

# ANNUAL ENVIRONMENTAL INSPECTION REPORT, GOUGH ISLAND WILDLIFE RESERVE, SEPTEMBER 2004

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## Summary

### *Actions Required and Recommendations*

1. The control and eradication of *Sagina procumbens* remains one of the major conservation issues for Gough Island, and the discovery of plants outside the species previously known range is of major concern and an urgent reminder of the need to upgrade control efforts. The continued control of this plant is vital during 2004/2004. **Action: Gough 50 team**
2. Because Gough team members do not necessarily have the time or roped access skills to tackle *Sagina* in all areas it is strongly recommended that funding be acquired and a dedicated 2 person eradication team be sent down to the island. The eradication team could either become part of the official annual Gough Team, or be sent down for each takeover period, with at least one additional eradication visit made during the spring/summer. **Action: GIWRAC and DEAT**
3. Stricter controls are needed to ensure that helicopter flights are taken within approved areas and do not over-fly breeding colonies of seabirds and seals. A tightening of the rules regarding helicopter flying is recommended, with a map and guidelines to be agreed upon and signed by the helicopter operator. **Action: GIWRAC and DEAT**
4. The responsibility for checking that all items packed and sent to Gough Island are propagule free before they reach Gough Island belongs to DEAT and NPWD. The condition of 5 DEAT containers which harbored numerous alien insects and seeds is a reminder of this. It is recommended (again) that NPWD containers, plastic bins, strops and cables be made island specific. **Action: DEAT and NPWD**
5. Issued clothing that does not contain Velcro would greatly reduce the risk and cleaning efforts needed to ensure clothing is propagule free. **Action: DEAT**
6. Prior to fuel pumping a pathway was cleared of *Sagina procumbens*, sprayed with herbicides and roped off to ensure that *Sagina* was not spread further in this area. It is recommended that this practice be continued during fuel pumping operations. **Action: Gough 50 and DEAT**
7. The continuous use of rodent bait stations and provision of insect light traps in *S. A. Agulhas* cargo holds is recommended as an extra precaution. **Action: Smit Marine**

8. The state and condition of the old helipad should be monitored during each takeover period by the Environmental Inspector and NPWD to see if it is deteriorating further or whether the current repairs have prevented further leakages of polystyrene. **Action: GIWRAC and NPWD**
9. Clear guidelines for dealing with rubbish onboard the *S. A. Agulhas* should be made available for all passengers by the ship and during the Environmental Inspector's talk. **Action: GIWRAC and Smit Marine**

### *Progress Made*

1. Publication of the SANAP takeover manual helped inform all team leaders of the environmental issues involved with Gough Island, and its use is commended. Additional copies onboard the *S. A. Agulhas* would enable all personnel to access this information.
2. The appointment of a dedicated Conservation Officer from the incoming Gough team has helped in ensuring that teams are responsible for environmental issues on the island. The continued role and status of the Conservation Officer as part of the team is recommended. Johanita Borman from Gough 50 has been appointed as the 2004/05 conservation officer.
3. The removal of all waste on the island has proved successful and this practice must be continued.
4. Communication and cooperation between the Environmental Inspectors and DEAT, NPWD and *S. A. Agulhas* crew was successfully undertaken at all times, with all parties involved taking seriously and swiftly responding to any environmental issues brought to their attention.

### **Voyage schedule**

The *S. A. Agulhas* sailed on schedule from Cape Town on the 2/9/2004, arriving off Gough Island on the evening of the 8/9/2004. Thick mist in the southeast of the island prevented any flying operations on the following day and flight operations were initiated on the 9/9/2004 when the inspection team and all NDPW team members were flown ashore, along with essential NDPW equipment. Because of the previous day's delay and the need to offload all equipment the normal hour-long inspection period was postponed. However, enough time was available to see that the base and general areas were in clean and good condition, to agree on the position of containers and building materials to be offloaded and to brief team members on areas of ground infested with *Sagina procumbens*. The *S. A. Agulhas* sailed for Tristan da Cunha and Inaccessible Island on the evening of the 9/9/2004, for unloading of cargo and passengers and the flax eradication team. The *S. A. Agulhas* returned to Gough Island on the 13/9/2004 for six days before embarking on the buoy run. The *S. A. Agulhas* returned to Gough Island on the evening of the 27/9/2004 and departed ahead of schedule and unexpectedly early on the 28/9/2004 visiting Inaccessible Island and Tristan da Cunha, before sailing for Cape Town on the 2/10/2004 and arriving on the morning of the 8/10/2004.

