



## Vice-President of Cuba visits the Vallée de Mai



*The Vice-President and her delegation enjoyed a tour of the Vallée de Mai © SIF*

Vallée de Mai management and staff were honoured to welcome the Vice-President of the State Council of the Republic of Cuba, Mercedes Lopez Acea to the Vallée de Mai on Friday 16th February. Vice-President Acea was accompanied by the Minister of Environment, Energy and Climate Change Didier Dogley, the Secretary of State Barry Faure and other officials. SIF CEO, Dr Frauke Fleischer-Dogley, Vallée de Mai site manager, Mr Marc Jean Baptiste



*Guessing the weight of the coco de mer © SIF*

and Vallée de Mai staff warmly welcomed the Vice-President and her delegation to the World Heritage site.

The honoured guests were given a guided tour of the Vallée de Mai by Dr Fleischer-Dogley, during the tour she described some of the endemic flora and fauna of the site, including the iconic coco de mer. The Vice-President participated in guessing the weight of a coco de mer nut, and surprised those in attendance with a perfect guess! She also witnessed the de-husking of the coco de mer nut performed by security officer Andrea Radegonde.



*The Vice-President received a coco de mer nut and book as a token of her visit © SIF*

The Kokosye Café staff were happy to be able to provide Vice-President Acea and other guests with refreshments such as lemon grass tea or *sitronnel*. The vice president was happy with how well preserved the site was and she thanked SIF for protecting this amazing place.

## SIF staff embark on training

SIF is always happy to support staff in gaining further training and qualifications and February was a good month in this regard! Aldabra ranger Ella Nancy became the fourth SIF staff member

to attend the prestigious Durrell Endangered Species Management (DESMAN) graduate certificate course based at the Jersey Zoo in the UK. Although the fourth SIF staff on the course, Ella is the first Aldabra based team member to attend the international conservation course and we are very excited for her to return to Aldabra with new knowledge and experience later this year.



*Annabelle poses for a selfie with a tortoise (left); Ella conducting tropicbird monitoring © SIF*

Vicky Alis is another Aldabra team member enjoying new training, during February she joined the GVI marine expedition based in Cap Ternay, Mahé. Although already a qualified diver, Vicky joined the expedition in order to become better at identifying fish and coral, develop the techniques needed to survey coral reefs and become more confident and accomplished under water. Vicky aims to use her new skills to contribute to the Aldabra marine monitoring programme next season.



*Vicky chats to a tortoise © SIF*

Annabelle Constance, SIF project and science coordinator, started her PhD at the University of

Zurich this month, where she will be investigating ways to improve Aldabra’s management. After completing her MSc in Zurich in 2016 with research on Aldabra’s mangroves, we are thrilled that Annabelle is taking the next step in her academic career and look forward to her first Aldabra field trip. Congratulations and good luck to Ella, Vicky and Annabelle!

## SIF attends the opening of the Global Climate Change Alliance Plus Initiative



On the 6th of February 2018, SIF Project Officer, Jeremy Raguain attended the official opening of the Global Climate Change Alliance Plus (GCCA+) in Seychelles. With Climate Change on the global policy agenda, the GCCA+, a European Union initiative, recognises the need to support developing states in their efforts to mitigate and adapt to Climate Change. Therefore, GCCA+, first established as the GCCA in 2007, aims to strengthen dialogue and cooperation, particularly with least developed countries and small island developing states. These aims are reached through the GCCA+’s two pillars: the promotion of dialogue and exchange of experience, and the provision of technical and financial support. The GCCA+’s priority areas are: mainstreaming Climate Change awareness while reducing poverty, increasing resilience to climate-related stresses and shocks, and assisting states to develop sector-based Climate Change adaptation and mitigation strategies. For the period of 2007-2020 the GCCA+ has committed to support over 50 national and regional programs with financial support of €780 million.

In Seychelles, the GCCA+'s has two components. Component A, which kicked off with this inception workshop, has the specific objective of strengthening Seychelles' climate change sector's policy framework and assisting with the implementation of the Seychelles Climate Change Strategy. Although this specific objective is largely directed at supporting the Seychelles government, through the Ministry of Environment, Energy and Climate Change, the GCCA+ seeks to engage with all relevant stakeholders.



2018 Marks the 10-year anniversary of the launch of GCCA © GCCA+

Component B, which supports climate change adaption in Seychelles' coastal areas, specifically La Digue, has been ongoing since 2016. Thus, this workshop was a good opportunity to present its status and progress. Component B's Project Manager, Mr Rodney Quatre, gave an informative presentation on how the project developed an Integrated Shoreline Management for La Digue, enhanced the island's beach berms, mitigated the effects of coastal flooding and salt water contamination and increased the productivity of stream channels and wetlands whilst increasing the flood buffering capacity.

