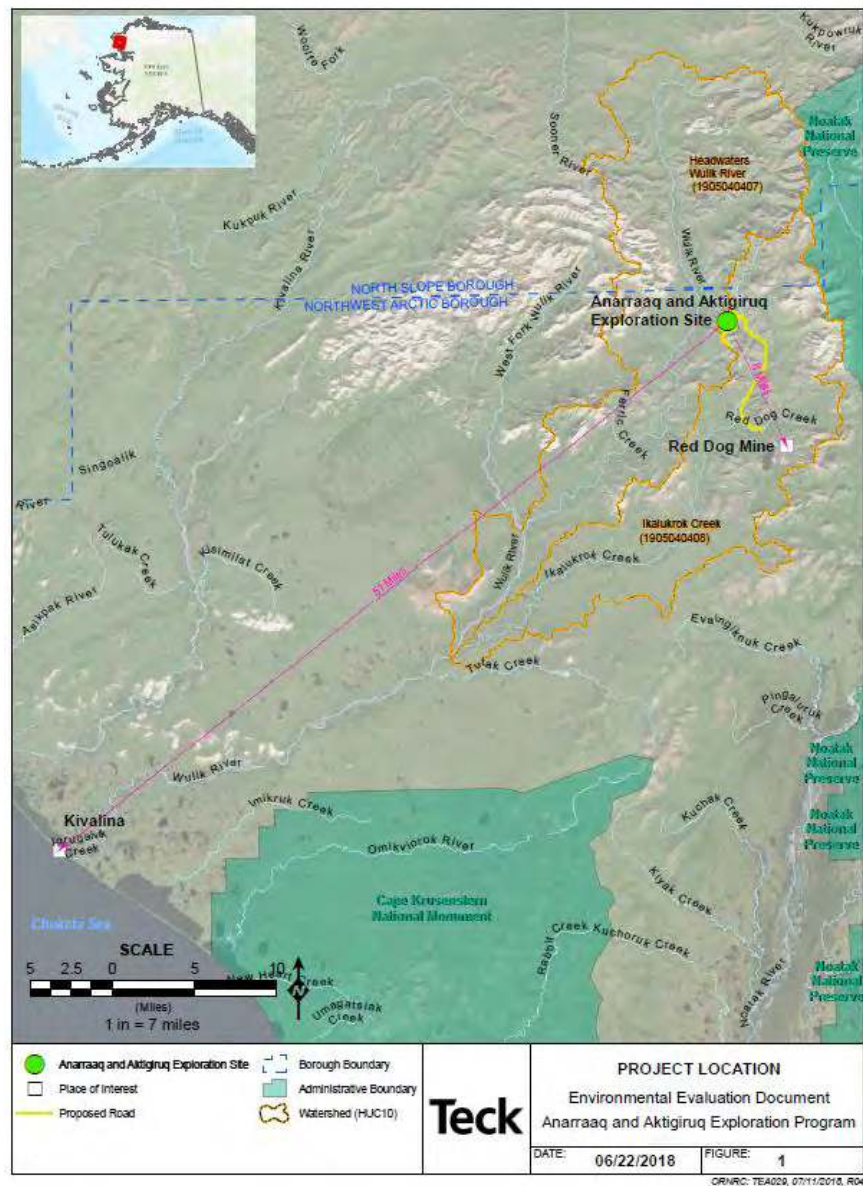
The Willow project would expand infrastructure in the northeastern NPR-A. This is the farthest west oil and gas infrastructure that is currently proposed within the NPR-A and comes up to the former edge of the Teshekpuk Lake Special Area, which previously was set aside to protect critical calving, post-calving, and insect relief habitat for the Teshekpuk Caribou Herd under the 2013 IAP land management plan.

The Willow project was approved in 2020 under ConocoPhillips Alaska, Inc.'s preferred alternative, which features road connections to existing Greater Mooses Tooth 1 and 2 infrastructure, a new gravel mine, and a winter ice bridge crossing of the Colville River during construction. See map below.

Currently, a legal ruling has halted development. BLM is likely to revise their approval to address issues identified by the court, which may lead to additional opportunities for comment. The Working Group did not comment on any of the previous processes.



5) Anarraaq – Aktigiruaq Mining Exploration



Teck American Inc. proposed an exploration project to evaluate the potential of new mineral deposits north of the current Red Dog Mine (see map above). The application with the Army Corps of Engineers was closed due to insufficient information. However, Teck has recently indicated interest in reopening the application and continuing the process.

It is not clear what opportunities will exist for engagement or commenting, but the Working Group asked to be informed if these arise.



Communication Committee Report

Western Arctic Caribou Herd Working Group

Communication Committee

Chair of Committee

CWG Chair 5

CWG Chair 14

CWG Chair 16

CWG Chair 18

ADF&G

BLM

NPS

USFWS

Vern Cleveland

David Kilbourn

Tim Fullman

Tom Gray

Heather Jameson

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Report

Western Arctic Caribou Herd Working Group Meeting Communications Committee Report December 2021

Chair of Committee	Vera Cleveland	vera_cleveland@seibornmail.com
CWG Chair 1	David Kilbourn	dkilbourn@gmail.com
CWG Chair 14	Tom Fullmer	tom_fullmer@noaa.gov
CWG Chair 15	Tom Gray	tomgray@hugoboss.net
ADWG	Heather Johnson	heatherjohnson@alaska.gov
BLM	Bruce Siepp	bsiepp@blm.gov
NPS	Rylee Joby	rylee.joby@nps.gov
USFWS	Brittany Swanson	brittany_swanson@fws.gov

This report details a variety of communication tools used by agencies, organizations, and the Western Arctic Caribou Herd Working Group (WACH WG) to distribute information to the public.

Publications

Caribou Trails 2021

The 21st issue of Caribou Trails highlighted series including status of the herd, research updates, proposed development projects and management of caribou over time. This publication was distributed as both hardcopy direct mail to approximately 3,000 people.

Caribou Health and Disease: A Pocket Guide, Alaska Department of Fish and Game
https://www.adfg.alaska.gov/index.cfm?adfg=wildlife/wildlife/wildlife_health_disease_booklet.pdf

Newsletter: Caribou Update, January 2021 News from the WACH WG's Dec. 2020 meeting (WS, 1 Feb. 21 Wildlife Service - Selawik Refuge - Kotzebue, AK)

Migrations: Alaska's Wild Wonders Wildlife Magazine (Issue 11) Alaska Department of Fish and Game
https://www.adfg.alaska.gov/index.cfm?adfg=wildlife/wildlife/wildlife_migrations_issue11

Articles/ Requests

Camron, M.D., K. Joby, and J. Hayken, 2021. New insights from monitoring tools using GPS data to detect calving events at Alaskan caribou herds. *Alaska Park Science* 24 (1): 84-87. <https://www.afg.gov/articles/view.asp?art=195104>

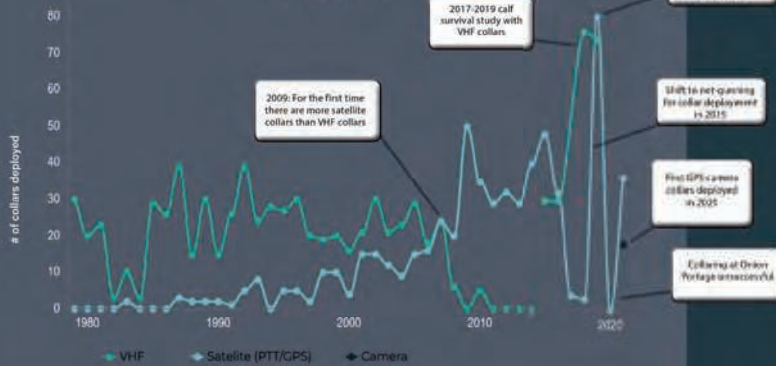
Camron, M. D., K. Joby, G. A. Freed, C. P. H. Mulken, and K. Kaufman, 2020. Translocated fidelity and selection for average locations of calving areas suggestive of spatial memory in a highly migratory ungulate. *Frontiers in Ecology and Evolution* 8:564757. DOI: 10.3389/fecv.2020.564757

Tullman, T.L., Wilson, R., McKeon, C., Gaudin, D., Lortie, J., Fox, W. 2021 Mapping potential effects of proposed roads on migratory connectivity for a highly mobile herbivore using circuit theory. *Ecological Applications* 31(1): e03207

Publications



Western Arctic Herd Collars 1979-2021



Cow collar



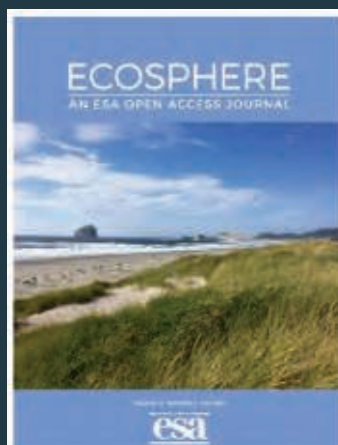
Articles and Reports

New tools to better understand the potential impacts of Arctic development

Thirteen papers present new tools for researchers and wildlife managers to better understand the potential impacts of development in the Arctic on a number of different species, including caribou. The first paper, **Mapping potential effects of proposed mines on migratory connectivity for a highly mobile species using remote sensing**, looks at how the flow of caribou migratory might be affected by a proposed road up east in northern Canada. The flow of caribou is affected by different climate, and different development scenarios were tested to see how much connectivity they provided to migratory connectivity in Canada.

The second paper, **Simulation modeling scenarios for caribou with quantifying ecological effects of development scenarios**, uses simulation modeling to assess the potential impacts of development on caribou. The authors used a range of development scenarios to see how they would affect caribou. The authors found that development scenarios that included roads and infrastructure had the greatest impact on caribou.

Both papers aimed to improve understanding of proposed development, land management and other use scenarios for caribou. The authors used a range of development scenarios to see how they would affect caribou. The authors found that development scenarios that included roads and infrastructure had the greatest impact on caribou.



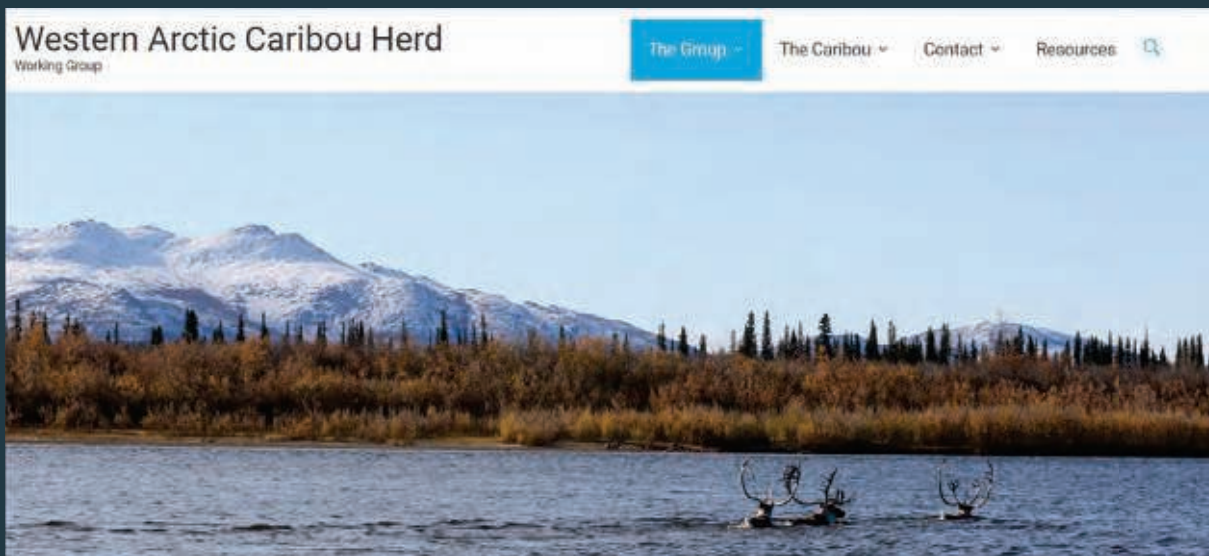
Seasonal patterns of spatial fidelity and temporal consistency in the distribution and movements of a migratory ungulate

Kyle Joly, Elisee Gauthier, D. Alexander Hansen, Matthew D. Cameron

Pages: 1183-1200 | First Published: 14 May 2021

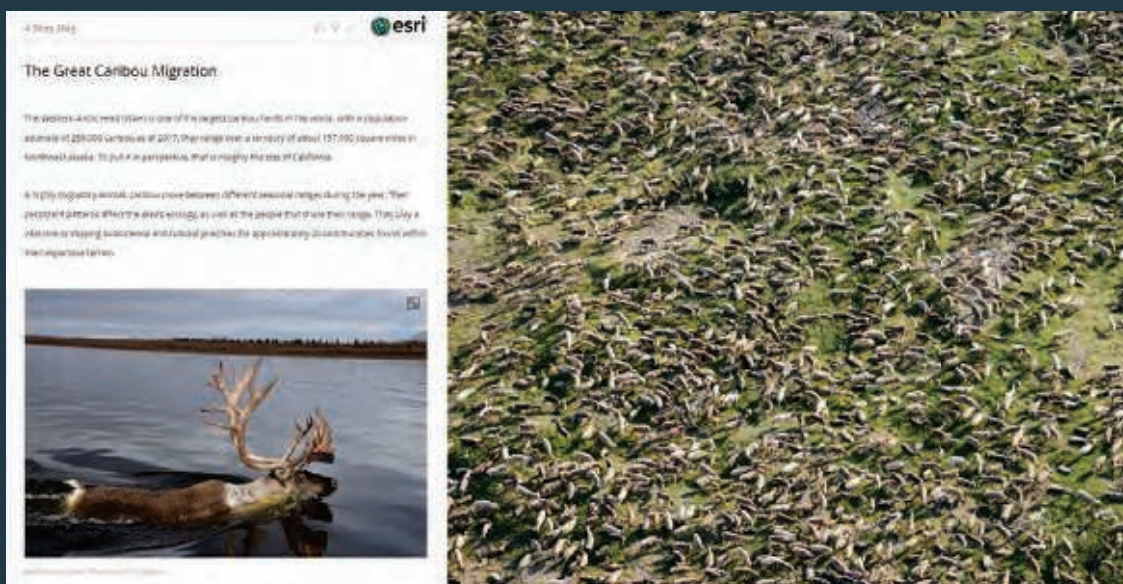


Website

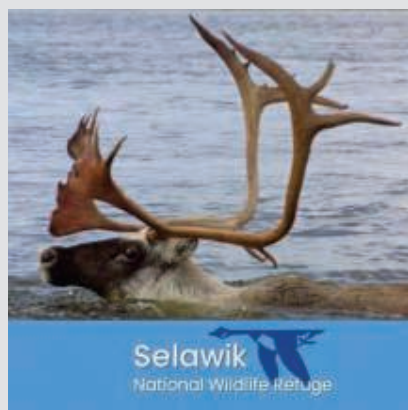


www.westernarcticcaribou.net

Story Map



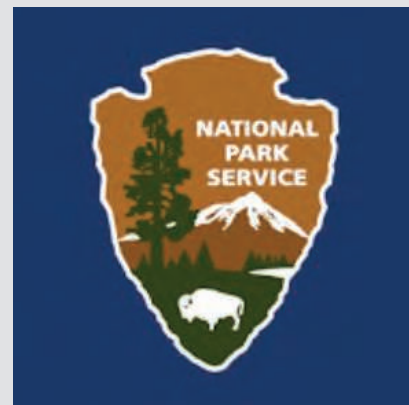
Social Media



Selawik National Wildlife Refuge
@SelawikNationalWildlifeRefuge



ADF&G Wildlife Conservation- Northwest Alaska Region V
@ADF&GWildlifeNorthwestAlaska



@BeringLandNPS,
@GatesOfTheArcticNPS,
@KotzebueMuseum

Hunt reminders

ADF&G Wildlife Conservation - Northwest Alaska - Region V
Published by Region V FG • October 12 at 2:18 PM

Attention Unit 23 and 264 Caribou Hunters:

We will not be seeing as many of you in person this fall, but we wanted to remind you to keep track of your caribou harvest through the station permit (RC907). Permit is also free and will help track changes in the availability of caribou and community needs.

