PRODUCTION TEAM

Adrian Skerrett

Born in Stoke-on-Trent, England, Adrian Skerrett has been resident in Seychelles since 1980 and naturalised since 1994. Adrian has authored or contributed to many books abut the country. He is a keen ornithologist and lead author of *Birds of Seychelles*, *A Checklist of the Birds of Seychelles*, *Zwazo Sesel: The names of Seychelles birds and their meanings*, *Where to Watch Birds in Seychelles* and *Beautiful Birds of Seychelles*. He is a member of the Editorial Board of *Silhouette*, the in-flight magazine of Air Seychelles, and a regular contributor of articles to this and *Seychelles Nation*. Adrian is also a businessman and a director of a several Seychelles businesses involved in shipping and tourism. He is Founding Chairman of Island Conservation Society, Founder and Secretary of Seychelles Bird Records Committee, country representative for African Bird Club and has served as a trustee for Seychelles Islands Foundation, Nature Protection Trust of Seychelles, Seychelles Heritage Foundation and Marine Conservation Society, Seychelles.

Telma Pool

Telma Pool was born on Mahé, Seychelles and educated at La Digue School before attending the National Youth Service and later the School of Humanities and Sciences at Seychelles Polytechnic and the School of Media Studies. Her professional training includes both television and radio production programming. She has worked in broadcasting for 20 years, producing programmes for Seychelles Broadcasting Corporation (SBC) covering a range of subjects including health, social and environmental issues. She has occupied various positions at SBC including as Senior Programmes Officer and Head of Radio Production. She has also worked on exchange programmes with other radio stations, including Radio Netherlands involved in English, French and Kreol productions and as a presenter of both radio and television programmes. In 2009, she joined Islands Development Company as Public Relations and Communications Consultant (IDC).

Judith Skerrett

Born in Stoke-on-Trent, England, Judith Skerrett has been resident in Seychelles since 1980. Judith is an historian and has produced the book *Pirates of the Indian Ocean* for Seychelles Heritage Foundation. She also writes novels including *Kael: The Body in the Bog* and *The Seychelles Story*. Together with her husband Adrian, she has produced eight other books about Seychelles, her work focussing mainly on historical and cultural aspects: *Spectrum Guide to Seychelles*, *Beautiful Plants of Seychelles*, *Beauty of Seychelles*, *Aldabra: World Heritage Site, Aldabra 9.24° South 46.1° East, A History of Paper Currency in Seychelles, Berlitz Seychelles Pocket Guide* and *Insight Guide to Mauritius, Reunion and Seychelles*. She has produced more articles for *Silhouette*, the in-flight magazine of Air Seychelles, than any other contributor.

The outer islands of Seychelles and Islands Development Company from discovery and settlement to conservation and tourism

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IDC LOGO

ISLAND CONSERVATION SOCIETY

Outer Islands of Seychelles

Outer Islands of seychelles

Zil Elwannyen Sesel

Adrian Skerrett • Telma Pool • Judith Skerrett

The Outer Islands of Seychelles tells the human and environmental story of these far fung islands for the frst time. Their history is fascinating and unique in the world yet they have remained virtually unknown not just to visitors to the country but even to the majority of Seychellois. They were discovered and charted by Arab, Portuguese, French and British sailors but their exact position and in some cases even their names remained unclear well into the 19th century, resulting in many a shipwreck. Eventually they were settled, becoming amongst the last islands on earth to receive human inhabitants. The people who toiled on the islands were isolated for months at a time, with no contact with their employers on Mahé or indeed the rest of humanity, like a satellite colony marooned on another planet. It was essential for survival that they were totally self reliant for all their needs from medical care and food to law and order.

This is a story of a way of life that appeared from nowhere, rapidly evolved and adapted to suit the requirements of an ever changing world and it continues to do so. Life could be harsh and sometimes short, with no possibility of assistance in the case of emergency such as an appendicitis, serious accident or even murder. Today, there are airstrips for emergency evacuation and satellite communications to maintain daily contact with the outside world. The islands are now managed by Islands Development Company. Without doubt the quality of life for islanders has been raised immeasurably, yet the islands and the special breed of person they attract to their shores remain much the same.

In Chapter One, local historian Kantilal Jivan Shah sets the scene with the story of the early exploration and settlement of the islands of the western Indian Ocean. In Chapter Two writer and historian Judith Skerrett traces the history of the outer islands from discovery and settlement through to the arrival of Islands Development Company, with a special focus on the copra industry. The story of Islands Development Company is related in Chapter Three by the man whose name has been synonymous in modern times with the outer islands themselves, Glenny Savy.

