
Sandhill Crane

Grus canadensis

Aves — Gruiformes — Gruidae

CONSERVATION STATUS / CLASSIFICATION

Rangewide:	Secure (G5)
Statewide:	Vulnerable breeding population (S3B)
ESA:	No status
USFS:	No status (Region 1); no status (Region 4)
BLM:	No status
IDFG:	Game bird

BASIS FOR INCLUSION

Lacking breeding information in Idaho; threats to wetlands and staging habitats

TAXONOMY

Six subspecies are recognized: *G. c. tabida* (greater sandhill crane), *G. c. canadensis* (lesser sandhill crane), *G. c. pratensis* (Florida sandhill crane), *G. c. nesiotetes* (Cuban sandhill crane), *G. c. pulla* (Mississippi sandhill crane), and *G. c. rowani* (Canadian sandhill crane) (American Ornithologists' Union 1957, Lewis 1977, Tacha et al. 1992). However, recent genetic studies only support subspecies designations of *tabida* and *canadensis* and not the others (Rhymer et al. 2000, Glenn et al. 2002, Petersen et al. 2003). Some subspecies are further divided into different populations and subpopulations based upon distinct wintering ranges and associated migratory pathways (more details below for birds that occur in Idaho; Tacha et al. 1992).

DISTRIBUTION AND ABUNDANCE

In general, sandhill cranes breed in suitable habitat in Siberia (e.g., tundra areas), Alaska, and much of central and western Canada, in states around the Great Lakes and upper Midwest, in disjunct populations westward across Montana, Wyoming, Idaho, Nevada, Washington, and Oregon, south to northeastern California and east to Utah and Colorado, as well as in the southeastern U.S. to Cuba and the Isle of Pines (Tacha et al. 1992; R. Drewien, pers. comm.). Northern populations (greater, lesser, and Canadian sandhills) are migratory, whereas southeastern populations (Cuban, Florida, and Mississippi sandhills) are non-migratory, remaining near breeding sites year-round. There are 5 populations of greater sandhill cranes (Eastern, Prairie, Rocky Mountain, Lower Colorado River Valley, and Central Valley; Drewien and Lewis 1987), 2 of which breed in Idaho – Rocky Mountain Population (RMP) birds in eastern and south-central (north to Bear Valley/Stanley area) Idaho (Drewien and Bizeau 1974; Drewien and Lewis 1987; Smith 1991) and Lower Colorado River Valley Population (LCRVP) birds in southwestern Idaho from the border with Nevada and in Owyhee Co. north to Cascade (Brown 1995). The only other sandhills that occur in Idaho belong to the Pacific Coast Population (PCP) of the lesser sandhill crane which uses staging areas in the Treasure and Payette River Valleys during spring migration on their way to nesting areas in southern Alaska (Ivey and Herziger 2005).

POPULATION TREND

Most population estimates and trends for this species are derived from direct counts of wintering or staging (migrating) birds and so are typically summarized by population, not subspecies. For the 3 populations that occur in Idaho, estimates of numbers and 20-year trends are as follows: RMP, 18,000–20,000 birds, stable trend; LCRVP, 1400–2100 birds, increasing trend; and PCP, ≤25,000 birds, increasing trend (Tacha et al. 1992; R. Drewien, pers. comm.). September aerial counts of RMP cranes in eastern and south-central Idaho from 1997–2004 have remained relatively stable, averaging 7974 birds for the 8-year period (Hemker 2004b), although there were >10,000 birds in 1987 (R. Drewien, pers. comm.). Breeding Bird Survey (BBS) data, which are admittedly a poor method for monitoring population trends for this species, also indicate stable to increasing numbers for the sandhill crane in Idaho, across the West, and in the U.S. in general (Sauer et al. 2005).

HABITAT AND ECOLOGY

The sandhill crane is found in open grasslands, marshes, edges of lakes and ponds, river banks, and, occasionally, pine savannas (Groves et al. 1997a). In Idaho, this species nests in shallow water, cattail and bulrush marshes, and on islands (Burleigh 1972). Typically prefers isolated, well watered river valleys, marshes, and meadows above 1500 m (5000 ft) elevation (Drewien 1973) where it nests in wet meadow-shallow marsh zones along marsh edges (Tacha et al. 1992). In the fall, the largest concentrations of sandhill cranes historically occurred at Gray's Lake and in the Teton Basin (Drewien and Bizeau 1974) where birds fed in grainfields, especially barley. During the past decade, however, numbers of cranes in these areas have declined and large numbers are now instead found in the Bear River Valley and at Ashton-St. Anthony staging areas (R. Drewien, pers. comm.). The highest reported density of breeding pairs in Idaho is from Gray's Lake at 250 birds/9,000 ha (22,000 ac) during the early 1970s (Drewien 1973). At this site, summering adult cranes eat mostly timothy combs (*Phleum pretense*), which make up 68% of the summer diet (Mullins and Bizeau 1978).

