Glacier Bay Climbing Expedition 2011

Fairweather Range, Southeast Alaska

Final Report



Upper NE spur and N ridge of Mt Orville from foresummit c.8074ft.

Supported by: Mount Everest Foundation

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Photos and content by Paul Knott except where indicated.

Summary

In April 2011, I returned for a second visit to the Johns Hopkins glacier basin in the southern part of the Fairweather range. In 2009, Guy McKinnon and I had been the first climbers to access the main glacier and had made two successful ascents. This time, Vaughan Snowdon joined me and we planned to attempt the north ridge of Mt Orville (10,495ft or 3199m). This is one of the awe-inspiring peaks photographed from tour boats in the Johns Hopkins Inlet. Previously, climbers had only attempted it from the south and only one party had summited. Just as in 2009, ski plane pilot Paul Swanstrom dropped us on the west shoulder of Mt Abbe at a little under 4000ft, this time in deep powder snow. A low cloud base limited our aerial reconnaissance of Mt Orville.

We retraced the 2009 route to 2000ft on the Johns Hopkins glacier, finding tough snow conditions but well-bridged crevasses, and easily accessed the lower slopes of the 8km-long northeast spur that weaves it way to Mt Orville's north ridge. The key to this spur would be to traverse its southern slopes in the lower part. We passed the striking pinnacle 5908ft by descending to cross its south rib and climbing up the avalanche couloir on the far side. Beyond a second rib from point 7803ft, we gained the ridge but an awkward gendarme forced us into a steeper bowl with a steep bergschrund to exit. Early on our fourth climbing day, 20 April, we reached a foresummit at c.8074ft with a fine view of the upper mountain. Beyond this point, the ridge became rocky on both sides with a cornice-encrusted knife-edge crest. This sustained exposed ground made up about half of the remaining 2.7km to the summit. We would have to abseil into a notch in front of us, and could see two more deep notches in the ridge ahead. Having to return the same way further compounded the level of seriousness. An approaching weather front sealed the decision and we retraced our steps back to base camp.

After four days of damp snow showers, the sky cleared and we set off for the imposing granite peaks southeast of Mt Abbe. Several of these summits were climbed by Alan Givler, Dusan Jagersky, Steve Marts and James Wickwire in June 1977, but the area has since been untouched. We gained access to this northwest facing bowl by traversing debris below the ice cliffs draining the hanging glacier southwest of Mt Abbe. First, we turned our attention to an unclimbed c.7400ft snow summit on the southwest side of the glacier. We rejected the northeast rib due to avalanche risk from powder snow, and instead approached a col to the northwest. On 27 April, we overcame the bergschrund after some effort and followed avalanche debris to the col then a snow arête to a forepeak at c.7484ft. A steep drop-off and north-facing rib and couloir separated us from the true summit pinnacle, and due to unstable powder in the couloir, we elected to retreat.

Another potential objective was unclimbed Peak 8410ft, immediately south of Mt Abbe, via a broad couloir on the south face. Unfortunately, the couloir funnels into a substantial cliff of broken granite and is essentially inaccessible. Our final option was Peak 8290ft further southeast, also unclimbed. This sports smooth granite pillars on the north side, but we hoped to access the southeast ridge via the col used by the 1977 party. Unfortunately, we were unable to reach this due to a gaping bergschrund and steep powder-covered slabs. We returned to base camp and flew back to Haines that afternoon, ahead of a forecast storm.

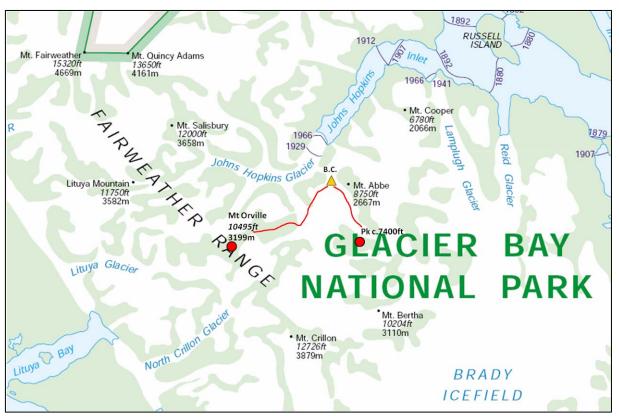
MEF Reference:	11/20
Area visited:	Johns Hopkins Glacier, Glacier Bay National Park, Fairweather Range, SE Alaska.
Climbers:	Paul Knott, Vaughan Snowdon
Contact:	Paul Knott, Department of Management, University of Canterbury, Private Bag 4800, Christchurch, New Zealand. Tel: +64 3 364 2941 (work); Fax +64 3 364 2020. EMail: <u>paul.knott@canterbury.ac.nz</u>
Objectives:	First ascent of the north ridge of Mt Orville (10,495ft or 3199m).

