

# SIF News Letter

seychelles islands foundation

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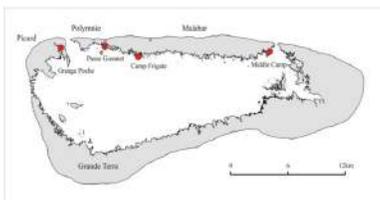
aldabra atoll

## Fourth annual Frigatebird survey completed on Aldabra



Staff undertaking the Frigatebird survey © H Richards

The fourth annual frigatebird census was completed on 18th February. All four known frigatebird colonies on the atoll were surveyed, with the majority of the survey undertaken from a boat at high tide. The team had to make use of the high spring tides for the boat to negotiate the less accessible parts of the lagoon where the frigatebirds nest. At the Passe Gionnet colony in particular the skills of the skipper were really put to the test. The strong currents ripping through this narrow channel made it very difficult to navigate around the treacherous champignon outcrops and ensure that the frigatebirds were not disturbed. The survey went to plan and was finished with the Middle Camp colony, which required the team to count on foot while walking through the narrow mangrove channels at low tide, as well as counting from the boat.



Map showing location of Frigatebird nesting colonies © SIF

A total of 6329 frigatebird nests was counted during the 2014 census. This is 27% fewer than in the 2013 survey but the decrease is not cause for concern because the latest survey is consistent with the pattern of breeding seen in the frigatebirds on Aldabra over the last 4 years. The annual variation in breeding numbers is thought to be due to the pattern of frigate breeding, with a single breeding cycle spanning more than one year. It is fascinating to see the cyclical nature of frigatebird breeding on Aldabra becoming apparent through these annual surveys; 2012 and 2014 had far fewer nests than 2011 and 2013. Lesser Frigatebird (*Fregata ariel*) nests either had



## Ring-necked Parakeet eradication reaches 40%



Team Leader Edme Melton-Durup (left) in the field with Corporal Marcus Dick (right) and an important local supporter of the project (centre) © SIF

The eradication of the introduced Ring-necked Parakeet from Mahé is making excellent progress following the recruitment of a professional hunter, Pete McIntosh, from New Zealand, and a new partnership with the Seychelles Peoples Defence Force. SIF is leading this eradication under the EU invasive species project because the introduced parakeets pose a significant threat to the endemic black parrots of Praslin, the flagship bird of the Vallée de Mai. Currently, the parakeets fortunately remain restricted to Mahé.

The eradication started in June 2013 and the team spent 6 months trialling capture methods, following and observing the birds to determine movement patterns and feeding preferences, and publicising the project to establish a network of contacts. During this initial phase, mist-netting, trapping and shooting were all intensively trialled, and shooting was determined to be the most effective and efficient method. Following this, a professional hunter was recruited to work on the project, which now partners SIF with not only the Environment Department and the Seychelles Police force, but most recently the Seychelles Peoples Defence Force (SPDF). This partnership has proved to be a very strong and successful combination, with excellent results so far.



## Caecilians in the limelight



Caecilian © SIF

SIF staff were invited to a fascinating workshop on caecilians held on 20th and 21st February and organized in collaboration with the Darwin Initiative funded project "A cutting-EDGE approach to saving Seychelles' evolutionarily distinct biodiversity". Dr Rachel Bristol, the coordinator of the project, opened the workshop and explained the EDGE initiative as a prioritisation of species for conservation action which combines evolutionary distinctiveness (species which have evolved separately for a very long time and have no or few close relatives are often more evolutionary distinct) with global endangerment. Seychelles, having been isolated for tens of millions of years, is considered an EDGE species hotspot, with sooglossid frogs, sheath-tailed bats, caecilians and coral species all appearing on the list. The project is partnered by several local organisations and institutions, including the Seychelles National Parks Authority, the Environment Department, the Natural History Museum, as well as SIF.



Workshop participants getting some hands on experience with caecilian identification © R Bristol

Caecilians are limbless amphibians, occurring in the tropical regions of the world. They mostly live underground (although some are aquatic) which makes them difficult to study and they are often confused with worms or snakes. They are all generalist predators, feeding on small animals such as frogs, fish, worms and insects, but they will also scavenge. There are an impressive six species endemic to Seychelles, but these are poorly known. PhD research being conducted by Simon Maddock on all of these species should shed some light on these elusive animals. The workshop was well attended and attendees learnt more about them from world experts and PhD supervisors Dr David Gower and Dr Mark Wilkinson from the Natural History Museum London, as well as from Simon himself. The talks

parents incubating an egg or very young chicks, while with the Greater Frigatebird (*Fregata minor*) nests, very few parents were seen at the nests, and all nests contained big chicks which were close to fledgling.