Chapter Four, by Adrian and Judith Skerrett is a Gazetteer of the islands which will be a useful source of reference for anyone seeking background information on the islands from their location, the origin of their name, their history and their fora and fauna.

In Chapter Five, Telma Pool and others interview islanders and those who provided their lifeline by air or sea. These accounts of daily life in the islands are stories that have never been told before, with amusing anecdotes, dramatic incidents, superstitions and the story of a distinctive culture. This human history may never have been told were in not for this documentation of their life and times.

Chapter Six is a miscellany of tales from the islands. There is the struggle to establish self suffciency on remote Astove, a giant tortoise who took an instant dislike to some invaders of his island home, the old way of life, turtle hunts, shipwrecks, murder and ghost stories. Chapter Seven documents the arrival of conservation awareness and the recognition of the need to respect the environment of these fragile islands. Finally Chapter Eight looks to a future, in which development, conservation and ecotourism will go hand in hand.

Despite all the changes wrought upon them, the outer islands remain some of the most beautiful islands in the world, epitomising the dream of untouched tropical splendour and an escape from the rat race, craved by many from the wealthier countries of the world. In a world where unspoilt beauty is an increasing rarity, the outer islands are priceless. They are among the last islands on earth where untamed nature rules supreme. With careful planning they may yet prove to be the tourism destination of the future, appreciated by a new kind of tourist and producing an income for Seychelles far greater than the workers that struggled to survive on the old coconut plantations could ever have imagined.

ISLAND RESTORATION

Dr Gérard Rocamora

The outer islands hold outstanding biological treasures that deserve to be preserved. In the southern islands and atolls, marine life is exceptionally rich and varied, thousands of turtles lay their eggs each year and huge seabird colonies offer unforgettable experiences to the rare visitors. No less than a dozen sites which host seabird or shorebird concentrations of international importance qualify as Important Bird Areas. The interest of outer islands for marine mammals, including dolphins and large whales, has also been shown. However, as in many other oceanic islands in the world, the arrival of man has caused severe ecological trauma.

All biological treasures need to be preserved for future generations, not just as wonders of nature or because of their role in the functioning of ecosystems, but also for the economic potential that they represent for Seychelles, mainly through the development of ecotourism in the case os Seychelles outer islands. Unfortunately, the problem of poaching and disturbance on turtles or seabird colonies remains a real problem, as well as the uncontrolled exploitation of fsh and other marine resources from passing vessels, especially on islands or atolls where there is no human presence to conduct some minimal surveillance. On Cosmoledo and Astove, for example, sharks have been almost exterminated, and full bodies thrown away after removal of fns. We must fnd urgently ways to re-establish a permanent presence on these islands and conduct some form of wardening to stop this pillage, set up baseline surveys and biodiversity monitoring schemes.

Fortunately, some of the damage that has affected the outer islands is reversible: it is possible to eradicate rats, cats and other introduced animals, to remove large extensions of coconut plantations and replant them with native trees, and bring back native birds, lizards, tortoises or invertebrates that used to be present on these islands.

Restoring the islands: eliminating rats and cats to reintroduce native species

In 2003, D'Arros became the first island of the Amirantes where rats were eradicated through a ground operation targeting the Norway rat, which is less arboreal than the smaller black or ship rat. In November 2007, as part of a four year programme co-funded by the *Fonds Français pour l'Environnement Mondial* (FFEM), ICS and IDC succeeded in eradicating black rats from three neighbouring islands of Cosmoledo: Grande Ile (143 hectares), Grand Polyte (21 hectares), and Petit Polyte (1 hectare). This operation was the first rat eradication in Seychelles conducted so remotely. In 2005, during the first one week expedition with 8 people on board of the *Lady Genevieve*, we had to abandon our initial plan to conduct a ground based operation due to adverse conditions including high rat densities, bad weather and logistic difficulties. We were forced to rethink completely our operation and came back with a helicopter able to perform two aerial drops of rodenticide pellets at eight days interval, as we had done successfully on several granitic islands as part of the same FFEM project. It took several months to prepare in detail this logistically complex expedition, which involved a barge carrying over 15 tonnes of cargo including equipment, food, water, raticide and fuel, plus a helicopter, and 20 people working continuously for three weeks. This included eight crew on the barge, a ground team of eight people, a coordinator on Mahé contactable through satellite phone, and three crew members of Helicopter Seychelles. The ground team worked intensively to install the helicopter fly marks, conduct rat trapping as well as bird, reptile and invertebrate monitoring. We were

Above: Systematic aerial spreading of raticide pellets on Grande Ile, Cosmoledo by Island Conservation Society and Helicopter Seychelles teams.

