seychelles islands foundation

# Newsletter

December 2018
Issue 72

## SIF long service awards celebrate eight members of staff

Human resources are the key to success for any organisation and during the last AGM the Board of Trustees recognised the importance of acknowledging the contributions of long serving staff. In early December SIF held a special awards ceremony to honour eight staff that have worked for the foundation for ten years or more. These people represent both sites and the head office, and their efforts over the past decade have ushered SIF into a new era of effective science driven management.


*The eight recipients of long service awards © SIF*

The long service awardees are:

Vallée de Mai staff:

- Marc Jean-Baptiste – Vallée de Mai Site Manager
- Andrea Radegonde - Security Officer

Aldabra staff:

- Jude Brice – Aldabra Island Manager
- Alain Banane – Senior Mechanic

Head Office staff:

- Dr Frauke Fleischer-Dogley - Chief Executive Officer
- Dr Nancy Bunbury – Director of Research and Conservation
- Mary Hoareau – Financial Controller
- Christina Quanz – Project Coordinator

The ceremony took place at Avani resort and SIF staff were honoured to be joined at the celebration by several members of the board of trustees. In her speech, SIF CEO Dr Fleischer-Dogley reflected on the achievements made in the Vallée de Mai and at Aldabra, emphasizing that the strength of an organisation is a direct result of the strength of its people and their ability to bridge gaps within the organisation. The Chairman of the Board, Minister Loustau-Lalanne also reflected on the major successes of the last ten years, and shared some of his thoughts on the achievements still to come!

Congratulations and thank you once again to the eight people who have dedicated such a long time to the protection and management of Seychelles' two UNESCO World Heritage sites.

## Aldabra opportunities showcased at the Blue Economy Youth Programme

On Friday 21st December Trevor and Ella, Aldabra skipper and senior ranger respectively, gave a presentation on Blue Economy career opportunities at SIF to al group of students at the Beau Vallon secondary school. The presentation was part of the Blue Economy Youth Programme organised by WiseOceans. The Blue Economy of Seychelles is reliant upon the health of the ocean and Aldabra hosts many

intrinsically linked marine habitats such as coral reefs, seagrass beds and mangrove forests that are paramount in securing biodiversity and thus safeguarding ecosystem health and food security in the region. Working on Aldabra means contributing to the protection of these ecosystems.


*Ella and Trevor during the presentation © SIF*

Ella and Trevor talked about their own experiences on Aldabra and explained all the different marine related monitoring programmes that are currently conducted on Aldabra, including seabird, sea turtle and reef monitoring. They also talked about the Blue Economy jobs available on Aldabra, highlighting the roles of island manager, science coordinator, field research assistant, ranger, skipper and marine mechanic. The students learned about how important all these roles are and that both logistics and research team depends on each other.

*The Beau Vallon students after the presentation © SIF*

The students were very attentive and interested during the presentation, they were amazed by all the wildlife on Aldabra. It was a great pleasure for Ella and Trevor to meet these students and to talk about their Aldabra experience with the group. We hope that this presentation has had a good impact on these students and we look forward to getting many applicants from this group in the future!

## International Year of the Reef *Coral News*: A final peep into the coral

As the International Year of the Reef comes to a close this will be our final edition of coral news. Featured in this final edition are the blennies, a species rich family of very common, reef dwelling fishes. Their generally small size, camouflaged appearance and shelter seeking behaviour makes them easy to be overseen, but if you take the time to find them they are interesting little creatures and fun to observe. This pair of little eyes was seen during this season's marine monitoring and belong to a curious little blenny of only a few centimetres length. Bottom dwelling blennies such as this one often seek shelter within corals, crevices or small holes and feed mainly on algae. Other blennies, the so called fangblennies, can be observed swimming above the seafloor, taking nips out of unsuspecting reef fishes, which instantly dart away or chase their offenders. Keep a look out for these little ones next time you're out on the reef, they are fun to watch!

