SIF News Letter

seychelles islands foundation

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Team survey Assumption for remaining Madagascar Fodies

The survey team spent three weeks walking the island looking for signs of Madagascar Fodies © SIF

A team of four staff from Aldabra visited Assumption Island this month to undertake a comprehensive survey of the island for any signs of the introduced Madagascar Fody.

The Assumption survey team © SIF

SIF started a programme on Assumption in 2012 to eradicate the population of Red-Whiskered Bulbuls and Madagascar Fodies, as both of these introduced species presented a threat to the endemic avifauna on Aldabra. At the beginning of the project there was an estimated population size of 3017 Madagascar Fodies and 4032 Red-whiskered Bulbuls on the island. The team used a combination of methods to eradicate the birds and in December 2014 it was confirmed that the last Red-whiskered Bulbul had been eradicated from Assumption. In January 2015 it was estimated that there was 1-3 fodies (either females or juveniles) remaining on the island. There was a concern that if they were juvenile birds, one of them could be a male, which would have greater implications for the success of the eradication. Intensive surveys conducted in March and April 2015 however, did not find any trace of these birds.

SIF attend premiere of Aldabra 3D film

SIF Chair Ambassador Loustau-Lalanne at the premiere © SIF

The long-awaited premiere of the 3D film 'Aldabra: Once upon an Island' was screened in Prague, Czech Republic on 19th November. SIF Chairman Ambassador Loustau-Lalanne and SIF CEO Dr Fleischer-Dogley were in Prague to attend the first showing of this new and exciting film that truly brings the wonders of Aldabra to life.

'Aldabra: Once upon an Island' was the third most watched film nationwide on its opening weekend in Prague with over 1500 paying visitors. After its worldwide premiere in Seychelles the film will be released in cinemas in the USA & Canada following by UK, France, Germany, Italy, Poland, Russia, China, Korea, Japan and the rest of the world. The date for the premiere in Seychelles is not confirmed yet but hoped to be released shortly.

The crew from Starlite films filming on Aldabra © R Baxter

The 73 minute long film was produced and directed by Czech film company Starlite Pictures in collaboration with Disney. The film is described as '*An adventurous 3D expedition to the shores of a mysterious island lost in the waters of the Indian Ocean. To an atoll, which has stubbornly rejected human life yet is home to a community of exotic animal characters and their entertaining tales. Cross your fingers as turtle hatchlings tumble into lethal shallows teeming with hungry sharks. Gaze in wonder at the world's largest terrestrial crabs clambering up palm trees in search of juicy coconuts. Hold your breath in awe as a giant grouper fearlessly guards an ancient shipwreck against all comers. Discover how the giant prehistoric tortoises live together with their babies. Explore an island, which has risen from the sea only to be engulfed once again by ocean currents*

7th breeding season starts for Seychelles Black Parrot monitoring programme

A Seychelles Black Parrot displaying the characteristic pale beak indicative of their breeding status © SIF

The SIF Seychelles Black Parrot (*Coracopsis barklyi*) breeding season monitoring programme has been running since 2009 and this month heralded the start of the 7th breeding season.

The research under this programme has been conducted by several members of Vallée de Mai staff in previous years and this year is no different. Black parrot expert and Vallée de Mai Ranger Terance Payet leads the team again this season, and he is ably assisted by field research assistant Mariette Dine, fieldworker Tessa Anthanase, and volunteers Indra Behren and recent SALS (School of Advanced Level Studies) graduate Brian Souyana. The team will be monitoring the breeding success of the black parrot once again to build up a long-term picture of the reproductive behavior and success of this endemic bird.

This month the team have been looking for potential or active nest sites that the black parrots may use. The parrots prefer to nest in the trunks of dead Coco de Mer trees although nests have also been recorded in other tree species such as palmis as well. The areas covered by the team are the same as the previous season and include the Vallée de Mai, Fond Peper, Praslin National Park, Glacis Noire, Fond Ferdinand and Zimbabwe. These are areas that have been actively used by the Seychelles Black Parrot for nest sites in previous years. The aim is also to compare the breeding activity in the Praslin National Park and Zimbabwe areas with the Vallée de Mai, Fond Peper, Glacis Noire and Fond Ferdinand.

