

Dedicated to the Memory of Commissioner Enoch S. "Inky" Moore Jr.



PLAY

Winter
2007

Pennsylvania • League • of • Angling • Youth

Smallmouth Bass

Have you ever heard of a "bronzeback"? That is one nickname people use when talking about smallmouth bass. In this PLAY issue, you will learn all about smallmouth bass. You will discover how to tell them apart from other kinds of bass, where they live, and what they eat. You'll also learn about their life cycle and why so many people enjoy fishing for them. You will be able to play a game that shows how smallmouth bass were moved from the places where they were first found to live in waters all over **Pennsylvania**. So grab a pencil and get ready to dive into the world of the smallmouth bass!

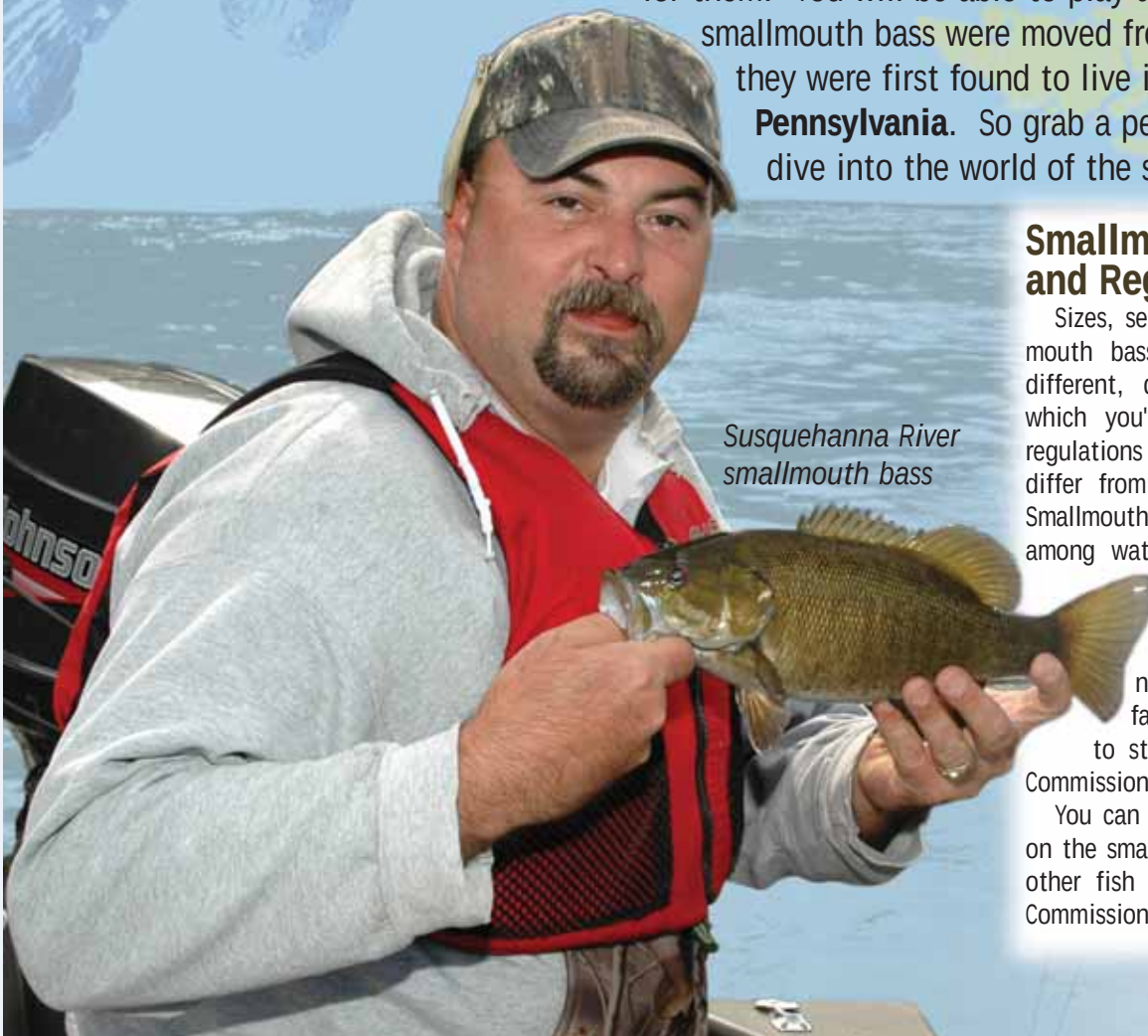
Smallmouth Bass and Regulations

Sizes, seasons, and creel limits for smallmouth bass and largemouth bass can be different, depending on the waterway in which you're fishing. For example, bass regulations for Commonwealth inland waters differ from those of Big Bass regulations. Smallmouth bass regulations also differ among waterways like the Delaware River, Lake Erie, Pymatuning Reservoir, and Conowingo Reservoir.