### Activities prior to sailing

Because Richard Cuthbert only arrived in Cape Town on the 31/8/2004 a full inspection of DEAT premises and the *S. A. Agulhas* was not possible before sailing. However, time was found to visit the DEAT Antarctic & Islands Directorate's Paarden Eiland stores on the 31/8/2004 and the NDPW stores on the 1/9/2004. Rodent poison-bait stations were found at **Paarden Eiland, however the general condition of the store was not satisfactory, with large amounts of rubbish (including spilled food) lying on the floor. Despite the presence of rodent poison-bait, the amount of rubbish around is likely to attract rodents into what should be an essentially sterile environment.** The NDPW stores were very clean with rodent bait found in all rooms. The majority of DEAT and NDPW containers had already been packed and transported. The few remaining containers in both stores appeared clean and washed down. Examination certificates for rodents were not available for Paarden Island, NDPW stores or the *S. A. Agulhas*. Rat guards were only fitted to two hawsers on the morning of sailing, however it was pleasing to note that the dock area around the *S. A. Agulhas* were clean and free from any rubbish that might attract rodents.

### Activities aboard ship prior to arriving at Gough Island

An environmental talk was given by Richard Cuthbert on board the *S. A. Agulhas* to all personnel going ashore at Gough Island and to interested Tristan passengers. **The absence of a functioning slide projector on board the ship made this more difficult than planned and it is recommended that DEAT also provide necessary equipment for this purpose.** Assistance from the ship's radio technician enabled the talk to be shown through the lounge television screen. Aspects of the island's wildlife and management plan were outlined and information given on avoiding alien introduction, waste treatment, black-out procedures, avoiding disturbance of wildlife and path erosion. A group leaders meeting was held aboard ship on 4/9/2004, when environmental matters relating to the takeover were discussed, no problems were encountered during this meeting.

A boot-washing "ceremony" was held on the helipad on 6/9/2004 September before the arrival at Gough Island. All personnel visiting the island were required to scrub shoes and check clothing for propagules. Additionally it was encouraged that all passengers visiting Tristan da Cunha should take the same care to avoid introducing more species to Tristan. The event was attended by all Gough personnel as well as by many Tristan passengers and Tristan Islanders, and everyone's cooperation was appreciated in making for an entertaining and successful afternoon. Clothing and boots were generally clean although it was noted that even clean and sealed clothing from DEAT sometimes contained seeds and plant material – particularly in Velcro material of waterproof jackets and trousers. **Outdoor clothing that does not contain Velcro would greatly reduce the risk and cleaning efforts needed to ensure clothing is propagule free.** Boot washing also took place prior to personnel revisiting Gough Island and Tristan da Cunha.

The helicopter hanger was inspected on the 4/9/2004 and was clean with rodent poison-bait in place. Both CHC helicopters were checked and found to be very clean, and after discussion with CHC staff it was agreed that skids of the helicopter should be washed down between islands to reduce the risk of spreading exotic species between Gough, Tristan and Inaccessible islands. **It was drawn to my attention that the helicopter's engine air-filters may well contain seeds and other propagules, and this should be checked for future takeover operations.** The light trap in the helicopter hanger had captured at least 100 insects and the continued use of this light is recommended. The dry food stores and freezers were inspected on the 5/9/2004 and were generally clean with some minimal spillage of food stuffs that were in the process of being unpacked. Dry food stores all contained rodent bait stations and insect light traps. Cargo holds 1, 2 and 3 were inspected on the 5/9/2004 and found to be very clean. No rodent baits stations were found in the holds and I was informed that they had recently been removed so the holds could be newly painted. Dunnage stored within the hold was in some cases splintered and dirty, and it was impossible to properly inspect this for propagules. **The continuous use of rodent bait stations and provision of insect light traps in cargo holds is recommended as an extra precaution.**