*Blenny seeking shelter in the coral © Anna Koester*

## SIF Vacancies

We have several vacancies at the head office on Mahé, in the Vallée de Mai and at Aldabra which need to be filled urgently. We are actively seeking Seychellois applicants for all of the positions, but some are also open to non-Seychellois candidates. Details can be found on 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:

Mahé

- IT and Database Development Officer (Open to any nationality)
- Communications Officer (Open to any nationality)

Aldabra:

- Shopkeeper
- Cook /Gardener
- Electrician/Mechanic Assistant

Vallée de Mai:

- Vallée de Mai Science Coordinator (Open to any nationality)
- Visitor Attendant
- Field Worker
- Housekeeper
- Ranger

## Yellow crazy ant invasion crisis at the Vallée de Mai

The ninth annual yellow crazy ant (*Anoplolepis gracilipes*) survey was conducted in November 2018 in the Vallée de Mai by the research team. The results indicate that this highly invasive ant has now spread across the entire reserve.

Yellow crazy ants were first documented in the Vallée de Mai in 2009. Annual surveys have been conducted since then to monitor the spread and distribution of the invasive ant over time. The survey uses pitfall traps at 50 points across the reserve, which are left for 24 hours and collected the following day. All ants in the traps are then sorted, identified and counted. The distribution

*Yellow crazy ants © SIF*

of yellow crazy ants was relatively stable after its detection and covered <50% of the site until 2016, when there was a marked increase. Survey results from November 2018 show that the ants now cover 100% of the Vallée de Mai as well as the highest average abundance ever recorded at each survey point.

Research on the yellow crazy ants published in 2014, as well as experience from other islands, suggests that, unless the numbers of yellow crazy ants can be reduced, we can expect major impacts on the biodiversity of the forest, particularly on arboreal molluscs and geckos. It is likely that they will also affect ground-dwelling fauna, including caecilians, skinks and arthropods. It could be a crisis situation for the Vallée de Mai, making further ant control and research into their impacts urgent priorities for SIF. Indeed, declines in the slug and snail populations have already been noted anecdotally and are in the process of being confirmed.


*Yellow crazy ant bait station © SIF*

So far, due to earlier expansion in their distribution revealed by the annual monitoring SIF has trialled methods to control the yellow crazy ants in the Vallée de Mai. Through the EU-funded Inva'ziles project, which was sought primarily as a response due to the increasing yellow crazy ant distribution, ant-specific bait stations using boric acid solution were trialled from March to September 2018. The trials did not show an immediate impact on yellow crazy ant numbers but indicated a subtler and potentially long-term impact of the bait stations, which is in line with what has been found elsewhere. The boric acid solution is known to be slow-acting so the bait stations are being deployed for long-term control of yellow crazy ants across the Vallée de Mai in an attempt to curb and ultimately reverse the species' spread. Alongside this, the research team is monitoring abundance of other native and endemic species to document the impacts of this highly invasive ant.

*Yellow crazy ants affect a variety of tree and ground dwelling species, including snakes © SIF*

The yellow crazy ant is listed as one of the top 100 worst invasive species by the IUCN and the Global Invasive Species Database. They can form super colonies (inter-connected 'united' colonies of multiple nests with multiple queens and workers which do not attack one another) and are aggressive to and competitive with other ants and insects, which enables them to out-compete and displace other species and dominate food resources. The ants also spray formic acid which can subdue even large prey when many ants are attacking. These traits cause yellow crazy ants to have substantial impacts on the ecosystems into which they are introduced and it was the species that triggered

the concept of 'invasional meltdown', following their catastrophic impacts after being introduced to Christmas Island. The yellow crazy ant is present on a number of islands in Seychelles, including Praslin, but until recently it did not occur throughout the endemic palm forest.

