South Georgia’s sealing past uncovered

Alison Neil, CEO SGHT

Back in May last year we told you of exciting plans to launch a project to unearth (pardon the pun) South Georgia’s hidden past, the first element of which was to be an expedition in early 2019, investigating the remains of South Georgia’s sealing industry and the first humans who lived and worked on the island. The idea was enthusiastically received and an expedition team was formed during 2018. Many organisations contributed (see p7) including Iridium and Shackleton Clothing who provided fantastic in-kind support of communications equipment and clothing respectively. In February and March the expedition team conducted the first archaeological investigation of South Georgia’s early historic occupation by 19th century American and British sealers. The expedition was organised by SGHT and FOSGI, with South Georgia historian and sealing expert Bob Burton as Project Manager.

The Sealing Archaeology Expedition team and Coastal Habitat Mapping team at Elsehul

The expedition team, which was based on Quixote Expeditions’ vessel Hans Hansson, included three archaeologists from the Cambridge Archaeological Unit (CAU) – Dr Marcus Brittain, Andrew Chaplin and PhD student Ian Ostericher, SGHT Guide Oli Prince, and five citizen scientists and archaeology enthusiasts: Vanessa Allen, Nadina Stainsby, Chip Barber and Cinnamon Dornsife and Alex Bulazel, Trustee of Mystic Seaport Museum. Neil Golding of SAERI joined the expedition to carry out the coastal mapping of South Georgia as part of a DEFRA project, with assistance from conservationist Gifford Hickey. Vessel owners Laura and Fede and their crew were joined by former skipper Dion Poncet who acted as Expedition Leader, with Laura as assistant EL.

Stunning imagery of South Georgia’s coastline was captured using the SAERI drone and transmitted using equipment from Iridium

The expedition’s aim was to reveal information about the living conditions, equipment and techniques of the sealers and their early impact upon the island’s ecology, providing a baseline for management of the island’s heritage conservation and giving an insight into the hazardous lives of its very first inhabitants. A diary of the expedition highlights, written by Marcus of the CAU, follows.
28 Feb – 3 March, Elsehul
Elsehul is the site of the first fieldwork. We are combining ground work such as surface artefact collection, topographic survey and excavation with aerial imagery acquired by drones flown as part of SAERI’s Coastal Mapping Project. At Elsehul we are opening test pits in three of four buildings (three built of stone and one of wood). Although the beach at Elsehul is open to controlled visitor access for cruise ship travellers, our prolonged presence, especially with all of our equipment, must be a curious sight for the seals, penguins, and bird life.

4 March, Bird Island
A short sail off the west tip of South Georgia, Bird Island is not normally accessible to visitors other than staff of the British Antarctic Survey station. We surveyed a probable sealers’ site that is very different to any other at South Georgia. It is formed of a stone-built hut with a stone trackway leading to the sea. A large whale rib with cut notches may have been another structural element. We also located a timber structure nearby, along with a trypot and small stone cairn. We will work with the SAERI drone imagery to present a complete site map.

WHAT did you say my bedroom was used for? ☺☺

Hunting of elephant seals culminated in the rendering of blubber fat by a controlled process of boiling, from which the surface oil could be ladled into barrel containers. The large iron pots – trypots – used in this process are some of the most enduring features of this early industry that remain on the island. The three trypots at Elsehul will be the focus of some targeted excavation to see if they are set within a hearth or other structure.

Wilson Harbour, 5 March
One of our new findings is of a stone and brick hearth at Wilson Harbour. Eroding out of a tall tussock grass mound, this seems to form part of a larger habitation with timber planks, wooden pegs and an iron barrel hoop. Two previously identified trypots are located nearby.

Nilse Hullet and Peggotty Bluff, 6 March
A beautiful location for archaeological fieldwork, the mountain-enclosed harbour of Nilse Hullet is a hugely interesting sealing site. A timber-lined hut floor and several trypots are the most evident remains. Masses of barrel hoops are visible in the sand. But other finds surround the site, including domestic, utilitarian and seafaring items.

Another important find has come from Nilse Hullet. This is the spike head of an iron lance wrapped in fur seal skin, which epitomizes the project’s theme of seal hunting. It may have been dipped in oil with the intention of being used as a torch.
Scientific tests on the skin and fur may provide important insights regarding historical seal populations at South Georgia. One of our citizen scientists, Giff, finds a rusty iron nail to add to the tally. He’s excited as it is his first artefact so far...

**Larsen Harbour and Albatross Cove, 8 and 9 March**

One of our outstanding artefacts so far is part of a tobacco pipe from Albatross Cove, decorated with ivy leaf and incised lines, and with the initials S and T on the pedestal. It may be possible to secure a date and even a source for the manufacture of this item.

*Part of a decorated tobacco pipe found at Albatross Cove*

**Larsen Harbour pot**

Our team of citizen scientists have been at the forefront of the fieldwork. Here, at a sealers’ camp in Larsen Harbour, Nadina Stainsby located an interesting object, shown by Alex’s excavation to be the base of a small iron cooking vessel.

*The Transit of Venus Observatory at Köppen Point*

The German Science Station was the first year-round occupation of Antarctic land. In spite of the efforts of the huge elephant seals that breed here, many of the station’s remains are still upstanding (timber beam supports, stone walls, wooden floors). Other features, such as a rusting circular framework, are reminders that celestial observations, particularly of the transit of Venus, were also conducted.

