
White-faced Ibis

Plegadis chihi

Aves — Ciconiiformes — Threskiornithidae

CONSERVATION STATUS / CLASSIFICATION

Rangewide: Secure (G5)
Statewide: Imperiled breeding (S2B)
ESA: No status
USFS: Region 1: No status; Region 4: No status
BLM: Peripheral (Type 4)
IDFG: Protected nongame

BASIS FOR INCLUSION

Low breeding populations in Idaho; regional threats.

TAXONOMY

Considered a subspecies of the glossy ibis until the late 1960s, the white-faced ibis is currently considered a full species (Ryder and Manry 1994). No subspecies of the white-faced ibis is recognized.

DISTRIBUTION AND ABUNDANCE

White-faced ibis breed from northern California, eastern Oregon, southern Idaho and Alberta, Montana, eastern North and South Dakota, and northwest Iowa, south to Durango and Jalisco states in Mexico. Population size rangewide is not available because of lack of census data and variations in colony locations and sizes from year-to-year (Ryder and Manry 1994). The Great Basin population is estimated to be 57,978 individuals nesting in approximately 40 different colonies (Ivey and Herziger 2005). In Idaho, there are approximately 6760 breeders nesting at 5–7 different locations (Bear Lake National Wildlife Refuge, Camas National Wildlife Refuge, Duck Valley Indian Reservation, Grays Lake National Wildlife Refuge, Market Lake Wildlife Management Area, Mud Lake Wildlife Management Area, and Oxford Slough Waterfowl Production Area; Trost and Gerstell 1994).

POPULATION TREND

After a drastic decline in the 1960s and '70s, white-faced ibis populations have increased dramatically in recent years. This increase is likely a result of improved nesting and foraging habitat management, the banning of DDT, and increased productivity at large breeding colonies (Ryder and Manry 1994). During the period 1966–2004, Breeding Bird Survey (BBS) data indicate statistically significant increases in the U.S. (+8.6% per year) and western BBS region (+9.9% per year; Sauer et al. 2005), and Ivey et al. (2005) reported a four-fold increase in the Great Basin population since 1985. BBS data show similar trends for these regions during the periods 1966–1979 and 1980–2004 (Sauer et al. 2005). BBS data do not indicate any statistically significant changes in the Idaho population during this period, although Taylor et al. (1989) reported marked increases in the nesting population.

HABITAT AND ECOLOGY

White-faced ibis are colonial breeders, generally choosing to nest in shallow marshes with dense emergent vegetation (Ryder and Manry 1994). In Idaho, most, if not all, colonies are found in hardstem bulrush/cattail marshes. Nest platforms are constructed within the bulrush, using bent-over bulrush stalks and adjacent upright stalks. This type of nest construction lends itself to collapse or flooding, and nest failure, if water levels drop or rise dramatically during the incubation/early nestling periods (Yee et al. 1990, Ryder and Manry 1994). This species forages for aquatic and moist soil invertebrates in shallowly flooded wetlands and irrigated croplands (Ryder and Manry 1994). Alfalfa, barley, and native hay meadows are particularly important foraging areas in Idaho and the Intermountain West overall (Bray and Klebenow 1988). After the nesting season, this species congregates by the thousands to feed on the extensive mudflats of American Falls Reservoir (Taylor et al. 1989).

