

Richard Zembal Resume

Orange County Water District
18700 Ward Street
Fountain Valley, California 92708
(714) 378-3213; Rzembal@ocwd.com

EDUCATION

B. A. in Biology, pre-med, Loyola University, Los Angeles, 1968.
M. A. in Biology, California State University, Long Beach, 1977.
Community College Teaching Credentials held in Biology and Ecology.

EXPERIENCE

June 2000 to Present: Natural Resources Director for the Orange County Water District. I administer an endowment for ecological management activities in the Santa Ana River Watershed. I author and oversee NEPA and CEQA documents and help design wetland projects.

January 1997 – present: Board Member Santa Ana Watershed Association dedicated to the restoration of the natural functions of the Santa Ana River; current Chair of the Board, see www.Sawatershed.org.

February 2002 – present: Board Member of Friends of Harbors, Beaches, and Parks Inc. until 2007; current Science Advisor.

January 2002 – present: Wetland Recovery Project, Science Advisory Panel Member and member of the Orange County Task Force.

June 2006 – present: Principal Investigator and Administrator of the Clapper Rail Recovery Fund held by the Huntington Beach Wetlands Conservancy (HBWC) for management and monitoring of the rails and other rare coastal wildlife populations; Board Member of the HBWC.

August 1997 to June 2000: Employed by U.S. Fish and Wildlife Service as **Science Coordinator** for the Salton Sea Project as a GS 13. I was the principal liaison with the other agencies. I authored a workshop proceedings on study needs at the Sea for which I received a "Star" and monetary Award. I coordinated an inventory of the birds of the Sea, to result in a book that I will coauthor after 2 years of monthly counts by 20 observers. I was also the principal Service contact for the Santa Ana River Watershed Program which I founded and the Research Coordinator for the Tijuana River National Estuarine Research Reserve under NOAA.

January 1998 to Present: Teach The Natural History of California at Saddleback College. Teach the habitats, living species, and their ecology to a few dozen students each semester emphasizing field trips.

1980 to August 1997: Employed by U.S. Fish and Wildlife Service; since May 17, 1992 as **Deputy Field Supervisor, Supervisory Fish and Wildlife Biologist**; I ran the daily operations of the Southern California office and its 60 employees; directly supervise as many as 23 employees and direct the operations of the Endangered Species, Multi-species, Consultations, Wetlands, Contaminants, and Federal Projects Programs; We implement the Endangered Species Act in compliance with NEPA and are advisory to lead agencies on CEQA and Clean Water Act issues. I am responsible for the budget too, \$3.9 million in FY 1994. My goals are for biological solutions that work on as large a scale as possible, for people too. Formerly I was **Federal Projects leader and Endangered Species specialist**; design, propose, and find funding for resource inventories, species studies, and resource management plans; solicit, organize projects of \$2,500 - \$1.5 million; conduct field operations; identification skills with Southern California flora and fauna; write, review, and edit reports including EISs and Biological Opinions; supervise 8 employees; frequent interaction with the public, diverse agencies, and organizations including evening and weekend presentations and tours.

Zemba Resume (continued)

1979 to present: **Investigate the life history of the endangered Light-footed Clapper Rail (Rallus longirostris levipes)**; Annual census of the U.S. population; nest monitoring; radio telemetry of rails and predators; trapping and banding; design and provision of artificial nesting rafts; restoration and management design and implementation; coastal wetland ecology; recently, translocation and captive propagation; annual reports; frequent presentations; publications.

1982 to 1990: **Endangered Species Recovery Teams Lead and Membership**; Appointed the recovery team chairperson for the combined Coastal Endangered Species Recovery Team for Southern California which deals with the California Least Tern (Sterna albifrons browni), Light-footed Clapper Rail, and saltmarsh bird's beak (Cordylanthus maritimus); currently team member of newly established West Coast Clapper Rail Recovery Team.

