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Contact Information: cporter@ukotcf.org

UKOTCF

Southern Oceans Working Group

(SOWG) e-Newsletter

Number 16

Welcome everyone to this special edition of the SOWG e-Newsletter. Invasive animal and plant species are among the largest threats to biodiversity, and are a conservation issue commonly faced across the territories. As such, and inspired by a good deal of interest from SOWG members, this issue will focus exclusively on some of the threats posed by, and efforts to combat, invasive species throughout the Southern Ocean territories. These topics will arise too in UKOTCF's forthcoming online conference (<u>https://</u><u>www.ukotcf.org.uk/our-conferences/onlineconference2021/</u>).

I hope you find these guest articles and their summaries interesting, and as always if you have any queries or suggestions for the next edition, please do send them to <u>cporter@ukotcf.org</u>. **Catriona Porter & the UKOTCF Team**



Photo: South Georgia Heritage Trust

Helicopter used for large scale baiting is re-supplied before continuing its efforts to cover large areas with poison in order to eradicate rats from South Georgia and restore habitat for native species such as the South Georgia pipit - in the foreground some of the native fauna, a group of king penguins.

Ascension Island

Ascension Island Biosecurity Strategy

Over 90% of plant species and 70% of invertebrates found on Ascension Island are thought to be introduced species from elsewhere. Lionfish, the brown rat, red fire ants and mosquitos were identified

by AIG as high risk invasive species in the first half of 2020, and new biosecurity legislation came into effect in July. The Ascension Island Biosecurity Strategy (2020-2025) published November 2020 by the Ascension Island Government Conservation and Fisheries Directorate, aims to establish an effective biosecurity system. The risk-based strategy acknowledges the current weaknesses in terms of biosecurity controls for preventing species introduction, and covers various other aspects influencing biosecurity; including plans for an awareness-raising campaign, and also eradication goals / management targets for established non-native species.



Photo: Michael Gäbler, Wikipedia Commons Common Lionfish *Pterois volitans*

https://www.ascension.gov.ac/new-biosecurity-legislation-recommended-by-council https://www.ascension.gov.ac/wp-content/uploads/2020/10/Ascension-Island-Biosecurity-Strategy.pdf

Two major historical influences: Rats and Ecosystem Engineering

Summarising extracts from the paper 'Impacts and Management of Invasive Species in the UK Overseas Territories', published as part of the Social and Ecological Interactions in the Galapagos Islands book series (SESGI), by Dr Nicola Weber and Dr Sam Weber.

"Two major episodes of species introductions, discussed below, have left an indelible imprint on Ascension's natural environment with which conservation managers are still wrestling: the successive introductions of rats and cats in the Eighteenth and Nineteenth Centuries and the Victorian era experiment in ecosystem engineering of the Island's montane habitats to create an environment more hospitable for human life."



Photo: M. Lambert via Ascension Island Government Black rat *Rattus rattus*

Rats

"It seems likely that rats would have been a persistent presence among Ascension's mainland seabird colonies and may have decimated populations of smaller, burrownesting species (Jones et al., 2008) such as band-rumped storm petrels which are now confined to nesting on Boatswainbird Island and inaccessible cliffs. Rats do not appear to have had a catastrophic impact on Ascension's larger breeding seabirds, whose impressive



Photo: Ascension Island Government Sooty Tern *Onychoprion fuscatus*

mainland colonies were described by visiting naturalists right through into the mid-nineteenth century (Stonehouse, 1960). However, the subsequent introduction of domestic cats Felis silvestris catus in a bid to control the burgeoning rodent population following human occupation of the Island in 1815 led to the rapid decline of all but one of the remaining seabird species on the mainland (Ashmole et al. 1994; Fig. 1). By the 1950s, the relatively small relict populations that remained survived only on inaccessible cliff ledges and offshore stacks, including the largest, Boatswainbird Island, with the exception of the vast sooty tern colony that

persisted by virtue of their numbers, seasonal migrations away from the island and 9-mont nesting cycle (Stonehouse, 1960). In 2001, a seabird restoration project was initiated with the aim of eradicating feral cats from Ascension Island and reinstating seabird breeding colonies to the mainland (Ratcliffe et al., 2010). In ecological terms the programme was a resounding success. The last known feral cat was removed from the mainland in March 2004 and the island was declared feral-cat-free in 2006. Seabird recolonisation of accessible mainland sites began almost immediately in 2002 and numbers have increased steadily since (Ascension Island Government Conservation Department [AIGCD], unpublished data). there is evidence to suggest that populations of rats are rebounding following the feral cat eradication (Hughes, 2014)."

