

United States Department of the Interior

FISH AND WILDLIFE SERVICE Alaska Peninsula and Becharof National Wildlife Refuges P. O. Box 277 King Salmon, Alaska 99613 907-246-3339



Agency Report to:

Bristol Bay Federal Subsistence Regional Advisory Council

Public Meeting, Naknek, Alaska February 8-9, 2022

Federal Subsistence Caribou Hunts for GMU 9C remainder and 9E

The public hearing regarding the opening of FC0914 (9C Remainder) and FC0915 (9E) was conducted on June 24, 2021. No concerns regarding the opening were voiced by the public or by other Federal agencies or ADF&G. Subsequently the Refuge announced the 2021/2022 season on June 30, 2021 with season dates that matched the ADF&G season opening and closure dates of Aug 10, 2021-April 30, 2022. Because this is no longer a draw hunt, hunters can register any time from the announcement of the hunt through the closing date. To date, the Refuge has had 4 applicants and issued 3 FC0914 permits and 0 applicants for FC0915 permits.

For more information on in-season management of these hunts contact: Susan Alexander, USFWS, Alaska Peninsula/Becharof NWR, PO Box 277, King Salmon, AK 99613. Phone: 907-246-3339; e-mail: susan_alexander@fws.gov

Clarification of 9E Caribou Hunting Opportunity for 9C Residents

Shortly after the opening of these two hunts, it came to our attention that public understanding of the limitations on use of state TC505 caribou permits on federal land was lacking. Specifically, there appeared to be a lack of understanding that federal lands in Unit 9E were closed to 9C residents of King Salmon, Naknek, and South Naknek regardless of whether they held a state or federal permit.

In response, we initiated an additional outreach effort including new fliers, Facebook posts, and a public service announcement on KDLG radio, as well as direct communication with air taxi operators, tribal leaders, and partner agencies, both state and federal. This outreach effort provided all the same information on these two hunts as our initial outreach, but placed greater emphasis on residency limitations for hunting on federal land, regardless of the type of permit held.

For more information on in-season management of the these hunts contact: Susan Alexander, USFWS, Alaska Peninsula/Becharof NWR, PO Box 277, King Salmon, AK 99613. Phone: 907-246-3339; e-mail: susan_alexander@fws.gov

Staffing at Alaska Peninsula and Becharof NWR

Both the Refuge Mammal Biologist and Avian Biologist positions remains vacant since 2017 and 2020, respectively.

For more information on refuge staffing contact: Susan Alexander, USFWS, Alaska Peninsula/Becharof NWR, PO Box 277, King Salmon, AK 99613. Phone: 907-246-3339; e-mail: <u>susan_alexander@fws.gov</u>

COVID-19 and Fieldwork "Pause"

On September 22, 2021, the USFWS Acting Regional Director announced a pause to field work due to the rate of increases in COVID-19 cases across the state. The main emphasis of this decision was to avoid activities that increase the risk of needing emergency services or hospital care. On December 2, 2021 the Acting Regional Director identified criteria for reinstituting fieldwork based on 3 measures associated with ICU capacity and the average daily case count in Alaska. As of Dec 9, only 1 of the 3 metrics meet the required criteria for resuming fieldwork. Alaska Peninsula-Becharof NWR did not qualify for exemption to the criteria.

For more information on the USFWS response to COVID-19 contact: Bill Smith, USFWS, Alaska Peninsula/Becharof NWR, PO Box 277, King Salmon, AK 99613. Phone: 907-246-3339; e-mail: <u>William Smith@fws.gov</u>

Mammal Projects

Project: Moose Composition and Trend Surveys (GMUs 9C & 9E)

No Report. No Refuge surveys were conducted within the Nov 1-Dec 10 survey window due to the Regional Director's pause on fieldwork (see above).

