

# United States Department of the Interior

FISH AND WILDLIFE SERVICE Togiak National Wildlife Refuge P.O. Box 270 Dillingham, Alaska 99576 Phone 907-842-1063 Fax 907-842-5402



# INFORMATION BULLETIN - September 2025

#### Aerial Salmon Survey Contact: Truett Cawlfield

Togiak Refuge has initiated aerial surveys of the Salmon River, which flows into the Kuskokwim Bay. The aim of this survey is to establish a baseline for salmon run timing and run size for this system. A weir will enumerate escapement on the Salmon River from 2023-2027 and is managed by the Kenai Fish and Wildlife Conservation Office, who is partnering with the Togiak Refuge staff on this project. The weir will be utilized to ensure the accuracy and precision of aerial surveys.

## Arctic Char Population Inventory Contact: Truett Cawlfield

Togiak Refuge has developed a multi-year study to inventory Arctic char populations throughout the Refuge. This species was previously confirmed to occur in 27 lakes. Since the beginning of the study 36 lakes have been sampled, and Arctic char occurrence has been documented in 17 new lakes. We have collected size and genetic information from 374 fish and provided the UAF museum with voucher specimens. If you have any first-hand knowledge of small or unique Arctic char populations and would be willing to share that information please contact Truett Cawlfield at the Togiak Refuge office.

#### Mulchatna Caribou Contact: Truett Cawlfield

Togiak Refuge assisted ADF&G with telemetry and law enforcement flights, satellite data acquisition, data entry and database management. A July 2025 post-calving photo survey for the Mulchatna herd was conducted in cooperation with ADF&G staff.

Togiak Refuge Manager, under authority delegated by the Federal Subsistence Board, closed caribou hunting and closed Federal public lands in the RC503 hunt area for caribou hunting. We envision hunting will remain closed in line with the ADF&G moratorium in place for the Mulchatna Caribou Herd.

### Nushagak Peninsula Caribou Contact: Truett Cawlfield

A photocensus of the Nushagak Peninsula Herd on July 7, 2025 found a minimum of 643 caribou in 7 groups, grown from the 2024 minimum count of 589. A composition survey in early October 2024 estimated 30 bulls and 58 calves per 100 cows. The calf to cow ratio was less than the October 2023 estimate of 62.7. The bull to cow ratio declined 2.7 points from the 2023 estimate.

The Nushagak Peninsula Caribou Planning Committee met via teleconference on July 17, 2025 to review results of previous hunts, population and lichen monitoring, and the harvest strategy. Hunters reported

taking 9 caribou (5 bulls and 4 cows) during the 2024-2025 season.

#### **Moose** Contact: Truett Cawlfield

In 2025 long term monitoring of radio collared moose in units 17 and 18 on Togiak NWR continued to study twinning rates and calf production. Additional reporting will be forthcoming on the results. The same individuals will be relocated in October to monitor calf survival on Togiak moose populations.

### Walrus Contact: Jannelle Trowbridge

Togiak Refuge has monitored Pacific walrus use of coastal haulouts since 1985 using a variety of methods and an increasing level of monitoring intensity. Monitoring methods have included daily ground counts restricted to spring-fall months (1985-2008), infrequent aerial surveys (2003-2012), and year-round time lapse photography using remote cameras (2010-2021). Increasing monitoring effort has resulted in an increasing understanding of when and where walruses use Togiak Refuge haulouts. Peak annual haulout counts have generally declined from 1985 through 2018, then for the past three years have returned to levels observed in the 1990s. The majority (80%) of haulout activity on Togiak Refuge haulouts takes place September – November and occurs on the Hagemeister Island haulout.

#### Seabirds Contact: Jannelle Trowbridge

The abundance of black-legged kittiwakes, common murres, and pelagic cormorants has been monitored at Cape Peirce since 1990. Monitoring was not conducted in 2015 and 2020. The average number of birds counted on study plots in 2024 was 558 kittiwakes, 210 murres, and 19 cormorants. Over the past 34 years, the average number of birds counted on study plots are 1,014 kittiwakes (range = 238-1,906), 2,369 murres (range = 53-4,490), and 80 cormorants (range = 15-149). Abundance has been below average for kittiwakes since 2021, and since 2014 for murres and cormorants.

#### **Invasive Plant Surveys** Contact: Kara Hilwig

Elodea spp. is a highly invasive and difficult to control aquatic plant implicated in the degradation and loss of fish habitat across the world. It was confirmed present in Alaska in 2009 and is now found in several waterbodies across the State. Refuge and Park staff completed the sixth Elodea survey within the Togiak Refuge, Wood-Tikchik State Park and the surrounding area. Both aquatic and terrestrial invasive plants were evaluated at high use areas such as popular camps, float plane beaching areas, boat ramps, and docks. Surveys are currently underway. Thus far, no Elodea has been detected.

