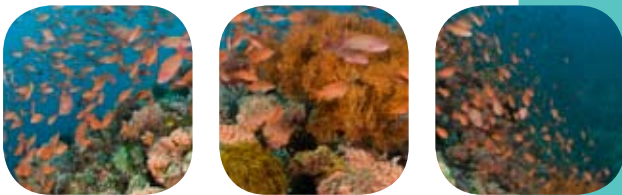


The Cagayan Ridge Marine Biodiversity Conservation Corridor

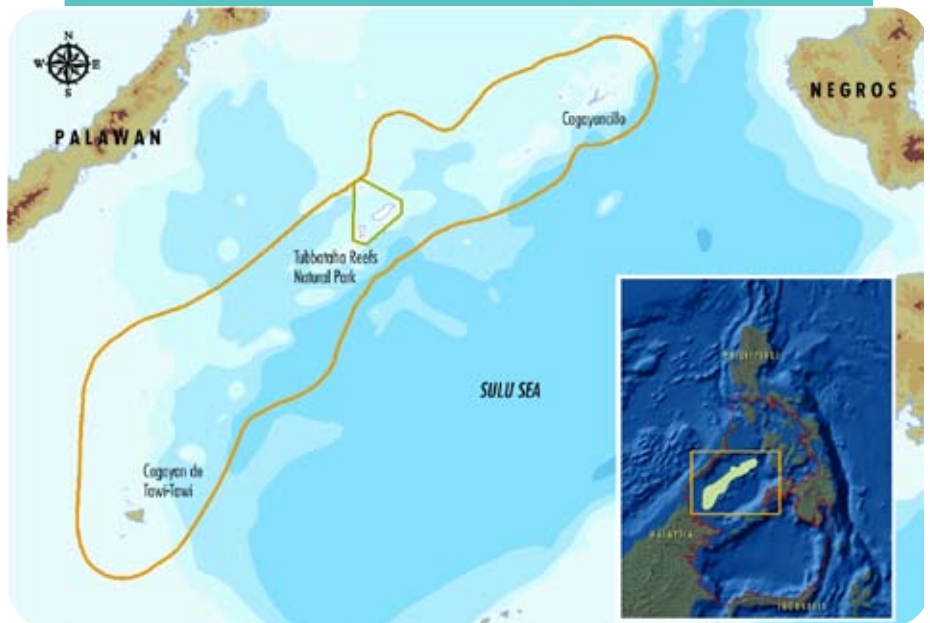


The **Cagayan Ridge Marine Biodiversity Conservation Corridor** is located at the center of Sulu Sea, east-southeast of the province of Palawan from the Sultana Shoal in the north to the San Miguel islands in the south. This corridor occupies an area of at least four million hectares.

Like oases in the desert seas, the small islands, reef atolls and shoals of Cagayan Ridge form a vibrant chain of critical life support systems necessary to maintain the marine biodiversity and fisheries throughout the Sulu Sea and beyond.

The Cagayan Ridge corridor has the highest number of cetacean species compared to the other marine biodiversity corridors of the Sulu-Sulawesi Seascape. Past surveys in the area, indicated that there are 11 species present: spinner dolphin, pantropical spotted dolphin, Fraser's dolphin, common bottlenose dolphin, Risso's dolphin, short-finned pilot whale, Blainville's beaked whale, false killer whale, dwarf sperm whale, Cuvier's beaked whale and sperm whale.

Historically, sperm whales were abundant in this area (and in the entire Sulu Sea) and were hunted quite extensively during the late 1800s.



The **Tubbataha Reefs Natural Park (TRNP)**, one of the most biologically diverse coral reef systems in the Philippines is a vital part of the Cagayan Ridge. The TRNP has been declared the only purely marine World Heritage Site in Southeast Asia by UNESCO, and in 1999, it was also declared a RAMSAR (The Ramsar Convention on Wetlands) site to demonstrate its global importance to the conservation of congregating seabird species.

In August 2006, Philippine President Gloria Macapagal Arroyo signed a proclamation expanding the area of Tubbataha Reefs Natural Park to three times its original size, thereby protecting 96,828 hectares against unauthorized entries and any form of pollution or exploitation.



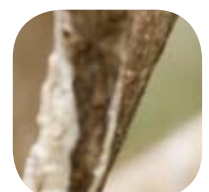
The TRNP boasts of diverse species of corals, reef fishes, algae and seagrass – complemented by aggregations of sharks and marine mammals. The islets on the two large atolls are sea turtle nesting sites and serve as important feeding and breeding grounds for seabirds. The inhabited islands are Cawili, Arena, Calusa and Cagayancillo. Known scuba-diving destinations are Jessie Beazely, Basterra, Bancauan and Bancoran.

TRNP is managed by the Tubbataha Protected Area Management Board that includes representatives from government, the Palawan Council for Sustainable Development, NGOs, and the Philippine Navy and Coast Guard. Conservation International-Philippines is an active member of this management board and continues to support conservation efforts in Tubbataha Reefs.

The Park’s “no take” policy is a critical step in ensuring the continued protection of Tubbataha Reef’s marine flora and fauna. Only tourism and scientific research are allowed in the Park.

“Conservation is never a story written by one author because for it to matter, it should be lived and practiced by many individuals and institutions. We have always believed that together with the people who matter, we can walk the conservation talk.”

Angelique Songco
TRNP Park Manager



Underwater treasures under threat



Illegal fishing and poaching from both local and foreign commercial fishers are major threats to the biodiversity of Cagayan Ridge, particularly Tubbataha Reefs.

