

PhytoCLAS: Learning about phytoplankton in the Gulf of Alaska through culture, language, art, and science

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Born in Kodiak

Kodiak Alutiiq Dancer

BA Political Science, University of Hawaii

MA Rural Development, University of
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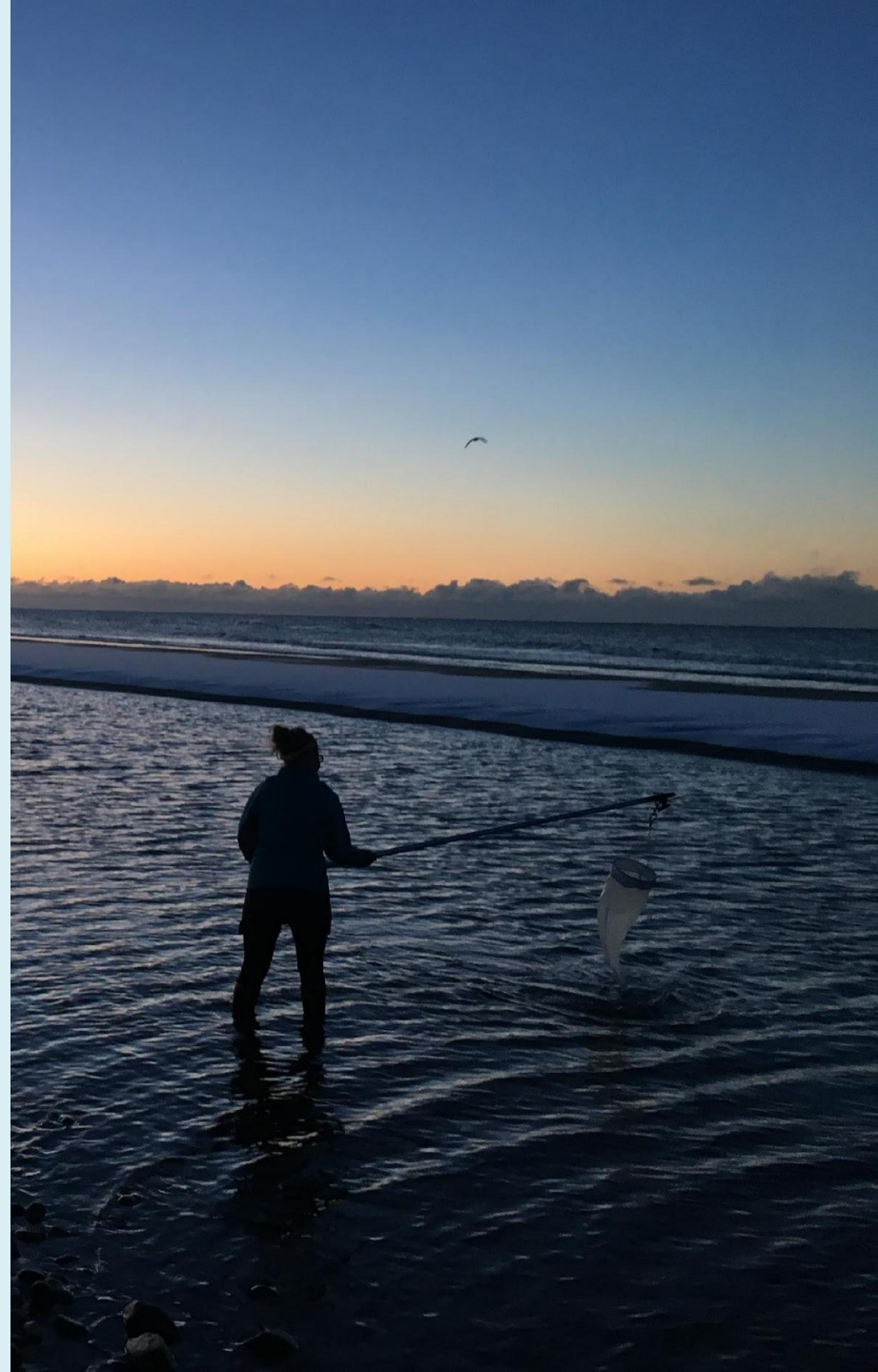
Presentation Outline

