



IN REPLY REFER TO:

United States Department of the Interior

U.S. FISH AND WILDLIFE SERVICE
1011 East Tudor Road
Anchorage, Alaska 99503-6199



FWS/OSM 15026.TJ

APR 24 2015

Wassillie Tugatuk, Sr.
President
Manokotak Village Council
P.O. Box 169
Manokotak, Alaska 99628

Dear Mr. Tugatuk:

This letter responds to your Emergency Special Action Request (WSA15-02) requesting that the Federal season for caribou be extended on the Nushagak Peninsula until the end of May 2015.

As authorized by the Federal Subsistence Board, the Office of Subsistence Management (OSM) has reviewed the request, and with unanimous recommendation by the Interagency Staff Committee, has rejected this Emergency Special Action based on human health concerns for local residents.

The enclosed copies of the staff analysis and Interagency Staff Committee recommendation are provided for your reference. If you have any questions, please contact Chris McKee, Wildlife Division Chief, OSM at (907) 786-3572.

Sincerely,

Eugene R. Peltola, Jr.
Assistant Regional Director, OSM

Enclosures

cc: Federal Subsistence Board
Susanna Henry, Togiak National Wildlife Refuge Manager
Chuck Ardizzone, Deputy Assistant Regional Director, OSM
Chris McKee, Wildlife Division Chief, OSM
Molly Chythlook., Chair, Bristol Bay Subsistence Regional Advisory Council
Donald Mike, Council Coordinator, OSM
Jennifer Yuhas, Federal Subsistence Liaison Team Leader
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Interagency Staff Committee
Administrative Record

Manokotak Village Council

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(907)289-2067 or 1227

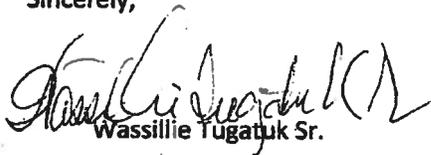
Fax: (907) 289-1235

To whom it may concern;

This letter is to inform anyone in Federal Subsistence Group,

Since winter has been unsafe for traveling to hunt caribou in Nushagak Peninsula by snow machine, but now better to travel on a lund/boat to hunt for caribou. Since the season is now closed, the request for several subsistence groups to hunt for our family at least until the end of May.

Sincerely,



Wassillie Tugatuk Sr.

Manokotak Village Council President.

**STAFF ANALYSIS
EMERGENCY SPECIAL ACTION
WSA15-02**

ISSUES

Emergency Special Action WSA15-02, submitted by the Wassillie Tugatuk Sr., Manokotak Village Council President, requests that the Federal season for caribou be extended on the Nushagak Peninsula until the end of May.

DISCUSSION

The proponent states that the winter of 2015 was unsafe for snowmachine travel due to poor snow conditions and that hunters were not able to harvest caribou as a result. Because of the poor winter conditions, only one caribou harvest was reported during the 2015 winter season (Aderman 2015 pers. comm.). The proponent says that hunters can now travel safely by boat and wish to use this opportunity to harvest caribou.

Existing Federal Regulation

Unit 17A and 17C— Caribou

<i>Units 17A and 17C – that portion of 17A and 17C consisting of the Nushagak Peninsula south of the Igushik River, Tuklung River and Tuklung Hills, west to Tvativak Bay – up to 2 caribou by Federal registration permit. Public are closed to the taking of caribou except by residents of Togiak, Twin Hills, Manokotak, Aleknagik, Dillingham, Clark’s Point, and Ekuk hunting under these regulations. The harvest quota, harvest limit, and the number of permits available will be announced by the Togiak National Wildlife Refuge Manager after consultation with the Alaska Department of Fish and Game and the Nushagak Peninsula Caribou Planning Committee. Successful hunters must report their harvest to the Togiak National Wildlife Refuge within 24 hours after returning from the field. The season may be closed by announcement of the Togiak National Wildlife Refuge Manager.</i>	<i>Aug. 1 – Sept. 30</i>
	<i>Dec. 1 – Mar. 31</i>

The applicable Federal regulations are found in 50 CFR 100.19(a) (Special Actions) and state that:

“...In an emergency situation, if necessary to ensure the continued viability of a fish or wildlife population, to continue subsistence uses of fish

or wildlife, or for public safety reasons, the Board may immediately open or close public lands for the taking of fish and wildlife for subsistence uses, or modify the requirements for take for subsistence uses, or close public lands to take for nonsubsistence uses of fish and wildlife, or restrict the requirements for take for nonsubsistence uses.”

