

SIF News Letter

seychelles islands foundation

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The Humpbacks are back!



Some of the whales sighted recently © C Onezia

There was great excitement on 29th June when the first Humpback Whales (*Megaptera novaeangliae*) were sighted in Aldabra's waters. This sighting is little earlier than previous years so it was an unexpected surprise. The first whales were seen from different vantage points by Skipper Jude Brice (who now has quite a reputation for spotting the humpbacks) and Martijn van Dinther. The whole Aldabra community enjoyed the amazing spectacle of these massive, awesome animals as they put on quite a display right in front of the research station – tail slapping, fluking and breaching. Following this observation numerous sightings have been made throughout July including groups of up to three adult whales and several of adults with a calf. Interestingly, a large group of six humpbacks was seen off the southern coast of Grande Terre last year and this month four separate groups of humpbacks were recorded at the same time in this area. We also observed what seemed to be an intensive competition between two large whales, presumably males, which lasted for over an hour with almost continuous breaching, fin-slapping, fluking and spouting! An incredible sight!

Humpback Whales are typically found in the waters around Aldabra between July and November where they come to breed and calf, living off their fat reserves during this time. They arrive in these tropical waters after an epic migration of thousands of kilometres from the Polar Regions where they spend the summer months feeding on krill and small fish.

All observations of humpbacks so far this year have been in the deeper waters beyond the outer reef. Everyone at station is keeping a watchful eye on the horizon to try and catch further glimpses of these fantastic animals and it hoped that there will be many more sightings of the humpbacks in the coming months.

A dream come true



Monitoring the ring-barked introduced trees in the Vallée de Mai



A marked *Albizia* tree ready to be ring-barked © SIF

It has now been three months since the invasive species team on Praslin began controlling the invasive alien trees in the Vallée de Mai, all of which are currently being ring-barked. The team is now part way through controlling a fifth target species *Adenanthera pavonina*, locally known as lagati, one of the most abundant invasive tree species in Seychelles.

With many trees being controlled it is important to monitor what has happened to the previously ring-barked trees. The team monitors all trees two months after they have first been ring-barked. Several aspects are monitored; one of the first and most important is checking the amount of leaves which have fallen from the tree (defoliation). When a tree has lost a significant proportion of its leaves it means that the tree is in poorer health and that the control is working, a sign of success!

The team also records any noticeable changes in the ring-barked tree's area and on the rest of the tree. This check gives information about the health state and/or the capacity of the tree to adopt defense mechanisms such as aerial roots, regrowth of cut bark, appearance of new shoots or a sudden appearance of flowers. If any of these are present follow up work may be needed and the tree may need to be re-ring-barked. At the same time, the team also looks for possible unpredictable effects that the control could have in changing the distribution and abundance of invasive animal species such as yellow crazy ants. All data collected will be used to plan future monitoring and take additional actions if necessary.



Praslin primary schoolchildren visit Vallée de Mai



Students from Baie Ste Anne primary school in the Vallée de Mai © SIF

A group of 64 pupils from Baie Ste Anne and Grand Anse Primary Schools visited the Vallée de Mai on the 19th July.

For many years SIF has conducted an annual survey in the primary schools on Praslin. This survey establishes how many P6 (final year of primary school) students have visited the Vallée de Mai. The data collected assists SIF in establishing the effectiveness of our Education and Outreach programme and ensuring that every child on Praslin visits the Vallée de Mai at least once during their schooltime. Many people around the world would love to visit the Vallée de Mai and cannot reach it. SIF ensures that this opportunity is given to all pupils on Praslin so that they can fully experience their unique forest.

The pupils' visit began with a short briefing on the Vallée de Mai by Education and Outreach Programme Officer, Maria Brioché. She then accompanied the children on a tour of the forest, providing information on the plants and animals they spotted and why they were so special. The children were very excited to see many of these species and asked many questions about them.

Volunteer needed for environmental education project



Do you have a passion for the environment and education? Do you want to play a crucial role in the development of the Vallée de Mai visitor centre? Then we have the job for you! SIF are looking for a volunteer for a short term (6 weeks) placement at the Vallée de Mai.



