



“ THIS DISCOVERY GIVES US GREAT HOPE THAT
THERE IS A FUTURE
 FOR IRRAWADDY DOLPHINS. ”

— BRIAN D. SMITH
 DIRECTOR OF WCS'S BANGLADESH CETACEAN DIVERSITY PROJECT



WILDLIFE CONSERVATION SOCIETY
 FINDS NEARLY 6,000 IRRAWADDY DOLPHINS



WCS: DEDICATED TO OCEAN CONSERVATION

WCS aims to secure the future of significant populations of Ocean Giants with a primary concentration on large whales, dolphins, sea turtles, and sharks across entire portions of their range. Cetacean conservation and research focuses on populations of humpback whales, right whales, blue whales, Irrawaddy dolphins, humpback dolphins, and several other species in the Atlantic, Indian, and Pacific Oceans. Complementing protection of these iconic marine species, WCS is dedicated to conserving seascapes by creating effective management of Marine Protected Areas within a larger spatial context, emphasizing an ecosystem approach to conservation, fisheries management, connectivity, and protection of adjacent terrestrial environments.

WCS develops and implements innovative solutions to the most challenging threats facing our world's oceans through applied conservation, research, capacity-building, and policy action. WCS maintains a long-term commitment to conservation success of priority marine species and seascapes throughout the world's oceans.

Support for this study has been provided in part by the Kerzner Marine Foundation and Ocean Park Conservation Foundation, Hong Kong (OPCFHK). This study was also funded in part by the U.S. Marine Mammal Commission. The Convention on Migratory Species of Wild Animals (CMS) has also supported WCS efforts as part of a regional program for cetacean conservation in the Bay of Bengal.



The Wildlife Conservation Society saves wildlife and wild places worldwide. We do so through science, global conservation, education and the management of the world's largest system of urban wildlife parks, led by the flagship Bronx Zoo. Together these activities change attitudes towards nature and help people imagine wildlife and humans living in harmony. WCS is committed to this mission because it is essential to the integrity of life on Earth. Visit www.wcs.org.

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Rare DOLPHIN DISCOVERY in Bangladesh



The fate of a rare coastal dolphin species living in South and Southeast Asia has become more certain with a major recent discovery in Bangladesh. A new census conducted by the Wildlife Conservation Society (WCS) and other groups has revealed nearly 6,000 Irrawaddy dolphins in the Sundarbans mangrove forest and adjacent waters of the Bay of Bengal—an area where little marine mammal research has taken place up to this point.

Prior to this study, the largest known populations of Irrawaddy dolphins numbered in the low hundreds or less.

Despite the discovery of this extraordinarily large population, the study's authors warn that the dolphins are still under threat, largely by accidental entanglement in fishing nets in Bangladesh's heavily fished coastal waters.

In other parts of its range, the Irrawaddy dolphin is known for its unique interactions with fishermen. In Myanmar's Ayeyarwady River, the dolphins engage in "cooperative fishing" with humans, where the animals voluntarily herd schools of fish toward fishing boats and awaiting nets. In 2006, WCS helped establish a protected area along the Ayeyarwady River to conserve this "Critically Endangered" population.

In addition to the threat from fishing gear, WCS researcher Brian D. Smith and coauthors report the additional long-term threats to the dolphin population from declining freshwater supplies, caused by upstream water diversion in India coupled with sea-level rise due to global climate change. These factors also threaten Ganges River dolphins, an endangered species with a range that overlaps with Irrawaddy dolphins in the Sundarbans mangrove forest.

The recent likely extinction of the Yangtze River dolphin, or baiji, is a potent reminder of the vulnerability of freshwater dolphin to extinction from the impacts of humans.

WCS is currently working closely with the Ministry of Environment and Forests in Bangladesh on plans for establishing a protected area network for both Irrawaddy and Ganges River dolphins in the Sundarbans mangrove forest.

The study was conducted by WCS and Chittagong University in Bangladesh.

“BANGLADESH CLEARLY SERVES AS AN IMPORTANT SANCTUARY FOR IRRAWADDY DOLPHINS, AND CONSERVATION IN THIS REGION SHOULD BE A TOP PRIORITY.”

— BRIAN D. SMITH



The Irrawaddy Dolphin

Growing to some 2 to 2.5 meters in length (6.5 to 8 feet), the Irrawaddy dolphin is a small, gray cetacean with a distinctly rounded beakless head and a small curved dorsal fin just past the middle of the back. The dolphin swims in the large rivers, estuaries, and freshwater lagoons of South and Southeast Asia, with population numbers of a few hundred, and in some cases fewer than 100 animals. The Irrawaddy dolphin is listed on the IUCN Red List as "Vulnerable" in Bangladesh. Several other populations of Irrawaddy dolphin in countries, such as Myanmar, are listed as "Critically Endangered."

Bangladesh: A Cetacean 'Hotspot'

Studies conducted by WCS's Bangladesh Cetacean Diversity Project (BCDP) have identified the estuarine, coastal, and oceanic waters of Bangladesh as a "hot spot" for cetaceans (whales, dolphins, and porpoises). Cetaceans occur from the mangrove forests to the open ocean, where the "Swatch-of-No-Ground," an undersea canyon, drops more than 900 meters (3,000 feet). In addition to containing the largest population of Irrawaddy dolphins known, the region also supports cetaceans such as Ganges River dolphins, Indo-Pacific humpback dolphins, finless porpoises, Indo-Pacific bottlenose dolphins, Pantropical spotted dolphins, spinner dolphins, and Bryde's whales.

How to Count Dolphins

Since dolphins and other cetaceans only spend a fraction of their lives at the water's surface, researchers must employ scientific survey methods to generate accurate population estimates. Researchers gather data (sightings of dolphins) by means of transect counts, straight lines on which boats travel in the process of searching for animals. Visual sightings of dolphins are recorded as data in the river channels and coastal areas, with researchers taking note of the species, the presence of newborn animals (or calves), and the angle at which the animal is sighted from the boat's bow (the angle can be used to accurately estimate distance). The data are then analyzed and used to formulate population estimates.