



# MAURITIAN WILDLIFE FOUNDATION

## ANNUAL REPORT 2016

**For: the Annual General Meeting of the Mauritian Wildlife Foundation to be held at its offices at Grannum Road, Vacoas, on Friday 31<sup>st</sup> March 2016 at 04.30 p.m.**

### **Birds**

#### **Mauritius Kestrel**

- Trial hand-rearing and hacking from nest boxes of Kestrels was carried out.
- 12 eggs were harvested from the western and eastern population (6 each), from these 3 chicks were reared to fledglings
- 2 birds were rescued from the wild and hand-reared at the Gerald Durrell Endemic Wildlife Sanctuary (GDEWS), the Black River Aviaries.
- 5 birds were released into the wild at Bel Ombre forest

#### **Pink Pigeons**

- Populations were managed as usual at 7 sites with an estimated population of 400 birds
- Carried out captive breeding and hand rearing of Pink Pigeons at the Black River Aviaries with the use of Barbary doves as foster parents
- Successful hand rearing of 5 Pink Pigeons at GDEWS
- Building of release aviaries in Ferney Valley
- Translocation of Pink Pigeon to Ferney for acclimatization in December 2016.
- Preparation for release of Pink Pigeon in January 2017.

#### **Echo Parakeet**

- Monitoring and supporting the population in the Black River Gorges National Park was ongoing.
- Estimated population: over 700 birds.
- The second translocation of birds to Ferney Valley took place from February to April.
- 29 birds were released: 13 birds are regularly seen and have settled at Ferney.

#### **Mauritius Olive White-eye**

- Improvement of supplemental feeding on Ile aux Aigrettes, investigating replacing perishable food in the feeds.
- A poison grid of 350 poison stations along 1.5 km of rivers at Combo, to reduce rodent density and increase the probability of Olive White-eyes fledging chicks was maintained.
- Discussions about the way forward to protect the Olive White-eye with the creation of a mainland island using Goodnature (self-resetting) traps
- Discussion concerning translocation of Olive White-eye to the mainland island and Flat island

#### **Mauritius Fodies**

- Discussions about the way forward to protect the Mauritius Fody, with the creation of a mainland island using Goodnature traps at Brise Fer
- Discussion concerning translocation of Mauritius Fody to the mainland island

#### **Mauritius Cuckoo-shrike**

- Tested GoodNature traps in Brise Fer, results encouraging
- Studied birds in the wild, 6 nests fledged chicks.
- Successful hand rearing of Mauritius Cuckoo-shrike, 5 in 2014-2015, 5 in 2015-2016, 5 in 2016-2017.

- Building of ground release aviaries in Ferney Valley
- Preparation for release of Cuckoo-shrike in January 2017.

### **Mauritius Paradise Flycatcher**

- Carried out hard release of 11 birds in Ferney Valley.
- Five released birds were equipped with radio transmitters and followed for two weeks following releases

### **Gerald Durrell Endemic Wildlife Sanctuary (GDEWS)**

- Captive breeding and hand rearing of Pink Pigeons at GDEWS with the use of Barbary doves as foster parents.
- 5 Pink Pigeon squabs were hand-reared
- Increased production of mice for Cuckoo Shrike handrearing and kestrel breeding.
- 5 Mauritius Kestrel chicks were hand-reared to 30 days
- 4 Mauritius Cuckoo-shrike were hand-reared between September and December 2016
- Hand rearing of rescued adult Mauritius Fruit Bats.

### **Other**

- Project proposal submitted by MWF to CEPF entitles 'Support to Private Sector to Engage in the Conservation of Mauritius' threatened endemic birds', which will reintroduce several species (Pink Pigeon, Echo Parakeet, Mauritius Kestrel) at one or more of three privately owned sites (Ferney Valley, Ebony Forest Chamarel and Bel Ombre) was approved and implementation begun.

### **Mauritius fruit bat**

- GSM GPS tracking of bats continued.
- A range of discussions and exchanges with IUCN Bat Specialist Group, Bat Conservation International, and several other international organisations, as well as the Government of Mauritius, local groups and people to share information and lobby against a cull.
- MWF instrumental in visits of Dr Tammy Mildenstein to advise on more acceptable methods of counting bats and the actual survey that took place in September / October 2016.
- Cull implemented by the Ministry of Agro Industry in December 2016.
- A bat education programme started with funds from the Rufford Grant.
- Chester Zoo agreed to advise on Human Wildlife Conflict actions needed and an initial fact finding visit was accomplished.
- A study was set up during the fruiting season to assess damage to fruit crops and the variance in market prices
- MWF proponent of Motion at the IUCN World Congress. 94% of national and international NGOs and 97% of Government members of IUCN adopted Resolution 019, "*Protection of wild bats from culling programmes*" which "*Urges governments to seek non-lethal solutions/mitigation measures to conflicts between humans and bats, as part of a strategy that combines scientific research on bat ecology and ecosystem services, as well as on life-history characteristics that support population models*". In the absence of peer-reviewed evidence, it also calls on Governments to "*not authorise or sanction culls of wild bat populations*". This is now formal IUCN policy adopted at the highest level and supported by the majority of Governments as well as NGOs. It appears that Mauritius was one of the few (two?) countries that abstained.
- MWF commented on the draft revision of the red list status of the Mauritius Fruit Bat. In all scenarios, an uplisting to Endangered or Critically Endangered is unavoidable after the two major culls.

