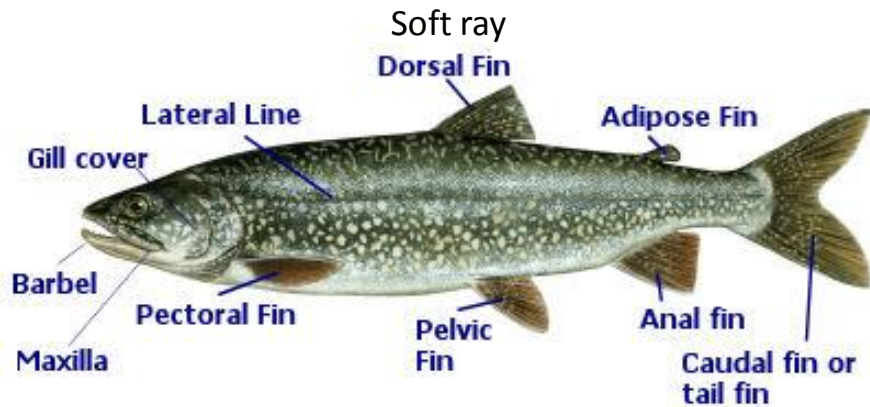
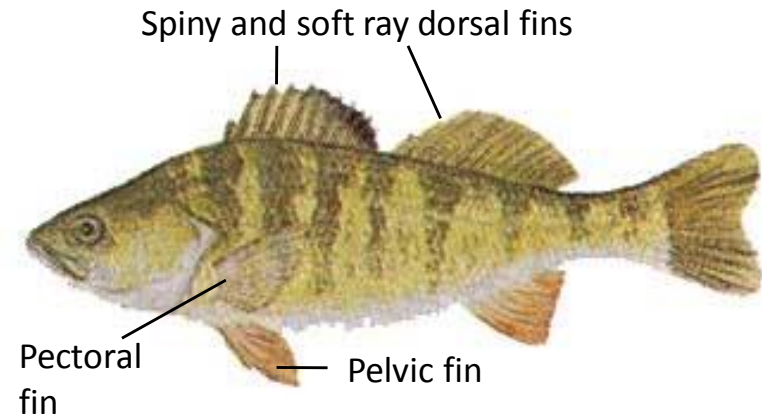


Fish Identification



“Lower” fish



“Higher” fish

Fins are conspicuous features of the fish body and can be used to identify groups of fish. The position of the pectoral and pelvic fins can vary greatly among families of fish. The [pectoral fins](#) of primitive or lower bony fishes tend to be placed low on the body whereas the position is more versatile in the higher fishes and tends to be located higher on the fish. This aids in their functionality and can be used in locomotion, turning, braking and aggressive displays. Eel-shaped fish have less prominent pectoral fins. The [pelvic fins](#) are generally smaller and more restricted in function. They tend to be positioned near the anal fin in the lower fish and placed below or a little behind the pectoral fins in the higher fish. The [dorsal fin\(s\)](#) may extend the length of the back, be divided into two or three separate fins, or be single and small. In some groups (Salmonids and some catfish) there is a small, fleshy adipose dorsal fin. In the higher bony fishes, the anterior part of the dorsal, or the first dorsal if there are two, is supported by spines. The anal fin is generally short-based but some species have anal fins that are long or longer than the dorsal fins, such as the burbot (*Lota lota*). The [caudal fins](#) appear in a variety of shapes and sizes and often reflect evolutionary levels and relationships more than other fins. Swimming habits also can be deduced to some extent by the caudal. For example, many pelagic species that are constantly on the move have forked tails; species with small caudals tend to be weak swimmers or may move by wriggling along the bottom, such as the sea lamprey. Most advanced fish have symmetrical caudal fins whereas more primitive fish, such as shark and sturgeon, have very asymmetrical caudal fins.

Sea Lamprey

(*Petromyzon marinus*)



- Eel-like elongated body
- Circular oral disc in place of mouth
 - Many small teeth in circular rows
 - 2 separate dorsal fins!

Lake Sturgeon

Lake Sturgeon- *Acipenser fulvescens*
averages 3-5 feet



- Prominent rounded snout; inferior mouth with fleshy lips, no teeth
 - 4 equal-length smooth barbels in front of mouth
 - Body with bony scutes down back
- Heterocercal (unequal lower and upper) caudal fin with long upper lobe
 - Single dorsal fin with no spines located on posterior portion of back

Bowfin

[\(2nd video link\)](#)



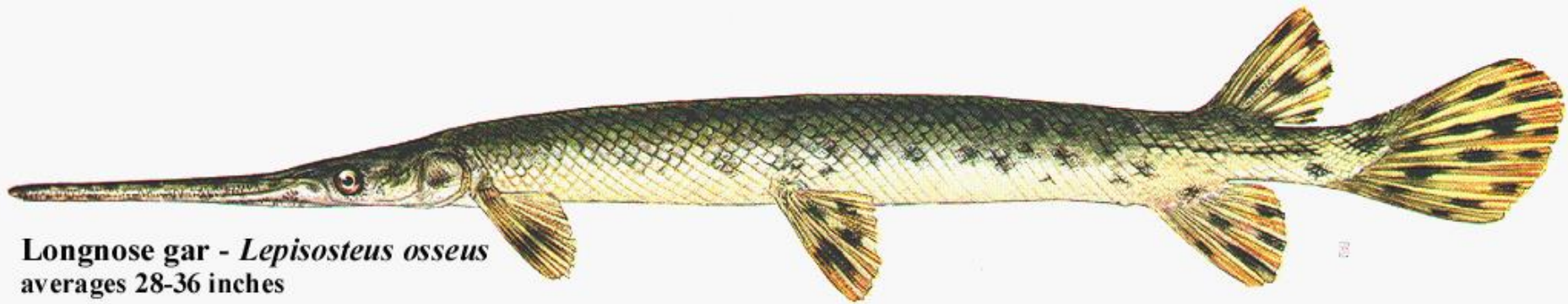
Bowfin - *Amia calva*
averages 18-24 inches



- Heterocercal caudal fin
- Long single dorsal fin without spines; short anal fin
 - Obvious scales
 - Gular plate on lower jaw and no barbels
- Large terminal mouth; prominent nostrils on snout
- Body mottled dark brown/black on olive background
 - Dark spot at base of caudal fin

Longnose Gar

(2nd video link)



Longnose gar - *Lepisosteus osseus*
averages 28-36 inches

- Heterocercal caudal fin
- Snout dorsal-ventrally flattened; prominent and beak-like
 - Long cylindrical, rigid, body shape
- No spots on top of head or snout; spots more pronounced toward back of fish

American Eel

(video of European Eel)

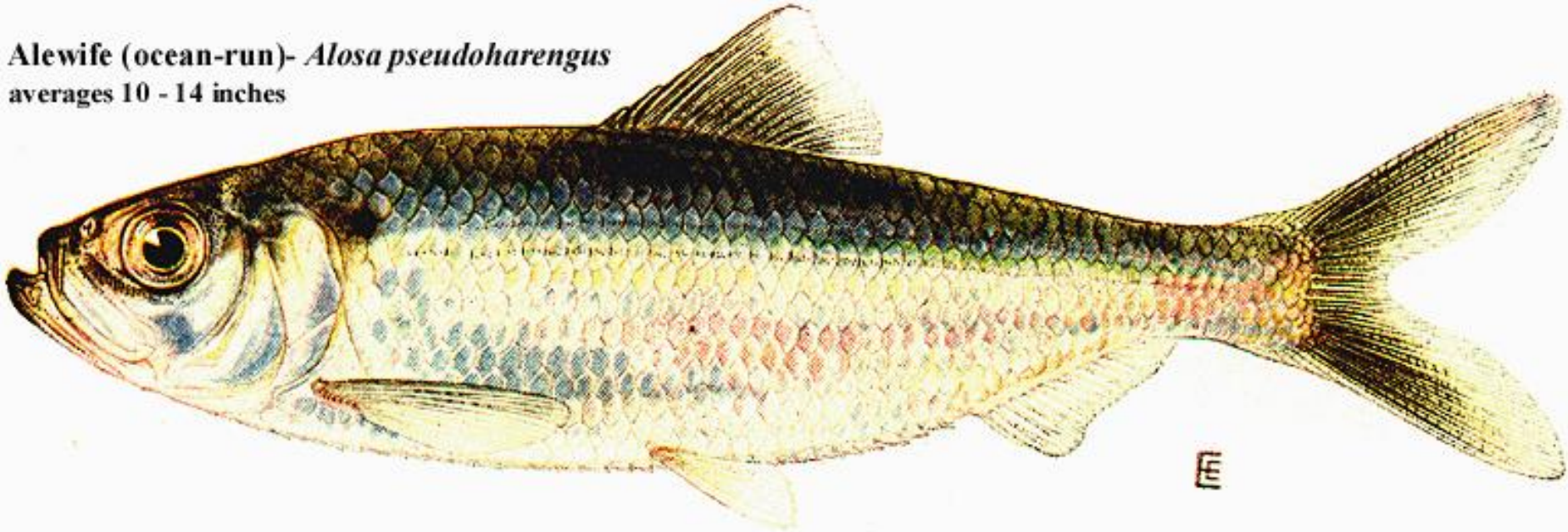
American Eel- *Anguilla rostrata*
averages 24-40 inches



