



RESEARCH AND CONSERVATION OF THE ENDEMIC PETRELS OF REUNION ISLAND

Layman's Report

LIFE 13 BIO/FR/000075



LIFE+ PETRELS is a project funded by the European Commission and co-funded by:



SEOR

UR

UNIVERSITÉ
DE LA RÉUNION



ESPACES
NATURELS
SENSIBLES



THE PROJECT



Name and aim of the project

LIFE + PETRELS LIFE13 BIO/FR/000075
Halting the decline of endemic Petrels from
Reunion Island:

Duration

July 2014 – July 2020 (6 years)

Budget

€3,107,240

European Commission contribution: 50%

€1,550,250



The LIFE programme is the EU's funding instrument for the environment and climate action created in 1992.

Partners and co-funding





LIFE+ PETRELS

BENEFICIARIES

Coordinating beneficiary:

Parc national de La Réunion



Associated beneficiaries:

Université de La Réunion



Société d'Etudes Ornithologiques de
La Réunion



Office Français de la Biodiversité /
Brigade nature Océan Indien



The overall goal of the project was to stop the loss of Reunion's biodiversity, by preventing two poorly-known endemic petrels from extinction.

We aimed to develop and implement demonstrative and innovative management strategies and appropriate conservation tools in a highly urbanised island so as to remove regulatory, technological and logistical constraints, consulting and involving stakeholders to reduce threats and undertake conservation actions.



CONSERVATION INTERNATIONAL



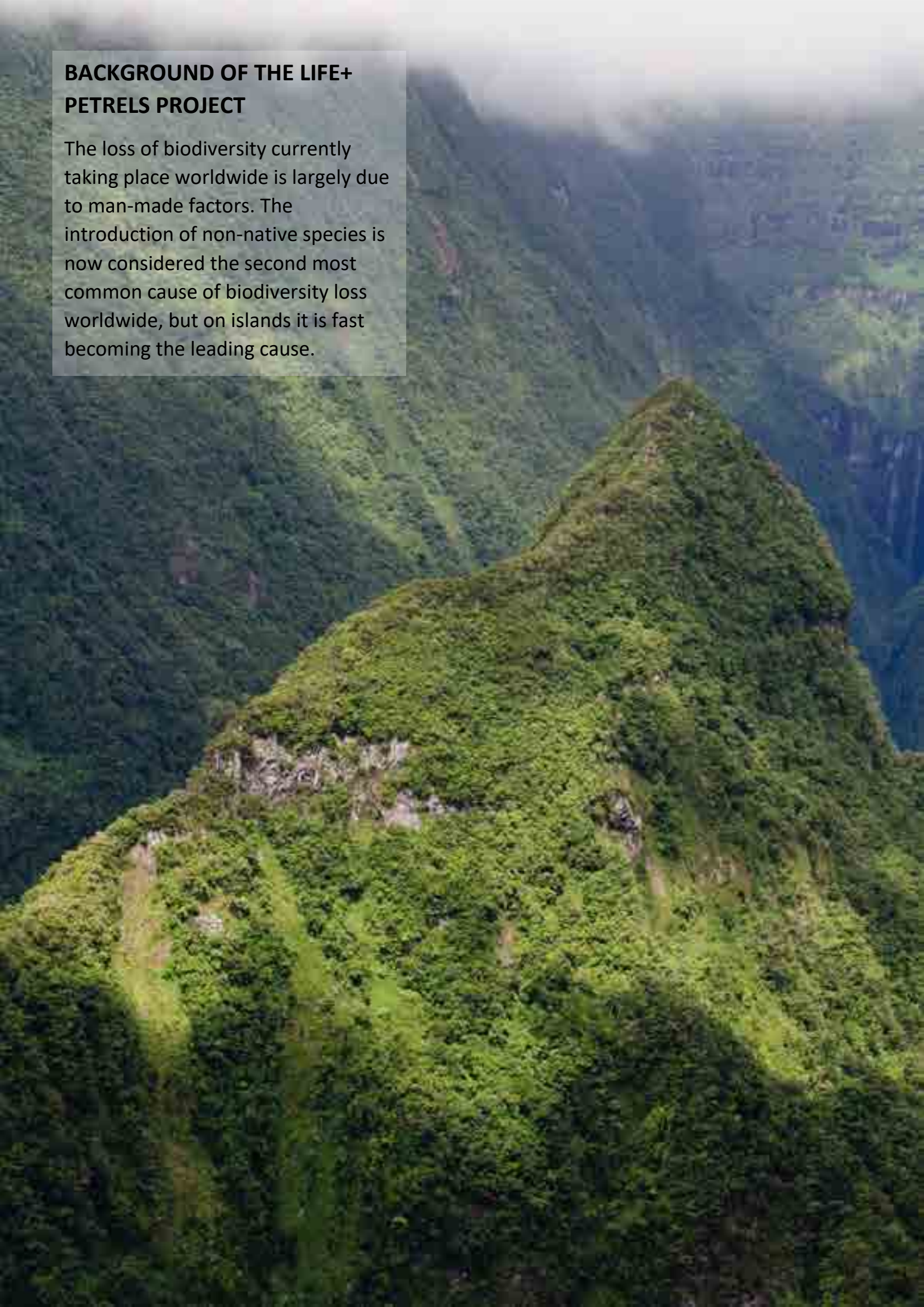
Reunion is a volcanic island belonging to a biodiversity hotspot

↑
Ile de La Réunion



BACKGROUND OF THE LIFE+ PETRELS PROJECT

The loss of biodiversity currently taking place worldwide is largely due to man-made factors. The introduction of non-native species is now considered the second most common cause of biodiversity loss worldwide, but on islands it is fast becoming the leading cause.





Reunion covers an area of 2,512 km², and its highest peak, Piton des Neiges, rises to an elevation of 3,071 metres. With its extremely rugged terrain, inaccessible sites, and threats to its endemic and indigenous species, it is highly complicated yet urgent to carry out conservation on the island.

