South Georgia Association Newsletter

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Fin whale seen off the north coast of South Georgia in early 2020

In this issue: Drone survey of South Georgia; KEP wharf redevelopment completed; update on South Georgia whales; GSGSSI launch strategy consultation; glacial retreat – a look back in time by David Brook; the mystery of Shackleton's folding boat.



Drone surveys of South Georgia (see pages 5 - 7)



KEP wharf development completed (see page 4)



The mystery of Shackleton's folding boat (see page 2)



South Georgia's Retreating Glaciers (see page 8-9)

The mysteries surrounding Shackleton's collapsible boat

Did Shackleton invent a collapsible life-raft? The question arose when I came across a little-known photo on the Getty Images website. In the photo a man is rowing an odd-looking little craft with Shackleton's name writ large on the side, along with the name Benetfink London. The website captioned the image "Shackleton's life-raft in the Thirties", and a sub-caption reads "Bendable Life-Raft Invented by the British Explorer Ernest Shackleton Who Passed Away In 1922". There are other mysteries here. What was Benetfinks, and how come the boat is pictured in the thirties when Shackleton died in 1922?

Benetfinks & Co was a large retail business in Cheapside, London. It was set up in around 1845 and they described themselves as "furnishing ironmongers". They sold a huge range of metalware products, and, from the photo of the boat, we must assume much else besides. An advertisement from 1852 claimed that Benetfink would furnish an eightroomed house for $\pounds 5$. The business was sold to A.W. Gamage in 1907 but continued to trade under the Benetfink & Co. name.







If you think Benetfink is a rather odd name, you are right! The business was named after Ironmonger Samuel Alexander Benetfink who started the company. Benetfink was a foundling abandoned on the steps of a church. His surname was an amalgamation of the name of the church, St Benet Fink. In turn the church's name is a bit odd. Benet is a shortening of St Benedict and Fink comes from Robert Finke the Elder who rebuild the church early in its history. The church has been rebuilt several times since.

So what of the folding boat. The link with Shackleton is proved by a second photo showing one of the folding boats displayed on the stern of his last expedition ship *Quest*. The photo is most likely taken before *Quest* set sail from London at the start of the Shackleton-Rowett expedition in 1921. In my view, it does not look all that useful as a life-raft on a ship with a crew of more than 20, so maybe it was more of a handy small tender that did not take up much space on a crowded deck. The date, the thirties, on the Getty image is likely misleading as well.

Foldable boat designs are not that uncommon, but little other information about this particular boat design has been found. The exception was a mention in the book 'Outrider of Empire - The Life and Adventures of Roger Pocock'. Pocock was, in his time, a policeman, a missionary, a pirate, a soldier, a cowboy, a journalist, a world traveller and a prolific writer. In this biography, by namesake Geoffrey Pocock, we read: "They also had a rather strange item, the Shackleton folding boat which received much publicity in England and when they arrived in America, although Ransley had no recollection of ever seeing it." Perhaps that is as much as we will ever know about it too.



The intriguing photo at the heart of the mystery



The folding boat aboard Quest

South Georgia News

New South Georgia Definitive Stamps Issued

The new definitive set of stamps was issued by South Georgia & the South Sandwich Islands in October 2020. A definitive issue includes stamps of a range of denominations sufficient to cover current postal rates and generally released every five years. The new stamps, which feature a range of iconic South Georgia images, represent a story of restoration and hope and replace the previous "Ships, Scientists and Explorers" definitive. More information on the stamps can be found at <u>www.pobjoystamps.com</u> and the stamps are available to purchase from:

https://www.falklandstamps.com.

Whale Research News

A southern right whale satellite tagged south of South Georgia in late January 2020 has become the longest ever tracked southern right. The whale, named after the MV *Braveheart* that supported the whale survey in January, passed through Falkland, Argentinian, Uruguayan and Brazilian waters, before returning to the Uruguayan coast, where the batteries finally failed on the tag. In addition, the first southern right whale genome has just been published from a sample collected in South Georgia in 2018. See https://www.bas.ac.uk/project/south-georgia-rightwhale-project for all the latest news.

