

ATTACHMENT SS2

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: ***Sceloporus undulatus garmani*** – northern prairie lizard

Criteria	Rank	Rationale	Literature Citations
1 Distribution within R2	B	<p>Within R2 the northern prairie lizard can be found from the southern edge of South Dakota, extending south through the western two-thirds of Nebraska and Kansas, and then ranging west into the eastern edge of Wyoming, and the northeastern corner and eastern edge of Colorado. In South Dakota it only occurs on the Buffalo Gap National Grassland, and it is not known to occur in any R2 designated lands in Wyoming. In Colorado it occurs on both of the National Grasslands, and in Nebraska and Kansas it is either known, or likely to occur, on all R2 designated areas. This subspecies of lizard can exist in a variety of habitats, but generally prefers grasslands with open sunny areas. It has been known to occur in scarp woodlands, sand dunes, and grasslands with sandstone/limestone outcroppings.</p> <p>Confidence in Rank <b>Medium</b></p>	<ul style="list-style-type: none"> <li>1,2,3,5,7,8</li> </ul>
2 Distribution outside R2	B	<p>There is not a great deal of this lizards range that extends beyond R2. It can be found from the western half of Oklahoma to the very northeastern corner of the Texas panhandle, and in a few disjunct populations along the eastern edge of New Mexico.</p> <p>Confidence in Rank <b>High</b></p>	<ul style="list-style-type: none"> <li>1,2,6,8</li> </ul>
3 Dispersal Capability	A	<p>Dispersal characteristics are not well known. Surviving young tend to occupy the same home range in successive years, but can shift to new locations in order to adapt to changing food sources, habitat, and social structure. The physiological characteristics of this species probably restrict daily and seasonal movements to a minimum. Large streams and roads may limit dispersal, and suitable cover is needed to provide protection from the elements.</p> <p>Confidence in Rank <b>Low</b></p>	<ul style="list-style-type: none"> <li>5</li> </ul>
4 Abundance in R2	B	<p>Abundance data is lacking to some degree, making this a difficult criterion to assess. Within R2 it seems to be locally abundant on most of the grasslands, but is rarely found on any of the other R2 designated lands. I am giving it a ranking of uncommon for the R2 area, since it only seems to be locally abundant in a few places. This species is likely to be more common within R2, on BLM and privately owned lands.</p> <p>Confidence in Rank <b>Low</b></p>	<ul style="list-style-type: none"> <li>1,2,4,5</li> </ul>

ATTACHMENT SS2

Species: <i>Sceloporus undulatus garmani</i> – northern prairie lizard			
Criteria	Rank	Rationale	Literature Citations
5 Population Trend in R2	D	There is not sufficient data to assess this criterion. In Wyoming this lizards population may have declined slightly due to recent habitat conversion. Hammerson states that the Colorado population may have declined in abundance in recent years, however a lack of good comparative data makes it difficult to evaluate overall population trends.  Confidence in Rank <b>Low</b>	<ul style="list-style-type: none"> <li>1,2,5</li> </ul>
6 Habitat Trend in R2	A	Information on this criterion is limited, but it seems that habitat may be slightly decreasing. In Wyoming some habitat may have been destroyed upon being converted into agricultural lands. In Colorado habitat has been lost along the western edge of the Great Plains due to urban and commercial development. Infestations of cheatgrass ( <i>Bromus tectorum</i> ) in Colorado have also resulted in decreased suitability of available habitat.  Confidence in Rank <b>Low</b>	<ul style="list-style-type: none"> <li>1,2,5</li> </ul>
7 Habitat Vulnerability or Modification	B	Habitat is vulnerable to conversion into agricultural lands and development by humans. Cheatgrass infestations can result in reduced habitat suitability by causing an increase in the overall thickness of the vegetation. This subspecies of lizard actually thrives on disturbances such as grazing and fire, which help to maintain the open areas of ground that this lizard prefers.  Confidence in Rank <b>High</b>	<ul style="list-style-type: none"> <li>2,5</li> </ul>
8 Life History and Demographics	B	<i>S. undulatus garmani</i> has a fairly high reproductive rate, as females can have 1 to 3 clutches per year, of 4 to 12 eggs each. Females are first able to breed at 21 months of age, and these yearlings usually only have 1 clutch of eggs. The number of clutches can vary from year to year. The mortality rate for this lizard is also high. Only about 10% of the young survive to reach their first year, and once they become adults the survival rate is 20-25%. Predators include larger lizards, snakes, birds, and some mammals. Mortality can occur during over wintering periods as well.  Confidence in Rank <b>Medium</b>	<ul style="list-style-type: none"> <li>1,2,5,6</li> </ul>
Initial Evaluator(s): Darby Dark-Smiley, Research Scientist, Wyoming Natural Diversity Database			Date: 7/31/2001

