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

Bristol Bay Regional Advisory Council Report
Winter 2021

Refuge Biological Program Staffing

- 3 of the 4 biologist positions in King Salmon are vacant, including the mammals/big game biologist position which has now been vacant for 4-years. The refuge continues to seek permissions to fill all the vacant positions on our organizational chart.

COVID

- The pandemic highly restricted the refuge's 2020 field season and will likely impact our operations in 2021. We will work through the USFWS field approval process to garner permission for biological surveys conducted within approved COVID guidelines.

Aerial Moose Composition Surveys

- In November and early December 2020, pilot Dan Pepin and Supervisory Biologist Bill Smith flew 7 moose composition surveys in GMU 9C and 9E. We experienced excellent snow cover and survey conditions on 2020. We submitted the moose data to the ADFG Area 9 biologist in King Salmon for analysis of population trends.
    - To continue to provide data on moose population change near the Chignik's, we attempeted to fly the Black Lake trend area again in 2020, but were unable to due to adverse weather.
    - The refuge reviewed the 3-year comp trend data on Big Creek and the Park Border trend areas and provided the data to OSM who is reviewing a Fall RAC proposal for closure of the December moose hunt opportunity on 9C portion from the south draining to the Naknek.

Aerial Bear Streamside Composition Surveys

- In August 2020 the refuge assisted ADFG resurvey historic bear composition surveys.

Caribou Winter Forage Monitoring

- In 2021 the refuge will identify use-areas of the NAP caribou winter range to identify areas for establishing longterm habitat condition monitoring locations of lichen and sedge winter forage-bases.

Long Term Habitat Change Monitoring— The refuge is working w/ ABR Inc from Fairbanks

to monitor decadal habitat change in the summer of 2021.

- Repeat Photos: Photographic monitoring will duplicate the location and orientation of historical images to the greatest extent possible for both qualitative and quantitative monitoring of change, including shrub expansion, glacial retreat, thermokarst, water-level and waterbodies changes, coastal erosion, and recovery after disturbance
- Monitoring Plots: We will establish 20 new plots and quantitatively measure vegetation at 1m intervals along 3 sampling lines using the point-intercept method recording all vegetation (live or dead) and ground-cover (e.g., rocks, bare soil).

Water Temperature Monitoring

- Lakes: Upper Ugashik, Mother Goose and Needle Lakes have been continually monitoried since 2012. We plan on reestablishing our lost monitoring array on Becharof in 2021

    - Set Netters, Fish Kills and Water Temperture: After 2019 salmon kills, the refuge has worked with Ugashik set-netters to provide our lake temperature data to the Bristol Bay Science and Research Institute and Cook InletKeepers to asses temperature trends on major salmon spawning lakes on the Northern Alaska Peninsula.

    - Stream Tempertures: The refuge will initiate a longterm stream temperature and dissolved oxygen monitoring program in the coming years to identify changes over time related to Chinook and Coho salmon spawning reds on Big Creek, King Salmon River (south); and King Salmon River (Ugashik/Mother Goose).