



The TRI-NATIONAL SEA TURTLE CORRIDOR is not just a haven for this enigmatic sea creature; it is also a repository of ocean wealth for three countries.

A Transborder Treasure...

Shared wealth

The Tri-National Sea Turtle Corridor, an area of over 7.8 million hectares, encompasses Indonesia, Malaysia and the Philippines. Here, national boundaries overlap, ocean currents flow and touch the coastlines of three nations, and migratory species that know no political boundaries, such as tuna and sea turtles, move across countries into habitats that are critical for the completion of their life cycles. Disruptions to these creatures' life cycle and the natural processes that sustain them result in an ecological imbalance that will also affect the resources and processes that humans rely on for their own survival.

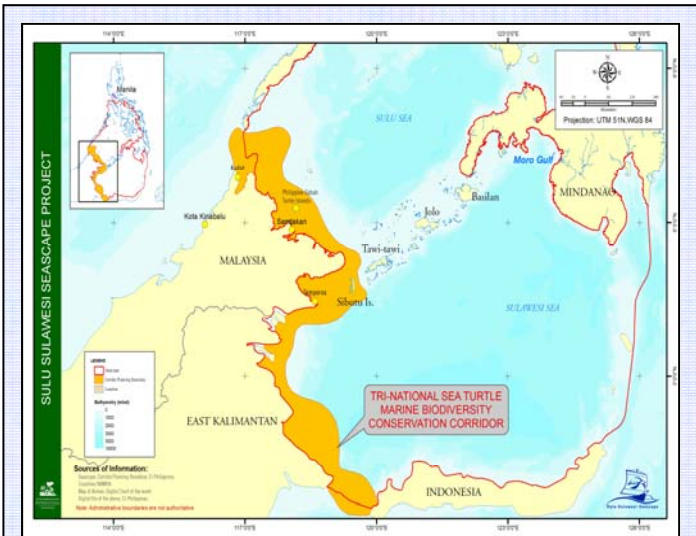
With greater threats to the resources and ecosystems of this corridor, the future of human welfare is bleak for Indonesians, Malaysians and Filipinos alike. The three countries should act together to pursue a commonly desired future, where humans continue to thrive on the biodiversity and productivity of the Sulu-Sulawesi Seas.

An ocean of threats

The ecological integrity of the corridor is threatened and, with it, human welfare. Turtles and eggs are collected not only for traditional use, but for commercial and tourism purposes. While egg concessions are legal in some places, such practices are unsustainable. Illegal trade at the borders and death of turtles and other species in by-catch fisheries occur. Nesting beaches are also being destroyed as coastlines shift or go underwater.

The decline of the turtle population—or of any other endangered species, for that matter—is not the only issue. Overfishing is the biggest threat to the Sulu-Sulawesi Seas. Increasing demand for seafood by a steadily growing population and expanding external markets continues to affect coastal ecosystems. Fishers resort to unsustainable and illegal fishing methods that destroy marine habitats, such as the rapid conversion of mangrove areas into aquaculture ponds, increased fishing, blast fishing, the use of poison in collecting reef fish for the aquarium industry, and the harvest of spawning fishes for the live reef food fish trade. All these negatively impact replenishment of the fishery, destroy the critical habitats and jeopardize the food security of human populations.

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GLOBAL IMPORTANCE

The corridor is globally significant as it harbors the only two remaining large populations of nesting green sea turtles in Southeast Asia: in the Turtle Islands shared by Malaysia and the Philippines, and the Derawan group of islands in Indonesia. It also supports the only existing large nesting population of hawksbills in the region. The corridor is dotted with islands, including other nesting sites located mostly in Malaysia. Examples are the islands of Sipadan, Lankayan, Tegapil, Nunukan, Bilean and Tanjung Paru Paru. Studies revealed that the tri-national corridor has three of the 17 genetic populations of green turtles identified throughout the Western Central Pacific and South-east Asia.

The corridor is riddled with bays, rivers, the largest of which is the Kinabatangan River, extensive mangrove forests, and productive seagrass beds and fringing reefs. All these, including the deep channels in between the many islands in the corridor, offer a variety of habitats to diverse life forms. Many of the areas function as foraging and feeding sites, for turtles and other endangered and migratory species such as dugongs, whale sharks, dolphins and whales. The coastal and pelagic ecosystems are highly productive, and are major sources of prized fish and shellfish, including prawns, crabs and groupers.