9 April 2011	Fly Christchurch - Seattle
10 April	Fly Seattle - Juneau; food shopping in Fred Meyer, near Juneau airport
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11 April	Marine Highway Juneau - Haines
16 April	Fly by ski plane to base camp at 3957ft on west shoulder of Mt Abbe
17-21 April	Attempt on NNE spur leading to N ridge of Mt Orville (see below)
22-25 April	At base camp in mediocre weather with damp snow showers
26-28 April	Attempt on Peak c.7400ft and other potential objectives S of Mt Abbe (see below)
28 April	Ski plane return to Haines
29 April	Fly Haines - Juneau
30 April	Fly Juneau - Seattle
3-5 May	Fly Seattle - Christchurch

Diary of events

Background to the area

The area we visited is part of the Fairweather range and part of the Glacier Bay National Park in southeast Alaska. A document recently updated by the National Parks Service (available on its website) details the mountaineering history of the area. 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 are some factors that likely limit the level of interest, especially in the southern part of the range. As a result, striking potential objectives such as the granite area south of Mt Abbe remain essentially untouched. The area 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.

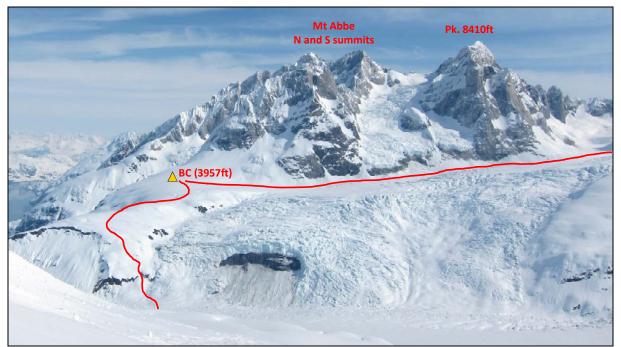


Extract from Glacier Bay National Park map showing our base camp and climbing routes

Accessing the Johns Hopkins glacier basin

The routes we explored on this expedition became newly accessible in the light of Paul's trip with Guy McKinnon in 2009 (MEF 09/11), which showed the possibility of climbing from the Johns Hopkins glacier. Climbers had not previously accessed this glacier despite its prominence within the west arm of Glacier Bay and the major summits that surround it. The extremely broken tidewater glacier area effectively prevents access from the sea, and crevasses have cut off all attempts at foot access from the Brady glacier. The only party to have accessed any point within the glacier basin was that of James Wickwire, Alan Givler, Dusan Jagersky and Steve Marts, who found a way onto the Hopkins side of peaks southeast of Mt Abbe. 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 key to accessing this area was, as in 2009, ski plane pilot Paul Swanstrom of Mountain Flying Service, Haines. As well as being knowledgeable, diligent and considerate, Paul offered us great hospitality in Haines while we waited for flying weather. We landed and made base camp at 3957ft on the snow shoulder on the west side of Mt Abbe. Other areas on and above the Johns Hopkins are inaccessible to ski planes as the upper névés are very broken and the lower glacier undulates and is prone to melting out.



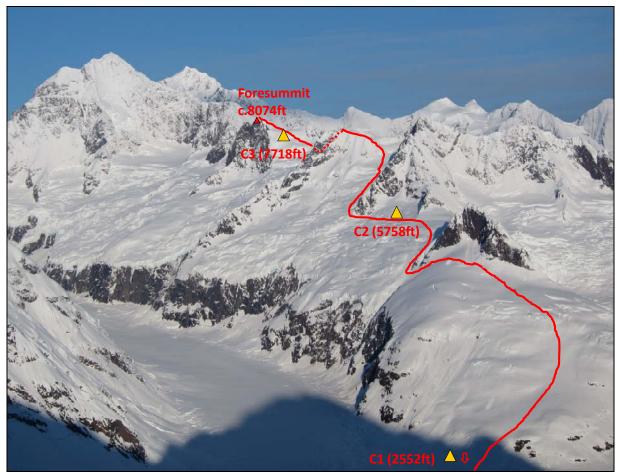
Aerial photo showing base camp and access routes to the main glacier and to the peaks S of Mt Abbe

From base camp, 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 the 2009 trip, the rock band became increasingly exposed and the southwest facing snow alarmingly wet. The descent reaches the glacier disturbingly low at the 2000ft contour, but despite this the crevassed section at the glacier edge was well snowed up in 2011 and caused us no problems. This access route might not work out after a low snowfall winter, or later in the season, and was one reason we chose to climb relatively early in April. Pictures on Google Earth show the snow shoulder completely cut off from the glacier by a major rock band.