Proposed Federal Regulation

Unit 17A and 17C—Caribou

<p><i>Units 17A and 17C – that portion of 17A and 17C consisting of the Nushagak Peninsula south of the Igushik River, Tuklung River and Tuklung Hills, west to Tvativak Bay – up to 2 caribou by Federal registration permit. Public are closed to the taking of caribou except by residents of Togiak, Twin Hills, Manokotak, Aleknagik, Dillingham, Clark’s Point, and Ekuk hunting under these regulations. The harvest quota, harvest limit, and the number of permits available will be announced by the Togiak National Wildlife Refuge Manager after consultation with the Alaska Department of Fish and Game and the Nushagak Peninsula Caribou Planning Committee. Successful hunters must report their harvest to the Togiak National Wildlife Refuge within 24 hours after returning from the field. The season may be closed by announcement of the Togiak National Wildlife Refuge Manager.</i></p>	<p><i>Aug. 1 – Sept. 30</i></p> <p><i>Dec. 1 – Mar. May 31</i></p>
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Existing State Regulation

Species and Bag Limits – Caribou	Permit/Ticket Required	Open Season
<i>Unit 17A, all drainages that terminate east of Right Hand Point—two caribou by permit</i>	RC501	<i>may be announced</i>
<i>Unit 17C remainder—two caribou by permit</i>	RC501	<i>may be announced</i>

Note: The purpose of the “may be announced” season under State regulations is to provide a possible opportunity to harvest Mulchatna caribou, should they migrate into adjacent areas without mixing with Nushagak caribou.

Extent of Federal Public Lands

Federal public lands comprise approximately 85% of the Nushagak Peninsula hunt area and are wholly located within Togiak National Wildlife Refuge (NWR) in portions of Unit 17A and 17C.

Customary and Traditional Use Determinations

Residents of Units 9B, 17, Lime Village, and Stony River have a positive customary and traditional use determination for caribou in Unit 17 which encompasses the Nushagak Peninsula Caribou Herd (NPCH) hunt area. However, in Units 17A and 17C, Federal public lands on the Nushagak Peninsula are closed to the harvest of caribou except by residents of Togiak, Twin Hills, Manokotak, Aleknagik, Dillingham, Clark's Point, and Ekuk.

Regulatory History

Caribou were reintroduced to the Nushagak Peninsula in 1988 and were intended to provide area residents with an important subsistence resource. (FWS, et. al. 1994). In 1994, Proposal 42 established a Jan. 1–Mar. 31 harvest season on the NPCH in portions of Units 17A and 17C, and instituted a closure to all users except residents of Togiak, Dillingham, Manokotak, Twin Hills, Aleknagik, Clark's Point, and Ekuk (FSB 1994). The newly established season started on January 1, 1995. Prior to the Federal Subsistence Board's (Board) action, there had been no harvest season for the reintroduced Nushagak caribou population. Special Action S95-06 extended the season from Jan. 1–Mar. 31 to Dec. 1–Mar. 31 for the 1995/1996 regulatory year. When the Board adopted Proposal 34 in 1996, the season extension was adopted into Federal regulations and a fall season (Aug. 1 – Aug. 30) was established in the affected area (FSB 1996). In 1997, the Board adopted Proposal 47, which increased the harvest limit from one to two caribou on the Nushagak Peninsula portions of Units 17A and 17C, as there was a harvestable surplus of caribou and the previous year's harvest was well below the management objective (FSB 1997). In 1998, the Board approved Special Action 97-10, which extended the fall season from Aug. 1–Aug. 30 to Aug. 1–Sept. 30, and this extension became permanent when the Board adopted Proposal 39 in 1999 (FSB 1999). In 2001 the Board adopted Proposal 18 to authorize use of a designated hunter permit.

