

ACL 29222

443

09/11



Glacier Bay Climbing Expedition 2009

Fairweather Range, Southeast Alaska

Final Report



Peak 5899ft from the Johns Hopkins glacier. The expedition made the first ascent of this summit.

Supported by: Mount Everest Foundation

The compiler of this report and the members of the expedition agree that any or all of this report may be copied for the purposes of private research.

Photos and content by Paul Knott except where indicated.

Summary

The Johns Hopkins is one of the major glaciers of the west arm of Glacier Bay, southeast Alaska, and features in numerous photos taken from tour boats in the Johns Hopkins Inlet. Surrounding it are major summits of the Fairweather range from Mt Quincy Adams in the north to Mt Crillon in the south. Thanks to the local knowledge and enthusiasm of our ski plane pilot, Paul Swanstrom, in April 2009 we were able to be the first climbing party to access this glacier. The price for this was an inconvenient 2000ft descent from the landing site on the west shoulder of Mt Abbe to the 2000ft contour on the south arm of the glacier.

Our aerial reconnaissance showed problems with icefalls and seracs on the approach and descent from our original objective, the long-coveted north ridge of Mt Crillon. Instead, we took advantage of the stable weather forecast to tackle the unclimbed northwest ridge of Mt Bertha (10,200ft). Bradford Washburn's party was the first to climb Mt Bertha in 1940, and the mountain has since received only three more ascents, all from the Brady glacier to the east. Four miles in length and rising 7100ft from the glacier, the undulating northwest ridge turned into a trial of stamina as we successively encountered unconsolidated winter powder, breakable melt-freeze crust, and compressible wind deposits. Long sections of ridge also featured typically exposed southeast Alaskan cornices. We reached the summit on our fourth climbing day, 26 April, enjoying panoramic views from the expansive Brady icecap to the mixed alpine faces of the Mt Fairweather group, the alluring rock spires of Mt Abbe, and the distant giants of the St Elias range.

After two days refuelling our bodies at base camp, we felt compelled in continued good weather to tackle the striking unclimbed 8599ft peak that lies north of Mt Crillon and east of Mt Orville. Somewhat tongue-in-cheek, we propose the unofficial name "Fifty Years of Alaskan Statehood" for this peak, following an old Russian naming tradition. Taking the only amenable line we could see, we waded up isothermic snow on the east rib. We stopped early at our second camp, at 7560ft in the bowl below the upper south face, and spent the day watching avalanches let loose on the face. Early on 2 May, we crossed the bergschrund and continued up the south face via a couloir and snowed-up rock rib to reach the summit in pre-dawn light. Still before mid-morning, we left a 3ft trench as we descended the lower snow rib on wet slopes that were close to sliding. Early next day, our southwest facing re-ascent to base camp started up a collapsing snow tongue over an increasingly exposed and water-covered rock band.

With the sea-level pressure falling rapidly, we flew out on 5 May before bad weather set in. The next day, Juneau reverted from record high temperatures to cold, wet and windy.

MEF Reference: 09/11
Area visited: Johns Hopkins Glacier, Glacier Bay National Park, Fairweather Range, SE Alaska.
Members: Paul Knott, Guy McKinnon
Contact: Paul Knott, Department of Management, University of Canterbury, Private Bag 4800, Christchurch, New Zealand.
Tel: +64 3 364 2941 (work); Fax +64 3 364 2020.
EMail: paul.knott@canterbury.ac.nz
Objectives: Exploration of climbs from the Johns Hopkins glacier basin; ascent of Mt Crillon N ridge.

