

Status of leatherback turtles in Tanzania (United Republic of)

By Catharine Muir

1. The legal protection status for leatherback turtles

1.1 Overview

All species of marine turtles occurring in Tanzania (green, hawksbill, leatherback, loggerhead and olive ridley turtles) are protected under section 57 of the Fisheries Act of 2003. Under section 12 (1) (9) of the Fisheries Regulation Act it states that *no person shall kill or fish sea turtles or possess a sea turtle shell or deal in sea turtle shells or any other species listed as endangered in any International Convention, which the United Republic is a party to.* In the case of a first offence, the fine is TSh 200,000 (approx \$200USD) or a 3 month sentence, and in the case of a second and subsequent offence, the offender is fined TSh 300,000, a 6 month sentence, or both.

1.2 Management agency responsible for marine turtle conservation in Tanzania

Name of agency: Fisheries Division, Ministry of Natural Resources & Tourism

Type of agency: Government Agency

2. Nesting populations

2.1) Overview

leatherback turtles do not currently nest in Tanzania, and there are no records of historical nesting by the species in Tanzania. Nesting for green, hawksbill and olive ridley turtles have been recorded by beach surveys (Frazier 1982). Marine turtle surveys have been conducted on Maziwi Island (olive ridley, hawksbill and green turtle nesting), Mafia Island (green turtle nesting) and Ras Dege (green turtle nesting) (Frazier 1982).

2.2) Seasonality of leatherback nesting

Not applicable for leatherback turtles and other species of marine turtle nest between June and October (Frazier 1982).

3. Foraging populations

3.1) Details on any leatherback turtle census or tagging results such as tag recovery data

Infrequent sightings of leatherback turtles have been reported by Frazier (1982). There has been no census of foraging populations of leatherback turtles in Tanzania, or tag returns in Tanzania from turtles tagged elsewhere. However, several leatherback turtles have been caught in nets off Mafia Island, Pemba Island and Madete (Saadani National Park) (Muir 2002, 2005 and see section 3.2 and Figure 1).

In addition, tagged recoveries from loggerheads tagged while nesting in Tongaland and Natal (South Africa), and from green turtles tagged while nesting in Seychelles, Comoros, Mayotte and Kenya.

3.2) Seasonality of leatherback turtles in coastal and offshore waters

- Two leatherback turtles were caught and drowned off Pemba Island in gillnets in 1997 (months not specified).
- Four leatherbacks were caught and drowned off the west coast of Mafia Island in gillnets (November 2001, September 2002, December 2003 and December 2004).
- One leatherback was caught in a gill net at Madete in April 2005 and returned to the sea alive.

3.3) Approximate size range of leatherback turtles

Two of the leatherback turtles that were caught in Tanzania were measured; the curved carapace lengths (CCL) were 192cm and 130cm (sex was not determined for either of the turtles) (Tanzania Turtle and Dugong Conservation Programme unpublished data)

3.4) Information on the diet of leatherback turtles

Unknown

3.5) Other biological studies conducted on leatherback turtles in foraging areas

No other biological work has been conducted on leatherback turtles in Tanzania.

3.6) Threats to foraging populations of leatherback turtles

The threats to turtles in Tanzania are outlined in (Muir 2004) which was prepared for the Tanzania Committee on the Conservation of Marine Turtles and their Habitats. However, there is nothing mentioned specifically about leatherbacks. Historical threats to leatherback turtles and marine turtles in general are not known. Current threats include gillnets, and may include plastics, industrial effluent and inshore oil pollution.

3.7) Fisheries bycatch of leatherback turtles and the fisheries involved

Type of fishery	Season of operation	Approx number of boats/operators	Impact – low, medium or high
Artisanal gillnets	Throughout year, during neap tides	Unknown	Low – medium
Commercial prawn trawlers	March - November	30	Low – medium

3.8) Other activities being undertaken to improve the conservation of leatherback turtle foraging populations

Awareness raising activities by the Tanzania Turtle and Dugong Conservation Programme occur along the coast of Tanzania (all species of marine turtles). The Tanzania Turtle & Dugong Conservation Programme is now registered as a local NGO called "SEA SENSE") and works in five coastal districts in mainland Tanzania – i.e. about 25 villages. Activities conducted by SEA SENSE include regular fisher meetings, school competitions, and the distribution of posters, T-shirts, videos. There is an Action Plan for Zanzibar although I don't think it is being implemented. Nothing is yet available for mainland Tanzania. There are two marine parks (Mafia and Mtwara) which are zoned and where fishing is regulated. There are also a number of marine reserves where fishing is illegal.

4. References

- Frazier JG (1982) Status of sea turtles in the central western Indian Ocean. In 'The Biology and Conservation of Sea Turtles'. (Ed. KA Bjorndal) pp. 385-389. (Smithsonian Institution Press: Washington, D.C).
- Muir (2002) Quarterly progress reports (July - Sept 2002) - Unpublished.
- Muir (2004) The status of marine turtles in the United Republic of Tanzania. Report commissioned by the Tanzania Committee on the Conservation of Marine Turtles and their Habitats.
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