## **Island Visit Reports**

## The Twins

## Falklands Conservation Nature Reserves



Sand beach with breeding Southern Elephant Seals on the northeastern coast of South Twin, with Carcass Island beyond, November 2006

Robin W Woods December 2008

# Report on two visits to The Twins, northwest of Carcass Island in November 1997 and November 2006

#### Introduction

The Twins, two small islands of about 23ha total land area (Woods 2001), lie about 3km west of the North West Point of Carcass Island (Figure 1). They were leased in 1984 to the Falkland Islands Foundation (later part of Falklands Conservation) by the Royal Society for Nature Conservation and the freehold was acquired from RSNC in 1992. These tussac islands are included in the West Point Group Important Bird Area and they were visited during the Striated Caracara Surveys by Falklands Conservation, with support from the Falkland Islands Government, in 1997 and 2006. Because these islands are very rarely visited, opportunities were taken to collect as much data as possible on birds and flowering plants.

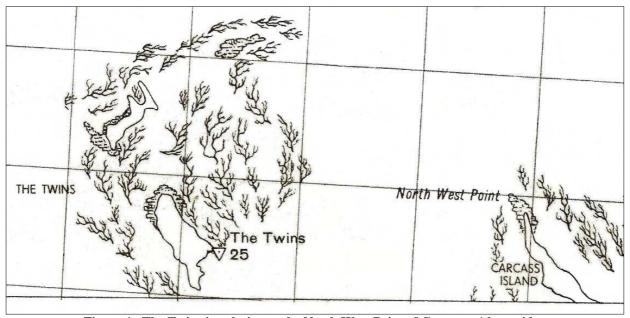


Figure 1. The Twins in relation to the North West Point of Carcass: 1 km grid squares Based on D.O.S. 453. 1:50,000 map sheet 2

**South Twin** (15ha) lies roughly NNW-SSE. It is about 1km long and about 250m across at its widest point. The best place for landing is on the southeastern side where there is more open water and access to a small bay sheltered from westerly winds. Around the northern point, a wide fringe of shelf rock is exposed at low tide. The island is generally very low lying, the highest point being only 8m (25 feet) above sea level. There are sand dunes behind a noticeable white sand beach on the northeastern side and some low rocky points. A large accumulation of dead, rotting kelp was found to the north of the southeastern point along a narrow boulder beach.

**North Twin** (8ha) lies about half a kilometre north of South Twin and is oriented approximately NE-SW. It is about 600m long and generally less than 100m in width. There is a wide rocky reef at the southwestern point which is exposed at low tide. A narrow reef extends along the western coast with a boulder beach on which dead kelp and a few bleached, drifted tree trunks have become stranded. The island barely reaches 5m (about 16 feet) at a few small rocky points.

Both islands are well vegetated, with much Tussac; on North Twin it was the only plant species found in 1997. Plants were healthy but tended to be shorter and more open than on South Twin, probably because Southern Sea Lions *Otaria flavescens* hauled out and rested on the island.

There is no evidence that either island was formerly grazed which is consistent with the apparent absence of rats or mice. The Twins may have been considered too small to graze or perhaps too difficult of access with livestock in small boats. However, there is strong evidence that sealers visited South Twin to kill seals, probably during the 19<sup>th</sup> century. Many bleached bones were found on sand dunes immediately inshore of the northeastern sand beach, where Southern Elephant Seals *Mirounga leonina* were resting and had borne pups in the spring of 2006. There was no sign that Tussac had been burnt in the past.



South Twin, view to Carcass Island - accumulated kelp, breeding Elephant Seals Kelp Geese and Pale-faced Sheathbills, November 2006



South Twin; close up seal bones and skull



Dunes with scattered seal bones, November 2006

#### **Surveying Visits**

Both islands were visited briefly in 1997 and 2006 during the Falklands Conservation Striated Caracara Surveys which aimed to locate adult Striated Caracaras that appeared to be holding territories.