- Long, flexible, snake-like body with no pelvic fins; dorsal and anal fins long
 - Terminal mouth with teeth
 - Single small gill slit at base of pectoral fin
- Body covered with small, inconspicuous, embedded scales

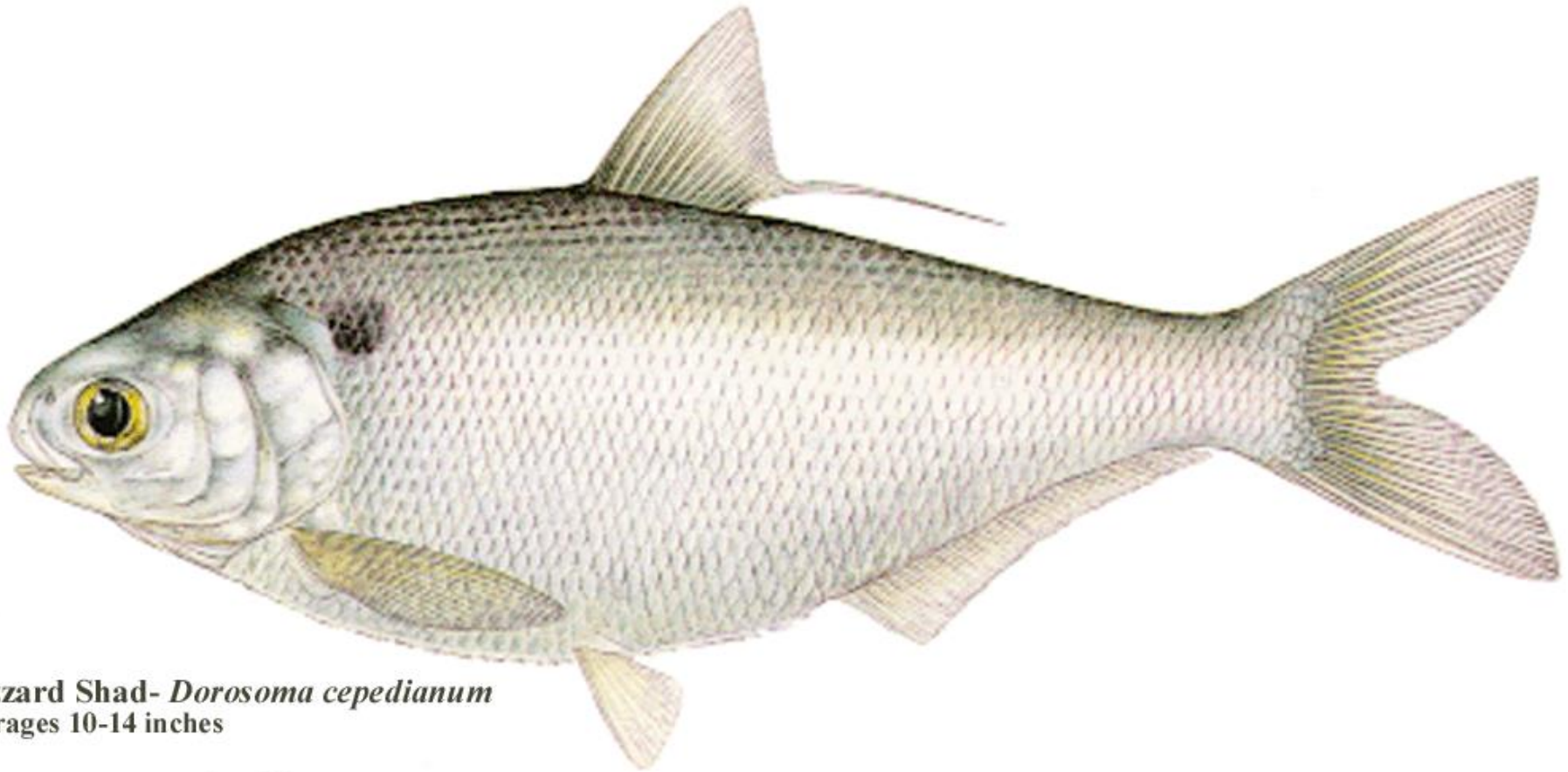
Alewife

Alewife (ocean-run)- *Alosa pseudoharengus*
averages 10 - 14 inches



- Keel-like belly with projecting scales; saw-tooth texture
 - Deep bodied; laterally compressed
 - Slightly superior, upturned mouth; teeth small
- Body and fins solid silver, slightly darker on dorsal side
 - Eye diameter equal or greater than snout length
- Single dark spot behind the gill opening on their sides

Gizzard Shad



Gizzard Shad- *Dorosoma cepedianum*
averages 10-14 inches

- Keel-like belly with projecting scales; saw-tooth texture; “scutes” on belly!
 - Deep bodied; laterally compressed
- Dorsal fin with last ray more than 3x longer than adjacent ray; dorsal fin origin behind pelvic origin
 - Silver body; spot behind upper part of gills

Cisco or Lake Herring

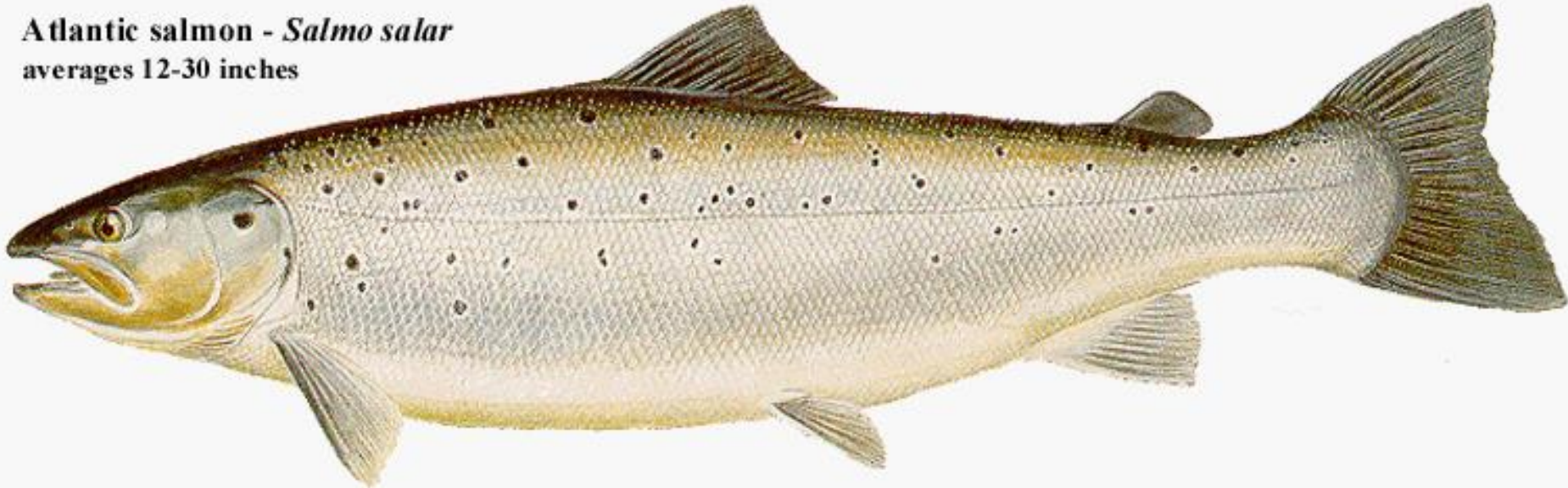
Coregonus artedii



- Terminal mouth with few, minute, teeth
- Elongated trout body (is in trout family, Salmonidae)
- Forked tail; single dorsal fin, no spines; adipose fin
 - Silvery body, darker on dorsal side, no spots
 - Typically 300-450 mm total length

