

Countries Coming Together

While the MTPAN focuses on the population of green turtles within the network, all turtle species can be covered in the Sulu-Sulawesi Seascape initiative, especially under the six-country CTI-CFF cooperation, which has identified marine turtles among the priority threatened species for conservation.

Even separate from the envisioned MTPAN, previous agreements have already brought the Sulu-Sulawesi Seascape countries together for the protection of wildlife, and of marine turtles in particular. The Philippines, Indonesia, and Malaysia are all parties to the Convention on Biological Diversity (CBD), and the Convention on International Trade in Endangered Species of Flora and Fauna (CITES). They have also signed a Memorandum of Understanding (MOU) on ASEAN Sea Turtle Conservation and Protection with other ASEAN Ministers on

Agriculture and Forestry, and are signatories of the MOU on the Conservation and Management of Marine Turtles and their Habitats in the Indian Ocean and Southeast Asia (IO-SEA).

In addition, the Philippines is a signatory to the Convention on the Conservation of Migratory Species of Wild Animals (CMS). The proposed MTPAN would be the most ambitious but extensive conservation effort yet for marine turtles in Philippine waters, but would send a clear message for marine turtle conservation to the world and affirm the country's commitment to international agreements on biodiversity conservation.

All these global commitments provide the enabling environment and a wealth of opportunities for Indonesia, Malaysia, and the Philippines in the proposed tri-national MTPAN to contribute to the conservation of green turtles in particular, and of all marine turtle species in general.



El Nido, Palawan



Department of Environment and Natural Resources



giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

On behalf of



Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety

of the Federal Republic of Germany



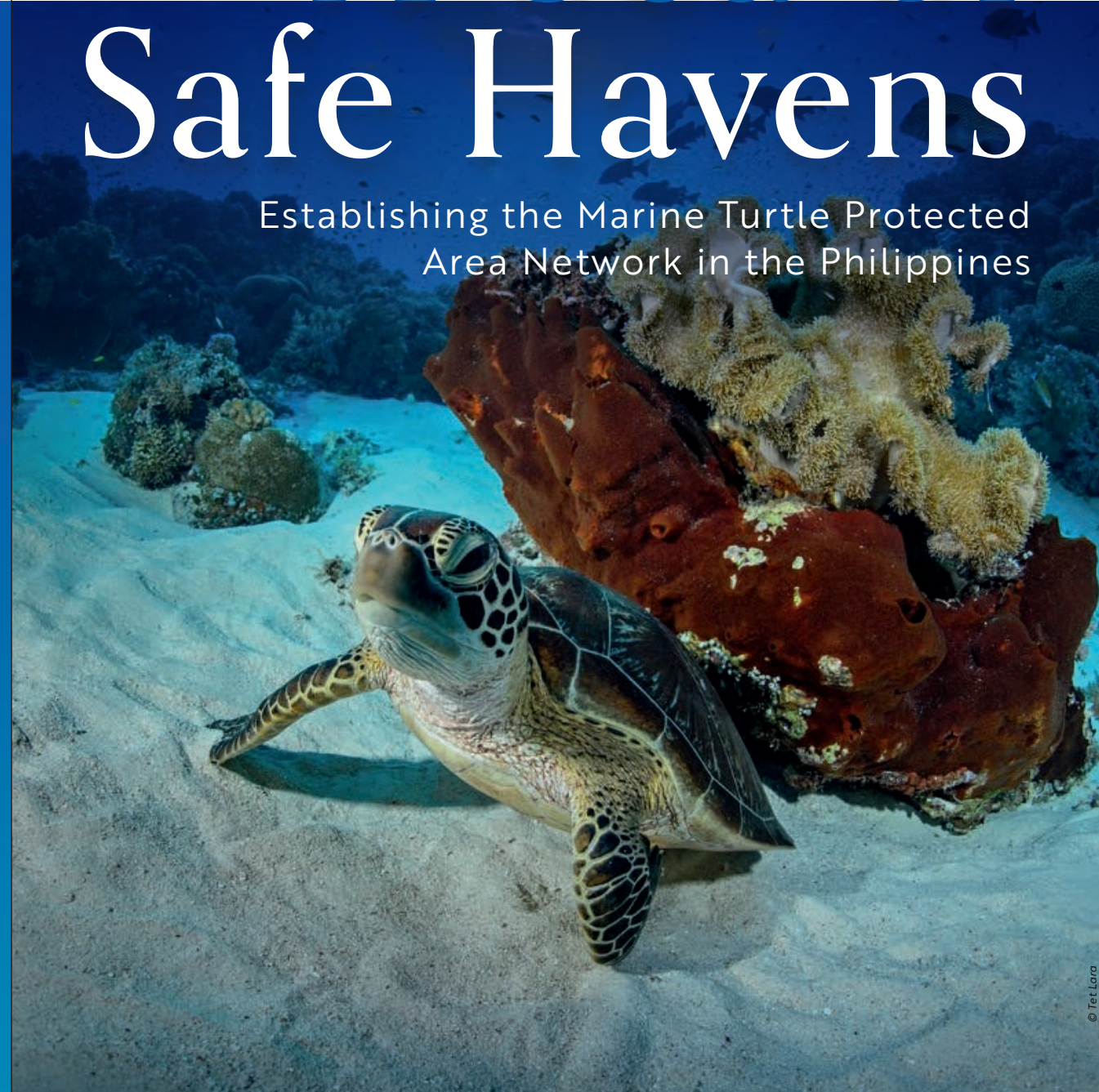
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Philippine Inputs to the Transboundary Marine Turtle Protected Area Network in the Sulu-Sulawesi Seascape, A Priority Seascape in the Coral Triangle Initiative Regional Plan of Action