South Twin was visited by Jonathan Meiburg, Ann Prior and Robin Woods from 1745 to 1915 on 8 November 1997 after travelling from Carcass Island, via Gibraltar Rock and South Fur Islands in excellent sunny conditions with only a light southwesterly wind. **North Twin** was visited by Michael Morrison, RW and JM from 1715 to 1900 on 19 November. During these short visits, a total of only 3½ hours, it was possible to list the species of birds present and note any evidence of breeding, to list species of flowering plants found and to collect samples of some that were not immediately recognised. Colour transparencies were taken of the coastline and the Striated Caracara nesting sites.

In 2006, the Striated Caracara survey team of Giselle Botha, Gavin Harrison, Mike Morrison and Robin Woods left West Point Island in *Condor* at about 0800 on 9 November in a strong westerly and fine weather, with a sharply rising barometer. The team first landed on **South Twin** at 1100 almost exactly nine years after the first visit, and left at 1500. In a falling tide, Michael Clarke ferried the group in his rubber boat to **North Twin** over shallow, kelp-ridden water by 1630 and we stayed until 1900. Several digital images were made of the habitats and the caracaras. Reembarkation was difficult as the tide had fallen to an even lower point. The total of 6½ hours spent ashore on the two islands was twice as long as in 1997. This was at least partly due to the much increased number of breeding Striated Caracaras found.

Vegetation Flowering Plants found on South and North Twin Islands, November 1997 and 2006

Species * = introduced	South Twin 1997	South Twin 2006	North Twin 1997	North Twin 2006	
Hours surveying	1½ hours	4 hours	1¾ hours	2½ hours	
*Aira praecox Early Hair-grass		X			
Apium australe Wild Celery	X	X			
Callitriche antarctica Starwort	X	X		X	
Carex trifida Swordgrass	X	X			
Cerastium arvense Field Mouse-ear					
Coronopus didymus Lesser Swinecress	X				
Elymus glaucescens Fuegian Couch		X			
Poa alopecurus Bluegrass	X	X			
*Poa annua Annual Meadow-Grass		X			
Poa flabellata Tussac grass	X	X	X	X	
*Rumex acetosella Sheep's Sorrel		X			
*Sagina procumbens Procumbent Pearlwort		X			
*Senecio vulgaris Common Groundsel	X	X			
*Senecio viscosus Sticky Groundsel		X			
Total flowering plant species	7	12	1	2	

There are extensive beds of giant kelp in the surrounding waters, particularly to the east and north. Tussac is dominant on both islands, covering most of the ground down to high water mark and clothing the tops of even narrow rocky points. On **South Twin**, much of the Tussac is dense, up to 2.5m tall and the bogs are surrounded by deep Tussac leaf litter. There appeared to be little variety in the plants, only seven species being identified in 1997. Four of these are native species commonly found on small outer islands: Tussac, the large sedge known as Swordgrass, Wild Celery and Antarctic Starwort. The Swordgrass occurred in small patches at damp places on the outer fringe of the dense Tussac but seemed to be shorter than plants seen elsewhere.



South Twin - Swordgrass patch among coastal Tussac, November 2006

The Celery plants were more widely spread around the Tussac fringe and were particularly noticeable among the low sand dunes. Only one small patch of Starwort was found; this is a small soft green plant of wet and flattish ground or Tussac peat surfaces that is easily overlooked. It can be confused with Antarctic Bedstraw but has only opposite pairs of tiny long-oval leaves rather than whorls of four leaves, and usually grows in much shadier places. A substantial area of Mountain Bluegrass was found among the sand dunes on the eastern coast. Seedlings of a groundsel species, probably Sticky Groundsel, were found in flattened disturbed sand and peat near entrances to Magellanic Penguin burrows, a common habitat in the Falklands of these widespread weeds of cultivated ground. A few small plants of Lesser Swine-cress were found in a crack on a low coastal crag. This peppery-tasting member of the cabbage family is widespread in coastal regions of the Falklands.

During the 2006 visit, another six species were found, five of which were introduced. Early Hairgrass was noticed on dry sandy soil by rocks, some native Fuegian Couch was found near the Bluegrass and a few plants of Annual Meadow grass were seen near the coast. Some Sheep's Sorrel was seen on Tussac peat and small areas of Procumbent Pearlwort were found on damp ground while Sticky Groundsel was definitely identified near Magellanic Penguin burrows.

