

United States Department of the Interior

NATIONAL PARK SERVICE

Wrangell-St. Elias National Park & Preserve Mile 106.8 Richardson Hwy. – P.O. Box 439 Copper Center, AK 99573-0439 907 822 5234 Fax 907 822 3281 http://www.nps.gov/wrst



Wrangell-St. Elias National Park and Preserve: Coastal Activities Updates for the Southeast Regional Advisory Council March 2025

1. Interpretation and Education Update

In 2025, Wrangell-St. Elias Education and Interpretation staff will activities for two Yakutat youth events – Oceans Week at the Yakutat School and the Tern Festival. These events are a great way to connect to community members in Yakutat. For more information, contact Russell Scribner at russell scribner@nps.gov or (907) 308-1021.



Youth from Yakutat exploring during Oceans Week, 2024. Photo Credit: NPS/Scribner

2. Sít' Tlein Research

Scientists from National Park Service, University of Alaska Fairbanks, University of Arizona, and University of Montana have completed all fieldwork associated with their three-year project studying recent and ongoing changes in the dynamics of Sít' Tlein, recently known as Malaspina Glacier. Based on field data collected so far, preliminary results and model outputs appear to confirm the project hypothesis that Sít' Tlein ("big glacier" in Tlingit) is on the cusp of a major retreat. In addition to last year's publication of a new surficial geology map for Sit' Tlein , the research group has a new publication in press. "The demise of the world's largest piedmont glacier: a probabilistic forecast" uses collected data and computer models to predict the pace of retreat for the piedmont lobe of the glacier , More publications are forthcoming. For information contact Michael Loso, Geologist, michael_loso@nps.gov or (907) 529-9372, or Martin Truffer, University of Alaska Fairbanks Professor, mtruffer2@alaska.edu or (907) 474-5359.

3. Coastal Ethnographic and Cultural Landscape Project: Documenting Eyak and Yakutat Tlingit Cultural Legacies

Building on Frederica de Laguna's 1972 *Under Mount Saint Elias* and the recommendations from the 2015 *Yakutat Tlingit Ethnographic Overview and Assessment*, the park has secured funding for a project to document the places and resources that connect Eyak and Yakutat Tlingit peoples to the Wrangell-St. Elias coastline – a culturally and spiritually significant environment and landscape. In fall 2023, park staff met with Yakutat Tlingit Tribe staff to discuss the project logistics. For the next three years, a team of cultural anthropologists plus an archeologist will work closely with Eyak and Tlingit knowledge holders to gather information to complete an Ethnographic Landscape Study to be used as baseline documentation for park management for coastal resources at risk of being lost due to climate warming and glacial melt. In addition to NPS staff, we anticipate working with Doug Deur, Portland State University, and possibly Thomas Thornton, University of Alaska Southeast and National Academy of Sciences. The project will collaborate extensively with the Native Village of Eyak and the Yakutat Tlingit Tribe, involving site visits, interviews, and opportunities for knowledge transfer between elders and youth. For more information, please contact Barbara Cellarius, Cultural Anthropologist, at (907) 822-7236 or barbara cellarius@nps.gov, or Amber Cohen, Cultural Anthropologist, at (907) 822-7284 or amber cohen@nps.gov.

4. Coastal Wolf and Shorebird Survey along Malaspina Forelands, Wrangell-St. Elias National Park & Preserve

In early-May, NPS staff will look for wolf scats to evaluate diets along remote beaches in the Esker Stream area of the Malaspina Forelands. Natural resources staff from Wrangell-St. Elias in collaboration with NPS-Ocean Alaska Science and Learning Center are investigating wolf diets along the Malaspina Glacier coastline. This work is in part of a larger project exploring wolf diets across multiple park units that contain coastal areas including Katmai, Lake Clark, and Glacier Bay National Parks. This spring, wolf surveys and wolf scat samples will be collected for genetic analyses to determine the type of species (wolves vs. coyotes), along with primary dietary sources. Genetic analyses can determine dietary sources such as the species of large mammal consumed (e.g., moose), species of small mammals and freshwater fish, marine fish, and salmon. This wildlife fieldtrip will also focus on conducting shorebird population surveys at this potentially critical stopover site during spring migration. Shorebirds will also be captured, and body tissues (blood) collected to evaluate relationships between micro-plastic presence and quantity on physiological health metrics (e.g., stress hormone levels) of shorebirds along the coastal portions of Wrangell-St. Elias.

For information, please contact Kyle Cutting (Kyle Cutting@nps.gov).

5. Research in the Park

Each year, approximately 20 to 30 research projects take place in Wrangell-St. Elias National Park and Preserve. Ongoing or planned projects in the Yakutat area include the following:

- <u>Alaska Earthquake Center: Accessing and Maintaining Existing Seismic Stations (2023-2027)</u> (Michael West, University of Alaska Fairbanks, mewest@alaska.edu). For more information, see AEC's website: https://earthquake.alaska.edu.
- Aleutian Tern Population Assessment and Conservation Surveys in southcentral Alaska (2023-2025) (Robert Kaler, US Fish & Wildlife Service)
- Coupled hydrologic and glacier dynamic instabilities during Turner Glacier's surges (2021-2026) (Ellyn M. Enderlin, Boise State University)
- Transient subglacial water routing efficiency modulates ice velocities prior to surge termination on Sít' Kusá, Alaska: (Yoram Terleth, University of Idaho, yterleth@idaho.edu) Recent publication: doi:10.1017/jog.2024.38.

Additional information about research in the park can be found on the park website: https://www.nps.gov/wrst/learn/research-in-the-park.htm.