



REPTILES

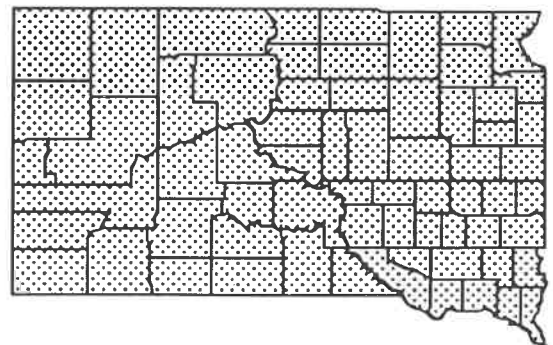
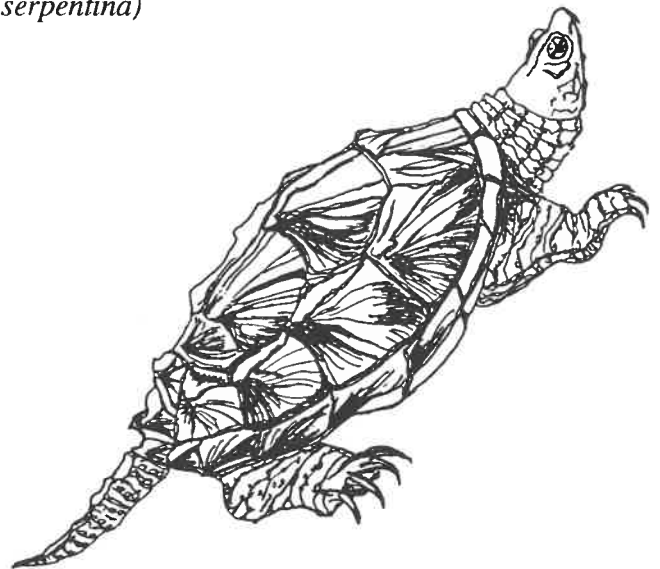
Status: Common, Native Resident

SNAPPING TURTLE

(*Chelydra serpentina*)

Description

Snapping turtles are the largest turtles in South Dakota. The top shell length is usually 8 to 12 inches (20-30 cm), with a record length of 18.5 inches (47 cm). Snapping turtles cannot retract their head into their shells because their shells are reduced in size, covering less of their bodies than do those of other turtle species. The massive adults weigh 10 to 35 pounds (4.5-19 kg). Their coloring is variable, ranging from light green and brown shades to very dark green and brown. Snapping turtles are easy to recognize by their large head, powerful jaws, and long tail, which is saw-toothed along the top. Another identifying characteristic is their aggressive behavior when threatened while out of water. Snappers have a hooked upper jaw and no teeth and, as their name indicates, will snap at prey or attackers. Their hard beak has a rough cutting edge that they use to tear food.



Distribution

Snapping turtles are found throughout South Dakota where there is adequate habitat of quiet or slow-moving water with a muddy bottom and vegetation.

Natural History

Any large or small, permanent body of fresh water is a potential home for a snapper. They can be found in lakes, ponds, marshes or slow-moving streams. Largely *nocturnal*, snapping turtles spend most of their time underwater, lying on the bottom. They often bury themselves in mud in shallow water with only their eyes showing. Camouflaged with their mud-colored skin and algae-covered shell, snapping turtles lie in wait and ambush their prey. However, they can also be aggressive predators. They are *omnivorous*, eating various small *aquatic invertebrates*, crayfish, snails, fish, frogs, toads, snakes, bird eggs, small mammals, and *carrion*. About a third of their diet is plants. Small prey are swallowed whole and large prey are torn to pieces with their large, powerful jaws and sharp claws. Like most turtles, snappers can go for days or even weeks without eating, but when food is available they will eat all they can and may become quite fat. Snapping turtles become more *sedentary* as they age and they can live to 60 years old.

