



Ecoschool competition winners visit Aldabra



The Echoschool students and teachers exploring Aldabra © SIF

A group of 12 students were the proud recipients of an SIF-sponsored prize to visit Aldabra for five days, after winning the 2015 national Ecoschool competition. After a five year hiatus from 2009 to 2013 due to the threat of piracy, the star prize of a visit to Aldabra was started again last year and we hope will now continue for future years.

These 12 students were chosen as representatives of their winning schools and were joined by three of their Ecoschool leaders. Early in the morning, the excited group boarded the plane to Assumption for the first step of their journey to Aldabra. On the way, the pilot kindly pointed out some of the other outer islands that could be seen on the way to Assumption. From Assumption the group were taken by boat to Aldabra and after a smooth crossing the dream became a reality as Aldabra appeared on the horizon.



One of the students enjoying the underwater world of Aldabra © SIF

The group of students and teachers were warmly welcomed to the atoll by the whole SIF Aldabra team. The team had planned many activities for the children so that they could learn and experience as much of Aldabra as possible. They took a boat trip into the lagoon to see the frigatebird colony, encountering many green turtles along the way. On one of the evenings they joined some of the research staff to participate in the coconut crab monitoring. The children loved this and they learned to identify the different sexes and how to record the data. They also received presentations from the staff on a variety of subjects, undertook a beach clean on Picard, snorkelled, took part in turtle nesting patrols and many others. This year SIF published a daily blog on the trip with contributions from the teachers and students which can still be viewed at <https://aldabraecoschooltrip.wordpress.com/>



HAVE YOU SEEN THIS BIRD?

SCR 2000 bounty for information leading to Ring-necked Parakeet culls



The team are still searching for any information on sightings of Ring-necked Parakeets © SIF

Since the last update from the team in January 2016, the team have managed to identify and cull two more Ring-necked Parakeets (RNPs) thanks to information provided by the public. The bounty payment that will be made for any information which leads to a cull has been raised to **SCR 2000**.

The introduction of a bounty payment in January has encouraged members of the public to provide information on sightings of Ring-necked Parakeets (RNP). Three calls were received from the public regarding RNP sightings in the vicinity of Bel Ombre in the north of Mahé. The information was instrumental in helping the team target this bird as the team was able to quickly follow up and confirm its presence in the area. This bird was finally culled in March and all three callers who had provided information which helped to target the bird were awarded the bounty payment.

To help locate any final birds and complete this vital eradication, the bounty payment has now been raised to **SCR 2000** for any information which leads to an RNP being culled.

If you see a Ring-Necked Parakeet (Kato Ver) on Mahé, then we ask you to call the RNP team on **2523623** to report the sighting **as soon as possible** and the team will come and investigate. If the team can locate the bird and cull it, the caller will be rewarded with **SCR 2000**. Please note that the bounty payment is **only eligible** if the RNP team culls the parakeet and no reward shall be given for any other bird culled in any other manner. Please note that the more detail provided on the sighting (e.g. time of sighting, location of RNP, feeding observations, behaviour), the more likely it is that the team will be able to target the bird.

More job opportunities at Aldabra Atoll



Vallée de Mai Biosecurity Manual finalised



The biosecurity manual seeks to prevent or limit the spread of invasive species such as these creepers © SIF

A new biosecurity manual was finalised for the Vallée de Mai this month. This document highlights high risk pathways and species, and lays out a comprehensive strategy to safeguard the ecological integrity of the Vallée de Mai from invasive alien species (IAS). This is the first time that a manual such as this has been implemented for the Vallée de Mai and builds on the work of the last few years of IAS management in the area.

Biosecurity means taking precautions to prevent or limit the spread of dangerous or potentially harmful organisms and diseases, combining detection, surveillance and emergency protocols. Biosecurity plans outline actions to avoid or limit the entrance and establishment of these harmful biological agents, especially in protected areas.

The Vallée de Mai is highly vulnerable to the introduction of IAS because of its lack of isolation from the surrounding more invaded forest and the continuous flow of tourists into the area. These factors create two main pathways for IAS to enter the Vallée de Mai; through the forest boundaries and the entrance gate. The manual includes a detailed analysis of these pathways to set biosecurity priorities and also considers the current status of existing IAS and potential outbreaks of new IAS given the location of and pathways into the site.

The manual provides guidelines on the highest IAS threats to the Vallée de Mai, existing IAS in the VdM and potential threats, a strategy for IAS detection, an emergency protocol, general recommendations that complement the specific guidelines given about IAS, and guidelines for education and awareness activities regarding biosecurity.