Atlantic Salmon

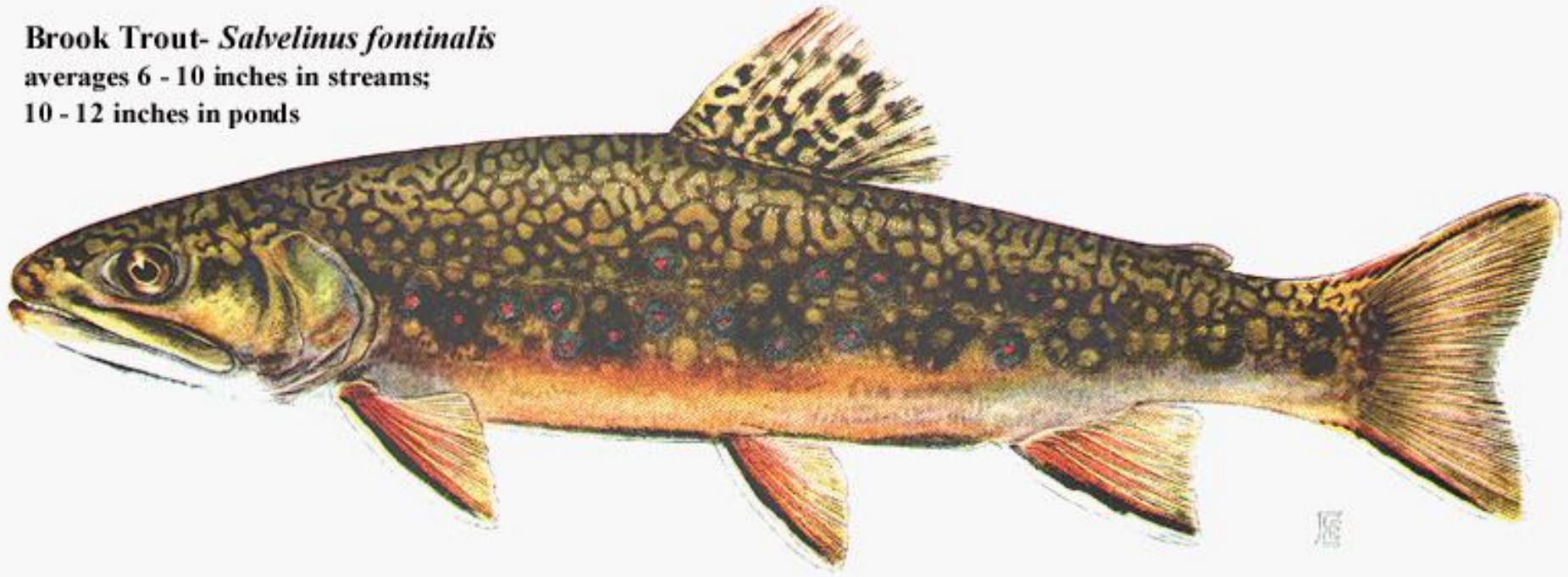
Atlantic salmon - *Salmo salar*
averages 12-30 inches



- Slightly oblique terminal mouth, numerous small/med teeth
 - Elongated trout body (is in trout family, Salmonidae)
 - Dark spots on light background
 - Single dorsal fin, no spines; adipose fin
- Silvery background body color, darker on dorsal side, cream on bottom

Brook Trout

Brook Trout- *Salvelinus fontinalis*
averages 6 - 10 inches in streams;
10 - 12 inches in ponds



- Slightly oblique terminal, large, mouth, numerous small/med teeth
 - Elongated body; single dorsal fin, no spines; adipose fin
- Background body color dark olive on back and sides, cream/golden/pink on belly; vermiculations lighter olive or gray
 - Spots on body cream/yellow/blue/red
- Pelvic, pectoral, and anal fins with thin white stripe on leading edge followed by black stripe then reddish coloration

Brown Trout

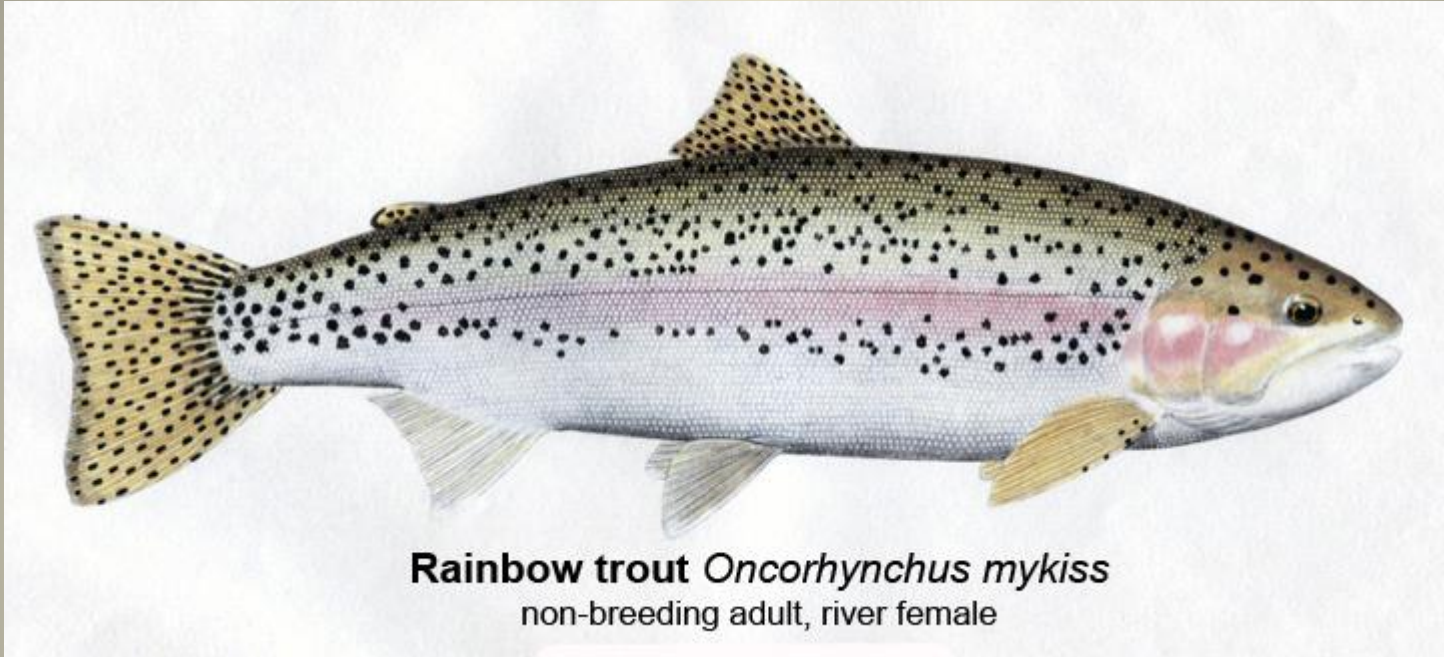


Property IGFA (Artist Duane Raver)

https://www.igfa.org/images/SpeciesID_Images/trout_brown.png

- Often have a brassy appearance (olive brown dorsally to mid side; from tan to yellow from mid side to belly)
 - Brown or black spots
 - Some orange to red spots, some haloed with white to pale blue
 - Dorsal fin is yellow-olive, marked with brown to black spots
 - White margins on pectoral, pelvic and anal fins