Using 30 years of whale sightings reports to the South Georgia museum, a new study led by British Antarctic Survey in Endangered Species Research finds rapid increases in sightings of humpback whales at South Georgia since 2013. Southern right whale sightings have been steady over time, while humpbacks are now the most commonly sighted whale, often seen in large feeding groups. These results support a recent study showing humpbacks have nearly recovered from whaling in the southwest Atlantic and show that South Georgia is a key feeding site for this species. https://www.int-res.com/prepress/n01072.html.

New South Georgia Museum website launched

The South Georgia Heritage Trust have launched a new museum website (<u>https://sgmuseum.gs/</u>), which allows virtual visitors to search and explore the collections. There is also a link to a virtual tour of Grytviken and the museum, which was created by Rolf Stange in 2014.



The new definitive stamps



Track of the southern right whale "Braveheart"



Humpback whale near South Georgia



King Edward Point Wharf Development Completed

By Joe Corner, BAS Project Manager

After 2 years of design and planning and a further year of procurement, logistics and construction the new Wharf at King Edward Point has been completed. The team arrived on South Georgia on the 11th January 2020 and departed via the JCR around the 11th of May approximately 3 weeks ahead of the original construction programme.

The wharf was constructed as a 'warp around' which retains the old structure and the new wharf was built around it. The inclusion of a 'Dolphin' allows for larger vessels to tie up safely and the lengthened slipway provides a larger range of tides to dry dock the GSGSSI Harbour Patrol boats for their regular maintenance. Three upgraded on-shore mooring points also provide further resilience.

Strict Environmental, Bio-security and Health and Safety procedures put into place were extremely successful and no bio-security, environmental or major safety incidents were noted.

The BAS, GSGSSI, BAM and Ramboll team provided support to each other throughout the construction phase and the 'one team' philosophy was evident during the evenings and weekends. The Project team lived in Everson House with the BAS wintering team moving into Discovery House for the duration of the project.

The team executed the project with the upmost professionalism and the support via the other SG residents was a major part of the jigsaw which resulted in such a successful project.

I would like to take the opportunity to thank the residents of King Edward Point, the construction team, GSGSSI, SGHT, and the design team based back in the UK for their hard work, dedication and support.

See video at: https://www.youtube.com/ watch?v=o5S3fLxFp9s



The new jetty at KEP with the new slipway visible on the right.



The dolphin, which extends the effective length of the wharf.



Aerial studies taking off at South Georgia John Dickens, British Antarctic Survey

Technological advances have the ability to completely change the way we are able to study wildlife. Developments in GPS and telemetry devices give us incredible insights into where and when animals travel, at what speed they are moving, and how deep they dive or how far they fly. Genetic research has answered questions that we hadn't even thought of asking. And photographic advances are allowing us to gain snapshots of the lives of animals that we could only dream of in the past.

Miniaturised cameras attached to the backs of penguins show their feeding and social behaviour in the water. Digital cameras set up in the field can capture a whole year of life in a colony, giving researchers (or citizen scientists) the chance to analyse the results in their own time. And having removed the limitations of film photography, a field biologist can now take dozens of highly detailed photographs of a seal or a whale in an attempt to get one accurate identification shot, even in very low light conditions, without having to worry about their shutter count or development time and costs.



Fig 1. John Dickens flies the drone at Maiviken.

We are now at a point where technology has opened up the skies and we can send cameras up into the air to capture a bird's eye view of the world below, all done affordably and safely. Unoccupied aerial vehicles (UAV's; Fig 1), more commonly known as drones, are one of the more recent technologies that look to be changing the way we study wildlife and are proving to be incredibly useful tools around the world. I have been interested in drones for many years and finally had the chance to pilot a drone project on South Georgia last austral summer.

With the assistance of the British Antarctic Survey and the Government of South Georgia & the South Sandwich Islands I was able to conduct a number of aerial surveys across the eastern coast of South Georgia, ranging from Drygalski Fjord up to the Bay of Isles. Having had training in the UK prior to travelling to South, and after acquiring all the necessary permits, I used a commercially available drone to capture hundreds of aerial images that were later stitched together to produce highly detailed orthomosaic photographs from which seals and seabirds could be identified and counted.