Probably known as early as the Middle Ages by Arab sailors, who called it *Dina Morgabin* (“island of the setting sun”), Reunion was not permanently inhabited until the mid 1600s.

Human settlement led to the introduction of many mammals such as feral cats (*Felis silvestris catus*), black ship rats (*Rattus rattus*), and brown rats (*Rattus norvegicus*) where previously only bats had been found. The island lost 61% of its bird species, including 12 endemic species, as a result of these introductions.



Reunion's petrels were already the subject of national action plans, which had identified 5 key goals:

1. Improve awareness of conservation needs
2. Limit the decline of petrels
3. Reduce threats
4. Reduce waste in the natural environment
5. Improve knowledge about petrel species

To achieve these ambitious goals, Reunion's National Park began a LIFE+ project, working closely with its long-standing technical partners: Reunion's Society of Ornithological Studies (*Société d'Études Ornithologiques de La Réunion, SEOR*), the University of Reunion Island, and the National Office for Hunting and Wildlife, which in 2019 became part of the French Office for Biodiversity. The project received joint funding from France's Directorate for Environment, Planning Development & Housing (DEAL) and Reunion's Departmental Council, with a view to initiating large-scale and innovative conservation work to save the island's two endemic petrel species, both of which are threatened with extinction.

MASCARENE PETREL

90 cm

285 g

Pseudobulweria aterrima



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What is The IUCN Red List?

Established in 1964, **The International Union for Conservation of Nature's Red List of Threatened Species** has evolved to become the world's most comprehensive information source on the global conservation status of animal, fungi and plant species.

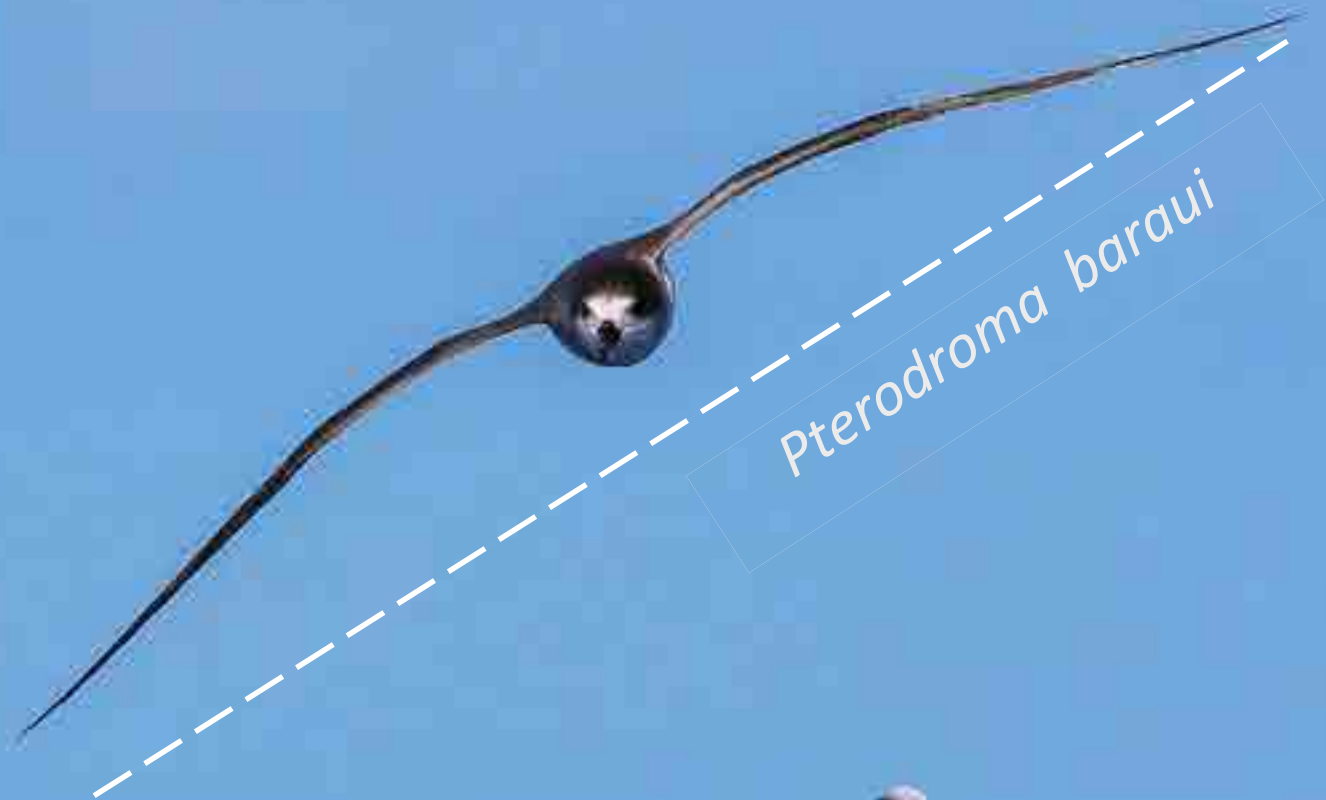
The IUCN Red List is a critical indicator of the health of the world's biodiversity. Far more than a list of species and their status, it is a powerful tool to inform and catalyse action for biodiversity conservation and policy change, critical to protecting the natural resources we need to survive. It provides information about range, population size, habitat and ecology, use and/or trade, threats, and conservation actions that will help inform necessary conservation decisions.



BARAU'S PETREL

98 cm

418 g



Pterodroma baraui



EN

MASCARENE PETREL

There is a great lack of conservation efforts and knowledge about the LIFE+ project's priority, the Mascarene petrel, and the species could become extinct within 50 years ...

