Ibis Environmental Inc. San Rafael, California, US, 94901 Phone: 415-203-4308 Fax: 415-453-7601 Email: Sue@ibisenvironmental.com

Education

1979	M.A.	Wildlife Biology	California State University	Sonoma, California			
1971	B.A.	Biology	California State University	San Francisco, California			
Professional Employment							

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1995-Present	Principal/Owner	Ibis Environmental Inc.	San Rafael, California
1983-1994	Wildlife Biologist	BioSystems Analysis, Inc.	Tiburon, California
1979-1983	Wildlife Biologist	California Fish and Wildlife	Sacramento, California

Synopsis of Experience

Wildlife Inventories and Monitoring:

A large portion of my work has involved field-intensive projects focusing on the inventory and monitoring of sensitive species. My main focus has been on rare mammal studies, in particular the endangered San Joaquin kit fox. Besides numerous field investigations of kit fox, I also have assisted United States Fish and Wildlife Service in developing appropriate survey methods for this species and assisted in revising the recover plan. During my career I have gained extensive field experience with wildlife monitoring methods, including radio telemetry, and animal capture and restraint techniques. Specific field experience includes live-trapping for sensitive furbearers; telemetry on several fox species; remote camera and track station surveys for rare mammals; small mammal trapping surveys; capturing and banding birds; surveying for sensitive raptors species; and netting and seining for sensitive reptiles and amphibians.

Research Experience:

Previous research experience includes investigations of several taxa (raptors, carnivores, salamanders). I designed and managed multiple studies to assess the impacts of windfarm development on raptor populations, including one that has received worldwide attention. For the past 9 years I have been on a scientific review committee to evaluate ongoing monitoring studies of avian mortality at California's largest wind energy site. During my tenure with the California Department of Fish and Wildlife, I managed a multi-year study of the San Joaquin kit fox which involved trapping and telemetry monitoring. I have also published three professional papers on this species. In addition, I designed and implemented a five-year study on the endangered California tiger salamander to determine movement patterns and migration distances that has recently been published.

International Wildlife Studies:

I helped develop natural resource management plans for seven Navy bases on Guam in the South Pacific. Management plans included habitat conservation guidelines, feral animal control programs, wildlife population monitoring, and endangered species habitat management. As part of a federal Biological Assessment, I conducted field surveys for the rare Puerto Rican boa constrictor. In addition, I assisted Dr. Rodney Jackson in his efforts to find additional populations of snow leopard in remote sections of the Himalayas in Nepal.

Peer-Reviewed Publications

- **Orloff, S. G.** 2011. Movement patterns and migration distances in an upland population of California tiger salamanders (*Ambystoma californiense*). Herpetological Conservation and Biology. 6(2):266-276.
- Orloff, S., A. Flannery, and K. Belt. 1993. Identification of San Joaquin kit fox (*Vulpes macrotis mutica*) tracks on aluminum tracking stations. California Fish and Game. 79(2):45-53.
- Orloff, S. 1988. Present distribution of ringtails in California. California Fish and Game 74(4): 196-202.
- **Orloff, S.**, L. Spiegel and F. Hall. 1986. Distribution and habitat requirements of the San Joaquin kit fox in the northern extreme of their range. Trans. Western Section Wildl. Soc. 22:60-70.

Other Publications

- Orloff, S. 2002. "Medium to Large Mammals", In Wildlife and Rare Plant Ecology of Eastern Merced County's Vernal Pool Grasslands" Vollmar J.E. (eds.).
- **Contributing Author**: BioSystems Analysis Inc. 1990. Natural Resources Management Plan, Naval Station, Guam. Prepared for Department of the Navy Pacific Division Naval Facilities Engineering Command. Pearl Harbor, HI.
- **Orloff, S.** 1992. San Joaquin kit fox survey techniques. Published in conference proceedings, Endangered and Sensitive Species of the San Joaquin Valley. Published by California Energy Commission, CA.
- **Orloff, S.** and A. Flannery. 1992. Wind turbine effects on avian activity, habitat use, and mortality in Altamont Pass and Solano County wind resource areas. Prepared for California Energy Commission, CA.
- Garcia, J., J. Pratt, G. Ahlborn, and S. Orloff. 1984. A method for assessing the value of stream corridors to fish and wildlife resources. BioSystems Analysis report to U.S. Fish and Wildlife Service, Oregon.

Book Chapters

Sterner D., S. Orloff, and L. Spiegel, "Wind turbine collision research in the United States," In Birds and Wind Farms, Risk Assessment and Mitigation, edited by M. de Lucas, G. F. E. Janss, and M. Ferrer, Quercus, London, England, 2007. ch 4. pp. 81-100.

Scientific Advisory Committees and Invited Presentations

One of five members of a Scientific Review Committee for the Altamont Pass Wind Resource Area avian monitoring program, 2005-present.

Member of an advisory group to provide guidance in formulating and implementing components of two Habitat Conservation Plans (HCP) in California, 1998-2000.

Participated in the revision of the endangered San Joaquin kit fox recovery plan for United States Fish and Wildlife Service, 1997

The Effects of Wind Turbine Development on Habitat Use, Activity Patterns, and Mortality at the Altamont Pass, presented at the International Workshop on Avian Interactions with Utility Structures, Miami, 1992.

San Joaquin Kit Fox Survey Techniques, presented at a workshop on survey methodologies for endangered species of the San Joaquin Valley, Taft, 1990.

San Joaquin Kit Fox Survey Techniques, presented at the conference on Endangered Species of the San Joaquin Valley, Bakersfield, 1988.

Distribution and Habitat Requirements of the San Joaquin Kit Fox in the Northern Extreme of Their Range, presented at the Western Section of Wildlife Society conference, 1986.

Stream Corridor Inventory and Evaluation System, presented to the 1984 Annual Meeting of the Ecological Society of America, Minneapolis, Minnesota.

Certifications and Professional Memberships (Past and Present)

Certified Wildlife Biologist (National Wildlife Society) Certified PADI Scuba Diver Member, The Wildlife Society Member, American Society of Mammalogists