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NORTHEAST (NE) Subarea

Subarea Map

Site Descriptions (24)

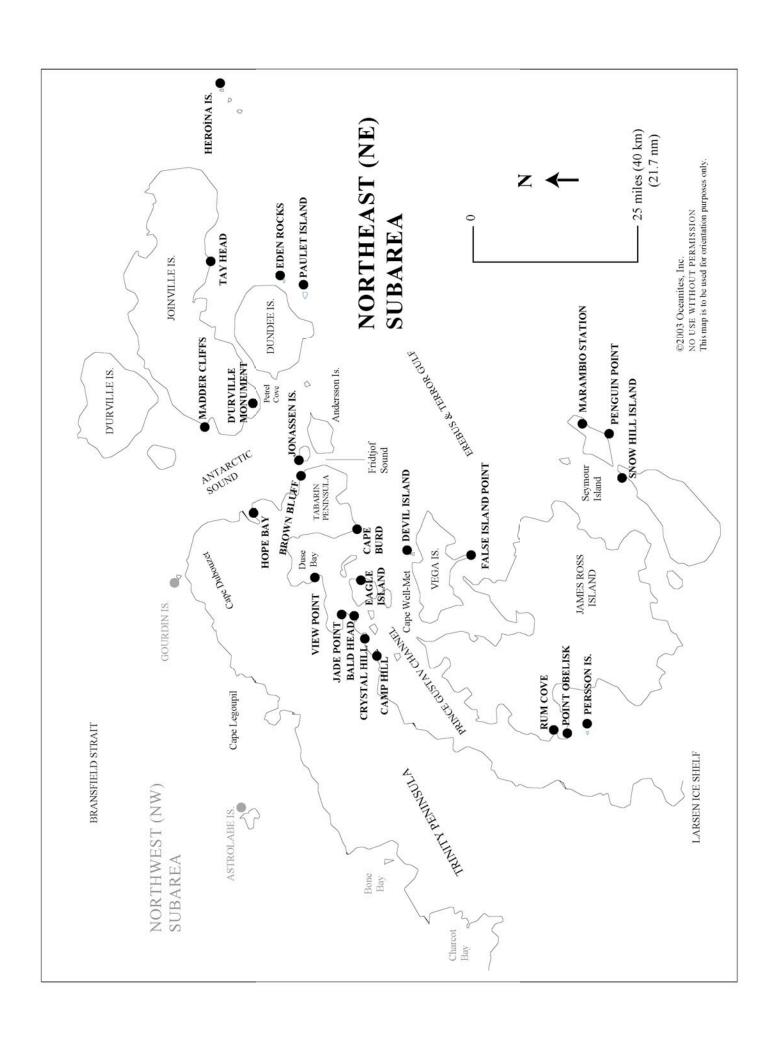
- Bald Head (BALD)
- Brown Bluff (BROW)
- Camp Hill (HILL)
- Cape Burd (BURD)
- Crystal Hill (CRYS)
- Devil Island (DEVI)
- d'Urville Monument (DURV)
- Eagle Island (EAGL)
- Eden Rocks (EDEN)
- False Head Point, Vega Island (FALS)
- Heroína Island (HERO)
- Hope Bay (HOPE)
- Jade Point (JADE)
- Jonassen Island (JONA)
- Madder Cliffs, Joinville Is. (MADD)
- Marambio Station Vicinity (MARA)
- Cape Obelisk, James Ross Island (OBEL)
- Paulet Island (PAUL)
- Penguin Point, Seymour Island (PEPO)
- Persson Island (PERS)
- Rum Cove, James Ross Island (RUMC)
- Snow Hill Island (SNOW)
- Tay Head, Joinville Island (TAYH)
- View Point (VIEW)

This subarea was less visited in the early 1990s, with heavy ice typical in the early austral spring. In the latter 1990s, continuing through the 2001-02 season, lighter ice conditions have allowed more November and December visits. Lighter ice conditions in Prince Gustav Channel and the collapse of the Larsen Ice Shelf, which formerly connected James Ross Island to the Trinity Peninsula, have enabled visits to many new landing sites.

Keys:

For acronymns of Antarctic Site Inventory researchers, see Appendix 1 p. 39.

For codes relating to penguin/seabird census/population data, see Table 3, p. 49.



Bald Head (BALD)

63°38'S, 57°36'W

Magnetic declination: 11.7°E Inventory subarea: NE Inventory acronym: BALD Species Diversity: LOW Site Sensitivity: LOW

Location — History — Features

Bare, ice-free headland located 8 miles SW of View Point on S side of the Trinity Peninsula. Probably first seen in 1902-3 by J. Gunnar Andersson's party from Nordenskjøld's Swedish Antarctic Expedition. Charted and named by Falklands Islands Dependencies Survey in 1945.

Landing Characteristics

Easily facilitated beach with volcanic rock and shale. Chilean *refugio* nearby. Offers a continental landing and elevated views of Prince Gustav Channel.

Antarctic Site Inventory Effort

Visits by Antarctic Site Inventory researchers, 1994-2003:

1.	January 11, 2000	SF	Cal Star
2.	January 10, 2001	SF	Cal Star

Assessment and monitoring. Preliminary surveying.

Fauna — Flora — Censuses

Penguins & flying birds. South polar skuas, kelp gulls observed; breeding not confirmed.

Seals. Crabeater seals present offshore in January 2000; Weddell seals on ice floes in January 2001.

Flora. Not surveyed.

Conservation Aspects

Site sensitivities. None observed

Visitation Aspects

Numbers of tourist zodiac landings and participating visitors, 1989-2003:

	Zodiac Landings	Participating Visitors
1989-99:	0	0
1999-2000:	3	326
2000-01:	1	98
2001-02:	2	264
2002-03:	0	0
14-Season Total	6	688

Proximate visitor sites. On the Trinity Peninsula: Jade Point, Crystal Hill, Camp Hill, and View Point; Cape Burd on the Tabarin Peninsula; Devil Island; and False Island Point on Vega Island.

Brown Bluff, Tabarin Peninsula (BROW)

63°32'S, 56°55'W

Magnetic declination: 11.2°E Inventory subarea: NE Inventory acronym: BROW Species Diversity: MEDIUM Site Sensitivity: MODERATE

Note: Restricted visitor space on landing beach with high tide, heavy snow or ice

Location — **History** — **Features**

An ice-capped, 745-meter-high, flat-topped mountain with a prominent cliff of reddish-brown volcanic rock on its N face, located 9 miles S of Hope Bay, and W of Jonassen Island, on the E side of the Tabarin Peninsula. On sunlit days, the towering bluff and blue sky are reminiscent of the "badlands" region of W North America, but with hordes of penguins dominating the scene. There is considerable erosion from upper slopes onto the almost 2-milelong, rock and ash beach.

It appears that some discrete groups/colonies of Adélie penguins may have been obliterated by these rock falls and slides. Brown Bluff appears to be the exposure of an englacial volcano. The tuff cliffs are embedded with many lava "bombs," which appear to be basaltic with olivine minerals present. The towering rust-colored bluff dominates this landscape.

Landing Characteristics

Uncharted water near shore. Hazardous rocks along the shoreline may be exposed, depending on the tide. Zodiac landings along broad, long, cobble and ash beach, which has a N exposure and is prone to swells in N-NE wind. Very restricted visitor space with high tide or when shoreline caked with ice, crowding penguins into long lines marching to and from the water. More visitor space on a low or falling tide.

The narrow, E end of the landing beach is a major access route for penguins, strewn with rocks and rubble, and too congested to accommodate marching penguins, nesting gulls, and visitors; it should not be visited.

Higher slopes are eroding severely, with much loose scree and rubble. Rock falls have been frequent and, in places, penguin colonies straddle enormous lava bombs and boulders.

Antarctic Site Inventory Effort

Visits by Antarctic Site Inventory researchers, 1994-2003:

1.	January 22, 1996	RN BH	Endurance
2.	February 10, 1996	BH RP	Livonia
3.	January 13, 1999	RN SF	Endurance
4.	November 25, 1999	LB BP	Cal Star
5.	December 15, 1999	RN	Cal Star
6.	December 11, 2000	RN	Cal Star
7.	December 25, 2000	SF	Cal Star
8.	January 9, 2001	SF	Cal Star
9.	February 2, 2001	RN	Cal Star
10.	December 11, 2001	RN SF CE	Endeavour
11.	December 22, 2001	JC LGC	Endeavour
12.	January 2, 2002	RP	Endeavour
13.	January 13, 2002	RP WT	Endeavour
14.	January 24, 2002	RD LS	Endeavour
15.	February 4, 2002	MM	Endeavour
16.	January 1, 2003	RP	Endeavour
17.	January 10, 2003	SF	Endeavour
18.	February 1, 2003	MM	Endeavour

Assessment and monitoring. Regular, site-wide censusing of gentoo penguins. Preliminary surveying. Aerial and ground photodocumentation achieved. Only preliminary estimates of Adélie penguin population; regular Adélie penguin census colonies not identified. Site-wide ground-survey of floral communities not achieved.

Fauna — Flora — Censuses

Penguins & flying birds. Adélie and gentoo penguins, kelp gulls, pintado petrels are confirmed breeders. Snow petrels seen flying about the higher slopes and they may nest, but breeding not confirmed. A few skuas, spp. were observed, but breeding not confirmed.

No site-specific population data are reported in Woehler (1993).

