



MINISTRY OF HIGHER EDUCATION



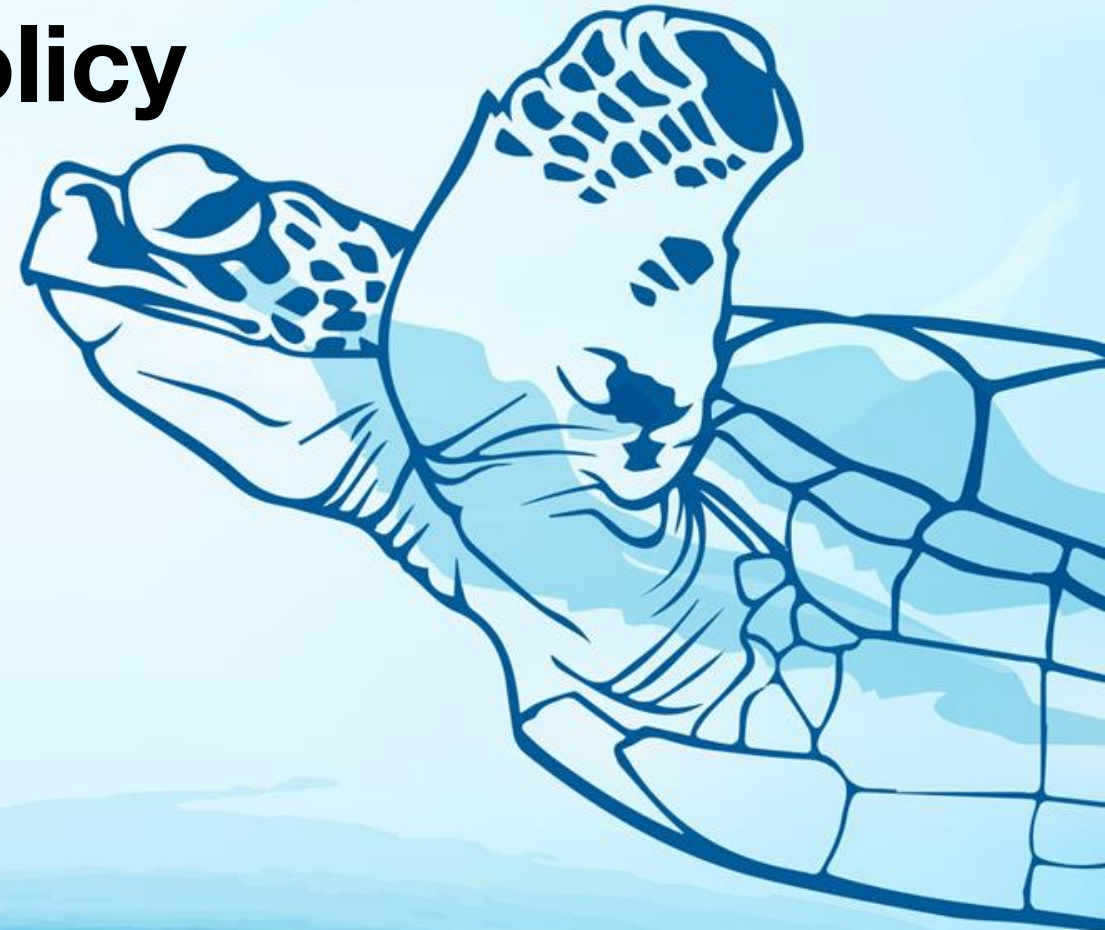
Sea Turtle Biology & Conservation

UNIVERSITI MALAYSIA TERENGGANU

Topic 6



Existing Legislation and Policy for Sea turtles in Malaysia and the way forward



Topic Outline:

Part 1: The history of sea turtle conservation
in Malaysia

Part 2: The legal and administrative
frameworks in conserving sea turtles
in Malaysia

Part 3: The way forward - beyond law and
order



Part 1: The history of sea turtle conservation in Malaysia

- Understanding the human-sea turtle dimension using a case study on the sea turtle scenario in Terengganu, Malaysia: from traditional to modern perspectives



Why pick Terengganu as the case study?