Even if you have already harvested, your information is helpful... See More

ADF&G Wildlife Conservation - Northwest Alaska - Region V

Sharing knowledge

Selawik National Wildlife Refuge
August 31

As the weather and the tundra colors become more fall-like, thoughts turn towards berry picking and caribou hunting. Wanted to re-sharing this message about respectful caribou hunting practices from the Kiiana Elders' Council.

Attached flyer needs (Istapuat: Anurialquiq) Hunter's Success for Caribou Hunting. Always camp and hunt on the south side of the river... See More

INUPIAT ILITQUSIAT
ANUNIALQUIQ: HUNTER'S SUCCESS FOR CARIBOU HUNTING

- Always camp and hunt on the south side of the river.
- When caribou start crossing the river, wait until they're half way across, and approach from the north side to keep the migration moving south.
- Sharing: hunting groups should take turns. If you already have caribou, let the next boat in line have a chance.
- Use smaller caliber rifles, for the safety of others.
- Shoot in a standing position from the front of the boat toward the caribou, so bullets don't travel toward other boats or camps.
- Respect the cabins you stop at and replace any source you borrowed. Hang all firearms and shotguns down.
- Keep the land and water clean of trash.
- "WE LIVE ON THIS LAND AND DEPEND FROM THE RIVER."
- Caribou permits and reporting your harvest will help at the survival of the herd.

THANK YOU FOR YOUR RESPECT AND ABIDING BY OUR TRADITIONS - KIIANA ELDERS' COUNCIL

Information and Resources

Selawik National Wildlife Refuge
September 1

Welcome to September, aka Amagapavik: the time when caribou lose velvet from their antlers (from the Kotzebue dialect of Inupiat), photo of caribou swimming across the Kotzebue River taken in 2010

ADF&G Wildlife Conservation - Northwest Alaska - Region V
Published by Region V FG • December 7, 2020

Hear updates on the Western Arctic Herd

The Western Arctic Caribou Herd Working Group will hold their annual meeting by teleconference on December 9, 2020, from 1-5 P.M.

The agenda will focus on the status of the Western Arctic Herd, a brief update on state and federal caribou harvest regulations, and resource development in the range of the herd... See More

Western Arctic Caribou Herd Working Group Meeting

Caribou collaring now back on track

May 5th 10:04 pm | Brittany Sweeney

print email

Satellite collars on caribou are one of the most important tools biologists, who study the Western Arctic Caribou Herd, have. Collar information is essential to understanding movements, survival rates, and in knowing the right time to take aerial photos for a herd count.

However, in recent years, the number of active collars among our region's herd had fallen - until last month, when a team were able to put out 54 new collars.

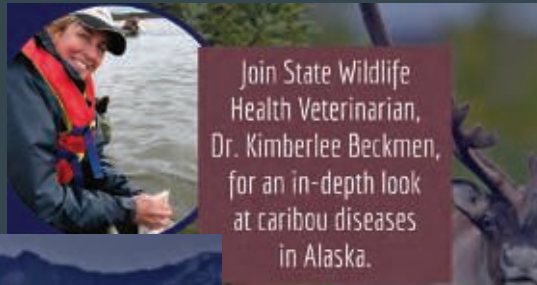


In early April this year, the collaring crew from the Alaska Department of Fish and Game and the National Park Service were able to successfully put out collars on wintering caribou northeast of Kobuk. - Photo courtesy of Matt Cameron / National Park Service

Most Popular Stories

Caribou collaring now back on track

Virtual programs



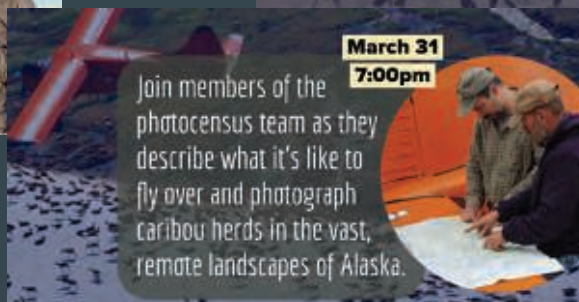
Join State Wildlife Health Veterinarian, Dr. Kimberlee Beckmen, for an in-depth look at caribou diseases in Alaska.



Join caribou biologist Alex Hansen for an overview of the Western Arctic Herd



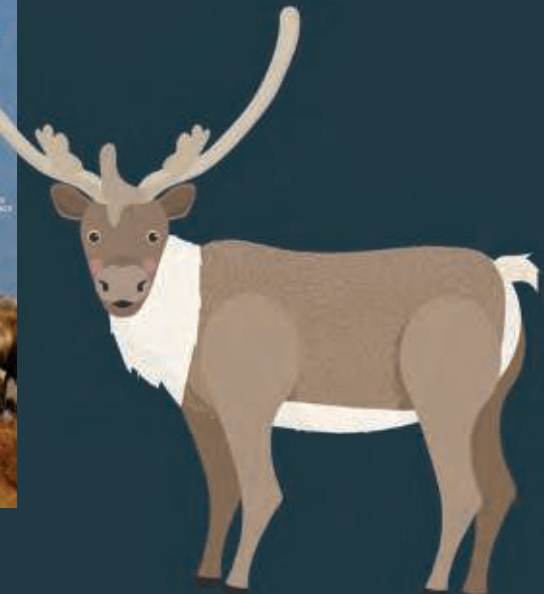
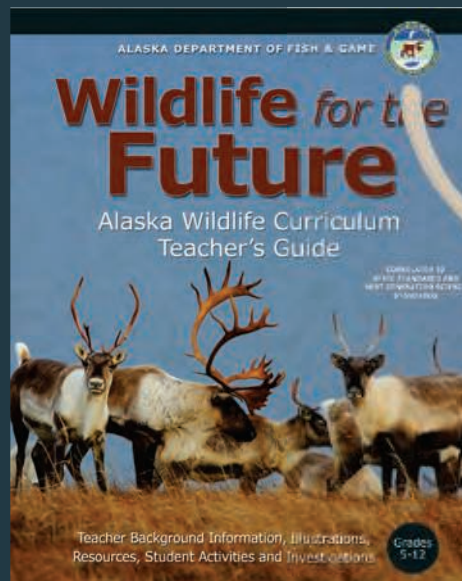
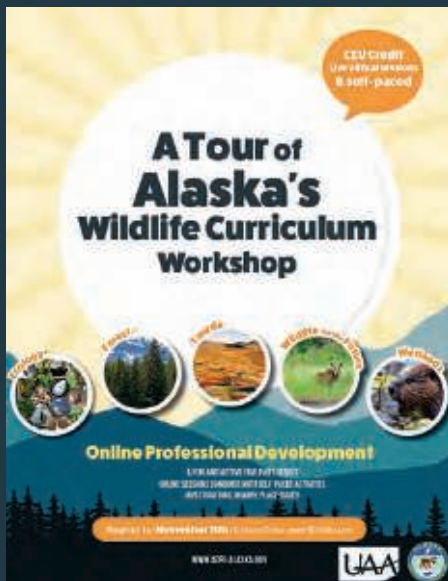
Join Lincoln Parrett, Wildlife Research Biologist for ADF&G, and take a closer look at caribou herds across Alaska.



Join members of the photocensus team as they describe what it's like to fly over and photograph caribou herds in the vast, remote landscapes of Alaska.

March 31
7:00pm

Professional Development Teacher Workshops

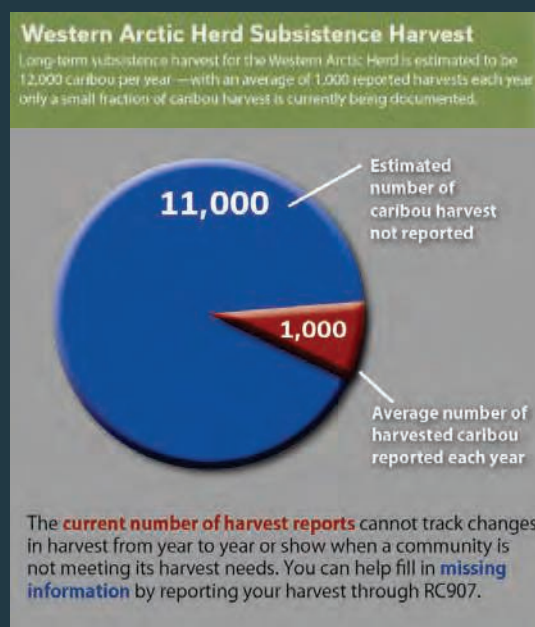
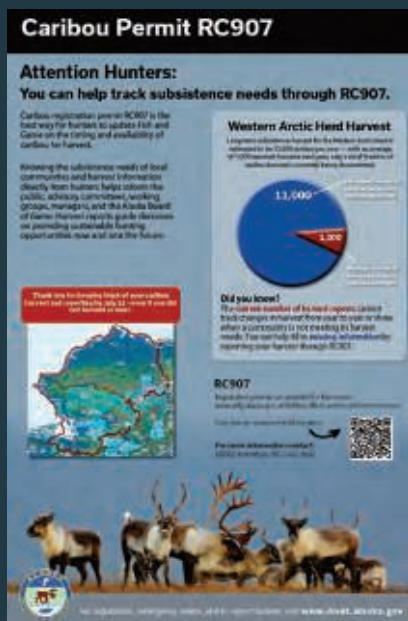


Registration Permit RC907

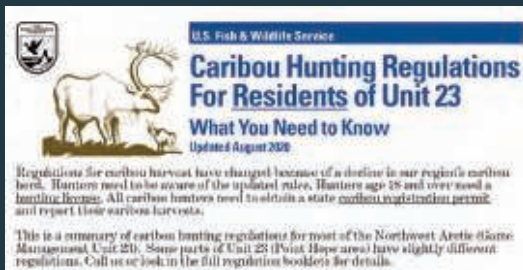
Posters

Postcards

Stickers



Hunter Success Working Groups



Upcoming projects

WACH WG Caribou
Conservation Kit

Teacher Workshop



Working Group Input

- WACH WG Questionnaire included in your meeting packet

Would you like to join the communication committee?

Western Arctic Caribou Herd Communication Committee Questionnaire 2021

1. What caribou topics should be focus on for communications? (rank highest to lowest)

- ☐ Herd numbers and management status
- ☐ Updates from the Working Group
- ☐ Research updates
- ☐ Protected Development updates
- ☐ Sharing caribou knowledge (elder stories, Northwest Alaska traditions, education resources and other topics)
- ☐ Other or suggestions (please specify)

2. What are the best methods to communicate with people in your region? (rank highest to lowest)

- ☐ While getting out on the field
- ☐ Word of mouth
- ☐ Radio
- ☐ Social media
- ☐ At the meetings (tribal council, working group, management, other)
- ☐ Newspaper
- ☐ Online government website
- ☐ In person at a government office
- ☐ Scientific articles
- ☐ Other (please specify)

3. Do people in your region read the Caribou Train newsletter?

Not likely 1 2 3 4 5 6 7 8 9 10 Very likely

4. What group(s) are the most important to reach with communications?

- ☐ School-aged youth
- ☐ Tribes and young adults
- ☐ Younger hunters
- ☐ Elder hunters
- ☐ Community leaders
- ☐ Elders
- ☐ Other (please specify)

Any additional suggestions or resources we should include in outreach?

“To work together to ensure the long term conservation of the Western Arctic caribou herd and the ecosystem on which it depends, and to maintain traditional and other uses for the benefit of all people now and in the future.”

Contact Information

ADF&G Heather Jameson heather.jameson@alaska.gov

Western Arctic Caribou Herd Working Group Meeting Communications Committee Report December 2021

Chair of Committee	Vern Cleveland	vern_cleveland75@hotmail.com
CWG Chair 5	David Kilbourn	dkilbourn@gci.net
CWG Chair 14	Tim Fullman	tim_fullman@twos.org
CWG Chair 16	Tom Gray	tomnbj@hughes.net
CWG Chair 18	-----	-----
ADF&G	Heather Jameson	heather.jameson@alaska.gov
BLM	Bruce Seppi	bseppi@blm.gov
NPS	Kyle Joly	kyle_joly@nps.gov
USFWS	Brittany Sweeney	brittany_sweeney@fws.gov

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Caribou Health and Disease: A Pocket Guide. Alaska Department of Fish and Game

https://www.adfg.alaska.gov/static/home/library/pdfs/wildlife/booklets_books/caribou_health_disease_booklet.pdf

E-newsletter: Caribou Update, January 2021 News from the WACH WG's Dec. 2020 meeting U.S. Fish & Wildlife Service - Selawik Refuge - Kotzebue, AK

Migrations: Alaska's Wild Wonders Activity Magazine (Issue 11) Alaska Department of Fish and Game

<https://www.adfg.alaska.gov/index.cfm?adfg=educators.wildwonders&issue=11>

Articles/ Reports

Cameron, M.D., K. Joly, and J. Hepler. 2021. New insights from an enduring tool: using GPS data to detect calving events in Alaskan caribou herds. Alaska Park Science 20 (1): 84-87. <https://home.nps.gov/articles/000/aps-20-1-9.htm>.