Be sure to consult the Pennsylvania Fishing Summary to become familiar with these regulations, or to study regulations online, visit the Commission's web site, www.fish.state.pa.us.

You can also find much more information on the smallmouth bass, and information on other fish species in Pennsylvania, on the Commission's web site, www.fish.state.pa.us.

*Susquehanna River
smallmouth bass*



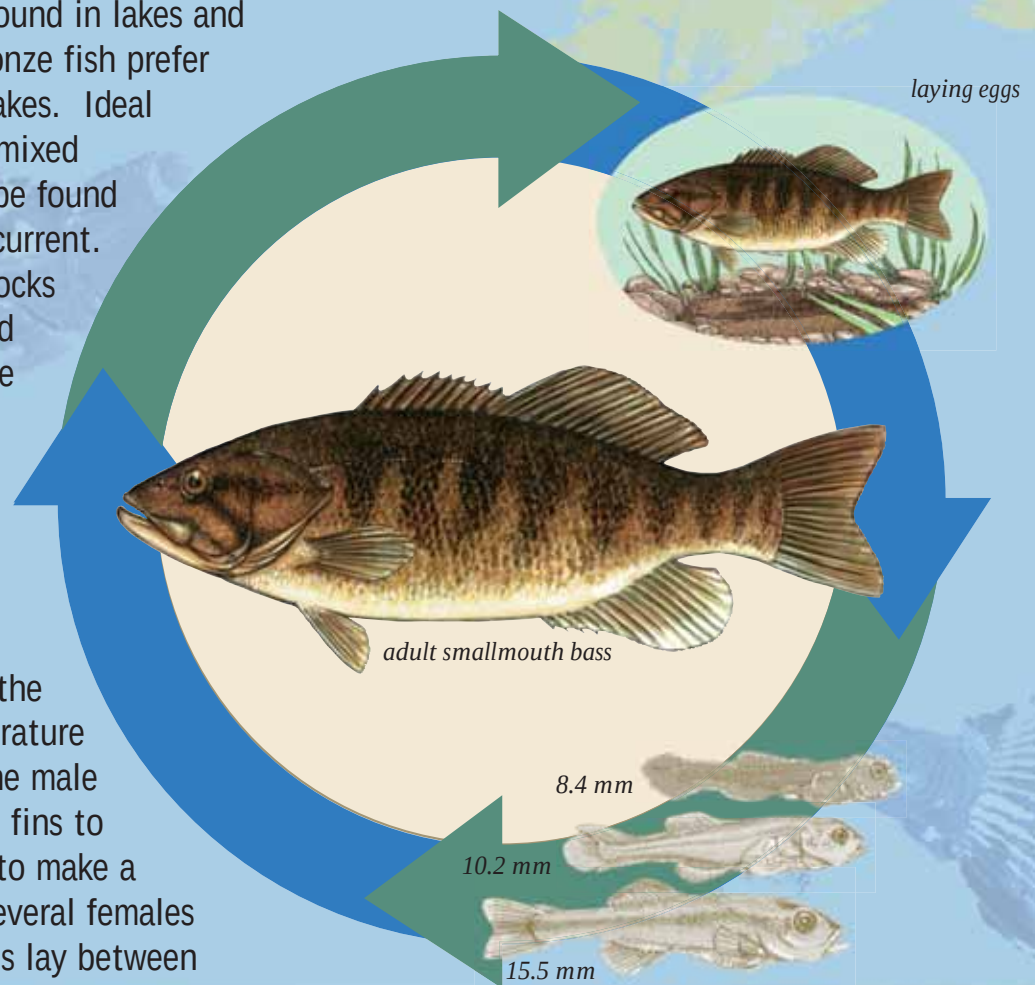
A Bronzeback is Born

Smallmouth bass can be found in lakes and in rivers. These brownish-bronze fish prefer moving water or cool, clear lakes. Ideal **habitat** includes rocky areas mixed with gravel. They can often be found where something breaks the current. These breaks could be large rocks and boulders, fallen trees, and other debris in the water. The dark color and eight to 15 **vertical** bars that run top to bottom along their sides help these fish blend in with rocks and branches.