- as its mascot, sea turtle is synonymous to the Terengganu state
- The only Malaysian state where all four species found in Malaysia have been recorded to land here to nest, including the giant Leatherback (*D. coriacea*) – **it was the largest Western Pacific Leatherback rookery in the world prior to 1990 (see paper by Chan and Liew 1996)**

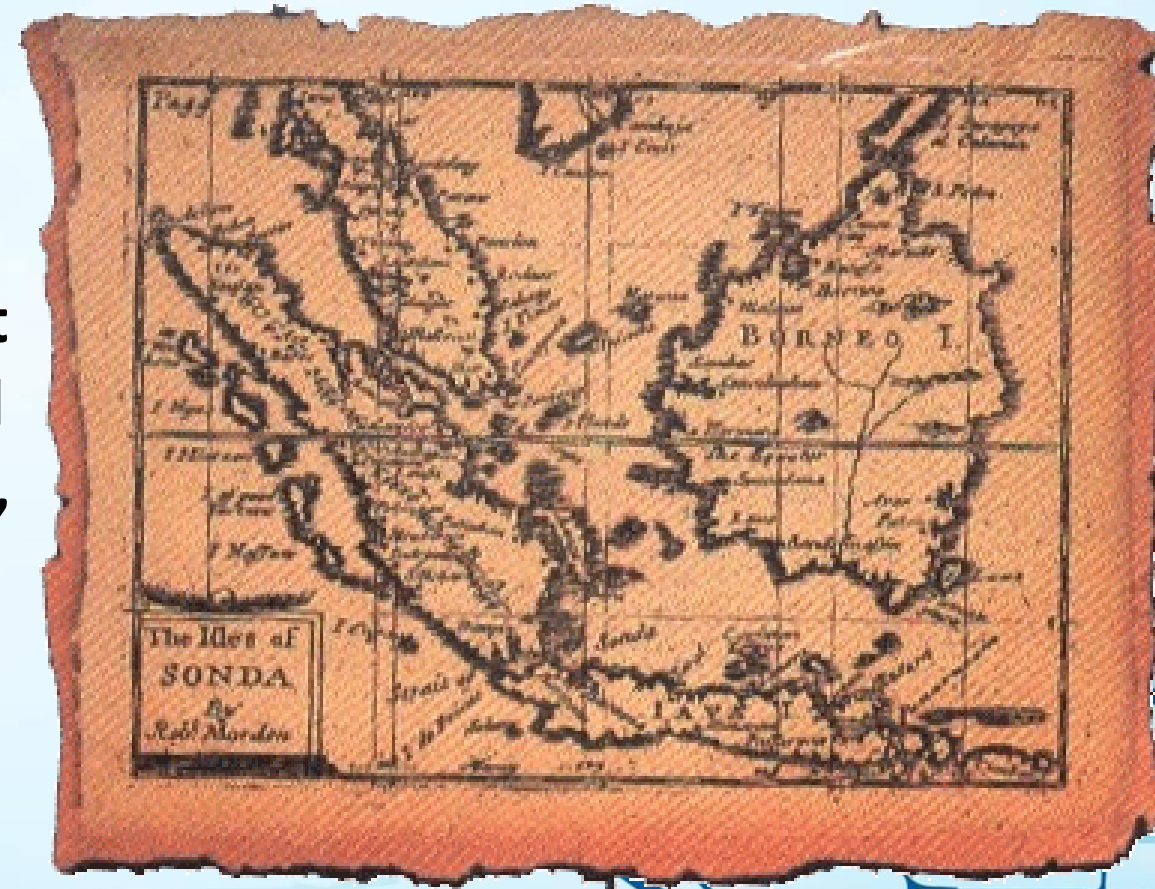
Note: An “interesting” leatherback turtle tragedy happened here, but it remains the most important nesting ground for Green turtles (*C.mydas*)



In pre-modern Malaysia:

- The eggs of sea turtles are the most abundant, and easily acquired (seasonal) source of protein for coastal communities that live in proximity of nesting beaches
- In some regions, the eggs have long been a prized commodity. In Sarawak for example, it is reported that sea turtle eggs has been sold to traders from China since the 1600s (C. Leh, 1985). Sea turtle egg trade has therefore been regulated using indigenous laws even before the colonial era.

