

Let's Learn About Turtles

Did you know that turtles have been on Earth longer than snakes, lizards and crocodiles? Turtles are ancient creatures. In fact, they have been on earth for over 200 million years. Turtles even survived the extinction of dinosaurs! In Native American culture, turtles appear in stories and art. According to the folklore of many tribes of the eastern woodlands (including the Lenape and Iroquois), North America is actually known as "Turtle Island." Turtles were even used as a calendar by native peoples. How does this work? Keep reading to find out!

In this worksheet, you will learn about the habitat, diet, and some other unique and fascinating features about turtles. You will also learn more about the different types of turtles that appear in the wild.

All About Turtles

Turtles are **reptiles**, which means they are cold-blooded, have a backbone, breathe air, and lay eggs. They have a hard outer shell that is made out of keratin, the same thing that your fingernails are made of. They live primarily in water, and some can live to be 150 years old. Turtles can duck into their shell to protect themselves, except the sea turtle. There are around 356 species of turtles, and they are broken up into 13 different families. Of those, 56 species of turtles are found in the US and Canada. In Connecticut, 12 different types of turtles can be found, but 4 of them are only found in the ocean. These are called marine turtles. Turtles can weigh as little as 5 ounces and be only 5 inches long, but some can weigh up to 1500 pounds and be over 7 feet long! On land, most turtles can only walk 3 to 4 miles per hour, but some species can swim up to 22 miles per hour! Turtles do not have vocal chords, but can hiss and make other sounds. Turtles can be found all over the world, except Antarctica.

Turtles differ from tortoises because they live in the water and have sharper claws. Tortoises live on land, and have toenails. A Snapping turtle that emerged after two weeks under mud carrying 18 pounds of earth on its back. The turtle itself only weighs 13 pounds. *Photo courtesy of livescience.com and Task Force Turtle of Maryland.*



Habitat

Turtles live mostly in aquatic habitats, including lakes, ponds, rivers, streams, wetlands, and swamps. They may also live in floodplains, fresh and saltwater marshes, shrub swamps, wet meadows, and coastal waters. They are not social creatures, they stay by themselves, and do not interact with other turtles. Turtles leave the water to dig a nesting burrow to lay their eggs. They cover the nest, and do not return until the next year. However, they return to the same exact nesting site every single year - within a millimeter! Some turtles use scent as a defense, and can give off a horrible odor. Turtles are not aggressive, but some, like the snapping turtle, can deliver a vicious bite if they feel threatened. See below for some pictures!



Snapping Turtle



Painted Turtle



Spotted Turtle



Bog Turtle



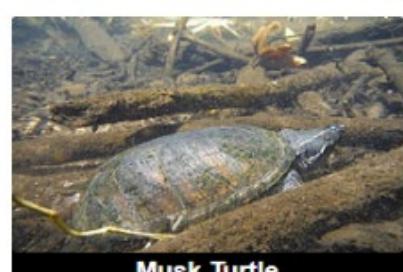
Wood Turtle



Diamond-backed Terrapin



Box Turtle



Musk Turtle

Inland turtles of Connecticut pictured above, courtesy of ctherpetology.com.

Special Note: Out of the turtles above, 4 of the turtles in Connecticut are of special concern, and one of them is federally endangered. What does that mean? It means that these turtles are in danger of going extinct, and may soon be gone forever, if we aren't mindful of how we interact with them. The four turtles of special concern in Connecticut are the Spotted Turtle, the Wood Turtle, the Diamond-Backed Terrapin, and the Box Turtle. The turtle that is in most danger of going extinct is the Bog Turtle, as they are being captured and sold as pets.

Even though it might seem like a good idea to have a pet turtle, most people don't realize how much space they actually need. For every inch of turtle shell, they need at least 10 gallons of tank space. That means for the average pet turtle, the tank itself should be 90 gallons! Turtles can also carry salmonella, which can make humans very sick. If you have a pet turtle, do not release it into the wild as it can affect the other creatures in the environment. You should also be aware that if you pick up a turtle by its tail, you can damage their spine. If you encounter a turtle in the wild, it's best to take a few pictures, and leave it alone. We need these creatures to thrive in their natural environment!

