



seychelles islands foundation

News Letter

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Happy Christmas and New Year from SIF!



SIF would like to wish all our supporters a belated Merry Christmas and a very happy New Year! 2016 was a successful year for SIF but was not without challenges. Fantastic progress was made towards the end of the ring-necked parakeet eradication project, exciting research was conducted on tortoises and mangroves on Aldabra and giant bronze geckos in the Vallée de Mai, removal of invasive species continued apace at both the Vallée de Mai and Aldabra, and the Vallée de Mai biosecurity manual was completed and the Aldabra management plan was finalised for submission to government. It was also the second year in which the Ecoschool competition winners returned to Aldabra after a 5-year hiatus as a consequence of the threat of piracy. The most significant challenge in 2016 was the coral bleaching event early in the year, although the Aldabra marine monitoring team were happy to report that there has been significant recovery of the bleached reef since the event. We are looking forward to everything we hope to achieve in 2017 and to your continued support and interest!

Ring-necked parakeet eradication supporters thanked in a special event

An event hosted by SIF and the Department of Environment was held on the 9th December at El Coco Café in the National Botanical Gardens to recognise the contribution of key members of the public and SIF partners to the success of the ring-necked parakeet (RNP) eradication project. The 9th December also coincided with the 33rd anniversary of Vallée de Mai as a World Heritage site.



Ring-necked parakeet © SIF

The ring-necked parakeet, known as kato ver in Creole, has in recent years posed one of the most serious threats to the Seychelles black parrot. The RNP was introduced to Mahé as a caged bird which then escaped to establish a wild population in the 1990s. The species flourished in the wild and its population was estimated at 300 individuals in 2011. Because the RNP has the potential to compete with the black parrot for nesting sites and food, and to transfer

diseases if it reached Praslin, an eradication was initiated to remove this threat. After some initial pilot work testing methods and conducting population counts and observations, the intensive eradication of RNP started in July 2013 under a wider EU-funded project to research and manage invasive species which threaten the two Seychelles UNESCO World Heritage sites. As a national priority, the RNP project was also supported by the Environment Trust Fund Seychelles and the Global Environment Facility.



*Award of tokens of appreciation to project supporters
© SIF*

Overwhelming support was received throughout the project by people in the community. They allowed access to their properties for bird observations, mist-netting and shooting. Many of them remained in regular contact with the RNP eradication team to report movements and activities of birds near their properties. The Defence Forces and the Public Security Support Wing (PSSW) of the Police also assisted SIF as field escorts and for the safe storage of firearms. The contribution of these stakeholders was vital to the progress of the eradication project on Mahé. SIF therefore organised the event this month to thank key people and partner organisations for their contributions.

The appreciation event held on 9th December was attended by the Minister for Environment, Energy and Climate Change Mr Didier Dogley; SIF trustees; and representatives from the

Department of Environment. Also in attendance were project funders Environment Trust Fund Seychelles; previous project team members; members of the Police force and the Seychelles People's Defence Force; several members of the public who have greatly assisted the eradication efforts; and SIF staff from the Mahé Head Office. Laurent Leite, the former RNP team leader gave a presentation summarising the last 3 years of the project. A total of 547 birds have been culled to date, with one bird killed on Silhouette and one on Praslin. The highlight of the event was the presentation of certificates and tokens by Minister Dogley to key persons and organisations that have made important contributions to the project. SIF CEO, Dr Fleischer-Dogley, in her address thanking all stakeholders for their support, highlighted the significant achievement for Seychelles if the eradication of RNP is successful.

The last known wild RNP on Mahé was shot in May 2016, but it is too early to say with certainty that the species has been entirely eradicated from the country. The bounty award of RS 2000 for any sighting that can be confirmed remains in place and SIF has a team ready to respond to any reported sightings. SIF hopes to be able to announce the eradication of the ring-necked parakeet from Seychelles in 2017.



Address by Minister Dogley © SIF



10th Annual holiday camp held at the Vallée de Mai

The annual SIF Christmas holiday camp programme was held from 12th to the 16th December in the Vallée de Mai. Thirty-four Praslinois school children attended the holiday camp where they learned about a variety of environmental subjects including birds of Seychelles, the Vallée de Mai forest ecosystem, recycling and many other topics.



