

## CHRISTINE R. MAHER

Department of Biological Sciences  
University of Southern Maine  
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### EDUCATION

- 1992 Ph.D., Animal Behavior (with emphasis in Ecology and Evolution), University of California, Davis. Dissertation: Variable behavior of pronghorn (*Antilocapra americana*): flexibility in male social organization and female group stability. Advisor: Dr. Dale F. Lott.
- 1990 M.S., Animal Behavior, University of California, Davis. Awarded by examination. Advisor: Dr. Dale F. Lott.
- 1986 M.S., Zoology, University of Idaho. Thesis: Age-related changes in reproductive effort of male bison. Advisor: Dr. John A. Byers.
- 1984 B.S., Zoology, Miami University, Oxford, Ohio. Graduated summa cum laude, Phi Beta Kappa, with General Honors, and with Honors in Zoology.

### CURRENT POSITIONS

Associate Dean for Academic Affairs, College of Science, Technology, and Health, University of Southern Maine, since 2015  
Professor of Biology, University of Southern Maine, since 2010  
Graduate Faculty, University of Southern Maine, since 2001

### PREVIOUS POSITIONS

- 2010 – 2015 Associate Editor, *Journal of Mammalogy*  
2010 – 2011 Acting Director of Math and Sciences, College of Science, Technology and Health, University of Southern Maine  
2010 – 2011 Chair, Department of Biological Sciences, University of Southern Maine  
2009 – 2010 Associate Dean, College of Arts and Sciences, University of Southern Maine  
2008 – 2009 Chair, Department of Biological Sciences, University of Southern Maine  
2007 – 2008 Graduate Coordinator, Department of Biological Sciences, University of Southern Maine  
2001 – 2010 Associate Professor of Biology, University of Southern Maine  
2001 – 2006 Chair, Department of Biological Sciences, University of Southern Maine  
1997 – 2001 Assistant Professor of Biology, University of Southern Maine  
1996 – 1997 Curator of Behavior, ZooMontana, Billings  
1992 – 1997 Assistant Professor of Biology, Montana State University – Billings  
1992 Lecturer, Department of Fish and Wildlife Biology, University of California, Davis  
1992 Lecturer, Department of Psychology, University of California, Davis  
1991 Post-Graduate Researcher, University of California, Davis  
1990 – 1992 Teaching Assistant, University of California, Davis  
1989 Graduate Student Assistant, California Department of Fish and Game  
1988 Teaching Assistant, University of California, Davis  
1986 – 1992 Research Assistant, University of California, Davis  
1984 – 1986 Instructional Assistant, University of Idaho

**PUBLICATIONS**

- Maher, C. R. 2018. Territoriality. In: *Encyclopedia of Animal Cognition and Behavior* (J. Vonk and T. K. Shackelford, eds.). Springer. doi.org/10.1007/978-3-319-47829-6\_725-1 [Invited contribution]
- Honeywell, A. F. and Maher, C. R. 2017. Intensity, rate, and outcome of agonistic interactions in harbor seals (*Phoca vitulina*) in relation to density on haul-out ledges. *Journal of Mammalogy*. 98:135-142. doi:10.1093/jmammal/gyw155
- Maher, C. R. and Burger, J. R. 2016. Diversity of social behavior in caviomorph rodents. In: *Sociobiology of caviomorph rodents: an integrative review* (L. Ebensperger and L. Hayes, eds.), pp. 28-58. Wiley-Blackwell.
- Zervanos, S. M., Maher, C. R., and Florant, G. L. 2014. Effect of body mass on hibernation strategies of woodchucks (*Marmota monax*). *Integrative and Comparative Biology*. 54:443-451.
- Aschemeier, L. M. and Maher, C.R. 2011. Eavesdropping of woodchucks (*Marmota monax*) and eastern chipmunks (*Tamias striatus*) on heterospecific alarm calls. *Journal of Mammalogy*. 92: 493-499.
- Maher, C.R. and Burger, J. R. 2011. Intraspecific variation in space use, group size and mating systems of caviomorph rodents. *Journal of Mammalogy* 92: 54-64. [Invited contribution to Special Feature on caviomorphs]
- Maher, C.R. and Duron, M. 2010. Mating system and paternity in woodchucks (*Marmota monax*). *Journal of Mammalogy*. 91: 628-635.
- Zervanos, S.M., Maher, C.R., Waldvogel, J.A., and Florant, G.L. 2010. Environmental effects on the hibernation patterns of woodchucks (*Marmota monax*): A latitudinal study. *Physiological and Biochemical Zoology*. 83: 135-141.
- Maher, C.R. 2009. Effects of relatedness on social interaction rates in a solitary marmot. *Animal Behaviour*. 78:925-933.
- Maher, C.R. 2009. Genetic relatedness and space use in a behaviorally flexible species of marmot, the woodchuck (*Marmota monax*). *Behavioral Ecology and Sociobiology*. 63: 857-868.
- Darhower, S.E. and Maher, C.R. 2008. Effects of immunocontraception on behavior in fallow deer (*Dama dama*). *Zoo Biology*. 27: 49-61.
- Brown, D.E., Maher, C.R., and Mitchell, C.D. 2006. A comparison of pronghorn body measurements throughout western North America. *Proceedings of the 22nd Biennial Pronghorn Antelope Workshop*. 22: 125-137.
- Maher, C.R. 2006. Social organization in woodchucks (*Marmota monax*) and its relationship to growing season. *Ethology*. 112:313-324.
- Mitchell, C.D. and Maher, C.R. 2006. Horn growth in pronghorn (*Antilocapra americana*) males: selection for precocial maturation in stochastic environments. *Acta Theriologica*. 51:405-409.