Antarctic site Inventory censuses:

Adélie ₁ 20,000	pengu C3	in (site-wide) 1996 Jan
20,000	CJ	1770 Jan
Gentoo	pengi	uin (site-wide)
617	N1	1999 Nov
567	N1	1999 Dec
668	C1	1999 Jan
756	N1	2000 Dec
511	C1	2001 Jan
450	N1	2001 Dec
409	C1	2002 Jan
764	C1	2003 Jan
483	N1	2003 Jan

In January 1996, the Adélie chicks were more than 95% in crèche, and the estimated, 200-250 gentoo chicks spanned a wide range of ages, from just out of brood to past 6 weeks and substantially molted.

Seals. Weddell seals observed hauled-out on the main beach below Brown Bluff.

Flora. Xanthoria, spp. and *Caloplaca*, spp. observed on exposed boulders from shoreline to an elevation of 606 feet. Some moss, spp. exposed at higher elevations near glacial drainage.

Conservation Aspects

Site sensitivities. Adélie penguins nest in large numbers and tightly packed colonies above and uphill of the landing beach, and on terraces and ridges extending to the W end; they are easily approached and disturbed, especially in November and early December when adults will be incubating eggs; subsequently, adults will be guarding and provisioning chicks at the nest, then in crèche. Gentoo penguins nest on flat terraces and lower slopes above and toward the E end; they are easily approached and disturbed, especially in November and early December when adults will be incubating eggs; subsequently, adults will be guarding and provisioning chicks at the nest, then in crèche. Kelp gulls nest in widely scattered locations and are easily approached and disturbed; in November and early December adults will be incubating eggs and, subsequently, guarding and provisioning chicks. Snow petrels and Wilson's storm-petrels nest in rock crevices and loose scree at higher elevations.

Pointers for avoiding disruptions.

Do not impede penguins' access to and from the water.

Walk slowly and carefully around nesting, crèching, or molting penguins.

Walk slowly and carefully around nesting gulls.

Strictly control hikes to higher elevations by organizing guided groups, all following the same path, and not allowing any free wandering.

Stay clear of — and do not visit — the narrow, E end of the landing beach, which provides a major access route for penguins, is strewn with rocks and rubble, and is very congested.

Stay clear of — and do not hike upon or wander over — the eroding, higher slopes.

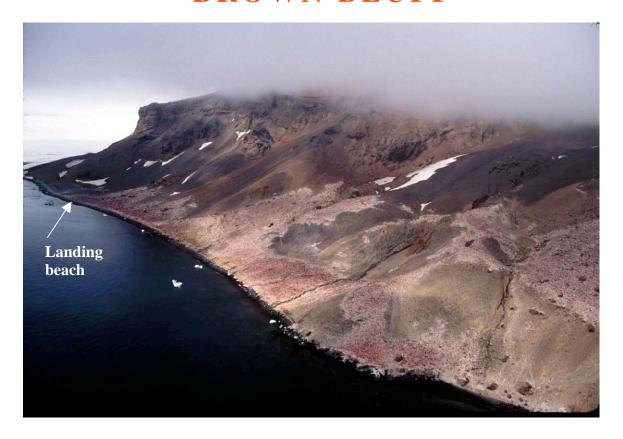
Visitation Aspects

Numbers of tourist zodiac landings and participating visitors, 1989-2003:

	Zodiac Landings	Participating Visitors
1989-1994:	0	0
1994-95:	2	77
1995-96:	4	223
1996-97:	9	553
1997-98:	17	1,293
1998-99:	14	996
1999-2000:	29	1,959
2000-01:	29	2,507
2001-02:	28	2,386
2002-03:	31	2,534
14-Season Total	163	12,528

Proximate visitor sites. Hope Bay lies due N, Jonassen Island lies almost due E.

BROWN BLUFF



POINTERS FOR AVOIDING DISRUPTIONS

DO NOT IMPEDE PENGUINS' ACCESS TO AND FROM THE WATER

WALK SLOWLY AND CAREFULLY AROUND NESTING, CRÈCHING, OR MOLTING PENGUINS

WALK SLOWLY AND CAREFULLY AROUND NESTING GULLS

STRICTLY CONTROL HIKES TO HIGHER ELEVATIONS BY ORGANIZING GUIDED GROUPS, ALL FOLLOWING THE SAME PATH, AND NOT ALLOWING ANY FREE WANDERING

STAY CLEAR OF — AND DO NOT VISIT — THE NARROW, E END OF THE LANDING BEACH, WHICH PROVIDES A MAJOR ACCESS ROUTE FOR PENGUINS, IS STREWN WITH ROCKS AND RUBBLE, AND IS VERY CONGESTED

STAY CLEAR OF — AND DO NOT HIKE UPON OR WANDER OVER — THE ERODING, HIGHER SLOPES

O C E A N I T E S Antarctic Site Inventory

Camp Hill (HILL)

63°41'S, 57°52'W

Magnetic declination: 11.9°E Inventory subarea: NE Inventory acronym: HILL Species Diversity: LOW Site Sensitivity: LOW

Location — History — Features

Small, ice-free hill, 120 meters in elevation, located 2 miles E of Church Point on S side of the Trinity Peninsula. Charted in 1946 by the Falklands Islands Dependencies Survey and named for geological camp established at base of this hill.

Landing Characteristics

Broad landing beach below this ice-free hill. All access inland is uphill, and often steep.

Antarctic Site Inventory Effort

Visits by Antarctic Site Inventory researchers, 1994-2003:

1.	February 20, 2002	RN	Endeavour
2.	February 17, 2003	MB	Endeavour

Assessment and monitoring. Preliminary surveying.

Fauna — Flora — Censuses

Penguins & flying birds. Antarctic terns observed feeding a chick on the landing beach; no nests observed. Kelp gulls and south polar skuas also observed, but breeding not confirmed.

Seals. Weddell seal observed on the landing beach.

Flora. Scattered large patches of *Usnea* lichens at higher elevations and inland, and many crustose lichens (*Caloplaca*, *Xanthoria*, *Verrucaria*, spp.) on jagged, seaward-facing rocks.

Conservation Aspects

Site sensitivities. None noted.

Visitation Aspects

Numbers of tourist zodiac landings and participating visitors, 1989-2003:

	Zodiac Landings	Participating Visitors
1989-2002:	0	0
2002-03:	1	100
14-Season Total	1	100

<u>Note</u>: Inventory researchers visited this site from a tour ship during the 2001-02 season; however, this landing is, inexplicably, not listed in the NSF compilations.

Proximate visitor sites. On the Trinity Peninsula: Jade Point, Crystal Hill, Bald Head, and View Point; Cape Burd on the Tabarin Peninsula; Devil Island; and False Island Point on Vega Island.

Cape Burd (BURD)

63°39'S, 57°09'W

Magnetic declination: 11.4°E Inventory subarea: NE Inventory acronym: BURD Species Diversity: LOW Site Sensitivity: LOW

Location — History — Features

Low rock cliff forming the SW extremity of the Tabarin Peninsula at the NE end of the Antarctic Peninsula. Charted by Falklands Islands Dependencies Survey and named for Falklands Islands Dependencies Survey meteorologist who perished when the base hut at Hope Bay burned in 1948.

Landing Characteristics

Landing onto barren, rocky shore of volcanic ash mixed with pyroclasts of many sizes. Continental landing on the Tabarin Peninsula.

Antarctic Site Inventory Effort

Visits by Antarctic Site Inventory researchers, 1994-2003:

1. January 27, 2001 RD

Cal Star

Assessment and monitoring. Preliminary surveying.

Fauna — Flora — Censuses

Penguins & flying birds. One gentoo penguin noted during the Inventory visit. Skuas (spp.) and southern giant petrels also observed, but no confirmed breeding of any penguin or flying bird species.

Seals. Weddell seal hauled-out on the landing beach.

Flora. Scattered moss patches observed. No lichens noted.

Conservation Aspects

Site sensitivities. None noted.

Visitation Aspects

Numbers of tourist zodiac landings and participating visitors, 1989-2003:

	Zodiac Landings	Participating Visitors
1989-2001:	0	0
2000-01:	0	0
2001-02:	1	107
2002-03:	0	0
14-Season Total	1	107

Proximate visitor sites. On the Trinity Peninsula: Jade Point, Crystal Hill, Bald Head, Camp Hill, and View Point; Devil Island; and False Island Point on Vega Island.

Crystal Hill (CRYS)

63°39'S, 57°54'W

Magnetic declination: 11.8°E Inventory subarea: NE Inventory acronym: CRYS Species Diversity: LOW Site Sensitivity: LOW

Location — **History** — **Features**

Ice-free hill, 150 meters in elevation, forming the summit of a headland between Bald Head and Camp Hill on the S side of the Trinity Peninsula. Named because crystals were collected at the foot of the hill by Falklands Island Dependencies Survey researchers.

Landing Characteristics

Broad landing beach below this ice-free hill. All access inland is uphill, and often steep.

Antarctic Site Inventory Effort

Visits by Antarctic Site Inventory researchers, 1994-2003:

1. December 15, 1999

RN Cal Star

Assessment and monitoring. Preliminary surveying.

Fauna — Flora — Censuses

Penguins & flying birds. None observed.

Seals. Large numbers of crabeater seals swimming near shore.

Flora. None observed.

Conservation Aspects

Site sensitivities. None noted.

Visitation Aspects

Numbers of tourist zodiac landings and participating visitors, 1989-2003:

	Zodiac Landings	Participating Visitors
1989-1995:	0	0
1995-96:	4	352
1996-97:	2	165
1997-98:	0	0
1998-99:	1	94
1999-2000:	6	526
2000-01:	0	0
2001-02:	0	0
2002-03:	1	53
14-Season Total	14	1190

Proximate visitor sites. On the Trinity Peninsula: Jade Point, Camp Hill, Bald Head, and View Point; Cape Burd on the Tabarin Peninsula; Devil Island; and False Island Point on Vega Island.