For many years, the remoteness of this rich biological wonder protected it against such activities. However, fishermen from outlying islands and nearby Asian countries have found their way to Tubbataha. Due to limited personnel and meager resources in managing this area, it is difficult to protect habitats (such as coral reefs) and species (such as seabirds, marine turtles and marine mammals) against intruders. Current government funding, tourist fees, and fines collected from environmental crimes such as damage to corals and wildlife from boat grounding and the dropping of anchors are not enough to cover park management needs.

Directed takes of cetaceans were found to be prevalent along the Cagayan Ridge. Cetacean meat is used as bait for the shark and nautilus fisheries.

Incidences of by-catch of dolphins in the purse seine fishing industry were also reported in the southern part of the ridge.

Keeping marine wonders intact



Conservation International joined forces with academic, government and non-government organizations in the Philippines to derive necessary information for the establishment of marine protected areas (MPA). These include the University of the Philippines' Marine Science Institute and Ocean Bio Laboratory, the Tubbataha Management Office and the Tubbataha Protected Area Management Board, the Tropical Marine Research for Conservation, the Pawikan (Sea Turtle) Conservation Project of the Protected Areas and Wildlife Bureau of the Department of Environment and Natural Resources, and the stakeholders and Local Government Unit (LGU) of Cagayancillo, Palawan.

Conservation Outcomes

Results from recent oceanographic and larval dispersal studies have provided some evidence of the strong ecological connectivity between the Cagayan Ridge corridor and the eastern coast of Palawan all the way to the Balabac Strait. While the Tubbataha Reefs Natural Park (TRNP) remains to be a top priority area for conservation, the protection and improved management of other critical reef areas in the Sulu Sea including Cagayancillo, Hinobaan, Negros Occidental, Cuyo Island Group, Green Island, Honda Bay, Puerto Princesa Bay, and Balabac are necessary to ensure the survival of Sulu-Sulawesi Seascape.



The strong current flows during the transition period of the Northeast monsoon (October to November) favors the exchange of larvae between Cagayancillo, Cawili-Arena, and Tubbataha Reefs, as well as the dispersal of eggs and larvae from northern sources such as the vicinity of Cuyo Shelf southwards along the east coast of Palawan.

- The Tubbataha Reefs Natural Park remains to be one of the areas with highest reef fish biomass, abundance and diversity in the Philippines. It hosts large predators and endangered species such as marine turtles and sea birds, and numerous commercially targeted fish species. Tubbataha shows indications of good recovery and resilience to natural disturbances most likely due to its reduced human impacts and effective protection. The adjacent reef systems of Cagayancillo were also relatively less stressed compared to those of Verde Island Passage and Balabac Strait.
- For Cagayancillo, research results indicate that expansion of no-take marine protected areas in four areas with important habitats and great potential for recruitment of fish and corals could contribute to recovery of fish stocks. The management plans for these MPAs will be finalized and implemented by the municipality.
- A marine turtle and dugong habitat assessment survey conducted in 2007 indicated that the Cagayan Ridge is a critical habitat for two marine turtle species (green turtle and hawksbill turtle). Apparent threats to the species are egg collection and directed hunting for local consumption, as well as destructive fishing practices (i.e. dynamite fishing).



Conservation Outcomes

- Seabird surveys have been completed and suggest that seabird population trends in Cagayan Ridge are alarming. Priority sites for seabird conservation are Tubbataha Reefs, Bancauan Island, Bancoran Island, Basterra Reef and Cawili Island. Tubbataha Management Office staff and volunteers have now banded more than 1,644 birds while efforts to conserve threatened species in the corridor included training in marine mammal and sea turtle rescue for 31 participants from 19 offices and three municipalities.



- From 2006-2008, Conservation International supported marine park ranger patrols in the Tubbataha Reefs. Park rangers have conducted a total of 138 patrols covering 6,000 nautical miles and 528 hours – a dramatic increase from previous records before CI's involvement.

This increase in ranger patrols resulted in identifying 27 illegal fishing boats with 148 illegal fishers arrested. A total of 48 cases were filed against the arrested individuals.

- Production and restoration cost estimates on boat grounding in TRNP suggest that violations will be charged a penalty of P12,000 (approximately US\$300) per square meter of coral reef damaged.
- Results of studies on the extent of incidental and directed take of marine threatened species in this area of the Sulu Sea indicate that municipal fishermen use three main types of fishing gear: gillnets, simple hook and line, and spear guns. Directed catch of cetaceans and marine turtles was practiced in the past, but has reportedly been discontinued. Evidence suggests that poaching of turtles still occurs.
- Information and educational activities to increase local support for marine conservation and management, targeting local communities, and local government unit officials were also undertaken to support existing conservation science efforts.



CI and partners will work towards consolidating a Marine Protected Area network including 97,000 hectares of No Take Zones that protect at least 20 percent of the critical habitats (coral reefs, seagrass beds, and mangroves) in the Cagayan Ridge Marine Biodiversity Conservation Corridor. Strengthening the management capabilities of the local stakeholders in Cagayancillo and other local governments involved in TRNP, as well as enforcement of fisheries regulations, and training on proper law enforcement and prosecution of offenders will be undertaken.



The Cagayan Ridge is a legacy that is alive! By protecting it, we give it a voice. You can be that voice.

Be at the center of conservation.

Help conserve the Cagayan Ridge Marine Biodiversity Conservation Corridor.



If you are interested to learn more about the Sulu-Sulawesi Seascape, contact:

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Founded in 1987, Conservation International believes that the earth's natural heritage must be maintained if future generations are to thrive spiritually, culturally, and economically. Our 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.

For more information, visit www.conservation.org/ph/sssi

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