Cameron, M. D., K. Joly, G. A Breed, C. P. H. Mulder, and K. Kielland. 2020. Pronounced fidelity and selection for average conditions of calving area suggestive of spatial memory in a highly migratory ungulate. Frontiers in Ecology and Evolution 8:564567. DOI: 10.3389/fevo.2020.564567.

Fullman TJ, Wilson R, Joly K, Gustine D, Leonard P, Loya W (2021) Mapping potential effects of proposed roads on migratory connectivity for a highly mobile herbivore using circuit theory. Ecological Applications 31(1): e2207.

Articles/ Reports cont.

Fullman TJ, Sullender BK, Cameron MD, Joly K (2021) Simulation modeling accounts for uncertainty while quantifying ecological effects of development alternatives. *Ecosphere* 12(5): e03530.

Joly, K., E. Gurarie, D. A. Hansen, and M. D. Cameron. 2021. Seasonal patterns of spatial fidelity and temporal consistency in the distribution and movements of a migratory ungulate. *Ecology and Evolution* 11 (12): 8183-8200. DOI: 10.1002/ece3.7650.

Joly, K. and M. D. Cameron. 2020. Caribou vital sign annual report for the Arctic Network Inventory and Monitoring Program: September 2019–August 2020. Natural Resource Report NPS/ARCN/NRR—2020/2210. National Park Service, Fort Collins, Colorado. <https://doi.org/10.36967/nrr-2282429>.

Kauffman, M. J., F. Cagnacci, S. Chamaillé-Jammes, M. Hebblewhite, J. G. C. Hopcraft, J. A. Merkle, T. Mueller, A. Mysterud, W. Peters, ..., K. Joly, et al. 2021. Mapping out a future for ungulate migrations. *Science* 372 (6542): 566-569. DOI: 10.1126/science.abf0998.

Media

Western Arctic Herd Working Group Website: www.westernarcticcaribou.net
Approx reach: 2,400 views

Story map: <https://arcg.is/1ibmez>

Website articles:

- Development: <https://www.nps.gov/articles/000/toolstoassessimpacts.htm>
- GPS to find calving: <https://www.nps.gov/articles/000/aps-20-1-9.htm>
- Fidelity: <https://www.nps.gov/articles/000/bouseasonalfidelity.htm>
- GIUM: <https://www.nps.gov/articles/000/migrationmapping.htm>
- Calving: Why do caribou calve where they do?: <https://www.nps.gov/articles/000/cariboucalvinglocales.htm>

Newspaper articles: Sweeney, B. (2021, May 5th). Caribou collaring now back on track. *The Arctic Sounder*

Social Media: Posts highlighting caribou research, management and natural history. Approx reach in the tens of thousands. @ADFGWildlifeNorthwestAlaska, @BeringLandNPS, @GatesOfTheArcticNPS, @KotzebueMuseum @SelawikNationalWildlifeRefuge

Virtual Presentations

Caribou Across the Last Frontier, ADF&G Research Coordinator Lincoln Parrett, Presented March 25, 2021
<https://youtu.be/cMQNCQb2LBo>

Counting Caribou, ADF&G Photocensus Coordinator Nathan Pamperin and ADF&G Photocensus Pilot Tom Seaton. Presented March 31, 2021 <https://youtu.be/jrHAIcuYkAE>

Caribou Disease, State Wildlife Health Veterinarian, Dr. Kimberlee Beckmen Presented April 5, 2021
<https://youtu.be/fejzFG81wYU>

Western Arctic Herd, ADF&G Research Biologist Alex Hansen Presented May 4, 2021
<https://youtu.be/VwI0VG58Flo>

Professional Development Teacher Workshops

- Wildlife for the Future Workshop, hosted March 16, 2021. With participants from across the state,the workshop focused on current wildlife management and research such as counting caribou and population dynamics of game species.

Workshops

Caribou Hunting Ethics Program, Elder Roy Nageak and ADF&G Carmen Daggett. Utqiagvik, Summer 2021


Registration Permit RC907

- Postcards highlighting harvest reporting delivered to Unit 23 residents through direct mail.
- Posters highlighting what registration permits are, when they are available and how they are important to caribou management distributed throughout Unit 23.
- Stickers highlighting RC907 and ADF&G website available at ADF&G offices.
- Facebook post throughout the year highlighting online reporting, reporting deadlines and the importance of tracking harvest for caribou conservation.

Hunter success Working Group

- Handout developed to highlight Unit 23 closures and restrictions for caribou hunting
- Redistribution of Kiana and Kotzebue Elder guidance on caribou hunting through e-mail and Facebook

DIVISION OF SUBSISTENCE



Caribou Harvest Assessment Program: 2021


2020-2021 project study year updates (Kobuk, Deering, Noatak, Shishmaref)

2018-2019 estimates of caribou harvest by the communities of Golovin, Selawik, Shungnak and White Mountain

Prepared for the Western Arctic Working Group Meeting
December 15, 2021

1

Western Arctic Caribou Herd Harvest Assessment



- **Funding Agency:** Fish and Wildlife Service (FWS)
 - Research partnership among 8 study communities, ADF&G Subsistence, ADF&G Department of Wildlife Conservation
- **Purpose:** conduct household large mammal harvest surveys (caribou focus) in 8 communities within the range of the Western Arctic caribou herd (WAH)
- **Focus area:** Communities of Golovin, Selawik, Shungnak, White Mountain, Shishmaref, Noatak, Deering and Kobuk
- **Methods:**
 - Household Surveys
 - Ethnographic interviews with mapping component
 - Participant observation
- **Project timeline:**
 - Project Start 03/2019, project end 06/2024
 - 4 years of surveys (2 years in each community during alternate years, 4 communities surveyed/year)
 - Fieldwork for spring 2020 postponed due to COVID, spring 2021
 - Surveys in Deering, Kobuk, Golovin and Shishmaref conducted remotely
 - Standard door-to-door in-person surveys, phone surveys, online surveys, or mail-in surveys all options being considered for 2022

2

2019 Sample Achievement

- **Golovin**
 - 31/43 households
 - 72%
- **Selawik**
 - 128 /150 households
 - 75%
- **Shungnak**
 - 50/63 households
 - 79%
- **White Mountain**
 - 52/62 households
 - 84%



WACH Harvest– SLIDE 3

3

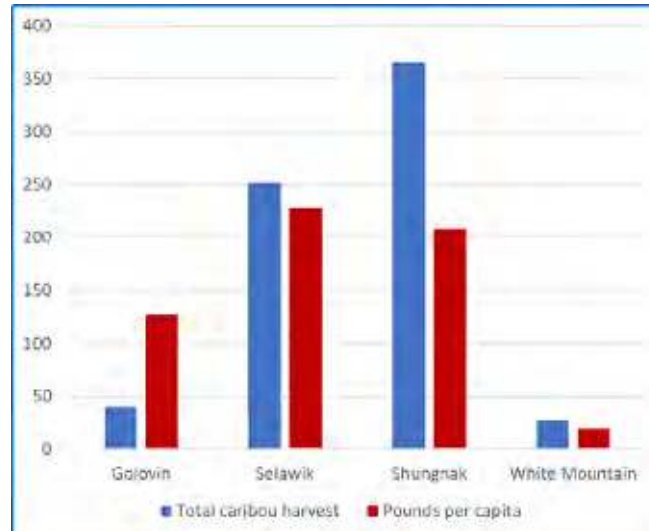
Harvest and Use of Caribou

- **Golovin:** 65% of households used caribou during the study year, 10% harvested
- **Selawik:** 96% of households used caribou, 29% harvested
- **Shungnak:** 98% of households used caribou, 46% harvested
- **White Mountain:** 64% of households used caribou, 12% harvested

WACH Harvest– SLIDE 4

4

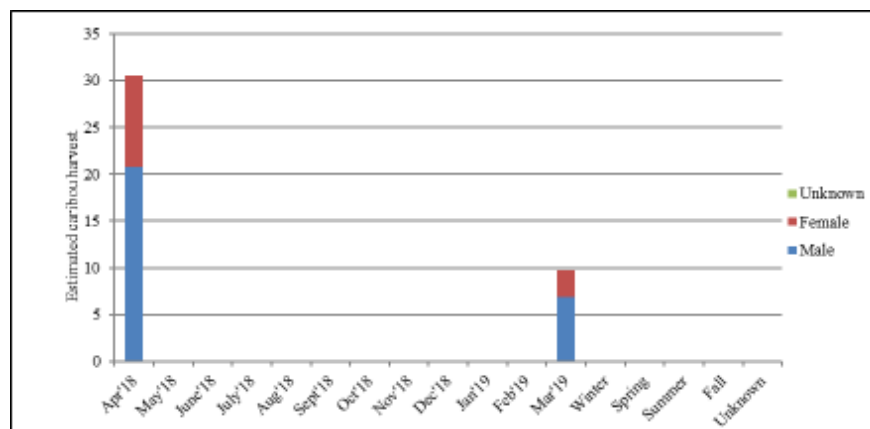
Harvest and Use of Caribou



WACH Harvest- SLIDE 5

5

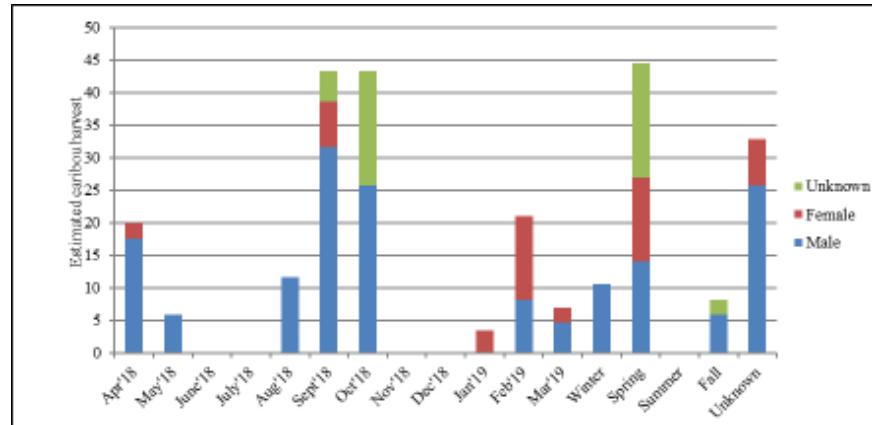
Harvest Timing Golovin



WACH Harvest- SLIDE 6

6

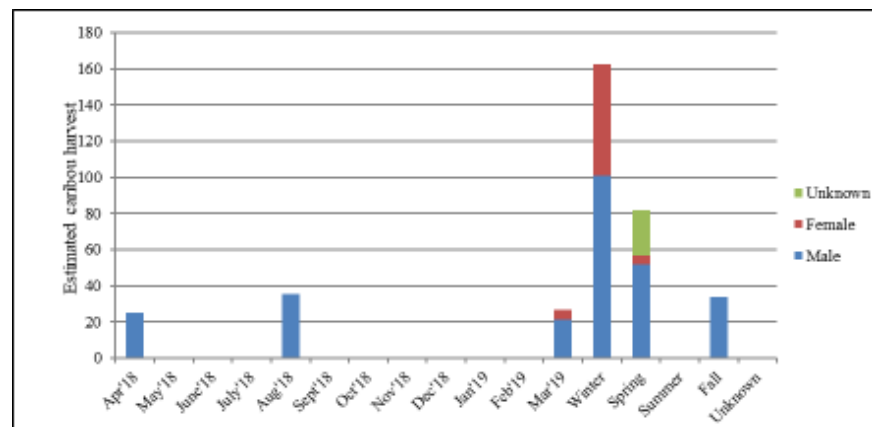
Harvest Timing Selawik



WACH Harvest- SLIDE 7

7

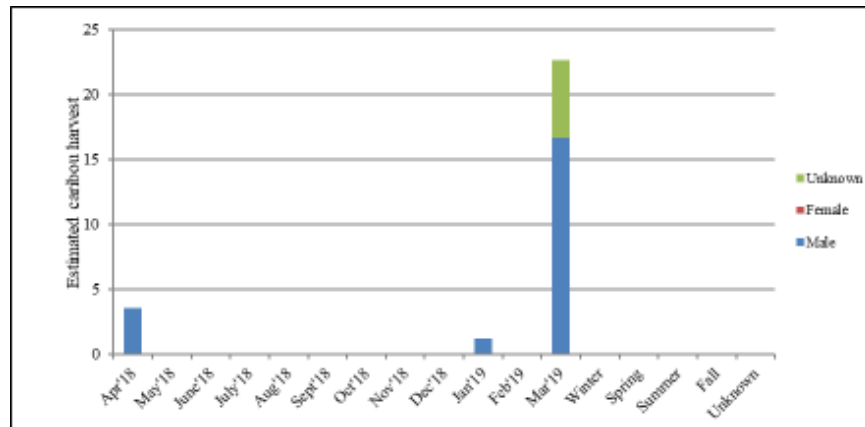
Harvest Timing Shungnak



WACH Harvest- SLIDE 8

8

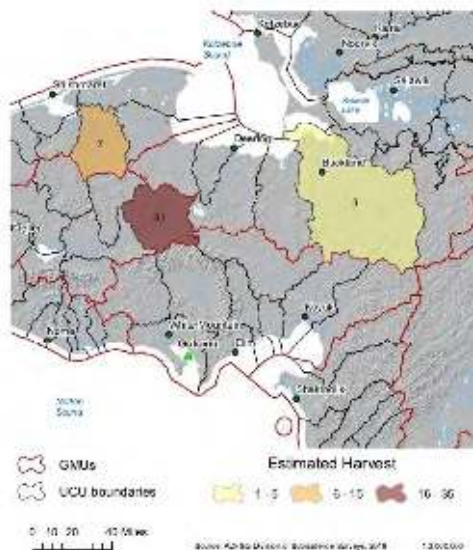
Harvest Timing White Mountain



WACH Harvest- SLIDE 9

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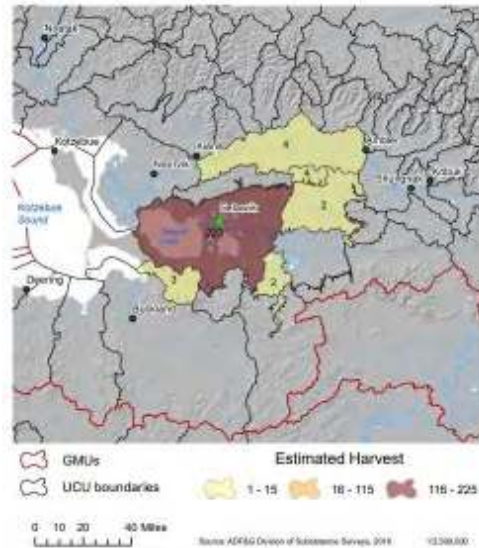
Harvest Density Golovin Caribou, 2018-2019



