

# Government of South Georgia & the South Sandwich Islands



Annual Report 2015



## A Message from the Commissioner

*The last twelve months have been busy, successful and marked with significant achievements across the range of work of the Government of South Georgia and the South Sandwich Islands.*

*I am very proud of all in the Government team – in South Georgia, in Stanley and in the United Kingdom. Their professionalism and commitment have supported our ambition for South Georgia to continue to be a world leader in environmental management. The award of the Polar Medal to Pat Lurcock was welcome recognition of the importance of the work of our Government Officers.*



*I am very grateful to our many partners and stakeholders for their cooperation and contribution. I should particularly congratulate the South Georgia Heritage Trust for completing the Habitat Restoration project. This is an achievement of global importance. The Government is committed to ensuring that South Georgia benefits from a biosecurity regime which ensures the long-term success of the project. The Government is also very grateful to our Norwegian partners and to our colleagues in the British Antarctic Survey.*

*This is also an opportunity to say thank you to Martin Collins OBE for his long and distinguished service as Chief Executive, and to welcome into the role James Jansen.*

*I am delighted that so many organisations and individuals have contributed to the development of our Strategy 2016-2020. I welcome the engagement of all who share our objective of better understanding and better protecting this exceptional territory and look forward to delivering the Strategy together in the period ahead.*



**Colin Roberts C.V.O.**

## Environment

### Final phase of rodent eradication completed

Early 2015 saw the completion of the final phase of baiting in the SGHT's Habitat Restoration project. All areas of the island that were known to be infested with rodents have now been baited. This was the largest and most ambitious rodent eradication project undertaken anywhere in the world and represented a tremendous effort by the SGHT in both raising the funds and in undertaking the operation.



*Bait being loaded into an SGHT helicopter*

With the bait now dropped attention will be turned to monitoring and biosecurity. In October 2014 signs of rats were reported at King Edward Point (KEP) which was baited during the first phase of the rodent eradication programme in 2011. Since the baiting operation the area around KEP has been regularly monitored by GSGSSI for rodent presence and was considered rat free. The evidence of a rat at KEP was convincing, and in reaction to the sighting

GSGSSI staff, with assistance from British Antarctic Survey personnel, implemented the pre-prepared rodent incursion response plan to eliminate the rat and determine its origin. Steps taken include spreading poison bait and deploying snap-traps in the immediate vicinity. Following the KEP incursion GSGSSI has reviewed and revised rodent biosecurity and rodent incursion plans.

In parallel with the bait drop, GSGSSI undertook monitoring of non-target mortality on the Barff Peninsula. With the bait drop starting earlier (mid-February) than in previous years, it was important to assess the impact on non-target species. As expected, the principal victims of non-target mortality were skuas and pintail ducks, but in both cases it is expected that populations will quickly recover to pre-baiting levels.

It will be many years before we can be certain that the rodent eradication has been successful, but in the meantime rodent biosecurity will remain a high priority for GSGSSI.

### Reindeer Project Completion

After the two main years of the reindeer eradication project, January 2015 saw the conclusion of the project with a mop-up of the last remaining reindeer.



*SNO marksman searching for signs of reindeer on the Barff Peninsula*

Two marksmen from the Norwegian Nature Inspectorate (SNO) made a final sweep of the Barff Peninsula and shot 44 reindeer that evaded the marksmen last year. Three male reindeer were subsequently spotted by a field party and quickly dispatched.

There has been no sign of reindeer since but we will continue to remain vigilant over the coming months. It is hoped that the only reindeer which remains on South Georgia is the one on the Government crest: here it will remain in recognition of the role this charismatic species has played in the history of the island.

### **Darwin weed project**

GSGSSI was awarded funding from the UK Darwin Plus initiative to undertake a project entitled 'Strategic management of invasive alien plants on South Georgia'. This project was planned to dovetail with the end of the reindeer eradication and utilise the small window when invasive plants are released from grazing pressure and become visible but before they spread beyond the point of control.



