



BFA

BREAM FISHERMEN ASSOCIATION

1203 N 16th Avenue
Pensacola, Florida 32503

A NONPROFIT ORGANIZATION CHARTERED IN THE STATE OF FLORIDA

July 2014 Newsletter

Happy Summer!

Please Mark your calendar for the next General Membership Meeting, **Wed, 6 August**. This will be an Eatin' Meeting with a Guest Speaker! Doors open at 5:30 PM.

Dinner will be served at 6:00 PM.

Dinner will consist of a fish fry, baked beans, coleslaw and hushpuppies.

Cost \$8.00/person.

1615 East LaRua Street, Pensacola.

Presentation – Please join us in welcoming Jeff Eble, UWF CEBD, who will bring us up to date on a new project for our area. His presentation is entitled, “Introducing the Gulf Islands Research and Education Center: A partnership between Gulf Islands National Seashore and the University of West Florida to promote park-based science and education”

Issues We are Keeping an Eye On: by Barbara Albrecht, BFA President

- The April flood event certainly got everyone's attention – whether you were directly or indirectly impacted – our community can no longer afford to ignore these costly impacts. An interesting result of the flooding and how FEMA (Federal Emergency Management Act) is responding to these emergencies has resulted in a proactive response. In 2009 and 2012, when our area suffered emergencies, FEMA would only provide money to 'rebuild' and not allow any FEMA monies to be used to enhance or upgrade roads or bridges. This resulted in costly losses during this event. As a result, FEMA is now encouraging communities to upgrade and enhance infrastructure to become more resilient to future catastrophes. This goes hand-in-hand with what the RESTORE Act is intended to accomplish.
- Apropos Restore Act, for those of you who have lost interest in following the slow progress of the legal process connected to the 2010 Gulf Oil Spill – here is a little update. U.S. District Judge Carl Barbier has afforded the legal teams on both sides of the issue – who are deciding who is at fault and was the fault avoidable – a hiatus until Jan 2015 to review the hundreds of documents connected to the case. Translated, that means that no monies from the RESTORE portion of the penalties will be making their way into our communities any time soon. And until the details are ironed out, the exact amount of penalties fined will remain unknown.



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Chemical found in plastics – and now in our water – makes male turtles develop more like females - [By Blythe Bernhard - bbernhard@post-dispatch.com](mailto:bbernhard@post-dispatch.com)

The turtles are in trouble. A chemical found in Missouri's rivers and streams can influence the sex organs of developing turtles, making males more like females, researchers say.

A pilot study conducted at the University of Missouri showed that the synthetic chemical bisphenol A — or BPA, which is known to mimic estrogen and disrupt hormone levels in animals — can alter a turtle's reproductive system after exposure in the egg. Turtles are perfect creatures for this type of study, because their sex is determined by the temperature of the environment during their development in the egg.

The study on turtles is a good indicator of the overall health of the ecosystem because the reptiles live in oceans, rivers and on land, scavenging food from decaying plants and animals.

"We have some environmental issues that are impacting wildlife," Deem said.

The researchers from the university, the zoo, Westminster College and the U.S. Geological Survey recently received a \$250,000 grant from the Mizzou Advantage research project to continue the study and compare results among fish, mice and turtles. They also hope to learn whether the introduction of synthetic and natural hormones alters the animals' DNA, which could create problems in future generations.

The changes already seen in animals' reproductive systems indicate the potential for the same effects in humans, the researchers said. Urinalysis has shown that 93 percent of people have detectable BPA levels in their bodies from exposures to plastics or industrial fumes, according to the Centers for Disease Control and Prevention.

Bisphenol A is found in certain food and drink packages including plastic containers, water bottles, baby bottles and cans. The chemical can leech into food or liquid, especially when the packaging is heated. The chemical is believed to pose higher risks to fetuses, infants and children and can potentially affect brain and reproductive development, according to the National Institutes of Health. Earlier this year, University of Missouri researchers showed that pregnant monkeys exposed to very low levels of BPA produced offspring with birth defects.



