

ABUNDANT BRIDLE
More than 200 species of birds have been recorded within Glacier Bay National Monument. Many of these species are more abundant here than elsewhere in the park. The park's abundant bird life is a result of the park's diverse habitats, including old-growth forest, tundra, and open fields. The park's abundant bird life is a result of the park's diverse habitats, including old-growth forest, tundra, and open fields.

FISH
Numerous streams are filled with spawning salmon in late summer and early autumn. The park's abundant fish life is a result of the park's diverse habitats, including old-growth forest, tundra, and open fields.

PLANT LIFE
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GLACIER BAY'S PONDERS
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GLACIER FORMATION
Glaciers form (right) because the snow that falls each year in the high mountains does not all melt but accumulates and is transformed into ice. New-fallen snow changes first into granular snow consisting of round grains of ice. As the depth increases, these ice grains become more closely packed and in time fuse into solid ice. When such ice is of sufficient thickness, volume, and weight, it flows downslope into lower regions to a point where the rate of melting equals the rate of accumulation. That point is the terminus, or snout, of the glacier.

THE GLACIERS RECEDE
When Capt. George Vancouver sailed through the ice-choked waters of Icy Strait in 1794, Glacier Bay was little more than a tent in the wake of the retreating ice. They EXTINCTION OF WITHDRAWAL. AL WHEN OVERWHELMED BY ADVANCING GLACIERS... AND AGAIN THE FORESTS RECOVERY, AS IN OUR TIME.

THE GLACIERS TODAY
The glaciers seen in the park today are remnants of a general ice advance which began about 4,000 years ago. This period, sometimes called the "little ice age," in no way approached in extent the continental glaciation of earlier Pleistocene time. Ice fronts reached their maximum limits about 1750, after which the slowly warming climate brought about general melting.

FOREST GROWTH QUICKLY INVADERS AREAS FORMERLY COVERED BY GLACIAL ICE
Pacific Glacier stood 195 kilometers (65 miles) from the mouth of Glacier Bay. Nowhere else has ice receded at such a rapid pace. The speed at which Glacier Bay's ice sheet shrank has created a unique scientific interest; consequently, the history of the recession is well documented. The retreat continues today on the bay's east and southwest sides. Muir Glacier recedes about 8 kilometers (5 miles) in 7 years. In contrast glacial termini on the west side were established by 1923. Most have slowly fluctuated ever since, but several, including the snouts of Grand Pacific and Johns Hopkins, have moved gradually forward. Glaciers outside the Glacier Bay drainage basin show other patterns of activity. Some may be as far forward as in any previous time. Local climate and topography are presumably involved, but the full explanation for this bewildering diversity of glacial activity has yet to be found.

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GLACIER BAY
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FOR YOUR SAFETY
Those portions of the text highlighted by yellow markers are classified as unclassified information.

ADMINISTRATION
The park is administered by the National Park Service, U.S. Department of the Interior. Personnel are stationed at the park headquarters at Bartlett Cove on a year-around basis. The park is the Nation's principal conservation agency. The Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interests of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

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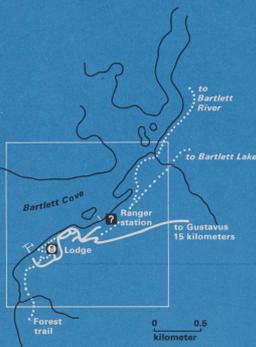
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GETTING TO GLACIER BAY

Glacier Bay is situated at the northwest end of the Alexander Archipelago in southeast Alaska. There are no roads to the park, and access is by various types of commercial transport, including regularly scheduled and charter air services, cruise ships and charter boats, private boats, and tours via kayak.

By boat, the distance from Juneau is about 100 kilometers (100 miles). Flying time from Juneau is about 30 minutes. An airfield is at Gustavus, just outside the park. Otherwise, landing is restricted to salt water. Adams Inlet is closed to aircraft landing.



VISITOR ACTIVITIES

SEEING THE GLACIERS
A trip to the face of one of many local tidewater glaciers is a highlight of a visit to Glacier Bay National Monument. Bartlett Cove is 72 kilometers (45 miles) from the nearest tidewater glacier, and arrangements should be made for trips by boat or plane to see them. Concession-operated

BOATING

Most of the areas of major scenic and biological interest are easily reached by boat through the natural waterway of Glacier Bay. Private boats should be aware of certain information and procedures. Remember that water temperatures are only a few degrees above freezing and that prolonged immersion is usually fatal.