Frigatebirds soaring over Passe Gionnet © SIF

The most welcome discovery of the survey was finding frigatebirds nesting again at the former colony area of Passe Gionnet. Aldabra's frigatebirds are known to be sensitive to human disturbance and tourists used to visit the Passe Gionnet colony. This area has the narrow channels and fast currents which increase the disturbance to the colony of boat trips. The link between tourism and a colony being abandoned is unconfirmed but it was following a period of high tourist activity that frigatebirds stopped breeding at this area of Passe Gionnet and probably moved to what is now the Grande Poche colony on Picard.



Frigatebird © SIF

Regulations to reduce the impact of tourists on Aldabra's frigatebirds were implemented following the first two annual surveys. At the same time the number of visitors to the atoll dropped substantially due to the threat of piracy in the region. Tourism has since picked up but visitors no longer visit Passe Gionnet and boat trips to see the frigatebirds are limited to Grande Poche, which, due to the layout of the colony means that the boat can maintain a more suitable distance from the birds and disturbance is minimised. As the team approached the Passe Gionnet former colony area in February, large numbers of frigatebirds were seen wheeling in the sky from afar, which was not the case last year. This is fantastic news as it suggests that the measures put in place to reduce disturbance to the frigatebirds are indeed working. Everyone is already looking forward to the fifth annual survey due in Jan/Feb 2015 to find out whether the number of nesting birds will again rise, and whether the Passe Gionnet colony will increase further.

**My life on Aldabra**



*New Zealand avian hunter Pete McIntosh ready for the field © SIF*

By the end of 2013, approximately 22% of the Ring-necked Parakeet population had been eliminated after 6 months of work. Only 2 months later, following the recruitment of Pete in mid-January, this total has doubled to over 40% of the population successfully targeted and the population is visibly declining all over the island. A wide network of contacts and supporters has been established by the team, led by Edme Melton-Durup, and the group are now a familiar sight in the south of Mahé.

We are pleased with the progress, particularly the success of the shooting but we are very much aware that the most difficult part of the eradication is still ahead. The progress to date is testament to the dedication of the team and the strong partnership with the Environment Department, the PSSW and the SPDF, but it is also dependent on the continuing support of the public so we would like to express our sincere gratitude to our fantastic supporters and network of Seychellois people providing essential help to the project with daily observations, reports, counts, access permission, cups of tea and fruit! Your support will be increasingly important to reach the goal of eradication of this major invasive species.

**Bait trials in preparation for eradicating rats from mangroves**



Mangrove stands on Aldabra © SIF

On Aldabra black rats occur in all available forest types, including mangrove forest, at high densities. Mangrove forest appears to be particularly good habitat with larger recorded body sizes, larger juveniles and in better body condition than rats trapped in 'terrestrial' forest.

The most common and proven successful technique in eradicating rats from islands is to distribute poisonous rat bait. The periodic cycle of tidal inundation in the mangroves poses a problem for this technique as bait potentially gets washed away, making it inaccessible to rats within hours after distribution. On smaller scales poisonous bait blocks have been nailed to trees in mangrove areas to counter this problem but for the 2000-odd hectare area of mangroves on Aldabra this is not a viable method.

Another technique involves creating poisonous bait bolas (two bait blocks connected by a string) that is thrown or propelled in the canopy where it gets caught by twisting around branches. Although distributing bait in this way on a large scale has not yet been technically proven possible we have trialled the technique on Aldabra to see if bait would be taken by rats.



Rat bait bolas © SIF

To do this, we created a small-scale (60m x 60m) grid with regular spacing of bait distribution points. Pellets of non-poisonous bait with marker dye were drilled and connected to strings. These bait bolas were manually thrown into the canopy at each distribution point.

covered their work on caecilians in different parts of the world, caecilian biology, ecology and genetic diversity and the history of caecilian research in Seychelles. The Seychelles species are tricky to identify and the workshop included a much welcomed identification session of live and preserved specimens as well as time in the field showing participants methods used to search for caecilians. We excitedly await further results from Simon's thesis for more findings about these fascinating amphibians!

Earlier in the week, other workshops were held on corals, marine conservation and social survey techniques also in the context of the EDGE project. The workshops were facilitated by marine biologist Rebecca Short and conservation biologist Dr Nisha Owen from the Zoological Society of London. To find out more about the EDGE project check out the Facebook page (Edge Seychelles) or the project website ([http://www.kent.ac.uk/sac/research/projects/ig\\_biodiversity.html](http://www.kent.ac.uk/sac/research/projects/ig_biodiversity.html)).

**New electronic brochure launched for Vallée de Mai**



Homepage of the new app

As part of the new communication and interpretation materials development at the Vallée de Mai SIF are pleased to announce the launch of a new e-brochure. This new electronic brochure has information on visitor facilities, location, SIF and a forest guide which provides details on some of the wildlife that can be encountered during a visit to the forest. This app is the perfect complement to any trip to the Vallée de Mai providing invaluable information both before and during a visit.

