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Issue 2
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Island Restoration News: Gough and Henderson





Offloading of the Agulhas II when the 2017/18 Gough team of Jaimie, Kate and Fabrice arrived at the island in September.

Welcome

Welcome to the second edition of the RSPB's Gough & Henderson Newsletter. This edition will provide updates on the exciting progress that the RSPB and our partners have made in the last nine months towards the restoration of these two globally important islands.

Gough Island

Since issue one, our case for conservation action on Gough Island has continued to gain weight as we further increase our understanding of the impacts of mouse predation.

We are reassured by the eagerly-anticipated decision of the RSPB Council to give the eradication their full support to go ahead in 2019, launching us into the next phase of operational planning. We also welcome the newest members of the Gough team, Jaimie Cleeland, Kate Lawrence and Fabrice le Bouard, who will be based on Gough for the next 13 months as they continue important research work from the island itself.

None of these developments, or the steps forward that will be made over the coming months, would be possible without the support of Tristan Island Council and the community of Tristan da Cunha.

Furthermore, we could not continue with planning efforts for this restoration programme without our generous supporters and funders. Although we still have a funding shortfall of about £2 million, we have greater confidence to commit to the operation with the knowledge that supporters will come to the aid of Gough's threatened species, the World Heritage Site and the RSPB.

Henderson Island

After the eradication attempt in 2011, the RSPB has worked with a wide range of experts to design our strategy to return for a second attempt.

Recently, the RSPB commissioned an independent feasibility study with the assistance of Island Conservation. This is nearing completion and will provide food for thought on how we maximise the likelihood that a second attempt will be successful.

We will also learn from other operations carried out in the tropics and subtropics. A key example of this is Desecheo where the first attempt to eradicate rats also failed in 2011 but a second attempt has proven to be successful.

We are confident that the RSPB in partnership with the Pitcairn Island Council and community can develop a refreshed approach to Henderson Island and lead a successful second eradication attempt.

Telling Our Story

As we draw closer to the 2019 Gough mouse eradication operation, we will increase communications to the wider media, informing the public and stakeholders of the importance of the operation and drawing in further support.

Front cover

On the front cover of this edition of *Island Restoration News* is a picture of an endemic species to Henderson Island, the Henderson shieldbug. This species is undoubtedly impacted by rat predation but due to the remoteness of the island, it is not possible to confirm the conservation status of this species. This species will benefit once rats have been removed from Henderson Island.

Photo: Sarah Havery RSPB.





Welcome to Gough Island. Inset: from left to right, Kate, Jaimie and Fabrice during a brief stopover at Tristan da Cunha.

Gough in 2017-2018

With the 2019 mouse eradication operation fast approaching, we focus on securing funding and finalising operational plans over the coming year.

The Gough Island Restoration has entered an exciting phase. Planning for the operation has already intensified and over the coming months, key contracts will be signed, and the practicalities of the operation itself will start to take shape.

The RSPB team is working closely with the Tristan da Cunha Island Council, BirdLife South Africa, and the South African Department of Environmental Affairs to ensure that the operation has everything it needs to be a success. This is no easy task! An operation of this

scale requires intricate planning, budgeting and negotiation to ensure the best possible chance of success, while staying on budget and meeting the requirements set out in international rodent eradication best practice guidelines.

Plans for keeping the Gough bunting and Gough moorhen in captivity during the operation are also in development. The RSPB has established a partnership with the National Trust, Zoological Society of London, the Royal Zoological Society of Scotland and

Durrell Wildlife Conservation Trust. Guided by these experts in captive husbandry techniques for birds, we will test the safety, practicalities, and suitability of capture methods and holding facilities ahead of the operation during 2018.

Website launch

To reflect the partnerships that make it possible, and the value of the programme as one of the most important conservation actions of this time we will soon launch a dedicated website.

The Gough Island Team for 2017/18

Meet the remotest team in the world as they spend 13 months on the front line of Gough's conservation.

Three intrepid conservationists, and an island 2,600 km from land. Their mission: learn more about some of the world's most endangered seabirds.

Overwintering teams

Each year we place a team of three biologists on the otherwise uninhabited Gough Island to complete detailed bird monitoring and *Sagina procumbens* eradication work (more info on the following page). Teams are based at the weather station operated by the South African Weather Service, without which these year-round surveys would not be possible.

The 2017/18 Team

The 2017/18 team is led by Fabrice LeBouard, with Jaimie Cleeland and Kate Lawrence completing the group. The team are highly experienced, all with a passion for seabird conservation on remote islands; Nightingale and

Macquarie Island are just two from their combined island repertoire. Each of the team brings their own invaluable specialism: Fabrice brings bird-specific reserve management experience; Jaimie, a PhD on the impacts of climate change, fisheries, and habitat degradation on albatross; and Kate, bird husbandry experience.

