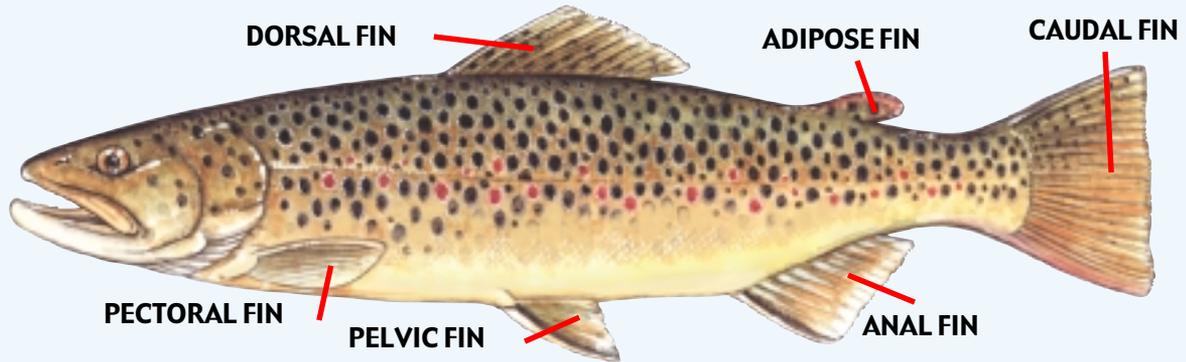


How Fish Swim

Fish swim to breathe, eat and move in the water.

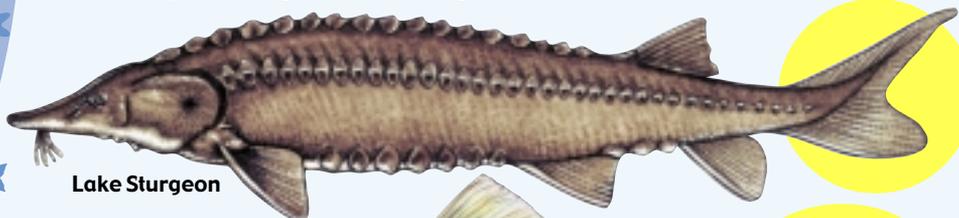
Fish muscles look like sideways W's, called myomeres (pronounced *my'-oh-mears*). The muscles contract from side to side and front to back. The fish's body pushes against the water and moves the fish forward.



Fins help fine-tune swimming. The caudal fin, or tail fin, increases speed. The pectoral and pelvic fins steer up or down. They also help fish turn and stop. The dorsal fin and anal fin keep the fish upright in the water—as the keel on the bottom of a sailboat keeps it upright.

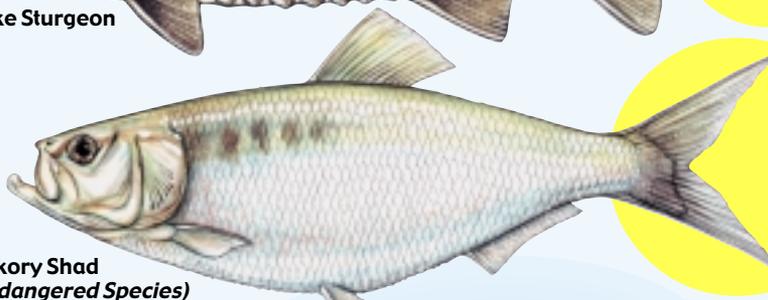
Fish Tails

The caudal, or tail, fin adds an extra forward kick to the fish's swimming. Tail shapes vary depending on how the fish swims or where it lives.



Lake Sturgeon

Crescent-shaped tails are suited for swimming fast for long distances.



Hickory Shad
(Endangered Species)

Fork-shaped tails are also suited for fast swimming, but they are helpful in making quick turns.



Yellow Bullhead Catfish

Rounded tails are built for swimming slowly.

Fish swim using their muscles, tail, fins and body shape.

Body shapes vary depending on how fish swim or where they live. Understanding this idea can give you clues to where a fish lives in the water.

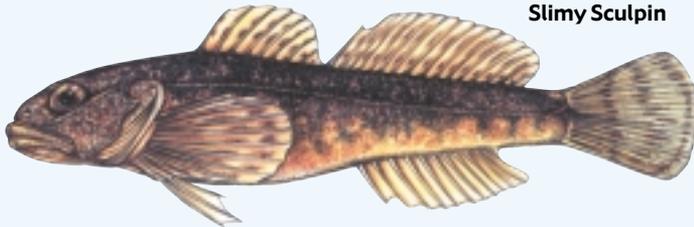
Flattened disks: Fish like sunfish and perch are shaped like a flattened disk on their sides. This shape makes them hard to see (if you are a predator).

Green Sunfish



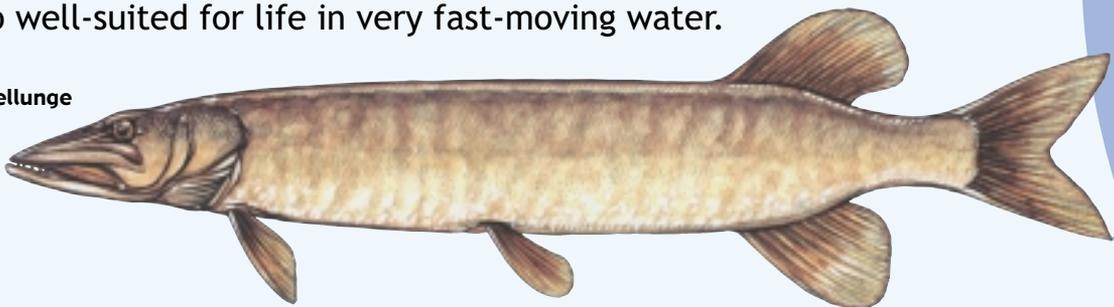
Horizontal disks: Catfish and sculpins are also flattened, but from top to bottom. This shape helps them stay on the bottom.

Slimy Sculpin



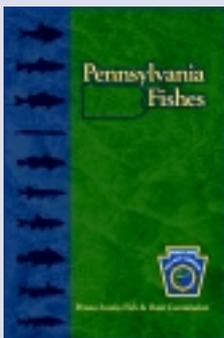
Torpedo: Muskies and trout have streamlined bodies. This shape helps them move quickly. Torpedo-shaped fish are also well-suited for life in very fast-moving water.

Muskellunge



Snakelike: Fish like eels have snakelike body shapes. Fish with these shapes slither, just like a snake! They swim quickly and are able to move quickly in different directions.

American Eel



Want to know more about Pennsylvania fishes?

Pennsylvania Fishes is a 170-page full-color book that contains information and identification details on Pennsylvania's fishes. The book sells for \$9.43 plus 57 cents PA state sales tax and \$3.00 shipping and handling (total of \$13).

Please send orders to: PA Fish & Boat Commission, Educational Media Services, P.O. Box 67000, Harrisburg, PA 17106-7000.