

CHRISTINA MARIE KENNEDY

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AREAS OF INTEREST

Conservation biology, community and landscape ecology, wildlife biology, environmental policy.

EDUCATION

Doctor of Philosophy, Spring 2009 (expected)

University of Maryland (UMD), College Park, MD

Graduate Program in Behavior, Ecology, Evolution & Systematics (BEES)

Dissertation: *Individual and Community-level Responses of Birds to Forest Fragmentation in Jamaica: Differential Mechanisms of Matrix Response*

Master of Environmental Management, May 2000

Duke University, Durham, NC

Nicholas School of the Environment

Concentration: Conservation Biology

Master's Project: *A Framework for Evaluating Ecosystem-Based Partnerships: A Case Study of the Gulf Coastal Plain Ecosystem Partnership*

Bachelor of Science, May 1997

Cornell University, Ithaca, NY

College of Agriculture & Life Sciences

Major: Natural Resources Management

Study Abroad: El Zamarano School of Agriculture, Honduras, January–May 1996

Honors Thesis: *The Effects of Demographic, Genetic, and Environmental Stochasticity on the Populations of Christmas Shearwater (*Puffinus nativitatis*), Wedge-tailed Shearwater (*Puffinus pacificus cuneatus*), and Bonin Petrel (*Pterodroma leucoptera hypoleuca*) on Midway Atoll*

HONORS & AWARDS

2006 American Ornithologists' Union Student Membership Award

2001 Finalist, Presidential Management Fellowship (PMF) Program (formerly PMI program),
U.S. Office of Personnel Management, U.S.A.

1995–97 Ho-Nun-De-Kah Honor Society of Agriculture, Cornell University

1995–97 Dean's List, Cornell University

SCHOLARSHIPS, FELLOWSHIPS, & GRANTS

2007 U.S. Fulbright Student Fellows Program (\$17,400)

2004–07 NASA Earth System Science Graduate Fellowship (\$72,000)

2006 Cosmos Club Foundation Grants-in-Aid to Young Scholars Program (\$2000)

2004 Smithsonian James Bond Trust Fund (\$35,000)

2004 Explorers Club Washington Exploration & Field Grant (\$2000)

2004 Nagel Travel Award, University of Maryland (\$300)

2003–04; 2007–08 Darwin Scholarship, University of Maryland (\$24,000)

1999 Edna Bailey Sussman Fellowship, Duke University (\$12,400)

1993–97 Cornell Grant & Cornell Tradition Fellowship for Community Service & Academic
Achievement, Cornell University (\$52,000)

PROFESSIONAL EXPERIENCE

University of Maryland, Department of Biology, College Park, MD

Graduate Research Assistant, September 2003–September 2004

Assist in spatial analyses and publish findings on the linkages of spatial rarity and extinction risk for fishes of the Sonoran Desert.

Environmental Law Institute (ELI), Washington, DC

Science & Policy Analyst, May 2000–July 2003

Assisted Biodiversity, Wetlands, and Sustainable Land Use Programs, by designing, conducting, and coordinating science and policy research, conferences, outreach activities and fundraising.

Smithsonian Environmental Research Center, Edgewater, MD

Spatial Analyst, January 2001–June 2003 (part-time)

Developed geospatial database and conducted spatial analyses for Neighborhood Nestwatch, a citizen-based volunteer program, measuring the effects of urbanization on bird populations in D.C. metro area.

Duke University Marine Laboratory, Beaufort, NC

Research Assistant, May 1999–May 2000

Assisted in development of a spatially-explicit, individual-based model of the red-cockaded woodpecker (*Picoides borealis*) (Dr. Larry Crowder Lab).

University of Hawaii, Zoology Department, Honolulu, HI

Ecological Research Assistant, May–July 1998

Assisted with establishment of field protocol for research on the role of alien tree plantations on native Hawaiian plant and bird populations. Designed mist-netting procedures, conducted vegetation sampling, implemented seed/fruit collection, and supervised field technicians.

Division of Forestry and Wildlife, Department of Land & Natural Resources, Honolulu, HI

Wildlife Technician, February–April 1998

Implemented census methods for game birds and documented threatened species in game management areas. Assisted with study on rat predation of endangered *Elepaio*, involving mist-netting, bleeding, banding, re-sighting, and nest searching of birds, and rodent control.

Biological Resources Division, U.S. Geological Survey, Hakalau Forest Refuge, HI

Field Intern, September 1997–January 1998

Investigated limiting factors affecting native passerines, emphasizing effects of predation. Conducted high-volume mist-netting; banding/re-sighting birds; censusing rodent populations, plant host species, and mosquito larvae; and data entry.

