

## KILLDEER OBSERVED DEPREDATING A WESTERN SNOWY PLOVER NEST

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Since 2001, the East Bay Regional Park District has managed nesting habitat for the California Least Tern (*Sternula antillarum browni*) at the Hayward Regional Shoreline (37° 37' 47" N, 122° 8' 46" W) on the eastern shore of San Francisco Bay, California. As has happened elsewhere in coastal California (Powell and Collier 2000), our efforts have resulted in the recent attraction of breeding Western Snowy Plovers (*Charadrius alexandrinus nivosus*) to the site. In 2008 and 2009 the plovers attempted one and four nests, respectively, within the Least Tern colony.

In 2009, from a distance of 25 m, we witnessed a nesting Killdeer (*C. vociferus*) harass two pairs of breeding Snowy Plovers. The Killdeer repeatedly ran up to a Snowy Plover, crouched, then lunged toward it with fluttering wings in an apparent attempt to drive it from its nest. Each time, in response to the Killdeer's approach, the attending Snowy Plover crouched and depressed its body over its nest. The two Snowy Plover nests, containing two and three eggs, were 14 and 47 m, respectively, away from the nest of the harassing Killdeer. On 29 May, after the Killdeer chased the closer of the two Snowy Plovers from its nest, it picked up one of the two eggs, pierced it with its bill and dropped it about 0.5 m away from the nest. After the Killdeer left the area, the Snowy Plover returned to the damaged egg, tried to push it back into its nest, but failed and later abandoned it. The plover resumed incubation of the remaining egg. To avoid any further disturbance to nesting plovers and terns, we made no attempt to enter the colony on that date to recover and examine the depredated egg. On the next day, after repeated episodes of harassment by the Killdeer, the pair of Snowy Plovers nearest the Killdeer abandoned their nest. The three eggs in the more distant Snowy Plover nest hatched, but we did not observe the chicks again.

Along the Pacific coast, important predators taking Snowy Plover eggs include the Common Raven (*Corvus corax*), American Crow (*C. brachyrhynchos*), coyote (*Canis latrans*), red fox (*Vulpes vulpes*), and striped skunk (*Mephitis mephitis*) (Page et al. 2009). Anecdotally, the Long-billed Curlew (*Numenius americanus*), Marbled Godwit (*Limosa fedoa*), and Willet (*Tringa semipalmata*) are suspected nest predators in Ventura County (R. Smith pers. comm.), but the Whimbrel (*N. phaeopus*) is the only shorebird known to depredate Snowy Plover eggs (Page et al. 2009). At Monterey Bay, California, Snowy Plovers defend territories against migrating Semipalmated Plovers (*C. semipalmatus*) and Whimbrels but are often not aggressive toward Black-necked Stilts (*Himantopus mexicanus*) or American Avocets (*Recurvirostra americana*) unless they approach within a meter of the plovers' nest (Page et al. 2009). At Cheyenne Bottoms, Kansas, Boyd (1972) reported that Snowy Plovers defend territories against both Killdeers and American Avocets.

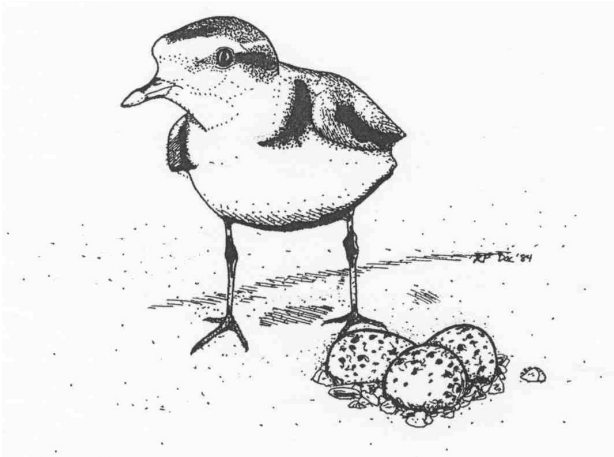
To our knowledge, and on the basis of our informal conversations with other Snowy Plover biologists, ours is the first observation of the Killdeer as a cause of mortality of Snowy Plover eggs. Although the prevalence of such behavior by the Killdeer and its effect on Snowy Plover populations are unknown, observations such as these may bring to light complex and potentially important interactions between closely related species that often share the same nesting habitats.

## NOTES

### LITERATURE CITED

- Boyd, R. L. 1972. Breeding biology of the Snowy Plover at Cheyenne Bottoms Waterfowl Management Area, Barton County, Kansas. M. S. thesis, Emporia State University, Emporia, KS.
- Page, G. W., Stenzel, L. E., Warriner, J. S., Warriner, J. C., and Paton, P. W. 2009 (revised). Snowy Plover (*Charadrius alexandrinus*), in The Birds of North America Online, no. 154 (A. Poole, ed.). Cornell Lab. Ornithol., Ithaca, NY; <http://bna.birds.cornell.edu/bna/species/154>.
- Powell, A. N., and Collier, C. L. 2000. Habitat use and reproductive success of Western Snowy Plovers at new nesting areas created for California Least Tern. *J. Wildlife Mgmt.* 64:24-33.

*Accepted 9 July 2010*



Western Snowy Plover

*Sketch by Robert Patton*