
Michael Bradbury
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Education

- 1986 to 1988. Post-graduate study in Environmental Biology with 30 units of graduate courses in Ecology, CSU Fresno. Certification, Wildlife Biology, The Wildlife Society
- 1986 to 1988. Secondary Teaching Credential, Life Science. CSU Fresno.
- 1979 to 1983. Bachelor of Arts Degree in Environmental Biology with additional emphasis in Mathematics and Business. CSU Fresno.

Professional ExperienceOctober 2013 to present

Program Manager II California WaterFix - Department of Water Resources Executive Program Office
Description: Program Manager for the California WaterFix permitting, overseeing the development of large-scale project permits, including Clean Water Act, Section 404 (wetlands); Rivers and Harbors Act, Section 14 (408, levees); Endangered Species Act Section 7 Biological Opinion; CESA Section 2018 Incidental Take Permit; National Historic Preservation Act Section 106 compliance; 1602 Streambed Alteration Agreement; and EIR/EIS development.

January 1999 to October 2013

Senior Environmental Scientist, specialist - Department of Water Resources Division of Environmental Services

Description: Environmental Compliance Coordinator on large-scale maintenance and construction projects for various DWR Divisions and cooperating agencies (Army Corps of Engineers, Bureau of Reclamation). Coordinate the activities of staff in the development of accurate impact analyses and permit requisitions; recommend, evaluate and negotiate mitigation; coordinate mitigation activities and pre- and post-project monitoring; and insure Department environmental compliance. Develop and implement research on project-affected species. Coordinate post-project restoration activities and make recommendations for purchase, restoration and management of mitigation and other project lands. Recipient of permits to trap and handle most California raptors; endangered fairy shrimp; giant, Stephen and Tipton kangaroo rats; and blunt-nosed leopard lizards.

December 2001 to present

Natomas Basin Conservancy Board of Directors, Vice President and past Chief Financial Officer.

Description: Appointed by the City of Sacramento to provide professional guidance in the implementation of the Habitat Conservation Plan mitigation measures adopted for Natomas Basin. Advised on appropriateness of purchases and habitat management for almost 4000 acres designated for giant garter snakes and Swainson's hawk. Insured that the HCP Implementation Plan is carried out as legally required, and to maximize the biological benefit to covered species.

August 2002 to December 2002

Ornithological Science Advisor on Solano County Water Agency's HCP Science Advisory Panel

Description: Worked in cooperation with other species, hydrological, and ecological experts to develop

ecology- based recommendations for Solano County's Habitat Conservation Plan. The resulting report is to be used to develop sound conservation policies to insure species and ecological preservation within the Plan area.

July 1995 to July 2005

Wildlife Biologist - Cooperative Research North Slope Borough, Arctic Research Facility.

Description: For five summer survey periods, assisted the project manager with studies vital to the subsistence hunting rights of native Alaskans. Studies included nesting abundance and ecology of eiders, geese and other avian species on the barrier islands in Northwest Alaska; abundance of nesting eiders in North America, based on migration counts in Barrow, AL.; peregrine falcon, gyrfalcon, and Canada goose nesting ecology and abundance on the Kukpowruk River in Northwest Alaska.

January 1992 to January 1999

Environmental Specialist - Department of Water Resources Division of Environmental Services

Description: Principal investigator and/or leadperson on a number of programs and projects including the following. Principal investigator and leadperson on a Swainson's hawk protection program; duties include surveying for, monitoring, and developing mitigation for Swainson's hawks; lead investigator on the Swainson's hawk migration study (under the Swainson's Hawk Technical Advisory Committee). Principal investigator, leadperson, and technical expert on a range study of sensitive species (terrestrial) within two field divisions; co-developer of the associated Biological Assessment for a 100-year Section 7 permit. Principal investigator in the development of Environmental Clearances for maintenance, exploratory, and encroachment activities. Principal Investigator for the Crop Shift Project's mitigation program. Principal Investigator and leadperson on the Fiber Optic Cable Project relative to kit fox protection and compliance with USFWS. Principal investigator for a terrestrial vertebrate range study in the Southern San Joaquin Valley, and assisted in the development of the associated Habitat Conservation Plan for the southern portion of the California Aqueduct. Principal investigator on a biological assessment for the Fiber Optic Project along DWR's South Bay Aqueduct relative to impacts on kit fox. Principal investigator and lead person in the design and implementation of an endangered species range study associated with northern DWR facilities. Developed the Water Bank Crop Rotation Biological Assessment; lead person in the development and implementation of the Wildlife Monitoring Program for that project. Aided in the development of numerous Section 7/Section 10A permit applications for maintenance activities associated with DWR's aqueducts.

