

SHACKLETON WALK

Visitor Management Plan & Extended Walk Plan

v2015 rev 1 (7/1/2015)



INTRODUCTION

This is a popular historic route that provides great views on descent into Stromness. Despite its popularity, this route is not without its dangers. In order to avoid particularly hazardous terrain and reduce risk of serious injury, it is essential that this plan adhered to.





GENERAL DESCRIPTION

○ Topography

The southern section of the western shore of Fortuna Bay is marked by a series of prominent scree ridges comprising sedimentary sandstone and shale. The two most conspicuous ridges lead up towards 'Crean Lake'. The pass lies at approximately 300m altitude. Conspicuous folding in the rocks, typical of the Cumberland Formation, is visible in the cliffs at the head of Shackleton Valley and at the east entrance of Stromness Bay. Shackleton Valley is dominated by a braided gravel river bed.

○ Fauna

Confirmed breeders: Fortuna Bay side - light-mantled sooty albatross (*Phoebastria palpebrata*), southern giant petrel (*Macronectes giganteus*), white-chinned petrel (*Procellaria aequinoctialis*), Wilson's storm-petrel (*Oceanites oceanicus*), South Georgia diving-petrel (*Pelecanoides georgicus*), kelp gull (*Larus dominicanus*), brown skua (*Stercorarius antarcticus*), southern elephant seal (*Mirounga leonina*) and Antarctic fur seal (*Arctocephalus gazella*).

Stromness Bay side - gentoo penguin (*Pygoscelis papua*), light-mantled sooty albatross, South Georgia diving-petrel, kelp gull, brown skua, Antarctic tern (*Sterna vittata*), southern elephant seal and Antarctic fur seal.

Habitat Restoration projects to remove introduced land mammals, brown rat (*Rattus norvegicus*) and reindeer (*Rangifer tarandus*), were undertaken in 2013. Any evidence of live rodents or reindeer must be reported to the Government of South Georgia and the South Sandwich Islands (GSGSSI).

○ Flora

Vegetation cover between Fortuna Bay and Stromness Harbour extends from sea level to approximately 100 - 150m altitude.

Fortuna Bay slopes - lower slopes predominantly tussac, merging into *Festuca* grassland with scattered mossy seepage gullies. Moss patches on lower scree slopes and at stream edges.

Shackleton Valley - inland fellfield communities merge with *Festuca* grassland, with bog and mire communities on the lower slopes. In the area of rolling hills behind Stromness whaling station *Festuca* grassland, short mixed grassland and bog and mire communities are mixed with moss communities. Areas of reindeer-grazed tussac and burnet are expected to recover rapidly.

○ Other

Last section of the route Shackleton, Crean and Worsley took across South Georgia 1916.



KEY FEATURES

- Historical interest
- Mountain Scenery

VISITOR IMPACTS

○ Known impacts

Track starting to form on some scree sections; divots on bog and mire slope adjacent to Shackleton Falls.

○ Potential Impacts

Disturbance of wildlife, particularly diving-petrel burrows and trampling of vegetation.

LANDING REQUIREMENTS

○ Ships

Ships carrying 500 or fewer passengers. One ship at a time.

Maximum two ships per day (midnight to midnight) of which no more than one vessel carrying more than 200 passengers.

(A ship is defined as a vessel, which carries more than 12 passengers).

○ Visitors

Walking groups of no more than 100 visitors exclusive of expedition guides and leaders. Minimum of one experienced guide per 15 visitors. If the number of walkers exceeds 100 then they should be divided into distinct groups of no more than 100 passengers, maintaining a minimum ratio of one guide to 15 visitors with each group (see walk grading below).



VISITOR AREAS

○ Landing Area

Fortuna Bay: Worsley Beach, gravel beach area to the south of Hodson Point.

Stromness: beach area between the ships' propellers (200m from station) and mouth of the Shackleton Valley river. (Permit Holders must study Prohibited Areas Order for details).

○ Closed areas

The hazardous terrain to north of approved route and the prohibited area surrounding whaling station (see route guidelines for details).

○ Free Roaming Areas

The immediate landing beaches at Fortuna Bay and Stromness Harbour, the braided river bed area in Shackleton Valley and the level area behind the whaling station between the staked area and the rolling hills. Extreme vigilance must be exercised to avoid disturbing nesting terns.

