

The background of the slide features a deep blue underwater scene with two whales. A large, semi-transparent watermark consisting of the Roman numerals 'IX' is positioned on the left side of the image. The text 'Science & Education Report' is centered horizontally across the middle of the image.

Science & Education Report

Alaska's Inside Passage: Where the Mountains Meet the Sea

MS Roald Amundsen, 13 – 25
July 2026





Science & Education Programme

Our Expedition Team naturalists guided guests using scientific tools to investigate the world around us. Through lectures, discovery sessions, expedition boat outings, and visits ashore we set out to make every expedition day a distinct and rewarding learning experience.

Alaska & British Columbia: Culture

Hearing about the native cultures of Alaska — through documentaries, books, or photographs — offers only a partial picture. Witnessing that cultural heritage in person is something else entirely. During this voyage, you encountered living traditions, not preserved artefacts.



Alaska & British Columbia: Culture

In Kake, we were greeted by the local community, who performed a traditional dance ceremony alongside local school children and explained the customs and traditions of the Ǿingít people. They showed us the regalia worn by different clans and gave us a demonstration of the traditional Inuit Olympic Games.



Alaska & British Columbia: Culture

During this voyage, we encountered totem poles carved by the Indigenous peoples of Alaska. They record clan histories, honour ancestors, and preserve events in visual form — a tradition of storytelling that has endured for generations.



History & Culture

Apart from the native Alaskan cultures, this voyage took us deep into the human history of the region — from the moment Russian interests first reached this territory to the centuries of change that followed. We explored the monetary motivations that drove Russian expansion, the peak of their influence, and the eventual decline that reshaped the lives of those who had long called this land home. We also traced the reasons behind the US purchase of Alaska and the territory's development from that point forward, including the significant decision to import reindeer from Scandinavia.



Gold Rush Era

We also learned about the famous Klondike Gold Rush era. A massive migration of roughly 100,000 prospectors travelling to the Canadian Yukon via Alaska between 1896 and 1899, before the Gold Rush continued in Nome.



Non-History

Our Historian Sandra shared some remarkable facts about the Pacific banana slug. We explored their unique slime, slow pace and important role in the forest clean-up crew.



Arts, Crafts & Creativity

The landscapes and cultures of Alaska and British Columbia are extraordinary to witness. Inspired by our surroundings, we created art that captured the character of the places we visited — watercolour postcards, creative writing, and origami.





Science Boat

During this voyage, we conducted plankton sampling techniques focused on the abundance and species of phytoplankton present in Alaskan waters. The samples we collected provided valuable data for NOAA's Harmful Algal Bloom (HAB) project, which monitors potentially harmful phytoplankton blooms.

During science boat outings in Icy Bay, William Henry Bay, Endicott Arm, and Hamilton Bay, we deployed a CTD to build a physical profile of the water column, took turbidity measurements to estimate phytoplankton abundance, and used a plankton net to collect phytoplankton and zooplankton samples.

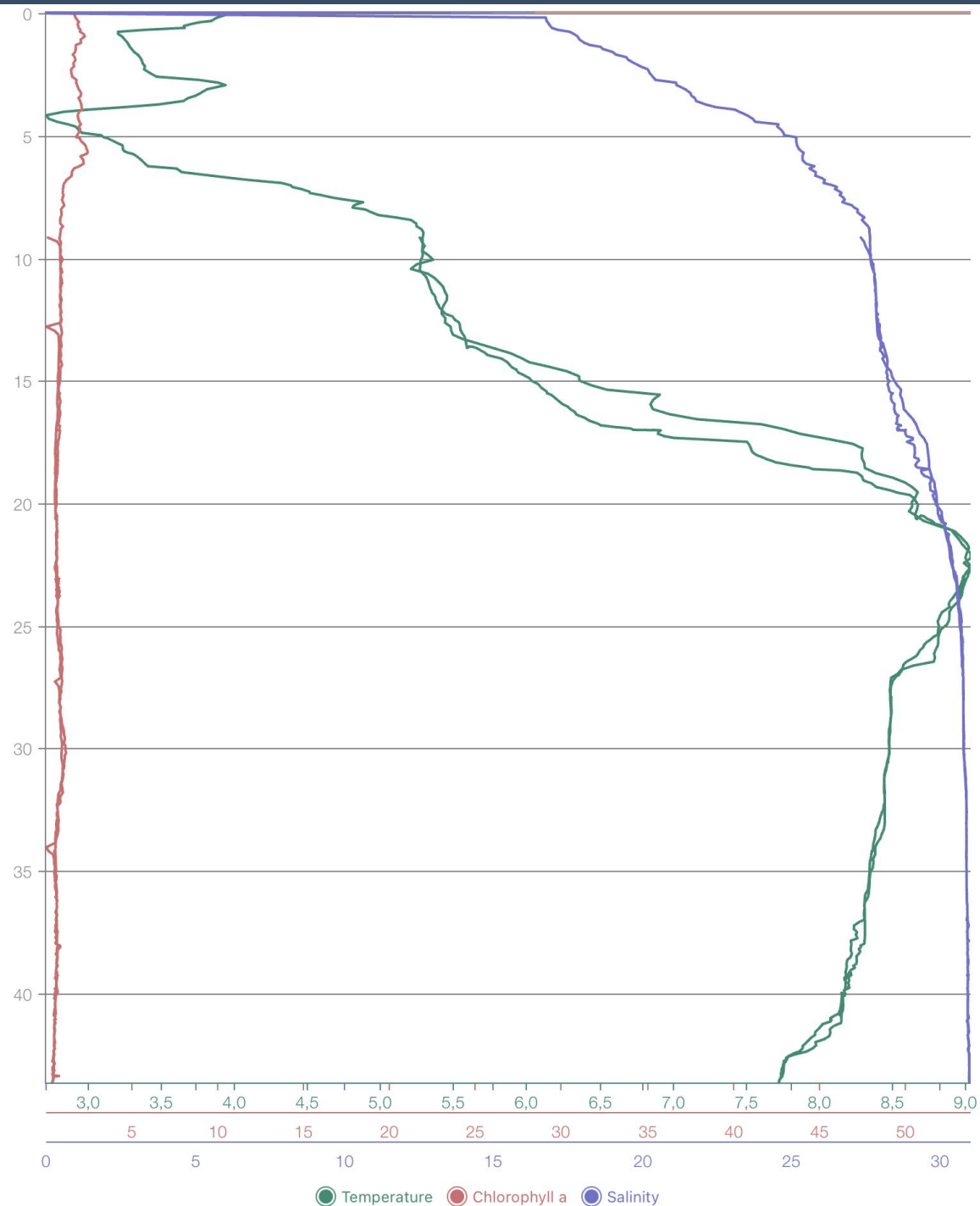
Science Boat: CTD data — Icy Bay

Temperature (green) is warmer at the surface, heated up by sun with temperatures of 7.5°C. Temperatures then decrease rapidly in the first 5 m to less than 1.5°C, due to colder glacial meltwater. Water temperatures then increase to around 8°C until a depth of 45m. This reflects a classic profile for glacial fjords.

Salinity (blue) is lowest at the surface at approximately 7.5 PSU, reflecting strong freshwater input from melting glaciers and river discharge. Salinity steadily increases with depth, reaching around 31.5 PSU at 45 m, indicating denser marine water beneath the fresher surface layer.

Chlorophyll a (red) reveals a low level of phytoplankton. Levels are slightly higher in the photic zone in a depth of 0–6m at 1.4–2.2 µg/l. After 6m, chlorophyll levels begin to gradually decrease to 0.4 µg/l at a depth of 45m.

Overall, this profile reflects a dynamic and nutrient-rich glacial fjord system.



