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WRANGELL-ST. ELIAS NATIONAL PARK AND PRESERVE SUBSISTENCE AND ANTHROPOLOGY REPORT WINTER/SPRING 2023

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Federal subsistence hunting permits issued for Wrangell-St. Elias in 2022

In 2022, Wrangell-St. Elias and Tetlin National Wildlife Refuge staff issued a total of 193 federal subsistence hunting permits for moose, goat, and sheep for Wrangell-St. Elias lands in Units 11 and 12. The most frequently issued permit was for the fall moose hunt in Unit 11 Remainder (FM1106). A total of 139 permits were issued for this hunt in 2022, 65 people hunted, and 15 moose were harvested. The second most frequently issued permit was for the Unit 11 sheep hunt for hunters 60 years of age and older (FS1104). A total of 25 permits were issued for this hunt in 2022, 10 people hunted, and 2 sheep were harvested. (See Table 1 for additional details.)

Wrangell-St. Elias staff and the Alaska Department of Fish and Game both issue a joint state/federal permit (RM291) for the moose hunt for portions of Units 11 and 12 in the northern part of the park. For the 2022 season, a total of 340 permits were issued, 197 people hunted, and 16 moose were harvested, including 10 moose by federally qualified subsistence users (see Table 2).

Upper Copper River communities to be surveyed about subsistence harvests

Chistochina and Mentasta residents will be surveyed in March 2023 about their harvest and use of wild fish, wildlife and plant resources, and Slana and Nabesna Road residents will be surveyed in early 2024. These surveys are a cooperative project in collaboration with the Alaska Department of Fish and Game and the Ahtna Intertribal Resource Commission.

Why this matters: Concern has been expressed about whether up-river communities are meeting their subsistence needs, especially for salmon.

Table 1. Federal Subsistence Registration Permits in Wrangell-St. Elias NPP, 2012-2022

Unit 11 Goat (FG1101)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Permits Issued	42	30	31	29	22	26	30	27	27	20	8
Individuals Hunting	6	7	10	6	4	3	8	8	4	2	0
Animals Harvested	0	0	0	0	0	0	0	1	0	0	0
Success Rate (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5	0.0	0.0	-

Unit 11 Remainder Moose -- Fall Hunt in part of unit outside of the RM291 hunt area (FM1106)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Permits Issued	189	146	123	128	138	132	144	107	156	140	139
Individuals Hunting	75	78	70	70	75	72	85	45	68	71	65
Animals Harvested	9	12	10	13	16	13	12	10	15	11	15
Success Rate (%)	12.0	15.4	14.3	18.6	21.3	18.1	14.1	22.2	22.1	15.5	23.1

Unit 11 Moose -- Winter Hunt in southern part of unit (FM1107) (Began in 2014)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Permits Issued	n/a	n/a	32	17	20	14	11	8	8	7	10
Individuals Hunting	n/a	n/a	3	3	4	4	2	2	1	2	0
Animals Harvested	n/a	n/a	0	0	1	0	0	0	1	0	0
Success Rate (%)	n/a	n/a	0.0	0.0	25.0	0.0	0.0	0.0	100.0	0	-

Unit 11 Elder Sheep (FS1104)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Permits Issued	32	20	25	25	32	34	38	34	38	26	25
Individuals Hunting	11	5	10	8	12	13	18	14	12	12	10
Animals Harvested	1	0	1	3	3	4	1	1	1	3	2
Success Rate (%)	9.1	0.0	10.0	37.5	25.0	30.8	5.6	7.1	8.3	25.0	20.0

Unit 11 Elder/Junior Sheep (FS1103)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Permits Issued	1	0	0	0	1	2	1	0	1	1	2
Individuals Hunting	0	-	-	-	1	2	0	-	0	0	0
Animals Harvested	-	-	-	-	0	0	-	-	-	-	-
Success Rate (%)	-	-	-	-	0.0	0.0	-	-	-	-	-

Unit 12 Caribou -- Chisana (FC1205) -- Closed in 2022 due to conservation concerns

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Permits Issued	9	9	11	11	8	8	6	4	7	5	n/a
Individuals Hunting	8	7	8	7	8	3	3	3	4	1	n/a
Animals Harvested	2	3	2	0	1	0	2	1	3	0	n/a
Success Rate (%)	25.0	42.9	25.0	0.0	12.5	0.0	66.7	33.3	75.0	0.0	n/a

Table 1. Federal Subsistence Registration Permits in Wrangell-St. Elias NPP, 2012-2022 (cont.)

Unit 12 Elder Sheep (FS1201)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Permits Issued	13	9	9	7	11	12	14	14	12	13	8
Individuals Hunting	3	3	5	3	6	4	8	6	4	6	4
Animals Harvested	0	0	1	0	1	1	0	0	1	0	0
Success Rate (%)	0.0	0.0	20.0	0.0	16.7	25.0	0.0	0.0	25.0	0.0	0.0

Unit 12 Elder/Junior Sheep (FS1204)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Permits Issued	1	0	0	0	0	0	0	0	0	0	1
Individuals Hunting	0	-	-	-	-	-	-	-	-	-	0
Animals Harvested	-	-	-	-	-	-	-	-	-	-	-
Success Rate (%)	-	-	-	-	-	-	-	-	-	-	-

Source: Federal Subsistence Permit Database.

