



UNITED STATES DEPARTMENT OF THE INTERIOR

FISH AND WILDLIFE SERVICE
Izembek National Wildlife Refuge
P. O. Box 127
Cold Bay, Alaska 99571



**Federal Subsistence Activity Report
Izembek National Wildlife Refuge, September 2021 – January 2022**

CARIBOU

Federal Subsistence Hunt—Unit 9D (Southern Alaska Peninsula)

The Izembek NWR 2021/22 Federal Subsistence Caribou Hunt in Unit 9D is split into two hunting periods. The first runs from August 01-September 30, 2021. The second half begins on November 15 and ends on March 31, 2022. These dates run concurrently with the Alaska Department of Fish & Game (ADF&G) sport hunt. ADF&G supported mirroring the state resident harvest regulations, therefore, the harvest limit of caribou in Unit 9D is three. To date there have not be any harvest reports submitted to the refuge.

Federal Subsistence Hunt – Unimak Unit 10

The Federal Subsistence Board approved a hunt for False Pass residents on Unimak to be taken between August 15 and October 15, 2021. The Alaska Department of Fish & Game supported an increase of hunter harvest from a total of 3 bull to a total of 5 bull caribou in Unit 10. Only 10 permits were allotted, five permits issued, and 3 caribou were harvested.

BROWN BEAR

Annual Brown Bear Stream Survey

The 2021 brown bear stream survey took place over 6 days from August 31 through September 7. The survey covered major watersheds on Izembek NWR and Unimak Island, where bears are likely to be concentrated while feeding on salmon runs.

The minimum population count for the Izembek area was 162 bears, which was made up of 89 single bears (54.9% of total), 21 sows with cubs (13.0%) and 52 cubs (32.1%). Of the 52 cubs, 17 were cubs of the year (32.7%), 28 were yearlings (53.8%) and 7 were 2 ½ year-old cubs (13.5%).

Compared to counts from 2020, the total count of brown bears at Izembek decreased by 3.5% (from 168 to 162), the count of single bears was the same (89), the count of sows with cubs, or number of litters, decreased by 19.2% (from 26 to 21), and the number of cubs decreased by 1.9% (from 53 to 52). The count of observed cubs of the year decreased (from 23 to 17), the

count of yearling cubs stayed the same (at 28), and the number of 2 ½ year-old cubs increased (from 2 to 7).

The minimum population count for the Unimak Island area was 108 bears (Table 3), which consisted of 72 single bears (66.7% of total), 12 sows with cubs (11.1%) and 24 cubs (22.2%). Of the 24 cubs, 5 were cubs of the year (20.8%), 12 were yearlings (50.0%) and 7 were 2 ½ year-old cubs (29.2%).

Compared to counts from 2020, the total Unimak brown bear count showed a decrease of 18.2% (from 132 to 108), the numbers of single bears increased by 1.4% (from 71 to 72), the count of sows with cubs decreased by 42.9% (from 21 to 12), and the count of cubs decreased by 40.0% (from 40 to 24). Within cub age classes, the number of cubs of the year decreased (from 17 to 5), yearlings decreased (from 15 to 12), and the number of 2 ½ year-old cubs decreased (from 8 to 7).

It is important to note that this survey may be used to understand the minimum number of bears present in the area and general population trends, but that it is not intended for use as a population estimate. Several variables can account for incomplete detection of bears during aerial surveys, including the time of day, individual observers, weather, flight altitude, vegetative cover, and tidal stage.

WATERFOWL

Brant Age Ratio Survey

Due to the ongoing pandemic, the Brant Age Ratio (Productivity) Survey was delayed and reduced in scale. USFWS employees were scheduled to travel from King Salmon, Anchorage, and Fairbanks to assist Izembek Staff with the survey, but travel was cancelled due to safety concerns. Izembek staff received approval to conduct a reduced-scale survey that was confined entirely to shore-based operations, rather than boat observations that were used in the past. Over the course of 7 days, 5 staff members traveled to locations along Izembek Lagoon and counted and aged 8,911 birds to understand the ratios of juvenile and adult birds in the population. Data were shared with USGS and used to develop a modeled estimate of productivity of the Pacific black brant population. While the long-term trend indicates a slow decline in brant productivity, 2021 appears to have been a productive year for brant and age ratios were higher than in 2020. Data are available for viewing and download here: [Annual Data and Model-based Estimates of Pacific Black Brant Age Ratios - U.S. Geological Survey](#)

Waterfowl Commercial Guiding

In 2021, Izembek NWR issued permits to 4 separate commercial hunt guide operations, which permits guiding clients using refuge lands. Each operation reports the number of client use days at the conclusion of the hunting season, which are the number of days a hunter was taken on the refuge by a commercial guide. Since 2009, the number of reported client use days has increased.