1984 to 1990: Ecology 100 evening **instructor at Golden West College**; 4.5 unit equivalents; Course title is Man and the Environment; enrollment of 100+ students each semester during the regular school year.

1970 to 1980: **Technical Assistant II at California State University, Long Beach, Biology Department**; Initially, I was the animal caretaker for the department; final 3 years, I ran the anatomy and physiology issue room including lab setup for classes, ordering supplies, repairing equipment, supervising graduate and student assistants, and presenting demonstrations to classes and tour groups.

March 1978 to November 1978: **Contractor and principal investigator for the Department of the Navy, Naval Weapons Center, China Lake, California**. I hired and directed 3 field assistants, mapped the vegetation, collected and identified 344 species of vascular plants, trapped 25 species of mammals, gathered data on distributions and population levels of plants and mammals over a several hundred acre area, and published results.

January 1978 to March 1978: **Contractor and principal investigator for the Bureau of Land Management, Bakersfield District**. I hired and directed two field assistants, generated habitat descriptions and population estimates of wintering birds on plots in 8 upper desert habitats. We identified 69 species of birds over a 126 square mile area near Little Lake, California. The 40 page contract report is no. CA-010-RFP-8-1.

May 1977 to October 1977: **Coauthored A Management Plan for the Natural Resources of Mugu Lagoon**, Ventura County, California; I collected and identified 222 species of vascular plants and generated an annotated checklist, mapped the vegetation, and assisted with other aspects of data collection for the Fish and Wildlife Service.

January 1976 to June 1976: **Participated in the formation of a development plan for Ronald Caspers Regional Park, Orange County, California**; consultant to Reynolds Environmental Group, Newport Beach, I co-authored "Vegetation and wildlife study of Ronald W. Caspers Regional Park", a 41-page inventory and analysis in riparian and coastal sage scrub habitats.

March 1976 to July 1976: Compiled an **inventory of 152 species of vascular plants from Madrona Marsh**; prepared a checklist, map of the vegetation, and report that were published by the city of Torrance, Parks and Recreation Department, funded by the Los Angeles chapter of the Audubon Society and Friends of Madrona Marsh.

August 1975 to September 1975: **Biologist at China Lake Naval Weapons Center**. I organized a team of 7 field scientists and took inventories of plants, birds, and mammals in upper desert habitat; assessed the effects of vehicular tracking on vegetation; our results were incorporated in the Bold Eagle 1976 report.

Zemba Resume (continued)

1974 to 1977: **Investigations for my Master's thesis** entitled "The feeding habits of the Chukar Partridge, Alectoris chukar, in the Argus and Coso Mountains of California" (77 pages). I examined plant food availability and selection by Chukar; 220 species of plants were identified from 132 crops.

SELECTED MEMBERSHIP SOCIETY ACTIVITIES AND AWARDS

I organized and chaired a special session of the Southern California Academy of Sciences 2007 Annual Meeting on the Hydrology and Aquatic Life of the Santa Ana River, presenting one of 10 papers.

I gave a presentation at the California Invasive Plant Council Meeting in 2007 and received a special award for "exceptional initiative in invasive plant management and the protection of California ecosystems".

I accepted the U. S. Fish and Wildlife Service's National Wetlands Conservation Award for 2003 for the OCWD and SAWA in national recognition of the significance of our resource management success.

Wilson Ornithological Society's Conservation Committee member with a small group of other Rallid experts. We issued a statement on the conservation and management of North American Rallids, presented it in August 1987 at the annual meetings along with invited papers (one by me), and published it in the Wilson Bulletin.

I chaired the session on endangered species at the 1983 meetings of the western section of the Wildlife Society and was awarded second place for the Nelson-Hooper Award competition for my presentation on Clapper Rails. I won the award for best technical presentation at the 1992 Western Section Meeting of The Wildlife Society. Innumerable such presentations since.