Any new species introduction could have devastating impacts on the delicate ecosystem of the Vallée de Mai so maintaining the results of the hard work and effort that have been put into controlling IAS in the Vallée de Mai is essential.

World Water Day





The students taking a tour of the mangroves at Picard © SIF

The national Ecoschool competition is coordinated by the Environmental Education Unit at the Ministry of Education. All schools in Seychelles are encouraged to participate by engaging in environmental activities, conduct environmental projects and adopt more environmentally friendly practices at their school. At the end of the year each school presents their achievements to a panel of judges. The 2015 winning schools were Beau Vallon Secondary (first), Anse Royale Primary (first), Plaisance Secondary (second), Anse Etoile Primary (second), English River Secondary (third) and Bel Ombre Primary (third). Winner of the Best Club member award in the Friends of Vallée de Mai Club on Praslin, Ella Pierre, and leader Ms Paulette Cappell also had the opportunity to join this group and visit Aldabra.



The beauty of Aldabra Atoll © SIF

Are you Seychellois and passionate about nature? Has it always been your dream to go to one of UNESCO's World Heritage Sites, Aldabra Atoll? We are looking to fill several positions of Field Research Assistants/Trainee Field Research Assistants/Rangers/Trainee Rangers. Candidates for the positions are to be engaged in research activities, ensuring the smooth running of all monitoring activities and maintain knowledge and information resources related to this World Heritage Site. The candidate should be practical, medically fit with the ability to swim, and have a SCUBA dive certification. We are also looking for a Cook/Logistics officer who is keen to join our hardworking team and contribute to the management and protection of this site.

Full job descriptions can be found on our Facebook page or by request from hr@sif.sc



Learning about the freshwater species of the Vallée de Mai © SIF

World Water day is celebrated each year as a means of highlighting the importance of freshwater resources and their sustainable management. To commemorate this day the Friends of Vallée de Mai club members on Praslin participated in an activity with SIF at the Vallée de Mai. This activity was organised in partnership with the Public Utilities Company (PUC) and was an opportunity for the students to learn about the freshwater species that live in the rivers of the Vallée de Mai.

A group of students were taken to a river in the Vallée de Mai where they carefully collected a specimen of each of the species that live there. The species were carefully placed in clear plastic bowls where children took turns to observe them. They were provided with magnifying glasses to enable them to observe the species closely and identify them from a poster. Once they had a chance to examine them properly all of the animals were all released back into the river.

MSc student studies Aldabra's mangroves



The dense mangrove habitat of Aldabra © SIF

Annabelle Constance, a former SIF Professor David Stoddart Scholar at the University of Seychelles completed her degree with first class honours. Following this outstanding result she is now being supported by SIF to undertake an MSc in Environmental Science at the University of Zurich. Annabelle visited Aldabra this month to collect data for her MSc project on mangrove distribution on the atoll.

The mangrove forests found on Aldabra are the largest area of mangroves in Seychelles and are 16 times bigger than the mangroves at Port Launay on Mahé. In spite of their recognised importance, there is presently limited information on the compositional, functional and structural properties of the mangrove habitat on Aldabra. Mangrove forests occur around almost all the lagoon shores of Aldabra, providing feeding and breeding areas for sea turtles, sharks, fish, shorebirds and seabirds. Mangrove habitat is an important component of Aldabra's listing as a Ramsar Wetland Site of International Importance. Annabelle will be focussing her research on two main aspects of the mangrove habitat.

The first component will assess the long-term stability of Aldabra's mangroves. Using remote sensing techniques, Annabelle will compare aerial black and white images of the atoll from 1960 against images from 2013 and evaluate any changes in mangrove habitat over this time period. This will provide important information on whether changes have occurred in coastal communities that are susceptible to the impacts of climate change.



Annabelle, assisted by Marcus Dubel, collecting data in the mangroves © SIF

The second component of the research focuses on providing an updated mangrove species map of Grande Terre (Aldabra's largest island), which can be used to assess future changes in habitat composition. Using high-resolution drone images taken by researchers from the ZARP group in December 2015 (see January newsletter), it is possible to identify individual mangrove species. Field data was needed to validate these images and the collection of this data was the purpose of Annabelle's trip to Aldabra. Together with the rangers on

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Students on their tour with PUC © SIF

To help the students understand the link between the rivers of the Vallée de Mai and the use of this water by the local community a visit to the nearby PUC water treatment station was also organized for them. The students had a guided tour with a member of PUC staff and they received detailed information about the different stages of water treatment. They were interested to learn that an average of 27,000–305,000 m³ of water from the Vallée de Mai is distributed to the community every month from that station. One household of 4 people uses on average 12 m³ per month which means that the equivalent of at least 2000 households can be serviced by this station.