### **Reptiles**

#### **Günther's gecko**

- The 2015/2016 breeding season ended in May with a total of 64 eggs detected at 25 sites and a hatching of 84.4%.
- A new survey method was devised and was tried in April and September 2016 to estimate the Günther's gecko abundance on Ile aux Aigrettes.

- Thirty Günther's geckos were caught on Round Island during the annual reptile monitoring survey in December; the data obtained will be used to calculate average body condition scores for comparison with the translocated population on Ile aux Aigrettes.

### **Telfair's skink**

- Headstarting on Ile aux Aigrettes: Artificial incubation is on hold following tenrec presence on the island. However 33 wild hatchlings were found and collected on IAA during 2015/2016 breeding season. The juvenile skinks are being reared in the nurseries along with young juvenile skinks from previous breeding season.
- 65 headstarted skinks were PIT-tagged and released in 2016 on Ile aux Aigrettes.
- The Telfair's skink population on IAA has still not recovered from the dog invasion and now with Tenrecs, the skink population estimate has gone further down. Translocation is on hold until issues with invasive alien species is solved.
- Morphometric data for 61 Telfair's skinks were collected on Round Island in December to obtain body condition scores for comparison with the translocated skinks on Gunner's Quoin and Ile aux Aigrettes.
- Gunner's Quoin annual reptile monitoring (November): A total of 938 Telfair's skinks were caught (541 new ones PIT-tagged) and morphometric and GPS data were collected during the Capture Mark Recapture survey. This data will be used to generate a population abundance estimate, assess the body condition of the skinks and map their distribution on the island.

### **Keel-scaled Boa**

- A total of 15 keel-scaled boas (six males, six females and three juveniles) were found during the annual reptile monitoring survey on Gunner's Quoin in November 2016. Fourteen were new and only one is a recapture from 2012 translocation. The distribution of the boas on the island has also increased with new snakes being captured outside the initial release range.
- Seventeen boas were captured during the annual reptile monitoring trip on Round Island in December. The morphometric data collected will be used to obtain body condition scores for comparison to the snakes on Gunner's Quoin.

### **Bojer's skink**

- Annual Capture Mark Recapture surveys were conducted: the number of skinks captured on Ile aux Fouquets, Ile de la Passe and Ilot Vacoas were: 156, 129 and 120 respectively. The data will be used to generate population estimate for these species and compared body conditions of skinks between the islands. The data is currently being analysed.
- Re-assessment of the genetic status of the southeast Bojer's skink populations with Cardiff University. 62 tail tip sample collected and sent in September.

### **Lesser night gecko**

- Capture Mark Recapture surveys were conducted on the translocated population on Ile Marianne. The number of geckos on Ile Marianne has tripled as compared to last year with 76 and 78 geckos found during the March and August trip. The higher number will allow us to finally work on a population estimate of this translocated population.

### **Orange-tailed skinks**

- A total of 98 sightings and 21 captures were made on Gunner's Quoin in November. The morphometric measurement for each captured skink was taken. The number of skinks seen and captured has doubled as compared to last year. Some skinks were found in areas outside of their previously recorded range. A trip was also organized to Ilot Gabriel, no orange-tailed skinks were recorded during the surveys.
- 19 samples were collected in November on Gunner's Quoin to determine genetic health of the orange-tailed skinks.

## **Tortoise project**

### ***Ile aux Aigrettes***

### **Free-roaming tortoises**

- Twenty-six adult free-roaming adult tortoise
- Location recorded every month and water provided
- An adult tortoise was given to Ile aux Aigrettes in October by a private donor.

### **Enclosed tortoises**

- A total of 133 hatchlings were collected on Ile aux Aigrettes in 2016.
- Enclosed tortoises were fed and watered daily. Morphometrics done monthly and body condition scores used as gauge of health.
- By the end of 2016, the IAA nurseries held 243 juveniles, which are fed and watered daily
- Worms were found during parasite screening in January and deworming was performed several times. Blood samples were also collected and sent to the International Zoo Veterinary Group for disease screening.
- Notching, new technique for marking tortoises, was carried out on all tortoises older than a year.
- New compartment was constructed in the bat enclosure in April to reduce overcrowding in hatchlings' enclosure
- To reduce risk of theft, a secure holding pen was built in August for locking tortoises in the bat enclosure at night
- Underweight tortoises were placed in the supplementary feeding pen and given extra care
- Sixty-three juvenile tortoises were PIT-tagged in November. All the tagged juveniles will be sent to Round Island in 2017.
- In January 2016, Durrell wildlife vet and tortoise specialist, Dr Tsanta Rakotonanahary provided training on tortoise healthcare, disease-screening and dissection
- Protocols were written on parasite screening, notching and blood removal by the tortoise staff in charge
- Twenty juvenile tortoises, donated by the State House, were brought on IAA in November after screening results showed they were free from disease and parasite.

