

THE HEAT IS ON

Species feeling the effects of climate change



Kemp's Ridley Sea Turtle

Lepidochelys kempii

Region:

Atlantic Coast/Gulf of Mexico

Area affected:

Cape Cod Bay

Climatic change:

Rapid temperature changes

Impact:

Range disruption, mortality

ABOUT THIS SPECIES

Measuring up to 2 feet long and weighing up to 100 pounds, the Kemp's ridley sea turtle is the smallest of the seven species of sea turtles—and the most critically imperiled. Females gather in large groups to nest along a small stretch of beach on the Gulf Coast near Tamaulipas, Mexico, the last remaining stronghold for Kemp's ridley sea turtles. Upon hatching, young turtles scramble into the ocean and attach themselves to floating seaweed, drifting with the currents and feeding on small invertebrates for up to two years. Older turtles inhabit the shallow, nearshore waters along the Gulf and Atlantic coasts, eating mostly crabs. In 1970, after decades of unsustainable harvesting of its eggs, habitat loss and entanglement in fishing nets, the Kemp's ridley sea turtle was listed under the Endangered Species Act. The species has since benefited from the protection of nesting beaches, prohibitions on egg harvesting and more widespread use of turtle excluder devices by shrimp trawlers, but was hit hard by the 2010 BP oil spill and remains vulnerable to disturbance, sea-level rise, habitat loss and pollution.

DESCRIPTION OF IMPACT

During the warm months, some sea turtles venture as far north as Nova Scotia to forage, making their way back south as winter begins to set in. It is not uncommon for some of the southbound migrants to venture into Cape Cod Bay and become trapped there when temperatures suddenly drop and the colder waters slow metabolism, stunning or killing them. This unfortunate fate befalls roughly 200 sea turtles annually. Recently that number skyrocketed. **In 2014, more than 1,000 cold-stunned turtles washed ashore along Cape Cod, over 200 of them already dead from hypothermia or pneumonia.** While several turtle species were affected, many of the victims were young Kemp's ridley sea turtles. Though it seems counterintuitive, increased risk of hypothermia may indeed be a consequence of a warming climate. As Atlantic coast waters have warmed, the turtles have expanded their range and remain in northern latitudes later in the season, making them more likely to become trapped when shallow coastal waters suddenly cool again in autumn, as occurred in the region when over 200 cold-stunned turtles washed ashore over three days in November 2018.

References

Crilly, R. 2018. Hundreds of 'flash frozen' turtles washed ashore in New England. *The Telegraph*, November 25. <https://www.telegraph.co.uk/news/2018/11/25/hundreds-flash-frozen-turtles-washed-ashore-new-england/>

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