Diary of events

16 April 2009	Fly Christchurch – Seattle
17 April	Fly Seattle – Juneau
18 April	Food shopping in Fred Meyer, near Juneau airport
20 April	Marine Highway Juneau – Haines
22 April	Fly by ski plane to base camp at 4000ft on west shoulder of Mt Abbe
23-27 April	Ascent of NW ridge Mt Bertha, reaching summit on 26 April (see below)
30 April – 3 May	Ascent of E rib and upper S face Pk.8599m, reaching summit on 2 May (see below)
5 May	Ski plane return to Haines; Marine Highway to Juneau
6 May	Fly Juneau - Seattle

Background

The area we visited is part of the Fairweather range and part of the Glacier Bay National Park in southeast Alaska. A document recently published by the National Parks service (available on its website) details the mountaineering history of the park. The total number of climbing visits remains low enough for this document to attempt to list them all. In general, climbing in the range is not popular. The exposure to coastal storms, broken glacier conditions and propensity to melt out due to low altitude limit interest in this part of the range to more dedicated parties. The part of the range north of Mt Fairweather is higher, more open and probably more amenable, weather permitting. There is no bureaucracy involved in climbing in the park – only a recommended registration of visit.



Extract from Glacier Bay National Park map showing base camp and climbing routes

Accessing the Johns Hopkins glacier basin

The Johns Hopkins is one of the major glaciers of the west arm of Glacier Bay and features in numerous alluring photographs taken from tour boats in the Johns Hopkins Inlet. Surrounding it are major summits of the Fairweather range from Mt Quincy Adams in the north to Mt Crillon in the south. Despite this, climbers have not previously established a base camp anywhere on this glacier. The Johns Hopkins is a tidewater glacier that is extremely broken in its lower part below about 1000ft, effectively preventing access from the sea. One spirited attempt at access was in 1977 by James Wickwire, Alan Givler, Dusan Jagersky and Steve Marts, who were unable to gain access either from the Johns Hopkins Inlet or from the Brady glacier via a col between Mt Abbe and Mt Bertha. They later found a way onto the Hopkins side of peaks southeast of Mt Abbe, but not further into the Hopkins basin. Similarly, in 1983 James and Kevin Haberl, Peter Mair and Bruce Blackwell were unable to gain access to the glacier either from the Johns Hopkins Inlet or from the Brady glacier. Research parties, too, may never have walked on the Hopkins glacier; the author's search turned up no evidence of visits other than to the inlet. Park regulations do not permit helicopter access. For a time, they prohibited all air access, effectively forcing climbers to make sea-to-summit ascents, but currently they permit ski plane landings.

The Johns Hopkins has long caught the attention of our glacier pilot, Paul Swanstrom of Mountain Flying Service, Haines, who has been operating in the area since 1992. Ski plane access is problematic as the upper névés are very broken and the lower glacier undulates and is prone to melting out. Paul's reconnaissance had suggested that a snow shoulder on the west side of Mt Abbe might provide a feasible landing site, and our trip provided the opportunity to make this a reality.



Aerial photo showing the route from the snowy west shoulder of Mt Abbe to the main Hopkins glacier

From the landing site at 4000ft, a broad snowy shoulder leads down towards the main glacier. This falls away at its base to a rock band that is snow-covered in winter. During our stay, the rock band became increasingly exposed and the southwest facing snow alarmingly wet. The descent took us to the disturbingly low 2000ft contour on the glacier, but despite this the crevassed section at the glacier edge was well snowed up and caused us no problems. Our access route might not work out after a low snowfall winter, or later in the season (see notes on weather and conditions). Current pictures on Google Earth show our snow shoulder completely cut off from the glacier by a major rock band.

Ascent of Mt Bertha (10,200ft; 3109m)

Allegedly named after a prostitute in Skagway, this mountain was first climbed by Bradford Washburn's party in 1940. It has since received only three more ascents, all from the Brady glacier to the east.



Mt Bertha from the WNW, showing camps and route of ascent.

The undulating northwest ridge of Mt Bertha is four miles in length and rises 7100ft from the Johns Hopkins glacier. Notwithstanding its length, it looked relatively straightforward from the air and we decided to climb it so that we could take a closer look at Mt Crillon. The climb turned into a trial of stamina as we successively encountered unconsolidated winter powder, breakable melt-freeze crust, and compressible wind deposits. Long sections of ridge also featured typically exposed southeast Alaskan cornices, some of which we managed to bypass via slopes of varying quality to the side. We had only taken minimal food and fuel on the climb, and this forced us to put in some full days on short rations. We reached the summit on our fourth day, 26 April, enjoying panoramic views from the expansive Brady icecap to the mixed alpine faces of the Mt Fairweather group, the alluring rock spires of Mt Abbe, and the distant giants of the St Elias range. Our descent was as rapid as we had hoped, and we reached base camp the following day.

