



Net capture

Helibird box

Nest with chicks

### Reintroduction of rare & threatened species

A minimum of nine reintroductions or conservation introductions of rare and threatened native birds, reptiles and invertebrates are expected: Seychelles White-eye and Seychelles Terrapins on North Island (2007); Leaf insects, Giant millipede and Giant tortoises on Conception (2008), Cosmolédo Turtle doves on Grande Ile (2009), etc.. Other invertebrates like native snails or stick insects, and bird species are also being considered. Habitat assessments for additional reintroductions will also be conducted, like for the Seychelles Black Parrot for which specific studies are being conducted.

### Scientific monitoring

Intensive monitoring of the transferred species as well as long term monitoring of the ecosystem and its biodiversity (vegetation, birds, reptiles and invertebrates) have been started in each of the rehabilitated islands, with the participation of students and volunteer graduates from foreign universities.



Seychelles Leaf Insect

Malaise trap

Vegetation measures

Terrapin

Black Parrot

Health Screening

### Improving wardening & ecotourism

Ecotourism generates funding for conservation. On Aride, actions to improve wardening and increase revenue from visitors are conducted (helistop, visitors center, leaflets, hotel surveys, boat chartering, etc.). On Conception, a helistop has been built and basic facilities have been renovated. On Cosmolédo, houses will be built to accomodate conservation rangers and scientific staff on Grand Ile and Menai. Permanent wardening is expected to start with the development of small scale high class tourism on Menai (far from rat free islands). In each case, a management plan is being written or updated to integrate rehabilitation and monitoring activities. The establishment of a protocol for the public to access rat free islands is being discussed and will be proposed as a national regulation.



Helistop

Cruise ship

Guided tour

### Building local capacity

Several Seychellois and foreign university students are conducting their Masters or PhD under the project. Specialised training courses are conducted on identification and monitoring techniques for birds, plants, invertebrates, and island rehabilitation techniques in general. Day to day training on the activities of the project is provided to local staff, including naturalist guides and lecturers. Project outputs are valorised through participation to international conferences and writing of scientific and popular articles.



Net capture

Bird ringing

Training session

Grande Ile (Cosmolédo)



#### Local partners



#### Scientific institutions



#### Foreign Sponsors



#### Local Sponsors



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# REHABILITATION OF ISLAND ECOSYSTEMS

Conception Island



Giant turtle

Bois Cuillère

Seychelles White-eye

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## Restoring small islands to recreate wildlife sanctuaries

As all oceanic islands around the world, the Seychelles have suffered a huge ecological trauma after humans colonised them, especially from Alien Invasive Species. Such damages can now be efficiently reversed in small islands, to recreate conditions where seabirds, turtles and the most endangered endemic wildlife can thrive again. This is why small islands need to be treasured. During the last decades, a handful of islands (like Aride, Cousin, Cousine, Frégate) have benefited from intense rehabilitation activities. The availability of predator free islands with suitable natural habitats is still a limiting factor. In 2004, only seven islands of more than 10ha were rat-free in the inner Seychelles.



Masked booby colony on Cosmolédo

Cosmolédo has outstanding coral reefs and marine life, including wildlife concentrations of international importance: nesting Green Turtles, largest seabird colony (Sooty tern) in Seychelles (9 species meeting international criteria) and the largest booby colony in the western Indian Ocean (Red-footed Booby, Masked Booby & Brown Booby). Three endemic forms of land landbirds typical of Cosmolédo are still present (Madagascar White-eye, Madagascar Turtle-Dove & Souimanga Sunbird) and five additional native species that became locally extinct can be reintroduced from Aldabra.

## Eradication of introduced predators

In 2005, ICS and North Island succeeded in eradicating Black rats *Rattus rattus* from North Island. This is probably the largest high (non flat) island where this species has been eradicated in the tropical world. On Mahé, control of rats is done over 20 ha at the properties of the UAE President, to prevent nest predation on the main sub-populations of the endangered Seychelles White-eye. A similar system was set up by ICS to eradicate rats on Anonyme Island (10ha). The eradication of Norway rats on Conception will bring the increase of the rat free area in the inner Seychelles (+300ha) to nearly 50%. This brings as much potential for the restoration of the country's endangered fauna and flora. For each island, strict protocols for loading and landing materials are implemented to prevent reinvasion.



Rat eradication by helicopter

## A four year project co-funded by FFEM

This programme has 5 major components and its budget is 1.3 million euros, with 33% provided by the Fonds Français pour l'Environnement Mondial (French Global Environment Facility). It is implemented in collaboration with a variety of local partners: private island owners, Ministry of Environment & Natural Resources (MENR), Island Development Company (IDC) and local NGOs. Other partners include private foreign and local companies, foreign research institutions and foreign NGOs. The programme is led by the Island Conservation Society (ICS).

The project started in 2005 and focuses on 5 islands. In the inner granitics: North Island (201ha), private island with an exclusive 11 villa resort and firmly committed to rehabilitation ([www.north-island.com](http://www.north-island.com)); Conception Island (69ha), an uninhabited private island stronghold of the endangered Seychelles White-eye; and Aride Island (70ha), the largest and richest nature reserve of the archipelago, managed by ICS ([www.arideisland.net](http://www.arideisland.net)). In the outer coralline islands: Grande Ile (160ha) and Grand Polyte (20ha), on Cosmolédo, a remote uninhabited atoll of the Aldabra group and largest unprotected biodiversity hotspot in Seychelles. Additional activities are also conducted on Anonyme and Frégate (home to small five star resorts), Praslin and Mahé.



## Vegetation management

In each island a vegetation management plan taking into account the needs of the animals to be (re)introduced is being produced or updated. Invasive alien plants are eliminated, and native trees saplings produced by North Island and MERN nurseries (min. 5000 per year) are planted. This includes thousands of trees producing berries preferred by the Seychelles White eye, and trees rich in invertebrates. Habitat restoration is also ongoing on Aride, and the island endemic Wright's Gardenia *Rothmania annae* is closely monitored. On Grande Ile and Grand Polyte (Cosmolédo) the invasive Sisal will be eradicated.

In total, 80 to 100ha are expected to be rehabilitated between the different islands. The Plant Conservation Action Group is responsible for advising North Island landscaping team and for conducting long term vegetation monitoring in collaboration with the Zurich Geobotanical Institute. Workers from the forestry section will be helping with vegetation management activities on Anonyme Conception, and Cosmolédo.



The **Rehabilitation of Islands Ecosystems** programme aims at restoring more islands through eradication of introduced predators, control of invasive plants and replanting of native vegetation, and reintroduction of species rare or threatened with extinction. Its development goal is to promote ecotourism and reinforce local capacity in the study of fauna and flora, and the sustainable management of islands. It also wishes to develop in various situations rehabilitation techniques that can later be applied elsewhere, and to investigate long term impacts on biodiversity through scientific monitoring.



Introduced Indian mynas and Barn owls are being eliminated from North Island and Aride Island using various techniques (shooting, trapping, selected poisoning). Black rats and wild domestic cats will also be eradicated from Cosmolédo. All eradications are being conducted with precautions to minimise risks for non target species.