

# Mauritian Wildlife Foundation



## Annual Report

for 2009 and 2010



Saving Endangered Wildlife From Extinction

## Contents



Message from the President	1
Scientific Director's Report	2
Who Are We?	3
The Need for Conservation in Mauritius and Rodrigues	4
IUCN and Conservation Status	6
Common and Scientific Names	6
<b>Projects and Involvements</b>	
■ Mauritius Kestrel	7
■ Pink Pigeon	8
■ Echo Parakeet	9
■ Passerines of Mauritius and Rodrigues	10
■ Fruit Bats	13
■ Darwin Initiative Reptile Translocation Project	14
■ Tortoise Re-wilding	15
■ Seabird Translocation	15
■ Rare Plants	17
■ Habitat and Island Restoration	19
■ Gerald Durrell Endemic Wildlife Sanctuary (GDEWS)	23
<b>Education and Awareness</b>	
■ Corporate Social Responsibility	25
■ Our Books	26
■ Rare Pride Campaign	26
■ Ile aux Aigrettes Ecotours	27
■ Rodrigues Environmental Education Project (REEP)	28
Data Management/Scientific Research/ Staff Development and National Capacity Building	29
Consultancy	30
Financial Information	31
Our Donors	33
Our Partners	34
Our Staff	35

### Notes:

Wherever we refer to seasons, this refers to the Southern Hemisphere summer months between late August/early September to end February/early March. The following endemic animals breed during this period: Mauritius Kestrel, Echo Parakeet, endemic passerines (including Mauritius Fody, Mauritius Olive White-eye, Rodrigues Fody and Rodrigues Warbler) and the fruit bats. However, one notable exception to this general trend is the Pink Pigeon, which breeds throughout the year. This period also corresponds to the fruiting of a wide range of endemic plants, although there are also some that fruit in winter e.g. bois de lait (*Tabernaemontana mauritiana*). Where stated otherwise (e.g. 2010), the dates correspond to a calendar year.

Key donors given for each project may apply to the year 2009, 2010 or both.

## Message from the President



I would like to express my gratitude to my predecessor, Félix Maurel, as President of the Mauritian Wildlife Foundation, for his immense contribution to the work of our organization. Félix, who disappeared last year in tragic circumstances whilst in the Seychelles, was a member of the MWF Management Committee for 14 years and President for 6 years. There is a tribute to him later in this report.

The challenges facing Mauritius regarding conservation remain essentially the same as they were when the Foundation was launched in the 1970s. These include continuing urbanization and habitat destruction and the proliferation of exotic species – be they birds, reptiles or plants – at the expense of the endemic. A positive development is that there is a greater awareness both on international and local levels of the importance of conservation and the preservation of biodiversity.

Mauritius is developing at a tremendous pace. However, whilst benefitting from this development both Mauritians and visitors to the island also want to appreciate the legendary beauty and nature of Mauritius. MWF's mission is to work towards the preservation of this natural Mauritius. We continue our work with the various endangered species of birds and reptiles, and the number of individuals in most of the species continues to increase. Our work to protect the endangered flora of the island is also ongoing. MWF is acutely aware that to achieve sustainability, both as regards fauna and flora, requires a major effort concerning our native forests. Currently, most of the forest is invaded by exotic species, especially goyave de Chine. The elimination of these exotics is a huge task but one which MWF is tackling with various partners.

Unfortunately, conservation is not perceived by most Mauritians to be a national priority. This has been an attitude shared by most of the world, until recently when the subject of climate change and the dramatic impact this could have on all our lives has been discussed. The role that the natural world plays in maintaining the basic elements that we need to live has been highlighted and the staggering cost of artificially replacing destroyed natural services is starting to be identified. MWF has traditionally focused on ensuring that the remaining endemic species are not lost to extinction but is now turning towards education as a key element in preserving what is unique and precious to Mauritius.

Ile aux Aigrettes is a showcase for MWF's restoration and conservation work, where members of the public can see at first-hand the work that we are doing. Since we launched our visitor programme in 1998, tens of thousands of Mauritians and tourists have visited the island. In 2009, MWF developed a new programme for schoolchildren, in partnership with Chester Zoo in the United Kingdom, called Learning with Nature. A resource pack for teachers prepares the children for the visit during which they take a walk around the island in small groups led by a MWF ranger. The students discover the native plants, birds and reptiles that have been reintroduced to Ile aux Aigrettes and walk through the regenerated coastal forest, learning about the importance of conservation and biodiversity and participating in learning activities. In 2010, we received visits from 3,592 pupils and 370 teachers and we hope to increase this number in the coming years.

I would like to end my message by thanking all the people and organizations that make MWF's work possible. These include the National Parks and Conservation Service and Forestry Department of the Ministry of Agro Industry, our funders both local and overseas, our many partners overseas including Durrell Wildlife Conservation Trust and the North of England Zoological Society (Chester Zoo), our volunteers and staff ably led by Debby de Chazal (our Executive Director), and Carl Jones (our Scientific Director).



**Tim Taylor**  
President, Mauritian Wildlife Foundation





## Scientific Director's Report

The world is a very dynamic place and there will always be conservation challenges at both a global and national level. Here on Mauritius we have to be bold in order to meet these challenges. We have had many successes with the recovery of rare species, including the rebuilding of the bird and reptile communities, and restoring the native plants and forests on Round Island, Ile aux Aigrettes and Rodrigues. This work provides a solid foundation on which to base MWF's larger vision: to conserve all our native fauna and flora and restore our threatened ecosystems.

Our work on Ile aux Aigrettes is an example of how, over the years, we have started to achieve this. Here we get a glimpse of what Mauritius was once like, before humans arrived, with its beautiful ebony forest, coastal vegetation and giant tortoises. Large lizards including Telfair's Skink and Guenther's Gecko have been reintroduced and, hopefully, in the next few years we will be able to add more reptiles to the island. The Pink Pigeons have an established population here, as do the Mauritius Fodies. More recently, we have established the Olive White-eye on the island and as at May 2011 have a population of 25 individuals. We are also aiming to establish a seabird community here, with the recent reintroduction of the Wedge-tailed Shearwater, White-tailed Tropicbird and Red-tailed Tropicbird. The techniques we are developing may be applied to other seabirds and we would like in future years to bring back species that were once common in the region, including the Abbott's Booby that is now only found on Christmas Island, north of Australia.

On Round Island we have recently established a population of giant tortoises, and we now have 115 Aldabra Giant Tortoises and 10 Radiated

Tortoises roaming free on the island, replacing the extinct Mauritian species. The tortoises fulfil an important role as grazers, restoring a grazing climax vegetation community including tussock grasses and many endangered species that only survive in closely cropped areas. An important member of this plant community is the small and seemingly insignificant *Aerva congesta* with only one population remaining, found on Round Island. The tortoises also spread the seeds of the native trees and palms, and we have found that seeds that have passed through a tortoise germinate and grow more readily. This work illustrates how reintroducing tortoises can help to save a whole community of plants.

The Mauritian Wildlife Foundation has a long-term commitment to managing and restoring Round Island, and the more we look at this island the more we realize just how very important it is. The seabird communities are some of the largest to be found on any Indian Ocean island and the population of Round Island Petrels is a unique hybrid of three or maybe even four species. It is possible that we are witnessing an incipient species as these petrels come together to create a unique form. Working with some of our partners we have been placing geo-locators on the petrels to track their progress when not on Round Island and have been amazed to discover that these birds travel vast distances, some moving eastwards until north-west of Australia and others moving north to the Arabian Sea. In 190 days of tracking we have recorded birds travelling distances of 12,500 to over 40,000 km. There is still a lot to learn about these and other native bird species and we are keen to develop our seabird research so that it becomes an important component of our work.



### Prof. Carl G. Jones MBE

International Conservation Fellow, Durrell Wildlife Conservation Trust  
Scientific Director, Mauritian Wildlife Foundation  
Conservation Fellow, North of England Zoological Society

Whilst we are pleased with the way our conservation work is progressing, we are also anxious to continue to develop the capacity of our staff, students and volunteers. Over the years, Mauritius has become an important training ground for young conservation biologists and we want to strengthen this element of our work. We are now talking to some of our collaborators to see how in the next few years we can make the Mauritian Wildlife Foundation an important centre for conservation training and research.

The Mauritian Wildlife Foundation is now in a stronger position than ever before and we look forward to developing a range of new projects, including additional work on the endangered species as well as the restoration of more of our islands and increasingly larger areas of native vegetation.

## Who Are We?

The 1970s were a low point in conservation, with several birds, the Rodrigues Fruit Bat and a host of plants on the brink of extinction. A number of key habitats (e.g. Round Island, Ile aux Aigrettes and upland forests) were equally threatened. Against this gloomy background emerged the first significant actions in favour of conservation. Following a report written by Sir Peter Scott in 1973, international organizations began to get involved in conservation projects in Mauritius. The first major project was that of the Peregrine Fund, USA, for the conservation of the Mauritius Kestrel. In 1976, Gerald Durrell, founder of the Jersey Wildlife Preservation Trust (now the Durrell Wildlife Conservation Trust), visited Mauritius for the first time, and his involvement marks the turning of the tide in biodiversity decline. Durrell wanted to take a lead role in saving animals in Mauritius and Rodrigues, but after several years of involvement he felt that a local organization should be created to manage and conduct the field conservation programmes and help raise funds. In 1984, the Mauritian Wildlife Appeal Fund was created by a small group of Mauritian businessmen, with the support of the Government of Mauritius, BirdLife International (formerly the International Council for Bird Preservation) and the Peregrine Fund. Over the years, a close relationship with Jersey has also been maintained. In 1995, the Fund was renamed the Mauritian Wildlife Foundation (MWF). It is the only non-governmental organization (NGO) in Mauritius exclusively concerned with the conservation of the native wildlife of Mauritius and Rodrigues. MWF works in close cooperation with the Government of Mauritius, in particular with the National Parks and Conservation Service (NPCS), the Forestry Service, the Ministry of Environment and the Rodrigues Regional Assembly.

### Our Mission

- 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 programmes 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.



Round Island



Placing an Echo Parakeet nest box



Hand rearing an Echo Parakeet chick

## Organizational Structure

MWF is governed by the Management Committee (see inside back cover) which consists of fourteen members comprising prominent Mauritian businesspersons and professionals, and representatives from the National Parks and Conservation Service, the Durrell Wildlife Conservation Trust, the North of England Zoological Society and International Zoo Veterinary Group.

The Management Team (see inside back cover) is composed of Mauritian staff and, in all, MWF employs about 80 Mauritians at all levels of responsibility, and up to 20 expatriate staff. Their work is supported by around 20 Mauritian and expatriate self-funded volunteers at any one time. In addition, up to five international postgraduate students and eight Mauritian undergraduate students annually carry out collaborative research projects focusing on practical conservation management issues.

MWF and the Management Committee are also advised by a number of scientific associates from various organizations, namely New Zealand Department of Conservation, the Natural History Museum (London), Royal Botanical Gardens (Kew, UK), Reunion National Park, Conservatoire Botanique National de Mascarin (Reunion), and universities.

## Key Areas of Involvement

Since MWF's inception, we are proud to have been at the leading edge of conservation work in Mauritius and Rodrigues. The passion and dedication of our staff and volunteers have led to some of the world's rarest endemic birds, reptiles and plant species being brought back from the brink of extinction.

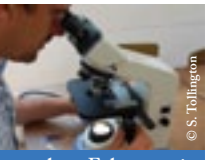
The organization has a history of successful species recovery programmes and those for the Mauritius Kestrel, the Pink Pigeon, the Echo Parakeet and the Rodrigues Fruit Bat have become textbook cases in conservation. To achieve these and other success stories related in this report, we have pushed the frontiers of conservation science and management, exploring innovative methodologies, such as the genetic management of species restored from limited founders. Currently, Mauritius is at a critical stage in the recovery of a number of species, which, although they have undergone significant increases in population size, will require continuous support until large-scale habitat restoration is implemented.

MWF has established a number of habitat restoration projects on several offshore islets, including Round Island and Ile aux Aigrettes, in mainland forest plots known as Conservation Management Areas (CMAs) and on private land. These involve eradicating alien predators and plants, propagating and planting native plant species and reintroducing the native fauna, starting with birds, reptiles and seabirds. Ile aux Aigrettes is of particularly importance, providing a showcase for our work through education and eco-tourism activities.

Since 1984, MWF has also been closely involved with restoration work at Mondrain Nature Reserve, the last native forest on the Vacoas Ridge, leased by the Medine Sugar Estate to the Royal Society of Arts and Science. All of these projects will help to recreate the biodiversity of the unique native forests and contribute to the conservation of the endangered endemic fauna.



MWF head office



Research on Echo genetics



Repairing the field station on Round Island



# The Need for Conservation in Mauritius and Rodrigues



Ebony forest on Ile aux Aigrettes

Mauritius, Rodrigues and Reunion form the Mascarene Archipelago, which is located in the western Indian Ocean. These islands were never connected to a continental landmass and this isolation, and the age of the islands, allowed some of the richest and most extraordinary terrestrial biodiversity to evolve, giving rise to a high percentage of endemic species. This high endemicity and the species diversity per unit area, combined with the threat presented to it by human activity, have resulted in the islands (along with Madagascar, the Comoros and the Seychelles) being classified by Conservation International as part of an Indian Ocean biodiversity hotspot.

Mauritius has a particularly diverse flora, with more than 670 native species of flowering plants, of which 315 are endemic. About 200 of the endemics are threatened and some 50 species are known only from less than 10 individuals in the wild. Rodrigues has 145 native species, of which 38 species are endemic, nearly all of which are threatened, with 9 species down to less than 10 wild individuals.

When humans first visited the islands they found luxuriant forest teeming with unique plant and animal life. The forest contained trees such as lataniers (one unique to each island), bois d'èbène and bois de natte (Mauritius), and bois pasner and café marron (Rodrigues). The forests provided a home for Dodos (Mauritius), Solitaires (Rodrigues), as well as parrots, giant geckos, giant skinks, giant tortoises, and fruit bats.

Uninhabited until 1598, Mauritius was occupied in turn by the Dutch, the French and finally the British, before gaining independence in 1968. Rodrigues received its first colonists, who stayed for just two years, in 1691, followed by other French settlers and then the British, remaining part of Mauritius after independence. Each successive occupying power caused its own damage to the islands and their native fauna and flora. Introduced invasive animals such as rats, cats, mongooses, pigs and monkeys eat the eggs and young of endemic birds and reptiles. Introduced plants such as Chinese Guava, Privet, Lantana, Traveller's Palm and Acacias grow rapidly, and out-compete the native plants for space, light and soil nutrients. As the older trees die out exotic plants replace them.

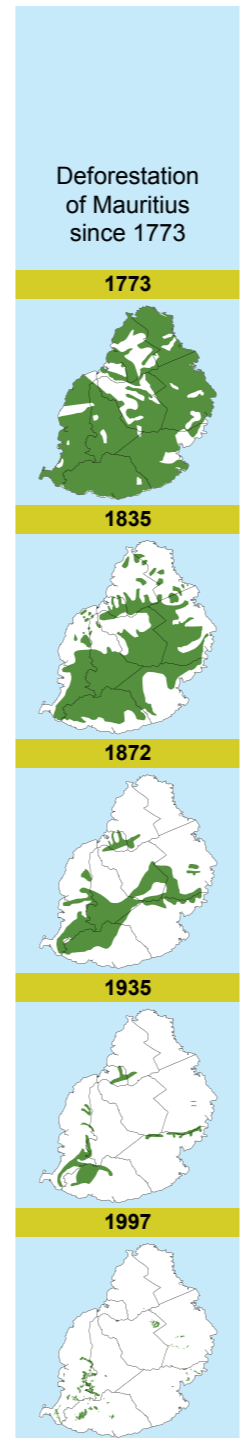
Forest clearance for agriculture and construction, and overgrazing by introduced cattle also negatively impacted on the native flora, so that after four centuries of human settlement less than 2% of the native forest on Mauritius remains. In Rodrigues today, there is no native forest remaining, only secondary areas of mostly exotic species.

All the endemic giant tortoise species on the islands were exploited and hunted to extinction and many other animal species, including the Dodo and the Solitaire, were simply unable to adapt to the invaders and to the loss of their habitat, and rapidly became extinct.

Today many of the remaining fauna and flora species are extremely rare on both islands. They are restricted to remnants of native forest in remote mountainous areas, the national park, nature reserves and offshore islets. Conservation interventions are essential to save the last forest fragments and to secure the future of threatened species. Not only are these unique forests part of our natural heritage, but they also play a vital role in our environment by conserving natural water resources and preventing soil erosion.