Rainbow Trout



Rainbow trout *Oncorhynchus mykiss*
non-breeding adult, river female

http://www.hookhack.com/img/rainbowtrout_1.jpg

- Native to rivers and lakes in North American; WEST of Rocky Mountains
- Bodies blue, green or yellowish, shading to silvery white underneath
 - Horizontal pink-red stripe running from gills to tail
 - Black spots along their backs

Lake Trout

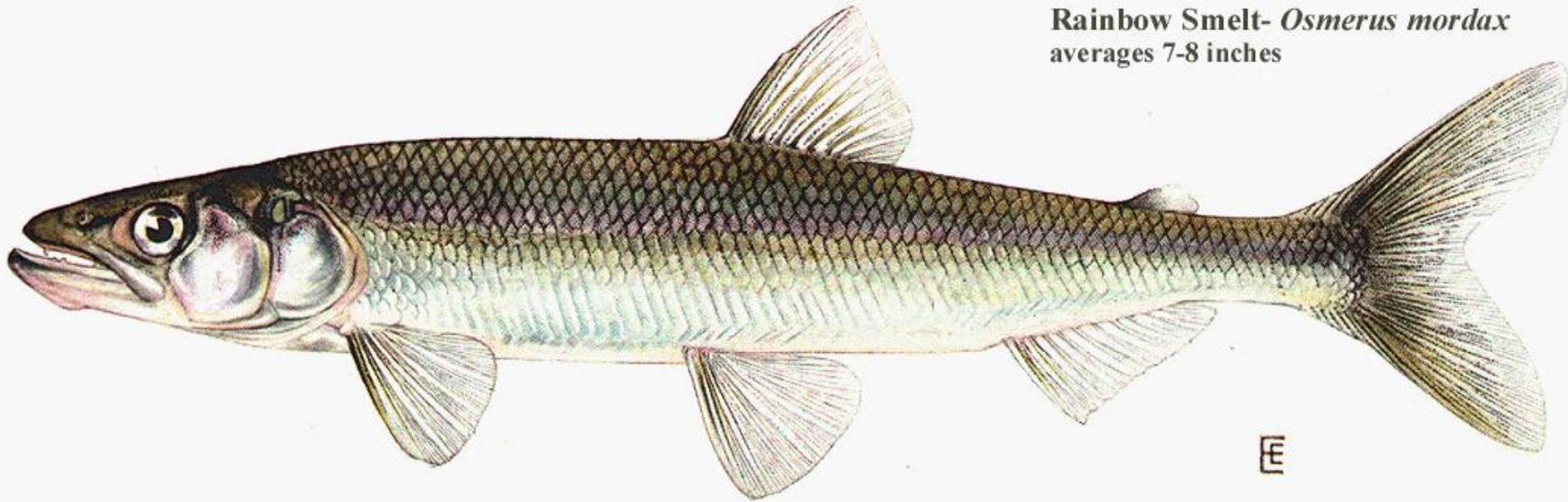


Lake trout - *Salvelinus namaycush*
averages 15-34 inches

- Slightly oblique terminal, large, mouth, numerous small/med teeth
- Strongly forked tail; elongated body; single dorsal fin, no spines; adipose fin
 - Background body color dark olive on back and sides, cream on belly; vermiculations lighter olive or gray; spots cream/olive
- No red spots on body; pectoral, pelvic, and anal fins uniformly colored

Rainbow Smelt

Rainbow Smelt- *Osmerus mordax*
averages 7-8 inches



- Terminal, large, and slightly oblique mouth with prominent teeth on both jaws
 - Elongate body
 - Adipose fin
- Solid body color: silvery with whitish ventral side

Northern Pike

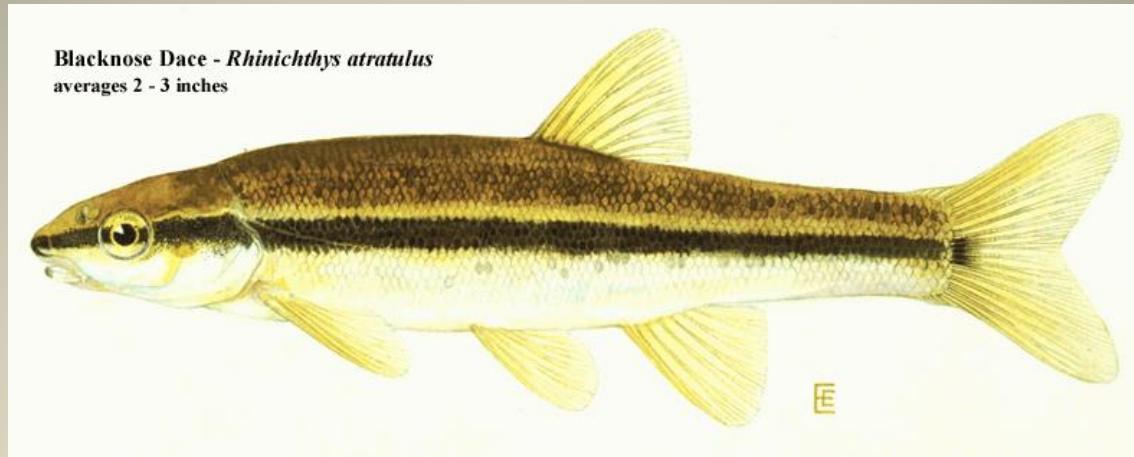
(2nd video)

Northern Pike- *Esox lucius*
averages 25 - 36 inches

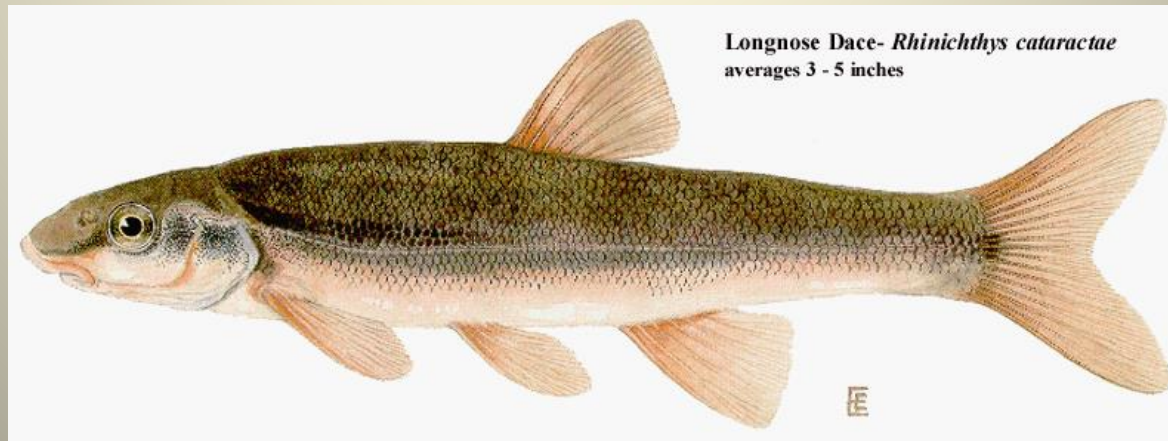


- Duck-billed with terminal mouth; numerous conspicuous teeth
 - Elongate body with dorsal fin closer to tail
- Yellow-green body with lighter cream oval spots; belly cream or white
 - Fins yellowish, dorsal, anal, and tail with diffuse dark spots

Dace (*Rhinichthys* spp.)