On **North Twin**, the only plant species found in 1997 was Tussac. It was healthy but tended to be shorter and more open than on South Twin, probably because Southern Sea Lions hauled out and rested on the island. The only other species found in 2006 was Antarctic Starwort.

#### Birds: species recorded at North and South Twin Islands, November 1997 and 2006 **KEY:** X = breeding or probably breeding; X? = possibly breeding; P = present

	South Twin 1997	South Twin 2006	North Twin 1997	North Twin 2006
Hours surveying	1½ hrs	4 hrs	1¾ hrs	2½ hrs
Number of observers	3	4	3	4
Gentoo Penguin Pygoscelis papua		P		
Magellanic Penguin Spheniscus magellanicus	X	X	X	X
Southern Giant Petrel Macronectes giganteus	X?	P		P
Grey-backed Storm-Petrel Garrodia nereis			X?	
Common Diving Petrel Pelecanoides urinatrix			X?	
Rock Shag Phalacrocorax magellanicus	P	P	P	P
Imperial/King Shag Phalacrocorax atriceps	P	P		P
B-crowned Night Heron Nycticorax nycticorax	X	X	X	X
Upland Goose Chloephaga picta		X		
Kelp Goose Chloephaga hybrida	X	X	X	X
Ruddy-headed Goose Chloephaga rubidiceps		X?		
Falkland Steamer Duck Tachyeres brachypterus	X	X	X	X
Crested Duck Lophonetta specularioides	X	X	X	X
Turkey Vulture Cathartes aura	X	X	X	X
Striated Caracara Phalcoboenus australis	X	X	X	X
Southern Caracara Caracara plancus	X			
Blackish Oystercatcher Haematopus ater		X	P	X
Magellanic Oystercatcher Haematopus magellanicus	X	X	P	X
Pale-faced Sheathbill Chionis albus	P		P	
Falkland Skua Catharacta antarctica				P
Dolphin Gull Leucophaeus scoresbii	X	P		P
Kelp Gull Larus dominicanus	X	P	P	P
South American Tern Sterna hirundinacea	X	X?	X?	X?
Tussacbird Cinclodes antarcticus	X	X	X	X
Falkland Grass Wren Cistothorus platensis	X		X	
Cobb's Wren Troglodytes cobbi	X	X	X	X
Falkland Thrush Turdus falcklandii	X	X	X	X
Black-throated Finch Melanodera melanodera	X	X		X
Black-chinned Siskin Carduelis barbata	X			
Total species recorded	22	22	19	20

Summary of bird species recorded in two visits nine years apart

	1997	2006	Total 1997 & 2006	P	<b>X</b> ?	X
South Twin	22	22	26	4	2	20
North Twin	19	20	24	7	3	14

#### **Birds**

#### November 1997

A total of 26 species was recorded; 22 on South Twin and 19 on North Twin. Both islands had good numbers of Tussacbirds and Cobb's Wrens around all the coasts, indicating the absence of rats or mice. Grass Wren and Falkland Thrush were also recorded on both islands. Gatherings of both

species of Shags were found on coastal rocks of both islands, but there was no evidence of breeding. On South Twin a pair of Black-throated Finches and a pair of Black-chinned Siskins with a fledged juvenile were seen but neither species was detected on North Twin. The siskin is an inhabitant of woodland in southern South America but in the Falklands it has adapted to utilise the local native substitute, mature Tussac. Also on South Twin, over 50 Southern Giant Petrels were resting on a sand beach, perhaps prospecting for nesting sites.

On North Twin, the remains of two other small burrowing petrels were found; the tail of a Greybacked Storm-Petrel and wings of Diving Petrels. These may have been discarded by feeding Striated Caracaras or possibly by Short-eared Owls, though the latter species was not recorded. The presence of fresh remains suggests quite strongly that both petrels are nesting in the underlying peat and fibrous parts of mature Tussac, on North or South Twin or both. Magellanic Penguin burrows were found on both islands, though few adults were seen. There were pairs of Crested Ducks and Flightless Steamer Ducks in the coastal waters and many pairs of Kelp Geese on the shores. About ten Pale-faced Sheathbills were seen near Southern Sea Lions on the rocks of both islands.



