

# Status of leatherback turtles in Islamic Republic of Iran

## 1. Introduction

Iran lies along the eastern shores of the Arabian (Persian) Gulf. The climate is generally arid or semiarid, and subtropical along the Caspian coast. There are an estimated 8,900 ha of *Avicennia* mangrove along the coast, and a rich and diverse marine fauna, seagrass beds and coral (Harrington 1977).

## 2. The legal protection status for leatherback turtles

### 2.1 Overview

The current main law covering nature conservation, the Environmental Protection and Enhancement Act of 1974, supersedes all previous enabling legislation. Four categories of protected natural area can be established and protected; any previously designated sites have been reclassified under this law.

Iran is a signatory to Convention on Biological Diversity (CBD), the Convention on Climate Change, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the Convention on Wetlands of International Importance (RAMSAR), the Convention on the Law of the Sea (not ratified), and the IOSEA Marine Turtle MoU, among others.

### 2.2 Management agencies responsible for marine turtle conservation

The main administrative and management body is the Department of the Environment, which was established in March 1972 and is divided into a series of divisions dealing with different environmental matters. Under the Environmental Protection and Enhancement Act it superseded the Game and Fish Department in 1974. The latter Department was established in 1967 and had been responsible for the protection of wildlife, hunting, and fishing in inland waters as well as protection of the natural environment. It had succeeded the original Game Council of Iran established in 1956.

The Division of Parks and Wildlife, Department of the Environment is the main body undertaking protected areas management. Generally, the Department undertakes long-term environmental studies and management projects, with responsibilities which include the conservation and enhancement of wildlife resources and the prevention of pollution. It also puts forward regulations on habitat management. Its long-term programmes for the conservation of wilderness sites and wildlife include the cleaning of the Caspian Sea and Iranian rivers and prevention of air pollution in Tehran and Isfahan. The Department has introduced environmental legislation regarding pollution (Sardar 1982). Recommendations for the establishment of reserves or changes in reserve classification are prepared by the Division of Parks and Wildlife, reviewed by all appropriate divisions of the Department of the Environment, and presented to the High Council of the Environment for approval. The arrangement ensures that all government organisations with jurisdiction over lands proposed for protection have an opportunity to assess the impact on resources administered by their organisations (Firouz and Harrington 1976).

Research is conducted in ministries and universities. Almost all ministries have their own research institutes and centres (Coad 1980-1981).

## 3. Nesting populations

There are no historical or contemporary records of leatherback nesting in Iran.

## 4. Foraging populations

### 4.1 Overview

While there are no historical or contemporary records of any sightings of leatherbacks in Iran's territorial seas, it is unlikely that they are not at least an infrequent visitor to Iran's waters given they are reported as being found occasionally in other Gulf-bordering nations. Marine turtle research and conservation efforts are in their infancy in Iran, with recent baseline coastal and tagging surveys directed primarily at the hawksbill and green turtles. There are no dedicated research or conservation efforts aimed at the leatherback turtle in the Islamic Republic of Iran.

#### 4.2 Threats to leatherback turtles

One of the major environmental threats lasting much of the 1980-1990 decade was the consequences of the military conflict between Iran and Iraq, although the effects of air pollution from burning Kuwaiti oil wells in the 1990-91 Iraq-Kuwait conflict was also reported in Iran (WCMC 1991). In 1983, the Nowruz oil field in the Persian Gulf, north-west of Kharg Island, was damaged, resulting in severe pollution of the sea by oil and gas leakage. The petro-chemical industry on the Gulf shore and islands continues to pose a number of threats to the environment, not least pollution. The movement of oil tankers through the Gulf presents a continued threat to marine life and to the increasingly important Gulf fishery. However, after eight years of war with Iraq, international political isolation, and economic sanctions, environmental goals have largely been put on the back-burner. It is thought that overfishing has caused a drop in fishing levels; industrial and urban waste water runoff has contaminated a number of rivers and coastal waters and threatened drinking water supplies; and oil and chemical spills in the Persian Gulf and Caspian Sea continue to pollute the seas and harm aquatic life.

#### 4.3 Protection of foraging areas

There are a number of protected areas along the Iranian coast. These include two of the three biogeographic zones covered by this country's coastline, the exception being the Indo-Pacific. However, the majority of these seem to be coastal terrestrial areas with others being proposed marine areas (for example, Hara Marine Park). Only one established MPA could be confirmed (Shidvar Wildlife Refuge). Its present legal status is not clear because it was declared prior to the Revolution in 1979.

#### **4.4. Gaps in capacity and requirements for improved conservation**

Effective conservation measures for Iran's marine turtles and their habitats can only be based on the timely delivery of accurate data concerning the state of the marine environment. There is a need for monitoring programmes that feed information into management plans, as opposed to one-time 'snapshot' surveys. Monitoring programmes need to provide regular updates and highlight changes in marine environmental quality which are the basic building blocks on which conservation measures are developed. There is also a need to develop and expand local capacity to monitor and carry out research on marine turtles. This must also include the designation, where applicable, of competent authorities to manage and conserve marine turtles, and detailed management plans to promote the development / replenishment of turtle populations.

Public education campaigns are also needed to increase understanding of the importance of marine turtles and their sensitivity to direct and indirect take, and pollution. These should highlight the use of time-area closures to prevent further damage to turtle populations, the need for restrictions / guidance on fishing practices, the problems caused by direct and indirect take, and the need for public and private participation in the management of turtles and their habitats.

There is also a need to designate additional Marine National Parks and Marine Protected Areas within integrated management plans. Only within these protected areas will Iran be able to fully protect its marine turtle populations.

#### **5. References**

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