

## **Recovery of North Atlantic Right Whales Constrained by Human-caused Mortality**

Peter Corkeron (27th March 2019, 9am PST)

My notes as I watched this webinar:

- I was impressed that this research was the result of a collaborative effort between scientists from all over USA, Australia, South Africa, Brasil, and Argentina, and was done entirely by email. It would be interesting to bring this up as an example for students to help them understand the importance of being able to communicate effectively in a written format, not just verbally, but also how important it is to be able to communicate with people whose first language isn't English.
- They have "poo-sniffing dogs" on their boats to help sniff out fecal samples! Students would get a kick out of that!
- 3 males for every 2 female whales, so improving the female population is necessary to improve the whole population
- There was a general increase in the population over the course of 20 years (2.8% per year) but then it declined again. They were able to notice this small decline quickly which is remarkable considering how small the population was to start with, in such a large environment.
- Random thought: he included a little note in a slide ("thx Claire Charleton!") which was great for citation purposes, but I'm honestly glad I didn't do this with my students considering how often we tell them not to use texting shorthand in academic settings!
- I loved that despite how high-level this instructor is academically, he still had a moment where he said, "Now let's ask a 'What If...?' question!" It's nice to see that science teachers of all levels do this!
- Main causes of population decline: chronic high adult mortality rate (fishing nets, getting hit by vessels, etc) and chronically, variably poor calving rate (females aren't in good enough condition to have calves)

- It's nice to see that while a lot of what this scientist talked about was over my head, he was still very personable, and wasn't just some stuffy guy talking about numbers. He made jokes, he had a lot of passion for the subject, he referred to whales as being "chubby" at one point, and he recognised the imperfection in their data collection. It's so important for students to see how scientists are people too, and they are funny, creative, and passionate.
- There's only about 400 of these whales total, so any slight change has a larger impact on them as a species than if they had a bigger starting population. That being said, it sounds like this species has the possibility of rebounding quickly if we find some fixes to anthropogenic mortality, including reversing some of the impact humans have had on their food sources.
- Every time he mentioned these animals getting struck by ships, I feel horrible about how often this must happen and yet it isn't something that is talked about much. I've been participating in "March Mammal Madness" this year with my students, and one of the simulated battles that occurred this week was between a manatee and lowland tapir, and the tapir was hit by a boat propeller and killed, and the manatee sustained some injuries as well. What struck me about this is that as with all battles in this simulated competition, everything is based off of real events, real scientific research, and fossil records. With this battle they linked to some articles and a photos of manatees with scars and open wounds sustained from boat strikes and such, and I honestly had no idea how big of a problem it was!