

REPTILES

Status: Common, Native Resident

ORNATE BOX TURTLE

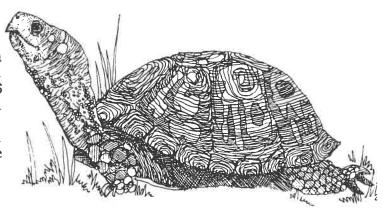
(Terrapene ornata)

Description

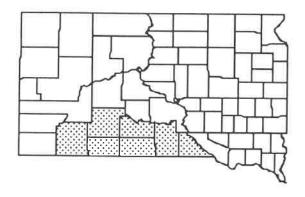
The ornate box turtle has a high-domed, oval shell, flattened on the top, with a width that is three-quarters of its length. The maximum shell length is about 6 inches (15 cm). The turtle's common name refers to its ability to completely close its shell, creating a secure box in which to hide. This behavior is possible due to a hinge on the lower shell. The top shell is chocolate to reddish-brown with a broken, yellow mid-dorsal stripe. Striking, yellow lines radiate from the stripe toward the edge of the shell. The head and legs are spotted with yellow and the tail also may have a yellow dorsal stripe. This turtle usually has 4 toes on each hind foot, but there are some rare instances when there are only 3. Adult males have a red tint in their iris while the female's eyes are yellowish-brown. The first toe on each of the male's hind feet is usually widened and sharply turned inward. He uses these toes to hold on to the female while mating.

Distribution

Ornate box turtles are said to be the "prairie" turtle. They inhabit treeless plains and gently rolling country with abundant and scattered low brush. They can be found in sandy and semi-arid regions, but rarely are found in densely wooded areas. Ornate box turtles are widely distributed in the central part of



the United States from southern South Dakota, south to Mexico. In South Dakota, they are found in the southcentral counties.



Natural History

Ornate box turtles are mostly terrestrial animals that are active from March through November. They remain under cover until mid or late afternoon when they become very active. Activity ends at dusk for all except the nesting females. During the summer, as temperatures rise, the time the turtles stay undercover lengthens. You may find box turtles spending the warmest hours of summer in pools of water.

Hibernation begins in October and by the end of November most of the turtles are underground in burrows they have dug. Ornate box turtles usually hibernate singly in burrows that will only accommodate one, but there are rare instances when they hibernate in pairs. Emergence from hibernation usually occurs in April, but the turtles have emerged as early as the first week in March. Emergence is delayed until the ground is moist and the air temperature reaches 79 degrees F (26 degrees C).

Box turtles begin mating between the ages of 1 and 2 years. Mating occurs most commonly in the spring soon after hibernation, but extends through mid-July. Nesting sites are located in open, well-drained, soft soil. Nest digging begins in the evening and is usually completed after dark. Females that nest early in the season often lay a second clutch in July. Clutch sizes range from 2 to 8 eggs, but 4 to 6 is most common. The shells of ornate turtle eggs are brittle and

white. Incubation lasts from 59 to 70 days.

Ornate box turtles eat insects and other small invertebrates. Beetles, caterpillars, and grasshoppers make up 90% of their diet. In areas where they co-exist with cattle, these turtles will search cow pies for insects to eat. Box turtles also eat a variety of plant matter, such as melons. tomatoes. mulberries. strawberries, and blackberries. Regular predators of the ornate box turtle are dogs, badgers, coyotes, crows, and bullfrogs. Other animals, such as raccoons and bull snakes, prey on these turtles when the opportunity arises.

Significance

Ornate box turtles are a minor nuisance to humans if they browse in gardens. However, there is little doubt their value as destroyers of insects far out-weighs their importance as garden pests.

Conservation Measures

The ornate box turtle is not an endangered or threatened species. People with fishing licenses are allowed to capture box turtles for personal uses. Probably the biggest threats to box turtles are drivers. Automobiles kill many adult turtles every year.

Glossary

Clutch - a hatch of eggs; the number of eggs hatched or incubated at one time.

Hibernation - passing the winter in a dormant or inactive state with lowered metabolism and heart rate.

Mid-dorsal - the middle part of the upper side of the body.

Radiate - to extend or spread from the center of an object in a ray-like pattern.

Terrestrial - living on land.

References

Carr, A.F. Handbook of turtles. Comstock Publishing. Ithaca, New York. 1969.

Ernst, C.H., 1972. Turtles of the United States. University Press of Kentucky.

Harless, M., 1979. Turtles: perspectives and research. New York. .

Stebbins, Robert C., 1954. Amphibians and Reptiles of Western North America, McGraw Hill Co., New York.

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