There have also been a number of requests to changes the methods and means for harvesting Nushagak Peninsula caribou that the Board has not adopted. In 1997, the Board rejected Proposal 48 that would have removed the same day airborne harvest restriction for caribou in Units 17A and 17C on the Nushagak Peninsula (FSB 1997). The issue was then resubmitted as Proposal 56 in 1998 and subsequently rejected by the Board (FSB 1998a). In 1998, Proposal 57 requested allowing NPCH caribou to be harvested from a snowmachine while it is in motion. The Board rejected the proposal for several reasons: harvesting caribou from a snowmachine in motion would have increased the likelihood of wounding animals; chasing with snowmachines could have caused undesirable physiological stress and decreased meat quality; and it would have caused misalignment between State and Federal regulations (FSB 1998b). In 2000 the Board rejected Proposal 36 which would expand the NPCH hunt area because it was not consistent with the herd management plan.

Closure reviews were conducted in 2008 and 2012 (WCR08-07 and WCR12-07). The Bristol Bay Subsistence Regional Advisory Council unanimously recommended maintaining the closures during both reviews (BBSRAC 2009, 2013). Local residents were still having a hard time finding moose and Mulchatna caribou, so in spite of an increasing NPCH population, maintaining this closure was still important to help subsistence hunters harvest an important resource.

Current Events Involving Species

From March 27-30, 2015, in an interagency effort between the Togiak NWR and ADF&G, 10 female yearling caribou were captured and radio-collared as part of a study of caribou demographics. The yearlings were chemically immobilized by darting them from a helicopter. A mix of two drugs was used to immobilize the caribou: Carfentanil hydrochloride and Xylazine. Once the animals received a radio-collar and examinations were complete, a mixture of the drugs Naltrexone and Tolazoline were used to reverse the Carfentanil and Xylazine and revive the caribou. An additional seven yearling caribou also were darted from the helicopter, but the darts either did not inject properly, or the animals' physical condition allowed them to resist the effects of the drugs and they were not immobilized. The drug manufacturers' recommended waiting period before animals that receive these drugs and human consumption of the same animals is 45 days. The 45 day waiting period would not expire until May 10, 2015. The presence of immobilization drugs in the bodies of the caribou makes the hunt extension problematic, since human reaction to the presence of these drugs cannot be ruled out (Henry 2015, pers. comm.).

Although the caribou capture took place during some of the last days of the existing winter harvest period (January 1- March 31), the poor travel conditions and the imminent closure of the hunt made it unlikely that any of the captured animals would be harvested. If the request from the Village of Manokotak had come earlier, the interagency caribou capture may have been postponed or cancelled.

Biological Background

In February 1988, 146 caribou from the Northern Alaska Peninsula Herd were transplanted to the Nushagak Peninsula (FWS 1994). The NPCH has since experienced six phases of growth, with the most pronounced being a large population increase from the 1988 introduction through 1994 (Hinkes et al. 2005, Aderman and Lowe 2012, Aderman 2015) (**Table 1**). This period of population growth exceeded the maximum theoretical potential for exponential population growth for caribou estimated by Bergerud (1980). Factors attributed to this dramatic growth may have included a high percentage of females in the herd, high calf production and survival, pristine range condition, few predators, and that no hunting was allowed on the herd from 1988–1995 (Aderman and Lowe 2012, Aderman 2015). The NPCH herd peaked at 1,399 caribou from a winter survey in February 1998 (FWS 1999), subsequently declined to a low of 550 caribou in July 2007, and then began increasing again.

The causes of the decline between 1999 and 2009 are not clearly understood and are almost certainly multi-factored (Aderman and Lowe 2012). The most likely explanation for the decline is that the exceptionally high growth through 1998 produced large annual cohorts of females that survived until a relative old age, at which time they declined in productivity. This high proportion of unproductive females, combined with high harvest years in 2001 and 2002, changed the population trajectory from an increasing trend to a decreasing trend, where it remained until the ultimate replacement of old,

unproductive females with younger, productive females. Changing nutritional conditions (both short-term, such as those associated with drought or winter icing; as well as longer-term changes, such as lowered overall carrying capacity due to continuous grazing on the Nushagak Peninsula since 1988) underlay and exacerbated this decline, but were not likely the primary drivers. Wolf predation could be a factor in the decline; however, a study of wolf predation from 2007–2011 found that wolf predation was not a primary driver of Nushagak Peninsula caribou population dynamics (Walsh and Woolington 2012, report in progress). Brown bears are common on the Nushagak Peninsula and likely have learned to exploit the caribou population, but their impact on the NPCH is not known (Aderman and Lowe 2012).