Staff may guide visitors to the Gentoo penguin colony in the area of small rolling hills behind station. However, extreme care must be taken to avoid protect fragile moss beds and mire communities. A flagged route is advisable and guidance from staff essential

VISITOR CODE OF CONDUCT

○ Behaviour Ashore

Walk slowly and carefully. Maintain a precautionary distance from wildlife and give animals the right- of-way. Increase your distance if any change in behaviour is observed.

Be alert to fur seals.

Remain vigilant for diving-petrel burrow areas and avoid them. Be alert to the presence of Antarctic terns in Shackleton Valley.

Avoid walking on areas of lichen and moss and on the bog and mire slope especially in the vicinity of the Shackleton Falls.

Avoid the gentoo penguin access routes between the colony and the beach at Stromness.

Be aware of giant petrel nests on the slopes above the landing beach (Worsley Beach) in Fortuna Bay, keeping a minimum distance of 10 m.

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○ **Cautionary notes**

This is a strenuous walk in potentially treacherous wilderness conditions, remote from any outside assistance. This walk should only be undertaken in calm, settled weather conditions with appropriate medical and safety procedures in place to enable self-sufficiency in the case of an emergency.

Follow the route guidelines. Be aware that the descent from the pass down into Shackleton Valley is particularly steep and there may be a risk of slab avalanches, particularly early in the season. Guides should undertake a reconnaissance of this area before proceeding with visitors and be prepared to return to Fortuna Bay if conditions dictate.

Minimise use of ship lights at nightfall to reduce risk of bird strikes and remain vigilant.

○ **Biosecurity**

All landings must comply with GSGSSI biosecurity measures and rigorous self-audit checks must be carried out prior to landing.

Following habitat restoration projects in 2013 any evidence of live rodents, or reindeer, must be reported to GSGSSI as soon as possible.





EXTENDED WALK GUIDELINES

Walk rating: Amber

Staff/Guest Ratio: 1/15 (minimum)

Max guests: 100 per group

300m ascent/descent

Approx. 6km walking

Est. Time: 3-4 hrs

Map: Busen Region, Series BAS 25, Sheets 5A and 5B

Great care needs to be taken on the descent into the Shackleton Valley and the route finding can be difficult in poor visibility. Early season snow may present a serious risk of avalanche, **so group leaders need to be prepared to reverse the route to Fortuna Bay if conditions dictate.** The walk has been the site of numerous injuries over the years and should not be undertaken lightly. Groups should be equipped to deal with harsh weather and rapid changes in conditions. Much of the terrain is blocky scree and so walking boots are strongly recommended.

Extended walks should never be undertaken if guides or visitors have any concerns. Careful consideration must be given to the fitness and ability of visitors intending to undertake the walk before participation can be approved. The remote location, lack of medical facilities and highly changeable weather mean that the consequences of an accident on an extended walk will be far more serious than would otherwise be the case in other less remote locations. For this reason alone, it is inappropriate to treat these walks as something that 'anyone can do'.

It is a condition of the visit permit that Visit Permit Holders (and all staff) adhere to Site Visitor Management Plans and guidelines for extended walks. Permit Holders must ensure that all other staff and guides are equally well briefed and that they adhere to all SVMP's.



WALK PLANNING AND PREPARATION

○ Walk Grading

Extended walks have all been graded on the basis of length, terrain and technical difficulty.

The Shackleton Walk has been graded as amber.

Amber Walk:

- Guides must be competent at route finding and leading groups through awkward terrain, requiring expert navigation skills in poor weather. The ground underfoot may be difficult and there will be stages of the walk where close monitoring of group members is essential for safety reasons.
- Staff (guide) to visitor ratio: 1:15. Additional staff should accompany the walk to ensure adequate staffing levels are maintained at all times to manage and respond to any incident arising.
- Suitable for walkers with previous hill walking experience and a good level of fitness. Robust footwear is essential, and walking boots are highly recommended.
- Maximum group size 100 visitors (plus guides / staff). Guides are strongly encouraged to manage walkers in discrete groups, rather than one long extended chain.

○ Waypoints

The waypoints have been produced as an aid to navigation on the walks. In the majority of cases, these provide a tangible point to head towards in poor visibility; the ground covered between the points is at the discretion of the leader and will depend on, for example, the nature and experience of the group.

