

Keep Texas Wild



COOL SCHOOL

Dive into the wet world of fish!



» SUPER SWIMMERS

EVER WISHED YOU WERE A FISH? Well, you'd look silly with fins, scales and gills, right? But those three main body parts enable fish to swim and survive under water. Fish are also cold blooded, which means their body temperature changes with the surrounding water. Freshwater fish live in rivers, creeks and lakes. Saltwater fish live only in the ocean. Fish can be as small as tiny minnows in a stream or gigantic, like blue marlins in the gulf. What kind of fish would you like to be?

Sailfish

>> SURVIVAL TACTICS

Shape and color matter if you're a fish. They both help a fish swim faster or hide better.

Color:

MOTTLED - grouper - can hide better in rocks

DARK UPPER SIDE - sunfish - not as easily seen by predators above

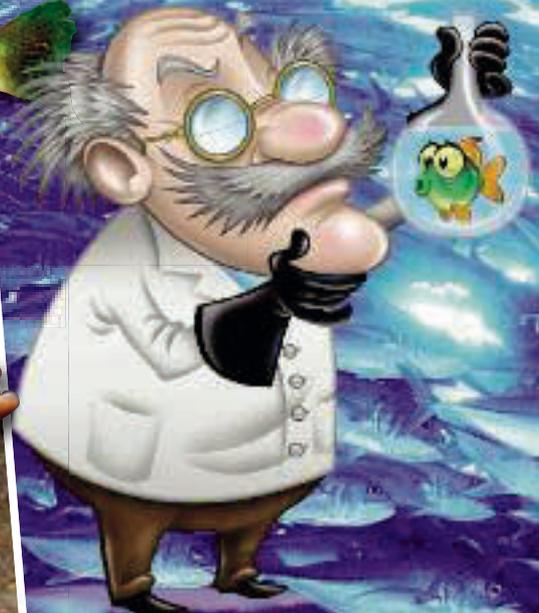
Body Shape:

TORPEDO - trout - speed, stability in a swift current

FLAT AND ROUND - flounder - hides better on bottom of ocean

TROUT © DENVER BRIAN; FLOUNDER © JEFFREY RATMAN

>> FISH SCHOOL

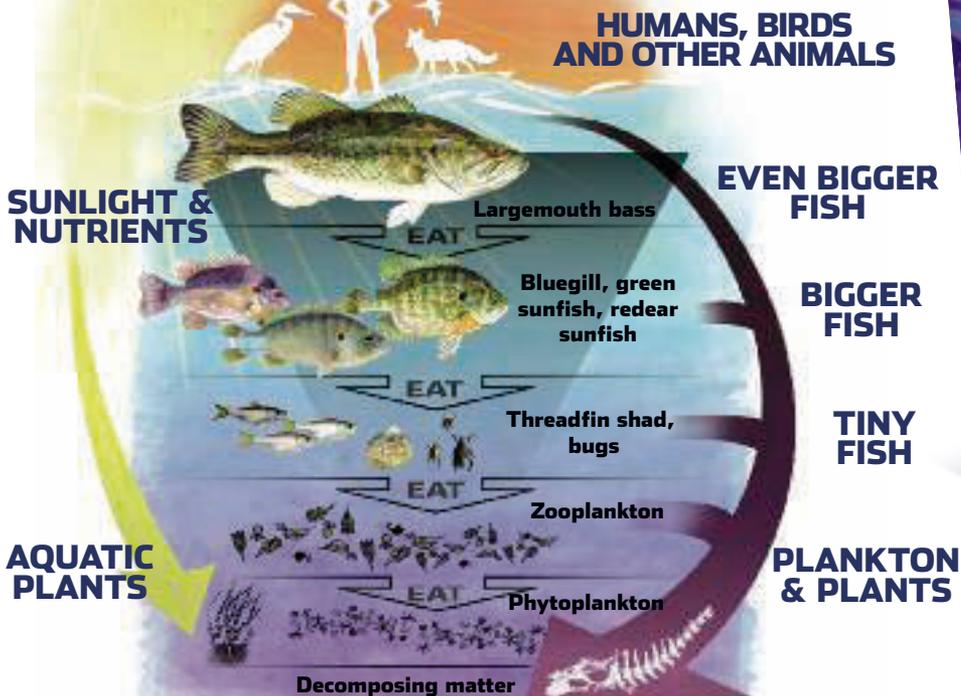


Did you know?