Class: Aves

Order: Procellariiformes

Family: Procellariidae

Genus: *Pseudobulweria*

Species: *aterrima*

BACKGROUND

One of the earliest references to the existence of the Mascarene petrel comes to us from the artist Jossigny, who, in 1771, made the engraving of a bird then named *Procellaria tota vestita ater* (Cheke 2009). The species was first scientifically described by Charles-Lucien Bonaparte in 1856, on the basis of two specimens collected on Reunion (Jouanin 1970). During the 20th century, it was considered extinct on several occasions, and until 2014 no information was available about its habitat or reproductive biology.

The background image is a composite of three scenes. At the top, a full moon is visible in a dark blue night sky, with two petrels in flight. One is in the upper left, and another is in the center. Below this, a petrel is shown in flight against a lighter blue sky. At the bottom, a petrel is seen in a nest, surrounded by dense green foliage and a large tree trunk.

SYSTEMATICS

The Mascarene petrel belongs to the *Pseudobulweria* genus. This genus is one of the least known and most endangered among the Procellariidae family.

Pseudobulweria include one extinct species (*Pseudobulweria rupinarum*), and four living species, three of which are critically endangered according to the IUCN's 2019 Red List of Threatened Species: the Mascarene petrel (*Pseudobulweria aterrima*), Beck's petrel (*Pseudobulweria becki*), and the Fiji petrel (*Pseudobulweria macgillivrayi*).

DESCRIPTION

Mascarene petrels have no apparent sexual dimorphism, i.e. males and females look alike. Adults have an entirely black plumage, and their black beaks are short and sturdy. The legs are bicoloured: the tarsus and the part nearest the webbed foot is pinkish, while the toes and distal two-thirds of webs are black.

The Mascarene petrel is so rare and mysterious that it is considered one of the 15 rarest seabird species in the world! Only a few short years ago, in 2014, we knew nothing about the biology of the species.

BARAU'S PETREL

Somewhat better known to scientists and conservationists, Barau's petrel nevertheless suffers from light pollution and being preyed upon by introduced species.

SYSTEMATICS

The first specimen of Barau's petrel, found on the north coast of Reunion Island, was scientifically described by Jouanin in 1963, and was initially named *Bulweria barau* in honour of local ornithologist Armand Barau. Based on morphological criteria, in 1985 the ornithologist Imber reclassified the species as belonging to the *Pterodroma* genus.

Class: Aves

Order:
Procellariiformes

Family:
Procellariidae

Genus:
Pterodroma

Species: *barau*

DESCRIPTION

Like the Mascarene petrel, Barau's petrel shows no sexual dimorphism, i.e. males and females look alike. The crown of the head and hindneck, as well as the wing and tail flight feathers are blackish-grey. The feathers covering the wings and the back are ash-grey-blue, and each feather has a paler fringe on its inner edge. The forehead, belly and underwings are white, and their black beaks are short and sturdy. In flight, the underside of the outstretched wings reveals a black bar from elbow to wing-tip which spans the flight feathers to form a "W" shape.

REPRODUCTION

Barau's petrel nests in burrows that lie in the cliffs of Reunion's highest mountains, between 2,200 and 3,000m in scrubby, high-altitude vegetation. They establish one of three types of burrow: either in a thick layer of humus, or in crevices under rocks, or in a mix combining humus and rocky crevices.

PHENOLOGY

The non-breeding phase lasts 5 months, from late March to early September, and is when individuals migrate to their wintering area.

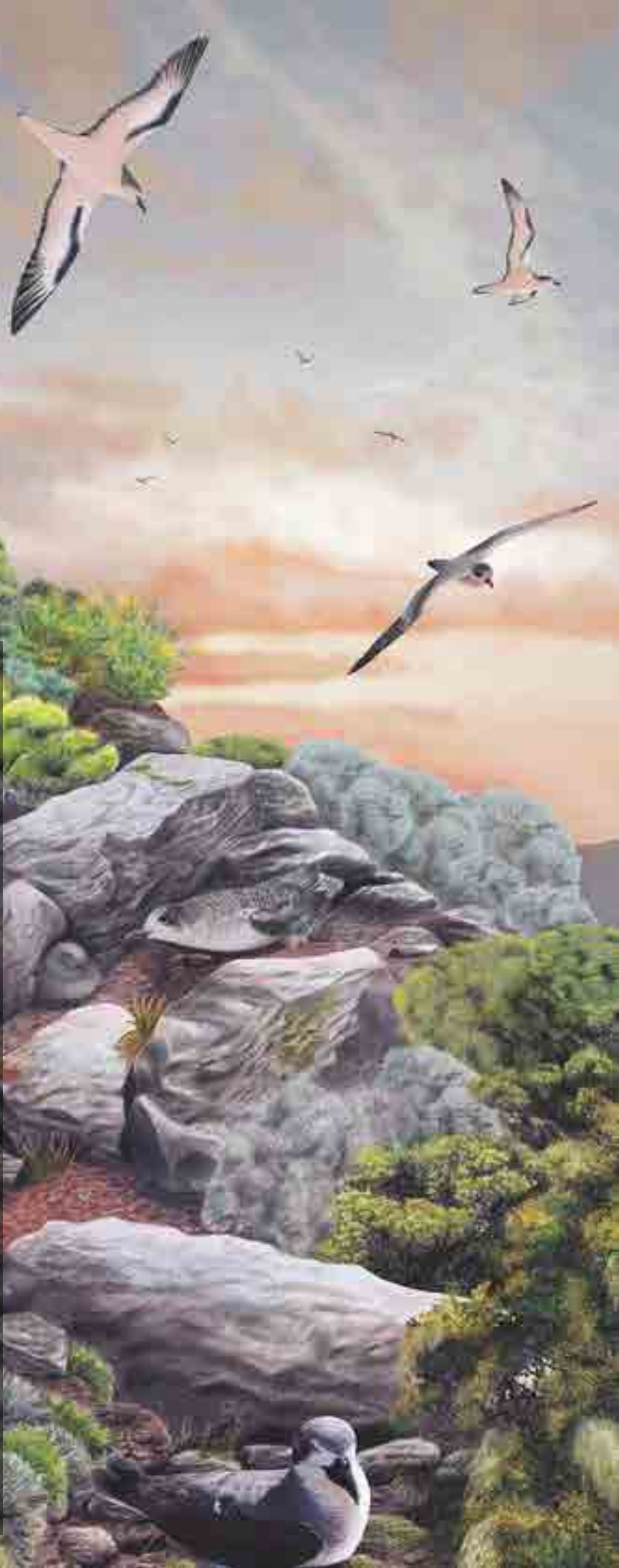
Barau's petrels breed seasonally, during the southern hemisphere summer.

