



**Team return to Takamaka to search for introduced Madagascar Fodies**



A female Aldabra Fody © A Burt

A team of staff returned to Takamaka on Grande Terre this month to undertake an intensive 3-week survey of the area looking for any signs of the introduced Madagascar Fody.



Map of Takamaka area showing tracks of the survey points

After the discovery of this invasive species, and one Red Whiskered Bulbul, on Aldabra in 2012 an eradication strategy was immediately implemented to remove both species from Aldabra in order to fully restore and maintain Aldabra's status as being free of introduced birds. The field station at Takamaka was restored and each breeding season a team were stationed there to conduct surveys and carry out the eradication. During the third field season on this project only two Madagascar Fodies were recorded in fine-scale surveys of the area. One of these was successfully shot, and the other was the famous bird 'Rasputin' who had so far evaded capture. By January 2015, Rasputin was no longer seen and although it is not known exactly why it was thought that based on his usual conspicuousness he may have died naturally. This third field season ended in April 2015 and the team were confident that the population of Madagascar Fodies had been significantly reduced. They could not be certain however, that the birds were completely eradicated from Aldabra, until further follow-up surveys had been completed.



The Takamaka survey team © SIF



**Development of Aldabra House concept**



The biomes of the Eden Project in Cornwall, UK © SIF

To further guide the Aldabra House concept development towards a financially sustainable project, a crucial step was made recently with the appointment of a cost consultant. The cost consultant carefully reviewed all proposed building options and provided the architects with the much needed knowledge of local construction costs to proceed with a realistic concept development.

Following on from this appointment the Chairman of SIF, Ambassador Loustau-Lalanne, SIF CEO Dr. Fleischer-Dogley, and Aldabra House Project Coordinator Christina Quanz met with the architects, exhibition designers and structural engineers in the UK. The team undertook a two day workshop in London to discuss the final building form and design. The finalized concept for the building is expected to be completed in December 2015. This will then be followed by further detailed planning development and submission of plans to the authorities. The construction of the building is hoped to start towards the end of 2016.



SIF CEO and Chairman meet with Marks Barfield Architects in London © SIF

Whilst in the UK the team took the opportunity to visit the Eden Project in Cornwall. A formerly exploited and depleted clay pit landscape has been re-developed and today, two biomes showcase tropical and Mediterranean vegetation from around the world. Paired with exciting elements such as waterfalls, canopy walkways, education spaces, music and art events, workshops, activities for kids and several restaurants, which all use locally produced food, Eden has become an amazing success story engaging just below 1 million visitors per year. Hearing Eden's success story of making the impossible possible and steadily pushing boundaries was an inspiring and encouraging experience for the team.

In addition, the expertise of the Eden Project team was used to review the business model which is being developed for the



**Heritage field trip to the Vallée de Mai**



Minister Ste Ange opened the heritage event © SIF

SIF was honoured to welcome the President of the ICOMOS International Tourism Cultural Committee, Mrs Sue Millar, and other delegates to the Vallée de Mai on Tuesday 20<sup>th</sup> October. The group made a visit to this World Heritage Site to learn more about the cultural and natural heritage of Seychelles.



A group photo with the many students that participated in the event © SIF

Accompanying the group from ICOMOS was the Minister for Tourism and Culture, Mr Alain Ste Ange, and the CEO of the Heritage Foundation, Mr Patrick Nanty, SIF CEO Dr. Fleischer-Dogley, representatives from UNESCO, the Seychelles Heritage Foundation, Seychelles Tourism Board, local schools and Vallée de Mai staff. During the morning event there were traditional dance performances, poems recited, and songs performed by students from the Friends of Vallée de Mai and Heritage clubs on Praslin. The students also gave a presentation on the ancient burial sites on Praslin and gave information on the beliefs that were associated with these historic sites. Damien Esther, a Friends of Vallée de Mai club member from Praslin Secondary School, gave a presentation on the benefits of Seychelles' Heritage Sites for education, using the Vallée de Mai as an example of this. The event was finished with a guided tour for all of the delegates around the forest where they got to see a Coco de Mer being de-husked.



Adabra House project. Simultaneously the exhibition content and design has been further developed and an overall storyline has been approved by the SIF board.



ICOMOC-ICTC President Sue Millar (second from right) holds a Coco de Mer in the Vallée de Mai © SIF

ICOMOS-ICTC President Sue Millar commented that 'the work SIF are doing is of the highest international standard for World Heritage Sites, complete with the engagement of local people. I was interested in the way the students encouraged such confidence amongst the young people in terms of presenting and speaking in public, this is an enviable achievement. My thanks to all the many contributors of the interesting, enriching and emotionally fulfilling morning we spent at the Vallée de Mai.'