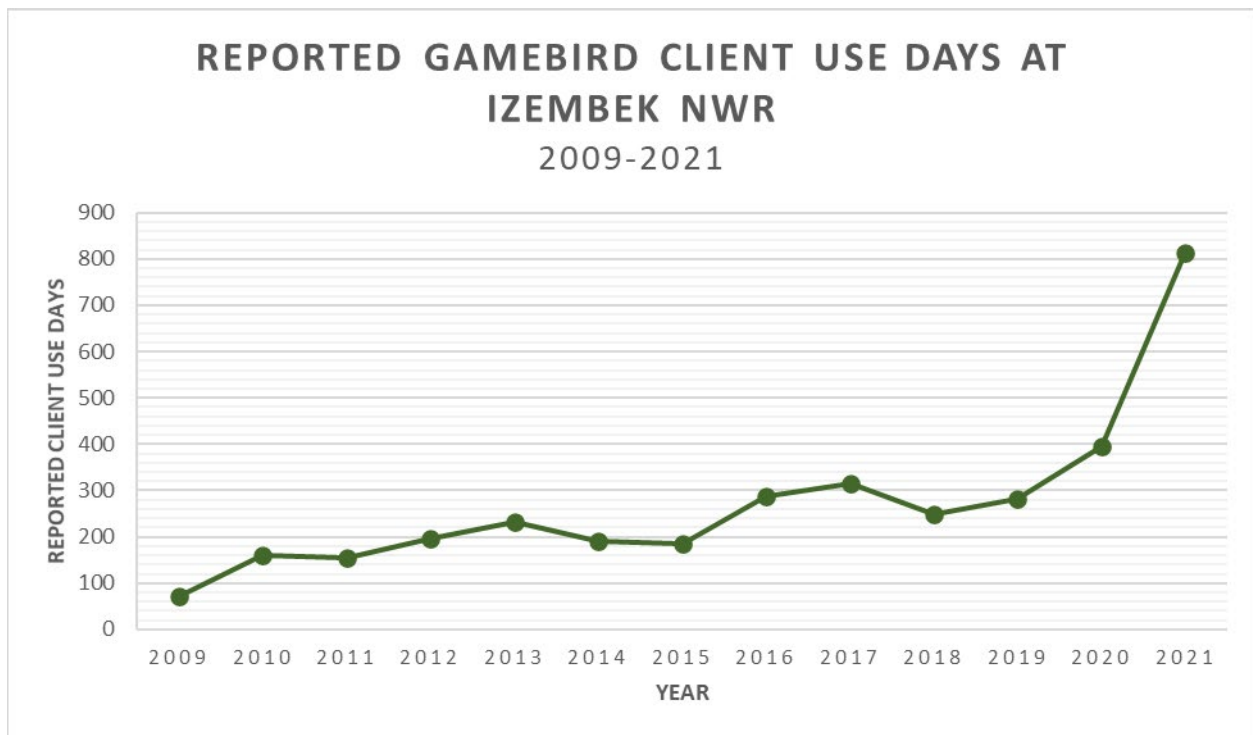


Figure 1. Line chart depicting the total number of reported client use days (CUD) by commercial gamebird guiding operations from 2009 through 2021. Client use days are the number of days a hunter was taken on the refuge by a commercial guide, so a single trip onto the refuge will contribute multiple client use days when multiple clients are guided at once, and multiple trips by the same client on the same day will only constitute a single day. Therefore, it is important to note that this is merely an index of commercial use of the refuge, as it illustrates the number of days a client was guided on the refuge, but does not account for the areas hunted, methods used, birds harvested, or amount of time spent on the refuge.

HABITAT

Eelgrass Abundance and Productivity and Monitoring

Due to COVID safety concerns, the full eelgrass survey of Izembek Lagoon was cancelled. However, Retired USGS Research Biologist David Ward spent a week in Cold Bay training staff on how the survey is conducted. Although the lagoon-wide survey was cancelled, Staff surveyed sampling transects at Grant Point, which has been done in spring and summer since 2007.

Invasive Species Inventory

USFWS Staff from the Invasive Species Program conducted surveys on and around Izembek and Alaska Peninsula National Wildlife Refuges during the summer of 2021. Surveys included a sampling of roadways for terrestrial invasive species, major bodies of water for invasive aquatic species, and surveying for invasive European Green Crab in Cold Bay. Surveys uncovered no species of high concern on Izembek NWR or signs of European Green Crab. However, several populations of the aggressive and invasive Orange Hawkweed, Canada Thistle, and Oxeye Daisy were found within the City of Cold Bay.

During the summer of 2022, Izembek Staff and the Invasive Species Program members hope to work with the community to compile a treatment plan for invasive species at Cold Bay. In addition, Izembek staff will be reaching out to the community of King Cove to share information on the project and discuss potential opportunities for partnering and conducting similar surveys around King Cove. Early detection and treatment of invasive species, which can have severe ecological consequences for habitat and wildlife, will reduce the likelihood of spread into remote and wilderness areas of the refuges.

UPCOMING WORK

Pacific Flyway Winter Brant Survey

Staff from Migratory Bird Management, based out of the U.S. Fish and Wildlife Service Regional Office in Anchorage, plan to conduct the Winter Brant Survey at Izembek and the Sanak Islands in late January and early February. Aerial surveys of wintering Pacific black brant at Izembek NWR have been conducted annually since the winter of 1980-1981. The survey represents the Alaska component of the Pacific Flyway Winter Brant Survey, which is a composite of winter counts from all the Pacific coastal states, Baja and western mainland Mexico, and British Columbia, documenting winter distribution, abundance, and population trend of brant.

Midwinter Caribou Survey

The midwinter caribou survey of the Southern Alaska Peninsula Caribou Herd (SAPCH) and the Unimak Caribou Herd (UCH) is planned for February 21 – March 4, 2022.