**Köppen Point, 10 March**

For a year over 1882-3 a German Science Station was established at Köppen Point in Little Moltke Harbour. This was part of an international science collaboration to synchronise observations of a range of natural phenomena, including meteorology, the earth’s geomagnetism and tidal patterns, geology and wildlife. Though not a sealers’ site, we visited to assess its condition and to combine drone imagery with on-ground data.

*It’s a match! A piece of a cooking pot found at Larsen Harbour fits neatly with a fragment held at the Museum at Grytviken*

In the Grytviken Museum archive we found another fragment of the body and rim of an iron vessel, also from Larsen Harbour. Incredibly, the two fragments fit together, giving us a complete profile of the cooking pot. We plan to take the second fragment back to the UK (subject to permission from GSGSSI) so that we can analyse and reconstruct the vessel in full.
Ocean Harbour, 11 March

A new trypot was found at Ocean Harbour, emerging out of an eroding tussock-matted sand dune. Another trypot is known to be here, submerged at the water’s edge. Nearby must be more remains of sealing activity.

New trypot found at Ocean Harbour

The cemetery at Ocean Harbour is a reminder that early seafaring and industry at South Georgia was a life or death experience. Most of these graves are of whalers who passed through the station at Ocean Harbour, though one of the graves is thought to be of a sealer. A number of graves are marked across the island, though others that are today unmarked must also be present.

The cemetery at Ocean Harbour may contain a sealer’s grave

Carlita Bay Shelter

Cave or rock shelters used by sealers as temporary camps provide a different context for comparison to the more open beach sites that we have mainly been working with. One was known at Carlita Bay, but we have also now found a second there with a hearth and remains of a stone wall. We wanted to assess the potential of these sites for buried floors contemporary with the sealing era. Test pits revealed horizons up to 10cm thick with burnt bone and charcoal. These may be what we have been looking for.

Fortuna Bay

We have been working at a cave at Fortuna Bay on a beautiful sunny day. The local inspection team has been keeping a close and curious eye on us, and we hope they are pleased with the three test pits we opened. We found tin cans in the top layer (probably a squaddie meal from 1982) and a much older – probably 19th century – occupation layer about 20cm below this, with burnt bone, charcoal and a stem of tobacco pipe. A stone wall at the front of the cave would have made this a great shelter from the elements.
In May 2018 the success of the South Georgia Habitat Restoration Project was announced, but without strong biosecurity measures in place, the hard-won battle we all fought against invasive rats and mice will have been for nothing. With glacier boundaries rapidly melting, just one pregnant rat finding its way to South Georgia’s shores could repopulate the entire island, with devastating consequences for South Georgia’s native wildlife.

As part of a suite of biosecurity measures aimed at protecting South Georgia by tackling any threat of invasive alien species ‘upstream’, the Government of South Georgia & South Sandwich Islands (GSGSSI), in collaboration with the Falkland Islands Government (FIG) and supported by SGHT and FOSGI, is running a second year trial of a rodent detection team in the Falkland Islands.

The trial, which has been organised by Ross James, GSGSSI Visitor Manager & Biosecurity Officer, involves a USA organisation, Working Dogs For Conservation (WD4C). WD4C retrain rescue dogs for a variety of purposes, including pest detection. Two dogs and their handlers; Samurai (Sami for short) with his handler Megan; and newcomer Pipit the Spaniel with her handler Erin, are searching vessels en route to South Georgia, particularly those that are allowed to berth there. The dogs are also helping to improve biosecurity within the Falkland Islands, particularly at the ports where it is important to minimise the risk of rats or mice finding their way on board vessels.

To keep them motivated, the dogs need to successfully detect their target scent at least once a day. The handlers have a ‘stash’ of rat and mouse droppings which they deploy daily, before letting Sami and Pipit track down the scent. The dogs’ behaviour lets the handlers know they have detected a smell - their breathing becomes more rapid and once the target is found, the dogs sit down to signal where the scent originated.

Depending on the dog’s personality, they then get a reward. Pipit loves to play tug-of-war, whereas Sami is more food oriented. Megan and Erin keep the rewards stimulating so the dogs never tire of tracking down rodent sign.

During this year’s trial the team has an extra objective; to find a local in the Falkland Islands who will become Pipit’s owner and new handler. This lucky person will be trained to continue the biosecurity work, so that South Georgia is protected year round from the threat of future rodent incursion. Please help us to support this vitally important work for South Georgia and protect the island’s wildlife by donating to SGHT or FOSGI at www.sght.org and www.fosgi.org.
If you love South Georgia and want to protect its amazing wildlife and heritage, then please consider becoming a Guardian of South Georgia.

You can join one of five teams, Team Chinstrap, Team Gentoo, Team Macaroni, Team King and Team Albatross who give a monthly or lifetime contribution to support our conservation work on the island.

When you join you’ll receive a welcome pack, a special quarterly Guardian newsletter and you’ll be entitled to a discount at the SGHT online shop.

As a Guardian of South Georgia, your donations could help to support these projects:

- Protecting South Georgia’s wildlife and habitat from future invasive species through measures such as rodent detection dogs
- Supporting research into Southern Right Whales and how we can help their numbers to recover
- Preventing the deaths of South Georgia’s albatrosses through longline fishing
- Conserving South Georgia’s industrial heritage and giving it a new purpose through outreach, education, research and science.

Join the team at http://www.sght.org/guardians/

Thank you to all who made the South Georgia sealing archaeology expedition 2019 possible.