SIF has substantially increased efforts on yellow crazy ant control since the survey results but is also actively trying to secure funding to conduct further control and management trials as well as doing additional research into impacts of this invasive ant. It is hoped that any impacts will be possible to mitigate with continued and increased control efforts and that we are not too late to act. Any interested parties for funding or research assistance should please contact SIF as soon as possible – we would welcome any expertise, support or advice on this potential emerging crisis.

## Black parrot eggs starting to appear!


*Images of eggs in nests are captured using a baby monitor © SIF*

During December the team continued with cavity checks at all the core breeding areas, increasingly eager to find the first active nest! They also continued with breeding behaviour observations and were happy to see parrots feeding each other, a breeding season behaviour, and to hear breeding calls in and around the Vallée de Mai. On the 12th December the team were thrilled to discover the first egg for the season, in Fond Ferdinand. Throughout the month more and more nests with eggs were found in black parrot breeding areas on Praslin and on the 18th December the first egg in the Vallée de Mai was discovered. By the end of the month a total of 20 eggs in 8 nests had been found.

Two unusual observations were made at nesting cavities in Fond Ferdinand. Most black parrot nests contain two or three eggs, but on the 19th December a nest was found with four eggs in it, which has only been found once before in 10 years of monitoring, and then on the 26th December a nest was found with an incredible five eggs, which has never previously been recorded, so this was an amazing observation! Given that the nest with four eggs in it was also observed in Fond Ferdinand it may be that this has happened because feeding resources are particularly good this season and the parrots are in excellent breeding condition. Sometimes when females lay more eggs than usual, one or more egg can be deformed, or some of them could be infertile, so it will be very interesting to see how many of them hatch.

It's turning out to be a very interesting breeding season and we are confident that we'll be seeing chicks soon, so stay tuned for the January newsletter.

*An incredible five eggs were observed in a nest © SIF*

## The Vallée de Mai celebrates 35 years as a UNESCO World Heritage site

35 Years ago, on the 9th December 1983, the Vallée de Mai joined the list of sites across the world that are recognised by the United Nations Educational, Scientific and Cultural Organisation, or UNESCO, as having cultural, historical, or scientific significance. These sites are protected in the interests of all of humanity. The 35th anniversary was marked with a ceremony and reception in the Vallée de Mai on Friday the 7th December, and SIF staff were joined by partners from Praslin.

*The ceremony took place in the Vallée de Mai visitor centre © SIF*

During the ceremony SIF CEO Dr Fleischer-Dogley gave a speech that reflected on the reasons that the palm forest was designated a UNESCO site, and she highlighted the changes that the Vallée de Mai has seen over the past 35 years. Through its outreach and education programme SIF strives to build relationships with the local community, and one of these community members was invited to address those gathered in the Vallée de Mai. Mr Wasson Joubert, a Praslinois who is very involved in SIF activities, spoke about the changes in the Vallée de Mai, the achievements of SIF, and about his hopes for the future. He also expressed the readiness of the Praslinois community to engage more in the protection of the World Heritage site by getting actively involved as part of the Friends of the Vallée de Mai club.

The Vallée de Mai team were very pleased to welcome a special partner to the event, Ms Salwa Razzouk, the Raffles resort manager. Raffles is a long term supporter of the Vallée de Mai, and has now become an incredible supporter of Aldabra by donating to the Aldabra Clean-Up Project. Ms Razzouk presented Dr Fleischer-Dogley with a cheque for SCR 90 000. Dr Fleischer-Dogley expressed her heartfelt gratitude to Raffles hotel and to all of the SIF's other supporters on Praslin and Mahé that help to make the protection and management of these sites possible.

*Ms Razzouk presented a cheque to Dr Fleischer-Dogley © SIF*

The ceremony concluded with a dance performance by the Vallée de Mai staff, followed by a small reception in the visitor centre.

## 15th SIF holiday camp – a collaborative event

In December SIF held the 15th edition of the Vallée de Mai holiday camp. The holiday camp is an educational programme held during the school holidays in August and December at the Vallée de Mai for children aged five to twelve years. This programme was held from the 17th to 21st December 2018. A group of 27 children participated in the holiday camp this year.