It was excellent to collaborate with the Heritage Foundation on this event and we hope to work with them further in showcasing Seychelles natural and cultural heritage.

## Festival Kreol at the Vallée de Mai



The opening of Festival Kreol at the Vallée de Mai © SIF

SIF is honoured that the Vallée de Mai was chosen to be the venue for the official opening ceremony marking the 30<sup>th</sup> edition of Festival Kreol on Praslin. As it has been customary for the last five years the celebration of Festival Kreol at the Vallée de Mai aims to celebrate and promote the creole culture and traditions ensuring that these are preserved for future generations.

Attending the opening ceremony were the District Administrators, headteachers, senior citizens, and representatives from different organisations on Praslin. At the ceremony students from the local schools conducted various performances including a short drama, comedy sketch and a traditional dance performance. Mr Bastienne, chairman of the senior citizens group at Baie Ste Anne, addressed the attendees and commented that the partnership between the district authority and the Vallée de Mai demonstrated the excellent engagement between the Praslin community and this heritage site.



Vallée de Mai staff performing some of the traditional creole dances © SIF

During the week of activities at the Vallée de Mai there was a variety of exhibits on display at the visitor centre. To demonstrate some of the cultural traditions there was an exhibition of antique household items displayed at the visitor centre. These items were popular with the Seychellois visitors and many old memories were shared while viewing these exhibits. Local artisans on Praslin were also invited to showcase and sell their traditional products to visitors. A Coconut Palm tree was displayed with labels on the different parts of the tree to explain their benefits and uses. The Coconut Palm has been an integral part of Creole culture in Seychelles and this display was to help our visitors understand the historical uses of the coconut palm. Historically the Coconut Palm was used for building houses, decorative purposes, food and even for medicine. Now its uses are diminishing but the leaves are still used to make brooms and the coconut itself for milk and oil.

Food and drink are also an important part of Creole culture and to help promote Creole teas, Citronelle and Tokmaria tea were on sale at the Kokosye cafe. Visitors could also have a taste of traditional Creole dishes which were on sale on the last day of the festival. On the last

## Generous donation from long-term supporter



Mr Elvis Cruz presenting his donation to Dr. Fleischer-Dogley © SIF

SIF were fortunate to receive yet another donation from Mr Elvis Cruz and his wife this month. Elvis has been a palm enthusiast for many years, and is now a lifetime member of both the International and South Florida Palm Societies.

With its six endemic species of palms, including the Coco de Mer, the Vallée de Mai is a palm paradise for someone like Elvis and he has been a long time supporter of SIF. He told us that 'SIF have been doing an outstanding job of managing and protecting the Vallée de Mai. It is my pleasure to support their good work conserving these precious environmental resources and it is my hope to convince others in the USA to do so'. Elvis' donation will go towards supporting the work of SIF at the Vallée de Mai and Aldabra, and we are incredibly grateful for yet another expression of his commitment and support of Seychelles two UNESCO World Heritage Sites.

## Volunteer needed for black parrot research programme



Help to undertake research on the Seychelles Black Parrot © SIF

Are you passionate about bird conservation? Would you like to assist with crucial research on the Seychelles Black Parrot? If so, then we are looking for a volunteer to assist our research team over the upcoming black parrot breeding season. Volunteers must be physically fit, able to work in strenuous conditions and for long hours, and a BSc in an environmental science and/or previous experience working with birds would be an advantage. We are looking for someone to start immediately until April 2016. Accommodation will be provided but volunteers will need to pay for their own flights/insurance. Please email [hr@sif.sc](mailto:hr@sif.sc) with your CV and covering letter if you are interested in applying for this position.

## SIF on Twitter!



The team then returned this month to conduct a fine-scale survey of the Takamaka area. This is a large area so the team used point counts set at 62.5 m apart in a grid formation so that as much of the area could be covered. Over the three weeks the team covered more than 1500 grid points, which is at least 250 hours of field observations! In some areas the points were inaccessible due to the density of vegetation so walking surveys were conducted instead. At the end of the three weeks neither sight nor sound of Madagascar Fodies had been recorded by the team. This is certainly a very exciting and promising result and suggests that the eradication may have been successful. Further surveys will be undertaken this season however, until we can be certain that no Madagascar Fodies remain on Aldabra.

## Improvements made at Aldabra research station



Nesting Green Turtle on Aldabra © SIF

It came to light this month that an adult female Green Turtle that was tagged while nesting on Aldabra in 2012, was encountered on a nesting beach at Juani Island in Mafia, Tanzania by the conservation group "Sea Sense" earlier this year.

