

CHAPTER 13

HUMAN HISTORY

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Far south as they are in mid-ocean, situated well away from continental land masses and the usual sea routes, it might be thought that the sub-Antarctic islands of Marion and Prince Edward, which have never been permanently inhabited, have but a short history of little general interest. Nevertheless, interest there is, and excitement as well at times, and also some mysteries. Who first discovered the islands, who gave the individual islands their present names, who was the first person to land, and when (and how) did the House Mouse *Mus musculus* arrive on Marion Island? Unlike the other sub-Antarctic islands to be found in the southern Indian Ocean, we do not as yet have clear answers to any of these questions, and it may well be that we will never know.

The history of the Prince Edward Islands is written here from a human perspective, so the author has not been shy of including his own views and comments, idiosyncratic or otherwise. A chronological approach has been adopted in the main, with the period from discovery until the present day divided into “eras”. Rather than present detailed accounts for each era (such as by including lists of ship’s visits, with their dates of arrival, or of the names of team leaders of the meteorological station since annexation), an attempt has been made to bring the islands’ human history to life by concentrating on selected events that have taken place over the years, so that the reader may try to gain an understanding of what it was like to visit and live on the Prince

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Edward Islands during different times. Two neglected subjects, the early histories of the introductions of alien mammals, and the influence of South Africa's gender and racial policies from 1948 to 1994 on island life are treated separately. Of course, not all the good stories can be told in this chapter, but it is hoped that the ones selected will give the reader an understanding of the rich history of a very special place.

13.1 Who first saw the islands? The discovery era, 1663-1776

From the fifteenth to the seventeenth centuries the European world knew very little about southern Africa. The inhospitable seas south of Africa were not known at all, with the first Portuguese explorers hugging the African coastline as they ventured from the Atlantic to the Indian Oceans. At its southern tip, the Cape of Good Hope (modern Cape Town) was founded by the seventeenth century, but its early settlers first looked eastward to the Dutch East Indies, rather than to the hinterland – or southwards. In 1663 the Dutch East Indiaman *Maerseveen*, bound for Batavia from Cape Town, sailed off course and discovered (it is thought) Marion and Prince Edward Islands on the fourth of March (Graham 1989; Cooper & Headland 1991). In a time prior to chronometers, the co-ordinates given by Captain Barent Barentzoon Ham of the *Maerseveen* do not, unsurprisingly, match the islands' current positions, so there will always be some uncertainty over the islands' first discoverer (Van Zinderen Bakker *et al.* 1971). No landings were made at the time, although the *Maerseveen* approached the southerly island (which he named after his ship) close enough to note its cliffs (Leupe 1868). The more northerly island was called Dena (also known as Denia or Dina). Towards the end of the century, the Dutch Governor in Cape Town dispatched a vessel, *Wesel*, to the reported positions of *Maerseveen* and Dina to exploit the timber on the islands which he thought “were entirely covered by many trees from top to bottom” (translated from Leupe 1868). Orders were also given to report on the herbs, flowers, fish, birds and other animals that might be present, as well as on the presence of fresh water. The voyage was unsuccessful, as the islands were not located, presumably due to incorrect co-ordinates. It was just as well, as no trees of any sort would have been found, although the first attempt to report on the environment and biota of the islands was lost to history.

The Prince Edward Islands, after surviving their very first attempt at exploitation, then lapsed back into obscurity for more than a hundred years. The second, and more definite, claimant for discovering the islands is the French explorer, Marc-Macé (or Marc-Joseph) Marion du Fresne, who with the frigates *Le Mascarin* and *Marquis de Castries*, sailed from Cape Town and came across the two islands on 13 January 1772, which he named Ile de l'Espérance (modern-day Marion Island) and Ile de la Caverne (Prince Edward Island). Again, no landing was made. A collision between his two vessels while searching for an anchorage the next day seems to have been the cause (Roth 1891). This accident caused some hen coops (and the latrines)

to be lost overboard, but there is no evidence of domestic chickens being the first alien species introduced by man to the islands! It also caused the first human death at the Prince Edward Islands, that of the look-out, Mathurin Le Tourneur, who was killed when the *Marquis de Castries*' foremast fell (Duyker 1994). The French observed a multitude of large white spots looking like flocks of sheep on modern-day Prince Edward Island (Roth 1891). These were most likely Wandering Albatrosses *Diomedea exulans* in "Albatross Valley", known for its high numbers of breeding birds (Underhill *et al.* 2003). This seems to be the first biological observation recorded for the islands.

The next visit was by Captain James Cook on his third and final voyage of discovery. Cook had previously searched for *Maerseveen* and Dena without success during his second voyage (Beaglehole 1961). This time, and armed with knowledge of Marion du Fresne's discovery shown to him on a chart "in a very obliging [sic] manner" by Julien Crozet (second in command of *Le Mascarin* under du Fresne) when they fortuitously met in Cape Town during his second voyage in 1775, he reached the islands on 12 December 1776 (Beaglehole 1961; Van Zinderen Bakker *et al.* 1971; Cooper & Headland 1991). Like his two predecessors, Cook did not make a landing, sailing between them in his vessels, the *Resolution* and the *Discovery*. This reflects that the Prince Edward Islands with no sheltered bays worthy of an anchorage must have appeared hugely inhospitable to the early explorers in their sailing ships. Accounts written by Cook and his officers at the time note the rugged and barren nature of the islands and the presence of much snow (Cook 1785; Beaglehole 1967).