Apart from reintroducing the GCCA+ to relevant organisation's and consultancies in Seychelles, explaining the outline of component A and reporting on component B, the workshop also allowed participants to voice their concerns and ideas on what was needed to enhance

Seychelles' adaptive capacity with regard to Climate Change. In this consultative section of the workshop three main groups discussed the challenges and possible solutions for Seychelles' human resource, financial and policy constraints. SIF was able to contribute to this and hear other organisation's issues. The consultants heading the workshop will use this input and over the next 33 months they aim to provide specific financial assistance to fund technical training and private consultants to help Seychelles' civil society and government enhance their adaptation efforts.

## SIF congratulates Seychelles for the signing of the Marine Spatial Plan Phase 1

Wednesday the 21st of February was a historic day for Seychelles and the world when it signed the first phase of its debt for nature deal swap with The Nature Conservancy (TNC). The swap, which saw 210,000 square kilometres or 16.2% of Seychelles' Economic Exclusive Zone (EEZ) demarcated as a "no-take" Marine Protected Area and \$22million of its sovereign debt bought by TNC. The deal, the first of its kind to involve a debt swap for the creation of a Marine Protected Area, represents a win-win for Seychellois. The deal captures much of the Blue Economy's essence of sustainably developing Seychelles' marine resources.



Seychelles Marine Spatial Plan © SMSP

Seychelles' Marine Spatial Plan increased Aldabra's protected area to 74,400 square kilometres or 5.4% of our EEZ with its

declaration that the Aldabra Group would be a National Marine park. This extension will benefit the marine life on Aldabra and afford additional protection to many species, especially the large apex predators that have a much larger range than the Aldabra reef. All apex predators are in serious decline world wide. The area of 136,169 square kilometres demarcated as the Amirantes to Fortune Bank area, represents 10.8% of our EEZ and was declared Area of Outstanding Natural Beauty. Both areas prohibit fishing, oil exploration and large-scale development. Phase two, which commences in March this year will start the process of determining what



*The extension of the marine protected area will afford wide-ranging species like sharks greater protection © SIF*

economic activities will be allowed under certain circumstance in these areas.

Phase one has been internationally recognised and acclaimed and will be replicated in other large oceanic states. Seychelles, in being the first state to complete such a process, and its international partners must be congratulated for this outstanding achievement. The Marine Spatial Plan process which started in 2014 and aims to be completed by 2020 still has a lot of work ahead of it, but this milestone can be taken as a very positive indication of what is to come.

## SIF Vacancies

We have several vacancies in the Vallée de Mai and Aldabra which need to be filled urgently, check out our website at <http://www.sif.sc/jobs> or contact HR on 432 17 35 if you are interested in any of the following positions:

Vallée de Mai:

- Field Worker
- Property Maintenance Supervisor
- Housekeeper

Aldabra:

- Maintenance and Logistic Assistant



## Inventory conducted to assess the status of invasive plants

The Vallée de Mai research team work to control many invasive plant and animal species, and since June 2016 the invasive alien tree species have been controlled with Starane herbicide. Starane is a broadleaf herbicide that is used to control a wide variety of weeds, but over the last year and a half the team have observed that the trees are not responding.



Vallée de Mai staff assess the status of trees in the firebreak © SIF

To assess the status of these invasive species in the firebreak bordering the Vallée de Mai, the Vallée de Mai site manager lead a team of research and Inva'Ziles project staff for a site

visit. The aim of the site visit was to identify all live invasive trees found in the firebreak, evaluate the possibility of their felling and assess the potential impact such an action may have on the reserve. The assessment considered the proximity of the trees to the path and other native/endemic flora.

Those trees that are too close to the path or important vegetation will not be felled, and will instead undergo another round of herbicide application, using drilled application of another herbicide option. This herbicide application will take place when the trees are drought stressed later this year, and it is hoped that this will eventually lead to the tree dying and disintegrating and eventually decomposing, thus causing minimal damage to nearby vegetation.

## Vallée de Mai to participate in Sooglossid research

Seychelles is home to the *sooglossid* frogs, famous for being some of the smallest frogs in the world. Before 2009 there were thought to be four species in the family, but in 2009 the Praslin sooglossid was discovered in the Vallée de Mai. The Praslin *sooglossid* resembles the existing species *Sooglossus sechellensis*, but the new frog is different in its size and calls and it is still to be determined whether this is a separate species.



