

**California State Parks**  
**Western Snowy Plover Management**  
**2005 Systemwide Annual Report Overview**  
1-27-06

**Management Activities:**

- **Public Education.** Districts continued to distribute western snowy plover (WSP) brochures developed in 2002 by the Department, providing information on the threatened status of WSP, and how State Parks is providing protection for nesting pairs on their beaches. These brochures also explain pertinent rules put in place for beach visitors and why they should be followed to assure protection and minimize impacts to the bird. In one district a special outreach to the public through a local television station created a positive image for State Parks and its efforts to protect WSP in their area.
- **Training.** Many districts used volunteers to help with plover monitoring, and provided training. Parks employees and concessionaires were also trained in WSP natural history and stewardship responsibilities, such as the importance of driving Parks vehicles slowly in the wet sand zone, away from breeding and foraging plovers.
- **Enforcement.** Dogs off leash continued to be an enforcement issue and was especially challenging in certain park units. One district offered the public a solution by designating certain beaches known to be unused by plovers as “dog walking” beaches, while continuing to enforce dog leash rules and dogs prohibited rules at nesting beaches.
- **Beach Restoration.** Restoration efforts, most notably the removal of the exotic European beach grass, continued in several districts along the coast. Ongoing efforts in some districts resulted in new beach areas being utilized by nesting plovers in 2005.
- **Predator Control.** Predation of nests and chicks continues to be the top limiting factor in WSP reproductive success. Many districts had contracts with permitted predator control specialists to monitor and remove predatory species where they posed a special threat to WSP reproduction. Most depredations of nests were done by avian species such as crows, gulls, and raptors, with the mammal species including skunks, coyotes, and red fox. Wire nest exclosures were put over many nests in high predation areas to protect nests during the incubation and brooding period of the breeding season.
- **Field Management and Monitoring.** The monitoring of WSP throughout the year continued with winter and summer population surveys in addition to the nest monitoring during the breeding season. Other management actions

included nest area protection (symbolic fencing, signage, public education, enforcement of State Parks regulations, and habitat restoration). WSP monitoring activities are achieved in cooperation and collaboration between State Parks, Point Reyes Bird Observatory, U. S. Fish & Wildlife, and other conservation organizations. Volunteers continue to do much to help State Parks in protection of breeding WSP.

### **Major Results:**

Western snowy plover nesting was reported in 23 units managed by the Department, up from 19 units in 2004. Nesting was reported for the first time in over twenty years at Sonoma Coast State Beach and Humboldt Lagoons State Park.

A total of 718 nests were reported in state park units, a 19% decrease in the number of nests documented in 2004, but still higher than in previous years. Causes of nest loss were varied, but 55% of systemwide losses were directly attributed to predation, with avian predators reported slightly more than mammalian predators. Wind and tide inundation were the next highest cause of nest loss (16%), with nest abandonment the third in importance (14%). Nest abandonment is commonly caused by disturbance of the breeding pair during the process of egg laying and incubation.

Of the total nests, 384 were reported successful at hatching at least one egg, a hatching success rate of 54%. Of a systemwide total of 644 banded or otherwise intensively monitored chicks, 41% (261) of those were reported to have reached fledging age (28 days from hatching), an increase from a 32 % fledging rate for the chicks in 2004. The increase in fledging rate was due to a mixture of factors, but increased protection by State Parks districts certainly contributed.

The following is a summary of each of the California coastal areas where State Parks manages land for the year 2005.

- Estero and Morro Bay units reported 294 nests, 41% of the systemwide total. This is a 21% decrease in nests from 2004, but still higher than in previous years.

The largest number of nests was reported from Montana de Oro State Park, with 225 nests. Of these, 106 nests (or 47%) were successful at hatching at least one egg. Determination of an accurate chick count and fledging rate was not possible due to the lack of a banding program at the San Luis Obispo district in 2005. Other park units in this region with nesting reported in 2005 included the Estero Bay/Villa Creek Beach unit with a total of 37 nests (down 42% from 2004), and 16 successful nests (equal to 2004), resulting in higher hatching success than in 2004. Morro Strand State Beach had a total of 27 nests in 2005 (down from 38 nests in 2004), and 19 nests successfully hatching (up from 8 successful nests in

2004). Finally, San Simeon had a total of 5 nest attempts, the highest number since official counts commenced in 2000. All 5 nests successfully hatched at least one egg.

