

**99. COASTAL FRESHWATER MARSH**

PANTANO COSTANERO DE AGUA DULCE

JOHN P. KELLY

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

**Location:** California; Marin Co.; Marshall; Livermore Marsh; 38°10'N, 122°53'W; Tomales Quadrangle, USGS. **Continuity:** Established 1988; 6 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. **Weather:** Mean start temp., 13.0°C (range 8–17°C). Generally mild with normal temperatures. Rainfall during the 1992–93 rainy season was slightly (20%) above the 38-yr average of 71.9 cm, following six consecutive years of below-average rainfall. Significant periods of rainfall extended into April and May. Source: Audubon Canyon Ranch. **Coverage:** 8.8 h; 8 visits (1 sunrise); 13, 27 April; 12, 19, 21, 25, 27, 28 May. **Census:** Red-winged Blackbird, 23.0 (88); Song Sparrow, 18.0 (69); Marsh Wren, 12.0 (46); American Coot, 9.0 (34); Mourning Dove, 3.0 (11); Wrentit, 3.0; Pied-billed Grebe, 2.0; Mallard, 2.0; Cinnamon Teal, 2.0; Ruddy Duck, 2.0; Virginia Rail, 2.0; Allen's Hummingbird, 2.0; Scrub Jay, 1.0; Black-headed Grosbeak, 1.0; Brown-headed Cowbird, 1.0; American Goldfinch, 1.0; Northern Harrier, +; Northern Oriole, +. **Total:** 18 species; 84.0 territories (320/40 ha). **Visitors:** Great Blue Heron, Cattle Egret, Black-crowned Night-Heron, Bufflehead, Black-shouldered Kite, California Quail, Anna's Hummingbird, Belted Kingfisher, Black Phoebe, Tree Swallow, Northern Rough-winged Swallow, Cliff Swallow, Barn Swallow, Chestnut-backed Chickadee, Bushtit, Swainson's Thrush, Warbling Vireo, Common Yellowthroat, Wilson's Warbler, California Towhee, Lincoln's Sparrow, Tricolored Blackbird, Brewer's Blackbird, Purple Finch, House Finch. **Remarks:** The Allen's Hummingbird territories were all males. Swainson's Thrush may have bred on the plot, but they arrived too late in the season for adequate census coverage. A singing Common Yellowthroat was observed twice in the vicinity of a 1992 breeding territory, but it was recorded as a visitor this year. Two successful Northern Harrier nests were located in coastal prairie habitat adjacent to the study site. Mourning Dove, House Finch, and American Goldfinch were common but inadequately quantified because of non-territorial breeding behaviors. **Acknowledgments:** This project is supported by Chevron USA and Audubon Canyon Ranch, Stinson Beach, CA, as part of a larger restoration and management program. I thank Susan Kelly and Sarah Tappen for help in summarizing the results.