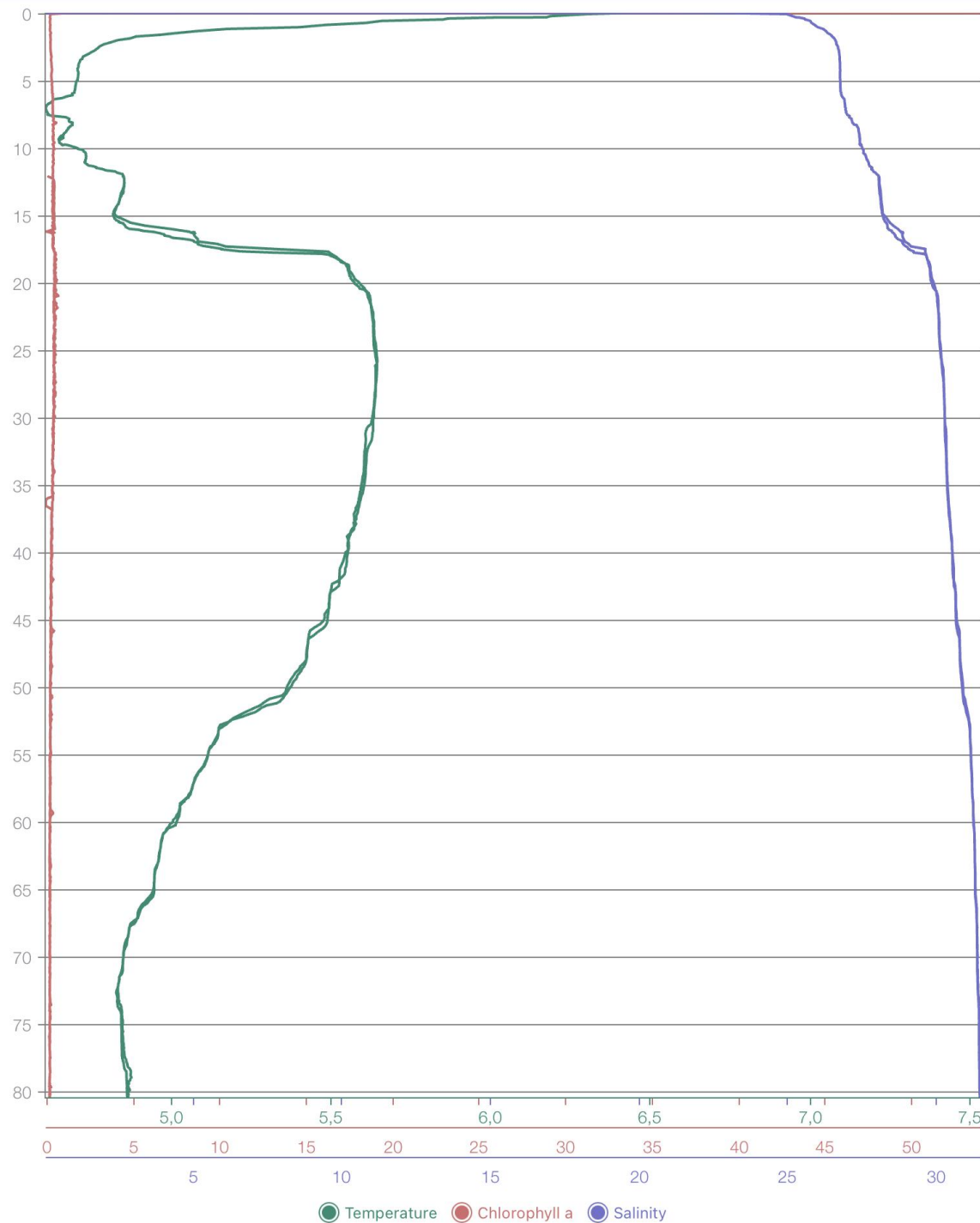
Science Boat: CTD data — Endicott Arm

Temperature (green) shows a classic profile for glacial fjords with colder water and temperatures of 3°C in the first 6m due to glacial meltwater influence and floating ice. Temperatures then increase to 5.5°C at a depth of 20m. Water temperatures then gradually decrease again to 4.8°C at a depth of 80m due to the higher density of colder water.

Salinity (blue) is lowest at the surface ~26.8 PSU, and increases with depth, to 31.5 PSU at 80m. Suggesting slightly fresher water, from ice melt overlying saltier, denser, deep water. This reflects a classic salinity profile for glacial fjords.

Chlorophyll a (red) reveals a low level of phytoplankton. Levels are slightly higher in the photic zone in a depth of 5–11m at 0.4–0.65 µg/l. After 11m, chlorophyll levels begin to gradually decrease to 0.2 µg/l.

Overall, this profile reflects a classic glacial fjord system.



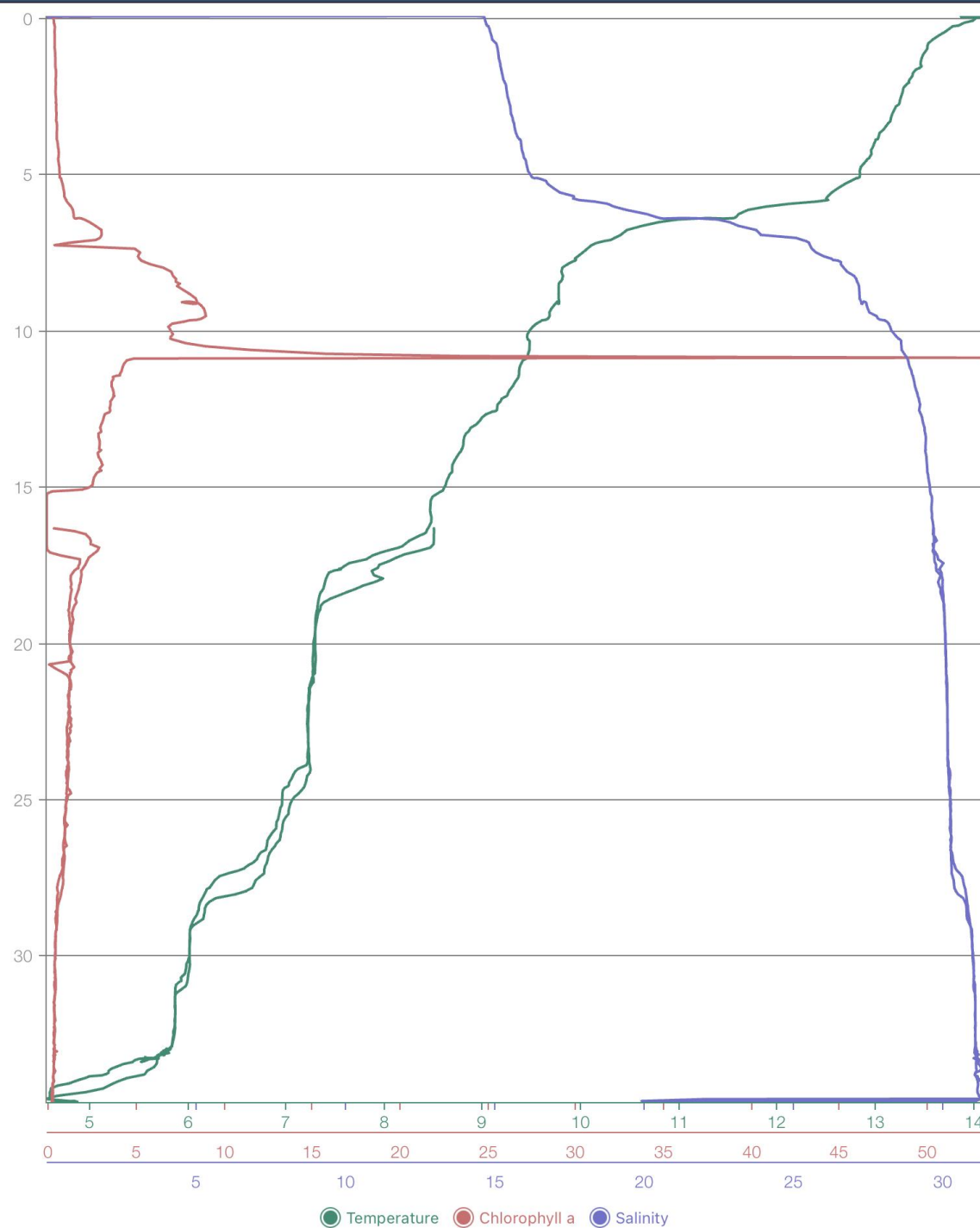
Science Boat: CTD data — William Henry Bay

Temperature (green) shows a classic profile with warmer temperatures at the surface of 13.5°C. Temperatures then decrease with increasing depth, due to higher density of colder water. Temperatures drop to 4.6°C at a depth of 34.6m.

