

ATTACHMENT SS2

DD-S (WYNDD) 7/31/01

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: Sylvilagus floridanus / Eastern Cottontail			
Criteria	Rank	Rationale	Literature Citations
<p>1 Distribution within R2</p>	B	<p>Wyoming and Colorado are on the western periphery of the known range for this rabbit, which extends east into all of South Dakota, Nebraska, and Kansas. <i>S. floridanus</i> only occurs in the very southeastern corner of Wyoming, and in Colorado it can be found along the eastern foothills of the Rockies and the eastern plains. It is known to occur on both National Grasslands in Colorado, and likely to occur along the eastern edges of the San Isabel and Roosevelt National Forests. In South Dakota, Nebraska, and Kansas this rabbit is known, or likely to occur, on all of the R2 designated forests and grasslands. In South Dakota this species has been documented from the eastern foothills of the Black Hills National Forest, but has not been found in the Wyoming side of the forest. The eastern cottontail inhabits brushy draws, open woodlands, forest edges of valley streams, grasslands, and riparian ecosystems.</p> <p>Confidence in Rank High</p>	1,2,3,4,5,6,7,8,9
<p>2 Distribution outside R2</p>	C	<p>Outside of R2 this rabbit has a wide distribution that runs from southern Canada south through the Great Plains, and into Texas, New Mexico, and Arizona, and ranges east all the way to the Atlantic coast encompassing everything except New England.</p> <p>Confidence in Rank High</p>	1,2,5,8,10
<p>3 Dispersal Capability</p>	A	<p>Dispersal characteristics are not well known for this species. It is likely that this species may disperse at a local scale, but only through appropriate habitats. Some dispersal corridors may be through riparian areas. The smaller size of this species limits dispersal capabilities, and large streams and roads may act as barriers to dispersal.</p> <p>Confidence in Rank Low</p>	2,9

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4 Abundance in R2	C	Overall this seems to be a common species within R2 where it is known to occur. It is less common on the western periphery of its range in Wyoming, and is also considered uncommon in the Black Hills of South Dakota. Although it only occurs on the edges of some of the forests and foothills within R2, it is common on all of the grasslands except Thunder Basin in Wyoming. In Colorado it less abundant along the eastern foothills, but in many of the counties in the eastern plains it is known to be common, and in Arapahoe county is considered abundant. Abundances tend to be higher on the eastern half of R2, as this is more within the core of the eastern cottontails distribution. Confidence in Rank Medium	1,2,3,4,8
5 Population Trend in R2	D	There is not sufficient data to assess this criterion. Population trends are difficult to estimate in a species such as this where major multi-annual fluctuations occur on a regular basis due to high birth and death rates. Confidence in Rank Medium	4
6 Habitat Trend in R2	D	There is not sufficient data to assess this criterion. Some habitat may have been lost in urban areas due to development. Within R2 and the plains area, habitat is increasingly restricted to riparian ecosystems. Confidence in Rank Medium	2,9
7 Habitat Vulnerability or Modification	B	Habitat is vulnerable to urban and commercial development that can result in the complete destruction of suitable habitat. This seems to be the only prominent threat to habitat of the eastern cottontail. Confidence in Rank Medium	2
8 Life History and Demographics	B	The eastern cottontail is a prolific breeder. Females are able to have 5 to 7 litters per year of 3-6 young each. Gestation lasts for about 30 days. Young are able to leave the nest at 14 days of age, and reach sexual maturity at 2 to 3 months. However, this species also has a high mortality rate, and approximately 75% of young die before they reach 5 months of age. The mean natural longevity for this rabbit is less than 1 year. There are a wide variety of predators that take the eastern cottontail as an important prey species, such as owls, hawks, coyotes, house cats, skunks, weasels, and foxes. This species is also hunted as a game animal in some areas and is killed frequently on highways. Confidence in Rank High	1,2,7,9

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Initial Evaluator(s): Darby Dark-Smiley, Research Scientist, Wyoming Natural Diversity Database			Date: August 1, 2001

Literature Citations:

- 1) Clark, T.W. and M.R. Stromberg. 1987. Mammals in Wyoming. University Press of Kansas, Lawrence, Kansas.
- 2) Wyoming Natural Diversity Database. 2001. Unpublished data. University of Wyoming, Laramie, Wyoming.
- 3) Turner, R.W. 1974. Mammals of the Black Hills of South Dakota and Wyoming. University of Kansas Museum of Natural History Miscellaneous Publication 60.
- 4) Bee, J.W., G.E. Glass, R.S. Hoffmann, and R.R. Patterson. 1981. Mammals in Kansas. University of Kansas Publications Museum of Natural History, Lawrence, Kansas.
- 5) Colorado Gap Analysis Program. 2001. Species distribution models: <http://ndis.nrel.colostate.edu/cogap/cogaphome.html>.
- 6) South Dakota Gap Analysis Program. 2001. Species distribution models: <http://wfs.sdstate.edu/sdgap/sdgap.htm>
- 7) Whitaker Jr., J.O. 1980. National Audubon Society Field Guide to North American Mammals. Alfred A. Knopf Publishing, New York, New York.
- 8) Colorado Species Occurrence and Abundance Tool. 2001. Species abundances by county: <http://ndis.nrel.colostate.edu/ndis/countyab/>
- 9) Jones, Jr., J.K., D.M. Armstrong, and J.R. Choate. 1985. Guide to Mammals of the Plains States. University of Nebraska Press, Lincoln, Nebraska.

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

<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	-	1,2	Cimmaron NG	3	-	Samuel R.McKelvie NF	4	-	Black Hills NF	6,7	-	Shoshone NF	-	-
White River NF	-	-				Halsey NF	4	-	Buffalo Gap NG	-	5	Bighorn NF	-	-
Routt NF	-	-				Nebraska NF	4	-	Ft. Pierre NG	5	-	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	-	1,2												
Comanche NG	1,2													
Pawnee NG	1,2	-												

Primary Sources:

- 1 CO GAP, 2001 - predicted distribution map.
- 2 Colorado Species Occurrence & Abundance Tool: <http://ndis.nrel.colostate.edu/ndis/countyab/>
- 3 Bee et al., 1981 – known distribution map in Kansas.
- 4 Jones Jr., J.K., D.M. Armstrong and J.R. Choate. 1985 – general distribution map for the plains states.
- 5 SD GAP, 2001 – known/predicted distribution map.
- 6 Clark & Stromberg. 1987 – known distribution map in Wyoming.
- 7 Turner, R.W. 1974 – confirmed locations in the Black Hills.

¹ 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.