ANNUAL REPORT
2018

28th March 2019

The Mauritian Wildlife Foundation

The Mauritian Wildlife Foundation (MWF) is a Registered Charity established in 1984. MWF works in close cooperation with the Government of Mauritius and the Rodrigues Regional Assembly, formalized in separate memorandums of understanding. The headquarters is located in Vacoas, Mauritius and the Rodrigues branch is based in Solitude. MWF is the only Mauritian NGO to be exclusively concerned with the conservation of terrestrial endemic species and their habitats, and in Rodrigues has a specialization in habitat restoration. The principal objective of the organization is to save threatened native and endemic species from extinction.

Achievements

MWF's best known achievement is the saving of the Mauritian Kestrel. The MWF, has in recent years, brought the Pink Pigeon, the Echo Parakeet and the Mauritius Fody back from the brink of extinction. MWF's work in the area of captive-breeding and hands-on wild management of endemic animals is of internationally high repute. Our expertise is also being used in Rodrigues to address problems caused by degradation of habitat. Here we are propagating native plants in nurseries and planting them out to restore vegetation communities. The Foundation also works actively to restore offshore islands, by removing exotic vertebrates and plants and by restoring vegetation and vertebrate communities. The MWF is currently working on several islands including Ile aux Aigrettes, Round Island, Ile Cocos and Ile aux Sables. All of these are high profile projects of national and global biological significance. The MWF believes that the work it is doing benefits the Mauritian nation both for the present and future generations. Most of MWF's projects are of international importance in the conservation of biological diversity and are therefore placing Mauritius at the forefront of the Conservation world giving a high profile to any projects, which need funding. The MWF is raising the profile of conservation among tourists through the Eco-tourism activity conducted on Ile aux Aigrettes. The MWF promotes local capacity building and provides employment through its activities. The Mauritian Wildlife Foundation wishes to remain a strong, vibrant and innovative organization.

MWF's Missions

• To save threatened Mauritian species through the restoration of entire ecosystems.
• To seek new information through field research, data management, captive studies and scientific collaboration for direct application to restoration methods and management.
• To share knowledge gained through restoration programs with fellow Mauritian and international conservationists.
• To share the joys and benefits of native wilderness and wildlife with the Mauritian people.
• To secure the future of Mauritian species through income generation and sound management of human, fiscal and capital resources.

Organizational Structure

MWF is governed by a Council of 12 members, made up of prominent Mauritian businessmen and women, representatives from the Mauritian Government's National Parks & Conservation Service, the Durrell Wildlife Conservation Trust, Chester Zoo and other international partners. MWF employs 84 Mauritian staff at all levels of responsibility, and up to 8 expatriate staff. Their work is supported by up to 25 Mauritian and expatriate self-funded volunteers. MWF and its Council are also advised by a number of scientific associates from organizations that fund or support it, namely The Durrell Wildlife Conservation Trust, The International Zoo Veterinary Group, North of England Zoological Society, the World Parrot Trust (UK), the Institute of Zoology (UK) and various universities.

Significant Events of 2018

Following MWF's formal application for consideration as a Partner and an assessment by Dr Mark Anderson, CEO of BirdLife South Africa in May 2018, MWF was admitted as a BirdLife Partner in December 2018.

In October 2018, MWF (Rodrigues) received the Philadelphia Zoo's 'Global Conservation Award' during the 9th Annual Global Conservation Gala held on October 4, 2018. It is an occasion that recognises extraordinary individuals and organisations doing extraordinary things. Dr Tatayah accepted the prize on behalf of the organisation.

The Pink Pigeon, Gunther's gecko and Keel-scale boa were Downlisted to 'Vulnerable'.

The Mauritius Fruit Bat was uplisted to Endangered. This is the direct result of the official culling conducted in 2015 and 2016, and the parallel illegal killing of fruitbats.

Birds

Mauritius Kestrel

Background

The Mauritius Kestrel (*Falco punctatus)* is unique to Mauritius and is one of the nine endemic bird species still left on the island. The species was saved in-extremis with an increase from just four birds in 1974, including a single breeding female, to a peak of about 800 individuals. It has become a world conservation icon as it is recognised as the most successful recovery programme in the world of an animal species and the programme remains MWF's proudest achievement.

However, because of the degradation of the Mauritian native forests the kestrels are now found only on the eastern and western part of the island where they continue to face the effects of habitat degradation and predators. The eastern population has been monitored constantly since the re-introduction of birds from 1988 to 1993 and has been healthy and stable for the past decade. However, the western sub-population suffered a decline and MWF had to resume monitoring there in 2008 after an island wide survey found a drastic reduction in kestrel numbers from the estimated 800 to around 300 birds. The findings sadly confirmed the disappearance of introduced kestrels from the Moka Mountain Range. The current monitoring has enabled us to identify the management which is required to reverse the downward trend in numbers and secure the population. Measures include placing more nest boxes in suitable habitats to increase breeding pairs, studying the genetics of the populations to identify if certain bird's genes need to be introduced into the other sub-population and hand-rear birds to boost population numbers and to reintroduce birds into new nesting areas. The field team will harvest eggs and/or chicks from nests in very tall trees. The eggs and chicks will be hand-reared at the Gerald Durrell Endemic Wildlife Sanctuary in Black River (GDEWS) under the supervision of staff from the Zoological Society of London, and then moved to nest boxes in the new release sites (like Bel Ombre) for a period of adaptation before leaving the box to go into the forest.

Releases have been done in Bel Ombre over the last three years; eggs were harvested from the east coast and were incubated and hand reared at GDEWS, and then the chicks were released in nest boxes in Bel Ombre, and they were fed every day until they reached independence. In 2016 five birds were released, in 2017 21 birds were released and in 2018 a further 21 birds were released.

The latest scientific findings illustrates that there is no room for complacency and we still need to look after the Mauritius Kestrels.

Main Actions

- Population monitoring in the west, south and east was carried out as usual
- Hand-rearing and hacking from nest boxes of Kestrels was carried out at Bel Ombre
- 36 eggs were harvested from the eastern population, 22 eggs were fertile; from these 21 chicks were reared to fledglings
- 21 birds were released into the wild at Bel Ombre forest from 6 nest boxes; this puts the total number of kestrels released in Bel Ombre to 47 in the last three years.
- Birds were healthy and were fed mice and birds. They will be fed until they are 100 days old and independent.

Pink Pigeon

Background

The Pink Pigeon (*Nesoenas mayeri*) is one of the world's rarest pigeons. Only 9 wild birds were known at its lowest point in 1990. In the last 25-30 years, an integrated management approach of captive breeding, releases, habitat restoration and predator control has seen the population recover to approximately 470 wild birds. Whilst the conservation work to date has saved the species from imminent extinction, MWF cannot relax in its efforts and reduce the level of support. The original causes of the species' rarity, mainly restricted and degrading native habitat and introduced predators, still prevail and unless we continue to manage the effects of these limiting factors, the Pink Pigeon may face the prospect of extinction once again. There is one subpopulation of Pink Pigeons established on the offshore island of Ile aux Aigrettes and six more in the Black River Gorges National Park.

Two of these sites, Pétrin and the Lower Black River Gorges, are open to the public and the birds can easily be seen. Additional subpopulations are planned in the future in areas of good quality native forest habitat. In 2017, 30 Pink Pigeons were released in Ferney Valley. In 2018, 50 Pink Pigeons were released in Ebony Forest, 30 in January to April 2018 and 20 in November to December 2018. These releases will increase the area occupied by Pink Pigeons and to help increase the population size to over 600 birds, a figure believed to be the minimum viable population size for an avian species. To provide birds for the additional subpopulations and to provide genetic diversity to the current populations, a captive population of Pink Pigeons has been set up at the Gerald Durrell Wildlife Endemic Sanctuary. The offspring of these birds will be released into the wild. In 2018, 6 pairs of pigeons were used for the captive breeding and 15 young birds were obtained.

There is an ongoing study supported by our University partners to consider whether it is justified to re-introduce birds from European zoos with genes that are missing or underrepresented in the wild in Mauritius. Six birds have already been quarantine to be sent to Mauritius in 2019. The genetic management of the Pink Pigeon is an indication of success and maturity of the project, and very few conservation initiatives worldwide are at this stage of management.

In November 2018, the Pink Pigeon was downlisted from endangered to vulnerable. (see: file:///C:/Users/mwfvi/AppData/Local/Microsoft/Windows/INetCache/Content.Outlook/U11YRACB/Pink%20Pigeon%20article%20BirdLife%20Magazine.pdf).

Main Actions

- Populations were managed as usual at 9 sites with an estimated population of 470 birds
- Carried out captive breeding and hand rearing of Pink Pigeons at the Black River Aviaries with the use of Barbary doves as foster parents
- 56 Pink Pigeon eggs were laid, 12 were infertile and 15 fledglings were obtained at GDEWS
- Translocation and release of 50 Pink Pigeons to Ebony Forest.
- Pink Pigeons breeding at Ferney, 9 Ferney born Pink Pigeon were ringed
- Pink Pigeons breeding at Ebony Forest, 1 Ebony Forest born Pink Pigeon was ringed
- Preparation for release of captive bred Pink Pigeon in Ile aux Aigrettes as from March 2019.