Devil Island (DEVI)

63°48'S, 57°17'W

Magnetic declination: 11.6°E Inventory subarea: NE Inventory acronym: DEVI Species Diversity: LOW Site Sensitivity: LOW

Location — History — Features

A narrow, 1-mile-long island with a low summit on each end, lying in the middle of a small bay one mile SE of Cape Well-Met, Vega Island, S of the NE end of the Antarctic Peninsula. The island was discovered and named by Nordenskjøld's 1901-4 Swedish Antarctic Expedition. Access to this site depends on the extent of ice in Erebus & Terror Gulf.

Landing Characteristics

Cobble beach on N side of the island. Narrow cut passes to S side, yielding excellent views of Vega Island. There are many low-lying rocks just offshore, and substantial tidal action. The rocks necessitate careful approaches and the site may be inaccessible because of ice conditions. Adélie penguins nest on the N side.

Antarctic Site Inventory Effort

Visits by Antarctic Site Inventory researchers, 1994-2003:

1.	January 20, 1996	RN BH	Endurance
2.	February 23, 1997	RN ST	Explorer
3.	January 11, 2000	SF	Cal Star
4.	January 17, 2000	RD	Explorer
5.	January 10, 2001	SF	Cal Star
6.	January 11, 2001	SF	Cal Star
7.	January 12, 2002	RP WT	Endeavour
8.	January 24, 2002	RD LS	Endeavour
9.	January 20, 2003	RD	Endeavour
10.	February 17, 2003	MB	Endeavour

Assessment and monitoring. Preliminary surveying, mapping, censusing, and photodocumentation (aerial and tyerrestrial). Regular Adélie penguin census groups not yet identified.

Fauna — Flora — Censuses

Penguins & flying birds. Adélie penguins and Antarctic brown skuas are confirmed breeders. One nesting skua pair appeared to be of hybrid lineage. Kelp gulls and Wilson's storm-petrels also flying about, but nesting was not confirmed

No site-specific population counts are reported in Woehler (1993).

Antarctic Site Inventory censuses:

Adélie penguin

10,320 C2 1996 Jan 8,501 C1 2000 Jan

Seals. None observed.

Flora. Primarily *Xanthoria*, spp., with some *Caloplaca*, spp. mixed-in, on seaward-facing slopes. *Prasiola* and occasional moss, spp. patches also noted. Skuas utilized the moss patches for breeding.

Conservation Aspects

Site sensitivities. Adélie penguins may be approached readily, and landing beach may be crowded with penguins if ice packs the shoreline.

Pointers for avoiding disruptions:

Do not impede penguins' access to and from the water.

Walk slowly and carefully around nesting, crèching, or molting penguins.

Visitation Aspects

Numbers of tourist zodiac landings and participating visitors, 1989-2003:

	Zodiac Landings	Participating Visitors
1989-1995:	0	0
1995-96:	4	352
1996-97:	9	657
1997-98:	1	2
1998-99:	3	285
1999-2000:	14	1,270
2000-01:	2	195
2001-02:	12	1,249
2202-03:	12	954
14-Season Total	57	4,964

Proximate visitor sites. On the Trinity Peninsula: Jade Point, Crystal Hill, Bald Head, Camp Hill, and View Point; Cape Burd on the Tabarin Peninsula; and False Island Point on Vega Island.

DEVIL ISLAND



WEST End, facing S — Vega Is. in the background

POINTERS FOR AVOIDING DISRUPTIONS

DO NOT IMPEDE PENGUINS' ACCESS TO AND FROM THE WATER WALK SLOWLY AND CAREFULLY AROUND NESTING, CRÈCHING, OR MOLTING PENGUINS

d'Urville Monument, Joinville Island (DURV)

63°31'S, 58°11'W

Magnetic declination: 12.0°E Inventory subarea: NE Inventory acronym: DURV Species Diversity: LOW Site Sensitivity: LOW

Location — History — Features

A conspicuous conical summit of 575 meters, at the SW end of Joinville Island, off the NE end of the Antarctic Peninsula. It was discovered by the British expedition led by Ross, 1839-43, and named by Ross for Capt. Jacques Dumont D'Urville, the French explorer who led his own Antarctic expedition (1837-40), and who first discovered land in the Joinville Island group.

Landing Characteristics

An alternative and very rarely visited site in the NE Peninsula subarea. The monument faces toward Petrel Cove on Dundee Island. The site involves steep hiking. Offshore rocks and islets also appear to have breeding penguins.

Antarctic Site Inventory Effort

Visits by Antarctic Site Inventory researchers, 1994-2003:

1. February 10, 1996

RP BH

Livonia

Assessment and monitoring. Preliminary surveying and censusing. Lacking a complete ground survey of penguin colonies and floral communities. No photodocumentation.

Fauna — Flora — Censuses

Penguins & flying birds. Adélie and gentoo penguins are confirmed breeders.

No site-specific penguin populations are reported in Woehler (1993) and Woehler & Croxall (1996); however, the overall Adélie penguin population estimated for Joinville Island: 35,000 nests A3, 1953.

On Feb 10, 1996 at least 300-400 gentoo chicks were observed near the landing beach. Adélies are relatively common, but a more detailed census is needed.

Seals. A single Weddell seal observed on the landing beach.

Flora. None noted.

Conservation Aspects

Site sensitivities. None noted.

Visitation Aspects

Numbers of tourist zodiac landings and participating visitors, 1989-2003:

	Zodiac Landings	Participating Visitors
1989-1994:	0	0
1994-95:	1	33
1995-96:	0	0
1996-97:	0	0
1997-98:	1	74
1998-99:	0	0
1999-2000:	0	0
2000-01:	0	0
2001-02:	0	0
2002-03:	0	0
14-Season Total	2	107

Proximate visitor sites. Paulet Island is located on the SE side of Dundee Island.

Eagle Island (EAGL)

63°40'S, 57°29'W

Magnetic Declination: 11.6° E Inventory subarea: SO Inventory acronym: EAGL Species Diversity: LOW Site Sensitivity: LOW

Location — **History** — **Features**

An island that is 5 miles long and 4 miles wide, rising to 560 meters on the NE side. It is the largest island in an archipelago that lies between Trinity Peninsula and Vega Island, and was probably seen for the first time by J. Gunnar andersson of the 1901-04 Swedish Antarctic Expedition. It is named after a ship used by the Falkland Islands Dependency Survey.

Landing Characteristics

The landing beach on the E side is a cobble and shingle beach intermixed with sand. Many granitic boulders lie on site. The first shelf above the beach is covered with *Caloplaca* spp., with *Usnea* spp. at higher elevations. Above ther beach are mesa formations of tuff, similar to the geology at Brown Bluff. Volcanic bombs are present in the tuff. The beach has many mummified seals and this appears to be a major tidal feeding area for kelp gulls, skuas, and Antarctic terns. The birds were observed feeding on krill, sea stars, urchins, amphipods, and limpets.

Antarctic Site Inventory Effort

Visits by Antarctic Site Inventory researchers, 1994-2003:

1. December 31, 2002 RP

Endeavour

Assessment and monitoring. Preliminary surveying. No aerial photodocumentation.

Fauna — Flora — Censuses

Penguins & flying birds. No breeding observed. Gentoo penguin, kelp gulls, skua spp., and Antarctic terns observed.

Seals. None noted.

Flora. Prasiola crispa, Xanthoria spp., Caloplaca spp., and Usnea spp. observed.

Conservation Aspects

Site sensitivities. None noted.

Visitation Aspects

Numbers of tourist zodiac landings and participating visitors, 1989-2003:

	Zodiac Landings	Participating Visitors
1989-2002:	0	0
2002-03:	1	104
14-Season Total	1	104

Proximate visitor sites. Camp Hill, Crystal Hill, Bald Head, Jade Point, Devil Island, and False Island Point on Vega Island.

Eden Rocks (EDEN)

63°29'S, 55°40'W

Magnetic declination: 10.4°E Inventory subarea: NE Inventory acronym: EDEN Species Diversity: LOW Site Sensitivity: LOW

Location — History — Features

Two rocks located off the E end of Dundee Island, and N of Paulet Island. Ross reported a small island here in 1842, and he named it for a captain in the Royal Navy.

Landing Characteristics

Visitor landings are unlikely because of ice conditions and uncharted waters. Zodiac tours may be possible.

Antarctic Site Inventory Effort

Visits by Antarctic Site Inventory researchers, 1994-2003:

1. December 1, 1996

RN SF

W. Discoverer

Assessment and monitoring. Preliminary surveying and population estimates. Regular Adélie penguin census colonies not identified. Preliminary ground and aerial photodocumentation achieved. Lacking a complete ground survey of penguin colonies and floral communities.

Fauna — Flora — Censuses

Penguins & flying birds. Adélie penguins are confirmed breeders.

Antarctic Site Inventory censuses:

Adélie penguin (W colony)

19,649 – 20,785 N3 1996 Dec

Adélie penguin (E colony)

24,600 – 28,905 N3 1996 Dec

Adélie penguin (site-wide)

44,249 - 49,460 N3 1996 Dec

These represent the first-reported penguin population estimates for this site.

Seals. None observed.

Flora. None noted.

Conservation Aspects

Site sensitivities. Adélie penguins are easily approached and disturbed, especially in November and early December when adults will be incubating eggs; subsequently, adults will be guarding and provisioning chicks at the nest, then in crèche.

Pointers for avoiding disruptions.

