

The COS often leads the way in new directions and other societies follow. Eileen's past experience working with the board and officers and her historical perspective of the issues and options facing the COS (and all ornithological societies) will be a valuable asset as the board tackles present and future challenges.

Carol Vleck is a Professor in the Department of Ecology, Evolution and Organismal Biology, Iowa State University. She received her undergraduate degree from Pomona College in Claremont, California, a Master's degree from the University of California, Los Angeles, working with Nicholas Collias and her Ph.D. degree from UCLA under the direction of George Bartholomew and Tom Howell. She did postdoctoral training with Hermann Rahn, Don Farner, and Roger Seymour. She has published 65 articles in scientific journals, including the *Condor*, on topics ranging from embryonic metabolism and incubation behavior to hormonal control of cooperative breeding behavior. She has worked on a variety of species including Harris' Hawk, Adélie Penguin, Mexican Jay, Zebra Finch, Leach's Storm-Petrel, and currently is working on the biology of aging in the Tree Swallow. She has served as chair of the COS Harry R. Painton Award Committee and the Joseph Grinnell Student Research Award Committee and was on the COS Board of Directors (1991–1994), as well as the AOU Council (1997–2000). She served on the AOU Brewster and Coues Award Committee and Wetmore and Van Tyne Student Research Awards Committee. She is a member of the Scientific Program Committee for the 2010 International Ornithological Congress and was on the International Committee for the International Society for

Avian Endocrinology (1997–2004). She served as treasurer for the American Society of Naturalists (1993–1995) and on the editorial boards of *Oecologia* (2003–2009) and *Physiological Zoology* (1986–1989). Carol believes in being a responsible steward of COS resources while maintaining a generous spirit. She thinks that the study of birds has much to offer the entire scientific process and that the ornithological societies play an important role in supporting that study. She wants to ensure that the COS remains committed to supporting broad training in ornithology, affordable and vibrant annual meetings, and dissemination of research results.

Blair Wolf is an Associate Professor of Biology at the University of New Mexico in Albuquerque, New Mexico. His research interests encompass the natural history, nutritional ecology, ecophysiology, and reproductive biology of birds. He has published papers in the *Condor*, *Auk*, and *Journal of Field Ornithology* and co-authored three accounts for the *Birds of North America*. He teaches Ornithology, General Biology, Animal Physiology, and graduate courses in Ecology at UNM. He served as the chair of publications committee for the COS from 2000 to 2007 and has served one term on the Board of Directors. He is the instigator and coordinator of SORA, the Searchable Ornithological Research Archive, which continues to offer free access to electronic ornithological journal archives and now offers 14 periodicals. He is very interested in extending the influence of the COS into the lives of students and researchers in developing nations and continuing to work to maintain the COS within the ranks of the top ornithological societies globally.

AWARD ANNOUNCEMENTS

2009 LOYE AND ALDEN MILLER RESEARCH AWARD OF THE COOPER ORNITHOLOGICAL SOCIETY

The Miller Award Committee is pleased to honor Frances C. James as the recipient of the Loye and Alden Miller Research Award for 2009. This award is presented for lifetime achievement in ornithological research.

Throughout her career, Fran James's research has been instrumental in influencing the way we approach the study of birds, especially the relationship between birds and their habitats. One of the predominant themes that characterize James's impact on the field of ornithology is her use of quantitative approaches to study the biology of birds. Her work has been consistently ahead of the times, indicating how influential it has been on the field. Eventually others caught up to Fran.

Frances Crews James grew up in suburban Philadelphia. As a high-school student she participated in bird watching and nature activities at the Academy of Natural Sciences in Philadelphia, and she spent several summers working at the Woods Hole Marine Biology Laboratory (serving food to biologists). She received a bachelor's degree from Mt. Holyoke College (1952) and then went to Louisiana State University to study migration (1952–1954). She interrupted her graduate studies to marry fellow ornithologist Douglas James, move to the University of Arkansas, and raise three daughters. During her time at Arkansas she collaborated with James and others on ornithological and conservation research. In 1965 she entered graduate school at Arkansas

and received her Ph.D. in 1970. She served as a program director at NSF 1973–1977, then in 1977 she moved to Florida State University as Associate Professor and Curator of Birds and Mammals in the Department of Biological Science. She retired from FSU in 2003 and is currently Pasquale P. Graziadei Professor Emerita.

During her graduate career, James began working on two topics that she continued throughout her career: species-specific habitat relationships in birds and geographic variation in morphology and plumage. Her reciprocal-transplantation experiments in the U.S. and Mexico demonstrated, in addition to the genetic component of geographic variation in nestling development, a statistically significant nongenetic component, especially in the shape of the bill. Her early work on habitat-related ecomorphology in birds led to both a more sophisticated interpretation of the mechanistic basis of Bergman's Rule and the development of new methods for the statistical analysis of size and shape. One of James's most important conceptual contributions was her transfer of multivariate statistical techniques to represent habitat relationships of birds. It was Fran who first argued in 1971 that birds probably do not use a single "cue" to select habitat but use a combination of numerous variables that represents a "niche gestalt" to the bird. This idea has grown more recently to include the idea that birds respond not only to a variety of cues simultaneously at any spatial scale but also to cue gestalts at several spatial scales hierarchically. James herself has used this conceptual approach recently to develop experiments and methods to aid the conservation of the Red-cockaded Woodpecker in the southeast U.S.



