# **Glacier Bay**

National Park Service
U.S. Department of the Interior

Glacier Bay National Park & Preserve

Horned puffins nest on rocky islands in Glacier Bay



### 2010 Fact Sheet

**Superintendent** Cherry Payne

**Established** Feb 26, 1925 Designated National Monument

Dec 2, 1980 Designated National Park & Preserve 1986 Designated World Biosphere Reserve 1992 Designated World Heritage site

Glacier Bay represents the most dramatic documented large-scale glacial retreat in the world and provides unparalleled opportunities for scientific study of tidewater glaciers and ecosystem development.

Size National Park 3,283,000 acres 5,130 square miles

National Preserve: 57,000 acres 90 square miles

3,283,000 acres (roughly the size of the state of Connecticut)

Park Wilderness: 2,658,000 acres World Heritage Site: 24,300,000 acres

also includes Wrangell-St. Elias National Park, Kluane National Park (Canada) and Tatshenshini-Alsek Park (Canada). One of the world's largest protected wilderness areas.

**Base Budget** \$ 4,500,000

**Staffing** Permanent 57

Term/Seasonal 70

Volunteers 78 (contributed 5,339 hours of work in '09)

**Access** Most visitors arrive on cruise ships and tour boats. The only road is 10 miles from the tiny town of Gustavus.

Gustavus has an airport and served by a jet in summer and small planes all year round.

**Visitation** The number of vessels per day is limited in the summer months. Maximum number of vessels allowed each

day include 2 cruise ships, 3 tour boats, 6 charter vessels, and 25 private vessels.

2009: 422,919 Cruise ship passengers

10,984 Tour boat passengers

10,000 Land Visitors

750 Backcountry users

**Lodging** Glacier Bay Lodge 48 rooms

Bartlett Cove Campground 33 campsites

also: multiple lodges and B&B's in the nearby community of Gustavus, AK

**Trails** 3 hiking trails: 10 miles

over 700 miles of shoreline to kayak, camp, and explore.

#### **Prehistory**

Glacier Bay has been the homeland of the Huna Tlingit people for countless generations.

#### Climate

Southeast Alaska is within a cool, wet coastal temperate rainforest. Summer: 50° to 60°; Winter 20° to 30°, with extremes of -10° F. Some form of precipitation occurs on average of 228 days per year. Annual precipitation is 70 to 80 inches, including an annual snowfall of 14 feet. High in the Fairweather Mountains, over 100 feet of snow may fall year-round.

### Marine waters & coastlines

Total Marine Waters: 607,099 acres (largest marine area managed by NPS)

Coastline (including the outside coast) 1180 statute miles

Coastline of Glacier Bay proper, excluding all islands: 563 statute miles Coastline of Glacier Bay proper, including all islands: 760 statute miles

#### **Oceans & Tides**

Deepest Point in Glacier Bay: 1,410 feet below sea level

Tides are diurnal: they change every 6 hours (2 high/2 low every 24 hours)

Tidal fluctuation: ranges from -5 feet to 18 feet (an extreme tide can change 23 feet in 6 hours)

#### **Glaciers**

250 years ago a single, large tidewater glacier covered all of Glacier Bay. By 1750 the glacier began to retreat and has now retreated 60 miles to the head of the bay.

Currently glaciers cover 1,375 square miles or 27% of the Park. There are over 50 named glaciers, 7 of which are active tidewater glaciers that calve icebergs into the sea. Most park glaciers originate between elevations from 8,000 to 15,000 feet.

The Grand Pacific, Brady and Carroll Glaciers have areas in excess of 200 square miles.

In general, tidewater and terrestrial glaciers in the Park have been thinning and receding over the last several decades. Exceptions include the Johns Hopkins and Margerie Glaciers.

Selected Glacier Statistics	Height above/below water	Width	Length	Flow rate	Status
Grand Pacific	60' / 0-60'	2 miles	35 miles	1-4'/day	receding
Johns Hopkins	250' / 200'	1 miles	12.5 miles	10-15'/day	advancing
Margerie	250' / 100'	1 miles	21 miles	6-8'/day	stable
Lamplugh	180' / 10-40'	.75 miles	16 miles	2-3'/day	Stable/thinning

## Landmarks & Elevations

Mt. Fairweather	15,325' above sea level	Mount Watson	12,516
Mt Quincy Adams	13,615	La Perouse	10,728
Mount Root	12,860	Mount Bertha	10,204
Mount Crillon	12.726		

#### **Earthquakes**

5 major earthquakes in the last 150 years (date/richter scale reading):

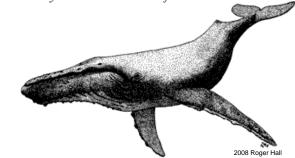
1853 / ?, 1874 / ?, 1899 / 8.6, 1900 / 7.9, 1936 / , 1958 / 7.9

Wildlife

Fish 160 marine and estuarine species

Birds 242 species
Mammals 41 species
Amphibians 3 species
Reptiles None

Humpback whales spend the summer in Glacier Bay and swim to Hawaii for the winter



#### **Flora**

Vascular Plants -333 individual taxa documented