

## Greater Short-horned Lizard - *Phrynosoma hernandesi*

Abundance: Rare

Status: NSS4 (Bc)

NatureServe: G5 S4

Population Status: Widely distributed, but vulnerable due to range-wide population declines.

Limiting Factor: Habitat: although habitat is not restricted, ongoing human activities will likely result in habitat loss.

Comment: None. Formerly *Phrynosoma hernandesi hernandesi*.

### Introduction

Greater Short-horned Lizards range throughout Wyoming. Although identified as common, anecdotal evidence indicates many populations are in decline throughout this species' range. Greater Short-horned Lizards are active from May to September or October. They forage diurnally on insects (beetles, termites, grasshoppers, caterpillars, etc.) and prefer ants (Baxter and Stone 1985, Stebbins 2003). Greater Short-horned Lizards bear live young from June to August, with litters ranging in size from 5 to 48 (Baxter and Stone 1985, Stebbins 2003). They overwinter in the banks of washes with relatively steep slopes at specific sites with bare and penetrable substrate. They probably overwinter around 1m under the soil and do not show a tendency to aggregate for the winter (Mathies and Martin 2008).

### Habitat

Greater Short-horned Lizards range from semiarid plains to the mountains; they can be found in shortgrass prairie and sagebrush habitats, and open pine-spruce, pinon-juniper, and spruce-fir forests. The ground may be stony, sandy, or firm, but usually has fine loose soil present, in which the lizards burrow (Stebbins 2003).

### Problems

- h Ongoing human activities throughout the state will likely result in habitat loss for this species.
- h Lack of basic information on the species presence, distribution, and ecology in Wyoming.

### 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 Greater Short-horned Lizard distribution in Wyoming.

### Recent Developments

Baseline reptile and amphibian surveys were conducted in southwest Wyoming in 2009 and 2010 (Snoberger and Walker 2012), in southeast Wyoming in 2011 and 2012 (Snoberger and Walker 2013, 2014) and in northern Wyoming in 2013 and 2014. Several Greater Short-horned Lizards were documented during these surveys and detailed habitat data was collected at these locations (Snoberger and Walker 2012, 2013, 2014). In 2009, a graduate project was implemented through the University of Wyoming to look at the effects of roads on reptile species, including Greater Short-horned Lizards, within the lower Green River valley (Hubbard 2011). A graduate project was conducted through the University of Wyoming from 2011 to 2015 on Greater Short-horned Lizards across the state. This project attempted to identify factors limiting the distribution and abundance of Greater Short-horned Lizards. Many new observations of Greater Short-horned Lizards were made during this study and the diet of the species was examined. Another ongoing project through the University of Wyoming is examining preferred body temperature and microhabitat selection in Greater Short-horned Lizard. Reptiles have received increased attention in Wyoming. Incidental observations are encouraged to be reported to the herpetology program.

### References

Stebbins, R.C. 2003. A Field Guide to Western Reptiles and Amphibians. Third Edition. Houghton Mifflin Company, Boston. 533pp.

Mathies, T., and D.J. Martin. 2008. Overwintering site selection by short-horned lizards (*Phrynosoma hernandesi*) in northeastern Colorado. *Journal of Herpetology* 42:163-171.

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

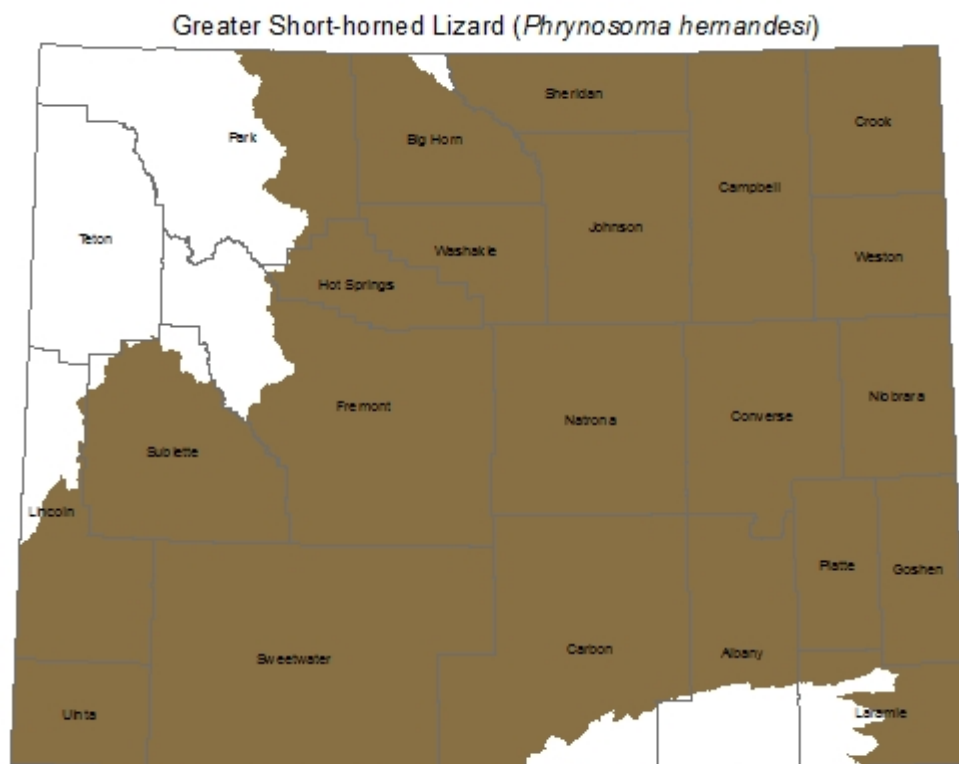
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SOURCE: Digital maps of ranges for Wyoming Species of Greatest Conservation Need: February 2016. Wyoming Game and Fish Department. Note that brown indicates the current known range of the species.