



## Point Count Monitoring at Crissy Field 2003

Thomas Gardali  
tgardali@prbo.org

August 2003

PRBO Conservation Science  
4990 Shoreline Highway  
Stinson Beach, CA 94970  
415-868-1221

This report summarizes bird survey work conducted by PRBO Conservation Science (founded as The Point Reyes Bird Observatory) at Crissy Field during the summer of 2003. I summarize methods, list counts of all species detected, and list species detected within dune habitat. Comparisons are made to the 2002 surveys.

## Methods

We used the point count method to survey birds at Crissy Field, San Francisco, California. A total of six permanent survey locations were visited three times each in the summer of 2003; 30 April, 28 May, and 16 June. We used the *variable circular plot* point count method as recommended by National Park Service Inventory and Monitoring Program (Fancy and Sauer 2000<sup>1</sup>). Variable circular plots are a type of distance sampling where the observer stands at a sampling station (point location) and records the horizontal distance between the observer and the bird. Location, distance, and breeding observations of all birds was noted. The distance to each individual was placed within intervals of 0 – 10, 10 – 20, 20 – 30, 30 – 40, 40 – 50, 50 – 75, 75 – 100, and > 100 meters. These intervals are consistent with those used at other survey points within the Presidio. We used the previously established location categories; dune (DU), dune fence (DF), path (PA), beach (BE), promenade (PR), promenade fence (PF), upland < 50 m (UL), and upland > 50 m (UG), with the addition of lagoon (LA), bay (BA), and buildings (BU). No location was noted for individuals detected only flying overhead or for those where location could not be confidently ascribed.

<sup>1</sup> Fancy, S. G., and J. R. Sauer. 2000. Recommended methods for inventorying and monitoring landbirds in National Parks. National Park Service Inventory and Monitoring Program, 1201 Oak Ridge Dr., Suite 200, Fort Collins, CO 80525.

## Results

A total of 34 species were noted in 2003 (Table 1). There were relatively few species observed using the dunes (Table 2). At least one pair of Killdeer was nesting in the dunes as a nest scrape (with out eggs) was discovered.

Table 1. All species and numbers detected during all three survey visits, 2002 and 2003.

| Species                                                    | 2002<br>Count | 2003<br>Count |
|------------------------------------------------------------|---------------|---------------|
| Pacific Loon ( <i>Gavia pacifica</i> )                     | 2             | 2             |
| Red-necked Grebe ( <i>Podiceps grisegena</i> )             | 0             | 1             |
| Western Grebe ( <i>Aechmophorus occidentalis</i> )         | 0             | 12            |
| Brown Pelican ( <i>Pelecanus occidentalis</i> )            | 23            | 0             |
| Double-crested Cormorant ( <i>Phalacrocorax auritus</i> )  | 6             | 2             |
| Pelagic Cormorant ( <i>Phalacrocorax pelagicus</i> )       | 0             | 1             |
| Great Blue Heron ( <i>Ardea herodias</i> )                 | 2             | 2             |
| Great Egret ( <i>Ardea alba</i> )                          | 2             | 1             |
| Snowy Egret ( <i>Egretta thula</i> )                       | 1             | 2             |
| Black-crowned Night Heron ( <i>Nycticorax nycticorax</i> ) | 1             | 0             |
| Mallard ( <i>Anas platyrhynchos</i> )                      | 6             | 0             |
| Scaup Species ( <i>Aythya</i> sp.)                         | 2             | 0             |

|                                                         |     |    |
|---------------------------------------------------------|-----|----|
| Surf Scoter ( <i>Melanitta perspicillata</i> )          | 0   | 2  |
| Red-shouldered Hawk ( <i>Buteo lineatus</i> )           | 1   | 0  |
| Semipalmated Plover ( <i>Charadrius semipalmatus</i> )  | 2   | 9  |
| Killdeer ( <i>Charadrius vociferous</i> )               | 8   | 12 |
| Whimbrel ( <i>Numenius phaeopus</i> )                   | 2   | 0  |
| Long-billed Curlew ( <i>Numenius americanus</i> )       | 2   | 0  |
| Western Sandpiper ( <i>Ereunetes mauri</i> )            | 0   | 45 |
| Western Gull ( <i>Larus occidentalis</i> )              | 93  | 78 |
| California Gull ( <i>Larus californicus</i> )           | 0   | 2  |
| Caspian Tern ( <i>Sterna caspia</i> )                   | 35  | 1  |
| Forster's Tern ( <i>Sterna forsteri</i> )               | 136 | 0  |
| Mourning Dove ( <i>Zenaida macroura</i> )               | 0   | 2  |
| Rock Dove ( <i>Columba livia</i> )                      | 29  | 17 |
| Anna's Hummingbird ( <i>Calypte anna</i> )              | 1   | 3  |
| Common Raven ( <i>Corvus corax</i> )                    | 0   | 3  |
| American Crow ( <i>Corvus brachyrhynchos</i> )          | 4   | 0  |
| Violet-green Swallow ( <i>Tachycineta thalassina</i> )  | 0   | 2  |
| Tree Swallow ( <i>Tachycineta bicolor</i> )             | 0   | 2  |
| Cliff Swallow ( <i>Petrochelidon pyrrhonota</i> )       | 6   | 2  |
| Barn Swallow ( <i>Hirundo rustica</i> )                 | 12  | 2  |
| Pygmy Nuthatch ( <i>Sitta pygmaea</i> )                 | 1   | 0  |
| Northern Mockingbird ( <i>Mimus polyglottos</i> )       | 0   | 3  |
| American Robin ( <i>Turdus migratorius</i> )            | 0   | 1  |
| European Starling ( <i>Sturnus vulgaris</i> )           | 45  | 21 |
| California Towhee ( <i>Pipilo crissalis</i> )           | 0   | 4  |
| White-crowned Sparrow ( <i>Zonotrichia leucophrys</i> ) | 8   | 8  |
| Song Sparrow ( <i>Melospiza melodia</i> )               | 3   | 3  |
| Brewer's Blackbird ( <i>Euphagus cyanocephalus</i> )    | 21  | 30 |
| Purple Finch ( <i>Carpodacus purpureus</i> )            | 0   | 2  |
| House Finch ( <i>Carpodacus mexicanus</i> )             | 5   | 12 |
| American Goldfinch ( <i>Carduelis tristis</i> )         | 1   | 3  |
| House Sparrow ( <i>Passer domesticus</i> )              | 13  | 9  |

Table 2. Species observed in restored dunes in 2002 and 2003.

| Species | 2002 | 2003 |
|---------|------|------|
|---------|------|------|

---

|                       |   |   |
|-----------------------|---|---|
| Great Blue Heron      |   | X |
| Killdeer              | X | X |
| Mourning Dove         |   | X |
| Rock Dove             |   | X |
| Anna's Hummingbird    | X |   |
| Common Raven          |   | X |
| European Starling     | X | X |
| White-crowned Sparrow |   | X |
| Brewer's Blackbird    |   | X |
| House Sparrow         | X |   |