

R. Craig Stillwell

Postdoctoral Research Associate
Department of Biology and Biochemistry
University of Houston
369 Science & Research Building 2
Houston, TX 77204-5001

Phone: 520-289-3885
E-mail: rcstillw@central.uh.edu
Web: <http://www.uh.edu/~rcstillw/>

Education

- 2007 Ph.D. Entomology, University of Kentucky.
Dissertation title: The evolutionary ecology of body size and sexual size dimorphism in two seed-feeding beetles.
- 1999 B.S. Summa Cum Laude (Biology), Campbellsville University.

Research and Teaching Positions

- 2010 – pres. Postdoctoral Research Associate, Department of Biology and Biochemistry, University of Houston.
- 2007 – 2010 Postdoctoral Excellence in Research and Teaching (PERT) Fellow, Department of Ecology and Evolutionary Biology, University of Arizona.
- 2001 – 2007 Graduate Research Assistant, Department of Entomology, University of Kentucky.
- 2005 Teaching Assistant, Department of Biology, University of Kentucky.

Grants and Support Funding

- 2007-2010 National Institutes of Health. Postdoctoral Excellence in Research and Teaching Fellowship, Center for Insect Science, University of Arizona. \$117,768 (salary) + \$22,500 (research support).
- 2005 National Science Foundation, Division of Environmental Biology. Interacting sources of selection and geographic variation in body size of a seed-feeding beetle. Charles W. Fox (PI) and R. Craig Stillwell (graduate student). Not funded.
- 2005 John L. Clarke and Fred W. Knapp Student Travel Award. R. Craig Stillwell. \$150.
- 2005 University of Kentucky, Graduate Student Travel Support. R. Craig Stillwell. \$1000.
- 2004 University of Kentucky, Dissertation Enhancement Award. Rapid evolution of a latitudinal size cline in the seed beetle *Stator limbatus*. R. Craig Stillwell. \$2850.
- 2004 University of Kentucky, Graduate Student Travel Support. R. Craig Stillwell. \$400.
- 2003 University of Kentucky, Commonwealth Research Award. R. Craig Stillwell. \$1000.

Publications

20. **Stillwell, R. C.**, A. Daws and G. Davidowitz. The ontogeny of sexual size dimorphism of a moth: When do males and females grow apart? In review.
19. **Stillwell, R. C.**, I. Dworkin, A. W. Shingleton and W. A. Frankino. Experimental manipulation of body size to estimate morphological scaling relationships in *Drosophila*. In press for *Journal of Visualized Experiments*.
18. Amarillo-Suárez, A. R., **R. C. Stillwell** and C. W. Fox. Natural selection on body size is mediated by multiple interacting factors: A comparison of beetle populations varying naturally and experimentally in body size. In press for *Ecology and Evolution*.
17. Fox, C. W., **R. C. Stillwell**, W. G. Wallin, C. L. Curtis and D. H. Reed. 2011. Inbreeding-environment interactions for fitness: Complex relationships between inbreeding depression and temperature stress in a seed-feeding beetle. *Evolutionary Ecology* 25:25-43.
16. **Stillwell, R. C.** and G. Davidowitz. 2010. Sex differences in phenotypic plasticity of a mechanism that controls body size: Implications for sexual size dimorphism. *Proceedings of the Royal Society of London, B* 277:3819-3826.
15. **Stillwell, R. C.** 2010. Are latitudinal clines in body size adaptive? *Oikos* 119:1387-1390.
14. **Stillwell, R. C.** and G. Davidowitz. 2010. A developmental perspective on the evolution of sexual size dimorphism of a moth. *Proceedings of the Royal Society of London, B* 277:2069-2074.