## **Round Island**

### **Free roaming tortoises**

- There are 462 free-roaming Aldabra and 15 Radiated Tortoises by the end of 2016
- Quarterly morphometrics of free-roaming tortoises was carried out.
- Daily sightings were carried out, which included feeding observations and recording GPS locations of all sighted tortoises
- Monthly Quadrat searches were carried out in the seven habitat types
- Two Radiated Tortoise found in December with shell rot are being held in enclosures and treated
- In January an Aldabra tortoise hatchling was found for the first time and another one was found in April. Both were found on the summit.
- Three more Radiated Tortoise hatchlings were found and are kept in an enclosure
- In September a new wallow was constructed and six new 5 by 5 m enclosures were built to study the impact of tortoise grazing on the plant communities on Round Island
- James Redcliffe, Tortoise intern from Swansea University, was on Round Island from April to June to track tortoise's movement and assist with the project
- Annette Stephanie, Tortoise intern from Zurich University, was on Round Island from April to August, and then again in December to produce a 3D map of Round Island and to look at tortoise behaviour

### **Enclosed tortoises**

- Enclosed tortoises fed and watered daily. Morphometrics done monthly and body condition scores used as gauge of health.
- Underweight tortoises were maintained separately and given supplementary food and care.
- Mitigation measures for the parasite infection of the enclosed tortoises were continued. Boots were worn to minimize spreading. All Tortoises were dewormed. Old enclosures were flamed to reduce parasite load of soil and prevent further spread.
- Faecal samples were collected from five tortoises from each of the three enclosures in May. Screening

was carried out to determine parasite load. No worms were found.

- Sixty one, 15 and 35 tortoises were released from the enclosures in June, July and October respectively. In total 111 tortoises were released on Round Island in 2016. The tortoises were PIT-tagged prior to being released. By the end of December 36 enclosed juveniles were left as they were too small to be released.

#### **Fixed point photos and vegetation surveys**

- Fixed point photos were taken in an ongoing effort to visually record vegetation changes at chosen points on Round Island.
- Vegetation surveys within the newly built enclosure and control areas were carried out.

## **Round Island**

### **Red-tailed Tropicbird**

- All nests in the survey area of the island were monitored once a month for activity.
- The ring numbers of adult birds were noted and new adults and chicks (provided they were old enough) were ringed.
- 932 birds were found during surveys and a total of 238 birds were ringed (50 chicks and 188 adults).

### **Round Island Petrel**

- 1,074 birds (695 adults and 379 juveniles) were found during monthly petrel surveys for the year. A total of 65 chicks and 38 new adults were ringed.
- Wardens received training on petrels in November from Dr Malcom Nicoll (Institute of Zoology) on bird handling, ringing, deployment of geotags, and collecting blood samples.

### **Keel-scaled Boa**

- Each of the seven boa quadrats (located in the seven habitat types on Round Island) as well as the area around the field station was monitored once a month during night surveys.
- A total of 202 boas (155 adults and 47 juveniles) were found in 2016. Another 57 incidental boa encounters (53 adults and 4 juveniles) were also recorded. 112 boas were PIT-Tagged for the year.
- The morphometric measurements of boas were recorded along with the GPS coordinates of their location and other environmental and micro-habitat information.

### **Günther's Gecko**

- 18 Günther's Gecko sites were monitored twice a month and new eggs and hatched or failed eggs were recorded to determine hatching success.
- 154 eggs (142 paired and 12 single) had been found by December 2016 of the 2016/2017 breeding season, of which 147 had hatched.

### **Plant restoration work**

- Approximately 36,000 seeds of 15 hardwood species and 2 non-hardwood species were collected on Round Island.
- 10,759 seeds from 19 species were sown.
- 522 seedlings which germinated from the nursery were potted.
- 283 plants were planted in the lower palm-rich habitat: 183 hardwood plants of 15 different species and 100 non-hardwood plants of four different species. All the plants were watered once a week and weeding is done regularly in the planting sites.
- 1,068 plants were sent to Round Island from the Ile aux Aigrettes nursery.
- In July searches for shallow soil planting sites were done. Several planting sites were identified that can accommodate some 1,700 plants.
- By the end of December 2016 the Round Island nursery contained 1,601 plants of 33 species.
- The irrigation system for the new planting sites was set up from January to March.
- A meeting on flora work was held in July. Two documents were produced to guide plant restoration work: A 2017 planting plan and a propagation plan for 2018 planting

### **Weed management**

- *Chromolaena odorata*, *Heteropogon contortus* and *Lycopersicon esculentum* sites were checked on a monthly basis. Plants found were uprooted and removed from the island if seeding, and uprooted and left to dry on rock if they were not seeding.
- A new "mega site" of *Chromolaena odorata* was discovered in February on the western edge of the below summit region. It took several months to bring this site under control.
- By the end of the year there were 30 known sites for *Chromolaena odorata*, 14 for *Heteropogon contortus* and 1 for *Lycopersicon esculentum* being monitored.
- Approximately 22,000 seedling and adult plants of *Chromolaena odorata*, 687 *Heteropogon contortus* and 1,020 *Lycopersicon esculentum* were found during 2016.
- A review of highly invasive weed work done on the island since 2002 was conducted in March and a document was produced to inform and improve effectiveness of highly invasive weed management on Round Island.