*Read the intriguing chapter on “Turtle Islands of Sarawak” in Alison Rieser’s book “The case of the green turtle: An uncensored history of a conservation icon” for details on traditional rights to collect turtle eggs in Borneo



The traditional perspective...

Sea Turtle = Natural resource

In Terengganu, coastal people lived in remote village habitations along the coast where sea turtles eggs used to be the most plentiful and accessible source of protein

Note: See H.C Liew's "Tragedy of the Malaysian Leatherback Population. What Went Wrong" (2011)

For that reason, people have always eaten sea turtle eggs, but the consumption used to be for subsistence only.



IMAGE SOURCE: INTERNATIONAL WAR MUSEUM

Then modernity came along!

Modern road networks were introduced in the 1920s by the British colonial administration to connect cities dotted along the east coast of Peninsular Malaysia, from Johor Bharu to Kota Baru

Better roads = **Sea turtle economy!**

(eggs became a market commodity & nesting turtle became a tourism attraction)

Note: Rantau Abang was the No 1 turtle tourism destination in the world!



And modern fishing operations too!

- Introduction of large scale trawl and purse seine fishery in the East Coast waters
- Higher occurrence of fishery-sea turtle conflicts

So, modern fishery = **more threats to sea turtles**

Note: Read Chan's (1988) report on fishery-related sea turtle by-catch in Terengganu at:

<http://www.turtleconservationsociety.org.my/wp-content/uploads/files/IncidentalCapture1988.pdf>



But at that time, sea turtle conservation efforts were already in place in Terengganu



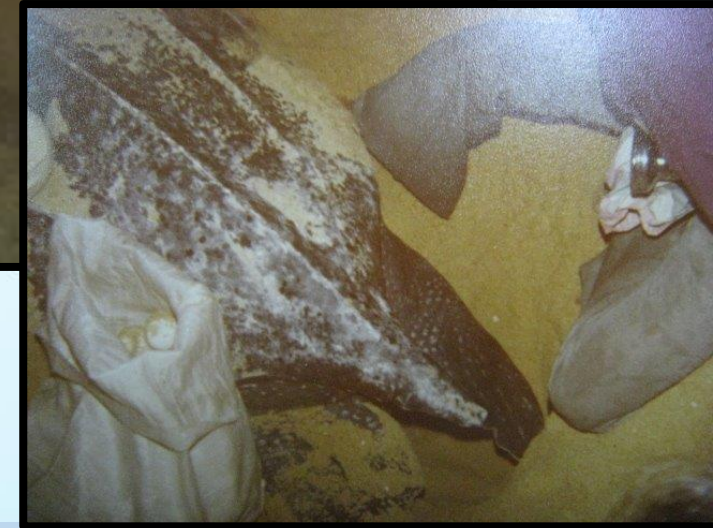
Terengganu's Sea Turtle Enactment 1951 - one of the earliest legal protection for sea turtles in Peninsular Malaysia- regulated egg collection and trade of all sea turtle species.

In 1961, one of the country's earliest sea turtle hatchery-based conservation and research efforts to protect sea turtles was established in Rantau Abang, Terengganu.



But not enough to protect?

Egg consumption and uncontrolled tourism are believed to have been the main contributing factor to the decline of the Giant Leatherback Turtles (Mortimer et al 1985)



Photos courtesy from:
<http://donyoo.blogspot.my/2008/08/leatherback-turtle-sighting-in-rantau.html>

The consequence...

The estimated annual egg production of 1956 was 10,000 eggs. Since the hatchery was set up in 1961, only 4% of the was incubated after 2 decades (Mortimer 1985) and the downward trend continued (Chan 2012)...