### **Cargo offloading**

Positioning of cargo containers was agreed upon by Richard Cuthbert, Erik Buenk (DCO) and Gary Hardenberg (head of the NDPW team), and took place at the helipad, crane point, the brown store, chemical store, upper-air building and beside the freezers. The only position that had to be altered was to agree that metal joists and roof timbers be placed on the area of introduced grass beside the freezers, rather than on ground immediately to the north of the old base and bar area which is covered in *Histiopteris incisa* fern and contained active Atlantic Petrel *Pterodroma incerta* burrows. Despite strong wind conditions all cargo was safely flown to Gough and positioned within the agreed zones. Two containers near the upper air building were partially dropped on to an area of *Histiopteris* fern and tree ferns *Blechnum palmiforme*, however given the high wind conditions encountered this was unavoidable and the impact minimal.

### **Container and cargo inspection**

All DEAT containers flown were clearly marked with a "G" and were dedicated Gough Island cargo. Blue NDPW containers were not island specific and it is again **recommended that NDPW follow the lead of DEAT and dedicate containers for Gough, Marion and SANAE operations. Metal strops and ropes for flying operations were not island specific, and while inspection of these revealed no visible propagules it is recommended that they should also be island dedicated.**

All NDPW containers, building equipment and tools were inspected and found to be clean. The cooperation of all NDPW team members was greatly appreciated in this process. All DEAT containers and their contents were inspected during unpacking and found to be clean, **apart from eight containers which held five bunk-beds. These beds were obviously dirty and close inspection revealed cob-webs, spiders eggs,**

**thistle down and several unidentified insects.** Because these eight containers held essential supplies and equipment and the *S. A. Agulhas* had departed for Tristan da Cunha, it was decided to clean the containers and beds *in situ*. After removing food items all eight containers were fumigated with “fumitabs” (Gamma BHC 440g/Kg) and left sealed for 3-4 hours. The beds were then thoroughly scrubbed with a strong bleach solution. Scrubbing took place in three containers and these were all back-loaded to the *S. A. Agulhas* during later flying operations. The assistance of three of the Gough 49 Team greatly helped during this process. **The condition of these beds represented a serious risk of introducing many alien species to Gough Island and a breakdown in the process of ensuring clean propagule free items are sent to the island. While it is appreciated that sending down old beds would have saved some cash, the potential risk and cost of this to the island is high compared to the cost of new bunk beds. Action and safeguards to ensure that all equipment sent to the Gough Island is clean is clearly required.**

### **Fuel pumping**

A total of 67,000 litres of diesel were pumped from the *S. A. Agulhas* to Gough Island on the 17/9/2004. Prior to pumping the tube was pressure tested with air, and personnel in a small inflatable from the *S. A. Agulhas* and team members ashore were equipped with dispersants and buckets. Sea conditions were mostly calm, although pumping operations had to be stopped on three occasions so the *S. A. Agulhas* could reposition, the fuel line could be extended and to sort out a twist in the hose caused by the sea. One small leak of approximately 4-6 litres occurred on shore when the twisted hosing was being reconnected. This was swiftly stopped and because of the small size of the leak and the fact that it was located on the concrete platform (where the old pumping station was) it was decided to not attempt to clean this up with dispersants and to allow the diesel to evaporate. **The action of all personnel involved in diesel pumping to prevent and minimize leaks is commended.**

Prior to fuel pumping a pathway was thoroughly checked and cleared of *Sagina procumbens* and sprayed with herbicides. This path was then marked with ropes forming a boundary line on either side. All personnel involved in fuel pumping were requested to remain within the marked area, to avoid coming in to contact with known *Sagina* areas and spreading *Sagina* into other areas around the diesel pumping site. This procedure appeared to work well and as a result the marked path has been left to demarcate a “safe” route for Gough 50. **It is recommended that this practice be continued during fuel pumping operations.**

During fuel pumping the *S. A. Agulhas* launched one of their old wooden skiffs which proceeded to take on water and sink in Quest Bay.