ISSUES

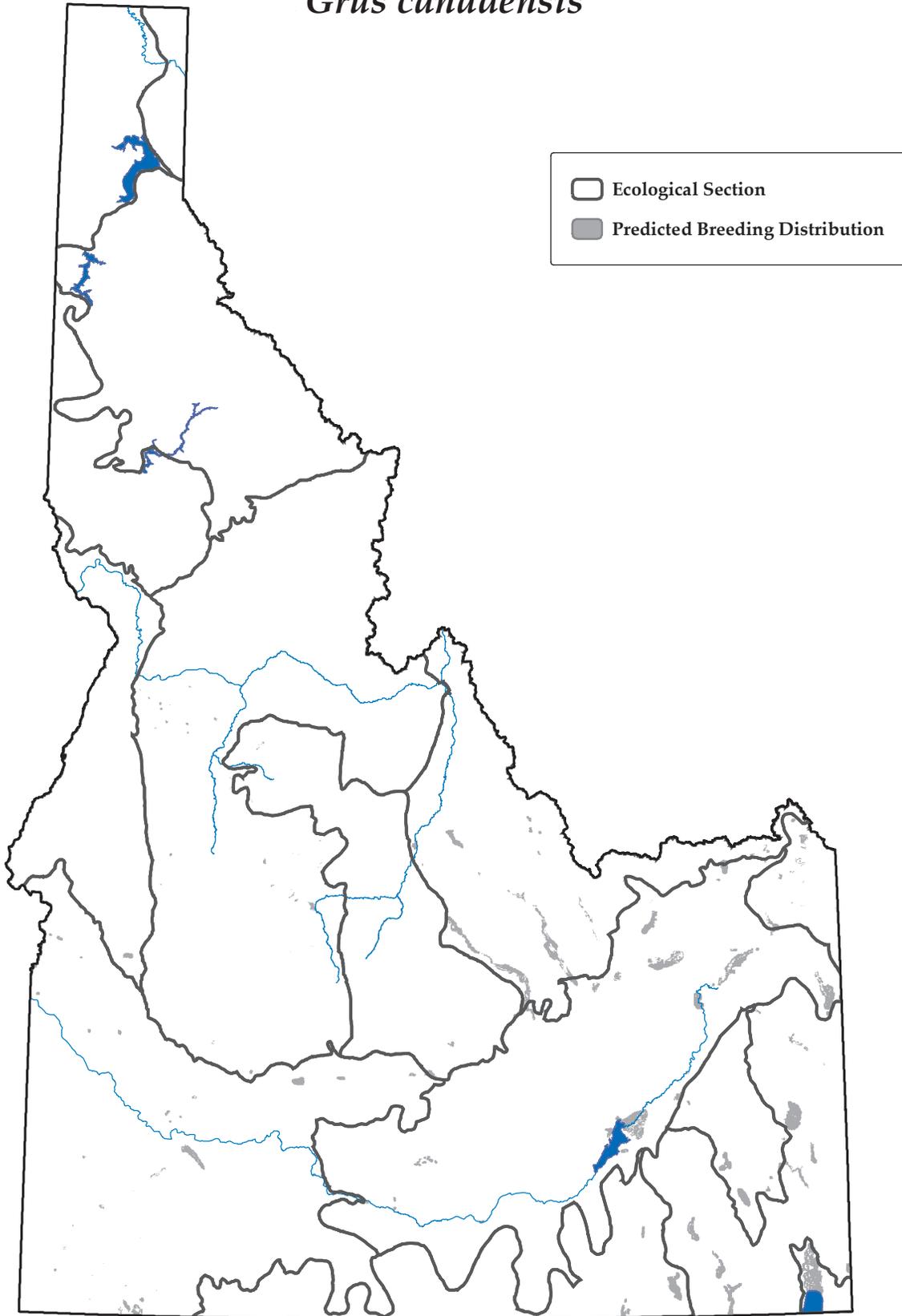
Main issue facing most sandhill crane populations is loss of wetland habitat, especially at staging and wintering areas for migratory populations (Tacha et al. 1992). Because of the flocking behavior of this species, both while staging during migration and when over-wintering, the potential exists for large concentrations of birds to use small areas of land; as a result, this species is highly vulnerable to relatively small-scale changes in habitat. Likewise, crop depredation can be of concern. In eastern Idaho, staging habitat has recently been lost due to the construction of subdivisions and other forms of human development. Loss of compatible agricultural foraging crops and development or disturbance at traditional night roost sites also can cause cranes to abandon traditional staging areas (G. Ivey, pers. comm.). Once populations decline, recovery is limited by low annual recruitment rates (Tacha et al. 1992). Breeding sites and reproductive biology of cranes in Idaho are not well documented.

RECOMMENDED ACTIONS

Substantial improvements are needed in annual surveys to monitor population and subpopulation trends with acceptable accuracy and precision (Tacha et al. 1992). A complete census of breeding cranes should be conducted at least every 10 years and annual surveys of staging cranes are recommended (Ivey and Herziger 2005). For the RMP Greater Sandhill Crane, Ivey and Herziger (2005) recommend maintaining suitable habitat at breeding sites throughout southeastern Idaho. In addition, wildlife and habitat managers should maintain grain fields and roost sites at traditional staging areas (e.g., Teton Basin, Gray's Lake, Blackfoot Reservoir, Ashton-St. Anthony area, and in the Bear River Valley). Similar actions are recommended for the LCRVP in western Idaho with the objective of maintaining ≥ 100 pairs (Ivey and Herziger 2005). Finally, for the PCP lesser sandhill crane, conservation actions in the Treasure and Payette River valleys should focus on maintaining spring staging habitat and roost sites to support ≥ 1000 cranes (Ivey and Herziger 2005). This objective for PCP cranes should be considered a minimum until a more accurate estimate of current numbers can be determined, at which point the objective should be revised to maintain the existing population (G. Ivey, pers. comm.). Therefore, another action would be to monitor spring staging PCP lesser sandhill cranes to improve current estimates of population size, distribution, and habitat use in southwestern Idaho. Gather information pertaining to crane reproduction in Idaho.

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Map created on September 21, 2005
and prepared by Idaho Conservation Data Center.
Sources: Predicted distribution is from the Wildlife Habitat
Relationships Models (WHR), A Gap Analysis of Idaho:
Final Report. Idaho Cooperative Fish and Wildlife Research
Unit, Moscow, ID (Scott et al. 2002). Predicted distribution
is approximate (for more information, go to
http://www.wildlife.uidaho.edu/idgap/idgap_report.asp).

