

United States Department of the Interior

NATIONAL PARK SERVICE

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WRANGELL-ST. ELIAS NATIONAL PARK AND PRESERVE SUBSISTENCE AND ANTHROPOLOGY REPORT

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Federal Subsistence Hunting Permits

Federal subsistence permits for hunts within Wrangell-St. Elias are issued by park staff in Chitina, Copper Center, McCarthy/Kennecott, and Slana along with staff from Tetlin National Wildlife Refuge in Tok. As of December 16, 2021, 212 federal registration permits had been issued for goat, moose, and sheep hunts in Unit 11 and for sheep and caribou hunts taking place primarily in Wrangell-St. Elias portion of Unit 12. See Table 1 for a summary of the permits issued for these hunts. Note that the Unit 11 winter moose hunt and the Unit 11 goat hunt were still open when this report was prepared. The table does not include 55 Unit 13 moose permits and 135 Unit 13 caribou permits issued at the Slana Ranger Station and numerous joint state/federal permits (RM291) issued by Wrangell-St. Elias staff for the moose hunt for portions of Units 11 and 12 in the northern part of the park. Permit and harvest numbers for the RM291 hunt area are shown in Table 2.

<u>Chisana caribou herd hunt:</u> The Chisana caribou herd hunt takes place in Unit 12 east of the Nabesna River and Glacier and south of the Winter Trail. Consistent with the management plan for the herd, the 2021 harvest quota was set at 7 bull caribou, 5 permits were issued, 1 person hunted, and no caribou were harvested.

<u>South Unit 11 winter moose hunt:</u> A winter moose hunt in the southern portion of Unit 11 was established in 2014. The season is November 20 to January 20. The quota for the 2021-22 season is 7 bulls. As of December 16, a total of 7 permits had been issued.

Table 1. Federal Subsistence Registration Permits in Wrangell-St. Elias NPP, 2011-2021

Unit 11 Goat (FG1101)

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021* |
|--------------------------|------|------|------|------|------|------|------|------|------|------|-------|
| Permits Issued | 53 | 42 | 30 | 31 | 29 | 22 | 26 | 30 | 27 | 27 | 20 |
| Individuals Hunting | 14 | 6 | 7 | 10 | 6 | 4 | 3 | 8 | 8 | 7 | 1 |
| Animals Harvested | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Success Rate (%) | 7.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 12.5 | 0.0 | 0.0 |

Unit 11 Moose -- Fall Hunt, since 2012 remainder only (FM1106)**

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021* |
|---------------------|------|------|------|------|------|------|------|------|------|------|-------|
| Permits Issued | 217 | 189 | 146 | 123 | 128 | 138 | 132 | 144 | 107 | 156 | 140 |
| Individuals Hunting | 131 | 75 | 78 | 70 | 70 | 75 | 72 | 85 | 45 | 70 | 70 |
| Animals Harvested | 27 | 9 | 12 | 10 | 13 | 16 | 13 | 12 | 10 | 15 | 10 |
| Success Rate (%) | 20.6 | 12.0 | 15.4 | 14.3 | 18.6 | 21.3 | 18.1 | 14.1 | 22.2 | 21.4 | 14.3 |

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

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021* |
|--------------------------|------|------|------|------|------|------|------|------|------|------|-------|
| Permits Issued | n/a | n/a | n/a | 32 | 17 | 20 | 14 | 11 | 8 | 8 | 7 |
| Individuals Hunting | n/a | n/a | n/a | 3 | 3 | 4 | 4 | 2 | 2 | 3 | - |
| Animals Harvested | n/a | n/a | n/a | 0 | 0 | 1 | 0 | 0 | 0 | 1 | - |
| Success Rate (%) | n/a | n/a | n/a | 0.0 | 0.0 | 25.0 | 0.0 | 0.0 | 0.0 | 33.3 | - |

Unit 11 Elder Sheep (FS1104)

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021* |
|--------------------------|------|------|------|------|------|------|------|------|------|------|-------|
| Permits Issued | 23 | 32 | 20 | 25 | 25 | 32 | 34 | 38 | 34 | 38 | 26 |
| Individuals Hunting | 10 | 11 | 5 | 10 | 8 | 12 | 13 | 18 | 14 | 14 | 11 |
| Animals Harvested | 0 | 1 | 0 | 1 | 3 | 3 | 4 | 1 | 1 | 1 | 3 |
| Success Rate (%) | 0.0 | 9.1 | 0.0 | 10.0 | 37.5 | 25.0 | 30.8 | 5.6 | 7.1 | 7.1 | 27.3 |