During the team's search of these areas a number of potential nest sites have been tagged and will be monitored for nesting activity throughout the season. Many of the parrots already have a pale beak and are vocalising their breeding calls indicating they are ready to breed. So far no eggs have been found but we will keep you updated on the team's progress throughout the season.

Celebrating the sea on Praslin

The team made sure to check the sinkholes on Assumption for any signs of fodies © SIF

This month at the start of the landbird breeding season a team of four Aldabra rangers, all experienced in invasive avian species eradication, spent three weeks on Assumption completing an extensive search of this island. Using both point count methods and walking sweep surveys the team covered the whole island several times, spending additional time observing in areas where the last Madagascar Fodies were seen. The team also searched each sink hole on the island as this is where the fodies prefer to nest. The team have happily reported that no sight or sound was made of any Madagascar Fodies during their survey. This suggests that now, nearly four years since the eradication began, Assumption no longer has a population of either Red-whiskered Bulbuls or Madagascar Fodies. Further surveys will be undertaken later this breeding season to confirm this, but we look forward to being able to declare the eradication project a success.

Landbird breeding season underway at Aldabra

Souimanga Sunbird nest © P Haupt

The monitoring of Aldabra's nesting landbirds is well and truly underway this month and the research team have been excited to discover several nests.

The landbird breeding season occurs on Aldabra during the northwest monsoon season, beginning in October/November and ending in March. So far the team have located and are monitoring nests of the Souimanga Sunbird, Aldabra Fody, Aldabra Rail, Madagascar Nightjar and Aldabra Drongo nests. They will also be looking out for nests of the Madagascar White-eye, Madagascar Bulbul, Madagascar Turtle Dove, Comoros Blue Pigeon, Madagascar Kestrel and Madagascar Coucal. Of all the landbird nests the Souimanga Sunbird nests are certainly the most impressive. These incredible creations are constructed from intricately woven materials, including grass, coconut frond and even man-made materials such as string. The sunbird then lines the inside of the nest with soft materials such as feathers, creating an impressive and comfortable place to lay their eggs.

Aldabra Drongo on its nest © SIF

Throughout the breeding season the rangers monitor all landbird nests found on Picard. Each nest is tagged and numbered as it is being built, and then observed every other day in order to accurately record the progress and outcome of each breeding attempt. This is one of the most incredible jobs for the research team, and visiting each nest and checking on the chick's progress is a wonderful start to the day! This monitoring programme aims to increase the knowledge of the

and rising seas. Discover Aldabra before it's lost!' SIF Chairman Ambassador Maurice Loustau-Lalanne said of the film, 'This 3D movie is unique in that it is for the whole family to enjoy, not just scientists, environmentalists and conservationists. Rather than actors, we have our own iconic animals of Aldabra leading the story, making it better than a wildlife documentary any day.'

The crew had to be inventive in order to film at some of the locations © R Baxter

With the support of SIF, the film crew from Starlite Pictures visited Aldabra in 2012 to undertake the complex and difficult process of obtaining footage for the film. As would be expected of filming in such a remote and hostile location there were many set-backs, including complications with the expedition vessel and sourcing the required escort of seven armed bodyguards (due to piracy activities in the area at the time). Of course there was also various situations regarding the technology and logistics of filming, for instance being in a lagoon full of sharks and one of the world´s fiercest tidal rips. With the excellent support of the SIF staff on the atoll however, the film crew successfully captured many of the unique flora and fauna of the atoll and the production of this film was underway. A film that includes powerful scenes such as the dramatic birth of green turtle hatchlings and their courageous dash through the shallow coastal waters that are teeming with predators. Audiences can look forward to exciting scenes such as this and much more in Aldabra, the 3D wildlife adventure feature produced by Starlite Pictures.