Cook named the island group (which he specifically stated, were unnamed on his French chart) the "Prince Edward Islands" (Cook 1785; Beaglehole 1967; Cooper & Headland 1991), and did not name the islands individually, *contra* to many 20th century accounts (e.g. Marsh 1948; Van Zinderen Bakker *et al.* 1971; Linklater 1972). Why he chose to name the islands after the fourth son of King George III of Great Britain, has not been recorded anywhere. His Royal Highness the Prince Edward Augustus, later to be titled the Duke of Kent and Strathearn, was only nine years old at the time and might have appeared an unlikely choice over his older brothers. But it seems possible that Cook had met the Prince, as he had been presented to George III (who was an admirer and enthusiastic supporter) after his first voyage in 1771. Interestingly, the Canadian Province of Prince Edward Island was also named after the Prince, although only later in his life. He was known as "the forgotten son" who never became King, but he preserved the British Royal family line by fathering Queen Victoria (www.bluepete.com/Hist/BiosNS/1800-67/Kent.htm).

Exactly how Marion Island got its name remains an unsolved mystery. Cook, after leaving the Prince Edward Islands, sailed to the modern-day Crozet Islands, which he named "Morion (sic) and Crozet Islands" (Cook 1785; Beaglehole 1967). Some time during the first half of the 19th century the name Marion was transferred from the Crozets to the Prince Edwards, most

probably by sealers, who formed the next group of seafarers to visit the islands (Cooper & Headland 1991).

13.2 Seal tongues for breakfast and seal skins for shoes: the period of exploitation, 1800-1930

The next recorded visitor to the islands was the sealer *Sally* (Captain Pierre Péron), which arrived on 10 February 1800, but once again made no landing (Péron 1824). The first recorded landing was from the *Catherine* in either December 1803 or January 1804, whose Captain, Henry Fanning, placed a sealing party ashore (Fanning 1834). However, Fanning laid no claim to have been the first ashore, so the name of the first person to land at the Prince Edward Islands remains unknown, although it is a near certainty to have been made from a sealing vessel (Busch 1985). A number of other sealers, mostly American, visited the island in the first decade of the century (Cooper & Avery 1986; Graham 1989; Headland 1989; Richards 1992). Initially sealers were after the valuable skins of fur seals *Arctocephalus* sp., but by the second decade Southern Elephant Seals *Mirounga leonina* were being killed and tried out for their oil as well (Richards 1992). The *Pickering*, under Samuel Edes, for example, took 7 000 fur seal skins and 50 000 gallons of elephant seal oil over the period 1818-1820.

The life of a shore sealer at the Prince Edward Islands at this time was rough and tough. They were routinely left ashore for a year, or even two, while their ship wintered in Cape Town or sailed elsewhere in more hospitable conditions than to be found in the Southern Ocean. Few sealers left written records of their sojourns, an exception being William Phelps, who under the pseudonym “Webfoot” and many years later in his life, published an account in 1871 of his two years ashore on Marion Island. In August 1818 Phelps was put ashore as a self-styled “growing boy” (born in 1802, he was only 16 years old at the time; Busch 1983) from the sealer *Pickering*, acting as he says as “cook, steward and Governor’s secretary”. Within the first month, three of his party of six had drowned, and more men had to be put ashore. When the water was too rough to use their boat, they carried the elephant seal blubber draped over their shoulders across the land from distant beaches to their try pots. Phelps says this was “not very hard” for a “mile or two” but it must have been for all but the strongest and fittest. They filled their casks with oil in a year and still with no sign of their promised relief, they then had little to do. Having run out of ship’s stores, they lived off seals (especially elephant seal tongues), birds, eggs and fish.

Phelps describes a number of incidents in a racy style, befitting a penny novel of the times. On first going ashore he was left on his own with instructions to kill an elephant seal and cook breakfast. He had no firearm, so armed with a lance on a pole he sent it “socket-deep” into the unfortunate seal, (he chose the smallest he could find as a sensible precaution). The seal “grabbed the lance by the shank with his teeth, and drawing it from the wound, gave it a rapid

whisking round; the end of the pole hit me a rap on the head and sent me sprawling”. Nevertheless, Phelps persevered, eventually killed the animal, used its blubber to start a fire and fried liver and tongue for his hungry shipmates. He describes how to make a pipe bowl out of an elephant seal tooth, collect fresh Macaroni Penguin eggs by the expedient of crushing all present and returning the next day for those freshly laid over “perhaps two or three acres of ground”, cure the skins of Wandering Albatrosses which he “presumed brought a good price”, make moccasins out of raw seal hide stuffed with grass to cross the unforgiving black lava, and make a crude spring net out of strips of seal hide to catch giant petrels for their feathers to make mattresses. These poor birds were deliberately plucked alive to keep the feathers clean and were then released. Phelps does comment critically on the cruelty of this, but such activities may be taken as usual for the times. No doubt, the wildlife of sub-Antarctic islands suffered dreadfully at the hands of sealers, and we can only guess what population changes took place for many species, and how long it has taken them to recover.

