

Jeremy M. Davis

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Education

University of California, Davis	Ph.D.	2006	Animal Behavior
Binghamton University (SUNY)	B.S. Summa Cum Laude	1998	Biological Sciences

Employment History

2014-pres	Full-time Lecturer	UW-Tacoma, Tacoma, WA
2013-2014	Visiting Assistant Professor	Pacific Lutheran University, Tacoma, WA
2012-2013	Visiting Assistant Professor	Seattle University, Seattle, WA
2008-2013	Assistant Professor	Vassar College, Poughkeepsie, NY
2006-2008	NIH Postdoctoral Fellow	University of Arizona/Pima Community College, Tucson, AZ
2005-2006	Research Coordinator	Sacramento Science Project (NSF GK12 Fellowship)

Publications (* indicates undergraduate author):

- Davis, J.M.**, *Coogan, L. and Papaj, D.R. (In Review) Big maggots dig deeper: Size dependent larval dispersal in flies. *Oecologia*
- *Howe, M., Okello, M.M., and **J.M. Davis** (2013) Variation in the displacement of ungulate species from human infrastructure. *African Zoology*. **48**: 159-166.
- Davis, J.M.**, C.R. Nufio, and D.R. Papaj (2011) Quality or competition: Why increase resource acceptance in the presence of conspecifics? *Behavioral Ecology*. **22**:730-727.
- *Pasqualone, A. and **J.M. Davis** (2011) The use of performance information in the reproductive decisions of flies. *Animal Behavior*. **82**: 281-284.
- Davis, J. M.** (2010) Habitat Imprinting. In: Encyclopedia of Animal Behavior (Ed. by D. B. Michael & M. Janice), pp. 33-37. Oxford: Academic Press. **83**:363-382.
- Papaj, D.R., E. Snell-Rood and **J.M. Davis**. (2008) Behavioral Ecology: Learning. IN: Encyclopedia of Ecology. Elsevier.
- Davis, J.M.** (2008) Variation in the influence of natal experience on habitat choices. *Quarterly Review of Biology*. **83**:363-382.
- Stamps, J.A., **J.M. Davis**, S. A. Blozis, K. L. Boundy-Mills (2007) Genotypic variation in refractory periods and habitat selection by natal dispersers. *Animal Behaviour*. **74**: 599-610.
- Davis, J.M.** (2007) Preference or desperation? Natal experience and variation in breeding site selection in *Drosophila melanogaster*. *Animal Behaviour*. **74**: 111-119.
- Stamps, J.A. and **J.M. Davis** (2006) Adaptive effects of natal experience on habitat selection by dispersers. *Animal Behaviour*. **72**:1279-1289.
- Stamps, J.A., M. Buechner, K. Alexander, **J.M. Davis**, and N. Zuniga (2005) Genotypic differences in space use and movement patterns in *Drosophila melanogaster*. *Animal Behaviour*. **70**: 609-618
- Davis, J.M.** and J.A. Stamps (2004) The effect of natal experience on habitat preferences. *Trends in Ecology and Evolution*. **19**: 411-416
- Bolnick, D.I., Svanback, R., Fordyce, J.A., Yang, L.H., **Davis, J.M.**, Hulsey, C.D. and M.L. Forister (2003) A review of individual specialization. *The American Naturalist*. **161**: 1-28
- Bolnick, D.I., Yang, L.H., Fordyce, J.A., **Davis, J.M.** and R. Svanback (2002) Measuring individual level trophic specialization. *Ecology*. **83**: 2936-2941
- Davis, J.M.** and D. Madison (2000) The ontogeny of light-dark response in *Triops longicaudatus* as a response to changing selective pressures. *Crustaceana*. **73**(3):283-288

Published Book Reviews:

Bell, A.M., **Davis, J.M.**, Greene, C.M., Lema, S.C., Watters, J.V., and L.H. Yang (2001) Evolutionary questions in an ecologically relevant context. *Evolution* **55**(8) 1715-1716

Bell, A.M., **Davis, J.M.**, DeBose, J.L., Long, S.J., Mabry, K.E., Stankowich, T. Watters, J.V. and J.C. Johnson. (2001) Greatest hits in behavioral ecology. *Trends in Ecology and Evolution*. **17**(6):296

Teaching experience

Instructor

Biological Conservation	UW-Tacoma
Introductory Evolution and Ecology (2 iterations)	Pacific Lutheran U., UW-Tacoma
Animal Behavior w/lab (Biology; 6 iterations)	Pacific Lutheran U., Seattle U., Vassar College
Animal Behavior (Psychology)	Seattle U.
Evolution w/ lab (2 iterations)	Pacific Lutheran U., Seattle U.
Comparative Vertebrate Anatomy w/lab	Seattle University
Animal Structure and Diversity w/lab (4 iterations)	Vassar College
Introduction to Biological Investigation Lab (2 iterations)	Vassar College
Insights from Pests and Weeds (Intro. Bio.) (2 iterations)	Vassar College
Concepts in Biology w/lab (non-majors)	Pima Community College

