



## 38th SIF Annual General Meeting held in the Vallée de Mai

The 38th SIF Annual General Meeting (AGM) was hosted by the Vallée de Mai in April, and with the inspiring setting of the palm forest, this year the Vallée de Mai was in focus.



AGM attendees © SIF

Following last years' declaration that the invasion of yellow crazy ants in the Vallée de Mai constitutes an emergency requiring immediate intervention, the board assessed the invasive alien species management methods and research in the Vallée de Mai. They acknowledged that progress has been made and re-asserted that the integration of invasive alien species and biosecurity management into operations in both World Heritage sites is imperative.

Poaching of wildlife is an emerging issue that was discussed at the AGM. The board members are highly concerned with rapid development in the trade of rare reptiles, specifically the giant bronze gecko or *Ailuronyx trachygaster*. The giant bronze gecko is a Seychelles endemic species and one of the largest living gecko species in the world. It is a rare and highly

specialised species with a tiny distribution, and is therefore highly vulnerable. The SIF board is calling upon Government to take steps towards the legal protection of the species nationally. Given the existence of giant bronze geckos in the international reptile trade, the board also believes that they should be listed on CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora).

Another important agenda item was Aldabra House. The project has made significant progress since last year's AGM with the overall building design and concept now finalised, the board members are satisfied that the plans for Aldabra House have been submitted to the planning authority. The focus of the discussion was on the exhibition part of the visitor centre. Aldabra House will engage all of the senses in a modern and exciting visitor experience. It will showcase Aldabra at its best, drawing inspiration from all that is most special about the UNESCO World Heritage site and displaying it as one outstanding exhibition.

While the two days of the AGM were very busy, the board members did have the opportunity to enjoy the Vallée de Mai at night by going on a night safari in the forest. Highlights of the walk were seeing a chameleon, tree frog and bronze eyed gecko.

## Introducing *Coral News* – our International Year of the Reef Feature!

Welcome to *Coral News*, our new Newsletter feature to celebrate Aldabra's coral reefs as part of the International Year of the Reef 2018! Every month we will provide short new insights into Aldabra's coral reefs to highlight the diversity

and importance of this incredible ecosystem. Our first feature shows an extensive patch of *Acropora* corals at Anse Var reef – a perfect example of the structural complexity branching corals such as these provide. A multitude of organisms such as tiny fish, crabs, shrimps and beautiful snails live on and between the coral branches. Provision of habitat is in fact one of the most important functions of coral reefs, as it does not only attract those little critters, but also bigger fish that come to find food there! Check back on our next Coral News, where we will feature one of the little less obvious reef dwellers found at Aldabra!



*Acropora coral at Anse Var © SIF*

## **Aldabra ranger attends DESMAN course at Durrell, UK**

Between February and April Ella Nancy, a ranger on Aldabra, attended the Durrell Endangered Species Management Graduate Certificate (DESMAN). The course was held on Jersey Island in the UK at the prestigious Durrell Conservation Academy. Ella joined a group of 14 other conservationists from different parts of the world who were also participating in the course. One of the strengths of DESMAN is large number of regions represented by the students, this year these included Seychelles, Samoa, St Lucia, Brazil, Canada, India, Sri Lanka, Armenia, Indonesia, Hong Kong, United Arab Emirates and Nigeria. The aim of the course was to

increase participant's critical understanding of the theory and practice of endangered species management and recovery, better equipping them to develop and realize their own species and/or habitat conservation projects.



*Ella with the other successful participants © SIF*

In order to achieve this aim the course covered practical approaches to species-led conservation action, based on theoretical knowledge, with an emphasis on immediate steps that can be taken to save endangered species from extinction. It also included topics on how to develop critical thinking skills necessary for participants to make informed decisions about conservation initiatives they are involved in. Topics about the development of management skill were also covered to better enable participants to lead their own conservation team.

Ella found the course to be an amazing opportunity although it was sometimes challenging. She met many inspiring people in the field of conservation and they supported her throughout the course. She is very grateful to all the course organisers for all the knowledge and skills she has acquired and she now feels more confident in her role and is ready to share her knowledge with her colleagues! This course will lead to many other opportunities in the field of conservation for Ella and we are thrilled she was able to take part. With the successful completion of the course she was promoted to a senior ranger – Congratulations Ella!

## Ring-necked parakeet look-alike on North Island?

Although the last known ring-necked parakeet on Mahé (and therefore in Seychelles) was culled in 2017, it is too soon to declare eradication as there may be more birds still present in the inner islands. We are still on the lookout for any remaining parakeets, and a former member of the eradication team had a fright when he spotted a suspicious green bird recently...