There are several accounts on the sealing era at the Prince Edward Islands, listing vessels in chronological order (Cooper & Avery 1986; Graham 1989; Headland 1989; Richards 1992) and three short-term archaeological investigations have taken place at Marion Island to date (Graham 1989; Boshoff *et al.* 1997; Boshoff & Van Schalkwyk 1999). However, very little is known on the numbers of seals killed, and the definitive history of the sealing era waits to be properly researched and written. Such research will require visits to naval and maritime archives and museums in a number of countries to search for ship’s logs and diaries of officers and crew. There are many more human stories to be told: of shipwrecks, privations and rescues (e.g. Marsh 1948). An exciting opportunity exists to combine historical and archaeological research. In this respect, the sealing sites on little-visited Prince Edward Island have not been “souvenired” as much as those on Marion unfortunately have been in the last 50 years (Cooper & Avery 1986), and a thorough investigation of that island is likely to lead to new discoveries and insights into a hard and now vanished way of life and survival.

By 1850 the sealing era was largely over, although sporadic attempts were made at the Prince Edward Islands as late as 1930, when a South African expedition killed 1 490 elephant seals. The expedition’s vessel, the *Kildalkey*, was built in 1918 as a World War I mystery or Q-ship (an armed gunboat disguised as an unarmed merchant ship to hoax the enemy; Rice 1991). The ship lives on in name at Kildalkey Bay on the south-east coast of Marion Island, home to huge Macaroni *Eudyptes chrysolophus* and King Penguin *Aptenodytes patagonicus* breeding colonies and a large beach group of elephant seals, now thankfully able to rest ashore in peace (Cooper & Avery 1986; Cooper & Headland 1991).

13.3 Gentleman scientists in suits: the exploration era, 1840-1940

Other than sealers there were very few human visitors to the Prince Edward Islands in the 19th century and the first half of the next. Most vessels passed by and few made landings. The first was the British Expedition of James Clark Ross in the *Erebus* and *Terror*, bomb-vessels that fired massive mortars and therefore very strongly built to handle the inevitable recoil, thus ideally suited for exploring ice-strewn seas (Ross 1847; Ross 1982). Ross was on his way to discover the Ross Sea and Ice Shelf of Antarctica, and he did not linger at the Prince Edward Islands, unable to land due to bad weather on 21 and 22 April 1840. He did record vast numbers of penguins and fur seals “playing in the surf” – so the sealers had not yet managed to exterminate them. Dredgings and soundings were made and marine animals recovered, the first marine collections from the islands. These were however not the first collections ever taken. In 1830/31 Richard Harris of the sealer *Betsey* and *Sophia* had collected seabirds for scientific purposes (Cooper & Headland 1991). Several geographical features commemorate Ross’s visit: Capes Crozier and Hooker (Captain of the *Terror* and expedition botanist, respectively) on Marion Island, and the Ross Rocks off the north coast of Prince Edward Island. One can only imagine that Joseph Hooker (later to attain eminence and be knighted) would have rather landed to botanize!

More than 30 years passed before the next scientific visit. The HMS *Challenger* had set off from Portsmouth, England in December 1872 on a voyage that would last until May 1876. Its primary goal was to make deep-sea observations, but when the ship arrived at the Prince Edward Islands on 26 December 1873, the weather was kind and a landing on Marion Island was affected in “uncommonly fine, sunny weather” (Linklater 1972). The next day the weather had changed and so a planned landing on Prince Edward Island was cancelled, leaving that island untouched by scientists for quite a while longer. While the scientists were ashore the Ship’s Captain, George Nares of the Royal Navy, undertook a survey that resulted in the island’s group’s first marine chart (illustrated in Marsh 1948) that remained in use until replaced by a new one in 1950 (Goosen 1973). From accounts written (e.g. Linklater 1972) it is clear that the civilian scientists, known as “the philosophers” and teased as such by the younger naval officers, much enjoyed their short outing away from navy rule, even though their landing through thick kelp and onto slippery rocks proved difficult (Spry 1876). They had all equipped themselves with heavy sticks in case they encountered fur seals, but saw none (Moseley 1879). The incubating Wandering Albatrosses were admired but still had to succumb to a “great deal of bullying with the stick before they stand up and let one see whether they have an egg or no”. Dive-bombing sub-Antarctic Skuas *Catharacta antarctica* caused trepidation (as they seem often to do to novices to sub-Antarctic islands) and as a consequence were beaten off with sticks and gun barrels. Detailed observation were made on three of the four species of penguins that occur, with the downy King Penguins eliciting much interest as “absurd objects”.

