
Caspian Tern

Sterna caspia

Aves — Charadriiformes — Laridae

CONSERVATION STATUS / CLASSIFICATION

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

BASIS FOR INCLUSION

Low breeding populations in Idaho; recent population declines.

TAXONOMY

This species is occasionally placed in the monotypic genus *Hydroprogne*, but has been more recently merged with the crested terns (*Thalasseus* spp.) and gull-billed terns (*S. nilotica*) into the genus *Sterna*. No subspecies is recognized (Cuthbert and Wires 1999).

DISTRIBUTION AND ABUNDANCE

Caspian terns breed in widely scattered locations along the Pacific Coast, central Canada, the Intermountain West, the Great Lakes, the Gulf Coast, and along the Atlantic Coast. There are an estimated 68,000 adults breeding in North America (Kushlan et al. 2002). In the Great Basin and Northern Rockies, there are approximately 2060 breeding pairs (Ivey and Herziger 2005). Of these, approximately 60 pairs were breeding at several locations (Blackfoot, Magic, and Mormon Reservoirs, and Minidoka National Wildlife Refuge) in southern Idaho as of 1993 (Trost and Gerstell 1994).

POPULATION TREND

Caspian tern populations have increased in most parts of this species' North American range, apparently as a result of increased protection of the species and nesting habitat, as well as human alterations to habitat (Cuthbert and Wires 1999). Breeding Bird Survey (BBS) data indicate statistically significant increases of 3.4% per year in the U.S., 4.3% per year in the western BBS survey region, and 16.8% per year in Idaho during the period 1966–2004 (Sauer et al. 2005). Similar trends are seen in BBS data during the periods 1966–1979 and 1980–2004. However, in the last 3–5 years, the breeding population in Idaho may have declined. Two of the 4 regular nesting locations, Magic and Mormon Reservoirs, were not used at all by Caspian terns in 2004, and Mormon, which had the largest colony (20–30 pairs) in 1993, was not used yet again in 2005 (Idaho Bird Inventory and Survey [IBIS], unpubl. data). This abandonment was likely a result of low water levels around nesting islands (C. Moulton, IDFG, pers. comm.).

HABITAT AND ECOLOGY

In the western interior, Caspian terns generally nest on open, fairly flat islands or islets of lakes, reservoirs, and rivers (Trost and Gerstell 1994, Cuthbert and Wires 1999). In Idaho, this species appears to always nest in mixed-species colonies, particularly colonies with California gulls (Trost and Gerstell 1994; C. Moulton, IDFG, pers. comm.). Nests are placed on either bare ground or in shallow scrapes, and lined with pebbles, grasses, mosses, and other vegetation (Trost and Gerstell 1994, Cuthbert and Wires 1999). This species forages over lakes, reservoirs, rivers, and sloughs and preys almost exclusively on fish (Cuthbert and Wires 1999).