Unit 11 Elder/Junior Sheep (FS1103)

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021* |
|--------------------------|------|------|------|------|------|------|------|------|------|------|-------|
| Permits Issued | 2 | 1 | 0 | 0 | 0 | 1 | 2 | 1 | 0 | 1 | 1 |
| Individuals Hunting | 1 | 0 | 1 | 1 | - | 1 | 2 | 0 | - | 0 | 0 |
| Animals Harvested | 0 | - | - | - | - | 0 | 0 | 1 | - | - | - |
| Success Rate (%) | 0.0 | - | 1 | - | - | 0.0 | 0.0 | - | - | - | - |

Unit 12 Caribou -- Chisana (FC1205) (Began in 2012)

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021* |
|---------------------|------|------|------|------|------|------|------|------|------|------|-------|
| Permits Issued | n/a | 9 | 9 | 11 | 11 | 8 | 8 | 6 | 4 | 7 | 5 |
| Individuals Hunting | n/a | 8 | 7 | 8 | 7 | 8 | 3 | 3 | 3 | 4 | 1 |
| Animals Harvested | n/a | 2 | 3 | 2 | 0 | 1 | 0 | 2 | 1 | 3 | 0 |
| Success Rate (%) | n/a | 25.0 | 42.9 | 25.0 | 0.0 | 12.5 | 0.0 | 66.7 | 33.3 | 75.0 | 0.0 |

Table 1. Federal Subsistence Registration Permits in Wrangell-St. Elias NPP, 2011-2021 (cont.)

Unit 12 Elder Sheep (FS1201)

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021* |
|---------------------|------|------|------|------|------|------|------|------|------|------|-------|
| Permits Issued | 9 | 13 | 9 | 9 | 7 | 11 | 12 | 14 | 14 | 12 | 13 |
| Individuals Hunting | 3 | 3 | 3 | 5 | 3 | 6 | 4 | 8 | 6 | 4 | 6 |
| Animals Harvested | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 |
| Success Rate (%) | 0.0 | 0.0 | 0.0 | 20.0 | 0.0 | 16.7 | 25.0 | 0.0 | 0.0 | 25.0 | 0.0 |

Unit 12 Elder/Junior Sheep (FS1204)

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021* |
|---------------------|------|------|------|------|------|------|------|------|------|------|-------|
| Permits Issued | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Individuals Hunting | 1 | 0 | - | - | - | - | 1 | - | - | - | - |
| Animals Harvested | 0 | - | - | - | - | - | 1 | - | - | - | - |
| Success Rate (%) | - | - | - | - | 1 | - | 1 | 1 | - | - | - |

Source: Federal Subsistence Permit Database.

Notes: 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), 2012-2021

All Hunters

| | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|--------------------------------|------|------|------|------|------|------|------|------|------|------|
| Permits Issued | 253 | 246 | 296 | 250 | 277 | 244 | 250 | 277 | 316 | 282 |
| Individuals Hunting | 164 | 151 | 191 | 142 | 179 | 145 | 155 | 159 | 180 | 162 |
| Total Animals Harvested | 23 | 19 | 20 | 20 | 23 | 19 | 23 | 21 | 26 | 23 |
| Unit 11 Harvest | 16 | 10 | 11 | 9 | 17 | 15 | 17 | 14 | 10 | 14 |
| Unit 12 Harvest | 7 | 9 | 9 | 11 | 6 | 4 | 6 | 7 | 14 | 9 |
| Success Rate (%) | 14.0 | 12.6 | 10.5 | 14.1 | 12.8 | 13.1 | 14.8 | 13.2 | 14.4 | 14.2 |

Federally Qualified Subsistence Users

| | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|---------------------|------|------|------|------|------|------|------|------|------|------|
| Permits Issued | 158 | 135 | 154 | 168 | 176 | 155 | 171 | 172 | 173 | 167 |
| Individuals Hunting | 94 | 74 | 92 | 89 | 106 | 88 | 108 | 103 | 106 | 95 |
| Animals Harvested | 19 | 15 | 15 | 14 | 18 | 15 | 19 | 21 | 15 | 16 |
| Success Rate (%) | 20.2 | 20.3 | 16.3 | 15.7 | 17.0 | 17.0 | 17.6 | 20.4 | 14.2 | 16.8 |

Source: Emails from ADF&G Tok and RC012 from 2018 Alaska Board of Game Central/Southwest Region Meeting.

