



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
Phone: 907-246-3339

Agency Report to:

Bristol Bay Federal Subsistence Regional Advisory Council

Public Meeting, Dillingham, Alaska

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

The public hearing regarding the opening of FC0914 and FC0915 was conducted on 14 April, 2020. No concerns regarding the opening were voiced by the public or by other Federal agencies or Alaska Department of Fish & Game. Subsequently the season was announced with season dates that matched the Alaska Department of Fish & Game season dates.

The harvest opportunity will be administered as a registration hunt. Additionally, almost 300 TC505 permits were issued by Alaska Department of Fish & Game. The announcement of a Federal season allows TC505 permit holders to harvest on Federal lands as allowed by federal regulations.

Cultural and Educational Subsistence Permits

No cultural or educational subsistence permits were requested.

Staffing at Alaska Peninsula and Becharof National Wildlife Refuge

Danny Moss will be reporting in November as the new Deputy Refuge Manager. Danny is currently the Refuge Manager of Mississippi Sandhill Crane National Wildlife Refuge. He is an experienced manager and lifelong hunter and fisherman. He is very excited to be realizing the dream of moving to Alaska.

Subsistence Biologist Kevin Payne left the Refuge staff September 12, 2020 after a decade of service. He will be sorely missed.

The Refuge Mammal and Avian Biologist positions are vacant.

The Refuge Environmental Educator position is currently vacant.

We do not know at this time when any of our current vacancies might be filled.

Mammal Work

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

The Refuge continues to work collaboratively with Alaska Department of Fish & Game and Katmai National Park on moose composition and trend survey efforts in units 9C and 9E by sharing U.S. Fish and Wildlife Service aviation resources (plane/pilot) with Alaska Department of Fish & Game biologists to fly both Refuge and State trend sites during the fall moose composition survey period (Nov 01 – Dec 10). All Refuge survey data will be provided to King Salmon Alaska Department of Fish & Game Area Biologists for compilation and analysis into the larger dataset of GMU 9 moose abundance and composition.

Project: Moose Reproduction and Survival Study

The Refuge will continue to assist Alaska Department of Fish & Game in tracking radio-collared moose on the Peninsula, but will not be able to undertake any large complex mammal studies until the big game/mammal biologist position can be filled at Alaska Peninsula-Becharof National Wildlife Refuge.

Mammal Program Direction

Future work will address knowledge gaps in small mammal and Alaska hare distribution, abundance, habitat use, and the impacts of potential climate change. Upcoming moose and caribou studies will focus on habitat use, availability, carrying capacity, and habitat and population change.

For more information on the Refuges' mammal programs contact: Dan Pepin, U.S. Fish and Wildlife Service, Alaska Peninsula/Becharof National Wildlife Refuge, P.O. Box 277, King Salmon, AK 99613. Phone: 907-246-1233; e-mail: Dan_Pepin@fws.gov

Avian Work

Project: Alaska Landbird and Breeding Bird Monitoring Surveys

The Refuge participates in the Alaska Landbird Monitoring Survey (ALMS) and a Breeding Bird Survey (BBS) route annually. These surveys document breeding birds and their habitats. Data from ALMS is utilized by the Refuge in addition to being sent to the U.S. Geological Service's Alaska Science Center for storage and further analysis at the state level. The Breeding Bird Surveys are a continent-wide program administered jointly by the U.S. Geological Service – Patuxent Wildlife Research Center and Environment Canada's Canadian Wildlife Service. Participation in these surveys aligns with the Refuge's mission to assess the presence, relative abundance, distribution, and trends in populations of wildlife and plants.

Both ALMS and BBS were cancelled in 2020 due to COVID-19. We hope to resume data collection for these long-term datasets in 2021.

Project: Tree Swallow Nest Box Monitoring Project

The Alaska Peninsula represents the southwestern edge of the tree swallow breeding range in Alaska; global declines in aerial insectivore populations have prompted increased study of these species, especially at range edges where declines are likely to be more pronounced.

