

Florida Fish Busters' Bulletin
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Florida Fisheries Habitat

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Florida's freshwater anglers are truly blessed with 7,700 lakes greater than 10 acres, covering 3 million total acres, and approximately 12,000 miles of fishable rivers, streams and canals. That is a lot of diverse habitat for more than 200 species of native freshwater fishes, plus more than 23 species of nonnative fishes that reproduce in our waters. Relatively little of that habitat could qualify as pristine, although most of it provides for quality fishing opportunities. There are a few topical concerns facing Florida that could impact fishing in the state.

Recent news articles from the U.S. Geological Survey (USGS) reported widespread mercury contamination in fish nationwide.

This is an issue the Florida

departments of Health,

Environmental Protection and Agriculture and Consumer Services along with the Florida Fish and Wildlife Conservation Commission (FWC) have been carefully monitoring. Together these agencies are reminding Floridians that eating fish is an important part of a healthy diet and that active outdoor



Dewey Andrews a long-time Florida angler has enjoyed Florida's fisheries resources for decades.

recreation such as fishing and boating can be an important key to a happier, healthier lifestyle.

Eating a variety of fish provides an excellent source of nutrition. For most people, fish caught in Florida do not pose a significant health concern with regard to mercury; however, it is advisable for women of child-bearing age and young children to select fish that are low in mercury. Additional information about fish consumption advisories and fact sheets can be found at <http://doh.state.fl.us/floridafishadvice/>.

Another USGS release announced that effluent from women's birth control pills has affected fishes — creating a feminizing effect caused by these hormones. However, research is also looking at the affect of other chemical stressors that aren't directly related to hormones, such as pesticides, heavy metals and cleaning compounds. Nationally, 44 percent of male black bass tested had egg cells growing in them, and the affect was found in six of the nine rivers tested nationally. The only river tested in the USGS study from Florida was the Apalachicola where 60 percent of bass from near Blountstown were intersex. Although, the FWC has done some background sampling and work with the University of Florida to further expose the problem in the Sunshine State much work remains to determine how this issue will impact fish populations and what can be done to safeguard them and the public.

Summer fish kills have always been common in Florida, and it is important to note that these are consistently associated with low dissolved oxygen levels in the water and not typically with pollutants. These historic and natural kills are related to some simple physical and biological facts. First, warm water can hold less dissolved oxygen than cold water. Second, fish and other animals need dissolved oxygen to live, and when they pass it through their gills, they remove oxygen—for that matter so do other animals, including bacteria that live in the water. Third, plants in the water on sunny days create oxygen, but they use oxygen at night or on cloudy days. A little oxygen is also dissolved into the water at the interface with the atmosphere. So what happens when you get few hot rainy days? Put it all together, and the warm water has less oxygen to start with, and rains sweep debris (such as grass clippings and leaves) into the water. Helpful bacteria start growing and reproducing to break down the debris and start using up lots of oxygen. With overcast skies, the plants in the water can't produce oxygen and have to use it, so before long there isn't enough oxygen to go around. If this occurs slowly, fish can often move out of the low oxygen areas until it is safe to return; but if it happens suddenly, and they are trapped, many die.

All of these recently reported issues point to the reason that environmental and health agencies need to continue to work together. The National Fish Habitat Conservation Act is a comprehensive strategy to allocate conservation dollars for effective restoration of our national

waterways and is working its way through Congress. The act, if passed, will improve how the U.S. Fish and Wildlife Service approaches fish habitat conservation. With 40 percent of the U.S. fish populations in decline and half of our waters impaired, this bill encourages collaborative regional conservation efforts that bring together federal government agencies, state and local governments, conservation groups, fishing industry groups, and businesses. The bill is being supported by the Nature Conservancy, American Sportfishing Association and other partners. You can learn more at FishHabitat.org.



Good fisheries habitat typically includes uncontaminated water, clean firm lake bottoms and a diversity of native aquatic plants.

Your FWC isn't waiting for the National Fish Habitat Conservation Act; we're already working with other state, federal, local and private partners to ensure a safe and sustainable future for Florida's freshwater fisheries. In addition, the

FWC has an active Aquatic Habitat Resource Enhancement section.

However, you and groups like the Florida Freshwater Fishing Coalition (FLFFC.org) and others can play a vital role in ensuring that the public understands the importance of healthy aquatic resources and the challenges facing us. Some of those challenges have been around since before the

Seminoles; others are a product of our technology and growth, but working together they are all manageable.

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