*Map of the areas surveyed during the 2014/15 season*

The main focus of the first part of the project was to complete weed surveys at sites with a history of human habitation including the the Stromness Bay area, and Thatcher and Barff peninsulas. In total more than 6,000 ha were surveyed, including comprehensive

searches of the old whaling stations at Grytviken, Husvik, Leith and Stromness.

Another important element of the fieldwork was to undertake control work. Accepting that the weed management plan could not be finalised until the survey work had been completed, it was nevertheless important to use herbicide to target known priority species to prevent their continued spread and further adding to the seed bank. In total 15,845 m<sup>2</sup> were been treated.

The project team utilized both local and international expertise with experts from New Zealand, Falkland Islands and the UK. The focus of the coming year will be to finalise the weed management plan and fully implement control measures with the hope of reducing many populations to zero density.



*Spraying bittercress near Grytviken*

### **Round-island albatross surveys**

As part of its agreed ACAP action plan GSGSSI committed to monitor populations of wandering, black-browed and grey-headed albatross across South Georgia. Annual monitoring is undertaken on Bird Island but once every decade, an archipelago wide census is required.

Surveys of black-browed and grey-headed albatross were undertaken in December 2014 and because colonies are located on steep coastal headlands and sea-cliffs the

fisheries patrol vessel *Pharos SG* supported a two person team to photograph the colonies from small boats. The photographs were then collated and the number of birds in each colony counted.

More than 15,000 black-browed and 16,000 grey-headed albatross were recorded but unfortunately this still represents a considerable decline since the previous survey in 2004. For the black-browed albatross this represents around a 20% decline in the South Georgia population but for grey-headed it is more than a 40% decline.



*Black-browed albatross with South Georgia in the background*

The wandering albatross survey was undertaken during a collaborative expedition between GSGSSI scientists and tourists from Cheeseman's Ecological Safaris. The survey was based on the motor yacht *Hans Hansson* and the team visited 25 sites from Bay of Isles to Cape Disappointment. Overall the population was down approximately 15% from the survey in 2004; this corresponds with annual trends that have been seen on Bird Island.

A major component of the population decline of the albatross species is likely to be due to mortality associated with fisheries. In South Georgia fisheries bird by-catch mitigation measures are compulsory and checked during licencing inspections and at-sea boarding's by Fisheries Officers.



*Surveying wandering albatross at Kade Point*

Simple by-catch mitigation measures such as bird scaring devices close to hauling areas help ensure that birds do not become entangled in fishing gear. Although more nations are now making mandatory the use of measures to avoid seabird by-catch, rigorous adoption and policing are needed at a regional scale to reverse the declining trend in albatross numbers.

### **Convention on Biological Diversity**

In March GSGSSI announced that the Convention on Biological Diversity (CBD) would be extended to South Georgia and the South Sandwich Islands. As part of the ratification process GSGSSI had to demonstrate that there were sufficient laws and policies in place to enable the Territory to implement, and comply with, its obligations under the CBD. A large body of evidence was collated in order to demonstrate this and show that biodiversity conservation is central to many of the policy documents that underpin the actions of GSGSSI.

With the CBD extended to SGSSI, the Territory will contribute to UK reports to the Convention. This is an important opportunity both to showcase the cutting edge conservation work that is on going in the Territory on a global stage and to learn from, and forge links with, other nations who are committed to protecting their biodiversity.

## Fisheries

The objective of our fisheries management regime is to have fisheries that are safe, sustainable and innovatively managed to minimise the impact on non-target species and the marine environment.