Ecosystem engineering

"The most significant event in this transformation was brought about at the instigation of the eminent botanist Joseph Hooker, who, following a visit to the Island in 1843 and with the help of his childhood friend Dr John Lindley, advocated an ambitious programme of planting aimed at creating pasture, reducing erosion and greatly increasing mist interception, soil development and groundwater recharge

(Ashmole & Ashmole, 2000). What ensued was a remarkable feat of "ecological engineering" that has fundamentally and irrevocably altered the natural environment of Green Mountain. In the years following Hooker's visit, more than 220 exotic plant species were imported from around the world, many of which subsequently naturalised and still grow side-by-side in a wild "botanical garden" of sorts. Today, the original habitats of Green Mountain have largely disappeared, replaced by a man-made mosaic of grasses, shrubs and trees. To some Green Mountain's manmade cloud forest is an extraordinary example of ecological



Photo: Ascension Island Government Green Mountain National Park, Ascension Island

terraforming, with a new, functioning ecosystem having been created almost entirely from scratch (Wilkinson, 2004); to others it is simply another example of invasive non-native species degrading a

previously pristine island environment (Gray, 2004). Such debates are now largely academic as restoring Ascension Island's mist zone to anything approaching a "natural" state will be practically, if not technically, impossible (Cronk, 1980)." https://link.springer.com/bookseries/10427 https://link.springer.com/chapter/10.1007/978-3-030-43973-6_13

Invasive predator research by the Army Ornithological Society

Summary provided by John Hughes of the Army Ornithological Society (AOS).

The Army Ornithological Society (AOS) project on Ascension started when members visiting the island *en route* to the Falklands reported massive seabird decline. Alien invasive predators were monitored on Ascension Island by the AOS for >1,500 field days between 1990 and 2015. More than 5,000 seabird carcasses were collected and 1,388 nests were monitored to determine the impact on seabirds of cats *Felis catus* (Hughes *et al.* 2008), common mynas *Acridotheres tristis* (Hughes *et al.* 2016) and black rats *Rattus rattus* (Hughes *et al.* 2018). The size and trends in the myna population was determined from look-see counts in 1994, 2004 to 2006 and 2015 and trends in the rat population size from trapping rats across nine field seasons. The introduction and extirpation of the house sparrow *Passer domesticus* was also reported (Hughes and Reynolds 2014). The research was completed at no cost to the public purse. The findings of the AOS long-term study were presented at the Island Invasive conference in 2017 and the project was runner-up in the Ministry of Defence prestigious Sanctuary Environmental Award 2018. The research papers are freely available at <u>https://www.researchgate.net/</u>. Unfortunately, military drawdown on Ascension has curtailed further research into other invasive predators on the island such as mice *Mus musculus* and centipedes *Scolopendra morsitans*.



Photo: Dave Thomas, provided by J. Hughes Sooty tern carcasses in a cat midden Waterside, Ascension Island 1994

Photo: Dave Thomas, provided by John Hughes Sooty tern chick predated by rats, Mars Bay, Ascension Island 2009

Hughes, B.J., Martin, G.R. & Reynolds, S.J. 2008. Cats and seabirds: effects of feral Domestic Cat *Felis silvestris catus* eradication on the population of Sooty Terns *Onychoprion fuscata* on Ascension Island, South Atlantic. *Ibis* 150 (Suppl. 1): 121–129.

Hughes, B.J., & Reynolds, S.J. 2014. The story of the Georgetown sparrows: The introduction and extirpation of house sparrows *Passer domesticus* on Ascension Island. *Sea Swallow* 63: 25–27.

Hughes, B.J., Martin, G.R. & Reynolds, S.J. 2016. Estimating the extent of seabird egg depredation by introduced Common Mynas on Ascension Island in the South Atlantic. *Biological Invasions* 19: 843–857.

@Dare There

Hughes, B.J., Dickey, R.C. & Reynolds, S.J. 2018. Predation pressures on sooty terns by cats, rats and common mynas on Ascension Island in the South Atlantic. *Island Invasives: scaling up to meet the challenge* 295–301.