### **Infrastructure**

- Two technicians from LEAL and Co. visited the island on February to try to repair the I-Kube solar system, but they were unable to resolve the issue during their stay.
- Three technicians from SFER and two officers from NPCCS, a welder and Mr Ashok Khadun visited the island in May to install a new solar energy system.
- Two of the field station windows were replaced in July.
- A new toilet was built by the wardens in August.

### **Other**

- Senior Warden, Ms. Aurelie Hector, was in Madagascar in December organised by ZSL EDGE of existence to represent the Round Island boa as an EDGE species.
- Prof David W Hedding and Prof Werner Nel, from South Africa, visited Round Island in October to collect weather and soil erosion data and upgrade the equipment in place.
- A delegation consisting of the Deputy Prime Minister Xavier Luc Duval and his aide, Mr Puttoo (Director of NPCCS), Dr Vikash Tatayah and four police officers from NCG visited the island along with a French film crew of two persons. The purpose of their visit was to film a short documentary about the Round Island boa with the Deputy PM and to help promote awareness about conservation issues in Mauritius.
- There were also a three 'day-trip' visits to the island in December by personnel from the Indian Navy Ship Darshak, who were conducting a mapping survey of the Indian Ocean.
- Visiting Round Island document, inspection protocol and cyclone procedures protocols were all reviewed and updated

## **Ile aux Aigrettes**

### **Invasive Alien Species control and bio-security**

- Tenrec were found on IAA in February 2015: they are a threat to the Telfair's skink population
- Tenrec trapping through 37 traps and 3 types of traps continued till July. Four captures and three sightings were recorded (Jan to July). Six new wooden traps made in August set in October.
- In October a dedicated staff was employed to work on invasive alien species issues on IAA. Only cage traps continued. 69 ink tunnel deployed over the island in October to know about tenrec distribution and prototype see-saw trap made and tested in December. Five captures and four sightings recorded
- Dog alert in January. Camera traps set out, dog trap baited for a month and searches conducted till end of February and nothing found.

- Two Larsen traps (to capture crows) were ordered from UK and were set in December on IAA. No crows caught yet.
- Monthly monitoring of chew cubes around the island, sooted tiles and shrew trapping around reptile nurseries continued on IAA as part of rat monitoring protocol.

## Ferney

### Fauna

- Translocation of 29 Echo Parakeets in February to April 2016 with 13 being regularly seen
- Preparation for release of Cuckoo-shrike in January 2017.
- Cuckoo-shrikes ground release aviaries completed.
- Translocation of 12 Pink Pigeon to Ferney in December 2016.
- Translocation of 11 Mauritius Paradise Flycatcher from November to December 2016.

### Flora

#### Weeding

- Initial weeding of 20,050 m<sup>2</sup> (2.0h) completed in Zones 1, 2 and 3
- Overall total initial weeding of 80,875m<sup>2</sup> (8.1ha) been done from the beginning of the project in April 2014
- Maintenance weeding was conducted of 34,900 m<sup>2</sup> (3.5 h)
- Overall total maintenance weeding of 64.450 m<sup>2</sup> (6.4ha) been done from the beginning of the project in April 2014.

#### Propagation of plants and planting in the restored areas

- For 2016, 6,917 plants have been propagated in the nursery.
- A total number of 17,067 plants have been successfully propagated from the beginning of the project,
- In 2016 3,803 plants were planted
- 10,241 plants planted from the beginning of the conservation project.

#### Training of restoration labourers

- 12 La Vallée de Ferney labourers were trained in weeding techniques, plant identification, herbicide application and nursery work.

#### Rare plant searches

- Plant survey and the location of rare plants species ongoing during restoration.
- In 2016 the following were discovered; 12 plants *Eugenia elliptica*, 6 plants *Poupartia borbonica*, 2 plants *Polyscias paniculata*, 2 plants *Diospyros boutoniana*, 1 plant *Apodites dimidiata*, 2 plants *Pandanus iceryi*, 2 plants *Pisonia lanceolata*, 1 plant *Turraea rigida*, 1 plant *Callophyllum parviflorum*, 1 plant *Bremeria landia* var. *holoserica*. Two orchid; one epiphyte orchid *Hederorkis scandens* and one clump ground orchid *Phaius tetragonus* and two fern; *Vittaria isoetifolia*, *Tectaria pica*

#### Education

- Enhanced tour 'In touch with the Forest' implemented for visitors and students
- 'In touch with the Forest' for students followed by 3,008 visitors from 54 educational institutions.
- Trail contents were reviewed regularly
- Practical training sessions were organized for the guides
- Fact sheets were prepared and circulated to the eco-tour team.
- Signage was worked on to provide information to visitors.
- A trail map was designed for the Visitors' Centre

#### Training

- Specialised technical workshops on plant conservation and practical hands-on sessions were run by the MWF Plant Conservation Officer, Mr Jean Claude Sevathian.

- Reinforcement sessions were held on the Mauritius Kestrel feed presentation
- Guides were informed about the Echo Parakeet translocation.
- Exchange sessions was organized with the MWF Rangers to compare the handling of their respective trails.

## Flora

### Rare Plants Search Project

- Searches carried out with collaborators: National Parks and Conservation Service, Forestry Service, Mauritius Herbarium, Independent Botanists.
- In 2016 41 rare plant species were located; two rare liana newly found in Combo, *Gouania tiliifolia* and *Agelaea pentagyna* in Le Bouton, Plaine Champagne, two orchids and eight ferns in different forest which were newly recorded.
- Result from the rare plant survey on Corps de Garde Mt on 25<sup>th</sup> February 2015, found clumps of *Phyllanthus mauritianus* on the crest line vegetation, this find was published in "Cahier Scientifique de l'Océan Indien 2016".

