



14.0 TWO DECADES OF SEA TURTLE CONSERVATION AND RESEARCH AT REDANG ISLAND: A SUCCESS STORY

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Even though protected by legislation, the sea turtle populations in Malaysia continues to decline and struggle to survive as they face increasing exploitation and threats, both natural and man-made. A classic and tragic example is the leatherback turtles at Rantau Abang, Terengganu. From more than ten thousand leatherbacks nesting per year in the 1960s, and untold thousands of hatchlings born of these nestings, in recent years there are no record of leatherback nesting in Rantau Abang. Possible caused was in the early years only 10% of the eggs were incubated, which was not enough to replenish future stocks. The accidental catching of leatherbacks in fishing gear was also high. Commercial sales of leatherback turtle eggs in Terengganu were only banned in 1987, which was a bit too late to save the population. Cultural interest in harvesting leatherback eggs for consumption was also a factor which contributed to the eventual leatherback extinction.

Other threats to sea turtles in Malaysia include by-catch in the ever-growing trawl fisheries and long-line fishing, habitat loss, environmental degradation, direct human disturbances and pollution. Although the story has been a sad tale so far, Universiti Malaysia Terengganu believes that there is still hope to conserve the sea turtles.

In 1993, Universiti Malaysia Terengganu (UMT) embarked on a mission to help save sea turtles in Malaysia, especially those at Redang Island. The major conservation projects undertaken by UMT are the monitoring of nesting turtles and the long-term tagging of green and hawksbill turtles at Chagar Hutang beach, Redang Island. All nests are incubated *in-situ*, which means that eggs laid on the beach are left untouched in their natural nests and allowed to hatch naturally. From 1993 – 2015, UMT protected 10,380 nests and produced

more than 600,000 healthy hatchlings that returned back to the sea to replenish the population of sea turtles in Redang. Besides carrying out conservation and research on sea turtles, UMT is also actively conducting educational and outreach programmes to promote public awareness of sea turtles.

Conservation efforts by Universiti Malaysia Terengganu include:

1. Ensuring that every sea turtle that comes ashore to nest can do so safely and naturally with minimal disturbance to their nesting rituals,
2. Protecting all eggs and giving them the chance to hatch, and ensuring that the hatchlings are allowed to crawl back to the sea naturally,
3. Conducting research to understand and learn more about sea turtles,
4. Educating the public so they are better informed on the plight and reasons why we have to conserve them.

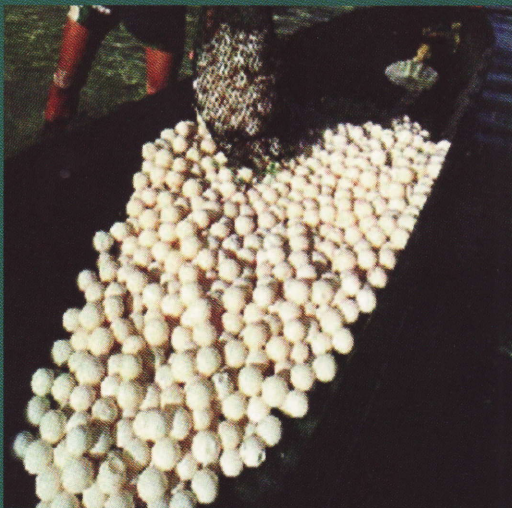
History of Sea Turtle Conservation at Redang Island:

1990s: A drastic decline of sea turtle nesting at Redang Island

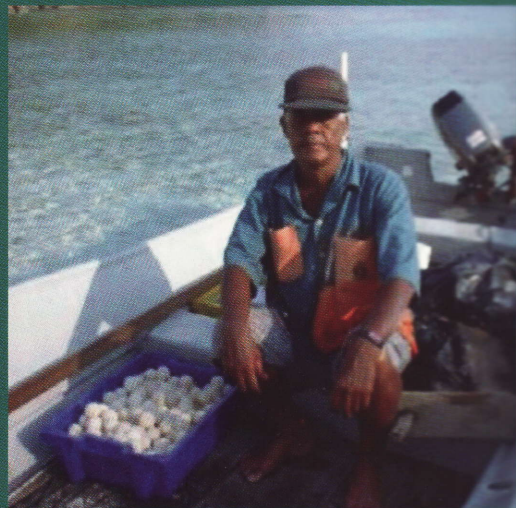
For centuries, the local people collect all the turtle eggs at Redang Island. By 1990s, a drastic decline of sea turtle nests were observed at Redang Island

1993: Sea turtle conservation was first initiated at Chagar Hutang beach, Redang Island by SEATRU, Universiti Malaysia Terengganu. All nests for incubation have to be purchased from the licensed egg collectors at RM120 to RM150 per nest. In the early years, the conservation program was supported by Berjaya Redang Resort, the Terengganu State Government, UDA holdings and a few other agencies

All turtle eggs were harvested at Redang Island



1960s



1990



1994: Sea turtle conservation by the Department of Fisheries, Terengganu at Mak Simpan and Mak Kepit beach, Redang Island

1996: Introduction of 'Kem Si Penyu' by UMT, a special program especially designed for the primary school students of Redang Island to increase their awareness on saving sea turtles. This program was supported by Berjaya Redang Resort (1996 – 2010) and Laguna Redang Island Resort (2010 – 2014).

1998: Introduction of the SEATRU Volunteer Program to assist and fund the conservation program at Chagar Hutang, Redang Island.

2001: The sea turtle conservation program at Chagar Hutang, Redang Island was recognised by the United Nations Environment Programme (UNEP) where the founders were awarded the Global 500 Roll of Honour.

2005: The three major nesting beaches in Redang Island (Chagar Hutang, Mak Simpan and Mak Kepit) were gazette as Turtle Sanctuaries by the Terengganu State Government. This was among the greater achievements of Universiti Malaysia Terengganu and other NGOs towards the conservation of sea turtles in Terengganu

2013: For the first time in two decades of conservation, the number of nesting at Chagar Hutang had reached more than 1015 nests. This was an early indication of success for the long-term conservation conducted by Universiti Malaysia Terengganu.

2015: A total of 10,380 nests were protected at Chagar Hutang and from these about 600,000

healthy hatchlings were released back to the sea to replenish the population of sea turtles in Redang. Through the tagging program (1993 - 2015), more than 3,000 sea turtles were individually identified.

Seminar and Workshop on sea turtle conservation in Malaysia, 1-3 September 2015

On 3rd September 2015, Profesor Dato' Dr. Nor Aeni binti Haji Mokhtar, the Vice Chancellor of Universiti Malaysia Terengganu with 60 participants from the Seminar and Workshop on Sea Turtle Conservation in Malaysia visited the UMT Sea Turtle Research Station at Chagar Hutang beach, Redang Island.

After the visit to Chagar Hutang, the participants proceed to Laguna Redang Island Resort for the UMT-Laguna Redang Island Resort Collaboration Ceremony. Laguna Redang Island Resort is one of the major sponsor (2002 – present) for the sea turtle conservation and research at Redang Island.



Group photo of the Seminar and Workshop participants with Prof. Dato' Dr. Nor Aeni binti Haji Mokhtar, Vice Chancellor of Universiti Malaysia Terengganu at Chagar Hutang, Redang Island.