This brochure is free to download through iTunes and is currently available only for iPhones, other versions will be released at a later date. Check it out and download your copy now from this link <https://itunes.apple.com/sc/app/vallee-de-mai/id826373015?mt=8>

**Celebrating World Wetlands Day**



The group at the end of their visit © SIF

World Wetlands day was celebrated on the 2nd March under the theme "Wetlands and Agriculture". This theme helped us to reflect on the importance of wetlands in supporting agriculture across the world and here in Seychelles. Wetlands often provide ideal agricultural areas as the soil is fertile and the water for irrigation plentiful. However, these wetlands are at risk due to increasing pressure from agriculture and climate change.

To commemorate this important day, the Wetlands Unit of the Department of Environment on Praslin collaborated with



Marvin Roseline, Logistics Assistant on Aldabra

The time that I've been here on Aldabra has been truly a journey of experiences. The people here are very friendly. We have different people from different places and cultures around the globe but they all have one purpose - to conserve Aldabra with all its natural treasures. Working on Aldabra is amazing! It is a place where you get many different opportunities and learn new things every day, from seeing the sky with the birds, to the sea with the many fish, and back to the shore and its tortoises. Our work has been much appreciated by the people here. Giving a hand in every department (research, logistics, projects) keeps you always open minded and involved in different activities. It might be doing maintenance on the water tanks one day, and building a water catchment or constructing a tortoise pen on another. Just recently we have been doing extraordinary work installing all of the new energy efficient air conditioning units. There is only one left to install and it is still a work in progress in the battery room for the solar panels. After this we will do full maintenance on the water tank to ensure plenty of water during the South East monsoon. I have even had the chance to work on the EU invasive species project, on the rat and sisal activities. This has really helped me to discover different aspects of working on Aldabra by helping in these different fields. The team on Aldabra work well together and they have always been really encouraging to each other, we are always doing our utmost best to get the job done. This community spirit was shown during the recent supply boat unloading where everyone put a lot of effort and team work into it. I am sure that there will be more good experiences to come and I am looking forward to the new challenges.



Staff distributing bait bolas © SIF

The bait bolas were distributed in mid-January and snap traps were set inside the grid a few days later for three nights. During this period there was a spring tide which allowed for complete inundation of the grid up to 1 m depth.

Only four rats were captured, but three of these had eaten the bait. However, the rat that showed no signs of eating the bait was caught on the first trapping night. Furthermore, three additional nights of trapping 10 days later as part of the regular research program in the vicinity of the grid captured a total of 13 rats that had eaten the bait, 5 of which had eaten the bait very recently as it was present in the stomach. The small number of rats caught during the three nights in mangroves was disappointingly low, but the fact that 75% had eaten the bait and, more than a week later, rats that had eaten bait were still being caught, is very promising.

### Preparing for stewardship scheme on Praslin



Invasive plant species, Vya Tang © SIF

The Invasive Alien Species team on Praslin is continuing with their Education and Outreach program on the island. The objective of this part of the EU funded project aims to sensitize the Praslinois people about the threats of invasive species to the island's native fauna and flora, and to show them which species are problematic and how to manage natural areas to promote the growth of natives. SIF has for some time been running invasive species activities in educational events for children, such as holiday camps and international theme days. A new initiative about to be launched by SIF, in partnership with the Seychelles National Parks Authority (SNPA), is an environmental stewardship scheme for which an area of palm forest has been set aside for public restoration. The area is a roadside plot very close to the Vallée de Mai and is easily accessible by the public.

The launch is planned for 24th May 2014 and, although the day will be overseen by SIF and SNPA staff, the event is firmly focused on participation by the community. The plot has been well prepared by staff and public who have worked on the area as part of previous environmental event days. In August 2013 the plot was worked on for the first time when staff from the Seychelles Peoples Defence Force (SPDF) and SNPA worked alongside SIF to clear the main invasive species from the previously unmanaged area (see below). The target species were vya tang (*Dieffenbachia seguine*) and Philodendron (*Epipremnum pinnatum*).



Seychelles Islands Foundation (SIF) to organise some activities for local schoolchildren. There was a visit planned to a farm close to a wetland at Amitie Praslin but due to heavy rain and landslide on Praslin this activity had to be cancelled. However, the children still had the opportunity to learn about wetlands in general, their functions and the species that live in this type of habitat through a visit to the Pasquere wetland on Praslin. The children spent several hours in the wetland learning about the different animals and plants that could be found and how they had adapted to this unique environment. They conducted a small 'survey' and noted that out of the seven species of mangroves found in the Seychelles, three of them could be found in this area.