For more information on moose monitoring contact: Bill Smith, USFWS, Alaska Peninsula/Becharof NWR, PO Box 277, King Salmon, AK 99613. Phone: 907-246-3339; e-mail: <u>William_Smith@fws.gov</u>

Habitat Projects

Project: Landscape Change and Shrubification Monitoring on the Alaska Peninsula

Detecting environmental change at multiple spatial and temporal scales is fundamentally important at Alaska Peninsula-Bechrof NWRs. The effect of climate change calls for improved long-term ecological data as a basis for science, policy, and decision making. Over at least the last three decades, changes in vegetation composition have occurred that have significant consequences for tundra environments. Specifically, the ability of woody shrub species to produce biomass has increased, leading to shrubs of greater maximum height. Spatial expansion has also occurred: latitudinal 'shrublines' have advanced and new recruitment has enabled progressive filling of patchy landscapes both at the expense of mosses and lichens. It's a phenomenon so common it has morphed into its own verb. "Shrubification" describes the expansion of shrubs across Alaska which might benefit species like moose and beaver, but pose challenges to animals like caribou, Alaska hare, and nesting shorebirds that are adapted to low-stature arctic vegetation.

During 2021 biologists from Alaska Peninsula-Becharof National Wildlife Refuge initiated a project to establish long-term monitoring (LTM) plots on the Alaska Peninsula, a dynamic transition zone between temperate maritime, Arctic tundra, and boreal forest ecosystems. Our objective is to provide a quantitative basis for evaluating ecological change in areas of maritime tundra, which have remained little studied compared to colder Arctic tundras. In addition to the LTM network, the field team also repeated several historical landscape photographs originally taken in August 1904 by U.S. Geological Survey. Initial results revealed striking patterns of both change and stability for different landscape elements and corroborated some of the greening (increasing) trends from the Refuge 2018 NDVI Trend Analysis. We will summarize baseline species richness, species frequency, species diversity (e.g., converse Simpson's diversity index), live cover, and canopy height to measure future change against and identify and interpret (where possible) emerging patterns and predicted trends in wildlife habitat.

For more information on habitat projects contact: Bill Smith, USFWS, Alaska Peninsula/Becharof NWR, PO Box 277, King Salmon, AK 99613. Phone: 907-246-3339; e-mail: <u>William_Smith@fws.gov</u>

Avian Projects

Project: Spring Ptarmigan Density, Alaska Peninsula

In the spring of 2022 the Refuge plans on resurveying established line transect surveys from 2015 to calculate density estimates to compare the relative abundance of male willow ptarmigan. We are interested in assessing if willow ptarmigan cycle here as elsewhere within their range. Secondary objectives included further investigation of ptarmigan distribution including relationship to habitat parameters, and refining survey methods. Our 2015 analysis of male only data calculated very low densities ranging from 0.022 to 0.028 male ptarmigan/hectare. We anticipate the 2022 survey will document an abrupt increase in ptarmigan in many areas on the Peninsula. Additional cooperation from Katmai National Park in the survey effort, will hopefully provide information on rock ptarmigan abundance on higher elevation park lands.

For more information on avian projects contact: Bill Smith, USFWS, Alaska Peninsula/Becharof NWR, PO Box 277, King Salmon, AK 99613. Phone: 907-246-3339; e-mail: <u>William_Smith@fws.gov</u>

Aquatic Projects

Project: Monitoring Lake Temperature at Varying Depths.

The primary purpose of this project is to acquire a long-term data series on the temperature of selected lakes. Lake temperature was recorded every hour at various depths between the lake surface and 100m. Monitoring sites were visited once or twice per year to extract data and to service monitoring equipment. With enough time, this data will be used to document long term temperature regimes in selected lakes and may help support management decisions regarding research in relation to climate change. Monitoring stations were deployed in upper Ugashik Lake, Mother Goose Lake, Needle Lake, and Becharof Lake in the fall of 2011. Unfortunately, the Becharof Lake monitoring station could not be relocated.

For more information on aquatic projects contact: Bill Smith, USFWS, Alaska Peninsula/Becharof NWR, PO Box 277, King Salmon, AK 99613. Phone: 907-246-3339; e-mail: <u>William_Smith@fws.gov</u>

Visitor Services Programs

Due to the COVID-19 pandemic and short staffing, the Refuge has been only able to offer minimal educational and interpretive programs. The King Salmon Interagency Visitor Center was open this past season for walk-up window service only and has been closed for the winter since November 1st. We look forward to working with local school districts this winter to develop distance learning opportunities for Refuge staff to interact with students.

For more information on the visitor services program contact: Sarah Lang, USFWS, Alaska Peninsula/Becharof NWR, PO Box 277, King Salmon, AK 99613. Phone: 907-246-1201; e-mail:<u>Sarah Lang@fws.gov</u>