National Park Service U.S. Department of the Interior



Western Snowy Plover Monitoring

Golden Gate National Recreation Area

Resource Brief

Above: A Western Snowy Plover rests in the low vegetation atop a restored dune in the Crissy Field Wildlife Protection Area.

Right: Western Snowy Plovers take shelter from the wind inside footprints left in the sand. Their sand-colored backs help them blend in with the beach.



Below: A large sign marks the northern end of the Western Snowy Plover Protection Area on Ocean Beach. Beachgoers play an important role in protecting plovers in this area when they keep their pets on leashes and avoid using the upper parts of the beach where plovers rest. Photos by Jessica Weinberg McClosky.



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Why Are Western Snowy Plovers Important?

Western Snowy Plovers are excellent indicators of the health and diversity of sandy beach ecosystems. They need wide beaches with sparse, low vegetation so they can see approaching predators while they feed on sand fleas and other beach invertebrates. Beaches that are also relatively undisturbed allow the plovers time to rest and save up energy for migration and breeding. 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. Plover numbers and nesting locations have declined significantly compared to pre-1970, signaling a decline in healthy beach ecosystems. Western Snowy Plovers were listed as federally threatened by the US Fish and Wildlife Service in 1993.

The National Park Service began monitoring overwintering Western Snowy Plovers at Ocean Beach in 1994. Monitoring at Crissy Field began in 2004 when the first plovers appeared on the newly restored Crissy Field beach and dunes.

Why Do We Monitor Western Snowy Plovers?

- To detect trends in the population size and distribution of overwintering Western Snowy Plovers in the Golden Gate National Recreation Area
- To understand threats to overwintering Western Snowy Plovers
- To determine when and how beach maintenance activities may be conducted

How Do We Use the Monitoring Data?

- To guide and evaluate Western Snowy Plover outreach and recovery efforts
- · To inform policy decisions on issues like beach closures and pet restrictions
- To plan strategies for emerging threats such as climate change and sea level rise

What Have We Learned?

The overwintering Western Snowy Plover population on Ocean Beach has generally remained smaller than when monitoring began. The plover population at Crissy Field has remained small but seems to be increasing slightly over time. Potential threats observed through monitoring have included patrol vehicles, equestrians, joggers, kite flyers and unleashed dogs. These threats can harm plovers by causing them to waste energy fleeing. Monitoring data have also shown that in spite of leash regulations lowering the number of unleased dogs in the monitored areas, they still threaten the Western Snowy Plover.

To learn more, visit www.sfnps.org/western_snowy_plovers Summary by Jessica Weinberg McClosky, July 2014.

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

San Francisco Bay Area Network http://science.nature.nps.gov/im/units/sfan/ Western Snowy Plover survey areas



Protection Area Ocean Beach

Snowy Plover Protection Area