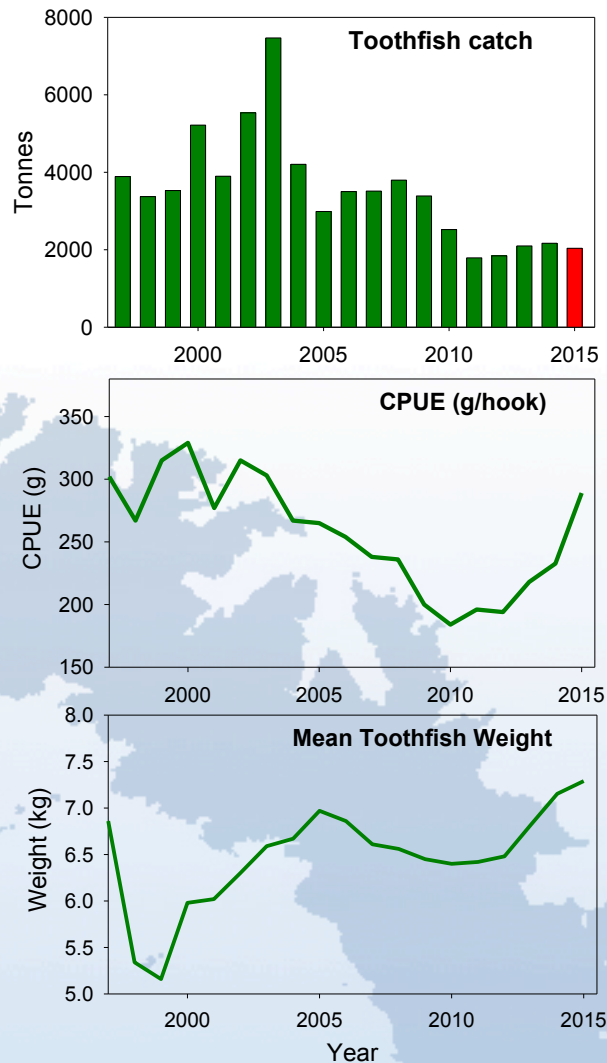
The 2015 season was the second year of the two-year licensing system in the icefish and toothfish fisheries. The two-year system has worked well and will be maintained for the next two years, with a licensing round scheduled for December 2015.

Safety remains a high priority and we have continued to inspect vessels to ensure they meet the standards established in the Torremolinos Protocol on Fishing Vessel Safety.

The South Georgia Patagonian toothfish fishery was unconditionally recertified by the Marine Stewardship Council (MSC) in September 2014 and was one of the highest scoring of all the MSC fisheries. The new certification remains in place for 5 years, with annual surveillance audits.

In the 2014 and 2015 seasons the catch limit of Patagonian toothfish was 2200 tonnes, with six vessels receiving two-year licences. Catches have been good in both seasons, with marked increases in the catch per unit effort (CPUE) across the fleet. In 2014 the CPUE increased to 230 g/hook and in 2015, with over 90% of the catch taken, has increased further to 290 g/hook. CPUE is an indicator of fish abundance, so the rapid increase over the past two seasons is a strong signal that the fishery is in good health. The mean size of fish caught has also increased in recent years.

Following a bird by-catch incident in 2014 the 2015 season started on April 16<sup>th</sup> and a single white-chinned petrel and one giant petrel has died during the season (so far).



*Catches, CPUE and mean size of fish in the South Georgia Patagonian toothfish fishery since 1997 (2015 season in progress).*

Depredation by killer whales and sperm whales has continued to be an issue in the fishery and this year GSGSSI commissioned some satellite tagging and photo identification work.



*Satellite tagging a sperm whale during the 2015 toothfish season.*

The South Sandwich Islands fishery now has separate catch limits for Antarctic and Patagonian toothfish and two vessels were licensed to fish in this area for the 2014 and 2015 seasons. These vessels are required to carefully spread their fishing effort to collect the data required for accurate stock assessments.

Mackerel icefish catches were poor in 2014. So far in 2015, 280 tonnes have been caught, but the fishery remains open until October.

A research survey was undertaken in January 2015. The survey provides an estimate of the stock of icefish and gives an indication of the abundance of young toothfish. The survey showed that the icefish stock is healthy.

