

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: Golden eagle ( <i>Aquila chrysaetos</i> )			
Criteria	Rank	Rationale	Literature Citations
1 Distribution within R2	B	The golden eagle occurs year round in all of the states of Region 2.  Confidence in Rank <b>High</b> or <b>Medium</b> or <b>Low</b>	<ul style="list-style-type: none"> <li>National Geographic Society 1983</li> </ul>
2 Distribution outside R2	C	The golden eagle is widespread. BREEDS: North America: mainly western and northern Alaska east through Northwest Territories to Labrador, south to northern Mexico, Texas, western Oklahoma, western Kansas; in East to New York, New England (rare). See Lee and Spofford (1990) for a review of nesting records from the central and southern Appalachians (most nesting records south of the Adirondacks are doubtful). Breeds also in the Palearctic. WINTERS: south-central Alaska, southern Canada south through breeding range, casually southward. In the U.S., most numerous in winter in the Rocky Mountain states, Great Basin, and western edge of the Great Plains (Root 1988). See Milsap and Vana (1984) for information on winter range in the eastern U.S. Accidental in Hawaii. Northernmost populations in Eurasia winter south to northern Africa (Sibley and Monroe 1990).  Confidence in Rank <b>High</b> or <b>Medium</b> or <b>Low</b>	<ul style="list-style-type: none"> <li>citations in references section</li> </ul>
3 Dispersal Capability	C	No known impediments to dispersal.  Confidence in Rank <b>High</b> or <b>Medium</b> or <b>Low</b>	<ul style="list-style-type: none"> <li></li> </ul>
4 Abundance in R2	B	North American population in the mid-1980s was estimated at about 70,000; perhaps about 20,000 breeding pairs occur in the western U.S. De Smet (1987 COSEWIC report) gave an estimate of 50,000-100,000 for North America. About 35,000 in the contiguous United States. Kirk et al. (1995) reported that the estimated number of breeding pairs in Canada was 1000-5000. Worldwide population estimate is not available.  Confidence in Rank <b>High</b> or <b>Medium</b> or <b>Low</b>	<ul style="list-style-type: none"> <li>citations in references section</li> </ul>

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5 Population Trend in R2	D	Throughout the United States the Breeding Bird Survey indicates stable numbers since 1966 and a slight increase in the Great Plains, Colorado, and Wyoming.  Confidence in Rank <b>High</b> or <b>Medium</b> or <b>Low</b>	<ul style="list-style-type: none"> <li>• <a href="http://www.mbr-pwrc.usgs.gov/cgi-bin/atlas99.pl?03490">http://www.mbr-pwrc.usgs.gov/cgi-bin/atlas99.pl?03490</a></li> </ul>
6 Habitat Trend in R2	D	Golden eagle habitat is generally open country, in prairies, tundra, open wooded country, and barren areas, especially in hilly or mountainous regions. The species nests on rock ledge of cliff or in large tree (e.g., oak or eucalyptus in California, white pine in eastern North America). Pair may have several alternate nests; may use same nest in consecutive years or shift to alternate nest used in different years.  There is no real information on the trend of golden eagle habitat throughout Region 2.  Confidence in Rank <b>High</b> or <b>Medium</b> or <b>Low</b>	<ul style="list-style-type: none"> <li>• <a href="http://www.natureserve.org">www.natureserve.org</a></li> </ul>
7 Habitat Vulnerability or Modification	B	Disturbance of habitat, especially nest sites, is probably a larger problem than actual loss of habitat.  Confidence in Rank <b>High</b> or <b>Medium</b> or <b>Low</b>	<ul style="list-style-type: none"> <li>•</li> </ul>
8 Life History and Demographics	B	Confidence in Rank <b>High</b> or <b>Medium</b> or <b>Low</b>	<ul style="list-style-type: none"> <li>•</li> </ul>
Initial Evaluator(s): John Sidle			Date: 06/26/01

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

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

<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.