The birds return to their colonies around 10 September every year, and a single egg is laid between late October and mid-November.

Eggs are incubated alternately by both partners for 52 ± 7 days.

The egg hatches at the end of December, near Christmastime, and most young birds make their maiden flight around 20 April.

Barau's petrel keep the same burrow and partner throughout their life.



Threats and their impacts on petrels

Introduced predators

Cats and rats are in the Top 100 of the world's worst invasive alien species 90: the number of Barau's petrels that a single cat can kill every year.

Cats and rats were introduced to Reunion Island by humans more than 350 years ago, and now live in all of the island's ecosystems. They are often found near waste, including organic waste, that has been discarded outdoors. Cats (*Felis catus*) and rats (*Rattus sp.*) are found at or near Barau's petrel and Mascarene petrel breeding colonies. Both these predators have a very negative impact on petrel populations as they are prey on eggs, chicks, and adults.

A recent study in Reunion Island (Faulquier *et al.* 2009) showed that Barau's petrel represents more than 60% of the diet of cats found near breeding colonies, and that 10 cats can kill around 900 petrels per year. As the presumed breeding sites of the Mascarene petrel are at lower elevations (between 1,100 and 1,900 m), with higher densities of predators than the Barau's petrel colonies (located between 2,200 and 3,000 m), we can assume the impact of predators is greater on the Mascarene petrel. Since 2010, sporadic feral cat capture campaigns have been carried out, but only in very localised areas and for a few weeks every year. Unfortunately this is still not enough to control these predators.

Light pollution



In January 2012, Reunion Island had 837,900 inhabitants and, according to France's National Institute of Statistics and Economic Studies, its population is forecast to reach almost one million by 2030. The average population density is 300 inhabitants per km², but is much more concentrated in coastal regions with an average of 2,000 inhabitants/km², leading to intense light pollution near the shoreline. Light pollution – defined as the incorrect adjustment or misdirection of artificial light – can affect living organisms and their ecosystems.

Both petrels and shearwaters are known to be attracted by artificial lighting.

Every year in Reunion Island – as is the case on other urbanised islands where petrels nest – mass fallouts of young birds occur during the period of maiden flights. In Reunion 2,500 petrels and shearwaters become stranded annually, disoriented by artificial urban light, including several hundred Barau's petrels (between 500 and 1,200 per year) and a handful of the extremely rare Mascarene petrels (between 0 and 5 per year). Since 1997 Reunion's Society of Ornithological Studies has developed a large voluntary rescue network across the island, which rescues and saves more than 2,500 birds every season.

Faced with such an urgent need for conservation, unprecedented resources have been allocated to meet these challenges.

The **overall project goal** is to stop the loss of Reunion's biodiversity, by preventing two poorly-known endemic petrels from extinction. We aim to develop and implement demonstrative and innovative management strategies and appropriate conservation tools in a highly urbanised island so as to remove reglementary, technological and logistical constraints, consulting and involving stakeholders to reduce threats and undertake conservation actions.

The 25 initiatives of the LIFE+ project focused on four top priorities which were identified as essential if we are to achieve our ambitious conservation goals and ensure the programme is a real success for Reunion.

The specific aims are:

- Limit the decline of petrels and prevent their extinction by implementing innovative/demonstrative actions
- Develop and use appropriate conservation management and communication techniques, in consultation with local stakeholders
- Acquire detailed biological knowledge of both species and apply this knowledge to demonstration techniques
- Exchange and disseminate the results of these actions with other conservationists, and raise awareness about the protection of these two endemic petrel species.



More than 150 team members from six different organisations spent over 1,597 days in the field, actively participating in the LIFE+ Petrels project.



From planning to action





Numerous local, national, and international partnerships were set up, providing donations and granting loans or preferential prices, thereby amplifying our capacity for action in Reunion. In total, more than 30 technical partners accompanied and supported LIFE+ Petrels, helping to ensure its success. These include:



The LIFE+ unit: backbone of the project

The project was coordinated and managed by a team of 7 permanent employees, who were recruited by 3 of the 4 co-beneficiaries. The team liaised between the European Commission, the steering committee comprising our partners, and the external service providers who were selected to work on the project. It also facilitated local, national, and international interactions, as well as the exchange of information between partners, and ensured results were promoted and published.

More than 35 permanent and temporary personnel, trainees, and civilian volunteers staffed the unit during the six years the project ran for.

Specific technology



ACOUSTICS

Island-wide acoustic prospecting was the first step in finding the colonies of the mysterious Mascarene petrel. The use of fifteen SM3 automatic recorders, and considerable efforts to deploy and recover recordings, made it possible to scour 38 km² of escarpments across 121 sites in very remote areas of the island.



INFRA-RED

More than 300 hours of night-time monitoring was carried out using innovative infra-red technology. In a world first, it was used on nocturnal sea-birds during the project, allowing them to be seen as clearly at night as during broad daylight. More than 270 petrels were observed in flight, some of them when "landing" on escarpments.



FIELD TRIPS

More than 35 field trips to search for and monitor petrels in inaccessible locations were carried out across the island. Assisted by experienced colleagues from the Indian Ocean Nature Brigade, these expeditions benefited from helicopter assistance, trained dogs, and endoscopic cameras to explore every metre of rock face.

FOCUS ON INFRA-RED

Use of infra-red technology was a key factor in the LIFE+ Petrels project. These military-grade Matis binoculars, manufactured by SAFRAN, gave extraordinary results, allowing bird detection up to 1 km.