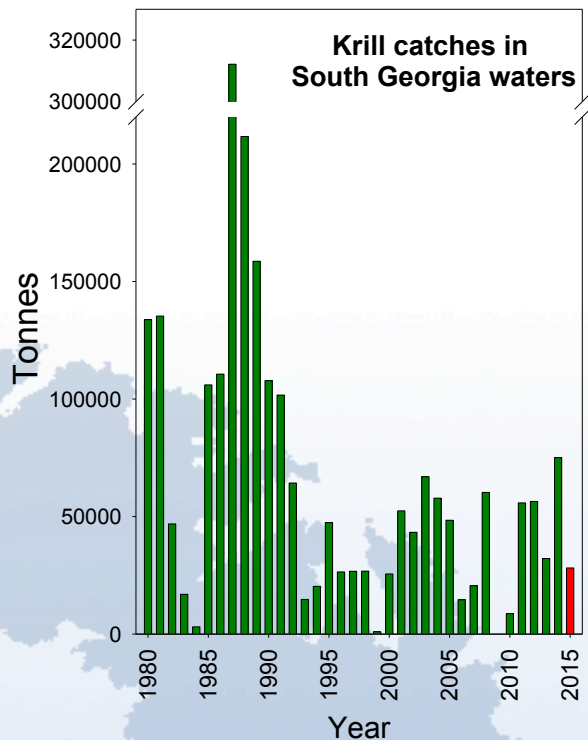


Three species of icefish from the 2015 survey

The krill fishery is now limited to the winter months to avoid the risk of competition with krill-dependent predators. The last three seasons have seen excellent catches of krill, with 30,000 tonnes caught in 2013, 70,000 tonnes caught in 2014, and over 25,000 tonnes by the end of July in 2015.

BAS scientists monitor krill and icefish dependent species at Bird Island and Maiviken (near King Edward Point). There is no evidence that any of the fisheries have any competitive effects on predators. In the case of the krill fishery, the seasonal closure coincides with the key foraging period for krill-dependent birds and mammals and with

advection of krill to the region impacts are highly unlikely.



Krill catches in South Georgia waters since 1980 (note 2015 season incomplete)

Observers are present on all toothfish and icefish vessels and GSGSSI has, for the second year, deployed roaming observers in the toothfish and krill fisheries. The roaming observer can assist the primary observer, but also facilitates comparisons between facilities and practices across the fleet.

Surveillance and monitoring remain high priorities for GSGSSI. The *Pharos SG* continues to patrol the Maritime Zone on a regular basis, undertaking boardings and inspections when conditions allow. GSGSSI also monitors AIS and VMS transmissions from vessels in the region and is investigating the efficacy of using remote sensing (satellite) data to supplement surveillance.

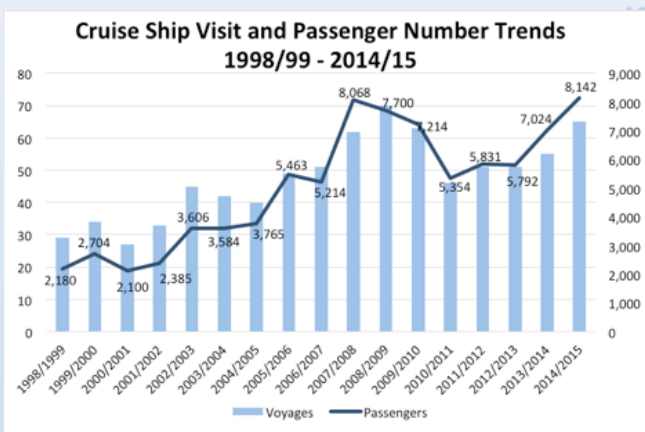
# Tourism

The 2014/2015 tourism season saw a record number of visitors to South Georgia, with 14,072 visitors, including 8,142 passengers on 65 ships. Other visits over the period included Royal Navy ships on patrol, science project teams and staff working on the fishery patrol and research ships.

## Cruise ships

Twenty two different cruise ships made 65 visits to South Georgia with 8,142 passengers during the 2014/2015 season. Two vessels made 6 separate visits and four cruise ships each made four separate visits.

The majority of visiting cruise ships (59) had fewer than 200 passengers. Five vessel visits had 200-300 passengers and one (*Seabourn Quest*) over 400 (432) passengers.



