

## Student reading

# Tarpon: The Silver Kings

**D**id you know that the tarpon were swimming in the oceans as dinosaurs roamed our planet? They have been swimming around for millions of years, since the mighty T-Rex was causing havoc on land. These fish are giant and mighty just like their long-lost dinosaur friends were.

In Florida, tarpon are catch-and-release only and it is illegal to keep them. Because of these laws and the good practices that fishermen use to keep their tarpon healthy while fishing, tarpon are able to live long lives and grow very large in Florida. This means that anglers can catch a four- or five- foot tarpon right off the shore. Tarpon are a unique species because of their huge size and their mighty

fight when they get hooked. A tarpon is an athlete in the water, leaping and jumping through the air trying its best to get rid of your hook and not get caught. These giant leaps are part of what makes this fish such a prized catch by anglers around the world.



An adult tarpon attacks a school of silver mullet, a forage fish species that is important in a tarpon's diet.

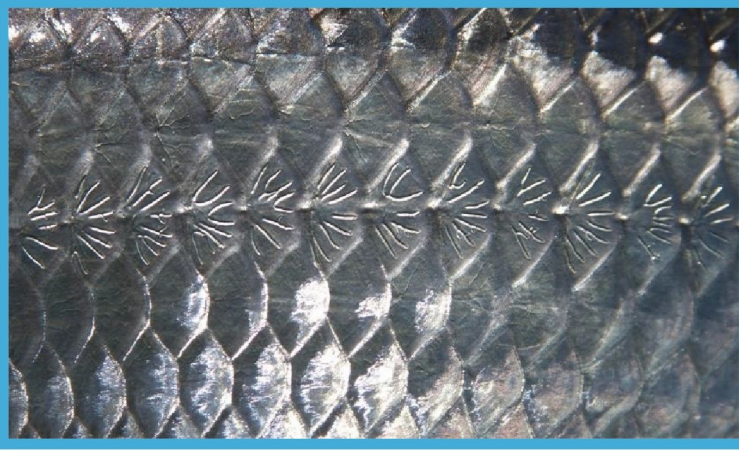


Tarpon use their huge bony mouths to inhale large fish, crabs, and shrimp. The larger the mouth, the larger the food.

The number of tarpon in the ocean has gone down over time because other countries still catch them for food, and because sometimes anglers do not treat them well and the tarpon die during fishing. This is why Florida has laws to protect them, and why the laws ask anglers to release them. But tarpon are a difficult fish to protect, because they can travel long distances and they are found all over the warm parts of the Atlantic Ocean. There is only one species of tarpon (*Megaloops atlanticus*) in the Atlantic Ocean. This means that tarpon caught in South America, the Gulf of Mexico, The Florida Keys, or even along the west coast of Africa are all probably related. This is really

amazing, but it means that all the countries where tarpon live need to work together if we want more tarpon to be swimming around in the Atlantic Ocean. It takes a long time to get other countries and states to make laws to protect tarpon, but there are still lots of things we can do here in Florida to help tarpon.

There is a lot we do not know about tarpon and what they do during their lives. Learning more about where they go and what they do is important in protecting them and taking care of them. It is hard to take care of tarpon when we do not know much about their lives. Here is some of what we DO know about tarpon:

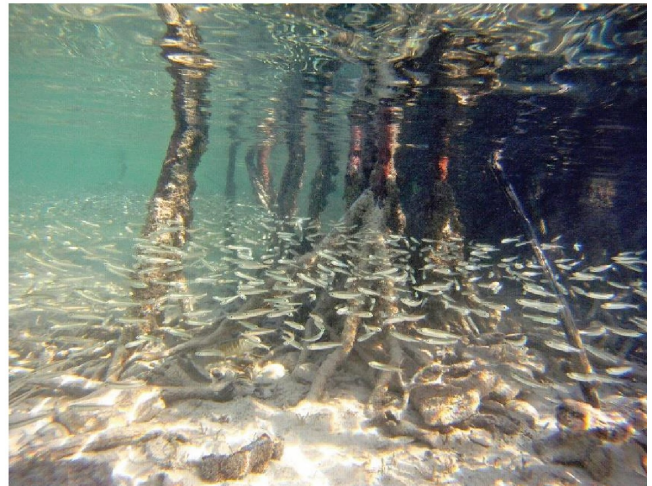


**Tarpon scales are large and mirror-like. Scientists think that by reflecting light the scales help camouflage the fish from predators.**

In the oceans and environments around the globe it is said that everything is connected. This is really true with tarpon. A tarpon's journey starts far offshore in the deep blue sea (the pelagic zone) where it begins life as a tiny baby fish, called a larva. It can't swim well on its own, so it is swept by the wind, currents and waves around in the open ocean. After about a month, the ocean carries it into shallow estuaries, which is where rivers meet the ocean. Here in the shallow water, the larvae can grow and develop into juvenile fish.

During this juvenile stage, a tarpon looks exactly like a grown adult, just smaller in size. The shallow estuaries where the fish grow up are full of mangroves, plants, and other small fish. The winding mangrove roots in these shallow areas create safe places for the fish to grow in size while hiding from bigger fish that could eat them. One really amazing adaptation (a way to deal with a negative situation) is that sometimes tarpon can breathe air! Juvenile tarpon are able to live in water that has little or no oxygen in the water. Fish need to breathe the oxygen in the water, so most fish are not able to live in this type of habitat. Juvenile tarpon take gulps of air from the surface into a special organ called a swim bladder - which most fish use to balance themselves underwater - but tarpon can also use that air to breathe. This means that the tarpon is able to live in areas where there are fewer large predator fish that could eat them.

Scientists know that tarpon need mangrove and wetland habitats to survive during this life stage, but unfortunately this is a habitat that is quickly being lost because of people building on the coast. One question scientists have is exactly what makes juvenile tarpon choose specific spots over others. It's an important question because if the best spots for juvenile fish to live are all destroyed, the number of adult tarpon will start to drop.



**Tarpon need to grow up near mangroves because mangrove roots protect small fish from predators.**

Adult tarpon can live up to 80 years and these old fish are very wise to the ways of anglers. This is part of why catching these silver kings is such a skill and why people want to catch them so badly. Tarpon take many years to reach the adult stage. An adult is about four and a half feet for females and males are about 4 feet. When most tarpon reach the adult stage they really start to travel! Tarpon have been tagged and tracked to migrate as far as 1,200 miles. That is as far as South Florida to New York City in mileage! However, some fish stay close to the place they grew up.

A thoughtful and aware angler will help keep this ancient species of fish around. Tarpon are big business in the places that they are caught and bring lots of money into the economies of these communities. It is very important that the species thrives for the ocean's sake and also for the people whose livelihoods depend on them.

Thoughtful anglers catch tarpon as quickly as possible, because keeping the fish on the line for a long time can tire it out and make it easier for nearby predators to find and eat it. Fighting a fish for a long time can also stress the fish out, making it more likely to get sick and possibly die. It is also good to keep the fish in the water for photos when you get it to the boat. Exposing the gills to air can damage them, making it harder for the fish to obtain oxygen from the water once it is released and swims away. And though oxygen they get from the water, they still get most of their oxygen through their gills. When you are handling the fish after catching it you should always use specially designed tackle pliers to safely remove the hook. These important steps can help keep your prized catch alive and also leaves your fish to fight another day.



**Though tarpon are predators near the top of the food web, sharks eat tarpon, including tired tarpon that anglers fought too long.**