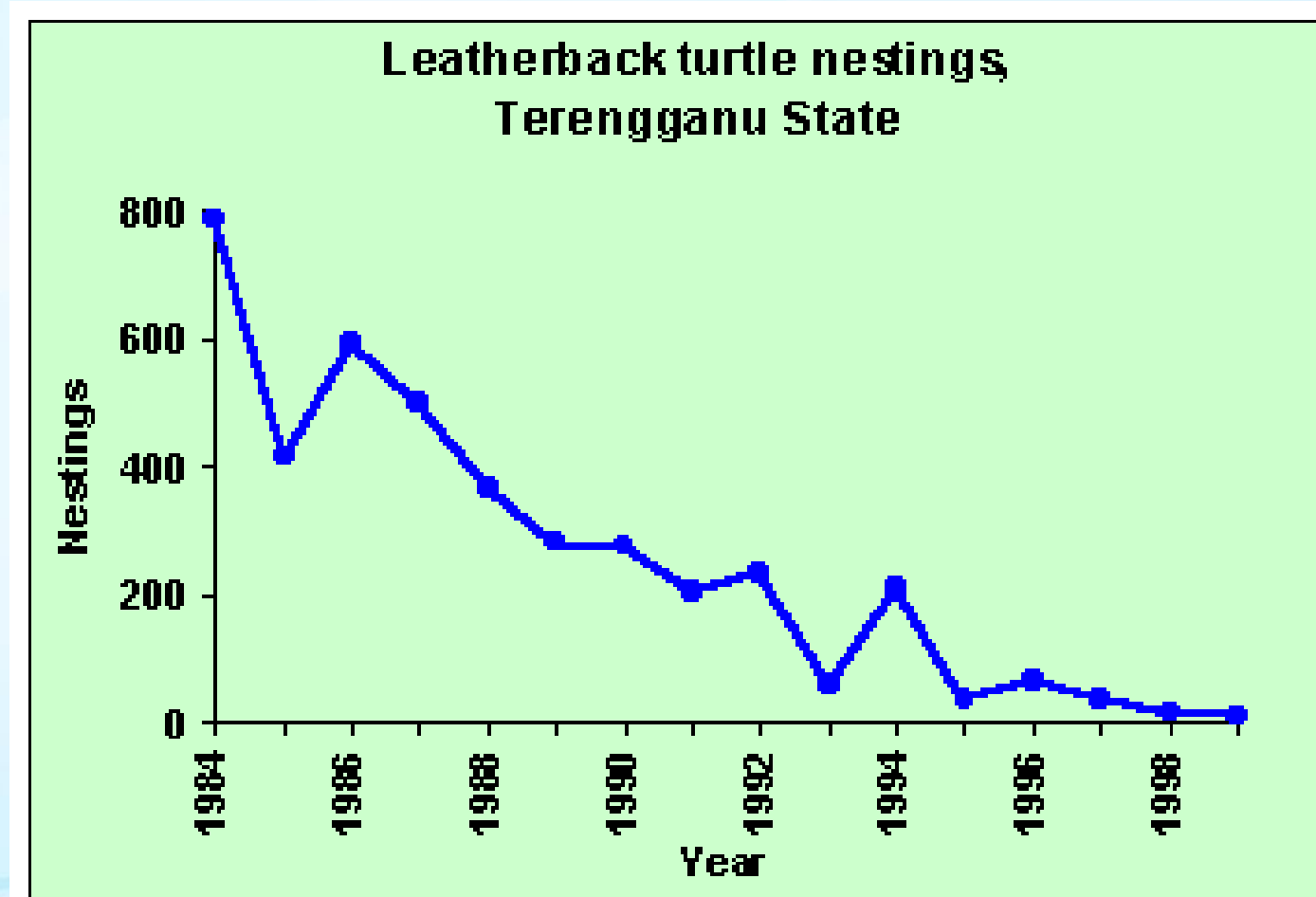


Figure 1: nesting record of leatherback turtles in Terengganu
(Source: Chan 2012)

The Response: more protection measures!

