

Shannon M. Murphy – Curriculum Vitae

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EDUCATION

- 2005 Ph.D. Cornell University
Ecology and Evolutionary Biology
Advisor: Paul Feeny Committee: Monica Geber, Alan Renwick and Marina Caillaud
- 1997 B.A. *Summa Cum Laude* University of Colorado at Boulder
Environmental, Population and Organismic Biology Major, Biochemistry Minor
Advisor: Yan Linhart Committee: Dave Armstrong and Bert Covert

RESEARCH INTERESTS

Plant-insect interactions	Population ecology	Chemical ecology	Community ecology
Multi-trophic interactions	Behavioral ecology	Ecosystem ecology	Stable Isotopes

EMPLOYMENT HISTORY

- 2010 – *Assistant Professor*, Department of Biological Sciences, University of Denver
(deferred until September 2010)
- 2007–10 *Postdoctoral Scientist* in the laboratory of Dr. John Lill,
Department of Biological Sciences, The George Washington University.
- 2005–08 *External Fellow* in the laboratory of Dr. Robert Denno, Department of Entomology,
University of Maryland.
- 2005–08 *National Parks Ecological Research Postdoctoral Fellow*, funded by the Ecological
Society of America and the National Park Foundation.
- 1997–98 *Professional Research Assistant* for Dr. Donald (Skip) Walker and Dr. Marilyn Walker.
Institute of Arctic and Alpine Research (INSTAAR) Tundra Ecosystem Analysis and
Mapping Laboratory (TEAML) at the University of Colorado.
- 1997–98 *Research Assistant* for Dr. Yan Linhart, EPO Biology, University of Colorado.

PUBLICATIONS

Peer-Reviewed Publications

(**=undergraduate student co-author, *=graduate student co-author)

Murphy, S. M., S. Leahy**, L. Williams** and J. T. Lill. In Press. Stinging spines protect slug caterpillars (Limacodidae) from multiple generalist predators. *Behavioral Ecology*.

Kula, R. R., J. T. Lill, **S. M. Murphy** and T. Stoepler*. In Press. The first host records for the nearctic species *Triraphis discoideus* (Hymenoptera: Braconidae: Rogadinae). *Entomological News*.

Murphy, S. M., J. T. Lill and D. R. Smith. 2009. A scattershot approach to host location: Uncovering the unique life history of the Trigonalyid hyperparasitoid *Orthogonalys pulchella* Cresson. American Entomologist 55(2): 82–87.

Murphy, S. M. 2008. Notes on *Papilio machaon aliaska* (Papilionidae) populations near Fairbanks, AK. Journal of the Lepidopterists' Society 62(2): 80–83.

Murphy, S. M. 2007. Inconsistent use of host plants by the Alaskan swallowtail butterfly: Adult preference experiments suggest labile oviposition strategy. Ecological Entomology 32: 143–152.

Murphy, S. M. 2007. The effect of host plant on larval survivorship of the Alaskan swallowtail butterfly (*Papilio machaon aliaska*). Entomologia Experimentalis et Applicata 122: 109–115.

Murphy, S. M. and P. P. Feeny. 2006. Chemical facilitation of a naturally-occurring host shift by *Papilio machaon* butterflies (Papilionidae). Ecological Monographs 76(3): 399–414.

Murphy, S. M. 2004. Enemy-free space maintains swallowtail butterfly host shift. Proceedings of the National Academy of Sciences 101(52): 18048–18052.

This publication was awarded the LaMont C. Cole Award in 2005. “This award is given each year to the author of the most outstanding published paper written by a graduate student or recent graduate of the Department of Ecology and Evolution for research carried out while at Cornell University. Papers are judged on the basis of their expected impact, originality, scholarship and clarity.”

Murphy, S. M. and Y. B. Linhart. 1999. Comparative morphology of the gastrointestinal tract in the feeding specialist *Sciurus aberti* and several generalist congeners. Journal of Mammalogy 80(4): 1325–1330.

Published Data Reports

Walker, D. A., N. A. Auerbach, T. K. Nettleton, A. Gallant, and **S. M. Murphy**. 1997. Arctic System Science Flux Study Data Report. Happy Valley Permanent Vegetation Plots: site factors, physical and chemical soil properties, plant species cover, photographs, soil descriptions and ordination. Tundra Ecosystems Analysis and Mapping Laboratory, University of Colorado.