Waypoints 7-12 are critical in that they dictate the northern boundary of the region in which groups should descend; this keeps groups away from the main riverbed that contains a number of problematic slopes and steep drops. It is at the leaders' discretion as to the route of descent taken within the bounds of the approved area, but the waypointed route described is well traveled and is safe if managed correctly.



○ **Closed Areas (see map)**

Closed Area A: An extremely hazardous area in places, to the north and west of the watercourse, which runs parallel and to the north of waypoints descending into Shackleton Valley.

Closed Area B: Prohibited Area surrounding Stromness whaling station, incorporating the station and any jetties to a boundary of 200m including to the seaward side. Refer to the Information for Visitors to South Georgia booklet for further details of the Prohibited Areas Order.

○ **Staff Experience**

Leading guides should ideally hold recognised qualifications (for example Mountain Leader Award).

All staff should be able to use GPS, map and compass and hold a current first aid qualification. Previous hill walking and guiding experience is important. Every staff member is expected to have sufficient experience to be able to independently and confidently manage and navigate a group of visitors down off a hill to safety.

○ **Staff Equipment**

There should be sufficient equipment carried by the each staff member to keep a group sheltered from the elements, raise the alarm if necessary, deal with immediate first aid, and have the tools to navigate independently.

This should include:

- Compass and whistle
- Local area map (plus GPS as required)
- Spare food and drink
- Spare clothing
- Basic first aid kit
- VHF

As a group, the staff should ensure they carry:

- 1 Iridium phone (minimum)
- 2 GPS units and spare batteries (minimum), more are required for larger groups
- Spare walking poles
- Group shelters to accommodate the complete party distributed between staff members

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○ **Visitors Equipment**

Visitor's personal equipment should include:

- Spare clothing
- Hat and gloves
- Emergency food & Drink (or access to these at all times)
- Personal medication (in case of delay ashore)
- Walking poles (if they normally used).

Careful consideration must always be given to footwear. Wellington boots should be avoided, particularly if visitors are not steady on their feet. Walking boots are strongly encouraged and recommended for this walk, due to the slippery conditions.

Guides should pay close attention to the footwear worn by the visitors.

○ **Medical Provision**

It is a requirement of visiting vessels to be self sufficient in every respect, including medical cover. The visit permit holder and leading guide must both check and ensure that there is adequate medical provision and a tested medical response plan in place to rapidly respond to any injury sustained during the walk or medical trauma incident.

All incidents, accidents and injuries, no matter how minor, must be reported to GSGSSI.



ROUTE DETAILS

Waypoints

Waypoint	Description	Location
WPT 1	Leaving the beach	54° 08.915' S 036° 47.146' W
WPT 2	Top of gully	54° 08.917' S 036° 47.028' W
WPT 3	Small rocky outcrops above the scree slope	54° 09.104' S 036° 46.420' W
WPT 4	Crean lake Viewpoint	54° 09.240' S 036° 45.928' W
WPT 5	Change in slope angle above Crean Lake	54° 09.207' S 036° 45.601' W
WPT 6	Tarns at col	54° 09.226' S 036° 45.179' W
WPT 7	Broad shoulder	54° 09.167' S 036° 44.833' W
WPT 8	Notch between two rock knolls. Stromness Bay and whaling station viewpoint.	54° 09.158' S 036° 44.761' W
WPT 9	Cairn on rock flats below descent from viewpoint	54° 09.085' S 036° 44.693' W
WPT 10	Easing of slope below descent from WPT 9	54° 09.047' S 036° 44.651' W
WPT 11	Obvious rocky knoll	54° 09.049' S 036° 44.575' W
WPT 12	Grassy plateau	54° 09.111' S 036° 44.458' W
WPT 13	Propellers	54° 09.414' S 036° 42.631' W

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Landings are normally made on Worsley Beach. However, this requires passing through tussac grass that may be hazardous at certain times of year due to fur seals. In this case it may be necessary to choose a different landing site to the south and to join the route described below further inland.