Echo Parakeet

Background

The Echo Parakeet (*Psittacula eques)* is the last endemic parrot of the Mascarenes and was close to extinction as the wild population numbers were estimated at around 20 birds in the mid-1970s. The Echo Parakeet is closely associated with good quality native forest, and the decline of the bird has been due to habitat decline and degradation, which cause shortage of food and tree cavities for nesting. Predators and diseases severely impact on the survival of Echo Parakeets.

The population is currently close to 800 birds thanks to a conservation programme that has included rescue of eggs and chicks in the wild, captive breeding and rearing, releases into the wild, pest and disease control, supplementary feeding nest site provision and habitat restoration. The Echo Parakeet is arguably the most successful parrot restoration programme and is a model for the rescue of other parrots worldwide. The immediate challenge is overcoming Psittacene Beak and Feather Disease (PBFD), a deadly viral disease, whilst long term, it is large scale habitat restoration that will provide for natural food and nest sites. Despite the disease, the population is still growing which would indicate that the current minimum management is adequate. However, the total population is found in the Black River Gorges National Park and in order to further secure the Echo Parakeet from a localised event which could severely impact on the population, a suitable area with good quality native forest has been identified in the Bambou Mountains.

The translocation started in February 2015: 14 birds were released in 2015, 29 birds in 2016 and 30 birds in 2017. At the end of 2017 we had 13 birds regularly visiting the feeding hoppers in the Ferney Valley.

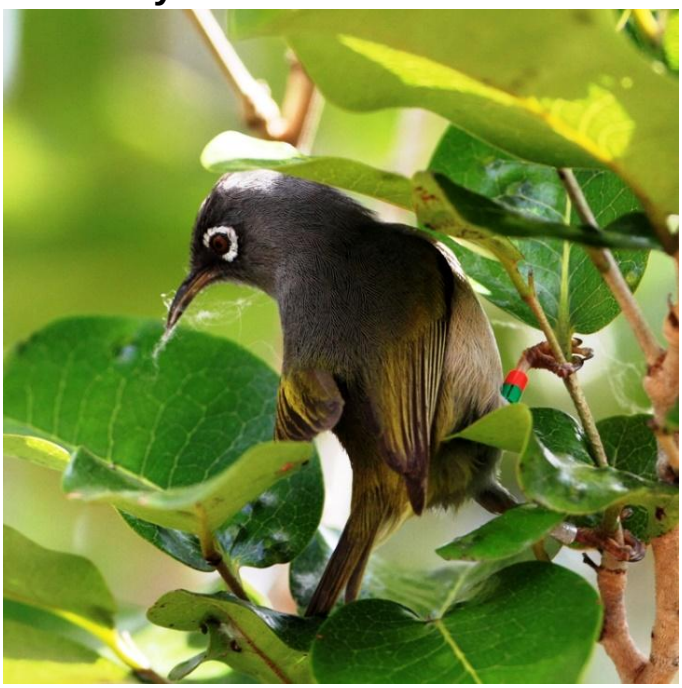
In 2018 translocation to a new area of suitable forest in the south west, Ebony Forest in Chamarel, was initiated. In total, 26 birds were released in Ebony Forest in 2018. Further translocations will be done to Ebony Forest in 2019, efforts are already underway, and 19 birds have been translocated so far.

Monitoring of the Echo Parakeet population will locate suitable birds and supplementary feeding will continue to support general bird fitness and breeding success. Our university partners are undertaking a number of studies which look at PBFD, supplementary feeding, genetics and population dynamics all of which will inform conservation actions in the future.

Main Actions

- Monitoring and supporting the population in the Black River Gorges National Park was ongoing.
- Estimated population: over 800 birds.
- A total of 73 birds were released in the Ferney Valley from 2015-2017. In the Bambou Mountains, Echo Parakeets are seen regularly at the ‘Ferney gardens’ near the visitor centre, in a fruit plantation in Domaine de l’Etoile and in Vallée de l’Est. The first Echo Parakeet nest site in the Bambou Mountains was found in a tree cavity in Vallée de l’Est this breeding season (2018/19), though unfortunately the attempt failed at chick stage. Between January and March 2018, 26 Echo Parakeets were released in Ebony Forest.
- The 2019 translocations to Ebony Forest are underway; 19 birds have been translocated to date.

Mauritius Olive White Eye



Background

The Mauritius Olive White-eye (*Zosterops chloronothos*) is thought to be the rarest and most threatened of the endemic Mauritian birds. The number of Olive White-eyes has fallen drastically since the early 1970s, coinciding with the last large-scale forest clearance on Mauritius. In 2005 conservation action was considered essential to decrease the risk of extinction of this attractive small bird whose habitat had dwindled to a small known area in the Black River Gorges National Park. The Mauritian Wildlife Foundation (MWF) aims to save the Olive White-eye through protecting the area they live in and maintaining a population of birds on the predator free island of Ile aux Aigrettes. Our biologists based in Combo (Black River Gorges National Park) identify nests and protect them from predators, as well as monitor nesting success to increase our knowledge of threats to the species. From 2005 to 2009 MWF rescued eggs and chicks from falling wild nests to incubate eggs, hand raise chicks and release fledglings onto Ile aux Aigrettes. The population is now around 60 birds and may have reached carrying capacity. A team of biologists monitor the progress of the birds on the island to understand the species biology and habitat requirements. It is now possible for the public to have a glimpse of the Olive White-eye, one of the most threatened birds in the world, on a visit to Ile aux Aigrettes.

Main Actions

- Research to Improve supplemental feeding on Ile aux Aigrettes carried out, investigating replacing perishable food in the feeds. This was stopped as it had a negative impact on the breeding of birds. We are now investigating if the bird can be fed every 2 days.
- A Mainland island grid was set up in Brise Fer in the Black River Gorges National Park in October 2018, covering an area of 5.6 ha. It consists of 115 A24 GoodNature self-resetting traps to control rodents, 31 wooden box traps to control feral cats and mongooses and 5 large mammal traps.
- The agreed way forward to protect the Olive White-eye was the creation of a population in a mainland island of 10 ha.
- Discussions concerning translocation of Olive White-eye to the mainland island and Flat Island took place.

Mauritius Fody

Background

The Mauritius Fody (*Foudia rubra*) is a small charismatic weaverbird endemic to Mauritius. The number of Fodies has fallen drastically since the early 1970s, coinciding with the last large-scale forest clearance on Mauritius. In 2002 conservation action was considered essential to decrease the risk of extinction of this attractive small bird whose habitat had dwindled to a small known area in the Black River Gorges National Park. The Mauritian Wildlife Foundation (MWF) aims to save the Mauritius Fody through protecting the area they live in and maintaining a population of birds on the predator free island of Ile aux Aigrettes. Our biologists were based in Pigeon Wood (Black River Gorges National Park) to identify nests and protect them from predators, as well as monitor nesting success to increase our knowledge of threats to the species. Having, identified predators as the main threat to the species, concrete action was undertaken from 2002. From 2002 to 2006 MWF rescued eggs and chicks from failing wild nests to incubate eggs, hand raise chicks and release fledglings onto Ile aux Aigrettes. The population is now around 400 birds and may have reached carrying capacity. A team of biologists monitor the progress of the birds on the island to understand the species biology and habitat requirements. It is now possible for the public to have a glimpse of the Mauritius Fody on a visit to Ile aux Aigrettes.

Main Actions

- One outbreak of avian pox was recorded on Ile aux Aigrettes but was less severe than in 2017, less birds were affected.
- Discussions were held about the way forward to protect the Mauritius Fody, with the creation of a mainland island using Goodnature traps at Brise Fer
- Discussions concerning translocation of Mauritius Fody to the mainland island and Flat Island took place.

Mauritius Cuckoo-Shrike

Background

The three year island wide survey of Passerines confirmed the decline of the Mauritius Cuckoo-shrike (*Coracina typica*) both in distribution and total population size. Preliminary observations indicate the decline is caused by predation of eggs and chicks. Urgent action is required to address this decline. A study has identified that there is habitat in the Ferney Valley for the Mauritius Cuckoo-shrike, which is currently absent there. The Mauritius Cuckoo-shrike is a declining endemic passerine that was once found in the valley, but it was probably extirpated in the 1950's by organ chloride pesticides no longer in use. To re-introduce the cuckoo-shrikes, hand-rearing birds is thought to be the best method as it will allow us to increase the probability of birds fledgling. From 2014, at the start of the season, a field team of two staff have been based in the Black River Gorges National Park to locate nests and clutches of eggs and chicks. The field team harvest eggs and/or chicks form nests in very tall trees. The eggs and chicks are hand reared at the Gerald Durrell Endemic Wildlife Sanctuary (GDEWS) in Black River under the supervision of Chester Zoo (UK) staff, and then moved to the Ferney Valley for a period of adaptation in a release aviary before being released into the forest. In the 2015/16 season, 5 birds were translocated to Ferney Valley and 2 were released. In the 2016/2017 season, 9 birds were released in Ferney Valley. In the 2017/18 season, 6 birds were translocated to Ferney Valley and 5 were released.