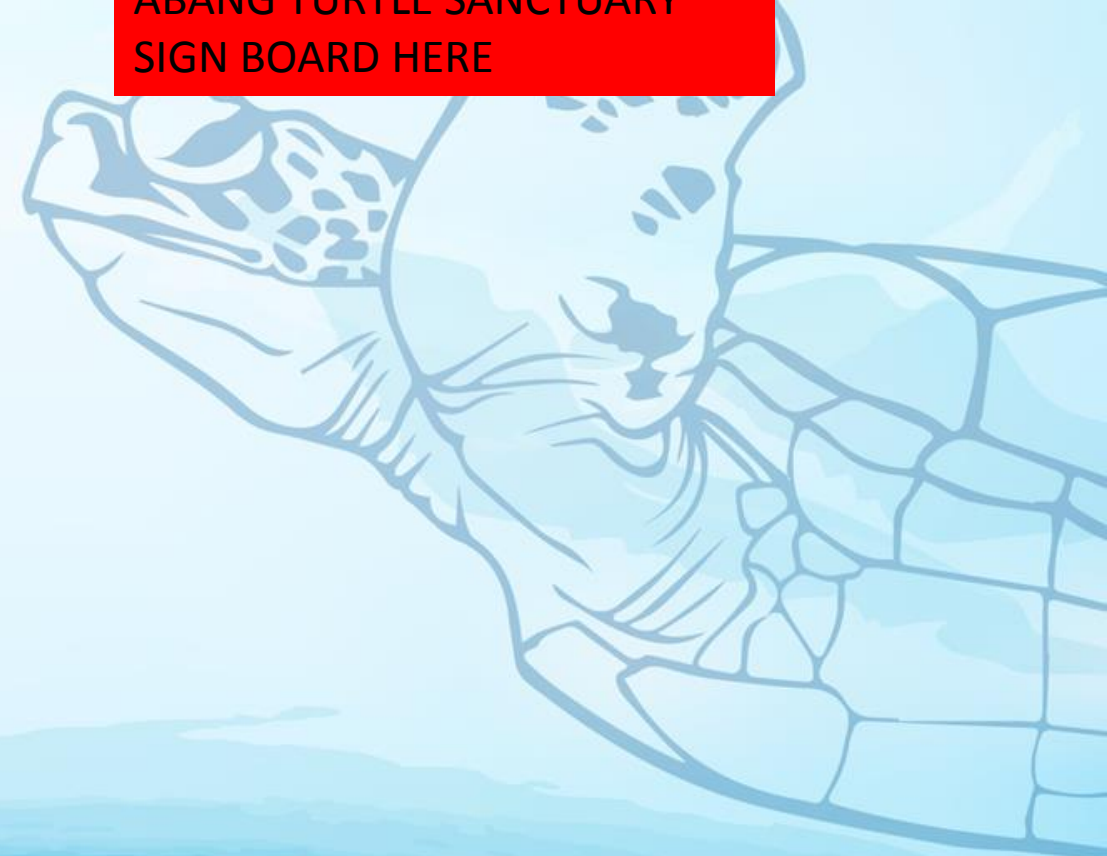
- The Turtle Enactment 1951 was amended in 1987, as the Turtles (Amendment) Enactment 1987:

It included new conservation measures such as the establishment of turtle sanctuaries, prohibition on the disturbance and killing of turtles while maintaining a licensing and tender regime for the eggs.

- In 1988, a 14km shoreline in the area was gazetted as a turtle sanctuary and the egg buy-back programme was launched in the same year.
- 1989, the trade of Leatherback turtle eggs was banned!
- In 1991, Rantau Abang Fisheries Prohibited Area was established as an offshore sanctuary.



INSERT PHOTO OF RANTAU
ABANG TURTLE SANCTUARY
SIGN BOARD HERE



Today's scenario...

there's active conservation

Since 1990s, hatchery-based conservation effort extended to other sea turtle, benefiting particularly the green turtles that constitute the largest population of the species in Peninsular Malaysia.

The conservation effort is also assisted by other organisations such as WWF Malaysia - in Ma'Daerah in the South and Penarik in the North; and our very own **SEATRU-UMT** that since 1993 has began research and conservation activities in Chagar Hutang, Pulau Redang where they run nest adoption as well as volunteer programmes to raise fund and manpower to support their conservation activities.



IMAGE SOURCE: SEATRU UMT

and concession (regulated egg trade)

There are to date 52 units of turtle nesting beaches in Terengganu, 36 of which are tendered beach* while 16 others are turtle reserve beaches and turtle sanctuaries (Department of Fisheries, 2014)

* The tender holders are legal egg collectors who are responsible to report the data on nesting and egg collection at their tendered beaches to the Department of Fisheries. They can also sell non-Leatherback turtle eggs



So today's scenario in Terengganu is ...

CONCESSION + CONSERVATION

Concession is allowed to respect the local communities' tradition of consuming the eggs, which some even believe to have health properties

Conservation, i.e. egg incubation in hatcheries and prohibition of certain activities are carried out to ensure that the population continues to not only survive but also thrive in the state

The challenges ...