Table 1. Sex and age composition and minimum count of Nushagak Peninsula caribou, southwest Alaska, 1988-2014 (Aderman 2015, Aderman pers. comm. 2015).

Year	Bulls: 100 Cows	Calves: 100 Cows	Minimum Count of Herd Size
1988	11.7	10	146
1989	---	---	268
1990	---	---	383
1991	---	---	561
1992	59.8	71.6	734
1993	---	---	1,007
1994	71.3	64.6	1,106
1995	---	---	1,214
1996	---	---	1,255
1997	63.7	62.0	1,273
1998	57.4	62.6	1,281
1999	48.1	52.5	1,159
2000	51.5	38.1	1,037
2001	45.9	34.8	937
2002	42.9	36.1	810
2003	47.3	44.1	780
2004	42.5	33.8	665
2005	38.2	32.4	600
2006	31.3	35.6	550
2007	49.2	40.0	560
2008	43.8	59.6	575
2009	37.1	34.8	600
2010	42.1	45.2	801
2011	28.9	38.6	805
2012	52.0	50.2	902
2013	32.2	40.3	926
2014	43.8	52.5	1,018

Since 2007, the population increased due to improved fall calf recruitment and adult female survival (Aderman 2015). The most recent population survey was conducted in June 2014 and a minimum of 1,018 caribou were counted on the Nushagak Peninsula. This minimum count is above the upper end of the Nushagak Peninsula Caribou Management Plan’s population objective (to maintain a population range of 400–900 caribou) (Aderman 2015). The NPCH population has been trending upward since 2006 and is currently above the ideal population objective of 750 caribou by at least 250 animals (**Table 1**) (Aderman 2015).

Managers are concerned that continued growth of the herd may result in a population crash. Caribou harvest will need to increase substantially to prevent another population decline like that experienced in the late 1990s and early 2000s (Aderman 2015). Composition surveys are conducted for the NPCH in early to mid-October. Recent surveys estimated 32 bulls:100 cows and 40 calves:100 cows in 2013 and 44 bulls:100 cows and 53 calves:100 cows in 2014 (Aderman 2015, pers. comm.). Herd composition averaged 41 bulls:100 cows and 45 calves:100 cows between 2007 and 2014 (**Table 1**). At the time of reintroduction, the initial herd composition was heavily female biased, with 82.2% females, 9.6% males (12 bulls:100 cows) and 8.2% calves (10 calves:100 cows) (Aderman and Lowe 2012).

Harvest History

Only Federally qualified subsistence users are allowed to harvest caribou from the NPCH. A Federal registration permit is required to harvest caribou on the Nushagak Peninsula in Units 17A and 17C and users are required to report their harvests to the Togiak National Wildlife Refuge within 24 hours of harvest. Reported harvest increased during the eight years after the season was established in 1994/1995 (**Table 2**). Unreported harvest can be high, similar to other rural areas in Alaska, and illegal take of NPCH caribou has been documented (Aderman and Lowe 2012).

The original NPCH Management Plan set a harvest level of no more than 10 percent of the population when the population is over 600 caribou (FWS, et. al. 1994). In 2011, the Management Plan Committee reviewed and updated the plan's harvest strategy to make it more responsive to a dynamic caribou population. The updated strategy annually establishes a harvest goal based on population size and trend, and permits harvest when the population exceeds 200 caribou and is stable or increasing. The Committee also updated the population objective from 600 to 1,000 caribou to 400 to 900 caribou. The revised harvest strategy also calls for a liberal harvest when the population is 800 caribou or greater and recommends harvesting all animals over a 750 count (Aderman 2015). The Committee recommended the Federal registration permits be allocated to eligible communities based on a formula in which each community receives 5% of the total permits, plus additional permits based on a percentage of the aggregate participating communities.

Hunting effort is influenced by travel conditions, availability of and opportunity to take Mulchatna caribou and moose, and economic factors (Aderman and Lowe 2012). Most of the reported harvest has occurred in February and March (**Table 2**), because of improved hunter access to the herd via snow machines (Aderman and Lowe 2012). Winter harvest in 2015 consisted of one male taken in February (Aderman 2015 pers. comm). There was no reported harvest in March 2015 due to poor travel conditions as a result of low snowfall. Difficult travel conditions have limited the harvest in other years, such as 2002/2003. Other years with poor winter harvest have occurred from 2004 through 2009.