Trends in cruise ship visits and passenger numbers since 1998/99.

Passengers from 67 countries visited the island on cruise ships this season. The largest number of passengers came from the United States (approximately 23%), followed by Germany (17%), United Kingdom (14%), Australia (11%) and Switzerland (6%).

Forty-six different sites were visited by cruise ships during the 2014/15 season. The most popular activity was boat landings, with every cruise ship using the opportunity to land passengers at Grytviken. Other popular sites were Salisbury Plain, Gold Harbour,

Stromness and St Andrews Bay, with each receiving more than 3,000 visitors.

The most popular extended walk remains the 5km "Shackleton Walk" from Fortuna Bay to Stromness Bay, which was undertaken by 781 visitors.



Le Boreal arriving in King Edward Cove

## Yachts

During the 2014/15 season there were 21 visits by 16 different yachts, a slight increase on the previous season (18 visits; 15 yachts). Forty-three different sites were visited by private and charter yacht passengers.

## Expeditions

Six expeditions visited South Georgia during the 2014/15 season. An expedition is an activity that involves a night ashore other than at Grytviken and requires a dedicated support vessel.

Five of the six expeditions were supported by yachts. Three undertook the Shackleton crossing from King Haakon Bay to Stromness. A further expedition was in support of a BBC film crew filming on Zavodovski Island as part of the forthcoming One Planet series.



# Heritage

It has, once again, been a very busy season with a range of large heritage projects in progress on South Georgia.

During the 2014/15 season work focussed on the Slop Chest, Nybrakke and a number of the smaller buildings at Grytviken, which were renovated. These renovations were jointly funded by the Norwegian Government and GSGSSI. Work also started on a project to develop an interactive display of the laser survey data.

## Renovation of the Slop Chest

The exterior of the Slop Chest was restored early in the season, with a new roof and cladding. The interior of the Slop Chest will house the new Grytviken Post Office, plus displays from the laser survey work (see below) and a mini-version of the RGS “Enduring Eye” Shackleton Centenary Exhibition.



*The Slop Chest during re-roofing (above) and following the completion of the external work (below).*



*The interior of the Slop Chest, which will serve as the new Grytviken Post Office*

## Nybrakke Works

Following the previous season’s work on the exterior, work during the 2014/15 season focussed on the interior of the Nybrakke. The first priority was to remove a small amount of asbestos that had been found inside the building. This was removed by asbestos specialists in October, which allowed the rest of the interior work to continue.

The wooden flooring on the first and second floors was repaired or replaced to allow safe access throughout. Further work was also undertaken to drain the basement of the building.

## Other Grytviken works

In addition to the Slop Chest and Nybrakke, the other buildings behind the museum (the Potato Store and Museum Waste Store) were also restored.

Other work at Grytviken included work to stabilise the bone loft and the addition of new barriers to keep visitors away from crumbling bricks and masonry in the vicinity of the old boilers.

## Display of the laser survey data

Bristol-based interactive display specialists, Shadow Industries, were commissioned to produce an interactive display from the laser survey data of the old whaling stations. The display, which was jointly funded by GSGSSI and the Norwegian Government, combines the laser survey data with old photographs and film footage from the stations and with the interviews with ex-whalers. The interviews included those filmed as part of *Britain's Whale Hunters: The Untold Story* made by Keo Films and broadcast on BBC4.



*The interactive console displaying the laser survey data*

## Shackleton Centenary

To commemorate the centenary of the remarkable story of Ernest Shackleton's ill-fated Imperial Trans-Antarctic Expedition, the Royal Geographic Society has commissioned an exhibition entitled "Enduring Eye". GSGSSI has contributed funds to the exhibition which will open in the UK in November, and will also receive a small version of the exhibition which will go on display in the rear of the refurbished Slop Chest.

## Whaling station visit

In February 2015 Martin Collins and Dave Peck accompanied Susan Barr (Norwegian Cultural Heritage Directorate), Jane Rumble (FCO) and Michael Morrison (Purcell) on a visit to South Georgia to look around the old whaling stations and review work undertaken by GSGSSI that was supported by funds from the Norwegian and UK governments.