Do not impede penguins' access to and from the water.

Walk slowly and carefully around nesting, crèching, or molting penguins.

Visitation Aspects

Numbers of tourist zodiac landings and participating visitors, 1989-2003:

	Zodiac Landings	Participating Visitors
14-Season Total	0	0

Proximate visitor sites. Paulet Island is located five miles to the S.

False Island Point, Vega Island (FALS)

63°55'S, 57°20'W

Magnetic declination: 11.7°E Inventory subarea: NE Inventory acronym: FALS Species Diversity: MEDIUM Site Sensitivity: LOW

Location — History — Features

Headland one mile long and 0.5 miles wide, connected by a low, almost unnoticeable isthmus to the S side of Vega Island. First sighted in 1902 and charted as an island by Nordenskjøld's Swedish Antarctic Expedition. Determined to be part of Vega Island by the Falklands Islands Dependencies Survey in 1945.

Landing Characteristics

Rocky beach with large cobble. Access inland is uphill.

Antarctic Site Inventory Effort

Visits by Antarctic Site Inventory researchers, 1994-2003:

December 10, 2001 RN SF CE Endeavour
 January 31, 2003 MM Endeavour

Assessment and monitoring. Preliminary censusing and ground photodocumentation. Lacking a complete ground survey of nesting birds and floral communities.

Fauna — Flora — Censuses

Penguins & flying birds. South polar skua confirmed breeding. Wilson's storm-petrel and snow petrel confirmed breeding in high scree at SE end of the Point, overlooking Pastorizo Bay. Kelp gulls and Antarctic terns also observed, but breeding not confirmed.

Seals. Weddell seals observed on nearby ice floes.

Flora. Scattered, occasionally dense moss patches in snow melt gullies. Usnea, spp. and Xanthoria, spp. Also noted.

Conservation Aspects

Site sensitivities. None noted.

Visitation Aspects

Numbers of tourist zodiac landings and participating visitors, 1989-2003:

	Zodiac Landings	Participating Visitors
1989-2002:	0	0
2002-03:	1	98
14-Season Total	1	98

<u>Note</u>: Inventory researchers visited this site from a tour ship during the 2001-02 season; however, this landing is, inexplicably, not listed specifically in the NSF compilations for that season; however, 1 zodiac landing and 72 participating visitors are listed for Vega Island)

Proximate visitor sites. On the Trinity Peninsula: Jade Point, Crystal Hill, Bald Head, Camp Hill, and View Point; Cape Burd on the Tabarin Peninsula; and Devil Island.

Heroína Island

63°24'S, 54°36'W

Magnetic declination: 9.7°E Inventory subarea: NE Inventory acronym: HERO Species Diversity: MEDIUM Site Sensitivity: LOW

Note: Restricted visitor space

Location — History — Features

This small island marks the NE end of the Danger Islands group. It is named by the Argentine Antarctic expedition of 1948-49 for the expedition ship Heroína.

Landing Characteristics

Uncharted water offshore and near shore. Passage may be totally blocked by ice. Hazardous rocks along the shoreline may be exposed, depending on tide. Landing on rocks along W side of the island; coast may be packed with ice, depending on wind and swell, and snow cover may be extensive. Very restricted visitor space because of difficult terrain, slippery conditions, and extremely high density of penguins.

Antarctic Site Inventory Effort

Visits by Antarctic Site Inventory researchers, 1994-2003:

December 1, 1996
 January 21, 2000
 RN SF
 W. Discoverer
 Shuleykin

Assessment and monitoring. Preliminary surveying and population estimates. Regular Adélie penguin census colonies not identified. Preliminary ground level and aerial photodocumentation. More complete ground survey of floral communities is needed.

Fauna — Flora — Censuses

Penguins & flying birds. Adélie and gentoo penguins are confirmed breeders. Large numbers of snowy sheathbills suggest breeding, but no nests observed. Kelp gulls, skuas (spp.), and blue-eyed shags observed, but no nests discovered. The gentoo penguins breed on the "tabletop" of this island, representing the first recorded gentoo breeding site in the Weddell Sea, and the easternmost gentoo nesting site in the Antarctic Peninsula. All of the gentoos were on eggs, with only 2-egg clutches noted. On the January 2000 visit, Inventory researchers found Adélie penguin chicks were at 3-4 weeks of age and beginning to crèche, and that gentoo penguin chicks were tightly crèched; however, time constraints prevented a site-wide census on this occasion.

Woehler (1993) reports 5 Adélie colonies in the Danger Island group, but without a specific estimate or census listed for Heroína Island. From aerial photodocumentation of the Danger Island group in January 1999, very large (20,000 to 99,999 breeding pairs) to extra large (>100,000 breeding pairs) numbers of Adélie penguins appear to be present on Beagle Island and Darwin Island in the Danger Islands group. With respect to other islands in this group, large (7,500 to 19,999 breeding pairs) numbers of Adélie penguins appear to be present on Platter Island, while Comb Island appears to have small (100 to 999 breeding pairs) to medium (1,000 to 7,499 breeding pairs) numbers of Adélie penguins breeding on its eroding slopes.

Antarctic Site Inventory censuses:

Gentoo penguin (site-wide)

215 N1 1996 Dec

Adélie penguin (site-wide)

285,115 -305,165 N2 1996 Dec

These represent the first-reported penguin population data for this site.

Seals. A single Weddell seal observed on the landing beach.

Flora. None noted.

HEROÍNA ISLAND



POINTERS FOR AVOIDING DISRUPTIONS

AVOID CONGESTION BY ALTERNATING ZODIAC TOURS WITH BRIEF LANDINGS, AT STAGGERED INTERVALS, ASHORE

WALK SLOWLY AROUND ALL NESTING PENGUINS, ENSURING AT ALL TIMES THAT PENGUINS' ACCESS UP AND DOWN THE SLOPES IS NOT IMPEDED

DO NOT IMPEDE PENGUINS' ACCESS TO AND FROM THE WATER

STRICTLY CONTROL ANY HIKES UPHILL BY ORGANIZING GUIDED, WELL SPACED GROUPS, ALL FOLLOWING THE SAME PATH, AND NOT ALLOWING ANY FREE WANDERING

AVOID AND STAY CLEAR OF ANTARCTIC FUR SEALS, WHICH SHOULD BE GIVEN A WIDE BERTH AND SHOULD NOT BE APPROACHED

Conservation Aspects

Site sensitivities. Adélie penguins nest in enormous numbers, occupying much of the available space on slopes and ridges leading to the flat top of the island; they are easily approached and disturbed, especially in November and early December when adults will be incubating eggs; subsequently, adults will be guarding and provisioning chicks at the nest, then in crèche. Gentoo penguins nest on the flat top of the island; they are easily approached and disturbed, especially in November and early December when adults will be incubating eggs; subsequently, adults will be guarding and provisioning chicks. Antarctic fur seals may be present.

Pointers for avoiding disruptions.

Avoid congestion by alternating zodiac tours with brief landings, at staggered intervals, ashore.

Walk slowly around all nesting penguins, ensuring at all times that penguins' access up and down the slopes is not impeded.

Do not impede penguins' access to and from the water.

Strictly control any hikes uphill by organizing guided, well spaced groups, all following the same path, and not allowing any free wandering.

Avoid and stay clear of Antarctic fur seals, which should be given a wide berth and should not be approached.

Visitation Aspects

Numbers of tourist zodiac landings and participating visitors, 1989-2003:

	Zodiac Landings	Participating Visitors
1989-1996:	0	0
1996-97:	1	90
1997-98:	1	37
1998-99:	2	85
1999-2000:	0	0
2000-01:	0	0
2001-02:	0	0
2002-03:	0	0
14-Season Total	4	212

Note: These numbers do not include 7 visits and 240 visitors to the "Danger Islands" that are listed in the NSF compilations for the 1996-97 season, because it is unclear whether Heroína Island or another island in this group was visited.

Proximate visitor sites. Heroína Island is located approximately 35 miles E-NE of Eden Rocks.

Hope Bay/Esperanza Station Vicinity (HOPE)

63°23'S, 57°00'W

Magnetic declination: 12.0°E Inventory subarea: NE Inventory acronym: HOPE Species Diversity: LOW Site Sensitivity: LOW

Location — History — Features

This is a 3-mile-long, 2-mile-wide bay indenting the NE tip of the Antarctic Peninsula, and opening onto Antarctic Sound. It was discovered by Nordenskjøld and the Swedish Antarctic expedition in 1902, and named in honor of the winter spent there by expedition members Andersson, Duse, and Grunden. The remains of their hut are found near the boat jetty that is often used by visitors. The ground surface leading to the hut consists of fragmented slate. The Argentine Esperanza Station occupies a gently sloping area beyond the hut, and near to the end of Hope Bay. Behind the station the ground surface rises to an extensive plateau and lake. The peak above and behind the Argentine station exhibits a well-developed cirque in its center with a small glacier extending down the slope toward the station.

Just beyond the boat jetty is the stone hut built by the Swedish Expedition in January 1903, which has been designated as an Antarctic Historic Site and Monument. Nearby is another Historic Site and Monument — a bust of General San Martin, a grotto with a statue of the Virgin of Lujan, and a flag mast — erected by the Argentines in 1955. There is a graveyard memorializing members of Argentine expeditions who have died in the area.

Landing Characteristics

A fairly regularly visited scientific station, with a very large, resident population of Adélie penguins. The remains of the hut from the Nordenskjøld expedition lends historical significance to this site. In recent years, the Adélie colonies close to the boat jetty utilized by tourists have been cordoned off to minimize disruptions; these same colonies abut the station's helicopter landing pad.