British Antarctic Territory

Antarctic Peninsula region at risk from 13 species

Although many view the Antarctic as a location too harsh and remote to be threatened by invasive species, in truth its biodiversity and ecosystems are fragile and becoming increasingly vulnerable as human activity there intensifies. Tourism and scientific research are the main pathways whereby invasive species may be unwittingly introduced, via numerous vectors [Fig 1]. A study published at the beginning of 2020 in the journal *Global Change Biology* identified 13 non-native species as being of high risk of invading the Antarctic Peninsula region over the next decade – including flowering button weed plants *Leptinella scariosa* and *Leptinella plumose*, Chilean mussel *Mytilus chilensis* and Asian kelp

Undaria pinnatifida. The research considered a total of 103 species currently absent in the Antarctic Peninsula region and was an international effort to provide a baseline for mitigation measures, e.q. biosecurity checks which are vital to ensure rates of introductions and invasions remain as low as possible. There is one silver lining, though; the research also concluded that although vertebrates such as rats and mice have been a major invasive problem for several sub-Antarctic islands, e.g. South Georgia, the harsh conditions in the Antarctic Peninsula region mean it is unlikely they will be able to colonise outdoors and so become much of an issue here.



https://www.bas.ac.uk/data/our-data/publication/invasive-non%e2%80%90native-species-likely-to-threatenbiodiversity-and-ecosystems-in/

https://www.bas.ac.uk/media-post/predicting-non-native-invasions-in-antarctica/#:~:text=%E2%80%9CMarine% 20invertebrates%20such%20as%20mussels,and%20springtails%20were%20also%20identified. https://onlinelibrary.wiley.com/doi/full/10.1111/gcb.14938

British Indian Ocean Territory

Boosting the biodiversity of the Chagos Archipelago through rewilding

The Chagos Archipelago is facing serious threats to its seabird populations caused by invasive rats which are decimating ground nesting species in particular, alongside native plants. Here, Helen Pitman from Chagos

Conservation Trust (CCT) summarises the situation and solutions which could have wide ranging positive impacts.

The Chagos Archipelago is located in the Indian Ocean, and forms the British Indian Ocean Territory, a UK Overseas Territory. It is home to an astonishing diversity of life, and acts as a refuge for many important species. By conserving and rewilding this precious environment, we can contribute to important marine conservation and learn much about the natural ecosystems of our world. The five atolls of the Chagos Archipelago, including the world's largest living atoll – the Great Chagos Bank, are home to 300 types of coral, 800 species of fish, 175,000 pairs of seabirds, two species of marine turtle and the world's largest land crab. The archipelago, made up of 55 islands, was declared a 640,000 km² 'no-take' marine protected area (MPA) on 1 April 2010, which is the maximum level of protection.

The problem:

Not all of the 55 islands that make up the archipelago are as healthy and thriving as they should be. When humans first discovered the archipelago in the 1700s they introduced several invasive species including rats, and cleared native forest and vegetation for habitation and the creation of coconut plantations. Coconut farming ceased in the 1970s but as a legacy of the plantation era, every island farmed for coconuts has rats. Rats decimate the native plants and important seabird populations by eating eggs and chicks. Today, the 30 rat infested islands have significantly fewer, to no, seabirds,



Photo: Anne Sheppard / Chagos Conservation Trust Chagos archipelago coral reef

particularly ground nesting species.

The 2015 ocean heatwave killed 60% of the hard corals at depths of up to 10 metres across the archipelago, with some species more affected than others. Before corals had the chance to recover, another heatwave struck just one year later and data collected from the Peros Banhos Atoll showed that 68% of the remaining hard corals were bleached and 29% died, suggesting that approximately 70% of hard corals were lost between 2015 and 2017 overall. At a time when coral reefs need to build resilience to help them recover from the effects of climate change, scientists from the Bertarelli Programme in Marine Science have discovered there is a direct

link between healthy seabird populations on islands and healthy reefs. Seabirds feed from the ocean and their droppings are a natural fertiliser for corals that surround those islands. Without healthy seabird populations supplying nutrients, the coral reefs are less likely to thrive. Where rats are present this natural link between islands and their associated reefs is broken, which may be detrimental to corals recovering from bleaching events.

The solution:

The Chagos Conservation Trust's new <u>Healthy Islands, Healthy Reefs programme</u> is an ambitious and exciting large-scale rewilding partnership with the British Indian Ocean Territory Administration that will reduce the damage caused by rats and loss of habitat, help corals recover from, and build resilience to, climate change and see the return of hundreds of thousands of seabirds to the archipelago. Creating a

rat free archipelago will result in three and a half times more habitat available for seabirds, allowing them to repopulate islands and increase nutrient flows to reefs by 250 per cent. Healthy Islands, Healthy Reefs is based on sound science that highlights the significant linkages between the islands of the archipelago and their associated coral reefs and how rewilding of these islands is crucial to the survival of seabird populations and coral reefs.