☹️ **Terengganu = Turtle egg trade hub:**
The markets in the state become trading posts for eggs from other states where the trade is prohibited, i.e Sabah and Sarawak

☹️ **Poaching activities on the rise as prices escalate**

☹️ **Insensitive tourism activities (lack of protection status make them vulnerable to exploitation**

☹️ **Cynicism towards conservation due to the dual reality**

☹️ **Difficulty in enforcement: How to distinguish legal and poached eggs?**

☹️ **In addition to many other issues such as coastal development impacts on nesting beaches**

Part 2: The legal frameworks in conserving sea turtles in Malaysia

- at Federal Government
- in the federated States



There are 2 federal laws that provide sea turtles some legal protection:

- i) The Wildlife Protection Act 1972; it however fails to include all species of turtles.
- ii) The Fisheries Act 1985

Note: The import and export of turtle eggs are prohibited under the Customs (Prohibition of Exports) Order – First Schedule and Customs (Prohibition of Imports) Order 1988 – First Schedule.

- **However, although there are acts and order under federal law to protect sea turtles, matters pertaining to sea turtles (viewed as a resource) are under the legislation of the states.**



In the 13 (federated) states, it's a complex mix; from **full ban** 😊 to **nothing** 😞 at all!



- **Total ban** on species exploitation in Sabah and Sarawak (both located in East Malaysia, Borneo)
- These states have long regulated the exploitation of sea turtles, well before they became part of Malaysia in 1963 (ex: Gazette notification Nos.227 and 228 of **1928** prohibited the capture of turtles for 12 month in Sabah)
- Their state legislations:
 - 1) the Sabah Wildlife Conservation Enactment 1997
 - 2) the Sarawak Wildlife Protection Ordinance 1998