Henry Moseley, aboard as Naturalist, reported that he ascended a valley to about 1 500 feet (c. 460 metres) over soft boggy ground at first, presumably, in his heavy Victorian dress becoming quite hot and bothered in the process, and he remarked that he found the walking “extremely tiring”. No doubt the large Christmas dinner consumed the day before (Linklater 1972) also had an effect on his progress. Moseley may have been the first scientist ashore on Marion Island to note the difficulties of the terrain, but certainly not the last, as it takes some weeks or months ashore to become what is now known as “island fit”. During the *Challenger*’s visit, Boot Rock, a vertical stack off the northern coast of Marion Island, was named. Cook’s voyage had previously remarked on this striking feature, without naming it (Cook 1785).

After the *Challenger*, few exploring vessels arrived in the next fifty years, and none stayed for any time (Headland 1989). The German *Gauss* sailed past in 1901, as did the *Fram* in the general vicinity in 1911, with Roald Amundsen aboard on his way to the South Pole. In 1935, the British *Discovery II* engaged in oceanographic research on its third commission and visited without landing; a few years later in January 1939 the French *Bougainville* made a brief landing at Ship’s Cove on Marion Island, resulting in some biological collecting (summarized in Cooper & Avery 1986 and Headland 1989).

Somewhat different to the above visits, during World War II, in 1939 and 1940, British warships called at the Prince Edward Islands, including the submarine *Olympus*, to search for signs of visits by German warships. Such visits have never been definitely proven, but may well have occurred, as the *Schleswig-Holstein* was reported to have called in 1939 (Anonymous 1982; Cooper 1986a; Halpern 1986; Headland 1989).

13.4 South Africans arrive to stay: the annexation of 1947-1948

The story of the annexation of the Prince Edward Islands is so well known it is not gone into any detail here, and readers are referred to Marsh (1948) for a detailed, first-person account, along with much on the pre-annexation history of the island group. A summary is given by Cooper & Headland (1991). John Marsh was a journalist from the Johannesburg *Star* who accompanied the S.S. *Gamtoos*, the then supply ship of the Government Guano Islands Department, to the islands in 1948, soon after they had been claimed for South Africa by personnel of the H.M.S.A.S. *Transvaal* (Plates 13.1-13.3). In the early 1970s the author sailed several times on the last voyages of the slow-moving and rolling *Gamtoos*, then the oldest vessel under South African registry, and he did not envy Marsh and his shipmates their journey one bit. Tragically, the maiden sub-Antarctic voyage of the *Gamtoos* resulted in a death. A crew member, Joseph Daniels, was hit on the head when his small boat overturned in heavy seas while off-loading cargo. He could not be revived and was buried on Marion Island some hundreds of metres south of the meteorological station overlooking the sea (Plate 13.4). A simple wooden cross, not the original (see

photograph in Cooper & Avery 1986), marks the burial site to this day, being repainted annually by team members as a mark of respect.

A not so well known fact is that a member of the first occupation party who landed from the *Transvaal* to camp ashore on Gunner's Point at the site of the current station, also drowned off the island on a subsequent visit by the same vessel. In January 1948, along with 13 companions, Able Seaman J.G. Bold spent 16 days ashore under difficult conditions (Marsh 1948). Eight years later, in April 1956, the same J.G. Bold, then promoted to Petty Officer, died in similar circumstances to that of Joseph Daniels, when a small boat capsized in heavy seas (*Cape Argus* Newspaper, 18 April 1956). Intriguingly, the third person to die at the Prince Edward Islands since annexation was also a crew member who drowned offshore following a small-boat capsize, this time from the R.S. *Africana II*, which visited Marion Island during an oceanographic research cruise in April 1963 (Roets 1963). His name is not recorded in the literature, and a white cross with no inscription next to Gentoo Lake on the island may well mark his (or Bold's) passing, although it does not seem to be a grave site. Fortunately, no member of a South African team stationed ashore has died on the island, although there have been a number of medical evacuations over the years. Prior to annexation, there had been sealer deaths ashore, from exposure and from drowning as early as 1818 ("Webfoot" 1871; Marsh 1948). One definite (Boshoff & Van Schalkwyk 1999) and one likely (personal observation) pre-annexation burial site have been discovered on Marion Island. The latter awaits archaeological investigation.

Another member of the very first shore party was Captain W.D. Anderson, a military engineer. His main tasks were to search for a local water supply, consider the possibility of constructing a landing facility for aeroplanes, see if the available vegetation could be used for fuel, and to look for local materials for the mixing of concrete (Marsh 1948). It is interesting to deduce what he achieved. Clearly, there were no plants worth burning, but the author's inspections of still-existing concrete survey beacons erected at the time of annexation shows that local volcanic materials did indeed form part of the mix. Then, and much later (Heymann *et al.* 1987), the island was deemed unsuitable for a landing facility and early plans to send down a Sunderland flying boat never materialized, thwarted by the constant rough seas (Marsh 1948). However, Anderson was successful in finding clean water at a waterfall in the later-named Van den Boogaard River, north of Gunner's Point. The author has in his possession a published photograph captioned as showing "Anderson Falls" on Marion Island. It is hoped the waterfall can one day be matched with the fading cutting and the use of this historic name reinstated.