Main Actions

- Further tested Good Nature traps in Brise Fer to control rats, however, results at spacing of 50 m were found to be less effective than at 25 m, thus we have now used a 25 m spacing in the mainland island.

- Surveyed birds as from September 2018 in the wild only, in the mainland island and in the control grid (no predator control). One fledgling was seen in the mainland island.
- Successful hand rearing of Mauritius Cuckoo-shrike chicks: 6 in 2017-2018.
- Discussions and preparations for resuming releases of Cuckoo-shrike in Ferney Valley around December 2019.

Gerald Durrell Endemic Wildlife Sanctuary (GDEWS)

Background

The Gerald Durrell Endemic Wildlife Sanctuary (GDEWS), also known as the Black River Aviaries, is a captive breeding centre set up for saving endangered endemic birds and bats. GDEWS is a small facility but yet has been critical for saving near extinct animals. The centre supports the fauna conservation programmes by providing facilities to captive breed, incubate and hand-rear animals to reintroduce to the wild to boost populations, providing training facilities for aspects of animal husbandry and to take care of sick animals. It also keeps captive populations of animals for research purposes to better understand their behaviour, diets and habits which in turn support efforts to maintain the wild populations and guide conservation actions. Additionally, GDEWS houses a collection of Critically Endangered endemic plants in a secure environment (e.g. palmiste blanc de l'ile Ronde *Dictyosperma album* var *conjugatum*, bois puant *Foetidia mauritiana*, bois tambour *Tambourissa quadrifida*) where seeds can be collected for propagation for the MWF Rare Plants project and subsequent reintroduction to the forest.

In 2015 we started an intensive breeding programme for the Pink Pigeon where pairs of birds are kept in captivity and their offspring released into the wild to create new sub populations of birds as well as reinforcing current populations, for example, on Ile aux Aigrettes. In 2018, 6 pairs of pigeons were used for the captive breeding and 15 young birds were obtained. In September 2019 hand-rearing of cuckoo shrikes is planned along with the Mauritius Kestrel to support their conservation. In 2016, 5 Cuckoo-shrikes and 5 kestrels were successfully reared at GDEWS. In 2017, 6 Cuckoo-shrikes and 21 kestrels were successfully reared at GDEWS. In 2018, 21 kestrels were successfully reared at GDEWS. The centre is managed collaboratively by the Mauritian Wildlife Foundation (MWF) and the National Parks and Conservation Service with specialist assistance from abroad (e.g. Chester Zoo, Durrell, Zoological Society of London, Wildlife Vets International). What makes the centre so successful is the cooperation and interaction of experts sharing their knowledge and the close collaboration between MWF and NPCS.

Main Actions

- New aviaries are being built to be able to hold more Pink Pigeons pairs.
- Captive breeding and hand rearing of Pink Pigeons at GDEWS with the use of Barbary Doves as foster parents continued
- Old generator room will be modified to accommodate insect breeding
- 15 Pink Pigeon squabs were hand-reared
- 21 Mauritius Kestrel chicks were hand-reared to 30 days
- Hand rearing of rescued adult and baby Mauritius Fruit Bats and stranded seabirds continued.

Mainland Island at Brise Fer

Background

A mainland island is an area where rats are controlled intensively using self-resetting traps. The traps would lower rat abundance significantly and allow the creation of new sub-populations of endangered passerines in new suitable areas while also helping the remaining bird populations to survive.

The species which would benefit the most are the Olive White-eye and Mauritius Cuckoo-shrike. The benefits for other species would also be quite significant as rats impact negatively on other endangered birds, plants and invertebrates.

Two pilot studies with A24 GoodNature® traps were carried out. The first pilot placed the distance between the traps at 25 m and this maintained a rodent free zone. The second pilot extended the distance to 50 m but this was found to be inefficient at keeping a rodent free zone.

A project proposal was submitted by MWF to National Geographic Society and entitled 'Creating an island on an island' and funds were obtained to create a Mainland Island of 5 ha.

The Mainland island grid was set up in Brise Fer in the Black River Gorges National Park (Mauritius) in October 2018, covering an area of 5.6 ha. It consists of 115 A24 GoodNature® self-resetting traps to control rodents, 31 wooden box traps to control feral cats (*Felis catus*) and mongooses (*Herpestes auropunctatus*) and 5 large mammal metal traps for pigs (*Sus scrofa*). Box traps for cats and mongoose were placed at a distance of 50 m and pig traps were placed at the four corners of the grid and with one in the middle.

A control grid of the same size was set up, 100 m away from the mainland island grid, consisting of 30 points of sandpits and 30 of chew cubes, as the predator index. In the control there was no trapping or GoodNature® traps. The sand pits and chew blocks had a spacing of 25 m between them. Every week, the sand pits are set and chew cubes are placed on the grid points and checked after 24 hrs on fixed days.

The GoodNature® traps are checked every month to see if the gas canister resetting the trap needs to be changed. The box and pig traps are checked every morning after being set and recorded for any activity. Traps are reset, if required.

To obtain a predator index and show its variation over time, 30 sand pits and 30 wax and chocolate chew cubes are placed randomly on the grid points in the mainland island grid every week for 24 hrs on fixed days.

Preliminary results show that the rodent index monitored by chew cubes reduced by 48% in the mainland island and by 6 % in the control during the first 3 months of monitoring. This indicates that the GoodNature® traps are effective at reducing rat density in the mainland island. Furthermore, more pairs of Mauritius Cuckoo-shrike *Lalage typica* (8 pairs) were found in the mainland island compared to the control (no predator management, 4 breeding pairs of birds recorded) between September 2018 and January 2019. One juvenile Mauritius Cuckoo-shrike was produced in the mainland island compared to none in the control.

Main Actions

- Maintain the mainland island grid with a low index of predators
- Monitor Cuckoo-shrike population and breeding to see in the mainland island has a beneficial effect on these.
- Consider translocation of passerines to the mainland island.

Reptiles

Monitoring and translocations

Background

The small islets around Mauritius support numerous unique species that were once abundant on the main island, but are now found nowhere else in the world. Several species, particularly reptiles, are now restricted to single island populations where they are at great risk of extinction from the threats that caused their loss elsewhere. Many other endangered Mauritian animals and plants are dependent upon the unique geckos and skinks for their survival, such that their preservation is crucial for sustaining island communities and local biodiversity. Since 2006 MWF has been reintroducing threatened reptile species back to other islets. A total of 2256 reptiles from seven species were moved to seven different released sites. Major threats (e.g. introduced predators, habitat loss and habitat degradation) have been addressed to lessen the risks of extinction and the reptile reintroductions contribute to the rebuilding of lost Mauritian ecosystems. These actions are enhancing the distribution and abundance of endangered reptiles. To date the distribution and abundance of five threatened Mauritian reptile species have been increased by an average of 85% and 55% respectively and the extinction of the orange-tailed skink has been prevented. To maintain this success MWF needs to continue the high level of research and monitoring on the islands to direct appropriate conservation management decisions; detect and adapt to emergent threats and to continue to build upon what has been started for the conservation of endangered island communities.

Günther's gecko

- The 2017-2018 breeding season was very successful for the re-introduced population on Ile aux Aigrettes (IAA) with an increase in both number of eggs found and hatching success as compared to the previous season. A total of 95 eggs were found with a hatching success of 87.4% hatching.
- The hatching success of Günther's gecko eggs on Round Island for 2017-2018 breeding season was 88% which is about the same as for IAA. This indicates that there are currently no threats on Günther's eggs from invasive species on Ile aux Aigrettes.
- Genetic samples were collected from Günther's gecko on IAA to investigate how many of the founders has contributed to the genetic stability of the population.
- The slight increase of the Günther's gecko population on Round Island and the second population established on IAA has contributed to down-list the Günther's gecko from Endangered to Vulnerable on the IUCN Red List of Threatened Species in 2018.

Telfair's skink

- Ile aux Aigrettes (IAA): Unable to estimate abundance as too few skinks remain following the invasions of non-native predators: dogs (threat removed), tenrecs (still present) and crows (still present). Less than 100 adult skinks remain. Despite trapping, it has proved to be very difficult to eradicate tenrecs from the island and no further skink translocations will occur until that happens.
- Gunner's Quoin (GQ): The reintroduced Telfair's skink population was found to be at their highest abundance in 2018 with preliminary results from December 2018 annual survey indicating 25,000 adult skinks on the island as compared to 14,000 adults in December 2017. To note that 350 skinks have originally been translocated to GQ and with no pressure from invasive species there, the species is thriving as compared to IAA.

Keel-scaled boa

- 25 boas were found during the annual monitoring trip on Gunner's Quoin in December 2018 and the health assessment show that they are healthy.
- The significant increase in the number of adult boas on Round Island over the past few years and the second population that has become established on Gunner's Quoin since translocations in 2012 and 2014 has allowed us to down list the species from Endangered to Vulnerable on the IUCN Red List of Threatened Species in 2018.

Bojer's skink

- Annual Capture Mark Recapture surveys were conducted. The abundance estimate of the reintroduced Ile de la Passe population was estimated at 412 (95%CI: 234-814) individuals and the source population on Ile aux Vacoas was estimated at 305 (95%CI: 170-626) individuals. Due to poor weather, recapture rates were too low and population abundance could not be obtained for the reintroduced population on Ile aux Fouquets.
- Health assessment showed that the skinks on all three islands are healthy.