Co-Instructor

Biology for Science Teachers (A short summer course in biology for middle and high school teachers)	Sacramento-area Science Project
Seminar in Neuroscience and Behavior (Variation, Essentialism and Psychopathology)	Vassar College
Seminar in Graduate-level Teaching in Animal Behavior (2 iterations) (I designed this course, and Dr. Gail Patricelli and I implemented it.)	UC-Davis

Laboratory Instructor

Introductory Biology (2 quarters: Organismal and Population Biology) (2005)	UC-Davis
Laboratory in Animal Biology/Scientific Methods (2004)	UC-Davis
Forensic Entomology (student research coordinator) (2002)	UC-Davis

Laboratory Development (for courses not listed above)

Statistical Analysis of Beetle Egg-Laying Decisions (2009)	Vassar College
The Scientific Method & Cell Respiration (2006)	Sam Brannan Middle School/UC-Davis
<i>Drosophila</i> genetics for Organismal and Population biology (2002)	UC-Davis
Take-home laboratory exercise for Animal Behavior (1998)	Binghamton University

Teaching Assistant

Introduction to Evolution (3 quarters: 2003 - 04)	UC-Davis
Primate Behavioral Ecology (1998)	Binghamton University
Introduction to Biology (1997)	Binghamton University

Science Education Training/Leadership

Member of Biology Education Research Group (University of Washington) 2013

Pacific Northwest Learning and Assessment Conference 2013

Chair of Vassar Biology Curriculum Committee: 2011 - 2012

Led the restructuring of departmental curriculum to reflect best practices in science pedagogy. This involved modeling staffing consequences of curricular change, administering and analyzing surveys of faculty opinion on curriculum, conducting a comparative study of peer institute curricula, and researching science pedagogy literature.

Head Post-doctoral Fellow: Center for Insect Science 2007 - 2008

Fostered collaborative environment for effective teaching and research. Organized program-sponsored seminars and meetings. Conducted a study on the first time teaching experiences of post-doctoral fellows.

NSF GK-12 Fellowship: 2005 - 2006

Received training in active inquiry-based education and education research from members of the UC Davis department of Education.

Teacher Research Coordinator 2005 - 2006

Led a teacher research group composed of 4 middle school biology teachers in the Sacramento-area. Developed guided inquiry modules on plate tectonics and cellular respiration. Used written assessment, classroom observations, and student interviews to test the effectiveness of the modules. Presented the research at National Science Teachers Association meeting

Graduate Course Development

Founder of Undergraduate Research Initiative (Sept. 2005-May 2006)

Collaborated with the Vice Provost of Undergraduate Research to create an email-based network facilitating the formation of graduate student/undergraduate student research collaborations.

Teaching/Outreach Presentations:

Davis, J.M. (2013) How to get the most out of your classes. Success in the Natural Sciences Workshop. Pacific Lutheran University, Tacoma, WA

Davis, J.M. (Poster in 2013) Skype-facilitated discussions on the process of behavioral biology. Teaching and Learning Symposium. University of Washington, Seattle, WA

Davis, J.M. and *Smith, L. (Poster in 2010) Going to the source by Skype-ing with scientists. Teaching and Technology forum, Vassar College, Poughkeepsie, New York

Davis, J.M. (2007) Applying a teaching philosophy where the rubber meets the unpaved, winding and long road. NIH-IRACDA National Conference, San Diego, CA

Davis, J.M., C. J. Hvidsten and C. Passmore (2006) Apply your knowledge: The importance of the concept application phase in model-based inquiry. National Science Teachers Association: Western Conference, Salt Lake City, UT

Davis, J.M. (2004) Teaching phylogenetic concepts (teaching exemplar). Instructional video for laboratory instructors at UC-Davis.

Other Leadership and Administrative Experience:

- Primary Investigator in Animal Behavior Research Laboratory (2008-pres)
Managed up to 10 students a semester, conducting 4 to 5 independent laboratory projects. Applied and received funding for research travel and equipment, familiarized students with several forms of behavior recording technology. Over the course of my science career, I have mentored at least 30 high school and college aged students through some of their first research experiences.
- Student Adviser (2009-pres)
Worked with up to 25 students a semester to help them develop well-rounded academic experiences. Worked in collaboration with Vassar's dean of studies office to resolve students' academic difficulties.
- Member of the Institutional Animal Care and Use Committee (Aug. 2011-pres)
Collaborated with professors, veterinarians, and community members to make decisions about the use of animals in laboratory research, and animal housing facilities at Vassar College.
- Member of Committee on Leaves and Privileges (2011-pres)
Collaborated with professors from diverse research backgrounds to review student applications for course overloads, underloads, leaves, and junior year abroad programs.
- Chair of Center for Animal Behavior Organizational Committee (Spring 2002)
Organized a day-long workshop for UC-Davis faculty and students entitled, "Integrating Behavior and Conservation."
- Graduate Student Representative - UC-Davis Educational Policy Committee (Fall 2002-Spring)
Collaborated with faculty to review all curricular changes to graduate programs.
- Deputy Program Officer (Spring 1998)
Animal Behavior Society Annual Meeting, University of Southern Illinois – Carbondale.