13.5 South Africans living in the sub-Antarctic, 1948 to present

A full history of the years of South African occupation since annexation will require a longer account. Indeed the subject, covering as it does, many years of scientific endeavour (summarized in other chapters in this book), as well as

compelling human interest (Plates 13.5 and 13.6), needs a whole book to give it justice. In April 2006, the 63rd Team travelled to the island for their year's sojourn. Its members have taken over a rich history that includes dramatic events such as the loss of the station to fire in June 1966 and its subsequent rebuilding, rough seas which have on more than one occasion carried away whole buildings built too close to the shore, the dropping off of emergency medicines and supplies by low-flying aeroplanes, the coming ashore of Russian personnel from two Soviet stern trawlers in 1974 (when the USSR's hammer and sickle flew beside the old South African flag for a brief photo opportunity, surely for the first and last time on *Apartheid*-era South African Territory), stories of researchers benighted within a few metres of field huts invisible in the dark, field rescues of injured and exhausted team members and visitors, round-island and peak-bagging trips, and many more. Some stories are still shrouded in mystery, and may never be fully explained or refuted: a nearby nuclear "flash" in the Southern Ocean, researchers reporting their unexpected encountering of military personnel in the field, and a "structure" erected on Prince Edward Island that later mysteriously disappeared, are examples. More significantly, perhaps, each team member has taken home a wealth of personal memories to enthral a new generation, and there has been no shortage of volunteers over the years to take their place for a 13-month stay on Marion Island.

In a year or two a new base, currently been constructed adjacent to the old one at Transvaal Cove, will be occupied, and the old base torn down and its site rehabilitated. It is planned to display many of the records and memories of the previous teams at the new base, in the form of framed photographs and the many curious objects and souvenirs that have accumulated over the years. In this way the human history of the Prince Edward Islands will be preserved.

13.6 Early aliens: how some introduced mammals became established, and others not

A number of mammals have deliberately been introduced to Marion Island (Watkins & Cooper 1986). Only two species have established long-lasting populations, the House Mouse and the Domestic Cat *Felis catus* (Prince Edward Island has always been free of introduced mammals). The latter has now been eradicated from the island following a long campaign (Bester *et al.* 2002) worthy of medals, but the mice still remain. A little-known introduction about the same time as the mice was the Domestic Pig *Sus scrofa*. The early histories of these three introductions are considered here in some detail, throwing light as they do on the activities and attitudes of those visiting the island over the years.

Nothing is known of when and how the House Mouse arrived on Marion Island. Williams Phelps states there were many mice on the island when he landed in August 1818, encountered on the beaches, in caves and bird burrows and "among the snows of the mountains" having "multiplied until their name was legion" ("Webfoot" 1871). Given that the turn of the century was about

the earliest they could have been introduced, they had certainly spread far in the two decades or less since the first human landing. Phelps thought that the mice had “been introduced from some sailing vessel, probably with the stores of the gang”. However, it is also possible that they arrived from a shipwreck, although none were recorded by name quite this early from the Prince Edward Islands (Marsh 1948; Cooper & Avery 1986; Graham 1989; Headland 1989). However, Phelps writes of obtaining lamps “from the French wreck”, so there had been at least one shipwreck prior to his arrival. Was this perhaps the source of the mice?

The mice on Marion Island show signs of originating from European populations (Berry *et al.* 1978; Jansen Van Vuuren & Chown 2007), but this tells us little of their immediate provenance. The sealing vessels known to have visited the island in the first decades of the 19th century were all originally from the United States of America (Cooper & Avery 1986; Headland 1989), but they could have picked up their unwanted rodent cargos at any of the many ports around the world – and there remains Phelps’ French wreck for a future historian to investigate.

Almost two hundred years later mice are still present on Marion Island and have been the subject of much research into their effects on the island’s biota (e.g. Van Aarde *et al.* 2004). Although consideration is now being given to the feasibility of their removal, this will be both difficult and expensive with current knowledge (Chown & Cooper 1995; Jackson & Van Aarde 2003). Their inadvertent introduction has proved a success story of note (from the point of view of the mice, and not of the island’s conservation).

Turning to a deliberate introduction, the American sealer, *Meyers* (Captain Samuel Edes) took seal skins from the Prince Edward Islands in January/February 1804, when a “couple” (presumably a breeding pair) of domestic pigs *S. scrofa* were released on Marion Island (Graham 1989; Headland 1989; Richards 1992). At least eight feral pigs (three were large boars described as “wild and terribly ferocious creatures”) were still present on the island in the period 1818–1820, so we can assume that the species commenced breeding ashore. The pigs were actively hunted to extinction by sealers left on the island by the *Pickering* as “we no doubt killed the whole stock” (“Webfoot” 1871). William Phelps has left us with a thrilling account of how the very last boar (“the worst of the lot ... an ugly customer”) was killed. The animal, on being cornered “made towards me with his ivory bow-chasers glistening through the froth”. Phelps then remarks he “had some business in the opposite direction, and of course I hurried back to attend to it” and rather wisely left the actual capture of the pig to another in his party! They did not eat this pig, perhaps because of its rank taste, as commented on by men of the *Challenger* for Crozet pigs (see below) which were “scarcely palatable in any case, since they fed on penguins and bitter Kerguelen cabbage, *Pringlea antiscorbutica*” (Busch 1985).

