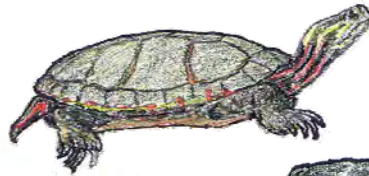


NATURE DETECTIVES

Spring 2016



Wake Up Turtle, It's Spring

Snapping turtle had been dozing for months. Last November the turtle dug into soft mud under a rotting log at the bottom of Duck Pond. It's his favorite spot for hibernating.

But now it is spring. The pond water is gradually warming and turtle is stirring. His muscles are stiff and slow, but he pulls himself from the mud and begins a labored swim to the surface. Turtle works his way to the basking log. The old log sticks out of the water in the middle of the pond providing a safe place to rest in the sun.

Other turtles will soon pile onto the same sunlit perch. Sunlight heats the turtles' cold blood. As their bodies warm, turtle muscles regain strength, and body wastes - built up during hibernation - begin to break down. After the turtles are warm, they will enjoy their first meal since last fall.

Pull Out and Save

Turtle Competition

The turtles arriving earliest on the basking log are the guys. They are first to awaken in order to build the strength they need to plod around and battle other male turtles. The strongest males claim the choice spots on the paths that female turtles will travel as they move to their traditional nesting areas. Soon turtle spring will be in full swing.

Turtle ancestors have lived on earth for millions of years. When dinosaurs walked on our planet, snapping turtles roamed here too. Dinosaurs died out, but snapping turtles have remained pretty much the same.

Sometimes slow and steady does win the race, at least for turtles.

Size Comparison

dinosaur foot



snapping turtle



Turtle Types of Boulder County

Two kinds of turtles jostle for space in the sun on the



basking log. The mud-colored **snapping turtle** looks almost dinosaur-like. Its flattened top shell ends with a saw-toothed edge, and spiky scales continue down its long tail. Its legs and neck are thick, wrinkly and rather bumpy looking.

Several **painted turtles** crowd onto the narrow end of the log. Their smooth-edged shells and bodies are marked with red and yellow lines and patches. Compared with the dull colors of the larger snapping turtle, their bright colors look hand-painted and give the turtles their name.



snapping turtle

Nest Eggs

Female snapping turtles choose their mates after wrestling with them. Perhaps this helps them find mates that are healthy and strong.

The female turtles swim and slog up shallow waterways and lumber over land on a solo journey back to the nesting area they remember. Maybe they nested in that easy-to-dig spot before or maybe it is where they hatched as a tiny girl turtle.

Returning to a good nest site can take several days of travel, and the trip often starts during rain. Rain helps soften dirt, especially if the soil isn't sandy. The female turtles dig a nest hole where the developing eggs will be warmed by sunshine. They lay the leathery eggs one by one in the hole, cover them up and head back to their home pond or river. The mom turtles do not hang around to protect their eggs.

Easy Prey

Turtle eggs are appealing to many kinds of hungry hunters. Hognose snakes, skunks, raccoons, foxes and minks may detect a nest and eat the eggs. The egg eaters will also gobble newly hatched turtles. Hatchlings dig out of their nest into a whole new world of predators. Crows, herons and opossums snatch tiny turtles during the hatchlings' scramble to find underwater shelter. Wandering dogs and cats can also harm baby turtles.

Camouflage color helps some survive – baby snapping turtles look a bit like dead leaves. Once they reach water, the youngsters must hide among underwater plants for safety. More predators lurk here such as bullfrogs, big bass fish and water snakes looking for a turtle meal. As the turtles grow, their shells gradually harden making them much less easy prey. A painted or snapping turtle may end up living 30, 40 or even 50 years.



painted turtle

Turtles Fight Back

Claws, a hard beak-like mouth, and top and bottom shells offer turtles a good defense for survival. Webbed feet help them swim away. Painted and snapping turtles can release a gross, stinky fluid to ward off attack. Snapping turtles - as their name suggests - can lash out with a vicious bite.



Adult turtles occasionally become coyote food, but only rarely. During their hibernation, when turtle body functions are shut down, river otters sometimes prey on them.



The turtle's shell is not a house but it is body armor against attack. The shell contains sixty bones and is connected to the ribs. Snapping and painted turtles can draw their heads under their shells by making their necks into an "S" shape, but that is no protection against cars or people that target them accidentally or on purpose.

