

Conservation Corner

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The summer issue of *Iowa Outdoors* has arrived. One of the articles features Hayden Prairie, a 240-acre virgin prairie in northeast Iowa. Established in 1950, Hayden Prairie is the first dedicated state preserve and also a national natural landmark. Its black soils that have never been plowed continue to nourish a wide variety of plants and animals, including the smooth green snake. Once found across north central and northeastern North America, today this small snake is reduced to a few scattered populations. Smooth green snakes have recently been observed in 53 Iowa counties, and so I went to the *Field Guide to the Reptiles and Amphibians of Iowa* to see if Pocahontas County was one of them. We are. Time to encounter this remarkable creature.

The smooth green snake, *Liophidophis vernalis*, is bright green emerald in color and at first glance would appear more at home in the Amazon rain forests than Iowa prairies. Its lip scales and entire belly are bright yellow or cream. Some specimens may be buff or tan colored instead of green, especially in central and northwestern Iowa. Because their blue pigment is more stable than their yellow pigment, smooth green snakes quickly turn dark blue after death.

The smooth green snake is found in scattered populations across Iowa in grassy, moist meadows, native prairies, and upland grasslands of lakes. Largely diurnal and less secretive than other small snakes, they spend their days foraging through tall grass. If spotted, they flee for a short distance before freezing and gently swaying with the grass, perfectly camouflaged. As a result, most sightings occur on roadways or while mowing the yard, crossing biking and hiking trails, or when carried home by cats or dogs.

Smooth green snakes breed in the spring, with females laying 3 to 15 eggs in single clutches under rocks and logs or in communal nests. Incubation and oviposition times vary greatly, however, with some females laying their eggs only days before hatching and some females retaining their eggs until hatching. Born from June to September, the 4 to 5 inch long hatchlings are olive green in color until their second summer. Adults may grow up to 2 feet long and live 5-6 years. Smooth green snakes spend the winter in burrows, rock crevices, and road embankments. In northern Minnesota, they over-winter with redbelly and plains garter snakes in abandoned ant mounds!

Smooth green snakes are one of the few snake species that are entirely insectivorous, feeding on crickets, grasshoppers, and smooth caterpillars. Like most reptiles, they are not mobile creatures. Their insect diet and dependence on their immediate habitat make them extra vulnerable to pesticides and habitat destruction. Due to their fragile populations, smooth green snakes are listed as a species of special concern in Iowa, and it is illegal to kill, capture, or keep them as pets.

Once common residents of our prairie potholes, smooth green snakes are seldom seen today. Have you encountered a smooth green snake in wild Pocahontas County?