Holiday camp participants © SIF

As part of a series of activities focused on birds Ms Maria Brioché, Education and Outreach Programme Officer, gave a presentation on the birds of Seychelles and later children produced various artworks on birds. This was followed by a walk at Glacis Noire to observe the different birds

in this environment and complete worksheets based on what was seen. The children learnt about the seeds around them, and in groups they produced and presented some very interesting artwork using seeds. When learning about the fresh water of the Vallée de Mai, the children were excited to be involved in carefully catching water species. The Vallée de Mai Science coordinator, Ms Vicky Stravens, gave a presentation on invasive species, focusing on the threats that the invasive plants and animal species pose to the Vallée de Mai ecosystem. To help them better understand the impact of invasive species on native species, children participated in some interactive outdoor games. Mr Wilton Constance, a registered Small Enterprise Promotion Agency (SENPA) artisan, and Ms Jeanette Larue of the Ministry of Environment, Energy and Climate Change, participated in activities which focused on recycling. Participants used empty juice packets, old newspapers, toilet paper rolls, empty pet bottles and other items found in the environment to produce some very interesting recycled items, including; jewellery, door curtains and wall decorations. The Vallée de Mai Site Manager, Mr Marc Jean Baptiste gave a presentation on Seychelles other UNESCO World Heritage Site, Aldabra Atoll.



Craft activities © SIF

The holiday camp ended with a Christmas party for participants and the children of SIF staff, culminating in a Christmas carol concert. The participants were each presented with a certificate for their participation in the 10th edition of the SIF Holiday camp.



Presentation on birds of Seychelles © SIF

Black parrot breeding season: 17 chicks so far!

The black parrot breeding season continues to go well with the discovery of more active nests. There are now 15 active nests distributed between the Vallée de Mai, Fond Ferdinand and Fond Pepper, with a total of 34 eggs and 17 chicks so far.



Black parrot chick © SIF

Sadly, but inevitably, not all the nests have been successful and several have already been found which failed before chicks hatched. Furthermore, the oldest chick, from the first active nest discovered in November, was found dead in the nest at the end of December. The chick was about to be ringed by the team and was alive and well the previous week so the fatality came as a surprise. There were no definitive signs to indicate what caused the chick death but invasive yellow crazy ants were seen around this nest during the weeks prior to the death and when the dead chick was discovered. Another fatality was discovered in Fond Ferdinand under similar circumstances so we are monitoring the remaining nests closely to try to ascertain whether or not yellow crazy ants pose a threat to the parrots or if they are simply scavenging remains of chicks that have died of other causes.

There are plenty of chicks still alive and these are developing well and are due to be ringed in January.



Black parrot eggs in a nest © SIF

7th yellow crazy ant annual survey completed

The 7th yellow crazy ant survey was conducted in the Vallée de Mai from 5th to 28th December. A total of 50 points were surveyed in a grid system across the Vallée. This 7th survey is part of continued monitoring of the site to track whether these invasive ants are spreading into new areas or are still largely confined to their previous distribution to the north and east of the reserve. Pitfall traps were used for the third consecutive year, which also makes it possible to monitor the distribution of other species of ant. The pitfall traps are set in the morning and left in the field for 24hrs to be collected the following day.

example trees with fallen branches, open canopy gap, or all leaves fallen off, i.e. changes that had altered the physical structure of the environment in the immediate area which might impact on the ants. Results of the survey will be compiled and reported in due course.



Conducting yellow crazy ant survey © SIF



Yellow crazy ants © SIF

For this survey the team started monitoring some new parameters to assess additional environmental factors that may affect the distribution of the ants. Yellow crazy ants are known to thrive in disturbed areas so the team identified environmental or management changes that could potentially affect the ants, for example, disturbance and changes in light levels (e.g. due to tree fall) on the forest floor due to invasive plant management. The surrounding vegetation type was recorded, along with any trees that had suffered structural damage, for

Alongside the survey, the team also located, GPSed and collected samples from five yellow crazy ant nests in the Vallée de Mai. From each nest the team collected 2-4 queens and 3-5 worker ants. These specimens are to be included in a genetic research project based in Germany which is investigating the global distribution and spread of yellow crazy ants with the aim of identifying the origins and pathways of spread of the species. This research is important because the native origin and the introduction pathways of this introduced species are poorly known. We hope that by contributing to the project it will help to address some of the outstanding questions on the origin and spread of this devastating invasive.



aldabra atoll

Successful completion of the 4th season of marine monitoring

The first fully in-house Aldabra Reef Monitoring was a success! A lot of hard work and energy goes into marine monitoring; however there is also nothing quite as enjoyable as two weeks of intensive diving at Aldabra Atoll! The team were very focused, knowing that they had to achieve a great deal in a short space of time, and expecting inevitable disruptions to the plan. The collective effort of the logistics and research teams enabled smooth operations, and the weather, for the most part, was ideal throughout. During the monitoring the team spent some time stationed at Middle Camp on Malabar Island to survey the furthest monitoring sites.