## ATTACHMENT SS2

### Literature Citations:

1. Baxter, G.T. and M.D. Stone. 1985. Amphibians and Reptiles of Wyoming. Wyoming Game and Fish Department.
2. Wyoming Natural Diversity Database. 2001. Unpublished data. University of Wyoming, Laramie, Wyoming.
3. Colorado GAP Analysis Program. 2001. Species distribution models: <http://ndis.nrel.colostate.edu/cogap/cogaphome.html>.
4. Colorado Species Occurrence and Abundance Tool. 2001. Species abundances by county: <http://ndis.nrel.colostate.edu/ndis/countyab/>
5. Hammerson, G.A. 1999. Amphibians and Reptiles in Colorado. University Press of Colorado and Colorado Division of Wildlife, Niwot, Colorado.
6. Behler, J.L. and F.W. King. 1979. National Audubon Society Field Guide to North American Reptiles and Amphibians. Alfred A. Knopf, Inc. Publishing, New York, New York.
7. Collins, J.T. 1993. Amphibians and Reptiles in Kansas, Third Edition. University of Kansas Museum of Natural History. University Press of Kansas, Lawrence, Kansas.
8. Conant, R. 1975. A Field Guide to Reptiles and Amphibians of Eastern and Central North America. The Peterson Field Guide Series. Houghton Mifflin Company, Publishers, Boston, MA.

**National Forests in the Rocky Mountain Region where species is KNOWN (K) or LIKELY(L)<sup>1</sup> to occur:**

---

<sup>1</sup> Likely is defined as more likely to occur than not occur on the National Forest or Grassland. This generally can be thought of as having a 50% chance or greater of appearing on NFS lands.

ATTACHMENT SS2

<u>Colorado NF/NG</u>	<u>Known</u>	<u>Likely</u>	<u>Kansas NF/NG</u>	<u>Known</u>	<u>Likely</u>	<u>Nebraska NF/NG</u>	<u>Known</u>	<u>Likely</u>	<u>South Dakota NF/NG</u>	<u>Known</u>	<u>Likely</u>	<u>Wyoming NF/NG</u>	<u>Known</u>	<u>Likely</u>
Arapaho-Roosevelt NF	-	-	Cimmaron NG	3	-	Samuel R. McKelvie NF	-	4	Black Hills NF	-	-	Shoshone NF	-	-
White River NF	-	-				Halsey NF	-	4	Buffalo Gap NG	4	-	Bighorn NF	-	-
Routt NF	-	-				Nebraska NF	-	4	Ft. Pierre NG	-	-	Black Hills NF	-	-
Grand Mesa, Uncompahgre, Gunnison NF	-	-				Ogalala NG	4	-				Medicine Bow NF	-	-
San Juan NF	-	-										Thunder Basin NG	-	-
Rio Grande NF	-	-												
Pike-San Isabel NF	-	-												
Comanche NG	-	-												
Pawnee NG	1,2	-												

**Primary Sources:**

1. Colorado GAP, 1001 – predicted distribution map.
2. Hammerson. 1999 – known distribution map for Colorado.
3. Collins, J.T. 1993 – known distribution map for Kansas.
4. Conant, R. 1975 – field guide to reptiles and amphibians of eastern and central North American.