- Small minnow species with fine scales, moderate size mouth
- Forked tail, single dorsal fin, pelvic fins abdominal, no adipose fin
- Some species with single or multiple stripes along length of body



Creek Chub

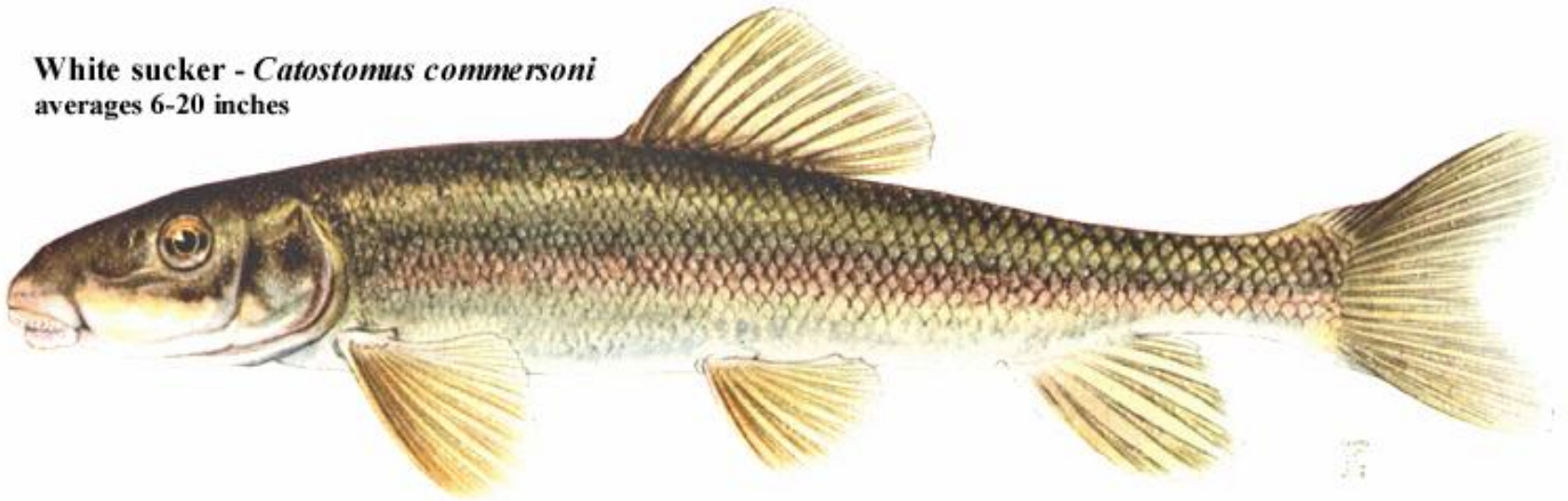
Creek Chub- *Semotilus atromaculatus*
averages 6 - 12 inches



- Larger minnow species with larger terminal mouth
- Solid dark brown/olive/silver/gray; dorsal surface darker
- Forked tail, single dorsal fin, pelvic fins abdominal, no adipose fin
 - Dark spot at anterior base of dorsal fin
 - Larger cycloid scales, 49-66 along lateral line
 - Distinctive barbell on the maxilla!

White Sucker

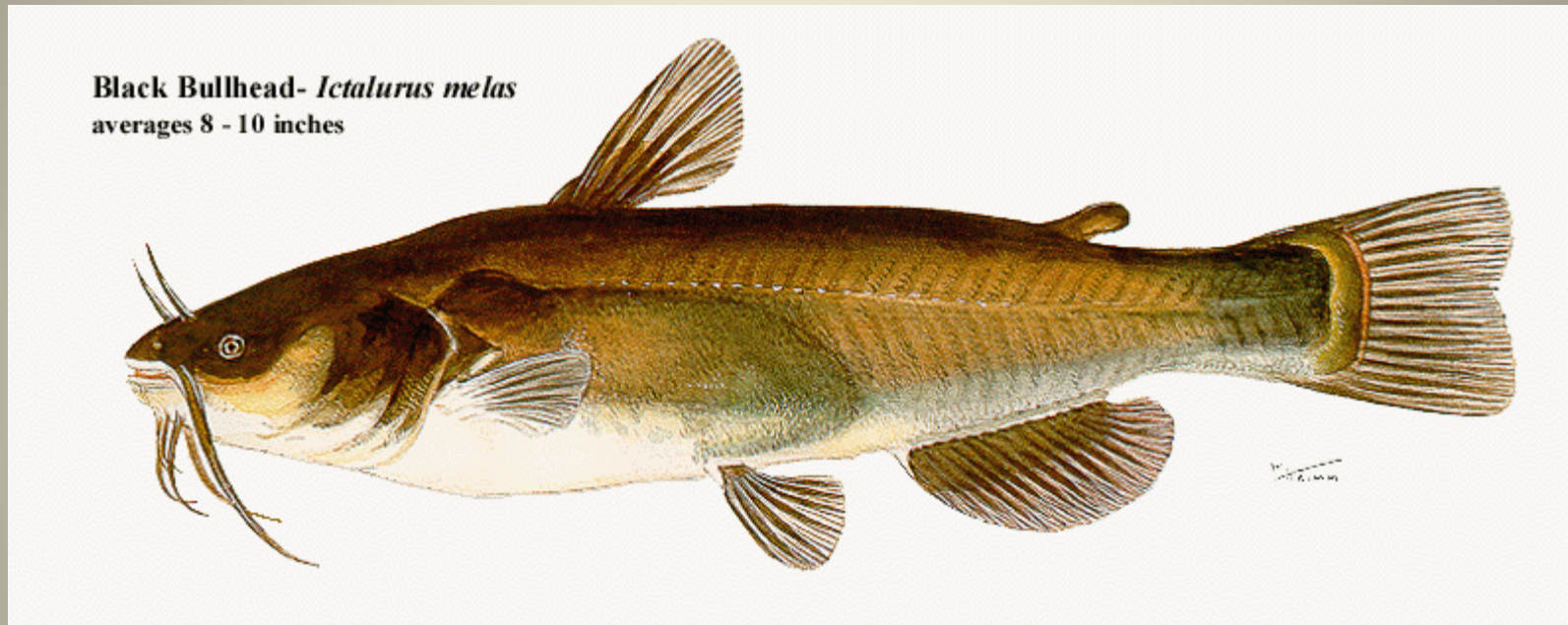
White sucker - *Catostomus commersoni*
averages 6-20 inches



- Mouth inferior, no teeth on jaws, no barbels
 - Lower lip broad and fleshy throughout
 - Body olive/tan/gray/brown
 - Fusiform body, but slightly dorsal-ventrally flattened and elongate
- Differs from all suckers in that: 10-13 soft rays in its dorsal fin and 55-75 scales in complete lateral line
 - Snout extends very little beyond upper lip

Black Bullhead

(uncertain species video, but good swimming behavior)



- Mouth slightly subterminal with patches of fine teeth
- 8 obvious barbels (grey or black)
- Smaller barbels on its on its spines than brown bullhead
- Dark olive/black on its back/upper sides; yellow or white belly
- No scales
- Free adipose fin
- Caudal fin slightly notched at midpoint



Burbot (2nd Video)



Burbot- *Lota lota*
averages 12 - 20 inches (up to 36 inches)

- Mouth terminal and wide; dorsal-ventrally flattened
 - Barbel on chin
- Very fine scales, hard to see
 - Long dorsal and anal fins
 - Body solid brown/yellow