To celebrate this being the 15th edition of the camp the programme was developed in collaboration with several partner organisations.

*Holiday camp participants in the Vallée de Mai education room © SIF*

Partly as a result of this collaboration a wide variety of activities were organised on Praslin during the five days of the camp. The activities covered a large range of environmental topics, and of course the participants learned about the Vallée de Mai and Aldabra Atoll.

*The group planting native species © SIF*

In addition to some of the usual activities that take place each holiday camp in the Vallée de Mai, there were several new activities for the children to enjoy. Staff from the education unit of the Ministry of Environment Energy and Climate Change (MEECC) taught the participants how to make use of 'waste' items. A number of lovely recycled items were produced using things that would normally be sent to the landfill. Children also had the opportunity to plant some native species in separate activities with the Seychelles National Park Authority, Le Ravin de Fond Ferdinand, the MEECC department on Praslin and Terrestrial Restoration Action Society of Seychelles. They met some of the tortoises from Curieuse Island and they had the chance to visit the nature reserve of Fond Ferdinand where they received interesting and detailed information about the reserve from one of the staff.

*The December 2018 holiday camp participants © SIF*

This programme wouldn't have been possible without the support of Raffles Resort. We would like to take this opportunity to thank Raffles for their continuous support in providing lunch for the participants for the holiday camp for the last seven years.

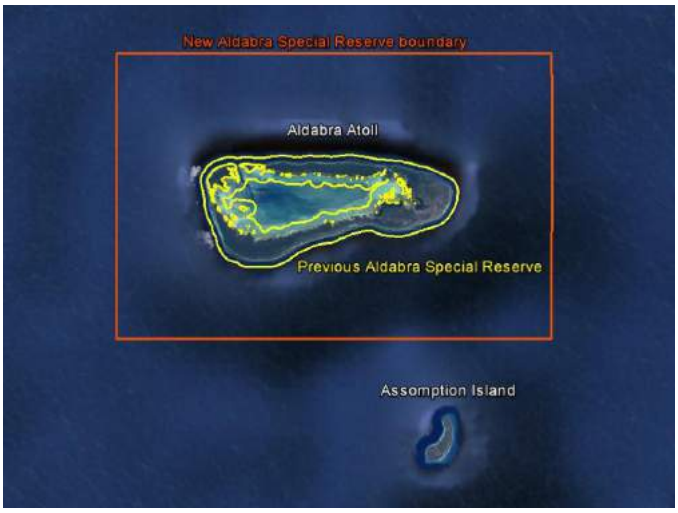
aldabra atoll

## Aldabra Atoll protected area substantially increased and strengthened!

In very exciting news, Aldabra Atoll's protected area zonation has officially been expanded under a new order of the National Parks and Nature Conservancy Act! Aldabra was first designated as a Strict Nature Reserve in 1976 under the Protection and Preservation of Wild Life Ordinance, of 1970, and then as a Special Reserve in 1981, but the marine protected area around the atoll extended to only 1km from the shore. SIF has been working towards motivating for the expansion since 2010, and it is one of the main outcomes of the major reef mapping exercise which took place from 2013 to 2015 as part of the GEF-UNDP Protected Area project. This project revealed that Aldabra's reefs extended much further than 1km on its eastern coastlines covering an area of 3.5 km2, approximately the size of 500 football pitches. We discovered a reef area rich in marine life, including commercially valuable species such as sharks, large groupers and snappers, significant hard and soft coral deposits and structurally rich habitat, warranting an increase in the area under protection.

*West channels of Aldabra Atoll © Adam Plezer*

In addition, the biodiversity-rich deeper reef and open water areas close to Aldabra were found to be in need of protection, which is provided under the new order. In addition to the scientific input of the reef mapping exercise, the motivation for the expansion included extensive stakeholder consultation and engagement, including with the National Assembly. The expansion means that the Aldabra Special Reserve has been enlarged from 439 km2 to a massive 2,582 km2. The size of the Special Reserve is significant because this is the area that SIF is mandated to manage and protect.