I received a monetary and Special Achievement Award from the Fish and Wildlife Service for my work on the Santa Margarita River Project in 1983 and each year since 1987 for my work on a variety of projects and annually for overall performance since becoming a supervisor in 1990.

SELECTED PUBLICATIONS

Mispagel, M. E., and R. Zemba. 1976. Effects of military maneuvers on Mohave Desert vegetation. So. Cal. Academy of Sciences, Abstracts of Annual Meetings. 44 pp.

Zemba, R. 1976. Vascular plants of Madrona Marsh In Madrona Marsh Wildlife Habitat Study. Spec. Public., City of Torrance, Calif. 16pp.

Zemba, R., C. Gall, D. Kruska, and P. Lobnitz. 1979. An inventory of the vascular plants and small mammals of the Coso Hot Springs Area of Inyo County, California. Naval Weapons Center, China Lake, Calif. Admin. Public. no. 202. 154pp.

Zemba, R., and C. Gall. 1980. Observations on Mohave Ground Squirrels, Spermophilus mohavensis, in Inyo County, California. Jour. Mammal. 61(2): 347 - 350.

Zemba, R., and B. W. Massey. 1981. A census of the Light-footed Clapper Rail in California. West. Birds 12: 87 - 99.

_____. 1983. The Light-footed Clapper Rail: distribution, nesting strategies, and management. Cal-Neva Wildlife Trans. 1983: 97 - 103.

_____. 1983. To catch a Clapper Rail -- twice. No. American Bird Bander 8: 144 - 148.

Zemba Resume (continued)

- Massey, B. W., R. Zemba, and P. D. Jorgensen. 1984. Nesting habitat of the Light-footed Clapper Rail in Southern California. *J. Field Ornith.* 55(1): 67 - 80.
- Zemba, R., and K. J. Kramer. 1984. The known limited distribution and unknown future of Santa Ana River Woolly-star (*Eriastrum*). *Crossosoma* 10(5): 1-8.
- Zemba, R., and B. W. Massey. 1985. Function of a rail "mystery" call. *Auk* 102(1): 179 - 180.
- _____. 1985. Distribution of the Light-footed Clapper Rail in California, 1980 - 1984. *Amer. Birds* 39(2): 135 - 137.
- Zemba, R., J. M. Fancher, C. S. Nordby, and R. J. Bransfield. 1985. Intermarsh movements by Light-footed Clapper Rails indicated in part through regular censusing. *Calif. Fish and Game* 71(3): 164 - 171.
- Zemba, R., and K. J. Kramer. 1985. The status of the Santa Ana River Woolly-star. *Fremontia* 13(3): 19 - 20.
- Massey, B. W., and R. Zemba. 1987. Vocalizations of the Light-footed Clapper Rail. *J. Field Ornith.* 58(1): 32 - 40.
- Zemba, R., and B. W. Massey. 1987. Seasonality of vocalizations by Light-footed Clapper Rails. *J. Field Ornith.* 58(1): 41 - 48.
- Eddleman, W.R., F.L. Knopf, B. Meanly, F.A. Reid, and R. Zemba. 1988. Conservation of North American Rallids. *Wilson Bull.* 100(3): 458-475.
- Zemba R., and J.M. Fancher. 1988. Foraging behavior and foods of the Light-footed Clapper Rail. *Condor* 90: 959-962.
- Zemba R., K.J. Kramer, R.J. Bransfield, and N. Gilbert. 1988. A survey of Belding's Savannah Sparrows in California. *Amer. Birds* 42(5): 1233-1236.
- Zemba, R., B. W. Massey, and J. M. Fancher. 1989. Movements and activity patterns of the Light-footed Clapper Rail. *J. Wildl. Manage.* 53(1):39-42.
- Wiley, J.W., and R. Zemba. 1989. Concern grows for Light-footed Clapper Rail. Fish and Wildlife Service, Endangered Spp. Tech. Bull. 14(3): 6-7.
- Foerster, K.S., and R. Zemba. 1990. Sabertooth cat, California grizzly, clapper rail? *Tideline*, San Francisco Bay NWR, Spring Issue, page 1.
- Zemba, R. 1990. Riparian habitat and breeding birds along the Santa Margarita and Santa Ana Rivers of Southern California. In *Endangered Plant Communities of Southern California*, Special Publ. No 3, Southern CA Botanists, pp. 98 - 114.
- Zemba, R. 1991. The Light-footed Clapper Rail, secretive denizen of the lower marsh shadows. *Western Tanager* 57(8): 1-3.
- Zemba, R. 1993. Status and management of Light-footed Clapper Rails in coastal southern California. 1992 *Transactions, West. Sect. Wildl. Soc.* 28: 1-5.