It is interesting to speculate as to what would have happened if Phelps and his companions had left the pigs to multiply and spread over Marion Island. Pigs have been introduced to other islands in the Southern Ocean. Ile aux Cochons (Hog Island) in the Iles Crozet no longer has its pigs that were also introduced by sealers in the early 1800s, causing considerable damage to tussock vegetation and penguin colonies. They had disappeared by the end of the century (Bonner & Lewis Smith 1985; Clark & Dingwall 1985). Pigs were introduced to Auckland Island south of New Zealand in 1807 from a whaling vessel and had become “very numerous” by 1840 (Ross 1847; Turbott 2002). They are still present, and boosted by further introductions, considerably affect the island’s megaherb fauna by uprooting, as well as by consuming albatross and cormorant eggs and chicks and disturbing burrowing petrels (Sanson & Dingwall 1995; Turbott 2002). Marion Island pigs, if they were able to survive the harsher climate, would have likely caused similar harm. We can indeed be thankful that Phelps’ companions got the lot. A few pigs were kept on the island in the early 1950s in a pig sty (known as “La Grange Villa”, still standing today although much dilapidated after half a century) on Boulder Beach immediately below the station. They were all eaten before they had any chance of becoming feral (la Grange 1952; Watkins & Cooper 1986).

When Phelps’ shore party was visited by the sealer *General Gates* in late 1818 or early 1819 they were given a cat by its Captain, Abimelick (or Abimelech) Riggs. The animal (a female) proved useful in ridding the cave in which they lived of mice (“Webfoot” 1871). After a few months, however, “she took a notion to ramble away” and became wild. She was thereafter occasionally spotted far inland but would “bound away” on approach. Fortunately, this individual did not lead to a feral population, so it may be assumed it was not pregnant when put ashore. But the real calamity was still to come.

More than a hundred years passed before feral cats became established on Marion Island, following the deliberate introduction of five individuals in two batches in 1949 to help curb the mouse plague in the meteorological station (Van Aarde 1979; Van Aarde & Skinner 1981; Watkins & Cooper 1986). Unfortunately, animals of both sexes were taken to the island, and they, as cats will do, commenced breeding. In about September 1949 “two seven-month-old kittens born to Tootles ‘Officer Commanding Cats’ were brought back to South Africa” (newspaper cutting in the author’s possession, entitled “Back from Marion Island. Six had the vilest winter”). This contradicts Van Aarde & Robinson (1980) who state that the first kittens were not born on the island until November 1949. Whatever the exact early history, the cat population soon burgeoned in the meteorological station, some inevitably went wild and the first feral cats were sighted 12 kilometres away from the station at Wild Cat Creek during 1951 (Van Aarde 1979). More information on exactly how the station’s pet cats became feral comes from an unpublished report in the author’s possession. The report, marked confidential and dated 30 July 1952, was written by the late R.W. (Bob) Rand, a biologist (the island’s first) who was

a member of the 8th South African Expedition from October 1951 to April 1952 (Cooper & Avery 1986). Rand states at the outset of his report that the “policy of allowing cats on the island should be halted immediately”. He was of the opinion that the cats in the station were too-well fed on “choice canned fish” to make efficient mousers. He also commented on their unsanitary habits, as animals “defecating on beds and other furniture”. Nevertheless, one team member allowed “nearly two dozen” to live in his bedroom. Whereas some of his fellow team members also doted on the cats, others despised them and “kick[ed] them out of the houses when they make a mess”. With such treatment (and such numbers), it is not at all surprising that some “took to the hills” and became feral.

Bob Rand observed four feral cats on his trips away from the station, writing that they were living off mice and burrowing petrels. With considerable perspicacity, he called their presence the result of a “misguided policy” and considered them a menace to the island’s wildlife. He recommended that the station cats be “rigidly controlled or else destroyed altogether”. However, pet cats (including “Bixs”, and the kittens “Rusty” and “Tommy”) were still present in the station two years later in 1954 (photographs in the author’s possession, taken by Sgt. W.J. Deysel, Medical Orderly of the 11th Island Team). Indeed, a single pet cat was present as late as 1974 (A.J. Williams, personal communication). Rand’s report was to no avail: cats killed hundreds of thousands of burrowing petrels before their final eradication at great expense in 1991, nearly 40 years after his call for their removal (Van Aarde 1980; Bester *et al.* 2002).

13.7 Gender and race in the sub-Antarctic and the policy of Apartheid

13.7.1 Early female pioneers: thwarting the “no doors on the toilets” syndrome

As far as it is known, the first women to visit the Prince Edward Islands did not manage to get ashore. On 19 June 1849 the emigrant brig *Richard Dart* bound for New Zealand was wrecked on Prince Edward Island in thick fog. All five women aboard drowned (as did 10 children) out of a complement of 63. Only 11 men reached the shore alive (Marsh 1948). Graham (1989) gives the names of some of the passengers who drowned, including a Mrs Fitten, who was lost with her husband and child. More happily, the wives of captains and officers of sealing vessels sometimes joined their husband’s expeditions in the 19th century, to avoid the loneliness of a temporarily widowed life at home, and for the adventure. They must have been courageous to go against convention in this way and put up with the inevitable privations on long uncomfortable voyages that might last well over a year. It seems likely that they did not venture ashore, and stayed away from the crew and sealing activities by restricting themselves to their cabins and to the aft decks of their vessels (Cooper 1987). On 2 December 1852 the clipper bark *Nathaniel S. Perkins* arrived at the Prince Edward Islands. Captain Gurdon L. Allyn had brought his wife along for

“company”, as had his mate, named Pinkham. They “tarried some days and succeeded in obtaining a small quantity of sea-elephant oil. But the prospect was slim, the animals were scarce and poor, and we bore away for other grounds” (Allyn 1879).

