



WWF

FACTSHEET

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THE MEKONG'S DOLPHINS: MONITORING A CRITICALLY ENDANGERED POPULATION

From 2007 WWF has worked with partners in Cambodia and Lao to monitor the Mekong River's Critically Endangered Irrawaddy dolphins.

WWF has completed the first ever demographic analysis of population size, recruitment and population growth up to April 2010.

THE MEKONG'S CRITICALLY ENDANGERED DOLPHIN

Irrawaddy dolphins are found only in coastal and freshwater areas in South and Southeast Asia. There are three river populations: one in the Mekong, one in the Ayeyarwady River in Myanmar, and one in the Mahakam River in Indonesia. All of these populations are critically endangered, with very small populations.

In the Mekong, dolphins once ranged from the delta in Viet Nam, into the Tonle Sap in Cambodia, and up tributaries such as the Sekong into Lao PDR.

Now dolphins are only found from above Kratie, in Cambodia, to a trans-boundary deep pool on the Lao PDR – Cambodia border.

Historically many dolphins were harvested for oil and shot by soldiers. Entanglement in fishing gear, and illegal methods such as explosive, poison and electro fishing continue to threaten the population. Many dolphins, especially calves also die from unclear causes that may be related to environmental contamination.



MONITORING DOLPHINS IN THE MEKONG

From April 2007 to April 2010, WWF and regional partners conducted 11 surveys for dolphins in the Mekong River. Surveys travelled between Kratie, in Cambodia, and the trans-boundary deep pool on the Lao PDR – Cambodia border.



In each survey, team members take photographs of dolphin's dorsal fins. Most adult dolphins have unique patterns on their dorsal fins. Photographs of the dorsal fins allow researchers to identify individual dolphins. This information is then used in a statistical model to estimate information about the population such as size and growth and recruitment rates. The model used also includes information about unmarked animals.



This method is part of a big field called photographic mark recapture, and similar methods are used for many other species such as other dolphins, whales, tigers and leopards.

OUR RESULTS

We estimate the population of dolphins in the Mekong River to be 85, with the 95% confidence interval between 78 and 91.

Very few calves are surviving to adulthood, and the population appears to be declining

The population on the trans-boundary deep pool on the border between Lao PDR and Cambodia may be as small as 7-8 individuals. This is the only area in Lao PDR where dolphins remain.

If these trends continue, Irrawaddy dolphins will become extinct in the Mekong River.

FURTHER INFORMATION

The full article:

Irrawaddy dolphin demography in the Mekong River: an application of mark-resight models. Gerard Edward Ryan, Verné Dove, Fernando Trujillo and Paul F. Doherty, Jr. 2011. *Ecosphere* 2(5):art 28 [doi:10.1890/ES10-00171.1]

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