September 1989 to December 1991.

Staff Biologist, Field Coordinator - San Joaquin Kit Fox Project. California Energy Commission

Description: Life history study of the San Joaquin kit fox which included a comparison of fox populations in and out of oil-developed areas through home range and movement analysis, den characteristics, food analysis, and population genetics; an evaluation of current census techniques; and monitoring and evaluating current mitigation requirements. Co-authored one publication. Sub-permitted to handle San Joaquin kit fox.

April 1990 to July 1990.

Sub-contractor, Bio-Specialist; Fort Hunter-Liggett Kit Fox Project. Jones & Stokes Consulting Firm

Description: Conducted study to analyze the effects of using artillery near kit foxes on a practice firing range.

April 1986 to February 1987.

Environmental Biologist, Environmental Impact Assessment, Dinkey Creek Project.

Kings River Conservation District

Description: Collection of base-line data to assess the cumulative impacts of a potential reservoir and develop mitigation measures relevant to that project. Personal responsibilities included: collection and banding of small passerines to assess impacts on populations, to assess impacts caused by introduced competitors (i.e. cowbirds), to assess impacts on nesting success of Dippers (*Cinclus mexicanus*), as with other passerines (Willow Flycatchers, Yellow Warblers, etc.); raptor and owl census through intense searches, raptor and owl calls, and incidental observations; population estimates of mammals with use of small mammal trap lines, spotlight surveys, and scent stations; detection of various herptiles of concern through incidental searches and warming pads; population analysis of fisheries through mark-recapture (using electroshock); and meadow and woodland description and impact analysis using vegetation transects, densiometer transects for percent canopy, and nearest-neighbor techniques for determining forest density, composition and tree characteristics.

January 1986 to May 1986.

Contract Biologist, Environmental Impact Assessment, Quinto Ranch Missile Fuel Factory. CSU Fresno Foundation, CSUF Biology Department

Description: Participated in study that included a preliminary impact assessment of the area effected by production, transportation, and testing of missile fuel. Responsibilities included a general inventory of all wildlife by small mammal trapping, scent stations, spotlight surveys, pond surveys for waterfowl, roost surveys for bald eagles, incidental birding, bird calls, feed stations, terrestrial searches and pond surveys for herptiles of concern, and aerial searches for deer, pigs, raptors, and kit fox dens. Resulting data was compiled into relative abundance charts, with analysis of important habitat losses. Co-author of published report.

February 1985 to November 1985.

Graduate Student Assistant - Biologist, Los Banos Grande Reservoir Environmental Impact Assessment. California Department of Fish and Game.

Description: The Environmental Impact Report of the Los Banos Creek area for the potential development of the Los Banos Grandes Reservoir, an off-line storage facility with a million acre-foot capacity. Responsibilities included surveying for all herptiles and bird species with emphasis on species of special concern. Techniques included riparian transects, variable circular plots, three minute bird counts, owl and raptor surveys, pond surveys for waterfowl, electro-fishing to inventory fish species, terrestrial searches for herptiles, seine-netting for tiger salamanders, red- and yellow-legged frogs and fish species; aided with the kit fox study in trapping, handling, and locating foxes using scent stations, spotlighting, and self-designed auto-night photography unit. Reports included relative abundance charts, impact assessment, and mitigation.