* 2022 data are as of 1/5/2023.

Note: Success rate is calculated based on the number of individuals hunting, not total permits issued.

Table 2. Joint State-Federal Permits for the Fall Moose Hunt in Portions of Units 11 and 12 (RM291), 2012-2022

All Hunters

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Permits Issued	253	246	296	250	277	244	250	277	314	282	340
Individuals Hunting	164	151	191	142	179	145	155	158	187	162	197
Moose Harvested	23	19	20	20	23	19	23	21	27	24	16
<i>Unit 11 Harvest</i>	16	10	11	9	17	15	17	14	12	16	12
<i>Unit 12 Harvest</i>	7	9	9	11	6	4	6	7	15	8	4
Success Rate (%)	14.0	12.6	10.5	14.1	12.8	13.1	14.8	13.3	14.4	14.8	8.1

Federally Qualified Subsistence Users

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Permits Issued	158	135	154	168	176	155	171	173	173	167	175
Individuals Hunting	94	74	92	89	106	88	108	102	107	93	88
Moose Harvested	19	15	15	14	18	15	19	21	14	16	10
Success Rate (%)	20.2	20.3	16.3	15.7	17.0	17.0	17.6	20.6	13.1	17.2	11.4

Source: Email from ADF&G Tok on 1/9/2023.

Notes: (1) 2022 figures are as of 1/9/2023.

(2) Success rate is based on the number of individuals hunting, not the number of permits issued.

(3) Data for Federally Qualified Subsistence Users excludes records with ambiguous residency (e.g., urban mailing address and rural resident community or local mailing address and non-local resident community).

Traditional Knowledge, Ethnographic, and Subsistence Projects:

Work is underway on several traditional knowledge, ethnographic and subsistence projects, with most of the work being carried out by project partners through cooperative agreements.

Ahtna Ethnographic Overview and Assessment (EOA): This baseline cultural anthropology study includes an annotated inventory of ethnographic and related materials relevant to the Ahtna Athabascans; a narrative synopsis of our current understanding of these materials, with a focus on connections to Wrangell-St. Elias; and an analysis of data gaps and additional research needs. It is being carried out through a cooperative agreement with the Ahtna Intertribal Resource Commission and is scheduled for completion in fall 2023.

Documenting Traditional Ecological Knowledge about Historic Dynamics of Caribou Herds Associated with Wrangell-St. Elias: This project includes a literature review/data mining regarding traditional ecological knowledge (TEK) and historic information (e.g., seasonal movement patterns; and herd sizes, interactions, and habitat relations) of the three caribou herds (Chisana, Mentasta and Nelchina) that spend time in Wrangell-St. Elias as well along with new traditional knowledge interviews about caribou with knowledgeable long-term residents. Topics covered in the new interviews include long-term knowledge about seasonal movement patterns, herd sizes, and observations regarding caribou in relation to the larger ecosystem and the other caribou herds. The information will be summarized in a report designed to inform management decisions about caribou. This project is being carried out through a cooperative agreement with the Ahtna Intertribal Resource Commission and is scheduled for completion in late 2023.

Local Knowledge of Winter Environmental Conditions and their Impacts on Subsistence Access: This project documents local knowledge of winter environmental conditions through interviews with trappers and other Copper Basin residents who are out on the landscape during the winter about environmental conditions (e.g., temperatures, snow and ice conditions), how conditions have changed over their lifetimes/careers, other traditional ecological knowledge about winter environmental conditions, and the way in which these conditions have impacted access to subsistence resources. The information gathered during the interviews is being summarized in a technical report. This project is being carried out through a cooperative agreement with the Ahtna Intertribal Resource Commission and is scheduled for completion in mid-2023.

Quantify Changing Environmental Conditions to Inform Decisions about Allowed Means of Winter Access to Subsistence Resources: This project quantifies temporal and spatial patterns of river freeze-up, winter ice conditions, and break-up using remote sensing data and evaluates the implications of changing environmental conditions for temporal and spatial patterns of winter subsistence access in the park. The analysis focuses on the Copper and Chitina Rivers. In addition to a peer-reviewed journal publication, interpretive products for the general public will be produced. This project is being completed through a cooperative agreement with the University of Alaska Fairbanks (UAF) and is scheduled for completion in in late 2023.

Assessing Subsistence Harvests in Upper Copper River Communities: Chistochina and Mentasta residents will be surveyed in early 2023 about their harvest and use of wild fish, wildlife and plant resources, and Slana and Nabesna Road residents will be surveyed in early 2024. This is a cooperative project being carried out in collaboration with the Alaska Department of Fish and Game and the Ahtna Intertribal Resource Commission.

Report updated 1/16/2023