- Santa Cruz and Monterey Bay area units, stretching from Manresa State Beach to the Fort Ord Dunes acquisition, reported 251 nests, 35% of the systemwide total. The number of nests in 2005 was virtually the same as the nest count of 247 for the year 2004.

Of the 251 nest reported in 2005, 48% (or 120 nests) were successful. These nests produced 335 chicks, a 30% decrease over the number of chicks hatched the previous year. Of these chicks, 150 were reported to have successfully fledged, This is 21% fewer fledglings than reported in 2004. The fledging rate of chicks hatched in 2005 was 45%, slightly higher than the 39% rate reported in 2004.

The Santa Cruz/Monterey Bay area has the longest record of plover monitoring and protection in the state, dating back to the mid-1980s with Point Reyes Bird Observatory (PRBO) leading the efforts. Since then, State Parks and USFWS have become increasingly involved in cooperative monitoring and management activities in the larger study area, which includes State Park System units, other state lands, federal property, and other lands. PRBO prepares and publishes annual reports on nesting activities for the study area, which include lands other than State Parks, and stretches from Waddell Creek to the City of Monterey.

In 2005, 62% of the total nests documented in the PRBO study area (State Park and other lands) were on State Park System lands, up slightly from 60% in 2004.

Nest hatching success on DPR lands in the study area was 48%, and for non-DPR lands it was 47%. Fledging success on State Park lands was 45%, higher than on non-DPR lands (38%).

- Oceano Dunes State Vehicular Recreation Area reported a total of 103 nests, with 80 hatching eggs successfully.

This is down from a total of 147 nests reported in 2004 and 110 being successful. However, hatching success has been consistently high over the past three years. Nests this year produced 204 chicks, with 40% fledging success; up from 25% in 2004.

- San Diego coast area reported a total of 39 nests, slightly less than 2004, but consistent with the past few years of monitoring.

At Silver Stand State Beach, 10 of the 20 reported nests were

successful in hatching chicks (50%). However, only 21% - 30% of the 27 - 29 chicks produced reached fledging age. Heavy predation on the nests and chicks was again this year the primary cause of poor fledging success.

At Border Field SP, of the 19 nests reported 10 were successful in hatching. Counts of chicks were not reported, so fledging rate was not established.

- Santa Barbara and Ventura area units reported 13 nests being initiated on property managed by State Parks, a 24% decrease from 2004.

In 2005, 11 nests were reported from McGrath State Beach and 2 nests from Mandalay State Beach. At McGrath State Beach, 9 nests hatched eggs successfully (82%) and at Mandalay State Beach one nest was reported to be successful. Reliable information on fledging success was not obtained because chicks were not banded.

- Del Norte and Humboldt coast units reported 6 nests, an increase from the two previous years. One nest was found in an area of beach where European beach grass had been removed just prior to the breeding season.

Three nests were reported from Little River State Beach and one nest was reported from Prairie Creek Redwoods State Park. At the Big Lagoon area of Humboldt Lagoons State Park, 2 nests were reported; the first nesting seen since 1983 in that park. Of all nests initiated, 5 nests were successful in hatching eggs and 3 of 14 chicks (21%) were reported to have fledged.

- San Mateo and Northern Santa Cruz area units reported a total of 6 nests (a 76% decrease from 2004); 5 at Half Moon Bay State Beach and 1 at Big Basin Redwoods State Park (Waddell Creek beach). Of these nests, one nest at Half Moon Bay successfully hatched 3 chicks; one of which is known to have fledged.
- Mendocino coast units reported a total of 3 nests, down from the 6 reported in the previous year.

A total of 2 nests were reported at Mackerricher State Park, with neither of the nests hatching eggs. One nest was reported at Manchester State Park, which hatched and produced a total of 3 chicks. It was not confirmed whether those chicks fledged.

- Sonoma coast units reported 3 nest attempts at Sonoma Coast State Beach, the first recorded nesting since 1978.

Three nests were initiated at the mouth of Salmon Creek, with two nests lost due to a windy rainstorm in June. Of the one nest successfully hatching a clutch, one unbanded chick is believed to have fledged based on late season observation.

The Department's complete 2005 Annual Report on systemwide western snowy plover management actions, results, and recommendations for the next breeding season is on file in the Natural Resources Division Headquarters.