

NOAA Working to Stem the Tide of Gulf Sea Turtle Casualties



A dead Kemp's ridley sea turtle is retrieved from the inshore waters off Mississippi.

[High resolution](#) (Credit: NOAA)

After months of oil gushing into the Gulf of Mexico from the Deepwater Horizon/BP oil wellhead, all five species of Gulf Coast sea turtles — already officially listed as threatened or endangered — face a significant new obstacle.

More than 600 sea turtles have been found dead and/or debilitated along the Gulf Coast since the oil spill started, and the numbers keep rising. Turtle rescue teams, composed of staff from NOAA, U.S. Fish and Wildlife Service, BP, and state and local partners, are searching for oiled and distressed turtles, and [transporting live turtles](#) to rehabilitation centers.

The turtles' deaths require further investigation because large numbers of dead turtles have not shown any visible signs of oil exposure. Scientists are regularly performing necropsies — animal autopsies — to be certain about the cause of death.

Turtle Losses: Oil is Just One Cause

Although many turtles are affected by the oil, the primary threats to sea turtles in the Gulf have traditionally come from human activities such as accidental capture in fishing operations that often result in injury or death.



A sea turtle escapes from fishing net equipped with a **turtle excluder device** — a gated opening that allows turtles to swim free.

[High resolution](#) (Credit: NOAA)

To help prevent turtles from being ensnared in trawl fishing gear, NOAA Fisheries currently requires the use of [turtle excluder devices, or TEDs](#), in most shrimp fisheries and some trawl fisheries for flounder. A [TED](#) is a grid of bars with an opening at either the top or the bottom of the trawl net that enables turtles to escape.

A spill-related threat of turtle mortality that has increased concerns and motivated at least one lawsuit involves the controlled burning of patches of oil slick on the sea surface.

In offshore waters, [free-floating patches of Sargassum algae](#) mixed with spilled oil accumulates in convergence zones, where strong opposing currents meet, making it easy to burn masses of oil on the sea surface. Controlled burns are still widely regarded as the preferred method to prevent oil from washing up onto sensitive coastal areas where it can cause great harm to wildlife and precious ecosystems.

Unfortunately, sea turtles, especially juveniles, gravitate to these algae islands for food and shelter. As a precaution, wildlife observers are working with the controlled-burn teams to spot and collect turtles in and around parts of the slick before the oiled algae patches are ignited.



A heavily oiled Kemp's Ridley turtle recovered near the Deepwater Horizon/BP accident site.

[High resolution](#) (Credit: NOAA)

Survival of the Species, With a Helping Hand from NOAA and FWS

NOAA and our partners are aggressively working to help save as many turtles as possible through a [variety of programs](#) and projects.

In a project developed under the [Unified Command](#) for the federal oil spill response, the U.S. Fish and Wildlife Service (FWS), NOAA's National Marine Fisheries Service and the state of Florida biologists will relocate 700 to 800 clutches of eggs laid by sea turtles on the vulnerable beaches of Alabama and northwest Florida to the east coast of Florida, where hatchlings will be released out of harm's way.

Scientists agree [the plan](#) has risks. It's possible the hatchlings will become disoriented and/or that the adult female turtles will return to the original nesting areas where their eggs were laid. However, if the eggs are not relocated, the resulting hatchlings will likely wander into oiled waters in the northern Gulf of Mexico.

Considering the alternative — greater losses for all five species of vulnerable Gulf Coast turtles — it's a chance scientists are willing to take.

Says Bob Hoffman, a turtle expert for NOAA's National Marine Fisheries Service: "NOAA scientists will continue to work with our partners to rescue as many sea turtles as possible and to learn as much as we can about how to help turtles survive future environmental disasters of this magnitude."



A green sea turtle (*Chelonia mydas*).

[High resolution](#) (Credit: NOAA)

Sea Turtles 101

Sea turtles are air-breathing reptiles; they inhabit tropical and subtropical ocean waters throughout the world where they are capable of migrating long distances between foraging grounds and nesting beaches.

Although they live most of their lives in the ocean, adult females must return to beaches to lay their eggs.

Five species of endangered and threatened sea turtles inhabit the Gulf of Mexico: *Kemp's Ridley*, *green*, *hawksbill*, *leatherback* and *loggerhead*. The major threats to sea turtles in the United States include, but are not limited to: incidental capture in commercial and recreational fisheries; destruction and alteration of nesting and foraging habitats; entanglement in marine debris; and vessel strikes.

To learn more about what NOAA and others are doing to save and rehabilitate sea turtles in the Gulf of Mexico, please visit: www.deepwaterhorizonresponse.com and www.nmfs.noaa.gov. Click here to download a copy of the [Effects of Oil on Sea Turtles and Mammals Fact Sheet](#). 