Sooglossid frog with fingers for scale © SIF

During his PhD, and under the umbrella of the Darwin Initiative Evolutionarily Distinct and Globally Endangered (EDGE) Species project, Dr Jim Labisko conducted research on the Praslin sooglossid, conducting a survey using audio monitoring methods. Together with Dr Simon Maddock, Dr Labisko recently started further work on *sooglossid* frogs funded by the Mohamed bin Zayed (MBZ) Species Conservation Fund. On the 6th February Dr Labisko gave a presentation to the Vallée de Mai team explaining the research.

The over-arching aim of the project is to generate a detailed, knowledge based framework, upon which a strategic, adaptive species conservation action plan for *sooglossid* frogs can be developed and implemented. Objectives include: capacity building, especially to build on the Darwin EDGE project; long-term monitoring of the multi-island population; documenting the extent of occurrence; DNA sampling; disease screening; developing a strategic conservation action plan; and improving understanding of the frogs.



*Sooglossid frog in the Vallée de Mai © SIF*

The presentation also covered project expectations and the involvement of the SIF team. Static Bio acoustic recorders are being set up in selected areas in order to record the calls of the *sooglossids*. This will record the

activities of the frogs through sound, and team members will download data from the recorders every month to send to Dr Labisko for further analysis. The recorders have already been set up on Silhouette Island and are being trialled with the help of Island Conservation Society (ICS) staff, SIF will be the next organisation to set up recorders and the team is excited to get involved. The Seychelles National Parks Authority (SNPA) is also involved in the project as the research areas include parts of Mahé, Praslin and Silhouette.

You can follow the progress of the project at: [https://twitter.com/SeyAmphibians!](https://twitter.com/SeyAmphibians)

## Vijay International School learns about seeds at the Vallée de Mai



*Maria explains how seeds work to the students © SIF*

A group of year one students from Vijay International School visited the Vallée de Mai on Tuesday 13th February. Their current topic in class was “Growing and Fun” and Maria Brioche, SIF education and outreach programme officer therefore complemented what they have learnt in class by giving a presentation on how seeds grow and develop into a mature plant.

The session began with an interactive introduction to the different types of seeds found in the Vallée de Mai. They had the opportunity

to touch and observe the seeds up close, and to compare the shapes, size and colours. Maria was amazed at the level of knowledge about seeds that they already had, as the students were able to describe the conditions in which a seed needs to grow. Following this they enjoyed a presentation on the development of the coco de mer seed until it reaches maturity. Later when they went on a tour of the Vallée de Mai they were able to identify the different stages of development of a coco de mer tree and complete a worksheet that was provided to them.

Once back at the visitor centre the children planted their own seeds to take home with them. They planted papaya seeds from the Kokosye café and found it to be a very exciting activity. The children have now promised to take very good care of their seeds and allow them to grow into strong healthy plants! It was a highly enjoyable activity and we look forward to seeing Vijay International School again.



*The group enjoyed a presentation about seeds © SIF*



*Teamwork makes the activities more fun! © SIF*



# aldabra atoll

## Aldabra 2018 frigatebird census completed



*Counting frigatebirds © SIF*

In February the Aldabra research team conducted this year's frigatebird census. In this annual monitoring event all four breeding colonies were surveyed and all nests of both the lesser and the greater frigatebird were counted. During the census the number of nests is equated with the number of breeding pairs. If adults are present on the nest they are counted per species. However, often parents go away to find food leaving their chick alone on the nest; since chicks of the two species are largely indistinguishable without careful inspection they are counted as one group.



*A lesser frigatebird section in peak nesting stage with males displaying (wings outstretched) © SIF*

This year nest numbers were high: a total of 7713 nests were counted compared to 4453 in 2017. This difference in counts is not unusual, due to the very long breeding cycle of frigatebirds the proportion of the population that is able to attempt breeding fluctuates between years. The 2018 nest total is similar to that recorded in 2011, 2013 and 2015 showing that the combined frigatebird breeding population has not declined over this time period. Of the total nest count, unguarded chicks and adult lesser frigatebirds on nests each numbered around 3800 while only 140 greater frigatebirds were counted. The actual number of breeding greater frigatebirds this season is certainly much higher. Our ongoing monitoring of breeding cycles for the two species showed us that the peak nesting time of greater frigatebirds was in October. By February, many of their chicks had fledged or were old enough to be left unaccompanied so the number of adults left sitting on nests was much reduced compared to numbers at peak



*A greater female feeding a large chick which she leaves mostly unguarded © SIF*



nesting time. In contrast lesser frigatebirds did not reach their nesting peak until February at the time of the census. Seeing such stark differences in breeding chronology between species highlights the importance of timing in census counts and the difficulties in estimating the breeding population size of each species. We expect that the continuation of breeding cycle monitoring over a two-year period will help us to understand the population dynamics of the breeding colonies even further.