Before deployment, they went through a rigorous training programme in the cool, rugged mountains of Tasmania. To prepare them for life on Gough Island, wilderness survival training tested the team with surprise emergency scenarios day and night; and an intensive first aid training course that could prove life-saving in such a remote location!

The Journey to Gough Island

Having completed the training and spent some valuable time gelling as a team, Fabrice, Jaimie and

Kate boarded the Aghulas II ship to Gough Island on the 7th of September. At the end of week one the team reached Tristan Island. They enjoyed a short one-day stopover and a spot of bird watching before continuing on to Nightingale Island, finally reaching Gough Island on the 16th of September.

Saving Gough's seabirds

They will continue monitoring and data collection on Gough's seabirds. Data collected will form the baseline against which the positive impact of the 2019 operation will be measured.

A world away

Fabrice, Jaimie and Kate are the RSPB's most remote team, and internet access and communications are limited. They will keep us up to date with their work via blogs on www.rspb.org.uk website and soon-to-be launched Gough Website.



From left to right, Jaimie and Kate searching for *Sagina* and implementing the current eradication plan.

Gough and Henderson at the Island Invasives Conference

This conference convened by the South Georgia Heritage Trust and University of Dundee was a roaring success.

The third Island Invasives Conference was held at the University of Dundee and proved to be a fantastic opportunity to raise the profile of plans to restore both Gough, and Henderson and connect with around 300 delegates from 43 different countries from right across the globe. The RSPB congratulates the organisers for such a well received conference.

We were pleased to see a number of our partners represented at the conference, including the Zoological Society of London, CABI, the New Zealand Department of Conservation, Island Conservation, and South African Department of Environmental Affairs.

RSPB's Gough Programme Manager, John Kelly, also

presented on 'The planning process for eradication of mice on Gough Island'. The talk was a great conversation starter with attendees and potential stakeholders with whom we hope to work in the coming years of the programme.

Sagina review

We also took advantage of the international presence and held a workshop for a select group of international experts who have a vested interest in the *Sagina* eradication work on Gough. The meeting was a chance to focus on the successes and shortcomings of the work as we strive to improve. The ideas and valuable advice that came from the meeting are now being reviewed and incorporated into the *Sagina* eradication project.



John Kelly presented the Gough Island Restoration Programme to an audience of industry experts at the Island Invasives Conference 2017 (Sarah Havery).

A fresh look at eradicating an invasive plant on Gough

Having achieved control of the invasive plant *Sagina procumbens* on Gough Island, expert input is helping us achieve full eradication.

Following the *Sagina procumbens* workshop in Dundee it was determined that the eradication effort on Gough would benefit from an up-to-date assessment from experts in environmental pest plants.

Eradication of *Sagina* forms another element of the overall Gough Island Restoration Programme. To determine the best course of action for *Sagina* control in the coming years, Zac Milner from Indigena Biosecurity International travelled to Gough as part of the September 2017 takeover to assist.

Zac's four week trip involved updating the team's training in weed control, determining

eradication feasibility and making recommendations for future management.

The review highlighted knowledge and skills transfer between the annual Gough Island teams as an important part of improving the consistency of *Sagina* control, and so the success of eradication. The Standard Operating Procedure for *Sagina* work has also been updated to incorporate Zac's immediate feedback.

The assessment was incredibly valuable and with a full review from Indigena, we will now be able to make informed plans for the future of *Sagina* eradication on Gough Island.



A close up of one of the headlands on
Henderson Island

Striving for success on Henderson Island

Standing firm to our commitment to restore Henderson Island, RSPB takes an important step towards a second rat eradication attempt.

Henderson Island Eradication

In 2011, the RSPB and partners led an operation to eradicate invasive rats from Henderson Island. Unfortunately, less than a year after the operation rats were found on the island. The operation was declared unsuccessful.

With continued commitment to protect this World Heritage Site, its unique species and potential importance as a large seabird nesting site in the middle of the South Pacific, we are making progress towards a second eradication attempt.

New research, fresh feasibility

Extensive investigations show that failure was not down to the operation itself; unfortunately this means that there is no easy answer.

However, a higher failure rate in tropical as opposed to temperate island rodent eradications was seen across the sector, and a review of these operations highlighted the most important factors for success:

- The need for greater understanding of tropical ecosystems.
- Eradication strategies designed specifically for tropical islands.