U.S. Fish and Wildlife Service, Midway Atoll National Wildlife Refuge, Midway Atoll

Wildlife Biology Intern, May–August 1996

Conducted habitat assessments and monitored nesting and breeding success of 15 seabird species.

Missouri Wildlife Rescue Center, Ballwin, MO

Animal Care Intern, May–August 1995

Collaborated with veterinarians on native wildlife captures, treatments, and releases.

RESEARCH EXPERIENCE

Individual & Community-level Responses of Birds to Forest Fragmentation in Jamaica, 2003-present
Design, fund, and implement field research in Jamaica on the response of resident and migratory birds to forest fragmentation across different landscape mosaics. Supervise and train field assistants in avian and vegetation monitoring; develop & manage bird census, life history, and vegetation databases. Conduct multivariate and multi-model statistical modeling.

Position: Doctoral Student and Principal Investigator, University of Maryland

Collaborators: P. Marra (Smithsonian Migratory Bird Center), W. Fagan, M. Neel, R. DeFries (UMD), T. Ricketts (World Wildlife Fund), A. Sutton (The Nature Conservancy "TNC" of Jamaica), O. Evelyn (Jamaica Forestry Dept.), S. Koenig (Windsor Research Center)

State Biodiversity Initiatives, May 2000–July 2003

Helped run Environmental Law Institute's (ELI) State Biodiversity Program through 1) fundraising, grant writing, and budgeting; 2) designing, managing, and conducting science and policy research to advance sustainable land use, wetlands protection and biodiversity conservation; 3) supervising research associates, who provided administrative and research support; 4) collaborating with federal and state agencies and private organizations that provided financial, technical, and political support; 5) publishing and presenting research findings and recommendations to various audiences, forums, and venues. Managed and/or collaborated in over eight major research and outreach projects, with budgets ranging from \$25,000 to \$250,000.

Position: Science & Policy Analyst, Environmental Law Institute

State Tools for Addressing Invasives, May 2001–August 2002

Conducted research on existing state laws, regulations, and policies to address invasive species. Contributed to the resulting report, *Halting the Invasion: State Tools for Invasive Species Management*, which analyzed invasive species prevention, regulatory, eradication, enforcement, and coordination tools across all 50 states.

Position: Science & Policy Analyst, Environmental Law Institute

Wetland Mitigation, May 2000–December 2002

Helped to survey federal, state, and local laws, regulations, and guidance related to U.S. wetland mitigation banking and in-lieu fee programs; document all existing wetland mitigation banks and in-lieu fee programs in operation and pending approval; and develop a database on existing and pending wetland mitigation banks made accessible to the public through the Internet.

Position: Science & Policy Analyst, Environmental Law Institute

Case Study of the Gulf Coastal Plain Ecosystem Partnership, September 1998–May 2000

Evaluated the Gulf Coastal Plain Ecosystem Partnership (GCPEP) as an ecosystem management model; designed and conducted stakeholder interviews and field observations of inter-partner relations; performed outcomes, process, and institutional evaluations.

Position: Master's Student and Graduate Research Associate

Collaborators: L. Maguire (Duke University), V. Compton (TNC), GCPEP Steering Committee

Land Cover Change Analysis, January 2000–May 2000

Using ArcGIS and ErdasImagine, conducted change detection analysis of lands surrounding the Gulf Coastal Plain Ecosystem Partnership in Alabama and Florida from 1970–1990.

Position: Graduate Research Associate

Collaborators: P. Halpin (Duke University), V. Compton (TNC)

Diagnostic Field Study on Resource Use in Honduras, February–May 1996

Conceived, designed and conducted a diagnostic field study on the role of women and the use of medicinal herbs in Galeras, Honduras. Conducted personal and group interviews, field observations, and community outreach.

Position: Undergraduate Research Associate

PEER-REVIEWED PUBLICATIONS

- Fagan, W., **C. Kennedy**, and P. Unmack. 2005. Quantifying rarity, losses, and risks for lower Colorado River Basin fishes: Implications for conservation listing. *Conservation Biology* 19:1872–1882.
- Fagan, W., C. Aumann, **C. Kennedy**, and P. Unmack. 2005. Rarity, fragmentation, and the scale-dependence of extinction risk in desert fishes. *Ecology* 86:34–41.

