

# Vaquita

## (*Phocoena sinus*)

### Conservation Profile Synopsis



Photo credit: Paula Olson, permit Oficio No. DR/488/08 from the Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT)

### State of the Species

The vaquita is one of the most critically endangered cetaceans in the world and has the most limited range of any marine cetacean.<sup>1</sup> Located only in the northwestern corner of the Gulf of California, Mexico, this little porpoise is inconspicuous and elusive on the water's surface, making them difficult to identify. The last formal population assessments in 1997 estimate the population to be 500-600, but more recently experts have suggested that it is likely to have been reduced to below 200 individuals.<sup>2, 3, 4</sup>



Source: IUCN 2015

The vaquita population has been in decline since the 1940s, and could continue to decline by about 7-15% each year.<sup>2</sup> Acoustic surveys from 2008, in combination with the 1997 population estimates and the current known kill rate and population growth estimates, show that the population is declining rapidly, resulting in a severe risk of extinction of this species.<sup>3, 4</sup>

### Primary Threats to the Species

The northern Gulf of California is the site of commercial and artisanal fishing, therefore the most serious and immediate threat to the survival of this species is bycatch from gillnets and trawls. In one port alone, 39-84 vaquitas were killed as bycatch from gillnets.<sup>2</sup> From the 1930s to the 1970s, commercial gillnet fishing of the now-endangered totoaba served as the most notable fishery for incidental take of the vaquita. Other potential threats include habitat alteration from the reduced flow of the Colorado River and water pollution. The risk of inbreeding depression and loss of genetic variability may increase if the population of vaquitas remains small.<sup>3</sup> The International Committee for the Recovery of the Vaquita (CIRVA) was established by the Mexican government in 1997. This Committee has prohibited large-mesh gillnets throughout the vaquita's known range, exclusion of gillnets and trawls within a biosphere reserve, and improved enforcement of fishing regulations in the northern Gulf of California. The Mexican Ministry of Environment established a Vaquita Refuge, and offered \$1 million to compensate affected fishermen in the states of Sonora and Baja California.<sup>2</sup>

### Status

#### North American Subpopulation

IUCN	Critically Endangered (2008)
ESA	Endangered (1985)
CITES	Appendix I (1979)

#### AZA Subpopulation

##### Marine Mammal Taxon Advisory Group

Chair Jim Robinett

AZA population None

## AZA Conservation Support

Between 2010 and 2014, three AZA-accredited zoos and aquariums reported taking part in a variety of field conservation projects benefitting vaquitas. Over those five years, the AZA community invested over \$50,000 in vaquita conservation. Most projects were associated with obtaining visual (photo and video) records, assessing wild populations, and conducting conservation education programs. A primary threat to vaquitas is entanglement in gillnets, used for capturing fish and shrimp. Collaborative projects between AZA-accredited institutions that raise awareness about this issue and engage the public in marine mammal conservation help ensure a future for this highly endangered porpoise.

1. IUCN. 2015. The IUCN Red List of Threatened Species. <http://www.iucnredlist.org> Downloaded on 08 May 2015
2. Rojas-Bracho, L., Reeves, R.R., Jaramillo-Legorreta, A. & Taylor, B.L. 2008. *Phocoena sinus*. The IUCN Red List of Threatened Species. Version 2014.3. <[www.iucnredlist.org](http://www.iucnredlist.org)>. Downloaded on 08 May 2015.
3. Jaramillo-Legoretta, A. M., Rojas-Bracho, L., Brownell, R. L., Jr., Read, A. J., Reeves, R. R., Ralls, K. and Taylor, B. L. 2007. Saving the vaquita: immediate action not more data. *Conservation Biology* 21: 1653- 1655.
4. Rojas-Bracho, L. and B. Taylor. 1999. Risk factors in the vaquita. *Marine Mammal Science* 15 (4): 974-989.