Frances C. James, recipient of the Loye and Alden Miller Research Award for 2009.

Another area of research in which James made major contributions is the analysis of long-term trends in bird populations. By making comparisons among species experiencing different habitat and climatic conditions, she was able to demonstrate that, although some populations were declining, a similar number showed trends of increasing population size over the same period. Her reanalysis of the Breeding Bird Survey data was bold. Her approach and findings bucked the bandwagon view that the sky was falling and led to a more realistic view of population trends in neotropical migratory birds, leading us to focus on the relatively small subset of species for which declines were probably real.

In recent years, Dr. James has embarked on a new area of research, the evolutionary history of birds and dinosaurs. In 2009 she and John Pourtless published a monograph in which they used a cladistic analysis to evaluate the hypothesis that birds are maniraptoran theropod dinosaurs. They concluded that the evidence is weaker than thought and that other hypotheses are equally viable. As in earlier stages of her career, James has challenged the prevailing wisdom and used a strong quantitative approach in her contribution to the field.

In addition to her stellar scientific contributions to the field of avian biology, Fran James's contributions have strengthened scientific societies and have influenced the careers of many ornithologists. She has been president of the American Ornithologists' Union (1984–1986; the first woman to hold the position) and the American Institute of Biological Sciences (1987). She has been

named an Eminent Ecologist by the Ecological Society of America (1997), received the 1999 Margaret Morse Nice Medal from the Wilson Ornithological Society, and was elected a Fellow of the American Academy of Arts and Sciences in 2001. In addition, she has been a role model and mentor for women and men in ecology and ornithology. Dr. James has written an inspiring and informative account of her own work, which was published (*Wilson Bulletin* 113:140–163, 2001) as the Margaret Morse Nice lecture.

In honor of her lifetime of achievements and contributions to our profession, the Cooper Ornithological Society is honored to present the 2009 Miller Research Award to Frances C. James.

HARRY R. PAINTON AWARD

Every two years the Cooper Ornithological Society bestows the Harry R. Painton Award on a paper published during the past four years in the *Condor* that made an extraordinary contribution to ornithology. The 2009 Harry R. Painton Award is presented to Leonard A. Freed, Rebecca L. Cann, M. Lee Goff, Wendy A. Kuntz, and Gustav R. Bodner for their paper "Increase in avian malaria at upper elevation in Hawai'i," published in *Condor* 107:753–764 (2005). This paper is extraordinary in demonstrating a significant change in Hawaiian birds' risk to avian malaria, an important limiting factor. The conservation of native Hawaiian forest passerine birds has been in a state of emergency for decades; extinction has already claimed a majority of native species, and half of extant species are currently listed as endangered under the Endangered Species Act. Many factors have contributed to the demise of these species, among others, habitat conversion to agricultural land, habitat degradation via grazing, and introduction of exotic species, such as important avian hosts (e.g., Blue-breasted Quail, *Coturnix chinensis*) and mosquito vector (*Culex quinquefasciatus*) of avian malaria (*Plasmodium* sp.). Malaria reduces survival and distribution of Hawaiian forest passerines; today many of the endangered honeycreepers (Drepanidinae) occur only at elevations exceeding 1500 m where cool temperatures inhibit the development of the infectious stage of malaria. In 2001, the authors sampled seven native and two exotic passerine species for malaria and poxvirus at a high-elevation site (1920 m) previously sampled around 1990 to provide insight into how climate change influences the prevalence of introduced pathogens in native Hawaiian forest passerines. The prevalence of malaria increased twofold to 5.4% within a decade, with two of seven species, the Hawai'i 'Elepaio (*Chasiempis sandwichensis sandwichensis*) and 'Iiwi (*Vestiaria coccinea*), showing significant increases, and three species, the Japanese White-eye (*Zosterops japonicus*) and Red-billed Leiothrix (*Leiothrix lutea*), both exotic, and the endangered Hawai'i Creeper (*Oreomystis mana*), not testing positive during either period. The authors documented the first epizootic of malaria at upper elevation that included dead and moribund birds and mosquito breeding. In addition, they documented malaria tolerance in two 'Iiwis, a species extremely susceptible to malaria; however, when recaptured after molt these individuals had broken head feathers, indicating a potential cost of malaria tolerance. By evaluating alternate hypotheses, the authors convincingly argued that warmer summer air temperatures could further development of the sporozoite stage of malaria in previously infected mosquitoes dispersing above 1500 m. With summer air temperatures projected to be increasing over the next 100 years, the authors suggest that most of the remaining mosquito-free bird habitat on any of the Hawaiian Islands will be eliminated. Overall, the authors made a significant contribution to the conservation of Hawaiian forest passerines, and their paper serves as an outstanding example of how to tackle the intricate problems associated with conserving avian diversity.