Fig. 2. Weddell seal cows and pups on the ice at the back of Larsen Harbour on the 25th September 2019.

The study began in Larsen Harbour in late September 2019 where, with the support of the MV *Pharos SG*, it was possible to identify Weddell seals on Bonner Beach and Laws Beach as well as documenting, for the first time, cows with pups on the ice at the back of the bay (Fig 2).

few weeks later the А elephant seal pupping season was in full swing and aerial surveys were carried out at St Andrews (Fig. 3) and Hound Bay at the height of the season. and throughout October and November within King Edward Cove. This was a valuable study as it gave us the first full count of elephant seals at St Andrews and Hound Bay since 1995 and helped contribute to the long-term studies of the population within Cumberland Bay.

In November the MV Pharos SG visited the Bay of Isles and it was possible to survey the majority of the islands within the bay over the course of a morning. The albatross wandering fledglings and adults present on the islands are clearly identifiable from the images and a full census of the population was conducted without having to step a biosecured foot on land (Fig. 4).

Fig. 3. Elephant seals at St Andrews Bay on the 24th of October 2019.



Fig 4. Images stitched together to form an orthomosaic of Albatross Island in the Bay of Isles. A wandering albatross fledgling is shown in inset A and a fledgling and adult are shown in inset B.

Fig. 5. Antarctic fur seals scattered across Tortula Beach at Maiviken at the start of the fur seal pupping season in December 2019.

At Maiviken the long-term monitoring of Antarctic fur seals and gentoo penguins was augmented with aerial surveys, giving an excellent opportunity to compare the accuracy of ground counts and aerial counts.

It turned out to be an incredible season for whale sightings with humpbacks seen within Cumberland Bay on a number of occasions between November and December (Fig. 6). By using the drone it was possible to witness the feeding behaviour of the whales that couldn't be seen from the land, and on one fortuitous flight at Maiviken I was able to identify the source of a huge spout of water as a blue whale, the first to be seen so close to South Georgia in decades.

The drone was also useful for surveying a number of whaling stations for assessment by the GSGSSI building team and the detailed images of Leith, Stromness (Fig 7), Husvik and Grytviken that were produced will hopefully also be of use for archaeological studies of these sites.

The drone proved to be an invaluable tool over the course of the summer. It gave incredibly accurate and verifiable counts of wildlife, showed behaviour that we would have otherwise missed, reduced the risk of biosecurity breaches by avoiding unnecessary landings at a number of locations, and made fieldwork safer for the researchers and less disturbing for the wildlife. I am very excited to see how this technology will continue to change the way science is conducted at South Georgia in the future.



Fig. 6. Humpback whales in Cumberland Bay with King Edward Point and Grytviken in the background.



Fig. 7. Aerial view of Stromness whaling station, with Grass Island in the background.

Looking back during lockdown by Dr David Brook OBE

It is now 16 years since I retired and about 10 years since I last carried out consultancy work after my retirement. I have not been totally inactive during the time since then as I have been involved with the HCNRG, the Harrow & Hillingdon Geological Society, the Harrow Natural History Society, the Geologists' Association and the London Geodiversity Partnership. However, I have gradually withdrawn from active participation in most of these groups so lockdown has not been too different from my normal life.

In thinking about what a retired geologist does in lockdown, one thing I have been actively doing is to reflect on my early years as a geologist with the British Antarctic Survey (BAS) and to look at how things have changed on the ground since that time. I have been aware of some of these changes through the activities and publications of the SGA (www.southgeorgiaassociation.org) and the BAS Club (www.basclub.org) as well as BAS.

I had travelled south on *RRS Shackleton*, leaving England in October 1965 and after stops in Montevideo, in Uruguay, and Stanley, in the Falkland Islands, we arrived in South Georgia in early November. The island had been mapped topographically and geologically during the South Georgia Survey expeditions led by Duncan Carse in the mid-1950s, with Alec Trendall (2011) as the geologist. Subsequently, Neil Aitkenhead and Phil Nelson had mapped the area around Cumberland East Bay, distinguishing contacts between the quartzo-feldspathic Sandebugten Series and the volcaniclastic Cumberland Bay Series on the Barff Peninsula.

