Preparing for Phase 2
By Project Director Professor Tony Martin

The Phase 2 numbers are frightening! In Year One alone we will be putting ashore 750 helicopter loads of gear and supplies, and using 500 drums of aviation fuel and 200,000 kilos of bait to clear rodents from 58,000 hectares (145,000 acres) of South Georgia. The 2013 operation will cover four times more land than any rodent eradication previously attempted. The cost is expected to be £3.2m or just short of $5m U.S. This scale of conservation work is not for the faint-hearted!

Until quite recently, Phase 2 fieldwork seemed a long way off, but I was reminded last week that in only 10 months time we will already be at South Georgia and laying depots of bait and fuel from our supply ship, the British Antarctic Survey’s RRS Ernest Shackleton. We must be ready for up to three continuous months of work under canvas, with a team of around 25 people, including pilots, engineers, doctors, camp-movers, cooks and bait-loaders.

We are now in the midst of preparing for this extravaganza. The planning is all but complete, and the priorities now are to finalise the list of people who will collectively become Team Rat in 2013, and to buy supplies and equipment. To be accurate, these are the spending priorities. Of equal importance is the raising of all this finance. In this Newsletter, Peter Taylor, our Fundraising Director, provides an update on this aspect of the Project and explains what is being done to ensure that the money is there when needed.

Other preparations underway include an analysis of how to maximise our chances of success in tackling South Georgia’s mice. Mice occupy a relatively small part of the island, and are a secondary target compared to rats, but the plan has always been to remove all introduced rodents from the island if we can. Globally, mice have proved far more difficult than rats to remove from islands, so we are realistic about the possibility of not being able to achieve this ambitious goal, but we will give it our best shot. To that end, Richard Cuthbert of the RSPB, supported by the South Georgia Government, has been doing some research on South Georgia to inform our strategy for tackling mice in 2013. Richard’s article on this work appears on Page 3.

While most of our attention is now focussed on the challenge ahead, we must not lose sight of the fact that Phase 1 was only completed 13 months ago, and that much work must be done before we can declare success. That effort will mostly comprise painstaking searching for signs of rats - continuing the vigilance that started even before we left the island in April last year. The latest element of this process was carried out by Kalinka Rexer-Huber and Graham Parker on the Greene peninsula, under the auspices of the South Georgia Government and BAS, and you will find an interesting article about this work by Andy Black on Page 2. Andy and Kalinka deployed knaw-blocks on the Greene peninsula in February this year, and these were checked for signs of rat attention in April.

The next few months will see the team composition decided, the bulk of the purchasing completed, and preparations made for the shipping of the gear to the Falklands. As ever we are extremely grateful for the support and donations flowing in from all over the world to make Phase 2 happen, and increasingly to companies who have been generous in donating their products to the cause. Among them is Kingfisher PLC - owners of Screwfix and B&Q - who will be kitting out the team with safety and camping gear, pumps, generators and much more. Thank you all.
During March 2011, SGHT dropped bait on the Thatcher, Greene and Mercer Peninsulas and Saddle Island to complete Phase 1 of the South Georgia rat eradication. For an eradication of this type to succeed, bait must be eaten by every rat. Careful planning and skilful flying ensured that bait was spread over all of the non-glaciated areas but how can we be sure that every rat has actually taken the bait and succumbed to its affects? This is where monitoring comes into play.

Post-baiting monitoring is a critical part of pest eradications, particularly in trial areas where eradication protocols are being tested. Although visitors to the Greene Peninsula have been asked to ‘look out’ for signs of surviving rats since the completion of baiting, efforts to check the success of the operation were stepped up in February 2012.

On a Government of South Georgia and the South Sandwich Islands (GSGSSI) initiative, two experienced fieldworkers, who had spent most of the summer trapping rats elsewhere on South Georgia, took the opportunity to visit Greene Peninsula to search for signs of surviving rats and deploy wax chew tags to further assess whether or not rats were present.

Coastal and inland areas of the Greene Peninsula were searched in late February 2012, looking for sign that rats were present. Rat sign includes fresh droppings, characteristically gnawed tussock, well-used runs and burrows. Searches concentrated in areas with dense coastal tussock grass, the favoured habitat of rats, but other vegetated areas were also surveyed. The two observers covered 55 km of survey track in these vegetated areas. Although old rat sign was found, there was nothing to indicate that live rats are currently present on the Greene Peninsula.

At the same time, 50 peanut-flavoured wax chew tags were deployed for longer-term monitoring. The tags are designed to be attractive to rats yet durable enough to last in the field for several months. The theory is that any rats present will sooner or later encounter a tag and leave teeth marks in the wax.

