Tips for Identifying Common Fish Species in the Bush River

Juvenile Largemouth bass

Spot

Threadfin shad

Juvenile White perch
The Herrings (Family Clupeidae)

- Alewife
- American shad
- Blueback herring
- Atlantic menhaden
- Gizzard shad

All Herring:

Fins without spines, Single dorsal fin (top or back fin) located near mid-point of body, Caudal fin (tail fin) deeply forked
Gizzard shad and Atlantic menhaden are deeper bodied (or rounder) than the alewife, blueback and shad.

Gizzard shad and menhaden are similar in body shape, however, there are distinct differences among these species:

Gizzard shad have a depression at the nape and the last ray of the dorsal fin is filamentous (thread like) – it is long and extends out.

The menhaden will also have a series of spots along the upper dorsal area

The mouth of the gizzard shad is small, whereas the mouth of the menhaden will be fairly large for its size. The gizzard shad mouth is subterminal – the lower jaw does not align to the top jaw. (Fish looks like it has a sever overbite.)
The Herrings (Family Clupeidae)

The Alosids
They are all the same genus and therefore look very similar

- Alewife (*Alosa psuedoharengus*)
- American shad (*Alosa sapidissima*)
- Blueback herring (*Alosa aestivalis*)

IT’S ALL ABOUT THE JAW!

Alewife and blueback herring have a bottom jaw that is “shovel shaped” whereas hickory and american shad have a “straight jaw”
The difference in the American and hickory shad is the bottom jaw – remember it is straight, but in the American shad, the bottom jaw is inferior to the top (in other words the fish has an overbite) and in the hickory shad, the bottom jaw is superior (it has an underbite)
Alewife have a larger eye in relation to the head than the blueback and they are deeper bodied.

When you examine the gut peritoneum (by cutting into the abdominal area) the peritoneum on an alewife is speckled; the peritoneum is black in a blueback herring.

Also, alewife generally spawn first, so they should be noticeably larger than the bluebacks as juveniles – however this is not always the case.
The Silversides
(Family Atherinidae)

Atlantic silverside
Inland silverside

All Siversides:
Lack a lateral line and possess a broad, silvery, midlateral band, mouth is small (distinguishing them from the Bay anchovy)

Look very similar –
The key distinguishing factor is the gut peritoneum:
The inland silverside – the gut peritoneum extends beyond the origin of the anal fin
The Atlantic silverside – the gut peritoneum ends abruptly at the origin of the anal fin
The Anchovies
(Family Engraulidae)

Bay Anchovy

All Anchovies:

Have a large mouth, lack a lateral line and dorsal and anal fins have no spines. The lower jaw is underslung – (they have a noticeable overbite!)

Small somewhat transparent fish – have a distinctly large mouth when you pull the lower jaw down to open the mouth
The Killifish (Family Cyprinodontidae)

- **Mummichog**
- **Banded killifish**

Generally small and slender fish (often used as bait)

- Single dorsal fin located posterior to the midpoint of the body
- Lack a lateral line
- Caudal fin margin is rounded or square
The Killifish (Family Cyprinodontidae)

The mummichog and the banded killifish look very similar. However, the mummichog has a broader head and a wider caudal peduncle.
The Sunfishes (Family Centrarchidae)

- Largemouth bass
- Bluegill
- Pumpkinseed
- Black crappie

All Sunfishes:

- Dorsal fin with spines and rays, the fin is continuous (spine part runs into ray part)
- Family similar to the perches and the temperate bass

The major differences are:
- The bluegill has a dusky spot on the lower half of the last 4 rays of the soft dorsal fin (sometimes referred to as the “thumb print”)
- The pumpkinseed will almost always have a red pigmentation on the edge of the opercular lobe
The Sunfishes (Family Centrarchidae)

Have only found largemouth

Difference between the largemouth and the smallmouth:

Largemouth upper jaw ends past the eye

Smallmouth upper jaw ends at the origin of the eye

Largemouth – double dorsal fin has a break between the rays and the spines

Smallmouth – no break
The Sunfishes (Family Centrarchidae)

The black crappie may look similar to bluegill but it has a speckled pattern and has 6 – 8 spines in the dorsal fin – (less than the bluegill)
The Perches (Family Percidae)

Yellow perch

Tessellated darter

Freshwater fish characterized by divided dorsal fin where the first part consists of spines, the second part consists of rays.