South Twin - flock of Falkland Flightless Steamer ducks on northeastern coast, with Southern Elephant Seal pups, November 2006

On the eastern coast of South Twin, several adult Black-crowned Night Herons patrolled rock pools and at least 16 immature birds were gathered around a particularly large accumulation of drifted dead kelp. A noisy pair of Southern Caracaras was seen there, probably with a hidden nest. A few Dolphin Gulls and more Kelp Gulls were seen on the coasts of both islands and it is possible that there is a small colony on South Twin, though the birds may have come from the colony on Carcass Island.

There were at least two, possibly three, pairs of Striated Caracaras breeding on each island. On South Twin we located two Striated Caracara nesting sites including an empty nest, a nest with three eggs and a probable third while on North Twin we found the same number of sites and again, only one nest with eggs.

A very interesting discovery was that the two nests containing three eggs on both islands were each being attended by a trio of fully adult birds, behaving as if they were paired. On South Twin, the three birds displayed and screeched together within a few metres of the nest and then flew back and stood, apparently admiring it from the surrounding Tussac.



South Twin - threesome of adult Striated Caracaras by a nest hidden in Tussac, November 1997

On North Twin, a third adult arrived and landed by one of a pair standing near the nest while the mate was incubating. In both cases, the three birds showed no signs of antagonism towards each other, in complete contrast to the behaviour of a pair when an immature bird approaches close to an occupied nest. Adults usually attack immatures and chase them away from the vicinity of the nest. It is clear that the breeding behaviour of these most unusual birds of prey deserves much closer attention.

#### November 2006

A total of 22 species was recorded; 22 on South Twin and 20 on North Twin. As in 1997, Cobb's Wrens and Tussacbirds were numerous on both islands and were present around both coasts. At least one pair of Black-throated Finches and several Falkland Thrushes were seen or heard but no Grass Wrens or Black-chinned Siskins were found on either island.



Southwestern point of South Twin - drifted tree trunk spattered with songbird droppings, in the Falklands an excellent sign that the island is rat-free, November 2006

Kelp Geese were noticeable on both islands, with several pairs spread around the shores. A flock of 58 was seen on the northeast-facing coast of South Twin. There was also a flock of about 30 Magellanic Oystercatchers and another gathering of about 100 Falkland Steamer Ducks. Nests or territory-holding pairs of both oystercatchers were found on both islands. Several broods of Steamer ducks were noted and a nest found on North Twin. Several pairs of Crested Ducks were

found by the shore of South and North Twin. A single female Ruddy-headed Goose was seen on South Twin and a few Upland Geese. Neither species had been seen there in 1997.

Striated Caracaras were noticeable as soon as we landed on South Twin. During the circuit of the coast, we located eight sites, found five nests of which four had eggs and located three more sites by the behaviour of adult pairs. At **North Twin** six sites were found; adults were incubating on five of the nests and eggs were seen in four of these while the sixth had a displaying pair of adults but the nest was not **seen**. No evidence for trios of adults was found, in contrast to the 1997 visit. Only three immatures were noted on South Twin and one on North Twin.



North Twin - adult Striated Caracara with a full crop Condor anchored with Carcass Island in the distance

A single Striated Caracara (age uncertain) was seen to fly up from the southwestern side of North Twin and then over the sea at about 30m in a south-easterly direction. It was followed through binoculars as it passed over most of South Twin until it was lost to view, apparently heading towards Carcass Island.

No Dark-faced Ground-tyrants, Falkland Pipits or Long-tailed Meadowlarks were seen in 1997 or in November 2006. The absence of these species is probably explained by the unsuitability of the Tussac habitat on both islands.

#### **Introduced Predators**

No evidence of introduced mammals was found in November 1997 or 2006.

### Other species of interest

#### **Native Mammals**

South Twin 1997: one bull and three cow Southern Sea Lions were found in a small bay, where they were probably breeding.

North Twin **1997**: two bulls and at least 13 immature Southern Sea Lions were seen. More animals were almost certainly present, but remained hidden in the Tussac. A pair of Southern Elephant Seals was found on the shore of North Twin but no pups were seen.

South Twin 2006: there were noticeable numbers of both Southern Sea Lions and Southern Elephant Seals, especially along the northeast-facing coast of South Twin. At least 32 Southern Elephant Seal pups were counted and mating was observed at one point. North Twin 2006: about six Southern Sea Lions were resting on beach kelp along the southeastfacing coast.