In light of this new research we decided that a fresh feasibility study was both responsible and valuable. The task was commissioned to Island Conservation earlier this year and we eagerly await their final report.

Island Conservation

Island Conservation's mission sits hand in hand with our own - to prevent extinctions from islands. Like the RSPB, they have a great deal of expertise in the field of eradicating invasive rats from islands.

Island Conservation are experienced in the research, practical action, review and knowledge-sharing of eradications. Island Conservation also led the second attempt to eradicate rats from Desecheo Island as discussed on the next page. For more information about Island Conservation, please see: www.islandconservation.org

Early Recommendations

Although still in the draft phase, the main question the study will address is whether all target individuals can be exposed to a lethal dose of the bait. Records of 136 successful island eradications show that this is feasible. However we expect recommendations for success to consider:

- The possibility of removing coconuts as an alternative food source from the island.
- Plans to protect the susceptible Henderson crane from bait uptake.
- Further understanding of seasonality to pinpoint the optimum time for eradication.

We will receive the final report by the end of 2017, and will have further updates in the next newsletter.



The Near Threatened Reischek's Parakeet on Antipodes Island

Desecheo declared successful

Desecheo National Wildlife Refuge safe from invasive mammals after nearly 100 years.

After more than a decade of conservation efforts, Desecheo National Wildlife Refuge (NWR) is once again safe for the Threatened Higo Chumbo cactus, native seabirds, and unique lizards found nowhere else in the world.

During 2011, there were a number of high-profile tropical and subtropical islands where eradication of rats was attempted. Like Henderson, Desecheo in Puerto Rico also failed to achieve its goal. Island Conservation, the US Fish and Wildlife Service, with cooperation of the Puerto Rico Department of Natural and Environmental Resources, and other key partners mounted a second attempt to eradicate rats from the island in 2016.

In July 2017, just one year after the final phase of this ambitious operation to rid Desecheo NWR of rats, conservation biologists have confirmed that these predators are absent from the island, and the operation was a success.

This project, the largest conservation operation of its kind to date in the region, will enable the island to return to its former and rightful status: the most important seabird colony in the region. The refuge lost this status due to the presence of invasive mammals for almost a century.

For more information, please see:

www.islandconservation.org/desecheo/

Antipodes Island: One year post-implementation

A year after the project was implemented the signs of recovery on the island are positive.

But the island's invasive-free status cannot be confirmed quite yet.

A little over one year after the implementation of a project to remove invasive mice from Antipodes Island, New Zealand, the native birds appear to be thriving and the island remains mouse-free. Unlike on tropical Desecheo, the confirmation phase of this project will not occur until 2018. Nevertheless, the one-year mark is a positive sign for the island's recovery.

Antipodes Island is a 22 km² (13mi²) island southeast of New Zealand and is home to 21 species of seabirds and 2 endemic species of ground birds.

Now, without the threat of invasive mice, native plants and animals have a chance to thrive. For years invasive species had inhibited native Antipodean Albatross, Antipodean Parakeets, and Reischek's Parakeets from breeding. Now the endemic parakeets can forage safely, and without mice there is more food to go around.

The project was part of the Million Dollar Mouse campaign where New Zealand's Department of Conservation, Island Conservation, WWF, Heritage Expeditions and The Morgan Foundation worked together to remove invasive mice from the island.

A year after the project was implemented the signs of recovery on the island are positive, but the island's invasive-free status cannot be confirmed quite yet. For a project of this magnitude, two breeding seasons need to pass to ensure no remaining invasive mice are hiding on the island. Hopefully, the 2018 visit to Antipodes will yield positive news and an official confirmation.

For more information, please see:

milliondollarmouse.org.nz

and

www.islandconservation.org/antipodes-island-post-implementation/



The Endangered Henderson petrel. Severely impacted by rat predation on Henderson Island.

Species Spotlight: The Henderson petrel

Millions of pairs of Henderson petrel used to breed on the Henderson Island. Today, that number is less than 20,000.

Prior to Polynesian settlement, Henderson petrel populations were estimated to be much larger than today before predation by humans and introduced rats led to large declines.

It has been estimated that the Henderson petrel populations in the pre-human past may have been as large as hundreds of thousands or even millions. The most recent estimate of Henderson petrel numbers is under 20,000 pairs.

Key facts

- The Gadfly petrels (*Pterodroma* spp.) are a particularly poorly known and threatened group of seabirds. The Henderson petrel is a species within this threatened group.
- This species is classified as 'Endangered' by the IUCN.
- It was once considered a dark morph of the Herald petrel. The Henderson petrel was proposed as a separate species in 1996 on the basis of genetic, behavioural and plumage differences.
- The Henderson petrel is thought to feed predominantly on cephalopods such as squid but will also eat fish and crustaceans.
- When guarding their eggs, the adults can be rather aggressive towards an attacking rat, often successfully defending their unhatched egg from predation.

