

REPTILES

Status: Common, Native Resident

WESTERN HOGNOSE SNAKE

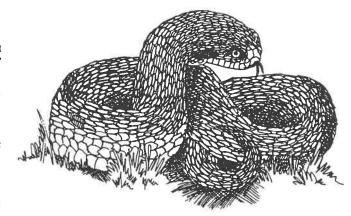
(Heterodon nasicus)

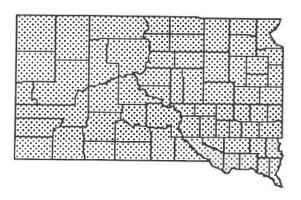
Description

The western hognose snake also known as the "blow snake" and the "puff adder" is, in spite of its nicknames, a harmless, non-poisonous creature. The size of the hognose can range from 12 to 48 inches (30.5 - 122 cm) long, with a girth of 2 to 4 inches (5 to 10 cm). The colors of the western hognose are brown, tan, and yellow with olive-colored oval markings down the center of the back. On each side of these blotches are distinct rows of dark, irregular spots. The belly and the underside of the tail are strongly marked with black. The unique physical characteristic of hognose snakes is their nose, which is turned up like a pig's snout. A second species of hognose snake, the eastern hognose, also lives in South Dakota. It is slightly different in color and lacks the extensive black markings under the tail.

Distribution

Hognose snakes live throughout the continental United States. The western hognose snake is common throughout South Dakota. The eastern hognose snake also occurs in the state, but only in the southeastern counties. Both eastern and western hognose snakes prefer highlands that are dry and sandy, but the





eastern species is also found along river bottoms.

Natural History

With the enlarged nose of the hognose comes an excellent sense of smell, which is used to locate prey. Hognose snakes swallow their prey head first, so that the prey is smothered to death. They feed on a wide variety of animals, but are specialized as toad eaters. They use enlarged teeth in the rear of their mouth to puncture the lungs of their toad victims. This deflates the defensively puffed up toads down to a swallowable size. Hognose snakes also are able to tolerate the skin poisons produced by toads. Other prey items include frogs, shrews, sparrows, rats, mice, lizards, and garter snakes.

The young of western hognose snakes are born in June through July. The female deposits 8 to 28 eggs in the ground. The eggs of the hognose stick together. This helps to conserve water for the young during their developmental stage by reducing the shell surface exposed to the air. When the newborns hatch, they are 6 to 8 inches (15 - 20 cm) long and gray in color.

The hognose snake is famous for its method of fending off predators. First, the snake spreads out the anterior ribs behind its neck, hence the nickname "adder." This fierce posture resembles that of a striking cobra. Second, the hognose imitates the tail rattling and striking of a rattlesnake. But, the

hognose snake has a short, pointed tail with no rattle. Then the hognose strikes out at the enemy with a closed mouth. Following all of these dramatics, the hognose plays dead. It flips over onto its back and lies motionless with an open mouth until the danger has left the area. The snake will not stop playing dead until it feels the area is safe.

Management Considerations

Hognose snakes play a major role in controlling the pest populations in South Dakota. They eat many rodents that disturb farmers' crops. Even though this snake does not cause harm to humans, people are the snake's biggest threat. People mistake the hognose for a rattlesnake, killing it to protect themselves. Educating people that the hognose snake is harmless will increase the survival of the species. The eastern hognose snake is classified as a threatened species in South Dakota and is therefore protected under state law. Because the eastern and western species of hognose snakes are so similar in appearance, it would be wise to leave all hognose individuals alone.

Glossary

Girth - circumference around an animal.

References

Mehrtens, John M., 1987, Living Snakes of the World in Color, Sterling Publishing Co. Inc. New York, New York, pg. 189-191.

Seigel, Richard A. and Joseph T. Collins., 1993, Snake Ecology and Behavior, McGraw-Hill inc. Publishers, New York, New York.

Wright, Albert H. and Anna A. Wright, 1957, Handbook of Snakes, Comstock Publishing Assoc., Ithaca, New York pg. 296-310.

Wisconsin Dept. of Natural Resources, 1996, Wisconsin Natural Resources Magazine.

Written by:

Frank Birch, biology student, Northern State University, SD. ©1997.

Reviewed by:

Doug Backlund and Steve Thompson, Resource Biologists, S.D. Department of Game, Fish, and Parks, Pierre, SD.

Publication of the Western Hognose Snake fact sheet was funded by the South Dakota Department of Game, Fish and Parks, Division of Wildlife, Pierre, SD.