Maher, C.R. 2004. Intrasexual territoriality in woodchucks (*Marmota monax*). *Journal of Mammalogy*. 85:1087-1094.

Mitchell, C.D. and Maher, C.R. 2004. Selection for early horn growth in pronghorn (*Antilocapra americana*) males. *Proceedings of the 21st Biennial Pronghorn Antelope Workshop*. 21:54-63.

Kitchen, D.W. and Maher, C.R. 2001. Pronghorn. In: *The new encyclopedia of mammals* (D.W. Macdonald, ed.). Oxford University Press, Oxford.

Mitchell, C.D. and Maher, C.R. 2001. Are horn characteristics related to age in male pronghorns? *Wildlife Society Bulletin*. 29:908-916.

Maher, C.R. 2000. Quantitative variation in ecological and hormonal variables correlates with spatial organization of pronghorn (*Antilocapra americana*) males. *Behavioral Ecology and Sociobiology*. 47:327-338.

Maher, C.R. and Mitchell, C.D. 2000. Effects of selective hunting on group composition and behavior patterns of pronghorn, *Antilocapra americana*, males in Montana. *Canadian Field-Naturalist*. 114:264-270.

Maher, C.R. and Lott, D.F. 2000. A review of ecological determinants of territoriality within vertebrate species. *American Midland Naturalist*. 143:1-29.

Maher, C.R. 1997. Group stability, activity budgets, and movements of pronghorn females. *Southwestern Naturalist*. 42:25-32.

Maher, C.R. and Lott, D.F. 1995. Definitions of territoriality used in the study of variation in vertebrate spacing systems. *Animal Behaviour*. 49:1581-1597.

Maher, C.R. 1994. Pronghorn male spatial organization: population differences in degree of non-territoriality. *Canadian Journal of Zoology*. 72:455-464.

Maher, C.R. 1991. Activity budgets and mating system of male pronghorn at Sheldon National Wildlife Refuge, Nevada. *Journal of Mammalogy*. 72:739-744.

Maher, C.R. and Lott, D.F. 1991. Pronghorn in California: information for the private landowner. University of California Cooperative Extension publication.

Maher, C.R. and Byers, J.A. 1987. Age-related changes in reproductive effort of male bison. *Behavioral Ecology and Sociobiology*, 21:91-96.

### **MANUSCRIPTS IN PROGRESS**

Maher, C. R. In preparation. Behavioral syndromes in a socially flexible species of marmot. To be submitted to *Behavioral Ecology and Sociobiology*.

### **INVITED SEMINARS AND PRESENTATIONS**

2015 Publishing a peer-reviewed paper from start to finish – Advice from the experts.  
Workshop presentation at the Annual Meeting of the American Society of Mammalogists.

2014 Individual variation in behavior: do woodchucks have personality? School of Biology and Ecology, University of Maine.

- 2013 Wildlife field studies. 2013 Research Integrity Symposium, Maine. Copresenter with Dr. Karen Wilson.
- 2011 What can a solitary species tell us about sociality? Department of Biological Sciences, Idaho State University.
- 2010 Lessons from (social) life: what can a solitary species tell us about sociality? Department of Wildlife Ecology, University of Maine.
- 2010 Lessons from (social) life: what can solitary woodchucks teach us about family dynamics? Science Department, Southern Maine Community College.
- 2009 Woodchuck family dynamics: effects of kinship on space use and interactions. Department of Biology, Bates College.
- 2007 Genetic relatedness and spatial organization in woodchucks (*Marmota monax*). Maine GIS Users Group Conference, Gorham, Maine.
- 2006 Factors affecting social organization of woodchucks: a test of the environmental harshness hypothesis. Department of Wildlife Ecology, University of Maine.
- 2006 Factors affecting social organization of woodchucks: a test of the environmental harshness hypothesis. Department of Biological Sciences, University of Southern Maine.
- 2004 Social organization of woodchucks: how social is the asocial marmot? Department of Zoology, Miami University, Oxford, Ohio.
- 2004 What can a solitary species teach us about the evolution of social behavior? University of Southern Maine Summer Research Seminar Series.
- 2002 Social organization of woodchucks in Maine: dispelling some myths about the asocial marmot. Department of Biology and Department of Wildlife Ecology, University of Maine.
- 1998 Correlates of spatial organization in pronghorn males. Department of Wildlife Ecology Seminar Series, University of Maine.
- 1998 Ecological and physiological correlates of spacing systems in pronghorns. Bates Biology Seminar Program, Bates College.