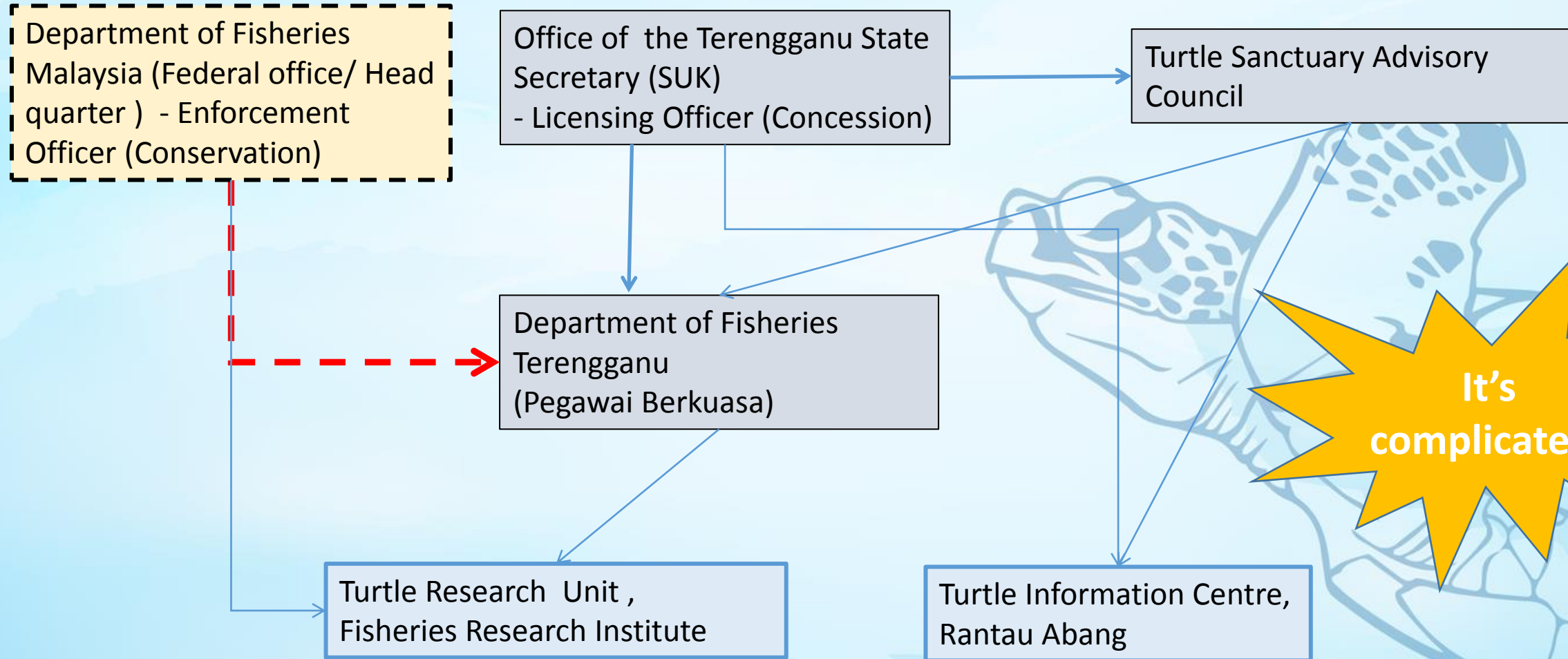


[Map developed using Map of Malaysia with Regions - Outline by FreeVectorMaps.com](#)

- “**Selective protection**” in Terengganu (as explained in earlier subtopic) and some other states
- These states in Peninsular Malaysia have varying degrees of legislation related to the exploitation, licensing for egg collection and killing or possession of sea turtles, as well as turtle watching and conservation activities.
- In Perlis and Selangor, there’s **no sea turtle related legislation at all!!!**



Sea Turtle Administration Framework (ex: in Terengganu)



So, to date there is still no comprehensive legal protection while the existing administrative framework often have implementation issues 😞

Ex: No sea turtle egg sale in Sabah and Sarawak, but they could be traded elsewhere once they cross state border!

[Click here to read full article](#)

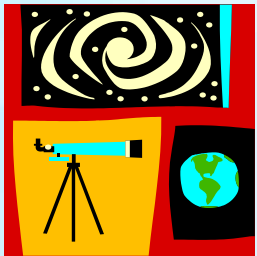


A total of 19,000 turtle eggs were seized from Filipino smugglers today. Sabah Marine Police Chief Assistant Commissioner Mohamad Madun said the eggs were found on board four pump boats - wooden vessels powered with modified water pumps - along with 11 Filipinos aged between seven and 63 off Sungai Batu Dua about 1.45am. Pix courtesy of Marine Police

Part 3: The way forward!