Notes: (1) 2021 figures are preliminary as of 12/9/2021.

- (2) Success rate is calculated 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).

^{* 2021} data are preliminary as of 12/16/2021.

^{**} From 2012 forward, the federal Unit 11 moose permit is for Unit 11 remainder only.

Traditional Knowledge, Ethnographic, and Subsistence Projects:

Work is underway on several ethnographic and subsistence projects. All projects are being supervised by the Wrangell-St. Elias cultural anthropologist, with much of the work being carried out by project partners through cooperative agreements.

Ahtna Ethnographic Overview and Assessment (EOA): This project will produce a report documenting Ahtna Athabascan connections to Wrangell-St. Elias. An EOA is a baseline cultural anthropological study that aims to document traditional associations between distinct cultural communities and landscapes, places or resources. This EOA will consist of 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. This project is being carried out through a cooperative agreement with the Ahtna Intertribal Resource Commission. Work on this project has been delayed, with completion currently anticipated in 2023.

Documenting Traditional Ecological Knowledge about Historic Dynamics of Caribou Herds Associated with Wrangell-St. Elias: The goals of this project are to conduct 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 as to conduct new traditional knowledge interviews about caribou with knowledgeable long-term residents. Topics to be covered in the traditional knowledge interviews may 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 completed through a cooperative agreement with the Ahtna Intertribal Resource Commission.

Local Knowledge of Winter Environmental Conditions and their Impacts on Subsistence Access:

The goals of this project are to document local knowledge of changing environmental conditions, and to evaluate implications for winter subsistence access. This will be accomplished by interviewing trappers and possibly 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 will be summarized in a report. This project is being completed through a cooperative agreement with the Ahtna Intertribal Resource Commission.

Quantify Changing Environmental Conditions to Inform Decisions about Allowed Means of Winter Access to Subsistence Resources: This project will quantify temporal and spatial patterns of river freeze-up, winter ice conditions, and break-up using remote sensing data and evaluate 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). Work has begun on preparing the remote sensing data for analysis. In addition, four time-lapse cameras collected daily images of the Copper River during winter 2020-2021 to help with the interpretation and validation of the satellite

imagery. One of the cameras is satellite-linked and will remain in place for two more winters. It uploads real-time images online on a daily basis through a partnership with the Fresh Eyes on Ice project at UAF. The satellite-linked camera will be in place for two more winters. The Copper River images from that project can be viewed at http://fresheyesonice.org/view-data/realtime-data/river-ice-camera/#a2677. (Note that this link has changed since the fall meeting report.)

Assessing Subsistence Harvests in Upper Copper River Communities: Planning is beginning on a project to survey residents of the upper Copper River communities of Chistochina and Mentasta about their harvest and use of subsistence resources, updating information most recently collected about a decade ago. This will be a cooperative project involving Wrangell-St. Elias National Park and Preserve, the Ahtna Intertribal Resource Commission, and the Alaska Department of Fish and Game Division of Subsistence.

New Hunting and Fishing Resources:

Two projects to provide additional information for people who harvest fish and wildlife in Wrangell-St. Elias are nearing completion. Both products are planned to be available for use in 2022.

- An online mapping tool will allow subsistence users and other park visitors to create georeferenced PDF (Portable Document Format) maps of areas of interest within Wrangell-St. Elias. These maps are designed for use on a GPS-enabled mobile device, such as a smart phone, and can be displayed on any PDF reader. When viewed in an installed mobile map application, each map is designed so that your location can be displayed on-screen in real time. The maps will show things such as land status (park, preserve, wilderness, non-NPS lands), roads, trails, game management unit boundaries, and hunt area boundaries. When finalized, this tool will be accessible through the map page of the park website: https://www.nps.gov/wrst/planyourvisit/maps.htm.
- A Users Guide to Hunting, Trapping and Fishing in Wrangell-St. Elias provides important information for people interested in harvesting fish and wildlife in Wrangell-St. Elias under State of Alaska regulations. It focuses on things that hunters, trappers, and fishers need to know about harvesting resources in Wrangell-St. Elias that might be different from other locations. Topics addressed include land status; eligibility and requirements for use of a hunting guide; license, salvage, and sealing requirements; trapping; fishing; food storage requirements and other bear safety recommendations; backcountry safety; and respecting private property. The answers to frequently asked questions and who to contact for more information are also provided. It is available both in print and on the park's website: https://www.nps.gov/wrst/planyourvisit/hunting-and-fishing.htm. Printed copies are available upon request.

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