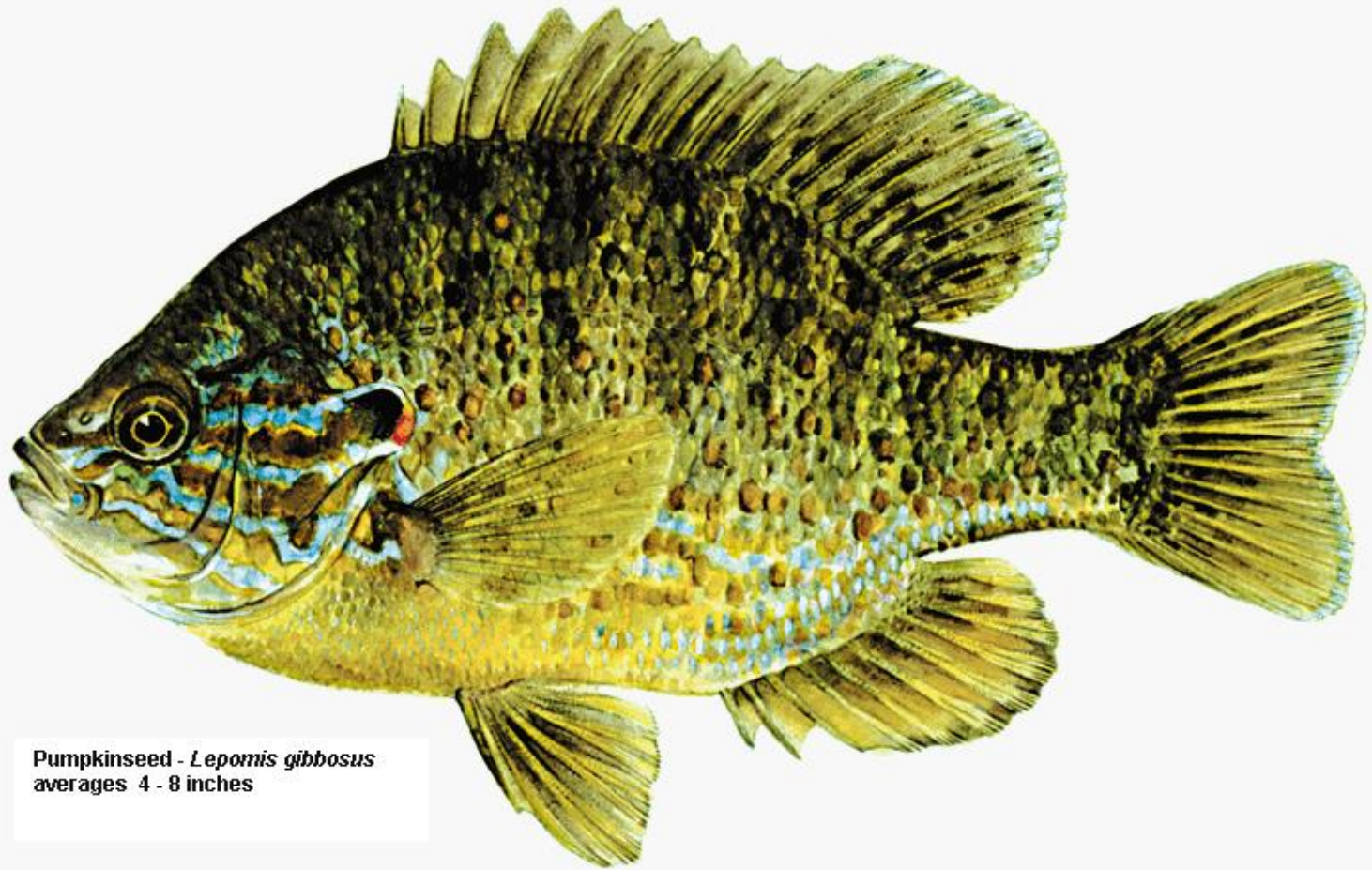
White Bass



White bass - *Morone chrysops*
averages 9-15 inches

- Mouth terminal and oblique
- Body deep and laterally compressed
- 6-8 dark horizontal lateral stripes over olive/silver/white body
 - Slightly-forked caudal fin
 - 3 anal spines
- Spine on upper back part of opercle, saw-edge margin of preopercle

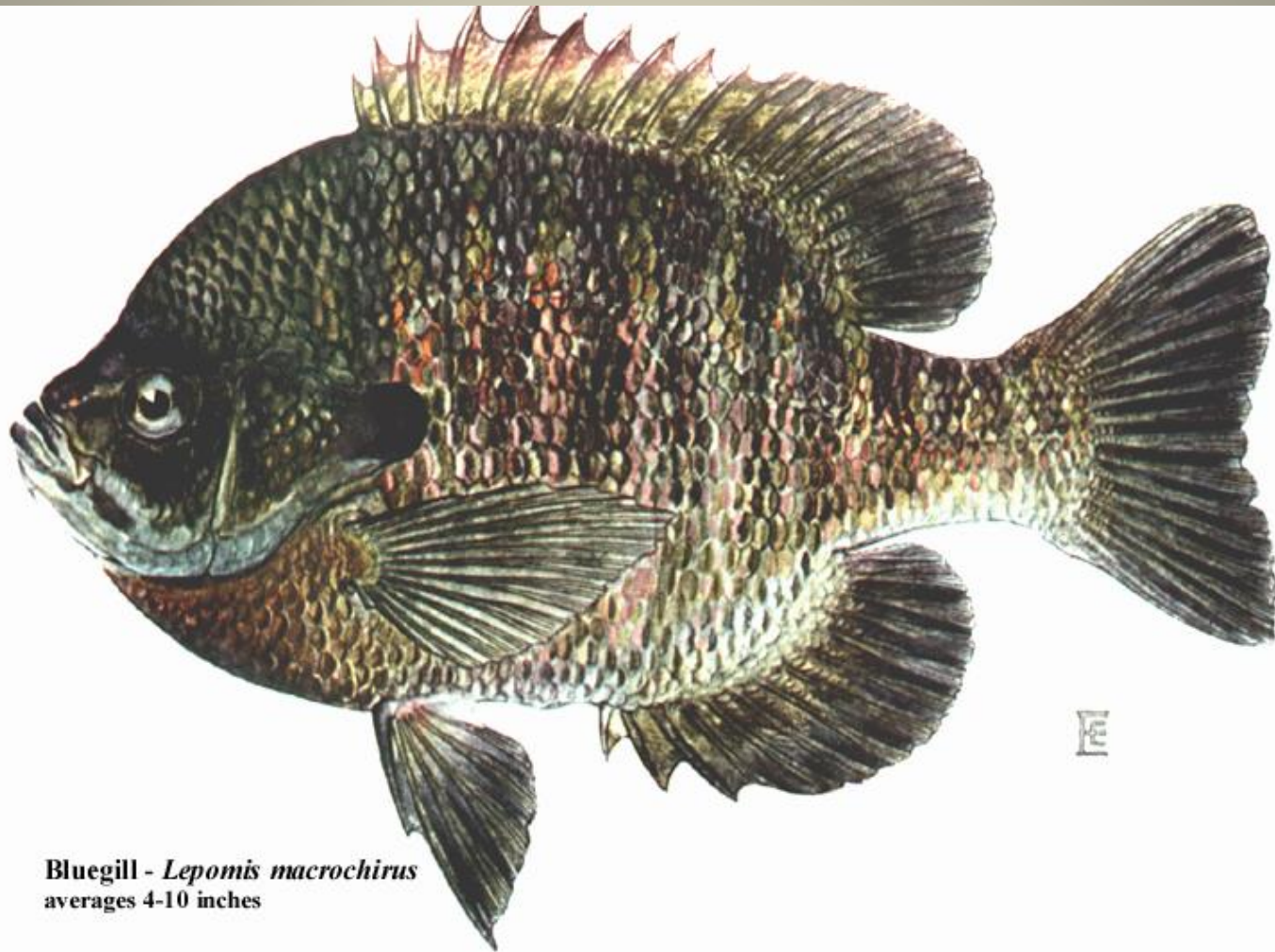
Pumpkinseed



Pumpkinseed - *Lepomis gibbosus*
averages 4 - 8 inches

- Mouth terminal, relatively small, and oblique
 - Body deep and laterally compressed
- Brown/olive body with yellow-olive sides and yellow belly
 - Long and pointed pectoral fins
- Blue lines radiating back from eye; red spot on opercular flap