In Review

Wimp, G. M., Finke, D. L., **S. M. Murphy**, A. F. Huberty and R. F. Denno. The effects of plant productivity on the structure and composition of a terrestrial arthropod community. Submitted to Ecology.

GRANTS AND FELLOWSHIPS

Postdoctoral Research

2005–08 National Parks Ecological Research Fellowship \$144,000

Ph.D. Dissertation Research

2003	American Museum of Natural History, Theodore Roosevelt Memorial Fund	\$1,000
2001–03	National Science Foundation Doctoral Dissertation Improvement Grant	\$12,000
2001	Explorer's Club Exploration Fund Grant	\$1,200
2000–03	Edna Bailey Sussman Fund Grants (2)	\$8,000

2000-02	Sigma Xi Grants (3)	\$1,700
2000-03	Andrew W. Mellon Student Research Grants (3)	\$2,300
1999-04	Department of Ecology and Evolutionary Biology Grants (4)	\$2,400

Undergraduate Honors Thesis Research

1996	Undergraduate Research Opportunities Program Grants (2)	\$600
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Field Courses and Travel Grants

2004-07	Gordon Conference Travel Grants (2)	\$1,200
2000-04	Cornell University Conference & Travel Grants (5)	\$2,900
2001	Organization for Tropical Studies <i>Tropical Biology</i> course	\$3,000
2001	National Science Foundation Graduate Research Fellowship Travel Grant	\$1,000

Fellowships

1999-02	National Science Foundation Graduate Research Fellowship	\$62,000
1998-99	Cornell Fellowship from the Cornell University Graduate School	\$16,000

Total Amount of Grants Received: \$259,300

TEACHING EXPERIENCE

Awards

2005	Excellence in Teaching Award, Department of Ecology and Evolutionary Biology, Cornell University. This award is given each year to a single graduate student.
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Courses Taught as the Instructor

2009	Honors Thesis Writing Workshop, George Washington University
2004	Writing in the Majors, Ecology and the Environment, Cornell University
1992	Conversational English, Centre Culturelle de La Madeleine, France

Courses Taught as a Teaching Assistant

2005	Herbivores and Plants: Chemical Ecology and Coevolution, Cornell University
2003	Herbivores and Plants: Chemical Ecology and Coevolution, Cornell University
2002	Evolutionary Biology, Cornell University
1998-99	Introductory Biology Laboratory Instructor, Cornell University

Guest Lectures

2002	Ithaca High School, Honors Biology classes
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Professional Development

2004	Writing in the Majors Seminar (Education 701), Cornell University
1999	Internship in Education (Education 620), Cornell University
1999	Graduate Student Professional Development Workshop participant, Cornell University

STUDENT MENTORING

Formal Programs

2005-07	Research advisor for University of Maryland undergraduate student Christine Finke, a participant in the College Park Scholars: Earth, Life and Time Program
2002-04	Research advisor for three Ithaca High School seniors who were participants in the New Visions: Explorations in the Biological Sciences program, part of the

- Board of Cooperative Educational Services (BOCES), Ithaca, NY. I mentored Jennie Lavine (2002), Mary Kate Wheeler (2003) and Michelle Samuelsen (2004).
- 2001 Independent Study research co–advisor for David Bollinger, a junior at Cornell University "Determining a definitive correlation between environmental stressors during pupal development and fluctuating asymmetries in eclosed *Papilio troilus* swallowtail butterfly wings"

Student Training in Laboratory and Field Techniques

Cornell University

- 1 High School Student: Peter Bennett
 6 Undergraduate Students: Christina Swanson, Crystal Tung, Joanna Goodman, Lauren Hough, Lauren Saunders and Susannah Rothman

University of Maryland

- 1 High School Student: Edgardo Parilla
 3 Undergraduate Students: Brian Crawford, Fiona Monosmith and Margaret Douglas

The George Washington University

- 7 Undergraduate Students: Laila Williams (NSF REU), Manaswi Sangraula (NSF REU), Lillian Power, Kylee Grenis, Rachel Liebson, Susannah Leahy and Victoria Fiorentino (Howard Hughes Medical Institution Fellow)