Gustav R. Bodner, Leonard A. Freed, Rebecca L. Cann, and Wendy A. Kuntz, recipients of the Painton Award for 2007.

YOUNG PROFESSIONALS AWARD

The Cooper Ornithological Society is pleased to recognize the first recipient of the new Young Professional Student Presentation Award, Jamie Cornelius, and finalists Karie Decker and Eben Paxton. Established in 2008, the Young Professional Student Presentation Award recognizes early-career ornithological researchers for their outstanding contributions to ornithology. Three finalists are selected from applicants to deliver talks at the Young Professional Plenary session held at each annual meeting and are given 25 minutes each (20 minutes for presentation, 5 minutes for questions) to present their research to the entire conference body. The three finalists are guaranteed travel awards and are invited to a breakfast attended by the COS president, officers, and student presentation committee members on the day prior to the plenary session. The recipient of the award receives a cash prize. Candidates (M.Sc., Ph.D., postdoctoral fellows) must be COS members and must be in their final year of graduate studies or have graduated within one year of the previous annual meeting. More information is available at www.cooper.org/awards_and_grants/awards_and_grants.htm#students.

Jamie Cornelius grew up among the forests and rivers of the Pacific Northwest, where her parents' environmental activism inspired an early (and sustained) interest in biology. She graduated cum laude in 2001 with a B.S. from the University of Washington and recently completed a Ph.D. in animal behavior at University of California, Davis. Under the guidance of Dr. Tom Hahn, she investigated the behavior and physiology of an opportunistic, nomadic finch. Previous studies of migratory behavior and physiology have focused almost exclusively on seasonal migrants. Jamie's work on the nomadic Red Crossbill (*Loxia curvirostra*) examined relationships between environmental cues, stress physiology, and behavioral response to nonseasonal environmental changes. Her work revealed a previously undescribed effect of social information on the endocrine response to food deprivation and exposed potentially important relationships among stress physiology, annual scheduling, and seasonality of resources (e.g., molt duration and stress suppression in seasonal versus flexible migration). Jamie has accepted a post-doctoral

position at the Max Planck Institute of Ornithology where she will work with Dr. Martin Wikelski to further investigate the behavioral and physiological flexibility of opportunistic nomads. In her first project, she will measure the metabolic costs of free-living, breeding Red Crossbills under winter and summer environmental conditions and relate those costs to reproductive effort, foraging effort, and fledging success. She thanks the Cooper Society for the opportunity to present her doctoral work and encourages other students to participate in the Young Professionals Award competition, which offers a low-pressure opportunity to meet society members and be involved in the meeting.

Born and raised in Montana, Karie Decker has always taken an interest in the natural world. This interest motivated the completion of her undergraduate degree in biology from the University of Montana in 2001. For several years after that, she worked in a variety of ecosystems throughout the world, including tropical cloud forests, high-elevation forests, desert and estuarial riparian



Jamie Cornelius, recipient of the Young Professional Student Presentation Award for 2009.



Karie Decker, finalist for the Young Professional Student Presentation Award.

habitats, and desert shrub-steppe uplands. From 2004 to 2007, she studied avian life-history strategies for Dr. Tom Martin as his field and lab supervisor at the University of Montana. By assisting and leading various research projects from northern Arizona to Venezuela she developed her own personal research interests, and in 2007 was accepted to the graduate program at the University of Arizona under the advisement of Dr. Courtney Conway. Karie's thesis focuses on why avian clutch size declines seasonally. Using correlative and experimental approaches, she is examining several alternative hypotheses, including nest predation, food availability, and the female's age. In addition, she is examining the independent effects of climate change and human recreation on avian nesting success in a high-elevation riparian system that has experienced drastic changes in spring temperatures and receives over two million visitors each summer. Upon completion of her research in July 2009, Karie will start a position as the coordinator for the Invasive Species Project at the Nebraska Cooperative Fish and Wildlife Research Unit at the University of Nebraska, Lincoln.

Eben Paxton's interests are in understanding and modeling population dynamics, conservation genetics, and migration



Eben Paxton, finalist for the Young Professional Student Presentation Award.

ecology. For his recently completed doctoral work at Northern Arizona University, Eben used molecular genetic and morphological markers to identify subspecies of the migratory Willow Flycatcher, linking flycatcher subspecies to sites on their wintering grounds and migratory stopovers and helping to better define the boundary of the endangered subspecies, the Southwestern Willow Flycatcher. Concurrently with his doctoral work, Eben was project manager of a long-term demographic study of the Southwestern Willow Flycatcher with the U.S. Geological Survey's Southwest Biological Science Center. Together, the two projects provide complementary insights into the ecology and conservation of the species. Eben also received a master's degree from Northern Arizona University and a bachelor's degree from Evergreen State College. Eben is continuing work with the USGS on riparian bird conservation issues in the Southwest and teaching classes in ecology and modeling at the University of Southern Mississippi.