WPT 1 Leaving the beach (54° 08.915' S; 036° 47.146' W)

Starting at this point provides the shortest route through the tussac and it has often been found to be the easiest route; guides, however, should select the safest route depending on seal density at the time of their visit. Follow the natural drainage line, leading up a steep, wet grassy gully. While this gully is wet and showing signs of wear, it is preferable to use this rather than trampling moss beds in neighboring gullies and slopes.



WPT 2 Top of gully (54° 08.917' S; 036° 47.028' W)

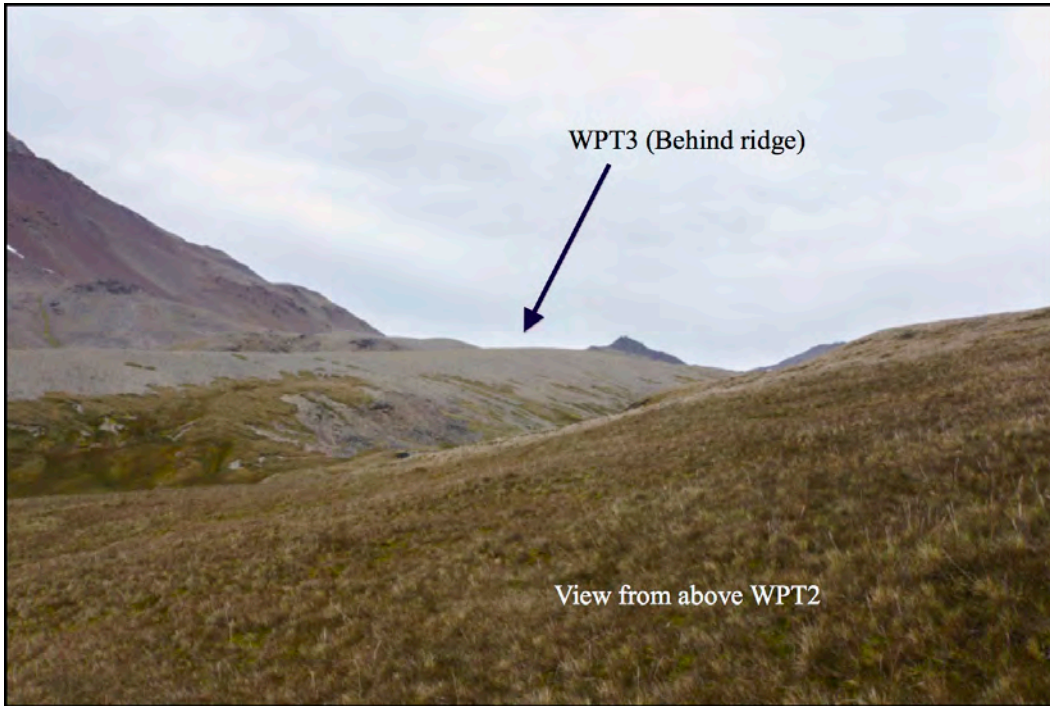
The terrain to the next waypoint is relatively open and a route can be chosen as desired. However, moss patches, other sensitive vegetation and nesting giant petrels should be avoided.

The stream crossing is very straightforward and there are numerous suitable places to cross.

Note that an area of burrowing diving petrels is located at 54° 09.116' S, 036° 46.496' W. Pass well to the south of this point to avoid them.

WPT 3 Small rocky outcrops above the scree slope (54° 09.104' S; 036° 46.420' W)

This is an intermediary waypoint en route to Crean Lake. Pass across gently rising scree slopes.



WPT 4 Crean lake Viewpoint (54° 09.240' S; 036° 45.928' W)

Be aware the lake surface is usually frozen in winter and early summer. From Crean Lake, skirt its NW shore, climbing a gravel/shale slope.



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WPT 5 Change in slope angle above Crean Lake (54° 09.207' S; 036° 45.601' W)