Restored native forest at Brise Fer



Gerald Durrell Endemic Wildlife Sanctuary



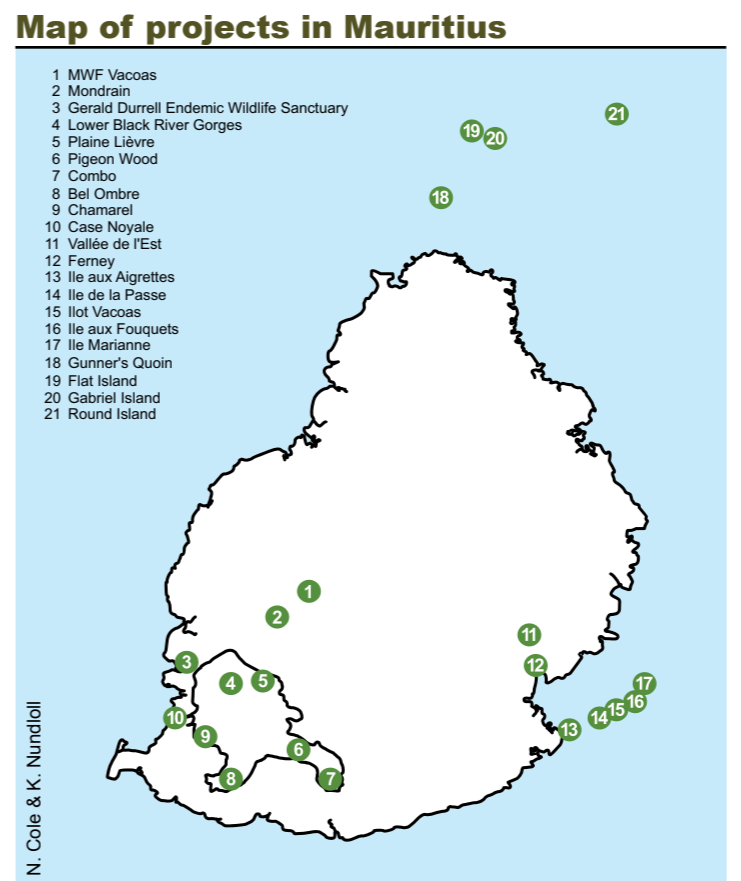
Plaine Lièvre



Combo

Although some areas have been protected by law, such as the Black River Gorges National Park, nature, mountain and river reserves, and some offshore islets in Mauritius, as well as the nature reserves of Grande Montagne, Anse Quitor, Ile Cocos and Ile aux Sables in Rodrigues, this alone is not sufficient to save the forest and its native inhabitants.

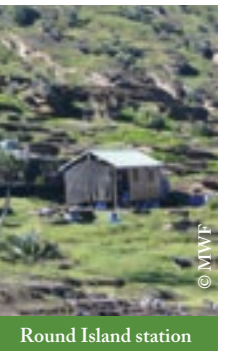
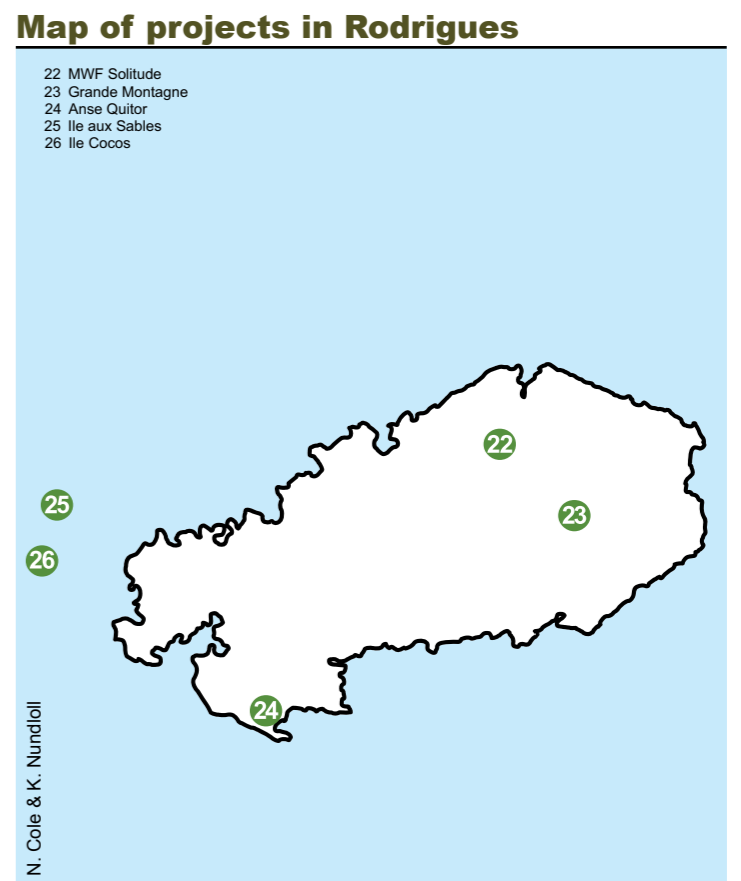
Active conservation management is essential if we want to keep our wildlife, and the Mauritian Wildlife Foundation has been at the forefront of this movement for over 25 years. Our habitat restoration projects on both main islands and on some of the small islets are long-term projects involving the control and eradication of introduced animal pests such as rats, cats, shrews and mongooses, the elimination of invasive alien plant species, and planting endemic plants grown in nurseries. MWF has also taken steps to preserve the most critically endangered plant species, by propagation and by maintaining field gene banks.



Intensive species recovery programmes have been set up to save endangered endemic birds. These have involved captive breeding and release of individuals to increase wild populations, progressing to monitoring and wild management of the species as it recovers. These programmes have gained worldwide acclaim for the methods used and results achieved.

Although much progress has been made in conservation management on Mauritius and Rodrigues, many of the original threats to plant and animal species still exist today (alien invasive species, loss of habitat, poaching, etc.). Efforts will have to continue long term to remove these limiting factors and to educate the population about the importance of preserving their native biodiversity.

Note: Maps below are not to scale.



Round Island station



MWF office, Solitude



## IUCN and Conservation Status

The IUCN (International Union for the Conservation of Nature), now referred to as the World Conservation Union, was the first global environmental organization aiming to improve and expand conservation work around the world. One component of the IUCN's work, under the Species Survival Commission, is to gather data on the current status of animal and plant species worldwide, using *The IUCN Red List Categories and Criteria* (version 3.1) to assess a species risk of global extinction. The result is *The IUCN Red List of Threatened Species*, which gives taxonomic information, conservation status and distribution details on evaluated animal and plant species.

The conservation status categories are given below:

### Extinct (EX)

■ there is no reasonable doubt that the last individual has died.

### Extinct in the Wild (EW)

■ known only to survive in captivity or as a naturalized population well outside the past range.

### Threatened

#### Critically Endangered (CR)

■ facing an extremely high risk of extinction in the wild.

#### Endangered (EN)

■ facing a very high risk of extinction in the wild.

#### Vulnerable (VU)

■ facing a high risk of extinction in the wild.

### Near Threatened (NT)

■ does not qualify for Critically Endangered, Endangered or Vulnerable now, but is close to qualifying for or is likely to qualify for a threatened category in the near future.

### Least Concern (LC)

■ does not qualify for Critically Endangered, Endangered, Vulnerable or Near Threatened, and is widespread and abundant.

6

MWF Annual Report 2009/10

## Common and Scientific Names

### of Some Native and Introduced Fauna in Mauritius and Rodrigues

#### Native Species

**Bojer's Skink** (scinque de Bojer) *Gongylomorphus bojeri*  
**Common Noddy** (macoua) *Anous stolidus*  
**Durrell's Night Gecko** (gecko de nuit de l'île Ronde) *Nactus durrelli*  
**Echo Parakeet** (grosse cîteau verte) *Psittacula eques*  
**Fairy Tern** (oiseau-la-vierge) *Gygis alba*  
**Guenther's Gecko** (gecko de Guenther) *Phelsuma guentheri*  
**Lesser Night Gecko** (gecko de nuit) *Nactus coindemirensis*  
**Lesser Noddy** (noddie marianne) *Anous tenuirostris*  
**Mauritius Black Bulbul** (merle) *Hypsipetes olivaceus*  
**Mauritius Cuckoo-shrike** (merle cuisinier) *Coracina typica*  
**Mauritius Fody** (cardinal de Maurice) *Foudia rubra*  
**Mauritius Fruit Bat** (chauve-souris de Maurice) *Pteropus niger*  
**Mauritius Grey White-eye** (pic-pic) *Zosterops mauritianus*  
**Mauritius Kestrel** (crécerele de Maurice) *Falco punctatus*  
**Mauritius Olive White-eye** (oiseau à lunettes) *Zosterops chloronothos*  
**Mauritius Paradise Flycatcher** (coq des bois) *Terpsiphone bourbonnensis desolata*  
**Orange-tailed Skink** (scinque de l'île Plate) *Gongylomorphus* sp.  
**Ornate Day Gecko** (lézard vert) *Phelsuma ornata*  
**Pink Pigeon** (pigeon des Mares/pigeon rose) *Nesoenas mayeri*  
**Red-tailed Tropicbird** (paille-en-queue à brins rouges) *Phaethon rubricauda*  
**Rodrigues Fody** (cardinal de Rodrigues/zoiso zon) *Foudia flavicans*  
**Rodrigues Fruit Bat** (chauve-souris de Rodrigues) *Pteropus rodricensis*  
**Rodrigues Warbler** (fauvette de Rodrigues/zoiso long-bec) *Acrocephalus rodericanus*  
**Round Island Boa** (boa de l'île Ronde) *Casarea dussumieri*  
**Round Island Petrel** (pétrel de l'île Ronde) *Pterodroma arminjoniana*  
**Sooty Tern** (sterne fuligineuse) *Sterna fuscata*  
**Telfair's Skink** (scinque de Telfair) *Leiolopisma telfairii*  
**Wedge-tailed Shearwater** (fouquet du Pacifique) *Puffinus pacificus*  
**White-tailed Tropicbird** (paille-en-queue à brins blancs) *Phaethon lepturus*

#### Introduced Species

**Aldabra Giant Tortoise** (tortue d'Aldabra) *Aldabrachelys gigantea*  
**Black/Ship Rat** (rat noir) *Rattus rattus*  
**Brown Rat** (rat brun/surmulot) *Rattus norvegicus*  
**Common/Indian Mynah** (martin) *Acridotheres tristis*  
**Giant African Land Snail** (kourpa) *Achatina* spp.  
**Indian Musk Shrew** (rat musqué) *Suncus murinus*  
**Indian Wolf Snake** (couleuvre) *Lycodon aulicus*  
**Lesser Indian Mongoose** (mangouste) *Herpestes javanicus*  
**Long-tailed/Crab-eating Macaque** (singe/lzaco) *Macaca fascicularis*  
**Madagascar Fody** (cardinal de Madagascar) *Foudia madagascariensis*  
**Madagascar Radiated Tortoise** (tortue radiée de Madagascar) *Astrochelys radiata*  
**Red-whiskered Bulbul** (bulbul orphée) *Pycnonotus jocosus*  
**Ring-necked Parakeet** (perruche de l'Inde/petite cîteau) *Psittacula krameri*  
**Wild Boar/Pig** (cochon marron) *Sus scrofa*

Even though Mauritius is considered to have one of the most endangered bio-diversities in the world, it is encouraging to know that through our conservation efforts with our partners the following five endemic bird species have been saved from extinction: the Mauritius Kestrel, the Pink Pigeon, the Echo Parakeet, the Rodrigues Fody and the Rodrigues Warbler. This ranks Mauritius as the lead country in bird species recovery, ahead of the United States of America and New Zealand, each of which has saved four bird species from extinction. In addition, significant progress has been made in saving the Mauritius Fody, the Mauritius Olive White-eye, the Rodrigues and Mauritius fruit bats, and numerous species of rare endemic plants.



Mauritius Kestrel with prey



Measuring a Mauritius Kestrel chick

## Projects and Involvements

### Mauritius Kestrel (crécerele de Maurice)

#### *Falco punctatus*

IUCN status: Vulnerable.

This is a small bird of prey, which feeds mainly on lizards but also catches insects, birds and small mammals. The Mauritius Kestrel usually lays its eggs between September and January, in a hole in a tree or cliff face.

It was probably once a common bird occurring throughout Mauritius, in both coastal areas and the mountains. More recently it became restricted to just three areas: the Bambous Mountains of the east coast, the Moka Mountains in the north, and the Black River Gorges area in the south-west. The population declined due to habitat destruction, hunting and, more recently, pesticide misuse. In 1974, only four individuals were known to remain in the wild, and it was feared that this species would become extinct.



Endangered in 1994, downlisted to Vulnerable in 2000. The Mauritius Kestrel recovery is the most spectacular of any raptor conservation programme in the world.

The Mauritius Kestrel project currently closely monitors the two separate populations in the Black River Gorges National Park in the south-west and the Bambous Mountains in the east. The small population reintroduced into the Moka Mountains in the 1990s is thought to have died out.

Ongoing monitoring of the Bambous Mountains population has enabled us to form an exceptionally complete data set, dating from the first reintroductions in 1987 up to the present day. Each season the majority of pairs are found and their breeding attempts closely monitored, with almost all chicks being ringed to allow subsequent identification in the field. The resulting continuous data set of more than 95% known, ringed individuals is unique and has greatly added to our knowledge of the species and the factors that limit and influence its population, in turn improving our ability to conserve it.

Up to 75% of the east coast pairs breed in nest boxes provided and maintained by MWF, making it easier for us to access and monitor them. In the west, by contrast, as many as 85% of breeding attempts occur in natural nest sites (cliff and tree cavities). This factor, and the more demanding terrain of the Black River Gorges, means that monitoring of this population is more difficult and cannot be as comprehensive as that in the east.

Following the recovery and growth of the population in the 1990s, monitoring of the west coast birds ended in 2002 but subsequently restarted in 2007 following some evidence of a decline. Fieldwork in recent years has confirmed this, revealing lower numbers than were found during the 1990s, with the kestrels' range having contracted significantly, mostly in the dry forest areas in the north and south of their previous distribution. However, the population in the core of the range, in the Black River Gorges themselves, remains good, and productivity is comparable to that found in the past (though slightly lower than in the east).

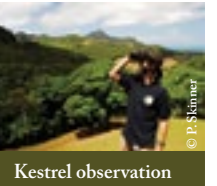
The west coast team found 39 pairs this season, fledging 37 young and it is thought that the population there numbers around 50 pairs in total. In the east there were 53 pairs fledging 59 young. This means that the total breeding population is around 100 pairs and, with fledged young and non-breeding individuals taken into account, we estimate the total population to be in the region of 500 individuals. Each season we are able to refine our estimates so that they are more realistic and the more recent figures show that there has been a decline in numbers related to the period when we discontinued intensive monitoring (2002-7). The current estimate is a significant decrease on the figures given for the late 1990s but the population at that time was artificially high because we were managing a high number of kestrel pairs in sub-optimal habitats (especially on the west coast). The drop is accounted for by the loss of pairs that were in unsuitable habitats.

### Main Donors 2009/10

Bouille, Nathalie  
 Drion, Laurent  
 Forges Tardieu Ltd  
 Kestrel Valley  
 La Prudence Leasing Finance  
 University of Reading



Kestrel landing



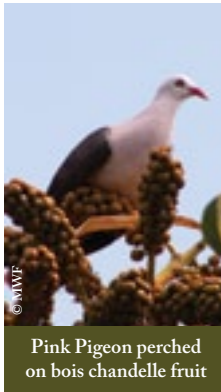
Kestrel observation



7

MWF Annual Report 2009/10





Pink Pigeon perched on bois chandelle fruit



Pink Pigeon chick

## Pink Pigeon (pigeon des Mares/pigeon rose)

*Nesoenas mayeri*

IUCN status: Endangered.

This medium-sized pigeon, with a pink body, brown wings and a broad rusty brown tail, is the largest pigeon/dove species in Mauritius. It feeds on leaves, flowers and fruits of native and exotic plants.

The Pink Pigeon was once widely distributed throughout Mauritius but by 1990 only nine individuals remained, restricted to a small area of upland forest in Black River Gorges. As a result, MWF commenced an intensive conservation programme, including captive breeding, with the ultimate goal of having a minimum of 600 free-living Pink Pigeons. This would be a huge step towards securing the long-term survival of this species.

Captive breeding of this species was initiated in 1976, followed by the first Pink Pigeon releases in the wild at Brise Fer in 1987. There are now six sub-populations of the Pink Pigeon: five in Black River Gorges National Park and one on Ile aux Aigrettes (an island leased to MWF for conservation purposes). The latest sub-population was introduced in the Lower Black River Gorges in December 2007 and this release site is a close collaborative project with the National Parks and Conservation Service. The current total population stands at around 400 birds in the wild.

Each sub-population is intensively managed by monitoring the individual birds and nests, supplementary feeding, predator control and disease management. Monitoring the birds provides a large data set that enables us to learn more about the factors affecting the Pink Pigeon's survival. With more detailed analysis we may be able to increase the number of sub-populations throughout the national park.

During the past two years, young fledglings harvested from the mainland have been released in the Lower Black River Gorges but a large number of these returned to their original site. New methods were applied and squabs



Critically Endangered in 1994, downlisted to Endangered in 2000.

were harvested from Ile aux Aigrettes, hand reared at the Gerald Durrell Endemic Wildlife Sanctuary and released at the site in the national park. So far, none has flown back to the island. This methodology will be continued until we have a self-sustaining sub-population. It is also necessary to establish additional sub-populations in order to increase the wild population and to encourage dispersal between the different sites, to maintain genetic diversity. A new aviary has been built at Pétrin and birds will be released there in 2011. Another site is planned in the Ferney Valley. We aim to reach the target of 600 Pink Pigeons with the establishment of these additional release sites.

For three years, the flowering and fruiting patterns of selected native and introduced food tree species used by Pink Pigeons at each site (except the Lower Black River Gorges) were monitored. When analyzed alongside the feeding observations recorded during the past 20 years we will know more about the natural food availability in the wild for pigeons. Ideally, this will result in supplementary feeding being carried out in a more strategic way and only when there is a food shortage in the wild.

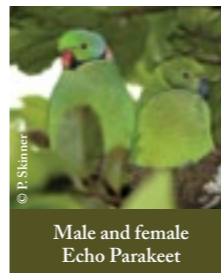
For the population to reach more than 600 individuals we also need to continue intensive monitoring. In addition, large restored forest areas (with reduced predator densities) will have to be created to provide core areas where the pigeon population can exploit safe nesting areas and spread out into the rest of the upland forest.



Pink Pigeon pair



© S. Tollington



Male and female Echo Parakeet

## Echo Parakeet (grosse câteau verte)

*Psittacula eques*

IUCN status: Endangered.