**PRESENTATIONS/POSTERS** (\* denotes undergraduate student; ‡ denotes graduate student)

- 2018 Panel Discussion: Using Undergraduate Assistants to Improve Student Learning. RiSE Center Teaching Symposium, University of Maine.
- 2018 Maher, C. R. What can solitary woodchucks tell us about sociality? Lightning Talk presented at 1st Annual Research Symposium, University of Southern Maine.
- 2017 Maher, C. R. Age related changes in behavior of woodchucks. Poster presented at Annual Meeting of the Animal Behavior Society.

- 2015 Maher, C. R. Individual variation in behavior: do woodchucks have personalities? Food and Thoughts presentation at University of Southern Maine.
- 2015 †Honeywell, A. F. and Maher, C. R. Agonistic interactions in harbor seals (*Phoca vitulina concolor*) vary with density on haul-out ledges. Poster presented at Annual Meeting of the American Society of Mammalogists.
- 2014 †Honeywell, A. F. and Maher, C. R. Intensity, rate, and outcome of agonistic interactions in harbor seals (*Phoca vitulina*) in relation to density on haul-out ledges. Poster presented at Thinking Matters: A Student Research, Scholarship and Creativity Symposium.
- 2014 †Honeywell, A. F. and Maher, C. R. Intensity, rate, and outcome of agonistic interactions in harbor seals (*Phoca vitulina*) in relation to density on haul-out ledges. Poster presented at the 70th Annual Northeast Fish and Wildlife Conference.
- 2012 Maher, C. R. Personality and behavioral syndromes in woodchucks (*Marmota monax*). Poster presented at the Annual Meeting of the American Society of Mammalogists.
- 2011 †Lewis, C. H. and Maher, C. R. Kin recognition in woodchucks (*Marmota monax*). Poster presented at Thinking Matters: A Student Research, Scholarship and Creativity Symposium.
- 2011 †Lewis, C. H. and Maher, C. R. What makes a good hibernaculum for woodchucks? Poster presented at Thinking Matters: A Student Research, Scholarship and Creativity Symposium.
- 2010 Florant, G. L., Maher, C. R., Waldvogel, J. A., and Zervanos, S. M. Latitudinal differences in the hibernation characteristics of woodchucks (*M. monax*). Poster presented at the Annual Meeting of the American Physiological Society.
- 2010 Maher, C. R. Reproductive suppression in woodchucks (*Marmota monax*). Poster presented at the Annual Meeting of the Animal Behavior Society.
- 2010 †McKay, J. L. and Maher, C. R. Effects of mercury on male song in Nelson's Sparrows (*Ammodramus nelsoni*). Poster presented at the Annual Meeting of the Animal Behavior Society.
- 2010 †McKay, J. L. and Maher, C. R. Effects of mercury on male song in Nelson's sparrows (*Ammodramus nelsoni*). Poster presented at Thinking Matters: A Student Research, Scholarship and Creativity Symposium.
- 2009 †Aschemeier, L. M. and Maher, C. R. Eavesdropping of woodchucks and Eastern chipmunks on heterospecific alarm calls. Poster presented at Thinking Matters: A Student Research, Scholarship and Creativity Symposium.

- 2009 †Regan, K. J. and Maher, C. R. Effects of wildfire on spatial organization of pronghorn (*Antilocapra americana*) males. Poster presented at Thinking Matters: A Student Research, Scholarship and Creativity Symposium.
- 2009 Maher, C. R. Woodchuck family dynamics: effects of kinship on space use and interactions. Seminar presented at the USM Biology Seminar Series.
- 2008 Maher, C. R. What can solitary woodchucks teach us about social behavior? Creativity and Discovery: Collaboration at USM (a university wide research conference), New Gloucester, Maine.
- 2008 Zervanos, S. M., Florant, G. L., Maher, C. R., and Waldvogel, J. A. Environmental influences on the hibernation patterns of eastern woodchucks. Oral presentation given at the VI International Conference on the genus *Marmota*: Marmots in a changing world: research and action.
- 2008 Zervanos, S. M., Florant, G. L., Maher, C. R., and Waldvogel, J. A. Environmental influences on the hibernation patterns of eastern woodchucks. Oral presentation given at the Annual Meeting of the American Society of Mammalogists.
- 2008 \*Long, S. and Maher, C. R. Experimental evidence that stabilimenta in *Argiope aurantia* serve multiple functions. Seminar presented at the USM Biology Seminar Series.
- 2007 Maher, C. R. Genetic relatedness and spatial organization in woodchucks (*Marmota monax*). Oral presentation given at the Annual Meeting of the Animal Behavior Society.
- 2007 Zervanos, S. M., Maher, C. R., and Waldvogel, J. A. Latitudinal differences in hibernation patterns of eastern woodchucks (*Marmota monax*). Oral presentation given at the Annual Meeting of the American Society of Mammalogists.
- 2007 \*Long, S. and Maher, C. R. Why do black and yellow orb weaver spiders (*Argiope aurantia*) produce stabilimenta? Poster presented at Thinking Matters: A Student Research, Scholarship and Creativity Symposium.
- 2006 †Darhower, S.E. and Maher, C.R. Effects of immunocontraception on behavior in fallow deer (*Dama dama*). Poster presented at the Annual Meeting of the American Society of Mammalogists.
- 2004 Maher, C.R. Natal philopatry and kin groups in woodchucks (*Marmota monax*). Oral presentation given at the Annual Meeting of the American Society of Mammalogists.
- 2004 \*Duron, M., Maher, C.R. and \*Greenleaf, M.R. Using microsatellite DNA to determine the mating system of woodchucks (*Marmota monax*). Poster presented at the Annual Meeting of the American Society of Mammalogists.
- 2003 Maher, C.R. Natal philopatry and dispersal in woodchucks: preliminary findings. Poster presented at the Annual Meeting of the Animal Behavior Society.