More details on the film and a trailer can be found at www.aldabra3D.com

Five illegal vessels intercepted at Aldabra

An illegal vessel intercepted off Aldabra © SIF

Following on from the report in the October 2015 issue of the SIF e-newsletter of illegal vessels being spotted in Aldabra's waters, there has now been five illegal vessels intercepted near Aldabra.

The first boat was intercepted when staff from Aldabra were making a crossing from Assumption to Aldabra. There was three men seen on board, and they were fishing within the boundaries of the Aldabra marine protected area. It was intercepted by SIF rangers with the help of three Seychelles Coastguard officers who have been based on Aldabra for the last month. These officers have been accompanying SIF staff on their research and activities around the atoll and on crossings to Assumption to transport SIF staff, after the initial suspicious activities were detected. In the following days a second, third, fourth and fifth fishing boat were then intercepted. A total of 19 fishermen from the five different boats have been detained by Seychelles Police. These fishermen are thought to be citizens of neighbouring Mayotte and the Comoros. After police officers gathered evidence and statements, all of the 19 fishermen were transferred to Mahé where they are being detained while the investigation into the reported illegal fishing incidents continues.

Proudly wearing their shark headbands © SIF

Even though the national Seychelles Oceans Festival was cancelled due to the general election, SIF coordinated an event with the Environmental Education Unit at the Ministry of Environment, Energy and Climate Change for children from the schools on Praslin.

The children taking part in the arts and crafts activities © SIF

The event aimed to celebrate the oceans through various sports, crafts, and educational activities. In conjunction with GVI Seychelles, Seychelles National Parks Authority (SNPA) and the Ministry, SIF organised several activities for a group of children on Cote d'Or beach, Praslin. One of the topics was sharks and there were several activities to sensitize the children on the different shark species found in Seychelles and their biology. The children were pleased to learn that the shape of sharks' teeth is related to the prey that they eat and in one activity they had to try to match the sharks tooth to its diet. To show their love for sharks the children also made their own shark headbands which they proudly wore all afternoon.

The children made turtle hatchlings from old plastic bottles © SIF

The children then learned about another key marine species, sea turtles. They played a fun game where they had to lay their own eggs (!) and they also used old plastic bottles to make their own sea turtle hatchlings. Other activities included face painting, and snorkelling with the SNPA staff. All participants went home with a little present they had received from the games they had participated in and the craft work that they had produced themselves.

PhD on caecilians and Seychelles Tree Frog completed

A Grandisonia sechellensis caecilian found in the Vallée de Mai with an egg clutch © S Maddock

Simon Maddock, a PhD student from University College London and the Natural History Museum, London, has recently completed his doctoral thesis on the evolution of the Seychelles Tree Frog and Seychelles caecilian species. During his field work Simon collaborated with SIF to undertake research at the Vallée de Mai.

Titled 'Systematics and Phylogeography of Seychelles

long-term reproductive success and failure of Aldabra's landbirds, helping to assess the impacts of potential and actual ecological changes and when to make conservation decisions and interventions.

Long-term monitoring of landbirds on Aldabra Atoll indicates increasing population trends

One of Aldabra's endemic landbirds, the Aldabra Drongo © SIF

An SIF-authored paper was published this month in peer-reviewed journal Bird Conservation international on the status of Aldabra's landbirds. The paper used data from SIF's long-term landbird monitoring programme from 2002 – 2013 where monthly surveys were conducted at seven locations around the atoll.

