The ESA and its present and future role in protecting the world's most endangered marine mammal

The ESA stands for the Endangered Species Act of 1973. *Ocean Today* describes the law's role in protecting endangered land, freshwater, and marine species and habitats through classifying the species as endangered and designating protected habitats. They also list some examples of aquatic endangered species under the act including the elk horn coral, leatherback sea turtle, and the Hawaiian monk seal. (Ocean Today). While the ESA puts much effort into protecting all species in their care, one that continues to suffer greatly is known to be one of the most critically endangered marine mammals in the world, the vaquita. With roughly ten left in the entire world, as *Porpoise.org* estimates, it's evident that the vaquita is a very critically endangered species that requires extreme protection (Porpoise.org). To see the ESA's overall role in protecting the vaquitas, it's important to review how they had protected them in the past, research how the species had become endangered and how to avoid it, and finally see the many ways the ESA can continue to help them in the future.

Firstly, how was the ESA able to help a species that doesn't live in the US? As vaquitas reside in the northern waters of Mexico's Gulf of California, how was the United State's ESA law able to help them? The *World Wildlife Fund*'s website offers some information about the ESA and its role in protecting at-risk species from extinction. They also describe the vast support of the ESA in regards to foreign species, they state that, "The ESA also supports the conservation of listed species outside of the US and is the law through which the US enforces the Convention on International Trade in Endangered Species" (worldwildlife.org). The ESA also offers benefits to those foreign wildlife including, "…regulation of their live or harvested trade across US borders, limitations on commercial activity that would affect their habitat, and increased funding for their conservation." (worldwildlife.org). Since the vaquitas have been declared endangered under the ESA since 1985, it's highly likely that they have received some of those benefits.

Secondly, how did the vaquitas even fall to such a low population in the first place? As stated before, the vaquita species resides in the northern part of the Gulf of California. This fact was a main focus in the *NOAA fisheries* overview of the vaquita; in addition with a strong focus on the vaquitas' similarity to the totoaba fish. This is because, as the website states, "The decrease in the vaquita population is also related to the totoaba, a large fish that also only lives in the Gulf of California….Because totoaba and vaquita are similar in size, gillnets illegally set for totoaba are the deadliest for vaquitas" (NOAA fisheries). This information is also supported by *Porpoise.org*, as they state that gillnets, "..pose the most significant threat to the vaquita population.", as, "Gillnets are designed to catch fish by their gills, but they are non-discriminatory, often trapping and killing vaquitas as bycatch. The high mortality rate caused by gillnets makes it difficult to keep an accurate count of the remaining vaquitas, as their numbers can decline rapidly between surveys." (Porpoise.org). Both of these sources explain how difficult it is to execute preservation action for the vaquita. As *NOAA fisheries* details, "The Mexican government has worked with scientists, nongovernmental agencies, and foundations to ban most gillnets. Unfortunately, their actions did not stop the population decline." (NOAA fisheries). *Porpoise.org* also adds that, "Conservation efforts for the vaquita are often hindered

by a lack of funding and resources. Conducting extensive surveys and implementing effective conservation measures require substantial investments in time, technology, and manpower. With so many endangered species vying for attention and funding, the vaquita's plight sometimes gets overshadowed." (Porpoise.org). These reasons are most likely the causes of such a decrease in the vaquita population, hopefully by knowing them it is easier to narrow down what action is needed to prevent more devastation.

Lastly, due to the vaquitas being increasingly threatened, what are more ways that the ESA can take action in the future? As described earlier, benefits the vaquitas could have previously gotten included, "…regulation of their live or harvested trade across US borders, limitations on commercial activity that would affect their habitat, and increased funding for their conservation" (worldwildlife.org). This, coupled with what was learned through *NOAA fisheries*, leads to the solution being the regulation of gillnets being more strictly enforced. Mostly because action against gillnets was attempted by the Mexican government and then failed, so if the ESA provided more support for their government action, perhaps the next attempt would succeed. Another way includes more funding for vaquita conservation. The *World Wildlife Fund* discussed that the ESA already provides funding for foreign species, all that would need to be done is to increase the funding. As *Porpoise.org* had stressed how support for conservation efforts are often hindered for vaquitas, it would make sense to try and resolve the previous lack of funding before the population declines more.

Knowing all this it is much easier to see the role of the ESA in protecting vaquitas, from their efforts in the past as well as what their role should be in the future. By reviewing how they formerly protected foreign species, researching the vaquitas themselves and how to avoid decreasing their population more, and finally by analyzing all of the information together to recognize ways the ESA can continue their support for such endangered animals.

Works Cited

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