

85. COASTAL FRESHWATER MARSH

PANTANO COSTANERO DE AGUA DULCE

JOHN P. KELLY

Audubon Cypress Grove Preserve, P.O. Box 808, Marshall CA 94940

Location: California; Marin Co.; Marshall; Livermore Marsh; 38°10'N, 122°53'W; Tomales Quadrangle, USGS. **Continuity:** Established 1988; 8 yr. **Size:** 10.5 ha. **Description of Plot:** See *J. Field Ornithol.* 60(Suppl.):64 (1989). Detailed quantitative habitat data from 1993 are available from the author. The bulrush density was reduced approximately 60% on average by winter storms. **Weather:** Mean start temp., 10.8°C (range 4–14°C). Generally mild with normal temperatures. Rainfall during the 1994–95 rainy season was 106.7 cm, 48% above the 38-yr average of 71.9 cm. Significant periods of rainfall extended into May. Source: Audubon Canyon Ranch. **Coverage:** 8.5 h; 8 visits; 14, 28 Apr; 2, 11, 18, 25, 28 May; 1 Jun. **Census:** Red-winged Blackbird, 28.0 (107); Song Sparrow, 19.0 (72); Marsh Wren, 12.0 (46); American Coot, 6.0 (23); Mourning Dove, 5.0 (19); Virginia Rail, 3.0 (11); Pied-billed Grebe, 2.0; Allen's Hummingbird, 2.0; Bush-tit, 2.0; Wrentit, 2.0; Brown-headed Cowbird, 2.0; Mallard, 1.0; Ruddy Duck, 1.0; California Quail, 1.0; Anna's Hummingbird, 1.0; Swainson's Thrush, 1.0. **Total:** 16 species; 88.0 territories (335/40 ha). **Visitors:** Great Blue Heron, Great Egret, Bufflehead, Northern Harrier, Red-shouldered Hawk, Common Moorhen, Black Phoebe, Ash-throated Flycatcher, Tree Swallow, Violet-green Swallow, Northern Rough-winged Swallow, Cliff Swallow, Barn Swallow, Western Scrub-Jay, American Crow, Chestnut-backed Chickadee, Common Yellowthroat, Black-headed Grosbeak, California Towhee, Tricolored Blackbird, Bullock's Oriole, House Finch, American Goldfinch. **Remarks:** The hummingbird territories were all male. One Northern Harrier territory was located in coastal prairie habitat adjacent to the study site. Mourning Dove, House Finch, and American Goldfinch were common on all visits but inadequately quantified because of non-territorial breeding behaviors. **Acknowledgments:** This project is supported by Chevron U.S.A. and Audubon Canyon

Ranch, Stinson Beach, CA, as part of a larger restoration and management project. Sarah Tappen compiled and summarized the results.