REPORTS, ARTICLES, BOOK CONTRIBUTIONS

- Kennedy**, C., J. Wilkinson, and J. Balch. 2003. *Conservation Thresholds for Land Use Planners*. Environmental Law Institute, Washington, DC. 55pp.
- Wilkinson, J., and **C. Kennedy**. 2003. *Planning with Nature: Biodiversity Information in Action*. ELI, Washington, DC. 33pp.
- Filbey, M., **C. Kennedy**, J. Wilkinson, and J. Balch. 2002. *Halting the Invasion: State Tools for Invasive Species Management*. ELI, Washington, DC. 112pp.
- Wilkinson, J., **C. Kennedy**, K. Mott, M. Filbey, and S. King. 2002 (Sep.–Oct.). Banks and fees mitigation study reveals an industry transformed. *National Wetlands Newsletter* 24(5):5–6, 16.
- Wilkinson, J., **C. Kennedy**, K. Mott, M. Filbey, S. King, and J. McElfish. 2002. *Banks & Fees: The Status of Off-site Wetland Mitigation in the U.S.* ELI, Washington, DC. 200pp.
- Wilkinson, J., **C. Kennedy**, K. Mott, and J. McElfish. 2001. *Status of the States: Innovative State Strategies for Biodiversity Conservation*. ELI, Washington, DC. 68pp.

PRESENTATIONS AT PROFESSIONAL MEETINGS (* indicates presenter)

- Kennedy**, C.*, P. Marra, M. Neel, R. DeFries, and W. Fagan. "Birds in fragmented landscapes in Jamaica: Differential mechanisms of matrix response." NASA Joint Workshop on Biodiversity, Terrestrial Ecology & Related Applied Sciences, Adelphi, MD, 21–25 August 2006.
- Kennedy**, C.*, P. Marra, M. Neel, R. DeFries, and W. Fagan. "Response of birds to landscape matrix in fragmented forests in Jamaica." NASA Biodiversity & Ecological Forecasting Team Meeting, Westin Grand Hotel, Washington, DC, 29–31 August 2005.
- Fagan, W., **C. Kennedy***, and P. Unmack. "Quantifying rarity, losses, and risks for lower Colorado River Basin fishes: Implications for conservation listing." Bioscience Research & Technology Review Day, University of Maryland, College Park, MD, 5 November 2003.
- Kennedy**, C.*, J. Wilkinson, K. Mott, and M. Filbey. "Banks & fees: The status of off-site wetland mitigation in the U.S." Wetlands Law & Regulation Conference, American Law Institute–American Bar Association, Washington, DC, 29–30 May 2003.
- Kennedy**, C*., J. Wilkinson, K. Mott, and M. Filbey. "Banks & fees: The status of off-site wetland mitigation in the U.S." 6th National Mitigation Banking Conf., San Diego, CA, 23–25 April 2003.
- Kennedy**, C.* and J. Wilkinson. "Planning for nature: How U.S. state laws influence the use of natural heritage data in planning." 2003 Leadership Conference: Networking to Connect Science with Conservation, Ellicott City, MD, 5–9 April 2003.
- Kennedy**, C.*, M. Filbey, J. Wilkinson. "Halting the invasion: State tools for invasive species management." Invasive Species Workshop, The Nature Conservancy of California, San Francisco Zoo, San Francisco, CA, 9–10 January 2003.
- Kennedy**, C.*, J. Wilkinson, K. Mott, and M. Filbey. "Banks & fees: The status of off-site wetland mitigation in the U.S." New Developments and Trends in Federal Wetlands Protection and Mitigation Policy, Environmental Law Institute, Washington, DC, 30 October 2002.
- Kennedy**, C.*, J. Wilkinson, K. Mott, and M. Filbey. "Banks & fees: The status of off-site wetland mitigation in the U.S." Wetlands 2002: Restoring Impaired Wetlands and Other Waters, Association of State Wetland Managers, Indianapolis, IN, 7–9 October 2002.
- Johnson, E.*, **C. Kennedy**, E. Gordon, and J. Wilkinson. "Needs assessment of biodiversity information users in New York State." Society for Conservation Biology, 15th Annual Meeting, University of Hawaii, Hilo, HI, 29 July–1 August 2001.
- Kennedy**, C.*, J. Wilkinson, K. Mott, and M. Filbey. "Status of wetland mitigation banking in the U.S." Communities Working for Wetlands Conference, Orlando, FL, 16–18 May 2001.