Ascent of Peak 8599ft (2621m)

This striking previously unclimbed peak lies north of Mt Crillon and east of Mt Orville at the northeastern end of a ridge arising from "False Wilbur" (an 8900ft peak incorrectly marked on some maps as Mt Wilbur). It rises 5600ft from the Johns Hopkins glacier and is a striking sight, especially from the north and east, from which it presents no amenable lines (see cover photo). From Mt Bertha, we saw a back door route to its summit, following the shallow east rib and continuing into the upper southeast bowl at c.7500ft to access mixed ground on the upper south face.

On 30 April, we waded up isothermic snow on the east rib to a campsite at 5135ft. The next day, we stopped early at our second camp, at 7560ft in the bowl below the upper south face, and spent the day watching avalanches let loose on the face. Early on 2 May, we crossed the bergschrund and continued via a couloir and snowed-up rock rib to reach the summit in pre-dawn light. The GPS altitude, for what it is worth, read slightly higher than the map at 8640ft (WGS84). Still before mid-morning, we left a 3ft trench as we descended the lower snow rib on wet slopes that were close to sliding.

With an eye to the old Russian tradition of peak naming, and the Russian colonial history of Alaska, we propose for this peak the strictly unofficial name "Fifty Years of Alaskan Statehood". In 2009, Alaska celebrated the 50th anniversary of its statehood, which was officially granted in January 1959.

Notes on Mt Crillon and other peaks

The striking north ridge of Mt Crillon was the original climbing objective for this expedition. Despite its obvious appeal, this route has remained unclimbed because of the difficulty of gaining the ridge from the North Crillon glacier and the previously unsolved problem of accessing the Johns Hopkins glacier. These issues prevented all of the following would-be ascensionists from making significant progress: Cline/Dahl/Tickell, 1977; Wickwire/Givler/Jagersky/Marts, 1977; Haberl teams in 1983 and 1993; Bill Pilling and Carl Diedrich, 1998; Steve Graepel and Gabe Rogel, 2006.



*North face of Mt Crillon with the unclimbed north ridge dividing light and shade.
The ringed areas highlight difficulties on the approach and descent.*



We hoped that once we had accessed the Johns Hopkins glacier, we would easily gain the ridge via a snowy spur that meets the main north ridge at c.8500ft. Unfortunately, we found on our reconnaissance that an icefall adds greatly to the commitment of this approach, and more crucially that the main descent option via the northeast ridge is broken by unstable seracs. One of these would require a long and perhaps free-hanging abseil onto perched ice blocks. As the photo extract shows, this area appears unstable, which is consistent with its position lee of prevailing storm winds.

A notable feature we did not expect is the light-coloured and apparently solid, well-featured rock close to our base camp on the south and west sides of Mt Abbe. This rock contrasts with the dark, poor rock we saw elsewhere. The 1977 Wickwire party climbed this side of Mt Abbe and the striking rocky peaks to the southeast, having approached from the Brady glacier via two linked cols. As with many other potential climbs in this area, access may be a problem as the hanging glacier below this group of peaks look quite broken. In addition, the 1977 route to the summit of Mt Abbe looked as if it might no longer be viable.

Conditions and weather

The exquisitely named Fairweather range is notorious for having anything but fair or settled weather, as it is a coastal range that catches storms coming up the Gulf of Alaska. Its southern end is also at a rather low altitude and surrounded by sea. For this reason, our planned trip dates were the relatively early mid-April to mid-May. We arrived in Juneau to wet stormy weather, but this gave way to an exceptional period of stable, high-pressure weather lasting from 22 April to 5 May. In mid April, snow still lay around Haines, and we flew in to find winter powder, wind-blown and otherwise. In late April, conditions warmed rapidly such that melt lines appeared on the glaciers and we faced wet snow slides, especially on rocks slabs that caught the sun. The stable weather and warm temperatures we experienced are the subject of the National Weather Service paper "The Alaskan Warm Episode of 29 April to 04 May 2009", available on <http://nws.met.psu.edu/severe/2009/01May2009.pdf>. After we flew out, Juneau reverted from record high temperatures to cold, wet and windy.