## Mary Gillham Archive Project gives glimpse of historical Aldabra



Mary with a tortoise on Aldabra © Mary Gillham Archive Project

Throughout the long history of people's interest in Aldabra many fascinating researchers and scientists have visited the atoll. One of these was Dr Mary E Gillham, described by her archivist as "a dedicated naturalist and conservation pioneer". While working as a lecturer at Cardiff University in 1970 Mary visited Aldabra. Her trip was sponsored by the Royal Society and she was part of the pioneering group that conducted some of the first ecological studies on the atoll. Mary was on the atoll from mid-February to early May to study the relationship between the native vegetation and bird life.

Mary kept field diaries, took photos, made species sketches at various stages of development,

wrote scientific papers, and otherwise recorded many of the details of her visit. These have now been archived, digitised, and made available for your viewing pleasure! The full Mary Gillham Archive Project can be found at: <https://www.marygillhamarchiveproject.com/>; and the content specific to Aldabra is at: <https://www.marygillhamarchiveproject.com/international-travels/aldabra/>.



Research station under construction © Mary Gillham Archive Project

Mary was on Aldabra when the Royal Society research station was being built, during an interesting time of transition between the historical exploitation of Aldabra and the modern conservation of the atoll. She describes the daily routine at the research station: *"Daily routine at base is rise with the lark at 5.00am. Coffee in dining hut at 5.30am, then off for the best 2 ½ hours of the day, when one does all the more energetic walks, wades and scrambles. Breakfast at 8.00am, lunch 11.30am, tea at 3.00pm, only I don't bother as there's no real milk or lemon. Dinner at 6.30pm to dusk and glorious sunsets over the sea. [...] The Royals Society's warning about 'sharks; no bathing' was all poppycock. A bath in luke-warm sea is an almost daily ritual as we have no shower or bath, water being carried from big rain water tanks."* Although life at the research station is quite different these days, it's not difficult to imagine the life Mary lived on Aldabra!

On behalf of SIF and all of Aldabra's supporters

we would like to thank the Mary Gillham Archive Project for sharing this amazing and invaluable record with us.



Mary's wash stand is visited by an Aldabra rail © Mary Gillham Archive Project

## Research published on the phylogeny of weaverbirds, shows Aldabra fody as a separate species

In 2015, SIF published the results of a genetic study conducted by Dr Janske van de Crommenacker, investigating the impact of a group of Madagascar fodies that had arrived on Aldabra from the adjacent Assumption Island where they were introduced by people. The study confirmed that the two different fodies had hybridized, which jeopardized the genetic structure of the Aldabra fody. The study, published in the peer-reviewed international scientific journal *Diversity & Distributions*, thereby confirmed that colonisation of Madagascar fodies on Aldabra was not a natural event, and it justified their eradication (as well as the eradication of the hybrids). The study's comparison of the Aldabra fodies' genetic structure with many of its relatives in the Western Indian Ocean, was also useful for another purpose: the reassessment of the taxonomic status of the Aldabra fody. With 24

more genetic samples added to the thus far, rather weak evidence in literature, the study provided a robust confirmation that the Aldabra fody should be re-classified as distinct species rather than sub-species, i.e. *Foudia aldabrana* instead of *Foudia eminentissima aldabrana*.



Female (left) and male Aldabra fody © SIF

It is very rewarding that this publication has also initiated some recent events that are vital to the bird's conservation status. Firstly, the Aldabra fody is recognized and mentioned as a separate species in a recent publication on the phylogeny of weaverbirds (de Silva *et al.* 2017, *Molecular Phylogenetics & Evolution*), which hugely contributes to the general acknowledgement of the Aldabra fody as a distinct species. Secondly, the Aldabra fody is currently being proposed on the BirdLife Globally Threatened Birds Forum for uplisting on the IUCN Red List. The Aldabra fody currently still holds the IUCN Red List status of 'Least Concern' that actually applies to the much more widely distributed *Foudia eminentissima*, under which it was previously considered a subspecies. On the forum, it is proposed that the Aldabra fody should be uplisted to Vulnerable, based on the recognition that the bird is prone not only to introduced predators but also to hybridisation which could cause future declines in this isolated species. We hope that the Red List up-listing goes ahead, this will emphasize the importance of appropriate conservation management of the species and aid in the direction of resources.

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