Whale and dolphin migrations are being disrupted by climate change



For millennia, some of the world's largest filter-feeding whales, including humpbacks, fin whales, and blue whales, have undertaken some of the longest migrations on earth to travel between their warm breeding grounds in the tropics to nutrient-rich feeding destinations in the poles each year.

"Nature has finely tuned these journeys, guided by memory and environmental cues that tell whales when to move and where to go," said Trisha Atwood, an ecologist and associate professor at Utah State University's Quinney College of Agriculture and Natural Resources. But, she said, climate change is "scrambling these signals," forcing the marine mammals to veer off course. And they're not alone.

Earlier this year, Atwood joined more than 70 other scientists to discuss the global impacts of climate change on migratory species in a workshop convened by the United Nations

Convention on the Conservation of Migratory Species of Wild Animals. The organization monitors and protects more than 1,000 species that cross borders in search of food, mates, and favorable conditions to nurture their offspring.

More than 20 percent of these species are on the brink of extinction. It was the first time the convention had gathered for such a purpose, and their findings, published this month in a report, were alarming.

“Almost no migratory species is untouched by climate change,” Atwood said in an email to Inside Climate News.

From whales and dolphins, to arctic shorebirds and elephants, all are affected by rising temperatures, extreme weather, and shifting ecosystems, which are disrupting migratory routes and reshaping critical habitats across the planet.

Asian elephants, for instance, are being driven to higher ground and closer to human settlements as they search for food and water amidst intensifying droughts, fueling more frequent human-elephant conflicts, the report found. Shorebirds are reaching their Arctic breeding grounds out of sync with the insect blooms their chicks depend on to survive.

The seagrass meadows that migrating sea turtles and dugongs feed on are disappearing due to warmer waters, cyclones, and sea level rise, according to the report. To date, around 30 percent of the world’s known seagrass beds have been lost, threatening not only the animals that depend on them, but also humans. These vital ecosystems store around 20 percent of the world’s oceanic carbon, in addition to supporting fisheries and protecting coastlines.

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