

## 100. COASTAL RIPARIAN MARSH

ANEGADO RIVEREÑO COSTANERO

JULES G. EVENS\* & RICHARD W. STALLCUP

\*P.O. Box 839

Point Reyes, California 94956

**Location:** California; Marin Co.; Point Reyes Station; Olema Marsh; 38°4'N, 122°49'W; Point Reyes Quadrangle, USGS. **Continuity:** Established 1990; 4 yr. **Size:** 17.5 ha. **Description of Plot:** See *J. Field Ornithol.* 62 (Suppl.):75 (1991). The vegetation has changed in response to natural succession and an increase in rainfall during the 1992-93 rainy season. Although no quantitative vegetation sampling was conducted this year, an increase in percent cover and frequency of willows in the marsh portion of the site was apparent. The riparian strip remained fairly uniform between years, although the number of snags, and therefore nesting opportunities for woodpeckers, swallows, and starlings, increased. **Weather:** Mean start temp., 14.6°C (range 11-19°C). Precipitation during the 1992-93 rainy season was 112 cm, approximately 20% above the hundred-year average. Rainfall extended later into the spring than in normal years, with significant storms in April and May. Source: Point Reyes National Seashore. **Coverage:** 27.9 h; 8 visits (8 sunrise); 2, 12, 28 March; 8, 15 April; 1, 22, 23 May; 2 June. **Census:** Red-winged Blackbird, 47.0 (107); Marsh Wren, 46.0 (105); Song Sparrow, 33.0 (75); Virginia Rail, 16.0 (37); Common Yellowthroat, 9.5 (22); Warbling Vireo, 6.5 (15); Wilson's Warbler, 6.5; Swainson's Thrush, 5.0 (11); Orange-crowned Warbler, 5.0; Pacific-slope Flycatcher, 4.5 (10); Chestnut-backed Chickadee, 4.0 (9); Bushtit, 4.0; Black-headed Grosbeak, 3.5 (8); Western Wood-Pewee, 3.0 (7); Tree Swallow, 3.0; American Goldfinch, 3.0; Allen's Hummingbird, 2.5; California Towhee, 2.5; Purple Finch, 2.5; Mallard, 2.0; Sora, 2.0; American Coot, 2.0; Anna's Hummingbird, 2.0; Acorn Woodpecker, 2.0; Bewick's Wren, 2.0; European Starling, 2.0; Black Phoebe, 1.5; Wren-tit, 1.5; Pied-billed Grebe, 1.0; Nuttall's Woodpecker, 1.0; Downy Woodpecker, 1.0; Scrub Jay, 1.0; Plain Titmouse, 1.0; Yellow Warbler, 1.0; Rufous-sided Towhee, 1.0; Pine Siskin, 1.0; Red-shouldered Hawk, 0.5; Mourning

Dove, 0.5; Steller's Jay, 0.5; American Robin, 0.5; Black-shouldered Kite, +; Barn Owl, +; Hairy Woodpecker, +; Olive-sided Flycatcher, +; Cliff Swallow, +; Barn Swallow, +; Western Bluebird, +; Hutton's Vireo, +; Brewer's Blackbird, +; Brown-headed Cowbird, +. **Total:** 50 species; 234.0 territories (535/40 ha). **Visitors:** Great Blue Heron, Great Egret, Green Heron, Sharp-shinned Hawk, Common Moorhen, Band-tailed Pigeon, Northern Pygmy-Owl, Ash-throated Flycatcher, Purple Martin, Violet-green Swallow, Northern Rough-winged Swallow, Cedar Waxwing, Yellow-rumped Warbler, Northern Oriole, House Finch. **Remarks:** We analyzed population trends of the ten most common species for the years 1985–1993. Although variance among the data was high, and therefore statistically suspect, 1993 population levels of the five marsh dependent species were each above their respective 9-yr mean. Additionally, each showed positive upward trends over the nine years with average annual increases as follows: Red-winged Blackbird (+16.6%), Song Sparrow (+9.9%), Marsh Wren (+5.4%), Virginia Rail (+21%), and Common Yellowthroat (+8.5%). Population changes of the three most common riparian associates were also positive with trend analysis revealing average annual increases of: Warbling Vireo (+10%), Swainson's Thrush (+7%), and Wilson's Warbler (+5.8%). The next most common riparian species (average of 3.0 territories each) also showed positive increases: Orange-crowned Warbler (+9.4%) and Pacific-slope Flycatcher (+23%). **Other Observers:** Terry Nordbye, Chris Wood, David Wimpfheimer. **Acknowledgments:** John Kelly, Maurice Schwartz, and Audubon Canyon Ranch, Inc. for consultation, encouragement, and support.