Bluegill

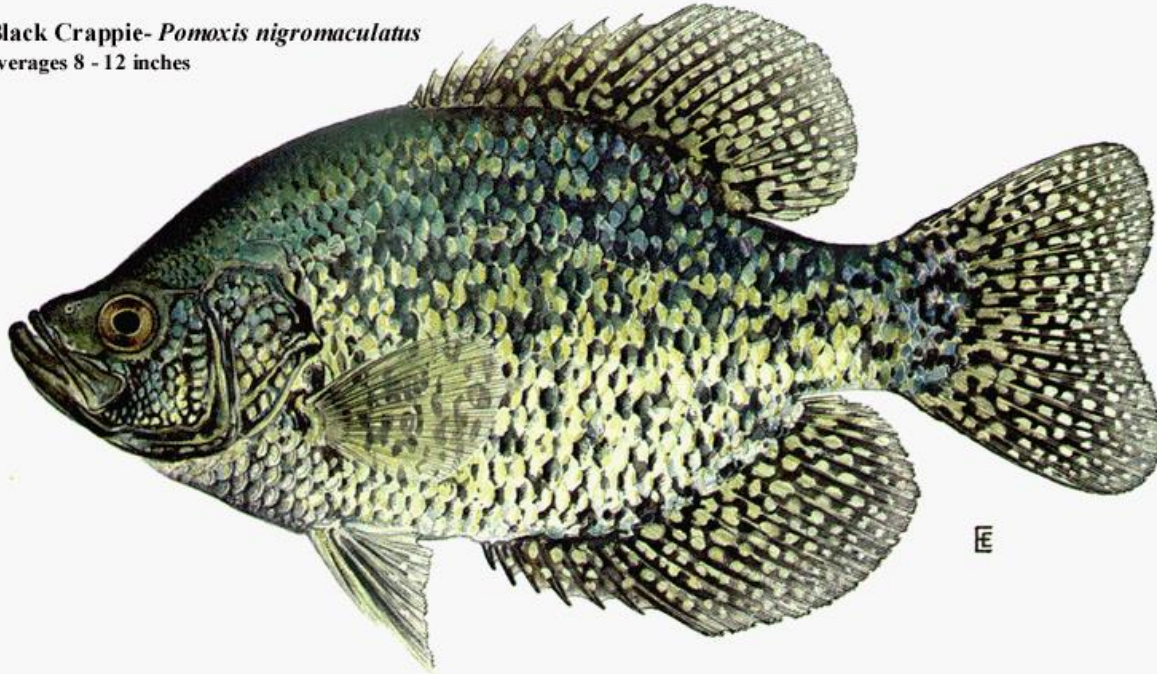


Bluegill - *Lepomis macrochirus*
averages 4-10 inches

- Mouth terminal, relatively small, and oblique
 - Body deep and laterally compressed
 - Blue opercular flap
- **Dusky thumb print** on posterior edge of dorsal fin

Black Crappie

Black Crappie- *Pomoxis nigromaculatus*
averages 8 - 12 inches



http://www.dec.ny.gov/images/fish_marine_images/blackcrappie.gif

- Dark green to golden brown in color, with mottled patches of dark scales
 - Snout tends to curve upwards
 - 5-7 anal spines

Largemouth Bass

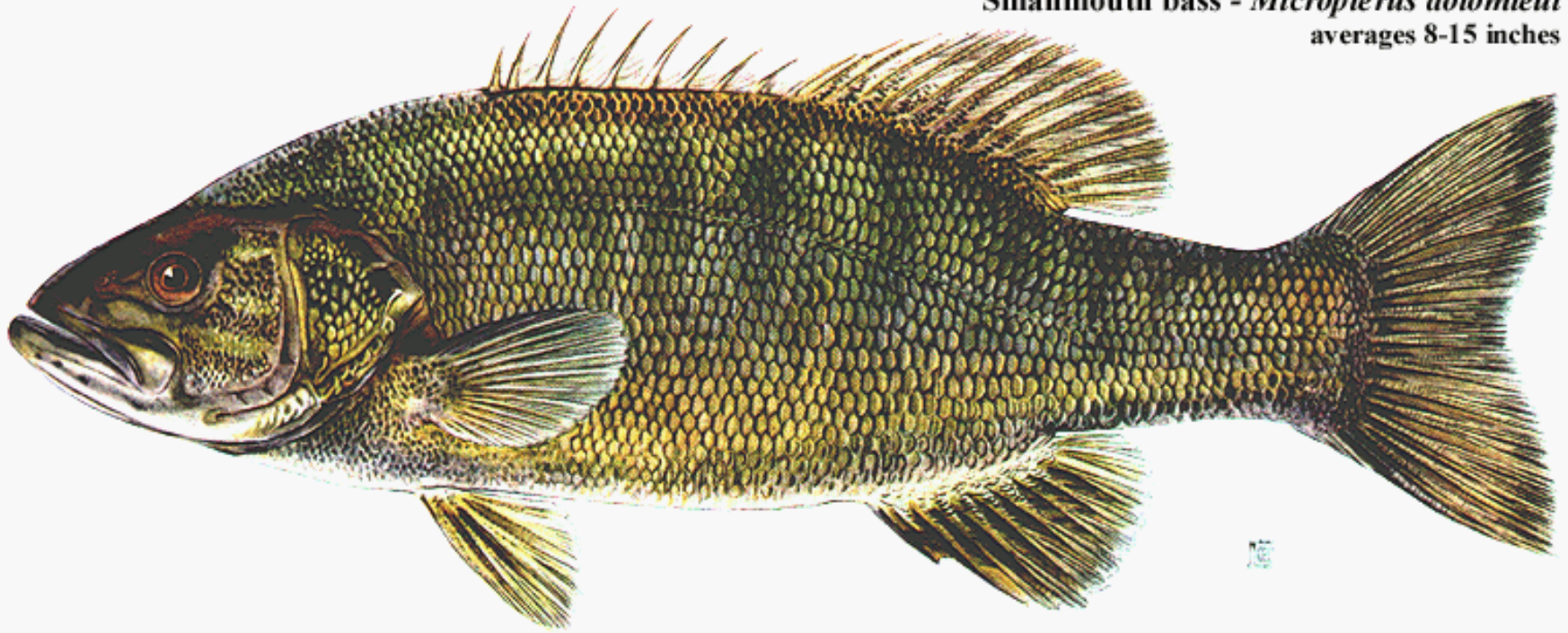
Largemouth bass - *Micropterus salmoides*
averages 8-17 inches



- Like sunfish but with relatively elongated body; length 3-4 times it's depth
 - Posterior end of upper jaw bone extends behind eye
 - Back and sides olive gray to black
 - Dark, wide band extending horizontally along side

Smallmouth Bass

Smallmouth bass - *Micropterus dolomieu*
averages 8-15 inches



- Like sunfish but with relatively elongated body; length 3-4 times it's depth
 - Posterior end of upper jaw bone *does not* extend behind eye
 - Back and sides olive gray to black
 - No dark horizontal band along side
 - Slight dark vertical bars may be present on sides

Yellow Perch

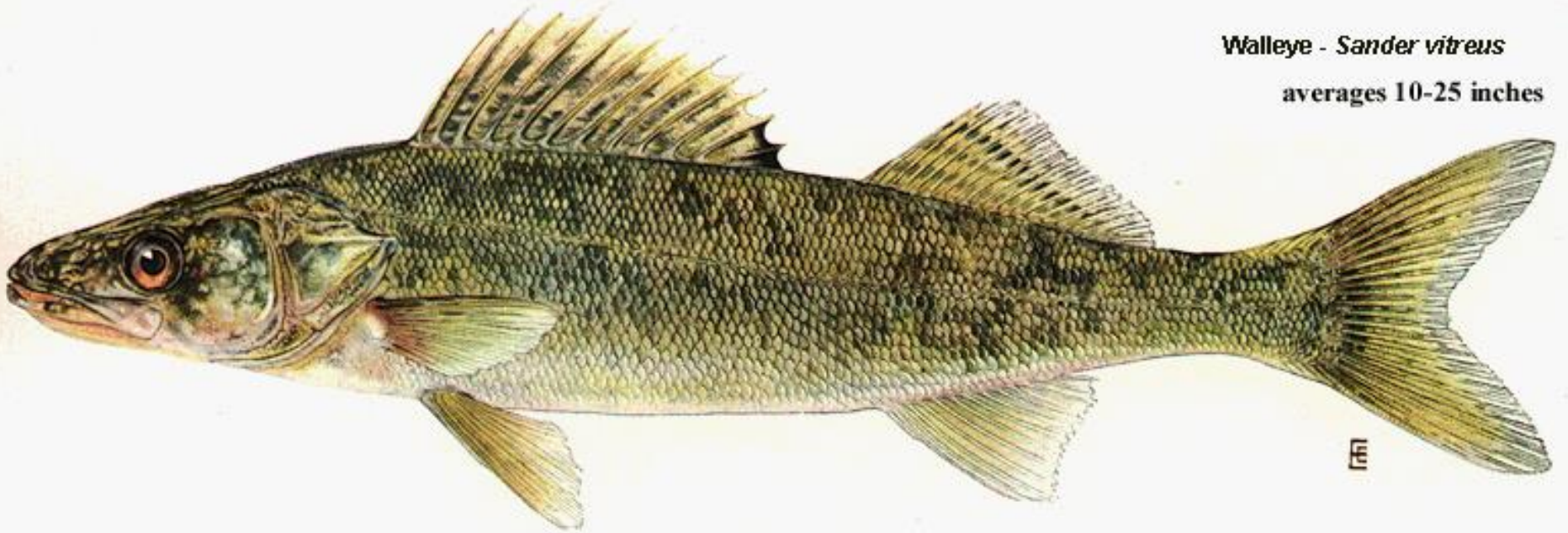
(European Perch video)