*Aldabra Special Reserve before and after © SIF*

In addition to the expanded area the Protected Area project also led to the establishment of the current marine monitoring programme on Aldabra, which is just one of the ways that SIF is ensuring that the Special Reserve is more than just a name, but is actively and effectively managed.


*Aldabra Group Marine Protected Area before, and as per the extension proposed by Marine Spatial Planning © SIF*

The Aldabra Special Reserve is embedded within the Aldabra Group Marine National Park and concomitantly, under the same act, the cabinet of Ministers have approved the National Park to be expanded from 71,612 km2 to 177,479 km2, and the Seychelles Marine Spatial Planning is continuing consultation with all stakeholders. The next step will be for the expansion to be gazetted. Once finalised this massive expansion will give the protected area 13% coverage of the Seychelles Economic Exclusive Zone, making it the largest in the country. The Aldabra Group Marine National Park is a result of the Seychelles Marine Spatial Planning, a process focused on planning for, and management of, the sustainable use and health of the Seychelles territorial waters, and this expansion is part of the second phase. The National Park includes the entire Aldabra Group of islands, which is Aldabra, Assomption, Cosmoledo and Astove. In order to govern the management of this new national park effectively the next important step will be to develop the regulations for this extensive area.

These two expansions showcase how scientific evidence is used to inform and advise management strategies and policies for Aldabra. The expansion of Aldabra's protective status is a milestone and demonstrates the government's commitment towards the continued protection of this universally outstanding treasure.

## Marine monitoring reveals impacts and recovery of 2016 bleaching

The Aldabra reef monitoring programme aims to deliver information on trends in reef biodiversity in a system with minimal human impact, serving as a unique baseline in which to monitor global stressors such as climatic change, disentangled from local stressors such as fishing pressure or pollution. Over the last six years the monitoring programme has recorded substantial changes occurring on the Aldabra reefs; in 2016 the global bleaching event saw a 52% reduction in overall hard coral cover across the atoll. Since then the staff have been observing and recording the changes that are ongoing.

This year, two and a half years since the global bleaching event, the observations made by staff were at times both shocking and marvellous. With just their eyes as a measure it is clear that there are huge changes ongoing at some of the Aldabra reef monitoring sites, increased macro algae being the most noticeable with north-west Aldabra coral reefs seemingly becoming algae reefs. These algae covered reefs are taking up precious space and therefore out-competing with the corals that would otherwise settle and grow there. Whilst this sounds very bleak there are also causes for optimism; coral take time to recover their health after bleaching, and coral spawning and subsequent recruitment pick-up again two to three years after the bleaching event, we are now recording an increase in coral recruitment around the atoll.

*The deeper reefs of Aldabra are thriving with corals, here is a terrace of porites and pachyseris, interspersed with large gorgonian fan corals © April Burt*

Secondly, there are some incredible places on Aldabra that survived the 2016 bleaching and thrive with up to 100% coral cover. These places are vital for the survival of Aldabra's reefs and may even play a larger role in the regional coral reef trajectory. At 25m depth, right in front of the research station there is a sloping reef and drop off that is 100% covered in encrusting corals and gorgonian sea fans; another incredible place inside the lagoon is dominated by large old colonies of the brain coral platygyra, whilst at the back of Passe Gionnet, one of the channels into the lagoon, around one of the Frigatebird islands is one of the most incredible and beautiful places imaginable, with goniopora stalked corals in a carpet which reaches right up to the very roots of the mangroves plus an abundance of the now rare branching acropora coral. Why are these places special? Why did they survive the temperature onslaught and what can we learn from them? This is what we must find out and is just one of the reasons that studying Aldabra's reefs is vitally important.