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'Microplastics' imperil marine life in Tampa Bay, worldwide

by Craig Pittman craig@tampabay.com.

Years of hard work and millions of dollars went into cleaning up the nutrient pollution that was ruining Tampa Bay with fish kills and algae blooms. Now healthy sea grass beds are spreading across the bay bottom once more, and fish and manatees are swimming through water that has become clearer.

But in the meantime another pollutant, one that few people have ever heard of, has been building up in the bay and posing a serious threat to marine life in Florida's largest estuary. So far, nobody knows what to do about it. Scientists are discovering "microplastics" — tiny shreds or particles of plastic — in every ocean in the world, including the Arctic.

Microplastics range from the decayed remains of monofilament fishing line to the microbeads that are now being used in some facial cleansers to unrecognizable debris that could come from any plastic product that has come apart. Biologists have begun raising concerns about microplastics because they can collect and even concentrate toxins that can sicken any marine life that consumes the material. A 2010 study by Tokyo University and the Woods Hole Oceanographic Institution tested plastic pieces from 140 beaches in 40 countries. Researchers found chemical toxins such as PCBs in every sample.

Eckerd College marine science professor David Hastings regularly sends his undergraduate students out to take samples from Tampa Bay. Three years ago, after he began noticing microplastics in some samples, he told his students to specifically sample for them. Every spring they collected samples and then used a microscope to look for microplastics. They hit the jackpot every time. Hastings said his crew has consistently found about 150 particles of microplastics in every gallon of water sampled. That amount is "high compared to the oceans," he said.

In their springtime sampling runs, they found the highest concentrations of microplastics in the center of the bay, where there's the least amount of water circulation, he said.

So far, they have done no research on where the pollution originated or what its effects might be, he said. Further studies are needed.

"Microplastics can change what types of bacteria are in sea water," said Koty Sharp, a microbiology professor at Eckerd. That can alter the most fundamental part of the aquatic food chain, she said. And if seabirds, fish and other marine creatures consume it, the microplastics may prevent them from absorbing what they need from the food they eat. Hastings said he's unaware of testing being done for microplastics in any other Florida estuary. A national expert on the subject says the pollutant is probably in every one of them.

"I suspect they can be found in virtually every coastal bay in the world that has a human population nearby using plastic products," said Woods Hole oceanography professor Erik Zettler, one of the authors of the 2010 study.



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The Tampa Bay Estuary Program, a quasigovernmental group that has led the drive to clean up pollution in the bay, has not been tracking the microplastics problem. In fact, said program director Holly Greening, no one there was aware of Hastings' findings until a reporter called to ask about the subject.

Sources

Both Greening and Hastings said they think that at least some of the microplastics, particularly the facial cleanser beads, could be coming from the sewage plants that still dump treated waste into the bay — particularly the ones in Tampa and Clearwater.

Both have made great strides in preventing nitrogen from flowing into the bay from their waste stream, Greening said, but nobody has given any thought to screening out microplastics. Hastings said doing so "would be very, very difficult and expensive."

He said the microplastics are unlikely to show up in Tampa Bay's water supply, most of which still comes from the aquifer. Some drinking water is taken from the bay and run through filters at Tampa Bay Water's desalination plant in Apollo Beach. The filtering that removes salt would also screen out the microplastics, Hastings said.

Solutions

Trying to clean up this latest pollution problem won't be easy. The first step, Hastings said, is cutting back on the use of so much plastic in our daily lives. He noted that Illinois, concerned about pollution, banned the use of plastic microbeads in facial cleansers this month, and that Ohio, New York and California are considering following suit. Canada and the Netherlands are also exploring bans.

"Today when I went to lunch I was served water in a plastic bottle. Twenty to 30 years ago that was not the norm. Instead, you'd get a glass and a pitcher," he said. "And I ate my lunch with a plastic fork. ... What we need is an increased sensitivity to all the plastic that's around us in the environment."

