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Author: Beissinger, Steven R.

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STEVEN R. BEISSINGER

Steven R. Beissinger is a professor of Conservation Biology and the A. Starker Leopold Chair in Wildlife Biology at the University of California (UC), Berkeley. He began his career at Miami University in Ohio, where his master's thesis was a study of the effects of urbanization on avian communities. He developed an early interest in tropical ecology during a field study of the foraging ecology of Snail Kites (Rostrhamus sociabilis) in Guyana. He received a Ph.D. from the University of Michigan for his research in the Florida Everglades on the peculiar mating system of kites, unusual among birds in its ambisexual mate desertion. Beissinger continued his research on kites in Venezuela through a National Science Foundation Postdoctoral Fellowship at the National Zoological Park in Washington, D.C., and later in a faculty appointment at Yale University. During his field work in the llanos, he noticed a local population of Green-rumped Parrotlets (Forpus passerinus) breeding in the hollow fenceposts in cattle pastures at Hato Masaguaral, a private ranch that was an early field site for the Smithsonian Institution. Beissinger set up nest boxes and started a field project that eventually grew into one of the longest-term

population studies of a tropical bird, with detailed research on behavior, reproductive biology, and demography. His interest in tropical birds has included the avifauna of Puerto Rico, where he studied Pearly-eyed Thrashers (*Margarops fuscatus*) nesting along an elevational gradient. In his current appointment as a faculty member at UC Berkeley and the Museum of Vertebrate Zoology (MVZ), Beissinger has developed projects on birds of conservation concern in the state, including Marbled Murrelets (*Brachyramphus marmoratus*) breeding in old-growth redwoods, Black Rails (*Laterallus jamaicensis*) in inland wetlands, and subspecies of Song Sparrows (*Melospiza melodia*) endemic to coastal salt marshes.

Beissinger has made outstanding research contributions to three major areas of ornithology. In behavioral ecology, his studies of reproductive strategies of birds have helped to understand mating patterns and maintenance of social monogamy, the links between incubation behavior and hatching asynchrony, and the ecological factors leading to mate desertion. Much of his research has been based on experimental protocols, including difficult



Steven R. Beissinger at the summit of Mount Lassen in northern California, August 2008. (Photograph by Whendee Silver.)

manipulations of hatching asynchrony under field conditions. In evolutionary ecology, Beissinger's long-term population studies have been critical for understanding the demography of tropical birds and for developing population models that identify determinants of population growth, including an intriguing new model for analyzing the causes of sex-ratio bias. One of his most novel lines of inquiry has been to investigate environmental constraints on egg-laying behavior of birds, including the effects of ambient temperature in hot, humid climates and the effects of pathogenic microbes on undeveloped eggs. This research has led to new insights into the causes of latitudinal variation in avian life-history traits, a major unanswered question in evolutionary ecology. In conservation biology, Beissinger has produced a series of important review articles on the use of population models in conservation, and his research papers have applied these models to recovery efforts for California Condors (Gymnogyps californianus), Snail Kites, Marbled Murrelets, Puerto Rican Parrots (Amazona vittata), sea turtles, and African Wild Dogs (Lycaon pictus). One long-lasting contribution has been an international symposium that he organized in San Diego. The symposium resulted in a book that he edited, Population Viability Analysis, which summarized the state of the field and catalyzed further research. Conservation has always been a central theme in Beissinger's field research, and his recent studies of birds in California have developed new demographic and genetic approaches for investigating source-sink dynamics among spatially structured populations. Innovative use of historical specimens and distributional data have allowed Beissinger and his colleagues at the MVZ to examine trophic changes in seabirds associated with collapse of fisheries in the past century and the

effects of global climate change on the distributions of terrestrial vertebrates in California.

Beissinger's long-standing commitment to developing resources for conservation of birds in the Western Hemisphere has resulted in field projects that have trained more than 60 undergraduates, graduate students, and postdoctoral fellows. Beissinger has been a superb research advisor, giving the members of his lab the necessary mentorship, training, and encouragement for professional careers in ecology. He has provided opportunities for students in Latin America by teaching workshops in conservation biology and by organizing symposia at international meetings in Argentina, Mexico, Puerto Rico, and elsewhere. Beissinger was instrumental in helping to form and provide early leadership for the Association for Parrot Conservation. The association brought together scientists from Latin America and North America with the shared goal of developing objectives for parrot conservation, including position statements on trade, sustainable use, ecotourism, captive breeding, and reintroductions. At the same time, he was a member of the IUCN Species Survival Commission for Sustainable Utilization. As part of these conservation efforts, Beissinger twice provided expert testimony to committees of the U.S. House of Representatives in support of authorization of the Exotic Wild Bird Conservation Act, legislation aimed at conserving parrots and other wild birds affected by international trade.

In recognition of his contributions to ornithology and ecology, Beissinger has previously been honored by election as a Fellow of the American Ornithologists' Union (AOU) and the London Zoological Society, and by appointment to the Leopold Chair in Wildlife Biology at UC Berkeley. He has been a Plenary Speaker

at six national meetings, including an AOU meeting at the University of Illinois and the Neotropical Ornithological Congress held in Maturín, Venezuela. Beissinger has been active in the AOU throughout his career, with terms as an elected councilor, chair of the AOU Conservation Committee, and member of the AOU Awards Committee. He has also supported a range of professional societies that have a conservation mandate, including service on the boards of the Cooper Ornithological Society, the National Audubon Society, and the Society of Conservation Biology, Ecology, and Ecology Letters.

Beissinger is an active research scientist who continues to make important and novel contributions to our understanding of the ecology, behavior, and conservation of birds in the Western Hemisphere. His most recent work illustrates the depth of his scope, ranging from the effects of microbes and ambient conditions on egg viability and avian life histories to the effects of biased sex ratios on population dynamics. For his innovative contributions, outstanding research productivity, and long-standing dedication to conservation biology of birds in the Western Hemisphere, the AOU is pleased to award Steven R. Beissinger the William Brewster Memorial Award for 2010.

Award criteria.—The William Brewster Memorial Award consists of a medal and an honorarium provided through the endowed William Brewster Memorial Award of the American Ornithologists' Union. It is given to the author or co-authors (not previously so honored) of the most meritorious body of work on birds of the Western Hemisphere published during the 10 calendar years preceding a given AOU meeting.