ISSUES

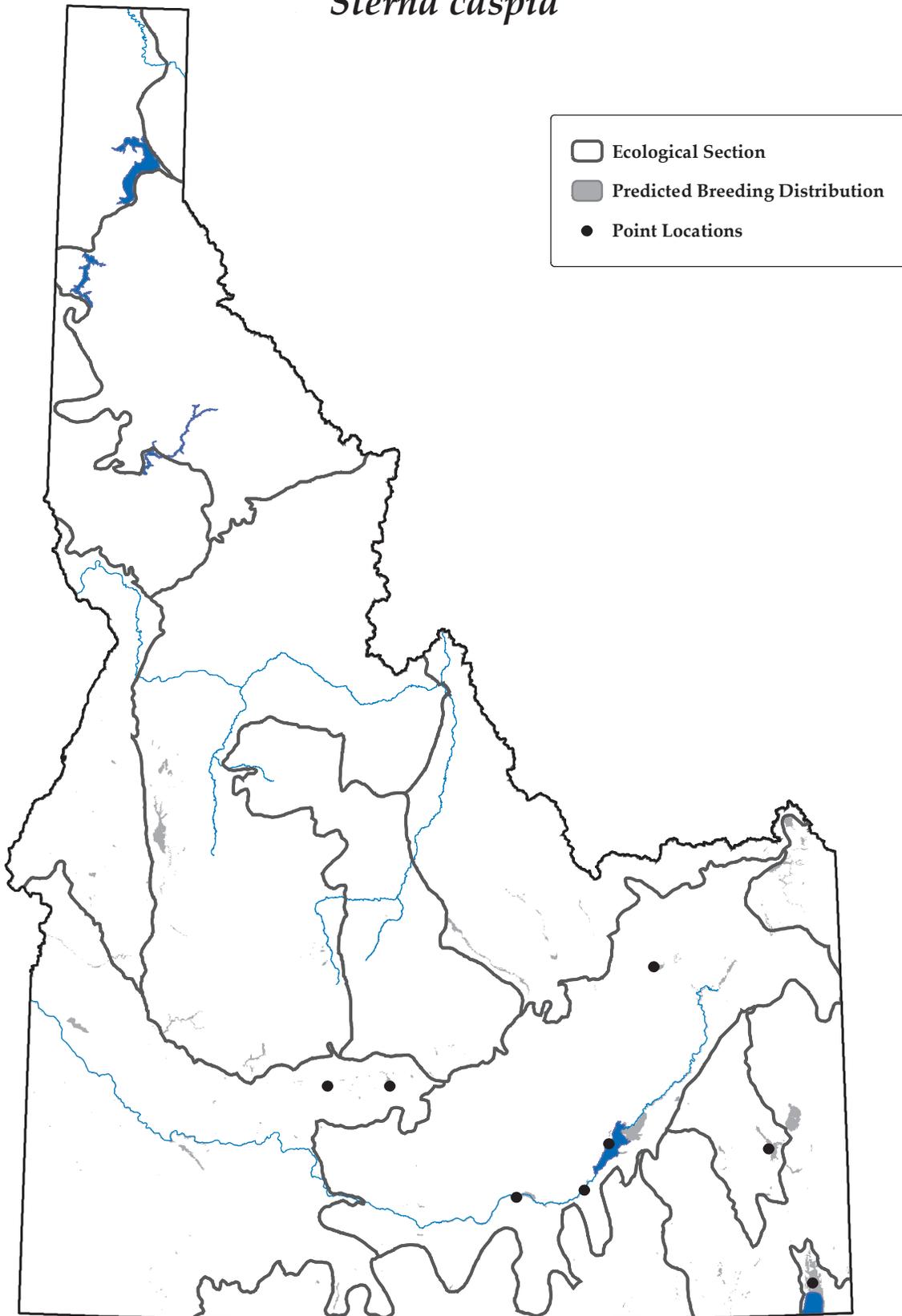
Low water levels, particularly in the Magic Valley, are a significant problem for Caspian terns in Idaho (Trost and Gerstell 1994; C. Moulton, IDFG, pers. comm.). Colony islands at Magic and Mormon Reservoirs have recently been connected to dry land, and thus exposed to predators and human disturbance. Neither location was used for nesting in 2004, nor was Mormon Reservoir used in 2005. Shooting of this species around trout hatcheries is a potential threat (Trost and Gerstell 1994). Conflicts between Caspian terns and fish populations are significant along some portions of its range, particularly along the Columbia and Snake Rivers in Washington and Oregon (Moulton et al. 2004). Such conflicts have not been documented in Idaho, likely because of the relatively low numbers of the species in this state. Caspian terns are sensitive to human disturbance, particularly during egg-laying and incubation, where entire colonies may desert if disturbed (Cuthbert and Wires 1999). Disturbance also facilitates egg predation by neighboring gulls when terns are flushed from their nest (Quinn 1984).

RECOMMENDED ACTIONS

Maintaining water levels that separate nesting islands from dry land is the most likely to have a positive impact on the Caspian tern population in Idaho (Ivey and Herziger 2005; C. Moulton, pers. comm.). Evidence of this impact was seen in June 2005, when water levels rose around 1 of the nesting islands at Magic Reservoir, and was subsequently used for nesting by 7 pairs of Caspian terns for the first time in several years (IBIS, unpubl. data). Disturbance at colonies should be minimized, and access to colonies by the public should be prevented. The effects of entering colonies in Idaho for research purposes should be studied, and findings should be applied to future work on these colonies. Additional potential nesting sites should be explored, as a new nesting location for 21 pairs of terns was discovered in 2005 at Bear Lake National Wildlife Refuge (IBIS, unpubl. data). Terns likely nested here in the past, but funding did not enable adequate surveying of this particular island (R. Bundy, pers. comm.). Finally, consistent monitoring of the breeding colonies should be implemented, through IBIS, 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 20, 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).