Rebecca Filippin at Aldabra © SIF

It all started 9 months ago when I was looking for a work attachment placement as part of my course in Advanced Fisheries Science at the Maritime Training Centre on Mahé, and a dream came true.

Wilna Accouche, SIF's Science Programme Officer, came to the Maritime Training Centre School, where I was studying, to give a talk about SIF and its work. I was inspired by the talk and interested to work for SIF so made an application to undertake my work attachment on Aldabra. There were only three places available but a few weeks later I found out that I had been given one of them! I had to take my final exam and diving license earlier than planned, then quickly prepare my gear and get ready to go as I was leaving just a few weeks later.

Goodbyes were said to my family at the IDC airport, and hellos to the team on Aldabra when we arrived. When I first arrived I was a trainee ranger so there was a lot to learn and the job was a challenge, but also a lot of fun and totally worth it. Now, as a ranger, I participate in all the scientific monitoring programmes on Aldabra. This includes regular monitoring of turtles, giant tortoises, coconut crabs, landbirds, waders, tropicbirds, and vegetation surveys. I got very excited when I managed to find the first Madagascar White-eye nest of the season.

I have also had the chance to go to some of the field camps and my first trip was to Cinq Cases in the east of Grande Terre. It was certainly an experience but there were a lot of mosquitoes! However, recently I returned to Cinq Cases and this time it was even better as I got to see some Madagascar Pond-herons, a number of Madagascar Ibis and a Great White Egret. My time there was magical, I didn't want to leave, there was so much more to explore and so many more things to take photos of.



Rebecca Filippin, in action at Takamaka on Aldabra ©T Mahoune

I also had the opportunity to participate in the invasive bird eradication work at Takamaka, which was a great experience and I learned many new skills. I worked with many amazing people from around the world and I learned about different cultures. In addition I had the great experience of assisting in the marine monitoring programme, which was exciting, especially when you get to see the results after your hard work. Watching some of the videos of marine life filmed on the Baited Remote Underwater Videos (BRUVs) which we deployed has been really interesting.

Aldabra is an amazing place and I am glad that I am part of the team working to protect and understand this beautiful site. I have become so used to this wonderful place now, that it certainly feels like home.

New alternative for biological waste



Invasive Albizia tree just ring-barked on the left, and later once defoliation has occurred © SIF

At present three invasive tree species which were controlled throughout the Vallée de Mai earlier in the year are being monitored by the team: albizia (*Falcataria moluccana*), santol (*Sandoricum koetjape*) and jackfruit (*Artocarpus heterophyllus*). It has been encouraging to see that the ring-barking is working very well for albizia and jackfruit. After only two months, an average of 35% of the albizia leaves have fallen and 20% of the jackfruit leaves. In some of the jackfruit trees, all the leaves have fallen and the trees have died. Another promising sign was that no sudden flowering was observed in these species, which is an infamous defence strategy of albizia. Santol has shown no signs of change so far, but the team will monitor the trees again in another two to three months to continue to examine the effects of ring-barking.

Ring-necked Parakeet eradication making progress

Since the last update in April 2014, the Ring-necked Parakeet eradication team was without a professional hunter for a month and a half. The team put this non-hunting time to excellent use by doing some much-needed catching up with observations of the birds.

After so many birds were removed from the population in early 2014 (over 100 birds were shot between January and April), there were some changes in the behaviour and movements of the remaining population. Compounding the effects of a declining population, the parakeets are highly sensitive to disturbance of any sort. The team have learned that the parakeets' movements between feeding and roosting areas can change instantly and unexpectedly in response to both urban and natural disturbances, for example, construction work, falling or removal of trees/branches or changes in landscaping or lighting conditions. Thus, to keep 'on top' of the ever-changing situation and ensure success with the shooting the team need to put considerable effort into observing the birds' movement patterns around Mahé on a daily basis. The observations take up the majority of the non-hunting team members' time and are equally if not more important than the hunting efforts themselves since they are key to the success of any targetting. The team have largely re-familiarised themselves with the parakeets' behaviour, feeding habits and new movements but it requires constant effort to maintain an updated picture of their patterns.