Smallmouth bass begin to **spawn**, or reproduce, during the spring when the water temperature reaches 60 to 70 degrees. The male builds the nest. He uses his fins to sweep away sand and gravel to make a depression in the bottom. Several females lay eggs in one nest. Females lay between 2,000 and 7,000 eggs for every pound they weigh, each year! The male guards the nest while he waits for the eggs to hatch. Hatching can take two to 10 days, depending on the water temperature.

The young smallmouth, called **fry**, are ready to leave the nest after only five to six days. They are still guarded by the male for a month or more. Zooplankton is their main food from the time they hatch until they are about a half-inch long. When the fry reach between a half-inch to one inch long, they begin to feed on insect larvae. When they grow larger than one inch long, the fry begin to feed on small fish and **crayfish**.

All the smallmouth bass eggs don't hatch. And not all young smallmouth bass survive the



first few months. This stage is important. These fish are called "young of the year" (YOY).

Fish & Boat Commission studies have shown that water flow and temperature are the most important factors in young bass survival. Other things such as **pollution** and predators can affect survival of eggs and fry. Conditions during some years cause few eggs to survive. On the other hand, in the best conditions, many young smallmouth bass survive.

In rivers, smallmouth bass populations change because of the conditions that YOY face. When many YOY survive, anglers can expect to see larger fish in three to five years. If few fish survive, fishing can be poor in three to five years!

Here a Bass, There a Bass

Did you know that smallmouth bass and all Pennsylvania black bass species are in the same family as bluegills? They are in the **sunfish** family, or as scientists call it, the Centrarchidae family. Several kinds of bass from the sunfish family can be found in Pennsylvania:

Smallmouth bass, largemouth bass, spotted bass, and rock bass. The white bass and striped bass are temperate basses in the Moronidae family.

Largemouth bass can grow to more than 25 **inches** long. Smallmouth bass can grow to about 20 inches long. The mouth of the largemouth bass extends past the eye. Its large mouth allows it to eat bigger food.

Another way to tell the difference between a smallmouth bass and a largemouth bass is to look at their dorsal fins, the ones that are on their backs. The smallmouth bass has a **shallow** notch that separates its dorsal fins. The largemouth bass has a deeper notch.

The spotted bass is uncommon in our state. It can sometimes be found in the Ohio River near Pittsburgh and in the Beaver River. It looks like a cross between a smallmouth bass and a largemouth bass.

The smallmouth bass has a shallow notch that separates its dorsal fins.



Look at the pictures below and use what you have learned, so far, to figure out which bass (smallmouth bass, largemouth bass, or spotted bass) each sentence describes. When you think you have the right answer, draw a line from the sentence to the picture of that fish.

1. This fish likes to live in deep, moving water.
2. The mouth of this fish extends farther than its eye.
3. Which fish has diamond-shaped spots along its sides?
4. This fish has eight to 15 broken lines that run up and down along its sides.
5. Because it can eat large-sized food, this fish is nicknamed "bucketmouth."
6. This fish is silver-green.
7. This fish is nicknamed "bronzeback."
8. This fish is not commonly found in Pennsylvania.
9. This fish is Pennsylvania's largest member of the sunfish family.

smallmouth bass



largemouth bass



spotted bass



Smallmouth Bass Game

Follow the journey of smallmouth bass in this game. You will need a game piece (a coin or small stone will do), and a die from another game. Just place your game piece at the starting line and roll the die!

Smallmouth bass are found all across Pennsylvania. But that wasn't always true. Before the mid-1800s, smallmouth bass were found only in the Great Lakes and in the **Ohio** River Watershed. The Ohio River Watershed includes all of the land, streams, and rivers that eventually flow into the Ohio River. How do you think smallmouth bass traveled over land and into the waterways near where you live?

Cars and buses weren't around. During this period our ancestors relied on one means of transportation—trains. Areas that were once separated by land were now connected by the railroads.