WACH Harvest- SLIDE 10

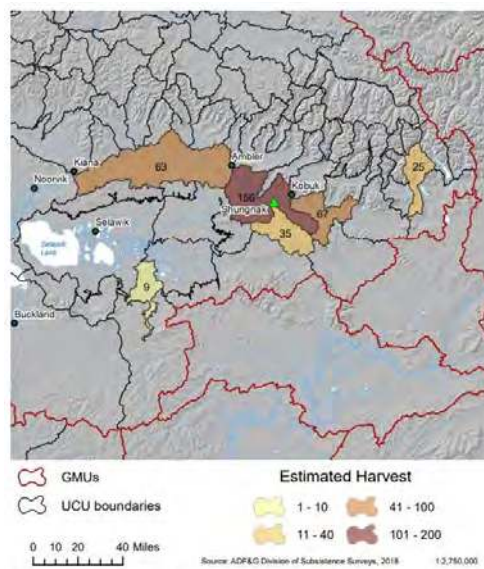
10

Harvest Density Selawik Caribou, 2018-2019



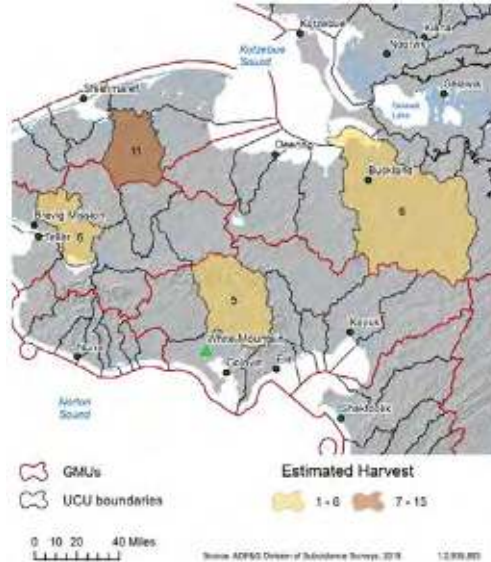
11

Harvest Density Shungnak Caribou, 2018-2019



12

Harvest Density White Mountain Caribou, 2018-2019



WACH Harvest—SLIDE 13

13

Questions?



WACH Harvest—SLIDE 14

14

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Caribou, muskox, Dall's sheep, moose, and reindeer conference Alaska – May 2023 – Call for input

This is the first announcement that a joint meeting of the North American Caribou Workshop and Arctic Ungulate Conference is scheduled to be held in Anchorage in May 2023. This meeting brings together an international group of managers, researchers, Indigenous and Local Knowledge holders, and other stakeholders who want to share their knowledge of caribou, muskoxen, Dall's sheep, moose, and reindeer. In addition to sharing research findings, the meeting seeks to bring people together to provide opportunities for exchanging viewpoints, concerns, and recommendations regarding the health, management, use, and study of these vital species.

Planning for this event is still in the early stages, but, at this time, the organizing committee is actively seeking people who would like to participate in the planning process. Participation could take the form of any level of involvement – suggesting topics you would like to see included in the agenda, joining a planning committee, giving a presentation, or attending. We will provide more updates as the date nears and plans solidify. Please contact the organizing committee if you are interested or have any questions.

Until the conference's website is live, for further information please contact:

[Kyle Joly@nps.gov](mailto:Kyle.Joly@nps.gov)

Caribou, muskox, Dall's sheep, moose and reindeer conference Alaska 2023 – Logo contest

The planning committee for the 2023 North American Caribou Workshop and Arctic Ungulate Conference, which will be held jointly in Alaska, is seeking help to design its logo. We are looking for original Alaskan artwork that highlights the importance of caribou and/or other Arctic ungulate species to Alaskans. Examples of previous logos are provided below. A small prize will be awarded to the winner, which includes a waived entrance fee to the meeting. Their artwork will be displayed on the conference proceedings, website, and memorabilia.

Submission guidelines and how to enter:

- The contest is open from October 1, 2021 to midnight on January 31, 2022.
- Submission must include the name(s) of the person(s) who designed the logo, the town they live, and an email address they can be reached at.
- More than one submission per person is welcome.
- The logo should be simple enough to be legible when reproduced at 2 inches across but high enough resolution that it remains crisp at 2 feet across
- Entries including the conference's theme "Crossing Boundaries" are preferred
- Acceptable formats include, but are not limited to, *.jpg, *.png, *.tiff
- Submit electronically to the planning committee at Kyle_Joly@nps.gov

Anyone is eligible to enter. Submitter(s) must hold exclusive rights to the entire work (i.e., no part of the work is copyrighted by any other entity). Submission of a logo indicates your consent for the conference organizers to use the logo, if selected, in electronic, print, and other formats to promote conference activities, without further compensation beyond the contest prize.

For questions and/or submissions, contact: Kyle_Joly@nps.gov



17th NORTH AMERICAN
CARIBOU WORKSHOP
2018 | Ottawa

**Western Arctic Caribou Herd Working Group
DRAFT – 2020 Meeting Summary**

December 9, 2020
Via Teleconference

DRAFT for review & approval by WACH Working Group at December 2021 meeting

The Western Arctic Caribou Herd (WACH) Working Group (WG) met via teleconference on December 9, 2020 (Agenda in Attachment 1). The following is a summary of meeting presentations and WG members' discussion. Motions passed at the meeting and Assignments for follow-up actions are listed in Attachment 2. Working Group members' responses to the Caribou Roundtable form are included in Attachment 3. The Working Group "Binder" that includes all written materials referred to at the meeting is posted at www.westernarcticcaribou.net

Wednesday, December 8, 2020

I. Call to Order – WG Chair Vern Cleveland called the teleconference to order at 1:00 p.m.

A. Invocation: Working Group members observed a moment of silence in remembrance of people and communities suffering with the pandemic or other needs.

B. WACH WG Roll Call / Establish Quorum – Quorum was met with 16 of 20 WG members present on the teleconference. The following table lists WG membership attendance.

Working Group Seat	Voting Chair
1. Anchorage Advisory Committee	Neil DeWitt
2. Buckland, Deering, Selawik	Ron Moto, Sr. (not present)
3. Anaktuvuk Pass, Nuiqsut.....	Eli Nukapigak
4. Elim, Golovin, White Mountain	Charles Saccheus (not present)
5. Fairbanks Hunters.....	David Kilbourn
6. Hunting Guides.....	Jake Jacobson
7. Kivalina, Noatak	Enoch Mitchell
8. Kotzebue	Cyrus Harris (Vice Chair)
9. Koyukuk River (Huslia, Hughes, Allakaket, Bettles, Wiseman)	Pollock Simon, Sr. (not present)*
10. Lower Kobuk River (Noorvik, Kiana).	Vern Cleveland, Sr. (Chair)
11. Middle Yukon River (Galena, Koyukuk, Nulato, Kaltag).....	Michael Stickman
12. Point Hope and Point Lay	Steve Oomittuk
13. Nome	Charlie Lean
14. Conservationists.....	Tim Fullman
15. Northern Seward Peninsula (Teller, Brevig Mission, Wales, Shishmaref)	Elmer Seetot, Jr.
16. Reindeer Herders Association	Tom Gray
17. Southern Seward Peninsula (Koyuk, Shaktoolik, Unalakleet, Stebbins, St. Michael, Kotlik)	Morris Nassuk
18. Transporters	Julie Owen
19. Upper Kobuk River (Ambler, Shungnak, Kobuk).....	Bill Bernhardt
20. Atqasuk, Utqiagvik, Wainwright.....	Wanda Kippi (not present)

* Note, Koyukuk River alternate Mr. Jack Reakoff was present as an audience member during the teleconference, but did not participate in discussion as an Alternate member during the Working Group meeting due to an error by the meeting facilitator.

C. Audience Attendance: Public and agency attendance was not taken. However, 65 people were present in the teleconference audience, including agency staff that presented information to the WG.

- D. Approve Agenda:** Facilitator Jan Caulfield reviewed the agenda (Attachment 1). MOTION by Neil DeWitt, second by Charlie Lean, to approve the meeting agenda. Motion carried unanimously.

II. Western Arctic Caribou Herd Status

Western Arctic Herd Overview – Alex Hansen, Alaska Department of Fish and Game (ADFG), Division of Wildlife Conservation, presented information about the WACH population status and trends (see p. 13 in WG Binder). The presentation laid the foundation for the WG's later recommendations regarding future management of the caribou herd. Key points in the ADFG presentation included:

- Herd abundance – 2019 photo census results provided an estimate of 244,000 caribou in the Western Arctic Herd. No census was conducted in 2020, but planning is underway to conduct the census in 2021. The 2019 her estimate is lower than the 2017 photo census, which estimated 259,000 caribou in the herd.
- High adult female mortality – Cow mortality for 2019-2020 was 25%, higher than the long-term average of 18%. Adult female survival is the most important metric influencing the population trajectory.
- Recruitment is average – Yearling recruitment in 2020 was 17:100 yearlings:adults, which matches the 25-year average.
- Calving (parturition) is average – Summer surveys show that 67% of collared cows had calves in 2020, compared with 81% in 2019, 86% in 2018, and 83% in 2017. Parturition rates are not an issue of concern for the WAH.
- WAH Collaring – After many years of collaring swimming caribou at the Onion Portage crossing of the Kobuk River during the fall migration, ADFG and the National Park Service (NPS) are no longer able to rely on this method and location. Agencies collared 49 caribou at Onion Portage in 2019, but the collaring effort failed in three of the past four years (including 2020) due to lack of caribou at the crossing. The agencies have not located another river crossing where this type of collaring would be possible. ADFG is now considering collaring animals from helicopter during spring (as is done with other Alaska herds) using either net guns or darting with tranquilizer. There are currently 70 collars out and ADFG has 58 collars to deploy in spring 2021. It is important to get those collars out before the summer 2021 photo census. Alex Hansen asked Working Group members for feedback on these methods. The following points were noted in WG and agency discussion:
 - Each method has its pros and cons and they are similar in terms of safety for the cows. Kyle Joly, NPS, noted that the mortality rate for darting caribou is about 2-3%, which is not high, but is higher than collaring at Onion Portage.
 - Net gunning is more dangerous for the gunners and it can be hard to find experienced pilot/gunner pairs to do this work effectively.
 - Agencies work hard to put the darted or netted caribou down without injury, typically in snow and on even terrain.
- Neonate Study 2017-2019 – ADFG's study of WAH calves indicate calving ground survival is 86% (2017-2019) and annual survival 37% (2017-2019).
- WAH abundance has declined, but not at rapid rate – Herd status looks good at this time and ADFG hopes that it will stabilize and rebound in numbers. At its December 8, 2020 meeting, the WACH Technical Committee (TC) recommended to the Working Group that the Western Arctic herd be considered "Conservative, Declining" on Table 1 of the *2019 Western Arctic Caribou Herd Cooperative Management Plan*. This is the same designation given to the Western Arctic Herd at the 2019 WG meeting. The TC believes this designation to be appropriate given the small decline from 2018 to 2019, the lack of a new photo census number for 2020, and lower than average adult cow survival. There is no difference in the harvest or management recommendations between the "Conservative, Stable" and "Conservative, Declining" categories (see Table 2 in the 2019 WAH management plan). (NOTE – Later in the meeting, the WG passed a motion designating the herd as "Conservative, Declining" in 2020. See page 4, below.)

Working Group questions and discussion on herd status included:

- Q: When we see higher cow mortality, is that because there are more collars on older cows? A: ADFG does not know the ages of the cows that it collars (although they are calf-bearing age). It is possible that there are more collars on older cows, but that is not known.
- Comment that wolf predation is a factor on the Seward Peninsula. (ADFG noted that they did not see wolf predation on the calving grounds during the neonate mortality study, but it is a mortality factor later in the year.)
- It is very unfortunate to lose the opportunity for middle- and high school students to participate in collaring and work with the caribou at Onion Portage. Perhaps find a new way for students to be involved in caribou management.
- It may be possible to catch caribou via net from snow machine? (This has been done for reindeer.)
- Q: Could a “roving team” of agency staff try to find another river crossing location that could work, to replace Onion Portage? A: We would transition back to this collaring method if we can, but we haven’t seen other feasible locations yet. In the past few years, the caribou aren’t even coming to a point on the Kobuk River where we can catch them.
- Preference to have a photo census every year. (ADFG noted that the 2019 WAH management plan indicates that for the “Conservative” management status, the herd should be censused “at least one every 2 years” (not annually) and there has been a census attempt every year since 2015. ADFG agrees that it is very important to have a census number in 2021.)
- Q: What is more convenient for access for collaring, aircraft or boat? A: Weather can be a challenge, but we do successfully do the bulk of our work from the air.
- Q: Would collaring from helicopter lead to more random distribution of collars in the herd? A: While this may be the case, ADFG feels confident that collaring animals at Onion Portage is also random, due to the mixing of the herd during migrations.

NPS Caribou Monitoring – Kyle Joly, NPS, presented information on the caribou the NPS has collared (see p.23 in WG Binder). Information included: location of collared caribou in November 2020, their movements/range in Sept. 2019-Aug. 2020, distribution of caribou as they cross the Noatak River in the fall (2010-2019), the timing of the fall crossing of the Kobuk River (2010-2019), and the timing of the spring migration crossing of the Selawik (2011-2020). Points from the presentation:

- In winter 2019-2020, there were no overwintering caribou in the Bering Land Bridge National Preserve and their presence was also down in the upper Gates of the Arctic National Park & Preserve (just 17% of the collars were located there). Fall/winter usage is down in all of the NPS units within the range of the WAH.
- The mean distance of travel by collared caribou from Sept. 2019-Aug. 2020 was 1,577 miles. This is the 6th year in a row in which the mean annual distance traveled has declined (it used to average 2,000 miles/year).
- From Sept. 2019-Aug. 2020, the caribou ranged farther west and north than usual – not as many animals ventured east. More animals are overwintering in the Brooks Range, not crossing to areas south of the Kobuk River.
- Fall migrations across the Kobuk River were later in 2017, 2018 and 2019 than in the past – and 2020 will be the latest date by far. Agencies are uncertain of the reason for this delay in migration. The date of first crossing has shifted from August to November in 2020. As of December 9, 2020, only 4 collared cows (<10% of the collars) have crossed the Kobuk River to go south.
- Not as many caribou are overwintering on the Seward Peninsula and the spring migration date is trending earlier.