INVITED SEMINARS & SELECT PRESENTATIONS

- 2007 Regional U.S. Fulbright Student Enhancement Seminar, Embassy of the United States of America, Kingston, Jamaica
- 2006 Commonwealth Scientific & Industrial Research Organization (CSIRO), Centre for Environment & Life Sciences, Sustainable Ecosystems, Perth, Australia
- 2005 Avian Biology Seminar, Smithsonian Migratory Bird Center, National Zoological Park, Washington, DC

INVITED CONFERENCE PARTICIPANT

- 2006 NASA Land-Cover & Land-Use Change (LCLUC) Science Team Meeting, University of Maryland Inn & Conference Center, Adelphi, MD
- 2006 NASA Joint Workshop on Biodiversity, Terrestrial Ecology & Related Applied Sciences, University of Maryland Inn & Conference Center, Adelphi, MD
- 2005 NASA Biodiversity & Ecological Forecasting Team Meeting, The Westin Grand Hotel, Washington, DC
- 2004 NASA First Symposium for the Earth System Scholars Network (ESSN), University of Maryland Inn & Conference Center, Adelphi, MD
- 2004 NASA Land-Cover & Land-Use Change (LCLUC) Science Team Meeting, University of Maryland University College, Adelphi, MD

TEACHING EXPERIENCE

Guest Lecturer, Northern Caribbean University, Mandeville, Jamaica

Seminar in Principles and Practices of Conservation (Master's level course), "The role of habitat fragmentation in conservation in the tropics," Spring 2007

Guest Lecturer, University of Maryland, College Park, MD

Seminar in Sustainable Development and Conservation Biology, "Birds in fragmented landscapes in Jamaica: The role of the matrix," Fall 2005

UNDERGRADUATE TRAINING & MENTORING

ArcGIS & Database Supervisor, Biology Department, University of Maryland, Fall 2006–2008

Hired, trained, and supervised undergraduate researchers in ArcGIS and database management. (C. Chanza, D. Fink, A. Pyle, N. Sofoluke, M. Thomas, V. Tran, R. Verma)

Avian Monitoring Supervisor, Mandeville, Jamaica, January–July 2005–2007

Hired, trained, and supervised 7 undergraduate and graduate students (including 3 Jamaican citizens) in bird and vegetation sampling in support of dissertation research in Jamaica.

(M. Beale, H. Davis, J. Hamilton, S. Lorenz, M. Podolsky, C. Samuels, M. White)

Residential Advisor, Duke University, August 1998–2000

Supervised and monitored residential activities, organized regular social and education events, and served as a mentor for >20 freshman female students per year.

CONFERENCES ORGANIZED

Invasives Forum, ELI, Washington, DC, September 2002

1-day forum with panel of national and state leaders on invasive species to discuss development of more effective state-level invasive species prevention and management laws and programs.

Delaware's Biodiversity Conservation Partnership, Sheraton Dover Hotel, February 2001

1-day forum convening 300 professionals in environmental, agricultural, and business sectors and politicians to build support for a statewide biodiversity strategy in Delaware.

State Strategies for Biodiversity Conservation, ELI, Washington, DC, January 2001

2-day forum convening key leaders from 23 state-level biodiversity programs to examine effective and innovative state strategies for biodiversity conservation.

National Wetlands Program Annual Ceremony, Washington, DC 2000–2003

Raised >\$100,00 annually to support and organize an annual ceremony held on Capital Hill honoring leaders in education and outreach, scientific research, voluntary leadership, private land stewardship, and program management related to wetlands.

TRAINING

Modeling Patterns & Dynamics of Species Occurrence Workshop, USGS Patuxent Wildlife Research Center, Laurel, MD, 7–9 August 2006

3-day training on latest methods for modeling patterns and dynamics of species occurrence in a landscape while accounting for imperfect detection of species.

Model Selection & Multi-model Inference Workshop, Smithsonian Environmental Research Center, Edgewater, MD, 19–20 July 2007

2-day training on the information-theoretic approach and model selection.

Intermediate ArcView Workshop, Smithsonian Institution, Washington, DC, 26–27 Feb. 2002

2-day training on using ArcView for scientific research.

Facilitative Leadership Workshop, Interaction Associates, Cambridge, MA, 28–30 Nov. 2001

3-day training on effective leadership, team-building, and facilitation in the workplace.

PROFESSIONAL AFFILIATIONS

2006 Member, American Ornithologists' Union (AOU)

2000–03 Member, Society for Conservation Biology (SCB)

SKILLS

Adept in various word processing, spreadsheet, database, statistical programs, and ArcGIS and ArcView; familiar with satellite remote sensing (ErdasImagine, PCI, ENVI); proficient in Spanish.