Originally, at least six native species of parrot could be found in the Mascarenes, but the Echo Parakeet is the only one to still survive today. Although similar to the introduced, and much more common, Ring-necked Parakeet (*P. krameri*) from India, the Echo Parakeet can readily be distinguished by the lower pitch of its call, shorter tail and darker green plumage.

These parakeets feed on flowers, leaves and fruit of native and exotic trees. The species was once common in Mauritius but began to decline in the mid-1800s, largely due to the destruction of native forest and predation by rats and monkeys. Common exotic birds, such as Indian Mynahs and Ring-necked Parakeets, also compete with the Echo for food and nesting sites.

The population dwindled to just 8 to 12 known individuals in the 1980s. However, due to the discovery of previously unrecorded breeding groups the minimum population may have never been less than 20. Efforts to recover the Echo Parakeet were initiated in the early 1970s and were intensified by MWF, the Forestry Service, the National Parks and Conservation Service and the World Parrot Trust after 1987. The present wild population is restricted to less than 40 km<sup>2</sup> of remnant native upland forest within the Black River Gorges National Park.



© S. Tollington

The only species in the world to be downlisted on *The IUCN Red List* in 2007, from Critically Endangered to Endangered. This is the world's most successful parrot recovery programme.

This recovery project has used a wide range of conservation techniques in order to bring the Echo Parakeet back from the brink of extinction. These have included captive breeding at the Gerald Durrell Endemic Wildlife Sanctuary, the manipulation of wild breeding pairs, harvesting eggs and chicks from wild nests that are prone to failure and rearing these in captivity, and the release of chicks back into the wild. However, with the significant increase in the population size, captive breeding is no longer required. Current techniques concentrate on supplementary feeding, provision of additional nesting sites in the form of nest boxes, habitat protection, regular inspection of active nests, and the weighing and monitoring of chicks to check condition. The wild population was estimated to be around 500 birds as of May 2010.

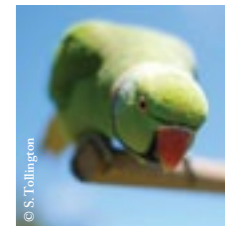
The 2009/10 breeding season was the fifth season of minimal management following the move away from intensive management prompted by an outbreak of the highly contagious and fatal Psittacine Beak and Feather Disease (PBFD) in 2005. The management strategy aims to reduce the risk of spreading PBFD, whilst ensuring continued good breeding success. From blood samples that we have been taking from individuals in the wild we have found that recovery is possible with 25 documented cases of birds recovering, having tested positive for the active virus or showing clinical symptoms. However, PBFD is still a major factor in slowing the population growth. In the latest season a total of 206 blood samples were obtained for disease screening. As more of the newly produced young were seen in good condition compared to the previous season, it is hoped that this is translated into increased survival to adulthood.

In terms of the number of eggs laid and chicks fledged in the wild, the 2009/10 breeding season was the most productive since the conservation management programme began. Of the 79 closely monitored breeding-age females 74 laid eggs. A minimum of 220 eggs were laid, with 156 chicks hatched from 175 known fertile eggs. A new record total of 134 chicks fledged in the wild, including 2 fledglings from unknown nest sites. The vast majority of new PVC nest boxes were accepted and used by the birds this year.

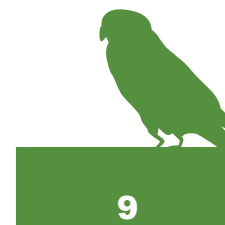
In the future, the management and monitoring of the population will be continued, with the focus on gathering breeding data, ringing all birds and the ongoing screening of the population for PBFD. The PVC nest box design will be under review for improvements. In addition, gathering data on the use of natural food sources will be given greater emphasis and an attempt to quantify the use of the supplementary feeding stations should be investigated.

### Main Donors 2009/10

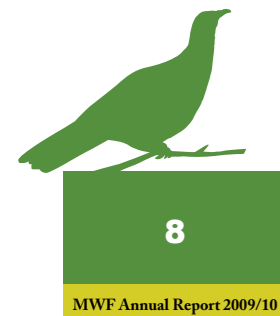
Durrell Institute of Conservation and Ecology  
Durrell Wildlife Conservation Trust  
Euro CRM (Mauritius) Ltd  
Fondation Harel Frères  
IBL Foundation  
International Financial Services Ltd  
Kaytee Manufacturer  
National Parks and Conservation Service  
North of England Zoological Society (Chester Zoo)  
University of Kent



© S. Tollington



MWF Annual Report 2009/10



8

MWF Annual Report 2009/10



## Passerines of Mauritius and Rodrigues

Today only eight endemic passerine (or songbird) species remain, two on Rodrigues and six on Mauritius. They are all forest-living birds of which two, the Mauritius Fody and the Mauritius Olive White-eye, are the subjects of intensive recovery programmes. MWF works in close collaboration with the National Parks and Conservation Service in Mauritius and the Forestry Service in Rodrigues for the recovery of endemic passerines, with funding and support from international organizations and private sources. The other species, described briefly below, are not currently subjects of recovery programmes. However, the Mauritius Cuckoo-shrike, Mauritius Paradise Flycatcher, Rodrigues Fody and Rodrigues Warbler have recently been identified as suitable for future translocation to parts of their former range. A complete census of the two Rodrigues endemics was conducted in 2010 and we plan to assess the population sizes of Mauritian endemic birds in the wild over the next few years to confirm or identify trends.

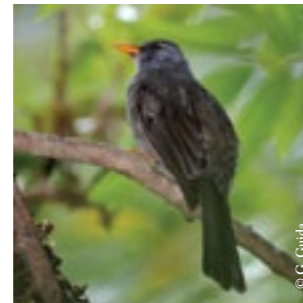
### Mauritius

The **Mauritius Paradise Flycatcher** (*Terpsiphone bourbonnensis desolata*) is an endemic subspecies of the Mascarene Paradise Flycatcher, the other subspecies is common in Reunion. Flycatchers were once widespread on Mauritius but are now found in scattered localities across the island with a current estimated population of more than 250 pairs, which is thought to be increasing. A recent survey has not been conducted although they are still classified as Least Concern. We currently monitor nesting attempts but would like to work more on this species, including establishing additional populations.



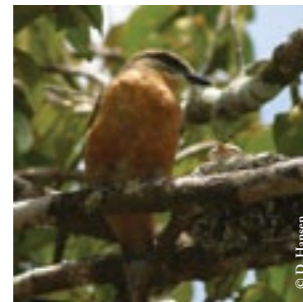
© R. Macneil

The **Mauritius Black Bulbul** (*Hypsipetes olivaceus*) is listed as Vulnerable with an estimated increasing population of around 225–340 pairs, although a new survey is required to establish a more precise population size and range. Threats include competition from exotics (such as the Red-whiskered Bulbul and Common Mynah), nest predation and habitat destruction.



© G. Guida

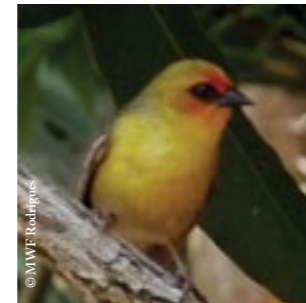
The **Mauritius Cuckoo-shrike** (*Coracina typica*) population was estimated at 260 pairs by 1993, but as this bird's range is expanding into the lowlands the population may be on the increase with as many as 600–700 birds. Past declines have been linked to pesticides, predation by introduced mammals and habitat destruction. This species is not seen as a conservation priority as numbers and range seem to be slowly increasing. There is still a need for some management of the species and we would like to re-establish a population in the Bambous Mountains.



© D. Hansen

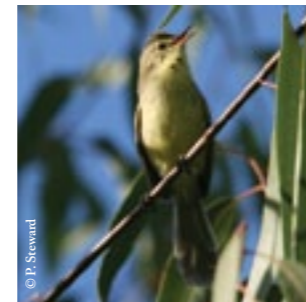
### Rodrigues

Rodrigues had at least 12 endemic bird species of which only 2 remain: the Rodrigues Fody and the Rodrigues Warbler. MWF has carried out regular censuses on the remaining endangered passerine species, both of which reached very low levels in the 1970s. We have implemented forest restoration with native plants in nature reserves and this increase in habitat has resulted in the spectacular recovery of these birds. Further habitat restoration will contribute to their long-term survival, although cyclones can still be responsible for population declines. In 2010, two MSc students from the University of East Anglia completed surveys on the populations of the Rodrigues Fody and Rodrigues Warbler.



© MWF Rodrigues

Having once been abundant, the **Rodrigues Fody** (*Foudia flavicans*) declined dramatically to around 6 pairs in 1968, although the population is now increasing, with around 900 individuals counted in 1999 and 8,000 in 2010. This is one of the most successful recoveries in the history of avian restoration. Predation by rats and cats is still a threat and the species is classified as Vulnerable. MWF is considering reintroducing the bird to other forested areas where it once existed.



© P. Steward

The **Rodrigues Warbler** (*Acrocephalus rodericanus*) was reduced to a population size of around 17 individuals in 1982, increasing to around 500 individuals in 1999 and 4,000 in 2010. Although the population is growing, the species remains Endangered. MWF is considering establishing additional populations on Ile Cocos, Ile aux Sables and in the Anse Quitor region.



© D. Hansen

The only passerine that is not threatened is the **Mauritius Grey White-eye** (*Zosterops mauritianus*), with an estimated population of 34,000–68,000 pairs. This species is common all over Mauritius.

## Mauritius Fody (cardinal de Maurice)

*Foudia rubra*



© S. Tillington

Male Mauritius Fody in breeding plumage  
Critically Endangered in 1994, downlisted to Endangered in 2009.

IUCN status: Endangered.

The Mauritius Fody is a small, forest-dwelling songbird, which feeds on nectar and insects. It closely resembles the introduced, and much commoner, Madagascar Fody (*F. madagascariensis*), with which it is often confused. One distinguishing feature is that the male Mauritius Fody has a red head and breast during the breeding season, whereas the male Madagascar Fody also has completely red underparts. Both male and female Mauritius Fodies have white wing bars, unlike the Madagascar Fody. They also have a thinner bill, which they use to probe for invertebrates, whereas the Madagascar Fody feeds predominantly on seeds.

The Mauritius Fody is one of the rarest endemic birds of Mauritius, with just 98–126 wild pairs remaining in upland forest in the gorges in 2002/3. The loss of suitable habitat has been a major threat to this species, as well as nest predation. We have successfully established a second sub-population of Mauritius Fodies on Ile aux Aigrettes, significantly increasing the numbers of this rare bird.

This conservation programme aims to reduce the risk of extinction of the Mauritius Fody by means of establishing additional sub-populations on off-shore islets. The programme began in 2002, and by 2004 a population of Mauritius Fodies had been successfully reintroduced to Ile aux Aigrettes. Today there are around 160 birds on Ile aux Aigrettes, the result of the releases and subsequent breeding, and around 400 birds in the wild in total. Efforts are now concentrating on monitoring and management of this population, including providing additional food. Monitoring improves our knowledge of the species, which in turn can aid future translocation attempts and contribute to the development of long-term management strategies.

Monitoring of the Ile aux Aigrettes population has given us valuable insights into the breeding and foraging ecology of the Mauritius Fody. As numbers of birds on the islet have increased, territory size and breeding success rates have declined. The population size of around 160 birds appears to be the carrying capacity of the islet with management. This information can be used when planning future translocations.

The establishment of the Ile aux Aigrettes population has been a great success, and although the IUCN status of the species was downgraded in 2009, this does not mean that the Mauritius Fody is safe from extinction. The isolation of the remnant populations, both on Ile aux Aigrettes and the upland forests, makes them vulnerable to catastrophic events, such as a disease or extreme weather conditions. In order to safeguard the species still further, our aim is to increase the number of populations and ultimately downgrade the species to Vulnerable. Preparations for a translocation of Mauritius Fodies to Round Island progressed with a cull and disease screening of the exotic birds on the island, to assess and reduce potential for disease transfer and resource competition. The trial translocation, using a small number of birds, took place towards the end of 2010.

In the 2009/10 season, monitoring continued on Ile aux Aigrettes. No work was carried out on the upland population at Pigeon Wood this season. For the 2010/11 season we aim to continue monitoring the Ile aux Aigrettes population.



© G. Guida

Female Mauritius Fody





© MWF Olive Team 2010

## Mauritius Olive White-eye (oiseau à lunettes)

*Zosterops chloronothos*

This beautiful small passerine has continued to decline in numbers, so in 2005 MWF began a project to save the species from extinction. The remaining wild population was closely monitored to find nesting attempts and to observe behaviour. Where possible, the contents of nests that were at risk from predators were rescued and the eggs and chicks taken to the hand-rearing facility at the Gerald Durrell Endemic Wildlife Sanctuary. Up to and including the 2009/10 season, we have been able to monitor 143 nests, and numerous eggs and chicks have been rescued for hand rearing.

Between 2006 and 2010, this work resulted in the release of 38 Olive White-eyes onto Ile aux Aigrettes, although not all of these survived. In 2010, the population stood at 19 individuals, comprising 10 released birds and 9 fledged. Research on the island aims to understand the species more thoroughly and to identify the pressures facing these birds. It will also help to establish future plans for long-term management.

Following the first breeding attempts on Ile aux Aigrettes in 2007/8, from which no birds fledged, there have been many breeding attempts and the 2009/10 season saw a record amount of fledglings with 14 young fledging from 5 pairs. During this season we saw the fledglings from the previous season nest and fledge their own young into the population. The first three-egg clutch on Ile aux Aigrettes was discovered, all of which successfully fledged and are still alive in the population today.

As part of this project we also devote time to examining limiting factors on the populations. From our recent research we have identified that the provisioning rates of parent birds to chicks does not affect nesting success. However, it may be quality of food rather than quantity that caused the failure of nests in the past. In 2009/10 we began investigating other types of management in the Combo population in the Black River Gorges, in order to increase nesting success. Rats are a major cause of nest failure for endemic birds here, so to identify how much of an impact they have, we conducted

**IUCN status: Critically Endangered.**

This is a small songbird that feeds primarily on nectar, but also on insects. It is easily identified by its white eye-ring, olive-green plumage and fine curved bill. It is likely that this bill has been adapted over time for improved nectar feeding. This is the least known of all the Mauritian birds.

In 2001, a survey showed that approximately only 100 pairs of this species were still to be found, mainly in the Black River Gorges National Park. Numbers had declined continuously over the previous 100 years, largely due to habitat degradation and nest predation by mammals and other bird species, both native and exotic. Between 1975 and 2001 the habitat range of the Mauritius Olive White-eye contracted by 50%, with the species now occupying less than 25 km<sup>2</sup> on mainland Mauritius.



a poison trial. This proved successful in establishing the effectiveness of the poison in controlling rat populations in territory areas.

The estimated total wild population of Olive White-eyes is around 100 pairs and future plans for the recovery of this species include the ongoing monitoring of both populations. Due to the nesting success on Ile aux Aigrettes in the most recent season, we will cease nest rescues from the wild. Instead we will carry out detailed monitoring of nesting to determine whether the presence of rat poison to control rat populations significantly increases nesting success. If this proves to be the case, poison management could be initiated throughout the remaining Mauritius Olive White-eye core population at Combo. The aim will be to increase the wild population while the island population is still establishing.

**Main Donors 2009/10**  
 Compagnie de Beau Vallon Ltée  
 Conservation International  
 National Parks and Conservation Service  
 New Noah Program (Wildlife Preservation Canada)  
 North of England Zoological Society (Chester Zoo)  
 Rufford Maurice Laing Foundation  
 Ruth Smart Foundation  
 Sun Resorts Ltd



Nest rescue



Rescued Mauritius Olive White-eye chicks

## Fruit Bats

Bats are the only mammals native to the Mascarenes. There used to be three fruit bat species on the islands: one is now extinct, leaving one species each on Mauritius (*Pteropus niger*) and Rodrigues (*P. rodricensis*). They feed on fruit and the nectar of flowers, and both species play an important role in seed dispersal and the pollination of fruiting trees.



© G. Guinda

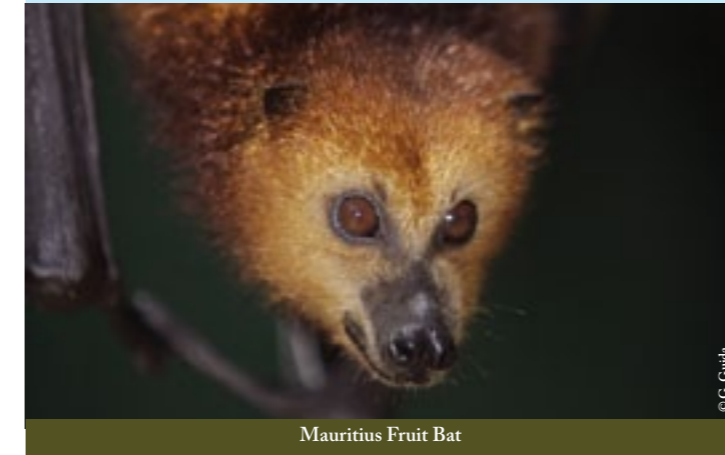
## Mauritius Fruit Bat (chauve-souris de Maurice)

*Pteropus niger*

**IUCN status: Endangered.**

The Mauritian species is a large bat that can be seen flying at dawn and dusk, using both sight and smell to find trees in fruit. These are social bats which usually roost together in large numbers. Once widespread over Mauritius, the population has decreased considerably due to habitat loss, cyclones and illegal sport hunting.

Although the Mauritius Fruit Bat became extinct on Reunion, where it was last recorded in 1790, the island has been recolonized by a handful of individuals over the last decade.