#### Water Temperature Monitoring Contact: Truett Cawlfield

Stream temperature monitoring has been conducted at 21 locations on 14 rivers in Togiak Refuge since August 2001. Continuous hourly water temperatures were recorded at each site. Over 2.4 million temperature records were collected, quality-graded, and digitally stored in a database. The warmest month each year was July. The warmest temperatures were observed in the Kukaktlim Lake outlet and the coolest temperatures were observed in the Weary River. In addition to the stream temperature monitoring, we monitored lake temperature using moored all-season temperature arrays to record hourly temperatures throughout the water column in 2 lakes since 2011. The lakes differed significantly in surface area, water volume, and elevation with Ongivinuk Lake being smaller and at higher elevation than Snake Lake. We observed variation in lake ice timing and fewer days of ice cover on Snake Lake than on Ongivinuk Lake. We observed that both lakes turn over in spring and fall. We observed water temperatures in excess of standards for fish rearing and migration habitats during summer down to 12.5 m in Snake Lake and down to 5 m in Ongivinuk Lake. Project reports are available upon request.

Quantifying River Discharge Contact: Truett Cawlfield

Togiak Refuge and the USFWS Water Resources Branch have worked cooperatively since 1999 to acquire hydrologic data of the flow regime (magnitude, duration, timing, frequency, and rate of change) and water quality on rivers throughout the Refuge. A network of stream discharge gages collected stream flow data from 1999-2005 at 20 locations. A subset of five of these stations continued to collect data through fall 2009, after which three of the five stations were removed. We continue to monitor discharge in the Togiak and Kulukak Rivers, although due to Covid-19 travel restrictions, the gages were inoperative in 2020-2021. Both stations were brought back into operation in July 2022. Stations have been visited and maintained by Fish and Wildlife staff each year since.

### Education and Outreach Contact: Terry Fuller

Togiak Refuge has a very active education and outreach program. From an education standpoint, during a normal school year, Refuge staff conducts an average of 60+ classroom visits throughout 12 Bristol Bay villages annually, Classroom visits include lessons about the Migratory Bird Calendar, National Wildlife Refuge Week, careers in natural resource conservation, and numerous teacher requested classroom presentations. The Refuge works with several school districts and private schools including the Southwest Region, Lower Kuskokwim, Dillingham City school districts and the Dillingham 7<sup>th</sup> Day Adventist School. Some topics often include bird walks, wilderness survival skills, salmon life cycles, aquatic resources, and bear safety. The refuge website, one of our educational tools, is undergoing a migration to a new platform, and we are excited about better access it will allow and the content it will provide.

During Spring 2024 Togiak Refuge launched a National Archery in the Schools Program in conjunction with Dillingham Elementary School. We are excited for the potential of this program and hope to grow it in the next school year.

Togiak Refuge, in partnership with ADF&G and the Southwest Region School District, also conducts hunter safety courses throughout western Bristol Bay Villages. Classes have impacted more than 100 students in Manokotak, Dillingham, Twin Hills, Togiak, Aleknagik and Quinhagak. The refuge plans to continue these courses, as requested, in the future.

The Refuge education program also produces Bristol Bay Field Notes, an award-winning weekly radio program on KDLG 670 AM that covers an array of outdoor-related topics (past episodes can be found on KDLG's website. Togiak Refuge has an active and heavily followed Facebook page which disseminates information on a daily basis to a rapidly growing global audience.

The Refuge normally hosts an Open House event, in celebration of National Public Lands Day and National Hunting and Fishing Day. This past year that event was postponed in 2023.

Togiak Refuge staff has a history of working with the Alaska Migratory Bird Co-Management Council and the ADF&G to conduct household subsistence waterfowl surveys. Refuge staff and volunteers conduct surveys in a number of southwest Alaska communities, Aleknagik, Dillingham, Togiak, Clark's Point, Newhalen, Chignik Lake and Chignik Lagoon. Due to budgetary constraints those surveys are on hold for the foreseeable future.

Togiak Refuge has historically has two Science camps for area teens, and assisted with a third. Those camps are in flux, for a host of reasons. This summer the Refuge was able to offer one camp to area JH students. The camp took place at Snake Lake and involved students from Dillingham, Manokotak, and Togiak. Students observed and learned about the many fish, wildlife and plant species found near the eastern border of the Refuge. Rafting skills, water safety, Leave No Trace camping practices, and bear safety were topics during the trip. Students also participated in other outdoor activities such as wilderness survival skills and archery. This camp helped students grasp the biological diversity found on the Refuge, while developing a

deeper sense of stewardship for local natural resources. Traditional councils and school districts in western Bristol Bay are cooperators with this camp.

# Division of Refuge Law Enforcement Contact: Melissa Vogt

Federal Wildlife Officer Melissa Vogt has been conducting patrols on Togiak National Wildlife Refuge.

Longtime Refuge staff members including refuge manager Kenton Moos, wildlife biologist Andy Aderman, administrator Cheryl O'Connell, and maintenance Jack Savo retired from Togiak Refuge in the spring of 2025. Deputy refuge manager Stan Culling has moved into acting refuge manager role and fish biologist Truett Cawlfield has taken on the moose and caribou projects. The entirety of Togiak staff has stepped in to try and keep up with the many roles and duties these staff performed.