After 3 days based at Godthul Harbour on the northern end of the Barff Peninsula to familiarise myself with the previous work, I transferred to the disused whaling station at Husvik, in Stromness Bay, to continue the geological mapping of the area between Cumberland West Bay and Fortuna Bay. I was assisted in the field by Alec Bottomley, a second-tour man who was an experienced member of the Craven Pothole Club. My mapping area was bounded on the south by the Neumayer Glacier and on the west by the König Glacier and it is the changes in these glaciers that are most noticeable. My field maps were enlargements to 1:50,000 scale of the 1:200,000 scale map of the island produced by the Directorate of Overseas Surveys.

Once we started using them, we realised their inadequacy so Alec assisted greatly in the exercise by putting his cave survey skills to excellent use to produce a more accurate 1:50,000 map of the area. I must confess that I was a little lost when it came to the geology. Ι found the identification and interpretation of complexly folded and faulted Andean volcaniclastic sediments of the Cumberland Bay Series a little difficult and my geological work was eventually incorporated in the work by Mike Skidmore (1972), the geologist who came after me in South Georgia and at Halley Bay.



Scree benches, lake at southern end Olsen Valley



Gulbrandsen Lake 16 November 1965



Extract from the DOS map of South Georgia showing the area mapped by Aitkenhead & Nelson and that I mapped



Lake at southern end Olsen valley showing extent of Neumayer Glacier



Gulbrandsen Lake 31 December 1965

The geomorphology was, however, of considerable interest, particularly the raised beaches and elevated rock platforms around the coast and the scree benches around 2 lakes alongside the Neumayer Glacier, one of which was dammed by the glacier and the other by moraine (Brook, 1971). Once again, Alec's surveying skills were put to full use while I struggled with the geology. The lake at the southern end of the Olsen Valley had more but narrower benches and assuming that they represented temporary still-stands during recession of the glacier, their formation had clearly ceased as the glacier no longer formed the dam. Gulbrandsen Lake on the other hand was still dammed by the glacier and it was quite possible that more benches would form as the lake level fell further.

I first became aware of significant changes when I looked at the Environment management plan for South Georgia (McIntosh & Walton, 2000). This clearly showed that the scree benches around Gulbrandsen Lake were much more extensive than they had been when I was there and that the lake itself had reduced considerably in size due to retreat of Neumayer Glacier. Chalmers Clapperton (1971) visited Gulbrandsen Lake 2 years after I had and recorded at least 30 abandoned shorelines extending to at least 50m above the lake, while we had measured 6 extending to 20m above the lake (more may have been present but they were not visible at the time of our 2 visits to the lake). BAS have recently produced a 1:50,000 scale map of the area around Stromness Bay, essentially the area I was working in, and the "Former Gulbrandsen Lake" is now marked on that map. The image below illustrates the changes that have occurred this century and how the lake initially shrank before finally disappearing, while the glacier retreated, dramatically lengthening Cumberland West Bay.

Interestingly, while I was preparing this short piece about the changes in South Georgia glaciers since I had worked there in 1965, I came across the American Geophysical Union's blog from a glacier's perspective: (https://blogs.agu.org/fromaglaciersperspective/2020/04/16/neumayer-glacier-8-8-km-retreat-1999-2020-fjord-expansion/). This gives detail of the changes between 1999 and 2020, with an 8.8km retreat of the Neumayer Glacier and its separation from the König Glacier (see BAS image below right). I would estimate that since my time on South Georgia, the 2 glaciers have retreated by over 10 km and 4-5 km respectively. A sobering thought on which to conclude.



Scree benches around Gulbrandsen Lake (GSGSSI, 2000)



A much reduced Gulbrandsen Lake (GSGSSI, 2000)



Snout of the Neumayer Glacier



Retreat of the Neumayer Glacier (courtesy of BAS -MAGIC with background image: Copernicus Sentinel-2 image from 27th Oct 2020)

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Book Review: *Claiming the Ice: Britain and the Antarctic 1900-1950* By John Dudeney & John Sheail

Most of us interested in South Georgia and the Antarctic generally, would claim to have at least a working knowledge of the human history of the Southern Continent and Ocean. If asked, we could reel off Captains Cook, Clark Ross and Scott, Shackleton, The Graham Land Expedition and Operation Tabarin. How many people know what was going on behind the scenes at Whitehall in the first half of the 20th century, when Britain started to make political and financial commitments to establish and bolster territorial claims in the Antarctic?

