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e Isabel Beasley

Irrawaddy Dolphin

(*Orcaella brevirostris*)

IUCN Red List: Data Deficient (Mekong Sub-population Critically Endangered)

CITES Appendix I

Introduction

The Irrawaddy dolphin is an unusual species of dolphin, with populations known to inhabit freshwater, brackish, and coastal marine environments. The Irrawaddy dolphins of the Mekong River are one of the five known freshwater populations of this species. Recent studies provided information that resulted in a reclassification of the Mekong population to 'Critically Endangered' on the IUCN Red List.

The dolphin is regarded to be a sacred animal in Buddhist culture, and is rarely hunted and consumed as food by local people. However, quite often it becomes accidentally entangled in fishing nets. As a result of such human-caused mortalities, the total population of the Mekong River Irrawaddy dolphin is estimated to be as low as 80-120 individuals, and decreasing at an alarming speed. Rapid and poorly planned dolphin-watching tourism development is also increasingly threatening the survival of the species.

The future potential for conservation of the Irrawaddy dolphin may lie in the development of well-managed ecotourism. If the tourism is planned and managed correctly, the economic incomes from tourists could provide an important source of livelihoods for local communities while also protecting the remaining population of this species, before it is simply too late.

Distribution

The Irrawaddy dolphin is patchily distributed in shallow coastal waters across the Asia-Pacific region from India in the west, to the Philippines in the East, and Indonesia (Sulawesi) in the south. As well as two freshwater lagoons, Chillika Lake in India and Songkhla Lake in Thailand, Irrawaddy dolphins are found in three inland river systems - the Mahakam River in Indonesia, the Ayeyarwady River in Myanmar, and the Mekong River in Vietnam, Cambodia and southern Lao PDR.



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The species was once found widely distributed in the Mekong River and its major tributaries in Cambodia, southern Lao PDR, and Vietnam, but it is now thought to be largely restricted to a 190 km stretch of the Mekong from the Lao PDR - Cambodia border south to the small Cambodian town of Kratie.

Irrawaddy dolphin populations in Australia and Papua New Guinea have recently been described as a separate species, emphasising the need for effective conservation in both regions.

Habitat and Feeding

Although Irrawaddy dolphins inhabit both freshwater and marine habitats, the species requires freshwater inputs to areas it commonly inhabits, with the distribution of all coastal populations being centred on estuaries and brackish-water environments.

In the Mekong River, the Irrawaddy dolphins depend heavily on nine "deep pools", where they spend the majority of their time, particularly during the dry season when the water levels are low. Some deep pools have been estimated at well over 70 m deep, although most of the pools used by the dolphins tend to be around 20-30 m deep. These pools also form an important dry season refuge for a variety of fish species which the dolphins and local communities rely on.



Conservation Issues and Solutions

The main threat currently facing Irrawaddy dolphins in the Mekong River is accidental entanglement in fishermen's gillnets. Although almost all the fishermen do not intend to, or want to, catch the dolphins, setting these nets (particularly those with large mesh sizes) in areas where fish are most abundant inevitably leads to dolphins also being accidentally caught. Also, as these nets are often left overnight, or for many hours before they are checked, the dolphins have usually drowned before they are found.

A high proportion of young or newborn dolphin calves also die in the Mekong population, which suggests that another form of environmental disturbance, such as toxic pollutants, may be severely impacting the population. Additional threats include poorly regulated tourism causing daily harassment to the dolphins, direct hunting/killing by a small number of individuals, increased boat traffic, destructive fishing practices (such as electric and dynamite fishing), and a potential threat of dam construction or other waterway modifications.

Eliminating or reducing the impacts of the most serious threats to the remaining Irrawaddy dolphins in the Mekong River is the most urgent need. Without a drastic

reduction in these threats and the associated mortality rates, the population could drop to unrecoverable levels within the next 3-5 years. In order to achieve this, effective regulations must be established and enforced to protect the dolphins and their critical habitats in the Mekong River. In addition, although poorly regulated tourism is a serious threat to the dolphins, effective use and dispersal of revenue generated by sustainable dolphin tourism activities may assist the survival of the dolphins in the longer-term.

The WWF Living Mekong Programme, in cooperation with the Wildlife Conservation Society (WCS), the IUCN/UNDP/MRC Mekong Wetlands Biodiversity and Sustainable Use Project (MWBSP), and the relevant government departments, are working with local communities towards these goals so that future generations can enjoy the sight of Irrawaddy dolphins in the Mekong River. Local human populations are so heavily dependant on the fisheries and natural resources of the Mekong that the fate of many poor, rural communities living along the river is closely tied to that of the Irrawaddy dolphins - the plight that the dolphins face could well be a sign of greater problems to come, unless we act now.



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