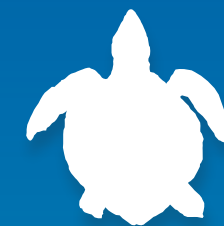
A Sea of

Safe Havens

Establishing the Marine Turtle Protected Area Network in the Philippines

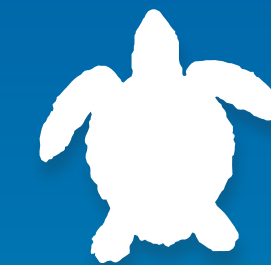


olive ridley
(*Lepidochelys olivacea*)
Vulnerable, IUCN



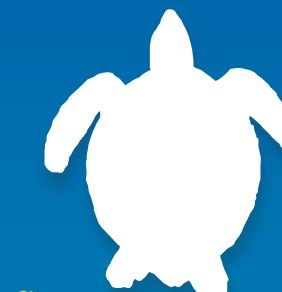
Size
Adults: length 60-70 cm
Mass: up to 70 kg
Hatchlings: length ± 25 mm
Mass 15-20g
Reproduction
Reproduce every 1-3 years
Lay 1-3 clutches of eggs/season
Lay 90-130 eggs per clutch
Eggs weigh ± 30 g each
Incubation period ± 60 days

loggerhead turtle
(*Caretta caretta*)
Vulnerable, IUCN



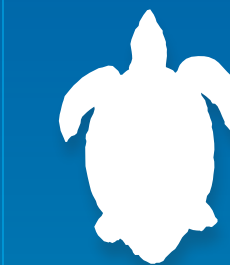
Size
Adults: length 70-100 cm
Mass: up to 200 kg
Hatchlings: length ± 25 mm
Mass 15-20 g
Reproduction
Reproduce every 2-4 years
Lay 2-5 clutches of eggs/season
Lay 80-120 eggs/clutch
Eggs weigh 30-40 grams
Incubation period ± 60 days long
20-30 years to reach sexual maturity