Antarctic Site Inventory Effort

Visits by Antarctic Site Inventory researchers, 1994-2003:

1.	December 10, 1995	BH	W. Discoverer
2.	January 15, 1996	RN BH	Endurance
3.	December 8, 1998	RN SF	Explorer

Assessment and monitoring. None.

Fauna — Flora — Censuses

Penguins & flying birds. Adélie penguins are confirmed breeders. Snowy sheathbills commonly observed among the Adélies and may breed.

Recent Hope Bay Adélie penguin census data reported in Woehler (1993): 123,850 N2, 1985.

Seals. None observed.

Flora. None noted.

Conservation Aspects

Site sensitivities. None noted.

Pointers for avoiding disruptions. Restricted visitor space (Adélie penguins near to the landing jetty are now cordoned off to protect these nearby rookeries from visitor intrusions)

Visitation Aspects

Numbers of tourist zodiac landings and participating visitors, 1989-2003:

	Zodiac Landings	Participating Visitors
1989-90:	1	145
1990-91:	3	1,130
1991-92:	9	1,278
1992-93:	3	209

	Zodiac Landings	Participating Visitors
1993-94:	17	1,801
1994-95:	11	907
1995-96:	17	1,476
1996-97:	7	710
1997-98:	10	1,210
1998-99:	9	1,031
1999-2000:	12	1,138
2000-01:	14	1,404
2001-02:	12	1,323
2002-03:	12	1,508
14-Season Total	137	15,270

Proximate visitor sites. Brown Bluff is due S on the N edge of the Tabarin Peninsula.

Jade Point (JADE)

63°36'S, 57°35'W

Magnetic declination: 11.7°E Inventory subarea: NE Inventory acronym: JADE Species Diversity: LOW Site Sensitivity: LOW

Location — **History** — **Features**

Gently sloping, rocky point forming the S limit of Eyrie Bay in the Trinity Peninsula. Named because of its lower, green-tinged, ice slopes.

Landing Characteristics

Rocky, morainal landing beach. Continental landing on the Trinity Peninsula.

Antarctic Site Inventory Effort

Visits by Antarctic Site Inventory researchers, 1994-2003:

1.	December 22, 2001	JC LC	Endeavour
2.	January 2, 2002	RP	Endeavour

Assessment and monitoring. Preliminary surveying.

Fauna — Flora — Censuses

Penguins & flying birds. Gentoo and Adélie penguin, Wilson's storm-petrel, kelp gull, south polar skua, and Antarctic tern observed, but none observed breeding.

Seals. Weddell and leopard seals on nearby ice floes and offshore.

Flora. None noted.

Conservation Aspects

Site sensitivities. None noted.

Visitation Aspects

Numbers of tourist zodiac landings and participating visitors, 1989-2003:

	Zodiac Landings	Participating Visitors
14-Season Total, 1989-2003	0	0

<u>Note</u>: Inventory researchers visited this site twice from a tour ship during the 2001-02 season; however, these landings are, inexplicably, not listed in the NSF compilations.

Proximate visitor sites. On the Trinity Peninsula: Crystal Hill, Bald Head, Camp Hill, Crystal Hill, and View Point; Cape Burd on the Tabarin Peninsula; Eagle Island; Devil Island; and False Island Point on Vega Island.

Jonassen Island (JONA)

63°33'S, 56°40'W

Magnetic declination: 12.0°E Inventory subarea: NE Inventory acronym: JONA Species Diversity: LOW Site Sensitivity: LOW

Location — History — Features

A 2.5-mile-long island, lying N of Andersson Island in the S entrance to Antarctic Sound, off the NE tip of the Antarctic Peninsula. Originally called Irizar Island by Nordenskjøld, who named it for the Argentine captain whose ship, the *Uruguay*, rescued the shipwrecked Swedish Antarctic expedition in 1903. However, in 1904, Charcot gave the name Irizar to an island of the W coast of the Antarctic Peninsula, being totally unaware of the Swedish naming. Because the name of the latter island received wider use, the small island at the entrance to Antarctic Sound was renamed in honor of Ole Jonassen, who accompanied Nordenskjøld on his two major sledge journeys in 1902-3.

At higher elevations, an excellent view of the strait between Jonassen Island and the Tabarin Peninsula.

Landing Characteristics

More suitable for zodiac touring than for shore landings. The cobble shoreline is slippery and there are few access points that avoid the gentoos nesting on this steep hillside.

Antarctic Site Inventory Effort

Visits by Antarctic Site Inventory researchers, 1994-2003:

1.	December 10, 1995	BH SF	W. Discoverer
2.	January 30, 1996	RN BH	Endurance
3.	December 22, 2001	JC LGC	Endeavour

Assessment and monitoring. Preliminary surveying. Unclear whether Adélie penguin colony reported in 1901 is still extant.

Fauna — Flora — Censuses

Penguins & flying birds. Gentoo penguins and kelp gulls are confirmed breeders. Adélie penguins also observed on shore and chinstrap penguins observed cruising offshore, but nests of neither species found. Many pintado and snow petrels flying about, and these species may breed in the island's higher reaches.

Woehler (1993) reports "large" Adélie penguin colony observed in 1901, but it was not relocated by Inventory researchers during 1995-96 visits. The 1901 reference also notes 20 breeding pairs of gentoo penguins.

Antarctic Site Inventory censuses:

Gentoo penguin

233 C1 1996 Jan

Seals. None observed.

Flora. Xanthoria, spp., Caloplaca, spp., and Usnea, spp. noted.

Conservation Aspects

Site sensitivities. Difficult walking over cobble, and many of the penguins located upslope and in hard-to-reach places.

Pointers for avoiding disruptions.

Walk slowly around all nesting penguins, and do not impede their access to the sea.

Visitation Aspects

Numbers of tourist zodiac landings and participating visitors, 1989-2003:

	Zodiac Landings	Participating Visitors
14-Season Total	0	0

Proximate visitor sites. Brown Bluff is located to the E.

Madder Cliffs, Joinville Island (MADD)

63°18'S, 56°29'W

Magnetic Declination: 10.8° E Inventory subarea: SO Inventory acronym: MADD Species Diversity: LOW Site Sensitivity: LOW

Location — History — Features

Reddish rock cliffs rising steeply from the sea to >300 meters and forming the N side of the entrance to Suspiros Bay, at the W edge of Kinnes Cove and the W end of Joinville Island. The name reflects the red color of the rocks, madder being a red vegetable dye. Adelie penguin colony along exposed, scree and tuff ridges above the rocky beach.

Landing Characteristics

Near the glacier, on the W edge of a very slick boulder beach, strewn with limpet shells, which rises steeply to a high ridge and peak. During the Inventory visit, there were snowfields above the beach, which penguins use to reach the sea.

Antarctic Site Inventory Effort

Visits by Antarctic Site Inventory researchers, 1994-2003:

1. January 21, 2003

RD Endeavour

Assessment and monitoring. Preliminary surveying. No aerial photodocumentation.

Fauna — Flora — Censuses

Penguins & flying birds. Adelie penguin, gentoo penguin, kelp gull, and snowy sheathbill are confirmed breeders.

Seals. None noted

Flora. Prasiola crispa and snow algae noted.

Conservation Aspects

Site sensitivities. Difficult walking on the beach and uphill, and many of the penguins located upslope on exposed ridges ande knolls.

Pointers for avoiding disruptions.

Walk slowly around all nesting penguins, and do not impede their access to the sea.

Visitation Aspects

Numbers of tourist zodiac landings and participating visitors, 1989-2003:

	Zodiac Landings	Participating Visitors
1989-2000:	0	0
2000-01:	1	92
2001-02:	0	0
2002-03:	1	93
14-Season Total	2	185

Proximate visitor sites. D'Urville Monument.

Marambio Station Vicinity, Seymour Island (SEYM)

64°13'S, 56°38'W

Magnetic declination: 12.0°E Inventory subarea: NE Inventory acronym: SEYM Species Diversity: LOW Site Sensitivity: LOW

Location — History — Features

This is the Argentine research station found on the NE end of Seymour Island, a barren, 10-mile long and 5-mile-wide island lying one mile NE of Snow Hill Island, at the S margin of Erebus & Terror Gulf. Seymour's NE end was first seen by Ross in January 1843. The barren area to the N of the station is where many important fossil discoveries have been made. A remarkably barren clay and mud landscape, laden with snail and shell fossils, where fossil penguin bones have been found.

Landing Characteristics

Inventory researchers visited the muddy, barren landscape of the N end of Seymour Island, in the course of helicopter reconnaissance. Zodiac landings appear possible. While devoid of life, the unusual landscape provides a glimpse into Antarctica's much warmer past.

Antarctic Site Inventory Effort

Visits by Antarctic Site Inventory researchers, 1994-2003:

1. January 25, 1996

RN BH

Endurance

Assessment and monitoring. Only preliminary censusing and ground photodocumentation has been accomplished.

Fauna — Flora — Censuses

Penguins & flying birds. No confirmed nesting. Antarctic terms were observed and may nest in the vicinity.

No site-specific penguin populations are reported in Woehler (1993); the Adélie penguin count of 21,954 N2, 1985, reported for Seymour Island presumably pertains to the colony at Penguin Point on the SE side of the island.

Seals and flora. None noted.

Conservation Aspects

Site sensitivities. Area where rare fossils have been discovered is easily trampled and eroded.