Falkland Islands

Biosecurity Detector Dog 2020 Updates

Like other islands, invasive species are also a serious threat to native biodiversity in the Falklands, and they are one of the leading overseas territories in invasive vertebrate eradication — some major success stories being Patagonian grey foxes in 2008, as well as rat eradication from 66 islands. However, rodents have reinvaded in some cases and are a difficult alien species to remove altogether. Here is a short summary of detector dog work in the Falklands.

In partnership with South Georgia, the Falklands also utilise a biosecurity detector dog programme as a preventative measure — South Georgia having been cleared of rodents in 2018. Although the biosecurity detector dogs are used mainly to check vessels bound for South Georgia, they are also now being used to help monitor rodent presence across the Falkland Islands. Rats are an issue for the mainly ground nesting birds of the Falklands, such as the endemic Cobb's wren Troglodytes cobbi and blackish cinclodes or 'tussock-bird' Cinclodes antarcticus.

News from 2020 includes evidence of rats on Cape Pembroke and one other island: including chew marks on wax tags deployed by the



Photo: South Atlantic Biosecurity Detector Dogs Biosecurity detector dog Samurai searching for rodent presence on a Falkland island

Falklands Conservation Watch Group, latrines, nests and eaten mussel shells. However, there is no indication of reinvasion at either Great or Tickle islands, where rodents were previously eradicated in 2016. Kidney Island also appears to be rodent free. Great Island was the first private island to be searched for rodents using the detector dog Samurai, alongside the FIG Kidney Island. Plans to check Bleaker Island are due to take place this year, after being postponed in 2020. The detector dog programme has also been funded for a further 3 years via an Environmental Studies grant in order to conduct cargo checks concerning outer islands, as well as on island rodent checks—including annual checks of Kidney and Cochon, as their proximity to Stanley and frequent visitation make them high risk islands.

http://www.radio.co.fk/index.php/listen-again?own=0&filter[tag][0]=environment

Read more on the issue here: https://www.researchgate.net publication/270899396_Modeling_the_distribution_of_Norway_rats_Rattus_norvegicus_on_offshore_i slands_in_the_Falkland_Islands.

Pitcairn

<u>Henderson Crake</u>

Although plastic pollution has recently dominated news of the island, the endemic species on Henderson are the critical features and vulnerable to threats from potential invasive species. One such species to be mindful of is the Henderson crake *Zapornia atra*, a flightless bird found in dense to open forest throughout Henderson Island's plateau. Although stable, the species is classified as Vulnerable on the IUCN Red List as it exists only on this small island. Efforts have previously been made (in 2011) to eradicate the invasive Polynesian rat population on the island, but were unsuccessful – likely due to the survival of approximately 50 rats who had not eaten the poisoned bait pellets (having not encountered them, or using natural food sources which were boosted at the time of the operation by unseasonal rains), and who then reproduced at a rapid rate - meaning rat populations recovered by 2013. Despite the Predation upon eggs and chicks, the two species have co-existed on the island for centuries. But, the Henderson Crake remains vulnerable - BirdLife International states "the accidental introduction of alien species could result in rapid population decline, or even extinction, as experienced by many other flightless island rails."

https://www.iucnredlist.org/species/22692711/93366374 https://royalsocietypublishing.org/doi/10.1098/rsos.160110



St Helena

Restoring St Helena's Cloud Forest

Rebecca Cairns-Wicks and Vanessa Thomas-Williams provide an interesting note on St Helena's cloud forest habitat, and the aims of their current Darwin Plus project (DPLIS099).

Work to save St Helena's cloud forest habitat, found on the Island's highest peaks largely above 700m, began in 1995. The cloud forest is home to one sixth of the biodiversity found within the UK, its Overseas Territories and Crown Dependencies and covers just 16 hectares. The area is locally known as the Peaks and is described within the Peaks National Park. This moist montane forest captures and filters rainwater, mostly through mist interception and provides 60% of the Island's water supply.