Salinity (blue) is lowest at the surface ~15.8 PSU, and increases with depth, to 31 PSU at 34.6m. Suggesting slightly fresher water, from precipitation and river entries bringing fresh water overlying saltier, denser, deep water.

Chlorophyll a (red) reveals a high level of phytoplankton. Levels are slightly higher in the photic zone in a depth 7–11 m at 7–15 µg/l, compared to the surface layer due to photoinhibition. After 11m, chlorophyll levels begin to gradually decrease to 0.2 µg/l.

Overall, this profile reflects a dynamic and nutrient-rich coastal system.



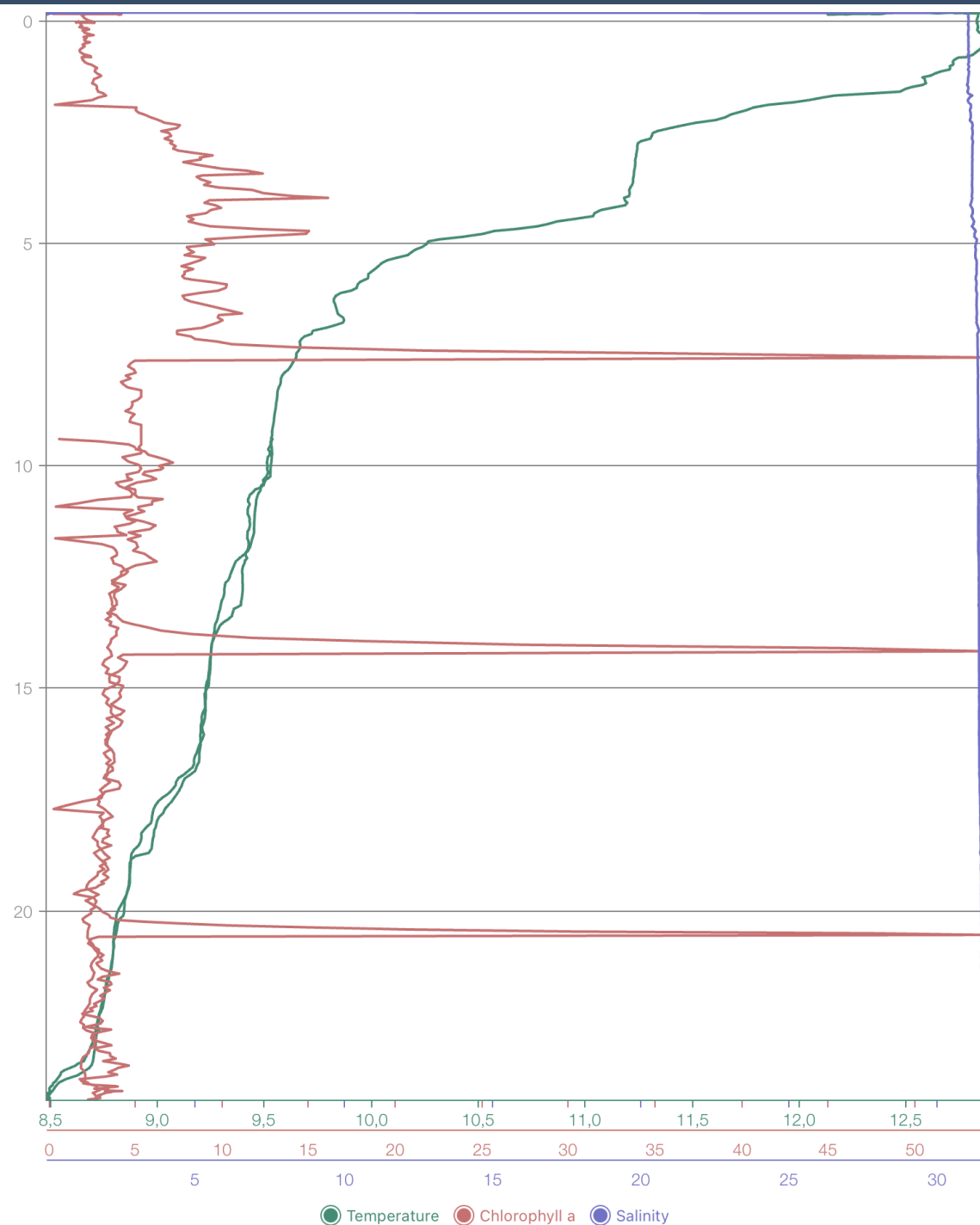
Science Boat: CTD data — Hamilton Bay

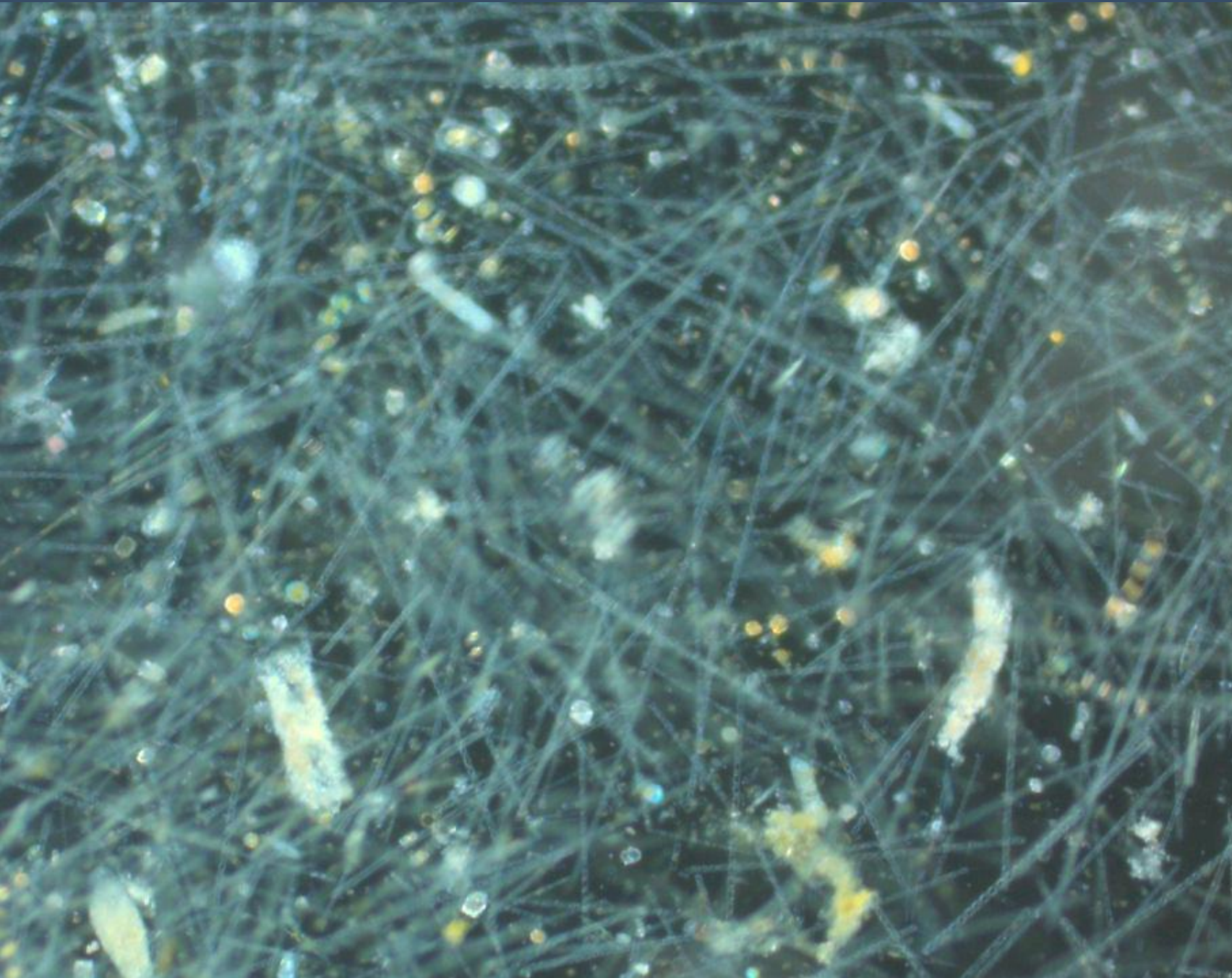
Temperature (green) shows a classic profile with warmer water overlying colder, denser water. Temperature ranges from 12.5°C at the surface to ~8.5°C at 25m depth.