Catch and Eat

Turtles themselves are predators of most anything they can catch. Snapping turtles prey on minnows, small frogs, crayfish, worms, snails and insects. Even baby ducks and other baby waterfowl may be grabbed, but not often. Turtles eat dead animals, small animals, snakes and eggs. Adult turtles eat lots of water plants and algae. Baby turtles look like their parents, but they eat less plant material. Hmmm, maybe like some human kids who eat fewer veggies.

Snapping turtles hunt for food night and day. Sometimes they bury themselves in the mud up to their eyeballs to ambush prey. Painted turtles are active in the day and rest at night.

Painted and snapping turtles like to eat in the water where it is easier for them to handle their food. They find food by smell, sight and feel. Their watery hangouts on the plains of Boulder County include ponds, reservoirs and larger streams. They like good underwater plants and branches for hiding and hunting. They need quiet water with soft muddy bottoms for resting and for hibernation. They prefer floating logs and warm shallow water for basking.

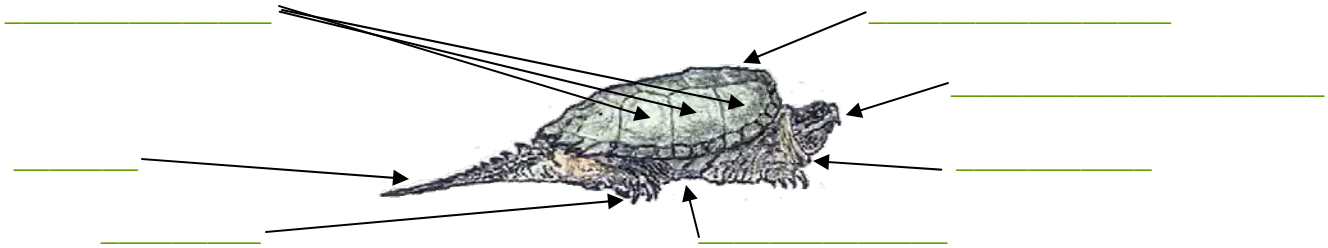
Basking Ectotherms

Like all reptiles, turtles are ectotherms. Ectotherms need external heat to warm their bodies so they can move and digest their food. Basking out of the water also helps kill parasites such as blood-sucking leeches.



Turtle Anatomy

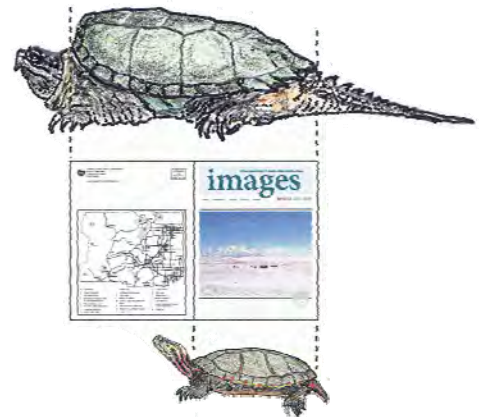
A turtle's body parts are a bit different from ours. Look at the list below and label the body parts of this turtle:



- scutes** (bony plates that make up a turtle shell)
- carapace** (hard upper shell, connected to backbone)
- beak-like mouth**
- neck**
- plastron** (under part of shell—protects turtles organs and belly)
- claws**
- tail**

Turtles Big and Small

The page you are reading is 8 ½ inches across, from left to right. That's about as long as a painted turtle could grow. If you open *Images* up and lay it flat, it is 17 inches wide from the left side all the way to the right. Snapping turtles can grow to about 18 inches long—that's longer than the width of the side-by-side *Images* pages.



Look for Turtles

Walden Ponds Wildlife Habitat (off 75th between Valmont and Jay roads) is a great place to see live turtles. Follow the road to the Cottonwood Marsh parking lot. Walk down the trail to Duck Pond. On a sunny day, you may see painted turtles basking in the sun on the logs in the water or along the shore. Sometimes a snapping turtle may join them! Take binoculars with you so you can see them up close. Keep your eyes peeled for turtles in other ponds and lakes in Boulder County as well.

Reminder:

Turtles are wild animals and should not be handled or approached too closely. Snapping turtles especially can do damage to you with their strong beaked mouths if they feel threatened. Enjoy them from a distance in their natural habitat.



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