

-KATHERINE W. McFADDEN-

Dept. of Ecology, Evolution, and Environmental Biology, Columbia University
1200 Amsterdam Ave., 1020 Schermerhorn Extension, New York, New York 10027
Phone: 212-854-7750, Cell: 917-734-0558, Fax: 212-854-8188; Kwm6@columbia.edu

Education:

2004 Ph.D. Ecology, Evolution and Environmental Biology, Columbia University
2003 M. Phil. Ecology, Evolution, and Environmental Biology, Columbia University
2001 Advanced Certificate in Environmental Policy, Columbia University
1999 M.S. Wildlife & Fisheries Science, Texas A&M University
1995 B.A. Biology, University of California, Santa Cruz

Positions Held:

2006- present Assistant Professor, Dept. of Ecology, Evolution, and Environmental Biology, Columbia University.
2006- present Scientific Director, Environmental Science and Policy Masters of Public Administration Program, School for International and Public Affairs, Columbia University.
2005 Knauss Postdoctoral Policy Fellow, National Oceanic and Atmospheric Administration, Washington, DC
2004 Postdoctoral Researcher, American Museum of Natural History, New York, NY
2004-2005 Adjunct Assistant Professor, Columbia University, NY
2003-2004 NSF GK12 Teaching Fellow, Columbia University, NY

Publications:

Peer Reviewed Manuscripts

1. A. Cuaron, D. Valenzuela, D. Garcia-Vasco, M. Copa, S. Bautista, H. Mena, D. Martinez-Godinez, C. Gonzalez-Baca, L. Borquez, **K. McFadden** and M. Gompper. 2009. Conservation of the endemic dwarf carnivores of Cozumel Island, Mexico. *Small Carnivore Conservation* (in press)
2. **K. McFadden**, D. Vasco, A. Cuaron, D. Valenzuela and M. Gompper. 2009. Conservation and population assessment of the endangered dwarf carnivores from Cozumel Island. *Biodiversity and Conservation* (in press).
3. E. Naro-Maciel, K. Holmes, P. Ersts, N. Bynum, **K. McFadden**, and E. Sterling. 2009. Globally endangered sea turtles of the Palmyra Atoll National Wildlife Refuge: a focus on scientific analysis. *Lessons in Conservation* (in press).
4. **K. McFadden**. 2009. Ecosystem approaches to management. *Lessons in Conservation* (in review).

5. **K. McFadden** and C. Barnes. 2009. The implementation of an ecosystem approach to management in a federal government agency. *Marine Policy* 33:156-163.
6. **K. McFadden**, M. Gompper, D. Valenzuela, and J.C. Morales. 2008. Evolutionary history of the critically endangered Cozumel dwarf carnivores inferred from mitochondrial DNA analyses. *Journal of Zoology* 276:176-186.
7. C. Barnes and **K. McFadden**. 2008. Marine ecosystem approaches to management: challenges and lessons in the United States. *Marine Policy* 32: 387-392.
8. **K. McFadden**, T. Lacher and G. Worthy. 2006. Photogrammetric estimates of size and mass in Hawaiian monk seals (*Monachus schauinslandi*) *Aquatic Mammals* 32:31-40.
9. **K. McFadden**, M. Gompper, R. Medellín and R. Sambrotto. 2006. Feeding habits of endangered pygmy raccoon (*Procyon pygmaeus*) based on stable isotopes and fecal analyses. *Journal of Mammalogy* 87:501-509.
10. **K. McFadden**, S. Wade, E. Dubovi, and M. Gompper. 2005. A serology and fecal parasitologic survey of the critically endangered pygmy raccoon (*Procyon pygmaeus*). *Journal of Wildlife Disease* 41:615-617
11. A. Cuarón, M. M. Morales, **K. McFadden**, M. Gompper and D. Valenzuela. 2004. The status of dwarf carnivores on Cozumel Island. *Biodiversity and Conservation* 13:317-331.

