

Neither snow, nor rain, nor ocean waves...

Stranding network volunteers overcome unfavorable conditions to save endangered sea turtles



by Raechel Kelly and Meagan Racey

This cold-stunned sea turtle, named Professor X, was rescued off the shores of Cape Cod and is doing well under the watch of biologists at the New England Aquarium. Photo Credit: New England Aquarium

On a cold day last December, volunteer Bill Allan scanned the Cape Cod beach in the early morning sunlight, searching for smooth flippers and scaly green shells. Focusing just beyond shore, his eyes settled on a lifeless sea turtle bobbing in the waves.

Without a second thought, Allan stripped to his underwear and plunged into the 40-degree ocean. As he waded through the chest-deep water, he noticed the turtle's head slowly rise above the waves, giving Allan a sense of relief and hope.

Like many turtles rescued by Allan, this one suffered from cold stunning. This condition, similar to hypothermia in humans, leaves turtles disoriented and unable to migrate to warmer waters.

"These peaceful, long-distance mariners come to the bay for a summer of fun," Allan says. "But as winter approaches,

some get locked in by the arm of Cape Cod."

Though cold stunning can be lethal, this lucky survivor was brought by Allan to Mass Audubon's Wellfleet Bay Wildlife Sanctuary, and was later transported to the New England Aquarium, just one of many rehabilitation centers that partner in the Northeast Sea Turtle Stranding Network.

"When these turtles are struggling to survive dropping temperatures, starvation and sickness, we're the only ones standing between life and death," says Allan, who has volunteered for the wildlife sanctuary for 11 years.

Sea turtles become cold-stunned because they are ectothermic, meaning their body temperature is controlled by their surrounding environment. Some sea turtles will travel as far north as Alaska or Canada, and later return to

more tropical waters for nesting season, from March to October.

If sea turtles are cold-stunned during their migration, they not only lose their sense of direction, but they also suffer from symptoms like frostbite, malnutrition and dehydration. Since temperatures have a tendency to rapidly drop in the Northeast, sea turtles are often cold-stunned and stranded in areas like Cape Cod and Long Island.

Sea turtles can also become stranded for other reasons, including disease, predation, strikes from vessels, and commercial fishery operations.

Sea Turtle Stranding Network

Each year, as November weather kicks in, about 100 volunteers begin combing the beach twice a day to find these cold-stunned creatures. In 2010, 126 cold-stunned sea turtles were found on

the Cape shores and transferred to the New England Aquarium.

The volunteers working with Allan range from nurses and teachers to engineers, students and others with diverse backgrounds.

“What we hold in common is this amazing experience,” he says. “It’s easy to get hooked. When you’re out there, you find a turtle that’s still alive, and you save it, that’s a big deal.”

The sea turtle stranding network was started in 1980 and operates as a joint partnership effort with federal and state agencies and non-governmental organizations, such as non-profit organizations, universities, and aquariums.

“It is the collaborative nature of the network that ensures stranded sea turtles receive the best possible care, and that we maximize the information collected from stranding events, allowing us to better manage sea turtles,” says stranding network coordinator Kate Sampson.

Sampson, who works in the Northeast region of the National Oceanic and Atmospheric Administration’s Fisheries Service, explains that stranding network organizations and agencies work together by sharing the responsibility of caring for stranded turtles; transporting turtles to

A crowd gathers to watch a turtle release in April 2012. Photo Credit: ©South Carolina Aquarium



Wellfleet Bay volunteer, Bill Allan, rescues a small Kemp Ridley's. Photo Credit: NER Sea Turtle Stranding Network

rehabilitation centers or release sites; providing resources to neighboring organizations; and much more.

“Thanks to volunteers and member organizations, the stranding network succeeds in saving hundreds of sea turtles,” says Alex Hoar, the Endangered Species Permit Coordinator for the Northeast Region of U.S. Fish and Wildlife Service. “The rescue, rehabilitation and release of healthy sea turtles are not only opportunities to help populations, but also ways to increase understanding of the challenges and needs to reach recovery.”

Rehabilitation of Cold-Stunned Turtles

The turtle Allan rescued in December was a Kemp’s ridley sea turtle (*Lepidochelys kempii*), which is the rarest and most endangered of the seven sea turtle species found in North America. Each year, an estimated 50 to 200 Kemp’s ridley sea turtles, which are green and have a triangle-shaped head, may get cold stunned in Massachusetts starting in late October to December.

After its rescue, the turtle began his recovery under the close watch of senior biologist Adam Kennedy with the New England Aquarium Marine Rescue Team. This particular type of sea turtle is the most plagued by cold stunning in the Northeast, accounting for more than

75 percent of all recovered cold-stunned turtles in the region.

Given the name “Professor X,” the turtle had a heroic, record-timing recovery. He was sent in January with six other turtles to the South Carolina Aquarium, where his name was changed to the more appropriate “Eastham” – the name of the town in which he was originally rescued. Kennedy explained that many turtles brought to the aquarium are there for about eight months, but livelier turtles may be transported south in the spring for an early release.

Timing is everything when it comes to saving these turtles. Some cold stunned turtles may float in the ocean for weeks before being rescued, making their chances for recovery much more difficult. Many arrive to the rehabilitation centers dramatically underweight and covered in algae and barnacles. But thanks to all the members of the Northeast Sea Turtle Stranding Network, including volunteers and biologists like Allan and Kennedy, a rescued cold stunned turtle has an 86 percent chance of being released back into the wild.

In fact, Kennedy and his partners worked with the Virginia Aquarium to release 15 rehabilitated Kemp’s ridley turtles and two loggerhead turtles in early June. Earlier this spring, Eastham was sent off with much fanfare at the Isle of Palms County Park in South Carolina. Though none of these turtles will be tracked by satellite, they do have tags for future identification.

Reachel Kelly is an outreach assistant in the Service’s Northeast Regional Office. Meagan Racey, a Public Affairs Specialist in the Service’s Northeast Regional Office, can be reached at Meagan_racey@fws.gov or 413-253-8558.