### **Building and construction work**

The construction of a new roof for the old section of the Gough base and the new supports and piles for this area meant that considerable building activities took place during the 2004 takeover. No environmental issues of note occurred during this process and the only precautions necessary were to lay boards on an area of ground

(close to the north door leading out of the bar/lounge area) where *Sagina* had previously been encountered. A new catwalk was built along the north wall of the old base/bar area, replacing the rotten wood of the old catwalk. A small area of vegetation and soil had to be cut back to fit the new catwalk, and this was not undertaken until after consultation and approval was given by Richard Cuthbert. A new sewage pipe was fitted from E-base to the coastal cliffs, replacing the old broken pipe that had been there since at least 2001. One large *Spartina* tussock had to be dug up during this process and Richard Cuthbert was again consulted before this took place. As requested, tin-sheeting was placed around the piles and holes in the old helipad.

### Assessing the removal of the old helipad

Following a request from John Cooper, Richard Cuthbert investigated the old wooden helipad and discussed its removal with Gary Hardenberg (NDPW team-leader). The old platform is currently used for the placement of containers during the takeover period and throughout the year as a site for waste containers. The platform is rotting in places and fragments of polystyrene are leaking from one side of the platform and from where the new helipad piles have been placed through the old platform. The NDPW assessment was that dismantling the old helipad would take three to four consecutive takeovers, with provision having to be made for alternative container storage areas during each takeover period, and with the dismantled old structure and polystyrene blocks estimated to fill 25-30 containers. **Dismantling the helipad would involve a high risk of contaminating many areas with polystyrene particles unless all of the work could be done on days with very little or no wind.** NDPW were of the opinion that if the old helipad were allowed to become completely overgrown with grass (as is happening), then it would remain structurally intact. While this may not be a long-term solution, other environmental issues on Gough Island (e.g. *Sagina*) warrant a higher priority at the present time. **The state and condition of the old helipad should be monitored during each takeover period to see if it is deteriorating further.** In order to prevent and reduce further leakage of polystyrene from the old platform I requested that all holes in the platform and around the new piles be sealed up with tin-sheeting. This was carried out by NDPW during the takeover period.

### Flying operations

All flying operations during the 2004 takeover were undertaken by CHC helicopters. The helicopters and hangar were inspected on the voyage down and found to be very clean. It was requested that the skids of the helicopter be washed down before flying between Gough, Inaccessible and Tristan, and CHC agreed to do this and reported to me that this was undertaken. **The pilot was briefed on the approved flight path to take prior to our arrival at Gough Island and of the need to avoid over-flying the island as much as possible. This advice was ignored during the first two flights to the base on the morning of the 9/9/2004** and it was not until the *S. A. Agulhas* had maneuvered around from near South Point to Transvaal Bay that flying took place within the agreed zone. **Flying was again observed outside of the agreed flight plan on the 17/9/2004**, with the helicopter seen flying low (*ca.* 50m altitude) over the yellow-nosed albatross study colony before flying over more yellow-nosed albatross

breeding areas past the “Golden Highway”, up to Tafelkop and down Sophora Glen directly above the large penguin rookery in this area. A video of this flight shown aboard the *S. A. Agulhas* confirmed where the helicopter had flown. This flight was outside of any cargo or personnel operations and Dick Helland of CHC helicopters was radioed onboard the *S. A. Agulhas* and reminded of the need to stick to the flight plan. Flying operations during the final back-loading stage of operations were mostly within the recognized flight area, although some “scenic” flights for personnel were taken without consultation with either Environmental Inspector. Removal of the large container and tote boxes from Gonydale and Waterfall Camp was successfully undertaken, although there was some confusion over the location and flight plan, despite previous discussion about this.