- 2003 \*Duron, M. and Maher, C.R. Using microsatellite DNA to determine genetic relationships of woodchucks. Poster presented at Thinking Matters: A Student Research, Scholarship and Creativity Symposium.
- 2001 Maher, C.R. Genetic relationships and social organization of woodchucks. Seminar presented to R&D at USM Seminar Series.
- 2001 Maher, C.R. Intrasexual territoriality in woodchucks (*Marmota monax*). Poster presented at the Annual Meeting of the Animal Behavior Society.
- 2001 \*Rodgers, H.I. and Maher, C.R. Effects of human activity on woodchuck flight response. Poster presented at the Annual Meeting of the Animal Behavior Society.
- 2000 Maher, C.R. Spatial organization of woodchucks (*Marmota monax*) in southern Maine. Poster presented at the Annual Meeting of the American Society of Mammalogists.
- 1998 Maher, C.R., \*Besel, R.M. and \*Blatnick, J. Effects of visitors and season on behavior patterns of captive Siberian tigers. Poster presented at the Annual Meeting of the Animal Behavior Society.
- 1997 \*Besel, R., \*Blatnick, J. and Maher, C. The effects of visitor traffic and seasonal changes on captive tiger behavior. Presented at the Annual Meeting of the Montana Academy of Sciences.
- 1997 Maher, C.R. Effects of selective hunting on behavior patterns of pronghorn males at Fort Belknap Indian Reservation, Montana. Presented at the Annual Meeting of the Montana Academy of Sciences.
- 1997 Maher, C.R. and Mitchell, C.D. Effects of selective hunting on behavior patterns of pronghorn males at Fort Belknap Indian Reservation, Montana. Presented at the Annual Meeting of the Montana chapter of The Wildlife Society.
- 1996 Berkeley, E.V., Maher, C.R., Rachlow, J. and Kirkpatrick, J.F. Fecal testosterone concentrations in territorial and nonterritorial pronghorns and southern white rhinoceroses. Poster presented at the Annual Meeting of the Montana chapter of The Wildlife Society.
- 1996 \*Besel, R. \*Blatnick, J., Maher, C.R., and Kirkpatrick, J. Effects of visitors on behavior patterns of captive Siberian tigers: preliminary results. Presented at the Annual Meeting of the Montana Academy of Sciences.
- 1996 \*Lofthouse, A., Maher, C.R., and Kirkpatrick, J. Effects of environmental enrichment on captive North American river otter behavior patterns: preliminary results. Presented at the Annual Meeting of the Montana Academy of Sciences.
- 1996 Maher, C.R. Correlates of variable spatial organization in two pronghorn populations. Presented at the Annual Meeting of the Montana chapter of The Wildlife Society.
- 1996 Maher, C.R. Ecological and physiological correlates of spatial organization in pronghorn males. Presentation given at the Department of Biology, Colorado College.