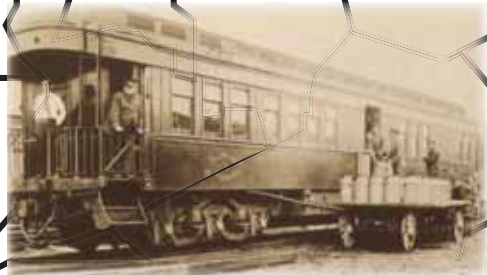
Anglers in the eastern part of the state learned of the smallmouth bass fishing in the Potomac River. The ancestors of these fish were stocked using fish taken from the Ohio River. Smallmouth bass were placed in metal milk jugs and loaded on trains headed east. The first stocking occurred in the Lehigh River at Easton around 1862.



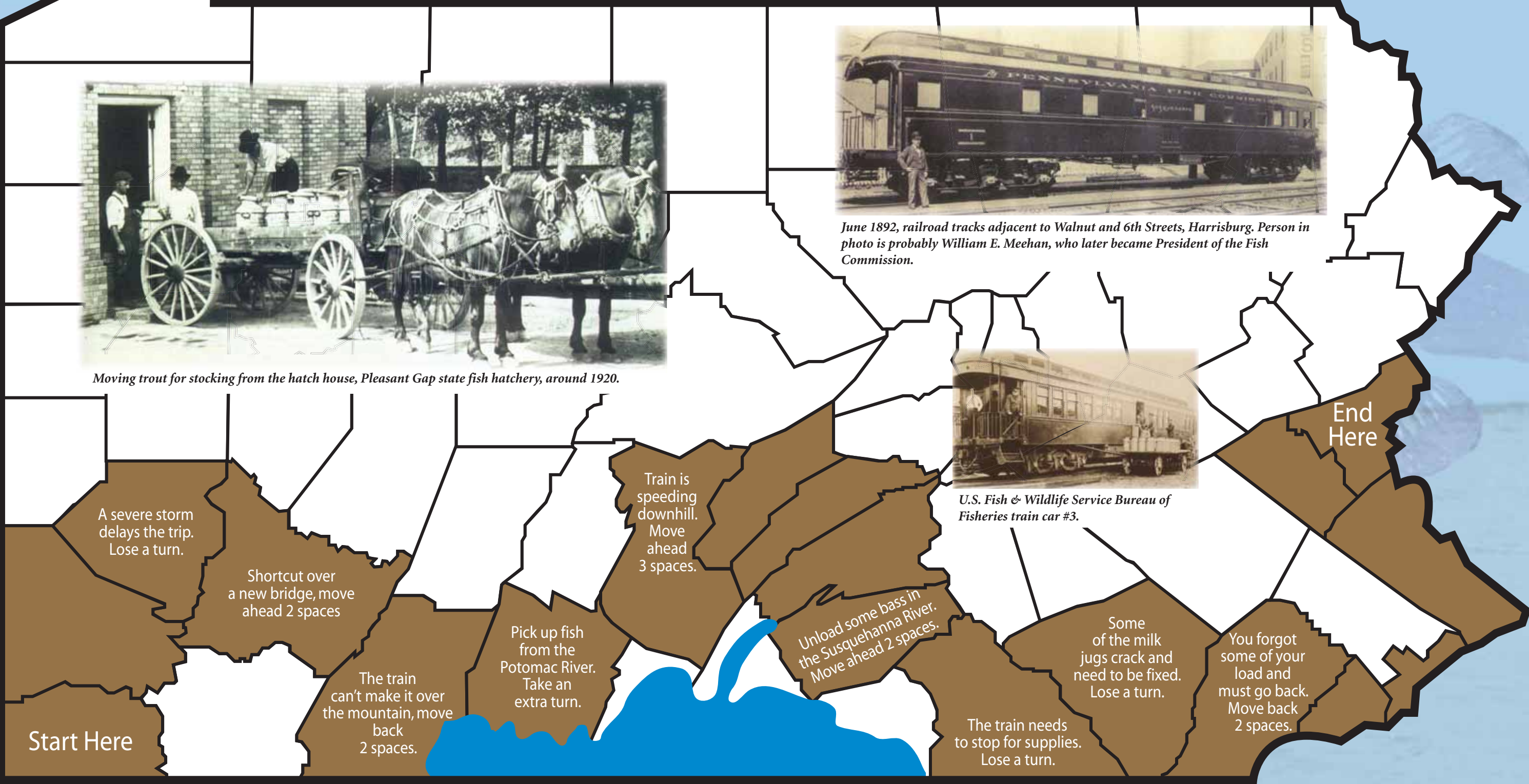
Moving trout for stocking from the hatch house, Pleasant Gap state fish hatchery, around 1920.