Salinity (blue) is lowest at the surface ~31 PSU, and increases with depth, to 31.5 PSU at 22m. Suggesting slightly fresher water from rivers, run-off, and rainfall overlying saltier, denser water at greater depth.

Chlorophyll a (red) reveals a very high concentration in phytoplankton. Levels are highest between 3–7 m at 10–15 µg/l, suggesting this area contains the optimum nutrients and light availability for a phytoplankton bloom. The surface layer reveals less phytoplankton due to the photoinhibition. After a depth of 7m, chlorophyll levels begin to gradually decrease to 5 µg/l. The peaks are most likely due to kelp passing the sensors.

Overall, this profile reflects a dynamic and nutrient-rich coastal system with a significant phytoplankton bloom.

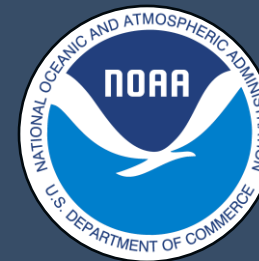




Plankton Samples

Plankton are ocean drifters, carried by currents and tides with limited ability to swim against them. Animals (zooplankton) and plant-like algae (phytoplankton) play a key role in supporting the marine food web and the health of our oceans.

The photograph on the left shows a phytoplankton sample collected during our Hamilton Bay science boat outings, including *Alexandrium*, *Thalassiosira*, and abundant *Skeletonema*.



Phytoplankton & Harmful Algal Bloom (HAB) Project

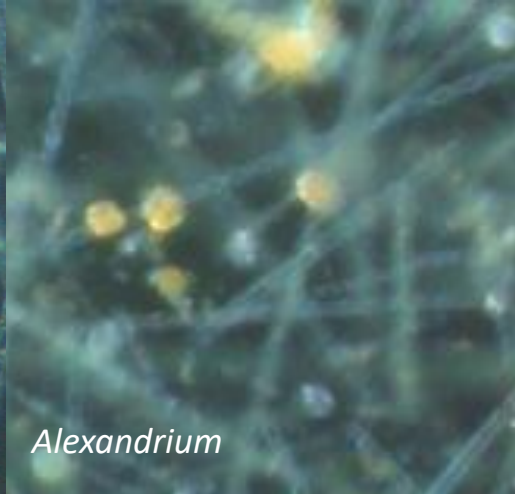
Phytoplankton are the base of the marine food web. Like plants on land, they use photosynthetic pigments (chlorophyll) to capture solar energy, producing glucose and oxygen gas while sequestering carbon.

We collected phytoplankton samples in Icy Bay, William Henry Bay, Hamilton Bay, and Endicott Arm. We then reported the abundance and species present for NOAA's HAB project, searching for harmful blooms of microalgae.

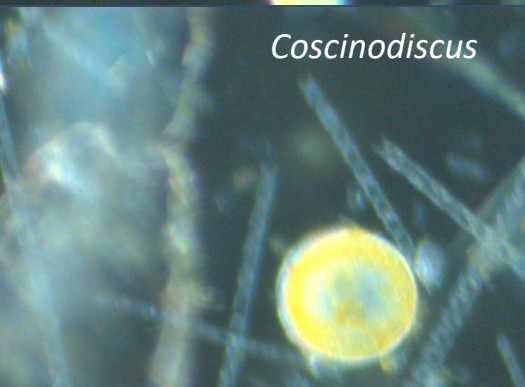
These blooms, caused by nutrient pollution and environmental changes, can produce toxins that harm aquatic life, disrupt ecosystems, and pose risks to humans. The HAB project aims to monitor outbreaks, identify contributing factors, and develop strategies to predict, prevent, and manage HABs through scientific research. In samples from Hamilton Bay, we identified a bloom of *Skeletonema* and reported it to NOAA. It is not one of our harmful target species, so there was no need to issue warnings to the surrounding areas, however this information is still insightful to our understanding of the ecosystem.



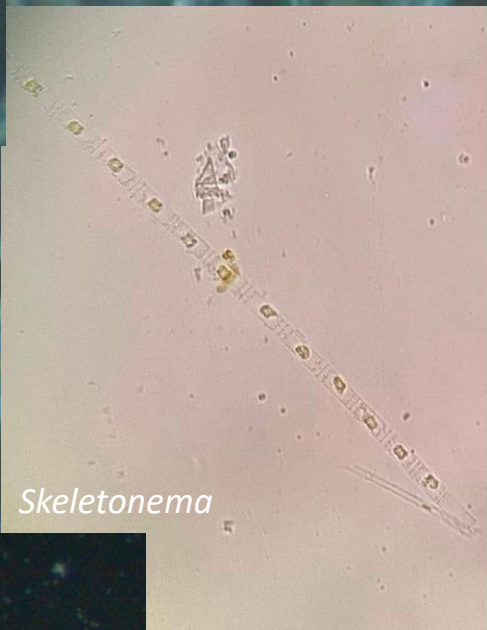
Thalassionema



Alexandrium



Coscinodiscus



Skeletonema



Tripos longipes

Zooplankton

We also collected zooplankton in each of our sampling locations. Samples included 'holoplankton' which remain planktonic their whole life cycle such as copepods, jellyfish, and arrow worms. We also found 'meroplankton' which are only planktonic for part of their life cycle e.g. crab, bivalve, and barnacle larvae.

The photos taken on our microscopes have also been added to our iNaturalist project, to help monitor plankton biodiversity.



Arrow worm

A microscopic image of an arrow worm, showing its elongated, segmented body and a long, thin, pointed anterior end.



Cross Medusa

A microscopic image of a cross medusa, showing its bell-shaped body and numerous small, circular tentacles around the edge.



Sea Butterfly

A microscopic image of a sea butterfly, showing its transparent, oval-shaped body and a small, circular eye.



Adult copepod and bivalve larva

A microscopic image showing an adult copepod and a bivalve larva. The copepod is a small, segmented crustacean, and the bivalve larva is a small, oval-shaped organism with a yellowish center.



Copepods stuck in a mucus net

A microscopic image showing several copepods stuck in a mucus net. The copepods are small, segmented crustaceans, and the mucus net is a thin, translucent web.



Barnacle larva

A microscopic image of a barnacle larva, showing its elongated, oval-shaped body and a small, circular eye.