## References

- American Ornithologists' Union (AOU), Committee on Classification and Nomenclature. 1983. Check-list of North American Birds. Sixth Edition. American Ornithologists' Union, Allen Press, Inc., Lawrence, Kansas.
- American Ornithologists' Union (AOU). 1998. Check-list of North American birds. Seventh edition. American Ornithologists' Union, Washington, DC. 829 pp.
- Bates, J. W., and M. O. Moretti. 1994. Golden eagle (*AQUILA CHRYSAETOS*) population ecology in eastern Utah. *Great Basin Nat.* 54:248-255.
- Bednarz, J. C., D. Klem Jr., L. J. Goodrich, and S. E. Senner. 1990. Migration counts of raptors at Hawk Mountain, Pennsylvania, as indicators of population trends, 1934-1986. *The Auk* 107:96-109.
- Biosystems Analysis, Inc. 1989. Endangered Species Alert Program Manual: Species Accounts and Procedures. Southern California Edison Environmental Affairs Division.
- Britten, M. W., C. L. McIntyre, and M. Kralovec. Satellite radiotelemetry and bird studies in national parks and preserves. *Park Science* 15(2):20-24.
- Ehrlich, P. R., D. S. Dobkin, and D. Wheye. 1992. *Birds in Jeopardy: the Imperiled and Extinct Birds of the United States and Canada, Including Hawaii and Puerto Rico*. Stanford University Press, Stanford, California. 259 pp.
- Fala et al. 1985. *Raptor Res.* 19:1-7.
- Fisher, A.K. 1893. The hawks and owls of the United States in their relation to agriculture. Washington U.S. Dept. of Agriculture Bull. no. 6. 210 pp.
- Harrison, C. 1978. *A Field Guide to the Nests, Eggs and Nestlings of North American Birds*. Collins, Cleveland, Ohio.
- Johnsgard, P. A. 1990. *Hawks, eagles, and falcons of North America*. Smithsonian Inst. Press, Washington, D.C. xvi + 403 pp.
- Johnson, S. R. and D. R. Herter. 1989. *The Birds of the Beaufort Sea*. BP Exploration (Alaska) Inc., Anchorage, Alaska. 372 pp.
- Kirk, D.A., D. Hussell, and E. Dunn. 1994/95. Raptor population status and trends in Canada. *Bird Trends (Canadian Wildlife Service)* 4:2-9.

- LeFranc, M. N., Jr., and W. S. Clark. 1983. Working bibliography of the golden eagle and the genus AQUILA. National Wildlife Federation Scientific & Technical Series No. 7, Washington, D.C. xxx + 222 + 12 appendix pp.
- Lee, D. S., and W. R. Spofford. 1990. Nesting of golden eagles in the central and southern Appalachians. *Wilson Bull.* 102:693-698.
- Milsap, B. A., and S. L. Vana. 1984. Distribution of wintering golden eagles in the eastern United States. *Wilson Bull.* 96:692-701.
- Murphy, R. 1965. *The golden eagle*. N.Y. 157 pp.
- National Geographic Society (NGS). 1983. *Field guide to the birds of North America*. National Geographic Society, Washington, DC.
- Palmer, R. S., ed. 1988. *Handbook of North American birds*. Vol. 5. Yale Univ. Press, New Haven. 465 pp.
- Pendleton, B. A. Giron, et al. 1987. *Raptor management techniques manual*. National Wildlife Federation, Sci. and Tech. Ser. No. 10. 420 pp.
- Phillips, R. L., J. L. Cummings, and J. D. Berry. 1991. Responses of breeding golden eagles to relocation. *Wildl. Soc. Bull.* 19:430-434.
- Root, T. 1988. *Atlas of wintering North American birds: An analysis of Christmas Bird Count data*. University of Chicago Press. 336 pp.
- Sibley, C.G., and B.L. Monroe, Jr. 1990. *Distribution and Taxonomy of Birds of the World*. Yale University Press, New Haven, CT. xxiv + 1111 pp.
- Snow, C. 1973. *Habitat management series for unique or endangered species, Report No. 7, Golden Eagle, AQUILA CHRYSÆTOS*. Bureau of Land Management, U.S. Dept. of Int., Technical Note, T-N-239, Denver.
- Spofford, W.R. 1971. THE BREEDING STATUS OF THE GOLDEN EAGLE IN THE APPALACHIANS. *AMERICAN BIRDS* 25(1):3-7.
- Terres, J. K. 1980. *The Audubon Society encyclopedia of North American birds*. Alfred A. Knopf, New York.