



Western Snowy Plover Monitoring

Point Reyes National Seashore

Resource Brief

Above: Western Snowy Plovers are well camouflaged for blending in to their sandy habitat.

Below: This female Western Snowy Plover is protected by a wire mesh enclosure as she incubates her eggs. National Park Service staff place enclosures over nests when necessary to protect them from an abundance of predators such as ravens.



Below: Western Snowy Plovers are especially vulnerable to human disturbance during the breeding season (March-September). Simply walking too close to these hard-to-spot birds can cause nests to be left unprotected or chicks and parents to be separated. Photos by Jessica Weinberg McClosky.



Why Are Western Snowy Plovers Important?

Western Snowy Plovers are excellent indicators of the health and diversity of sandy beach ecosystems. They need relatively undisturbed beaches and dunes where they can feed on insects and other invertebrates using their distinctive run-pause-snatch strategy. They nest above the high tide line in areas of sparse or low vegetation so they can see approaching predators. Unfortunately, these birds and the sandy habitats they rely on are vulnerable to human recreational activities, coastal development, invasive plants, and artificially inflated predator populations. Western Snowy Plovers nest in only half as many locations in California as they did prior to 1970, indicating that such forms of habitat degradation have taken their toll on ecosystem health. They were listed as federally threatened by the US Fish and Wildlife Service in 1993.



■ Western snowy plover survey areas

Point Reyes Bird Observatory began annual breeding-season Western Snowy Plover monitoring at Point Reyes National Seashore (PRNS) in 1995. The National Park Service Inventory and Monitoring Program and PRNS took over in 2008.

Why Do We Monitor Western Snowy Plovers?

- To detect long-term trends in the Western Snowy Plover population size, distribution, nesting success, and chick survival on Point Reyes beaches
- To determine where plovers are nesting so protective enclosures, fencing, and signage can be put in place, and so visitor outreach can be planned accordingly

How Do We Use the Monitoring Data?

- To guide policy decisions on issues like beach closures and pet restrictions
- To guide dune restoration efforts, plan strategies for emerging threats such as climate change and sea level rise, and evaluate existing recovery efforts

What Have We Learned?

Historically, Western Snowy Plovers bred on three beaches in Point Reyes. Since 2001, they have only bred on the Great Beach, primarily on the northern half between North Beach and Kehoe Creek. Their population in recent years has been well below average for a number of reasons. Predators and abandonment have been among the top causes of nest failure. Also, while the weekend docent program has successfully reduced chick loss through visitor outreach, it is possible that human activity still impacts chick survival.

To learn more, visit www.sfnps.org/western_snowy_plovers Summary by Jessica Weinberg McClosky, September 2013.

For More Information

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SF Bay Area National Parks Science and Learning
http://www.sfnps.org/western_snowy_plovers

San Francisco Bay Area Network
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