Children completing their worksheet in the wetland © SIF

It was impressive to see that this environmentally concerned group of children were disappointed to find rubbish in the wetland on their visit. They took it upon themselves to spend some time collecting this litter so that the wetland could be returned to its natural state. They are indeed the environmental 'ambassadors' of our future!

### Following Black Parrot fledglings



'Rocky', a fledgling from the Vallée de Mai © P Woods

The Black Parrot breeding season was reaching its end during February as the last four parrot chicks were ringed and the chicks started to fledge from their nests. In the 2013/14 Black Parrot breeding season 12 chicks successfully fledged, 10 from nests in Vallée de Mai and Glacis Noir and two from nests in Fond Ferdinand.

Once the chicks have left the nest the mother keeps on making her unique breeding call as she continues to feed and care for her chicks after they have left the nest. The chicks fledge at around 45 days old but the mother feeds the fledglings for several weeks until they are able to forage for themselves. Fledglings have a pale ring around their eye, which allows the parrot research team to distinguish them from adult parrots (if the colour rings are not visible). After the chicks have been ringed by the SIF black parrot team, the nests continue to be monitored to determine the fledging date. Leaving the nest can be a dangerous time for fledglings as they are not initially good fliers and often end up on the ground near the nest, where they are extremely vulnerable to introduced predators such as cats. The parrot team monitors the fledglings to check that they successfully leave the nest and are being fed by their mother.

The 12 chicks that are known to have successfully fledged during the 2013/14 breeding season reflects another healthy breeding season for the black parrots, following on from the successful 2012/13 season. We hope this trend will continue into next year's breeding season.



*The site for the Stewardship scheme © SIF*

The plot was revisited in September 2013 for Clean Up The World Day by staff and members of different community groups including JJ Spirit foundation and Praslin school children. Once again invasive species were cleared from the area. Since then, SIF staff have been doing regular maintenance of the area to ensure that the removed invasive species do not re-invade.

The official launch of the Stewardship Scheme plot on Praslin aims to get the whole community involved in running and managing an area of the Praslin National Park in an environmentally-friendly way, keeping it free of invasive species to protect the natural biodiversity of the palm forest. On the day, as well as clearing invasives, there will be planting and adopting of native trees, such as palmis (*Deckenia nobilis*) and vakwa parasol (*Pandanus hornei*).



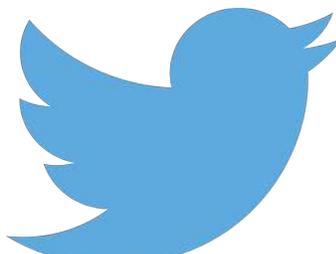
*Seedlings of the endemic palm tree Palmiste will be planted  
© K Beaver*

The plot is currently being prepared for the big day; more vya tang has been removed from the site to make it more accessible and three frames have been constructed on which the removed invasive species are dried before they are taken away or buried once dead.

Local schoolchildren and their families on Praslin are being invited, along with the police, many local organizations and the general public. We are aiming to reach out to parts of the community that would not normally be involved in activities such as this, and we are hoping that the event will lead to more members of the Friends of the Vallée de Mai group. If you live on Praslin and would like to attend the launch and find out what you can do to help restore the native habitat of your island, please get in touch with Miss Maria Brioche at the Vallée de Mai!



**SIF on Twitter!**



Continuing the development of SIF's communications and social media tools, we are excited to announce the launch of our official page on Twitter! We hope that Twitter will allow us to reach and communicate with an even wider audience. As one of the top ten most used social media websites, Twitter offers us a chance to connect and share with a truly international audience.

If you are regular Twitter user then you can find us under @SIF\_Seychelles. For those of you new to this social media page why not sign up now? You can find the link to our page here, [https://twitter.com/SIF\\_Seychelles](https://twitter.com/SIF_Seychelles), and can follow all of our latest updates and news.



Don't forget to join us on our Facebook page that was launched last year! The page has regular news and updates on research and events at both World Heritage Sites and has been well received. We would invite all friends, supporters, partners, colleagues, and anyone else who has an interest in staying up to date with the management and protection of the UNESCO World Heritage Sites in the Seychelles, or in Seychelles' biodiversity and conservation in general to become a fan of our page. For those who have a Facebook account already please use this link [https://www.facebook.com/pages/Seychelles-Islands-Foundation-SIF/1414466072110654?hc\\_location=stream](https://www.facebook.com/pages/Seychelles-Islands-Foundation-SIF/1414466072110654?hc_location=stream) and 'Like' our page. For those that are not on Facebook then perhaps you can receive updates through a friend or family members account, or maybe now is the time to join Facebook for yourself! We look forward to welcoming you onto this page!

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