*Can you spot the difference!? Blue-cheeked bee-eater on the left and ring-necked parakeet on the right © SIF*

The bird was spotted on North Island, and luckily upon closer inspection it turned out to be a blue-cheeked bee-eater! The blue-cheeked bee-eater is a naturally occurring vagrant to Seychelles that is seen occasionally throughout the inner and outer islands. Although from the side the bee-eater and the parakeet look very different, from the back they are quite similar.



*The birds are easy to distinguish if seen from the front or side, blue-cheeked bee-eater on the left and ring-necked parakeet on the right © SIF*

If you have any information on recent sightings of ring-necked parakeets the team can be contacted on 2523623.

## SIF Vacancies

We have several vacancies at the Vallée de Mai and at 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:

Aldabra:

- Tourism Coordinator
- Shopkeeper
- Maintenance and Logistic assistant

Vallée de Mai:

- Visitor Centre Service Coordinator
- Property Maintenance Supervisor



## Yellow crazy ant update!

During the last few months Inva'Ziles staff have been monitoring the bait stations put in place to control yellow crazy ants. These bait stations contain a natural poison – boric acid. During April the team set out to monitor the yellow crazy ants across the northern half of the Vallée de Mai; the area containing the bait stations. Monitoring is done using pitfall traps that are made from plastic water bottles and contain a sugar and washing-up-liquid solution. The traps are left overnight and the following morning they are collected and the number of yellow crazy ants in each trap are counted. This survey was done both before the bait stations were put in place, and after four weeks of control efforts. We are very excited to announce that during the four weeks between surveys there was decline



Pitfall trap © SIF

of nearly 60% in the presence of yellow crazy ants; which is a great start! In many cases the ants were seen actively feeding on the bait, and in one instance there was an ant nest actually in the bait station, obviously the ants really like the bait...



Yellow crazy ant © SIF

Inva'Ziles staff will continue to monitor the bait stations in the next few months as they are moved to the southern half of Vallée de Mai. It is hoped that these bait stations will be able to control the yellow crazy ant population when left in place long term and this will reduce their impact on the Seychelles black parrot during future breeding seasons.

## Vallée de Mai staff member attends training in Madagascar

Shanone Adeline, the Vallée de Mai invasive species technical officer recently had the opportunity to attend the first session of the course: “from Mauritius to Madagascar building regional capacity for biodiversity conservation and monitoring”. The course was funded by the Durrell Academy (Mauritius) in collaboration with the Vahatr Association. The combination of the internationally renowned Durrell Academy and the Madagascar focused Vahatr Association made for an interesting course.

The course took place in Madagascar from the 2nd to the 20th of April. Madagascar is well known for its wealth in biodiversity and endemism and the 14 participants (Seychellois, Mauritian and Malagasy) and their five Vahatr Association tutors had the opportunity to camp for two weeks in Ambohitantely Reserve. The reserve is situated north-west of the capital

Antananarivo and its 5,600 hectare area includes 1,800 hectares of primary forest and 3,800 hectares of grass land. The reserve is threatened by slash-and-burn agriculture, irrigation for rice paddies and poaching.



Training course participants © SIF

Participants were divided into four groups which were rotated every two days. The groups were taught about different monitoring methods used for different species groups. For herpetofauna, the study of amphibians and reptiles, pitfall trapping and day and night transects were used to count and identify specimens. Small mammals were monitored using various traps, and participants learnt about flea and tick sampling. Bird monitoring was done using mist-netting, audio counts, and bird observation. Entomological monitoring was done by sweeping and beating of vegetation, aquatic trapping, sifting, black lighting and flight intercept techniques. They also learned about plant identification and vegetation monitoring



The course included a large amount of fieldwork © SIF

using quadrats and transects. After the two weeks of fieldwork the participants spent a week in Antananarivo for lectures, and learned about conservation projects in different regions of Madagascar.



Participants learned a variety of field techniques © SIF

Shanone found the course to be very beneficial, stating that she has developed particular skills and gained new knowledge which she will be able to apply to her work in the Vallée de Mai. She particularly enjoyed learning about the different monitoring methods for entomology, vegetation and herpetofauna.

## Friends of Vallée de Mai members visit GVI base for Earth Day

Earth Day is celebrated each year on the 22nd April, this very important theme day brings people together to take action to protect the planet. To commemorate earth day this year SIF organised a visit to the Global Vision International (GVI) base on Curieuse Island for the Friends of Vallée de Mai club members. The aim of the visit was to learn about the sustainable design and lifestyle practices at the GVI base.

The base manager Alan Grant welcomed us to Curieuse and GVI staff member Victoria Beasley gave the students a tour of the base where the children learnt about the different sustainable operations there. She also explained how rain gauge works and the group had the opportunity

to read and record the rainfall readings for the previous night.