Population trends of seven landbird species from Aldabra were evaluated and showed that six of these species were increasing in abundance (Comoros Blue Pigeon, Madagascar Turtle-dove, Madagascar Bulbul, Aldabra Fody, Souimanga Sunbird, and the Madagascar White-eye). The seventh species, the Aldabra Drongo, remained stable over this time period. The increase in abundance ranged from 83-100% in the 11 year period, which may indicate that at the start of the surveys in 2002 the landbirds were recovering from a disturbance still to be identified. Some of the landbird species seemed to be affected by climate, for example in years with more rainfall the abundance of the Souimanga Sunbird increased. Other species showed seasonal behavioural changes, e.g. Aldabra Fodies became more vocal during breeding seasons, which meant that they were more obvious to the observers and more likely to be counted during the monitoring session.

The Comoros Blue Pigeon © SIF

An important outcome of these findings is that revisions to the long-term landbird monitoring programme are required. One of the suggestions is to record additional information on the ease of detection of different species during the monitoring session, as this can have an impact on the accuracy of the data recorded. This 'detectability index' will be developed further by SIF, with trials of the new methodology expected next year.

The link to the paper is: http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=10018397#. It is not open access so please contact Janske van de Crommenacker (janskevandecrommenacker at gmail.com) should you wish to have a copy.

The full citation for the paper is: van de Crommenacker, J., Richards, H., Onezia, C., Mahoune, T., Haupt, P., Accouche, W., Fleischer-Dogley, F. and Bunbury, N. Long-term monitoring of landbirds on Aldabra Atoll indicates increasing population trends. *Bird Conservation International*, Available on CJO 2015 doi:10.1017/S0959270915000143.

The fish retrieved from the illegal vessels © SIF

Over one tonne of fish was retrieved from the boats and Aldabra remains vulnerable to the threat of illegal fishing activities which could severely threaten its protected marine ecosystem. SIF has requested for further assistance from the Seychelles Coastguard to send a vessel to patrol the Aldabra Group of islands.

Merry Christmas and a Happy New Year!

We would like to offer our sincere thanks to all of our supporters and followers in 2015. We hope that you have enjoyed reading our newsletter over the past year and we look forward to bringing you our next issue in January 2016.

SIF on Twitter!

Follow us on Twitter! As one of the top ten most used social media websites, Twitter offers us a chance to connect and share with a truly international audience. If you are regular Twitter user then you can find us under @SIF_Seychelles. For those of you new to this social media page why not sign up now? You can find the link to our page here, https://twitter.com/SIF_Seychelles, and can follow all of our latest updates and news.

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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 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!

Amphibians', Simon's PhD thesis investigated the evolution of the seven species of caecilian amphibians in Seychelles and the Seychelles Tree Frog across the granitic islands of the Seychelles. Much of Simon's research focussed on the distribution and population size of these species as well as looking for potentially new species. Simon and his colleagues visited the Vallée de Mai during three separate field research seasons between 2013 and 2015. During these trips they were excited to discover the caecilian *Grandisonia alternans* in the Vallée de Mai, which is the first verified record of this species on Praslin. Simon and his colleagues also worked closely with Charles Morel from the Natural History Museum Seychelles. Charles was designated as the caecilian fellow under the ZSL EDGE project and has been working to improve the knowledge and awareness of this group of species in Seychelles.

For some of his research Simon used genetic data from historical museum specimens of Seychelles caecilian species at the Natural History Museum, London and the University of Michigan Museum of Zoology. This research uncovered some significant genetic and morphological separation amongst and within the currently classified caecilian species. This indicated that there could be new undescribed species but further research is needed to confirm this status.

Simon during his fieldwork digging for caecilians © S Maddock

Although the Seychelles Tree Frog showed a variety of different colour patterns across the different islands of Seychelles, Simon found that it had conflicting genetic and morphological variation. This data suggests that the differences in colouration between islands does not represent the evolutionary history of the species, but instead seems to be more linked with environmental factors during their development.

Work on the Seychelles caecilians is still ongoing by Simon and his colleagues, but the discovery of distinct evolutionary patterns sheds an interesting light on the generation and maintenance of diversity within the Seychelles. It is clear that there is still much more to be learned about the evolution of the endemic caecilians, especially the true extent of their diversity within the Seychelles.