**Tightening the guidelines for helicopter flights at Gough Island is clearly required.** Currently the management plan stipulates that flights away from the meteorological station “must not cause excessive disturbance to seals and birds”, that shore areas containing breeding seals and penguins “be avoided during breeding seasons” and overflights be “kept to a minimum”. The 2004 Takeover Manual further stipulates that a “vertical and horizontal distance of 200 meters is to be kept from any known bird colonies”. **Provision of a map with marked flying zones and clear rules regarding flying in other areas** (unless there is a clearly determined and approved reason for doing so) **is recommended. These guidelines should be agreed upon and signed by the helicopter operator and pilot as part of their contract.**

### **Food stocks and waste**

All eggs supplied and sent ashore were marked as having been irradiated and several bags (from the 400 kg) of washed potatoes were found to be clean of soil and invertebrates. However, many potatoes inspected had commenced sprouting and the chef was instructed that unless they had been boiled **all potato peelings should be frozen with bone and egg waste**. No other fresh produce was taken ashore. Gough 49 reported few infestations of food stocks by insects, with weevils found on three occasions throughout the year and all infested food frozen for return to South Africa.

All waste is now being recycled and returned to South Africa, and the Gough 50 teams were instructed on the correct procedures to be used. No items were burnt during the takeover period and all paper, cardboard, plastic, glass and metal is being properly separated and stored in separate containers. The Gough 50 team was instructed to freeze all egg-shell, bones and potato peelings and dispose of food waste at Skivvy Gat after dark. A “chicken run” was organized on the 27/9/2004 and one container was filled with waste, mainly consisting of old timbers from catwalks as well as smaller plastic and metal scrap recovered during building operations.

One plastic bag of waste and a bottle was observed to be thrown from the *S. A. Agulhas* on the return voyage. The purser was informed and was very concerned that this had taken place and reminded the crew that no plastics should be disposed at-sea. **Clearer guidelines on waste and plastic disposal should be given to all passengers in the Smit Marine Passenger Information Brochure and additionally in the talk by the Environmental Inspector.**

## Bird strikes

No bird strikes were observed at the base during the takeover period and all base personnel were conscious of the need to close blinds at dusk and avoid excess lighting. Self-closing devices have been fitted to outside doors as recommended by John Cooper during the 2003 inspection.

## Introduced plants and *Sagina procumbens*

Introduced *Sagina procumbens* continues to be a major conservation issue for Gough Island, with the plant still occurring in most areas where it was discovered in 1999. **The efforts of Norman Leveridge from Gough 49 in controlling *Sagina* are greatly appreciated over the course of 2003-2004. Additionally, the co-operation of all takeover personnel in 2004 ensured that boots were washed and the *Sagina* problem was taken seriously by all.** The work of Gough 49 has gone a long way to reducing *Sagina* to the levels observed in 2000 by Warren Glass and 2001 by Richard Cuthbert. This work has helped recover the *Sagina* program from 2002-2003 when large areas of *Sagina* were not adequately treated. *Sagina* continues to occur in areas around the diesel pumping and Joe Roes and beneath the crane and within “*Sagina* Kloof” (the steep area where the slip has occurred on the way to the old lookout platform).