Technical Panels/Committees/Boards

Greater Sandhill Crane Technical Advisory Committee

The Natomas Basin Conservancy, Board of Directors, Vice President

Swainson's Hawk Technical Advisory Committee

Bank Swallow Technical Advisory Committee

Riparian Mammals Technical Group
San Joaquin Kit Fox Protection and Conservation Team
Greater Sandhill Crane Recovery Team
Burrowing Owl Consortium
Ad hoc member of the Yellow-billed Cuckoo Working Group
Solano County Water Agency Habitat Conservation Plan Expert Science Panel
Bay Delta Authority Science Proposal Review Panel

Publications

- Tsao, D.C., R. E. Melcer, Jr. and M. Bradbury. 2015. Distribution and Habitat Associations of California Black Rail (*Laterallus jamaicensis coturniculus*) in the Sacramento-San Joaquin Delta. *San Francisco Estuary & Watershed Science*, 13(4).
- Hull J.M., R. Anderson, M. Bradbury, J. Estep, H. B. Ernest. 2008. Population structure and genetic diversity in Swainson's Hawks (*Buteo swainsoni*), implications for conservation. *Conservation Genetics* 9:305-316.
- Spiegel, L. K. and M. Bradbury. 1992. Home range characteristics of the San Joaquin kit fox in western Kern County, California. *Transactions of the Western Section Wildlife Society* 28:83-92.

Research

- Swainson's Hawk migration and wintering ecology.
Swainson's Hawk nest ecology.
Swainson's Hawk population status.
Swainson's Hawk life history and behavior in the Sacramento/San Joaquin Delta.
Protected avian species' occurrence in the Sacramento/San Joaquin Delta.

Invited Speaker/Presenter/Trainer

- American Ornithological Union, North American Conference, New Orleans, LA, 2002.
Raptor Research Foundation Annual Meeting, Ogden, UT, 1998.
UC Davis, Bay Area Conservation Biology Symposium, Davis, CA, 2004.
The Wildlife Society National Conference, Albuquerque, NM, 1994.
The Wildlife Society, Western Section Conferences, CA (3), 1992, 1998, 1999.
The Wildlife Society, North Coast Chapter, Falconiformes of Northern California, Arcata, CA, 2000.
Interagency Ecological Program Annual Conference, Monterey, CA, 1997.
Central Valley Birding Symposium, Stockton, CA, 1998.
Department of Water Resources and The Wildlife Society, Swainson's Hawks of the Central Valley, 8 hour classroom and 24 hour field course, solo presenter, Sacramento, CA 2008, 2012, 2014.
Swainson's Hawk Technical Advisory Committee, Swainson's Hawk Workshop, Sacramento, CA, 2000.
Department of Water Resources, Environmental Scientists Conferences (7), CA, 1992-2013.
Audubon Society, Sacramento and Yolo Chapter meetings, CA (4), 1997-2009.
Friends of the Swainson's Hawk, Annual Public Education Events, Sacramento CA, 2006 to 2013.
Effie Yeaw Nature Center, Children's Education Event, Sacramento, CA, 2005
California Association of Professional Scientists, State Scientist Day, Sacramento, CA, 1997.

Financial Management

Oversee multiple consultant contracts for biological and legal services.

Procured \$200,000 in research funds for Swainson's Hawk research for the Swainson's Hawk Technical Advisory Committee. Manage contracts for that research.

Managed a \$550,000 contract with CSU Stanislaus, Endangered Species Recovery Program, for Riparian Brush Rabbit and Riparian Woodrat research.

Oversaw the management of The Natomas Basin Conservancy's assets of \$60,000,000, including endowment fund of \$13,000,000, and multimillion dollar annual working budget.

Teaching Experience

1995 to 2005. Employee Environmental Liability, Department of Water Resources.

1987 to 1989. Middle and High School Biology, Physics, and Math. Fresno and Madera USD.

1986 to 1988. Graduate Teaching Assistant, Biology. CSU Fresno.

Professional Memberships

The Wildlife Society: Past President of the Sacramento-Shasta Chapter, Past Newsletter Editor for the Western Section. Certified Wildlife Biologist.

Member of the Raptor Research Foundation

Member of the American Ornithologist's Union