Students visit the GVI base © SIF

The base has a small water filtration system which treats rain water to make it safe to drink and some of the examples of sustainable operations that were given included reducing the amount of water used by not taking daily showers, using a basin for washing their clothes, collecting water in a basin to wash dishes and using sea water for flushing toilets. To further reduce their impact they eat mostly dried and canned food and they have meat just once a week, this minimises the number of supply trips to Praslin and avoids wastage of fuel. They are also very careful about food wastage always aiming to cook only what they need. They have a solar panel and recycling bins for bottles, drink cans and plastic. Victoria emphasized that these practices not only help them to save money, more importantly they help to save the planet. We only have one earth; we must find ways to reduce the harmful impact to the environment.

The children then visited to the doctor's house museum to see a variety of displays there. They were fascinated by how realistic the papier mâché displays appeared. The group spent some time there before proceeding to the nearby beach where they enjoyed swimming in the sea.

## World Heritage Day celebrated with visits around Praslin



Heritage site visits © SIF

World Heritage Day is celebrated on the 18th April. Our education and outreach team believe that our heritage is what we leave behind for future generations therefore we need to prepare young people to protect it—and the best way is through education. It was with this in mind that SIF organised visits to various heritage sites on Praslin for a group of children from Praslin Secondary School. The children were accompanied by senior citizens while they visited the different sites. The Heritage Club leader of Baie Ste Anne School, Ms Marie Helene Hetimier, provided the group with information about each site. It was very interesting to listen to the stories the senior citizens had to tell about some of the sites, a priceless window into the past for the students!



Students learned about the past from the senior citizens © SIF



# aldabra atoll

## Biosecurity consultant visits Aldabra



*Aldabra management team inspecting the biosecurity building with Joanna © SIF*

Despite being highly protected as a Special Reserve Aldabra UNESCO World Heritage site is facing various threats; as with many islands this is especially the case from invasive alien species. In order to protect Aldabra's species and ecosystems from alien species that do not naturally occur on the atoll, biosecurity measures are needed. Biosecurity is defined as a set of preventive measures designed to reduce the risk of transmission of infectious diseases in crops and livestock, quarantined pests, invasive alien species, and living modified organisms. Although biosecurity measures have been operational for some time on Aldabra, these were not comprehensive enough to ensure that

the threat of invasive alien species is minimised. Therefore SIF secured funding from the Indian Ocean Commission to “*Institutionalise and implement biosecurity measures to ensure sustainable conservation management of biodiversity on Aldabra Atoll*”.

The project aims to create urgently needed biosecurity facilities on Mahé and Aldabra which will allow for appropriate checking, and safe packing and unpacking of supplies, within sealed containers for transportation. A further fundamental project component is the training of all SIF staff and partners by an expert to ensure high capacity to standardize biosecurity measures throughout the organisation. In April and May SIF hosted biosecurity expert Joanna Hiscock from New Zealand on Aldabra and at the Mahé head office to conduct training for all staff.



*Biosecurity training at head office © SIF*

In addition the project will also produce easy to follow training materials to ensure that future staff members are introduced to biosecurity concepts and trained immediately when starting employment. To ensure that any species reaching Aldabra would be discovered timeously surveillance techniques and emergency response procedures were assessed and further developed based on international guidelines and best practices recommended by the experts.

SIF is extremely grateful that with the help of the Indian Ocean Commission it has been possible to boost biosecurity measures for Aldabra to

the necessary level. Biosecurity is a task never completed and more can always be done. SIF is determined to fully integrate and institutionalise best biosecurity practices to prevent any introduction of invasive alien species to Aldabra.

## Final cruise ship visit



Visitors depart from Settlement beach © SIF

And just like that, the north-west monsoon season, and therefore the tourism season on Aldabra, has come to an end. With the strong winds from the south-east, it is difficult and unsafe for vessels to visit Aldabra between May and October. This North-West monsoon season on Aldabra was extra exciting for tourism due to the new policies and regulations introduced last year as part of the Aldabra Management Plan being implemented. Although the regulations put limitations on activities around the atoll, they have been created in order to ensure that impacts on the ecosystems on and around Aldabra are kept to a minimum but also ensure that the expectations of guests who are lucky enough to visit the atoll are met as far as possible. With these regulations, a tourism package and tour operators' guide were introduced this season, and the position of Aldabra tourism coordinator was created to professionally facilitate visits. As tourism continues to increase in the Aldabra group these rules and regulations will become key to keeping Aldabra unspoiled.