### Pigeon Wood Nursery and Field Gene Bank

- We have propagated twenty rare plants species in the nursery and we have succeeded on twelve species amongst which are the seedlings of *Eugenia alletiana* and the germination of *Elaeocarpus bojeri*
- In the Field Gene Bank we have planted 26 rare plants species included four palms, *Acantophoenix rubra*, *Hyophorbe vaughanii*, *Dictyosperma album* var. *album* and *Tectiphiala ferox*. In addition we have planted 37 rare plants species in government arboretum and in private forests; *Albizia vaughanii* and *Ficus laterifolia* in Ebony Forest Chamarel; *Pandanus iceryi* in Vallee de Ferney.

### Red Listing of Mauritian Plants

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

### Mondrain Nature Reserve

- Work on the Management plan for Mondrain has to be finalised
- Medine Sugar Estate provided 2 labourers for weeding in March for two months.
- 219 plants were planted at Mondrain.

### Other

- MoU between MWF, Missouri Botanical Gardens and Ministry of Agro-Industry signed
- Project proposal submitted by l'Arche des Plantes (Conservatoire Botanique National de Brest, France) to the Critical Ecosystems Partnership Fund (CEPF) in collaboration with MWF for re-introduction of rare plants to Mauritius and Rodrigues and assistance in plant conservation approved and three-year project implemented.

## Future Islet Projects

### Vision for St Brandon

- St Brandon is now an official MWF project in order to promote the conservation of the atoll.
- Funding was applied for (and obtained) from the Critical Ecosystems Partnership Fund to help develop a common vision for the sustainable management of St Brandon.
- MWF has consulted very widely (government, private sector, NGOs and members of the public) about the development of the vision, receiving comments constructive comments and criticisms from a wide cross section of respondents.



- Government's reaction to the Vision has not been forthcoming so far, possibly as a misunderstanding of what the vision aims to achieve.

### **Flat Island**

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

### **Gunner's Quoin**

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

## **Rodrigues**

### **Solitude Endemic Nursery (SEN)**

- 21,226 endemic and native plants propagated in stock in the nursery at 31/12
- 9,277 endemic and native plants were transferred from the nursery for conservation purposes in 2016
- The entire nursery was fenced and barbed wire used, following theft of 2 water pumps
- A gene bank 'garden' was created behind the nursery for educational visits
- 12 octopus fisher worked in the SEN between August and October doing general maintenance
- The nursery store rooms were all repainted by octopus fishers

### **Anse Quitor Nature Reserve (AQNR)**

- 3,470 endemic and native plants were planted in the AQNR
- 16 octopus fishers worked in the GMNR between August and October doing general maintenance

### **Grande Montagne Nature Reserve (GMNR)**

- 4,229 endemic and native plants were planted in the GMNR
- The GEF-SGP-UNDP project was closed on the 25/05
- 21 octopus fisher worked in the GMNR between August and October doing general maintenance
- Emtel Ltd began supporting the GMNR via CSR funds

### **Eco-Tours Grande Montagne**

- Ecotours officially launched on the 25/02, by the Chief Commissioner Hon Serge Clair, Mrs Pamela Bappoo-Dundoo (UNDP GEF Small Grants Programme National Coordinator) and Mrs Deborah de Chazal (MWF Executive Director)
- 2,000 promotional flyers produced in February and distributed around Rodrigues
- Environment Educator manned the GMNR information centre till August
- Conservation Assistant manned the GMNR information centre till 01/12
- Ecotour Ranger was recruited on 01/11
- 272 paying clients visited the GMNR in 2016, generating Rs24,900
- 65 persons received complementary visits in 2016 (journalists, scientist, RRA VIPS, staff)

### **Rodrigues Environmental Education Programme (REEP)**

- 1,378 endemic and native plants were donated to schools, local institutions and community groups
- 154 teachers and 1,852 school children reached in 2016
- 216 volunteers worked with MWF in 2016

### **Rodrigues Fruit Bat (RFB)**

- Censuses carried out 3 times island-wide, and fortnightly at one site.
- The highest RFB count was in March returning 18,855 bats of which 7,944 at 1 site (Jardin Mamzelle)
- UEA M.Sc. student Ms.Sarah Gottschalk studied the RFB in Rodrigues
- Plans underway to downlist the RFB from Critically Endangered to Endangered

## **Ile Cocos and Ile aux Sables Nature Reserves**

- Mayeri boat was sent from Mauritius to Rodrigues, repaired, repainted and renamed Yéyé
- The old 4-stroke 25hp engine was serviced, refreshed, mounted on Yéyé
- Yéyé passed the skipper survey, seating capacity reduced from 8 to 5
- No plants were planted in 2016
- Seabird Censuses were carried out four times a year

## **Grenade Community Forest (GCF)**

- 7 octopus fisher worked in the GCF between August and October doing general maintenance
- 200 endemic and native plants were planted in the GCF
- 55 fruit plants were planted in the GCF