- 1996 Maher, C.R. Ecological correlates of spatial organization in pronghorn males. Presented at the Annual Meeting of the Montana Academy of Sciences.
- 1996 Maher, C.R. Ecological correlates of variable spacing systems in pronghorn males. Presented at the Dept. of Biological Sciences, Central Washington University.
- 1996 Mitchell, C.D. and Maher, C.R. Pronghorn age and horn size. Presented at the Annual Meeting of The Wildlife Society.
- 1996 Mitchell, C.D. and Maher, C.R. Relationship of age and horn size in pronghorn. Presented at the Annual Meeting of the Montana chapter of The Wildlife Society.
- 1995 Maher, C.R. A quantitative analysis of variable spatial organization in pronghorn males. Presented at the Annual Meeting of the Montana Academy of Sciences.
- 1995 Maher, C.R. Quantitative comparison of spatial organization in pronghorn males. Presented at the Black Hills Studies Conference, Black Hills State University, South Dakota.
- 1995 Maher, C.R. Quantitative descriptions of spatial organization in two pronghorn populations. Presented at the Annual Meeting of the Animal Behavior Society.
- 1994 Maher, C.R. Group stability and movements of female pronghorn: implications for mate choice. Presented at the Annual Meeting of the Montana Academy of Sciences.
- 1993 Maher, C.R. Quantitative analysis of non-territorial pronghorn males. Presented at the Annual Meeting of the Montana Academy of Sciences.
- 1993 Maher, C.R. Quantitative description of behavior of male pronghorn and differences in degree of non-territoriality. Presented at the Annual Meeting of the Animal Behavior Society.
- 1992 Maher, C.R. Are female pronghorn more mobile during the breeding season? Poster presented at the Annual Meeting of the American Society of Naturalists.
- 1992 Maher, C.R. Are female pronghorn more mobile during the breeding season? Poster presented at Animal Behavior Research Training Grant Workshop.
- 1992 Maher, C.R. Spatial organization of male pronghorn in a translocated population: defending food or females? Invited speaker at Texas A & I University.
- 1990 Maher, C.R. Behavior and ecology of pronghorn translocated to the Carrizo Plain, San Luis Obispo County. Presented at the Annual Meeting of the Southern California Academy of Sciences.
- 1990 Maher, C.R. Status of pronghorn translocated to San Luis Obispo County, California. Seminar presented in Wildlife and Fisheries Biology Seminar Series, University of California, Davis.



- 1989 Maher, C.R. Behavior and social organization of male pronghorn at the Sheldon National Wildlife Refuge, Nevada. Seminar presented in Wildlife and Fisheries Biology Seminar Series, University of California, Davis.
- 1989 Maher, C.R. Behavior of male pronghorn at Sheldon National Wildlife Refuge, Nevada. Poster presented at the Annual Meeting of the Animal Behavior Society. Received Honorable Mention in Founders Award competition.
- 1987 Maher, C.R. and Byers, J.A. Age-related changes in reproductive effort of male bison. Presented at the Annual Meeting of the Animal Behavior Society.
- 1986 Maher, C.R. Reproductive effort in male bison. Presented at the meeting of the Pacific Northwest Bird and Mammal Society.

### **GRADUATE STUDENTS SUPERVISED**

Sarah Darhower, M.S. Biology, May 2006  
 Lisa Aschemeier, M.S. Biology, May 2009  
 Jennifer McKay, M.S. Biology, May 2010  
 Kevin Regan, M.S. Biology, August 2010  
 Carrie Lewis, M.S. Biology, May 2011  
 Anne Honeywell, M.S. Biology, May 2014  
 Zachary Lankist, M.S. Candidate, in progress

### **GRADUATE STUDENT COMMITTEES**

Lisa Vickers, M.S. Biology, May 2005  
 Sean Casto, M.S. Biology, May 2012  
 Timothy Divoll, M.S. Biology, May 2013  
 Ellen McCann Labbe, M.S. Biology, May 2013  
 Molly Paine, M.S. Biology, May 2014  
 Gregory LaBonte, M.S. Biology, August 2016  
 Vanessa Blair-Glantz, in progress  
 Briana Fischella, in progress  
 Grace Relihan, in progress  
 Aaron Svedlow, in progress  
 Meg Thurrell, in progress  
 Amy Webb, in progress  
 Margret Welch, in progress

### **COURSES TAUGHT**

#### University of Southern Maine

Biological Foundations (for nonmajors)  
 Marine Biology Laboratory (for nonmajors)  
 Biological Principles I: Cellular Biology (majors)  
 Laboratory Biology (majors)  
 Biological Principles II: Evolution, Biodiversity, and Ecology, with an integrated laboratory  
 Vertebrate Zoology, with an integrated laboratory  
 Animal Behavior and Animal Behavior Laboratory  
 Graduate Seminars in Conservation Behavior; Topics in Animal Behavior; Biology of Running

#### Maine Audubon Society

Wildlife Behavior 101

Montana State University – Billings

Survey of Biology (for nonmajors)

Organismal Biology I and II: Botany, Zoology and Ecology, with Laboratories (responsible for zoology and ecology sections)

Ecology and Ecology Lab

Written Examination

Behavioral and Evolutionary Ecology, and Lab

Vertebrate Zoology and Lab

**PROFESSIONAL SERVICE AND ACTIVITIES**Memberships

American Society of Mammalogists

Animal Behavior Society

International Society for Behavioral Ecology

Service

2016	Chair	Ad Hoc Committee on Obituary Policy, American Society of Mammalogists
2012 – 2015	Member	University of New England Institutional Animal Care and Use Committee
2010 – 2016	Member	Publications Committee, American Society of Mammalogists
2010 – 2016	Associate Editor	<i>Journal of Mammalogy</i>
2010 – 2011	Secretary	Board of Directors, Biodiversity Research Institute
2006	Reviewer	Student Research Grants, Animal Behavior Society
2003	Reviewer	Student Research Grants, Animal Behavior Society
1999 – 2006	Institutional Liaison	Council on Undergraduate Research
1999 – 2001	Chair	Program Development Committee, Mainly Women in Science
1997	Co-organizer	Rangeland and Riparian Areas Symposium, Montana Academy of Sciences
1996 – 1997	Institutional Liaison	Council on Undergraduate Research
1995 – 1998	Member	Research Grants Committee, Animal Behavior Society
1995	Judge	Founders Award Poster, Animal Behavior Society
1994 – 1996	Vice President	Biological Sciences section, Montana Academy of Sciences