Opposite: The rat eradication team on cosmolado; From left to right Pierre-André Adam, André Labiche, Captain Rick Dooley, Gérard Rocamora, Roland Nolin and Carl Fanny.

accommodated in large tents on Grande Ile, an island with few trees and virtually no shade to escape the harsh sun, with meals and water provided from the barge by a small boat. To come to Cosmoledo and return to Mahé, the helicopter had to island-hop through Desroches, Alphonse and Farquhar, and it was at the very limit of its fuel autonomy! In case of adverse winds, the co-pilot would have had to go out to refuel the tank while in fight, using an extra reserve installed on the back seats! This was the largest and most challenging expedition I have ever conducted, and it could have never happened without the logistical capacity and full support provided by IDC. It was a beautiful example of what we can achieve in Seychelles when we all work together.

During a brief visit a few months later, when the cruiseship *Le Ponant* called at Cosmoledo, there was no sign of rats in the 30 bait-stations with raticide blocks that we had installed around the areas used by people to disembark and set up camps. In November 2008, we were fnally able to confrm the success of our rat eradication after an intensive week of trapping over the whole islands, during which, to our great relief, no rats were caught. It also became apparent that the cat population had been signifcantly reduced in the process, and no cats at all were found on Grand Polyte. This second stay was made possible thanks to the logistical support of the *Indian Ocean Explorer* and its crew, sadly captured by pirates on their return from Cosmoledo to Mahé a few months later. The crew fnally returned safely to Seychelles after three months of captivity but the boat was sunk by the pirates. We were very lucky not to be on board, as we were supposed to, when the boat was captured ! Unfortunately, we were unable

Above: The rat-free island of Goëlettes, Cosmolédo atoll hosts important seabird colonies.

Opposite: The sooty tern colony of Goëlettes, Farquhar (about 350.000 pairs).

to conduct another expedition to eliminate all remaining cats due to the threat of piracy, but the time will come. Then, we should be able to translocate to Grande Ile and Grand Polyte some of the rare turtle-doves still surviving on neighbouring Ile du Sud-Ouest.

Rat eradications will eventually be conducted on Alphonse and Desroches. Being islands with an hotel and a human population, strict abatement measures, inspired from the ones designed for North Island as part of the FFEM programme, will have to be applied to prevent reinvasion. These include a strict control of all incoming goods, the use of a rat proof room and fumigation of all cargo that cannot be checked visually in the rat proof room. The eradication of cats is also planned on both islands, plus the elimination of wild chickens on Alphonse. The five year management plans prepared by Alphonse Foundation and Desroches Foundation also aim to progressively rehabilitate the vegetation on a significant proportion of the islands. On each, a nursery of native trees has been established and the first plantations of saplings to replace coconuts have commenced. Translocations of the endemic Desroches cockroach will be considered towards other parts of the island having benefited from habitat rehabilitation and also to other neighbouring coralline islands. On Alphonse atoll, the endemic red-headed race of Seychelles turtle dove (*rostrata*) that once occupied the granitic islands before becoming genetically diluted with the grey headed Madagascar form, could be reconstituted from crossings of red-headed individuals, some of which can still be found on islands like Aride or Denis. Grey headed turtle doves present on D'Arros and Rémire would probably not be able to reach Alphonse, more than 200 kilometres away, and interfere with the selection process. So Alphonse sould be the best place for trying to 'resurrect' and establish a wild population of the red-headed Seychelles turtle doves. The Aldabra rail, a species present only on Aldabra, should also find suitable habitats on rat and cat free islands of neighbouring Cosmoledo, but probably also on Alphonse and islands of the Amirantes. After a

canopy broad leaf forest of 30 to 40 hectares becomes established, transfers of additional landbird species such as the Seychelles magpie-robin, which once used to be present on Alphonse, the Seychelles warbler or other rare Seychelles endemic birds can also be considered in certain rat and cat free islands of the Amirantes.

