



# Fish of the James River



Directions: Research these 4 common fish found in the James River. The White Perch has been completed for you. Here are some websites to help you. Also, watch this James River Association Video which shows you how we catch this fish.

Fish Resources: Weblinks from the Chesapeake Bay Program

- [https://www.chesapeakebay.net/S=0/fieldguide/critter/white\\_perch](https://www.chesapeakebay.net/S=0/fieldguide/critter/white_perch)
- [https://www.chesapeakebay.net/S=0/fieldguide/critter/blue\\_catfish](https://www.chesapeakebay.net/S=0/fieldguide/critter/blue_catfish)
- <https://www.chesapeakebay.net/discover/field-guide/entry/hogchoker>
- [https://www.chesapeakebay.net/discover/field-guide/entry/smallmouth\\_bass](https://www.chesapeakebay.net/discover/field-guide/entry/smallmouth_bass)

Objective: Students will be able to learn about 4 common fish species found in the James River. By learning about these fish students will be able to understand different characteristics and traits that each species possesses.

<u>Characteristics</u>	<u>White Perch</u> <i>Morone Americana</i>	<u>Blue Catfish</u> <i>Ictalurus furcatus</i>
<u>Picture</u>		 <small>Photo courtesy USFWS/Duane Raver</small>
<u>Physical Characteristic</u> <u>What it looks like?</u>	White perch grow seven to ten inches in length. They rarely weigh more than one pound. They have a silvery, greenish-gray body with faint lines on the sides. Whitish belly	Long fish with a flat dorsal fin and deeply forked tail. Its smooth skin lacks scales. It has a slate blue body, a silver-white belly and four pairs of black, whisker-like barbels around its mouth
<u>Native or Non-Native</u>	Native to James River	Non-Native to James River
<u>Mouth Position</u>	Middle of body	Bottom of Body
<u>Defensive Adaptation</u>	Swim in schools for protection, Spines on its Dorsel Fin help protect from predators	Barbs with sharp serrated, Counter Shading
<u>Diet</u> <u>Herbivore,</u> <u>Omnivore,</u> <u>Carnivore?</u>	Carnivore, Feeds on small fish, insects, detritus, and fish eggs and larvae	Omnivores, eat plants in early life then eat almost any type of fish.

<u>Characteristics</u>	<u>Hog Choker</u>	<u>Smallmouth Bass</u>
<u>Picture</u>		
<u>Physical Characteristic</u> <u>What it looks like?</u>	flat, rounded body that grows to about 6 inches in length. Dark brownish-gray on top and pale on the bottom, with narrow, black vertical lines or spots on the top side of its body	Elongate body is pale brown or olive green, while their belly is yellow-white in color. The fish's body features a number of small, dusky brown blotches
<u>Native or Non-Native</u>	Native	Non-native
<u>Mouth Position</u>	Bottom of body, vertical slit	Middle of body
<u>Defensive Adaptation?</u>	Hides under sediment, sandpaper body (tail to head)	Counter Shading, fast swimmer, forked tail
<u>Diet</u> <u>Herbivore, Omnivore,</u> <u>Carnivore</u>	Carnivore, eat worms and crustaceans. They hunt for prey by lying half-buried in bottom sediments with both eyes looking up	Carnivore, feed on insects, amphibians, fish and crayfish, as well as the young of other smallmouth bass.

Conclusion: Questions

- Which of the four fish species is non-native and some say invasive species to the James River? What are two reasons we should keep invasive species out of the James River?  
Blue Catfish – The blue catfish is considered invasive species of James River because it out competed most native species of catfish and has decimated some native fish species like menhaden. Blue Catfish also reproduce in large numbers and have become a large percentage of the biomass of the James River. In other words it has unbalanced the ecosystem, less biodiversity.
- By understanding the positioning of the fish's mouth you can determine where it lives mostly in the James River? Which two fish typically live on the bottom of the river?  
The two fish species that mostly live on the bottom of the James River and have mouths that are on the bottom of each fish are Hog Choker's and Blue Catfish.

Who am I activity? By reading the brief description you should be able to guess which of the 4 species is being described?

1. Who am I? I am a fish that is typically found on the bottom of the river. I was imported from the Mississippi River and have the ability to reproduce in large numbers of the James River. **Blue Catfish**
2. Who am I? I am a fish that doesn't typically get that large. I often swim with many other fish in a school. I eat small fish, fish eggs, and insects. **White Perch**

**Write your own, Who am I?**

3.