

SHOWCASE SPECIES: NORTHWEST

WESTERN **SNOWY PLOVER** OF THE PACIFIC NORTHWEST

The Issue

Beach restoration and control of human and predator activities on beaches are helping recovery of the western snowy plover along the Pacific Northwest coast.



USFWS

Natural History

The western snowy plover is a small shorebird that forages for invertebrates in intertidal zones, in dry sandy areas above the high tide line, in salt pans and along the edges of salt marshes. The birds of the Pacific Coast population nest near tidal waters along the mainland coast and offshore islands from southern Washington to southern Baja California. Most nesting occurs on unvegetated to moderately vegetated, dune-backed beaches and sand spits, though the birds may nest on salt pans, dredge spoils and salt pond levees. Their nests, which the birds often use repeatedly, are shallow depressions that they scrape out in open areas of dry land.

Nesting and chick rearing generally occur between March and September. During the non-breeding season, western snowy plovers may remain at breeding sites or may migrate to other locations, with most of the birds wintering south of Bodega Bay, California. Many birds from the interior of the continent winter on the central and southern coast of California.

Important components of the beach/dune/estuarine ecosystem include surf-cast kelp, sparsely vegetated foredunes, interdunal flats, spits, blowouts, intertidal flats, salt flats and flat rocky outcrops. Several of these components are mimicked in artificial habitat types used less commonly by western snowy plovers, such as dredge spoil sites, salt ponds and adjoining levees. The suitability of areas for nesting also depends on isolation from human disturbance and predation.

Urban development and encroachment of nonnative invasive plants, such as European beachgrass, have caused the loss of nesting habitat for the Pacific Coast population of the western snowy plover and have reduced the bird's reproductive success at many locations.

Human activities such as walking, jogging, unleashed pets, horseback riding and off-road vehicles frequently crush and destroy western snowy plover nests and chicks. These activities also flush adults off nests and away from chicks, interfering with incubation and chick rearing. Chicks are especially vulnerable to dogs because they tend to freeze in their tracks and rely on camouflage to protect them when approached by a predator.

Listing

The U.S. Fish and Wildlife Service in 1993 listed the Pacific Coast population of the western snowy plover as threatened.

Management

The U.S. Fish and Wildlife Service cooperates on western snowy plover recovery as part of an interagency working group that includes the federal Bureau of Land Management, U.S. Forest Service, U.S. Army Corps of Engineers, state wildlife and natural resource agencies and tribal groups. The key to western snowy plover recovery is beach integrity. The agencies have been

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restoring beaches by removing invasive, nonnative plants that choke the open sandy areas plovers need for nesting and by planting native species. The agencies also have controlled human activities on publicly administered beaches, keeping people, dogs, motor vehicles and horseback riders away from nesting areas during critical times of year.

The result of these measures is a doubling in nests in the Pacific Northwest coastal region since 1990. Nest success in survey areas rose from 13 percent in 1990 to 38 percent in 2006. Nest numbers have gone from 36 in 1990 to 147 in 2006.

In areas where predators are being managed to reduce impacts on plovers, fledging success has risen from 30 percent to 60 percent.

Funding

Funding from all government sources for western snowy plover recovery nationwide ranks the species at 46 out of 1,311 species, according to the U.S. Fish and Wildlife Service fiscal year 2004 report (the most recent available) to Congress, *Federal and State Endangered and Threatened Species Expenditures*.^{*} Total recovery funding for the plover from all government sources that year was about \$4.5 million, with \$1.4 million coming through the Service. “This species is showing positive trends thanks to management measures like control of beach traffic,” says John Kostyack, director of Wildlife Conservation Campaigns at the National Wildlife Federation. “Congress should make sure that U.S. Fish and Wildlife—the lead federal wildlife agency—has the necessary funding to move quickly on the ground and take advantage of management opportunities as they arise for this and other listed species.”

^{*} The U.S. Fish and Wildlife *Federal and State Endangered and Threatened Species Expenditures* report incorporates subjective estimates provided by regulated entities without any independent verification and without effort to segregate Endangered Species Act expenditures from other related expenditures. However, for most listed species, no other funding data is available.

Local Contacts

National Wildlife Federation Northwest Natural Resource, 206-285-8707; Fish and Wildlife Region One Office, Endangered Species Division, 503-231-6158; Oregon Department of Fish and Wildlife, 503-872-5310; Washington Department of Fish and Wildlife, 360-902-2200; Chandra Legui, Oregon Wild, 541-344-0675; Wendell Wood, long-time conservation activist who initiated the listing process for the snowy plover, 707-465-6541.

Other Threats

The prognosis for the western snowy plover in the Pacific Northwest is good under current management regimes and offers promise to many other species, from butterflies to shore plants, that depend on beaches and that will benefit from protection of plover habitat.

THREATS FROM GLOBAL WARMING



Global warming poses a dangerous threat in the future, as plovers and other shore-nesting birds are highly vulnerable to the loss of habitat as sea levels rise in the wake of higher global temperatures.

A significant increase in the rate of sea-level rise due to melting glaciers and ice caps and to thermal expansion of the oceans is one of the most direct consequences of global warming. Scientists project an average sea level rise of 7 to 23 inches before this century ends and perhaps as much as 31 inches if the rate of ice melt from Greenland and Antarctica increases as some models predict. Along coasts with gradually sloped shores, such as Florida and the Gulf Coast, a 31-inch sea level rise translates into an advance of water inland by as much as 500 feet.