Zemal Resume (continued)

Zemal, R. 1993. The need for corridors between coastal wetlands and uplands in southern California, in Jon Keeley, ed., Interface between ecology and land development in California, So. CA Academy of Sciences, pp. 205-208.

Massey, B.M. and R. Zemal. 2002. Guide to Birds of the Salton Sea. Arizona-Sonora Desert Museum. 300 pp.

Zemal, R., J. Pike, and L. Hays. 2001. The Least Bell's Vireo and Southwestern Willow Flycatchers in Prado Basin of the Santa Ana River Watershed. P 35 – 48 in P.M. Faber, ed., California Riparian Systems. Publ. Riparian Habitat Joint Venture.

Zemal, R. 2007. Chipping away at Arundo. SW Hydrology, Nov/Dec 2007; pp 24 – 33.

I started breeding bird censuses and winter bird studies in 1974 and usually published the results in the journal American Birds.

Breeding Bird Censuses

Completed alone or participated as organizer and chief observer in 14 studies in different habitat types including: Joshua tree-black bush-bladder sage association. 1974. 28(6): 1043; Creekside willow woodland. 1982. 36(1): 87-88; Palo verde-cheesebush-chuparosa desert wash. 1982. 36(1): 95-96;

Narrow creekside mixed riparian woodland. 1984. 38(1):101-102; Willow woodland with dense riparian understory. 1984. 38(1):106-107; Chaparral with canyon-bottom woodland. 1984. 38(1): 117 - 118; Coastal sage scrub - live oaks. 1984. 38(1): 118, among many others.

Winter Bird Counts

Completed 16 studies as principal observer or alone and another 12 as organizer and compiler in a variety of habitats including: Disturbed coastal salt marsh. 1974. 28(3): 721; Creosotebush scrub on southern Sierra alluvium. 1979. 33(1): 32; Saltbush scrub. 1979. 33(1): 32-33; Creosotebush scrub. 1979. 33(1): 33; Joshua tree woodland. 1979. 33(1): 33-34; High desert spring. 1979. 33(1): 34. Desert scrub. 1979. 33(1): 34; High desert hot springs. 1979. 33(1): 34 - 35; High desert reservoir and shoreline. 1979. 33(1): 35; Creekside willow woodland. 1982. 36(1): 37-38; Desert floodplain. 1982. 36(1): 40; Palo verde-chuparosa desert wash. 1982. 36(1): 40-41; Narrow creekside band of mixed riparian woodland. 1984. 36(1): 48; Willow woodland with open ponded water. 1984. 38(1): 51-52; Coastal sage scrub with scattered live oaks. 1984. 38(1): 52; Chaparral with a narrow band of canyon-bottom woodland. 1984. 38(1): 52-53; among many others.

I have written annual and interim reports on status, distribution, and recovery efforts for the endangered Light-footed Clapper Rail since 1979 (see www.clapperrail.com); reports on the status and distribution of the Belding's Savannah Sparrow in California every 5 years since 1986; and annual reports on the status and distribution of the willow flycatcher and least Bell's vireo since 2000.