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News

Endangered porpoise worse off than thought

Mexican marine mammal may have two years left. [Rex Dalton](#)



The vaquita is often ensnared in fishermen's nets. *C. Faesi/Proyecto Vaquita; courtesy O. Vidal/WWF-Mexico*

The world's most critically endangered marine mammal — a porpoise that lives off the western coast of Mexico — is closer to extinction than previously believed, says a new study.

Only an estimated 150 individuals of the species, called a vaquita, survive in its sole habitat in the upper Gulf of California, according to an article¹ published online this week in *Conservation Biology*. Researchers and environmental groups are launching a multinational drive to save the remaining animals.

"This is the best political opportunity we have ever had to try to save them," says co-author Lorenzo Rojas-Bracho, a marine mammalogist in Ensenada, Mexico. "If it doesn't work, the vaquita will go extinct."

There is roughly a two-year window in which to save the animal, the team estimates. The vaquita (*Phocoena sinus*) frequently becomes entangled in the nets of fishing boats.

In 1999, researchers estimated² there were 567 vaquitas left in the northern Gulf of California. Mexican biologist Armando Jaramillo-Legorreta, lead author of the new report, says that the rising number of

fishing boats is killing the porpoises at a rate of at least 40 a year. A population of about 100 must be saved for sufficient genetic diversity, the team says.

Previous attempts to create no-fishing zones and buy out fishermen in the vaquita's habitat have failed. But now the environmental groups WWF, Nature Conservancy and Conservation International have joined forces in a \$10 million pledge. In the short term they will use the funds to buy up boats and nets that kill the vaquita, while also seeking to develop more sustainable fishing practices. The Mexican government has also allocated about \$4 million this year for the vaquita, including developing alternative economic opportunities for local fishermen.

Mexico's president, Felipe Calderón Hinojosa, has joined the push to save the animal. But fishing industry advocates sometimes speak openly of wiping it out.

The vaquita's plight echoes that of other marine mammals. Last year, for instance, an international team of researchers declared the Chinese river dolphin, the baiji (*Lipotes vexillifer*), extinct in the Yangtze River, after a belated effort to save it. But the vaquita rescue is different, researchers say, because the upper Gulf of California remains a relatively healthy ecosystem — unlike the polluted and heavily trafficked Yangtze.

“The problem is known, and a remedy is available,” says Barbara Taylor, a co-author on the article who is a mammalogist at the US Southwest Fisheries Science Center in La Jolla, California. “The question is whether there is the political will to make it happen.”

Earlier programmes to alter fishing practices in the region have proven difficult to implement; last year, \$1 million from the government that ostensibly paid regional fishermen not to fish instead went to buy new boats and motors, scientists say.

This year, the Mexican government is allocating about \$1 million to help enforce the no-fishing regulations. Conservation agencies are also supporting the effort.

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For the long term, economic researchers at the Mexican National Ecological Institute in Mexico City, and the Sustainable Fisheries Group at the University of California at Santa Barbara, are studying how to provide alternative opportunities for the fishermen. “We want to introduce incentive-based fishing management,” says biologist Susan Anderson, director of the Nature Conservancy’s northern Mexico programme.

Whether that is enough to save the vaquita remains to be seen.

• **References**

1. Jaramillo-Legorreta, A. *et al. Conservation Biology* (OnlineEarly Articles). doi:10.1111/j.1523-1739.2007.00825.x (2007)
2. Jaramillo-Legorreta, A. *et al. Marine Mammal Science* **15**, 957-973 (1999) | [Article](#) |



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