As prescribed by the management plan, there were no fall hunts in 2006, 2007, and 2008 because the population was below 600 animals. There were a limited number of permits (five) available for the winter hunts in 2006/2007 and 2007/2008, but no harvest was reported (Aderman 2008, pers. comm.). Annual harvests have increased as the population has recovered (**Table 2**). In 2011/2012 120 permits were issued, including two permits for the August and September 2011 season and the remaining 118 permits for the

winter hunt (Aderman 2012, pers. comm.). In addition, the harvest limit was increased from one to two caribou for the Feb. 1–Mar. 31, 2012 season (Aderman 2012, pers. comm.).

Table 2. Reported harvest of caribou, by month, on the Nushagak Peninsula during regulatory years 1994/1995 to 2014/2015 (Aderman 2015; Aderman 2015, pers. comm.).

Regulatory year	Month							Total
	AUG	SEPT	DEC	JAN	FEB	MAR	Unknown	
1994/1995	NS ^a	NS	NS	3	1	25	6	35
1995/1996	NS	NS	3	0	5	43	1	52
1996/1997	5	NS	0	0	2	13	0	20
1997/1998	5	NS	0	2	25	35	0	67
1998/1999	0	2	0	0	0	50	3	55
1999/2000	0	0	0	2	7	54	0	63
2000/2001	0	6	0	0	22	98	0	126
2001/2002	0	3	0	0	9	115	0	127
2002/2003	3	0	0	0	0	0	0	3
2003/2004	2	3	0	0	0	29	0	34
2004/2005	1	0	0	0	0	8	0	9
2005/2006	1	1	0	0	0	9	0	11
2006/2007	NS	NS	NS	NS	0	NS	0	0
2007/2008	NS	NS	NS	NS	0	0	0	0
2008/2009	NS	NS	NS	NS	5	2	1	8
2009/2010	NS	NS	NS	NS	3	14	1	18
2010/2011	NS	NS	NS	NS	18	27	0	45
2011/2012	0	2	NS	NS	20	64	0	86
2012/2013	6	3	0	5	6	89	0	109
2013/2014	3	1	0	0	0	98	0	102
2014/2015	8	7	0	0	1	0	0	16
Total	34	28	3	12	124	773	12	986
% Total	3.4	2.8	0.3	1.2	12.6	78.4	1.2	-

^aNS = No season

Effects of the Proposal

If this Special Action is adopted, it would extend the caribou season until May 31. Federally qualified subsistence users would have additional harvest opportunities since they can now safely travel to the hunt area by boat. February and March have been important months for Federally qualified subsistence users to harvest Nushagak Peninsula caribou. However, poor travel conditions this year resulted in a significant decrease in harvest with only one reported harvest having occurred in February. A season extension would also provide added opportunity to reduce the caribou population closer to the management objective.

Subsistence users may be exposed to a mix of drugs used to capture caribou if they eat recently darted animals. The drugs may only be in a small percentage of individuals however, there is risk in allowing harvest to occur when drugged individuals may be harvested. If a drugged individual were to be harvested

and meat was shared, the effects could be dispersed among community members, especially to those at greater risk such as the elderly and children.

A selective harvest of only bulls would be difficult to implement due to antler retention by both bulls and cows during spring. There have been no radio collar studies of NPCH bulls to determine specific use areas or segregation from cows (Aderman 2015, pers. comm.) The best-available information suggests there are no areas of the Nushagak Peninsula where there would be a clear separation of bulls and cows during the calving season as with other caribou herds with larger home ranges. In addition, using antler restrictions to avoid harvesting of yearling females would be difficult because of various stages of antler retention among sex, pregnancy status of cows, and age classes. Most pregnant cows will be antlered as well as many of the younger aged bulls (Demma 2015, pers. comm.). When present with cows, positive identification of bulls can be difficult especially when encountering caribou at varied distances on the open tundra.

Additionally, a season extension through May 31 will likely disturb the NPCH calving season. Calving on the Nushagak Peninsula begins between May 13 and June 3, with peak calving occurring by May 25 (Aderman 2015). Although additional harvest could benefit the overall health of the population, hunting during calving season could lead to higher disturbance and increased stress on individual cows with calves and possibly increased cow harvest and orphaned calves.

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