Marine monitoring team © SIF

Dives at the 12 monitoring sites have to be timed perfectly to make maximum use of the tides and to ensure the diving is not disrupted by strong currents from the channels. Surveys were completed at two depths per site, with one dive at 15m and another at 5m. At these depths benthic photoquadrats (multiple images of the reef and other substrate), fish surveys and coral juvenile surveys were conducted. Each team member was allocated a role and the underwater operations ran like clock-work, with everyone knowing what they were supposed to do when. The first task upon entering the water was to locate the start of the permanent transect and then descend near to this, ensuring not to enter into the survey area. The fish team then begin first, counting and identifying the fish within the transect area. The benthic team follow, focussing on surveying the benthic community.



Conducting marine monitoring © SIF

Although each team had to focus on their task and ignore everything else, there were some dives with distractions that were impossible to ignore, for example when a giant Manta Ray slowly glided past, or divers were flanked by a large Silvertip shark, or were surrounded by a wall of shoaling snappers, or (for the benthic lovers) when they encountered a huge thriving patch of *Physogyra* corals. These moments are very special.



Manta ray and *Physogyra* coral © SIF and C. Ferguson

The over-riding feeling for the team was that, despite a substantial and obvious shift in coral cover since the widespread bleaching of early 2016, there has been much recovery and the reefs are still thriving. The Aldabra marine ecosystem is doing what it does best, bouncing back from disturbance because it has the capacity to do so!

Tortoise monitoring expanded on Cinq Cases expedition



Cinq Cases monitoring © SIF

In December a team of six deployed to the Cinq Cases region of Grande Terre Island. There were multiple aims for this trip, starting with the completion of the standard tortoise and landbird monitoring transects. The tortoise monitoring programme is currently under review with the aim to ensure that the data collected provides an accurate estimation of population size. To do this the representation of certain habitat types is being increased, notably mangroves, Pemphis and open pool areas. Currently there are three relatively short tortoise transects at Cinq Cases. In December the team cut and marked a new longer transect from the end of the Coco transect (roughly from the centre of the island) to the inner edge (lagoon side). This new transect traverses terrestrial mixed scrub habitat and mangroves, covering many open pool areas, including areas that become inundated with lagoon water at extreme high tides. The team used

natural pathways where possible to navigate through the dense areas, using machetes only when absolutely necessary. The work was very rewarding, especially upon arrival in the dense mangroves that skirt Bras Cinq Cases.

The team also tracked some of the radio-tagged tortoises, which was difficult at this time of year as the tortoises have seemingly moved from their locations over the south-east season, probably because water is now much more widespread due to heavy rains.



The University of Zurich phenocamera *Cinq Cases monitoring © SIF* (which takes regular images of the 'greenness' of the vegetation at a fixed point) was checked and all the images downloaded. The team also conducted the exclusion plot monitoring, which comprises fenced off areas to prevent tortoise grazing to better understand the role tortoises play in driving the 'tortoise turf' ecosystem. The team found a marked difference in the vegetation between the exclusion plots and the control areas, particularly in the wet season.



Cooling off © SIF

Aldabra

The whole of the Cinq Cases area was alive, thriving on the ample rainfall, the pools were filled, the tortoises were out in force, even an abundance of baby tortoises was encountered. The team observed one predation event whereby a land-crab (*Cardisoma* sp.) had captured and was eating a hatchling tortoise, a sad but interesting observation of the Aldabra food web.

To finish off the trip, the team collected rain gauge data and recorded the Green Turtle nesting activities along the coast beaches before heading back to station, very smelly but very satisfied with their work.

First cruise ships of the season arrive at Aldabra



Guests from the Silver Explorer © SIF

The visiting vessel season kicked off at the end of December with the first visit from cruise ship Silver Discoverer. Opportunities for cruise ships to visit Aldabra were limited this season due to the scheduled construction of a cyclone shelter. This was the first time that the Silver Discoverer made her journey to Aldabra. She is a relatively small ship with a shallow draft and specialises

in exploring rugged coastlines, islands and archipelagos. The ship had approximately 80 guests and spent two days at Aldabra enjoying a variety of activities. The Aldabra team chaperoned the guests in all activities to ensure regulations were adhered to, and gave informative tours of the lagoon and also on Picard Island. The visit was an opportunity to trail the 2016–2026 Aldabra management plan in which a strict zoning scheme has been implemented to limit the impacts of tourist visits at the atoll. The tourism zones allow for a wide variety of activities and experiences but ensure that the most fragile



Guests enjoying the snorkelling © SIF

areas are not visited. So far the management zones are working well.

The guests were delighted by their time at Aldabra, despite less than ideal weather conditions. It was a good experience for all the Aldabra staff, having had a somewhat quiet Christmas, to see so many new faces and to talk with a variety of people. The teams from Aldabra and the cruise ship worked very well together, especially as SIF former staff member Rowana Walton was onboard the vessel as a lecturer. The SIF team were treated to breakfast and lunch onboard and certainly enjoyed that part of the day!

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