Habitat loss on a massive scale and the introduction of non-native invasive species of plants and animals threatens the future of over 250 endemic species found entirely or almost entirely within this unique forest. The five remaining endemic 'cabbage trees', and the endemic tree ferns are the keystone species. The habitat is highly fragmented. Over 120 fragments, covering less than 0.6 ha, have been described where tiny pockets of often individual and isolated and aged cabbage trees cling on, and with them their associate unique plants and invertebrate species. Work on the current Darwin Plus funded project "Fragmented cloud forest habitat rehabilitation through innovative invasive plant management" is building on the experiences of the past decades to expand these tiny fragments of native biodiversity and to link them by creating new habitat corridors through the control of invasive vegetation and replanting. The knowledge that we are gaining through this process is adding to our understanding of the ecology and ecological restoration of these critical habitats. In the last 26 years we've struggled to gain ground against the onslaught of invasive plant species. This needs to change if we are going to save the forest, the rich biota it supports, sustaining and expanding natural ecological function to increase the Island's water security in a warmer climate. We want to use the experience and knowledge we are continually gaining to scale-up invasive plant management in the near future as part of a multi-sector collaborative project.

For further information about the project please contact project leaders: Vanessa Thomas-Williams <u>vanessa.t-williams@sainthelena.gov.sh</u> or

Rebecca Cairns-Wicks rebecca.cairns-wicks@sainthelena.gov.sh .



Photo: EMD St Helena A lone black cabbage tree in the mist



South Georgia and the South Sandwich Islands

Success story: eradicating rats and mice on South Georgia

Like several other territories, South Georgia's biodiversity has suffered from threats posed by rats and mice, prompting an eradication programme spanning several years. Alison Neil of South Georgia Heritage Trust (SGHT) here provides a summary of the completed fieldwork and an update on the current situation - as well as future plans.

In 2011, 2013 and 2015 the South Georgia Heritage Trust carried out fieldwork to eradicate each and every rat and mouse on South Georgia, working with its USA affiliate Friends of South Georgia Island to raise the £10 million in funding needed for what was called the South Georgia Habitat Restoration

project. With no experience of this sort of work, the Trust was reliant on the expertise of a fantastic field team made up of conservation practitioners from New Zealand, Australia and the USA, led by Project Director Tony Martin. Around 1000km² of mountainous terrain was baited by helicopter thanks to skillful flying by the pilots, with extra bait coverage in the highly vegetated areas near the coast and hand baiting by the team in the former whaling stations. An independent group of experts assessed the impact of the bait on non-target species such as skuas. Happily this was minimal and affected populations rapidly recovered once the rodents were removed. An interim survey in 2014 of the areas baited in the early phases looked encouraging.

With help from GSGSSI, Thies and Kicki Matzen on their yacht Wanderer III, and three amazing rodent detection dogs and their handlers, SGHT undertook an extensive island-wide survey of the formerly infested areas in 2017-18 which came out clean – there was no recent sign of rodents. Since then the news has remained good, with the song of the endangered pipit (an indicator of breeding) being heard

all over the main island, and other birds such as petrels beginning to return in numbers. There have been no positive sightings of rats or mice since the baiting work completed. SGHT hopes to carry out some form of bird count, possibly in 2025 (which will be 250 years since Cook discovered South Georgia), to give more information on the progress of bird recovery. In the meantime the Trust is supporting the South Georgia Government's biosecurity programme, which includes a permanent rodent detection dog and handler team to check vessels visiting South Georgia.



Watch a video of the helicopter baiting here: <u>http://www.sght.org/sght-habitat-restoration-project/</u>

Biosecurity Detector Dog Programme

Following the success of rodent eradication from South Georgia, as summarised above, responsibility for maintaining this legacy now falls to the Government of South Georgia and the South Sandwich Islands (GSGSSI). This summary supplied by Helen Havercroft, Chief Executive Government of South Georgia and the South Sandwich Islands, details the monitoring and detector dog programme important for safeguarding the territory's newfound stability.

Sammy is the first biosecurity detector dog in the Falklands. He visited the islands for two trial periods in 2018 and 2019 and is now permanently stationed here with his handler Naomi as part of the Biosecurity Dog Programme established by the Government of South Georgia & South Sandwich Islands (GSGSSI), which has been running for just over a year.

In 2018 South Georgia was declared free of rodents after a long and expensive eradication programme led by the South Georgia Heritage Trust. Ridding the islands of rats and mice helped protect the stunning wildlife and habitats which the rats were destroying. Rats and mice may seem small and innocuous, but they can wreak havoc in areas with ground-nesting birds, mainly by eating their eggs. Before the eradication, for example, the endemic South Georgia pipit had been largely confined to offshore islands that the rodents couldn't access. Now the rodents have gone, the South Georgia pipit is

re-populating the mainland. So, with a lot of money and time invested in ridding the islands of rodents, keeping them that way is imperative.

