

ing tape which may be readily removed after use would be preferable to any other kind of identification method if it is necessary. Permanent markings, such as indelible paint and ink, are not recommended and can be harmful to the animal and its survival. Box turtles should be kept in sanitary conditions meaning very few in each confined area with regular changing of water. Adequate shade and ventilation should be provided. Summer races should be generally scheduled during cooler times of the day. Fruits, canned dog food, berries, and vegetables may be supplied for short periods of times for temporary keeping but these animals are omnivores and eat a wide variety of food in the wild. Due to the natural diet plus the fact that they are very susceptible to respiratory-related diseases in captivity, prolonged keeping of these animals is not recommended.

In no instances should box turtles be subject to any permanent markings other than specific, well-regulated research studies. Box turtles should never be collected from general areas, used for an event and then released all at one site. They should be temporarily housed in clean and humane conditions permitting adequate ventilation and sanitation. Participants should be cautioned to thoroughly clean their hands with soap and water after handling turtles of any kind. This is especially true of water turtles which are more susceptible for harboring and transmitting salmonella bacteria.

Box turtles are very interesting and enjoyable creatures. Our commitment to treating them properly and respecting their biological needs will ensure their perpetuation for future Kansans to enjoy.



## Sources

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Curator of Amphibians, Reptiles, and Fishes  
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### *“Amphibians and Reptiles in Kansas”*

Joe Collins

# BOX TURTLES



## in Kansas



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## General Information

There are two box turtle species found in Kansas. Both can be identified by their hinged lower shell which permits them to withdraw their head and legs to become completely enclosed and protected from predators. The Eastern Box Turtle, exhibiting a rather plain olive colored shell, occurs only in the southeast quarter of Kansas northward to Kansas City. The Ornate Box Turtle, with its more showy, yellow striped shell, can be found statewide. It grows up to 5 inches long in its upper shell length. The Eastern gets a little larger - up to 6 inches. These cold-blooded reptiles are long-lived, many surviving as long as 30 years. Adult males have red eyes in both species as opposed to the yellowish or brown eyes of the females.

## Habits

The home of the box turtle consists of several burrows and a home range of about 5 acres, of which it becomes very familiar. Burrows are used as sleeping quarters and to avoid extremely hot or extremely cold weather. A few box turtles may inhabit part of the same home range. They first become active during the first warm days in early spring, coming out of winter hibernation. They may be active at temperatures ranging from 60 to 95 degrees F but will seek shade and shelter at the higher extremes. Both species are diurnal, meaning they are active during the day, returning to their burrows at night.

## The Living Armor

We all recognize turtles for their shells, but there's a lot more to a turtle's shell than meets the eye. Unlike the shell of a snail or a helmet on your head, this armor is a living part of the turtle! Underneath a very thin layer of dead scutes (sections of the shell) are newer, living scutes. This is similar to the outer and inner layers of a human's

skin. The innermost layer and the support structure of the shell is made of bone. These bones are very porous and are filled with blood vessels which supply oxygen and food to all this living tissue. Along the middle line of the top shell (the carapace), the turtle's backbone arches to connect entirely to the shell. The backbone houses the spinal cord from which more nerves spread out along the shell. Thusly, the turtle has a very good sense of touch all over its shell.

## Kansas Treasure

Box turtles are fascinating animals, rivaling the beauty of any turtle in the world. This is one reason why the ornate box turtle is the state reptile of Kansas. It is unfortunate that their attractiveness could work against their survival because of illegal pet trade. We can all lend box turtles a hand by respecting their role as wild animals. Enjoy a turtle for a couple of weeks, but be sure to return it to its home (the exact spot where it was found).

Recognize the dangers of roads to box turtles, and help them cross when you are able to safely do so.

## Troubling Times for Turtles

Living in coexistence with people is rough on box turtles. Much of their habitat has been altered for human use. Homes which fulfill their needs (such as food, security, mates, hibernation sites, and egg-laying sites) are increasingly harder to find. Some home ranges have been intersected with roads. Box turtles move slowly and often are unable to climb curbs, thus many perish on roads.

During recent years, another problem has become apparent. Because box turtles are so beautiful, they are collected from the wild and sold overseas as pets. Many of the turtles die in transit or due to improper care, and so the demand for more is very large. Tens of thousands of animals were shipped each year until 1994. Because it was

feared that box turtles would soon be threatened with extinction if such collecting was not controlled, they were given some international protection.

Even within the United States, the pet trade can hurt the already declining turtle populations. Box turtles usually have very shortened lives once taken into captivity. They succumb to respiratory failure or other stress-related illness. Box turtles that are released after a period in captivity must find and become familiar with a suitable home before winter. A turtle whose shell has been painted by well-meaning owners may not only suffer from chemical poisoning; the odd colors may attract predators or deter potential mates. In fact, box turtles should not be kept as pets for long at all. They need to eat food and find habitat that only they know how to find.

## The Law

Because of the overall threats to these fascinating animals, there are restrictions on their use. Neither of the Kansas box turtle species may be bought or sold in Kansas or be transported out of the state for sale (K.S.A. 32-1002 and K.S.A. 32-1005). Kansas regulations (K.A.R. 115-20-20) do permit the legal keeping of up to five individuals of each of these species providing the keeper has a valid hunting license or is exempt from needing one. Therefore, any person under 16 years of age or older than 65 may legally keep up to five each under their own possession.

## Turtle Races

Recognizing the biological needs of box turtles and the threats to their existence, we must become sensitive to their proper enjoyment and use. If they are to be used during turtle races or similar events, consideration must be made to return each individual turtle to the site where it was collected as soon as possible. Using temporary markers and mask-