John Dudeney and John Sheail have written 'Claiming the Ice' to share their hard won discoveries. The geographical focus of these intrepid explorers' expeditions was south from Cambridgeshire to Kew, in the London Borough of Richmond on Thames. Although Kew is well known for its gardens and botanical science it is also home of the National Archives, which generally receive scant attention from those concerned with polar exploration, but contain much to discover. The authors' mission was to throw light on the 20th century's dark age of Antarctic politics ending in the 1950s and the era of the Antarctic Treaty.



ISBN: 978-1-5275-3048-5 Price: £64.99

The book takes us from around 1900 and the dawn of the heroic age of British Antarctic exploration. Scott, Shackleton and their men took the limelight during that period up to the start of WWI but at the time of those early exploratory expeditions the Antarctic whaling industry had started up, was growing rapidly and would soon become massive. With the industry's origins on South Georgia at Grytviken the whalers attracted considerable attention from the British Government, partly because they yielded a valuable tax income for the impoverished Government of the Falkland Islands but also because, even during the first decade of whaling, there was growing concern about over-exploitation of the stocks. After WWI the need for scientific knowledge to regulate whaling led to the Discovery Investigations, an interdisciplinary ocean science programme, focused on whale biology, which ran until 1980 and left us today with Discovery House at King Edward Point.

Initial investment in CA Larsen's venture at Grytviken came from Argentina and in due course British sovereignty of the Falkland Islands and the Dependencies was challenged by Buenos Aires. After WWI Britain was the leading Antarctic power, the empire was at its peak but soon to start its decline and there seemed to be an opportunity to formalise sovereignty over the Antarctic beyond the Antarctic Peninsula. As a first step to painting the Antarctic red for the British Empire, the United Kingdom Government conferred the Ross Sea Dependency upon the New Zealand Government. Australia then took up the initiative and claimed the Australian Antarctic Territory after negotiation with the French over its border with the French claim. There were private expeditions to the Antarctic in the 1920s and 30s and the Norwegians continued to develop their business interests. South American nations laid claims to territory on the continent and then WWII intervened and the Colonial Office launched Operation Tabarin. After the end of the war, Tabarin became the Falkland Islands Dependencies Survey and later the British Antarctic Survey. In due course the Antarctic Treaty was signed.

This is a meticulously researched work. It will keep you turning the pages to reveal a wealth of newly unearthed information about political activity behind the scenes during fifty years of Britain in the Antarctic. If 21st century politics is a turn off for you don't let that stop you reading this. It is a fascinating story of the politics of the Antarctic and British colonialism at the time when the sun did finally start to set on the empire. It is the political history behind everything that Britain does so well today in the Antarctic and at South Georgia in particular.

For anyone with an interest in the era of Antarctic whaling more is yet to come in another volume about this near-extinction event in the Southern Ocean.

Paul Rodhouse Burwell, Cambridge

South Georgia Government News

GSGSSI Consult on New Strategy

GSGSSI have launched a consultation on their new draft strategy: "Inspire, Protect, Manage". The document, which is available from the GSGSSI website, sets out the Government's approach to the next five years. The vision of "Sustainable environmental recovery through world-class precautionary management", together with four guiding values: Environmental Protection; Evidence-Based Decision Making, Sustainability and Openness will guide the Government in its assessment of current and future activities.

GSGSSI are seeking comments on the draft strategy, which is available at <u>www.gov.gs</u> and comments should be submitted to Helen Havercroft by 16th October 2020.