During the 2004 takeover Warren Glass, Norman Leveridge and Richard Cuthbert extensively searched areas within and outside the known *Sagina* area. A few isolated patches (*ca.* 400 mm in diameter) of *Sagina* were found on cliffs two the north of the diesel pumping area (with one Sooty Albatross nest totally consisting of *Sagina*) and below the steep area of rock where the arch has collapsed by the old lookout platform. These areas were only accessible by roped abseil, and the *Sagina* was removed and the soil treated with herbicide. Other areas within diesel pumping were abseiled and no plants were found and areas *ca.* 25 and 75m north of Skivvy Gat were abseiled and found to be clean. No evidence of *Sagina* was found on the paths to or the exposed cliffs of Seal Beach, Tumbledown, The Admirals and the Golden Highway. Worryingly, **two small (*ca.* 100mm) patches of *Sagina* were found in one area of Snoek Gat, an area that is 100-150m away from the previous known distribution of *Sagina*.** These plants were removed and the remaining soil and rock was treated with a blow-torch, and the Gough 50 team was instructed to revisit these areas to check for further plants. Despite checking this and other areas it was impossible to comprehensively search all potential sites for *Sagina*. **The discovery of *Sagina* outside its previously known distribution is an urgent reminder that the need to control *Sagina* has to be upgraded. The presence of a 2 to 4 person dedicated *Sagina* team during the takeover period (with rope skills to access cliffs) to concentrate on finding and controlling *Sagina* is strongly recommended. If trained personnel from Tristan were involved (as occurred during 2000) then follow-up visits during the summer could easily be tied in with the schedule of the *Edinburgh* or *Kelso*. Alternatively, the presence of 1 or 2 trained personnel should become part of the official Gough team, to spend the whole year controlling and eradicating *Sagina* and searching new areas. Action to acquire funding and approve this process are needed to ensure that the *Sagina* control**

**efforts of the last 5 years are not lost.** Approximately 800 kg of *Sagina* infected soil was removed from Gough Island and flown aboard the *S. A. Agulhus* where it was dumped at sea mid-way between Tristan and Cape Town.

The area of sand uncovered by John Cooper near the site of the dismantled “German Hut” was checked for introduced species, with some *Poa annua* found invading this area. Because this grass is widely established around the base and on the island it was felt that treating this small patch would be a pointless exercise and the grass was left in place. Broad leaf Dock *Rumex obtusifolius* and *Poa annua* were observed in Gonydale and along paths and stream banks across the island. *Sonchus* thistles were observed around the base and some of these were uprooted during the course of controlling *Sagina*. The sites where two containers had been situated in Gonydale and Waterfall Camp in 1999-2001 were inspected for introduced species, with none being found at either area.

### Paths and erosion

The majority of paths were walked and inspected by Richard Cuthbert or Warren Glass during the course of takeover. The Gough 49 team was active, with all members visiting the island for overnight trips, and the presence of two biologists added to the walking (Table 1).

**Table 1.** Number of trips made to various destinations on Gough Island during 2003/2004, sorted for base personnel, bird related research and during takeover. Units are number of people walking each route, with round trips recorded as one trip.

| Area                         | Base Personnel | Bird Study | 2004 Takeover |
|------------------------------|----------------|------------|---------------|
| Admirals/Snoekgat            | 25             | 4          | 12            |
| Dam area                     | 45             | 0          | 14            |
| Gonydale                     | 12             | 33         | 12            |
| Prion Cave area              | 11             | 26         | 10            |
| Richmond Hill area           | 5              | 2          | 0             |
| Rowetts and beyond           | 7              | 14         | 5             |
| Seal beach/yellownose colony | 51             | 65         | 40            |
| Serengeti                    | 0              | 2          | 0             |
| Tafelkop/South Peak          | 9              | 14         | 1             |
| The Glen/Sophora Glen        | 20             | 0          | 0             |
| Tumbledown                   | 27             | 10         | 12            |

Despite the amount of walking undertaken in 2003/2004 no major erosion issues were uncovered, apart from some minor areas on the steep banks of the streams above Swim Gat and deep rutting of the path from base to Seal Beach. The path on the Golden Highway route to Tafelkop is in good condition and has recovered greatly

from 2001 when this route was heavily walked over two consecutive years. The Ruin Ridge path was followed down from Tafelkop and is still visible but fully vegetated in upper sections and completely overgrown and difficult to find in lower sections. The majority of walks to the upland areas were made by the Prion Cave/Gonydale route, and because of the easier angle of this walk the path is less prone to slips and erosion than the Tafelkop route. Footprints were visible in some upland mire areas, however the trampling that used to be very evident near Waterfall Camp has to a large degree recovered. Ropes down to Seal Beach, Tumbledown and The Admirals were generally in good condition, although at least 5 steps are missing from The Admirals rope ladder. No major peat slips were observed during the year, although during the takeover period (when there was heavy rain) two peat slips occurred on the steep tussock covered slips above Seal Beach and on Cavern Head.