Working Group questions and discussion on the NPS presentation included:

- Discussion of impacts of migratory caribou on commercial reindeer herds. Reindeer industry continues to urge that ADFG provide herders with access to satellite collar data to help them address loss of reindeer into the caribou herd.

The Working Group concurred with the recommendation of the Technical Committee to designate the WAH as “Conservative/Declining” under Table 1 of the 2019 WAH management plan.

MOTION by Morris Nassuk, seconded by Jake Jacobson, to designate the WAH as “Conservative, Declining” category on Table 1 of the *2019 WACH Cooperative Management Plan*. Motion carried unanimously.

III. Wildlife Harvest Regulations

Implementation of Registration Permits – Alex Hansen, ADFG, discussed registration permits RC907 and RC800 (see p. 33 in the WG Binder). ADFG estimates annual WAH harvest at 12,000 caribou, based on community harvest surveys and considering the availability of caribou for harvest. Approximately 95% of that harvest is local hunters, and 5% non-local. However, ADFG needs more accurate harvest data for optimal herd management – and this is even more important when the herd is declining. ADFG is working hard on public outreach, to explain that harvest reporting will help ADFG manage and conserve the herd for the future. Many local hunters are still not obtaining the registration permits, but the return rate for those who receive permits is high.

Alaska Board of Game Regulations – Alex Hansen, ADFG, noted that the Board of Game met in January 2020 and took action on proposals for regulation changes that affect WAH harvest that took effect in July 2020 (see p. 39 of the WG binder). The Working Group submitted comments on these regulatory proposals prior to the Board of Game’s meeting in January 2020. (See also WACH Working Group Final Meeting Summary for 2019, on www.westernarcticcaribou.net) The next opportunity to submit proposals for state wildlife regulations will be in 2022.

Federal Subsistence Board Regulations– Lisa Maas, USFWS Office of Subsistence Management, explained that proposals for changes to wildlife harvest regulations affecting the WAH would be open in early 2021, for regulations that would take effect in July 2022 (see p. 45 of WG Binder). She noted that in 2020, the Federal Subsistence Board adopted a regulation to have year round bull season in Game Management Unit 23 and to allow the harvest of calves on federal lands in Unit 23. (Noted that calf harvest is allowed on state lands in Units 22, 23, and 26A).

MOTION by Tom Gray, seconded by Neil DeWitt, to submit a proposal to the Federal Subsistence Board to allow calf harvest on federal lands on the Seward Peninsula in Unit 22. Motion carried unanimously.

The intent of this motion is to allow for calves to be harvested in those circumstances where they have lost their mother and are wandering unattached to the herd. This also resolves the current situation, in which it is legal to take calves on state land in Unit 22, but not on federal land in that Unit.

MOTION by Steve Oomittuk, seconded by Morris Nassuk, to support the North Slope Subsistence Regional Advisory Council’s (NSRAC) proposal to close federal lands in Game Management Unit 26 to non-federally qualified subsistence hunters (if the NSRAC submit this proposal to the Federal Subsistence Board in early 2021). After discussion (below) the motion passed: 10 Yes, 5 No, 1 Abstention.

The following points were made during the Working Group’s discussion of this motion:

- It is important to support the RACs that are concerned about subsistence hunters’ ability to obtain food.

- Concern that non-local hunters' activities can cause changes in the herd's migration route, making it difficult for subsistence hunters to succeed in their hunting using boat access.
- It is estimated that non-local hunters harvest just 5% of the harvest, which does not impact the herd's abundance. Unless there is a biological reason for the closure, cannot support the motion.
- There is not much state land available in Unit 26.
- Concern that this would create separate regulations for state and federal lands, which creates problems for hunters and enforcement.
- ADFG commented that the State does not recognize a biological concern with the caribou herd at this time that would warrant a closure on federal lands, especially since the non-local harvest is very low compared to the total harvest. The former closure on federal lands in Unit 23 created unforeseen consequences, including hunter displacement to and crowding on state lands, which affected other subsistence communities and hunters. This could, for example, affect hunters in the Kivalina or Point Hope areas, where non-local hunters would be concentrated on state lands near these communities. ADFG is concerned that these closures could increase contention, rather than fixing a problem.
- The Chair and several Working Group members asked that in the future written information be provided for the Working Group to consider in advance, so they could be better prepared for discussion.

ASSIGNMENT – Facilitator Jan Caulfield will work with Chair Vern Cleveland, Sr., to submit the WACH Working Group's regulatory proposal and comments to the Federal Subsistence Board, per the two motions above.

IV. Resource Development Committee Update

Tim Fullman, Chair of the WG's Resource Development Committee, gave an update on resource development projects within the range of the WACH (p. 49 in WG Binder).

Ambler Mining District Industrial Access Project (p. 50 in WG Binder)

- The Ambler Road Final Environmental Impact Statement (FEIS) and Record of Decision (ROD) were issued in 2020, with a decision to construct the road on Route A (see map on p. 50).
- Trilogy Metals has submitted a feasibility study for mine development. When mining permit applications are submitted, there will be an opportunity for the Working Group to comment.
- The Working Group may want to submit a letter to the incoming Secretary of the Department of Interior, to inform them of concerns regarding the proposed road and mine development and potential effects on the caribou herd and subsistence harvest.

National Petroleum Reserve in Alaska (NPR-A) Integrated Activity Plan (IAP) Revision (p. 52 in WG Binder)

- In 2020, the Working Group submitted comments to the Bureau of Land Management (BLM) on the Draft NPR-A IAP Revision (p. 57 in WG Binder), supporting Alternative A, which maintains existing protections for caribou and other species, and made suggestions for how to strengthen protections for caribou.
- The BLM issued a Final EIS for the IAP Revision in July 2020. The Final EIS added an additional alternative, Alternative E, which reduced the area closed to oil and gas leasing, but added additional "no surface occupancy" areas. Alternative E was identified as the preferred alternative, but no Record of Decision (ROD) has been released to date. This ROD may be issued before the end of 2020, with a lease sale in early January. This would provide an opportunity for Working Group to comment to BLM.

Noatak – Red Dog Road (p. 68 in WG Binder)

- In 2019, the Alaska Department of Transportation and Public Facilities (DOT&PF) announced it is partnering with the Northwest Arctic Borough and Native Village of Noatak to look into building a permanent gravel road connecting Noatak to the Red Dog Road. In 2020, the Working Group submitted a letter to DOT&PF relevant to minimizing impacts to the Western Arctic and Teshekpuk caribou herds. The state's planning process is ongoing.

Kotzebue to Cape Blossom Road (p. 75 in WG Binder)

- DOT&PF is considering construction of a gravel road south from Kotzebue across the Baldwin Peninsula to beach access near Cape Blossom.
- Opportunities for public comment have passed, but raising it for Working Group consideration.

Willow Master Development Plan (p. 76 in WG Binder)

- The Willow project would expand infrastructure for oil and gas development in the northeastern NPR-A, and would be the closest development to the Teshekpuk Lake Special Area, which is important habitat for the Teshekpuk Caribou Herd. The Working Group did not comment on the Willow Draft EIS in 2019.

Anarraaq – Aktigirug Mining Exploration (p. 77 in WG Binder)

- Teck American, Inc, is proposing an exploration project to evaluate potential for new mineral deposits northeast of the Red Dog Mine. The project is currently on hold as Teck reevaluates its plan, but the WG Resource Development Committee will continue to track future opportunities to comment.

Arctic Strategic Transportation and Resources (ASTAR) Project (p. 78 in WG Binder)

- The State of Alaska's ASTAR project seeks to advance infrastructure development that would benefit North Slope Borough communities. There is not an active public process at this time, but the WG Resource Development Committee will continue to monitor this, as the project maps show roads and other infrastructure that would bisect the WAH and Teshekpuk caribou herds' calving grounds.

Arctic National Wildlife Refuge (ANWR) Oil and Gas Leasing (no written material in WG Binder)

- The entire Arctic Refuge coastal plan was made open to leasing in 2020. There was a call for lease tract nominations, with leasing bids accepted for a January 6 lease sale.
- The area is used by the Porcupine caribou herd and regularly by the Central Arctic herd, with at least one instance of use by the Teshekpuk Herd for overwintering. It has not been used by the Western Arctic Herd.
- Raised this topic at the request of a Working Group member who wanted more information about the lease sale and opportunities to comment.

MOTION by Charlie Lean, second Neil DeWitt, to empower the Executive Committee to work with Tim Fullman, as Resource Development Committee Chair, to submit letters if there are opportunities to comment to BLM regarding oil and gas leasing in the NPR-A on the calving grounds and regarding the Ambler Road project. After discussion the motion passed: 14 Yes, 1 No, 1 Abstention.

Tim Fullman clarified that if additional opportunities to comment come up prior to the next Working Group meeting (e.g., related to other projects), the Resource Development Committee can work with the Executive Committee to develop and submit comments. The Bylaws give the 5-person Executive Committee the authority "to make decisions when the Working Group is not in session" (see p. 8 in the WG Binder). Regarding the Ambler Road, Bill Bernhardt asked that the Executive Committee should include someone who lives in the area where the road is going to go.

V. Business Meeting

Approval of 2019 WACH WG Meeting Summary (p. 79 in WG Binder) – MOTION by Tim Fullman, second by Neil DeWitt, to approve the 2019 WACH WG meeting summary. Motion carried unanimously.

Executive Committee Report – This report lists actions taken by the Executive Committee in 2020 (see p. 97 of the WG Binder).

Communication Committee Report – Heather Jameson from ADFG reviewed the Communications Committee Report (see p. 99 of the WG Binder), highlighting the 20th Anniversary issue of the Caribou Trails newsletter sent out in 2020. Next year, the committee plans to distribute an E-newsletter as well as the Caribou Trails. The committee welcomes suggestions from Working Group members for outreach topics or education opportunities.

Caribou Roundtable Forms – Jan Caulfield asked Working Group members to fill-out and send in the Caribou Roundtable Forms, using the stamped, addressed form.

2021 WACH Working Group Meeting – The Working Group plans to meet in-person in Anchorage in December 2021. Jan Caulfield will contact Working Group members about preferred dates.

VI. Adjournment – MOTION by Neil DeWitt, second by Tom Gray, to adjourn the meeting at 4:50PM on December 9, 2020. Motion carried unanimously.

Western Arctic Caribou Herd (WACH) Working Group Meeting

December 9, 2020 1:00 - 5:00pm

Via Teleconference

Western Arctic Caribou Herd Working Group Mission

“To work together to ensure the long term conservation of the Western Arctic caribou herd and the ecosystem on which it depends, and to maintain traditional and other uses for the benefit of all people now and in the future.”

Agenda

1:00 Call to Order (20 min)

Teleconference – *operator moderates WG member discussion; audience listen only*

WACH Working Group Roll Call / Establish Quorum (*p. 1*)

Review Agenda – *Focus on information sharing & Working Group member observations and questions*

1:20 Western Arctic Caribou Herd Status (70 min)

1:20 Western Arctic Herd Overview – including Technical Committee recommendation on status of the herd per the 2019 WACH Cooperative Management Plan (30 min) – Alex Hansen, Alaska Department of Fish and Game (ADFG) (*p. 13*)

1:50 National Park Service (NPS) Caribou Monitoring (10 min) – Kyle Joly, NPS (*p. 23*)

2:00 Working Group decision on herd status per the 2019 plan (30 min)

2:30 Break (10 min)

2:40 Wildlife Harvest Regulations (40 min)

2:40 Western Arctic Herd registration permits (10 min) – Alex Hansen, ADFG (*p. 33*)

2:50 Alaska Board of Game 2020 action on proposals affecting Western Arctic Herd (10 min) – Alex Hansen, ADFG (*p. 39*)

3:00 Federal Subsistence Regulations – New Wildlife Regulation Proposals to be Accepted in 2021 (20 min) – Lisa Maas, OSM (*p. 45*)

3:20 Resource Development Committee Update (40 min) – Tim Fullman, Chair, WG Resource Development Committee (*p. 49*)

4:00 Working Group Business Meeting (60 min)

- Approval 2019 WG Meeting Summary (*p. 79*)
- Executive Committee Report (*p. 97*)
- Communication Committee Report (*p. 99*)
- Business / Action Items
- 2021 Meeting – Date / Location

5:00 Adjourn

Motions Acted Upon at WACH Working Group Meeting

December 9, 2020

1. Agenda Approval: MOTION by Neil DeWitt, second by Enoch Mitchell to approve meeting agenda. Motion carried unanimously.
2. WACH Management Level, 2019 WACH Cooperative Management Plan: MOTION by Morris Nassuk, seconded by Jake Jacobson, to designate the WAH as “Conservative, Declining” category on Table 1 of the *2019 WACH Cooperative Management Plan*. Motion carried unanimously.
3. Federal Regulatory Proposal – Calf Harvest in Unit 22: MOTION by Tom Gray, seconded by Neil DeWitt, to submit a proposal to the Federal Subsistence Board to allow calf harvest on federal lands on the Seward Peninsula in Unit 22. Motion carried unanimously.
4. Federal Regulatory Proposal, Comment Letter – Support proposal to close federal lands to non-federally qualified subsistence hunters in Unit 26: MOTION by Steve Oomittuk, seconded by Morris Nassuk, to support the North Slope Subsistence Regional Advisory Council (RAC)’s proposal to close federal lands in Game Management Unit 26 to non-federally qualified subsistence hunters (if they submit this proposal to the Federal Subsistence Board). Motion passed: 10 Yes, 5 No, 1 Abstention.
5. Resource Development Comments: MOTION by Charlie Lean, second Neil DeWitt, to empower the Executive Committee to work with Tim Fullman, as Resource Development Committee Chair, to submit letters if there are opportunities to comment to BLM regarding oil and gas leasing in the NPR-A on the calving grounds and regarding the Ambler Road project. After discussion the motion passed: 14 Yes, 1 No, 1 Abstention.
6. Approval of 2019 WACH WG Meeting Summary (p. 79 in WG Binder) – MOTION by Tim Fullman, second by Neil DeWitt, to approve the 2019 WACH WG meeting summary. Motion carried unanimously.
7. Adjournment – MOTION by Neil DeWitt, second by Tom Gray, to adjourn the meeting at 4:50PM on December 9, 2020. Motion carried unanimously.