Mauritius Fruit Bat

© G. Guinda

Although the Mauritius Fruit Bat currently exists in relatively high numbers it recently faced a new and serious threat to its existence, when the Mauritian Government discussed the possibility of culling this species, despite its IUCN listing, in order to protect the interests of fruit farmers. MWF has provided scientific and management advice to the Government to convince them that plans to legalize culling could have catastrophic effects. In fact, the extent to which this fruit bat takes lychees in comparison to other fruit eaters (such as the Ring-necked Parakeet, Common Mynah, Red-whiskered Bulbul, and rats) has not been scientifically determined. 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 2010.

The most recent MWF survey, in 2007, found that the minimum population size of the Mauritius Fruit Bat is around 25,000 individuals. Although this may initially seem quite a large number, this fruit bat has just been uplisted from Vulnerable to Endangered by the IUCN, due to its reduced range, the continuing decline in the extent and quality of its habitat, and the impending threat of legalized culling.

## Rodrigues Fruit Bat (chauve-souris de Rodrigues)

*Pteropus rodricensis*

**IUCN status: Critically Endangered.**

This species used to be found on Mauritius but is now found only on Rodrigues. It is often known as the Golden Fruit Bat.

In the 1970s, the population dwindled to between 70 and 100 individuals but has now recovered to several thousand, largely due to increased forest cover and sensitization efforts. These bats are threatened by cyclones, one of which severely affected the population in 2003.



Rodrigues Fruit Bat

© P. Steward

Three complete population surveys were conducted in 2009 and four in 2010 at a number of roost locations, in order to estimate current bat numbers and to monitor the population. Regular bat surveys are also conducted at the Cascade Pigeon roost, which is one of the major roost sites on the island. From these surveys it has been found that the number of individuals now stands at around 9,000. To continue with this level of monitoring, volunteers from the local community have been trained to carry out some of the work, in addition to MWF staff. Similar surveying levels will be maintained in the future.

An Annual Bat Day/Festival was organized in April 2009 and June 2010 to sensitize the public about this species and its importance in the ecosystem. The festival included an exhibition on the bat, newspaper articles, radio talks, activities in schools, and an opportunity for the public to participate in a bat survey. A bat poster and sticker were also created for distribution on this occasion. In 2009, an art competition was launched in primary schools and in 2010 MWF organized a photography competition on the theme *Bats in the Wild*. In 2011, MWF aims to target pre-primary school students with a day of activities including a bat talk, bat colouring page, bat mask, and face painting.

**Main Donors 2009/10**  
 North of England Zoological Society (Chester Zoo)  
 Zoological Society of Philadelphia





## Darwin Initiative Reptile Translocation Project

Before the first colonists arrived in Mauritius some 400 years ago, it was an island of unique reptiles and birds. The reptiles flourished and adapted to fill many of the roles that mammals usually occupy: giant tortoises were the grazers and browsers; snakes ate smaller reptiles and birds; and large lizards, that were also predators, and smaller lizards both helped to disperse plant seeds and pollinate flowers.

However, the new arrivals brought with them a number of invasive animal and plant species from elsewhere and cut down much of the original Mauritian forests. These disturbances caused the loss of more than 60% of the unique Mauritian reptiles from the main island. Five endemic reptile species became extinct. Some species managed to persist on a few of the offshore islands, particularly those that had not been invaded by predators, such as rats and mongooses. In Rodrigues, all of the endemic reptiles became extinct.

Currently, the majority of Mauritian reptiles are restricted to either Round Island or another one of six of the numerous islands around Mauritius.

The re-establishment of reptile communities within Mauritius is an initiative building on over 30 years of reptile research and offshore island conservation management by the Government of Mauritius, Durrell Wildlife Conservation Trust and MWF. The programme began in 2006 and involves the translocation of vulnerable reptile species to other islands to form new populations and thus enhance their chances of survival. These new populations are monitored to assess their success and also the impact on their new habitat, to discover more about the reptile's role within the ecosystem.

Reptile conservation in Mauritius faces many challenges in terms of continuous introductions of alien predators and competitors, destruction of habitat, disturbance from camping, illegal fires and littering. During 2009/10, invading populations of rats on Ile aux Aigrettes, shrews on Ile Marianne and introduced geckos on Ile aux Fouquets and Ile Marianne have had to be eradicated. Despite some setbacks caused by these challenges, the project has made significant progress.

Since 2009, monitoring of reintroduced populations of Telfair's Skinks (*Leiolopisma telfairii*) on Gunner's Quoin has shown that survival, reproductive output and population growth is on target. Their survival on Ile aux Aigrettes is also high and whilst they have made significant impacts upon invasive species such as Indian Musk Shrews, Giant African Land Snails and Indian Wolf Snakes, the survival of eggs and juvenile skinks is very low. Although the shrew population declines in response to the number of adult skinks it is thought that the shrews predate the juvenile skinks and eggs. To test this theory, an additional 500 adult skinks from Round Island were translocated to Ile aux Aigrettes in 2010 to apply more pressure on the shrew population and allow successful skink reproduction. Monitoring of the skinks has demonstrated how important they are for the dispersal of seeds from endemic trees.

The release of skinks to Ile aux Aigrettes in 2010 coincided with the release of 50 Guenther's Geckos (*Phelsuma guentheri*) from Round Island.

The geckos have recently gone through their first breeding season, with more than 76 eggs, many of which have recently started to hatch. This is the first time the gecko has reproduced in the wild outside Round Island in more than 150 years.

Monitoring and careful management of translocated populations of the Ilot Vacoas form of Bojer's Skink (*Gongylomorphus bojeri*) on Ile aux Fouquets and Ile de la Passe has shown that the populations are healthy and growing. The number of individuals has increased from approximately 350 on one island in 2007 to more than 1,300 on three islands and continues to increase.

The Orange-tailed Skinks (*Gongylomorphus* sp.) translocated from Flat Island to Gunner's Quoin are proving to be healthy and are reproducing. The decision to translocate in 2008 was justified, as shrews were detected on Flat Island in early 2010 and have already decimated the island's reptile populations. To enhance the chances of survival a further 300 Orange-tailed Skinks were translocated in 2010 to Gunner's Quoin and 90 individuals were released on Gabriel Island (Ilot Gabriel).

The captive breeding programme for the Lesser Night Gecko (*Nactus coindemirensis*) has proceeded well. From the 30 individuals collected from Ilot Vacoas, the Herpetological Department at Durrell in the UK bred over 100 geckos to support a translocation to Ile Marianne in 2011. Fortunately, this has reduced the need to remove a large proportion from the source population of only 390 individuals on Ilot Vacoas.

Future plans include the continued monitoring and management of the resident and translocated reptile populations, the translocation of Lesser Night Geckos to Ile Marianne, the placing of Orange-tailed Skinks in captivity to safeguard against extinction, the development and implementation of plans to protect the terrestrial reptiles of Flat Island from adverse development for tourism, and further research to tackle the shrew problem.



Ilot Vacoas form of Bojer's Skink

**Main Donors 2009/10**  
 Darwin Initiative (DEFRA, UK)  
 Durrell Wildlife Conservation Trust  
 Happy World  
 Harcroft Foundation  
 Mauriplage Investment Co. Ltd  
 National Parks and Conservation Service  
 Summertimes  
 Toyota Mauritius Ltd



Guenther's Gecko



Lesser Night Gecko

## Tortoise Re-wilding

Two distinct groups of giant tortoises could once be found on the Indian Ocean islands: the Seychelles islands tortoises and the Mascarene islands tortoises, with several different species among the different islands. It is believed that Mauritius and Rodrigues each had two species (*Cylindropsis inepta* and *C. triseriata*; *C. peltastes* and *C. vosmaeri*, respectively), which were a dome-shaped tortoise and a saddleback tortoise, while Reunion had a single dome-shaped species (*C. indica*). These tortoises filled many of the roles usually held by mammals (grazers, browsers and seed dispersers). Once humans arrived on the island, the tortoises were harvested as a food source and their young were killed by introduced animals such as pigs, cats, dogs and rats. The sole surviving species of giant tortoise in the Indian Ocean is the Aldabra Giant Tortoise (*Aldabrachelys gigantea*) from the Seychelles.



Madagascar Radiated Tortoise

With the extinction of the tortoises, many ecosystem interactions such as grazing and seed dispersal were disrupted. As part of ongoing ecosystem restoration, MWF released 20 Aldabra Giant Tortoises on Ile aux Aigrettes in 2000 as an analogue for the extinct Mauritian species. These tortoises were allowed to roam free on the island from 2004.

In 2007, a PhD study into the use of analogues in the conservation of plant communities involved the translocation of 12 sub-adult Aldabra Giant Tortoises and 12 Madagascar Radiated Tortoises (*Astrochelys radiata*) to Round Island. At the end of 2010, a further 60 Aldabra Giant Tortoises were translocated there and we have planned an ongoing translocation programme to promote the restoration of the island's ecosystem by recreating the lost links of grazing and seed dispersal.

Monthly monitoring will focus on the health and growth of the tortoises and we will also be conducting a vegetation survey to assess the impact of the tortoises.

**Main Donors 2009/10**  
 Conservation Works  
 National Parks and Conservation Service

## Seabird Translocation

Mauritian offshore islands, especially Round Island and Serpent Island, support some of the largest breeding colonies of seabirds in the Indian Ocean. Many other islands had seabird populations but these disappeared with the introduction of predatory feral cats and rats. Translocation is becoming a major tool for increasing the distribution of species and creating new sub-populations to ensure the survival of threatened species.



White-tailed Tropicbird

The reintroduction of seabirds to Ile aux Aigrettes aims to restore a lost seabird community and reactivate the missing ecological interactions. Seabirds bring nutrients onto an island in their droppings, regurgitated food, moulted feathers and unhatched eggs, and their reintroduction should improve the fertility of the soil, promoting plant growth. A seabird colony will also attract increased numbers of insects and other invertebrates, providing food for Telfair's Skinks, geckos, Mauritius Fodies and Olive White-eyes. Although there have been successful reintroductions of seabirds elsewhere, this will be the first multi-species reintroduction to restore a whole seabird community.

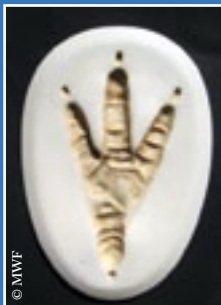
In 2009, a trial release of 28 Wedge-tailed Shearwaters (*Puffinus pacificus*), 23 White-tailed Tropicbirds (*Phaethon lepturus*) and 2 Red-tailed Tropicbirds (*P. rubricauda*), harvested as chicks on Round Island, were released on Ile aux Aigrettes to fledge from artificial nest boxes. Chicks were reared on a diet of squid, octopus and small fish. All birds were ringed to enable identification and monitoring.

Building on the success of the trial, follow-on releases are planned for 2011, whereby more birds of the same species will be harvested from Round Island for release on Ile aux Aigrettes. We also have plans for trial releases of the Lesser Noddy (*Anous tenuirostris*), Common Noddy (*A. stolidus*) and Sooty Tern (*Sterna fuscata*), from Serpent Island to Ile aux Aigrettes.

These translocations will lay the groundwork for more challenging seabird restoration work, such as the establishment of some of the rarer seabirds including the Round Island Petrel (*Pterodroma arminjoniana*) and Red-footed Booby (*Sula sula*).



## A Small Piece of History

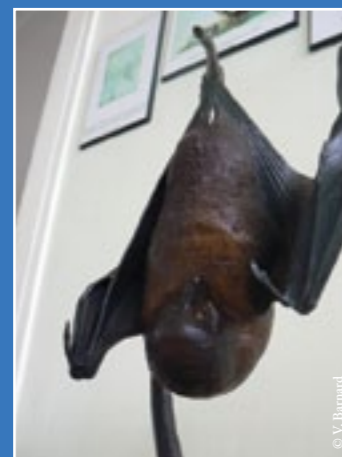
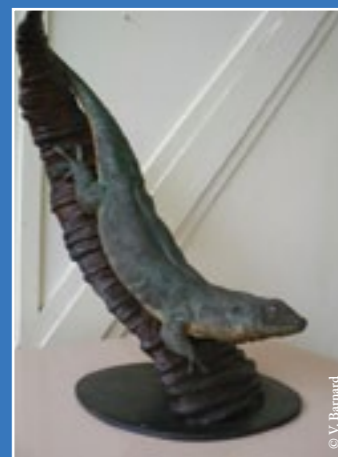


The Mascarene Islands have suffered the disappearance of a number of unique species since the arrival of humans over 400 years ago. A project was conceived jointly by MWF and Pangolin Editions in England to recreate some of these extinct creatures in the form of life-size bronze sculptures. The ten sculptures are the work of Nick Bibby, and include species such as the Dodo, the Giant Skink, the Rodrigues Giant Gecko and the Red Rail. The aim is to draw attention to the tragedy of extinction and also to inspire a deeper understanding of the need for conservation.

A complete collection of the bronze replicas has been donated to the Mauritian Wildlife Foundation and is now exhibited on Ile aux Aigrettes. This nature reserve is particularly suitable for this role as it encompasses all aspects of our work and is accessible to the general public. This is a unique opportunity for visitors to look closely at, and touch, representations of extinct native species. In addition to the life-size bronzes, hand-made mini-bronzes are also available for sale.

Another exciting project is the Dodo footprint, which has been modelled on the preserved remains of a Dodo foot from the Natural History Museum (London). The original foot is now lost, but fortunately we have a cast of it and from this we have been able to make this 100% authentic Dodo footprint, which is available for sale.

The sale of these items raises funds for our conservation projects and at the same time the projects enhance the ecological, historical and educational aspects of Ile aux Aigrettes.



If you are interested in purchasing either the mini-bronzes or the Dodo footprint, they are available at Ile aux Aigrettes, or see the outside back cover for our contact details.



## Rare Plants

Mauritius has been ranked by the IUCN as having the third most endangered flora in the world. Around 200 of the 315 endemic plant species are threatened and Mauritius may already have lost as many as 70 plant species.

The island has experienced four centuries of large-scale forest clearance for agriculture and urban development, and when combined with the introduction of invasive species of plants and animals, this has had a disastrous effect on native flora. Some endemic plants such as the palm *Hyophorbe amaricaulis* have been reduced to just one individual in the wild.

### Mauritius Rare Plants

Work this season has continued with the core elements of the project, which are rare plant monitoring and search, and the field gene bank. The data from rare plant monitoring is used to update the IUCN plant list and to assist in collecting plant samples for the Mauritius Herbarium.

In an attempt to save not only species but also the genetic diversity of the rarest plant species, a field gene bank was set up in the uplands in the year 2000. It is a collaborative project between the National Parks and Conservation Service and MWF. This project aims to capture the genetic diversity of rare species by taking cuttings or seeds from each known wild individual, and developing a duplicate collection in a protected environment. After an initial plant survey of the location, plant materials are taken (cuttings, seeds, seedlings) to propagate in the Pigeon Wood nurseries at Plaine Paul in Black River Gorges National Park (upland plants), and Ile aux Aigrettes (lowland plants). Some of the successfully propagated individuals from Pigeon Wood are distributed to the NPCS and Forestry Service. The remainder are planted in the field gene bank, a plot of forest in Pigeon Wood. Plants in the gene bank are monitored and regular maintenance weeding is carried out in collaboration with the NPCS. These plants will be propagated on a larger scale in different nurseries for future restoration projects.

On Ile aux Aigrettes, out of the 23 species of rare plants that were propagated during this period, 21 were successful. Planting is usually done during the rainy season, from January to April, and takes place all around the island, in clusters. Each plant is guarded with large pieces of coral to protect them from trampling by giant tortoises. The plants are then given a unique code, tagged and regularly monitored. During 2009/10, over 1,300 individuals of 21 Critically Endangered species were raised, of which 782 were planted on the island. In Pigeon Wood, 15 species have been propagated with 13 successes and some 64 upland plant individuals were planted in the Pigeon Wood field gene bank.

*Chassalia boryana*, a rare upland plant species, was known from only a single wild individual in Mondrain Nature Reserve but during recent rare plant surveys we located a population of 12 individuals in Chamarel Forest and 2 individuals on Mont sur Mont. All these newly found individuals were relatively young with limited material for collection. We advised on restoration of the sites, which has been implemented with the collaboration of the private sector, and the plants are now being closely monitored.



*Chassalia boryana*



*Ochrosia borbonica*



*Elaeocarpus bojeri*



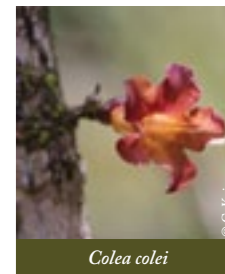
A bee gathering nectar and pollen from an ebony flower

**Plant phenology** is the scientific study of the timing of recurrent biological events such as flowering, fruiting, leaf shedding and leaf flushing, and the causes of their timing with regard to living and non-living factors.

One of the main causes of species endangerment has been identified as seasonal food shortages and it is a major cause of population limitation in Mauritian birds. As a result, studies on phenological activities of food plant species have been set up by MWF. The aim of the phenology study, which started in February 2007, is to understand the phenological behaviour of the food plant species of our native birds and document the quality and quantity of natural food in different habitats. For the study, 10 individuals of 37 native and 10 exotic food plant species at 5 field stations (Brise Fer, Combo, Pigeon Wood, Bel Ombre and Ile aux Aigrettes), have been permanently tagged along main tracks. Phenological data from these plants are recorded monthly on the observation sheets. Analysis provides information about the difference in flowering/fruiting times and abundance across all of the stations. Ultimately the insight gained from this study will contribute towards our conservation strategies for the long-term conservation of native fauna species.



Plant tagged for phenology study



*Colea coleii*



*Tambourissa peltata*



**Main Donors 2009/10**  
 Air Mauritius  
 Compagnie Sucrière de Bel Ombre Ltd  
 HSBC  
 Le Domaine de la Vallée de l'Est  
 North of England Zoological Society (Chester Zoo)  
 Sofap Ltd  
 UNDP-GEF PAN



## Rodrigues Rare Plants

Invasive alien woody weeds dominate all forest areas on Rodrigues and, with the exception of intensively restored areas in the nature reserves, no contiguous areas of native forest exist. Elements of the original biodiversity do remain in some forest fragments, but without restoration work these will degrade into thickets of entirely introduced vegetation of the type that covers much of the island.