We now jump more than a century ahead to consider who the first woman was to come ashore at the Prince Edward Islands. In December 1974 the French Antarctic vessel *Marion du Fresne* briefly visited Marion Island. “Two boat loads of French came ashore, mainly scientists ... they brought a woman ashore, Marion’s second ever” (Anonymous 1974; Cooper 1986c; A.J. Williams, personal communication). So who was the first? More is known about later pioneer visits by women. Pamela Laycock of the University of Cape Town may well be the first woman to have gone ashore on Prince Edward Island: at least there are no other claimants known. She spent the period 13-16 September 1979 camping on the island as part of an ornithological research team during a relief voyage at a time when women were not allowed by the government’s Antarctic Department to stay on Marion Island for a longer sojourn (Cooper 1986b). Pam Laycock also appears to have been the first woman to publish a scientific paper from her visit to the island group (Williams & Laycock 1981), although Sue Lane co-authored a paper two years previously on zooplankton collected from around the islands in 1976 (Grindley & Lane 1979). In 1981 Tamar Salinger of the then Transvaal Museum visited Marion Island on another relief voyage, then becoming the first woman to walk right around the island, a “right of passage” for many island inhabitants since the early sealing days (“Webfoot” 1871). With rules still in place not allowing women to be members of annual teams, it fell to Christine Hänel to be the first of her sex to spend an extended stay at the island. She arrived on 16 January 1986 as a member of the crew of the dismasted New Zealand yacht *Totorore* and was left behind by the skipper as a safety measure when the repaired yacht continued its voyage the next month (Clark 1988). Christine stayed on Marion Island, with South African Government approval as a “shipwrecked mariner”, until the annual relief vessel arrived in April. During this time she also walked around the island (Cooper 1986b).

For four decades from annexation, all team members at Marion Island were male, who, perforce, had to undertake all the “household chores which are usually considered to be the responsibility of womanfolk” (King 1952). No wonder the early teams felt the need for servants (see below)! The first women to spend a full year on Marion Island as team members were the biologists Marita Cawood and Marianna Steenkamp from the then University of the Orange Free State in 1986/87. At that time women were only allowed to be team members if there was a minimum of two (for company and support, said those (males) in charge in a seemingly sexist manner). This proved difficult to organize within the small scientific community, so a full decade passed before women were again members of annual teams (Christine Hänel again and Jeanne Hurford in 1996/97, as members of the 53rd Team), but from then

on their presence has been regular. To date no woman has spent a full year on the island as the sole representative of her gender. In the mid 1980s the author tried to persuade the authorities to allow Susan Jackson, then of the University of Cape Town, to spend a year on the island (as the only woman team member) to conduct physiological research on seabirds. This request was refused and she had to complete her Ph.D. (Jackson 1990) by dint of relief visits only to Marion Island in the period 1986-1988. Her thesis is the first by a woman to be awarded a higher degree for research conducted at the Prince Edward Islands. Her success in this regard was quickly followed by that of Marianna Steenkamp who completed her Ph.D. in 1991 (Steenkamp 1991).

Antwanette Lombard, a medical orderly, was the first female Team Leader (55th Team in 1998/99), and Bettine Jansen van Vuuren the first female Chief Scientist based at the island during a relief voyage (2006). Nowadays, married couples are often team members, playing their role in increasing the diversity (and it is hoped, stability) of their isolated communities. Quite a few team members of opposite sexes have formed stable relationships on the island which continued throughout the years that followed back in South Africa. To date, there has been no wedding conducted on Marion Island (as have happened at French and United Kingdom sub-Antarctic islands). However, at least one honeymoon has been spent in Marion field huts (and there have been two recent, but unofficial, accounts of conceptions). The author is proud to have played his small part in helping women realize their ambitions of “heading south” on South African expeditions, both to the islands and to the Antarctic Continent (Cooper 1979). Right on sister!