Peer Review

2018	<i>Animal Behaviour, Ethology</i>
2017	<i>Animal Behaviour, Behavioral Ecology and Sociobiology, Journal of Mammalogy</i>
2016	<i>Animal Behaviour, Journal of Mammalogy, Journal of Tropical Ecology, Urban Ecosystems</i>
2015	<i>Behavioural Processes, Biological Journal of the Linnean Society, Ethology Ecology and Evolution</i> , External reviewer for Ph.D. dissertation
2014	<i>Animal Behaviour (2), Ethology, Journal of Mammalogy, PLOS ONE</i>
2013	<i>Animal Behaviour, Behavioral Ecology and Sociobiology</i>
2012	<i>Animal Behaviour, Behavioral Ecology and Sociobiology, Canadian Journal of Zoology, Journal of Animal Ecology, Philosophical Transactions of the Royal Society of London B, Proceedings of the Royal Society of London B, National Science Foundation Animal Behavior Panel</i>

- 2011 *Animal Behaviour, Behavioural Processes*, Ad hoc reviewer to National Geographic Society Committee for Research and Exploration, National Science Foundation
- 2010 *American Midland Naturalist, Animal Behaviour* (2), *Journal of Mammalogy* (3), *Western North American Naturalist*
- 2009 *Animal Behaviour, Journal of Mammalogy*
- 2008 *Behavioral Ecology and Sociobiology, Ethology, Journal of Mammalogy* (3), *Revista Chilena Historia Natural*, Ad hoc reviewer to Natural Sciences and Engineering Research Council of Canada (NSERC), National Science Foundation (2)
- 2007 *Animal Behaviour* (3), *Behavioral Ecology and Sociobiology, Ethology, Journal of Mammalogy* (2), *Southwestern Naturalist, Biology* (text by Campbell and Reece), Ad hoc reviewer to National Science Foundation
- 2006 *Ethology, Journal of Applied Ecology, Journal of Mammalogy*, Ad hoc reviewer to National Science Foundation (2)
- 2005 *Behavioral Ecology* (2), *Ethology, Evolutionary Ecology, Journal of Mammalogy*, Ad hoc reviewer to National Science Foundation (2), External reviewer for Ph.D. dissertation
- 2004 *Journal of Mammalogy*, Ad hoc reviewer to National Science Foundation
- 2003 *Behavioral Ecology and Sociobiology* (2), *Journal of Mammalogy* (2), Ad hoc reviewer to National Science Foundation
- 2002 *A Short Guide to Writing about Biology, Journal of Avian Biology*
- 2001 *Behavioral Ecology, Behavioral Ecology and Sociobiology, Journal of Mammalogy, Reproduction*, National Science Foundation Doctoral Dissertation Improvement Grant Panel, Ad hoc reviewer to National Science Foundation (2)
- 2000 *Behavioral Ecology, Southwestern Naturalist*
- 1999 *Behavioral Ecology and Sociobiology*
- 1998 *Animal Behavior: Mechanisms, Ecology, Evolution*
- 1997 *The European Roe Deer: The Biology of Success*
- 1996 *Great Basin Naturalist*
- 1994 *Journal of Mammalogy*
- 1993 *Journal of Mammalogy*

### UNIVERSITY SERVICE ACTIVITIES

#### University of Southern Maine: College and University

- |                |          |   |
|----------------|----------|---|
| 2018 – present | Chair    | John Ricci Lecture Hall Renovation Committee  |
| 2017           | Member   | Search Committee for Associate Dean, Lewiston-Auburn College                        |
| 2017           | Reviewer | CSTH Scholarship Applications   |
| 2016 – present | Co-chair | Learning Assistants Program Team  |
| 2016           | Member   | Director, Center for Collaboration and Development Screening Committee              |
| 2016           | Member   | RSCA Summer Research Proposal Review Committee                                      |
| 2016           | Member   | Provost Search Committee  |
| 2015 – 2017    | Member   | MEIF Internship Review Committee  |
| 2015           | Member   | Early Studies Committee   |
| 2015           | Chair    | Personnel Committee for Dr. Karen Wilson, Dept. of Environmental Science and Policy |
| 2014 – 2015    | Member   | Personnel Committee for Dr. Karen Wilson, Dept. of Environmental Science and Policy |