Lesser night gecko

- Capture Mark Recapture surveys were conducted on the translocated population on Ile Marianne and from source population on Ilot Vacoas. Estimates of population size were 331 (95%CI: 157-810) on Ile Marianne. No abundance estimate could be obtained for Ilot Vacoas due to poor weather during the expedition. However no sign of decline in abundance was noted.
- Health assessment showed that the geckos on both islands are healthy. Ile Marianne geckos had higher health scores as compared to 2017, which shows the re-introduced population is thriving.

Orange-tailed skinks

- A total of 172 skinks were seen, including 134 detections during the Visual Estimate Surveys (VES) on Gunner's Quoin. The number of orange-tailed skinks is not high enough to obtain an abundance estimate using usual survey methods. However, VES surveys allows us to calculate the number of skinks sighted per hour to compare to previous years from which we can follow relative change over time. For example, an unusual decrease in encounter rate might indicate fewer skinks within the population. The encounter rate for 2018 was 0.959 (95%CI: 0.935, 0.983) showing a slight increase as compared to 2017.

Bio-security work on the islets

- No novel exotic animal introductions were detected during trapping and searches on any of the islands we work on.

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Tortoises

Background

The tortoises had an important role in the native ecosystem as browsers, grazers and seed dispersers. Many native and endemic plants have evolved with and are adapted to the presence of tortoise grazing and seed dispersal. Since the extinction of our endemic tortoises, all the functional roles fulfilled by giant tortoises in the ecosystem have gone missing. To remediate this we are using a close relative of Mauritian giant tortoises, the Aldabra tortoises from Seychelles as replacement to re-activate those lost plant-tortoises interaction and helping in restoring the forests on two of the islands we work on: Ile aux Aigrettes and Round Island. The aim of this project is to manage 25 adult tortoises free-roaming on Ile aux Aigrettes and currently 673 free roaming tortoises on Round Island. Wild hatchlings produced from Ile aux Aigrettes' adult tortoises are collected and head-started in captivity on the island. They are on show to the public thus serving an educational purpose on Ile aux Aigrettes. The juvenile tortoises are then transferred to Round Island to create a tortoise population that will be self-sustainable. The tortoises on both islands are monitored closely and studies have been set up to assess their impact on the ecosystem.

Ile aux Aigrettes

- At start of 2018, 26 adult free roaming tortoises were monitored monthly. SH04 died in September hence at the end 2018; there were 25 adult free roaming tortoises on the island.
- The morphometric measurements of the adult free roaming tortoises was taken biannually to assess their health and they were found to have good body condition.

- Vegetation surveys were done biannually on the 20 exclosures and their control, to monitor effect of the tortoises on the vegetation.
- Hatchlings and juvenile Aldabra tortoises were collected from the wild and placed in the tortoise nurseries on Ile aux Aigrettes.
- Enclosed tortoises were fed and water provided daily. Morphometric measurements were carried monthly for each tortoise to assess their health. Underweight tortoises were given supplementary feeding and calcium supplements.

Round Island

- By the end of 2018, over 500 free-roaming Aldabra tortoises were present on Round Island. One dead adult Aldabra tortoise bones was found in 2018.
- The morphometric measurements of the free-roaming tortoises were carried out twice per year to assess their condition and health.
- Daily sightings and monthly quadrat searches were carried out in the seven habitat types to obtain abundance, movement and distribution data.
- Fixed point photos and vegetation surveys were carried out to monitor impact of tortoises on Round Island vegetation.
- Wild hatchlings were found on Round Island which were all were tagged and released in the wild.
- A grid survey system was devised for Round Island for locating tortoises in a systematic way. The island was divided in 1 ha grids to facilitate the survey effort. This system is currently proving very effective in displaying the distribution of tortoises across the island.

Islands

Round Island

Background

Round Island, 219 ha, is undeniably Mauritius' most important island for conservation with unique or significantly large remnant populations of endemic plants, reptiles and native seabirds. The island was spared from predators such as cats and rats that have caused irreversible damage elsewhere, but goats and rabbits were introduced in the early 19th century that caused severe loss of soil and vegetation. Poaching of seabirds was a common activity on the island. By 1986, the herbivores were eradicated, and closer management put an end to seabird poaching by 1997. A field station was built in 2002 and this has allowed MWF to achieve a greater impact to protect and restore the island, control or eradicate invasive plants and restore over 15 ha of the island. A permanent staffing of the island has supported reptile rescues through reintroduction to other islands including in 2012 the translocation of the Round Island boa, a greater understanding of seabirds including resolving the identity of the Round Island Petrel (*Pterodroma arminjoniana*), and a host of field studies. The restoration of Round Island has been initiated, but we need to continue to restore the island, conserving its unique plants and animals. This will include saving from extinction two endemic plants that are in precipitous decline (*Aerva congesta* and *Phyllanthus revaughanii*), tracking of seabirds to understand where they travel to (thus identifying Marine Important Bird Areas and assessing the impact of global climate change), monitoring the response of threatened reptiles to restoration activities, curbing soil erosion and planting greater areas of the island with native plants which will benefit the resident endemic animals. Round Island has been an important training and research ground for local and international restoration practitioners and scientists. Being one of very few islands in the world to have never been invaded by rats or non-native reptiles, combined with ongoing extensive restoration work and pioneering research on highly threatened and unique animals and plants, the global significance of Round Island is increasing as a leading site for conservation and scientific excellence.

Red-tailed Tropicbird

- 1,232 birds (445 juveniles and 787 adults) were found during monthly surveys and a total of 172 birds were ringed (47 juveniles and 125 adults).

Round Island Petrel

- 1,145 birds (316 juveniles and 829 adults) were found during monthly surveys and a total of 105 birds were ringed (63 juveniles and 42 adults) as part of the long-term monitoring of the Round Island Petrel population
- 24 geolocators were recovered and nine deployed as part of the tracking research conducted with ZSL.

Keel-scaled Boa

- A total of 167 boas (128 adults and 39 juveniles) were found during the monthly quadrat surveys as part of the long-term study to monitor the health, survival and abundance of the snake.
- Another nine incidental boa encounters (nine adults) were also recorded.
- 65 boas were PIT-Tagged for the year.

Günther's Gecko

- 17 Günther's Gecko sites were monitored fortnightly.
- 165 eggs (148 paired and 17 single) had been found by December 2018 of the 2018/2019 breeding season, of which 81 had hatched.

Plant restoration work

- Approximately 67,500 seeds (66,100 from Round Island; 1,400 from the mainland) of 20 hardwood species and four non-hardwood species were collected.
- Approximately 1,000 seeds of *Latania loddigesii* were collected and sent to NPCS.
- 8,295 seeds from 23 species were sown.
- 897 seedlings which germinated from the nursery were potted.
- 141 seedlings collected in the field were potted.
- 317 *Diospyros egrettarum* from NPCS Robinson nursery and 239 seedlings of seven species from IAA nursery were potted.
- 1,026 plants were planted, with 987 in the lower palm rich habitat, 29 around the field station, six in the mixed weed and four within the gullies. This was made up of 746 hardwood plants of 17 species and 280 softwoods of five species.
- By the end of December 2018 the Round Island nursery contained 1,765 plants of 27 species.
- Seven sites of the rare plants *Aerva congesta*, *Phyllanthus revaughnii* and *Phyllanthus mauritianus* were checked monthly. Only one site of *A. congesta* and two sites of *P. revaughnii* were active.
- Wardens have regularly worked in Ile aux Aigrettes nursery, collecting seeds for Round Island and collecting and potting seedlings from Ile aux Aigrettes, Morne Sèche and Mt Brisé to build up a backup for the planting season.
- Dr Phil Lambdon finished the vegetation survey across the island as part of the Mohamed Bin Zayed project.

Weed management

- *Chromolaena odorata, Heteropogon contortus*, *Lycopersicon esculentum* and *Leucaena leucocephala* sites were checked on a monthly basis.
- 30 new sites of *C. odorata*, two new sites of *H. contortus* and one new site of *L. leucocephala* were found in 2018.
- By the end of the year there were 56 known sites for *C. odorata* plus one megasite encompassing several old individual sites, 16 for *H. contortus* and one for *L. esculentum* being monitored.
- 33,978 seedling, sapling and adult plants of *C. odorata,* 119 *H. contortus*, eleven *L. esculentum* and two *L. leucocephala* were found in 2018.
- Two *Withania somnifera* and eight *Nicotiana tabacum* were also found.

Infrastructure

- A new water filter system (4 filters plus a pump) was installed in the field station.
- The cyclone equipment was reviewed, maintained and upgraded: protective case and panels for solar panels, new panels for windows, new anchor points and anchor plates.
- New benches were built in the nursery. Some special ones were set aside to provide protection to rare or sensitive plants.
- A raised bed was built in the nursery to trial propagation methods for the rare plants.
- A cupboard and drawers were built in the tool-shed to store and protect tools and spare parts.
- Two technicians from SFER came on the island in March to service the solar panel system.