## Stamps, coins & outreach

New definitive sets of stamps are produced every five years. In early 2015 the new definitive issue, *Scientists, Explorers and their Ships* was released.



*The new definitive stamp issue "Scientists, Explorers and their Ships"*

Other issues in the last year included the Heroes of the Trans-Antarctic Expedition,

which featured Frank Worsley, Tom Crean and Frank Hurley.

New commemorative coins issued in the last year include one featuring the South Georgia Coat of Arms and another with a humpback whale.

During the last twelve months GSGSSI has embraced the world of Twitter. To get all the news and events from South Georgia as they happen you can follow us on @GovSGSSI.

GSGSSI will be launching an updated website in September 2015. This will include the Twitter feed, regular news items, key information and an online sales service for visitors to purchase GSGSSI maps & books, and branded goods.

## Legislative Review

As part of its good governance responsibility GSGSSI is undertaking a review of existing legislation and developing new legislation that is fit for purpose for the unique circumstances of South Georgia and the South Sandwich Islands.

The existing legislation has now been reviewed and a plan and timetable has been put in place to take new legislation forward. Policies on which draft legislation will be based have been prepared in priority areas including immigration, income tax,

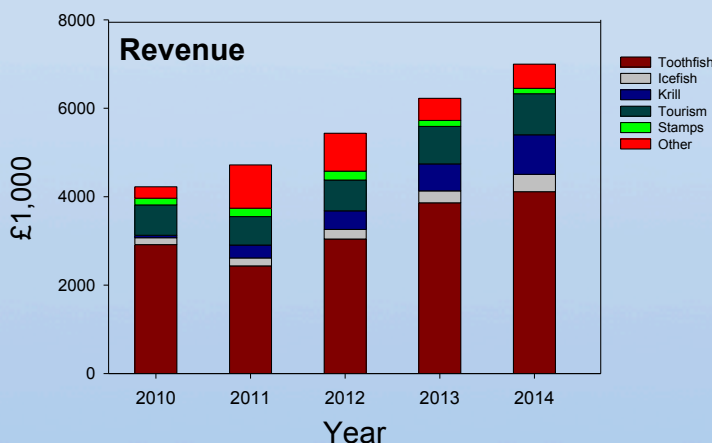
administration of justice and crimes. Legislative drafting is due to commence in October in these areas. Policies are in development in other areas including policing and visitor management. Good progress has been made in identifying and scanning all the legislation relating to the Territory with a view to making this publicly available in the coming year. The opportunity will also be taken to repeal and dis-apply legislation that is no longer necessary for the Territory.

## Finance

The GSGSSI annual accounts are produced on a resource accounting basis and are published on the GSGSSI website following approval by auditors. The 2014 accounts have recently been finalised and approved and are now available on the website.

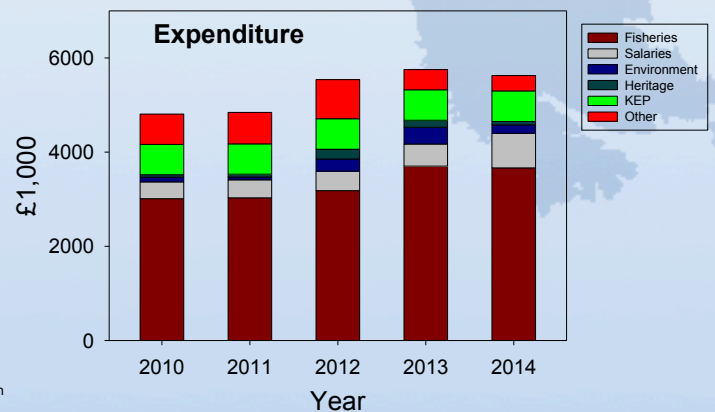
The accounts for 2014 showed a surplus of £1.37 million compared to a £130,000 surplus in 2013. The surplus in 2014 was largely due to an exceptionally good krill year, but 2014 also saw a rise in revenue from tourism. The toothfish fishery was the main source of income.

management costs although there was a slight drop in expenditure on fisheries mainly due to lower oil prices. The increase in salary costs is due to a change in the way the building / maintenance team costs are included.



