



Revealing the brick structures around the rendering pots

A new project launched by the South Georgia Heritage Trust is aiming to unearth and shed light on the earliest settlement and commercial activity established on South Georgia: that of early sealers. Penguin News spoke to members of the team that carried out the project's first fieldwork expedition about their finds.

THE rusting chimneys and disused whale oil tanks of Leith and Grytviken have become synonymous with South Georgia, as tightly woven into its history as Ernest Shackleton and as present in its landscape as the king penguin colonies that blanket its bays.

But decades before a single whale had even been landed, sealers eked out a bleak existence on the island. Beginning in the late 18th and early 19th centuries, they constituted the island's earliest occupation and their quarry - the elephant and fur seals - its first capital.

"It's the emergence of a vast global economy," says Dr Marcus Brittain, from the University of Cambridge Archeological Unit, "very early, very specific, but it's incredible that this island in the middle of the ocean is the heartbeat of that global economy. Brittain is the archaeological team leader of a project launched by the South Georgia Heritage Trust (SGHT) to shed light on the coal-face of that global economy. That team recently completed what it hopes to be the first of many archaeological field trips to the island.

SGHT took on the project at the behest of Bob Burton, who they

have since employed as project manager. Bob, a previous director of the South Georgia Museum, wanted to build on Sally Poncet's efforts to find and record sealing locations before they were lost forever: "After the sealers had effectively removed the seals, tussac grass invaded the breeding beaches. Since the seals started to return, the tussac has been eroded away to reveal tantalising glimpses of sites where the sealers lived and worked. The problem is that the seals are now damaging the sites, as is flooding by streams and erosion by storms."

The seals might well have reason to erase traces of that history. By the 1830s, demand for prized seal oil in New York, London, and Canton, had all but eradicated elephant seals from South Georgia, "they would take [oil] by the barrel load. Probably hundreds if not in some cases thousands of barrels of oil, which equates to thousands of animals being culled in a mass seasonal harvest," says Dr Brittain. The reward, he adds, was in stark contrast to the likely living conditions, "it was a squalid, tough, challenging, dangerous life, and there's lots of stories about people getting wrecked on the island, people getting dashed against the rocks and finding just an arm and a leg. I'm sure we'll still find bits of body on the island."

For the following 30 years, sealing on South Georgia ebbed and flowed as seal numbers dwindled and recovered before being slaughtered back down again. By the 1860s, numbers were so few that the industry effectively collapsed and the flensing knives began to be



Penguins watch the activity take place

Tracing the birth of a global economy

turned toward whales. Though some sealing took place in the 1920s, international conventions eventually ended the practice and by the 1970s seal populations began to recover.

That this resurgence is putting sites of archaeological value at risk is not without its circular significance, says Dr Brittain, "they are under threat from the animals they were built to exploit; there's a nice irony in there that's certainly not lost on us."

During the trip, the team studied fifteen of those sites, which fall into two categories: cave sites, often en-

closed by a stone or tussac wall; and open beach sites.

Deposits built up in the caves over decades and centuries reveal clues of the life they would have housed: charcoal, bits of bone, bits of tobacco pipes. Small stone-line hearths still hold the concretised remains of what are thought to have been blubber-fuelled fires, and these remains will be subject to microscopic analysis to determine exactly what fuels were being used, says deposit specialist Ian Ostericher, also of the University of Cambridge, "Is there wood ash in there? Is there

kelp? The silica in kelp melt in a certain way that when they're fired you can see this quite easily under the microscope. Wood is completely different."

The open beach sites have held up to decay and disrepair with varying levels of success, and tend to be more engineered to reflect the industrial processes they enabled, "some of them are very substantial, built of stone architecture, and strong foundations suggesting they are not just temporary encampments," says Dr Brittain. "[some] have wooden timber platform floors, probably made

up of bits of wrecked boat and previous elements of architecture. Some of those floors are very well designed; they have cross beams underneath; they've even got brick surfaces in some instances."

The team had hoped that microscopic analysis would have provided more clues about the use of space in these sites, linking specific chemical signatures to different activities, such as slaughter or distinct stages in the processing. That, however, may not be possible, says Ostericher, "the way that these sites are oriented in the landscape,



The team reveals a wooden platform



Carefully digging back the soil

they're in really, really reworked deposits ... one storm can reform the entire beach, and while those chemical signatures may be present, they're going to be masked by the current usage of these places by the seals."

One of these sites at Elsehul - a popular visitors' site - still houses three iron pots that would have been used for rendering down seal blubber. The pots are encased in a stone and brick path, but further investigation suggests a more elaborate structure, "it looks like they would have been held in a big, iron scaffold," says Dr Brittain, "it all collapsed at one point but it's all the soil deposits that have built up underneath the pots, and within the hearth that are again revealing a story and a time-line as to how long these things might have stood and quite how they were utilised."

The next steps in the project will involve not only chemical analysis, but also conservation and specialist analysis of artefacts found during the digs, however niche they may seem. "People do specialise, believe it or not, in clay pipes from the 19th century," marvels Dr Brittain.

In addition, historical documents from China will provide a clearer picture of how the fur from fur seals was processed and used. "There were different ways that you could process the pelts and get that really nice fine sub-layer of hair, particularly in Canton; this was a prized commodity."

From all that analysis will stem reports, publications, and, the team hopes, funding to carry out further digs. Such digs, however, will have to be accompanied with decisions

about what to leave and what to expose, says Ostericher. "It may be decided that it's more valuable to leave certain sites covered by tussac so that they are protected from the elements... it's finding that balance between gaining information that is actually going to be useful for us as archaeologists, that will actually challenge the historical record, versus leaving things if we can assess that the information we're going to get from that site isn't going to matter that much in the whole narrative."

Some of the sites, however, do not enjoy the luxury of a protective layer of tussac, and are in a precarious situation. Says Dr Brittain, "some of it is only a wave away from being removed... or the drag of a big seal body away from being completely removed from existence."

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All photographs by Oli Prince

The South Georgia Archeological Project is led by the South Georgia Heritage Trust and managed by Bob Burton. It is partly funded by National Geographic, the Gino Watkins Memorial Fund (through the Scott Polar Research Institute) and the McDonald Institute at the University of Cambridge, and the South Georgia Association. A contribution was made to the expedition by SAERI through its Coastal Habitat Mapping project (see page 11). The trip was carried out from the Hans Hansson by Quixote Expeditions and Dion Poncet, with support from guide Oli Prince, and citizen scientists Vanessa Allen, Chip Barber, and Cinnamon Dornisfe.