Ile aux Aigrettes

Background

Ile aux Aigrettes is a 26-hectare low coralline island, and has been declared that Ile aux Aigrettes is a 26-hectare low coralline island and has been declared a Nature Reserve since 1965 due to its remnant Mauritian dry coastal forest. Ecological restoration started in 1985 with the aim of restoring the coastal vegetation community and to replace the missing components of the flora and fauna. Through weeding of introduced species and planting of native species, including rare and critically endangered plants that have been propagated and reintroduced on the island, we are restoring the ecosystem. Around 30,000-40,000 plants per season/year were planted from 1998 to 2003, although the forest is now regenerating well naturally, specialised planting still continues to enhance the species diversity, to provide food for the native species reintroduced on the island and to provide habitat for seabirds and reptiles. The island is also used to conserve suitable lowland species that are critically endangered in the wild. Maintenance weeding continues through employment of a team of labourers living in the vicinity. As a part of a sustainable conservation programme, the island is open to visitors through our ecotourism and environmental education programmes. Students, tourists and the general public learn about the habitat restoration project, in order to raise their awareness of the conservation of the threatened Mauritian flora and fauna.

Projects on the island

- Pink Pigeon
- Mauritius Fody
- Mauritius Olive White-eye
- Günther’s Gecko

- Telfair's skink
- Aldabra Tortoise
- Learning with Nature Education programme
- Ecotourism

Rare Plant protection

- Rare Plant Nursery
- Field Gene Bank
- Forest: Weeding and Planting

Invasive Alien Species control and bio-security

Monthly monitoring of sooted tiles and chew cubes around the island for rodent detection continued. Nothing was detected. Shrew trapping continued around reptile nurseries.

Invasive species work on Ile aux Aigrettes

18 new traps (10 cage traps and 8 pitfall traps) were acquired in January 2018 with a total of 31 traps deployed all over the island in 2018. A total of 10 tenrecs were caught this year. Despite continued efforts tenrecs are still present on the island.

Ile Cocos & Ile aux Sables

Background

Ile Cocos and Ile aux Sables, two sandbar islets to the West of Rodrigues, of 15 and 8 Ha respectively, are renowned for their breeding seabirds - water birds as well as migratory birds and occasional prospecting seabirds. The islets are also the last place on Rodrigues where there is natural vegetation succession (from coastal strand to shrub to tree), and despite their small size hold several ecotypes (strand, grasses, marshes, forest). Ile aux Sables also support the only known breeding population of the Roseate Tern (*Sterna dougalli*) and population of bois mapou (*Pisonia grandis*) in the Mascarenes. By virtue of the biodiversity hosted by these islets, they are classified as an 'Important Bird Area for Africa' by Birdlife International. The Mauritian Wildlife Foundation (MWF) has had a long history of involvement with these islets, and has advised the Government in formal and informal capacities for over two decades on their management, giving advice on planting, weed control and on the management of the bird populations. In February 2014, the Rodrigues Regional Assembly (RRA) approved the up-scaled role of MWF for the conservation of the two islets, in particular Ile aux Sables and discussions on future plans have been ongoing. Despite their native biodiversity, the islets have been severely modified by man and the vegetation communities have been replaced to a great extent by casuarinas and coconut plantations, damaged by invasive exotic plants and animals, coastal erosion, and by inadequately managed human visitation.

Main Actions

- Clean up of the islets
- 588 plants were planted in 2018
- Plant Monitoring of 10 x 10 m quadrats
- Seabird censuses were carried out four times during the year

Future Island Projects

Flat Island

- We continue to promote our vision when appropriate.
- The future Global Environment Facility (GEF) 6 has included conservation work on Flat Island in the proposal which MWF would be involved in.

Gunner's Quoin

- Government is building a field station on Gunner's Quoin. MWF has voiced some concerns about the field station construction in terms of quarantine and manning once built, enquired about the restoration plan for the island and has offered its assistance where possible.

St Brandon

Background

Rich in native coastal flora and fauna, St Brandon's beaches are a favourite place for sea turtles (Hawksbill Turtle *Eretmochelys imbricata* and Green Turtle *Chelonia mydas*) to lay their eggs. Coconut trees can be found on a few of the St Brandon islands as well as native trees, shrubs and grasses. The coral and outer reefs are still in good condition. This archipelago has a huge range of marine biodiversity with important seabird colonies on the islets, and the shores are visited by migratory birds. Unfortunately, invasive alien plants and animals have reached the islets and are affecting the vegetation and breeding of seabirds. The islets are also affected by ongoing human activities. The project is the first step towards encouraging all stakeholders involved in St Brandon to develop and abide by a common Vision for the conservation of the archipelago. It is recognised that any actions carried out would not be effective unless Raphael Fishing Ltd, the Outer Islands Development Corporation (OIDC), and other relevant departments and Ministries of the Government of Mauritius support the actions. Thus, it is necessary to enter into discussions with the various stakeholders to agree a common vision and work together to establish guidelines and an action plan which all stakeholders will uphold.

Main Actions

- Funding received from the Critical Ecosystems Partnership Fund to help develop a common vision for the sustainable management of St Brandon
- MWF continues to consult widely to obtain views from the government, private sector, NGOs and members of the public about management of the islands' environment and natural resources, receiving constructive comments and criticisms from a wide cross section of respondents.
- An expedition to assess the feasibility of eradication of invasive species, planned for late 2018, has had to be postponed to early 2019.

La Vallée de Ferney

Background

Following the Strategic Grant obtained by the Mauritian Wildlife Foundation (MWF) from the UNDP GEF Small Grants Programme for the project «Optimising the Ferney Valley into a Mauritian biodiversity conservation and awareness hotspot», which has now been completed, MWF continues to work closely with the Vallée de Ferney Conservation Trust to monitor and manage the biodiversity and to advise on Flora restoration and ecotourism.

Under the UNDP Strategic Grant four endemic bird species were re-introduced to the Ferney Valley. Two of the species, the Echo Parakeet and the Pink Pigeon need a certain level of management which is provided from the Ferney Field Station. Supplementary feeding is provided to both species and the area around the field station protected with predator control. Nest boxes are provided for the Echo Parakeet. All species of birds are monitored.

Forest restoration of the Conservation Zone has made great advances in recent years and this needs to be maintained along with the plant nursery which supports the work. Advice, training & support for the Flora work including plant nursery, forest restoration (weeding and planting) and rare plant monitoring.

The objective for the Eco-tours is that the guides are well informed and deliver a professional standard of tour to visitors. The Mauritian Wildlife Foundation supports this objective in two ways, by reviewing the delivery of tours including coaching and via capacity building.

A yearly training plan is prepared and agreed with Ferney to cover the key areas of conservation information for the guides as well as providing some general knowledge of conservation in Mauritius.

La Valley de Ferney is the only site in Mauritius to offer Kestrel feeding daily which is supported by MWF having trained the birds and the staff to both feed and deliver commentary. This is an opportunity for the public to see a Mauritius Kestrel up close.

Fauna

Pink Pigeons

- Translocation and release of 30 Pink Pigeons to Ferney in 2017.
- Pink Pigeons breeding at Ferney, 9 Ferney born Pink Pigeons were ringed
- A total of 33 birds in the valley but 29 seen regularly.

Echo Parakeet

- Echo Parakeets were released at Ferney for three consecutive years from 2015 to 2017, with 73 birds released in total.
- 16 birds returned to their site of origin; two birds are confirmed to have died and 2 are presumed dead
- There could be up to 54 birds living independently on the East Coast
- Echo Parakeets are seen regularly at the 'Ferney gardens' near the visitor centre, in a fruit plantation in Domaine de l'Etoile and in Vallée de l'Est.
- The first Echo Parakeet nest site in the Bambou Ranges was found in a tree cavity in Vallée de l'Est this breeding season (2018/19), though unfortunately the attempt failed at chick stage..

Mauritius Cuckoo-shrike

- 19 birds were translocated up to March 2018.
- In July 2018 one adult male established a pair with a female which had been released earlier in the year. They were seen foraging, feeding and was nest prospecting but the nest was not found.

Mauritius Paradise Flycatcher

- A total of 32 birds were hard released in the valley.
- Trials were carried out with different ages and combinations of birds: Juveniles worked best.
- 3 birds returned to Combo.
- 56% of birds were not seen in the valley after release
- Translocations ended in January 2018 although another is planned for January 2019.

Flora

Weeding, Planting, Propagation of Plants

- Monthly visits carried out by the MWF Horticulturist
- Advice given where required covering plant nursery practices, propagation, weeding and planting
- Training given to Ferney staff

Ecotourism

- Reinforcement sessions were held on the Mauritius Kestrel feed presentation
- Guides were informed about the Echo Parakeet, Pink Pigeon, Mauritius Cuckoo shrike and Mauritius Paradise Flycatcher translocation.
- Guides received training on the Flora project as well as on some general conservation being carried out in Mauritius.
- Exchange sessions were organized with the Ile aux Aigrettes Rangers to compare the handling of their respective trails.
- An inauguration of educational signage was carried out on 25th August 2018.