Awards:

- ESA Mercer Award - Best ecology paper by young investigators (2005)
(2003 *American Naturalist* Article)
- Outstanding Graduate Teaching Award (UC-Davis) – Nominee (2005)
- James Wilmoth Award for Excellence in Biology (Binghamton University) (1998)

Funding and honors:

- Frances Collins Research Fund (Vassar College) (2011)
- CCAS Keeping Current Grant: Funding for participation in *Drosophila* workshop (2011)
- Fran Ferguson Classroom Technology Fund (Vassar College) (2010, 2011)
- NIH - Postdoctoral excellence in research and teaching fellowship. (2007)
- NSF- Collaborative Classroom Based Inquiry Fellowship (2005)
- Professors for the Future Fellowship - UC-Davis (2005)
- Animal Behavior Block Grant - UC-Davis (2003)
- Jastro-Shields Research Grant - UC-Davis (2003)
- UC-Davis Center for Population Biology Research Grant (2001)
- NSF Pre-doctoral Fellowship (1999)

Research Presentations:

Invited Talks

- Davis, J.M. (2014) "Silver spoons and social information: How size and social environment affect insect reproductive decisions" Invited Talk at Pacific Lutheran University.
- Davis, J.M. (2013) "Silver spoons and social information: How size and social environment affect insect reproductive decisions" Invited Talk at University of Washington-Tacoma.
- Davis, J.M. (2011) Parents and Peers influence the Reproductive Decisions of *Rhagoletis suavis*. Invited Talk at Binghamton University, Binghamton, New York.
- Davis, J.M. (2010) How parents & peers influence insect decisions. Invited talk at Bard College, Annandale-on-Hudson, New York.
- Davis, J.M. (2009) Preference, time, and size: How mothers influence the habitat choices of their offspring. Invited talk at CUNY Queens College, New York.
- Davis, J.M. (2007) Why natal experience does (or does not) affect habitat choices. Symposium in honor of Judy Stamps. University of California-Davis.
- Davis, J.M. (2006) The effect of natal experience on habitat and host use. University of Arizona, Tucson, Arizona.

Conference Talks and Posters

- *Odell, S. and **J.M. Davis** (Poster in 2012) Morphological and behavioral plasticity in female choice due to social experience in *Drosophila hydei*. Hudson Valley Life Sciences Meeting., Poughkeepsie, NY
- Davis, J.M.** and *A.A. Pasqualone. (2011) Conspecific phenotypic states influence reproductive decisions in nonsocial insects. Animal Behavior Society/International Ethology Conference. Bloomington, IN
- *Liang, H, *Thomas, D. and **J.M. Davis** (Poster in 2011). Scarce sperm and sexually aggressive females. Animal Behavior Society/International Ethology Conference. Bloomington, IN
- *Whelan, K., *Rundell, E. and **J.M. Davis** (Poster in 2011). Influence of learned handling times on the hunting decisions of preying mantises. Hudson Valley Life Sciences Meeting.
- *Pasqualone, A.A. and **J.M. Davis** (Poster in 2010) Peer Pressure in Flies. Hudson Valley Life Sciences Meeting.
- *Coogan, L and **J.M. Davis** (Poster in 2009). Ecology of larval dispersal in walnut husk maggot (*Rhagoletis suavis*). Hudson Valley Life Sciences Meeting.
- Davis, J.M.** & D.R. Papaj (Poster in 2009) A "Silver Ovipositor" effect in *Rhagoletis juglandis*. Society for Integrative and Comparative Biology. Boston.
- Davis, J.M.** and J. A. Stamps (2007) Testing the alternative effects of early experience on habitat choice. Animal Behavior Society Meeting. Burlington, VT
- Stamps, J.A., **J.M. Davis**, S. A. Blozis, K. L. Boundy-Mills (2007) Genotypic variation in refractory periods and habitat selection. Animal Behavior Society Meetings. Burlington, VT
- Davis, J.M.** and J. A. Stamps (2006) Multiple adaptive mechanisms for natal experience's influence on habitat and host use. Society for the Study of Evolution, SUNY - Stonybrook
- Davis, J.M.** and J. A. Stamps (2004) The Effect of Natal Experience on Habitat Preference. Animal Behavior Society Annual Meeting. Oaxaca, Mexico.
- Davis, J.M.**, Bell, A.M. and Sih, A. (2002) Genetics and Behavioral Syndromes. Center for Animal Behavior Workshop: Behavioral Syndromes. UC-Davis.

Davis, J.M. (1999) Levels of artificial selection: Animal welfare implications. Center for Animal Behavior Workshop: Animal Welfare. UC-Davis.

Davis, J.M. and D.S. Wilson (1998) Avoid the best! Why some males should prefer less desirable females. Animal Behavior Society Annual Meeting. University of Southern Illinois-Carbondale.

Society/Group Membership:

Society of Integrative and Comparative Biology (2008-pres)

Animal Behavior Society (1998-pres)

Society for the Study of Evolution (2000-pres)

Peer Reviewer (2003-pres)

Manuscripts for PLOSOne, OIKOS, Biology Letters, Evolution, Heredity, Animal Behavior, Behavioral Ecology, Ecological Entomology, Arthropod-Plant Interactions.