The tessellated darter and the yellow perch are easy to distinguish. Tessellated darters are small “torpedo shaped” fish. They are speckled and have long pectoral fins.

The yellow perch have dark vertical bands are yellowish in color. They are similar to and sometimes confused with white perch and striped bass. However, the vertical banding is a dead give away.
The Striped Basses Or Temperate Basses (Family Moronidae)

Striped Bass

White Perch

Striped basses have double dorsal fins that are nearly separated. They are perch-like fish, however the distinguishing characteristic is the anal fin, that has three strong spines.

Striped bass and white perch look distinctly different as adults. The adult striped bass is more stream line and had distinct dark stripes. The white perch is deeper bodied and lacks the stripes.

The juveniles look very similar. The best way to determine the difference is to push against the anal fin. If the spine seems weak then it is a striped bass. Striped bass the second spine of the anal fin is shorter then the third. In a white perch these spines are equal length.
The Carps and Minnows (Family Cyprinidae)

- Common Carp
- Goldfish
- Golden shiner
- Eastern silvery minnow
- Spottail shiner

This family is very diverse. Minnows which are often confused with silversides have a single dorsal fin and the pelvic fins are located near the mid-body with the pectoral fins occurring low on the body.
The Carps and Minnows
(Family Cyprinidae)

The best way to determine the difference between the carp and the goldfish is to look for barbels (whiskers). If they are present then it is a carp. If no barbels are present, then it is a goldfish.
The Carps and Minnows (Family Cyprinidae)

The golden shiner is distinctly different from the spottail shiner and silvery minnow. It has a depressed lateral line and is much deeper bodied.

The spottail shiner and the silvery minnow look very similar. It is difficult to determine which species is present when only one species is captured. The spottail shiner has a narrower caudal peduncle than the silvery minnow.

If you look at the bottom jaw of a silvery minnow, it is crescent shaped. The silvery minnow also has a dark peritoneum that is sometimes visible through the skin. When the abdomen is opened, the gut will be coiled.
The Catfishes
(Family Ictaluridae)

Channel catfish

Brown bullhead

Catfish are distinct fish, having adipose fins and barbels (whiskers) around the mouth.
The Catfishes
(Family Ictaluridae)

Channel catfish have deeply forked tails and the body is speckled with random spots.

The brown bullhead has a slightly notched caudal fin and all of the barbels are dark.

Although yellow bullhead have not been identified in this survey, they do inhabit the area. The main difference between the yellow bullhead and the brown bullhead is the color of the barbels. The yellow bullhead’s chin barbels are white, not dark as in the brown bullhead.
The Drums
(Family Sciaenidae)

 Atlantic croaker

 Spot

The key distinguishing trait of the drum family is that the lateral line extends to the end of the caudal fin (it actually appears on the center caudal ray).

The spot and croaker are similar in appearance and can be easily confused.

However, the spot has an almost straight caudal fin.

The croaker’s tail fin comes to a slight point.

Also, the croaker has tiny barbels on the chin and the operculum has a “pointy” area on it.
The Tonguefishes (Family Cynoglossidae)

**Hogchoker**

The hogchoker is the only flatfish that has been observed in this survey. All flatfish (flounder and tonguefish) have both eyes on the same side of the head.
Bluefish have been observed in drought years. These fish are very streamline and very silvery in appearance. They have a large mouth with numerous sharp teeth. The head is large. A notable feature of the bluefish is the dark blotch at the base of the pectoral fin.
The American eel is the only species of eel that has been observed in this survey. It is round bodied (snake-like). The dorsal, caudal and anal fins are continuous. The pectoral fins are well developed and pelvic fins are absent.
The Suckers
(Family Catostomidae)

- White Sucker
- Quillback
- Golden Redhorse

The key distinguishing trait of the sucker family is that mouth is subterminal with fleshy papillose lips and they have toothless jaws. There is a long pharyngeal bone in the throat containing a single row of teeth.

The key characteristic is the first several rays of the dorsal fin form a long “quill”. The back always is moderately arched.
The Suckers
(Family Catostomidae)

The Northern hog sucker is well-camouflaged with its red-brown or olive-brown with dark bands. The fish has a white belly and is known for its sucker mouth.

The Golden redhorse sucker has golden scales along its sides, olive colored backs, and reddish-orange tinted fins on the ventral side of the body.