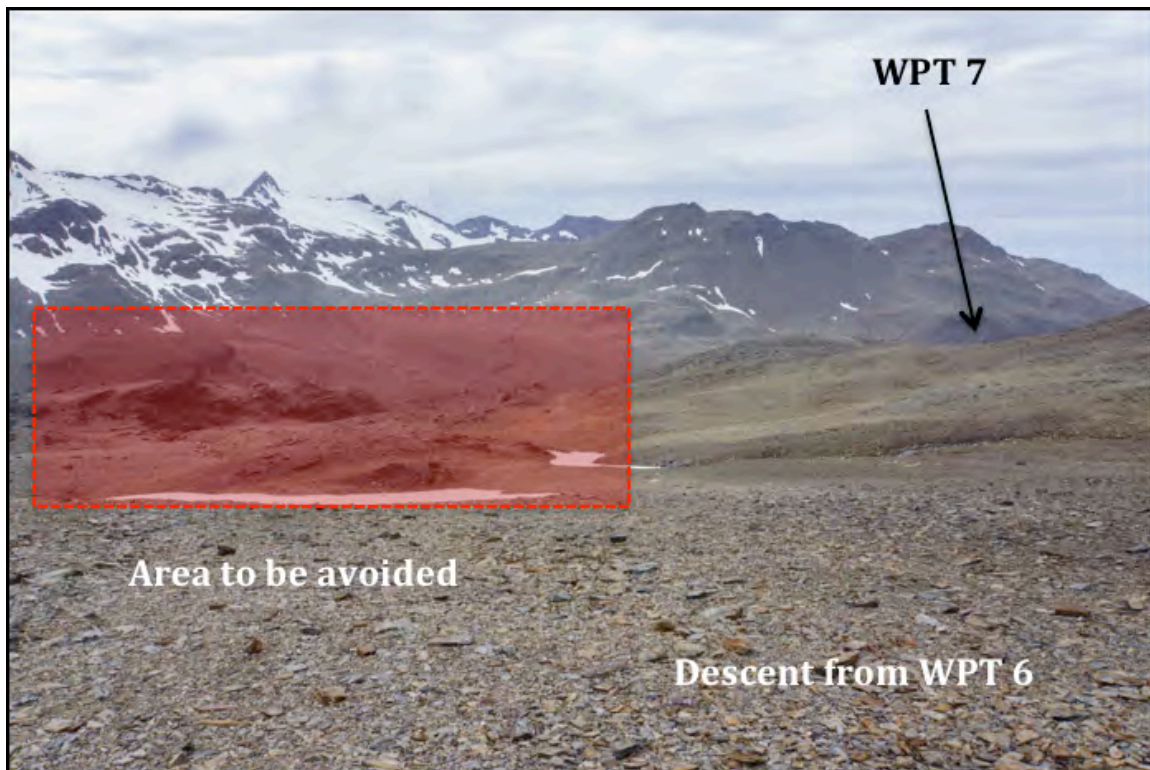
At the top of the slope the terrain eases as the route heads towards the col.

WPT 6 Tarns at col (54° 09.226' S; 036° 45.179' W)

This is the high point of the route (300m ASL), skirting to the south of two small tarns. These may be well hidden under snow in early season.

This waypoint marks the start of the descent and it is imperative that the described route be adhered to, as the complex terrain below can lead unwary parties into dangerous ground.

From the tarns descend gently to the ENE towards a broad shoulder. Note to the left is a rocky knoll with a well trodden path alongside. **This route should be avoided as below the terrain becomes steep and dangerous.**



WPT 7. Broad shoulder (54° 09.167' S; 036° 44.833' W)

Continue on the track down scree to the main viewpoint.

WPT 8. Stromness Bay and whaling station viewpoint (54° 09.158' S; 036° 44.761' W)

The notch between two rocky knolls provides a good view of the Shackleton Valley and whaling station at Stromness.

From these rocky knolls, head north to start a steep descent through scree. Take great care descending this slope. Waypoint 9 is at the base of this slope near a small cairn.

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Should leaders choose to avoid the waypointed route, the slopes extending to the east from this viewpoint offer alternate descents down steep scree slopes. These may well be snow filled, especially in the early season with some avalanche prone slopes above, so staff need to assess the risks involved in such descents on the day. **Guides and staff should undertake a reconnaissance of this area before proceeding with visitors and be prepared to return to Fortuna Bay if conditions dictate.**

WPT 9 Cairn on rock flats below descent from viewpoint (54° 09.085' S; 036° 44.693' W)

Picking up the path from WPT 9 is not obvious so take care, especially in poor visibility. The path initially heads N towards the river, descending through a small craggy band before turning NE on an obvious track. For a short stretch at the top a fall could be very serious, so staff must marshal groups carefully through this zone.



