

41. COASTAL FRESHWATER MARSH

PANTANO COSTANERO DE AGUA DULCE

JOHN P. KELLY

*Cypress Grove Preserve, P.O. Box 808, Marshall CA 94940***Location:** California; Marin Co.; Marshall; Livermore Marsh; 38°10'N, 122°54'W; Tomales Quadrangle, USGS. **Continuity:** Established 1986; 9 yr. **Size:** 10.5 ha. **Description of Plot:** See

J. Field Ornithol. 60(Suppl.):64 (1989). Arroyo willows continue to increase in number, covering approximately 10% of the upper marsh in patches 3–7 m high. Cattail has increased to cover approximately 12% of the lower marsh, and bulrush covers 21% of the lower marsh. **Weather:** Mean temperature 7.6°C (range 5–11°C). **Coverage:** 8.2 hrs; 7 visits (mornings): 19, 28 Jan; 7, 14, 18, 23, 26 Feb. **Count:** Song Sparrow, 17.9 ind./visit (7 visits); Marsh Wren, 15.1 (7); American Coot, 10.4 (7); Black-crowned Night-Heron, 8.4 (7); Mallard, 7.4 (7); House Finch, 5.1 (3); Common Snipe, 4.9 (6); Bufflehead, 4.0 (7); Ruby-crowned Kinglet, 4.0 (7); Ruddy Duck, 3.7 (6); Red-winged Blackbird, 3.0 (3); Pied-billed Grebe, 2.9 (7); Yellow-rumped Warbler, 2.3 (5); White-crowned Sparrow, 2.3 (4); Wrentit, 2.1 (7); Common Yellowthroat, 2.0 (7); Golden-crowned Sparrow, 2.0 (4); Fox Sparrow, 1.7 (5); Virginia Rail, 1.6 (5); Lincoln's Sparrow, 1.3 (5); Bewick's Wren, 1.1 (5); Great Blue Heron, 1.0 (5); Anna's Hummingbird, 1.0 (5); Black Phoebe, 1.0 (4); European Starling, 1.0 (1); American Wigeon, 0.9 (2); Allen's Hummingbird, 0.9 (3); Northern Flicker, 0.9 (4); California Towhee, 0.9 (5); Belted Kingfisher, 0.7 (5); Bushtit, 0.7 (1); Canvasback, 0.6 (1); Cooper's Hawk, 0.4 (3); Tree Swallow, 0.4 (1); Swamp Sparrow, 0.4 (3); Cinnamon Teal, 0.3 (1); Ring-necked Duck, 0.3 (2); Northern Harrier, 0.3 (1); Chestnut-backed Chickadee, 0.3 (1); Great Egret, 0.1 (1); Common Goldeneye, 0.1 (1); Red-breasted Merganser, 0.1 (1); Turkey Vulture, 0.1 (1); Red-tailed Hawk, 0.1 (1); Winter Wren, 0.1 (1); Hermit Thrush, 0.1 (1); American Robin, 0.1 (1); Purple Finch, 0.1 (1). **Total:** 48 species; 116 ind./visit (444 ind./40 ha). **Remarks:** Fifteen Black-crowned Night-Herons occupied a winter roost in the lower marsh bulrushes. One male Allen's Hummingbird and three male Anna's Hummingbirds occupied breeding territories. Canvasback numbers decreased dramatically. Coincidentally, one or two river otters (*Lutra canadensis*) occupied the marsh for much of the winter. **Acknowledgments:** Field data were compiled by Sarah Tappen. This work was supported by Chevron U.S.A., Inc., San Francisco, CA, and Audubon Canyon Ranch, Stinson Beach, CA.