It's wise to try to prevent that material from ever getting into the water, "because once the microplastics are in the water, I don't think there are any easy alternatives for getting it out."

Oyster Spat Traps – Need Volunteers to help Construct

Do you have some extra time? Do you like to build things? Are you a student looking for Community Service Hours? The BFA would like to provide materials to individuals or teams who can make spat traps for area high schools participating in water quality monitoring programs. Please email Balbrecht@uwf.edu or call 850.384.6696 for details.



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Tri-State Water Wars - Update

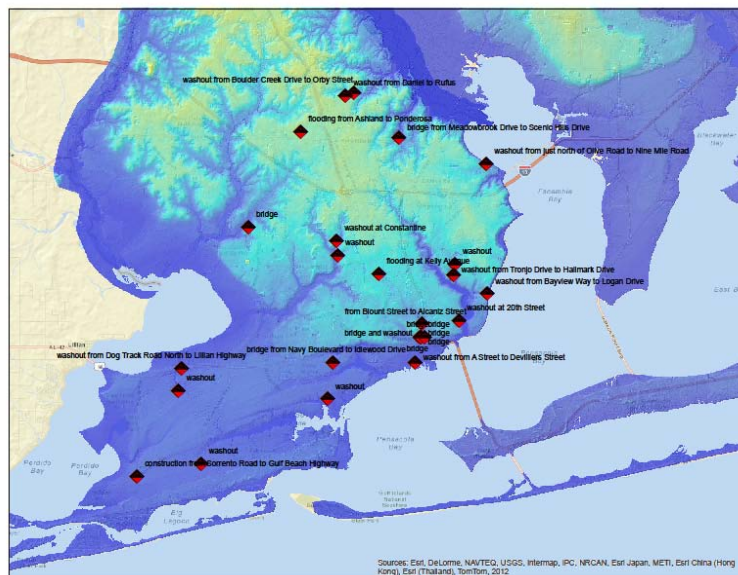
In 2012, a combination of drought and reduced freshwater downstream from the Apalachicola-Chattahoochee-Flint river system, which originates in Georgia, produced the lowest flows since records have been kept.

The oyster industry was hit hard as a result. The Apalachicola Bay has been a huge economic driver for the Florida Panhandle thanks to its unique blend of saltwater and freshwater, which formerly produced 90 percent of the state's oysters and 10 percent of oysters nationwide. But without higher freshwater flows downstream from Georgia, the mixture is too salty for oysters to thrive.

Since 1990, control of the water in the river system shared by Florida, Georgia and Alabama has been the subject of lengthy litigation.

Escambia County Area – Reported Flooding - on LiDAR

Light Detection and Ranging was developed by the military to gauge topographic relief. In the image below (best seen on a computer screen) the lighter blue and yellow areas are higher ground while the deeper purple areas are low lying areas.



Many of the areas that flooded were collocated near creeks and streams. As rains saturated the ground and raised the ground water level, creeks and streams buried by roads, culverts, and infrastructure began to ‘fill up’ from the ground water table causing soils to become fluidized and flow – these liquid rivers of sediment flowed to the nearest low point. The National Weather Service noted 22-26” rain fell in southern Escambia County in under 12 hours.



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The Bream Fishermen Association is a not-for-profit organization dedicated to the promotion of the conservation responsibilities as well as the recreational enjoyment of fishermen, hunters, campers and related outdoorsmen.

It is the objective of the BFA to support, develop, and implement programs that will:

- 1) Improve the quality of our environment;
- 2) Protect and maintain our present wilderness type lakes, rivers, swamps, marshes, bays, forests, and beaches in their natural undeveloped state; and
- 3) Advance the causes of plant, marine, and wildlife preservation.

Membership is open to all individuals who support these objectives. Please join the BFA by sending us your contact information (name, mailing address, phone, and email) be sure to notify us if you prefer to receive notices and announcements by mail or email, and \$10 annual dues to our mailing address: 1203 North 16th Ave, Pensacola, FL 32503

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