For the 2017/2018 season, approximately 700 guests visited Aldabra in 11 vessel visits (including repeat vessel visits). Visits included different activities, mostly centred on and around Picard: diving and snorkelling, land tours, and lagoon cruises. In April, there was a visit from a large cruise ship with over 200 guests, and then the season was closed off with the visit of a vessel with 16 guests. Although the weather was a bit rough, the last vessel for the season stayed at Aldabra for three days and guests were able to dive and snorkel in two of the channels and at other beautiful dive sites along the north side of Picard. They were also able to do a lagoon cruise, including a sneak peak of a frigatebird colony, and were amazed at the amount of turtles that the lagoon hosts. It was the perfect ending to a very busy and rewarding tourism season.



Visitors enjoying a lagoon cruise © SIF

Each visit is unique in regards to weather conditions, in number of guests, and in guest expectations for their visit. The regulations set in place by SIF this season were a success and are being reviewed before the next season. This will allow SIF to continue meeting the aims of the Aldabra management plan, and also to keep the atoll as wondrous as it is.

## An update on the Aldabra turtle season

There is always excitement amongst the Aldabra research team during the busy turtle season; green turtles breed year-round but it is from



March to May that the research team encounter highest frequency of nesting activity. During April, there were a total of 694 emergences on Settlement Beach, 304 of which resulted in nests, an average of slightly over ten per 24-hour period. These figures show a significant decrease compared to April 2017, during which 921 emergences and 411 nests were recorded. Although this is the lowest it has been in the last five years, green turtles are known to have variation in their annual breeding patterns and the research team hopes to see increasing turtle tracks and nests as the season progresses.



A turtle returns to the sea after nesting © SIF



Turtle tracks are monitored daily © SIF

Taking advantage of this busy nesting period, a total of 21 new green turtles were tagged while on the beach in the last two months. Tagging sessions take place at night because this is the time females emerge to nest. Green turtles are easily startled and disturbed, so tagging is only permitted when females are finishing covering their chamber or heading back to sea.

Although the inner islands of Seychelles host the largest breeding population of hawksbill turtles in the Western Indian Ocean and the Aldabra lagoon is home to large numbers of juveniles, it is relatively rare to find hawksbill nests on Aldabra. Hawksbills, unlike the green turtles, have a defined breeding season that stretches from September to March, and unlike green turtles they normally nest inside the lagoon.

## Paper published on late stage dynamics of the goat eradication on Aldabra

The goat eradication on Aldabra was one of the most ambitious and large scale invasive alien species eradications in SIF's history, with goats finally eradicated from the atoll in 2012. The results of the final stage of the eradication are presented in a paper recently published in the journal *Biological Invasions*. Although information about the eradication has been published previously, this paper presents the final phase of the eradication; including methods, eradication dynamics, outcomes and financial costs.



Fitting a radio collar to a Judas goat © SIF

Goats were present on Aldabra for well over 100 years, with eradication efforts beginning in 1987; ultimately 2297 goats were culled over the entire 25-year period. Over the 25-years various eradication and control methods were employed intermittently, and in 2007 a final campaign was launched using the Judas goat method. This campaign ran from 2007 to 2012, culminating with the complete eradication of goats from Aldabra in 2012.



Tracking Judas goats © SIF

The Judas method relies on the social nature of goats, and on their tendency to find one another and congregate. Individual goats are selected and sterilised, radio-collared and then released. After a set period the eradication team would use the radio collars to track the Judas goats on foot, culling any non-collared goats that were found. As with most eradications the final stages are the most challenging, with a lower density of the target species and remaining individuals

likely to be the best at avoiding detection. During the five year effort 227 goats were culled, 202 in the first four months and only 25 over the final years, six of which were Judas goats. The total cost of the five year eradication was US\$ 185,105, an average of US\$ 815/goat, or US\$ 31/ha.

The eradication was not the largest goat eradication from an island, but it is notable because of the outstanding value of Aldabra, and because of the extremely challenging logistical difficulties that had to be overcome. These included tidal restrictions, virtually no infrastructure on site, limited fresh water availability and challenging terrain as well as tropical conditions. The use of the Judas goat method was highly effective and was probably the only feasible method with which the eradication could be completed. Although the cost of the eradication was high, goats have had serious impacts on Aldabra's ecosystem, and their eradication was an essential intervention for conservation of Aldabra's unique biodiversity.

The full citation for the paper is: N. Bunbury, N., von Brandis, R., Currie, J.C., van de Crommenacker, J., Accouche, W., Birch, D., Chong-Seng, L., Doak, N., Haupt, P., Haverson, P., Jean-Baptiste, M., Fleischer-Dogley, F. (2017) Late stage dynamics of a successful feral goat eradication from the UNESCO World Heritage site of Aldabra Atoll, Seychelles. *Biological Invasions*.

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