

UC SANTA BARBARA

# THE *Current*

October 11, 2001

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## **UCSB RESEARCHER RECEIVES TOP ORNITHOLOGY AWARD**

Steve Rothstein, director of the Museum of Systematics and Ecology at the University of California, Santa Barbara and professor in the Department of Ecology, Evolution and Marine Biology (EEMB), recently received the Brewster Award for 2001, the highest honor bestowed by the American Ornithologists' Union.

"It's a very significant achievement that acknowledges his lifelong contributions to the field and one that shines a bright light on our department," said Mark Holmgren, associate director of the museum.

"Dr. Rothstein has contributed uniquely to ornithology with his stellar research in the behavioral ecology of birds," said Roger Nisbet, chair of the Department of EEMB at UCSB. "His most important work concerns the interactions between parasitic birds and their hosts, in particular the evolution of host defenses to brood parasitism."

In summary, for his detailed and perceptive contributions to the fields of behavioral ecology, evolution, and conservation of birds; his incisive and objective evaluations of the works of other researchers; and his contributions to educating and training young scientists, Dr. Rothstein was given the 2001 Brewster Award, according to the American Ornithologists' Union.

The award cited Rothstein's "novel, careful, and elegant experimental studies on parasitic egg rejection behavior. These studies revealed that most songbirds tested

could be classified as either acceptors or rejecters of Brown-headed Cowbird eggs. The lack of intermediate levels of rejection suggested that selection for parasite egg recognition must be very strong in hosts; once the behavioral mechanism needed to recognize and eject parasitic eggs evolved, it would be rapidly fixed in the population."

Rothstein's behavioral studies have expanded to include brood parasitism in related South American cowbird species and Old World cuckoos, and to detailed analyses of population trends, breeding ecology, dispersal, and vocalizations in the Brown-headed Cowbird.

"His contributions to the study of avian vocal behavior, in particular to our understanding of the behavioral and evolutionary significance of repertoires and dialects, have been exceptional," according to the citation.

"His comprehensive studies have revealed the relative importance of vocal learning, dominance interactions, and female choice in the origin and maintenance of dialects in the flight song of the Brown-headed Cowbird. Additionally, Rothstein developed an adjunct yet highly successful research program on dominance and status signaling in White-crowned Sparrows, conducted largely in his own backyard."

Recently, Rothstein has contributed to conservation programs involving endangered species that may be impacted by brood parasitism.

He has provided opinions about the role that Brown-headed Cowbird parasitism plays in population declines and endangerment of North American songbirds. He has assumed the lead in performing and evaluating the research required to discover the impacts of cowbirds on Western species such as Bell's Vireos and Willow Flycatchers, and in convening relevant researchers for needed dialogues concerning a diversity of management options.

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The University of California, Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Our academic community of faculty, students, and staff is characterized by a culture of interdisciplinary collaboration that is responsive to the needs of our multicultural and global society. All of this takes place within a living and learning environment like no other, as we

draw inspiration from the beauty and resources of our extraordinary location at the edge of the Pacific Ocean.