

Cold Weather Impacts on Marine Life

by Bryan Fluech, Collier County Sea Grant Extension Agent



The record cold spell in 2010 was a stark lesson on the impacts that extreme weather events can have on the region's marine life. The cold weather led to a record high number of manatee deaths, which was unprecedented in both numbers and geographic extent. In addition hundreds of cold-stunned sea turtles had to be rescued, and the die-off of snook was so severe along Florida's west coast the fishery is closed until at least September 2011 to help protect the remaining populations. **As coastal temperatures continue to drop this winter it is important to be aware of potential wildlife interactions on the water and what to do if you encounter stressed or dead marine life.**

For instance, manatees typically seek warm-water refuge near power plants, springs, and rivers as water temperatures decrease. Boaters should keep a close look out for the marine mammals moving into coastal waters to reach these areas, and strictly obey all posted speed restrictions and manatee protection zones to avoid potential vessel strikes. Wearing polarized sunglasses will help spot manatees and boaters should watch for manatee "foot prints" (*large tell-tale circular slicks on the water's surface*) that indicates the presence of the animal.

Manatees and other marine life such as sea turtles can quickly become disorientated and stressed when exposed to colder water temperatures for extended periods of time. Symptoms of a cold-stressed manatee can include but are not limited to white skin around the face, flippers and tail and/or deep grooves on the underside from the animal using significant amounts of their fat stores in order to keep warm. Sea turtles tend to float listlessly in the water or wash onto shore when they are cold stressed.

If you encounter an injured or dead manatee or other wildlife you are encouraged to call the Florida Fish and Wildlife Conservation Commission's (FWC) Wildlife Alert Hotline at 1-888-404-FWCC (3922).*

** Due to limited resources wildlife officials may not be able to respond to your call immediately. If it is possible, keep an eye on the animal in question and document its condition as well as its location. The more specific information you can provide officials, the more prepared they will be in their rescue attempt.*

Occurrences of fish kills within estuaries, rivers, and lakes may also increase as coastal temperatures drop suddenly or for extended periods of time. These are natural events and typically do not cause permanent damage to fish populations and their ecosystems. One positive aspect is the cold events can help limit the spread of non-native fish species such as cichlids, armored catfish and tilapia. Fish may be killed directly by the cold stress or become weakened and more susceptible to disease or depredation.



Fish affected by the cold may appear lethargic and may be seen at the surface where the water may be warmer from the sun. It is important to remember all recreational fishing regulations still apply to fish affected by cold temperatures. Even if you come across a dead or dying fish that is legal to keep, it is never recommended to eat any fish that appears sick or is already dead due to elevated bacterial levels and associated health concerns.

Reporting fish kills that occur in natural water bodies is an important step in helping to protect Florida's fisheries. These reports help state scientists keep track of the location and extent of fish kills in natural lakes and estuaries, and to see if there are problems developing in an ecosystem that might require investigation or restorative measures. **To report fish kills that occur in natural water bodies call the FWC Fish Kill Hotline at 1-800-636-0511 or visit <http://research.MyFWC.com/fishkill/submit.asp>**

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