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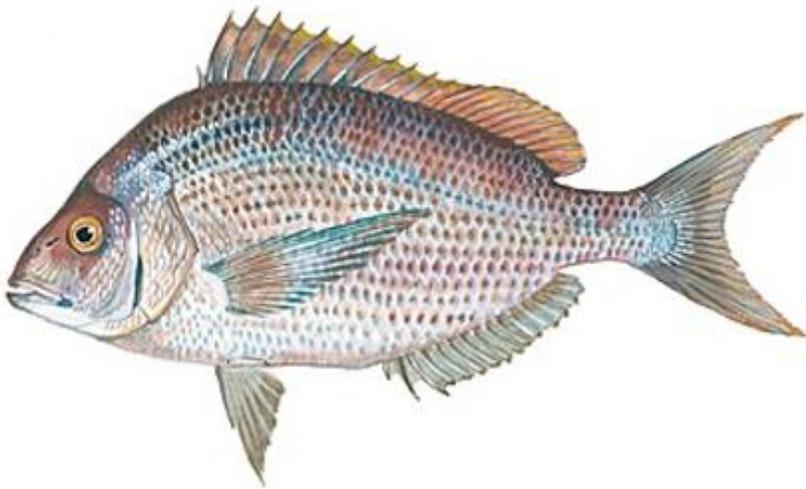
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MNS Research to Investigate Mercury Levels in Local Fish

Rhode Island Saltwater Anglers Foundation awards grant to RWU faculty/student team to fund research that will help update state's fish consumption advisories



June 10, 2013 | Public Affairs Staff

BRISTOL, R.I., – [The Rhode Island Saltwater Anglers Foundation](#) has awarded a \$12,166 grant to [Roger Williams University](#) to drive new research that will measure mercury levels in scup, a native fish found primarily in the Atlantic and frequently fished and consumed by local recreational fishermen. The research will assist the Rhode Island Department of Health in establishing new guidelines for safely eating scup, which account for 23 percent of the total recreational catch in Rhode Island.

While swordfish, mackerel and tuna are notably identified as fish that should be eaten in moderation due to high mercury levels, little information has been recorded on the mercury levels of native fish, like scup, that are heavily fished and consumed by New Englanders. Over the next year, RWU Associate Professor of Biology David Taylor and marine biology student Sean Maiorano '14 (from Briarcliff Manor, N.Y.) will analyze mercury levels of scup to enable the Department of Health to update fish

consumption advisories, should a change in mercury risk be identified. The effort is aimed at encouraging safe, healthy consumption of scup, a fish that Taylor anticipates will measure low in mercury levels.

Generally, state-issued fish consumption advisories are based on nationally aggregated data, yet regional data is critical to more accurately assess mercury levels in local species. Recent research^[1] led by Taylor concluded that the mercury levels of local fish like striped bass, bluefish and flounder do not reflect nationally aggregated data and often underestimate the mercury risk.

“Since the current consumption advisories for local marine fish are based largely on nationally aggregated data, they may be overly or insufficiently protective in limiting mercury exposure,” Taylor says. “With this grant from the Rhode Island Saltwater Anglers Foundation, we can begin new research that will provide the information needed to more specifically determine which fish are safe to eat and the recommended consumption amounts to minimize harmful exposure to mercury.”

Research shows that recreational fishermen generally consume higher quantities of fish than the average American, and thus may be more susceptible to mercury poisoning, which can cause damage to the nervous system, the immune system and heart. To determine how much fish and what species area residents are consuming, Taylor surveyed eating habits of 280 local fisherman and their families and found that they eat 80 percent more fish relative to the national average. Further, approximately 29 percent of those surveyed reported eating scup on a regular basis.

Taylor and Maiorano will begin the research in June by collecting approximately 100 scup samples from Narragansett Bay, Rhode Island Sound and Block Island Sound. When the analysis concludes, consumption advisories will be created for scup as well as other recreational fish. Taylor has performed comprehensive research on mercury contamination in other recreational fish including striped bass, bluefish, tautog, black sea bass, summer flounder and winter flounder from Narragansett Bay. The updated advisories will be based on data from this new research in addition to Taylor’s previous research.

Steve Medeiros, president of the Rhode Island Saltwater Anglers Foundation says, “We are very pleased to offer this grant in support of Taylor’s important research into mercury levels in our local scup. This is an important fish caught by local anglers and consumed by thousands of people. Our Foundation believes that this research will aid everyone to determine if consumption of scup could lead to exposure to mercury. We are sure that this work will help improve the overall recreational fishing experience and we are pleased that such fine research will be conducted at a local University.”

For additional information about research and news from the University’s marine and natural sciences programs, visit <http://departments.rwu.edu/mns/>.

[1] Taylor, DL, JC Linehan DW Murray, and WL Prell (2012) Indicators of sediment and biotic mercury contamination in a southern New England estuary. *Marine Pollution Bulletin*. 64:807-819

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Piraino, MP and DL Taylor (2009) Bioaccumulation and trophic transfer of mercury in striped bass (*Morone saxatilis*) and tautog (*Tautoga onitis*) in the Narragansett Bay (Rhode Island, USA). *Marine Environmental Research*. 67:117-128

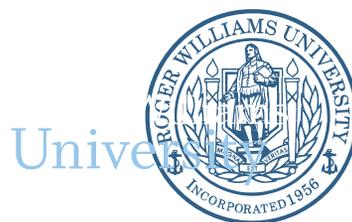
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