Through both tagging and genetic studies it has been shown that most turtles return to nest as adults in the general location of where they were born. They are often faithful to a particular nest site, with Hawksbill Turtles returning to the same site every 2 - 4 years in Seychelles, and longer intervals seen for Green Turtles. But this recent discovery shows that this faithfulness to a site is not 100%. Not only has this recently discovered turtle been recorded at two distinct nesting sites, but the sites are thousands of miles apart and in two different countries. This sighting of a turtle from Aldabra on a nesting beach in Tanzania is, according to Dr. Jeanne Mortimer a long-term researcher of marine turtles in Seychelles, a very rare record. It is impossible to know the intention of this turtle, it could be that it was 'lost' and that the turtle had misread navigational cues leading her to a different nesting site.

Scientists have spent decades trying to learn more about the movement behaviour of marine turtles, often investing in expensive satellite tagging equipment to track them. Indeed over the past few years SIF have tagged several female Green Turtles from Aldabra with satellite transmitters, and their post-nesting journeys showed that migrations to the east coast of Africa were not uncommon. These journeys however, were made to feeding grounds for what is known as a remigration interval, where the turtles spend a number of years fattening themselves up in preparation for another nesting season. This includes a strenuous long-distance swim back to their original nesting location and the production of more than 1000 eggs that will be laid in clutches of 100-200, over the course of a three-month nesting season.



Map showing movements of the previously satellite tagged Green Turtles from Aldabra © SIF

Dr. Mortimer explains "As is the case for humans, turtles have individual personalities, and each individual contributes to its society in a different way. It is usual for most turtles to return to the same nesting beach where they were born, because that site has a proven history of healthy offspring production. But what if the site is destroyed? What if the beach erodes or the island sinks? Such an event could prevent members of the nesting colony from successful reproduction. Fortunately, 'adventurous' turtles like this one might establish new breeding populations at these remote sites. Given enough time, perhaps hundreds of years, new healthy colonies might become established at these distant sites to secure the future of the species."

This finding certainly highlights the effectiveness of the method of attaching metal flipper tags to turtles when there is a solid network

of turtle monitoring programmes with good communication between them, even when from different countries! Lindsey West from Sea Sense comments, 'This finding highlights the importance of regional cooperation in the conservation and management of migratory species such as marine turtles. The Western Indian Ocean Marine Task Force has been an invaluable platform for sharing information, developing collaborations and furthering our understanding of the behaviour and movement patterns of marine turtles in our region.' The Western Indian Ocean Marine Task Force was established under the IOSEA (Indian Ocean South East Asian) Marine Turtle Memorandum of Understanding. Aldabra Atoll was designated as a site of global importance for marine turtles under this Memorandum in 2014. With regional networks such as these the more knowledge we have, and therefore are better equipped to make the right choices towards the conservation and management of marine turtles.

## Illegal vessels seen at Aldabra

Over the past few months two unidentified vessels have been seen in Aldabra waters. SIF have been working closely with the Seychelles Coastguard to increase surveillance and to ensure that the regulations of Aldabra are enforced.



*An illegal vessel spotted off Aldabra © SIF*

The first illegal boat was seen off Picard Island in August and was approximately 7 - 9 m long with three individuals on board. After being sighted it was seen to make its way in a southerly direction towards Grande Terre. A patrol team from station was deployed the following day to investigate any further presence of the unknown vessel, but it was not sighted again. The Seychelles Coast Guard was alerted immediately and an air patrol was conducted. In addition "ETOILE", one of the Seychelles Coast Guard vessels was also deployed, and conducted another patrol in the surrounding area. Both patrols did not sight any vessels. During the South East monsoon the sea conditions are rough and to have a vessel of this small size in the vicinity of Aldabra is quite unusual.

In October, a second unidentified vessel was spotted along the West coast of Grande Terre, while the Aldabra team was conducting routine monitoring there. A patrol team was launched to investigate the situation, but the unknown vessel had already left from the location it was initially sighted. The patrol team noticed that the unfamiliar boat was throwing fish and rubbish over the side of the boat as they departed. The Seychelles Coast Guard was again alerted and they conducted another air patrol of the area to look for signs of the vessel.



*'Etoile', the Seychelles Coastguard vessel © SIF*

Due to the sightings of these vessels it was agreed that members of the Seychelles Coast Guard would now be stationed on Aldabra on a full time basis. This will allow for a timely response to any illegal activities that are sighted in Aldabra's waters. This collaboration with the Seychelles Coast Guard and the occurrence of more frequent boat patrols by them will certainly assist in safeguarding Aldabra's pristine ecosystem from any illegal activities.