Citizen Science **NASA Cloud Observer**

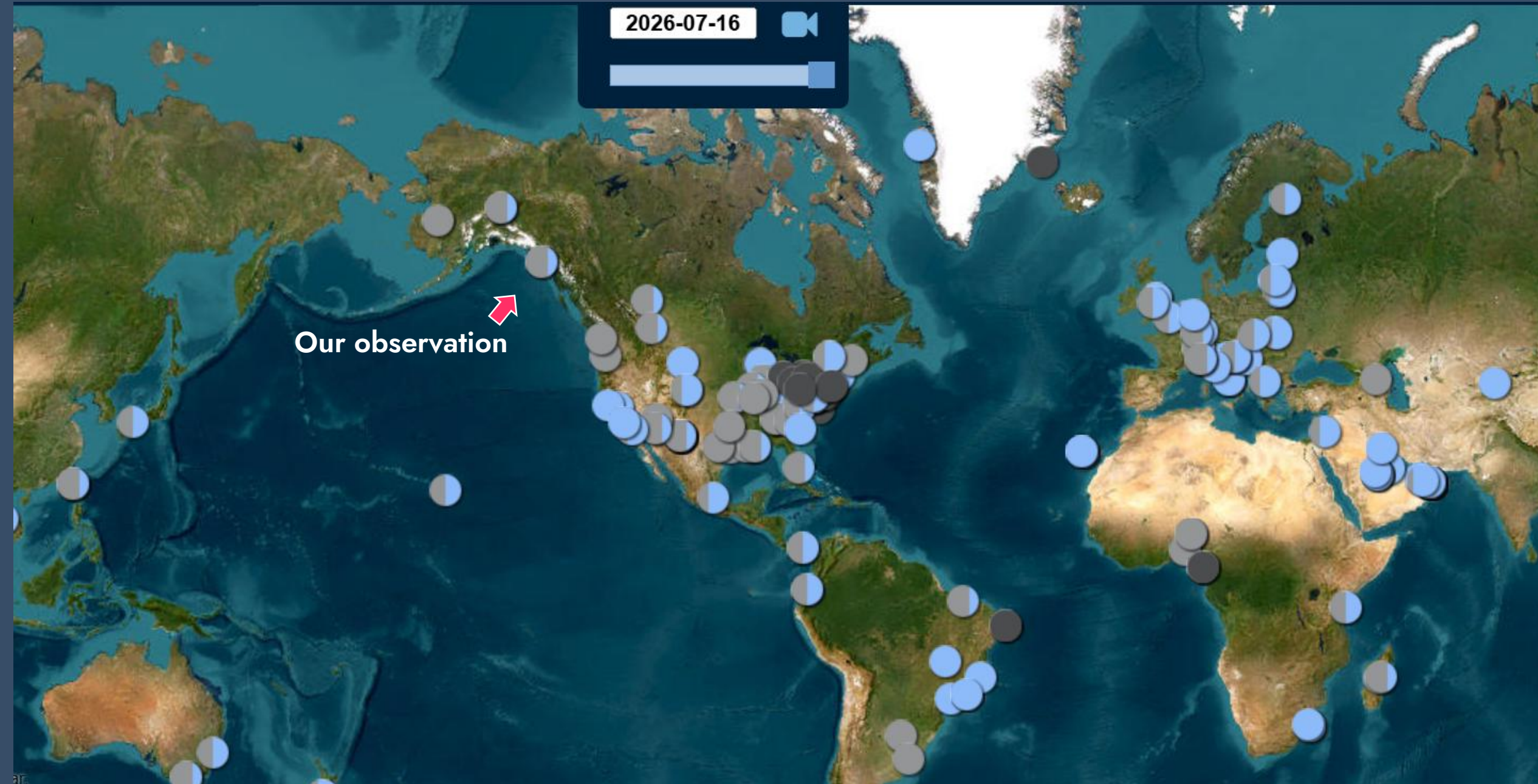
Clouds are not just shapes in the sky — they are important components of Earth's heat budget and balance. Information about when, where, and what types of clouds are forming helps scientists understand more about Earth's climate and climate change. Through NASA's GLOBE Cloud Observer programme, we contribute to that record.

Our Citizen Scientists submitted six observations over six sessions to the global database run by NASA. So far, two of these observations have been matched to data from weather satellites. Every ground observation adds to the growing baseline for these remote regions, whether or not a satellite pass is matched from above.

If you would like to continue cloud observations at home, download the app 'GLOBE Observer'.

[View our data](#) on the global map

NASA Cloud Observer data worldwide, 16 July 2026





Observation	GLOBE	GOES-18 Satellite
Universal Date/Time	2026-07-16 19:05:00	2026-07-16 19:03
Latitude	58.18	57.86 to 58.5
Longitude	-136.8	-137.12 to -136.48
Total Cloud Cover	Broken (50-90%)	Broken 90.00%
High Clouds		Cover: Few (6.00%) Altitude: 8.57 (km) Phase: Ice 251.3 (K) Opacity: Transparent
Mid Clouds	Altostratus Cover: Scattered (25-50%)	Cover: Scattered 34.00% Altitude: 2.86 (km) Phase: Water 272.69 (K) Opacity: Translucent
Low Clouds	Stratus Cumulus Stratocumulus Cover: Scattered (25-50%) Opacity: Translucent	Cover: Scattered 50.00% Altitude: 1.53 (km) Phase: Water 277.04 (K) Opacity: Translucent
GLOBE Cloud Photos and Corresponding NASA Satellite Images.	GLOBE Photos North East South West Up Down 	GOES-18 Visible Infrared GEO Tutorial
Click image to view --->		
<i>Note: Photos submitted though GLOBE need approval before being displayed, this may take a few days.</i>		
Sky Conditions, Surface Conditions and Observer Comments	Sky Conditions Sky Visibility : no report Sky Color : no report Surface Conditions Snow/Ice : No Standing Water : No Muddy : No Dry Ground : Yes Leaves on Trees : No Raining or Snowing : No	Are there any comments you would like to add? Be sure to add the name of the satellite for our record. Submit Comment

NASA Cloud Observer — George Island, 16 July 2026

The light blue column shows our observation made on our way to George Island, matched with satellite data taken from above at the same time. The white column shows the data collected by the satellite GOES-18.

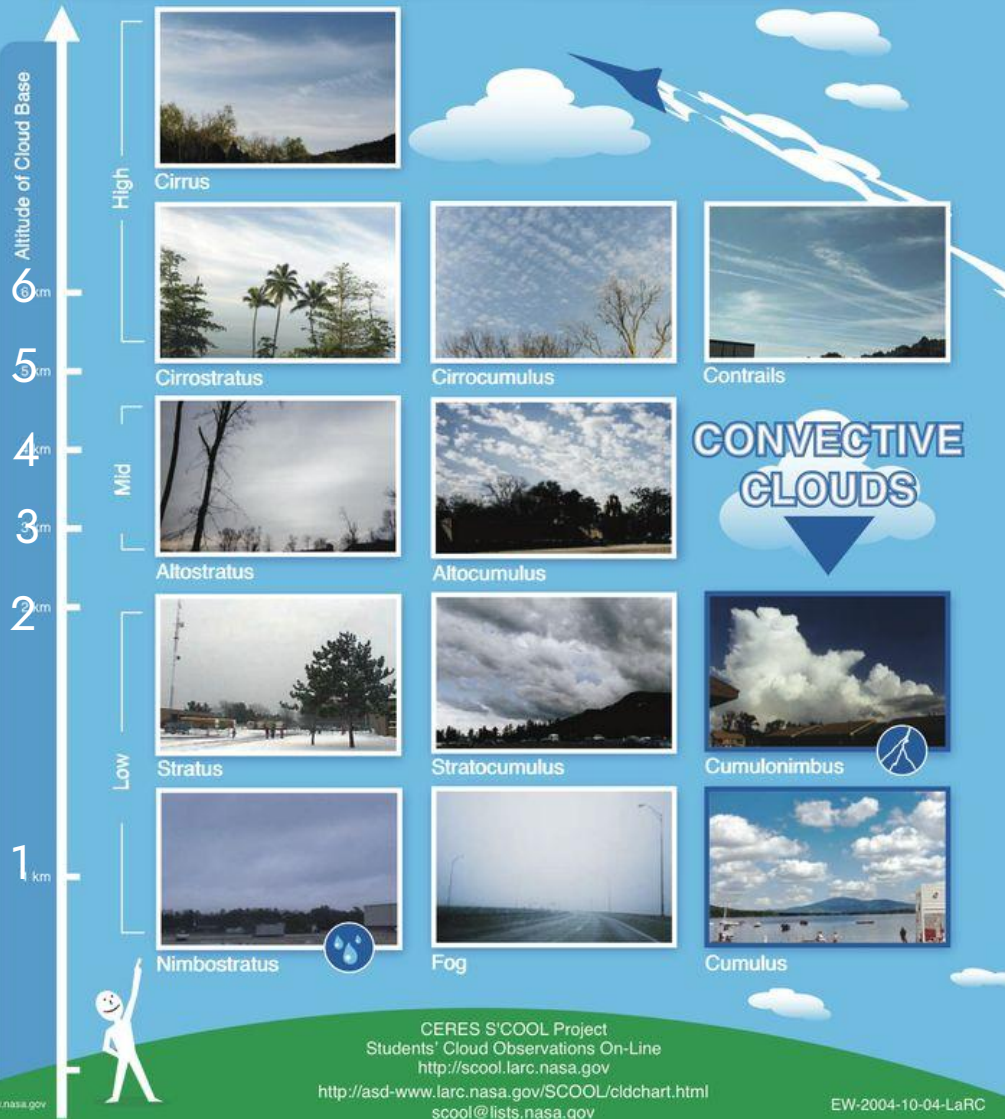
When both observations are placed side by side, we can fill the gaps between ground-level and orbital data. This improves the intelligence of these satellites, validates their data, and sharpens weather forecasts.