Scientists who study fish are called ichthyologists.

>> PASS THE PLANKTON, PLEASE!

LAKE FOOD CHAIN



Did you know?

Do fish drink water? Not like we do. Freshwater fish absorb water through their skin, while saltwater species get the water they need through their gills.

ILLUSTRATION © AUGGIE HAUND/TPWD



NO BOOKS, EITHER! A fish "school" is a big group of fish (all the same kind) swimming close together. Why? Think about what your parents and teachers tell you: It's safer to walk with friends, right? So a large group of small fish has a better chance of getting away from a hungry predator. Plus, all those eyes can find food much faster!

ILLUSTRATIONS © FIAN ARROYO; PHOTO © DOUG FERRINE/SEAPICS.COM

»» LIVING UNDERWATER

Scales



HARD, THIN PLATES that overlap and protect a fish's skin. They're covered with mucous (a slimy substance), which helps the fish move faster through the water.

FIVE DIFFERENT types of fins allow a fish to move forward, backward or stay in the same position.

5 Fins



Gills

FISH "BREATHE" by taking water into their mouths and through their gills. After taking air from the water, the gill coverings open and let the water back out.

PHOTOS © RUSSELL A. GRAVES

»» SPOTLIGHT ON TEXAS FISH

Freshwater



Bluegill



Largemouth bass



Channel catfish

Saltwater



Southern flounder

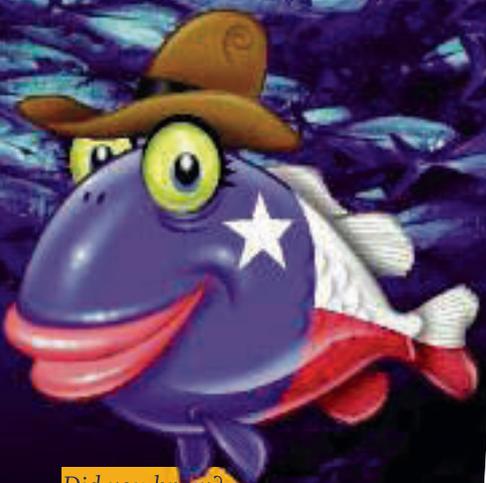


Red snapper



Spotted seatrout

PHOTOS/ILLUSTRATIONS BY TPWD



Did you know?

Guadalupe bass - our state fish - live in only a few Central Texas rivers.



Spike's Activity Page



>> WILD ART

YOU'LL NEED SOME CRAFT FOAM or stiff cardboard. Draw a simple fish outline on the foam. Decorate or color your fish. Cut it out, then attach a paper clip near its mouth. Find a magnet and tie a long string around it. Attach the string to a pole or a ruler. Now go fishing! Make lots of fish in different sizes and colors. Find a book on fish and draw outlines that look like a channel catfish, longnose gar or some other Texas fish.