PUC had also collaborated with a new group on Praslin called the 'Watershed Committee' and organized a water awareness activity at Grand Anse. Many environmental organizations on Praslin participated in the small fair. To kick off the activities there was a short ceremony to officially launch the day's event and a prize giving for the students who took part in a water awareness poster competition. SIF participated with an exhibition of pictures showing the importance of protecting the water sources of the Vallée de Mai. This was done by demonstrating the links between these rivers and the PUC water treatment station at Nouvelle Découverte. The SIF stand also showcased the educational sessions that are conducted in the Vallée de Mai to teach students about the freshwater species that are found there and the importance of protecting them.

Giant Bronze Gecko research off to a flying start





Giant Bronze Geckos feasting on jackfruit © SIF

The new research project on the Giant Bronze Gecko in the Vallée de Mai has gotten off to a great start with 88 geckos caught or recaptured by the end of March.

Of the 88 geckos, 57 were caught for the first time, 28 were recaptures from earlier in this project and a further three were recaptures from the research conducted two years ago. All geckos that are caught have a PIT (Passive Integrated Transponder) tag inserted, which can be scanned with a digital reader to help with future identification of the animal.

With such a high number of geckos tagged, the recapture rate has been increasing. A number of geckos previously caught at one site have now been found up to 50 m away! Such data provide a valuable insight into the movement of these large geckos. This will be complemented by radio-tracking of the geckos which will start in the next few weeks. Chris Tagg, the MSc student carrying out the project, has been trialling deployment of the tiny radio transmitters onto the geckos to find an attachment method that is secure, comfortable and harmless to the animal.



Close-up of the prehistoric Giant Bronze Gecko © SIF

The recaptured geckos that were first caught as adults two years ago are shedding light on the growth rate of the Giant Bronze Gecko in adulthood. Many new immature and sub-adult geckos have also been caught and it is hoped that recaptures of these animals will provide more information about their growth and development whilst they are still in the early stages of their lives.

In addition to generous support from the University of Zurich, the project has received a fantastic donation of 10 additional PIT tags and an application gun from PetDetect, UK. We would like to extend our gratitude to Institute of Environmental Sciences of the University of Zurich in memoriam of Prof. Christine Müller, and PetDetect (www.pet-detect.com) for their kind support which has enabled this important research to go ahead.

The sisal eradication on Aldabra continues...



The site of the previous sisal patch on Ile Michel © SIF

The Aldabra research team has demonstrated great perseverance in the eradication of the invasive sisal plant (*Agave sisalana*) and have continued their efforts over the past few months.

Sisal is known for its fibre production, and is the primary agave cultivated for fibre in eastern Africa, Brazil, India, and various countries in Asia. Sisal was noted as being present on Aldabra in 1957, at least on Picard Island, but in the 1970s it was also reported to be growing on Malabar, Ile Michel and Anse Polymnie. Upon this discovery in the 1970s, efforts to remove this introduced species began and have continued to this day. It is safe to say that sisal is a difficult species to eradicate. However, it is equally safe to say that Aldabra is close to being sisal-free thanks to the people who have been involved in its eradication.

After extensive surveys and trials of herbicide treatments, the optimal treatment was applied to the remaining sisal stands at Picard, Polymnie and Ile Michel in 2013/2014. The largest and densest of the stands was at Ile Michel, a small island in the Aldabra lagoon, where 2500–3000 plants were treated. The density of the Ile Michel sisal patch meant certain areas were not easily accessible, with large adult plants hindering access to the smaller plants under and in between them. Eradication of sisal from this patch was conducted in several stages as it was not possible to treat all of the plants during one visit.



The sisal plant regrowth at Ile Michel © SIF

Follow-up visits to all patches to check for re-growth were essential to ensure eradication success and several visits were made in 2015. In November small amounts of re-growth were reported at Ile Michel but the other two locations remained sisal free. In early January the team visited Ile Michel to re-apply herbicide to the 31 small plants that were found. Since then, monthly visits have been made to treat any further re-growth in the area. The small patch size is a good sign, indicating that the majority of sisal is dead throughout the root system. The team will continue to visit and re-apply herbicide as necessary until we can declare Aldabra sisal-free.

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