

National Park Service U.S. Department of the Interior

Ocean Alaska Science and Learning Center

Ocean Alaska Science and Learning Center 2023 Annual Report

About Us

The Ocean Alaska Science and Learning Center (OASLC) is one of 18 Research Learning Centers established by the National Park Service to increase the communication, use, and effectiveness of scientific research in national parks.

We support Alaska's 11 coastal parks, which comprise over 3,600 miles of coastline and one-third of the coastline in the entire National Park System.

Our mission is to promote stewardship of the marine-influenced ecosystems of Alaska's coastal national parks through learning, education, and research. Please learn more by visiting our website.



Cover: Brown Bears at Sunset, Lake Clark National Park, NPS Photo/A. Lattka Above: Bear Glacier Lake, Kenai Fjords National Park, NPS Photo/F. North





Kelsey Griffin Director

From The Team

Hello and thank you for taking time to read about the work, initiatives, and collaborations of the Ocean Alaska Science and Learning Center.

We are thrilled to have a complete team and look forward to continued support of Alaska's coastal parks by providing funding and support for research, educational outreach, and science communication.

In 2023, we supported coastal projects in 10 park units encompassing a wide variety of disciplines from oceanography and marine debris surveys to coastal archeology, traditional ecological knowledge, and more. Our staff visited Sitka and Klondike Goldrush (KLGO) National Historical Parks to assist with Inventory and Monitoring intertidal sampling and coastal waterbird surveys, and to learn about other important coastal projects such as KLGO ship manifest preservation. We traveled to Lake Clark National Park (LACL) to document coastal bear collaring and clam survey efforts and we led teacher workshops in the field and classroom at Kenai Fjords National Park (KEFJ).

It is an honor to work with many dedicated partners and collaborators to accomplish work supporting Alaska's coastal national parks and its stewards. We look forward to another great year!

All our best,

Kelsey, Fiona & Anne

Ocean Alaska Science and Learning Center We are privileged to live and work on Sugpiag Homelands

Fiona North Education Coordinator



Anne Lattka Science Communicator

Alaska's Coastal Parks

Aniakchak National Monument and Preserve

Bering Land Bridge National Preserve

Cape Krusenstern National Monument

Glacier Bay National Park and Preserve

Katmai National Park and Preserve

Kenai Fjords National Park

Klondike Gold Rush National **Historical Park**

Lake Clark National Park and Preserve

Noatak National Preserve

Sitka National Historical Park

Wrangell-St Elias National Park and Preserve

Education



Secretary Deb Haaland with OASLC Education Coordinator Fiona North at the October Teacher Workshop.



Teachers observe marine mammal behavior at the ASLC. At the OASLC, we seek to facilitate and expand opportunities to increase awareness of Alaska's marine and coastal environments through education and outreach. With a focus on culturally relevant, place-based education, we provided a variety of workshops, programming, and outreach materials this year.

In-person Teacher Workshops

We partnered with Alaska Geographic to offer a 9-day Floating Teacher Workshop in KEFJ. Teachers from around the state earned credit through University of Alaska Anchorage by participating in research in the park and creating their own culturally responsive, hands-on lesson plans to bring back to their students. Additionally, we provided a 3-day workshop for 40 K-6 Alaskan educators in collaboration with the Alaska SeaLife Center (ASLC) this October. This workshop received an exciting impromptu visit from Secretary Haaland! The content focused on empathy building for coastal Alaskan animals through increased understanding and personal connection.

Classroom Programming

After leading the Floating Teacher Workshop we collaborated with a workshop attendee to bring live plankton into her classroom and teach about the importance of healthy ocean ecosystems. Three-hundred 4th and 5th grade students were reached in this place-based learning opportunity.





Students observe plankton through microscopes and discuss species with OASLC Science Communicator Anne Lattka.

