

## Editorial

# The vaquita (*Phocoena sinus*) -Another species on the brink. A special issue of JMATE



The editors and staff of JMATE are pleased to dedicate this 2015 issue to a timely and impactful marine mammal crisis looming in the Gulf

of California - namely the dire situation of the vaquita (*Phocoena sinus*). The sad plight of this little known species of porpoise, which only resides in a very specific and limited region in the northern Gulf of California, also called the Sea of Cortez, is such that the JMATE editorial staff thought it critical to dedicate the next issue exclusively to this marine mammal. The goal is to bring understanding and awareness regarding this mammal to our readership. It is truly sad to think that human activity has once again brought a species to the brink of extinction. The next generation may never have the opportunity to see a living example of this shy and beautiful creature.

We have tried to include the many aspects of this problem from the vaquita's unique biology, political history, and the 'human aspects', while including differing perspectives from various invested groups.

We begin with a poignant *Letter to the Editor*, which describes the concern and angst felt by our young generation of high school students who ask 'why' and beg that something be done.

Next, in the *Invited Commentary*, we see the issue through Tom's eyes, who has followed the vaquita situation for many years. His concern was so great that he established *VIVA Vaquita!* (VV), a coalition that includes a number of marine mammal research focused groups including the American Cetacean Society, Cetos Research Organization, Save the Whales and our parent organization, the Oceanographic Environmental Research Society (OERS), as well as student groups. VV was created to try to help bring public awareness to this issue

and has done so for over six years now. This invited commentary not only serves to introduce the specific plight of the vaquita, but integrates this with other species, both present and past, that have found themselves in similar situations. The point that 'lessons learned' must be acted upon or dire scenarios are destined to repeat themselves, creating a highly undesirable precedent, is critical to the message!

The next, a *Review Article*, authored by Mike Belanger *et al.*, provides the reader with background regarding the basic biology and what is known about this rare species. It is humbling to realize that the species was initially scientifically described only in 1958 and that the first physical specimens were only recovered in 1985. Using the limited information available from published articles, this review presents what is known regarding their habitat, evolution, unique morphology/physiology and other characteristics. This shy and elusive creature is even more impressive once one realizes how special the vaquita is and the role it plays in that ecosystem!

This is followed by a focused historical *Review Article* by Cantú-Guzmán and co-authors, in which they provide an in-depth accounting, from the perspective of a Mexican NGO, on the history of what efforts have been made in Mexico throughout the years to remedy the decreasing vaquita numbers. In this paper, it becomes overwhelmingly obvious that politics, economy, and personalities can affect even the best and most well meaning efforts. It is also shocking and surprising that in truth this problem has existed for many more years than we realized.

Finally, this is followed by a *Scientific Article* written by Urrutia-Osorio and co-authors including the vaquita expert, Lorenzo Rojas-Bracho, who has for many years been involved scientifically and politically working on the vaquita's dilemma. In this work, the authors analyze the artisanal fisheries of San Felipe, Mexico, estimating incidental mortality

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of the vaquita using data collected during one representative peak fishing season. Specifically, it explores the role of gillnets used by the shrimp fishers of Mexico, which has resulted in large numbers of vaquita trapped as by-catch. The data presented are solid evidence of the issue and identify that unless an immediate and thorough solution is implemented, we will shortly say good-bye to yet another marine mammal species.

So on behalf of the JMATE staff, we want to thank all the authors for providing the articles for this special JMATE issue and hope you, the reader, will appreciate their contributions and the message contained within.

We will be featuring any *Letters to the Editor* related to this issue in our subsequent issue of JMATE, should you feel compelled to voice your thoughts or want to add anything to this topic that you might feel was left out. This is one event that needs to be rapidly addressed and commentary from concerned individuals is one useful way to help accomplish that.

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