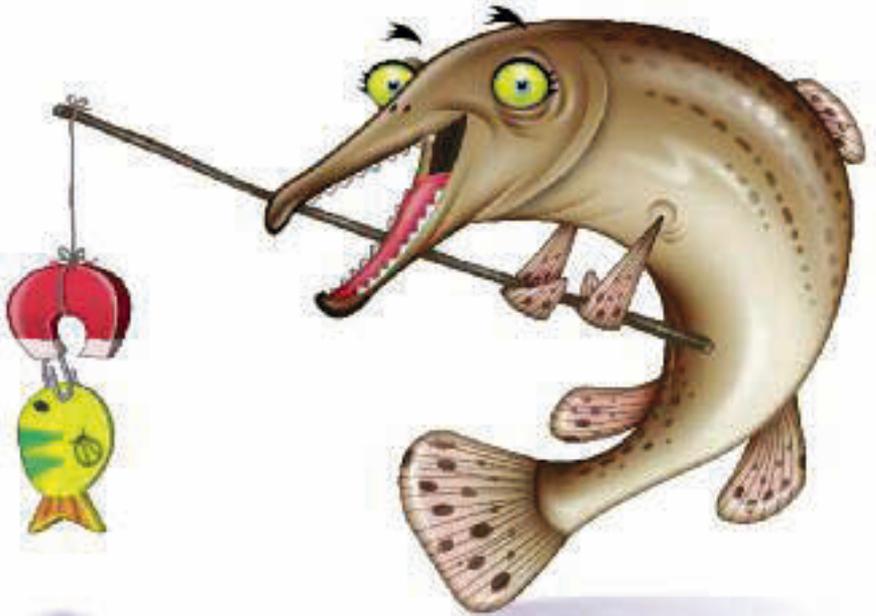


ILLUSTRATION © FIAN ARROYO

>> KEEPING IT WILD

WHAT DO YOU DO when you see trash on the ground? If you don't pick it up, that soda can or candy wrapper could eventually get washed into a river or onto a beach. Trash dirties the water, which can hurt fish and other aquatic animals. Do you live near water? Why not invite some friends to help you clean up a riverbank or part of a beach? (Be sure to ask an adult to come along as well.) If you live in a city, pick up trash in your neighborhood. Explain to your friends why fish need clean places to live, too.



PHOTO BY TPWD

>> WILD MATH

$$\begin{array}{r} 1 \times 35 \\ 2 \div 4 \end{array}$$



MOST FISH REPRODUCE BY "SPAWNING." A female lays hundreds or thousands of eggs, then a male comes by and fertilizes them. A female Guadalupe bass deposits 9,000 eggs. After chasing her off, the male guards the nest. That sounds like a lot of eggs, right? But some minnows sneak up and eat 3,679 eggs. Then two catfish come along and snatch 2,534 more. The "fry" (baby fish) hatch, but bigger fish swallow up 2,707 during the first week. How many survived? Why do you think fish lay so many eggs?

PHOTO © ROLF NUSSBAUMER

NEXT MONTH: Mysteries of the monarch

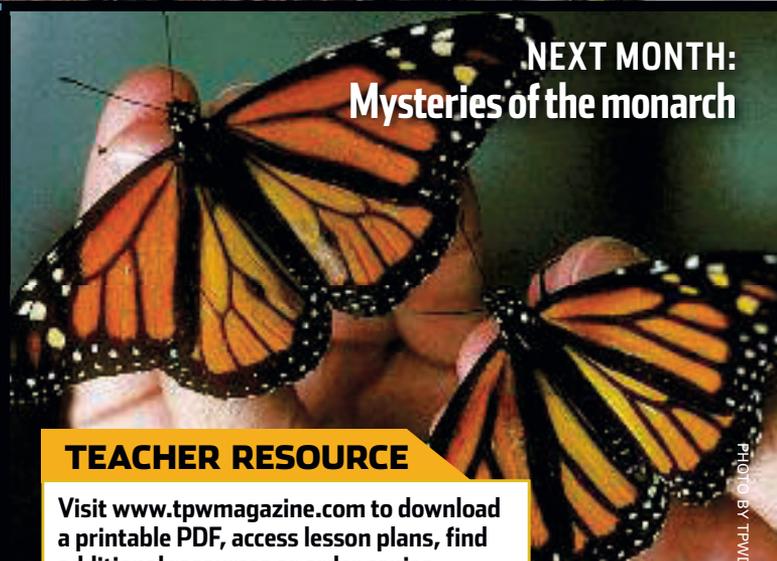


PHOTO BY TPWD

TEACHER RESOURCE

Visit www.tpwmagazine.com to download a printable PDF, access lesson plans, find additional resources or order copies.