## **Other**

- UEA M.Sc. student Mr Jamie Willmott studied the Rodrigues Fody and Warbler in Rodrigues, producing a thesis, suggesting rise to 20k-25k Warblers and 15k-20k Fodies
- Dr Nick Porch, Deakin University, Australia visited Rodrigues to do beetle research in the field
- Dr Hadoram Shirihi, Israel, visited Rodrigues to do shearwater and warbler research in the field
- University of Mauritius scientists visited Rodrigues for a Crop Wild Relative project, with MWF
- 2 endemic plant species were rediscovered in the wild by Project Support Officer, Mr Alfred Bégué
- MWF Rod celebrated its 20 years in Rodrigues on the 24/11 in the presence of Prof. Carl Jones, Dr Vikash Tatayah, the Chief Commission and Commissioner for Environment, Mr. Richard Payendee
- 2 MWF Rod staff attended a module each of the PGDip course in Mauritius
- 11 MWF Rod staff followed their ½-day First Aid refresher
- 2 new MWF Rod staff followed a full 2-day First Aid course
- MWF Rod welcomed 2 interns: Mr Tomke Honkomp from Germany and Mr Antoine Jouin from France

## **Education on Mauritius**

### **Learning with Nature on Ile aux Aigrettes**

- A total of 3,626 visitors followed the LWN trail in 2016 from 116 institutions of which 2,143 from 66 institutions were CSR sponsored and received educational and food packs.
- Specialised programmes were organized on request for a number of groups following modules in conservation as part of the National Curriculum.
- Feedback was collected from educators and students and analysed to evaluate ranger performance and learning outcome.
- The National Curriculum and school textbooks for all subjects were reviewed and resource material for the educational tour on Ile aux Aigrettes was updated
- Training of Rangers was continuous during the year

### **Mauritius Beyond the Dodo**

- This travelling Photographic Exhibition on local endemic species toured the island during 2016
- Exposed at open access venues where entry is free of charge minimum one week to over one month

## **Other**

- Plant donations extended to schools and public institutions
- Special occasions like Earth Day, World Biodiversity Day and World Environment Day were celebrated
- A *No Litter* campaign was implemented for the Pointe Jerome jetty area
- A structured tour for Ile de la Passe was worked on and training given to Rangers
- A structured tour for Mondrain was worked on
- Educational Material 'Discovering Dodos' book, written by Mr Allan Grihault, was finalised and published
- Educational Material 'Ile aux Aigrettes' book was edited and re-published in French and English

## **General**

## Committees & Consultations

- MWF continued to actively participate in various national committees: Native Terrestrial Biodiversity and National Parks Advisory Council, National Invasive Alien Species Committee, Ramsar Committee
- MWF participated in policy dialogues: National Biodiversity Strategy and Action Plan, National Communication on Climate Change
- MWF is also represented on the National Eco-School committee and the Duke of Edinburgh Award committee

## Visitors & Collaborators

- Dr Andrew Greenwood: Consultant International Vet from IZVG and council member from 20<sup>th</sup> to 28<sup>th</sup> April 2016.
- Dr Rachel Bristol: Project officer, Seychelles EDGE species project from 10<sup>th</sup> to 19<sup>th</sup> April 2016
- Mr Guntram Meier from InGrip Consulting and Mr Peter Haverson, Independent Invasive Species Consultant visited from 12<sup>th</sup> to 21<sup>st</sup> September 2016 to assess the potential for a complete crow eradication in Mauritius.
- Dr Russell Mittermeier, Co-Founder of Conservation International, visited parts of the project in Mauritius and Rodrigues on 6<sup>th</sup> October 2016.
- Dr David Hedding : from University of South Africa (UNISA) from 6<sup>th</sup> to 13<sup>th</sup> October 2016 on his yearly monitoring visit for the Round Island Soil Erosion study.
- Dr Alexandra Zimmerman and Dr Simon Tollington: from North of England Zoological Society (Chester Zoo) visited from 25<sup>th</sup> to 30<sup>th</sup> September 2016 to discuss the Mauritius Fruit Bat human conflict resolution project and Dr Simon Tollington returned from the 6<sup>th</sup> to 12<sup>th</sup> November 2016 to support the implementation.
- Prof. Ken Norris and Dr Malcolm Nicoll: were in Mauritius for their yearly visit to discuss projects they are involved in and Ms Gwen Maggs accompanied them to present her PhD findings (OWE). They are all from the Institute of Zoology, London and were in Mauritius from 2<sup>nd</sup> to 17<sup>th</sup> November 2015.
- Mr. David White: from North of England Zoological Society (Chester Zoo) visited from 6<sup>th</sup> to 18<sup>th</sup> November 2016 with a special focus on the Rodrigues Fruit Bat.
- Dr John Ewen: from the Institute of Zoology, London, was in Mauritius from the 13<sup>th</sup> to 19<sup>th</sup> November 2016 to advise on the Passerine projects and supplementary feeding.
- Dr Stéphane Buord and Mr Dominique Guyanec: from the Conservatoire Botanique National de Brest (France) arrived in Mauritius on the 27<sup>th</sup> November until the 6<sup>th</sup> December 2016 as a working visit for the CEPF funded project for the re-introduction of very rare plants grown at Brest.
- Dr Rachel Bristol: Project officer, Seychelles EDGE species project from 1<sup>st</sup> to 23<sup>rd</sup> December 2016