On this day, we had some broken cloud cover alongside welcome stretches of blue sky. With clear sightlines, we were able to estimate cloud cover and types more accurately — our reported coverage aligned closely with the satellite's own record. A strong result from our Citizen Scientists.

We take photographs within the app, which means NASA can verify our observations against those images if any identification needs to be checked.



S'COOL Cloud Identification Chart



Citizen Science NASA Cloud Observer

High Clouds (base above 6,000 metres):

- **Cirrus:** thin, wispy clouds composed of ice crystals. They often appear as delicate streaks or feathery wisps high in the sky.
- **Cirrostratus:** thin, sheet-like clouds that cover large portions of the sky. They can create a halo around the sun or moon.
- **Cirrocumulus:** small, fluffy clouds resembling fish scales or ripples.

Medium Clouds (base between 2,000 and 6,000 metres):

- **Altostratus:** puffy, grayish-white clouds with rounded edges. They often form parallel rows or patches.
- **Altostratus:** thick, grayish clouds that partially obscure the sun or moon. They lack the distinct features of cirrostratus.

Low Clouds (base below 2,000 metres):

- **Stratus:** uniform, gray clouds that cover the sky like a blanket. They can bring drizzle or light rain.
- **Stratocumulus:** low, lumpy clouds with defined edges. They often appear in rows or patches.
- **Nimbostratus:** thick, dark gray clouds associated with steady rain or snow.

If you would like to explore more examples, take a look at NASA's [On-Line Cloud Chart](#) [View our data](#) on the global map

Citizen Science iNaturalist

During our voyage we had the chance to explore many different ecosystems: from the rainforest to the intertidal zone and the kelp forest; from rivers and lakes to glaciated fjords. Across these habitats we observed a wide variety of trees, flowers, marine invertebrates, mammals, and birds.

In total we recorded:

- **184** Species
- **423** Observations
- **14** Observers
- **81** Identifiers

... and counting. As you upload more photographs from home, our dataset grows.

Through iNaturalist, these observations can now be used as data in global scientific research.

Thank you for joining the project and contributing to this Citizen Science platform.

View our data submitted on our iNaturalist project:

[2026 July 13 - 25: MS Roald Amundsen: Alaska & British Columbia](#)



Citizen Science

Happywhale

Cetaceans — whales, dolphins, and porpoises — hold a special place in the story of any expedition at sea. Something as straightforward as photographing them can contribute meaningfully to scientific research. That is the premise behind Happywhale: using AI to match images submitted by users, scientists can track individual animals as they migrate across ocean basins and through their lifetimes. When you submit a photograph of a whale, you will be notified of any past or future matches for that individual.

So far, the team has submitted five registered photographs of humpback whale tail flukes from this voyage, and we are waiting to see whether any match known individuals. It is never too late to upload identification-quality photographs of whales — and seals with distinctive spot patterns — from this or any previous voyage. Older photographs are just as valuable: they can confirm whether individuals seen recently were alive years before those encounters were recorded.



MS Roald Amundsen

Images	Encounters	Identified
811	1322	768

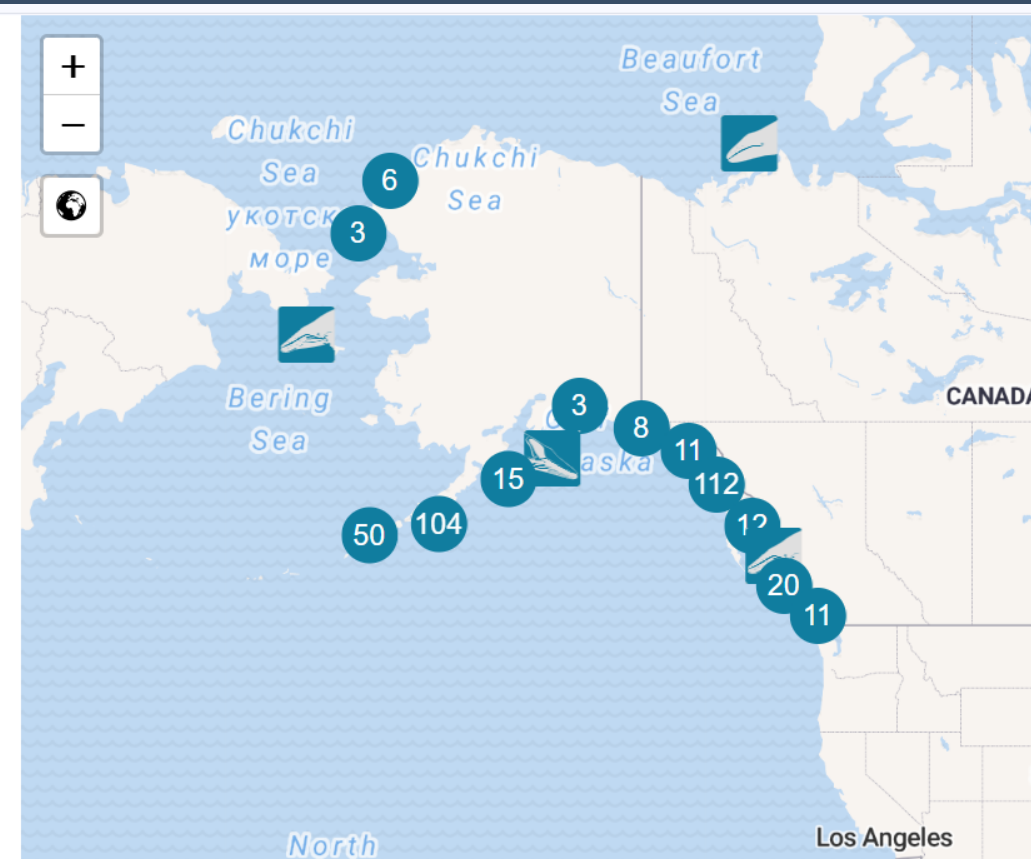
Individuals	Species
715	34

Following	Users	Orgs	Individuals
	0	1	1

Followers 16 [Follow](#) 

Organizations

**HX Expeditions**
City of London, England,
United Kingdom



[View](#) the MS Roald Amundsen's submissions to Happywhale during our voyage!

To receive updates on if/when these individuals are seen again (don't worry there's no spam emails) then create a login, and add yourself to this voyage by clicking the + sign next to this trip's dates on MS Roald Amundsen's page [here](#)





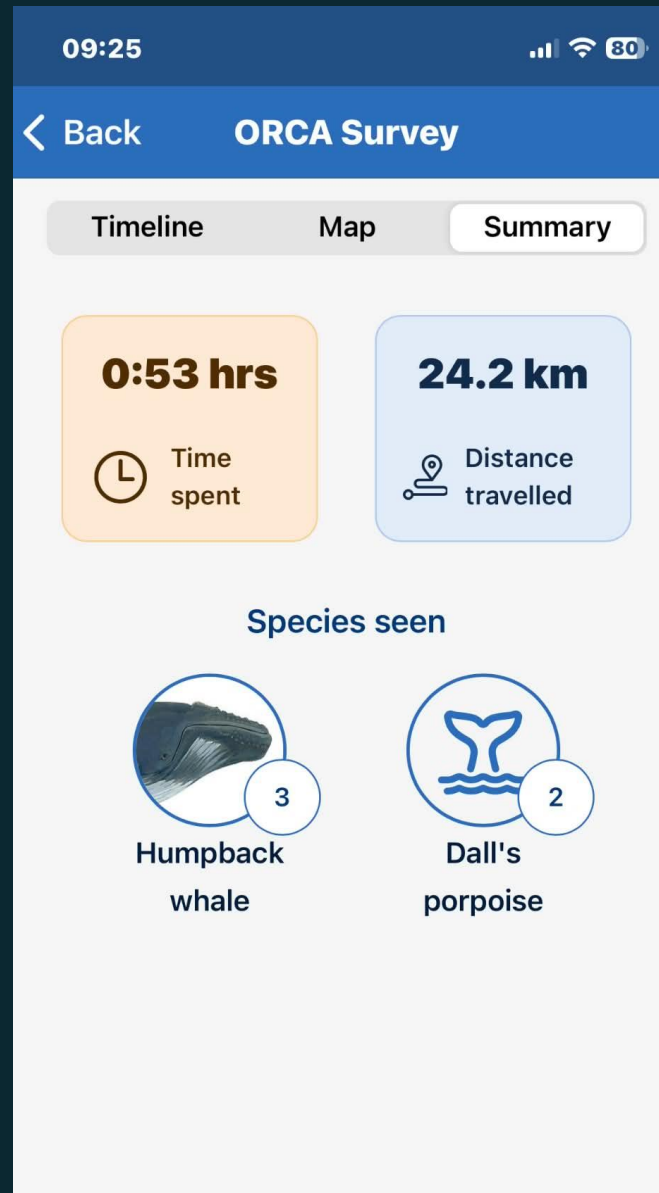
Citizen Science **ORCA**

While on your journey through Alaska, you were joined by [ORCA](https://orca.org.uk) Ocean Conservationist Dave, who collected data during wildlife watches on whales, dolphins, and porpoises. ORCA is a cetacean conservation charity dedicated to the long-term protection of these animals. The data Dave collected was sent to ORCA and made available to organisations working in cetacean conservation. Visit orca.org.uk for more information.