The access from our base camp to the area south of Mt Abbe seemed reasonably secure, if threatened in places by active ice cliffs. Further out from the debris area, the glacier becomes very broken. As an alternative, it might be possible to land a ski plane in the north-facing bowl between Peak c.7400ft and Peak 8440ft.

Attempt on Mt Orville (10,495ft; 3199m)

Mt Orville (3199m) is among the most prominent and awe inspiring of the peaks viewed from the tour boats that frequent the Johns Hopkins Inlet. It is an enigmatic summit with access apparently cut off from almost every direction. The only party to reach the summit was Philip Kauffman, Patrick Simmons and Steve Carroll, who climbed via the south face in 1995. After calling by radio from the summit, they subsequently all took a fatal fall during their descent in storm conditions. The south (or southeast) ridge might be objectively safer, but several parties in the 1990s and one in 2006 were repelled by major steps of steep, rotten rock. The north ridge appears to be the sole remaining option for an ascent and was the main objective for this expedition. It has the appeal of a classic symmetrical snow arête, but as with many mountains in this area, suitors must first negotiate the 8km-long northeast spur that weaves its way from low on the Johns Hopkins glacier.



Mt Orville from the east, showing camps and route of ascent.

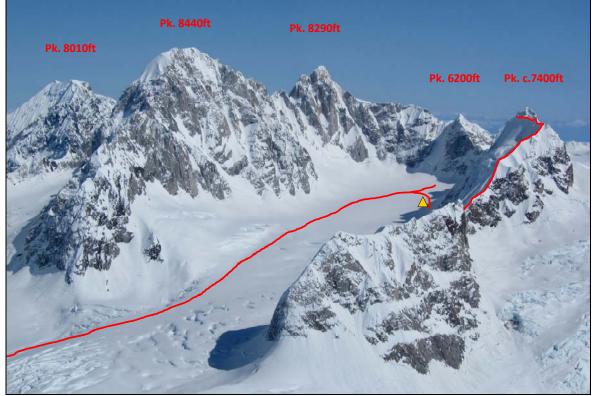
After descending from base camp as described above, we easily crossed the glacier to camp at the base of the snow slope that accesses the northeast spur. The following day, 18 April, we passed an area of seracs at the top of this slope and crossed the snow bowl above. Beyond this, the key to the northeast spur would be to traverse its southern slopes to avoid several pinnacles. We passed the striking pinnacle 5908ft by descending to cross its south rib and climbing up the avalanche couloir on the far side. From here, we continued into the cwm above to camp at 5758ft. The following day we continued around a second rib descending from point 7803ft and climbed up to the main ridge a little beyond. We attempted to continue along the ridge, but soon encountered an awkward gendarme. This might have been passable on the north side except that the unconsolidated powder offered no traction. Instead, we descended again, this time into a steeper bowl that heated alarmingly in the morning sun. To exit this bowl we had to negotiate an open bergschrund with a steep snow wall behind. We camped a little above, close to a small col at 7718ft.

Early on our fourth climbing day, 20 April, we reached a foresummit at c.8074ft with a fine view of the upper mountain. Beyond this point, the ridge was unavoidable and became rocky on both sides with a cornice-encrusted knife-edge crest. This sustained exposed ground made up about half of the remaining 2.7km to the summit and the piled-up cornice was most likely composed of unstable powder. We would have to abseil into a notch in front of us, and could see two more deep notches in the ridge ahead. Having to return the same way further compounded the level of seriousness. An approaching weather front sealed the decision and we retraced our steps back to our camp on the glacier. We continued to base camp next morning in cloudy but otherwise reasonable conditions.

Attempt on Peak c.7400ft (2256m)

This is an elegant but modest-looking snow summit that lies on a spur between the main Mt Abbe peaks and the Johns Hopkins glacier. The 1977 party (see above) climbed Peak 7200ft at the southeast end of this spur, in what appears to have been a fairly short climb from the 6400ft col they used for access. From our base camp, the highest point along this spur, Peak c.7400ft, appeared to be a straightforward summit we could bag before attempting harder objectives.