Navigation of Glacier Bay should not be attempted without nautical charts, tide tables, and local knowledge. All are available at Bartlett Cove, along with the booklet, *Boating Guide to Glacier Bay*.

Park rangers are stationed at Bartlett Cove to assist you. Field ranger crews are

and commercial transportation are available. Warm clothing and rain gear are essential when visiting the park. Summer temperatures seldom exceed 24°C (72°F) and extended periods of wet weather are to be expected. The ground is usually moist and foot wear should be selected accordingly.

also based at Goose Cove in Muir Inlet and at Dundas Bay during the summer months. Several radio frequencies are monitored daily at park headquarters, and you are encouraged to use them if needed.

- Floating ice is a special hazard in Glacier Bay. While boats can slowly push through smaller pieces safely, icebergs are often unstable and roll easily. It is extremely dangerous to lie next to larger bergs.
- Boats should not approach closer than three-quarters of a kilometer (about one-half mile) to the face of a tidewater glacier. Both icefalls and large ice masses boiling to the water's surface some distance from the terminus often create substantial waves. Boats should not be beached on shorelines subject to these waves.

VISITOR SERVICES

NATIONAL PARK SERVICE CONDUCTED

Park naturalists conduct daily hikes, evening programs, and other activities at Glacier Bay Lodge. Hiking trails of various lengths are maintained at the Bartlett Cove area (see insert). The Forest Trail is a 1.6 kilometer (1-mile) loop near the lodge that traverses both beach and forest settings. A 6.5 kilometer (4-mile) trail round trip to the Bartlett River

CONCESSIONER OPERATED

Glacier Bay Lodge at Bartlett Cove is operated from about May 15 to September 15. Rooms and meals are available. For reservations, write to Glacier Bay Lodge, Glacier

Bay National Monument, Gustavus, AK 99928 during the operating season, and Glacier Bay Lodge, Inc., 312 Park Place Bldg., Seattle, WA 98101, the remainder of the year. A tour boat makes daily cruises from the lodge to the glaciers.

Boaters may obtain gasoline, diesel fuel, water, and limited moorage space at Bartlett Cove. No other public facilities for boats are within the park.

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CAMPING AND HIKING

Although only one campground, at Bartlett Cove, is maintained, the park's several hundred kilometers of shoreline, numerous islands, and alpine meadows offer nearly unlimited camping and hiking opportunities. Lightly vegetated regions of the upper bay are especially attractive to hikers.

Access to more isolated areas is usually by the daily tour boat from Bartlett Cove, which will drop campers at selected points en route, or via charter air services. Reservations may be required, and it is advisable to obtain local information prior to a camping trip. Inquiries may be addressed to the superintendent. In addition, a hiker's guide with many suggestions for back-country users and topographical maps covering the park can be obtained at Bartlett Cove.

Be sure to buy your own food and camping supplies before you come to Glacier Bay. There are no stores or camping services locally. Juneau is the closest city offering a complete selection.

Wet weather and terrain with numerous streams, lakes, and moist surfaces are the rule in Glacier Bay. Rain gear, a tent, and water-resistant boots are often essential items for a successful trip.

Cooking stoves are recommended because no wood is available in many portions of upper Glacier Bay for camp-

fires. All campers and others are requested to carry out all unburnable materials.

There are some special natural factors that back-country users in Glacier Bay should consider:

- Brown and black bears may be encountered at nearly any site. They are always dangerous when protecting themselves, their young, and their territories or when interested in your food. Keep your food supply separate from campsites and equipment so that no odors linger. Make noise when you hike to announce your presence. Photograph bears and other wild animals using telephoto lenses—do not try to get close. Never feed any wild animal, as it seldom is good for them, you or for other campers who follow.
- Glacial streams may be small in the morning and uncrossable torrents in the afternoon after a warm or rainy day. Tides may fluctuate 7 meters (25 feet) daily and beach meadows that are enticing as campsites may be flooded.
- Avoid crossing or approaching steep glacial interlaces. Though some steep banks of ice may be crossed safely, extreme caution should be taken when hiking on glacial surfaces.

FISHING

Hallibut, salmon, Dolly Varden and cutthroat trout occupy Glacier Bay waters. Sport fishing is permitted under regulations established by the Alaska Department of Fish and Game, and fishing licenses are required. Boats for charter may be obtained at Bartlett Cove.

WE'RE JOINING THE METRIC WORLD

The National Park Service is more meaningful for park visitors from other nations. The National Park Service is introducing metric measurements in its publications to help Americans become acquainted with the metric system and to make interpretation

Elevations are in meters. One meter equals 3.28 feet.

