

## Ned K. Johnson Young Investigator Award, 2007

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Source: The Auk, 125(1): 241-242

Published By: American Ornithological Society

URL: https://doi.org/10.1525/auk.2008.125.1.241

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avian tree of life with molecular markers and then mapping other biological characters such as life history, behavior, geographic distribution, and ecology on the tree to understand their evolution. Apart from studying how biodiversity has evolved, Baker is very active in conservation of migratory shorebirds, which are declining around the world. In another landmark paper, he demonstrated that the rapid population decline in Red Knots (*Calidris canutus*) was caused by overfishing of horseshoe crabs and their eggs in Delaware Bay, thereby preventing most birds from refueling properly and lowering their annual survival in the Arctic breeding grounds. Along with Professor Theunis Piersma, Baker is cofounder of the Global Flyway Network, which provides an early-warning service for identifying migratory shorebirds at risk.

Throughout his career, Baker's many publications have been aimed at general audiences and have resulted in fundamental contributions to our knowledge of the evolution of birds at multiple taxonomic tiers and of evolutionary processes in general. For his outstanding and influential work in avian molecular evolution, the AOU presents Allan J. Baker with the William Brewster Memorial Award for 2007.

Award criteria.—The William Brewster Memorial Award consists of a medal and an honorarium provided through the endowed William Brewster Memorial Fund of the American Ornithologists' Union. It is given annually 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.

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## NED K. JOHNSON YOUNG INVESTIGATOR AWARD, 2007:

LYNN BLOXOM MARTIN II



Lynn Bloxom Martin II, November 2007. (Photograph by Jason Rohr.)

Lynn Bloxom (Marty) Martin II has significantly contributed to progress in the field of eco-immunology, which is currently proving its explanatory power in many aspects of biology. Martin studies the physiological mechanisms that underlie life histories in free-living vertebrates, particularly birds. He combines field work with laboratory experiments, but his emphasis is always on understanding organismal responses in natural settings.

Specifically, Martin is interested in understanding the connection between the immune system, energy expenditure, and survival of birds (and mammals). Such an approach is novel and has high potential in both basic and applied sciences.

Martin's career has already been highly productive. He began his master's thesis as a naturalist at the Virginia Commonwealth University (VCU), studying woodpecker abundance and

distribution in a managed hardwood forest. His emphasis was on what sorts of dead trees were preferred for foraging and excavating by eastern North American woodpeckers. Subsequently, he joined Martin Wikelski's lab in the Department of Ecology and Evolutionary Biology at Princeton University, where he received his Ph.D. for a study of immune adaptations of temperate and tropical House Sparrows (*Passer domesticus*). He then joined Randy Nelson's lab in the Department of Psychology at The Ohio State University (OSU), where he continued to study immune–life history connections in rodents. In fall 2007, Martin started his own research group as an assistant professor in the Division of Integrative Biology, Department of Biology, at the University of South Florida in Tampa. His current research involves identification of the physiological traits of good invasive species and the influence of stressors on immunity in wild animals.

Martin's publications are cornerstones for the new scientific field of eco-immunology. He and a small cohort of young colleagues across the globe have started to conduct research on comparative immunology in ecological contexts, research that essentially did not exist 20 years ago because many considered it unachievable. Martin's seminal contributions, thus far, are findings that (1) immune responses can be as expensive energetically as breeding, (2) immune defenses differ in predictable ways between ecologically distinct populations, (3) immune differences vary over time depending on environmental conditions, and (4) immunocompetence is not a monolithic trait that can be accurately characterized by one assay. Despite the complexity of the immune

system, Martin's research suggests that general patterns of immune responses emerge when individuals, species, and populations are compared in natural settings, and that immune responses are tuned to individual life histories.

Martin is also a superb and dedicated teacher. His ideal is to combine mentorship with research so that students can actively participate in exciting new discoveries. He has received several teaching awards and mentored numerous undergraduate theses at VCU, Princeton, and OSU. Several scientific papers were published from these studies that included undergraduate students. Martin is both challenging and supportive to students, a style highly praised by the students he has taught. The AOU is proud to award Lynn Bloxom Martin II the Ned K. Johnson Young Investigator Award for 2007.

Award criteria.—The Ned K. Johnson Young Investigator Award recognizes outstanding and promising work by a researcher early in his or her career in any field of ornithology. Candidates excel in research and show distinct promise for leadership in ornithology within and beyond North America. They must have received their doctorate within five years of being nominated, must not have received the award previously, and must be a member of the AOU at the time of nomination. The award consists of a framed certificate and an honorarium provided through a gift to the endowment of the American Ornithologists' Union honoring Ned K. Johnson, a lifelong supporter and former President (1996–1998) of the AOU. This award, presented for the first time in 2005, is funded by the Ned K. Johnson Fund of the AOU.

The Auk 125(1):242–244, 2008
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## **AOU CONSERVATION AWARD, 2007:**

CARL E. BOCK AND JANE H. BOCK

The AOU Conservation Award was established in 2005 to honor those who have made extraordinary scientific contributions to the conservation, restoration, or preservation of birds and their habitats. No group of North American birds is more threatened by degradation and loss of habitat than that associated with grasslands, and no two individuals have contributed more to the conservation and understanding of their plight in the American West than Carl and Jane Bock. Through 40 years of field research, extending from the high plains of eastern Montana through the savannas of southeastern Arizona, the Bocks have made major contributions to our understanding of the habitat and landscape requirements of grassland birds. Their published works have provided critical insights into the impacts that humans have had on western grasslands and their avifaunas, including the results of fire suppression, livestock grazing, introduction of non-native vegetation, and the effects of suburban and exurban development. They have contributed to the conservation and protection of grassland habitats through their involvement with organizations and land-management agencies. Through writing and by mentoring scores of graduate and undergraduate students, they have helped to inspire future generations of ornithologists and the general public to make conserving grassland birds and their habitats a priority issue.

Jane and Carl Bock graduated from the University of California at Berkeley, where Jane studied plant ecology with Herbert Baker and Carl worked in the Museum of Vertebrate Zoology as Alden H. Miller's last graduate student. The eminent wildlife biologist A. Starker Leopold played a critical role in leading the Bocks to careers in conservation biology, encouraging them to purposefully blur the distinction between basic and applied research at a time when this was not the norm. Leopold also guided the Bocks into their first collaborative research project—a pioneering study of the avian and vegetative responses to stand-replacement fire in the Sierra Nevada. Following graduate school, the Bocks joined the faculty of ecology and evolutionary biology at the University of Colorado at Boulder in 1968, where they have taught and conducted field research for their entire academic careers. Jane retired in 1999, and Carl in 2005, but both remain active field scientists.

A seminal and serendipitous event in the Bocks' life was their discovery in 1972 of an 8000-acre property in the grasslands of