WPT 10 Easing of slope below descent from WPT 9 (54° 09.047' S; 036° 44.651' W)

Once past the initial steep gravel slopes, turn NE towards a conspicuous rocky knoll on the skyline.

WPT 11 Obvious rocky knoll (54° 09.049' S; 036° 44.575' W)

Take care to keep to the South (uphill side) of this outcrop to keep out of an area of diving Petrel burrows.

Descend scree, heading SE towards a small stream in a very shallow gully which is often filled with snow. After crossing the stream the path then continues down to a small but broad grassy plateau. **Note the slopes above this point are highly avalanche prone under certain conditions and staff leading the walk should assess the hazard before crossing them.**

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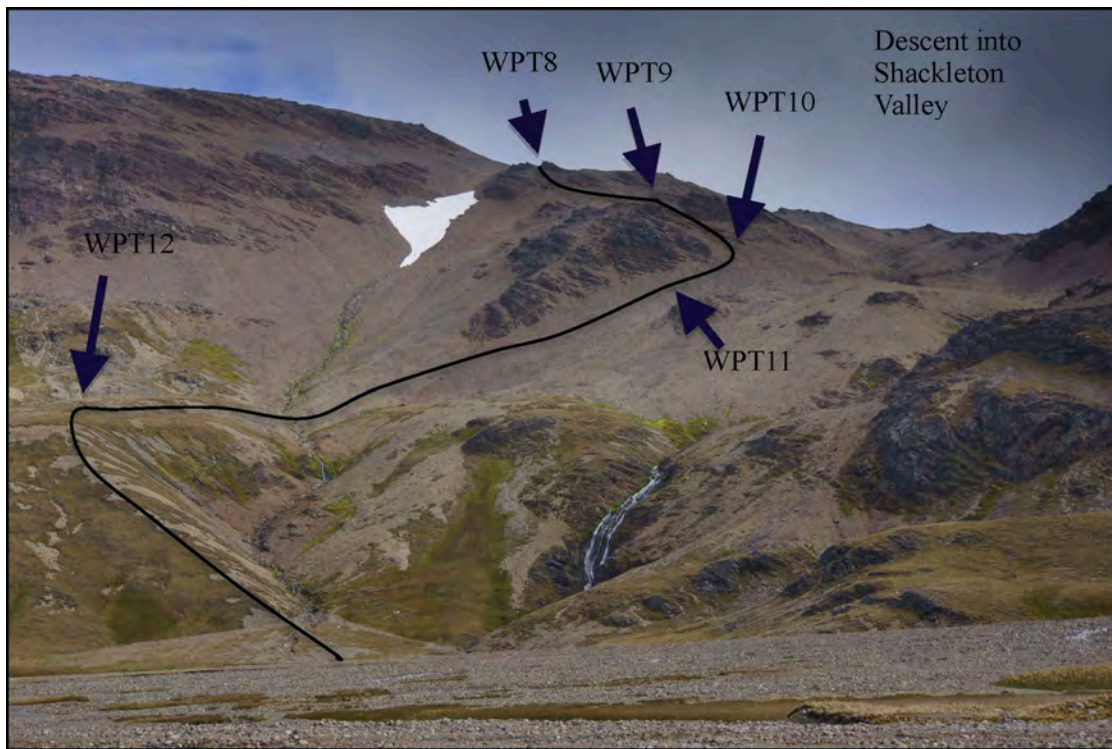


WPT 12 Grassy plateau (54° 09.111' S; 036° 44.458 W)

From here, head down the broad, curving grass and gravel covered ridge to the viewpoint below the waterfall.

This slope can be slippery so take particular care when descending, or if needs be, descend grass slopes further to the SE.

When viewing the waterfall, remain on the valley floor and do not approach the bog and mire slope adjacent to the waterfall. This habitat supports a rare fern that is easily damaged by trampling. It is essential that the Shackleton Falls should only be approached from the valley floor in order to avoid both hazardous conditions under foot and the fragile (and protected) vegetation on the slope adjacent to the waterfall.

