

## MOVIE REVIEW

# Sonic Sea Reveals Whales Are at Risk in an Ocean of Noise ... But What about Other Sea Life?

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“March 15, 2000. The day of infamy as far as I’m concerned.” The film opens with Kenneth Balcomb recounting the day he witnessed his first mass whale stranding in the northern Bahamas. Old home video shows Balcomb trying to push a dazed beaked whale out to sea, but the whale keeps returning to the shallow water. Over the next few days, Balcomb would find 16 beached whales in the area. He became obsessed with figuring out *why*.

*Sonic Sea* is the story of how human-made noise is overwhelming the oceans and destroying the lives of cetaceans around the world.

From shipping to pile driving to sonar to wind farms, humans have been steadily adding acoustic pollution to the oceans. The film addresses military sonar and seismic testing, both linked to mass cetacean strandings: whales and dolphins try to escape the piercing sounds—unbearable during the film even to the human ear—often beaching themselves and dying of internal hemorrhaging. The grotesque images of their bloated, bleeding bodies is horrific and persist in the viewer’s mind.

The film also describes consequences of shipping noise. Shipping spans the entire global ocean, accounting for over 80% of global freight transport. Over the last half century alone, low-frequency ocean noise such as from ships has risen by at least 20 dB and is only expected to increase. How can whales hear each other above the din? The film discusses how ship noise disrupts whale communication and increases their stress levels.

Solutions to ocean noise are explored near the end of the film, including new types of ocean imaging (much less intense than explosions), quieter propellers for ships, and rerouting shipping lanes from cetacean migration routes. Michael Jasny, one of the film’s producers and director of the Natural Resources Defense Council’s Marine Mammal Protection Project, reminds us that on the plus side, unlike other marine stressors, “when you stop making noise, it goes away.”

For a somewhat obscure topic, this film was strong in star power. Though we hear from the more familiar ocean celebrities (e.g., Sylvia Earle, Jean-Michel Cousteau), we also hear Oscar winner Rachel McAdams as the film’s narrator and meet musician Sting, who brings a human dimension to noise and hearing loss (stating poignantly now—given his vocation—“I prefer silence”).

But the real strength of the film lies in the ability of its characters—and there were many—to effectively inform the audience

through compelling anecdotes and storytelling. By weaving in science and personal experiences, the interviews succeeded in conveying the bulk of information and the plot, without depending much on narration or text. Strengthened by beautiful images, evocative home video, haunting recordings of whale songs, and graphic animations to help explain the more complex material (acoustic properties of underwater sound, the process of cavitation), the result was an easily digestible and informative documentary.

As someone who studies the impacts of noise on fish, I think this film is important and I give it two enthusiastic thumbs up. But I also have two criticisms. First, I think it would have benefited from having an indigenous perspective from North America (the film’s central focus). Indigenous people from the coasts and Arctic have an intimacy and understanding of whales and sea life that extends far back into time, well before the modern hydrophone, and persists today. For example, scientist Chris Clark describes an Iñupiat whaling captain from Alaska asking him whether he knew “that the ears are the entrance to the soul of the whale.” It would’ve added depth to hear directly from them.

Second, the only reference to noise impacting other forms of marine life beyond cetaceans was through a fisher from Norway, who described significant fish catch declines since oil and gas exploration began off the coast. This is my biggest critique of the film: a lost opportunity to mention noise effects on other taxa, a field that has recently gained momentum in the literature. For example, we now know that cephalopods, including squid and octopus, undergo immense acoustic trauma when exposed to loud sounds, crabs suffer internal bruising, scallops endure developmental delays and deformities, and fish can be seriously injured, in addition to a host of impacts on their behavior. Compared to whales, these animals are small, but they shouldn’t be neglected. I mentioned this oversight to Michael Jasny; he agreed, wishing they had addressed it. Perhaps that’s for the next film.

*Sonic Sea* premiered in January 2016 and was produced by the Natural Resources Defense Council and International Fund for Animal Welfare. You can watch the trailer at [www.sonicsea.org](http://www.sonicsea.org), where you’ll meet the filmmakers and learn more about each cast member. There you’ll also see current and past screening locations and times—you can even propose to host your own screening—and learn how to take action against ocean noise. **AFS**