Monitoring for rat sign on the Greene Peninsula, February 2012. Tracks (red and black lines, see inset box) indicate area searched for rat sign, while squares show locations of wax tags.
In early April, approximately five weeks after the tags were deployed, two GSGSSI fieldworkers returned to the Peninsula to check the tags for rat gnaw marks.

Despite several inches of snow, all the tags were relocated and none showed evidence of rats. The tags will be checked again in the spring.

As time passes and the monitoring effort intensifies, the level of confidence that the eradication has been successful increases. Early signs have been very encouraging but it is still too early to declare that the Greene Peninsula is rat-free. It is generally accepted that it takes at least two years of monitoring before rat-free status can be declared.

During both of the recent visits, a single South Georgia pipit was observed in the same area as others were seen in the late summer of 2011. Although pipits are apparently not yet breeding on the Greene Peninsula, the presence of young birds in consecutive years bodes well for the future establishment of pipits on Greene Peninsula.

Plans are in place to establish a similar network of tags on the Thatcher Peninsula in the coming weeks.

Mouse Monitoring on South Georgia
By Richard Cuthbert of the Royal Society for the Protection of Birds

A successful mouse research fieldtrip on South Georgia took place during March 2012. A team of five biologists from the Royal Society for the Protection of Birds (UK) and the Government of South Georgia and South Sandwich Islands spent a month on the remote and seldom visited southwest coast of South Georgia.

The aim of the visit was to understand more about the distribution and ecology of house mice in order to assist the South Georgia Heritage Trust with the forthcoming eradication of mice and rats from the island. The team spent two weeks at Cape Rosa camping close to the site of Shackleton’s landing point and two further weeks on the neighbouring Nuñez Peninsula. Little is known about mice on South Georgia, which were only discovered on the island in 1976 and the last mouse research on the island was over 30 years ago.

On other islands, most notably on Gough Island (Tristan da Cunha), house mice are a major conservation threat because they have learned to predate chicks of albatrosses and burrowing petrels as well as impacting invertebrates and vegetation. This predatory behaviour is not yet known on South Georgia, but there is every chance that it could evolve, as elsewhere. The team found very low numbers of mice at both sites, and they were mainly restricted to a narrow strip of tussock habitat close to the coast. Tests of baiting rates using non-toxic pellets indicated mice were eager to consume bait, which combined with their low numbers and limited distribution is encouraging for the prospects of a successful eradication.

The fieldwork was funded by the UK Government’s Darwin Initiative programme as part of a larger project to increase knowledge of how to eradicate mice from islands within UK Overseas Territories.

The team would like to thank Tony Martin and Martin Collins for assistance with shipping bait and equipment, the master and crew of the FPV Pharos SG for transport and support in the field, and the British Antarctic Survey team at King Edward Point for their hospitality and support.
Despite a continuing difficult financial climate, we make steady progress with our fundraising and remain confident we will reach our year-end target and be in a position to commence Phase 2 of the HR project next February.

We are continuing our programme of approaches to Foundations in the UK, USA and further afield and now greatly assisted on this front with the arrival of our new Trust Fundraiser. Stephanie Strutt joined us on 30th April. Stephanie has had previous experience with the Sustainable Fisheries Partnership and the Royal Society for the Protection of Birds, as well as working for the grant-maker The Esmée Fairbairn Foundation. Stephanie’s arrival will allow us to significantly increase our activity level in what has been a very lucrative sector so far, as evidenced by a further grant recently from the Binks Trust. In summary, there is still good potential in this sector, particularly outside the UK; the limitation to date has been one of resource and we have now solved that problem.

Getting companies to support projects, particularly many miles away, is always difficult, but we have secured some success and have a number of interesting prospects in the pipeline. Kingfisher PLC, parent company of B&Q and Screwfix, has agreed to supply clothing, consumables and equipment from their product ranges for both the 2013 and 2014 seasons. We are also in discussion with a leading Scottish outdoor equipment retailer about the supply of tentage and warm weather gear for Team Rat. We also hope to attract support from companies with interests in the Falkland Islands and South Atlantic, including ones with a historical link to South Georgia.

Much effort is being devoted to increasing the number of individual donors. The starting point for this was our reception at the House of Lords last September where we introduced a number of influential people to the Habitat Restoration Project. These contacts are beginning to bear fruit and we hope to recruit a number of long-term donors by the end of the year. Recruitment should be accelerated by our Patron, HRH The Princess Royal, who is hosting a luncheon in support of SGHT at St James’s Palace in June.