Flora

Rare Plants Project

Background

Mauritius is home to 691 native species of flowering plants. 281 are endemic to the island, of these over 90% are considered to be threatened and about 100 species have less than 100 individuals in the wild. The project undertakes to propagate and plant the rarest species to increase their numbers and protect them from extinction. The Mauritian Wildlife Foundation (MWF) horticulturists search in forests and map the locations of these species and propagate the rarest plants by growing them from seeds, cuttings, and sometimes seedlings in the MWF nurseries at Pigeon Wood (Black River Gorges National Park), Ile aux Aigrettes and Round Island. The plants, when grown, may be planted in the Field Gene Bank found at Pigeon Wood or on Ile aux Aigrettes. This safeguards the remaining genetic diversity of the species and will provide propagation material in later years. Plants are also re-introduced to their original locations or to protected rediscovered plant species that were thought extinct and found new populations of rare plants. MWF holds the co-chair ship of the IUCN (International Union for the Conservation of Nature) Mascarene Islands Plant Specialist Group, with overview on Mauritius and Rodrigues from 2017-2020. The group brings specialists together and is working on completing the red-list of Mauritian plants.

Main Actions

Pigeon Wood Nursery and Field Gene Bank

- A list of 28 critically Endangered upland species were identified to be propagated between July 2016 and June 2019.
- Field visits and searches allow plant parts to be collected for propagation in the Pigeon Wood nursery.
- Several rare plants propagated in Pigeon Wood Nursery which have been re-introduced in protected areas and private conservation areas e.g. *Gouania tiliifolia* (at Mondrain, Perrier, NPCS arboretum), *Ficus laterifolia* (at Forestry Service and NPCS arboretum, Mondrain, Ebony Forest), *Pandanus macrostigma* and *Trochetia parviflora* (Ebony Forest), *Albizia vaughanii* (Chamarel), *Pandanus microcarpus* (Petrin), *Hibiscus boryanus* (Tamarind Falls) etc

Red Listing of Mauritian Plants

- The IUCN Red Listing has been compiled and finalized for the endemic plants of Mauritius, with the collaboration and input of the Mauritius Herbarium, National Park and Conservation Service and the Forestry Service with the support of the Missouri Botanical Gardens.
- We have worked out and finalized a list of 281 endemic species for Mauritius.
- Updates from the Mauritius Herbarium are being awaited.

Mondrain Nature Reserve

- The Management plan for Mondrain has to be finalized
- Due to ill health and retirement of Mr Gabriel D'Argent in 2018, a request for labourers from Medine Sugar Estate was not made. However, a few corporate social responsibility groups conducted weeding under supervision of other MWF staff, removing particularly invasive species such as *Cuscuta reflexa*.

Ile aux Aigrettes

- The following critically endangered plants were successfully grown and planted on Ile aux Aigrettes e.g. *Trochetia boutoniana* (52), *Phyllanthus revaughanii* (10), *Poupartia borbonica* (4) *Foetidia mauritiana* (5), *Zornia revaughani* (1), besides other endemic / native species.

Other

- Visits from Brest (France) scientists took place during the year. This is part of the project submitted by l'Arche des Plantes (Conservatoire Botanique National de Brest, France) to the Critical Ecosystems Partnership Fund (CEPF) in collaboration with MWF for re-introduction of rare plants to Mauritius and Rodrigues and assistance in plant conservation projects. Plants were also repatriated to Mauritius in September 2018 and were kept in quarantine at the NPCS nursery in Curepipe. These plants (in addition to plants sent in November 2017) will be despatched to NGO, private sector and government project partners in Mauritius and Rodrigues. Brest is also supporting the development of plant databases, training in horticulture, nursery upgrades, equipment, rare plant rescues under the CEPF project, and unrelated to the CEPF funding on seed banking in Mauritius and search for ancient seeds in soil deposits on Rodrigues.

Rodrigues

Solitude's nursery

Main actions

- 26,400 endemic and native plants propagated in stock in the nursery at 31/12/18
- 22,088 endemic & native plants were transferred from the nursery for conservation purposes in 2018
- 19 octopus fisher worked in the Solitudes Endemic Nursery between February and March doing general maintenance, and 16 between August and October.

Rodrigues Environmental Education Program (REEP)

Background

The Rodrigues Environmental Education Project (REEP) has been operational since 1998. From its inception REEP has been involved with the community, changing people's attitudes towards the environment. This is achieved through awareness-raising and informal environmental education initiatives. These involve talks in schools and to the media, visits to restoration areas and environmental education campaigns including outreaching to community groups in order for them to experience 'hands-on' the habitat restoration process. Volunteer's day is celebrated with activities and hand-outs of educational materials for those who have volunteered for MWF during the year. REEP also focuses on sensitising school children about environmental issues that affect Rodrigues and encourages them to take pride in their natural heritage.

A short film was made on the Rodrigues Fruit Bat to create awareness on the importance of the Bat to the ecosystem in previous years and a 'Bat day' is held each year. World Biodiversity day is also celebrated each year by a donation of plants to Grade 6 children.

In 2016, guided Ecotours were launched in the Grande Montagne Nature Reserve. This site has now become an active regional and international platform for raising awareness of Rodrigues' unique endemic fauna and flora with foreign visitors. These projects have developed collaborative links with the government, private sector and other non-governmental organisations.

Main Actions

- 1202 endemic and native plants were donated to schools, colleges, local institutions and community groups
- Participation in World Environment Day by helping in a clean-up activity at Grand Baie, organised by the Rodrigues Regional Assembly's Commission for Environment, Shoals Rodrigues, a marine conservation NGO and the President of the village, Mr Sylvestre Begué and participating in the Exhibition.
- Participation in the international day of Forest by attending official ceremony at the Mon Plaisir Leisure and Cultural Centre organised by the Commission for Agriculture, Environment and Forestry.
- For MWF's Celebration of the international day of Forest, the REEP Educator organised a talk to students from Port Sud Est Government school, followed by a symbolic planting of a rare plant (*Sideroxylon galeatum*)
- Participation in the Earth Day by delivering a talk to Grade 6 students at Port Sud Est Government School and symbolically planted 4 endemic and native plants.
- The REEP Educator participated in the International Education and Community Engagement Week at Chester Zoo in the UK from 29th September 2019 to Monday 8th October 2018
- Educational talks were given to 1624 school children & youths in 2018
- Educational visits benefited 1196 school children and 166 teachers during 2018 at Grande Montagne Nature Reserve, Anse Quitor Nature Reserve, & Solitude Endemic Nursery
- 390 volunteers workdays were organised with MWF in 2018
- MWF celebrated the International Volunteer Day on the 5th December 2018 at the Women Integrated Family Centre at Malabar in the presence of the Chief Commissioner, Serge Clair, the MWF Executive Director, Deborah de Chazal and the MWF Office Manager, Mr Dominique Rene

Grande Montagne Nature Reserve

Background

The Mauritian Wildlife Foundation (MWF) has been working in the Grande Montagne Nature Reserve for more than twenty years and the visitor is now able to enjoy areas of maturing forest while witnessing other more recently restored areas or view restoration underway. Around 84% of the 25.5 ha fenced area at Grande Montagne has been restored to date and the aim of MWF is to complete the initial restoration of this reserve within the next few years. Over 156,516 plants have been planted in the reserve by MWF so far and 40 rare Rodriguan plant species are successfully conserved on Grande Montagne. The forest is a habitat to the surviving endemic animals and insects of Rodrigues. From about only 30 birds, the population of the Rodrigues Fody reached 8,000 individuals in 2010, whilst that of the Rodrigues Warbler increased to over 4,000 individuals over the same period, in part due to the habitat restoration on Grande Montagne. This project involves the local community, providing employment to restoration labourers from the nearby villages and organising 'restoration working days' with grassroots associations to sensitise and empower the local people in habitat restoration. The reserve is included in the Rodrigues Environmental Education Programme where students visit and are taught about the reserve and its importance. The reserve is also open to the public for visits, and in 2013 the Rodrigues Regional Assembly approved plans for the MWF to conduct ecotourism activities in this nature reserve. In 2018, 5 Aldabra Giant Tortoises were introduced in the Reserve

Main Actions

- 16,000 endemic and native plants were planted in the GMNR.
- The Indian Ocean Commission (COI) Biodiversity project ended on the 30th November 2018.
- 16 octopus fisher worked in the GMNR between February and March doing general maintenance, and 15 between August and October during the closure of the octopus fishing.
- 5 Aldabra Giant Tortoises were introduced to the GMNR in the presence of Environment Commissioner, Richard Payendee, Nik Cole, the COI delegation, Forestry Officers, MWF Staff and media on the 30th October 2018.

- Mala Curroah and Roberto Cesar carried out a vegetation survey and 1st impact monitoring within the GMNR from the 7th to 11th August 2018 before the introduction of the Aldabra Giant Tortoise.
- Completed the construction of a view point.

Eco-Tours Grande Montagne

- Visit of Jacquie Helie, French volunteer , to help for the ecotour guiding and promotion.
- Creation of new signage for the visitors centre with the support of Chester Zoo. To be installed in early 2019.
- Increased marketing efforts with new flyers produced and distributed around Rodrigues.
- The Ecotour ranger and Conservation Assistant manned the GMNR information Centre and conducted ecotour visits and the Administration Assistant assist in the welcoming and registering of visitors
- 612 paying clients visited the GMNR in 2018
- Educational visits were given to Rodriguan students free of charge.