Partners:



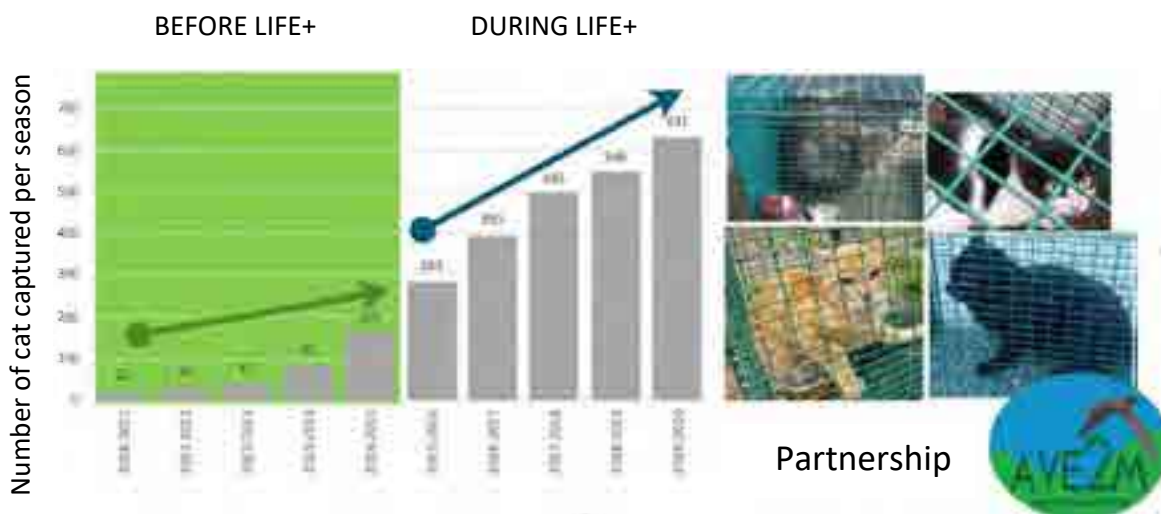
DEMONSTRATIVE AND INNOVATIVE CONSERVATION

LARGE-SCALE PREDATOR CONTROL

Before the LIFE+ Petrels project began, five years of capture campaigns had helped catch around 160 feral cats over an average area of 1,800 ha. These campaigns were extended by the LIFE project: preliminary studies were carried out on cat populations and their behaviour, regulations were worked on, and a partnership signed with a vocational integration association called AVE2M.

The capture campaigns carried out as part of the LIFE+ Petrels project increased the average efficiency of catching efforts by five, enabling 448 feral cats to be caught during 5 seasons, i.e. 90 cats on average per year over the course of more than 38,000 trap-nights.

Thanks to the efforts made and the new protocols developed, capture efficiency was tripled, and the average surface area controlled quintupled, rising from 1,800 ha to more than 9,000 ha per year. This is an area nine times larger than initially planned in the project. In addition, optimising the process reduced the effort by a factor of 5 while nevertheless ensuring that catches remained effective.



RODENT EXTERMINATION AT SITES

All the cat capture sites, both on the edges and in the middle of petrel colonies, were de-ratted at each campaign using more than 2,500 poisoned rat baits, representing a total area of 650 ha. Considering rats' small ranging area, and the colonial behaviour of petrels, ongoing rat control has mainly focused on the centre of known breeding colonies. About 10 ha of these high-priority areas were de-ratted each season in order to improve the likelihood of the petrels breeding successfully. In 2017, in order to reduce the amount of biocide used, 150 A24 Goodnature automatic piston traps were deployed, enabling better continuous control during the breeding season while reducing the number of field trips needed. Combining both methods enabled us to manage these highly sensitive sites more efficiently and with greater regularity.



FOCUS on A24 traps

Manufactured to the highest standards, the Goodnature A24 Automatic Rat & Mouse Trap is based on behavioural science, and is toxin-free. It kills up to 24 vermin instantly with a single CO₂ canister.

ARTIFICIAL COLONIES: AN INNOVATIVE SOLUTION FOR SUSTAINABLE PROTECTION

The project aimed to build and install artificial colonies to prepare for the future, in the hope that they will be used in 5- or 10-years' time.

The natural breeding sites of Mascarene petrels still present on the island are located in vertical rock-faces, on ledges that are very difficult to access and where nesting space is very limited.

The creation of protected areas – providing favourable conditions for individuals to meet and settle in burrows – offers the possibility of sustainable species management. Thus, in suitable sites where predators are controlled, two artificial colonies were created by installing specially adapted artificial boxes that were buried in the ground, mimicking natural burrows.

About forty such burrows have been installed on mountainsides that are naturally protected from most predators due to the rugged terrain, yet accessible to scientists to ensure long-term monitoring.



Artificial burrows

ATTRACTION AND MONITORING SYSTEMS

In order to attract prospecting birds looking for a site and partner, the sound of a natural colony was reproduced: male and female calls were broadcast every night using a stand-alone acoustic system. Cloths imbued with petrel scents were also placed in these burrows. Camera traps were installed to ensure permanent video monitoring and to enable colony colonisation to be observed.



COORDINATING AND FINDING COMMON SOLUTIONS



The direct and indirect threats affecting endemic petrels are mainly related to increasing urbanisation. The LIFE+ project encouraged a large number of stakeholders and users on the island to practice eco-citizenship and implement good conservation practices. The flight patterns of petrels mean that they travel the island from seashore to mountaintop. As such they link natural environments to be preserved with increasing urbanisation, as well as connecting the related social and cultural aspects. These two species of petrels are therefore excellent role models for engaging and bringing together all of the island's stakeholders, whether they are ordinary citizens or decision makers, in developing an innovative strategy to preserve biodiversity.