green turtle
(*Chelonia mydas*)
Endangered, IUCN



Size
Adults: length 80-120 cm
Mass: up to 300 kg
Hatchlings: length 30-40 mm
Mass 25-30 g
Reproduction
Reproduce every 2-4 years
Lay 2-5 clutches of eggs/season
Lay 80-120 eggs per clutch
Eggs weigh ± 40-50 g
Incubation period ± 60 days
20-40 years to reach sexual maturity

hawksbill
(*Eretmochelys imbricata*)
Critically Endangered, IUCN



Size
Adults: length 75-90 cm
Mass: up to 150 kg
Hatchlings: length ± 30 mm
Mass approximately 5 g
Reproduction
Reproduce every 2-4 years
Lay 2-5 clutches of eggs/season
Lay 120-200 eggs/clutch
Eggs weigh ± 25-30 g
Incubation period ± 60 days long

leatherback turtle
(*Dermochelys coriacea*)
Critically Endangered, IUCN



Size
Adults: length 140-160 cm
Mass: 300-1000 kg
Hatchling: length ± 50 mm
Mass 40-50 g
Reproduction
Reproduce every 2-4 years
Lay 4-7 clutches of eggs/season
Lay 50-90 eggs/clutch
Eggs weigh ± 80 g
Incubation period ± 60 days long

Important Species in Peril

Turtles are among the most charismatic of sea creatures, ancient mariners who live amidst coral reefs and seagrass beds as true indicators of the health of the oceans. Populations of marine turtles worldwide are subjected to various threats, from the continuing harvest of animals and eggs for food and trade, to pollution, impacts of climate change, and the relentless destruction of different critical habitats they rely on for their life's requirements.

Five of the seven existing species of marine turtles are found in the Philippines.

Source: seaturtlestatus.org, 2017

Connect to Protect

With the Sulu-Sulawesi Marine Ecoregion (SSME) scientifically established as a major nesting site and habitat for green turtles under the SSME Program of Indonesia, Malaysia, and the Philippines (2006–2016), the idea of an expansive Marine Turtle Protected Area Network (MTPAN) has come to the fore. The establishment of networks of protection and management has become a particularly relevant conservation strategy for large areas such as seascapes. Such a network naturally crosses political and geographical borders, necessitating a transboundary approach to conservation and management.

A pioneering network

The Turtle Islands Heritage Protected Area (TIHPA) is an example of existing bilateral cooperation for a transboundary approach. Comprised of three islands of the Turtle Islands Park of Sabah and six islands of the Turtle Islands Wildlife Sanctuary of Tawi-Tawi Province, it was the first transfrontier protected area for marine turtles in the world, specifically established to protect green and hawksbill turtles in 1996 with a Memorandum of Agreement (MOA) between the Governments of Malaysia and the Philippines. The TIHPA is globally important because it harbors one of the few remaining major nesting populations of green turtles in the world.

Scientific studies have confirmed the connectivity of TIHPA with other turtle habitats in Indonesia, Malaysia, and the Philippines through the known migration of green turtles from this transfrontier protected area. Such studies provided the basis for the SSME Regional Action Plan for the Conservation of Sea Turtles, which included a proposed tri-national network of marine protected areas for green turtles.



Selingan Island, Turtle Islands, Sabah (top)
Selingan Island turtle hatchery, Turtle Islands, Sabah (above)



Taganak Island, Turtle Islands, Tawi-Tawi



Baguan Island, Turtle Islands, Tawi-Tawi



A continuing opportunity

With the completion of the SSME Program in 2016, an even broader opportunity to continue and expand transboundary cooperation in marine turtle conservation came with the Coral Triangle Initiative for Coral Reefs, Fisheries, and Food Security (CTI-CFF). It was a logical continuum, as the Sulu-Sulawesi Seascape is also a priority seascape in the CTI Regional Plan of Action. The proposed MTPAN is consistent with the Plan's Goal # 5, to see "threatened species status improving." Thus, an MPA network for marine turtles remains a priority of the CTI-CFF.