One of the best 'technologies' available to detect rodents on boats is sniffer dogs so Sammy was employed by GSGSSI to provide that service through the charity Working Dogs for Conservation. It's an important job sniffing out rodents on vessels and cargo bound for South Georgia, and last year Sammy sniffed over 70 vessels bound for South Georgia, including cruise ships, yachts and fishing vessels. The team have developed a presentation summarising all the work that has been done over the past few years to develop and implement the programme, which goes into more detail (and has many cute pictures and videos of Sammy working).

Check it out here: https://vimeo.com/488900058.

You can follow Sammy's adventures on Twitter and facebook: @Sammysniffer

https://www.facebook.com/SABDetectorDogs .

Tristan da Cunha

Invasive Species Challenges in Tristan da Cunha

Below is an interesting summary of some major threats to biodiversity in Tristan, and what conservation work is being done to combat them. Article provided by Stephanie Martin, Environmental and Conservation Policy Officer, Government Tristan da Cunha.

Invasive species are an ever-increasing threat and a challenge to the native biodiversity in many parts of the world. This includes the world's most remote inhabited island of Tristan da Cunha, where its remoteness has not entirely protected the islands that make up the archipelago.

The historical legacy of 19th-century sealers bringing non -native mice on to Gough Island has had a devastating impact on the seabird populations on this World Heritage Site. The mice have evolved to attack Tristan albatross chicks, and more recently the adults, that are sitting on the nest, as an alternative food resource. While these "vampire" mice do not kill the birds directly, repeated attacks weaken the immune system, leading to mortality and impacting their reproductive success. After many years of planning with lead partner Royal Society for the Protection of Birds (RSPB) and others, 2020 would have been the year for the Gough Island Restoration project to eradicate the mice and potentially save over 2 million birds. Unfortunately, like so much of the rest of the world, the Covid-19 pandemic impacted this project with a year-long delay. We are hopeful for success in 2021 after the recent decision to go ahead with this critical project to remove the mice and successfully restore this ecosystem.



Photo: supplied by Stephanie Martin Albatross chick with predation wounds from rodents, Gough Island

For more information and support about this project, visit: https://www.goughisland.com/ .

The small community on Tristan is also working on other invasive species challenges with two

DawinPlus projects. A second terrestrial project is tackling an invasion of a *Coccus hesperidum*, a non-native scale insect. The insect and resulting mould have infested Tristan's only native tree species, *Phylica arborea*, smothering and killing many on Nightingale Island. Two endemic buntings, Nightingale *Nesospiza questi* and Wilkins' *Nesospiza wilkins* buntings, evolved to only feed on *Phylica* fruit and are therefore threatened with possibly imminent extinction. In other regions, successful biological controls have been successfully used on these scale insects to remove the threat. The DarwinPlus project is led by Tristan's Conservation Department, working



Photo: supplied by Stephanie Martin Wilkins bunting Nesospiza wilkinsi

with experts from CABI and Fera to try to use these methods on Nightingale Island. Like on Gough, there have been delays due to Covid-19, but we are planning to carry out the central part of the project in 2021.

Invasive species are also a challenge in the marine environment. In 2006, a free-floating semi-

submersible oil platform PXXI was stranded on the southeast coast of Tristan. It had started its journey off the coast of Brazil and had various non-native invertebrates and fish species associated with it when it stranded in Tristan's waters. One of these fish, the South American silver porgy *Diplodus argenteus argenteus*, is now found off Tristan year-round. There are still questions surrounding its impacts on native populations, which forms one of the questions that Tristan's Fisheries Department is working on during this DarwinPlus project.

Invasive species are a constant threat to all the UKOTs and their unique ecosystems, the Tristan



Photo: supplied by Stephanie Martin Oil Platform PXXI

community is working with various government agencies and partners to try to address these challenges and protect their important ecosystems.

To find out more about the UK Overseas Territories, research and work being done by various organisations to protect the unique biodiversity of these special places, and the role UKOTCF plays, please visit our website: <u>www.ukotcf.org.uk</u>.

For more information about the SOWG, comments, or contributions to the newsletter, please contact Voluntary Secretary / Voluntary Conservation Officer, Catriona Porter: <u>cporter@ukotcf.org</u>