

## Indiana Division of Fish & Wildlife's Animal Information Series

# Shovelnose Sturgeon (*Scaphirhynchus platyrhynchus*)

### **Do they have any other names?**

The shovelnose sturgeon is also called hackleback, switchtail, and sand sturgeon.

### **Why are they called shovelnose sturgeon?**

They are called shovelnose for their flattened, shovel-shaped snouts. *Scaphirhynchus* is Greek for “spade snout” and *platyrhynchus* is Greek for “broad snout.”

### **What do they look like?**

Shovelnose sturgeon are light brown or buff on the back and sides and white on the belly. They have a flattened, shovel-shaped snout and are covered in rows of bony plates (called scutes) instead of scales. The upper lobe of the tail fin is longer than the bottom and has a long, slender filament that sometimes breaks off in adulthood. The mouth is far back on the underside of the snout and there are four large barbels that dangle from the snout in front of the mouth.



Photo Credit: Maynard Reece, Iowa DNR

### **Where do they live in Indiana?**

Shovelnose sturgeon are found in the rivers of Indiana, and are most common in the Wabash and White Rivers.

### **What kind of habitat do they need?**

Shovelnose sturgeon live in the open channels of large rivers. They stay on the

bottom, often in areas with a swift current and sandy or gravelly bottom, and are tolerant of high turbidity.

### **How do they reproduce?**

Spawning occurs in the open channels of large rivers in a strong current over gravel bottoms between April and July. The peak of spawning is around May 10 and the sturgeon migrate from the feeding grounds to the breeding grounds. During spawning fertilized eggs stick to the bottom of the river and hatch after 3 to 5 days.

### **How old are they when they reproduce?**

Shovelnose sturgeon do not spawn until they are 5 to 7 years old. Females do not spawn every year. This late maturity makes the sturgeon vulnerable to overharvest.

### **How long do they live?**

Shovelnose sturgeon can live up to 30 years.

### **How fast do they grow in Indiana?**

Shovelnose sturgeon are slow growers and reach a length of about 8.3 inches in the first year. The average length of an adult shovelnose sturgeon is about 21 inches and the average weight is 1.5 pounds.

### **What do they eat?**

Shovelnose sturgeon feed on the bottom by raking the bottom with their sensitive barbels. They eat aquatic insect larvae and crustaceans.

### **What eats them?**

Many species eat the eggs and young shovelnose sturgeon but the adults have few predators. The main predator for an adult sturgeon is humans who take them for their meat and caviar.

### **Are they safe to eat?**

The flesh of sturgeons has an excellent flavor and is often smoked. The eggs are also in high demand for caviar.

### **How do I fish for them?**

Shovelnose sturgeon can be caught by rod and reel or trot lines baited with worms or minnows and set in drop-off areas near the lower ends of sand bars.

### **How is Indiana managing shovelnose sturgeon?**

Shovelnose sturgeon are a native fish to Indiana and are not stocked by the state. There is a 25 inch minimum length limit however placed on shovelnose sturgeon harvested by anglers. In addition, they cannot be harvested commercially without a roe harvester's license in addition to a commercial fishing license.

### **Additional facts about shovelnose sturgeon**

-Although they are mostly sedentary, they are capable of traveling very long distances and often cross between states. One particular sturgeon was tagged in the Mississippi River at the mouth of the Ohio River and was caught seven years later in the Wabash River near Vincennes, IN.

-Because they are bottom feeders they are an important host for many species of freshwater mussel larvae. One of these species is the hickory-nut mussel, whose only known host is the shovelnose sturgeon.