CONSERVATION MISSION

Conservation International's mission is to conserve the Earth's living heritage — our global biodiversity — and to demonstrate that human societies are able to live harmoniously with nature.



Use of poison / cyanide to catch aquarium fishes is one of the major threats to biodiversity within the Seascape (photo © Juergen Freund).



A napoleon wrasse inside a fishpen with two groupers in the waters of Balabac Strait. (photo © J. Freund).



Slaughtered hawksbill ready for processing onboard a poacher's boat (photo courtesy of BFAF).

A transborder treasure..... Continued from page 1

Additional threats are posed by improper land-based development and marine-based activities (such as shipping, which is expanding in the Sulu-Sulawesi Seas) that result in pollution and aggregate effects of global climate change. Human migration, marine wildlife traffic, poaching by foreign vessels, inadequate enforcement mechanism for transboundary monitoring and regulation are shared problems of the three countries in this corridor.



What turtles can tell us...

Sea turtles underscore the significance of the tri-national corridor to global biodiversity. More than the survival of turtles, the real issue in this corridor is human welfare. But turtles, just like any flagship species, tell us the big story, about the state of natural systems crucial to biodiversity. The turtle population is an indicator for the environment's capacity to sustain living things, a basis for projecting future scenarios if current levels of exploitation and other threats remain, a suggestion of the extent of conservation and management interventions needed, and a measure of the successes or failures of these interventions.

In a transboundary corridor where resources are shared and people face a common fate in a shared environment, it is important for the countries involved to work together formally and govern the Sulu-Sulawesi Seas as one large management unit. In the Tri-National Sea Turtle Marine Biodiversity Conservation Corridor (MBCC), a strategy to establish a network of marine protected areas (MPAs) that primarily targets sea turtles, but also covers other biodiversity components within the context of ecosystems-based management framework is imperative. A tri-national coordinating and management mechanism should provide a way to implement actions to pursue the goals of conservation and sustainable development for the benefit of the peoples in the three nations.

CI: A stake in the seas...

Conservation International helped formulate a biodiversity vision and the development of a multi-stakeholder Conservation Plan for Sulu-Sulawesi in 2001 and 2003, respectively. By implementing the Sulu-Sulawesi Seascape (SSS) Project with partners in Indonesia, Malaysia and the Philippines, CI has taken initial steps towards the achievement of the vision for the Sulu-Sulawesi Seas. This includes biodiversity conservation, maintenance of productivity to meet human needs, and participatory management across political and cultural boundaries. The SSS Project aims to enhance the management of MPAs, establish new ones, and design an MPA network that transcends political boundaries. In the process, awareness and capacities are built, policies are linked to species and fisheries interaction are developed while also creating, sustainable financing, alliances and partnerships.

How to make an MPA work...

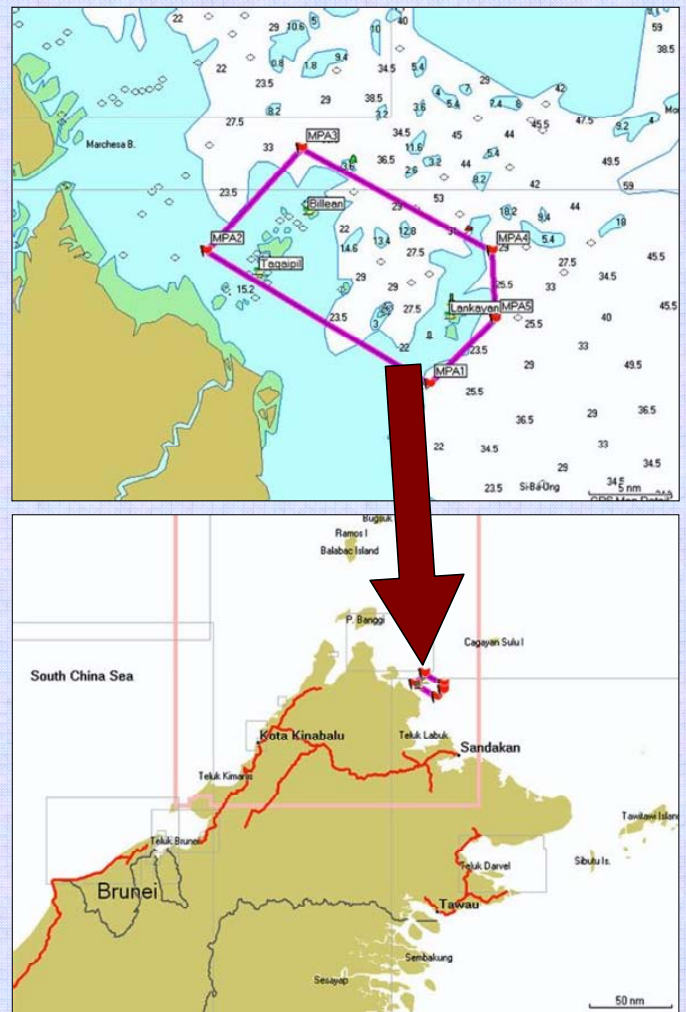
MPA work in the tri-national corridor required four types of intervention: strengthening of existing MPAs; supporting the gazettement of a new, large and co-managed MPA; providing the science for the network of MPAs through genetic mapping of turtles; and designing an MPA network that will protect turtles in nesting habitats, foraging areas, and migration routes.