*Dombeya rodriguesiana*



*Mathurina penduliflora* (bois gandine), endemic to Rodrigues

Rodrigues, with its highly endangered flora, has had an active rare plant conservation project for over two decades, although initially this work was modest. In collaboration with the Forestry Service, a larger, improved nursery was erected in 1996 at Solitude to produce native plants for the restoration of both Grande Montagne and Anse Quitor nature reserves, and more recently Ile Cocos and Ile aux Sables. At Solitude, plants are also produced for private restoration projects, such as the François Leguat Giant Tortoise and Cave Reserve. In addition, the nursery is used to train local villagers in horticultural techniques to improve native plant production in backyard and village nurseries. Propagation trials of rare Rodriguan endemic species are conducted at Solitude.

Plant conservationists have spent a great deal of effort in recent years in locating, propagating and reintroducing Rodrigues' rarest plant species into protected areas. In some cases this has resulted in bringing individual species back from the brink of extinction. Recently, we have succeeded in propagating two very rare endemic species through cuttings. The endemic *Gouania leguati*, which has only one population remaining in the wild, and the bois papaye (*Badula balfouriana*), with only eight remaining individuals in the wild, are both being propagated in the MWF Solitude Nursery. Since 2009, individuals of both species have been reintroduced to Grande Montagne Nature Reserve, and one individual of each species is still surviving. The recovery work is not yet complete since the propagation method is only now being mastered. As the plants grow, more individuals will need to be planted and monitored in reintroduction sites throughout Rodrigues.

## Back from Extinction – *Ramosmania rodriguesii*

This member of the coffee family is a Rodrigues endemic with attractive white flowers. After 1940, the plant was thought to be extinct, with the only evidence being a drawing made by the botanist Balfour who visited Rodrigues in 1877. In 1980, Mr Raymond AhKee, a schoolteacher on Rodrigues, encouraged his biology pupils to look for Rodriguan endemic plants. One pupil, Hedley Manan, collected a specimen next to a road at Mont Plaisir, near to his house. This was identified as the last remaining wild café marron, and in 1986 cuttings from the tree were sent to the Royal Botanic Gardens in Kew (UK). It took several years to propagate cuttings

successfully in Rodrigues, but by 1996 three plants were obtained. Artificial pollination was successful in Kew in 2003 and cuttings were brought to Rodrigues. Another breakthrough came in 2008, when the MWF nursery was successful in propagating seedlings from a seed collected in Rodrigues. In 2009, three café marron seedlings were planted at Mont Plaisir near the wild tree, and in 2010 an additional three seedlings were reintroduced to Grande Montagne Nature Reserve. Recently, we have received café marron seeds from Kew Gardens, and we are now propagating these in our nursery in order to identify the best techniques to use.



*Ramosmania rodriguesii*

**Main Donors 2009/10**  
Air Mauritius  
North of England Zoological Society (Chester Zoo)

## Habitat and Island Restoration: Mauritius

### Round Island

Round Island covers just 214 ha, and is situated 22.5 km north-east of Mauritius. It has often been stated to have more endangered species per unit area than any other comparable area on earth. Many species are unique to the island. The last remnants of palm savannah are found there, including latanier (*Latania loddigesii*) and palmiste blanc (*Dictyosperma album* var. *conjugatum*).

The island was (until the Reptile Translocation Project) the only location for some reptile species including the Round Island Boa (*Casarea dussumieri*), Telfair's Skink, Guenther's Gecko and Durrell's Night Gecko (*Nactus durrelli*). Also important are the seabirds which have their breeding grounds here, with relatively large populations of shearwaters and tropicbirds. It is the only known breeding location for the Round Island Petrel.

The island was classified as a nature reserve in 1957 and is administered jointly by the National Parks and Conservation Service and MWF.



MWF staff/volunteers and equipment arriving on Round Island

**Main Donors 2009/10**  
Mauritius Commercial Bank Ltd  
National Parks and Conservation Service  
O&O Le Saint Géran  
University of Reading

Projects on Round Island include work on both the plant and animal communities. The main priorities are to restore the plant community and to monitor and manage the reptiles and seabirds. Since 2002, work has greatly progressed with the presence of the field station and the wardens, who have the day-to-day responsibility for activities on the island.

An intensified effort to restore the hardwood forest that once existed on Round Island is being made. The Round Island nursery produces about 1,500 plants of hardwood species from materials that are collected on the island itself. Non-hardwood species that are propagated in the nursery include the Round Island Bottle Palm (*Hyophorbe lagenicaulis*), bois de chandelle (*Draceana concinna*) and vacoas (*Pandanus vandermeerschii*). These species are also naturally regenerating on the island and during the rainy season of 2011 we are envisaging direct transplanting of seedlings from around mother plants to planting sites.

In 2009, most of the planting was done in shallow soil, an arable depth of less than 20 cm, unlike the previous seasons when planting was done in deep soil. This new method of planting ensures that plants are not damaged by shearwater activity, which occurs mainly in deep soil areas. Plant survival is monitored twice a year and fixed-point photographs are taken annually to record changes in vegetation structure.

Ongoing weed management remains important. Certain weeds present on the island could hinder the restoration efforts if they are not controlled: *Heteropogon contortus*, *Chromolaena odorata*, *Sporobolus capensis* and *Mikania micrantha* are considered high-risk invasive exotics. If a particular site has high recruitment it is checked more regularly to ensure that the weed is contained to a defined area. Only one new site of the weed *Chromolaena odorata* was found in the palm savannah during this period, and the site was covered with thick black plastic bags to destroy any viable seeds. A strict quarantine protocol remains in place to prevent introduction of new plant and animal species.

Ongoing observation of the island's reptile population remains important. The different reptile populations were monitored and most are increasing. Monthly boa searches were carried out and more boas were PIT tagged, indicating that the population could be larger than previously estimated (1,200 individuals). Additional Telfair's Skinks and some 50 Guenther's Geckos were translocated to Ile aux Aigrettes, to further secure the future of these species. Introduced Aldabra Giant Tortoises and Radiated Tortoises are now roaming free on the island and have already taken up their role as preferential exotic plant grazers and seed dispersers. We boosted the Aldabra Giant Tortoise population with the release of 60 animals in 2010, which will be followed by further annual translocations (see page 15).

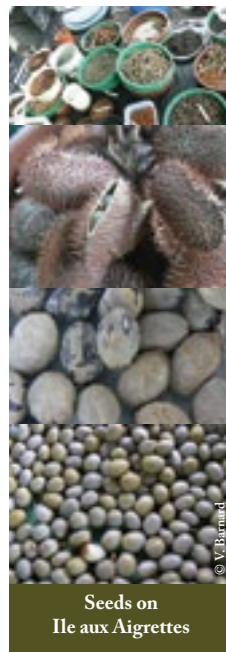
A translocation of Mauritius Fodies to the island was carried out in 2010, although unfortunately the birds were heavily predated by the Round Island Boa. Plans for further translocations are being reviewed.

Round Island Petrel monitoring is carried out monthly, with the ringing of new individuals. Two recent MSc projects by students from Cardiff University have studied the diet of this species. For the much larger populations of Red-tailed Tropicbirds and White-tailed Tropicbirds monitoring is restricted to an area close to the field station. Translocations of the Wedge-tailed Shearwater and both species of tropicbirds from Round Island to Ile aux Aigrettes, based on a successful trial conducted in 2009, are planned for 2011 (see page 15).



Juvenile Round Island Boa





Seeds on Ile aux Aigrettes

## Ile aux Aigrettes

Located in the bay of Mahébourg, about 800 m off the south-east coast of Mauritius, these 26 ha of coralline limestone, partially overlain with sand and humus deposits, are what remain of an eroded dune exposed after a drop in the sea level some 10,000 years ago.

Previously much degraded and weed invaded, this islet is the last refuge of the dry coastal forest, an ecosystem once common around much of coastal Mauritius.

Free from human presence for a long time, Ile aux Aigrettes became a natural museum with a remarkable collection of endemic species of Mauritian fauna and flora. However, the arrival of humans on the islet in the early 1600s disturbed and almost totally destroyed this island ecosystem. Tree felling, particularly of ebony, continued even after the island was first declared a nature reserve, in 1965.

MWF initiated a habitat restoration project here in 1985, taking over full management of the island in 1987. Now it is possible to witness here animal and plant species unique to Mauritius living in a habitat restored, as closely as possible, to its natural state of 400 years ago. Members of the public have been able to take a tour of the island, as part of our visitor programme, since 1998 to experience for themselves this transformation.



Weeding on Ile aux Aigrettes

**Main Donors 2009/10**  
Air Mauritius  
Compagnie de Beau Vallon Ltée  
Ecotour visitors  
North of England Zoological Society (Chester Zoo)



Ile aux Aigrettes from Lion Mountain

Restoration work on the island began with a weeding programme to eradicate introduced invasive plants such as the faux acacia (*Leucaena leucocephala*) and prune malgache (*Flacourtia indica*). The forest was then replanted with native plants, including a rare species of ebony with which the island was once covered (*Diospyros egrettarum*). The next step was to eradicate introduced predators such as rats, paving the way for the reintroduction of native fauna. In 1997, a nursery was built for the propagation of endangered native plant species for planting on the island.

Following the establishment of the native forest we began to reintroduce endemic species of birds and reptiles, including Pink Pigeons, Mauritius Fodies, Mauritius Olive White-eyes, along with the Aldabra Giant Tortoise (to replace the extinct giant tortoise once found here), Telfair's Skink and Guenther's Gecko. More recently seabird translocations have been undertaken (see page 15).

The coastal forest of Ile aux Aigrettes is now naturally regenerating and each year we produce 7,000 plants of 60 different species for use in specific projects, including the Rare Plants Project. We grow nectar-producing plants for endemic passerines and tussock grasses for tortoises and seabirds, as well as plants for donations. Up to 1,000 of the plants produced on Ile aux Aigrettes are sent to Round Island annually for planting during the rainy season.

The island has undergone significant development over the last couple of years, with the planning and implementation of the new educational programme (see page 27) and the cutting of the new pathway. Service grid lines were also cut to allow the field staff to move freely across the island without causing any damage to the emerging flora.

In April 2010, MWF hired 11 labourers on a temporary basis (3 months) in order to carry out weeding. With these extra labourers in addition to the island team, 468 grids representing 73,125 m<sup>2</sup> (29% of the island) were weeded. Unlike earlier weeding exercises where the weeded biomass was disposed of by controlled burning, this time it was carefully stacked to provide shelter for the reintroduced skinks.

Rats present a serious threat to native wildlife worldwide and despite being eradicated from the island in 1992 they have subsequently reinvaded on four separate occasions, being introduced accidentally via boats, equipment or building materials, the last time in 2009. Initially, a poison grid was established across the island to eradicate the Black Rat, with daily monitoring of bait stations and replacement of used bait. Once rats had not been observed for several days the poison was removed and monitoring continued with chew sticks dipped in oil which act as indicators of presence or absence of rats. The rats were successfully eradicated after heavy investment. It has been proven that it is more effective to have an ongoing quarantine and monitoring system, rather than rely on an emergency response, so in 2009 we implemented a stricter protocol to prevent rat and other alien species introductions. However, if the quarantine is breached, MWF is now in a better position to detect invasion early on and to respond promptly.



Ornate Day Geckos

## Habitat and Island Restoration: Rodrigues

### Anse Quitoir and Grand Montagne Nature Reserves

MWF has worked on the restoration of all four nature reserves in Rodrigues, namely Anse Quitoir, Grande Montagne, Ile aux Sables and Ile Cocos, for more than two decades. The reserves have entirely different habitats: Anse Quitoir is almost at sea level, with coralline substrate and is a relatively dry area; Grande Montagne is considered to be at high altitude (300–350 m) and is relatively wet with a deep rich soil; and Ile Cocos and Ile aux Sables are isolated sandbar islands.

We have run trials in these areas with different native species and planting regimes to establish the most suitable restoration programmes. Several exotic shrub species (unlike native ones) tend to utilize a lot of water and are not suitable for the dry Rodrigues environment. Since water is a precious resource in Rodrigues, work has been carried out to replace exotic forest with native planting.



MWF Rodrigues staff removing invasive plants

**Main Donors 2009/10**  
Air Mauritius  
Australian High Commission  
Conservation International  
European Union - DCP  
Forestry Service  
Mauritius Oil Refineries Ltd  
North of England Zoological Society (Chester Zoo)  
UNDP-GEF Small Grants Programme

Since Rodrigues has lost its intact forests we have been working to restore the areas that still have remnant populations of endemic plants. Restoration of these areas will serve to protect the endangered plant species, provide a habitat for the two surviving endemic birds (the Rodrigues Fody and the Rodrigues Warbler) and the Rodrigues Fruit Bat, and enhance the population of insects, thus helping to complete the entire ecosystem.

Approximately a third of the 35 ha fenced Anse Quitoir Nature Reserve has been restored and many of the endemic plants of Rodrigues have been planted there. Anse Quitoir is home to very rare endemic plants, such as bois pasner (*Zanthoxylum paniculatum*), bois goudron (*Antirhea bifurcata*) and bois blanc (*Gastonia rodriguesiana*).

With the intense restoration efforts over the past few years, nearly three-quarters of the area of the fenced Grande Montagne Nature Reserve (25.5 ha) have been restored, with work progressing well due to the high success rate of seedlings planted. Several plants such as café marron (*Ramosmania rodriguesii*), mandrinette (*Hibiscus liliiflorus*) and bois lubine (*Poupartia castanea*) are being successfully conserved here. The reserve is open to the general public and provides an excellent educational opportunity to observe conservation at work.

The methodology of restoration in these reserves involves sectioning off chosen areas, thinning of invasive species, planting seedlings propagated in the nursery, followed by additional weeding and monitoring. Local groups such as the Scouts, Rotaract, Lions Club, youth clubs, and secondary school children are involved in this process and educational outings by primary school children are organized, so that the local people can learn about their environment and the importance of conservation. Labourers living in villages surrounding the reserves have been recruited to work towards the advancement of the restoration work, showing that conservation can create work for locals.

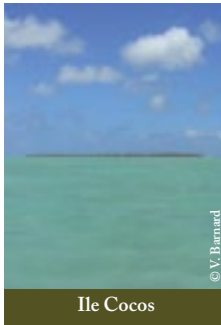
During the last year, ongoing weeding of invasive species and regular maintenance of restored areas were carried out in both reserves. Restoration is a long-term process and seedlings of different species continue to be planted in the restored areas to increase diversity.

Since 2008, 9 ha have been restored at Grande Montagne Nature Reserve with over 63,000 endemic seedlings. Similarly, 3 ha have been restored at Anse Quitoir Nature Reserve with over 23,000 endemic seedlings. Some of the seedlings at Anse Quitoir were planted under the Air Mauritius *One Take-off, One Tree* initiative. During 2009 and 2010, volunteers helped with 558 and 676 working days of conservation work, respectively. A volunteer appreciation day has been held on International Volunteer Day (5 December) each year since 2009 to thank our volunteers and to encourage them to continue helping MWF protect the endemic biodiversity of Rodrigues. In 2010, a field guide for Grande Montagne was produced for distribution to visitors of the reserve. Future plans include the restoration of one additional hectare at Grande Montagne and two additional hectares at Anse Quitoir, along with continuous weeding in recently restored plots.



MWF Rodrigues staff on Grand Montagne





Ile Cocos



Ile aux Sables from Ile Cocos

## Ile Cocos and Ile aux Sables

Ile Cocos (15 ha) and Ile aux Sables (8 ha) are important island nature reserves in the lagoon of Rodrigues. Ile Cocos is a key tourist site, whereas Ile aux Sables is a nature reserve with restricted access. Both are home to important coastal vegetation communities and seabird populations under threat from introduced weeds and unmanaged tourist development. With habitat restoration and appropriate management the populations of seabirds found on the islands should increase, with the potential to become internationally important seabird reserves. Seabirds native to these islets include the Common Noddy (*Anous stolidus*), Lesser Noddy (*A. tenuirostris*), Fairy Tern (*Gygis alba*) and Sooty Tern (*Sterna fuscata*).



Lesser Noddy



Fairy Tern

Mauritian Wildlife Foundation has had a long-term involvement with these islets, although the relationship has only been formalized since 2006. Our work here aims to restore the native flora of the islets, both of which are home to thousands of seabirds, and to encourage increasing numbers of Rodriguans to visit Ile Cocos, which is an educational and ecotourism resource. For this project, MWF is working in collaboration with the Forestry Service and Discovery Rodrigues.

The intense programme of work has comprised land preparation and general weeding, plant propagation in the Solitude Native Plant Nursery, and planting of over 35,000 plants of 19 different species. These include vacoas (*Pandanus heterocarpus*), latanier jaune (*Latania verschaaffeltii*) and *Lycium tenue*. Volunteers from youth and community groups, secondary schools, and the Scouts have been active in helping with the planting of seedlings on these islands. As part of the ecotourism component on Ile Cocos a new pathway for tourists has been created, giving options of either a short or a long walk, without disturbing the fauna or damaging the flora.

Rodrigues staff have received specialist training on seabird monitoring techniques and four monitoring surveys are now carried out yearly on the four native seabird species. Seabird monitoring will help us to learn about the breeding cycle of the species, and their population patterns.