The eradication now has two professional hunters attached to it, Nick Page and Jesse Friedlander, both hailing from New Zealand and both of whom previously worked on the Assumption introduced bird eradication for 4 months. The team remain well-supported by two escorts from the Seychelles Peoples Defence Force, Corporal Norvill Dick and a new escort, Private Macshane Botsioe, who are working alongside the team in targetting the parakeets. In addition, in July the project received much appreciated boosts from St Dorothee (the official escort of the eradication in 2013) of the Public Security Support Wing, who shot a parakeet in the police compound, and a resident of Silhouette Island, Jonas Jean-Baptiste, who, after seeing posters for the project, successfully targeted the lone parakeet on Silhouette! This was both very proactive and very welcome as it means that the team now do not have to spend valuable time targetting this bird on Silhouette and can focus their efforts on the Mahé population. We would like to sincerely thank PSSW, the Island Conservation Society (and Nigel Boniface, Adrian Skerrett and Angela Street) and the Islands Development Company for encouraging and supporting the project and for their rapid reporting of these actions. Although 'only' single birds, these catches, as well as general public goodwill and cooperation, are encouraging indications of the wider national support for this project.

The team have their work cut out for them as, not only is the total population approx. 30% larger due to breeding increases compared to 2012, the dwindling number of parakeets will become increasingly difficult to target as the birds become more wary and elusive and their movements become harder to trace. The combination of shooting and intensive observations, however, is continuing to prove an effective strategy and the team are doing a fantastic job in often difficult circumstances.

for a volunteer for a short term (8 weeks) placement at the Vallée de Mai later this year, to assist with the redevelopment of our education and information area. We are looking for someone who is passionate and professional about communicating and educating people on the environment and this UNESCO World Heritage Site. You will need to have experience in environmental education and a BSc in a related field. If you think you've got what it takes or are interested to find out more then you can find further details on this position on the home page of our website, or through this link -

https://drive.google.com/file/d/0B_zpqmCxlN1dejdyWlzbWQXvGM/edit?usp=sharing.

All applications and enquiries about this position should be made to Rowana Walton at communications@sif.sc

End of Coco de Mer research season for PhD student



Coco de Mer © www.jameswarwick.co.uk

PhD student Emma Morgan has now reached the end of her second field season on Praslin and has returned to ETH Zurich. During her second season Emma selected 57 female Coco de Mer trees to examine the relationship between tree isolation and reproductive success. The chosen trees were from across Praslin, including Fond Ferdinand and more isolated areas such as Zimbabwe and Anse Boudin, as well as from the Vallée de Mai and Fond Peper. The numbers of flowers and nuts were counted on each of the female trees and their distance to the nearest male tree was recorded. Soil was collected to analyse the nutrients available to each of these female trees, and leaf samples were collected from all trees for genotyping.

With excellent assistance from SIF fieldworkers Gerry Rose and Fabio Lesperance, Emma also collected samples from another 350+ adult Coco de Mer palms in three different areas on Praslin. Once the DNA has been extracted from these samples and genotypes ascertained, the data should support and complement the results obtained from Emma's first field season. These results should help to answer important questions about the Coco de Mer such as how far their seeds disperse and perhaps more interestingly, how far can the pollen disperse. This will provide us with important information on Coco de Mer regeneration to assist in future species management.

Raising awareness of sustainable living



© UNESCO.org

Every year SIF organizes activities to raise awareness on the topic of sustainable living. This year a series of presentations on adopting sustainable practices was given by Education and Outreach Programme Officer Maria Briocche in the schools on Praslin and to the Vallée de Mai staff. These presentations aimed to encourage the participants to understand the concept and importance of sustainable living and most importantly how to



Staff using the compost tumbler on Aldabra © SIF

With much anticipation and excitement the staff from both the Vallée de Mai and Aldabra have received their long-awaited compost tumblers. In line with the environmental management policy of the two sites, these units are a sustainable solution for organic waste. The quality compost produced will be used in the Aldabra vegetable garden, and a new herb garden at the Vallée de Mai. The units reduce the amount of biological waste produced at both sites and allow for a more sustainable operation.

Every time biological waste is disposed inside, the unit is turned which speeds up the composting process. After four to six weeks the compost is ready! These Joraform compost tumblers were imported from 'GreenGenie Waste Solution' in South Africa. Besides cooked food waste the unit can be used for fish bones, soft plant waste, fruits, vegetables, coffee grounds, teabags, paper, eggshells and egg cartons, bread and biscuits, and much more. For further information on these tumblers please check out: <http://www.greengenie.co.za/7.aspx> or <http://www.youtube.com/watch?v=fAk8FXpbyec>.