In Malaysia, CI partners with Reef Guardian to step up the monitoring of green and hawksbill turtles in a relatively new MPA, the Sugud Islands Marine Conservation Area (SIMCA), which consists of the islands of Lankayan, Bilean and Tagaipil. SIMCA is located about 80 kilometers off Sandakan mainland and about 40 kilometers from Turtle Island Park (Selingan, Gulisaan & Bakungan Kecil Islands), which is the major site for Green turtle (*Chelonia mydas*) and hawksbill turtle (*Eretmochelys imbricata*). SIMCA is threatened with turtle egg poaching and other illegal and destructive fishing activities. In close cooperation with Sabah Wildlife Department and the Police Field Force, Reef Guardian protects SIMCA by intensifying sea patrols and maintains marine law enforcement in and around the MPA. In the Philippines, CI works with the Department of Environment and Natural Resources (DENR) Protected Areas and Wildlife Bureau (PAWB) to address conservation issues in the Turtle Islands Wildlife Sanctuary and develop a management plan

CI, in partnership with Sabah Parks and WWF-Malaysia, also supports the gazettement of the proposed Tun Mustapha Park, a 1.1 million-hectare park covering 50 islands and 63,790 hectares of marine waters. In March 2003, the Sabah government gave notice of approval and declared its intention to gazette the area as a marine park. The proposed Tun Mustapha Marine Park will create a new paradigm for marine conservation by introducing the large marine managed area concept, co-managed by local communities. The grant from CI will support stakeholder consultations, research to determine turtle nesting sites within the park for consideration in the zoning plan, and compilation of information to write up the gazettement document for submission to the state agency.

CI partners with Udayana University in Indonesia, in mapping out the genetic stock of green and hawksbill turtles to provide the scientific basis for a network of MPAs for sea turtles in Derawan Islands. Different genetic stocks must be represented in the network of MPAs for turtles to safeguard the diversity of the species. The CI grant will make possible the mapping out of different areas that support the different developmental stages of the turtles. It is important that the network of MPAs for turtles not only protect nesting beaches, but all other critical habitats that provide what they need to grow, mature and breed.

CI partners with the Marine Research Foundation (MRF) in Malaysia to draft a design for an MPA network that will protect turtles in nesting habitats, foraging areas, and migration routes. While the completion of the MPA network design for the entire corridor will require more time than the duration of the first phase of the CI-SSS Project, suggestions can be made based on information gathered from partners and stakeholders involved in the project. At best, this phase of the SSS Project can provide some information for an MPA network within “pockets” of the corridor, such as in Berau in the Derawan group of islands in Indonesia, whose network will be based on genetic studies by Udayana University; Semporna Peninsula in Malaysia, whose network will be based on WWF-Malaysia’s determination of turtle habitats; Kudat-Banggi in Malaysia, which has been studied by Sabah Parks and WWF-Malaysia in line with the gazettement process of Tun Mustapha Park; and the fisheries by-catch assessment of the Department of Fisheries (DOF)-Sabah in different parts of the corridor, which will identify critical turtle habitats in fishing grounds to help in fisheries by-catch reduction.



The SIMCA MPA (from Reef Guardians).