## Hawksbill Turtle nesting season underway



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Don't forget to like our Facebook page! The page has regular news and updates on research and events at both World Heritage Sites. 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!

day of the festival there was a performance of two of the most popular traditional dances, the moutya and kanmtole dance. The visitors could not stop themselves from joining in and it was a great way for them to experience the traditional songs and dances.



*The Vallée de Mai (left) and Head Office (right) SIF staff battle against each other in the Creole quiz © SIF*

Finally to revisit and celebrate some of the traditional Creole words and cultural past times, there was a Creole quiz. Teams of schoolchildren from Baie Ste Anne and Grand Anse primary school, senior citizens from both districts, SIF staff from Head Office and the Vallée de Mai all competed against each other in the quiz. It was impressive to see the extensive knowledge that these teams had of the history of Seychelles and all thoroughly enjoyed participating.

## Control methods reapplied to introduced trees



*Vicky Barbe drills a Bwa Ber tree as a secondary control method © SIF*

The invasive species team on Praslin continue to tackle the introduced plant species in the Vallée de Mai. Over the past few months the team have been rigorously checking the trees that were previously controlled, and re-applying or adapting the control methods where necessary.

Previously the team had applied several different control methods to a range of introduced species in the Vallée de Mai. Ring-barking was used for Lagati, Santol, Kalis Dipap, Kannel, Bwa Zonn, and Jackfruit. Trees of the Strawberry Guava, Bwa Ber, the Rubber Tree and other introduced palms were controlled by having holes drilled in the stems and herbicide applied. For the Coco Plum plants, the team cut back the branches and sprayed herbicide onto the cut main stems. Vya Tang, was manually pulled from the ground and dried on racks to prevent it from re-sprouting. The Filodendron creepers were also manually removed by cutting the base of the stem, pulling the creepers down and drying them on racks.



*Re-growth of Bark*



*A nesting Hawksbill Turtle © A Burt*

In line with the rest of Seychelles, the Hawksbill Turtle nesting season started recently on Aldabra. This nesting season runs from September – March and during this time turtle patrols are conducted on the inner lagoon beaches of Aldabra.

Seychelles is one of the five largest Hawksbill Turtle nesting populations in the world. Most of the nesting beaches for this critically endangered species are found in the inner granitic islands of Seychelles. Aldabra however, also hosts a small number of nesting Hawksbill Turtles every year despite being better known for having one of the largest population of Green Turtles in the Western Indian Ocean. Interestingly both turtle species demonstrate a defined preference for nest sites in relation to Aldabra's unique geography; with Green Turtles nesting predominantly on the beaches of the outer edge of the atoll and Hawksbill Turtles nesting almost exclusively on the inner beaches. It is not entirely understood why the two species exhibit differing preferences for nest sites at Aldabra.



*The distinctive tracks of a nesting female Hawksbill Turtle © A Burt*

Throughout the Hawksbill nesting season the Aldabra rangers visit the lagoon beaches twice a month to record any nesting activity. The staff are always excited to find the smaller tracks of the Hawksbill Turtle, and on each visit the staff hope that they may encounter a nesting female on the beach. The Hawksbill Turtles of Seychelles are unique in that they nest almost exclusively in the daytime, which makes encountering them more likely.

Although it has a nesting population of adult Hawksbill Turtles, Aldabra is perhaps more important as a nursery and foraging area for juvenile hawksbills with a large number sighted and tagged in the lagoon, particularly close to the mangrove forests. Last month two hawksbills were recaptured during tagging activities in the lagoon which were originally tagged in 2007. With a continuing long-term tagging and recapture programme it will be possible to further understand the behaviour of juvenile turtles.

*Some of the ring-barked trees had bark re-growth as shown here © SIF*

Despite this initial treatment, all of the introduced trees need regular checks to assess their rate of deterioration. When doing these checks the team observed that some of the trees that were only ring-barked initially, were showing signs of defence responses, such as bark re-growth, re-sprouting and aerial roots. In order to prevent these trees from recovering it was decided that the trees should be controlled using another method as the ring-barking was not effective as hoped. The trees that were still in good health had holes drilled into the trunks or stems into which herbicide was applied, the holes were then sealed. These trees will continue to be monitored and it is hoped that his new method will be more effective.

Work on the Yellow Crazy Ants has also continued and the team have been trialling an experiment for their removal. The team set up artificial nests made out of bamboo in certain areas around the Vallée de Mai. The team will then monitor whether the ants have colonized these artificial nests, if they do then this could allow the team to remove the population of ants from the Vallée de Mai. Further information on the success of this experiment will be given in future newsletters.

**Articles contributed by:** *Rowana Walton, April Burt, Maria Briocche, Christina Quanz, Jakawan Hoareau, Vicky Barbe.*