Tropical Coastal Ecosystems online training course



Coral reefs of Aldabra © Imran Ahmad/www.escapeincom.com.sg

The Aldabra Research Team (Philip Haupt, Rebecca Filippin, Catherina Onezia, Christina Quanz, Dainise Quatre, Daig Romain and Heather Richards) extended their knowledge by completing a 7-week online training course in Tropical Coastal Ecosystems this month. The course has been developed at the University of Queensland's research station on Heron Island. Lectures are delivered online by world-leading experts in the field with knowledge testing quizzes, activities, additional reading and discussions in between. The course introduced the participants to the incredible plants and animals of tropical coastal ecosystems and explored the threats to this environment such as overfishing, coastal pollution, ocean warming and acidification. The course was a fantastic educational tool and was directly applicable to the marine monitoring programme being undertaken on Aldabra.



Local community members continue work at stewardship plot



Students working at the stewardship plot © SIF

Members of the national Duke of Edinburgh award scheme on Praslin continued working this month on the stewardship scheme plot at the Vallée de Mai that was launched on Biodiversity Day in May (see May 2014 issue of SIF newsletter).

Around 23 children and three leaders from the Seychelles Duke of Edinburgh Award Scheme, volunteered their free time to assist with the removal of invasive plant species at the stewardship plot. The group spent four hours removing invasive plant species such as Vya Tang and Philodendron creepers from the plot. Although a great many plants were removed in May, the plot needs continual maintenance to prevent the regrowth of these virulent invasive plants. This maintenance should be given a helping hand by the planting of native seedlings which started in May and will be continued at another community event in September for Clean up the World day. Once enough of these native seedlings establish, they will create shade cover which will help to slow down the growth of new invasive seedlings.



Invasive plant species that have been cleared from the stewardship plot © SIF

It was rewarding and inspiring to see that this group of children gave up their free time to assist in the maintenance of this area, and demonstrated once again the commitment of the local community to protect the endemic biodiversity of the Vallée de Mai from invasive plants.



Celebrating Wildlife Clubs of Seychelles 20th anniversary



and importance of sustainable living and most importantly how to apply sustainable living practices in the workplace and adopt a more sustainable lifestyle. Even simple actions such as switching off lights and fans when not in a room, and ensuring there are no leaks in taps and water pipes can make a significant reduction to your impact on the environment.

Sustainable development is defined as "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs." SIF have adopted sustainable working practices and policies at the Vallée de Mai and Aldabra under their environmental management strategy. It is important, however, to regularly reinforce these practices with staff members and encourage them to adopt them at home as well as work.

Training for SIF ranger in Reunion



Group photo of participants at the workshop © JYM

Mariette Dine, a Field Research Assistant in the Vallée de Mai, was in Reunion recently to participate in a three-day workshop on invasive species at the University of Reunion.

The participants at the workshop comprised of experts and practitioners from Reunion, Madagascar, Mauritius, Rodrigues and Seychelles. The workshop was led by Geoffrey Howard, the Global Coordinator for the IUCN Invasive species specialist group, and there were many presentations given on examples of successful bio-control projects for invasive species. One such example was the case of *Lantana camara* on Mauritius. This was introduced as an ornamental plant at the Jardin du Roi (Pamplemousses Garden) in the early 19th century. It formed dense masses of vegetation which became unmanageable. The Lantana lace bug (*Teleonemia scrupulosa*) was found to negatively affect Lantana and was then used in Mauritius as a successful biocontrol agent.



Field Research Assistant, Mariette Dine, in Reunion © SIF

At the end of the workshop, the group had the chance to visit one of the farmers on the "Notre Dame de la Paix", an agricultural terrace, to see new invasive species control methods in action. Mariette's newly acquired knowledge will be of great benefit to the ongoing EC-funded invasive control work in the Vallée de Mai.



Participants with their course completion certificates © J Brice

There was a lot of enthusiasm for the training from all participants and congratulations to the team for successfully passing the course!