2014	Member	Multi-Disciplinary Research Cluster Development Seed Fund Proposal Review Committee
2013 – 2018	Member	Prior Learning Assessment Advisory Board
2013	Member	MEIF Graduate Assistantship Selection Committee
2012 – 2015	Chair	Institutional Animal Care and Use Committee
2011	Co-chair	Faculty Senate Award Nominations Committee, Math and Science
2010 – 2011	Member	STEM Pioneers Committee
2010 – 2011	Member	Leadership Team, College of Management and Human Service
2010 – 2011	Member	Naming and Mission Committee, College of Science, Technology, and Health
2010	Member	Core Equipment Committee
2010	Member	Distinguished Professor Screening Committee
2010	Member	Screening Committee for Woodrow Wilson-Rockefeller Brothers Fund Fellowships for Aspiring Teachers of Color
2010	Presenter	Upward Bound Careers Day
2010	Participant	Engaging Departments Institute, AAC&U
2009 – 2012	Presenter	Preparing High School Students for College Program
2009	Presenter	Invention 2 Venture Biotechnology Workshop Panel Discussion
2008 – 2010	Member	NEASC Re-accreditation Committee on Public Disclosure
2008 – 2010	Chair	College of Arts and Sciences Liberal Studies Committee
2008 – 2014	Presenter	Academic Showcase (New Student Orientation)
2008 – 2009	Member	Research Administration Blue Sheet Revision Committee
2008 – 2009	Member	College of Arts and Sciences Scholarship Committee
2007 – 2008	Member	College of Arts and Sciences Graduate Affairs Committee
2007 – 2008	Member	Graduate Council
2006	Member	College of Arts & Sciences General Education Liaison Group
2005 – 2006	Chair	College of the Arts Planning Committee
2005 – present	Member	Institutional Animal Care and Use Committee
2004 – 2008	Mentor	College of Arts and Sciences New Faculty Mentoring Program
2004 – 2005	Member	College of Arts and Sciences Dean Search Committee
2004	Member	Selection Committee for 2004-2005 Trustee Professorship
2003 – 2004	Member	Undergraduate Research Initiatives Committee
2002 – 2003	Member	SENCER Committee
2002	Member	College of Arts and Sciences Graduate Studies Policies and Procedures Committee
2002	Member	Selection Committee for 2003-2004 Trustee Professorship
2000 – 2001	Chair	College of Arts and Sciences Faculty Colloquium Series Committee
1999 – 2000	Member	College of Arts and Sciences Dean's Scholars Committee
1999 – 2000	Member	College of Arts and Sciences Faculty Colloquium Series Committee
1998 – 2000	Co-chair	Faculty Senate Awards for Math and Sciences Committee
1998 – 1999	Member	Biotechnology Research and Development Committee

University of Southern Maine: Department

2018	Member	Departmental Search Committee (Laboratory Associate)
2018	Editor	Department Self Study
2017 – 2018	Contributor	Department Self Study

2016 – present	Coordinator	Course scheduling
2016	Chair	Biology Learning Outcomes Committee
2016	Chair	Ad hoc committee for articulation agreements with Central Maine Community College
2015	Member	Departmental Search Committee (Lecturer of Physiology)
2014 – 2015	Chair	B.S./B.A. Biology Curriculum Planning Committee
2014 – 2015	Member	Minor in Ecology Planning Committee
2014 – 2015	Coordinator	Course scheduling
2013	Member	Departmental Search Committee (Lecturer of Microbiology)
2012 – 2015	Reviewer	Graduation Certifications
2011 – present	Webmaster	Biology Department website
2011 – 2012	Coordinator	Biology Department Seminar Series
2010 – 2011	Chair	Department of Biological Sciences
2010	Chair	Budget Subcommittee
2008 – 2009	Chair	Department of Biological Sciences
2007 – 2008	Coordinator	M.S. Graduate Program
2004 – 2005	Member	Alumni Survey Committee
2004 – 2006		Lab Safety Officer
2003 – 2005	Coordinator	M.S. Biology Graduate Admissions
2003 – 2004	Member	Departmental Search Committees (2 positions)
2002 – 2003	Member	Departmental Search Committee
2002 – 2003	Member	Departmental Safety Committee
2001 – 2002	Co-editor	Department Self Study
2001 – 2006	Chair	Departmental Part Time Faculty Review Committee
2001 – 2006	Chair	Department of Biological Sciences
1999 – 2001	Coordinator	Biology course schedules
1999 – 2000	Member	Departmental Search Committees (2 positions)
1998 – 2001	Chair	M.S. Biology Planning Committee
1998 – 2001	Editor	Biology 106K Lab Manual
1998 – 2000	Member	Departmental Space Committee
1997 – 2006	Advisor	Beta Beta Beta (Biological Honor Society)
1997 – 2001	Advisor	Biology Club
1997 – 1998	Member	Departmental Search Committees (2 positions)