ISSUES

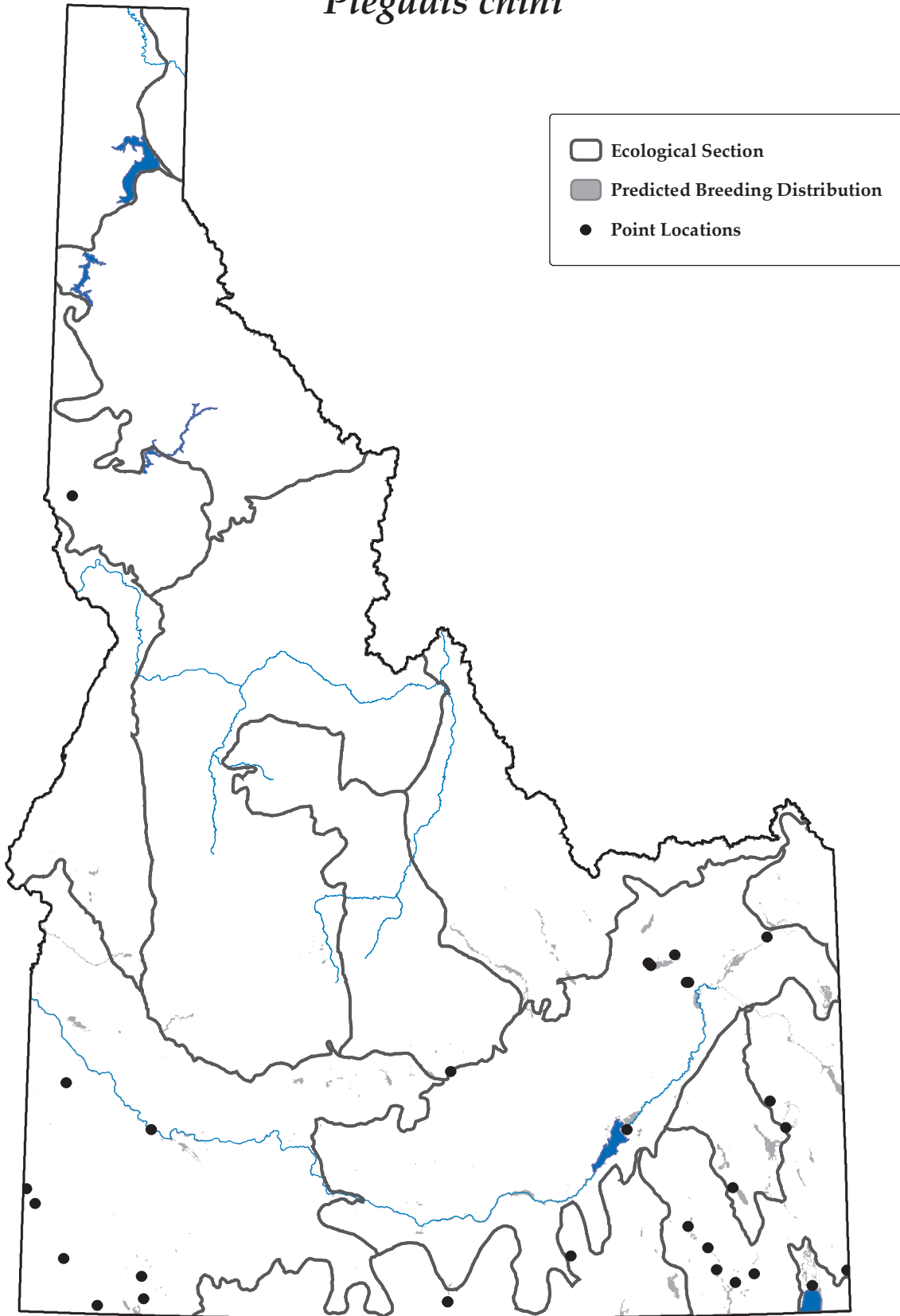
Drought and/or diversion of water away from existing marsh/wetland habitat have resulted in temporary or permanent abandonment of traditional nesting sites throughout the West, including Idaho (Ryder and Manry 1994, Ivey et al. 2005; R. Larrañaga, pers. comm.). Adequate water supplies and water rights to ensure the persistence of ibis colonies are currently lacking (Ryder and Manry 1994; Ivey et al. 2005; M. Fischer and R. Larrañaga, pers. comms.). Fluctuating water levels, from flooding, drought, and wetland drawdowns, often result in failure of nests and/or complete abandonment of the colony (Ivey et al. 2005). Because white-faced ibis forage extensively in agricultural fields, they are at risk of exposure to pesticides (Ivey et al. 2005). This species also is susceptible to colony abandonment resulting from human intrusion into colonies during the early nesting period (Ryder and Manry 1994).

RECOMMENDED ACTIONS

Acquiring water rights for existing wetland sites used by ibis for nesting is a crucial step toward ensuring the persistence of these colonies (Ivey and Herziger 2005). Providing stable water levels at colony sites during the nesting period also would aid in breeding success. Disturbance at the colony should be minimized and a minimum buffer zone of 100–180m (309–557 ft) should be maintained (Oakleaf et al. 1996). Disturbance to the colony for research purposes should be minimized as much as possible, particularly during the early nesting period (egg-laying through incubation; Oakleaf et al. 1996). Consistent monitoring of the 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).

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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).