Coastal Connections Camps

In collaboration with Alaska SeaGrant and Kenai Mountains-Turnagain Arm National Heritage Area, we piloted a week-long Coastal Connections Camp for 11–14-year-olds this summer. The program was highly successful with extensive positive feedback from the community of Seward. We will work with partners to expand the camp to additional coastal communities next year by offering a 2024 educator training, planning resources and additional sessions for increased audiences.

More 2023 Highlights

-Hosted the One Ocean Art Show for the Alaska Tsunami Ocean Sciences Bowl in collaboration with University of Fairbanks (UAF).

-Partnered with UAF, ASLC, National Oceanic and Atmospheric Administration (NOAA), and Chugach Regional Resources Commission (CRRC) to put on the first inaugural Seward Marine Science Symposium highlighting scientists from across the region.
-Presented glaciology talk to UAF oceanography course students.
-Finalized Supper Sea book project as a follow-up to the OASLC's *Swimming on Your Back* publication. Books will be printed and provided to educators in 2024.
-OASLC supported a 6th year of the ASLC SeeBird program with 16 Seward High School students participating this fall.



Teachers find inspiration to bring back to their classrooms while learning about fjord ecosystems paddling in Northwestern Fjord, KEFJ. NPS Photo/F.North

Updates from the Field

Where the Land Meets the Sea

This multi-year project continued with aerial sea otter surveys, wolf scat data processing, and bear collaring and clam surveys in LACL. Education and outreach materials including classroom lessons, visual media outreach materials, and written materials for a variety of audiences will be available for distribution and use in 2024. Preliminary results will be shared at the Alaska Marine Science Symposium in January.

Targeted Archaeological Survey of Topographical Anomalies

This survey took place in the Chinitna Bay and Shelter Creek area of LACL. It resulted in documentation of three new archaeological sites and condition assessment updates on numerous others.



NPS scientists check vitals before collaring a coastal brown bear in LACL . NPS Photo/F. North



Documentation of a semi-subterranean housepit at Chinitna Bay, LACL.

Recognizing High Bryophyte Diversity in Glacier Bay

An extremely rare leafy liverwort, *Acrobolbus ciliatus*, is a new discovery at Glacier Bay National Park (GLBA) this year. It is now found three places in Alaska: the Boussole Peninsula on the GLBA outer coast, the outer Aleutian Islands and Sitka. As with many liverworts, this one reproduces in a process called fragmentation, where small leaf fragments regenerate and grow into new plants; this is likely one of the reasons why it is so rare.

A newfound bryophyte, Acrobolbus ciliatus, for GLBA.

Updates from the Field Continued

Indigenous Voices and Traditional Ecological Knowledge

This project is partnered by Chugachmiut, CRRC, KEFJ and OASLC. Partners met in late October to discuss next steps of the project. The project is one of several that are honoring the knowledge and culture of the Sugpiag Elders and Tribes brought together through Chugachmiut.



(From left to right) KEFJ TEK Project Leader Nick Jordan (Chugachmiut), Cultural Resource Specialist Patrick Lewis (KEFJ), Project Leader Dr. Tim Mullet (KEFJ), and Project Leader Mark Hiratsuka (Chugachmiut) at KEFJ.

Glacier Scale Models for Wrangell - St. Elias

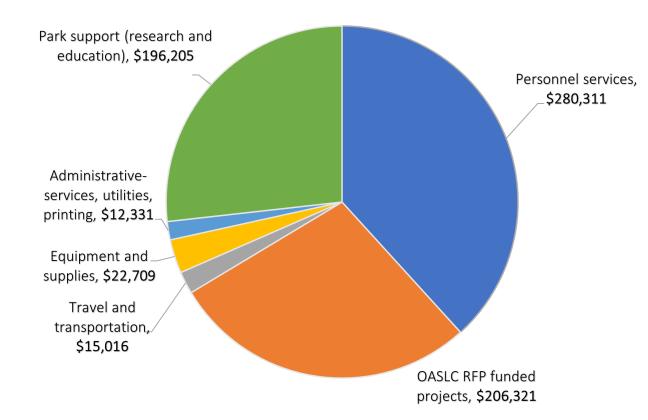
In 2021, OASLC provided WRST with funding to support the construction of two 3-dimensional glacier models that realistically depict the retreat of glacier ice over the course of the last ~80 years. Funding in 2023 allowed for fabrication of a permanent exhibit sign and to construct a historicstyle display table for the heavy model itself. Both were successfully completed this fall and are now displayed in the Kennecott Mines Visitor Center.