Assignments Made at WACH Working Group Meeting

December 9, 2020

1. Regulatory Proposals – Facilitator Jan Caulfield will work with Chair Vern Cleveland, Sr., to submit the WACH Working Group’s regulatory proposal and comment letter to the Federal Subsistence Board. (See Motions 3 and 4, above).

Western Arctic Caribou Herd Working Group

Caribou Roundtable Questionnaire Responses – 2020

The December 9, 2020 Western Arctic Caribou Herd Working Group meeting was held via teleconference. Working Group members were asked to complete the Caribou Roundtable Questionnaire form and send it in to the facilitator. Responses received from Working Group members as of January 18, 2021 are provided below. Additional responses will be added to this record as they are received. Responses will also be entered into the Caribou Roundtable database from 2011-2020 that is posted on the group's website, <https://westernarcticcaribou.net/>

Kotzebue Sound / Game Management Unit 23

Working Group members: Vern Cleveland Sr. (Noorvik), Cyrus Harris (Kotzebue), Enoch Mitchell (Noatak)

Weather/Physical Environment

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

- Vern – Freeze up very late October 2020. Getting later and later. Need snow. Still very little snow (Dec 2020).
- Cyrus – Late freeze up and early break up seem to be the norm now days.
- Enoch – Freeze up first week of November 2020 – seems to be getting later and later every year. First snowfall was on time, but not as much as we used to get 20 years ago.

When did break-up occur [in 2020] and how did that compare with past years?

- Vern – Breakup is earlier and earlier every year.
- Enoch - Break up was more like “melt-up” and it was on time.

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

- Vern – No snow. Ice not very thick. Too warm.
- Cyrus – Fair amount of snow for November (Kotzebue). Early snowstorm in November.
- Cyrus – Lack of land fast ice.
- Enoch – Very little snow and expect it will snow lots in April (2021) again. Ice is very thin; does not get very thick anymore.

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

- Vern – Winter mild with hardly any storms. Wish it would blow more in summer to keep bugs away.
- Cyrus – Prevailing East/Southeast winds.
- Enoch – Winds mild so far this winter. We get strong winds and storms in April now. No strong winds all summer.

4. Has there been any unusual weather this year (2020)? If so, what kind? (For example, strong winds, storms, much/little rain or snow, etc.)

- Vern – Strong wind in late November 2020. Hardly any storms and it rains. Send snow please!
- Enoch – Not much rain. Not much snow.

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.)

- Vern – It's just too warm in the fall.
- Enoch – The late fall season and late freeze up has had a late caribou migration.

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?

- Vern – Caribou arrive in November and are very late. It's been getting later and later.
- Cyrus – Few caribou spent the summer around the Cape Krusenstern area. Occasional sighting along Cape Krusenstern to Sisaulik (June, July, August 2020). Small herds arrived in mid- to late-October around Sealing Point, Cape Krusenstern. Larger herd migrated through Cape Krusenstern-Sisaulik-Kotzebue mid- to late-November after Kotzebue Sound freeze-up.
- Enoch – In my time and my dad's time and his dad's time, the caribou were always present. Compare? – the caribou seems to be smaller in size and a lot less fat than in my father's time.

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?

- Vern – Lots of females. Healthy. Males in rut!!
- Cyrus – The caribou that summered near Cape Krusenstern consist of about 12 animals – 2 mature bulls, 1 young bull, and the rest cows and yearlings. The small herds (30-40 animals) in October 2020 were mostly cows and yearlings. The bigger herd that migrated through in November 2020 were all mixed.
- Enoch – We always have caribou on the Noatak River. The mixture was always like half females and half bulls. We seem to be seeing smaller and smaller bunches cross [the river] here and there, compared to the large herds of 50 or so that crossed the river 20+ years ago.

8. If you harvested caribou, how did the meat and skins compare with past years? What did you notice about fat? Parasites?

- Vern – No fat. Traveling too much. Meat was good!
- Cyrus – The few caribou that I harvested were all good. The early ones had a little fat; the latter ones were mostly lean, but good meat.
- Enoch – The caribou are much leaner than in past years.

9. Were there any other notable changes regarding caribou compared with past years?

- Vern – Migration getting later and later.
- Cyrus – Not so much along the coast. The coastal migration route usually takes place after the bay (Kotzebue Sound) freeze-up.
- Enoch – Yes, they seem to show up skittish and lean.

Other Animals

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

- Vern – Lots of bears and wolves.
- Cyrus – Fair amount of bear along the coast, along with few wolf tracks. More abundance of wolves along the coast after the caribou herd migrated through (November 2020).
- Enoch – Lot of bears – We see them on every bend of the [Noatak] River. Lots of wolves – People spotting them near town [Noatak] and more frequently. There's been a caribou kill and a bear killed by wolves near the village limits.

10-A. How did these predators affect caribou in your area?

- Vern – Affect caribou a lot. Predators – bears, wolves, eagles.
- Cyrus – Uncertain; did not spend enough time observing.
- Enoch – They trouble the caribou when it's time to come down to the river. They are killing off caribou here and there.

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).

- Vern – Lots of eagles in our area. In the past hardly any, but now quite a few eagles everywhere.
- Enoch – There have been many beaver moving into our river [Noatak]. We never used to have beaver.

Other Comments

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

- Vern – Too much Facebook. No sewing. But still use skins for mukluks.
- Enoch – Clothing, sleeping mats, sewing, crafts and rain gear.

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

- Vern – Red Dog Road.
- Enoch – Planes diving at caribou, diverting the herd.

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?

- Vern – Shut down outside hunters [to reduce conflicts].
- Cyrus – Lack of respect from non-locals coming into our village (see more information below).
- Enoch – I have noticed no [direct] conflicts between local and non-local hunters. Just conflict with planes diving at caribou and diverting them.

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

- Vern – Yeah. No snow. Santa didn't even make it, with no snow!! LOL!
- Cyrus - The reason I mentioned respect (question 14, above) is that there is a lack of respect from non-locals toward the local people. For example, during the Covid 19 pandemic and mandates in our community, I overheard one non-local sport hunter talking to another group of non-local hunters. His statement was, "Look at these Eskimos, what's with weather that mask: he's sweating and his glasses are fogging up". As soon as I stopped to hear more what he had to say, he shut up and turned away. This happened in August 2020 during the time I was traveling back from Anchorage. This group was all unmasked at the Anchorage Airport and all the way to Kotzebue. Another similar incident happened to another local person two weeks prior.
- Enoch – Yes, Covid 19.

Koyukuk & Middle Yukon Region

Working Group member: Pollock Simon, Sr. (Allakaket)

Weather/Physical Environment

- 1. When did freeze-up occur? How does this compare with past years? How about the first snowfall? How about break-up?**
 - Pollock – Freeze-up was about mid-September. Later than past years. Break-up is about two weeks early now.
- 2. What did you notice about snow depth and icing?**
 - Pollock – Last year (winter 2019-20) we had lots of snow; about 5' deep.
- 3. What were winds like in winter? In summer?**
 - Pollock – Not much wind in Allakaket. More winds in 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.)**
 - Pollock – Last winter (2019-20) was cold December to March. There was lots of snow.
- 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.)**
 - Pollock – High water during break-up. Lots of bank erosion.

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?**
 - Pollock – No caribou this year. Before 1974 there used to be lots of caribou around Allakaket. They started pushing north with the oil pipeline. That year, the caribou didn't come back for 12 years. The Haul Road was open for public use shortly after (Dalton Highway). People came up and down the road, and the caribou stayed more to the west. Hunters came up the road and started shooting at caribou. After that, the caribou stayed to the west of the haul road. The caribou did not cross over to our area again.
- 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?**
 - Pollock – No caribou.
- 8. If you harvested caribou, how did the meat and skins compare with past years? What did you notice about fat? Parasites?**
 - Pollock – Don't know.
- 9. Were there any other notable changes regarding caribou compared with past years?**
 - Pollock – No caribou this year.

Other Animals

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

- Pollock – The black bear population declines.

10-A How did these predators affect caribou in your area?

- Pollock – Wolf always follow the caribou.

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).

- Pollock – The caribou don't come back here (Allakaket) since 1974.

Other Comments

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

- Pollock – We use the caribou skins for mattress.

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

- Pollock – The pipeline, the Haul Road (Dalton Highway). People come up the road and hunt. Any kind of road development will impact the caribou migration routes. For this, I hate road development.

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?

- Pollock – There are some outside hunters, but not much game around this area.

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

- Pollock – Some fish and game planes fly around during hunting season. We don't want the planes to fly around. They chase the moose away.

Seward Peninsula Region

Working Group members: Charlie Lean (Nome), Morris Nassuk (Koyuk), Elmer Seetot, Jr. (Brevig Mission)

Weather/Physical Environment

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

- Morris – Freeze-up late October 2020.
- Charlie – Rivers are staying open much later. Some still open at Thanksgiving – a month later than a few years ago.
- Elmer – Port Clarence Bay froze up around December 11, 2020. About five times in my lifetime has the Bay froze as late as December or January. Lots of rain in late May 2020 – During the month we constantly had rain. Break-up around the 4th week of May 2020. Freeze-up in the Bering Sea has been later and break-up earlier than in past years.

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

- Morris – Not much snow in winter 2019-20. It came in February 2020.
- Charlie – Normal.
- Elmer – The depth of the snow on the tundra really has not accumulated through the past winter.

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

- Morris – Consistent North wind.
- Elmer – Most of our high winds that occur in the summer have been offshore, like Northeast or East. But, our onshore winds during fishing season lasts about a month and a half recently.

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

- Morris – High water.
- Charlie – Two warm summers. 2020 was second driest year on record.
- Elmer – More high winds coming from the easterly direction.

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.)

- Morris – Fires.
- Elmer – With early May melting, surrounding vegetation in the tundra have been dry and spongy and surrounding vegetation in the tundra have been dry and spongy and salmon berries were hard to locate, but the blackberries did grow good from early melting of the snow.

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?

- Morris – Not as near [to Koyuk] as before, although a group passed the Iglutalik River towards the Nulato area between Unalakleet and Nulato in February/March 2020. The past years, they were scatted in the area in a larger group scattered around the Seward Peninsula.
- Charlie – Very few caribou have come within 100 miles [of Nome] for two years. The caribou that have been taken seem to be resident in two remote locations, Mt. Bendeleben and Midnight Mountain. These have been there for decades, but have been mingling with the caribou every winter.

- Elmer – Caribou are present throughout the year, but are located in the mountains north of Brevig. Really have not seen caribou around or at the Agiapuk River in the past couple of years.
- 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?**
- Morris – In approximate groups of 50-70 or less. The females and calves were in the rear of the males. In comparison [to past years], they were harder to get.
 - Charlie – Small bands, not sure on size. Mixed groups; males, females, yearlings
 - Elmer – Male caribou tend to hang out towards the northern portion of the Seward Peninsula. Hunters have harvested in early fall north of Brevig Mission mountains.
- 8. If you harvested caribou, how did the meat and skins compare with past years? What did you notice about fat? Parasites?**
- Morris – The meat was low in fat content, which is understandable with their migratory patterns. Did not have or hear of any parasites.
 - Charlie – Resident animals have more parasites, nasal bots and warbles. Poor condition in spring.
 - Elmer – Caribou have been lean that the hunters have harvested. Due to late snow conditions, Brevig hunters have not hunted in the Kuzitrin River / Bendeleben Mountains last spring (2020) and went north to hunt.
- 9. Were there any other notable changes regarding caribou compared with past years?**
- Morris – Less frequent migration routes in this area [near Koyuk].
 - Elmer – Weather changes have kept the caribou more toward the eastern part of the Seward Peninsula and hope they are in good feeding areas.

Other Animals

- 10. What did you notice about bears and wolves in your area?**
- Morris – They are still present and seem to be increasing in numbers. The wolves are still healthy.
 - Charlie – Fewer wolves, but still some. Late snow and early bear season reduced bear near Nome. Many humpies have allowed for a high reproduction rate for bear.
 - Elmer – Noticed a little increase of bears in and around Grantley Harbor/Imaruk Basin in the spring and summer. Never did see an increase of wolf harvest last winter due to hunters going out late in spring when snow conditions improved a bit.
- 10-A. How did these predators affect caribou in your area?**
- Morris – No definite proof, but my thoughts are that they keep the healthy caribou on the move.
 - Charlie – Wolves hunt the animals where they roam; wolves are as reduced as the caribou. Bear [numbers] seem to track with salmon runs.
 - Elmer - I know that in the past observations by me, predators have kept the animals on the move depending on wind conditions.
- 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).**
- Morris – Musk ox.
 - Charlie – Most predators are doing well.
 - Elmer – I did not see any notable changes in the Seward Peninsula area.

Other Comments

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

- Morris – Diet & main course.
- Elmer – Preferred harvest in early winter, the hides are sought after for sleeping and sled mats. Sinew taken from the caribou for sewing.

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

- Morris – Not much.
- Elmer – Nothing I can think of now.

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?

- Morris – None. (Tough question. Unsure on it.)
- Charlie – Not much caribou hunting. Moose hunt lasted 2-4 days. Not much opportunity.
- Elmer – Reindeer herders have lost their animals to caribou migration and hunters at times have harvested reindeer for their meat supply when caribou are not present.

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

- Morris – Less caribou in traditional hunting routes.
- Elmer – Fall migration of snow geese are staying west of Brevig Mission feeding and fattening up before their trip down south. Fish species were not seen in great numbers during the past years.

North Slope Region

As of January 18, 2021, no Caribou Roundtable responses were yet received from Working Group members with knowledge of the North Slope Region.



**Selawik National Wildlife Refuge
U.S. Fish and Wildlife Service
Kotzebue, Alaska**

**Western Arctic Caribou Herd Working Group
December 15, 2021**

WHO WE ARE

We currently have eight staff, two of whom are based in Selawik.