An integral part of the programme is sensitization of the general public, through the creation of a field guide and educational signboards. The *Guide de la Faune et de la Flore de l'Ile Cocos* was launched in February 2009 and a complimentary copy was given to the stakeholders as well as to every primary and secondary school on the island, whilst the remaining copies are available for purchase. Five educational signboards were placed on Ile Cocos in June 2010, informing the public about native and non-native seabirds, the restoration process, and the appropriate legislation.

With the increasing public awareness of the conservation work on Ile Cocos and Ile aux Sables some of the abuses, including littering, have already declined. It is hoped that Ile aux Sables will continue to be maintained as a strict nature reserve, without trespass from fishermen or tourists.

Future plans for Ile Cocos and Ile aux Sables include continued quarterly seabird monitoring and the restoration of the vegetative community, including weeding and the planting of endemic seedlings.

### Main Donors 2009/10

Forestry Service  
UNDP-GEF Small Grants Programme

## Gerald Durrell Endemic Wildlife Sanctuary (GDEWS)



Juvenile Aldabra Giant Tortoises

Gerald Durrell Endemic Wildlife Sanctuary, or Black River Aviaries as it is commonly referred to, was established in 1976 and is run jointly by MWF and the National Parks and Conservation Service. Originally, the project was concerned with the captive breeding and hand rearing of the Mauritius Kestrel and the Pink Pigeon for release into the wild. Due to the success of these programmes there is no longer a need for captive breeding of these two species. Echo Parakeets were also captive bred in the aviaries for release but with the increase in the population this has now also been discontinued, although a small number of parakeets remain here for captive studies. Echo Parakeets are susceptible to a fatal disease called the Psittacine Beak and Feather Disease (Pbfd), and a vaccine has recently been developed and tested on African Grey Parrots with encouraging results. The vaccine is now being tested on our captive Echo Parakeets.

### Main Donors 2009/10

CIM Group  
National Parks and Conservation Service

The Black River Aviaries has many roles, including the rehabilitation of sick or injured rare native birds and bats, training staff in animal handling and general vet practices, and passerine and reptile work in support of ongoing projects. The facilities were upgraded in 2004 to strengthen the recovery programmes for our endemic bird species, with the focus on two of the passerines, the Mauritius Fody and the Mauritius Olive White-eye. The 2010 breeding season has seen the hand rearing of the Mauritius Fody at GDEWS. Eggs and chicks are rescued and harvested from Ile aux Aigrettes, the eggs are then incubated and the young are hand reared and later released. A total of 19 Mauritius Fodies have been released onto Round Island.

This centre is also used as a quarantine station for animals, such as the reptiles recently translocated to the nearby islets, or as a holding facility in the case of fruit bats, prior to being sent overseas.

In addition, a total of 262 baby Aldabra Giant Tortoises are being raised here. Tortoises hatched on Ile aux Aigrettes have to be removed from the island until they are older and larger, to avoid the risk of being poached and kept as pets. Later they will be released on Ile aux Aigrettes, Round Island or other suitable islands.

In April 2010, a new project to reinforce the Pink Pigeon sub-populations started. Feathered nestlings (aged 17–19 days) are harvested from Ile aux Aigrettes and taken to GDEWS, where they are being hand reared. They are then released at the Lower Black River Gorges when they are completely weaned. So far, nine birds have been successfully hand reared and released.

Future work will concentrate on the incubation and hand rearing of passerines, and on reptile and seabird projects. GDEWS will remain an essential element in conservation and its role will continue to adapt in order to remain responsive to the critical needs of saving our endangered species.



Hand rearing of chicks



Aviary



## Prominent Visitors to Ile aux Aigrettes

HRH Princess Anne visited the Ile aux Aigrettes nature reserve on 4 December 2010. During her visit to the island she encountered Aldabra Giant Tortoises and endemic birds as well as meeting with MWF biologists, staff and some of our key supporters. The Princess Royal first visited the island in 1998 as patron of the Durrell Wildlife Conservation Trust (partner of MWF) and wanted to come back to pay tribute to the recent developments in conservation work undertaken by the organization. Furthermore, this visit coincided with the end of celebrations for the International Year of Biodiversity 2010.



10 April 2010

Yann-Arthus Bertrand, French photographer, journalist and environmentalist.



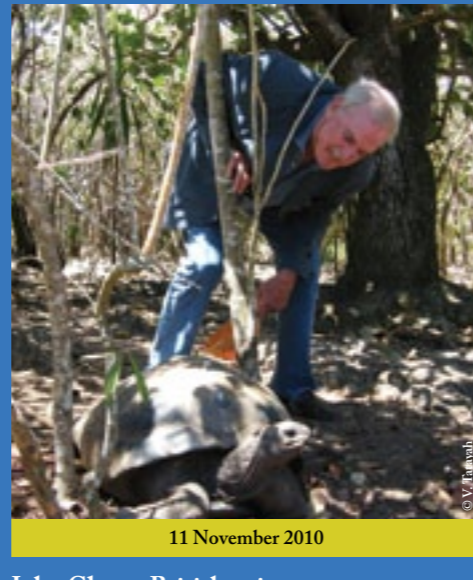
31 July 2010

Mr and Mrs Le Sueur of Jersey, one of the Channel Islands. Mr Le Sueur is Chief Minister of Jersey.



21 August 2010

Dr Woodrow Clark II, co-recipient with Al Gore of the Nobel Peace Prize in 2007.



11 November 2010

John Cleese, British writer, actor and funder of the seabird translocation and tortoise analogue project through the charity Conservation Works.

## Education and Awareness



The Mauritian Wildlife Foundation is committed to education and promoting awareness as vital components of the conservation of biodiversity. In Rodrigues, we have a well-established and successful education programme working closely with schools and local communities. As yet Mauritius does not have a full-time educator post, but there are plans to extend education and awareness-raising activities in the near future. Most of our conservation sites are not accessible to the public, with the exception of Ile aux Aigrettes which acts as the formalized centre for education and awareness-raising activities in Mauritius (see page 27). Since the visitor programme to Ile aux Aigrettes began, increasing numbers of Mauritians and tourists have visited the island on a tour that has developed to keep pace with the expansion of our conservation projects. In 2009, the Learning with Nature programme was launched, which is specifically targeted at Form 2 students, both to introduce them to the conservation work being carried out in their country and at the same time support curriculum subjects that they study. The programme is also a valuable educational and awareness-raising tool for children of other ages who visit the island. In addition, we visit schools and other institutions on request, to talk about environmental and conservation issues and are also collaborating with education authorities in Mauritius to make conservation information and resources available to science teachers. Most of our education and awareness activities in Mauritius are now sponsored under the Corporate Social Responsibility (CSR) initiative.

## Corporate Social Responsibility (CSR)

This new legislation was introduced in 2009 and requires businesses in Mauritius to donate 2% of their pre-tax profit to approved projects that contribute to the social and environmental development of the country. Since the introduction of CSR, a number of local companies have supported MWF's projects under the scheme and numerous activities have been organized in this context. Although CSR is vitally important in the financing of our projects, the participation of the personnel of the involved organization is just as important. Specific help that we have received from local businesses includes weeding of invasive plant species on Ile aux Aigrettes, assistance with plant work in our nursery, as well as giving the organization's staff a chance to get involved in our education and awareness activities. The funding of schoolchildren to visit Ile aux Aigrettes for our Learning with Nature education programme is made possible under the CSR scheme, in 2010 providing over 3,500 students with the opportunity to take part in this award-winning educational experience.

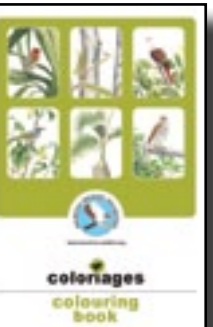


Staff from CSR funding company taking part in conservation activities

**Main Donors 2009/10**  
HSBC  
PricewaterhouseCoopers  
Rare Pride



Classroom activities



25





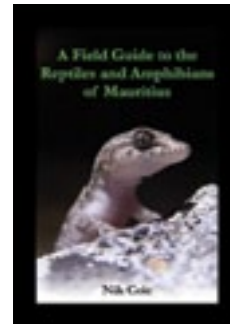
## Our Books



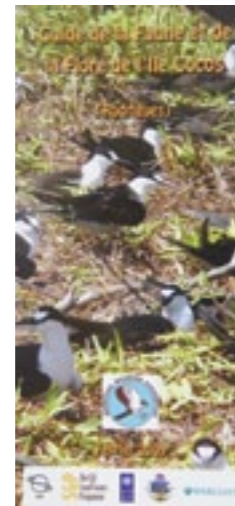
Atkinson, R. and Sevathian, J. C. (2005)  
*A Guide to the Plants in Mauritius.*  
Mauritius: MWF.



Mauritian Wildlife Foundation (2005)  
*The Native Plants & Animals of Mauritius.*  
Mauritius: MWF.



Cole, Nik (2009)  
*A Field Guide to the Reptiles and Amphibians of Mauritius.*  
Mauritius: MWF.



Mauritian Wildlife Foundation (2009)  
*Guide de la Faune et de la Flore de l'Ile Cocos.*  
Mauritius: MWF.



Carter, M. and Tatayah, V. (2010)  
*Green Conquest: Naturalists and 1810.*  
Mauritius: MWF.



MWF/Editions Vizavi (2010)  
*Ile aux Aigrettes: A Nature Reserve.*  
Mauritius: Editions Vizavi.  
(Also available in French)

26

MWF Annual Report 2009/10

## Rare Pride Campaign

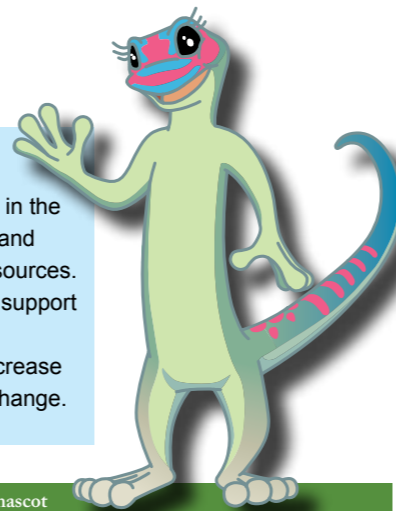
This three-year awareness campaign ended on International Environment Day in June 2010. The campaign centred on endemic reptiles – the Lesser Night Gecko, Ilot Vacoas form of Bojer's Skink, and Telfair's Skink – with a focus area of Mahébourg. Some of the endemic geckos are Critically Endangered and are only found on the south-east islets of Mauritius. The aim was to prevent damage caused by humans, such as littering, introducing alien invasive species, and lighting of barbecues out of designated areas, and to encourage the Mauritian people to play an active role in safeguarding their natural heritage.

The campaign focused on the local boat skippers who take visitors to the islands, and involved educating and motivating them so that they become ambassadors for the local wildlife. Raising awareness in the local community was another key component, using different techniques including posters, stickers, brochures, temporary tattoos, children's drawing competitions, special awareness days, sports activities, puppet shows, and many other community-based activities.

The final event saw the launch of educational material such as a colouring book, a song and a film, all specifically created for this project. It took place on Ile aux Aigrettes and Ile au Phare and was held in the presence of funders, schoolchildren, skippers and other partners. This was the first time that a national conservation awareness campaign of this type had been carried out in Mauritius.

Rare is an international conservation organization that has worked in over 40 countries to equip people in the world's most threatened natural areas with the tools and motivation they need to care for their own natural resources. Rare's Pride Campaign aims to establish grassroots support for environmental protection, by training local conservationists to use social marketing tactics to increase awareness, influence attitudes and enable positive change.

Miss Ti, the campaign mascot



Face painting



## Ile aux Aigrettes Ecotours

Since 1985, MWF has managed this islet as a restoration project, conserving native plants and reintroducing the native fauna to recreate pristine Mauritius. Ten years later we adopted an objective to 'Promote ecotourism, as a means to raise public awareness, generate income and employment and to contribute towards the sustainable development of Mauritius and Rodrigues', and in 1998 Ile aux Aigrettes opened to the public on a visitor programme. The main aims of the project are to help finance the ongoing restoration programme and to raise awareness about our conservation work. We also endeavour to show that biodiversity conservation need not be an exclusion activity but can, and should, lead to employment and educational and recreational opportunities for the improvement of local communities, through responsible and sustainable tourism.



Pupils planting endemic trees during a tour of the island

Pre-bookable guided tours are available to the general public, giving them the opportunity to view the restoration work undertaken and have a glimpse of what the coastal vegetation on Mauritius was like before the island was colonized. We currently provide four different types of tours: Learning with Nature tours for schoolchildren, VIP tours with extra time allocated for bird-watching or other specific requirements, tours for groups booked through local tour operators, and our regular tour for members of the public booking direct. To avoid damage to the vegetation, visitors are required to remain on the specially designed trail around the island to the main sites of interest.

All tours are guided by our rangers, who come from the area around Mahébourg, and who have a good knowledge of the history of the area. The rangers inform visitors about various species of rare plants on the island such as bois de boeuf (*Gastonia mauritiana*) and vacoas (*Pandanus vandermeeschii*) and their importance in the ecosystem. Visitors can also view the native fauna including the Ornate Day Gecko, Pink Pigeon, Mauritius Olive White-eye, Mauritius Fody and the recently reintroduced Telfair's Skink and Guenther's Gecko.



Schoolchildren encountering an Aldabra Giant Tortoise

The threat of extinction facing many species of plants and animals is highlighted by the presence along the trail of four life-size bronzes of species of fauna which were once abundant on either Mauritius or Rodrigues and are now extinct: the Dodo, Commerson's Owl, the Giant Skink and the Rodrigues Giant Tortoise.

Ile aux Aigrettes is also an Education Resource Centre where facilities are made available for school activities. The Learning with Nature programme for schools was created in collaboration with Chester Zoo in the UK. It includes *Le Sentier du Dodo* nature trail which is 1.5 km in length, during which the schoolchildren learn about the geography, history and geology of the island and can experience hands-on activities, exploring the topics of habitat, endemism, food chains and extinction. It is extremely relevant to the students' day-to-day lives as well as to their school curriculum and was awarded Best Education Project at the British and Irish Association of Zoos and Aquarias awards for 2009.

October 2010 saw the opening of our purpose-built combined education centre, visitor centre and booking office on the mainland, opposite the island, which will make an important contribution to our work there.

**Main Donors 2009/10**  
Blanche Birger  
Fondation Solidarité (FAIL)  
IBL Foundation  
Investec  
Japanese Government  
North of England Zoological Society (Chester Zoo)  
PricewaterhouseCoopers  
Scott & Co  
Swan Group

27

MWF Annual Report 2009/10



## Rodrigues Environmental Education Project (REEP)



School visit to Grande Montagne Nature Reserve

Environmental education programmes aim to improve ecological awareness and understanding, and encourage better appreciation and conservation of our natural resources. To further our belief that conservation goes hand-in-hand with education in order to be successful, MWF employs a full-time environmental educator on Rodrigues. The Rodrigues Environmental Education Project started in 1998, targeting both primary school children and local communities. MWF liaises with the Commission for Education, part of Rodrigues Regional Assembly, and has been present in primary schools since 2001. Since June 2008, with a new full-time MWF educator in post, REEP has a new dynamism in its activities and has been active in working with schools, villages and volunteers, and in creating new educational material.

The educator gives classroom talks in all 14 primary schools on the island on topics relating to conservation such as water, air pollution, plants and animals in the environment, and endemic plants. These are integrated with the science, history and geography elements of the curriculum. In 2009 and 2010, REEP classroom talks reached 1,314 and 513 students, respectively. Getting the children to understand the environmental challenges that the world currently faces and how they, as individuals, can make a difference is a fundamental part of the project. Field outings are an important component, and cover the nursery, nature reserves, water sources and treatment plants. During 2009 and 2010, 561 and 690 students, respectively, visited either Grande Montagne or Anse Quitor to experience the restored habitat of these important nature reserves.

School community projects are another way to involve both children and teachers in environmental issues, and include the planting of endemic shrubs in school gardens or playground areas. We provide the expertise and then the teachers, parents and children take on the project on a day-to-day basis. Endemic gardens have been created in all primary and secondary schools on Rodrigues with the help of MWF. Schools were further involved with organized visits by local head teachers to see our conservation work in action.

In the wider community, MWF's environmental educator organizes volunteer days, village talks, donations of plants to village groups, newspaper articles and radio talks. Events to celebrate specific days related to conservation issues are also arranged, such as our annual celebrations for World Environment Day and International Volunteer Day. In 2009, educational material such as a screensaver, bat sticker, MWF sticker and bat poster were created and distributed to schools and in the villages. In 2010, activities were also organized for International Biodiversity Day, as part of the International Year of Biodiversity. In 2011, MWF will celebrate International Forest Day and also mark the fifteenth anniversary of MWF in Rodrigues.

Future plans include the continuation of educational talks and field outings with the schoolchildren, creation of new educational material, regular radio talks, organization of volunteer days, village talks and event days, and giving support to other MWF conservation projects.



Educational talk in a secondary school

## Data Management

Through its individual recovery and restoration projects, MWF is in the position to collect unique data on rare species and on conservation techniques, which could help in future projects and in long-term management of species. Efforts are continuing to update the Mauritius Kestrel, Pink Pigeon and Echo Parakeet databases. The database for the Mauritius Kestrel has been improved and is jointly managed by MWF and the Centre for Agri-Environmental Research (CAER) at the University of Reading. CAER is also assisting us with the improvement of the Pink Pigeon and Round Island Petrel databases.

MWF is also maintaining existing databases on rare plants and reptiles. Centralizing and managing the data to make it more comprehensive and accessible are areas that we aim to develop in the future. The information on the databases has already been used to compile the MWF publications *A Guide to the Plants in Mauritius*, *Guide de la Faune et de la Flore de l'île Cocos* and also a *Phenology Monitoring Manual*.