Also, the six countries of the Coral Triangle region—Indonesia, Malaysia, the Philippines, Timor-Leste, Papua New Guinea, and the Solomon Islands—and their rich waters make up what is considered the epicenter of global marine biodiversity, which is now also facing the high levels of threats, thus justifying immediate attention.

Towards transboundary networking

The Sulu-Sulawesi Seascape Project, commissioned by the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) and being implemented through a Memorandum of Understanding between CTI-CFF and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, is working for the realization of the transboundary MTPAN, in partnership with the Ministry of Marine Affairs and Fisheries of Indonesia, the Department of Fisheries-Sabah and Sabah Parks of Malaysia, the Department of Environment and Natural Resources-Biodiversity Management Bureau and Department of Agriculture-Bureau of Fisheries and Aquatic Resources of the Philippines, and Conservation International-Philippines.

With the critical habitats of this important population of green turtles indubitably linked across the Philippines, Malaysia, and

Indonesia, the species has become a focus of cooperation among the three countries, underscoring the need to jointly manage marine resources through the MTPAN. This connectivity will not just benefit the species, but will also allow for the conservation of ecosystems that provide goods and services for human communities.

The proposed sites for inclusion in the migratory path of this important population of green turtles—are the Bunaken National Park and Berau Marine Conservation Area (including the Derawan Island Group) in Indonesia; Sipadan Islands, Tun Sakaran Marine Park, Turtle Islands Park, Sugud Islands Marine Conservation Area, and Tun Mustapha Park in Malaysia; and four component sites in the Philippines. Individual MPAs should be established and functioning to be able to contribute to and support network-level initiatives.



Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security Implementation Area

The Philippine Initiative

The Philippines has taken the lead in this process by identifying the four component sites of its own green turtle network, which will form part of the tri-national MTPAN.

• **The El Nido-Taytay Managed Resource Protected Area (ENTMRPA)** is located in the northwestern portion of mainland Palawan, and covers an area of 903.21 km². Four species of marine turtles have been reported within the PA: hawksbill, green, olive ridley, and leatherback. It is a nesting habitat for green and olive ridley turtles, and a foraging site for green, hawksbill, and leatherback turtles. The PA started out as a Marine Turtle Sanctuary in 1984.

• **The Tubbataha Reefs Natural Park (TRNP)** sits in the Sulu Sea, 150 km from Puerto Princesa City, Palawan, within the political boundaries of the Municipality of Cagayancillo. The park covers a total area of 970.3 km², with 100 km² of coral reefs and more than 870 km² of surrounding waters. Two of five species of marine turtles found in the Philippines, green and hawksbill, can be found in the TRNP. The park serves as a foraging habitat for hawksbill turtles. Most green turtles here are juveniles, which means the TRNP is a developmental habitat for this species, although mating and nesting turtles have also been sighted. The TRNP was first established as the Tubbataha National Marine Park in 1988. It was declared a Unesco World Heritage Site in 1993, the only purely marine World Heritage Site in Southeast Asia.