#### Montana State University – Billings

1996 – 1997	Member	Undergraduate Curriculum Committee
1996 – 1997	Member	Environmental Studies Advisory Group
1995 – 1997	Member	College of Arts and Sciences' Honors Program Task Force
1995 – 1996	Member	Departmental Search Committee
1994 – 1997	Member	Departmental Space Utilization Committee
1994 – 1995	Member	Chancellor's Advisory Group
1994 – 1995	Member	Departmental Search Committees (2 positions)
1993 – 1994	Member	Departmental Search Committees (2 positions)
1993 – 1994	Chair	Computer Users Advisory Subcommittee
1992 – 1996	Advisor	Environmental Awareness Club
1992 – 1994	Member	Student Computer Fees Committee

#### **AWARDS**

2001 College of Arts and Sciences' Emerging Teacher/Scholar Award

#### **GRANTS**

- 2015 University of Southern Maine Title III High Impact Educational Practices Grant, "Vertebrate Zoology (BIO 353) lab: Survey of vertebrates on natural areas in southern Maine", \$500
- 2006 University of Southern Maine Faculty Senate Grant, "Microsatellite DNA analysis of the mating system in woodchucks", \$1500
- 2005 University of Southern Maine Faculty Senate Grant, "Ecological factors affecting dispersal in woodchucks: when to leave home?" \$3000
- 2004 College of Arts and Sciences Research and Creative Activity Fund, "Testing new microsatellite DNA loci in woodchucks", \$1496
- 2000 - 2002 National Science Foundation, Professional Opportunities for Women in Research and Education, "POWRE: Evolution of sociality in a behaviorally flexible marmot", \$50,000
- 2000 University of Southern Maine Summer Research Award, "Determining genetic relationships among woodchucks", \$21,109
- 2000 University of Southern Maine Faculty Senate Grant, "Assessing genetic relationships and mating systems in the behaviorally flexible woodchuck (*Marmota monax*)", \$3000
- 1998 University of Southern Maine Faculty Senate Research Grant, "Flexibility in woodchuck social organization: how social is the asocial marmot?" \$2996
- 1997 Montana State University Faculty Development Award, "Ecological and physiological correlates of variable spatial organization in pronghorn males", \$650
- 1996 U.S. Fish and Wildlife Service, "Effects of selective hunting on the behavior of a pronghorn population, Fort Belknap Reservation, Montana", \$2000
- 1996 Montana State University, Billings Research and Creative Endeavor Grant, "Effects of selective hunting on the behavior of a pronghorn population, Fort Belknap Reservation, Montana", \$500
- 1996 Montana State University Faculty Development Award, "Effects of selective hunting on the behavior of a pronghorn population, Fort Belknap Reservation, Montana", \$206
- 1995 U.S. Fish and Wildlife Service, "Effects of selective hunting on the behavior of a pronghorn population, Fort Belknap Reservation, Montana", \$1500
- 1995 Montana State University Faculty Development Award, "Ecological and physiological correlates of variable spatial organization in pronghorn males", \$1075
- 1995 Black Hills Natural History Association Grant, "Ecological and physiological correlates of variable spatial organization in pronghorn males", \$300

- 1994 Montana State University, Billings Research and Creative Endeavor Grant, "Ecological and physiological correlates of variable spatial organization in pronghorn males", \$1250
- 1994 Montana State University, Billings Foundation Grant, "Ecological and physiological correlates of variable spatial organization in pronghorn males", \$1200
- 1994 Black Hills Natural History Association Grant, "Ecological and physiological correlates of variable spatial organization in pronghorn males", \$300
- 1993 Eastern Montana College Foundation Grant, "Ecological and physiological correlates of variable spatial organization in pronghorn males", \$1200
- 1993 Eastern Montana College Research and Creative Endeavor Grant, "Ecological and physiological correlates of variable spatial organization in pronghorn males", \$760
- 1990 Theodore Roosevelt Memorial Fund, "Spatial organization and female group stability in a translocated pronghorn population", \$883
- 1990 Renewable Resources Extension Act Grant, "Spatial organization and female group stability in a translocated pronghorn population", \$5000
- 1990 Graduate Research Award, "Spatial organization and female group stability in a translocated pronghorn population", \$500
- 1990 San Luis Obispo County Fish and Game Fines Commission, "Spatial organization and female group stability in a translocated pronghorn population", \$3000
- 1990 Golden Gate chapter, Safari Club International, "Spatial organization and female group stability in a translocated pronghorn population", \$2000
- 1989 Sacramento Safari Club, "Spatial organization and female group stability in a translocated pronghorn population", \$5000
- 1989 San Luis Obispo County Fish and Game Fines Commission, "Spatial organization and female group stability in a translocated pronghorn population", \$2000
- 1989 San Fernando Valley Wildlife Fund, "Spatial organization and female group stability in a translocated pronghorn population", \$2000
- 1988 Sigma Xi, "Spatial organization and female group stability in a translocated pronghorn population", \$400
- 1987 Outstanding Research Award, University of California, "Spatial organization and female group stability in a translocated pronghorn population", \$500

1985            Sigma Xi, "Age-related changes in reproductive effort of male bison", \$250