Anse Quitor Nature Reserve

Background

Forest clearance, introduction of invasive plant and animal species, predators (e.g. rats and cats), over exploitation of the island's nature resources, unsustainable agricultural and farming practices and soil erosion have led to the demise of much of Rodrigues rich biodiversity. Well over 20 bird species and a host of plants are, as a result, extinct.

The Anse Quitor Nature Reserve contains critically endangered plants within some of these last relics of forest on Rodrigues, although even these are highly degraded. Small-scale restoration began in Anse Quitor in the mid-1980s and the Mauritian Wildlife Foundation (MWF) began a larger scale restoration project in 2010 with a focus on employing conservation labourers from the local community. So far, 16 of the 35 ha fenced reserve have been restored, with MWF planting approximately 107,955 native Rodriguan plants. By restoring this area, extremely rare plants are safeguarded and endemic and native habitat is recreated for the critically endangered Rodrigues Fruit Bat (*Pteropus rodricensis)* and it is hoped that the recolonisation of this area by the Rodrigues Warbler and Rodrigues Fody, both red-listed-species according to the International Union for the Conservation of Nature, may be possible thus helping increase their numbers. The restoration work is being carried out by labourers residing in the surrounding villages with a focus on supporting poverty alleviation through training and employment so they may acquire a marketable skill. It is to be noted that Anse Quitor ranks as one of the poorest regions of the Republic of Mauritius. Restoration working days are organized with grassroots associations to sensitize and empower local people in habitat restoration and conservation. The reserve is included in the Rodrigues Environmental Education Program, where students visit and are taught about the reserve and its importance.

Main Actions

- 5500 endemic and native plants were planted in the AQNR
- 10 Octopus fisher worked in the AQNR between February and March doing general maintenance, and 10 between August and October during the closure of the octopus fishing.
- Received funding from the National CSR Foundation for the employment of an additional 7 restoration labourers for 8 months.

Rodrigues Fruit Bat (RFB)

- Censuses were carried out 3 times island-wide and fortnightly at one site.
- The highest RFB count was in November returning 19,503 bats of which 9099 were at 1 site (Accacia). When the counts at temporary roosts were added the total was 23,953 bats.
- The RFB was down listed from Critically Endangered to Endangered in 2017, but is still threatened.

Grenade Community Forest (GCF)

- 6 octopus fishers worked in the GCF between February and March doing general maintenance and fence repairs
- 5 octopus fishers worked in the GCF between August and October doing general maintenance

Education in Mauritius

Learning with Nature on Ile Aux Aigrettes

Background

The Mauritian Wildlife Foundation (MWF) recognises that the long term survival of Mauritius' endangered biodiversity depends on the continuous education of Mauritian and Rodriguan children and raising the level of awareness among the public at large to overcome human indifference towards conservation. MWF believes that this depends on providing opportunities for everyone to appreciate strategic areas, local species, and foster education to highlight the ecological, aesthetic, cultural, spiritual, recreational and economic importance of protecting our endemic animal and plant species. MWF is conscious of the challenges involved in changing attitudes to the environment. One of the MWF's missions is: 'To share the joys and benefits of native wilderness and wildlife with the Mauritian people'. To achieve this mission, various educational initiatives are undertaken by MWF. As from 2009, the MWF developed 'Learning with Nature' (LWN), a structured educational programme on Ile aux Aigrettes which supports the national school curriculum and is supported by the Ministry Education and Human Resources, Tertiary Education and Scientific Research. MWF's 'Learning with Nature' programme strives to promote greater environmental awareness and support for conservation nationwide by helping to create the next environmentally conscious citizens. Students have the opportunity to visit the islet, discover a nature reserve, and appreciate its biodiversity, witness actions undertaken to save species from decline in their restored natural habitat, obtain support towards their school curriculum, and return armed with knowledge and educational materials especially designed to reinforce learning.

Main Actions

- 3,826 students, teachers and youth groups followed the LWN trail in 2018 on 90 visits from institutions.
- 2,797 students, teachers and youth groups on 63 visits were CSR sponsored and received educational and food packs.
- Feedback was collected from educators and students and analysed to evaluate ranger performance and learning outcome.
- A Mauritian PhD student is using the Learning with Nature programme to collect data for her study 'Investigating Situational Interest and Learning about Biodiversity: A case study of how Students experience a field trip to a Nature Reserve in Mauritius'.
- Training of Rangers was continuous during the year.
- A life cairn, an assemblage of natural stones and rocks was erected next to the visitors centre on the mainland in memory of all the Mauritian extinct species, in April 2018.

Mauritius Fruit Bat

Background

Bats are the only mammals native to the Mascarene Islands. Three species of fruit bat were once widespread over Mauritius, but two went extinct and the population of the surviving species (*Pteropus niger*) decreased considerably due to habitat loss, cyclones and illegal hunting. This bat went extinct on Reunion Island, where it was last recorded in 1790.However it is known that Reunion Island has been recolonized by a handful of individuals over the last decade, whilst a second species (*Pteropus rodricensis*) has survived on Rodrigues Island. Due to lack of major cyclones, the population of the *Pteropus niger* (also known as the Mauritius fruit bat) has increased over the last 20 years, shifting its IUCN status from Endangered to Vulnerable in 2014. The most recent bat surveys done by the National Parks and Conservation Service found that the population size of the Mauritius fruit bat is around 62,000 individuals.

In 2009, a positive step was taken when the Government carried out a sensitization campaign for the protection of farmed fruit and promoted the use of nets to protect fruit from bats and birds, along with a grant scheme to purchase the nets, which was extended into 2017. However, the species faced a serious threat to its existence as the Mauritian Government announced it had culled 30,938 bats in 2015 and 7,380 in 2016 in order to protect the interests of fruit farmers. A further cull was carried out in 2018 but the official number of bats culled has not been released. The Mauritian Wildlife Foundation along with IUCN and BCI provided scientific and management advice to the Government to convince them that the culling could have catastrophic effects on the bat population in Mauritius especially if there was a severe cyclone. The Mauritius Fruit Bat was uplisting to Endangered in 2018, the direct result of the official culling conducted in 2015 and 2016, and the parallel illegal killing of fruitbats.

Main Actions

- Discussions and exchanges with IUCN Bat Specialist Group, Bat Conservation International, and several other international organisations, as well as the Government of Mauritius, local groups and people to share information and lobby against a cull
- MWF was invited to the 'Special Technical Committee', which is a committee set up under the Native Terrestrial Biodiversity and National Parks Act 2016, which discusses culling of species. MWF was the only non-government institution invited. Of the c. 12 institutions present, all except MWF voted in favour of a cull. The recommendation was to cull 10% of the current fruitbat population estimate, 65 000. MWF is fiercely opposed to this plan and emitted a position statement to condemn this decision
- Initiated a Human/Wildlife Conflict initiative for the Mauritius Fruit Bat. In May 2018 supported and participated in a Research workshop.
- Carry out various actions under a bat education programme:
    - Communication in the media & social media.
    - Promoting of tree netting: produce and distribute a Brochure, put it on MWF's website.
    - Produce promotional items including a T shirt, tote bag and Bat plush toy.
    - Produce a 10 minute film "Mauritius Fruit Bats under threat" for use in presentations and accessible from the MWF website.
    - Presentations given to schools & community groups.
    - Creation of a bat ecotour.

Mauritius Beyond The Dodo

- This Photographic Exhibition on local endemic species was exhibited 6 times during the year being available on request for exposure by organisations.
- The panels are also used for public exhibitions where MWF is participating to illustrate MWF's work.

Southeast Islets Sensitisation Project

The project begun in May 2017 funded by the European Union (EU) via the Indian Ocean Commission (IOC) until October 2018 and aimed to sensitise leisure boat skippers, fishermen, private boat owners and coastguards in the region on how to help protect the wildlife on the southeast islets. The objective is to have a reduction in littering, open fires, trampling and new exotic species introduction hence helping to conserve the endemic/native animals and their habitat. The islets involved were Ile aux Fouquets, Ile de la Passe, Ile aux Aigrettes, Ile Marianne, and Ilot Vacoas and are home to endemic species of skinks, birds and plants as well as native seabirds.

Main Actions

- 103 leisure boat skippers trained (target: 75).
- 91 fishermen trained (target: 60).
- 77 National Coast Guards trained (target: 20).
- 56 private boat owners trained (target 20).
- Awareness raising was conducted with around 200 coastal villagers.
- Activities included pre and post project surveys, workshops, training sessions with the National Coastguard, site visits, community talks and a certificate ceremony in the form of a regatta and family day.
- Media coverage was obtained and a Facebook page created.
- Several types of educational materials were developed and/or distribut
- ed through the project: This includes: PowerPoint presentations, waterproof factsheets, educational quizzes, flyers, booklets, boat stickers, T-shirts, caps, posters, and educational boards.
- Signage was placed on islets and at embarkation points.
- Fortnightly islet trips were conducted to monitor the impact of the project (litter and fire places).