Summary breeding biology

On Henderson, the Henderson petrel nests on the ground exclusively on the plateau, scattered in the dense forest.

Data indicates that the breeding success is considerably lower than it should be if rats were not present. In 1991, less than 20% of eggs hatched and survived past the young chick stage. The picture was not as bleak in 2015 but still of great concern with a success rate of only 28%.

Both the 1991 expedition and the RSPB expedition in 2015 found most attacks by rats and coconut crabs happened when chicks were very young, small and relatively defenceless while left alone by the parents that were out at sea foraging for food. This is an all too common pattern for many seabirds facing introduced predators.

Little is known about the foraging range of the Henderson petrel during nesting. Only one bird has been successfully tracked but the battery unfortunately used up the last of its power reserves part way through the bird's foraging trip. The bird did however travel for 23 days in total and was successfully tracked for 14 of those days.

During this time at sea, the bird covered a wide area in a northerly direction from Henderson Island. It is estimated that the total distance the bird travelled was just under 5,000 km while searching for food to feed its young chick.



A pair of Tristan albatross in courtship. Once a bond is formed, this species mates for life.

Species Spotlight : The Tristan albatross

The Tristan albatross (*Diomedea dabbenena*) is one of the great albatrosses of the genus *Diomedea*.

An iconic species of the Tristan Island group, their magnificent 3.5 metre wingspan makes them relatively easy to spot as they glide across the ocean.

Only recognised as a full species since 1998, today the Tristan albatross is listed as Critically Endangered by the International Union for Conservation of Nature (IUCN).

Key facts

- The Tristan albatross, along with the Gough bunting are the only two species of British bird classified as Critically Endangered.
- Tristan albatross pairs mate for life and females lay just one egg per breeding attempt.
- They have long life histories with the oldest recorded bird being 35 years. The species is however believed to be able to live more than 50 years.
- They do not begin breeding until they are eight years old.
- During the 2013/14 breeding year, on average about 90% of chicks failed to fledge their nests due to attacks by mice. This is the worst breeding success since records began.
- The threat of mice on Gough has put the species in a rapid decline towards extinction. Today, the Tristan albatross is on track to be extinct within 30 years if we do nothing.
- Of the 22 species of albatross recognised by the IUCN, most are considered globally threatened with only one, the Black-browed albatross, now listed as listed as Least Concern.

Summary breeding biology

Adults return to Gough during November and December, lay eggs in January and the chicks fledge in November. During the breeding season the length and range of foraging trips can vary considerably.

Immature birds begin returning to their breeding colony from their life at sea between 3-7 years after fledging.

In the absence of mouse predation, the Tristan albatross would usually only attempt to nest every second year. However, evidence from Gough shows that some are now attempting to nest the following year after their first chick is killed. This is having an unknown impact on the parents and the population.

Efforts to preserve albatrosses

Thousands of albatrosses die needlessly every year as victims of longline fishing. They are attracted to the baited hooks, get caught and are dragged under the water and drown. The Tristan albatross is also affected.

Fishermen are often unaware of the simple, cost-effective techniques that when used correctly, dramatically reduce albatross deaths.

In 2005, the RSPB launched the Albatross Task Force (ATF) on behalf of the BirdLife Partnership, creating a team of men and women who work with fishermen in ports and at sea.

The ATF team demonstrates and encourages the use of solutions that prevent seabird bycatch. The teams in South Africa, Namibia and Brazil are especially relevant

for the Tristan albatross, as is crucial work with the high seas tuna fleets such as the Japanese and Taiwanese fleets.

Since the formation of the ATF, there has been a dramatic reduction in the numbers of albatross and other seabirds killed. To find out more, please see: www.birdlife.org/news/tag/albatross-task-force

Donations for Gough

Gough donations

Our current budget shortfall for the implementation of the operation is £2 million. If you would like to donate to the **Gough Island Restoration Programme**, you can use the following link.

<http://tinyurl.com/zvjm9y3>

Or search online for:

[Gough Island Donation RSPB](#)

Postal donations

Alternatively, donations by cheque or postal order, payable to the RSPB, can be sent to:

John Kelly, The RSPB
The Lodge,
Sandy SG19 2DL,
United Kingdom

Please also include a short note and your address so we can acknowledge receipt of your donation.

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The RSPB is a member of BirdLife International, a partnership of conservation organisations working to give nature a home around the world.

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