



Conservation of Turtle Rookeries through Community Involvement



Four¹ of the seven marine turtle species of the world, are found in the Seychelles, two of which nests in the Seychelles, the hawksbill and green turtle. The hawksbill tends to nest in the inner islands while the green turtle nests on the outer islands. Seychelles has the fifth largest population (approx. 475-575 females) of the critically endangered Hawksbill and the sixth largest population (1000-2000 nesting females) of the endangered green turtle.

Threats

There are two major types of threats to marine turtles. Firstly, marine related (commercial fishing (by-catch), offshore oil and gas exploration, ingestion of marine litter) and secondly, terrestrial related threats, in particular, the impact of coastal development on nesting sites is significant throughout the Indian Ocean Region. Marine turtles have a high affinity for their nesting beaches. The loss or reduction of even a single nesting beach can have serious consequences on future populations. The key terrestrial threats to turtle nesting habitats are:

- **Beach development**- increased human presence through residential and tourist use of

beaches can result in nesting females shifting their nesting sites to less suitable habitat, and thereby reducing hatching success.

- **Beach erosion**- accelerated by human interference, impacts the availability of suitable beaches for nesting. Additionally, erosion mitigation measures such as beach nourishment (sand deposits) can cause egg/nest burial and beach armoring (seawalls and jetties) can disturb and hinder turtles from nesting.
- **Predators** - Turtle eggs are particularly vulnerable to predators. In the Seychelles, turtle eggs are preyed upon by stray dogs.
- **Illegal Poaching**- Nesting turtles are an easy target and are often poached for their meat.



MFF Small Grant Project

The Marine Conservation Society of Seychelles (MCSS) is a local NGO and a recipient of an MFF Small Grant. MCSS has been implementing a turtle conservation programme since 2003. MCSS has focused its efforts to identify the remaining nesting sites and carry out on-going turtle monitoring with the assistance of local and international volunteers.

¹ Hawksbill - *Eretmochelys imbricate*

Green turtle - *Chelonia mydas*

Loggerhead - *Caretta caretta*

Leatherback - *Dermochelys coriacea*

Photo: Release of hawksbill hatchlings saved from stray dogs.

Can a small grant project effectively contribute to turtle conservation?

Through the MFF project, MCSS has extended its on-going monitoring programme by expanding into the other areas in the inner islands. This has enabled MCSS to engage with local communities living near nesting sites to enhance the protection of the species. The primary objectives of this project are to: identify, monitor and rehabilitate priority turtle nesting beaches through collaborative programmes with local communities and the private sector; and to raise public awareness on the need for conservation and management of nesting sites.

Local Community involvement

For the long term success of conservation, engaging with and building community stewardship for turtle conservation is vital. The project is actively working with local communities, particularly through educational activities for school children. Community capacity is built by providing training in turtle monitoring for volunteers and community members, to monitor and report on turtle sightings. The project also works with the local law enforcement, by engaging with the tourist police to increase patrolling along common tourist areas around the island's beaches on a voluntary basis.

Working with the Private Sector

The tourism industry is an important stakeholder in turtle conservation. A five star Resort, The Banyan Tree is located on *Anse Intendance* beach, the only beach of the five beaches monitored under the MFF project with development. While it is too early to draw concrete conclusions, data collected to date indicate a significant decline in the number of hawksbill nesting on this beach. To reduce development impacts, the Banyan Tree has developed a plan to manage the beach ecosystem by establishing a long-term approach to rehabilitation and maintenance of the beach crest vegetation. By protecting the dune structure and associated vegetation, turtle nesting habitat is being enhanced. The Banyan Tree is also distributing the "Hatchling and Turtle Watchers Code of Conduct" to all its guests. MCSS hold talks at the resort as well as providing training in turtle conservation for the staff. The Banyan Tree Resort also provides direct financial assistance and in kind support to the project. Working with partners such as the Banyan Tree, the project is demonstrating how the private sector can contribute to conservation while still utilising the beaches for economic activities.

Targeting Poachers

Poaching continues to be one of the major threats to turtle populations. To reduce poaching, MCSS hopes to offer further training on turtle conservation to the community and the Tourist Police.



© Photo: Minna Epps, MFF Secretariat

Foraging evidence left behind by stray dogs: empty turtle egg shells



© Photo: Veronique Carola, MFF Seychelles NCB

Waterproof tags indicating nest sites and numbers at Grand Polis Beach, on the main Island, Mahé

What have we learned?

A number of learning opportunities and challenges with regards to the management, monitoring and conservation of turtle landing sites have emerged.

Human development such as residential and hotel construction on previously isolated beaches is growing and there is an immediate need to have practical guidelines to support sustainable use practices in these areas. The code of conducts developed can be adapted or replicated at other vulnerable nesting sites to help reduce the disturbance of human development.

A partnership approach where the private sector, communities and law enforcement work together is essential to help diminish some of the threats to marine turtle populations.

Conducting public surveys on stakeholder perception is essential to design effective outreach and awareness activities that mitigate or reduce threats to nesting habitat. There is a daily TV spot promoting the hatchling and turtle watching Code of Conduct to minimize disturbance at turtle nesting beaches. However, an advocacy strategy targeting poachers should be developed.

Hopes for the future

More data on turtle nesting behaviour are needed. Although, satellite tags have proven to be an effective way of obtaining data, these are not cost-efficient since each tag costs €5,000. Although, MFF is positive that the conservation goals can be met through active awareness raising and local ownership, and hopes that the results and approached used in this project will serve as a model. Working through the MFF, Seychelles National Coordinating Body which constitutes key actors, including Government representatives from various Ministries, can be an effective way to upscale this learning and to tackle the demand for turtle meat.