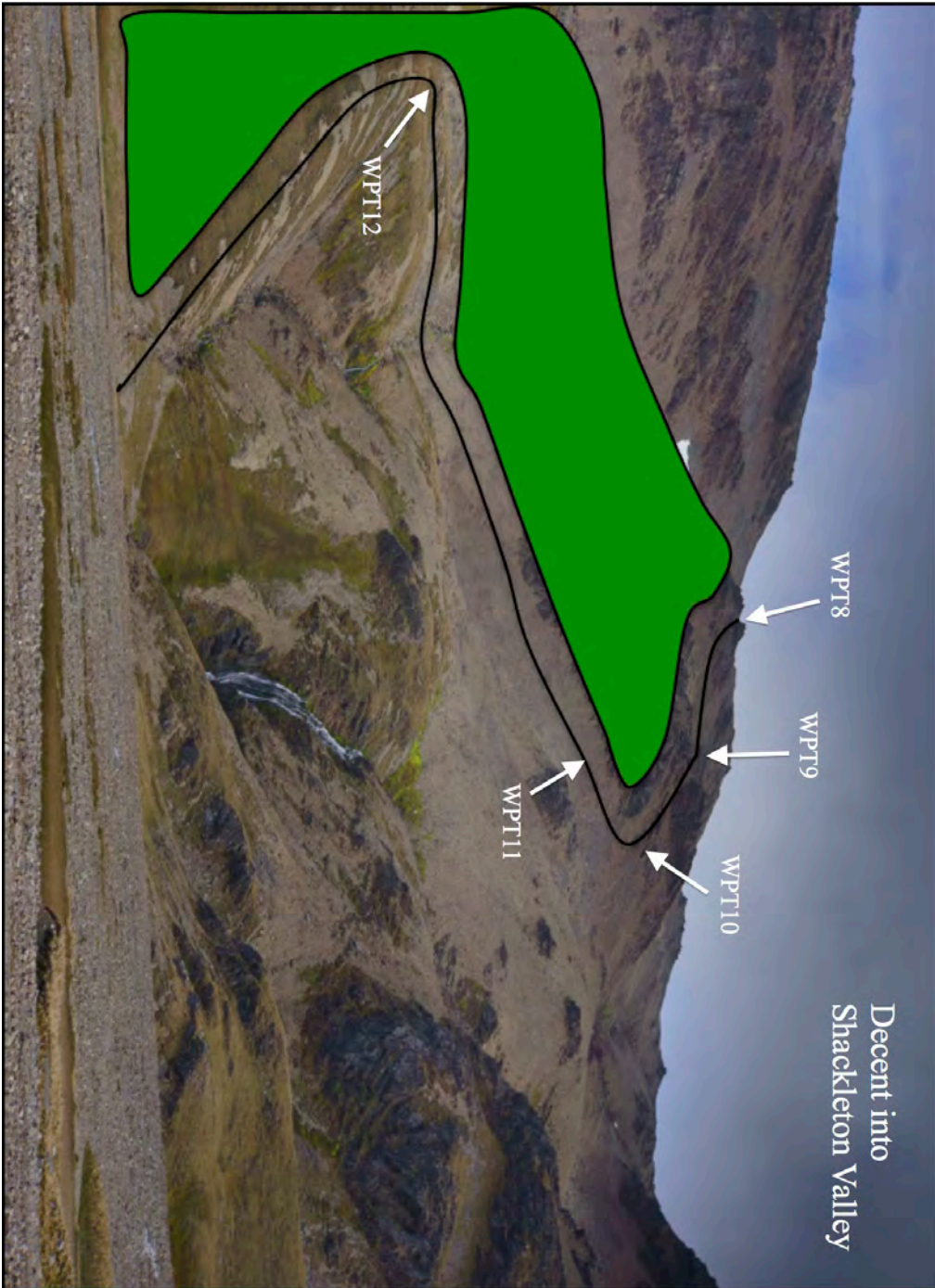


Follow the braided gravel streambed down to the Stromness beach area. Please stay on the gravel bed as this avoids the bog and mire communities on the lower slopes on the south side of Shackleton Valley, the moss communities around the small lakes and the easily trampled plant communities situated in the hills behind the station. On the beach, avoid intersecting the Gentoo penguin colony access routes. Ensure also that all visitors adhere to the Prohibited Areas Ordinance (and do not enter the prohibited area around the former whaling station).