ADAPTED TO THE LOCAL CONTEXT

In response to these situations the LIFE+ project sought to understand expectations, and to implement solutions that met requirements and remove obstacles from stakeholders and users. For example, in conjunction with partners, the project fronted a campaign to sterilise domestic cats in the most petrel-sensitive areas of the island, in isolated villages or *cirques* where the population lacks access to veterinarians. This initiative – requiring considerable regulatory and logistical efforts – was a concrete way of managing stray animals in areas close to petrel colonies.



A 4-POINT COMMUNICATION STRATEGY



In 2015, after surveying the local population’s knowledge and perception about petrel conservation, we designed a communication strategy for the 5 years of the project. A dedicated Communications Officer position was created in the unit, conducting and coordinating a strategy determining “when, what, how, to whom...” (to) communicate. This strategy surpassed many of its goals, and brought the project and petrels to international attention.

1. DEVELOP COMMUNICATION ACTIONS AND TOOLS
2. MAKE INFORMATION ACCESSIBLE TO ALL, AND RAISE PUBLIC AWARENESS ABOUT PETREL CONSERVATION
3. EDUCATE YOUNG PEOPLE ABOUT THE ENVIRONMENT
4. SHARE, PROMOTE, AND DISSEMINATE THE RESULTS TO ALL LOCAL, NATIONAL AND INTERNATIONAL STAKEHOLDERS




A GREAT CONSERVATION SUCCESS STORY

After 160 years of mystery and years of research, the first two breeding colonies of Mascarene petrels were finally discovered in November 2016 and February 2017.

This is the world's first photograph of Mascarene petrels in their burrow, taken on 16 November 2016 during the prospection field trip which led to the discovery of the first breeding colony



A night scene in a forest. A full moon is visible in the dark blue sky. Two birds are flying in the sky, one in the upper left and one in the middle right. The forest is dense with green foliage and trees. In the lower part of the image, several birds are on the ground, some appearing to be nesting or resting. The overall atmosphere is dark and mysterious.

100 is the incredible number of Mascarene petrels in colonies ringed since 2016

18 sites where there are vocal Mascarene petrels have been located, including two colonies discovered in November 2016 and February 2017 with more than 45 burrows, now monitored.

New findings

BARAU'S PETREL

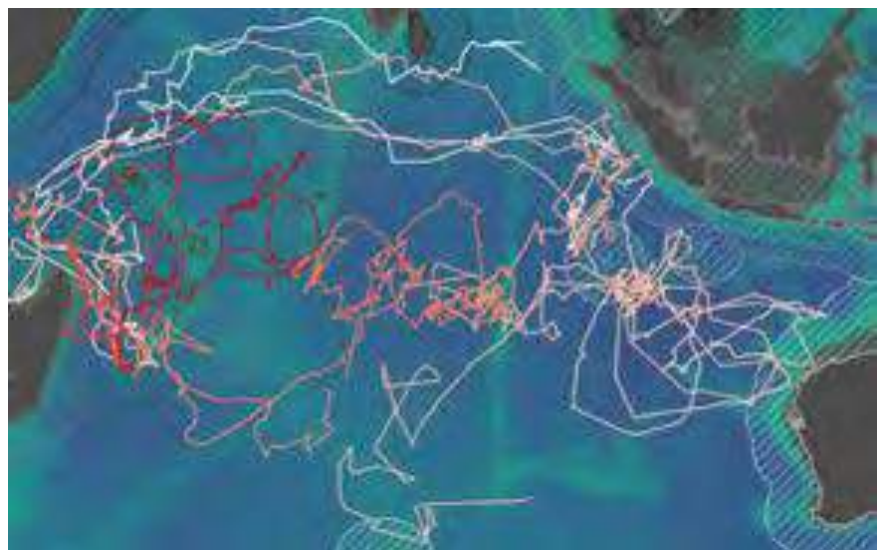


Demographic monitoring of the two Barau's petrel breeding colonies was stepped up during the six years of the project, allowing twice as many burrows to be monitored as before the project. A total of more than 320 burrows have been monitored annually to assess how successfully the species is breeding. 366 adults were ringed and 1481 checks were carried out. 796 juveniles were ringed in colonies before they left on their maiden flight. Such data has made it possible to work on population dynamics, quantify threats, and assess our conservation work. Modelling shows that thanks to the cat control carried out at colonies, the growth rate of the population is positive (1.026), but remains extremely sensitive to any decrease in adult survival (currently estimated at 0.94). If cat predation resulted in the survival rate of breeding adults dropping below 0.92, the growth rate would be less than 1. In other words, a decrease of only 0.02 in the current survival rate would suffice to reduce the population. The current population balance is therefore extremely fragile, and continued cat control is essential.

Thanks to capture campaigns, cat presence in the colonies has been reduced by more than 70%, and the average reproductive success rate is currently stable at 64%. The population of Barau's petrels now has a positive growth rate.

FOCUS ON JUVENILES

An unprecedented study made it possible to study the dispersion of juvenile Barau's petrels for the first time. Unlike adults, they mainly migrate to the northern Indian Ocean then to the east, migrating more than 18,000 km on average (min = 1,850 km; max = 42,864 km), crossing 18 Exclusive Economic Zones (EEZs) belonging to 12 different countries. Eventually they find the adult wintering area.



An incredible journey!

MASCARENE PETREL

Demographic monitoring finally began in 2016-2017, and indicators were measured over 4 seasons until 2020. 77 adults and 23 juveniles were ringed at both colonies, and 94 checks of individuals were carried out.

