

Mission:

To protect, promote & improve the health of all people in Florida through integrated state, county & community efforts.



Rick Scott
Governor

John H. Armstrong, MD, FACS
State Surgeon General & Secretary

Vision: To be the Healthiest State in the Nation

September 10, 2014

Mr. Ted Lange
Florida Fish and Wildlife Conservation Commission
601 West Woodward Avenue
Eustis, Florida 32726

Dear Mr. Lange:

PURPOSE

The Florida Fish and Wildlife Conservation Commission (FWC) periodically and by request monitors mercury (Hg) levels in fish harvested from Lake Brantley. Lake Brantley is a private lake located in central Florida, northwest of Altamonte Springs and is bounded by Seminole County.

One of the concerns for local citizens and FWC is whether or not the fish from Lake Brantley are safe to eat. Fish sampling data for Lake Brantley from 2014 were forwarded to the Florida Department of Health (FDOH) for review to recommend consumption advisories for recreational fishermen. FWC collected samples based upon popular sports fish. Species collected included two mid-range trophic level fish (bluegill, redear sunfish), and the predator species (largemouth bass). Typically, contaminant concentrations increase up trophic levels.

METHODS

Data provided by FWC for fish included muscle fillet analyses. FDOH bases advisory information on the edible portion of the fish (i.e., fillet). Twelve individual fish analysis data was provided. Data analyses focused on the 2014 data in order to provide up to date advisories.

An average tissue value of a contaminant was calculated for individually analyzed fish. The average value was then compared to FDOH fish tissue advisory levels. Samples were gathered from various locations in Lake Brantley. The data were considered together without specifying separate intra-lake locations.

FDOH based recommended advisory levels on sample sizes of $n = 8$, or greater. Fish tissues were analyzed for total mercury (Hg).

Monthly/weekly limits were calculated using equations that were obtained from USEPA Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories, Volume 1 and Volume 2, November 2000. Mercury specific values were obtained from USEPA's IRIS database. Two populations were considered for advisories. For women of childbearing age and young children, a body weight of 64

Florida Department of Health

Division of Disease Control and Health Protection • Bureau of Epidemiology
4052 Bald Cypress Way, Bin A-12 • Tallahassee, FL 32399-1720
PHONE: 850/245-4401 • FAX 850/414-9069

www.FloridaHealth.gov

TWITTER: HealthyFLA
FACEBOOK: FLDepartmentofHealth
YOUTUBE: fldoh
FLICKR: HealthyFla
PINTEREST: HealthyFla

kilograms (kg), a consumption rate of 0.032 kg/day, and a meal size of 0.228 kg (8 ounces) were used. For the general population (all other individuals), a body weight of 70 kilograms, a consumption rate of 0.032 kg/day, and a meal size of 0.228 kg (8 ounces) were used.

FINDINGS

In general, the contaminant Hg level was low across lower fish trophic levels including bluegill and redear sunfish. The advisory levels for these two species were found to be two meals per week for all individuals. Largemouth bass is recommended at a once per month advisory for women of childbearing age and young children and one meal per week for all other individuals.

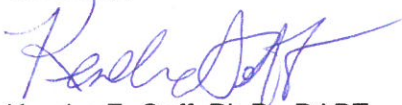
RECOMMENDATIONS

- For all individuals, eat a maximum of two meals per week of bluegill and/or redear sunfish (muscle fillets).
- For women of childbearing age and young children, eat a maximum of one meal per month (8 ounces, uncooked weight) of largemouth bass. All other individuals may consume one meal per week of largemouth bass.

Following these consumption advisories would minimize any adverse health effects associated with Hg intake from these species.

If you have any additional questions or comments please contact me by phone at (850) 245-4960 or email at Joseph.Higginbotham@flhealth.gov.

Sincerely,



Kendra F. Goff, Ph.D., DABT
State Toxicologist



Joseph Mark Higginbotham, M.S., Ph.D.
Deputy State Toxicologist

KG/jmh

cc: Fred Streetman