And finally, ‘In the Footsteps of Legends’ is in the planning stages. Polar explorer David Hempleman-Adams is to lead a group of wounded servicemen across Antarctica to the South Pole in November 2012. This extreme event is being undertaken to raise funds for SGHT and the Walking with the Wounded charity. A dedicated website will be set up as part of the fundraising activities and we will be providing regular updates on preparations for this gruelling challenge.

The 2011/12 South Georgia Cruise Season was extremely successful for SGHT. The team on South Georgia, led by SG Director Sarah Lurcock, did a great job in promoting the Habitat Restoration Project to cruise ship passengers. We raised nearly £250,000 from visitor donations, made either on South Georgia or through our US non profit organisation Friends of South Georgia Island (FOSGI). Two tour operators, Zegrahm and Lindblad, were particularly supportive and we hope to encourage more operators to strongly promote our project next season.
King Edward Point (KEP) has been the central hub for a lot of rodent and bird fieldwork, and some rat monitoring, this summer. With fieldworkers out in diverse spots around the island for several months, working on both the Overseas Territories Environmental Programme (OTEP) rat and bird project and Darwin mouse project, much has been learnt - not least a better knowledge of rat and mouse habitats and existing bird populations in the Phase 2 area.

Some of the discoveries have been surprising, like a well-established colony of Kerguelen petrels in the Shallop Cove area at the northern end of the island. This distinctive dark plumage bird is often seen at sea off the island, but had not previously been recorded breeding here. It would normally breed further north on the sub-Antarctic Islands of Gough; Marion, Prince Edward, Crozet and, of course, Kerguelen.

The fieldworkers also fitted in some monitoring of the Phase 1 baited area. Greene peninsula was visited several times and gnaw tags deployed. These peanut butter-infused tags are very attractive to rats which would leave sign of their presence by gnawing the tags, leaving teeth imprints. Later checks showed no tooth marks, increasing hope that the rats have gone. The tags will stay out and be checked repeatedly.

As part of higher biosecurity measures Government of South Georgia and South Sandwich Islands (GSGSSI) has received some rodent detection boxes from New Zealand. These are now being trialled. They will be distributed around the Grytviken coast line, an area at higher risk of reintroduction of rodents from shipping activity in the area. The boxes are designed to catch both rats and mice, and regular checks should give early warning of any reintroduction.

As is usual for this time of year, pipits have been seen locally. The presence of these sub-adult birds in the rat-cleared areas of Greene Peninsula and the Thatcher Peninsula is very exciting. We all hope they will soon be the founders of a breeding population.

After a year’s gap in the programme to monitor the Phase 1 success, things are picking up pace as preparations begin ready to start baiting again. In the past I have been no fan of noisy helicopters around this special island, but now I am positively thrilled to think that in less than a year we will once again be hearing the buzz of the Habitat Restoration aircraft over Grytviken as they head off to tackle the massive Phase 2 area.

This image of SG shows the areas of baiting over the two Phases. Phase 1 (completed) is shown in green. Phase 2, our next and much greater challenge, is shown in red.
Frozen Planet: The making of a landmark wildlife documentary

On 23rd March SGHT held an illustrated fundraising talk in Cambridge given by Frozen Planet Executive Producer and Honorary President of SGHT, Alastair Fothergill. This event was extremely well attended with an audience of over 400, and was enjoyed by young and old alike. Alastair showed some amazing footage which had not made the television series and the audience was completely captivated; producing some very interesting probing questions from the youngest members of the audience!

The talk was part of the University of Cambridge’s Science Festival and took place in the Bristol Myers Squibb Lecture theatre in the Chemistry department. There was a small reception before the talk hosted jointly by the Scott Polar Research Institute (SPRI) and SGHT. Funds were raised for the Habitat Restoration project which is gearing up for Phase 2. Some Frozen Planet memorabilia in the form of first day covers and commemorative coins is on sale from the SGHT online shop at
http://www.southgeorgia.absolutewebhosting2.co.uk

Fundraising continues apace in order to raise sufficient funds to clear the remaining rodent-infested areas of the island.

We would like to thank SPRI, BAS, the University of Cambridge, the Cambridge Science Festival and everyone who came along to support us on the night.

SPONSOR A HECTARE

Many people continue to sponsor a hectare of South Georgia to support the Habitat Restoration project – thank you all. These donations go a long way towards our goal of raising £5.5 million for the second phase of work to eradicate the remaining rodents from South Georgia, and return it to its former status as one of the world’s most important breeding sites for seabirds. If you haven’t already done so, please do think about donating to the cause. It is simple to donate via the SGHT website (http://www.sght.org/make-donation) or the FOSGI website (www.fosgi.org) for US donors. Once we receive your donation you will be sent your personal certificate stating that you have cleared a hectare or more to save the birds of South Georgia.