- Susan Georgette, Refuge Manager
- Will Wiese, Assistant Manager
- Bill Carter, Fish Biologist
- Brittany Sweeney, Outreach Specialist
- Christina Nelson, Wildlife Refuge Specialist
- Shawn Nelson, Maintenance Professional
- Melissa Brown, Refuge Information Technician (Selawik)
- Frank Berry, Jr., Maintenance Worker (Selawik)



Selawik Refuge staff, Oct 2021 (L to R): Brittany Sweeney, Shawn Nelson, Christina Nelson, Susan Georgette, Melissa Brown, Will Wiese, Bill Carter, and Sonny Berry (inset).

WHAT WE DID – 2021

Selawik Refuge continues to focus its Western Arctic herd work on outreach and education in local communities. Below are a few highlights from this year. COVID-19 prevented us from doing most of our usual in-person activities such as village meetings and the Selawik Science-Culture Camp, which we hope to get back to in 2022.

- Wrote and distributed an e-newsletter with a Western Arctic herd update after last year's Working Group meeting (*see attached*)
- Produced a series of posts for the Selawik Refuge Facebook page on caribou and hunting regulations (*see attached*)
- Coordinated with other agencies to update fact sheets on regulations and partial closure of federal public lands to caribou hunting by non-federally qualified users (*see attached*)
- Gave a presentation to Northwest Arctic Borough Assembly on hunting closures in Unit 23
- Participated in the Caribou Hunter Success Working Group with agency and regional partners
- Assisted ADF&G with the Working Group's *Caribou Trails* newsletter



Caribou on Selawik Refuge in early fall, 2015.



Northwest Alaska Caribou Update 2021

News from the Western Arctic Caribou Herd
Working Group's annual meeting

Herd Status Stays "Conservative"

At their December 2020 yearly meeting, held via teleconference, the Western Arctic Caribou Herd Working Group chose to keep the herd management status at "conservative declining." Without a new population count, and with cow and calf survival rates about the same as last year, the group felt it made sense to stay with the same management level. You can learn more about management levels in the Working Group's management plan at <https://westernarcticcaribou.net/herd-management/>

In this Issue:

- [Herd Status Stays "Conservative"](#)
- ["Where are the Caribou?"](#)
- [Caribou Trends to Watch](#)
- [Collaring Challenges](#)

More Information:

"Where are the Caribou?"



National Park Service biologist Kyle Joly presented data that matched what local residents have reported: caribou migrations are changing.

Western Arctic caribou are moving less than in previous years – about 1,577 miles average in 2019-2020. While still a large number (caribou have some of the longest land-based migrations of any animal), it is the lowest amount yet recorded from this herd, and the sixth year in a row in which the distance traveled has declined. One of the biggest changes is in where caribou spend the winter. While a few years ago 75% of the collared animals headed to the western Seward Peninsula in winter months, none of the collared caribou traveled there in the winter of 2019-2020. Caribou are now wintering further to the north and east, with some staying in the Brooks Range and with the Selawik River valley seeing increased numbers of wintering caribou. The impacts of this on hunter success vary across the range of the herd – for example, caribou were closer to Anaktuvuk Pass but further from Koyuk.

Shorter migrations are pairing with later migrations. In the early and mid-2010s, most collared caribou crossed the Kobuk River on their fall migration by October 10. Starting in 2017 the crossings have been near the end of October or

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**Western Arctic Caribou
Herd Working Group**
westernarcticcaribou.net

into November. For communities that typically harvest caribou during their fall migration, this has been a challenge.

Caribou Trends to Watch



Alaska Department of Fish & Game biologist Alex Hansen shared an overview of caribou trends - the information below is based on his report.

cow mortality still cause for concern - -

One major factor in the health and growth of a caribou herd is the survival rate of the cows (females). For the Western Arctic Herd in 2019-20, cow mortality was above average, at 25% of collared cows. The herd's long-term average is 18%. Several factors may be contributing to this high number: age of collared cows, weather and habitat, predation, harvest and more.

One reason for this year's changes in Unit 23 caribou hunting regulations (eliminating the closed season on bulls) was to allow for harvest of younger bulls when bigger ones are "stink," and hopefully reduce take of cows.

calf birth rates - -

This past year, about two-thirds (67%) of cow caribou in the Western Arctic Herd gave birth to a calf. While that number is close to the average

birthing rate for this herd, it's less than the previous three years when over 80% of cows gave birth annually.

calf survival - -

How are caribou calves faring? Biologists use the term “recruitment” to describe how many calves survive their first year and are “recruited” into the herd. 2020 recruitment for the Western Arctic Herd was 17 calves per 100 adults (17:100), also an average number for this herd. Recruitment rates have varied in recent years, from a low of 9:100 in 2011 to a high of 26:100 in 2016.

Collaring Challenges



As caribou fall migrations have gotten later, the caribou collaring program at Onion Portage on the Kobuk River has become much less reliable. In the past 4 years, only one yielded decent results: 2017 = 4 collars put on; 2018 = 3; 2019 = 49; 2020 = 0. Without the ability to consistently get collars on caribou at Onion Portage, biologists are faced with a difficult challenge.

Satellite and radio collars are a key monitoring tool for caribou biologists, essential to tracking almost *every* important indicator: calf production, cow mortality, bull/cow ratio, caribou movements and more. Location information from collars is

critical to accomplishing a photocensus (count) as well.

Northwest Alaska presents few other good options for boat-based collaring. A suitable spot needs a good lookout point AND a wide, deep river channel to effectively capture swimming animals with boats. Helicopter collaring is becoming a more reasonable option. From helicopters, biologists can either use netguns or chemical immobilization darts to capture caribou.

Net gunning has the advantage of being drug-free but can be more dangerous for the human crews and can cause a slightly higher rate of caribou injuries. Chemical darts work well, but the drugs stay in an animal's system for a short time afterwards - a consideration if they were to be subsequently harvested.

Caribou hunters and biologists had a good discussion of all these factors during the Working Group meeting, weighing out these considerations together. No final decision was reached, but we will share more information on collaring efforts as things progress.

This newsletter was produced by Selawik National Wildlife Refuge in Kotzebue, with help from agency partners. Please contact Brittany Sweeney at Selawik Refuge for more information or to offer feedback. Please share this newsletter with others who may appreciate the information.



Caribou-related posts on the Selawik National Wildlife Refuge Facebook page, 2021



10/27/21: Northwest Arctic Subsistence Regional Advisory Council to meet Nov. 1-2 via teleconference.

-The agenda will include a review of regulatory proposals, an update on the Western Arctic Caribou Herd, and a discussion of the council's special action request on caribou hunting by non-federally qualified users.

-meeting starts at 9 am each day. Call-in number is 1-866-801-9605, and passcode 29886091. Find the full agenda and meeting info at

<https://www.doi.gov/.../nwarac-fall-2021-book-v1-reduced...>

Reach: 2,681

Likes: 11

Shares: 32

10/20/21: What Is It Wednesday: Caribou trails!

Over many generations, the Western Arctic Caribou Herd has passed through the region during their annual migration. As a result, deeply-rutted paths are carved into the tundra, winding and weaving across the landscape. Many other animals and people use these paths as highways to traverse the tricky tundra terrain as well! As winter draws near, we will also begin to carve our own trails across the snow and ice.

Dark brown trails winding through green tundra vegetation. Photo by Lisa Hupp/USFWS



Reach: 696

Likes: 50

Shares: 3

9/27/21: Want to know more about caribou and caribou hunting in Northwest Alaska? Check out "Tuttunnaiq," a 2001 movie featuring elders and community members of Selawik, Alaska. <https://www.youtube.com/watch?v=lv5YhdebtAw>

#ThrowbackThursday #tbt

Reach: 775

Likes: 15

Shares: 6



9/22/21: We're beginning to hear a few reports of caribou on the move! Please remember - as elders have taught, if you let the first groups of caribou go by, others will follow, helping to establish the migration for all the communities in the region. This is a widely held value of ethical hunting across our region and many parts of Alaska.

#TraditionalEcologicalKnowledge #WildlifeWednesday caribou crossing the Selawik River, USFWS photo from our collection.

Reach: 14,598

Likes: 131

Shares: 176

9/7/21: Welcome to September...aka Aṃiāḡaiqsivik: the time when caribou lose velvet from their antlers (from the Kobuk dialect of Iñupiaq).

photo of caribou swimming across the Kobuk River taken in 2010

Reach: 3720

Likes: 75

Shares: 22

8/31/21: As the weather and the tundra colors become more fall-like, thoughts turn toward berry picking and caribou hunting.

Wanted to re-share this message about respectful caribou hunting practices from the Kiana Elders' Council.

Attached flyer reads: Iñupiat Ilitqusiat

Aṇjunialḡuḷiq: Hunter's Success for Caribou Hunting

- Always camp and hunt on the south side of the river.



- When caribou start crossing the river, wait until they're half way across, and approach from the north side to keep the migration moving south.
 - Sharing: hunting groups should take turns. If you already have caribou, let the next boat in line have a chance.
 - Use smaller caliber rifles, for the safety of others.
 - Shoot in a standing position from the front of the boat toward the caribou, so bullets don't travel toward other boats or camps.
 - Respect the cabins you stop at and replace any source you borrowed. Keep allotments and shorelines clean.
 - Keep the land and water clean of trash.
- "We live on this land and drink from the river."
- Caribou permits and reporting your harvest will help on the survival of the herd.

Thank you for your respect and abiding by our traditions – Kiana Elders' Council

Reach: 2,904 Likes: 16 Shares: 18

8/16/21: *CARIBOU HUNTERS* Did you get a caribou permit last year? Please report the results of your hunting, even if you did not harvest. You can report on your caribou permit (called RC907 in Unit 23) online at

<http://www.adfg.alaska.gov/index.cfm?adfg=hunting.main> or by calling the Alaska Department of Fish & Game directly at: (907) 442-3420 (Kotzebue), (907) 852-3464 (Utqiagvik), or (907) 443-2271 (Nome).

Harvest information helps biologists who manage the herd, and helps document and record subsistence use. This can be valuable if there is ever a resource shortage, to ensure that subsistence needs are known and prioritized.

Reach: 736 Likes: 23 Shares: 5



8/11/21: Have you read the summer 2021 edition of "Caribou Trails," the newsletter of the Western Arctic Caribou Herd Working Group? It has the latest info on our region's herd. If not, you can find it online at

https://westernarcticcaribou.net/.../CaribouTrails_2021.pdf

-What do you think of "Caribou Trails?" What do you want to see more of? Take the reader survey from the newsletter's editors at www.surveymonkey.com/r/HRQPNBS to have your say.

image: portion of the front page of 2021 Caribou Trails

Reach: 326 Likes: 13 Shares: 20

7/9/21: Happy birthday to 'bou! How would you like to have the same birthday as nearly half of your friends?! As a group protection and survival strategy, nearly half of pregnant caribou in a herd will give birth to their calves on the same day. In such a big 'family' when all the babies are calling for mom and the moms are calling for their baby, it's important that caribou mothers know the unique call of their calf so they can distinguish them from the rest. Kind of like having a special nickname that you call your child or parent by. What nickname do you use in your family? #HomeOnTheRefuge



Photo of Caribou cow with calf by Gregory "Slobirdr" Smith/FlickrCC

Reach: 412 Likes: 22 Shares: 2



6/22/21: The Federal Subsistence Board met on Wednesday, June 16 to consider a special action request for moose and caribou hunting in Unit 23. The Board deferred action on this request, and will reconsider it prior to the 2022 hunting season. The Board's deferral of this temporary special action request means that at this time, there are no changes to Federal regulations for moose or

caribou in Units 23 or 26A for the 2021 season. Read more at [doi.gov/subsistence...](https://doi.gov/subsistence) USFWS photo of a caribou swimming across the Kobuk River

Reach: 284 Likes: 8

4/27/21: As caribou from the Western Arctic Herd begin their spring migration toward the calving grounds, we remind hunters to target bulls.

- Cow caribou season is closed to protect them and their soon-to-be-born calves...the future of our herd.
- Need help with telling them apart in the field? Check out ADFG's handy guide at

http://www.adfg.alaska.gov/.../bull_or_cow_caribou_how_to

Photo of winter caribou group ©Jim Dau, used with permission for education/outreach purposes.

Reach: 260 Likes: 11 Shares: 1



4/22/21: *Update on Public Hearing*

The hours for tomorrow's (April 23) hearing on caribou/moose hunting on Federal public lands in Unit 23/26a have been extended.

Now starting at 3:00 pm and going until 7:00 pm

Teleconference: Toll Free: (877) 918-3011

Passcode: 8147177

more at: <https://www.doi.gov/.../public-hearing-time-extended...>

Reach: 1,218 Likes: 10 Shares: 10

4/16/21: Yesterday we posted about a public hearing on whether to limit caribou and moose hunting on federal lands in Unit 23 and Unit 26a to only federally qualified subsistence users during August and September.

Today we heard that written public comments will also be accepted on this special action request, starting today:



"Due to a high level of public interest in a temporary special action request submitted to the Federal Subsistence Board, there will be an opportunity to submit written comments on this request during a five-day comment period (April 16–20, 2021), in addition to an already-scheduled public hearing.

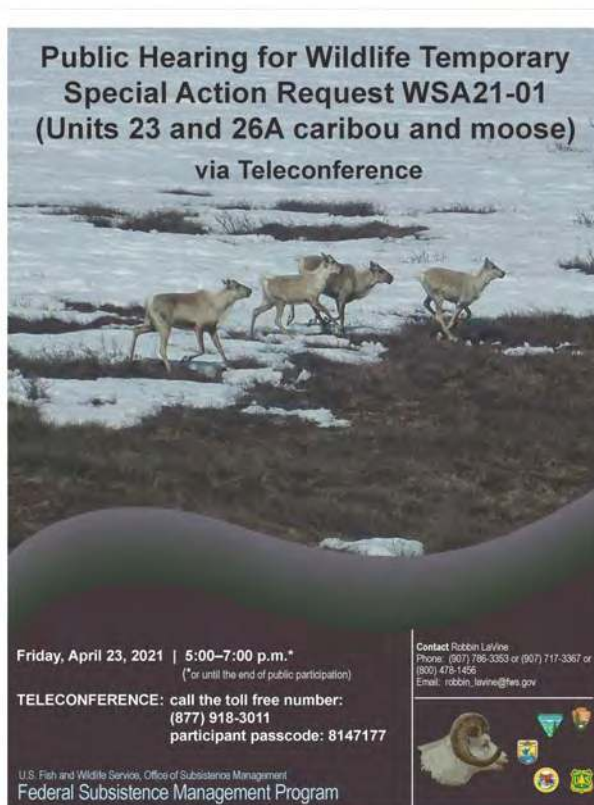
Temporary Special Action Request WSA21-01, submitted by the Northwest Arctic Subsistence Regional Advisory Council, asks to close Federal public lands in Units 23 and 26A to harvest of caribou and moose by non-Federally qualified users from August 1 through September 30, 2021. This request, if approved by the Board, would add the following language to the current Federal regulations for caribou and moose in Units 23 and 26A:

"Federal public lands are closed to the harvest of caribou and moose from August 1 through September 30, 2021, except by Federally qualified subsistence users hunting under these regulations."