PROFESSIONAL PRESENTATIONS (FIRST–AUTHORED ONLY)

Invited Presentations

- 2009 Cornell University, Department of Ecology and Evolutionary Biology
 2009 University of Virginia, Blandy Experimental Farm
 2009 University of Denver, Department of Biological Sciences
 2009 Smithsonian Environmental Research Center
 2008 Entomological Society of America, Annual Meeting: Reno, NV
 2008 Smithsonian Institution, National Museum of Natural History
 2008–09 Howard Hughes Medical Institute & National Science Foundation, Research Experience for Undergraduates Seminar Series, George Washington University
 2007 Georgetown University, Department of Biology
 2006 University of Maryland, Department of Entomology
 2005 The George Washington University, Department of Biological Sciences
 2005 Cornell University, Department of Ecology and Evolutionary Biology
 2004 Cornell University, Ecology and Evolutionary Biology Graduate Student Recruitment
 2003 Eastern Branch of the Entomological Society of America: Harrisburg, PA

Contributed Presentations

- 2009 Ecological Society of America, Annual Meeting: Albuquerque, NM
 2008 Ecological Society of America, Annual Meeting: Milwaukee, WI
 2007 Ecological Society of America, Annual Meeting: San Jose, CA
 2007 Gordon Research Conference on Plant–Herbivore Interactions (poster): Ventura, CA
 2006 Ecological Society of America, Annual Meeting: Memphis, TN
 2005 Ecological Society of America, Annual Meeting: Montreal, Canada
 2005 Society for the Study of Evolution, Annual Meeting: Fairbanks, AK
 2004 Ecological Society of America, Annual Meeting: Portland, OR
 2004 Society for the Study of Evolution, Annual Meeting: Fort Collins, CO
 1999–06 Ecology and Evolutionary Biology Graduate Student Symposium: Cornell University
 1996 Guild of Rocky Mountain Population Biologists Annual Meeting: Colorado College Baca Campus, Crestone, CO

SERVICE AND COMMUNITY OUTREACH

Review of Manuscripts

Australian Journal of Entomology	Ethology
Behavioral Ecology	Global Change Biology
Biological Journal of the Linnean Society	Insect Science
Ecological Entomology	Oecologia
Ecology	Oikos
Ecology Letters	The Canadian Entomologist
Entomologia Experimentalis et Applicata	The Great Lakes Entomologist

Review of Proposals

2009	Panelist, NSF Graduate Research Fellowship Program, Ecology Panel
2009	External Referee, NSF DEB–Evolutionary Processes (1 proposal)
2009	External Referee, NSF DEB–Ecology (2 proposals)
2008	External Referee, Netherlands Organization for Scientific Research (Dutch Research Council), Council for Earth and Life Sciences
2002–04	Panelist, Andrew W. Mellon Fund, Cornell University
2002–04	Panelist, Kieckhefer Adirondack Fellowship, Cornell University

Outreach

2008–09	Classroom presentations for >500 2 nd graders to enhance science curriculum on insect life cycles at Rosemary Hills Elementary, Garrett Park Elementary and Forest Knolls Elementary, part of Montgomery County Public Schools, Maryland
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Miscellaneous Service

2008–09	Judge for Buell and Braun awards at the Ecological Society of America Annual Meetings: Milwaukee, WI; Albuquerque NM
2000–05	Graduate Representative at Faculty Meetings, Cornell University
1999–00	Co-President, Ecology and Evolutionary Biology Graduate Student Association
1999–00	Graduate Student Representative, Cornell University College of Agriculture and Life Sciences' Task Force for Improvement of the Graduate Teaching Assistant Experience

PROFESSIONAL SOCIETIES

Ecological Society of America	Lepidopterists' Society
Entomological Society of America	Society for the Study of Evolution

FIELD EXPERIENCE

United States: Alaska, Colorado, District of Columbia, Florida, Maryland, New Jersey, New York, North Carolina, Virginia, Washington
Elsewhere in North America: British Columbia, Yukon Territory
Central America: Costa Rica, Panama

LANGUAGES

English (native), French (proficient)