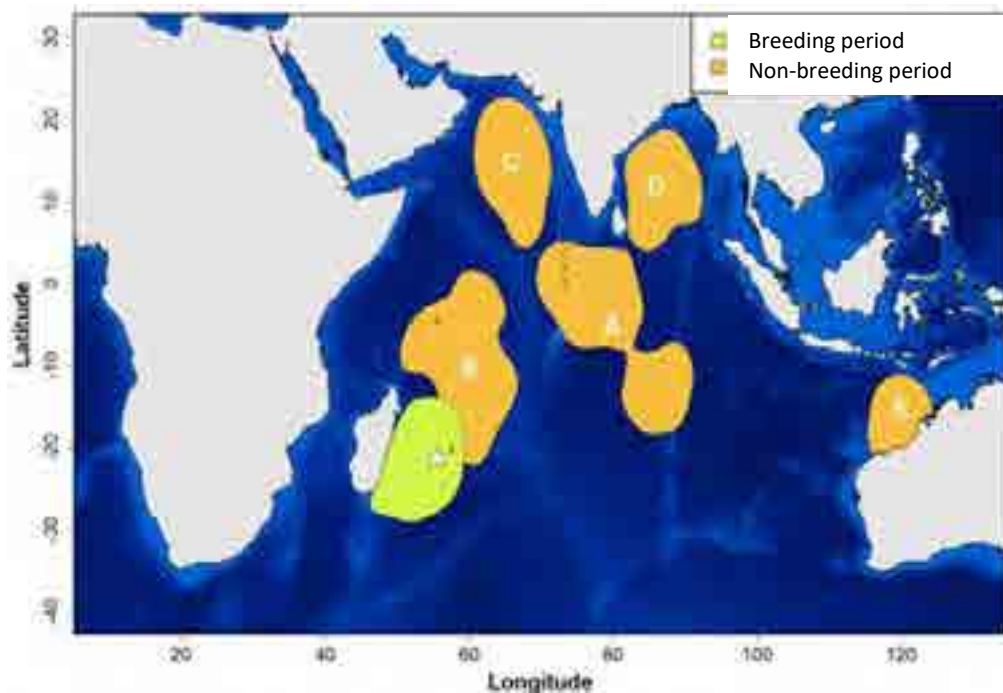


When the colony was first discovered in 2016-2017, the reproductive success rate observed at both Mascarene petrel colonies was 0%! No eggs or chicks survived the rats.

GENETICS: A DECLINING POPULATION

Population genetics research on 92 birds estimated a population size of 100 pairs and approximately 200 prospecting individuals. So there is still high genetic diversity within the population, which shows no signs of inbreeding depression.

There is good genetic diversity, but an actual population size estimated at only 100 breeding pairs suggests a recent decline in populations linked to the arrival of humans and predators on the island 350 years ago.



AT-SEA DISTRIBUTION REVEALED

Adult Mascarene petrels migrate in early March and return early August. Their distribution at sea is highly dispersed, and covers a large part of the Indian Ocean. During the non-breeding period, they migrate to five distinct wintering areas: southern Sri Lanka, the Arabian Sea, Bay of Bengal, Seychelles plateau, and western Australia (Saunier 2019).

During the breeding season, Mascarene petrels alternate between periods at sea and on the breeding colonies. They forage around Reunion, mainly to the south of the island and to Madagascar, at distances ranging from about ten kilometres to 1,300 km to the south of Reunion

POSITIVE IMPACT OF RAT CONTROL



Monitoring of population health programmes over 4 seasons. Reproductive success has increased considerably, from 0% in 2017 to almost 80% in 2020, with more chicks being raised each year. There is a very close correlation between the percentage of rats present in or near colonies, and the annual increase in successful breeding. The LIFE+ Petrel project's conservation work on the colonies have proved their effectiveness, and confirm that high rat density is the main threat in these very isolated and inaccessible refuge habitats. Predators such as these have a huge impact on breeding, as they eat almost all the eggs and chicks. "Simply" controlling rats results in a dramatic and rapid increase in average reproductive success, giving new hope for the survival of the species.



Rapid use of artificial nests

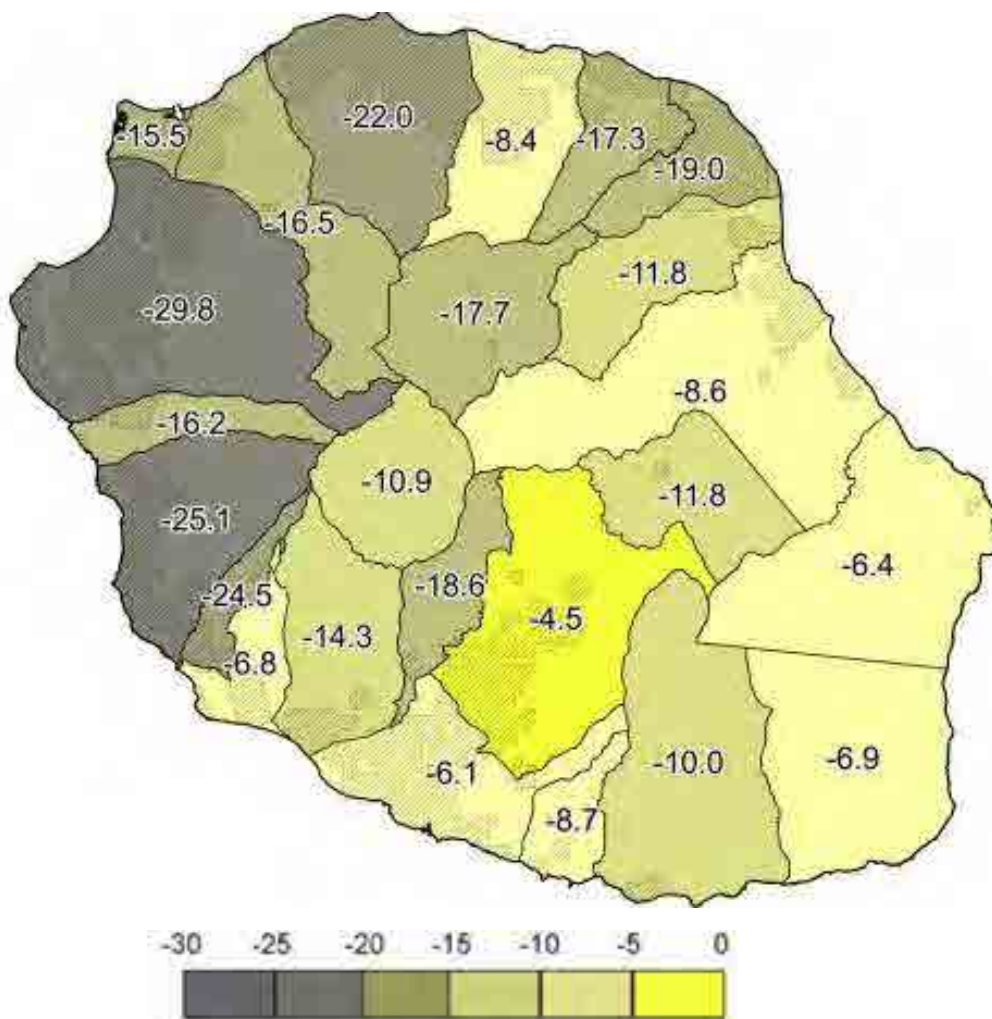
One year after the artificial colonies were established, seven burrows had already been visited and as of 2018, two prospecting birds seemed to have taken up residence in them.