The first challenge was negotiating a route into the northwest facing bowl below the peak. Much of the area below this bowl is heavily crevassed, but we were able to gain access by traversing debris below the ice cliffs draining the hanging glacier southwest of Mt Abbe. Once in the upper bowl, we found ourselves wading unconsolidated powder. Our first choice of route was the northeast rib, which leads directly to the main summit, but we rejected this due to avalanche risk from powder snow. Instead, we camped below a c.6100ft col to the northwest. On 27 April, we overcame the open bergschrund after some effort and followed avalanche debris to the col then a snow arête to a forepeak, which registered c.7484ft on the altimeter. A steep drop-off and north-facing rib and couloir separated us from the true summit pinnacle, and due to unstable powder in the couloir, we elected to retreat.



Aerial photo showing northwest-facing cirque south of Mt Abbe

Notes on the peaks south of Mt Abbe

During our attempt on Peak c.7400ft, we were able to reconnoitre the intriguing climbing possibilities on the light-coloured and apparently solid granite on the south and west sides of the Mt Abbe group. This is in contrast to the dark schist elsewhere in the vicinity. The 1977 Wickwire party climbed several of these peaks, but not all, after approaching from the Brady glacier via two linked cols.

Many of the summits in this group sport stark granite pillars, none of which have been attempted, notably peaks 8410 and 8290, which are also unclimbed. Although it was not hard to reach this area from our base camp, parties intending specifically to climb on these peaks might consider requesting a landing in the upper snow bowl, which appears to be possible. Another issue worth bearing in mind is that all the bergschrunds we saw looked very open. On our last climbing day we turned back from the col by Peak 8290 as the schrund looked impassable.



S face of unclimbed Peak 8410ft

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 and because we would be relying on snowbridges at 2000ft for access to and from base camp, our planned trip dates were early in the spring season. La Niña conditions strongly influenced winter 2010-11, and this seemed to divert the heaviest storm snowfall further south, resulting in a lesser snowpack with poorer consolidation. We arrived at base camp to deep powder snow, despite its west-facing aspect, and struggled through breakable crust on our descent to the glacier. Luckily, the crevasses still seemed well enough bridged, although not the bergschrunds in the area south of Mt Abbe. However, unconsolidated powder on the ridges and northern aspects was a significant impediment to our climbing both on Mt Orville and on Peak c.7400ft. Warming during our stay produced melt-freeze cycles on sunny aspects only.

We experienced no real storms during the trip, but conditions warmed alarmingly during showery weather from 22-25 April before cooling as a northerly flow resumed. Temperatures in this area seem to vary hugely according to whether the airflow is from the sea to the south and west or the mountains to the north and east.

Equipment notes

Notable points concerning our equipment choices and use are:

• We used snowshoes and not skis. Snowshoes were a good option as we carried them quite high on Mt Orville to make it easier to traverse various bowls. We used the MSR Lightning Ascent 25, which had excellent grip on icy crust but did show some wear on the decking, probably from frozen lumps in avalanche debris.

- Between our two climbing attempts, very wet snow fell at base camp and the melt penetrated our bags that we stored outside. This contrasts markedly with other Alaskan experiences.
- We burnt exclusively White Gas in our stoves. We used one gallon (3.78l) during the two weeks we spent on the glacier, which partly reflects the warm spell we had at base camp.

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 minimise packaging before leaving the city and will fly out all our garbage for proper disposal in Haines, as required by the National Park authorities. Burning waste is out of the question for this trip. 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, which is a good solution in this range with heavy snowfall."

We left no wands and no abseil slings.

Apart from the sounds of migrating geese, the main wildlife interest in the mountains was the Ptarmigan that were frequent visitors at base camp. Their enigmatic calls intrigued us many times before we eventually managed to photograph these elusive birds.

Finances

INCOME

	GBP	Totals (GBP)
MEF grant	£1800.00	
Individual contributions	£4018.84	
Total income		£5818.84

EXPENDITURE

	GBP	Totals (GBP)
Travel		
Air NZ Flights Christchurch-Seattle return (including ancillaries)	£2137.03	
Alaska Airlines Flights Seattle-Juneau return (incl. ancillaries)	£1230.99	
Travel Juneau-Haines return	£98.20	
Ski plane flights	£882.77	
Accommodation	£122.32	
Other travel expenses	£446.77	£4918.07
Food and supplies		
Food	£501.14	
Coleman fuel and other supplies	£74.01	£575.15
Insurance	£180.42	£180.42
Other items		
Satellite phone rental and expenses	£145.21	£145.21
Total expenditure		£5818.84

Exchange rates applied: USD/GBP 0.66; NZD/GBP 0.49.

GPS data

The following records the GPX data file from the GPS (using the WGS84 map datum). The file can be transferred onto another GPS or used to plot the waypoints onto Google Earth:

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