Other

Staff Training

• Aurelie Hector continued her in depth research on the Round Island Boa under the two year EDGE fellowship scholarship obtained in March 2017.

• Liliana Meunier, Rodrigues Educator, was invited to attend the International Educators Training Week run by Chester Zoo from the 29th September to 8th October 2018.

• An induction course was held for new staff on 22nd October and 5th November 2018.

• 12 Presentations and Talks were delivered in 2018. These are held when we have visitors as part of our staff capacity building and our staff also deliver talks on MWF project developments

Training Delivery

MWF works in collaboration with Durrell Conservation Training (Mauritius) (DCT). In 2018 MWF delivered field school content and also delivered some lectures for a regional training course funded by the Critical Ecosystems Partnership Fund with participants from Madagascar, Mauritius, Seychelles and Comoros spending 5 weeks with in Mauritius in August 2018.

Visitors

MWF receives visits from our overseas partners and collaborators regularly during the year amongst which were:

- Dr Leslie Dickie, Dr Andrew Terry and Dr Richard Young: from Durrell visited in April for discussions with management and included a visit to Round Island.
- Dr Alexandra Zimmerman, Dr Simon Tollington and Dr Claire Raisin: from North of England Zoological Society (Chester Zoo, UK) were in Mauritius to facilitate a 'Mauritius Fruit Bat Research Strategy Workshop' held on the 9th and 10th May 2018. Dr Raisin, Field Programmes Coordinator Madagascar and Mascarenes took the opportunity to visit some projects.
- Stéphane Buord and Dominique Guyader of Conservatoire Botanique National de Brest (France) visited Mauritius in September 2018 to advance the development of a plant data base.
- Peter Wyse Jackson President, of the Missouri Botanical Gardens was in Mauritius from 22nd to 26th October bringing a group of funders for a tour of Mauritius.
- Dr Claire Raisin: visited Rodrigues from the 7th – 13th November with Mr Gregory Counsell, Social Science Officer to advise on the education programme following the training offered by Chester Zoo to the Rodrigues Educator, Lilianna Meunier. She was in Mauritius from the 13th to 23rd November 2018 and joined by Mr Mark Vercoe, Deputy Curator of Birds. The visit was a mixture of field visits, project planning meetings and discussions with Management.

- Prof. Ken Norris and Dr Malcolm Nicoll accompanied by Miss Theresa Robinson (PhD student also with University of Reading) and Dr Nicole Milligan (Wildlife database manager) from the Institute of Zoology, London stayed varying lengths of time within the period 20th November to 9th December 2018.

Media Coverage

Regular requests are made from the local media for MWF to comment on current affairs regarding conservation and for visits to projects.

Filming

- ION news in February featured the SE Islets sensitization project with filming and interviews on Ile aux Aigrettes.
- On the 2nd March the MBC aired the programme 'Ekoute, tande, koze" with a mixture of studio interviews with Vikash Tatayah, Martine Goder, Issabelle Desire and films of Yogishah and the Mauritius Fruit Bat.
- Dr Vikash Tatayah and Suraj Dwarika were filmed for the BBC Travel Show for the 50 years of Independence. The focus was on tortoises and bats. The film was played on BBC World Service from 9th to 14th March 2018.
- A promotional film for Ile aux Aigrettes has been made.
- Inside Africa (CNN) was filmed on Ile aux Aigrettes in November and aired in March 2019.
- Asian Broadcasting Union / Mauritius Broadcasting Corporation documentary 'Green Warriors' was filmed in Mauritius and MWF participated in the production.
- 'Jardins de Pamplemousses – Une conversation' requested some support from MWF. The film was for training purposes for various staff of the Mauritius Broadcasting Corporation in film production
- CEPF course sessions held at MWF office Vacoas was filmed by MBC

- Grande Montagne, Rodrigues, was filmed by the MCB

Written media

- There has been a focus on Facebook in 2018 with regular posts about MWF's work or related topics.
- MWF staff in Mauritius and Rodrigues are interviewed and MWF asked for information on numerous occasions which has resulted in radio talks, radio interviews, TV shows and many local and international press articles.
- Continue to be published on the Osmose page of L'Express on a weekly basis and the articles are available on our website.

Local Committees, Consultations and Workshops

National Committees

MWF continued to actively participate in various national committees: Native Terrestrial Biodiversity and National Parks Advisory Council, National Invasive Alien Species Committee, Ramsar Committee and in policy dialogues: National Biodiversity Strategy and Action Plan, Protected Area Network (including Expansion Strategy), Forest Code revision. MWF is also represented on the National Eco-School committee and the Duke of Edinburgh Award committee and participated in meetings for the "Collaborative Project on Marine Turtle Conservation".

Consultations

MWF was invited to the 'Special Technical Committee', which is a committee set up under the Native Terrestrial Biodiversity and National Parks Act 2018, which discusses culling of species. MWF was the only non-government institution invited. Of the c. 12 institutions present, all except MWF voted in favour of a cull.

MWF continued to provide support and views to the Marine Spatial Planning Coordinating Committee under the aegis of the Department for Continental Shelf and Maritime Zones Administration and Exploration, under the Ministry of Defence and Rodrigues, especially towards the fulfilment of the country towards SDG 14.

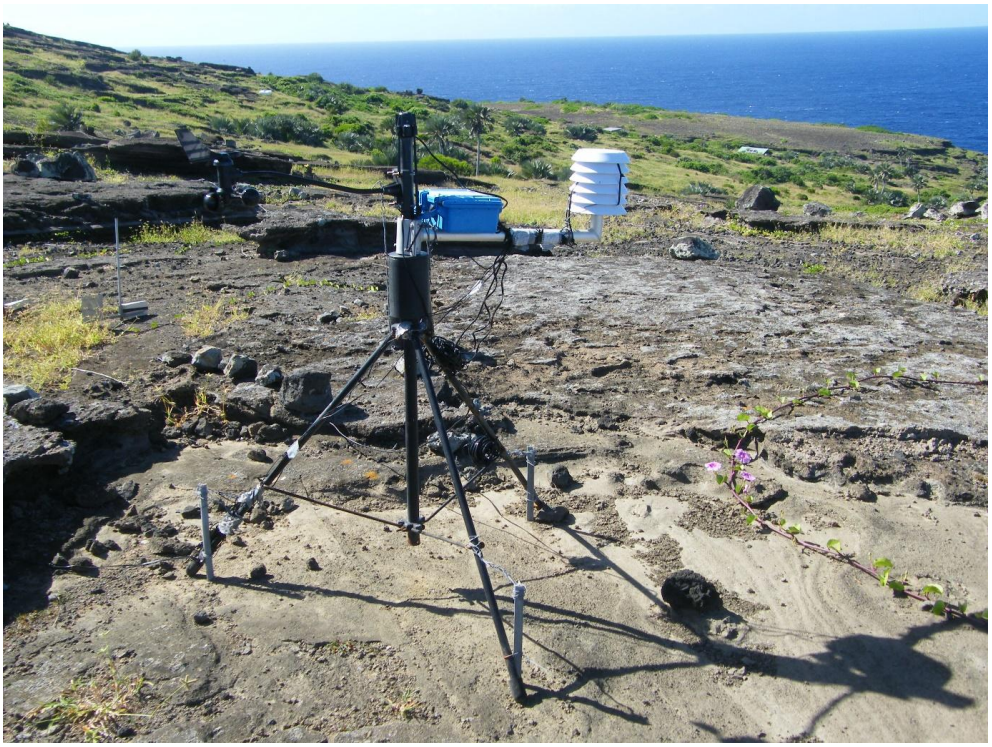
We received the visit of Traffic International (Madagascar), who was on a mission to Mauritius from Thursday 21st and Friday 22nd of June 2018 with regards to the implementation in the SADC region of a platform for sharing information on illegal wildlife trade amongst law enforcement officials.

Conferences and Workshops

These can be overseas or local. MWF receives a lot of invitations but will select to attend on various criteria which include whether it is fully funded (overseas), the relevance to MWF's work or to influence national policy. Some attended were:

- Final Restitution workshop, GDZCOI, Madagascar
- CEPF Workshop in Madagascar
- Forest Code Revision in Mauritius
- Mainstreaming Biodiversity into the Management of Coastal Zones in the Republic of Mauritius
- Maurtius Fruit Bat Research in Mauritius
- BirdLife Global Partnership Meeting in Belgium

Research and Publications



There are a number of research initiatives being conducted in collaboration with overseas partners and others under development:

- Tortoise movement behaviour
- Optimal survey design and modelling to track species abundance trends
- Health and survival of translocated seabird chicks
- Impact of habitat restoration on the Round Island Gunther's gecko population and reproductive biology
- Weather and soil erosion on Round Island
- The movement behaviour of Red-tailed Tropicbirds
- Tracking of Pink Pigeons

There were 15 publications issued in 2018 which had a connection with MWF's work or a MWF author. All publications on Mauritian species are filed in our library and made available to staff and researchers.

Accounts

The accounts are under audit. A summary will be posted on the website when they are ready. Draft accounts indicate that MWF has broken even in 2018 and the feared drop in income from the Private Sector due to changing CSR legislation was less than anticipated thanks to the efforts of our fundraising and management team.