To our surprise the first Mascarene petrel checked on in a burrow was already ringed, as in 2015 it had been found stranded and disoriented in Saint-Pierre, attracted there by urban light pollution during its maiden flight. Saved the first year of the LIFE+ Petrels project by Reunion's Society of Ornithological Studies rescue network, it probably returned home to occupy an artificial burrow on its very first journey back to the island.

This achievement shows the synergy of our conservation work, increasing petrels' chances of survival and breeding.

Analysis of more than 3,000 camera-days has enabled us to accumulate thousands of photos and videos since 2017, and to observe that at least eight burrows have been visited by five identified prospecting birds.

REDUCING LIGHT POLLUTION



Reduction of light pollution per municipality

From Lévi-Funck, *et al.* 2017 Diminution de l'intensité lumineuse par communes pendant les nuits sans lumière à La Réunion

In Reunion, municipalities are already aware of the impact of light pollution on biodiversity, health, energy consumption, and night sky observation. Some 18 municipalities out of 24 participated in the so-called "Nights without light" campaign in 2019, either through temporary blackouts at critical times or by organising awareness-raising events. In 2020 a new, more ambitious programme lasting the whole year was launched: "The Days of the Night".

The LIFE+ programme has launched a website to view data on light pollution and petrel fallouts which can be used to identify affected sites and prioritise light reduction in the community.

Across the island, an overall reduction of 15% in light pollution has been recorded during the period of petrels' maiden flights, a figure that rises to 30% for certain districts.



CAT STERILISATION CAMPAIGN IN AT-RISK AREAS

As controlling cat reproduction in urban areas is essential to limit the fight against felines in the natural environment, LIFE+ Petrels carried out a cat sterilisation, identification and awareness campaign in areas that are remote and highly sensitive and/or without easy access to a veterinarian.

Backed by the local chapter of the Order of Veterinarians, as well as inter-municipal authorities and municipalities, it was even possible to carry out sterilisations at the town hall or owners' homes.

300 cats were neutered and microchipped in five different municipalities during the sterilisation campaign.



Focus on an awareness-raising campaign

Social networks, websites, and posters were all used to organise a major awareness-raising campaign for the inhabitants of Cilaos and Entre-Deux. A survey was carried out and more than 3,000 people were consulted. Their feedback helped better understand the relationship they have with their cat.

Following the success of the campaign's first phase, it has been extended thanks to additional funding allocated to the National Park by Reunion's Regional Council.



DIVERSIFIED COMMUNICATION TOOLS AND ACTIONS

EDUCATIONAL PROJECTS

1,512 children were made aware of the importance of protecting petrels; in particular, 118 pupils participated in five educational "petrel projects" over an entire school year as part of an artistic and cultural education project.



PUBLIC OUTREACH

More than 63 events were organised as part of the project, reaching over 10,000 people across the whole island!

A WIDE RANGE OF RESOURCES

Suitable communication tools were created not only to highlight these species that are little known to the general public, but also to raise awareness about the threats they face.



These well-designed, educational, and entertaining resources have made it possible to reach and inform a great number of people.

IN DEMAND BY THE MEDIA

So far more than 129 TV and radio reports have been recorded and broadcast. From the discovery of the colonies to scientific monitoring, including bird rescue by the local population and meeting the inhabitants of Grand Bassin village, the petrels have helped raise the profile of Reunion Island and its population, all united in the conservation of their natural and cultural heritage.

INNOVATIVE TOOLS

With the pirate characters "Jack Barau" and "Black Bourbon" in a game-inspired comic, family members of all ages can now come together to talk about petrels!



WHAT NEXT?

The unprecedented mobilisation that resulted from this project has made it possible to prepare for the future and bring many new stakeholders on board.

New conservation projects have already been launched by partners, and a new “National Action Plan for endemic petrels in Reunion Island: Mascarene petrel (*Pseudobulweria aterrima*) & Barau's petrel (*Pterodroma barau*) 2020-2029” has been initiated.

As they say in Reunion *Ansanb, alon sov 'nout petrel:*
“Together let’s save our petrels!”

WWW.PETRELS.RE

Illustrations: Cédric Anamoutou, Rodolphe Bax, Solenn Boucher, Lorien Boujot, Thierry Brochart, Audrey Cartraud, Marie-Laure Chaurand, Christophe Caumes, Nicolas Defavri, Design System, Jérôme Dubos, Johnny Egidi, Henrik Gronvold, François Jean, Peter Hodum, Benoît Lequette, Stéphane Michel, Gérard Millischer, Camille Payet, Kiko Peltier, Patrick Pinet, SEOR, Djamila Sidat, Bénédicte Silotia, Patxi Souharce, Yahaia Soulaïma Mattoir, Julie Tourmetz, Martin Riethmuller, Audrey Vélia, Guillaume Verbeke, Lionel Walter Rothschild

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