*GSGSSI Revenue 2010-2014*

Expenditure was again dominated by the fisheries patrol vessel and fishery



*GSGSSI Expenditure 2010-2014*

GSGSSI should, once again, make a small surplus in 2015. In the long-term we are seeking to maintain at least one year's operational costs in reserve and this year's surplus should take us close to that. Once a stable reserve is established GSGSSI can start to consider funding major projects such as removing waste oil from the whaling stations.

## Other events and activities in 2014/15

### Polar Medals

Government Officer, Pat Lurcock, and South Georgia environment expert, Sally Poncet, were awarded Polar Medals in 2014. The medals were presented by Prince William at a ceremony at Buckingham Palace in May.

### Meetings Attended by GSGSSI staff

Martin Collins and Katherine Ross attended the CCAMLR meetings in Hobart in October 2014 as part of the UK delegation. Katherine attended the Working Group on Fish Stock

Assessment, whilst Martin attended Scientific Committee and Commission.

Martin Collins and Richard McKee attended the IAATO meeting in Rotterdam in May and provided members with a briefing on next season.

Jennifer Lee attended the UK Overseas Territories Conservation Forum meeting in Gibraltar in July and a biosecurity workshop on Ascension Island in August.

## Plans for 2015 / 16 Season

### Strategy 2016-2020

GSGSSI launched a consultation in April on a new 5-year Strategy for SGSSI. Over 30 responses have been received. GSGSSI are reviewing and finalising the Strategy prior to its launch later in the year.

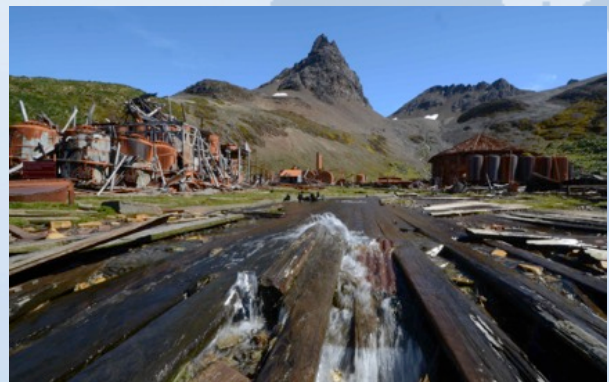
### Grytviken

Work will continue next season in Grytviken. The interior of the Nybrakke will be given a basic refurbishment to enable it to be used as emergency shelter. Work will also be undertaken to stabilise the Bone Loft and Meat Loft and to restore the exterior of the Main Store and Engineer's Workshop. Work is also required on the water supply from Bore Valley dam to KEP.

### Laser Survey of Prince Olav Harbour

Following the surveys undertaken of the whaling stations in Stromness Bay and Grytviken a final laser survey field season is planned for 2015/16. This season the focus

will be the station in Prince Olav Harbour, with data also collected from Ocean Harbour and a few structures that were not completed in Stromness Bay.



*The old whaling station at Prince Olav Harbour*

### Environmental projects

The Darwin Plus funded weed management project will continue in 2015/16. Work will also continue on a programme of post-reindeer eradication monitoring which will ground truth satellite data to look at changes in plant communities.

## Photo Credits

The photographs in this report were provided by: Andy Black, Simon Browning, Martin Collins, Jennifer Lee, Dave Peck, Oli Prince, Tore Solstad and Nick Wren.

## GSGSSI Staff

### **Dr Martin Collins OBE – Chief Executive and Director of Fisheries**

Martin was Chief Executive and Director of Fisheries from May 2009 until leaving post at the end of July 2015. Martin has recently returned to the UK and hopes to return to South Georgia in the near future in a different guise. Prior to working for GSGSSI Martin worked for the British Antarctic Survey as a marine ecologist and as a lecturer at Aberdeen University.