Technical & Government Reports

- K. McFadden**, E. Sterling, K. Holmes and E. Naro-Maciel. 2008. The status of green sea turtles at Palmyra Atoll National Wildlife Refuge. US Fish & Wildlife Report.
- C. Barnes, L. Bozzi and **K. McFadden**. 2005. Exploring an Ecosystem Approach to Management. Ecosystem Research Program, National Oceanic and Atmospheric Administration Ecosystem Goal Team.
- A. Veit and **K. McFadden**. 1998. The status of the Hawaiian monk seal at Kure Atoll-1998. Southwestern National Marine Fisheries Annual Report.
- K. McFadden** and B. Ryan. 1997. The status of the Hawaiian monk seal at Kure Atoll during the 1997 breeding season. Southwestern National Marine Fisheries Annual Report.
- J. Seymour, **K. McFadden**, L. Keith, and K. Blake. 1996. The status of the Hawaiian monk seal at Lisianski Island- 1996. Southwestern National Marine Fisheries Annual Report.
- M. Craig, A. Veit, and **K. McFadden**. 1995. The status of the Hawaiian monk seal at French Frigate Shoals-1995. Southwestern National Marine Fisheries Annual Report.

Published Abstracts:

- S. Seto & S. Newman & **K. McFadden**. 2009. Small mammal abundance, distribution and foraging habits in a oak dominated landscape. Black Rock Forest Consortium Conference, New York.
- E. Naro-Maciel, E. Sterling, K. Holmes, & **K. McFadden**. 2009. Movements of sea turtles from the Palmyra Atoll National Wildlife Refuge, Central Pacific: Insights from satellite telemetry and genetic analysis. Society of Conservation Biology, Annual Conference, Beijing, China.
- E. Naro-Maciel., P. Ersts, **K. McFadden**, K. Holmes, and E. Sterling. 2007. Sea Turtles of the Palmyra Atoll National Wildlife Refuge, Central Pacific: Distribution and Habitat Associations. Society of Conservation Biology Annual Conference, South Africa.

- K. McFadden**, M. Gompper, R. Medellin and R. Sambrotto. 2006. Feeding Ecology of an Endangered Insular Carnivore. Ecological Society of America Conference, Memphis, TN.
- K. McFadden**, R. Medellin, and M. Gompper. 2006. The Current Population and Conservation Status of the Endangered Carnivores of Cozumel Island, Mexico (*Nasua nelsoni* and *Procyon pygmaeus*). Society of Conservation Biology Annual Conference. San Jose, CA.
- K. McFadden**, M. Gompper, and J.C. Morales. 2004. The Genetic Structure of the Endangered Dwarf Carnivores (*Nasua nelsoni* and *Procyon pygmaeus*) of Cozumel, Mexico. Society of Conservation Biology Annual Conference. New York, NY.
- K. McFadden** and M. Gompper. 2000. Cozumel Carnivore Diversity. Society of Conservation Biology Annual Conference. Missoula, Montana.
- K. McFadden** and G. Worthy. 1998. Body condition indices and survival in immature Hawaiian monk seals. International Conference of Marine Mammalogists. Maui, Hawaii.
- K. McFadden**, T. Lacher, and G. Worthy. 1997. Photogrammetry as a tool for assessing body condition and survival in the Hawaiian monk seal, Northern elephant seal, and harbor seal. International Conference of Marine Mammalogists. Monaco.

Theses:

The ecology, evolution and natural history of the endangered dwarf carnivores on Cozumel Island, Mexico. PhD. dissertation. Columbia University, Department of Ecology & Evolutionary Biology, 2004. Major Advisor: Dr. Matt Gompper.

Photogrammetry as a tool for assessing body condition and survival in the Hawaiian monk seal, Northern elephant seal, and harbor seal. M.Sc. Thesis. Texas A&M University. Department of Wildlife and Fisheries Sciences. 1999. Major Advisors: Dr. Graham Worthy and Dr. Tom Lacher.

Awards and Grants:

- 2009 *Foraging ecology and disease in small mammal communities affected by sudden oak death.* Black Rock Forest Grant, \$4500
- 2008 *Health Assessment and Dietary Analysis of Tamandua mexicana in Honduras,* Mazuri Grant, \$4300 (Co-PI with C. Fiorello DVM)
- 2008-2010 *Conservation of the sea turtles of Palmyra Atoll, Central Pacific.* Pacific Insular Marine Turtle Conservation Research Grant, National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service, \$122,000 (Co-PI with E. Sterling, E. Maciel)
- 2008 *Small mammal response to oak removal in a northeast forest.* Black Rock Forest Research Grant, \$4000
- 2007 *Conservation of the sea turtles of Palmyra Atoll, Central Pacific.* Pacific Insular Marine Turtle Conservation Research Grant, National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service, \$65,000 (Co-PI with E. Sterling, E. Maciel)

