

# Monitoring Glaciers - Visualizing Climate Change

## Frequently Asked Questions

### PROGRAM SPECIFIC FIELD CONDITIONS

What are the average weather conditions during the time of the field school? (average temperature, humidity levels, amount of rain, wind, variation between day and night, etc.)

In Prince William Sound in early July, expect temperatures between 45 to 55 at night and 55 and 65 degrees during the day (as low as 40 degrees very close to some glaciers), with some rain. Winds are generally light this time of year. Mosquitoes and flies are rarely an issue here.

Please describe the site(s) where the students will work, for example, outside and/or inside; in a city, town or rural area; shady or sunny, etc. –

Prince William Sound is generally protected from the open ocean and has many excellent anchorages.

With 3,800 miles of coastline, bounded to the east and north by the Chugach Mountains and to the west by the Kenai Peninsula, the sound is commercially important for the fishing and oil industries, the sound is also prized for its abundance of marine and coastal life, its rain forest of Sitka spruce and western hemlock, and its glacier-studded landscape.

Are there special features of the program site, for example, nearby important cultural areas, ambiance or scenery, interaction with staff, access to unique infrastructure, techniques or objects?

The sound contains 150 glaciers including 17 tidewater glaciers, known for dramatically calving huge ice chunks into the sea. More than 220 species of birds, 30 species of land mammals, and at least a dozen marine mammal species are found in the region. Bald eagles are plentiful along treetops and shorelines. Among the estimated 200,000 seabirds that summer in the sound are marbled murrelets, black-legged kittiwakes, and glaucous-winged gulls. We will visit at least 35 glaciers in as many as 15 fiords.

Will there be other people onsite with the field school or working in the same area? For example, other researchers, staff, or community volunteers?

No, there will not be other people traveling with the field school. We may see other vessels, including cruise ships and fishing boats. As we will traverse all of Prince William Sound, we may see others in the same areas we visit.

What does an average week look like (working times, lecture/discussion times, free time, weekends)?

As we begin our voyage less than 5 hours of sailing time from the first glaciers and fjord we want to investigate, we should have more than 10 full days to perform our research. Over those ten days we will move west-south-westerly across Prince William Sound visiting new fjords every day. Prior to our departure from Cordova, we will have pre-plotted a ship's-track that will take us to locations of the glaciers that we want to investigate in as many as 15 fjords. These glaciers are: Aialik Glacier, Bainbridge Glacier, Baltimore Glacier, Baker Glacier, Barry Glacier, Bryn Mawr Glacier, Cascade Glacier, Cataract Glacier, Chenega Glacier, Columbia Glacier, Contact Glacier, Cox Glacier, Childs Glacier, Dirty Glacier, Falling Glacier, Harriman Glacier, Harvard Glacier, Holyoke Glacier, Meares Glacier, Miles Glacier, Nellie Juan Glacier, Portage Glacier, Princeton Glacier, Roaring Glacier, Serpentine Glacier, Shoup Glacier, Smith Glacier, Surprise Glacier, Tebenkoff Glacier, Tiger Glacier, Toboggan Glacier, Ultramarine Glacier, Vassar Glacier, Wellesley Glacier, Worthington Glacier, and Yale Glacier.

After breakfast, each day we will sail to the next glacier on our list. At each site we will compare the present size and terminus position of the glacier with historical data. We will take new photographs from previously occupied sites, sometimes from shore and sometimes from on deck. Every morning and evening we will have discussions about what we will be seeing and what we observed. We will have a daily discussion topic and time for free discussion. Lunch will be either onboard or onshore. There will be free time every evening after 8 pm.

What are the options for students to access money? Are there ATMs nearby? Should students plan to bring a certain amount of cash?

From the time we leave Cordova, until we arrive in Seward, there will be no need for money. We will be a self-contained ship-board community.

## **ACTIVITY LEVEL & ACCESSIBILITY**

Please provide information about the physical requirements of the program. Example: *Excavation during this program entails moderately strenuous physical activities—lifting, bending, kneeling, crouching, carrying. We often walk three miles over uneven terrain.*

Students should expect to walk and hike along the coast as we explore the glaciers, which can include uneven and slippery surfaces, crossing streams and marshes, and climbing over downed trees and rocks. There will be a moderate amount of such physical activity daily. Students will move from the research vessel to shore boats to land frequently. They will also move around the ship and participate in shared duties such as food preparation, cleaning, and watch duties.

How accessible your site is for people with mobility challenges. Would someone using a wheelchair be able to participate? Someone who uses crutches or other assistive walking devices?

We would advise people with mobility challenges to **NOT** consider this program. The ship has narrow passageways, steep ladders, and getting in and out of shore boats requires balance.

## PROGRAM COUNTRY & CULTURAL INFORMATION

What do you love about the country and area you work in? What do you think students will be most excited to discover?

This is one of the fastest changing, most dynamic, most scenic locations on Earth. John Muir commented that seeing this area could spoil a person's appreciation for almost anywhere else on the planet.