## Conferences and Workshops

### Local Workshops:

- Vulnerability Assessment and Adaptation to Climate Change in Mauritius and Rodrigues (part of the development of the Third National Communication on Climate Change to the UNFCCC)
- Inception workshop for updating the National Biodiversity Strategy and Action Plan (2015-2020) {to integrate Aichi Targets}
- Protected Area Network project (Consultative workshop for formulation of good practice guide for native forest restoration in Mauritius)
- Workshop on plant databases and ex-situ conservation (run by the Conservatoire Botanique National de Brest and MWF, in both Mauritius and Rodrigues)
- Sustainable Development Goals Mainstreaming, Acceleration, Policy Support (MAPS) workshop held by UNDP.

### Overseas Conferences and Workshop:

- International Bat Research Conference in South Africa attended by Dr Vikash Tatayah
- IUCN World Congress in Hawaii attended by Dr Vikash Tatayah

- Life + & Foret workshop in Reunion attended by Jean Claude Sevathian, Martine Goder from MWF Mauritius and Anieta Shan Yu from MWF Rodrigues.

## Training

### DESMAN Course

- Mr Stephan Mellier, Conservation Biologist on the Reptile Recovery project attended this three month course in Jersey from February to April 2016, MWF paid his air fare, Durrell sponsored him for the course.

### MWF Induction Course

- The induction course for all new staff in 2015 was held over three days in January 2016.

### Pg Diploma in Endangered Species Recovery

- One MWF Staff attended the course full time with a total of fifteen MWF staff having benefited from the individual modules for this year with eighteen places taken up.

### EDGE Fellowship Course

- Ms Aurelie Hector was awarded a place on a one month EDGE fellowship course in Madagascar from 22<sup>nd</sup> November to 22<sup>nd</sup> December 2016. She had the possibility of being selected for a two year EDGE fellowship scholarship to support in depth research on the Round Island Boa to begin in 2017.

### Other

- Dr Tsantha Rakotonanahary, Durrell's vet in Madagascar, trained reptile and tortoise staff on faecal sample analysis and other useful veterinary techniques in January
- Ms. Finella Blair, database expert from Durrell, came to Mauritius in February to work with reptile team to set up Access databases and Open Data Kit
- Training was conducted on using Wild ID and programme Capture in Mark to estimate population abundance of reptiles

## Presentations and Talks

These are held when we have visitors as part of our staff capacity building and our staff also deliver talks. In 2016 the following were held which were open to all MWF staff and council members:

- Mr Joe Taylor, PhD student with the Institute of Zoology on "Investigating past and future impacts of extreme weather on the threatened and endemic wildlife of Mauritius"
- Dr Steve Boyes, founder of the Cape Parrot Project and Dr Kirsten Wimberger from the Wild Bird Trust in South Africa on "Research into PBFDF in a wild population of Cape Parrots"
- Prof Derek Engelbrecht, Associate Professor and Lecturer in the Department of Biodiversity at the University of Limpopo on his "Research into the ecology and morphological variation of larks (*Alaudidae*)"
- Miss Finella Blair, intern from Durrell on "Managing data for conservation"
- Mr Matt Goetz, Durrell Wildlife Conservation Trust, Head of Herpetology on "Conservation of the Anguillan Racer"
- Dr Rachel Bristol, Project Officer, Seychelles EDGE species project on "Translocation as a conservation strategy for the Seychelles paradise flycatcher"
- Ms Annette Stephani, Masters student from the University of Zurich on "*The influence of habitat preference and terrain on tortoise dispersal*"
- Mr James Redcliffe, Masters student from Swansea University on tagging tortoises "*Life in the slow lane*"
- Ms Rosemary Moorhouse-Gann, PhD student from Cardiff University on "*Tortoises providing the ecosystem service of habitat restoration through grazing*"
- Dr Adam Moolna, Consultant, Giant Tortoise Environment and Conservation Ltd (UK), on "Freshwater Ecology & Invertebrates".
- Mr Peter Haverson, Independent Invasive Species Consultant, on "Eradicating invasive birds from Indian Ocean Islands"
- Dr. Nik Cole, MWF Island Restoration Manager, on "The ups and downs of the Continental Divide"

