VANISHING COWS

Report by ***Alex Rose***

There are currently 93 identified species of cetaceans (whales, dolphins, and porpoises) that inhabit the world's oceans, rivers and lakes, but the smallest and most imperiled of all these species is the vaquita (*Phocoena sinus*). This tiny marine porpoise has the most restricted range of any cetacean and lives only in the northern tip of Mexico's Gulf of California. Vaquitas do not exceed 1.5 metres in length, and adults typically weigh less than 55 kilograms. It is the only porpoise species that inhabits such warm waters and there are sadly less than 100 individuals remaining.

As is often the case with highly endemic and non-migratory species, the vaquita is extremely susceptible to environmental pressures, the most severe of which is the harmful fishing practices of humans. The gillnet fishery in particular has caused the most damage to vaquita populations because these small marine mammals become entangled in the nets and drown. Legal gillnets are usually set to catch sharks, milkfish, mackerel, etc. and accidentally ensnare vaquitas, but illegal fishing is an even larger problem in these waters. The illegal gillnet fishery for the endangered "totoaba", the largest member of the drum family and the only species in the genus *Totoaba*, is likely the primary cause of the vaquita's demise. This fish, *Totoaba macdondaldi*, can reach a mature size of 2 metres and weigh 100 kilograms, and is highly prized in Asia for its swim bladder. According to NOAA, the Chinese counterpart of the totoaba was fished to extinction for use in soups, and demand has now turned to the U.S. population. Since this species is endangered and fishing for them in the Gulf of California is not legally allowed, the fish are often stripped of their air bladders and the rest of the body is left on the beach to rot. These air bladders are worth well over 1,000 USD each, and are consequently a sought after black market item. The true environmental cost of the illegal totoaba air bladder fishery is of course much higher than the impact on just this one species of fish. It has had detrimental effects on the populations of many marine species, but most notably, the vaquita.

Commercial shrimp trawlers are also playing a role in the loss of the vaquita. Their huge nets unselectively capture marine life and destroy entire seascapes, scooping up massive amounts of bycatch that is tossed back into the ocean dead or dying. Shrimp trawl fisheries have the highest rates of incidental catch of non-target species, with the average bycatch percentage resting at around 85 percent. This means that for every 100 kilograms of seafood caught in a shrimp trawl, only 15 kilograms of that weight is actually shrimp. It is estimated that 30 vaquitas lose their lives each year as the result of entrapment in shrimp trawler nets.

Like most marine mammals, vaquitas have a relatively low reproductive rate and long gestation periods, making it difficult if not impossible for their population to recover without the assistance of serious protection measures. In an effort to safeguard the dwindling vaquita population, the Mexican government established the Upper Gulf of California Biosphere Reserve in 1993. Despite this measure, gillnet fisheries, both legal and illegal, as well as commercial trawlers, claim the lives of 40 to 80 vaquitas annually. If left unchecked, these actions will absolutely lead to the extinction of this beautiful porpoise likely within the next five years, making the vaquita the second cetacean to perish exclusively as a result of human activities. There are precious few critically endangered vaquitas left, and it is ultimately up to the Mexican government to limit the amount and type of fishing conducted in the Gulf of California. In order to not contribute to the extinction of the vaquita, always purchase sustainably harvested seafood that has been obtained through methods that have a minimal environmental impact.

To learn more about the plight of the vaquita and how you can help, please visit the following websites:

- *http://www.iucn-csg.org/index.php/vaquita/*
- *http://vaquita.tv*
- *http://www.worldwildlife.org/species/vaquita*