**Call for Smallmouth Samples and Collection Protocol** Fall 2017

The MDC Conservation Genetics Lab is requesting smallmouth fin clips for an investigation of Missouri smallmouth bass. We need:

\*samples from 10 to 20 individual, adult smallmouth bass, males and females, taken from sites across Missouri. Of interest are impounded and stocked waterbodies. An even ratio of males to females is best but at least 10 females is a good number to shoot for.

\*Any number of spotted bass, if possible

\*Smallmouth Bass individuals should have a **minimum total length of 200 millimeters in order to collect morphometric measurements.**

**Protocol for sampling:**

With clean scissors, cut a piece of fin from the fish, a least the size of a thumb nail and place in provided tube. Fill tube to the top with 95% ethanol (if the tube is not pre-filled). Screw cap on tightly and store in a regular freezer. Scissors and any other equipment touching a sample should be rinsed and wiped clean with a sterile KimWipe (or similar) or flame sterilized with alcohol between each sample. Please fill information about the sample in the datasheet provided and label tube with sample number***. Please use a different sample sheet and label color for each waterbody.*** Please put appropriate datasheet with tubes in a plastic bag and label the outside of the bag with the waterbody name.

**Protocol for morphometric measurements**

For each individual smallmouth bass collected, please record total length (the length from the tip of the mandible to the end of the caudal fin when pressed together), standard length (the length from the tip of the mandible to the point just before the start of the caudal fin; see diagram), orbital length (the diameter of the eyeball), head length (the length from the tip of the mandible to the furthest tip of the gill cover; see diagram), body depth (the width of the fish at approximately its thickest point, likely in the middle of the spiny fin ray complex), and the number of soft dorsal fin rays.

Number of Soft dorsal rays



Orbital Length

Head Length

Head Length

Total Length

Standard Length

Please notify Leah Berkman ([Leah.Berkman@mdc.mo.gov](mailto:Leah.Berkman@mdc.mo.gov)) if you have samples to submit and she will arrange transportation. Contact Leah at the above email address or at (573) 815-7901 x2927 if you have any questions.

Thank you for your assistance!

**Materials provided:**

Sample tubes pre-filled with 95% ethanol, sample sheet

**Materials you may need to provide:**

Makers, scissors, tweezers, lighter, wipes, calipers