*An eagle ray glides over fields of goniopora coral, which covers this channel, it is rare to see corals growing right up to the very roots of the mangroves © April Burt*

## Aldabra Clean-Up Project making progress on all fronts

December was another tremendous month for the Aldabra Clean-Up Project with the team announcing in time for Christmas that its fundraising target was surpassed! This outstanding feat was only possible through the staggering response and support of people, organisations and corporations in Seychelles, the United Kingdom and around the world. An enormous thank you to them and you, our supporters, who have been following along and sharing the cause with your families, friends and networks. Our target was achieved in December through several large donations. Raffles Hotel had previously donated SCR 50,000 to the project, and they went even further in December by donating a further

PONANT

Schroder Charity Trust

SCR 40,000. This has been added to the SCR 250,000 donated by MCB and the SCR 100,000 donated by Cable and Wireless (see September newsletter). The Schroder Charity Trust donated £5,000 and Ponant Cruises became an international Gold sponsor with a contribution of £50,000! The Schroder Charity Trust is an independent grant-making Family Trust that has been supporting a broad range of charitable and voluntary actions in the United Kingdom and internationally over 70 years and we are very honoured to be supported by this generous organisation. Ponant Cruises is a world renowned French cruise operator that offers luxury excursions across the globe and visited Aldabra this month with its futuristic ship Le Perouse. We are over the moon with these contributions and are determined to deliver on all our goals. With any extra funds raised we are working on several additions to the project to bolster and consolidate its legacy so continue to watch this space!


*Breakdown of funds received © SIF*

While on Aldabra the clean-up team will be mostly based at the remote field camps around the atoll, and with only a few weeks before the 22nd February arrival of the volunteers at Aldabra it has been essential to ensure the field camps of Cinq Cases, Takamaka, Dune Jean-Louis and Dune d'Messe are in good conditions and well stocked with food and water. This has meant delivering non-perishable food supplies and building materials for the Aldabra team to install water tanks, and conduct building repairs and renovations to guarantee enough water and space for the volunteers, who will be based on these camps for up to 11 consecutive days. To help the team with the preparations, as well as discuss and finalise the expedition's schedule, project officer Jeremy Raguain was based on Aldabra for most of the month.

*The camp at Dune Jean-Louis has had a new water tank installed and the roof extended © SIF*

April Burt, the project's Oxford lead and former Aldabra science coordinator, was also on Aldabra in December collecting coral samples for her PhD research. She has also been conducting a series of preliminary beach surveys and finalising Aldabra Clean-Up Project's research protocol. These initial surveys have been carried to quantify the amount of marine debris currently on Aldabra, its composition and its accumulation rate. She has also been investigating the species that are arriving attached to the plastic debris. Initial results show that by weight, fishing gear, ropes and buoys are dominating the accumulated debris on the south coast whilst consumer items such as bottles and flip-flops account for a large portion of the composition on the north coast beaches. Excepting fragments of items, flip-flops are by far the most abundant item found on all beaches. On a 100m metre stretch of Settlement Beach up to 5kg of marine debris is arriving daily at the moment! This is a big eye-opener for us and really helps us understand the problem better so we can find meaningful and long-lasting solutions.

On the outreach and awareness front, April has been awarded the prestigious WINGS World Quest Flag for the project. Carrying the WINGS Flag means she will be flying the symbolic flag for women in science and exploration. The WINGS World Quest stipulates that the expedition is to be undertaken with the goal of enhancing our knowledge of the world while being mindful of the peoples and environments you encounter. December also saw the Seychelles volunteers host a group of enthusiastic scouts for a night at the Natural History Museum. The staff of the museum opened their doors to the team and joined in the activities which included fun icebreakers, scavenger hunts, a screening of *A Plastic Ocean* followed by a discussion on how society can and must change its habitats to safeguard our oceans.

*A night at the Natural History Museum © SIF*

**The SIF Newsletter can be downloaded at www.sif.sc/downloads, or subscribe to the mailing list at www.sif.sc**

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