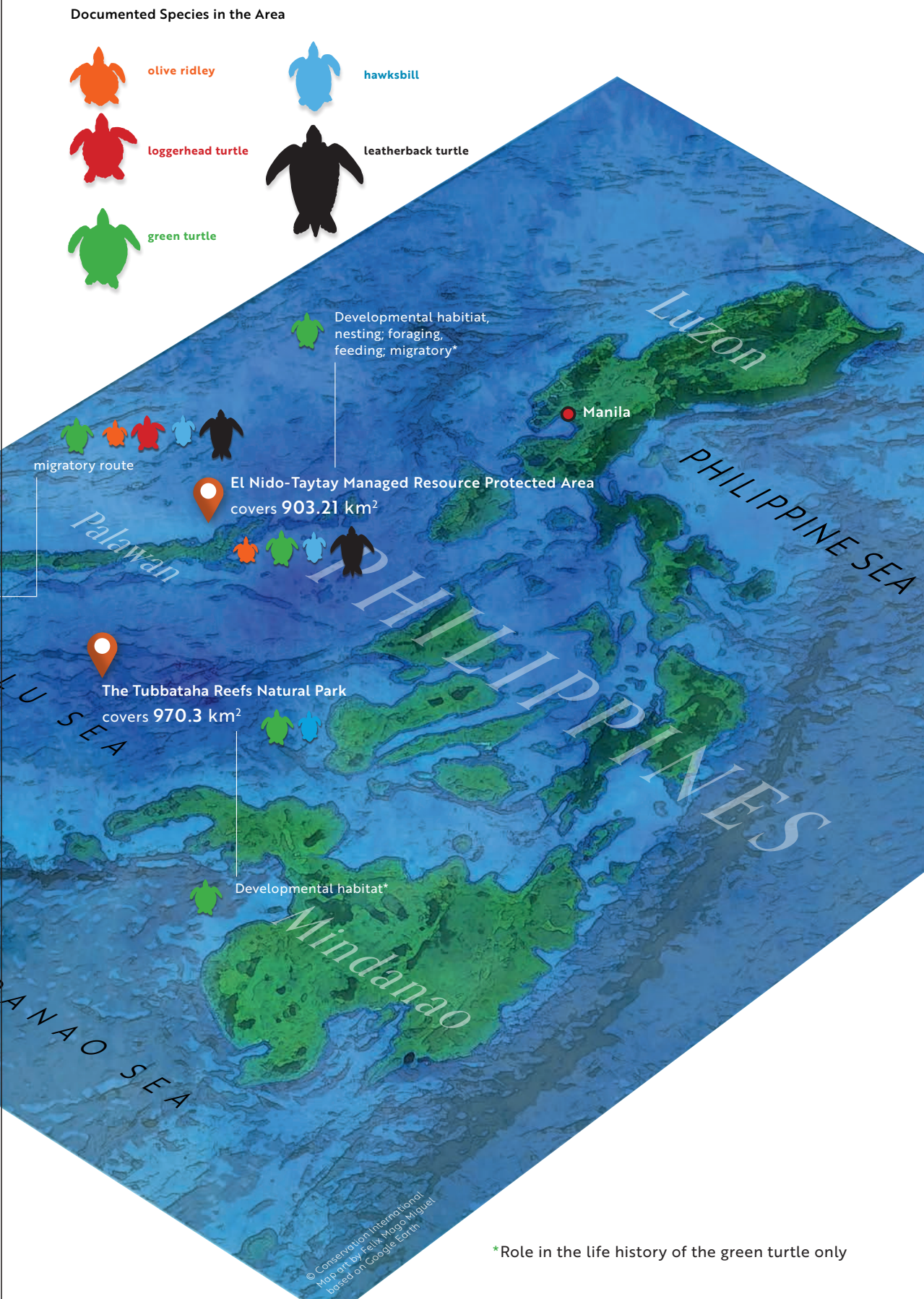
• **The Turtle Islands Wildlife Sanctuary (TIWS)** is in the Sulu Archipelago, under the political jurisdiction of the Municipality of the Turtle Islands in the Province of Tawi-Tawi. It consists of

small islands Taganak, Baguan, Langaan, Boan, Lihiman, and Great Bakkungan and a rocky islet, with a total land area of approximately 3 km². The Turtle Islands host two species of marine turtles, green and hawksbill, and are considered the most important nesting habitat of green turtles in the Philippines. The sanctuary covers a total area of around 2,414.96 km², including its surrounding waters.

• **The Balabac Strait** in Palawan has yet to be declared an MPA before it can become part of the Philippine network for marine turtles. Work has begun to protect this critical route for marine turtles. The strait is a worthy addition to the network, providing

passage not only for turtles from the Indonesian and Malaysian parts of the Sulu-Sulawesi Seascape, but also for those entering the Sulu Sea from adjacent regional seas.

Relevant laws and policies have been in place since 1948 to support the establishment of the Philippine part of the tri-national MTPAN.



*Role in the life history of the green turtle only