Policies that protect

CI is working with the DOF-Sabah for fisheries policy development in order to protect sea turtles, other key species and their habitats in the tri-national corridor. The grant from CI-SSS Project shall enable the DOF to assess the effects of fishing gear such as long lines, gillnets, trawls and others on sea turtles, seabirds, small cetaceans, sharks and rays and other marine wildlife. The study shall determine critical habitats of by-catch species so that only appropriate fishing methods that allow for the sustainability of stocks can be used. The results of the study shall help in developing and implementing by-catch reduction measures.

CI is helping with an aquaculture development plan for the east coast of Sabah. Sabah has 61% of Malaysia's mangroves and 75% of its coral reefs. Aquaculture is a major development that will grow in the coming years. The plan will incorporate internationally accepted codes of practice and will issue guidelines for developing aquaculture farms in Sabah. Given that most mangrove areas in Sabah have adjacent seagrass beds and coral reefs that themselves contribute greatly to fisheries production, the State Government of Sabah wants to ensure that aquaculture development will not adversely damage marine ecosystems.

Goals for the Tri-National Sea Turtle MBCC:

- Sustained technical and financial assistance for the Turtle Islands Heritage Protected Area (TIHPA) from the international community to address the issue of nests flooding due to erosion and the shifting of nesting beaches;
- Completion of the gazettelement of the Tun Mustapha Park, to become a model of large and co-managed MPA in Malaysia that links human survival and protection of species and habitat. This will be the first of this kind and of this scale in Malaysia. This is a significant transborder corridor not only between the Philippines and Malaysia, but also between the Sulu Sea and South China Sea.
- Creation of a network of MPAs that protects turtles in its different developmental stages, benefits other wildlife sustains productive ecosystems and human populations and is fully supported by stakeholders
- Institutional networking of MPA management units for the purpose of exchanging experiences, lessons, and skills for better MPA management.
- Implementation and enforcement of relevant park and fishery laws through cooperative arrangements among concerned groups
- Management cost of MPA network shared by stakeholders and supported by sustainable financing mechanisms
- Development of fishery policies in support of the protection of turtles and other wildlife in their critical habitats and migration routes
- Strong and functional tri-national governance fully implementing species conservation action plan that directly benefits marine biodiversity, protects habitats and sustains the people of the Sulu-Sulawesi Seas

By 2008, we want to see stronger existing marine protected areas, a design for a sea turtle MPA network, and a formal management regime established within the Tri-National Sea Turtle Marine Biodiversity Conservation Corridor.

Can do: Partners in capacity building

The Marine Research Foundation in Malaysia conducted a Trinational Sea Turtle Training in Kota Kinabalu, Sabah, Malaysia in September 2006. A total of 35 participants from the Philippines, Malaysia and Indonesia were trained on the biology, ecology and value of marine turtles, their attributes which affect conservation, management needs, community-based management, investigation and research methods, data analysis and more. The trained personnel are expected to echo the training to build capacity for the network of MPAs in the long term. The training also established contact among turtle conservationists and habitat managers for the exchange of learning, discussions on a tri-national action plan for sea turtle conservation, and institutional networking.

CI also works with Sabah Parks to determine training needs related to sea turtle conservation and management in existing marine parks in Sabah, develop appropriate training modules, and train park staff and stakeholders. Sabah Parks shall also conduct awareness campaign that will promote sea turtle conservation among local communities and develop their appreciation for the work.

Under CI's partnership with the Department of Environment and Natural Resources (DENR) in the Philippines, turtle conservation and management training has already been conducted for park wardens, park superintendent and local stakeholders in the Turtle Islands Wildlife Sanctuary. With regards to sustainable financing, CI is also working with WWF-Malaysia, which in turn is working with Sabah Parks and the private sector to determine the cost of park management and to find potential sources of revenue to support the Turtle Islands Park.

CI-Philippines is strengthening its role in the national and tri-national governance of the SSS, as a member of the Presidential Commission for Sulu-Celebes Seas and of the Philippine delegation to the Tri-National Committee for the Sulu-Sulawesi Marine Ecoregion, respectively. CI-Philippines has been officially recognized as a member of the three Technical Working Groups under the Tri-National Committee that will establish the sub-committees on Endangered, Migratory and Charismatic Species; Network of Marine Protected Areas; and Sustainable Fisheries and Livelihood.



Green sea turtle (photo © CI, Roderic Mast)

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