

# Status of leatherback turtles in Maldives

By Hussein Zahir

## 1. The legal protection status for leatherback turtles

### 1.1. Overview

#### *The Moratoriums of 1995-2005 and 2006-2016*

All turtle species, but not their eggs, have been legally protected under a presidential decree for 10 years since 1995. July 2005 ended the 10 year ban on capture, killing and handling of what is reported to be the five species of marine turtles seen in the Maldivian waters: green turtle, hawksbill turtle, olive ridley turtle, loggerhead turtle and leatherback turtle. In fact, however, most likely only green turtles and hawksbills nest in the Maldives.

#### *Deciding on a new Moratorium.*

During the moratorium of 1995-2005, information on egg harvesting was reported to Ministry of Fisheries Agriculture and Marine Resources (MFAMR), thus providing the principle source of information about the extent and pattern of turtle nesting in the islands. In 2005, levels of egg harvest were reviewed by MRC (a research arm of MFAMR that provides technical information and recommendations for marine resource management and policy decisions.) MRC assessed the impact of the moratorium and recommended that MFAMR strengthen the existing conservation efforts. Based on the relative intensity of egg harvesting recorded at various sites, field trips were made to some of the most important beaches. Two islands in the south of Maldives; Gaadhoo in Laamu atoll and Gan in south Huvadhoon atoll were found to be exclusively green turtle nesting beaches with a nesting population of approximately 60 and 80 females (based on monthly egg harvesting from 1995-2005). Based on this information, recommendations were made to MFAMR to enhance conservation effort.

After the reviewing the moratorium, the management decision was to extend the moratorium for another 10 years (2006-2016) with the following enhancement of conservation measures:

- No nationwide ban on egg harvesting, but eleven islands to be designated as "No Egg Harvesting" islands for the 10 year period.
- Initially, egg harvest will be allowed at Gaadhoo and Gan islands; but starting in 2007 these two islands will become "No Egg Harvesting" islands

### 1.2. Legislation protecting leatherback turtles

No legislation is specific to leatherback turtles, but there is legislation in general for the protection of marine turtles

1. Bill no. 24/87 prohibiting catching of hawksbill turtles of under two feet in carapace length and all the other species under 2 ½ in carapace length.
2. Bill no 31/79 prohibits the export of unprocessed product of hawksbill or hawksbills.
3. Presidential decree for the 10 years from 1995-2005 banned the catching, killing or handling of marine turtles (but not the collection of turtle eggs).
4. New 10 year moratorium (2006-2016) recently adopted that will provide partial protection for turtle eggs as described in section 1.1.

### 1.3. Management agencies responsible for marine turtle conservation

<b>Operational level</b>	<b>Ministry of Fisheries Agriculture and Marine Resources</b>
<b>National level</b>	Marine Research Centre

## 2. Nesting populations

### 2.1. Overview

#### *Historical evidence*

There is very little evidence that leatherbacks ever nested in the Maldives. Gardiner in 1906 reported a gravid female from Addu atoll. Deraniyagala in 1956 (in Frazier and Salas, 1984) gave a description of

a turtle resembling a leatherback. There is not a single report of nesting of this species in the Maldives. Historically there are five species of marine turtles reported from the Maldives: green turtle, hawksbill turtle, olive ridley turtle, loggerhead turtle and leatherback turtle. But this is historical information only. There have been no confirmed reports of nesting except by greens and hawksbills.

#### *Current situation*

There is no evidence that leatherbacks currently nest in the Maldives.

#### *Summary of surveys conducted & what beaches have been surveyed*

There is no systematic monitoring program for nesting marine turtles in the Maldives. But there is a reporting and data collection process implemented by the Ministry of Fisheries Agriculture and Marine Resources (MFAMR) which started as an effort to estimate the number of turtles caught and eggs harvested, and which has been used to evaluate the impact of the Moratorium of 1995-2006 which banned the harvest of all species of turtles (but did not ban egg harvest). During the moratorium information of egg harvesting was reported to MFAMR and is the principle source of extent and pattern of nesting in the islands. Review of the information on egg harvesting was carried out in 2005 by MRC, a research arm of MFARM to provide technical information and recommendations for marine resource management and policy decisions.

### **3. Foraging populations**

Much of the information provided in this section derives from the accidental capture of a single leatherback in an exploratory fishing survey that was carried out in 1988 (Zahir 2000).

Size: Curved carapace length: 120 cm

Date of Capture: 27 November 1988

Location of capture: 5° 34' N; 74° 5' E

Fate of turtle: Captured in experimental gill net (live & entangled) and was freed and released.

#### 3.1. Details on any leatherback turtle foraging area census or tagging results

There have been no tagging studies conducted on leatherback turtles foraging in the Maldives

#### 3.2. Seasonality of foraging leatherback turtles in coastal or offshore waters

Single known entanglement occurred in November 1988 (Zahir 1988).

#### 3.3. Approximate size range of leatherback turtles

Single known entangled leatherback measured 120 cm curved carapace length (Zahir 1988).

#### 3.4. Information on diet of leatherback turtles

No information reported

#### 3.5. Other biological studies conducted on leatherback turtles in foraging areas

No other biological studies have been conducted on foraging populations of leatherback turtles

#### 3.6. Threats to foraging populations of leatherback turtles

One individual leatherback was caught during an off shore fishing experimental fishing project in 1988 entangled in a gill net at latitude 5° 34'N and 74° 5'E (Zahir 2000). Sightings of olive ridley turtles have been reported in several occasions both within atolls and off shore. Most of these are found entangled in ghost nets.

Drift gill netting is illegal under fisheries law which is specific to the economic fishing zone (75-200 miles offshore). However several types of set gill nets are used by the local fishermen in near shore fisheries such as shark fishing and reef fishing. This is not widely practiced.

#### 3.7. Fisheries bycatch of leatherback turtles and the fisheries involved

Not applicable

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

None

#### 4. Conservation Actions

Areas of change	Summary including report references
Legislation changes	Legislation not specific of the leatherbacks but all turtle species
Awareness raising programmes	

#### 5. References

- Frazier J; Salas S; Hassan Didi, N. T. (1984). Marine Turtles of Maldives Archipelago. In: Marine Turtles of the Maldives Archipelago published in 2000. *Marine Research Bulletin*, **4**, 5 -42.
- Zahir H (2000). Status of Sea Turtles in Maldives. In: Marine Turtles of the Maldives Archipelago published in 2000. *Marine Research Bulletin*; **4**, 43 -61.