- Dr Alexandra Zimmerman, Head of Conservation Science, Chester Zoo on "Human-Wildlife Conflicts, essential background and principles for good practice"
- Miss Aurelie Hector, MWF Round Island Senior Warden, on 'Conservation Status of the Round Island and setting future monitoring protocols'
- Mr Jeremy Keeling, Director, Monkey World, Dorset UK on 'Jeremy Keeling; a life with animals'
- Gwen Maggs, PhD student, Institute of Zoology of London on 'Too much of a good thing - Supplementary feeding exit strategies for successful reintroductions'
- Dr Malcolm Nicoll, Senior Research Fellow, Institute of Zoology, London on 'An update on MWF/ZSL scientific research; fodies, parrots, petrels and extreme weather'
- The Pg Dip Students presented their projects to MWF staff on Monday 10<sup>th</sup> October 2016 on the following subjects:
  - Finding the sweet spot: habitat quality as a predictor for nest site selection in the Endangered Mauritius echo parakeet *Psittacula eques*
  - Is it possible to determine the sex of an Echo parakeet *Psittacula eques* chick from the colour and shape of the beak.
  - Disease in an avian translocation: Beak and Feather Disease Virus (BFDV) in Endangered Echo parakeets (*Psittacula eques*) in Mauritius
  - Saving native forests: seed dispersal by the Mauritian flying fox *Pteropus niger*
  - Neglected and Vulnerable: the distribution of the Natal free-tailed bat *Mormopterus acetabulosus* in Mauritius.
  - Improving capture rate for an invasive species: Determining bait preference of the Asian musk shrew *Suncus murinus* in Mauritius.
  - Counting Aliens: the abundance of the Asian musk shrew *Suncus murinus* on Ile Aux Aigrettes
  - What's for dinner? Invertebrates of Round Island, Mauritius
  - Are we there yet? Reassessing the conservation status of the endemic Mauritius Gunther's gecko, after 20 years of management actions.
  - How do tortoises recognise heterophylly?
  - Caught in the trap: measuring live-trap effectiveness for invasive mammals in Black River National Park, Mauritius
  - Lessons from elsewhere: identifying perceptions of effective leadership methods in conservation
  - When the price is right: would people be willing to pay to visit the Black River Gorges National Park, Mauritius?
  - Lost in Publication: do research papers inform conservation practice?
  - The war against aliens: strategies for controlling house crows in Mauritius
  - Spatial orientation in lemurs: food availability, influence of substrate or scent?'

## Events, Media and Communication

Ferney Valley: To celebrate the release of Echo Parakeets to the Ferney Valley an official ceremony was held on Wednesday 13<sup>th</sup> April 2016. The guest of honour was the Minister of Agro Industry and Food Security, Honourable Mahen Seeruttun. Representatives of the UNDP GEF Small grants programme who fund this project, CIEL and the Ferney Valley Trust, the Mauritian Wildlife Foundation were present. Following speeches with guests seated on the veranda of the field station, the hatches were opened in the aviaries for a symbolic release of birds that were inside, followed by a visit to the plant nursery and refreshments at the Lodge.

Photo exhibition: Following the launch of the exhibition in August 2015 it was constantly on display in different venues until the end of February 2016. Then on 5<sup>th</sup> May 2016 it was re-launched at the Blue Penny Museum in Port Louis under the title 'Celebrating Conservation in Mauritius' to mark Prof. Carl Jones success at winning the Indianapolis Prize and featured some additional panels explaining Prof. Jones's role. From there it went on display at the Middlesex University and then to L'Aventure du Sucre.

The exhibition was funded by the US Embassy. There were funds remaining so we were able to manufacture additional panels and easels for a reduced display to be based in Rodrigues. This was launched at the Rodrigues 20<sup>th</sup> anniversary celebrations on 24<sup>th</sup> November 2016.

Filming: MWF has collaborated with a project to produce a documentary on the Human/Wildlife Conflict for the Mauritius Fruit Bat led by Ms Diane Gueho. The film will be complete in early 2017.

Publishing Books: 'Discovering Dodo's' written by Alain Grihault was published during the year as part of the education programme. Books will be donated to schools and given as educational material for Std 5 to Form 2 in the Learning with Nature project. 'Native Plants and Animals' was re-printed.

Facebook: This media is being developed for MWF communication and to improve the regular flow of posts a dedicated staff was employed.

Media: MWF staff in Mauritius and Rodrigues are interviewed and MWF asked for information on numerous occasions which has resulted in radio talks, radio interviews, TV shows and many local and international press articles.

'MWF Files' articles: Continue to be published on the Osrose page of L'Express on a weekly basis and are available on our website.

## Financial Matters

- The financial results in 2016 were satisfactory with overall income rising and costs remaining contained to produce an operating surplus. The overall result has been impacted by a large bad debts provision of Rs 2m representing grants from previous years from the Government of Mauritius which have not been paid to date and thus a deficit has been incurred.
- The amount raised from CSR funders in 2016 was Rs 13.5m which was an improvement on 2015 and back to 2014 levels. There were fears that new CSR regulations would affect fundraising in this sector but it became clear that this negative impact would begin in 2017. This sector continues to be very competitive and demanding needing regular contact with funders, CSR activities organised and regular reports submitted.
- The amount raised from International Donors has reduced, impacted by the loss of one significant funder and the depreciation of the UK pound after Brexit.
- The Ecotourism activity on Ile aux Aigrettes maintained its performance in 2016 with a result matching the income budgeted to enable a contribution to running costs of conservation projects. Prices were reviewed and the Mauritian price raised. In Rodrigues an Ecotourism activity was launched in February 2016 and grew slowly. It is not yet breaking even.
- Other sources of revenue are considered and explored if felt to be a potential for fundraising. Consultancies are undertaken if available and suitable. Training has remained at the same level. Partnerships with 'Trails' (Dodo Trail, Rando Raid) ceased in 2016. The Adoption project, adapted for the local market with a cost of Rs 250 per adoption has not taken off. The strategy will be reviewed for 2017. Product placement, developed during 2014 has continued to prove successful with a number of new companies for 2016 and some interesting prospects for 2017.

31<sup>st</sup> March 2017