In recent years, the Refuge expanded the existing nest box monitoring efforts in participation with The Alaska Swallow Monitoring Network, part of the Alaska Songbird Institute. Initial efforts to monitor tree swallows began in King Salmon in 2007. Efforts increased in 2014 through 2019. This project focuses on nest box occupancy, nesting phenology, nesting success rates, and recapture data collected from banding efforts. The Tree Swallow project incorporates a strong citizen science component, geared towards community engagement and education.

A multiagency effort is underway to analyze the tree swallow data collected in Fairbanks, Anchorage, McCarthy, Bethel, and King Salmon.

Avian Program Direction

The Refuge plans to focus avian survey efforts on the most highly ranked species: Beringian marbled godwit, willow ptarmigan, and endemic landbirds. Plans are underway for marbled godwit population estimates, continuation of willow ptarmigan surveys, and a study to determine the density of endemic song sparrows.

For more information on avian projects contact: Jaime Welfelt, U.S. Fish and Wildlife Service, Alaska Peninsula/Becharof National Wildlife Refuge, P.O. Box 277, King Salmon, AK 99613. Phone: 907-246-1205; e-mail: jaime_welfelt@fws.gov

Habitat Work

Project: Normalized Difference Vegetation Index (NDVI)

From 2018-2019 Alaska Peninsula-Becharof National Wildlife Refuge completed a measurement of the trend in satellite-derived Normalized Difference Vegetation Index (NDVI) to assess gradual and punctuated changes on the landscape (e.g., shrub expansion, wetland drying, landslides, erosion, and volcanic activity). Significance levels from three trend analyses were calculated for the maximum and median NDVI time-series analyses by unit, vegetation class, and elevation. Trends and changes in the satellite-observed NDVI provides a spectral metric of vegetation productivity or “greenness” documenting gradual and abrupt changes on the landscape. The NDVI assessment will provide refuge-wide spatial data products that depict recent changes in vegetation greenness and provide historical context for assessing and monitoring future ecological change.

Project: Wetland Habitat Change

Beginning in 2019 the Refuge began working with ABR Inc. to quantify change in lowland wetlands and waters within the Ugashik drainage using georectified, high-resolution imagery for three time-steps (circa 1950, 1980, and 2015). Using the time-series imagery we identified wetland change-detection points from 1950-2015 along a stratified-random grid system. A subset of change-detection points were selected for field visits in June and July of 2019 to assess the range of conditions present along different hydrologic and habitat change gradients. We are currently evaluating field data to confirm the relationship between existing wetland condition and selected wetland-stability indicators. The results of this study will provide information on possible drying trends observed through a retrospective remote-sensing approach to help predict future outcomes and provide a detailed framework to develop future Refuge wetland monitoring programs.

Upcoming Habitat Priorities

Upcoming projects have been proposed and will be conducted to document and analyze specific environmental and ecosystem characteristics. These projects include monitoring and analysis of climate variables, snow and ice cover persistence, soil temperature and permafrost distribution/change, lake and stream temperature and chemistry changes, and long term changes in vegetation and wetland composition and distribution.

For more information on habitat projects contact: Bill Smith, U.S. Fish and Wildlife Service, Alaska Peninsula/Becharof National Wildlife Refuge, P.O. Box 277, King Salmon, AK 99613. Phone: 907-246-1213; e-mail: William_Smith@fws.gov

Aquatic Work

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. The Becharof Lake station could not be relocated. The remaining stations are active.

For more information on aquatic projects contact: Bill Smith, U.S. Fish and Wildlife Service, Alaska Peninsula/Becharof National Wildlife Refuge, P.O. Box 277, King Salmon, AK 99613. Phone: 907-246-1213; e-mail: William_Smith@fws.gov

Visitor Services Programs

Due to the COVID-19 pandemic, the Refuge was unable to offer any educational or interpretive programs, or partner with any youth organizations to provide programming this summer. The King Salmon interagency Visitor Center has also remained closed since March 17th. We look forward to interacting with students in the coming school year.

For more information on the visitor services program contact: Sarah Griffith, U.S. Fish and Wildlife Service, Alaska Peninsula/Becharof National Wildlife Refuge, P.O. Box 277, King Salmon, AK 99613. Phone: 907-246-1201; e-mail: Sarah_Lang@fws.gov