Physical Characteristics

Turtles are amazing creatures, and have unique features that allow them to thrive in the wild. They have a very hard outer **carapace**, or shell, made of keratin that protects them from predators. Their shell has 13 large scutes, or plates, on top of it. The bottom shell is called the **plastron**. They have a soft inner body with skin that looks like scales, and a tail. Turtles have rigid beaks, some with razor sharp serrated edges instead of teeth. Believe it or not, 150-200 million years ago, turtles had teeth! Unlike other reptiles, turtles cannot extend their tongue. Turtles have keen senses of sight, smell, and direction, but poor hearing. Turtles can hold their breath underwater up to 4 to 7 hours. In the winter, they may go for weeks without oxygen. Turtles can be active in the winter, but they may also hibernate. Turtles also have webbed feet for swimming. They can tuck their head and feet into their shell if attacked, protecting their soft inner body.

See the anatomy graphic below to understand the parts of a turtle or tortoise.

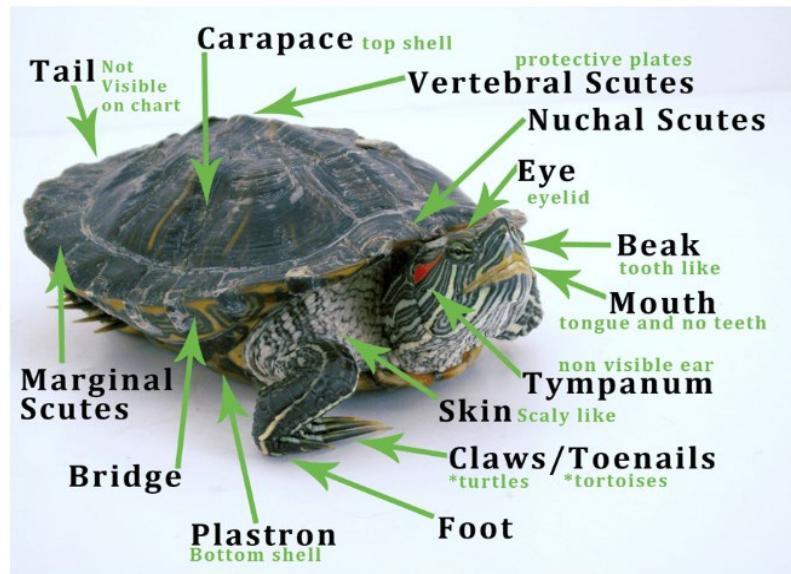


Photo credit: caringpets.com

Diet and Social Habits

Turtles are **omnivores**, which means they eat meat and plants. Their diet includes invertebrates, such as insects and their larvae, earthworms, snails and crabs. Small fish (live or dead), mussels, clams, and a variety of different water plants, including duckweed are also eaten. When turtles are young, they are mostly carnivorous, and will eat fish and other meat sources, as they need a lot of protein in order to grow. As they get older, turtles will typically add more plant materials to their diet. Turtles typically will lay eggs in late May or early June, and the eggs hatch within 45-90 days, depending on the temperature.

Marine (Sea) Turtles

There are 4 sea turtles found in Connecticut waters, including the Atlantic Green Sea turtle, the Loggerhead Sea turtle, the Leatherback Sea turtle, and the Atlantic Ridley Sea turtle. These turtles are unique because they cannot tuck their head or legs inside their shell, and have flippers for swimming.

Sea turtles have an excellent sense of direction, and it is said they can feel the magnetic field of the earth and use it as a compass. In a single year, a Leatherback sea turtle can travel 10,000 miles or more! Of the sea turtles pictured below, 3 out of 4 are endangered species, and the Loggerhead turtle is a threatened species. They are rare, so if you happen to see a marine turtle, consider yourself very lucky!



Atlantic Ridley Sea Turtle: savetheseaturtle.org



Atlantic Green Sea Turtle: National Wildlife Federation



Loggerhead Sea Turtle: National Geographic



Leatherback Sea Turtle: National Geographic

Turtles: Quiz

1. What type of animal is a turtle?
 - a. Reptile
 - b. Bird
 - c. Mammal

2. How long have turtles existed on Earth?
 - a. More than 20 thousand years
 - b. Less than 50 million years
 - c. More than 200 million years

3. What does endangered mean?
 - a. Living a long time
 - b. Being attacked by another animal
 - c. At serious risk of becoming extinct (no longer living).

4. What is the difference between a turtle and a tortoise?
 - a. Turtles live in water and have claws, tortoises live on land and have nails
 - b. There is no difference between a turtle and a tortoise
 - c. Tortoises live in water

5. What special characteristic does a turtle have?
 - a. Thin layer of fur covering their body
 - b. Webbed feet
 - c. Good sense of hearing

6. Why do turtles tuck their head and feet into their shell?
 - d. To stay warm
 - e. To take a nap
 - f. To protect themselves

(See next page for answers)

Answers: 1.a, 2. c, 3.c, 4.a, 5.b. 6. c