Written public comments may be submitted between April 16 and April 20, 2021, on this temporary special action request. Comments may be sent to: subsistence@fws.gov. Written comments emailed to this address will be provided to the Board for consideration.

In addition to this five-day public comment period, public comments will be taken at a public hearing (previously announced) on April 23." View news release at <https://www.doi.gov/.../nr-public-comment-period-wsa-21...>

Reach: 716 Likes: 17 Shares: 2



4/15/21: There has been a public hearing announced for Temporary Wildlife Special Action Request WSA21-01 regarding caribou and moose in Units 23 and 26A.

What's that, you ask?

Temporary Special Action Request WSA21-01, submitted by the Northwest Arctic Subsistence Regional Advisory Council, asks to close Federal public lands in Units 23 and 26A to harvest of caribou and moose by non-Federally qualified users from August 1 through September 30, 2021. This request would add the following language to the current Federal regulations for caribou and moose in Units 23 and 26A:

"Federal public lands are closed to the harvest of caribou and moose from August 1 through September 30, 2021,

except by Federally qualified subsistence users hunting under these regulations."

A telephonic public hearing is scheduled for 5:00 – 7:00 p.m., or until the end of public participation, on Friday, April 23, 2021, to receive public testimony on a temporary special action request submitted to the Federal Subsistence Board (Board).

The public is encouraged to participate in this hearing by calling the telephone number below. When prompted, enter the passcode. Comments will be forwarded to the Board for consideration. Public Hearing Information:

Friday, April 23, 2021 from 5:00 p.m. – 7:00 p.m. (or until the end of public participation); Teleconference: Toll Free: (877) 918-3011; Passcode: 8147177

The Board is committed to providing access to this public meeting for all participants. Please direct requests for accommodation needs to the Office of Subsistence Management at (800) 478-1456 or (907) 786-3888 or by e-mail subsistence@fws.gov at least seven business days prior to the meeting.

View full news release at: <https://www.doi.gov/.../nr-public-hearing-wsa-21-01.pdf>

Reach: 237

Likes: 2

3/29/21: ⚠Attention Caribou Hunters:⚠
Hunting for female/cow caribou closes at the end of March in Unit 23 (NW Arctic).

This helps protect pregnant cows, the future of the herd.

Hunting for bull caribou remains open.

Thank you for doing your part to help conserve caribou.

photo of a mixed group of caribou on snowy tundra courtesy Kyle Joly/NPS.

Reach: 8,822

Likes: 31

Shares: 92



3/16/21: Have you heard of TED talks? What about tuttu talks?!

Here are some virtual sessions to learn more about caribou - tuttu - a vital element of Arctic ecosystems and Iñupiaq life for thousands of years.

Hat tip to our partners at ADF&G Wildlife Conservation -

Northwest Alaska - Region V for putting this on!

Likes: 4

Shares: 2

2/25/21: For generations, natural materials have been used in Northwest Alaska to make tools, gear, clothing and art. Pictured here are homemade wooden net floats and caribou antler sinkers. In some areas, rocks are used for sinkers, depending on what is locally available. Although plastic floats are now common, you'll still find homemade items in use as well.

Photo by Susan Georgette/USFWS

Reach: 751

Likes: 29

Shares: 5



1/29/21: What or where is home for a caribou calf, when they are always on the move? Within minutes of birth, the calves get onto their feet and get ready to keep up with the herd. For the next months of their life, home will be wherever their mom is – a home on the go. For caribou from the Western Arctic Herd, part of their home range is within Selawik Refuge, at least seasonally.

When you grew older and started to venture out to new villages, cities or even states, did you ever feel overwhelmed by all the new experiences? Imagine how much a caribou calf learns during the first year of its life! #HomeOnTheRefuge

Reach: 711 Likes: 21 Shares: 5



1/26/21: ⚠Attention local caribou hunters⚠

Have the longer days and improving snow cover got you thinking about heading out after tuttu? A few quick reminders:

☑Caribou season is open for both bulls and cows – you can help our caribou herd by taking fewer cows as much as possible

☑caribou hunters should have both a 2021 hunting license and a "907" caribou permit (the permits are free)

☑Take your time and select the animal you want. Don't shoot into bunched up groups of caribou

☑Running caribou too much results in poor quality meat

Here's wishing you a safe and successful adventure!

Reach: 1,837 Likes: 37 Shares: 16

1/19/21: All of us at Selawik Refuge would like to offer our sympathies to the family and friends of Ron Moto Sr. We were saddened to hear of his recent passing, having had the opportunity to work with Mr. Moto over many years on the Western Arctic Caribou Herd Working Group, Unit 23 Working Group, and more. Thank you for giving your time and your voice to help our region, and may you rest in peace.

📷 2009 image of Ron Moto Sr. at a Western Arctic Caribou Herd Working Group meeting

Reach: 1,597 Likes: 62 Shares: 6

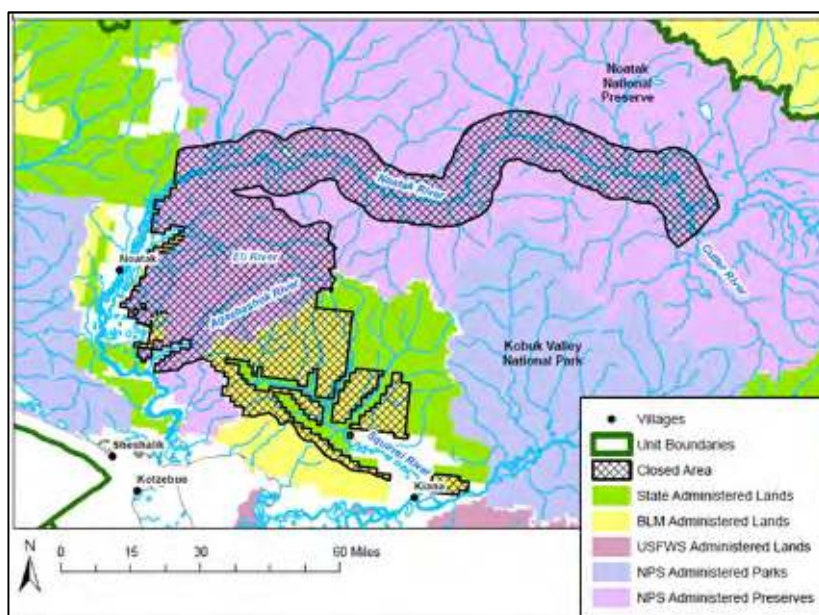


Information on Closures and Land Restrictions for Caribou & Moose Hunting in Unit 23

This fact sheet summarizes closures and other land restrictions for hunting in Unit 23. Some of these apply only to non-local hunters and commercial services, while others apply to everyone. It is your responsibility to know which of these apply to you. Several of these restrictions have been put in place to address local communities' concerns about the impacts of non-local hunters.

Native Corporation Lands (NANA and KIC)

Access to these private lands is controlled by the land owners. Non-shareholders cannot hunt on these lands without permission from the proper corporation. Learn more at <https://www.nana.com/about-us/lands/> or <https://kikiktagruk.com/>



Federal Caribou Hunting Closure (Federal Subsistence Board)

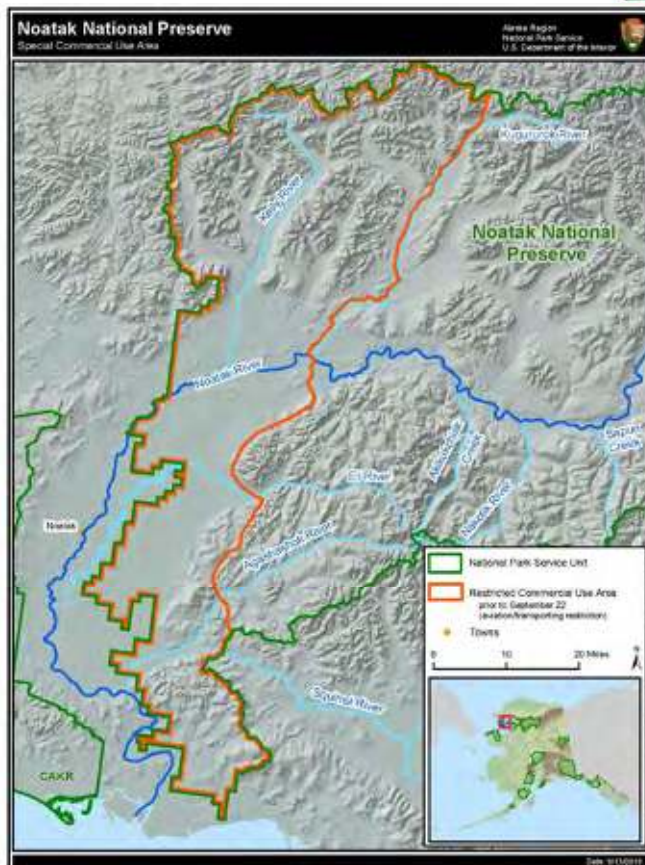
Only Federally qualified subsistence users may hunt for caribou on Federal public lands within a 10 mile wide corridor (5 miles either side) along the Noatak River from the western boundary of the Noatak National Preserve upstream to the confluence with the Cutler River; within the northern and southern boundaries of the Eli and Agashashok (Aggie) River

Drainages, respectively; and within the Squirrel River drainage (black lined area above).

For caribou in Unit 23, a “Federally qualified subsistence user” is a person who has lived in Alaska for at least 12 months and has their primary, permanent place of residence in Unit 23 and several adjoining areas, including Units 22, 26A, most of Units 21D and 24, and Galena.

Noatak Controlled Use Area (State of Alaska)

A corridor extending five miles on either side of, and including, the Noatak River beginning at the mouth of the Agashashok (Aggie) River, and extending upstream to the mouth of the Nimiuktuk River. This area (red outlined area, right) is closed from Aug. 15 – Sept. 30 to the use of aircraft in any manner for big game hunting, including transportation of big game hunters, their hunting gear, and/or parts of big game; however this does not apply to the transportation of big game hunters or parts of big game to and between publicly owned airports.



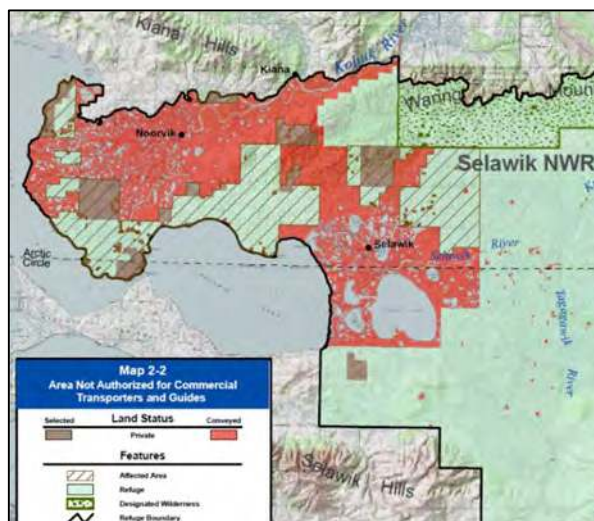
Noatak National Preserve Special Commercial Use Area (National Park Service)

This “delayed entry” area managed by the National Park Service prohibits commercial use operators from dropping off or picking up non-Federally qualified subsistence caribou hunters within the Restricted Commercial Use Area (red outlined area, left) in the western Noatak National Preserve prior to September 22nd, unless otherwise authorized by the Superintendent.

Restricted Parklands (National Park Service) Cape Krusenstern National Monument and Kobuk Valley National Park are only open to hunting of any kind by residents of the NANA region (local resident zone communities).

Kobuk/Selawik Delta Areas Not Authorized for Commercial Use (U.S. Fish & Wildlife Service)

Commercial guides and transporters are prohibited (through permit requirements) from using refuge lands in the western portion of Selawik National Wildlife Refuge, where there is mixed land status and greater subsistence use (areas with diagonal lines, right).



Non-resident Moose Season Closed (State of Alaska)

There is no open season in Unit 23 for moose hunting by non-Alaska residents.

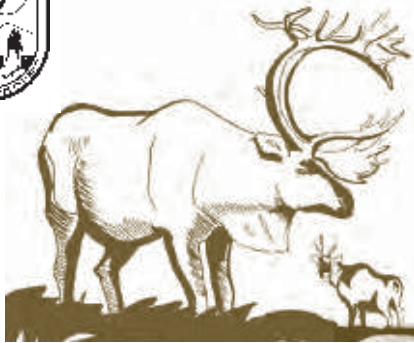
State of Alaska Hunting Regulations – <http://www.adfg.alaska.gov>

Federal Subsistence Hunting Regulations – <http://www.doi.gov/subsistence>

Contact Us:

For more detailed information on any of the restrictions summarized above, or for larger or more detailed maps, please contact one of the members of our working group.

AK Dept. of Fish & Game Kotzebue office: 442-3420	Alaska Wildlife Troopers Trooper Cantine: 442-3241	NANA Trespass / Lands Damon Schaeffer: 442-8103
US Fish & Wildlife Service Selawik Refuge Kotzebue office: 442-3799	National Park Service Ranger Joe Dallemolle: 907-385-8234	Maniilaq Natural Resources Cyrus Harris: 442-7914



Caribou Hunting Regulations For Residents of Unit 23

What You Need to Know

Updated August 2020

Regulations for caribou harvest have changed because of a decline in our region's caribou herd. Hunters need to be aware of the updated rules. Hunters age 18 and over need a hunting license. All caribou hunters need to obtain a state caribou registration permit and report their caribou harvests.

This is a summary of caribou hunting regulations for most of the Northwest Arctic (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	
Bulls open year-round	
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).
- You must follow Federal regulations on Federal lands in the Noatak/Agashashok/Eli and Squirrel River areas (which are closed to non-federally qualified users for caribou hunting).
- 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: kathleen.sherman@alaska.gov

National Park Service
Kotzebue, AK
(907) 442-3890 or (800) 478-7252
email: maija_lukin@nps.gov

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.