Would-be future parties may like to consider that our visit was at the end of a reasonably strong La Niña winter that produced colder temperatures and healthy winter snowfall. In some years, the access routes we used might not be viable because the rock slabs between the landing site and the glacier might be exposed and the glacier at 2000ft might be too open.

While in the mountains, we benefitted greatly from Paul Swanstrom's insightful and well-researched weather updates.

Equipment notes

Notable points concerning our equipment choices and use are:

- We used snowshoes and not skis. Snowshoes were a good option as we had to carry them on a section of the descent from base camp to the main glacier, and they performed well enough in the conditions.
- We built virtually no snow walls at base camp or on the mountain, and only carried the minimalist 'Snow Claw' shovel on the hill. On this trip, we had no bad weather, but the same approach has worked well on Paul's five previous trips to this part of Alaska. We did use strong tents: a Terra Nova Super Quasar and an Integral Designs MK3.
- For communication, we used an Iridium phone. The Globalstar system that has been an option in this area was not fully operational at the time of the trip. We found the phone reliable despite the rock buttress behind base camp blocking out a significant portion of sky. The sound quality was similar to current GSM mobiles.
- We burnt exclusively White Gas in our stoves. Because we were at base camp a shorter time than planned, and melted much of our water in the sleds, we used only one gallon (3.78l) during the two weeks we spent on the glacier.

Environmental notes

We complied in full with the pre-trip environmental impact statement,

"We will minimise general impact through the small team size. By flying in and out, we will avoid impact on the sensitive coastal ecosystem, which can be a problem especially with bears. We will fly out all non-human waste for proper disposal in Haines, as required by the National Park authorities. We will avoid the scourge of lost glacier wands by substituting GPS waypoints. We will bury human waste as deeply as possible in the snowpack."

We left no wands, dropped no equipment, and left no abseil slings.

The first time we descended to the main Johns Hopkins glacier, we passed two sets of bear tracks on the glacier a little above the 2000ft contour. We also saw bears on the lower glacier as we flew out. They did not appear to have roped up, and it seems questionable whether they practised effective waste containment, or even burial deep in the snowpack.

In order to be socially as well as environmentally conscientious, on our return from the trip, we donated our surplus food to the homeless shelter in Juneau.

GPS data

The following data were recorded with the instrument on the WGS84 map datum.

Location	Latitude	Longitude	Date taken	Altitude (if noted)
Base camp	58 47.537' N	137 07.311' W	1526 22 April	4000ft
Bertha camp 1	58 43.651' N	137 05.492' W	1556 23 April	3077ft
Bertha camp 2	58 42.574' N	137 05.012' W	1528 24 April	6000ft
Bertha camp 3	58 41.151' N	137 02.427' W	1636 25 April	9500ft
8599 camp 1	58 43.326' N	137 08.571' W	1353 30 April	5135ft
8599 camp 2	58 43.503' N	137 10.917' W	1028 1 May	7566ft
Peak 8599 summit	58 43.692' N	137 10.787' W	0416 2 May	8640ft
Hopkins glacier camp (8599 descent)	58 45.026' N	137 07.404' W	1210 3 May	-

Finances

INCOME

	GBP	Totals (GBP)
MEF grant	£1550.00	
Individual contributions	£3841.25	
Total income		£5391.25

EXPENDITURE

	GBP	Totals (GBP)
Travel		
Flights Christchurch-Seattle-Juneau return (including ancillaries)	£2830.12	
Alaska Marine Highway Juneau-Haines return	£105.08	
Ski plane flights	£866.09	
Accommodation in Juneau and Haines	£297.46	
Other travel expenses	£391.55	£4490.30
Food and supplies		
Food	£410.55	
Coleman fuel and other supplies	£76.01	£486.55
Insurance	£217.36	£217.36
Other items		
Satellite phone rental and expenses	£197.03	£197.03
Total expenditure		£5391.25

Exchange rates applied: USD/GBP 0.71; NZD/GBP 0.38.