> 2023 Partners Alaska Geographic Alaska Sea Grant Alaska SeaLife Center (ASLC) Chugachmiut Chugach Regional Resources Commission (CRRC) Gulf Watch Alaska Kenai Mountains-Turnagain Arm National Heritage Area (KMTA) **Knik Tribal Council** National Oceanic and Atmospheric Administration (NOAA) Student Conservation Association (SCA) Univeristy of Alaska Anchorage (UAA) University of Alaska Fairbanks (UAF) U.S. Fish and Wildlife Service (FWS) U.S. Geological Survey (USGS)



WRST exhibit sign and glacier scale model on display table.

FY23 By the Numbers



Category	Amount
Personnel services	\$280,311
OASLC RFP funded projects	\$206,321
Park support (research and education)	\$196,205
Equipment and supplies	\$22,709
Travel and transportation	\$15,016
Administrative services, utilities and printing	\$12,331
Total	\$732,893

Ocean Alaska Science Learning Center Kenai Fjords National Park Seward, Alaska

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FY23 Projects Receiving Direct OASLC Support

Project	Benefiting Park(s)/communities*	Amount
Mysids in coastal Arctic lagoons**	CAKR; BELA	\$46,204
Targeted archaeological survey of topographical anomalies in Chinitna Bay and Shelter Creek**	LACL	\$11,993
Indigenous voices and traditional ecological knowledge**	KEFJ	\$58,351
Threatened coastal archeological sites**	BELA	\$11,539
UAF oceanography course support	KEFJ; coastal communities	\$19,900
Where the land meets the sea**	LACL	\$30,631
SeeBird: High school citizen scientists monitor seabirds (Alaska SeaLife Center/Seward High School)**	KEFJ	\$27,703
Teacher workshop (Alaska SeaLife Center/OASLC)	KEFJ; coastal communities	\$8,000
Floating teacher workshop (Alaska Geographic/OASLC)	KEFJ; coastal communities	\$60,000
SCA interns (Media and Education) for FY24	all coastal parks	\$34,855
Coastal connections camp in Seward	KEFJ	\$3,862
Glacier scale models for visitor center	WRST	\$1,960
Support NOAA geodetic survey efforts for tidal benchmarks	KEFJ	\$5,750
National Wetlands Inventory support	all coastal parks	\$10,000
Coastal ethnographic and cultural landscape project: Eyak and Yakutat Tlingit cultural legacies	WRST	\$7,505
Building bridges, connecting landscapes climate change youth internship program	WRST	\$26,000
Recognizing high bryophyte diversity in Glacier Bay NP&P	GLBA	\$7,500
Support for seabird mortality and marine debris surveys on Katmai coast	KATM; ANIA	\$11,40
Orthophotography of Taiya River	KLGO	\$10,000
LACL coastal bear collaring flights	LACL	\$7,871
NOAA marine debris exhibit support	KEFJ	\$795
TOTAL		\$ 4 01,821

*ANIA: Aniakchak National Monument & Preserve; BELA: Bering Land Bridge National Preserve; CAKR: Cape Krusenstern National Monument; GLBA: Glacier Bay National Park & Preserve; KATM: Katmai National Park & Preserve; KEFJ: Kenai Fjords National Park; KLGO: Klondike Gold Rush National Historic Park; LACL: Lake Clark National Park & Preserve; WRST: Wrangell-St. Elias National Park & Preserve.

**Project funded through biennial OASLC Request for Proposals (RFP).



Ocean Alaska Science Learning Center Kenai Fjords National Park Seward, Alaska



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