## Scientific Research

Locally we work in conjunction with the University of Mauritius, providing logistical field support to BSc final year student projects. Every year students from Biological Sciences and other faculties visit Ile aux Aigrettes for practical advice and discussion on field projects. We view this as an important step in local capacity building and in generating interest in our conservation projects. We also work with international universities of repute to obtain self-funded MSc and PhD students to carry out research in areas central to our mission. The applied (rather than pure theoretical) nature of the research studies has been a pillar of our conservation programmes.

## Staff Development and National Capacity Building

We are continually looking at ways to extend the knowledge base of our staff, through exchange programmes with other conservation organizations, on university placements and on courses. MWF has also developed an annual induction course for Mauritian, Rodriguan and expatriate staff, so that they obtain vocational training that allows them to improve their understanding of conservation and work performance. The in-field and classroom training is enhanced by monthly lectures from staff on MWF projects and visiting scientists on a broad

range of conservation-related subjects. In addition, Mauritian and Rodriguan staff attend courses and workshops where they contribute to discussions and benefit from the training and exposure.

Over the past few years, we have arranged workshops and training courses for the benefit of our staff and partner organizations. In November 2010, in cooperation with a number of local and international bodies, MWF held an Invasive Species Management course, attended by 32 participants from government, non-government and private organizations. The aims of the six-day course were to enhance understanding of the impact of exotic plants and animals (and the diseases they often bring with them) on human livelihoods but in particular on native wildlife once they become established and begin to spread. The course developed strategic action planning skills for invasive species management as well as practical field skills for the control or eradication of problematic species in the wild. The event provided the ideal forum to establish partnerships between the different organizations involved in this area, working towards achieving the aims of the recently developed National Invasive Alien Species Strategy and Action Plan (NIASAP).

## Research Studies Ongoing During 2010

**Lois Baker** University of East Anglia, UK (MSc) *Distribution, reproduction and conservation of Myoporum mauritianum, an endangered island endemic.*

**Steeves Buckland** University of Bristol, UK (PhD) *Status, ecology and conservation of endemic day geckos in Mauritius.*

**Samantha Cartwright** University of Reading, UK (PhD) *Agriculture, natal environment and the life histories of Mauritius Kestrels (Falco punctatus).*

**Lianne Concannon** University of East Anglia, UK (PhD) *Managing threatened species: understanding the factors limiting the recovery of the endangered Pink Pigeon (Nesoenas mayeri).*

**David Norfolk** University of East Anglia, UK (MSc) *Range expansion and population growth of the vulnerable endemic Rodrigues Fody (Foudia flavicans).*

**Claire Raisin** DICE, University of Kent, UK (PhD) *Population genetics, disease and reproductive fitness in the endemic echo parakeet (Psittacula eques) and the introduced ringneck parakeet (P. krameri) on Mauritius.*

**Peter Steward** University of East Anglia, UK (MSc) *2010 Rodrigues warbler (Acrocephalus rodericanus) census: onwards and upwards!*

**Vikash Tatayah** University of Mauritius, Mauritius (PhD) *The breeding biology of the Round Island Petrel (Pterodroma spp.) and factors determining breeding success.*

**Simon Tollington** DICE, University of Kent, UK (PhD) *The effects of inbreeding on immune function and interactions with disease in endangered Mauritius bird populations.*



## Consultancy

### National Conservation Issues

As part of our role as a conservation organization, MWF provides advice and expertise to national committees, boards and government departments, regarding conservation-related issues. This ensures that we can contribute actively to discussions on projects or policies that may impact on the local flora and fauna.

Some of the committees that we are currently involved with are: the Wildlife and National Parks Advisory Council, which manages the Black River Gorges National Park; the Nature Reserves Board, which controls the nature reserves of Mauritius and the islet reserves of Rodrigues; and the Ramsar Committee, which works to conserve wetlands and protect them from development.

We are also working with, and providing advice to, a range of national (and some international) conservation and development organizations and projects:

- The Islets National Parks Strategic Plan and Management Plan, which aims to give an overall strategy to the conservation management of islets in Mauritius and Rodrigues.
- The lease of Flat Island and Gabriel Island to private enterprises – MWF aims to ensure that environmental and conservation standards are met by the lessees, through our involvement with the Nature Reserves Board.
- The prospective lease of some Mahébourg Bay islets to MWF for conservation management.
- Protected Areas Network (PAN) is a United Nations Development Programme and Government of Mauritius project, in cooperation with MWF, aiming to establish a network of public and private lands with conservation value, so that biodiversity can be better protected.
- Invasive Alien Species consultancy, working towards a National Invasive Alien Species Strategy and Action Plan (NIASSAP) to overcome the risk of alien species introduction, manage the effects of established/establishing species and promote awareness of the risk of alien species introductions. Although the strategy has been completed, work on the action plan is ongoing.
- A UNDP-GEF, Food and Agriculture Organization, and Government of Mauritius project on Capacity Building for Sustainable Land Management in Mauritius and Rodrigues.
- The Mauritius Environmental Outlook Report, including chapters on inland biodiversity, offshore islets, and Agalega and St Brandon.
- The Second National Communication on Climate Change, working towards ensuring that Mauritius has the capacity to detect and measure changes in the climate and sea levels, and assess their impacts so that appropriate strategies can be developed.
- Piloting integrated processes and approaches to facilitate national reporting to the three Rio Conventions on biodiversity, climate change and desertification.
- The Africa Adaptation Programme (AAP) aiming to integrate climate change adaptation policies into national development plans and policy in Africa, including Mauritius.
- Conservatoire Botanique National de Mascarin, Parc National de La

Réunion and Société d'Etudes Ornithologiques de La Réunion on conservation matters.

- The GEO-5 (fifth Global Environmental Outlook) report of UNEP, regional consultations to agree on priority environmental issues and challenges within each of the seven regions and to define goals.

### Habitat Restoration Projects

We continue to be involved in restoration projects in partnership with government and private local partners wanting to restore native plants on their land. These projects usually progress as follows: initially the forest or land is surveyed to establish exactly which species are growing there; a nursery is set up; seeds of native plants may be collected for propagation; and workers are trained to identify native plants, to weed specific exotic plant species, and in different techniques to control exotic species.

Projects include:

#### Vallée de l'Est

The restoration of this forest started in 2004 with the objective of controlling exotic plant species and propagating native plants in the nursery for planting. Specific areas of good quality native forest were selected for the initial conservation work and once the exotics had been weeded out it was possible to see which native plants remained. This project is now well established and only requires our presence once or twice a month to monitor progress and provide advice.

#### Ferney Valley

The project in Ferney Valley started in August 2006 after 200 ha of forest were set aside as a conservation area. The forest has a specially designed walking track for visitors, on which MWF advised, and restoration works have started. There are plans to reintroduce endemic birds such as the Pink Pigeon, and a field station has been constructed.

#### Ebony Forest Reserve, Chamarel

Restoration work started here in January 2007 with the initial objective of establishing a native nursery to grow plants to restore the forest. A plant survey was conducted and regular monitoring of rare native plants is carried out. Once restoration is well advanced, the public will be able to visit the restored forest and the educational centre to learn about Mauritian biodiversity and the problems it still faces.

#### Bel Ombre, Case Noyale and Chamarel

MWF is working with the Compagnie Sucrière de Bel Ombre on a three-year programme for the restoration, conservation and management of their forests at Bel Ombre, Case Noyale and Chamarel. The project began in 2009, aiming to preserve the forests by weeding out introduced plants, planting native species and ultimately creating walking trails for ecotourism purposes.

## Financial Information

### Statement of Financial Position

	2010 Unaudited Rs m	2009 Rs m
<b>Assets</b>		
Non-current assets	8.40	8.40
Current assets		
Cash and cash equivalents ■	2.50	1.90
Inventories ■	2.10	1.30
Other assets ■	6.80	9.60
	11.40	12.80
<b>Total Assets</b>	<b>19.80</b>	<b>21.20</b>
<b>Equity and liabilities</b>		
Accumulated fund ■	(0.70)	0.40
Non-current liabilities ■	8.10	7.90
Current liabilities ■	12.40	12.90
<b>Total equity and liabilities</b>	<b>19.80</b>	<b>21.20</b>

### Statement of Comprehensive Income

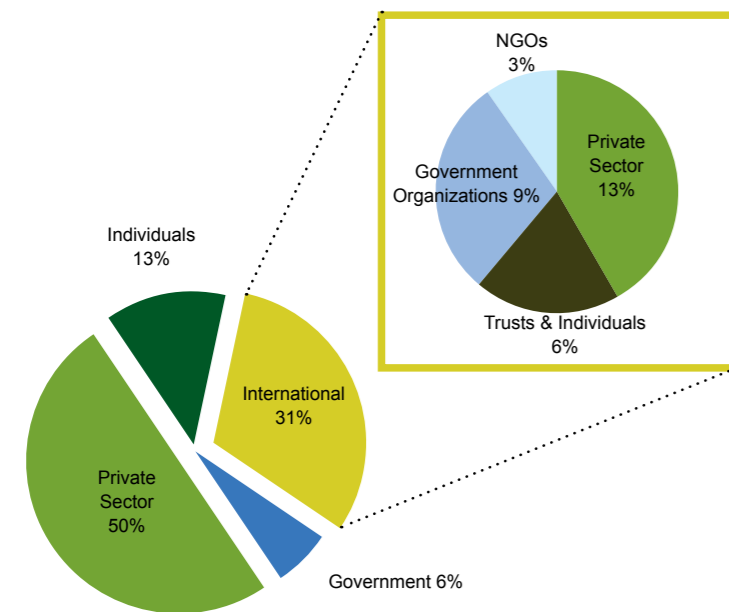
	2010 Unaudited Rs m	2009 Rs m
<b>Revenue</b>		
Grants ■	24.50	22.20
Donations ■	1.70	1.90
Finance income ■	0.02	0.09
Other income ■	6.60	5.40
	32.82	29.59
<b>Expenses</b>		
Project expenses ■	27.90	23.80
Administrative expenses ■	2.90	2.91
Other expenses ■	1.10	0.80
Depreciation ■	2.10	2.10
	34.00	29.61
<b>Total comprehensive loss</b>	<b>(1.18)</b>	<b>(0.02)</b>

Note: Figures are in rupees millions.

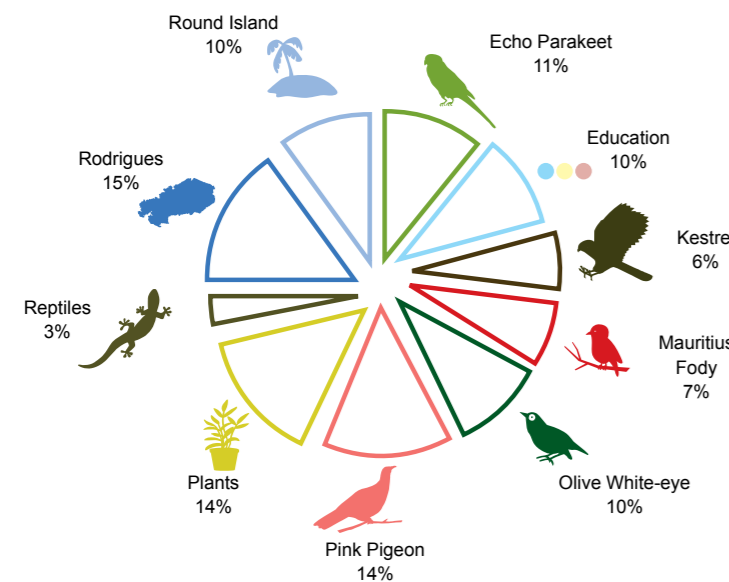


## Financial Information continued...

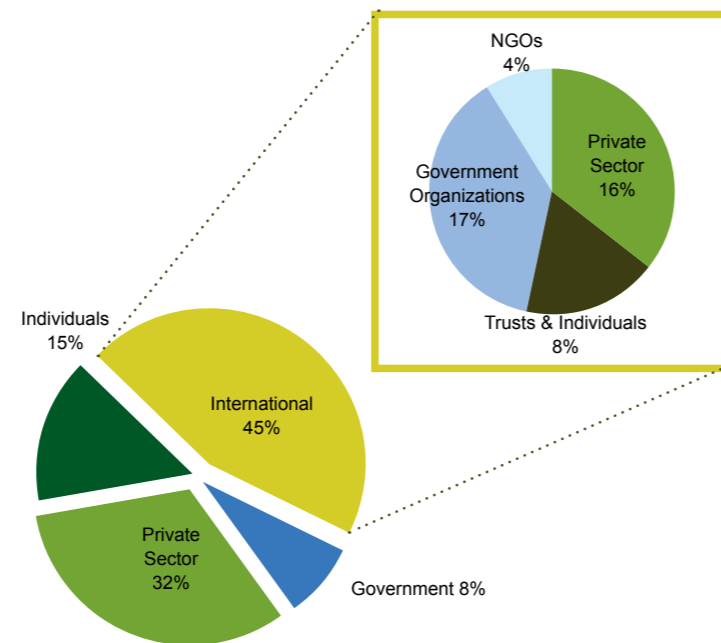
### Revenue 2010



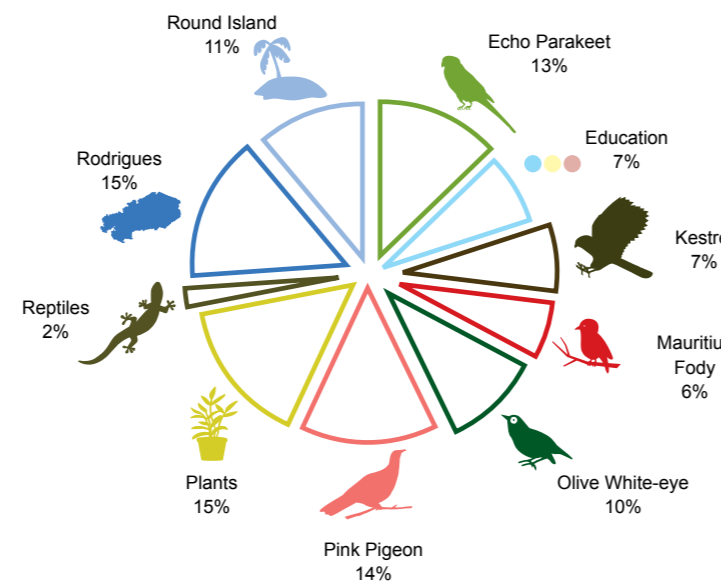
### Revenue Allocation 2010



### Revenue 2009



### Revenue Allocation 2009



## Our Donors

The Mauritian Wildlife Foundation is a non-profit organization, which can only operate through the support of voluntary donations. We are proud to list the businesses, organizations and individuals that have contributed during 2009 and/or 2010. Every donor is important to us, large or small, for without your continuing participation our work would not be possible. We thank all of you equally.

- A Maunapen Fencing & Contractors
- AAPCA
- Adamas
- Administrators & Consultants Ltd
- Afons
- Air Mauritius
- Alcohol & Molasses Ltd
- Altman, Annette
- Amadeus
- Ascencia Ltd
- Associated Brokers
- Associated Textiles
- Atoba
- Australian High Commission
- BBC
- Birchmayer, Philip
- Blanche Birger
- Boule, Nathalie
- BR Property
- Cannings, Frank
- Carpentier, Nicole
- Ceres Ltd
- Chevron
- Cim Group
- Clavis Primary School
- Compagnie Agricole de Labourdonnais Ltd
- Compagnie d'Exploitation Agricole Ltée
- Compagnie de Beau Vallon Ltée
- Compagnie Sucrière de Bel Ombre Ltd
- Connections Ltd
- Conservation International
- Conservation Works
- Consultancy & Co
- Coroi Ltd
- Darwin Initiative (DEFRA, UK)
- Data Communication Logistics Ltd
- DCDM
- De Chazal, Deborah
- Deutsche Bank
- Drion, Laurent
- Durrell Institute of Conservation and Ecology
- Durrell Wildlife Conservation Trust
- Electrical & Control Specialists
- Eller, Joachim
- Emcar Manufacturing Ltd
- Equateur
- Ernest Kleinwort Charitable Trust
- Ernst & Young
- Espace Marin
- Esther, Monia
- Etude Roland Constantin
- Euro CRM (Mauritius)
- European Studbook Foundation
- European Union - DCP
- Fideco Global Business Services
- Fidelity Trust
- Flacq United Estates Limited
- Folarex
- Fondation Harel Frères
- Fondation Harel Mallac
- Fondation Solidarité (FAIL)
- Forex Direct
- Forges Tardieu Ltd
- Forget, Dr Philippe
- Fraser, Eliane
- Friends of Mauritian Wildlife
- General Construction Ltd
- GFA Insurance Ltd
- Habit
- Happy World
- Harcroft Foundation
- Hardy Henry Services Ltée
- HHL Dyers
- HSBC
- IBL Foundation
- IBL Staff Association
- Image Photography Ltd
- India Capital Management
- Infinite Corporate
- International Financial Services Limited
- International Press and Book Distributors
- International Proximity
- Investec
- Ivitex International Ltd
- J. Kalachand & Co Ltd
- Japanese Government
- Kaytee Manufacturer
- Kestrel Valley
- Kinnoull Foundation
- La Ferme Tropicale
- La Prudence Leasing Finance
- La Sentinelle Ltd
- Lam Po Tang & Siew Architects Ltd
- Le Bocage School Club
- Le Domaine de la Vallée de l'Est
- Le Morne Anglers Club
- Les Gaz Industriels Ltd
- Les Moulins de la Concorde
- Lim How Brothers Co Ltd
- Lindeth Charitable Trust
- Livestock Feed Ltd
- Lohson Industries (Mtius) Ltd
- Management & Development Ltd
- Marbella Espace Maison
- Markit
- Mary Vernor-Miles Charitable Trust
- Masefield, Rupert
- Maurilait
- Mauriplage (Investment) Co. Ltd
- Mauritius Commercial Bank Ltd
- Mauritius Oil Refineries Ltd
- Metal Can Manufacturers Ltd
- Ministry of Agro Industry, Food Production and Security
- Moores, Charlie
- New Noah Programme
- North of England Zoological Society (Chester Zoo)
- Nottingham Trent University
- O&O Le Saint Géran
- Paradise Plastic and Tools Ltd
- Parker, Tom
- Plunkett, Mrs G. M.
- Pocamo Ltd
- Pollock, Lesley
- Presse Book Ltd
- PricewaterhouseCoopers
- Promotion & Development
- Rare Pride
- Revelations Ltd
- Rey & Lenferna Ltd
- Robert, Mrs George