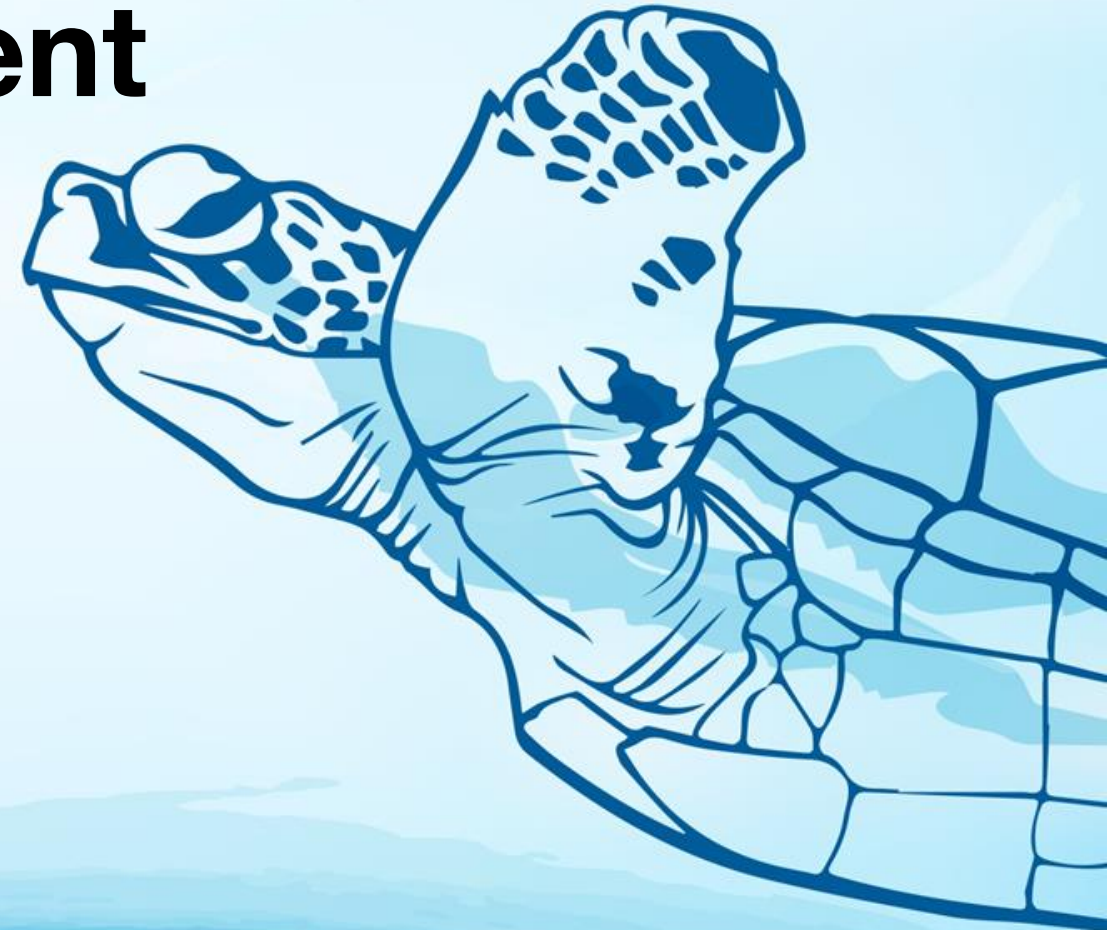


Law & Enforcement



Research

Outreach



Better law & enforcement!



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Encourage and **support** the federal and state authorities:

- to introduce better laws.

Eg. the MSTWG is working on nation-wide level ban of sea turtle egg trade

- to increase their enforcement efforts of the existing rules and regulations, as well as **offer & share** resources!

Help with enforcement work!

Ex: When you spot an illegal activity, **report it!**

Share and **insist** on best practices, even if there are no legal or administrative framework in place for it yet.

Marine Turtle Conservation Seminar and Workshop in Malaysia
1-3 September 2015
Institute of Oceanography and Environment (INOS),
University Malaysia Terengganu

Key Recommendations*

Malaysia's biodiversity is among the richest on earth, a natural capital asset which is critical to the wellbeing and sustained development of the nation. In this regard, Malaysia is home to 4 out of the 7 marine turtle species. The growing threat to turtles globally needs immediate actions by range countries including Malaysia where we are experiencing possible local extinctions of the iconic leather back turtle. Recognising that biodiversity is our life, our heritage and our future, we the participants of this dedicated seminar and workshop on marine turtle conservation recommend that the Government of Malaysia:

- To review the current Malaysia's National Plan of Action (NPOA) on Marine Turtles and update the document for the years 2016-2020. The document should incorporate a clear policy direction and priority issues identified with a monitoring mechanism and timelines stipulated for the achievement of each action to be undertaken. This task is to be completed by December 2015;
- To reactivate the Malaysian Sea Turtle Working Group (MSTWG) by November 2015 with multi-stakeholder membership and its Terms of Reference spelt out;
- To have a nation-wide ban on the selling of marine turtle eggs, as well as marine turtles and other derivatives by December 2016;
- To immediately establish a dedicated multi stakeholder task force to re-examine the legal framework on turtles, and propose amending current legislations or create a new legislation to strengthen the governance of marine turtle conservation in Malaysia. This task force should complete its work by June 2016; and
- Take immediate actions for Malaysia to accede to the Convention on Migratory Species, subject to reservation if need be, by April 2016.

*These recommendations are immediate actions required and the NPOA on Marine Turtles (2016-2020) will have the details of comprehensive actions for the next 5 years in conjunction with the 11th Malaysia Plan.

More research to understand the complex human- sea turtle dimensions!



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More studies beyond the biological aspects of sea turtles is needed to solve the problems that are mainly of anthropogenic nature

Note: See [Jacques' \(2010\)](#) call for “social oceanography” for inspiration



More effective public and local community engagement!



Traditions and habits that are proven harmful and culturally insignificant **can be changed** through dialogues to foster better understanding and acceptance

Promote **community-based conservation**, especially when it creates **sustainable livelihood options** for participating individuals

Support sea turtle conservation efforts whenever possible



**Let's do our part in
saving our sea
turtles, in Malaysia
and beyond!**

Terima kasih