Overview of PhytoCLAS Project

Importance of Indigenous language

Example activities from Dig Afognak

Thank yous & acknowledgements





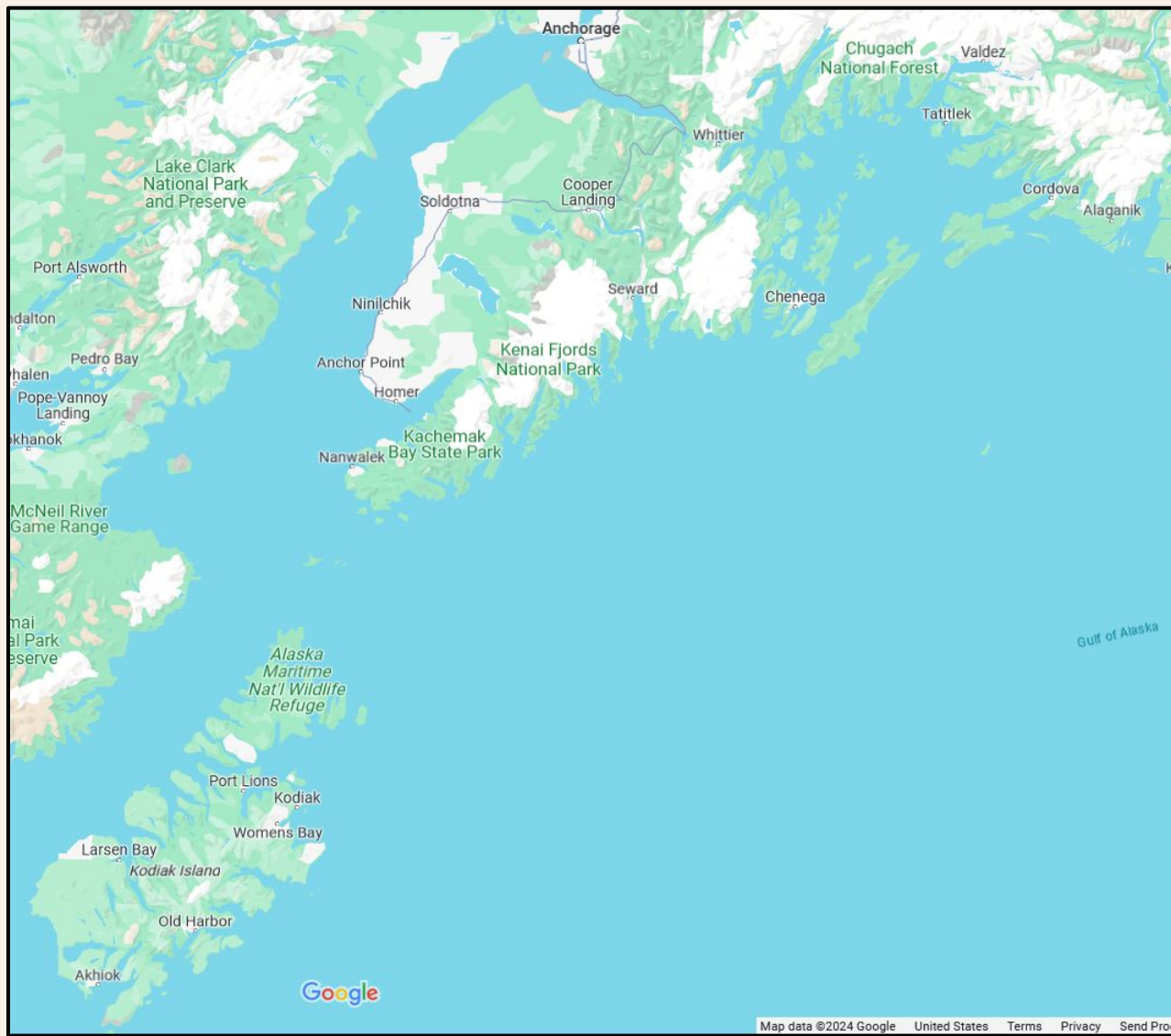
Project Focus

Phytoplankton

Ecological Importance
(Connection to culture,
foods & economies)

Big vs. small phytoplankton

Other relevant local topics



Project Location

Coastal Communities Northern Gulf of Alaska

So far, including:

Chenega
Afognak
Port Graham
Nanwalek
Homer



PhytoCLAS

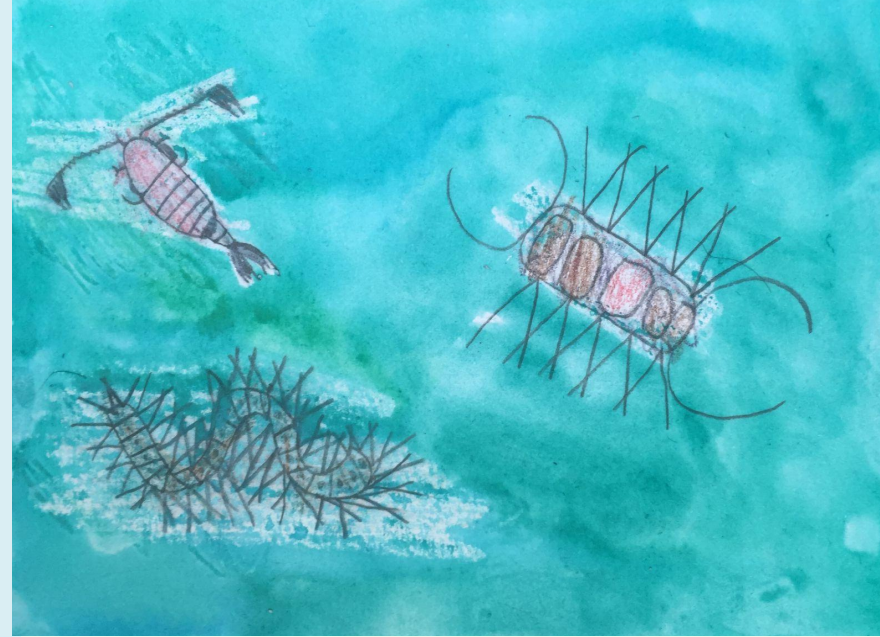
Learning about phytoplankton in the Gulf of Alaska
**through culture, language,
art and science**

Key Project Activities: Educational Activities for Youth



Plankton Tows
Microscope Labs
Guest Presenters
Food Web Games
Outdoor Learning
& More

Key Project Activities: Plankton-Focused Art



Scientific Sketching
Watercolors
Naming & Description
Notecards



ALUTIIQ LANGUAGE WORK

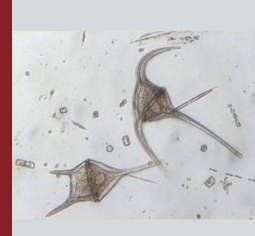
Kumitgaruat Zooplankton

Kumitgaruat means "things that are like beach fleas" in the Alutiiq/Sugpiaq language. Zooplankton mostly eat phytoplankton, but some do eat other zooplankton. Perhaps the most famous zooplankton is krill!



Naut'staaryugngasqat Phytoplankton

Naut'staaryugngasqat means "ones that look like plants." Phytoplankton can photosynthesize – just like plants on land! Some phytoplankton, like dinoflagellates, can also eat other organisms.



Kenquu'ut'stet Dinoflagellates

Kenquu'ut'stet means "ones which light up the ocean" in the Alutiiq/Sugpiaq language. The word could apply to any plankton that bioluminesces in the ocean, but dinoflagellates are perhaps the most notable for their bright blue hue when agitated.



Alutiiq Names and Archaeological Sites

- Physical Characteristics
 - *Penartuliq*
 - Has an abundance of cliffs
- Proximity to other Features
 - *Caugaa Qikertaq*
 - Faces Kodiak Island
- How Site was Used
 - *Puyurwik*
 - Smokehouse
- Resources the Site Provides
 - *Wiinarsurwik*
 - Place to hunt sea lions

Harvest & Survival Camp

Dig Afognak



Plankton Sampling
Microscope Lab
ID Guide with Alutiiq Names
Sketching & Watercolor
Plankton Engineering Challenge
Intertidal Exploration
Uriitaaq Harvest
HAB Discussion (Teens)

*Cabin Co-Leader
Zip Line Assistant
Language Classes*

Thank you ~ Quyanaasinaq ~ Chin'an

Communities, Tribes, Organizations, Schools that have welcomed the project

Native Village of Afognak (Denise Malutin)

Chenega Community School & Chugach School District (Doug Penn)

Native Village of Chenega Env. Program (Carmen Butler)

Project GRAD of the Southern Kenai Peninsula

Port Graham School (Greg Melvin, Brian Grieser)

Nanwalek School (Penny Bearden-Brown)

Nanwalek community leaders & knowledge bearers

Priscilla Evans, Nancy Yeaton, Eugenia Moonin, Rhoda Moonin

Science Support

Strom Lab, Western Washington University

Kachemak Bay National Estuarine Research Reserve

Northern Gulf of AK Long Term Ecological Research

Thank you ~ Quyanaasinaq ~ Chin'an

Alutiiq/Sugpiaq Language

Elders Session, Alutiiq Museum & Archaeological
Repository

Chugach Heritage Preservation

Chugach Regional Resources Commission

Alutiiq/Sugpiaq Language Resources

Alutiiq Language Dictionary

www.alutiqlanguage.org

Word Wiinaq

www.wiinaq.org

Alutiiq Word of the Week

<https://alutiiqmuseum.org/collection/word/index>

Alutiiq Museum Digital Language Archive

languagearchive.alutiiqmuseum.org

Funding

North Pacific Research Board

Additional Support

NGA LTER - NSF

CORaL Network - EVOSTC

SACRED Project - NOAA Env.
Literacy

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