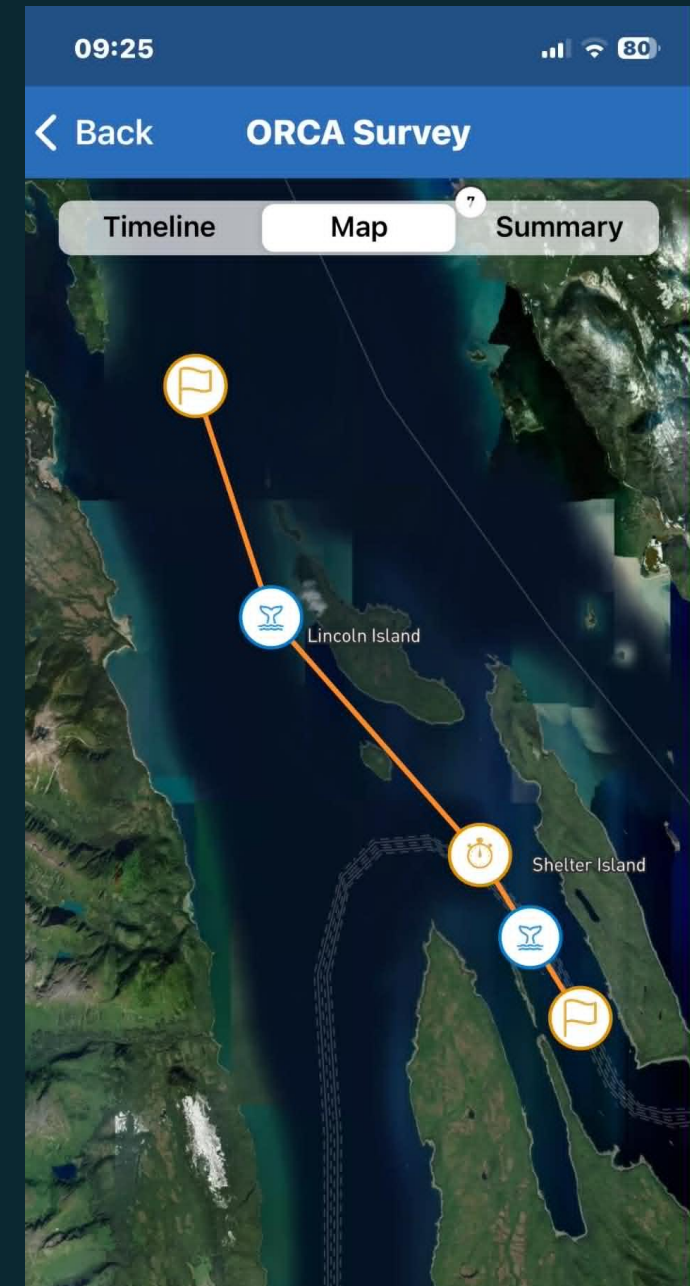


OceanWatchers Survey Effort

Thank you to everyone who came out and joined the Naturalists on deck for the wildlife watches, whatever the conditions. Sightings are not guaranteed, but every data point collected and every kilometre covered contributes to our understanding of population dynamics.



Screenshots from the data collection



Trip Survey Totals

Humpback whale		... 51
Dall's porpoise ..		 23
Harbour porpoise		 2
Orca		 6

Surveyed over 34 hours and 660 km



Bald Eagle,
Haliaeetus leucocephalus

Citizen Science eBird

At sea and on land, our onboard Ornithologists and enthusiastic birding guests surveyed the avifauna we encountered along our route. The diversity of habitats we travelled through gave us an equally diverse array of birds, from the bald eagle to a wide range of ducks and shorebirds.

Across onboard wildlife watches and eBird sessions on deck, we recorded 81 bird species over 36 eBird checklists. Through the eBird platform, the data we collected is available to scientists around the world to help understand patterns of bird distribution, migration, and habitat use.

View our data for this trip here:
[2026 13th July – 25th July: MS Roald Amundsen: Where the Mountains Meet the Sea](#)

Guest Scientist

Our Guest Scientist Christina joined the voyage to study marine fog and to advance new atmospheric sensors developed by NSF NCAR. Using weather and aerosol sampling instruments installed onboard, she collected data on visibility, weather conditions, and the airborne particles that influence cloud and fog formation. Through this work, guests were able to understand how fog develops from moisture and specific aerosol particles known as cloud condensation nuclei (CCN) and ice nucleating particles (INP). Christina also led weather and cloud workshops, giving participants hands-on experience with Kestrel handheld weather devices and cloud identification techniques.

[Visit the project's website](#)
to learn more



Scan the QR
code for the
project data
portal

Wildlife List — Birds



A pair of Arctic tern *Sterna paradisaea* on the ice at Endicott Arm.

Wildlife List — Birds

Scientific Name	English	Deutsch	Norsk
<i>Branta canadensis</i>	Canada goose	Kanadagans	kanadagås
<i>Mareca strepera</i>	gadwall	Schnatterente	snadderand
<i>Anas platyrhynchos</i>	mallard	Stockente	stokkand
<i>Aythya marila</i>	greater scaup	Bergente	bergand
<i>Histrionicus histrionicus</i>	harlequin duck	Kragenente	harlekinand
<i>Melanitta perspicillata</i>	surf scoter	Brillenente	brilleand
<i>Melanitta deglandi</i>	white-winged scoter	Höckersamtente	amerikasjørre
<i>Mergus merganser</i>	common merganser	Gänsesäger	laksand
<i>Dendragapus fuliginosus</i>	sooty grouse	Küstengebirgshuhn	sotjerpe
<i>Columba livia</i>	rock pigeon	Felsentaube	klippedue
<i>Patagioenas fasciata</i>	band-tailed pigeon	Bandtaube	bånddue
<i>Streptopelia decaocto</i>	Eurasian collared-dove	Türkentaube	tyrkerdue
<i>Selasphorus rufus</i>	rufous hummingbird	Rotrücken-Zimtelfe	rødkolibri
<i>Haematopus bachmani</i>	black oystercatcher	Klippenausternfischer	amerikasvarttjeld
<i>Phalaropus lobatus</i>	red-necked phalarope	Odinshühnchen	svømmesnipe
<i>Actitis macularius</i>	spotted sandpiper	Drosseluferläufer	flekksnipe