How large is the community where students will be staying? Will students have opportunities to interact casually with local residents? Please describe.

We will be a self-contained community of about ten people for 10 days. We will have minimal opportunity to interact casually with local residents or travelers.

Primary languages spoken by people in the area:

English

What are some things students may find surprising about the local culture?

We will see a lot of commercial salmon fishing.

What cultural enrichment opportunities are students likely to have outside of the program? For example, are there museums, parks, coffee shops in the area, or will there be festivals or events nearby during the program period?

Alaska is a world-class tourist destination because of its scenery and wildlife. I would advise our students to add several days to their trips after departing Seward. Upon arriving in Anchorage there are numerous world-class opportunities to visit amazing destinations, including Denali National Park.

Will students have opportunities to explore other areas of the country? If so, what options are available to them (such as available transportation or unscheduled time for exploration).

No – not during our 10 days of ship time. But students can explore other parts of Alaska before and after the expedition.

## ACCOMMODATIONS & MEALS

Please describe student accommodations, including the type of accommodation (tent, hostel, hotel, etc.) and a brief description of the accommodation itself, including number of students to a room or tent, access to toilets and showers, and common areas. –

The expedition takes place aboard the classic 72-foot research vessel *Endeavour*, combining daily fieldwork ashore with classroom and lab discussions on board. The boat offers comfortable living space for both learning and personal time.

Ample mid- and upper decks provide opportunities for observing Alaska's wildlife and amazing landscapes, fishing, shrimping, and crabbing. In addition to its two shore boats (and Zodiac RIB and an aluminum jet boat) *Endeavour* offers canoes

for personal exploration/downtime as well as a book and video library for research and enjoyment.

Life on any boat means teamwork. Participants share two-person cabins. Showers are available every three days, laundry is usually done once per trip.

While we do our best to accommodate dietary restrictions, with limited space and access in the Alaskan wilderness, we cannot guarantee that every need can be met, but the crew is happy to work with participants to provide reasonable alternative solutions. Bella, the ship's dog, is on board as well.

You can learn more about the ship at: <https://www.alaskaendeavour.org/ship>.

Please describe how/how often students can do laundry.

Once on the expedition, unless there are special circumstances (like an accidental roll in glacial mud).

How are room assignments made? If rooms are assigned according to gender, how will you assign rooms for non-binary, trans and queer students?

Although we strive to accommodate by gender, that's not always possible, so students should be willing to share the cabin with another gender.

Are there options for single rooms? Would there be an additional charge (and approximate cost)?

There is no option for single rooms.

Will the program provide meals? If not all meals, please specify which meals students will be responsible for, and what facilities are available for them to get groceries and prepare meals.

All meals will be provided. All students rotate through crews to assist with meal prep, cleaning, watch, and deck duties.

Please describe typical meals that are offered by the program.

We strive to provide healthy, simple meals with as much fresh fruit and vegetables as possible in the Alaskan wilds. Typical dinners range from pasta to tacos or chili, fish, and chicken.

If the program can accommodate different dietary needs, please indicate:

With limited kitchen space and facilities, it can be difficult to accommodate different dietary restrictions. Students with allergies or restrictions should talk to us ahead of time and plan on helping cook separate meals when needed.

## **VISA AND PERMIT REQUIREMENTS**

Indicate the visa requirements, if any, for US citizens. If there is a visa requirement, what type of visa should students apply for?

No visas are required. Prince William Sound is part of the State of Alaska.

## **TRAVEL (TO AND DURING THE PROGRAM)**

If students will fly, what airport should they fly into?

Students should fly into Cordova, Alaska, arriving no later than 2:11 PM on July 1 (Alaska Airlines flight 66 from Anchorage).

If there are other ways students can get to the program, please describe.

There is a ferry from Whittier (which is connected by road to Anchorage) and crosses Prince William Sound to Cordova several times a week.

Where will you meet students? If not at a primary arrival point, like an airport, how should students get to the meeting point?

Students will be met at the *Endeavour*, which will be docked in the Cordova harbor. The exact location will be sent by text to the students just before they arrive. Students will be given information on ground transportation from the airport to the harbor.

## **EQUIPMENT LIST**

Please list any equipment students must bring with them to complete the academic/field portions of the program. Please include links to any specific equipment required (or examples if brand is not important).

- Digital camera (cell phone with good camera resolution is fine alternative);
- Rain jacket and pants.
- 15-inch-high rubber boots
- Indoor shoes.
- Identification/passport
- Travel documents
- Prescription medication for the entire program period
- Credit/Debit card
- Extra glasses/contacts if worn

A detailed gear list will be provided upon registration.

Will students need formal or nicer clothes?

No.

Are there items that are hard to get locally, such as tampons or sunscreen?

The supply chain in remote Alaska is hard to predict. Please be completely prepared upon arrival.

Hiking boots/socks?

No. Leather hiking boots are misery in maritime Alaska. Tall rubber boots are essential.

Swimwear?

Optional.

How often can students do laundry?

Once during the trip.

Items they should not bring?

Firearms, alcohol, any illegal drugs.