WPT 13 Propellers on the beach (54° 09.414' S; 036° 42.631' W)



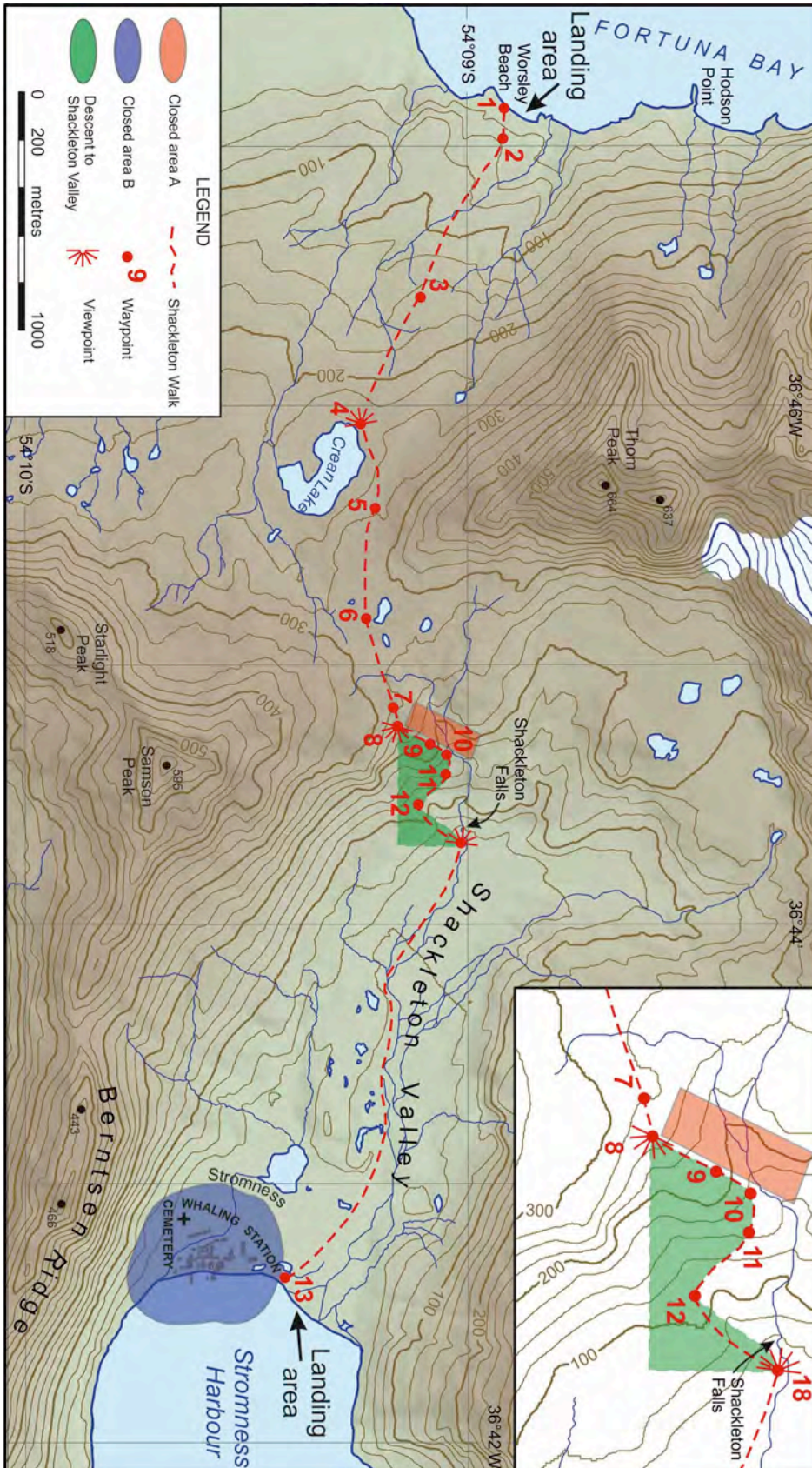
Area where guides may, at their discretion, deviate from the waypointed route in order to follow the safest descent, depending on terrain & weather conditions.



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Start: 54° 08.85` S 36° 47.11` W Finish: 54° 09.4` S 36° 42.6` W
5.5km hike across a 300 metre mountain pass between Fortuna Bay and Stromness



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FUNDING

Original publication part funded by the Foreign and Commonwealth Office Overseas Territories Programme Fund