

Smooth Greensnake - *Opheodrys vernalis*

Abundance: Rare

Status: NSS3 (Bb)

NatureServe: G5 S2

Population Status: Vulnerable due to restricted numbers and distribution, but extirpation is not eminent.

Limiting Factor: Habitat - the habitat for this species is restricted. Additionally habitat loss will result in loss of localized scattered populations.

Comment: Changed from NSS2 in 2005 due solely to changes in the matrix.

Introduction

Smooth Greensnakes occur in southeast and south-central Wyoming, as well as the Black Hills. Smooth Greensnakes may be active from April to October (Ernst and Ernst 2003). This species is primarily ground-dwelling, but will occasionally climb bushes. They can be secretive and difficult to find due to their camouflaged color when near green plants (Stebbins 2003). Smooth Greensnakes are most active during the warmer parts of the day and feed on insects and spiders (Baxter and Stone 1985, Ernst and Ernst 2003, Stebbins 2003). They hibernate underground, usually in aggregations. Ant mounds may occasionally be utilized for hibernacula (Ernst and Ernst 2003). Female greensnakes lay 2 to 12 eggs from June to September, sometimes hatching within a few days (Stebbins 2003). Oviposition may be communal and could occur in the same location in successive years (Redder et al. 2006). Hatchlings usually emerge from August to October. Preferred nest sites are piles of rotting vegetation, rotting logs and stumps, mammal burrows, and sawdust piles (Ernst and Ernst 2003).

Habitat

Smooth Greensnakes occupy habitats from prairies to open damp grassy areas. Populations can occur at lower elevations of the foothills and montane zones (Baxter and Stone 1985, Stebbins 2003). They can inhabit meadows, marsh and stream borders, open woodlands, and rocky habitats interspersed with grass (Ernst and Ernst 2003, Stebbins 2003). Smooth Greensnakes are rarely seen far from riparian areas and are often found under rocks, logs and other objects (Baxter and Stone 1985, Redder et al 2006).

Problems

- h This species has restricted habitats in the state, therefore disturbance to these areas may affect the range of the species in Wyoming.
- h Insecticides may be a threat to this species (Ernst and Ernst 2003).
- h Lack of basic information on the species presence, distribution, and ecology in Wyoming. Because of their small reproductive output and short life span, loss of reproductive females (> age 3) could adversely affect population size and persistence (Redder et al. 2006).

Conservation Actions

- h Survey and monitor population distribution, status, and habitat associations.
- h Develop management recommendations based on resulting data.

Monitoring/Research

Conduct baseline surveys to gain a better understanding of Smooth Greensnake distribution in Wyoming.

Recent Developments

Baseline reptile and amphibian surveys were conducted in southwest Wyoming and in the smooth greensnake's range near Savery and Baggs during the summer of 2009. Smooth Greensnake distribution, abundance, and habitat associations are being examined. Reptiles have received increased attention in Wyoming. Incidental observations are encouraged to be reported to the herpetology program.

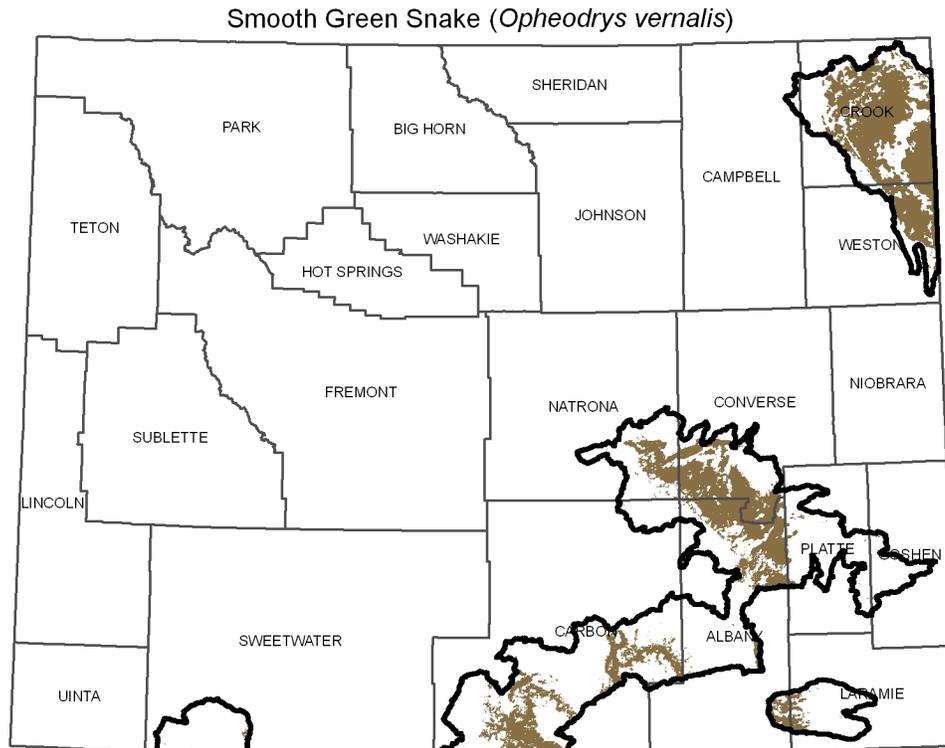
References

Redder, A.J., B.E. Smith, and D.A. Keinath. 2006. Smooth Green Snake (*Opheodrys vernalis*): a technical conservation assessment. USDA Forest Service, Rocky Mountain Region.

Ernst, C.H., and E.M. Ernst. 2003. Snakes of the United States and Canada. Smithsonian Books, Washington and London. 668pp.

Stebbins, R.C. 2003. A Field Guide to Western Reptiles and Amphibians. Third Edition. Houghton Mifflin Company, Boston. 336 pp.

Baxter, G.T. and M.D. Stone. 1985. Amphibians and Reptiles of Wyoming. Second Edition. Wyoming Game and Fish Department, Cheyenne. 137pp.



SOURCE: Digital maps of ranges and predicted distributions for Wyoming Species of Greatest Conservation Need: April 2010. Wyoming Natural Diversity Database. University of Wyoming, Laramie, Wyoming. Note that brown indicates the predicted distribution of the species; heavy black lines indicate outermost boundaries of possible occurrence.