Great Egret
*Ardea alba*

Aves — Ciconiiformes — Ardeidae

**CONSERVATION STATUS / CLASSIFICATION**
- Rangewide: Secure (G5)
- Statewide: Critically imperiled breeding (S1B)
- ESA: No status
- USFS: Region 1: No status; Region 4: No status
- BLM: No status
- IDFG: Protected nongame

**BASIS FOR INCLUSION**
Low breeding population in Idaho; disjunct populations.

**TAXONOMY**
Great egrets have been classified in several genera over the years. Originally placed in its own genera, *Casmerodius*, then included with other egrets in *Egretta*, it has been more recently placed in the genus *Ardea* on the basis of morphological characteristics and DNA evidence (McCrimmon et al. 2001). Of the 4 subspecies recognized, *A. a. egretta* is the only subspecies found in North America. The other 3 subspecies are found throughout the continents of Africa, Asia, Australia, and Europe.

**DISTRIBUTION AND ABUNDANCE**
Great egrets breed in various locations throughout North and South America, with the majority of the U.S. population breeding along the east coast from southern Maine, south throughout Florida, and west to the southern tip of Texas. In the central and western U.S., this species breeds at scattered sites in the San Francisco Bay area, the Great Plains and the Intermountain West. There are approximately 180,000 breeding great egrets in the U.S. (Kushlan et al. 2002). In the Great Basin, there are approximately 1119 breeding pairs (Ivey and Herziger 2005). Of these, approximately 26 pairs breed in Idaho at 4–6 sites in the southern half of the state, including Duck Valley Indian Reservation and American Falls Reservoir (Trost and Gerstell 1994).

**POPULATION TREND**
After a greater than 95% population decline at the turn of the century, resulting from overhunting (for plumes; McCrimmon et al. 2001), the great egret has rebounded from 1000–1500 pairs in 1912 (Allen 1958) to the current 90,000 pairs. Breeding Bird Survey (BBS) data indicate increases in the U.S. (+2.0% per year) and the western BBS region (+4.0%; not statistically significant) during the period 1966–2004 (Sauer et al. 2005). BBS data indicate similar trends during the period 1980–2004, but non–significant declines in the U.S. (−2.9% per year) and western BBS region (−9.8% per year) during the period 1966–1979. Because of low detection rates, trend data are not available for Idaho.
HABITAT AND ECOLOGY
Great egrets generally breed in mixed–species colonies in large trees, often at the highest point in the colony, over water or on islands (Trost and Gerstell 1994, McCrimmon et al. 2001). Nests are often distinguishable from great blue herons (*Ardea herodias*) by the flatter construction and lack of nest lining (Trost and Gerstell 1994). This species forages in water up to 28 cm (11 in) deep (Powell 1987) in ponds and marshes, feeding on small fish, invertebrates, frogs, salamanders, and other small vertebrates (Trost and Gerstell 1994, McCrimmon et al. 2001).

ISSUES
Presence of pesticides and other contaminants has been detected in great egret eggs and adults in various locations throughout the U.S. from the 1970s through 1990s (McCrimmon et al. 2001). Several of the historic nesting locations documented by Trost and Gerstell (1994) may not be currently used by this species (C. Moulton, IDFG, pers. comm.). This species also may be sensitive to human disturbance during the breeding season, although in some areas they seem to be able to habituate to such disturbance (DeMauro 1993, Klein 1993). No statewide assessment of breeding locations and colony sizes has been made since Trost and Gerstell’s (1994) study.

RECOMMENDED ACTIONS
Monitoring for the presence and potential effects of pesticides and contaminants on great egrets in Idaho should be pursued. Historic nesting locations (Trost and Gerstell 1994) should be visited to determine if they are still being used by this species, and potential new nesting locations should be explored. Consistent monitoring of existing breeding colonies should be implemented through the Idaho Bird Inventory and Survey (IBIS) program, such that all colonies are surveyed every 3 years following the monitoring plan outlined in the Intermountain West Waterbird Conservation Plan (Ivey and Herziger 2005). Buffers of 100 m (328 ft) around these colonies should be maintained, where possible, during the breeding season (Erwin 1989, Rodgers and Smith 1995).
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Map created on September 21, 2005 and prepared by Idaho Conservation Data Center.
Sources: Point data are from Idaho Conservation Data Center, Idaho Department of Fish and Game (2005). 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).