- 2006-2008 Columbia University Faculty Research Grant, \$10,000
- 2005 Knauss Sea Grant Fellowship in Marine Policy, NOAA Research, \$41,500
- 2003-2004 National Science Foundation, GK12 Fellowship, \$55,000
- 2003 *Foraging ecology of insular dwarf carnivores*. Sigma Delta Epsilon/Women in Science Research Grant \$500.
- 2002 *Phylogenetic analysis of the Cozumel carnivores*. American Museum of Natural History Roosevelt Grant \$2500
- 2001 *Conservation of dwarf carnivores*. Center for Environmental Research and Conservation Graduate Research Grant, \$2500
- 2001 *Conservation of dwarf carnivores*. Explorer's Club Research Grant, \$1000
- 2000 *Conservation of dwarf carnivores*. Sigma Xi Grant-in-Aid of Research, \$500
- 2000 The Society for Conservation Biology Travel Grant awarded for presentation of carnivore diversity research on Cozumel Island, Mexico, \$300

Teaching Experience:

Adjunct Assistant Professor, May 2004-August 2005, School of International and Public Affairs (SIPA). Environmental Science and Policy Masters of Public Administration Program, Columbia University.

NSF Teaching Fellow, July 2003- May 2004, National Science Foundation GK12, Columbia University.

Teaching Assistant, 1996-1999, Dept. of Biology, Vertebrate Anatomy/Physiology and Vertebrate Zoology Courses, Texas A&M University.

Courses Taught:

Columbia University:

- 2009 Ecology, Biodiversity & Land Use (graduate level, enrollment 68)
- 2008 Introductory Environmental Biology (undergraduate level, enrollment 50)
- 2008 Professionalism in Science (graduate level, enrollment 10)
- 2008/2010 Marine Conservation Ecology (graduate and undergraduate level, enrollment 20)
- 2008-2004 Conservation Ecology & Biodiversity (graduate level, enrollment 60)
- 2007/2009 Behavioral Ecology & Conservation (2008, graduate level, enrollment 10)
- 2007-2004 GIS in Ecology (graduate level labs, enrollment 60)
- 2007 Environmental Science for Sustainable Development (graduate level, enrollment 30)

Texas A&M University:

1999-1996 Vertebrate Zoology & Vertebrate Anatomy/Physiology (undergraduate level, lab instructor, enrollment 40)

Research Experience:

-National Oceanic and Atmospheric Administration (NOAA) Research Fellow (2005) and Endangered Species Biologist (2006). Office of Oceanic and Atmospheric Research & Office of Protected Resources, Silver Spring, MD. Worked on listing actions associated with the Endangered Species Act (ESA). Ecosystem Research coordinator.

-Research Biologist (1995-1998) and Field Camp Leader, (1997) National Marine Fisheries Service (NMFS) Hawaiian Monk Seal Project, Kure Atoll, Hawaii.

Graduate Student Advising (* indicates WCS Project):

Sharon Newman (Masters, Major Advisor) Anticipated graduation May 2010.

Small mammal foraging habits in altered oak forest systems

Stephanie Seto (Masters, Major Advisor) Graduated May 2009.

How small mammal communities respond to sudden oak death in forest ecosystems.

Lisa Michl (Masters, Major Advisor) Graduated May 2009.

Mesopredator foraging ecology in the Adirondacks, NY.

Katie Laumann (Masters, Major Advisor) Graduated Oct 2008.

Sustainable Seafood Patterns Amongst Consumers in New York.

Kaitlin Baird (Masters, Committee member) Graduated May 2008.

Oyster Restoration in Long Island Sound, New York.

*Alison Devlin (Masters, Committee member) Graduated May 2008.

Measuring stress in captive and wild jaguars using fecal cortisol.

*Corinne Kendall (Masters, Committee member) Graduated May 2008.

Understanding the ecological basis of human-hippopotamus conflict.

Scientific Journals Reviewed for:

Animal Conservation
Biodiversity & Conservation
Biological Journal of the Linnean Society
Endangered Species Research

Journal of Mammalogy
Journal of Zoology
Mitochondrial DNA
Southwestern Naturalist

Media Experience:

PBS NOVA ScienceNOW! (June 2009)
Scientific Consultant for television - NBC (May 2007)
Scientific Consultant for film- Columbia University School of Art and Film (May 2007)

Professional Associations:

American Association for University Women
Association for Women in Science
Ecological Society of America
Explorer's Club
Society for Marine Mammalogy

Sigma Delta Epsilon
Sigma Xi
American Society of Mammalogy
Society for Conservation Biology