### **James Jansen – Chief Executive and interim Director of Fisheries**

James joined GSGSSI in July from the UK Department for Environment, Food and Rural Affairs where he has spent the last three years working on international environmental issues and agricultural trade. He has previous experience of South Georgia from his time in the Polar Regions Department of the Foreign and Commonwealth Office and is delighted to have the opportunity to be involved with South Georgia again.



### **Richard McKee – Executive Officer (Part-time)**

Richard has been employed by GSGSSI since 2001, initially spending two winters at King Edward Point as Government Officer. He returned to Stanley to work as Assistant Operations Manager, Operations Manager and now Executive Officer. Richard is currently working part-time from Edinburgh. Before working for GSGSSI Richard spent 3 years working as a Fishery Protection Officer in the Falkland Islands and South Georgia maritime zones.



### **Dr Jennifer Lee – Environment Officer**

Jennifer joined GSGSSI in March 2012, and has been working in sub-Antarctic and Antarctic terrestrial systems since 2006. She has a particular interest in invasive species management and biosecurity. Having previously worked in research, she is enjoying using her scientific background to inform management decisions.



### **Dr Katherine (Frin) Ross – Marine Fisheries Officer**

Frin joined GSGSSI in November 2012 having previously worked on Marine Protected Area policy for the Joint Nature Conservation Council in Aberdeen and on fish and shellfish stock assessment and habitat restoration in the Outer Hebrides. Frin studied benthos and scallop aquaculture at Port Erin Marine Laboratory (Isle of Man) and spent two years as a Fisheries Scientist at King Edward Point.



### **Mark Lewis – Legal Adviser**

Mark has been in the post of legal advisor since June 2014 to provide general legal advice and assist with the review of legislation. Previously Mark was the Attorney General for the Falkland Islands and SGSSI and before that worked as Audit Solicitor to the Audit Commission following a career in local government.



## GSGSSI Staff

### **Dr Keiron Fraser – Operations Manager (left in April 2015)**

Keiron joined GSGSSI in 2009 as a Government Officer based at King Edward Point. In October 2013 he became the Stanley based Operations Manager with responsibility for logistics and operations. Before working for GSGSSI Keiron worked at the BAS for 10 years as a Marine Biologist, diver and Base Commander.



### **Ian Haywood – Administrative and Logistics Assistant**

Ian joined GSGSSI in July 2014. He is currently on unpaid leave from HM Diplomatic Service, accompanying his wife who is Head of the Governor's Office. Over a 35 year career he has specialised in administration, accounting and logistics and has served in many diplomatic posts overseas ranging from Bridgetown to Baghdad.



### **Pat Lurcock – Government Officer**

Pat graduated in Electrical and Electronic Engineering in 1985. After a two-year stint in the Antarctic doing geospace physics, followed by three years in the Falklands running the IT for the government Fisheries Department, Pat has spent the last twenty years working on South Georgia, supported by his wife Sarah.



### **Simon Browning – Government Officer**

Simon has a degree in Environmental Biology from Swansea University. Simon attended the Royal Military Academy Sandhurst and joined the Army as a Logistics Officer where he gained 24 years experience. Within the Army he saw deployments around the globe; his last being the Falkland Islands. He is a BSAC dive leader, yacht sailor and qualified RHIB handler. Simon is married to Sarah.



### **Steve Waugh – Government Officer**

Steve joined GSGSSI in March 2015. He trained in Aquaculture and Fishery Management working in both Israel and the UK before a career change into Fishery Protection with the UK Environment Agency and latterly the Falklands Islands Government where he spent 15 years as a Fishery Protection Officer, spending considerable time patrolling and providing logistical assistance in the SGSSI maritime zone.



### **Dave Peck – Building Projects Supervisor**

Based in the Falklands, Dave has working on South Georgia for many years. First employed to work on the church roof, Dave oversaw the 2004/05 clean-up of Grytviken and has led the building team for the renovation of Discovery House and Nybrakke. Dave also has extensive knowledge of the old whaling stations.