The SIF stand at the WCS festival © SIF

SIF joined Wildlife Clubs of Seychelles (WCS) at a small festival on 12th July to celebrate their 20th anniversary. SIF and other supporting organisations and NGOs of Wildlife Clubs came together to display their work and provide fun educational activities for the event held at the University of Seychelles Campus at Anse Royale.

The SIF stand was popular with the festival visitors, especially as they had the opportunity to 'Guess the weight of the Coco de Mer'. A fun activity for all ages, lots of people tried to guess the right weight with many coming very close. It was also a great opportunity to share information with the students about this unique giant, and many of them had never seen an entire nut before (with the husk) so it was a valuable learning experience.



A student trying to guess the weight of the Coco de Mer © SIF

During the festival there were performances by some of the club members, a presentation of the achievements of WCS, a variety show by WCS members, and many hands-on workshops and activities including; a turtle debate, a climate change workshop, a plant treasure hunt and many more! The festival was also an opportunity to launch a new booklet on environmental law and citizenship, aiming to encourage young people to uphold the law and become responsible environmental citizens.

SIF participation in Island Biology conference in Hawaii



Group photo of the participants at the conference © Paulo Borges

From July 7th to 11th, island biologists and conservationists from all over the world gathered for the very first Island Biology Conference. The conference attracted around 450 participants from at least 35 countries, representing work on Hawaii, Galapagos, Bahamas, Guam, Japan, Cape Verde, Canary Islands, Micronesia, New Zealand, Arctic islands, Mauritius, Seychelles and many more. The topics covered various conservation issues and a wide range of ecological and evolutionary research. With an ever expanding human population, our impact is felt indirectly in even the most remote places. This conference was a valuable opportunity for island biologists to exchange ideas and develop collaborative approaches to protecting many of these island treasures. It is planned that the conference will continue to be held every two to four years in a different island location each time.

SIF was represented at the conference by Dr Janske van de Crommenacker, as well as former ZARP Project Officer Rich Baxter. Janske presented the genetic research that she has been undertaking on potential hybridization between Aldabra and Madagascar Fodies, and explained how the results of this research are being used to guide the management strategy for this invasive bird eradication. Meanwhile Rich presented his MSc research on giant tortoise movements on Aldabra.





Dr Dennis Hansen presenting at the conference © J van de Crommenacker

Associated SIF researcher from the ZARP (Zurich Aldabra Research Platform) collaboration, Dr Dennis Hansen also attended the conference. Dennis gave a presentation entitled '*Island conservation megaherbivores: non-native novel functions welcome?*', in which he discussed the potential role of Giant Tortoises in ecosystems when introduced as a functional replacement for other extinct species.

It was an excellent opportunity to discuss SIF's work with biologists working on islands around the globe, who are facing similar conservation issues. Janske commented, "I found it sad to hear that so many people - working on the most remote islands - report that those islands are infested by invasive species and it will be near impossible to remove them. It made me realize even more that Aldabra is unique in being relatively free from invasive species, in comparison to other islands in the world. That a Biosecurity Plan for Aldabra is being finalized and preparing for implementation is extremely important and very valuable to maintaining this status."

Donation from Hannover Rotary club

SIF Science and Projects Coordinator, Dr Nancy Bunbury, and SIF Associate Researcher Dr Christopher Kaiser-Bunbury, were invited to give a bi-lingual presentation about the Seychelles and SIF's work to the Rotary Clubs of Hannover-Leineschloss in Germany at the end of June. They very much enjoyed presenting the work to a new audience and appreciated the positive feedback from the club members. Following the talk, the Rotary Club very kindly donated €1500 to SIF which will cover much-needed equipment for conservation work on Aldabra and at the Vallée de Mai.

SIF would like to extend our sincere gratitude to the Rotary Club, its President Mr Joachim Hellemann, and its Secretary Mr Joachim Werren, for providing the opportunity and forum to share SIF's work with a new audience, and for the subsequent very generous donation. Thank you!

SIF on Twitter!



Continuing the development of SIF's communications and social media tools, we have launched 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, 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

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 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!

Articles contributed by: *Rowana Walton, Nancy Bunbury, Maria Brioche, Heather Richards, Lucia Latorre Pineiro, Mariette Dine, Christina Quanz, Emma Morgan.*