Sir David Attenborough narrates the new South Georgia Briefing film

A new visitor briefing film "South Georgia – A Visitor's Guide" has recently been launched by GSGSSI. The film, which is narrated by Sir David Attenborough, encourages visitors to respect and protect the archipelago and highlights the recovery of the islands' ecosystems from damaging human interventions. The film, which includes new sequences filmed during the 2019/20 season, was produced by Silverback Films Ltd and is available to view at: <u>https://www.gov.gs/south-georgia-a-visitors-guide/</u>.

GSGSSI Annual Report Published

The GSGSSI annual report from 2019 calendar year has been published on the Government's website. The report showcases the Government's activities and key achievements for the year and includes updates on finances, tourism, fisheries, environment and heritage. The report is available at:

Award winning art

Paul Rodhouse (Events Officer for the SGA Committee) was one of 12 winning artists in the inaugural Cambridge Invitational Art Contest and Exhibition <u>www.CamArtContest.com</u>. The two Antarctic paintings he submitted for the competition were exhibited at Castle Fine Art in the Grand Arcade Cambridge following the awards evening in November 2019. His entry was accompanied by a short statement highlighting the impact of climate change on the Antarctic and how his paintings, which depict the grandeur of the Antarctic, draw attention to the threats facing the region.



RRS Ernest Shackleton among bergs



Adelaide Island





The Dictionary of Falklands Biography Website & South Georgia

The Dictionary of Falklands Biography website goes from strength to strength. The website format allows almost unlimited expansion and the 386 illustrations of the printed volume have now increased to almost 1590. Thanks to some determined research by Dr Stephen Palmer who has mined the archives and picture galleries and established links with many of the families of personalities who feature in the DFB.

For South Georgia a recent interesting addition has been Bob Headland's account of the life of José Moneta, an Argentine meteorologist and writer who visited the Island on numerous occasions en route for the South Orkneys from Buenos Aires. He was present when Governor Hodson unveiled the memorial to Shackleton at Grytviken, though alas the film which he made of the occasion has been lost.

Another interesting biography – more correctly auto-biography – is Colonel Ewen Southby-Tailyour's account of his Falklands experiences. He describes his difficult relationship with Governor Parker in the years before the Conflict and the unique role he played in the recovery of the Islands in 1982.

During October 2020 the website was visited 1244 times – of these visitors, 573 came from the UK, 76 from Argentina and 46 from the Falkland Islands.

South Georgia Association News

SGA Meetings

With the 2020 AGM cancelled due to the Covid-19, the SGA have organised a series of online seminars (webinars) for SGA members and others interested in South Georgia. Each webinar has included three guest speakers. The first webinar in May featured talks from Tom Hart (South Sandwich Islands expedition), Jen Jackson (cetacean research at South Georgia) and Crag Jones, the most recent recipient of the Morag Husband Campbell Medal. A second event in September included a talk on the Patagonian toothfish fishery from one of the main vessel operators, Peter Thomson, a talk from Pat Lurcock on habitat restoration monitoring and a presentation from Joe Corner about the extension of the KEP wharf.

The next series of talks is planned for November 18th, with talks from Robb Robinson about the Viola / Dias and John Dickens about the drone surveys (see pages 5-7). It is hoped that we will be able to hold the AGM / Spring Meeting in May 2021, but that will depend on the Covid-19 situation in the UK.

Morag Husband Campbell Medal 2021

The South Georgia Association is seeking nominations for the award of the Morag Husband Campbell medal for 2021. The medal, which was made possible by a generous bequest from Morag (right), who was a long-standing supporter of the Association, is awarded to individuals who have contributed significantly to the understanding, appreciation and promotion of South Georgia. Full details and the nomination form are available on the SGA website (https://southgeorgiaassociation.org/morag-husband-campbell-medal-2021-call-for-nomintions/) and completed forms should be sent to the SGA Secretary by 31st December 2020.



Morag Husband Campbell

Editor's Note

Thanks to the contibutors to this edition, notably John Dickens, David Brook, Sarah Lurcock, Jen Jackson and Paul Rodhouse and to Bob Burton & Fran Prince for their proof-reading and fact checking. The South Georgia Association newsletter is produced twice a year, in April and November. Contributions should be submitted, at least one month before publication, to the editor: Martin Collins (e-mail: only1martincollins2@gmail.com).