- Elongated body
 - 2 separated dorsal fins; anterior spiny, posterior soft
- Broad vertical olive green bands overlaying yellow background color on sides
 - Anal fin has two spines
 - Serrations on preoperculum

Walleye

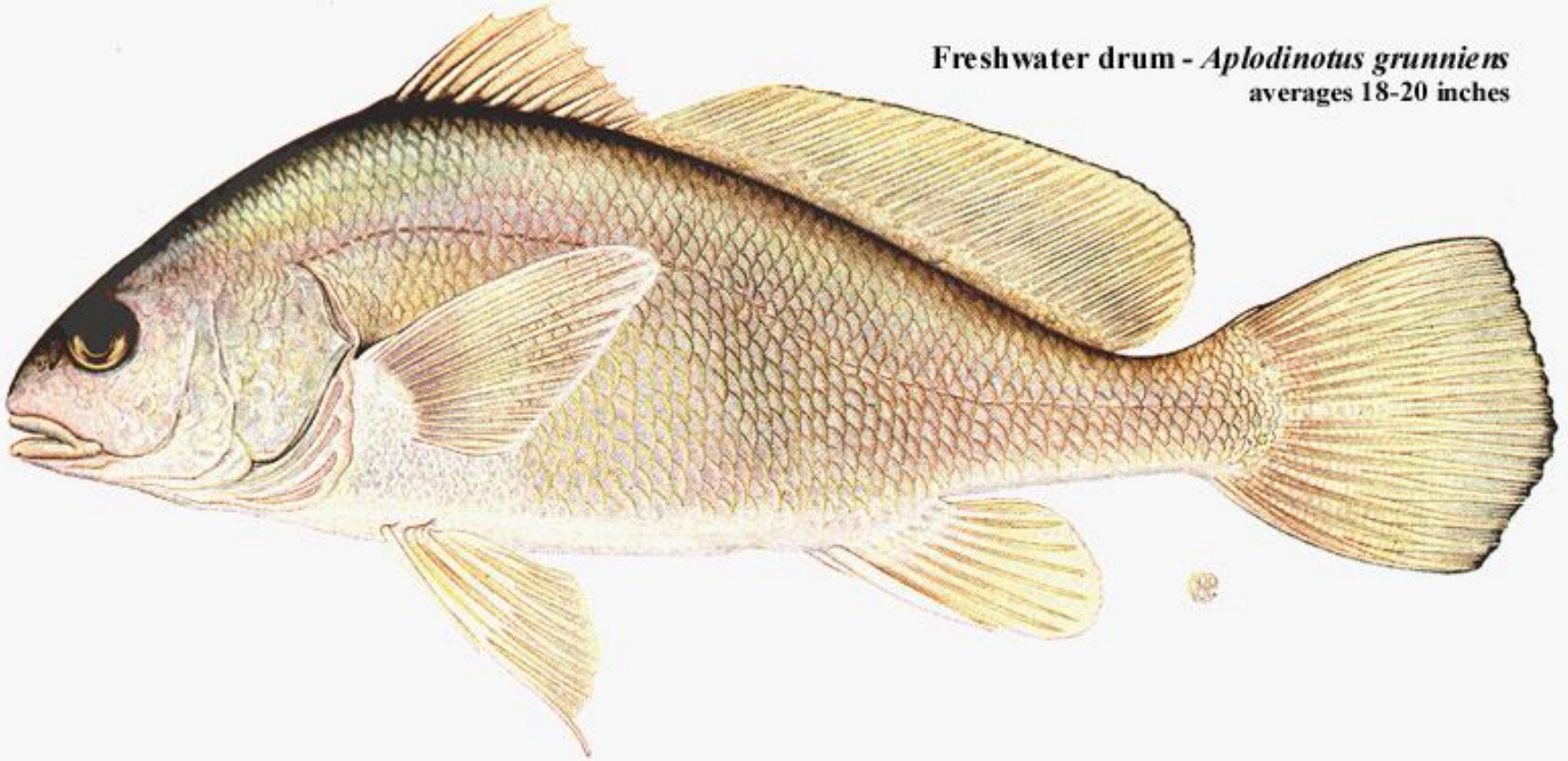
Walleye - Sander vitreus
averages 10-25 inches



- Elongated body, like perch
- 2 separated dorsal fins; anterior spiny, posterior soft
- Anterior dorsal fin has large black spot at posterior base
 - No vertical bars on body
- Serrations on posterior edge of preoperculum

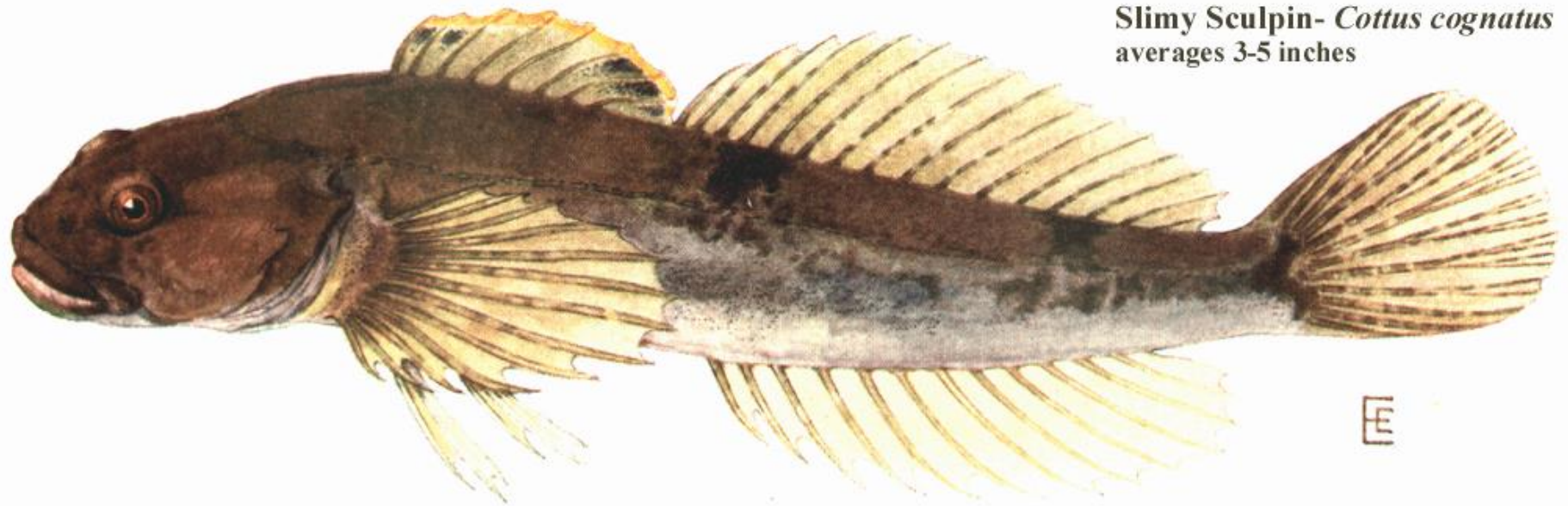
Freshwater Drum

Freshwater drum - *Aplodinotus grunniens*
averages 18-20 inches



- Heavy-, deep-bodied
- 8-9 spines in anterior dorsal fin; 2 spines in anal fin (one small, other large)
 - Lateral line extends well onto rounded caudal fin
 - Yellow/silver with green/brown back

Slimy Sculpin



Slimy Sculpin- *Cottus cognatus*
averages 3-5 inches

- Small, elongate, scale-less
- Flattened head and large pectoral fins
 - Rounded caudal fin
- (Scalloped shape anal fin and 3 pelvic rays distinguish it from mottled sculpin)