Because their bottom shell is so small, snapping turtles can't pull themselves into their shells to protect themselves from predators. Instead, their best defense is a strong offense. They are very aggressive and threatening when confronted on land. When threatened, they raise their bodies and lunge fiercely at an intruder with their jaws open. They also produce a very unpleasant odor.

Snapping turtles are reptiles and, like all reptiles, they are cold-blooded. Many *aquatic* turtles bask to gather warmth from the sun. Snappers rarely bask on land as most other turtles do, but may bask on the water surface. They survive the winters of South Dakota by *hibernating*. As the temperatures drop they get less and less active. Finally, they burrow deep into the mud at the bottom of ponds. Scientists have found that the blood of *hibernating* turtles actually changes to function like antifreeze used

in car radiators. As a result, the turtle's body temperature can drop to only a few degrees above freezing, which is much lower than that of most animals that *hibernate*.

Male snapping turtles mature at 3 to 5 years and females at 4 to 6 years. Mating usually takes place in water early in the summer. Although snapping turtles breed in the water, their eggs are laid on land. Female snapping turtles often have traditional nesting areas and they are known to journey 10 miles (16 km) in order to reach the nesting site. Twenty to 30 eggs are laid in a hole in moist soil about 4 to 7 inches (10 -18 cm) deep that is dug with their hind legs. The eggs are round, shelled, and about an inch (2.5 cm) in diameter, about the size of a small golf ball. Once the eggs are laid, the female turtle has completed her maternal tasks and returns to her pond or stream.

The turtle eggs often hatch in the fall after an incubation of 2 to 3 months. If the eggs are laid late in the season, they may not hatch until the following spring. The incubation temperature of the eggs determines the sex of the hatchlings. Males result if the eggs are maintained within the temperature range of 72 to 82 degrees F. (22-28 degrees C). Snapping turtle eggs produce more females at incubation temperatures outside of this range. As soon as they have hatched, the young turtles make their way to water. They grow quickly and may reach 6 inches (15 cm) in shell length within their first year. Many of the hatchlings become prey to raccoons, skunks, snakes, bullfrogs, herons, and other large birds.

Management Considerations

Snapping turtles are long-lived and important members of the *aquatic* food chain as prey and predators. They continue to be found in many wetland habitats. Because they prey on many amphibian and *invertebrate* species that are sensitive to pollution and water

quality, it is important that wetland quality is maintained. In some areas of the country snapping turtles are economically very important. Large numbers are caught for making soups and stews. To collect snapping turtles in

South Dakota, you need a fishing license. Anglers are limited to 2 snapping turtles per day and a possession limit of 4. It is illegal to buy, sell or trade turtles for any purpose other than personal consumption.

Glossary

Aquatic - living or growing in, on, or near fresh water.

Carrion - dead or decaying animal matter.

Hibernate - to pass the winter in a dormant or inactive state with lowered metabolism and heart rate.

Invertebrate - animals that lack a backbone, such as worms, insects and clams.

Nocturnal - active at night.

Omnivorous - eating both animal and plant.

Sedentary - remaining in one locality, not moving around very much.

References

Conant, Roger, 1975. A Field Guide to Reptiles and Amphibians of Eastern and Central North America. Boston: Houghton Mifflin. 2nd ed. Peterson Field Guide Series.

Halliday, Tim and Kraig Adler, ed., 1986. The Encyclopedia of Reptiles and Amphibians. New York: Facts On File.

Smith, Hobart M. and Edmund D. Brodie, Jr., 1982. Reptiles of North America. Racine, Wisconsin: Western Publishing Company, Inc. (Golden Field Guide).

Resources for Teachers

Caduto, Michael and Joseph Bruchac. Keepers of the Earth: Native American Stories and Environmental Activities for Children. Golden, CO: Fulcrum Press. 1988.

Caduto, Michael and Joseph Bruchac. Keepers of the Animals: Native American Stories and Wildlife Activities for Children. Golden, CO: Fulcrum Press. 1991

Aquatic Project Wild has several excellent activities related to turtles.

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