Visitation Aspects

Numbers of tourist zodiac landings and participating visitors, 1989-2003:

	Zodiac Landings	Participating Visitors
1989-2000:	0	0
2000-01:	4	128
2001-02:	0	0
2002-03:	0	0
14-Season Total	4	128

Proximate visitor sites. Penguin Point, Seymour Island, lies to the SE. Snow Hill Island lies to the W.

Paulet Island (PAUL)

63°35'S, 55°47'W

Magnetic declination: 11.0°E Inventory subarea: NE Inventory acronym: PAUL Species Diversity: MEDIUM Site Sensitivity: MODERATE

Note: Restricted visitor space if high tide, creching penguins, heavy snow, or ice

Location — History — Features

A circular island, about 1.0 mile in diameter, lying 3 miles SE of Dundee Island, off the NE end of the Antarctic Peninsula. Paulet is the site of an enormous Adélie penguin colony. The island was discovered by Ross's British expedition (1839-43), and named by Ross for a captain in the Royal Navy. Paulet consists of a distinct volcanic cone, 1,158 feet high. The landing beach on the N side of the island contains rounded, mainly spherical boulders and pebbles of basalt and scoriae. Well to the E of the landing beach is a memorial cross marking the grave of one of the members of the Nordenskjøld expedition who died here, and the remains of the hut in which these explorers overwintered may be found above the landing beach. Beyond and above the hut is a substantial ovoid-shaped lake, several hundred feet long and about half that width, which appears to be in the crater of the old volcano. The ridge above the landing (upon which the remains of the hut are located) is made up entirely of rounded boulders, pebbles, and even bomb-shaped fragments. This ridge slopes up gently to a steeper hillside leading around the lake.

There are many Adélies around the lake and on the elevated ridge between the lake and a basaltic stack NE of the landing beach. This stack contains sheathbill and shag nests, and sits opposite a large shag colony that covers a steep ridge on an interior hillside. Beyond this rock stack is a flat terrace that forms an apron around the N and NE side of the island. Enormous numbers of Adélies nest on this apron and on the ridges above. The ground surface consists of cinders and pebbles in a muddy, guano-rich soil. The steep ridge that houses the large shag colony is underlain by solid basalt. Angular slabs of thin cryoturbated (broken and churned by freezing and thawing) basalt are common, and were used by the Nordenskjøld expedition members to build their emergency hut.

On site is an Antarctic Historic Site and Monument, the stone hut built in February 1903 by C. A. Larsen, Norwegian captain of the wrecked vessel *Antarctic* of the Swedish Antarctic Expedition, led by Otto Nordenskjøld, and the grave of a member of that expedition.

This small island in the W Weddell Sea is normally the home to at least 60,000 breeding pairs of Adélie penguins. It is also the site of an historical hut and burial marker from the ill-fated Nordenskjøld expedition. The landing site is on the N central side of the island, and access is often impeded by ice. Anchoring is generally impossible because of the fast flowing ice and currents. Leopard seals often may be found offshore of the landing site. In normal circumstances, Paulet presents a very major challenge: the Adélies are tightly grouped and often difficult to access, especially when the beach is caked with ice, or later in the breeding season, when penguin chicks break crèche and move to the beach. In the 1994-95 austral summer, Paulet experienced a site-wide Adélie breeding crash, with many dead chicks strewn about and relatively small numbers of undersized chicks gasping for food. Normally, in mid-summer, this site is awash in chicks, guano, and mud. In the 1994-95 season, blue-eyed shags also failed. The causes for the abject breeding failures are unclear, although suspicions suggest krill stock fluctuations in the penguins' and shags' normal foraging areas or, because of a "high ice" winter, the penguins and shags found Paulet difficult to reach and were much delayed in starting their breeding cycle.

Landing Characteristics

Uncharted water near shore. Cobble landing beach on N coast may be packed with ice, depending on wind and swell. More visitor space on a low or falling tide; otherwise, space is very restricted. Landing beach difficult to negotiate when snow- or ice-covered or wet, and especially in January after Adélie penguin chicks break crèche and move seaward. Access inland is uphill and immediately places visitors in close proximity to nesting penguins. Late in the season, Antarctic fur seals may be present, and in large numbers. Historic Nordenskjøld expedition hut located inland above the landing beach, with an ovoid-shaped melt lake beyond and S of the hut.

Antarctic Site Inventory Effort

Visits by Antarctic Site Inventory researchers, 1994-2003:

1.	January 22, 1995	RN	Explorer
2.	November 30, 1995	RN LB	Explorer
3.	December 9, 1995	BH	W. Discoverer

4.	January 16, 1996	RN BH	Endurance
5.	January 31, 1996	RN BH	Endurance
6.	November 27, 1996	RN WT	Explorer
7.	December 1, 1996	RN	W. Discoverer
8.	December 31, 1996	LB	Hanseatic
9.	January 21, 1999	RN RD ST	Vavilov
10.	November 25, 1999	LB BP	Cal Star
11.	December 14, 1999	RN	Cal Star
12.	January 21, 2000	RN	Shuleykin
13.	December 11, 2000	RN	Cal Star
14.	December 25, 2000	SF LF	Cal Star
15.	January 9, 2001	SF	Cal Star
16.	January 26, 2001	RD	Cal Star
17.	February 2, 2001	RN	Cal Star
18.	December 11, 2001	RN SF CE	Endeavour
19.	December 21, 2001	JC LGC	Endeavour
20.	January 25, 2002	RD LS	Endeavour
21.	February 3, 2002	MM	Endeavour
22.	February 20, 2002	RN	Endeavour
23.	January 10, 2003	SF	Endeavour
24.	January 20, 2003	RD	Endeavour
25.	February 1, 2003	MM	Endeavour
26.	February 16, 2003	MB	Endeavour

Assessment and monitoring. The Inventory undertakes regular censusing of blue-eyed shags and specific Adélie penguin groups.

Fauna — Flora — Censuses

Penguins & flying birds. Adélie penguins, blue-eyed shags, kelp gulls, and snowy sheathbills are confirmed breeders. Both snow and Wilson's storm-petrels commonly course the higher scree and are strongly suspected to be breeding. There is a noticeable paucity of skuas, spp.; none were found nesting and very few were observed harassing penguins. Kelp gulls also observed but it is unclear whether they actually nest on site.

Recent Adélie penguin census data reported in Woehler (1993): 60,000 A3, 1984.

Antarctic Site Inventory censuses:

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Adélie penguin ("hut" colony)
       C1
             1995 Jan
216
502
              1995 Nov
       N1
447
       N1
              1995 Dec
559
       N1
              1996 Nov
609
       N1
              1999 Nov
458
       C1
             2000 Jan
522
             2000 Dec
       N1
472
       C1
             2001 Jan
373
       N1
             2001 Dec
252
       C1
             2002 Jan
238
       C1
              2002 Feb
573
       C1
             2003 Jan
```

Adélie penguin (large colony contiguous to landing site, Nordenskjøld hut) 75,000 N2 1999 Jan

Adélie penguin (NE canyons, far removed from landing site area)

20,000-30,000 N3 1999 Jan

Adélie penguin (site-wide estimate) 95,000-105,000 N2/3 1999 Jan

Blue-e	yed shag	5
432	N1	1995 Nov
326	N1	1996 Nov
360	N1	1996 Dec
377	N2	1999 Nov
291	N1	2000 Dec
265	C1	2001 Jan
297	N1	2001 Dec
273	N1	2003 Jan
524	C1	2003 Jan

Seals. Weddell seals and Antarctic fur seals have hauled-out on the landing beach, and leopard seals often may be found hunting offshore.

Flora. Xanthoria, spp. may be found on exposed slopes.

Conservation Aspects

Site sensitivities. Adélie penguins nest in large numbers and large, tightly packed colonies immediately above and uphill of the landing beach, on slightly elevated terraces surrounding the entire N coast, and on inland slopes and ridges; they are easily approached and disturbed, especially in November and early December when adults will be incubating eggs; subsequently, adults will be guarding and provisioning chicks at the nest, then in crèche. Adélie penguins also nest in steep, rubble-strewn canyons on far NE end of the island; they are not readily accessed, but are easily disturbed. Blue-eyed shags nesting on a basaltic, shoreline stack E of the landing beach and in a large, cliffside colony opposite this stack are easily approached and disturbed; in November and early December adults will be incubating eggs and, subsequently, guarding and provisioning chicks. Snowy sheathbills also nest on this basaltic, shoreline stack, and are easily approached and disturbed. Snow petrels and Wilson's storm-petrels nest in loose scree on steep slopes inland and W of the landing beach. As the penguin breeding season winds down, Antarctic fur seals begin to arrive, crowding onto beaches and elevated terraces.

Pointers for avoiding disruptions.

Do not impede penguins' access to and from the water.

Walk slowly and carefully around nesting, crèching, or molting penguins.

Walk slowly and carefully around nesting shags.

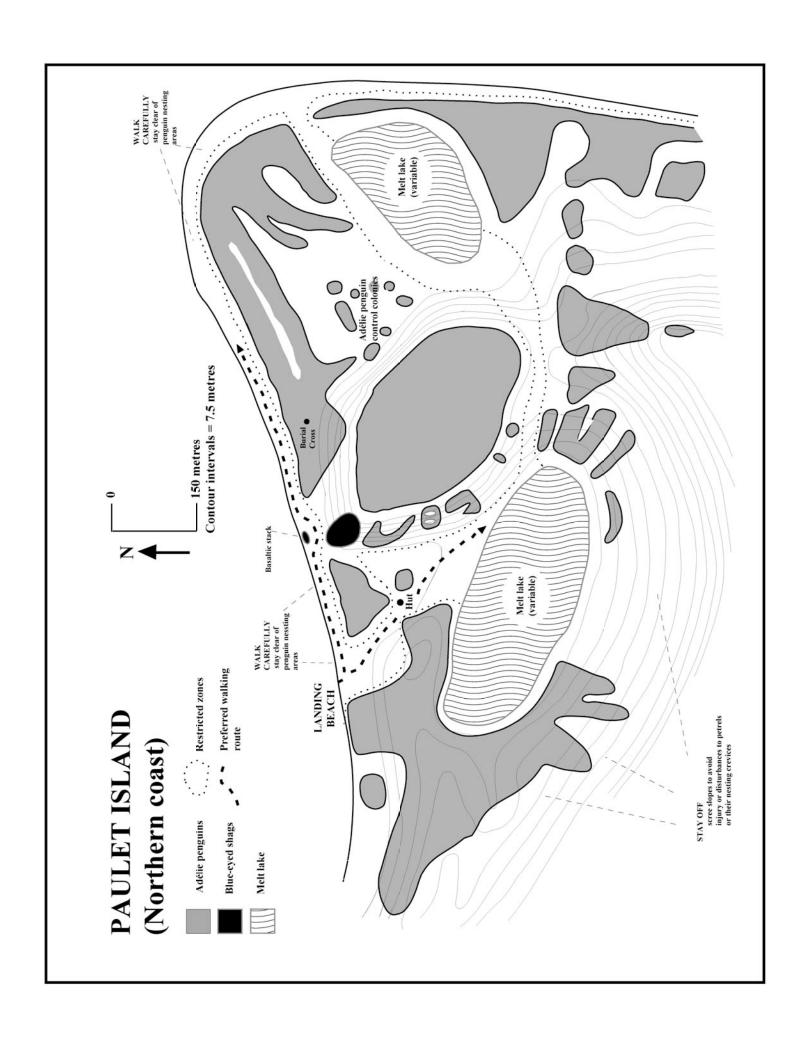
Avoid and stay clear of penguins nesting in canyons on the NE end.

Walk slowly and carefully around nesting sheathbills.

Stay clear of — and do not hike upon or wander over — scree slopes and high ridges.

When visitor space on the landing beach is restricted by high tide, ice, or swarms of penguins, strictly control landings by organizing guided, well spaced groups, all following the same path, and not allowing any free wandering.

Avoid and stay clear of Antarctic fur seals, which should be given a wide berth and should not be approached.



PAULET ISLAND



POINTERS FOR AVOIDING DISRUPTIONS

DO NOT IMPEDE PENGUINS' ACCESS TO AND FROM THE WATER

WALK SLOWLY AND CAREFULLY AROUND NESTING, CRÈCHING, OR MOLTING PENGUINS

WALK SLOWLY AND CAREFULLY AROUND NESTING SHAGS.

AVOID AND STAY CLEAR OF PENGUINS NESTING IN CANYONS ON THE NE END

WALK SLOWLY AND CAREFULLY AROUND NESTING SHEATHBILLS

STAY CLEAR OF — AND DO NOT HIKE UPON OR WANDER OVER — SCREE SLOPES AND HIGH RIDGES

WHEN VISITOR SPACE ON THE LANDING BEACH IS RESTRICTED BY HIGH TIDE, ICE, OR SWARMS OF PENGUINS, STRICTLY CONTROL LANDINGS BY ORGANIZING GUIDED, WELL SPACED GROUPS, ALL FOLLOWING THE SAME PATH, AND NOT ALLOWING ANY FREE WANDERING

AVOID AND STAY CLEAR OF ANTARCTIC FUR SEALS, WHICH SHOULD BE GIVEN A WIDE BERTH AND SHOULD NOT BE APPROACHED

Visitation Aspects

Numbers of tourist zodiac landings and participating visitors, 1989-2003:

	Zodiac Landings	Participating Visitors
1989-90:	7	772
1990-91:	4	240
1991-92:	14	2,239
1992-93:	16	1,498
1993-94:	18	1,664
1994-95:	30	2,819
1995-96:	31	2,315
1996-97:	31	2,808
1997-98:	8	732
1998-99:	37	3,722
1999-2000:	49	4,230
2000-01:	19	1,905
2001-02:	38	3,357
2002-03:	21	1,916
14-Season Total	323	30,217

Proximate visitor sites. D'Urville Monument may be found to the NW at Joinville Island. Jonassen Island and Brown Bluff lie to the W, Seymour and Snow Hill Islands to the SW.

Point Obelisk, James Ross Island (OBEL)

64°08'S, 58°27'W

Magnetic declination: 12.5°E Inventory subarea: NE Inventory acronym: OBEL Species Diversity: LOW Site Sensitivity: LOW

Location — History — Features

Located at the N end of the entrance to Röhss Bay on the W side of James Ross Island. Discovered by Nordenskjøld's Swedish Antarctic Expedition and named for a conspicuous rock pinnacle two miles within the headland, visible from the NW and S.

Landing Characteristics

Barren landing beach.

Antarctic Site Inventory Effort

Visits by Antarctic Site Inventory researchers, 1994-2003:

1. January 1, 2002

RP

Endeavour

Assessment and monitoring. Only preliminary censusing and ground photodocumentation has been accomplished.

Fauna — Flora — Censuses

Penguins & flying birds. Pairs of kelp gull and south polar skua acting defensively, but no nests discovered.

Seals. None observed.

Flora. Scattered moss beds. Xanthoria, spp., Usnea, spp., Mastodia, spp., and Caloplaca, spp. noted.

Conservation Aspects

Site sensitivities. None noted.

Visitation Aspects

Numbers of tourist zodiac landings and participating visitors, 1989-2003:

	Zodiac Landings	Participating Visitors
14-Season Total,	0	0
1989-2003		

<u>Note</u>: Inventory researchers visited this site from a tour ship during the 2001-02 season; however, this landings is, inexplicably, not listed in the NSF compilations.

Proximate visitor sites. On James Ross Island: Rum Cove, Brandy Bay, Cape Gage, Cape Lachman, Comb Ridge, Gin Cove, and Holluschickie Bay; and Persson Island.

Penguin Point, Seymour Island (PEPO)

64°19'S, 56°43'W

Magnetic declination: 12.0°E Inventory subarea: NE Inventory acronym: PEPO Species Diversity: LOW Site Sensitivity: LOW

Location — History — Features

Located SE of the Argentine Marambio station, this site has remarkably barren clay and mud landscape and a large colony of Adélie penguins sprawled along mud slopes rising from the site's landing beach.

Landing Characteristics

The muddy, barren landscape is similar to that on the N part of the island. The landing site is regularly impeded by ice.

Antarctic Site Inventory Effort

Visits by Antarctic Site Inventory researchers, 1994-2003:

1. February 19, 2002

RN

Endeavour

Assessment and monitoring. Preliminary censusing and ground photodocumentation accomplished.

Fauna — Flora — Censuses

Penguins & flying birds. Adélie penguins are confirmed breeders.

Woehler (1993) reports Adélie penguin census data for Seymour Island: 21,954 N2, 1985, which, presumably, pertains to the colony at Penguin Point.

Seals. Weddell seal and Antarctic fur seal hauled-out on cobble beach.

Flora. Need to be surveyed.

Conservation Aspects

Site sensitivities. Adélie penguins are easily approached and disturbed.

Pointers for avoiding disruptions.

Walk slowly and carefully around nesting, crèching, or molting penguins, and do not impede their access to the sea.

Visitation Aspects

Numbers of tourist zodiac landings and participating visitors, 1989-2003:

	Zodiac Landings	Participating Visitors
1989-90:	0	0
1990-91:	0	0
1991-92:	1	86
1992-93:	1	85
1993-94:	2	129
1994-95:	1	41
1995-96:	0	0
1996-97:	0	0
1997-98:	0	0
1998-99:	0	0
1999-2000:	0	0
2000-01:	0	0
2001-02:	4	413
2002-03:	1	56
14-Season Total	9	810

Proximate visitor sites. Marambio Station. Snow Hill Island.

Persson Island (PERS)

64°13'S, 58°24'W

Magnetic declination: 12.6°E Inventory subarea: NE Inventory acronym: PERS Species Diversity: LOW Site Sensitivity: LOW

Location — History — Features

A 1.5 mile long island in the entrance to Röhss Bay on the SW side of James Ross Island. Discovered by Nordenskjøld's Swedish Antarctic Expedition, 1901-04, and named for Nils Persson, one of the patrons of the expedition.

Landing Characteristics

Rocky landing beach. Much frost heaving in the rocks, some fossils observed, and evidence of previous volcanic activity. Until recently, the SW end of James Ross Island and Persson Island were covered by the Larsen Ice Shelf.

Antarctic Site Inventory Effort

Visits by Antarctic Site Inventory researchers, 1994-2003:

1. January 12, 2002

RP WT

Endeavour

Assessment and monitoring. Only preliminary censusing and ground photodocumentation has been accomplished.

Fauna — Flora — Censuses

Penguins & flying birds. No evidence of any breeding activity.

Seals. None observed.

Flora. Moss, spp. in meltwater channels. *Usnea*, spp., *Mastodia*, spp., *Caloplaca*, spp., and *Xanthoria*, spp. observed.

Conservation Aspects

Site sensitivities. None noted.

Visitation Aspects

Numbers of tourist zodiac landings and participating visitors, 1989-2003:

	Zodiac Landings	Participating Visitors
1989-90:	0	0
1990-91:	0	0
1991-92:	0	0
1992-93:	0	0
1993-94:	0	0
1994-95:	0	0
1995-96:	0	0
1996-97:	0	0
1997-98:	0	0
1998-99:	0	0
1999-2000:	0	0
2000-01:	0	0
2001-02:	1	104
2002-03:	0	0
14-Season Total	1	104

Proximate visitor sites. On James Ross Island: Rum Cove, Cape Obelisk, Brandy Bay, Cape Gage, Cape Lachman, Comb Ridge, Gin Cove, and Holluschickie Bay.

Rum Cove, James Ross Island (RUMC)

64°06'S, 58°25'W

Magnetic declination: 12.5°E Inventory subarea: NE Inventory acronym: RUMC Species Diversity: LOW Site Sensitivity: LOW

Location — History — Features

A cove indenting the NW coast of James Ross Island between Tumbledown Cliffs and Cape Obelisk. Named in 1983 to associate with other sites along this coast named for alcoholic spirits.

Landing Characteristics

This site was first visited in 1996-97, as the Larsen Ice Shelf on the SW side of James Ross Island to such an extent, that the island could be circumnavigated. Lichens appeared to be the only living organisms on site. Uncharted waters and drifting ice offshore required the expedition ship to drift, and required long zodiac rides to reach the shore.

Antarctic Site Inventory Effort

Visits by Antarctic Site Inventory researchers, 1994-2003:

1. February 23, 1997

RN

Explorer

Assessment and monitoring. Only preliminary censusing and ground photodocumentation has been accomplished.

Fauna — Flora — Censuses

Penguins & flying birds. Skuas, spp. observed, but no nests observed.

Seals. None observed.

Flora. Crustose lichens, spp. noted.

Conservation Aspects

Site sensitivities. None noted.

Visitation Aspects

Numbers of tourist zodiac landings and participating visitors, 1989-2003:

	Zodiac Landings	Participating Visitors
1989-1996:	0	0
1996-97:	1	80
1997-98:	0	0
1998-99:	0	0
1999-2000:	2	183
2000-01:	0	0
2001-02:	0	0
2002-03:	0	0
14-Season Total	3	263

Proximate visitor sites. On James Ross Island: Cape Obelisk, Brandy Bay, Cape Gage, Cape Lachman, Comb Ridge, Gin Cove, and Holluschickie Bay; and Persson Island.

Snow Hill Island (SNOW)

64°28'S, 57°12'W

Magnetic declination: 12.0°E Inventory subarea: NE Inventory acronym: SNOW Species Diversity: LOW Site Sensitivity: LOW

Location — **History** — **Features**

A 20 mile-long, 6 mile-wide, island lying SE of James Ross Island, and separated from it by Admiralty Sound. It was discovered by Ross in 1843, but he was uncertain of its connection to the mainland, and named it simply Snow Hill because its snowy appearance contrasted so markedly with the barren ground of nearby Seymour Island. Many fossils may be found on site. The refuge built in 1902 and utilized by the main party of the Nordenskjøld expedition is still intact, is maintained by the Argentines, and is designated as an Antarctic Historic Site and Monument.

Landing Characteristics

The Nordenskjøld refuge is maintained for visitors, and is reached by an easy uphill climb from the landing beach. Snow Hill and Seymour are in close proximity of the Argentine Marambio Station. There appears to be no breeding wildlife. A seal census is easily accomplished along the shoreline.

Antarctic Site Inventory Effort

Visits by Antarctic Site Inventory researchers, 1994-2003:

1.	January 22, 1995	RN	Explorer
2.	December 10, 2001	RN SF CE	Endeavour
3.	December 21, 2001	JC LGC	Endeavour
4.	January 2, 2002	RP	Endeavour
5.	January 13, 2002	RP WT	Endeavour
6.	February 19, 2002	RN	Endeavour
7.	January 31, 2003	MM	Endeavour
8.	February 16, 2003	MB Ende	avour

Assessment and Monitoring. The landing site has been surveyed and is regularly censused.

Fauna — Flora — Censuses

Penguins & flying birds. No confirmed nesting species, though kelp gulls, south polar skuas, and Antarctic terns observed on site.

Woehler (1993) and Woehler & Croxall (1996) report no site-specific penguin populations.

Seals. None observed.

Flora. Crustose lichens (spp.) noted.

Conservation Aspects

Site sensitivities.

Pointers for avoiding disruptions.

Fossils easily found and trampled

Visitation Aspects

Numbers of tourist zodiac landings and participating visitors, 1989-2003:

	Zodiac Landings	Participating Visitors
1989-90:	2	125
1990-91:	0	0
1991-92:	1	90
1992-93:	0	0
1993-94:	0	0
1994-95:	4	304

	Zodiac Landings	Participating Visitors
1995-96:	2	187
1996-97:	1	35
1997-98:	0	0
1998-99:	5	482
1999-2000:	5	442
2000-01:	0	0
2001-02:	16	1,589
2002-03:	7	516
14-Season Total	43	3,770

Proximate visitor sites. Penguin Point and the fossil area N of the Marambio Station on Seymour Island.

Tay Head, Joinville Island (TAYH)

63°21'S, 55°34'W

Magnetic declination: 10.3°E Inventory subarea: NE Inventory acronym: TAYH Species Diversity: LOW Site Sensitivity: LOW

Location — History — Features

A rocky headland located 6 miles E of Mt. Alexander and extending into the Firth of Tay, on the S coast of Joinville Island. Named derives from the Firth of Tay.

Landing Characteristics

Broad cobble landing beach, which, during Inventory visits in 2002, was overrun with fur seals. Once above the cobble beach, a broad, flat stretch of terrain extends inland and N to a large glacier. Adélie penguin colony located W of the landing beach.

Antarctic Site Inventory Effort

Visits by Antarctic Site Inventory researchers, 1994-2003:

1.	January 25, 2002	RD LS	Endeavour
2.	February 4, 2002	MM	Endeavour
3.	February 20, 2002	RN	Endeavour

Assessment and monitoring. Only preliminary censusing and ground photodocumentation has been accomplished.

Fauna — Flora — Censuses

Penguins & flying birds. Adélie penguins, skua, spp., and Antarctic terns are confirmed breeders. Southern giant petrels observed on the landing beach, but nests not observed. Molting, likely 2-year-old, emperor penguin observed in January and February 2002 on the glacier, one mile inland from the landing beach.

Antarctic Site Inventory censuses:

Adélie penguin

15-20,000 N3 2002 Jan/Feb

Seals. Weddell seals hauled-out on landing beach and on ice floes offshore. Leopard seal observed on the landing beach during the January 2002 visit; leopard and crabeater seals observed offshore on January 25, 2002 and February 4, 2002 visits. Fur seals hauled-out on landing beach during all 2002 visits, with an estimated 1,500+ observed on February 20, 2002.

Flora. Xanthoria, spp., Caloplaca, spp., Usnea, spp., and snow algae noted.

Conservation Aspects

Site sensitivities. If large numbers of fur seals, access inland may be impeded. Breeding Adélie penguins are easily approached. Antarctic terns nesting opportunistically between the landing beach and N toward the glacier, on available, open ground, are skittish, defensive, and very easily disturbed, even from a distance.

Pointers for avoiding disruptions:

Walk slowly and carefully around nesting, crèching, or molting penguins.

Avoid and stay clear of wallowing elephant seals.

Avoid and stay clear of Antarctic fur seals, which should be given a wide berth and should not be approached.

Stay clear — and do not approach — nesting terns.

Visitation Aspects

Numbers of tourist zodiac landings and participating visitors, 1989-2003:

	Zodiac Landings	Participating Visitors
1989-2001:	0	0

	Zodiac Landings	Participating Visitors
2001-02:	3	301
2002-03:	0	0
14-Season Total	3	301

Proximate visitor sites. Heroína Island.

View Point (VIEW)

63°33'S, 57°22'W

Magnetic declination: 11.5°E Inventory subarea: NE Inventory acronym: VIEW Species Diversity: LOW Site Sensitivity: LOW

Location — History — Features

E tip of a promontory, 150 meters in elevation, forming the W side of the entrance to Duse Bay on the S coast of the Trinity Peninsula. Discovered by Gunnar Andersson's party from Nordenskjøld's Swedish Antarctic Expedition, 1901-4, and named by the Falklands Islands Dependencies Survey, after a 1945 survey, because good panoramic views and photographs were obtained from this promontory.

Landing Characteristics

Continental landing site on the Trinity Peninsula. British hut was erected in 1953 and later transferred to Chile. Mummified seal carcasses near the hut.

Antarctic Site Inventory Effort

Visits by Antarctic Site Inventory researchers, 1994-2003:

1. January 17, 2000

RD

Explorer

Assessment and monitoring. Only preliminary censusing and ground photodocumentation has been accomplished.

Fauna — Flora — Censuses

Penguins & flying birds. Kelp gull confirmed breeding. Adélie and gentoo penguin, and skua, spp. noted, but no breeding activity observed.

Seals. Weddell seals hauled-out on landing beach. Juvenile southern elephant seal also observed on the beach.

Flora. Xanthoria, spp. and snow algae noted.

Conservation Aspects

Site sensitivities. None noted.

Visitation Aspects

Numbers of tourist zodiac landings and participating visitors, 1989-2003:

	Zodiac Landings	Participating Visitors
1989-1995:	0	0
1995-96:	1	99
1996-97:	3	207
1997-98:	0	0
1998-99:	1	88
1999-2000:	2	138
2000-01:	0	0
2001-02:	2	139
2002-03:	4	212
14-Season Total	13	883

Proximate visitor sites. On the Trinity Peninsula: Jade Point, Crystal Hill, Bald Head, and Camp Hill; Cape Burd on the Tabarin Peninsula; and False Island Point on Vega Island.