In January-February 2003, a census of all known Southern Sea Lion breeding sites was organised by personnel of the Sea Mammal Research Unit, Aberdeen University under contract to Falklands Conservation. On South Twin 115 lions were counted, including 43 pups, while on North Twin 39 lions including 15 pups were seen.

#### **Conclusions and Implications for Conservation**

The Twins are good examples of low lying, Tussac-covered islands that have not been grazed by herbivores or invaded by alien predatory mammals. These two small islands are important for birds, Tussac, Southern Sea Lions and Southern Elephant Seals. Their status as Nature Reserves owned by Falklands Conservation should ensure that they remain in their present natural condition.

Although time available for field work was limited during these visits, it was found that both islands have good representative collections of breeding birds for their small size. It is very probable that other bird species breed, particularly Short-eared Owl and small petrels including Grey-backed Storm-petrel and Common Diving petrel. Other plant species are almost certain to be present and it would be interesting to examine North Twin in detail to discover whether it supports other flowering plants than Tussac and Antarctic Starwort.

The Striated Caracara breeding population on these two small islands had increased significantly between 1997 and 2006. In 1997 there were only two definite pairs on each while in 2006, eight were found on South Twin and six on North Twin. It may be significant that the breeding population on nearby Carcass Island had increased in the same period from 13 to 16 pairs. The density of breeding pairs on the Twins is much higher than that on Carcass Island, which suggests that there may be sufficient food available on the Twins or perhaps that adults foraging for their chicks are able to fly to and from Carcass Island to prey on Gentoo Penguins, geese or sheep and carry food back to their young.

Given that Falklands Conservation now has some data on the breeding population of Striated Caracaras over a nine year period, it would be valuable to re-survey in a few years, perhaps in 2011, five years after the previous count. The time needed for such a survey is not great; the main requirement is the availability of reliable boat transport, probably from Carcass Island and some reasonable weather allowing landings on both islands. If a whole day was made available, it would be possible to repeat the 2006 survey with a team of at least three people.

A more detailed examination of the flowering and other plants occurring on each island would be valuable but would require more time than was available for the surveys reported here.

It would be worthwhile to collect a representative sample of the seal bones on South Twin, to confirm identification of the species and maybe gain more information on the ages of animals when they were killed.

There appears to be no reason to interfere with the vegetation on either island because it is in an apparently natural condition and is surviving under the pressures imposed by Southern Elephant Seals and Southern Sea Lions.

#### Acknowledgements

The survey teams in 1997 and 2006 are very grateful for the tremendous support received from Michael and Jeanette Clarke of King's Ridge Farm, who owned and crewed the ak *Penelope* in 1997 and for Michael Clarke and Ron Dixon who conveyed the team to and from the islands in 2006 on the ms *Condor*. Without their help we should know very little about these two interesting islands. In November 1997, Roddy Napier and Rob McGill provided very welcome overnight rest and refreshment on West Point Island and Carcass Island respectively, which certainly helped the team to carry on surveying. Rob McGill also facilitated the 2006 visits through logistical support. Thanks are due to Ann Prior, Jonathan Meiburg and Mike Morrison (1997) and to Giselle Botha, Gavin Harrison and Mike Morrison (2006) for their dedicated and enthusiastic efforts to find Striated Caracara territories and nests and to report all other bird and plant sightings. Falklands Conservation is indebted to these teams and for the information gathered to produce this report.

#### References

Thompson, D. 2003. Southern Sea Lion Survey of the Falkland Islands. Report to Falklands Conservation.

Woods, RW & Smith JG 1999 The Distribution and Abundance of the Striated Caracara Phalcoboenus australis in the Falklands, 1997-1998. Report to Falkland Islands Government and Falklands Conservation, Stanley.

Woods, RW. 2001 A survey of the number, size and distribution of islands in the Falklands archipelago. The Falkland Islands Journal 7(5):1-25.

Woods, RW. 2007 The Distribution and Abundance of the Striated Caracara Phalcoboenus australis in the Falkland Islands, 2006. Report to Falkland Islands Government and Falklands Conservation, Stanley.