June 1892, railroad tracks adjacent to Walnut and 6th Streets, Harrisburg. Person in photo is probably William E. Meehan, who later became President of the Fish Commission.



U.S. Fish & Wildlife Service Bureau of Fisheries train car #3.



Tubing for Smallmouth

"Tubing" is one of the most popular fishing techniques for catching smallmouth bass. Tubing doesn't mean using an old inner tube to float on the water. It is fishing with a tube lure. A tube lure looks like a short piece of tubing with one end closed and the other end shredded or cut into strands. Tubes come in several sizes, but 2-inch to 3-inch tubes work best for catching smallmouth.

Most shades of green or smoke (gray) tubes are popular among anglers. Devoted tube anglers have several colors of tubes in their tackle boxes. Bass **tournament** anglers have been tubing for several years. They regularly catch smallmouth bass over 20 inches long.

To fish a tube, you need jig heads to slide into the tube and have the jig

eye pop up through the tube head. The weight of the **jig head** depends on where you are fishing and the size of the tube.

When fishing a 3-inch tube, a quarter-ounce jig is great for a slow fall and water up to 10 feet deep. If you want the tube to fall through the water slower, use a smaller jig head. If you're using a longer tube, you will need a bigger jig head. Have fun trying different tubes with different-sized jig heads until you find one that works best for you.

Cast your tube lure near rocks and reel in your line slowly. Stop the tube a few times, and let it fall to the bottom near the rocks. Near rocks is a great place to catch smallmouth bass because they like to live near rocky areas, but be careful. It is easy to get snagged when fishing around rocks. Many anglers say that this technique can help you catch smallmouth bass over 20 inches long.



Smallmouth Bass Skills

As you read through this issue of PLAY, you may have noticed that some of the words were highlighted darker than others. Using what you have learned and the darker words you found, complete the words in these 14 sentences.

1. There are three types of ___ A ___ S found in Pennsylvania.
2. Ideal smallmouth bass H ___ ___ I T ___ T includes rocky areas with gravel.
3. Bass are members of the ___ ___ N ___ ___ H family.
4. ___ R ___ ___ Z ___ ___ K is one of the nicknames of the smallmouth bass.
5. Dorsal fins are separated by a S ___ ___ O ___ notch on the backs of smallmouth bass.
6. Smallmouth bass have eight to 15 V ___ T ___ A ___ broken bars along each side.
7. When female bass ___ P ___ W ___, they lay between 2,000 to 7,000 eggs per pound of body weight.
8. Smallmouth bass were found only in the Great Lakes and the ___ H ___ River Watershed until the mid-1800s.
9. A competition to catch fish is called a T ___ N ___ E ___.
10. Smallmouth bass food consists of insect larvae, ___ R ___ F ___ H, and fish.
11. The largest smallmouth bass recorded in P ___ S ___ V ___ was over 8 pounds.
12. Smallmouth bass can grow 20 I ___ H ___ or more in length.
13. Young fish are called ___ Y.
14. Trash, chemicals, and other materials that shouldn't be in the water are called P ___ U ___ N.

Smallmouth Bass Under the Ice

Ice fishing for smallmouth bass can be fun in impoundments—not in rivers or flowing water, even though anglers go after largemouth bass more than they target smallmouth bass. Nevertheless, fishing minnows on tip-ups is effective. You can try your luck for smallmouth bass wherever smallmouths are present in impoundments under safe ice. However, these waterways are proven smallmouth bass ice-fishing spots: Lake Arthur, Moraine State Park, Butler County; Lake Nockamixon, Nockamixon State Park, Bucks County; Blue Marsh Lake, Berks County; High Point Lake, Somerset County; Ridgeway Reservoir, Elk County; and Yellow Creek Lake, Yellow Creek State Park, Indiana County.

Check ice conditions before venturing onto ice. Always go ice fishing with an adult. Visit the Commission's ice fishing web pages on the Commission's web site, www.fish.state.pa.us, so that you and any adults with whom you fish become completely familiar with ice safety. On the Commission web site main page's left side, hold your cursor over "Fish." In the drop-down menu, click on "Fishing Fundamentals." Then navigate to "Ice Fishing."



PLAY

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1. Bass. 2. Habitat. 3. Sunfish. 4. Bronzefish. 5. Shallow. 6. Vertical. 7. Spawn. 8. Ohio. 9. Tournament. 10. Crayfish. 11. Pennsylvania. 12. Inches. 13. Fry. 14. Pollution.