13.7.2 Racial issues: from servants to leaders

Shortly after the islands were annexed, the first meteorological team was left on the island for a six-month period from March to September 1948. We are fortunate that the Team Leader was Allan Crawford, who has published two books that include accounts of his island sojourn (Crawford 1982, 1999). He had previously spent several years on Tristan da Cunha and suggested that Tristan Islanders accompany the team as “handymen”, because of their boat-handling skills and experience of life on an oceanic island (Marsh 1948; King 1952). Six islanders thus joined the team of four South Africans (Cooper & Avery 1986). On the island, the islanders occupied one building (Island or Tristan House) and the South Africans another (Union or Governor’s House) (Marsh 1948; Goosen 1973). Governor’s House had the better of it in terms of comfort, Tristan House initially being without any ablution facilities (Mackay 1949; R.W. Rand, unpublished report). In an unpublished report (in the author’s possession) addressed to “The Director Met Services” by Alan Crawford dated 21 September 1948 on his period as “late Officer in charge Marion Island”, Tristan House is described as “where non-Europeans are housed”. At the time this segregation may have seemed perfectly natural (the Tristan Islanders were from a very tight-knit community after all, one they had never left before). But

by the 1960s when Tristan had to be evacuated because of a volcanic eruption, the Tristan Islanders were still regarded as non-white under the (then) South African racist policies of *Apartheid* (separateness), presumably because of the St Helenan women of mixed race that had married into their community in the early 19th century (Crawford 1982).

The second team, led by D.O. Triegaardt, a Senior Meteorological Officer, arrived on the island to relieve Allan Crawford in August 1948. This team included two “South African coloured servants” (also described as “Cape Coloureds”, i.e. of mixed race) whose names appear to have gone unrecorded in the published literature (La Grange 1952, 1954; Cooper & Avery 1986). This cavalier treatment, at its most charitable, may be taken as a “sign of the times”, given that the Nationalist Party campaigning on a policy of rigid *Apartheid* had come to power in South Africa the very same year. In May 1952 a team member who had recently returned from the island wrote to the Director of the then Weather Bureau and under the heading “Coloured Servants” had the following request: “The need for servants for the cleaning of the base, washing of dishes, cooking and undertaking of outside work, has long been felt. I strongly recommend it, as long as the Responsible Official has a good knowledge of Coloureds and their habits and knows how to administer and control them. Servants will be useful with the proposed experiments for the breeding of sheep on the island.” (translated from the original Afrikaans letter in the author’s possession).

Whatever the reasons, no more servants of any race were included in island teams after the first two; members “mucking in” and taking on their share of domestic duties in the station, as teams still do today. But there remains a responsibility among the South African sub-Antarctic community to attempt to “recover” the names of the two lost persons from dusty government files, and to commemorate their services in an appropriate way. Two members of their team, Daan Triegaardt and H.M.E. Van den Boogaard, had geographical features on Marion Island named after them (a bay and a river, respectively), and this would be fitting for the unnamed two.

From the arrival of the third island team in March 1949 up until 1989 every single team member staying for an extended period at Marion Island has been classified as white under the then South African race laws. The author of this chapter well remembers being referred an application for a field assistant post in the 1980s from a South African of Indian descent on whose personnel form a government official had carefully placed a ring around his racial classification, presumably as a warning sign! Needless to say, his ambition to travel south was not realized.

Since the change of South African Government in 1994, however, this odious type of discrimination has thankfully fallen away, and nowadays a Marion Island team, including its scientists, broadly reflects the racial (and cultural) make-up of the country, as it should have all along. The first non-white person

to spend a full year on Marion Island was Gerald Meyer, a meteorologist, who accompanied the 46th Team to Marion Island in 1989, over 40 years since annexation. Samantha Linnerts was the first non-white female team member, serving as a meteorologist (60th Team, in 2003/04). The first non-white Team Leader was Nole Green, the diesel mechanic of the same 60th Team.

Alvan Gabriel (entomologist and conservation officer) studied Collembola at Marion Island as a team member during the period 1999-2000 (Gabriel 1999; Gabriel *et al.* 2001). Bantu Hanise and Shadrack Podile (University of Pretoria) co-authored a publication on Killer Whales *Orca orca* based on observations made in 2000 (Pistorius *et al.* 2002). Lukhanyiso Vumazonke (Rhodes University) studied marine shrimp during an oceanographic cruise adjacent to the islands in April 2002 (Vumazonke *et al.* 2003). The first non-white persons to be awarded higher degrees for research they conducted ashore at Marion Island are Alvan Gabriel and Azwianewi Makhado, who completed their M.Sc. degrees at the Universities of Durban-Westville and of Pretoria, respectively (Gabriel 1999; Makhado 2002). The numbers continue to grow.

13.8 Postscript: looking to the future

What will befall the Prince Edward Islands in the years ahead? It seems climate change and new alien introductions will inevitably lead to slow changes in a number of aspects of their ecology, as set out elsewhere in this book – and there is always the risk of a major volcanic eruption. The islands seem set to continue to be well protected by South Africa, with a new and comprehensive management plan from 2007, a surrounding Marine Protected Area in an advanced stage of planning, and World Heritage and Wetland of International Importance nominations made to the respective conventions (De Villiers & Cooper 2008). Parliament will have to decide if commercial tourism will be allowed, but currently this seems most unlikely. The new base currently constructed should lead to more researchers working on Marion Island, which will be no bad thing, but it is hoped that visits to near-pristine Prince Edward Island will remain few and very strictly managed, as at present. The author thus expects (and hopes) that in a hundred years from now, the island group will still be regarded as a special place that continues to instil a long-lasting passion in many, if not most, who are privileged to have visited it, and that new human stories about sub-Antarctic Marion and Prince Edward Islands will continue to be told.

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