### **Ornithological work**

The presence of Ross Wanless and Andrea Angel has provided another essential year of ornithological research on Gough Island, and their work has confirmed that introduced mice *Mus musculus* are a major conservation issue for the predation of Tristan albatross *Diomedea dabbenena* and Atlantic petrel *Pterodroma incerta* chicks. During the course of the 2004 takeover further ornithological work was carried out, including a total island count of Tristan albatross chicks (507 counted) and a census of both inland Southern giant petrel *Macronectes giganteus* breeding colonies (a total of 216 incubating birds). During the island count likely areas above the steep cliffs on the west of the island from above Saddle Island to Rockhopper Point were searched for giant petrel breeding colonies: none were found. All Tristan albatross chicks within Gonydale and Tafelkop were banded, with a further 40 birds banded in Albatross Plain (band numbers J15441-15450 and J15371-15400). A scan count of Rockhopper Point revealed around 1,200 rockhopper penguins *Eudyptes chrysocome moselyi*, far less than the 200,000 pairs observed by Swales in 1955: suggesting that populations of rockhopper penguins have suffered a major decline at Gough Island. Counts of rockhoppers at Seal Beach and Admirals revealed no major change since 2000. Additional ornithological research included fitting 34 breeding Tristan albatross and 52 yellow-nosed albatrosses *Thalassarche chlororhynchos* with Geolocators, to track their movements during the breeding and non-breeding seasons. These devices should be recovered in 2005/2006. The yellow-nosed albatross study colony continues to be monitored and Johanita Borman and Leonard Maree from the Gough 50 team were instructed on the methods to be used to continue this project. A total of eight oiled penguins were seen at Seal Beach (5 birds) and The Admirals (3 birds) during the takeover period.

### **Conservation activities throughout the year**

The appointed Gough 49 conservation officer (Norman Leveridge) undertook a thorough and good job over the course of the year, and has contributed greatly to the control of *Sagina*. No major conservation issues were uncovered during the year and seal pup weighing and monitoring yellow-nosed and the Tafelkop Tristan Albatross colony were successfully completed. A total of 1816 mice were killed around the base and 1088 in the field. Three birds (2 Atlantic Petrel *Pterodroma incerta* and 1

Soft-plumaged Petrel (*Pterodroma mollis*) were found dead after hitting structures around the base. Seven Elephant Seals *Mirounga leoina* were seen at the Glen on the 29 March 2004 and 14 Elephant Seals were counted on Long Beach on 10 June 2004 and 21 on 11 June 2004 as reported from the Kelso. Ms Johanita Borman from the Gough 50 team has been appointed as the conservation officer for 2004/2005.

### **Fishing**

Approval for recreational fishing in Gough and Tristan waters was received from Mike Hentley the Administrator of Tristan da Cunha, on the condition that fish be consumed aboard the vessel and not taken back to South Africa. Fishing took place on the ship on at least three occasions and it was requested that small fish be returned and reminded that all fish landed were for consumption only. Fish appeared on the menu on the *S. A. Agulhas* on three occasions and after consultation with Richard Cuthbert some of the catch was also taken to Gough where it was consumed during the takeover period. To avoid attracting birds, all fishing should be undertaken when the ship is anchored, as is already required by the *S. A. Agulhas*. Only a limited number of fishing trips (7 visits in total) were made by Gough 49 during the course of the year.

### **Acknowledgements**

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October 11<sup>th</sup> 2004