REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: American bittern (*Botaurus lentiginosus*)

Criteria	Rank	Rationale	Literature Citations
1 Distribution within R2	B	The American bittern is found in all states of Region 2 in wetland areas. Confidence in Rank **High** or Medium or Low	•
2 Distribution outside R2	C	American Bitterns breed from the southern Northwest Territories through central British Columbia east through Alberta, Saskatchewan, Manitoba, Ontario, Quebec, and southern New Brunswick, south through the Great Plains to northeastern New Mexico and southern Texas, west through northern Utah and Nevada to southcentral California, and east to the East Coast, extending from Maine south to western South Carolina Confidence in Rank High or Medium or Low	•
3 Dispersal Capability	C	Confidence in Rank High or Medium or Low	•
4 Abundance in R2	D	There are no abundance data on this species. Trend data is used to assess the species' status. Confidence in Rank **High** or Medium or Low	• www.natureserve.org

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5 Population Trend in R2	B	Breeding Bird Survey (BBS) data (1966-1987) indicate a decline in the north-central U.S. (Hands et al. 1989, Brewer et al. 1991) and possibly in New England (USFWS 1987), due mainly to loss and degradation of wetlands. BBS data suggest a 2.4% annual decline in U.S. populations between 1966 and 1989, but no significant trends were evident for populations in the eastern U.S. or Canada; other sources suggest that declines have occurred in portions of New York and in southern New England, Pennsylvania, New Jersey, and Delaware (Gibbs and Melvin 1992). The species is viewed as secure in South Dakota, imperiled in Wyoming, critically imperiled in Kansas, and vulnerable in Colorado and Nebraska. Confidence in Rank High or **Medium** or Low	• citations in references section • http://www.mbr-pwrc.usgs.gov/cgi-bin/atlasa99.pl?01900
6 Habitat Trend in R2	A	During the breeding season, American Bitterns use tall, dense, shallow- or deep-water emergent vegetation in wetlands; native vegetation in wet meadows; and moderately tall, dense, native or tame vegetation in uplands adjacent to wetlands (Bent 1963; Stewart 1975; Duebbert and Lokemoen 1977; Hanowski and Niemi 1986, 1988; Faanes and Lingle 1995; Kent and Dinsmore 1996). They breed in seasonal, semipermanent, temporary, permanent, fen, and restored wetlands, and in hayland, cropland, Conservation Reserve Program grasslands, and idle grasslands (Stewart and Kantrud 1965; Stewart 1975; Duebbert and Lokemoen 1977; Faanes 1981; Kantrud and Stewart 1984; Hanowski and Niemi 1986, 1988; Luttschwager and Higgins 1992; VanRees-Siewert 1993; Faanes and Lingle 1995; Brininger 1996; VanRees-Siewert and Dinsmore 1996). Wetlands with robust emergent vegetation are decling in Region 2 and elsewhere in the Great Plains. Confidence in Rank **High** or Medium or Low	• citations in references section • www.natureserve.org

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7 Habitat Vulnerability or Modification	A	Threatened by loss and degradation of wetlands due to drainage, filling, conversion to agriculture or recreational use, siltation, and pollution. The most serious factor limiting populations is availability of wetland habitat. The entire life cycle is dependent on wetlands, yet over half the original wetlands in the conterminous U.S. have been destroyed (Tiner 1984). The most serious losses have occurred among palustrine emergent wetlands, of which about 4.75 million acres (1.92 million ha) were lost between the mid-1950s and mid-1970s (Tiner 1984). Inland, freshwater wetlands, the most important nesting and wintering areas, are among the most threatened habitats (Tiner 1984). Larger wetlands (greater than 10 ha) may support large portions of regional nesting populations, and loss of these wetlands can be critical to populations in many areas. Small wetlands (less than five ha) may serve as important alternate feeding sites and as "stepping stones" during movements between larger wetlands, but receive no legal protection in most states. Habitat quality also may be limiting. Eutrophication, siltation, chemical contamination, and human disturbance may seriously reduce habitat quality, even at large protected wetlands. Eutrophication, caused by inflow of nitrates and phosphates from urban and agricultural areas, in combination with silting and turbidity, has damaged the aquatic fauna that serve as prey for endangered Eurasian bitterns in Great Britain (Day and Wilson 1978). Marshland invasion by purple loosestrife (LYTHRUM SALICARIA) and phragmites (PHRAGMITES AUSTRALIS) may substantially alter waterbird habitats in the northeastern U.S., but effects on bitterns have not been assessed. Stock ponds and other water developments can provide wetland habitat if grazing is curtailed but this is usually not the case on private and public lands. Confidence in Rank **High** or Medium or Low	• citations in references section • www.natureserve.org
8 Life History and Demographics	B	Confidence in Rank High or **Medium** or Low	•

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Initial Evaluator(s): John Sidle			Date: 6/29/01

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

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

[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.

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