## Our Donors continued...



- Rufford Maurice Laing
- Ruth Smart Foundation
- Salamolard, Mark
- Scott & Co
- Seymour, Andrew
- Shell Mauritius Ltd
- Société Industrielle de St Melior
- Société Rouillard Frères & Cie
- Sofap Ltd
- Solis Ltd
- St Mary's Charity
- Stanford University
- Sugarex
- Summertime
- Sun Resorts
- Swan Group
- Sylvanus Charitable Trust
- Taktik Architects Company
- Tardieu Technical Support Ltd
- Taylor, David
- Toyota Mauritius Ltd
- Traktor Mauritius
- UNDP - GEF/SGP
- University of Reading
- Urbanscape Ltd
- Victoria Tackle Ltd
- Watkins, William
- Zoological Society of Philadelphia

## Our Partners

- Agricultural Research and Extension Unit
- Air Mauritius
- Apollon, Tony
- Barnard, Véronique
- BirdLife International
- Conservatoire National Botanique de Mascarin (Réunion)
- Crosières Austral
- Durrell Wildlife Conservation Trust
- Ecole Hôtelière de Maurice
- Ecosud
- Editions Vizavi
- Ex Libris Consulting Ltd
- Flower Ad Ltd
- Forestry Service
- Global Invasive Species Programme (GISP)
- International Zoo Veterinary Group
- Island Conservation Society (Seychelles)
- IUCN (World Conservation Union)
- La Sentinelle Group
- Le Preskil Hotel
- Librairie Allot Plaisance Ltd
- Markit Ltd
- Mauritius Broadcasting Corporation
- Mauritius Herbarium
- Mauritius Marine Conservation Society
- Mauritius Meteorological Service
- Mauritius Museums Council
- Mauritius National Volunteer Project
- Mauritius Ports Authority
- Mauritius Press Corps
- Mauritius Sugar Industry Research Institute
- Metal Can Manufacturers Ltd
- Ministry of Agro Industry, Food Production and Security
- Ministry of Education and Human Resources
- Ministry of Environment and National Development Unit
- Ministry of Fisheries
- Ministry of Health and Quality of Life
- Ministry of Tourism
- National Coast Guard
- National Parks and Conservation Service
- Natural History Museum (London)
- Nature Seychelles
- North of England Zoological Society (Chester Zoo)
- Parc National de La Réunion
- Police Helicopter Squadron
- Rajiv Gandhi Science Centre
- Reef Conservation Mauritius
- Rodrigues Forestry Service
- Royal Botanical Gardens, Kew, UK
- Royal Society of Arts and Science
- SAFRING (University of Cape Town)
- Samouilhan, Angélique
- Shoals Rodrigues
- Société d'Etudes Ornithologique de La Réunion
- Special Mobile Force
- Universities of Aarhus, Bristol, Cambridge, Cardiff, East Anglia, Kent, London, Mauritius, North-West, Kwazulu-Natal, Reading, Réunion, Stanford, and Zurich

## Our Staff

### Local Staff

- Ingrid Adam
- Marie Estelle Agathe
- Bibi Zairabee Ahamud
- Liliانا Ally
- Sunita Ancharaz
- Patricia Antoine
- Nadine Armelle
- Vale Armoogum
- Anne-Sophie Auguste
- Jennifa Augustin
- Marie Sabrina Azie
- Sylvain Baptiste
- Yannick Baulacky
- Alfred Begue
- Harel Begue
- Fristina Bernard
- Faizal Boochanah
- Martine Brasse
- Anissa Calloo-Rohimun
- Christina Casimir
- Roberto Cesar
- Jennifer Cezar
- Rachelle Chenny
- Aurelie Chowrimootoo
- Dabisingh Choytun
- Soorialall Chumbit
- Sylvie Clair
- Gianni Clarisse
- Cathleen Cybele
- Gabriel d'Argent
- Deborah de Chazal
- Dominique de Marasse Enouf
- Doreen Dugesclin
- Souraj Dwarika
- Jean Karl Emilien
- Louis Stanley Espiegle
- Jessica Etienne
- Joseph Elie Farla
- Christelle Ferriere
- Harene Francoise
- Poonam Gangaram
- Martine Gebert
- Martine Joelle Goder
- Reshma Gokhool
- Rahul Goodar
- Benny Henry
- Alain Husseiney
- Jenica Jean
- John Cliff Jean
- Zayd Jhumka
- Diane Juhoor-Laboucherie
- Jacques Jullienne
- Ashok Khadun
- Stephane Kirsakye
- Frederique Koenig
- Amanda Ladkoo
- Kumar Lallsing
- Denis Lamarque
- Nadine Lamarque
- Josime Legentil
- Denis Li Lung Hok
- Marie Dianella Lolo
- Diraj Luximon
- Joseph Jokenson Manan
- Isabelle Martine Marie
- Nicole Matoka
- Stephan Mellier
- Corinne Montocchio
- Fabiola Monty
- Soobrayen Mootoocurpen
- Keven Murday
- Kevin Nundloll
- Jose Palmire
- Jocelyn Pariapen
- Jean Olan Joyce Perrine
- Chetan Peryagh
- Jean Kurtis Philippe
- Jean Daniel Pierre Louis
- Dantonio Polimon
- Jean Eric Polimont
- Sandra Poongavanan
- Asha Poonyth
- Ted Pydiah
- Marie Emilie Raffa
- Lone Raffray
- Frissot Raphael
- Marie Florese Raphael
- Aruna Rookny-Ramkissoon
- Riad Rujad
- Sarvesh Seeburrun
- Liloutee Seechurn
- Jean Claude Sevathian
- Anieta Shan-Yu
- Benoit Soobaya
- Hortense Christio Speville
- Vikash Tatayah
- Danny Thisbe
- Hans Thumiah
- Valerie Thummadoo
- Bruno Vardapanaicken
- Dany Vencatasamy
- Yannick Virginie
- Andrea Waterstone
- Nicolas Zuel

### Local Volunteers and Students

- Allan Asiriah
- Jean Noel Azie
- Didier Baho
- Kashmira Banee
- Marie Ajani Begue
- Jah Dana Bernard
- Jah Melia Bernard
- Loraineza Botlar
- Marie Fiby Casimir
- Ryan Chevery
- Keshini Cuniah
- Zara Currimjee
- Christabelle Duhamel
- Christelle Edouard
- Richard Edouard
- Claudette Emilien
- Adam Fakim
- Arnaud Florigny
- Nadia Foo Kune
- Christophe Gontran
- Maneesha Gooheeram
- Sailesh Halkory
- Christabelle John
- Daryse Jolicoeur
- Marie-Anne Kee-Mee
- Kalyanee Desha Keetarut
- Bhavnah Komul
- Hanna Kureemun
- Fabiola Lamarque
- Jean Hugues Legoff
- Brigitte Lisette
- Catherine Lolotte
- Asha Luchmaya
- Shakeel Mahadoo
- Fabio Marianne
- Boris Mayer
- Zainab Oderuth
- Marie Anne Perrine
- Marie Stephania Perrine
- Samuela Perrine
- Marie Estelle Philippe
- Marie Anne Kirina Pierre Louis
- Marie Antoinette Raboude
- Hansley Ramasawmy
- Hansradah Ramburn
- Dhruvi Ramjuttun
- Jean Paul Ravanne
- Jean Pascal Samoisy
- Sandesh Samput
- Wendy Sanasee
- Kirti Seegoolam
- Yannis Isaac Soogun





## Management Team

### Executive Director

■ Mr Jacques Jullienne  
(to August 2010)

■ Mrs Deborah de Chazal  
(from September 2010)

### Conservation Manager

■ Mr Vikash Tatayah

### Fundraising Manager

■ Mrs Lone Raffray

### Finance Manager

■ Mrs Aruna Rookny  
(from July 2010)

### Flora Manager

■ Dr Asha Poonyth

### Fauna Manager

■ Dr Nicolas Zuel  
(from July 2009)

### Ecotours Manager

■ Mr Danny Thisbe

### Rodrigues Administrator

■ Mrs Andrea Waterstone

### Project Manager

■ Mrs Frederique Koenig

### Reptile Translocation Manager

■ Dr Nik Cole

### Islet Plant Restoration Manager

■ Mr Ashok Khadun

### Rare Plant Conservation Officer

■ Mr Jean Claude Sevathian

### HR Manager & PA to Executive Director

■ Mrs Nadine Armelle

### Accountant

■ Mrs Martine Gebert

### Félix Maurel

Committee Member 1996 to 2010/President 2003 to 2009

It was with great shock that we learnt, on 8 April 2010, of the disappearance of Félix while on Farquhar Island in the Seychelles. Despite extensive searches, no trace of him has been found. Félix was a member of the MWF Management Committee for 14 years and held the presidency for 6 years. During that time he built individual relationships with the staff and council and everyone appreciated his calm and measured approach to issues facing the organization, his gentlemanly manner and passion for our work.

MWF flourished under Félix's presidency, with new projects and initiatives being undertaken, including the Rare Pride Campaign, an island-wide survey of Mauritius Fruit Bats, the monitoring of the west coast population of Mauritius Kestrels, the translocation of reptiles, and seabird reintroductions; and in Rodrigues, the development of Ile Cocos for conservation and tourism and the restoration of Grande Montagne forest.

Félix not only played a significant role in the evolution of MWF but was notable in his business career, having been instrumental in the building up of La Prudence Mauricienne, an insurance company of which he was CEO. He was also a devoted family man. His loss, in the prime of his life, leaves a large void.

## Management Committee

### President

■ Mr Félix Maurel (to November 2009)  
*Businessman (Insurance)*  
*Managing Director (Mauritius)*

■ Mr Tim Taylor  
*Economist*  
*Company Chairman and retired*  
*Chief Executive (Mauritius)*

### Vice President

■ Mr Félix Maurel (to April 2010)

■ Mrs Deborah de Chazal  
*Chartered Accountant*  
*Executive Director (Mauritius)*

### Secretary

■ Mr Jacques Jullienne  
*Retired Sugar Estates Administrator*  
*Retired Executive Director (Mauritius)*

### Assistant Secretary

■ Mr Philippe la Hausse de la Louvière  
*Scientist*  
*Managing Director (Mauritius)*

### Treasurer

■ Mrs Deborah de Chazal  
(to April 2010)

■ Mr Damien Mamet  
*Chartered Accountant*  
*Director (Mauritius)*

### Assistant Treasurer

■ Mr Gerard Pascal  
*Certified Accountant*  
*Retired Chief Finance Executive*  
(Mauritius)

### Scientific Director

■ Prof. Carl G. Jones MBE  
*Scientist*  
*International Conservation Fellow*  
(Mauritius/UK)

### Members

■ Mr Christian Dalais  
*Businessman*  
*Company Chairman and*  
*retired Chief Executive*  
(Mauritius)

■ Mr Georges André Robert  
*Retired Solicitor*  
*Senior Counsel (Mauritius)*

■ Ms Feerdaus Bundhun  
*Barrister*  
*In-house Lawyer (Mauritius)*

■ Dr Andrew Greenwood  
*Veterinary Surgeon*  
*Specialist in Zoo and Endangered Species,*  
*International Zoo Veterinary Group (UK)*

■ Mr Paul Masterton  
*Chief Executive Officer,*  
*Durrell Wildlife Conservation Trust (UK)*

■ Dr Roger Wilkinson  
*Head of Field Programmes and Research,*  
*North of England Zoological Society*  
(Chester Zoo) (UK)

■ Mr Manickchand Puttoo  
*Director, National Parks and*  
*Conservation Service,*  
*Ministry of Agro Industry (Mauritius)*

## Our Staff continued...

### Expatriate Staff, Volunteers and Students

■ Lois Baker  
■ Laura Bambini  
■ Patrick Banville  
■ Richard Baxter  
■ Ewa Bednarczuk  
■ Matthew Bidski  
■ Katherine Booth-Jones  
■ Claire Brown  
■ Samantha Cartwright  
■ Emilie Chavel  
■ Thomas Churchyard  
■ Julie Cole  
■ Nik Cole  
■ Lianne Concannon  
■ William Crowther  
■ Richard Dale  
■ Thomas Durcan  
■ Cara Ezzi  
■ Alexander Fleming  
■ Claudia Fleuter  
■ Michael Garratt  
■ Andrea Gear  
■ David Hamilton  
■ Thalassa Hamilton  
■ Dennis Hansen  
■ Lydie Héré  
■ Paquita Hoek  
■ Karen Hotopp  
■ Tara Imlay  
■ Lucy Jones  
■ Victoria Kaldis  
■ James Kidd  
■ Kendra MacDonald  
■ Gwendolyn Maggs  
■ Alice Mercier  
■ Saoirse Morgan  
■ Paul Morris  
■ Walter Mungroo  
■ Tegan Newman  
■ David Norfolk  
■ Djamali Nouzhat  
■ Lucy Ormsby  
■ Edward Packshaw  
■ Alexa Piggott  
■ Margaux Pizzo  
■ Madeleine Pott

■ Tara Proud  
■ Leanna Racine  
■ Claire Raisin  
■ Anna Reuleaux  
■ Heather Richards  
■ Lucy Rouse  
■ Andrew Skinner  
■ Donal Smith  
■ Peter Steward  
■ Daniel Thomas  
■ Paul Tinsley-Marshall  
■ Simon Tollington  
■ Rachel Tucker  
■ Amy Vercoe  
■ Megan Whittaker  
■ Lucy Williams  
■ Edward Winfield





## Getting in Contact

For queries, suggestions or comments please contact us at:

### **Mauritian Wildlife Foundation**

Grannum Road - Vacoas - Mauritius

Tel: (230) 6976097 - Fax: (230) 6976512

Email: [executive@mauritian-wildlife.org](mailto:executive@mauritian-wildlife.org)

Website: [www.mauritian-wildlife.org/](http://www.mauritian-wildlife.org/)

### **To visit Ile aux Aigrettes:**

You can reserve your ticket for a tour of Ile aux Aigrettes by telephone on (230) 6312396, or visit our website for further information at:

[www.mauritian-wildlife.org/](http://www.mauritian-wildlife.org/)

### **How can you become involved?**

Mauritian Wildlife Foundation is a non-profit organization and can only carry out its work with the support of donations. Please take the opportunity to become one of our donors and support vital conservation work. Various activities linked to corporate social responsibility can be arranged with MWF, please contact us for more information. Or you can simply become a Friend, please email us for more information at [fundraising@mauritian-wildlife.org](mailto:fundraising@mauritian-wildlife.org)

### **To make a donation:**

- Send a cheque or postal order, made payable to Mauritian Wildlife Foundation (see address below).

- Make a donation through our website at:  
[www.mauritian-wildlife.org/donate](http://www.mauritian-wildlife.org/donate)

- Send a direct credit at your bank. Beneficiary Bank:  
The Mauritius Commercial Bank Ltd. Port Louis – Mauritius.  
Swift BIC: MCBLMUMU / Account Number: 010204792 /  
Account Currency: Mauritian rupees.

Please include your full name and contact details, including email address, with all donations.

Address your correspondence or questions regarding donations to:

The Fundraising Manager - Mauritian Wildlife Foundation

Grannum Road - Vacoas - Mauritius

Tel: (230) 6976097

Email: [fundraising@mauritian-wildlife.org](mailto:fundraising@mauritian-wildlife.org)

## Volunteer for Us

The Mauritian Wildlife Foundation is always keen to hear from university graduates who would like to gain practical hands-on experience and pursue a conservation career working within our organization. We accept volunteers throughout the year to work on a range of our projects.

The work may involve endemic bird nest location and monitoring, radio tracking, population monitoring, report writing, animal handling of Pink Pigeons, Echo Parakeets, Mauritius Kestrels and passerines, and conservation of rare plants. Projects are located on mainland Mauritius and Rodrigues, as well as on offshore islets such as Round Island and Ile aux Aigrettes.

Working for MWF gives you the opportunity to gain valuable first-hand experience of conservation work in the ongoing recovery of endangered species, for which we are world-renowned.

If you are interested and require further information please send your CV and personal details and/or queries to us:

**By post:** The Executive Director - Mauritian Wildlife Foundation  
Grannum Road - Vacoas - Mauritius

**By email:** [volunteer@mauritian-wildlife.org](mailto:volunteer@mauritian-wildlife.org)

(Please state clearly on your envelope or email subject APPLICATION FOR JOB.)

**Editor:** Elizabeth Weaver, Ex Libris Consulting Ltd

**Design and illustrations:** Véronique Barnard

**Text** © 2011 Mauritian Wildlife Foundation

**Photographs** © as indicated

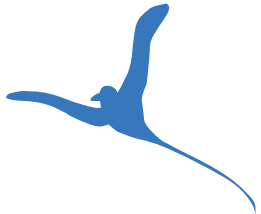
**Cover photographs** © V. Barnard (a); C. Kaiser (b); G. Guida (c-d-e-f).

All rights reserved.

Thanks to all photographers and also to the staff/students/volunteers of MWF (past and present) for their contributions to this report.

This report is also available for download from our website at:

[www.mauritian-wildlife.org/](http://www.mauritian-wildlife.org/)



**Thank you for your support**