Wildlife List — Birds

Scientific Name	English	Deutsch	Norsk
<i>Arenaria melanocephala</i>	black turnstone	Schwarzkopf-Steinwälzer	svartsteinvender
<i>Stercorarius longicaudus</i>	long-tailed jaeger	Falkenraubmöwe	fjelljo
<i>Stercorarius parasiticus</i>	parasitic jaeger	Schmarotzerraubmöwe	tyvjo
<i>Cerorhinca monocerata</i>	rhinoceros auklet	Nashornalk	neshornlunde
<i>Fratercula cirrhata</i>	tufted puffin	Gelbschopflund	topplunde
<i>Fratercula corniculata</i>	horned puffin	Hornlund	hornlunde
<i>Ptychoramphus aleuticus</i>	Cassin's auklet	Aleutenalk	sotalke
<i>Brachyramphus brevirostris</i>	Kittlitz's murrelet	Kurzschnabelalk	kortnebbdvergteist
<i>Brachyramphus marmoratus</i>	marbled murrelet	Marmelalk	marmordvergteist
<i>Cepphus columba</i>	pigeon guillemot	Taubenteiste	beringteist
<i>Uria lomvia</i>	thick-billed murre	Dickschnabellumme	polarlomvi
<i>Uria aalge</i>	common murre	Trottellumme	lomvi
<i>Synthliboramphus antiquus</i>	ancient murrelet	Silberalk	nordstarik
<i>Rissa tridactyla</i>	black-legged kittiwake	Dreizehenmöwe	krykkje
<i>Chroicocephalus philadelphia</i>	Bonaparte's gull	Bonapartemöwe	kanadahettemåke
<i>Larus brachyrhynchus</i>	short-billed gull	Kurzschnabel-Sturmmöwe	kortnebbmåke
<i>Larus smithsonianus</i>	American herring gull	Kanadamöwe	amerikagråmåke

Wildlife List – Birds

Scientific Name	English	Deutsch	Norsk
<i>Larus glaucescens</i>	glaucous-winged gull	Beringmöwe	gråvingemåke
<i>Sterna paradisaea</i>	Arctic tern	Küstenseeschwalbe	rødnebbterne
<i>Gavia stellata</i>	red-throated loon	Sterntaucher	smålom
<i>Gavia pacifica</i>	Pacific loon	Pazifiktaucher	amerikastorlom
<i>Gavia immer</i>	common loon	Eistaucher	islom
<i>Hydrobates furcatus</i>	fork-tailed storm-petrel	Gabelschwanz-Wellenläufer	gråstormsvale
<i>Hydrobates leucorhous</i>	Leach’s storm-petrel	Wellenläufer	stormsvale
<i>Fulmarus glacialis</i>	northern fulmar	Eissturmvogel	havhest
<i>Ardenna grisea</i>	sooty shearwater	Dunkelsturmtaucher	grålire
<i>Urile pelagicus</i>	pelagic cormorant	Meerscharbe	beringskarv
<i>Ardea herodias</i>	great blue heron	Kanadareiher	herodiashegre
<i>Cathartes aura</i>	turkey vulture	Truthahngeier	kalkunkondor
<i>Pandion haliaetus</i>	osprey	Fischadler	fiskeørn
<i>Haliaeetus leucocephalus</i>	bald eagle	Weißkopf-Seeadler	hvithodehavørn
<i>Megaceryle alcyon</i>	belted kingfisher	Gürtelfischer	belteisfugl
<i>Sphyrapicus ruber</i>	red-breasted sapsucker	Feuerkopf-Saftlecker	rødbrystsevjespett

Wildlife List — Birds

Scientific Name	English	Deutsch	Norsk
<i>Leuconotopicus villosus</i>	hairy woodpecker	Haarspecht	hårspett
<i>Colaptes auratus</i>	northern flicker	Goldspecht	gullspett
<i>Empidonax difficilis</i>	western flycatcher	Western Flycatcher	vestempid
<i>Cyanocitta stelleri</i>	Steller's jay	Diademhäher	furuskrike
<i>Corvus brachyrhynchos</i>	American crow	Amerikakrähe	amerikakråke
<i>Corvus corax</i>	common raven	Kolkrabe	ravn
<i>Poecile rufescens</i>	chestnut-backed chickadee	Rotrückenmeise	kastanjemeis
<i>Tachycineta thalassina</i>	violet-green swallow	Veilchenschwalbe	talassinsvale
<i>Hirundo rustica</i>	barn swallow	Rauchschwalbe	låvesvale
<i>Regulus satrapa</i>	golden-crowned kinglet	Indianergoldhähnchen	ildkronefuglekonge
<i>Certhia americana</i>	brown creeper	Amerikabaumläufer	amerikatrekryper
<i>Troglodytes pacificus</i>	pacific wren	Pazifikzaunkönig	barsmett
<i>Sturnus vulgaris</i>	European starling	Star	stær
<i>Ixoreus naevius</i>	varied thrush	Halsbanddrossel	båndtrost
<i>Catharus ustulatus</i>	Swainson's thrush	Zwergmusendrossel	brunkinnskogtrost
<i>Turdus migratorius</i>	American robin	Wanderdrossel	vandretrost

Wildlife List — Birds

Scientific Name	English	Deutsch	Norsk
<i>Bombycilla cedrorum</i>	cedar waxwing	Zedernseidenschwanz	einersidensvans
<i>Anthus rubescens</i>	American pipit	Amerikapieper	kanadapiplerke
<i>Loxia curvirostra</i>	red crossbill	Fichtenkreuzschnabel	grankorsnebb
<i>Spinus pinus</i>	pine siskin	Fichtenzeisig	stripesisk
<i>Spizella passerina</i>	chipping sparrow	Schwirrammer	brunissespurv
<i>Junco hyemalis</i>	dark-eyed junco	Winterammer	vinterjunko
<i>Zonotrichia leucophrys</i>	white-crowned sparrow	Dachsammer	hvitkronespurv
<i>Melospiza melodia</i>	song sparrow	Singammer	sangspurv
<i>Melospiza lincolnii</i>	Lincoln's sparrow	Lincolnammer	gråbrynspurv
<i>Parkesia noveboracensis</i>	northern waterthrush	Drosselwaldsänger	vannparula
<i>Leiothlypis celata</i>	orange-crowned warbler	Orangefleck-Waldsänger	oransjekroneparula
<i>Setophaga aestiva</i>	northern yellow warbler	Goldwaldsänger	gulparula
<i>Setophaga coronata</i>	yellow-rumped warbler	Kronenwaldsänger	myrteparula
<i>Setophaga townsendi</i>	Townsend's warbler	Townsendwaldsänger	granparula
<i>Cardellina pusilla</i>	Wilson's warbler	Mönchswaldsänger	kalottparula

Wildlife List — Marine Mammals



Wildlife List – Marine Mammals



SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS	NORSK
<i>Megaptera novaeangliae</i>	humpback whale	Buckelwal	baleine à bosse	knølhval
<i>Orcinus orca</i>	killer whale (orca)	Schwertwal, Orka	orque	spekkhogger
<i>Phocoena phocoena</i>	harbor porpoise	Schweinswal	marsouin commun	nise
<i>Phocoenoides dalli</i>	Dall's porpoise	Weißflankenschweinswal	marsouin de Dall	Dalls nise
<i>Eumetopias jubatus</i>	Steller sea lion	Stellerscher Seelöwe	lion de mer de Steller	stellersjøløve
<i>Phoca vitulina</i>	harbour seal	Seehund	phoque commun	steinkobbe
<i>Enhydra lutris</i>	sea otter	Meerotter	loutre de mer	havoter
<i>Callorhinus ursinus</i>	northern fur seal	Nördlicher Seebär	otarie à fourrure du Nord	nordlig pelssel

Wildlife List — Land Mammals



Wildlife List – Land Mammals



SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS	NORSK
<i>Ursus americanus</i>	American black bear	Amerikanischer Schwarzbär	ours noir	amerikansk svartbjørn
<i>Ursus arctos</i>	brown bear	Braunbär	ours brun	brunbjørn
<i>Oreamnos americanus</i>	mountain goat	Schneeziege	chèvre des montagnes rocheuses	snøgeit
<i>Neogale vison</i>	American mink	Amerikanischer Nerz	vison d'amérique	amerikansk mink
<i>Odocoileus hemionus sitkensis</i>	Sitka black-tailed deer	Maultierhirsch	cerf à queue noire	mulhjort
<i>Tamiasciurus hudsonicus</i>	American red squirrel	Gemeines Rothörnchen	écureuil roux américain	amerikansk ekorn

A scenic photograph of a whale breaching the surface of a calm body of water. The whale's dark, curved back and tail are visible above the water, creating a splash. The water is covered in shimmering, sunlit ripples. In the background, a dense forest of tall evergreen trees lines the shore, and beyond that, a range of snow-capped mountains is visible under a clear, light blue sky. The overall atmosphere is peaceful and majestic.

**Thanks for your
participation!**