The total rat free area of the outer islands in 2009 was about 700 hectares or 3.2 percent of the territory. Although rats have never been eradicated so far from tropical islands larger than 250 hectares, we have high hopes to increase this size limit in the near future, Desroches being already considerably larger at 394 hectares. Considering that it should be possible to eradicate progressively islands or atolls of larger size, such as North and South islands on Farquhar (over 700 hectares) or even Assumption (over 1,000 hectares), the total rat free area of the outer islands could be increased dramatically over the years by eradicating rats and cats from another 12 islands, and brought up to more than 5,200 hectares, representing 24 percent of the total area of the islands. This would definitely contribute to make Seychelles the country with the highest percentage of its territory free of invasive rats and cats (15 percent when we add the few small inner islands that could also be freed from rats and cats), and a recognised world leader for island restoration achievements. The time frame necessary to undertake this task will depend on our speed to find the necessary funds to conduct these operations, but also to establish the long-term wardening and efficient abatement measures to prevent reinvasions.

Establishing partnerships and financing mechanisms

When we created ICS in 2001, one of our main objectives was to rehabilitate the outer islands in partnership with IDC. By 2009, we had established Island Conservation Centres with permanent ICS teams on both Alphonse and Desroches. Island foundations grouping the various partners involved and tourism operators on these islands have been created to fund conservation and monitoring activities, and similar foundations are now being developed for other islands including Farquhar and Silhouette. The principle is that tourism infrastructures are allowed in certain parts of the islands, while the areas with highest biological value remain preserved from alterations and developments and benefit from habitat restoration and conservation activities. IDC has played a key role in this process bringing together government representatives, developers from the private sector and ICS as a conservation NGO to work together towards a shared goal.

Much still remains to be done. The task is huge and we are probably moving too slowly compared to the threats faced by some of the islands, especially Cosmoledo and Astove. Nevertheless, we have made a good start and given a good example of what can be achieved through partnership. But partnerships are never straightforward, especially when they involve several more than twopartners. They need to be built and shaped over time until the best possible mutual benefits can be achieved for each partner, just like a symbiosis between two or several wild creatures. Partnerships require good communication between partners, sometimes compromises, and understanding in times of difficulties. I strongly believe that, in the field of conservation, there is no other choice than to move forward and to make such partnerships work. Scientists and conservationists working alongside developers and island managers is not always easy and is also part of the challenge. Since its formation in 1980, IDC has progressively moved from copra industry and fishing to tourism and conservation, a good example of adaptation in a changing world where sustainable development and nature conservation must be the rule.

So let us hope that we can all continue to work together for many more years to come, and succeed in this challenge of preserving the wonderful biological treasure that the IDC islands represent, for the people of Seychelles and for our planet as a whole.

The ecological importance of small islands

The diversity of living creatures, also called biodiversity, is not equally distributed on earth. During the last 15 years, international conservation organisations have shown that a high proportion of it is concentrated in a limited number of hotspots. Seychelles belongs to one of them (Madagascar and neighbouring islands) and tropical oceanic islands in general occupy an important place in this list. Islands have developed in limited territories assemblages of unique species, called endemics, and ecosystems which have evolved in complete isolation from continental faunas. This explains the great fragility and vulnerability of islands to the ecological trauma that followed their colonisation by humans. All together, islands are home to about 20 percent of the known diversity of plants and animals but represent only about 2 percent of the area of the planet. Having little or no natural predators, small oceanic islands generally support large concentrations of seabirds, turtles or marine mammals. Predation by man of fearless and defenceless animals, destruction of natural habitats generated by forest clearing and wetland reclamation, introduction of exotic plants, animals, and diseases which have decimated native faunas through predation or competition, all this is the classic scenario of the huge ecological trauma suffered by most oceanic islands around the world. As a result, over 90 percent of species that have vanished from earth have taken place on islands, and these host a large proportion of species (birds, reptiles, amphibians, plants, etc.) considered threatened with extinction. But small islands can play a great role to partly reverse this trend. Because of their limited size, they can be restored by eradicating or controlling invasive plants and animals, replanting native trees and recreating natural sanctuaries where threatened species and concentrations of marine animals can thrive once again. This is why the islands managed by IDC represent a real biological treasure for the Seychelles and the Indian Ocean.

Above left: Forestry workers of Division of Environment undertake eradication of sisal on Grand Polyte, Cosmoledo.

Above right: Hand-made bait stations with raticide blocks are installed on landing sites on Grande Ile, Cosmoledo to prevent re-invasion of rats.