This study was cited in over 10,000 science websites and blogs including NSF's Science360 (<http://news.science360.gov/archives/20100316/>).
13. **Stillwell, R. C.**, W. U. Blanckenhorn, T. Teder, G. Davidowitz and C. W. Fox. 2010. Sex differences in phenotypic plasticity affect variation in sexual size dimorphism in insects: From physiology to evolution. *Annual Review of Entomology* 55:227-245.
12. **Stillwell, R. C.** and C. W. Fox. 2009. Geographic variation in body size, sexual size dimorphism and fitness components of a seed beetle: Local adaptation vs. phenotypic plasticity. *Oikos* 118:703-712.
11. Fox, C. W. and **R. C. Stillwell**. 2009. Inbreeding load for adult lifespan varies among environments in the seed-feeding beetle, *Callosobruchus maculatus*. *Heredity* 103:62-72.
10. **Stillwell, R. C.**, J. Moya-Laraño and C. W. Fox. 2008. Selection does not favor large body size at lower temperature in a seed-feeding beetle. *Evolution* 62:2534-2544.
9. **Stillwell, R. C.**, G. E. Morse and C. W. Fox. 2007. Geographic variation in body size and sexual size dimorphism of a seed-feeding beetle. *The American Naturalist* 170:358-369.
8. **Stillwell, R. C.**, W. G. Wallin, L. J. Hitchcock and C. W. Fox. 2007. Phenotypic plasticity in a complex world: Interactive effects of food and temperature on fitness components of a seed beetle. *Oecologia* 153:309-321.
7. **Stillwell, R. C.** and C. W. Fox. 2007. Environmental effects on sexual size dimorphism of a seed-feeding beetle. *Oecologia* 153:273-280.
6. Blanckenhorn, W. U., **R. C. Stillwell**, K. A. Young, C. W. Fox and K. G. Ashton. 2006. When Rensch meets Bergmann: Does sexual size dimorphism change systematically with latitude? *Evolution* 60:2004-2011.

5. Fox, C. W., **R. C. Stillwell**, W. G. Wallin and L. J. Hitchcock. 2006. Temperature and host species affect nuptial gift size in a seed-feeding beetle. *Functional Ecology* 20:1003-1011.
4. Fox, C. W., K. L. Scheibly, W. G. Wallin, L. J. Hitchcock, **R. C. Stillwell** and Benjamin P. Smith. 2006. The genetic architecture of lifespan and mortality rates: Gender and species differences in inbreeding load of two seed-feeding beetles. *Genetics* 174:763-773.
3. **Stillwell, R. C.** and C. W. Fox. 2005. Complex patterns of phenotypic plasticity: Interactive effects of temperature during rearing and oviposition. *Ecology* 86:924-934.
2. Fox, C. W., **R. C. Stillwell**, A. R. Amarillo-Suarez, M. E. Czesak and F. J. Messina. 2004. Genetic architecture of population differences in oviposition behavior of the seed beetle *Callosobruchus maculatus*. *Journal of Evolutionary Biology* 17:1141-1151.

Book Chapters

1. Fox, C. W., **R. C. Stillwell** and J. Moya-Laraño. 2007. Variation in selection and the evolution of sexual size dimorphism in two seed-feeding beetles. In D. F. Fairbairn, W. U. Blanckenhorn and T. Szekely (eds.) *Sex, size and gender roles: Evolutionary studies of sexual size dimorphism*.

Articles that feature our research

Science Daily, "Why female moths are big and beautiful" by Daniel Stolte, March 11, 2010.

This article featuring our study on sexual dimorphism in moths (Stillwell and Davidowitz 2010) was cited in over 10,000 science websites and blogs including NSF's Science360 (<http://news.science360.gov/archives/20100316/>).

Invited Seminars

- 2008 Zoological Museum, University of Zurich, Switzerland.
- 2008 Department of Integrated Natural Sciences, Arizona State University (West campus).
- 2007 Department of Biology Seminar, Southern Utah University.
- 2006 Department of Biology Seminar, Campbellsville University.

Presentations

- 2010 Population Biology Seminar, Department of Biology and Biochemistry, University of Houston.
- 2010 Annual meeting of the Society for the Study of Evolution. Portland, OR.
- 2009 Annual meeting of the Society for the Study of Evolution. Moscow, IA.
- 2009 Department of Entomology, University of Arizona.
- 2008 Annual meeting of the Society for the Study of Evolution. Minneapolis, MN.
- 2007 Department of Ecology and Evolutionary Biology, University of Arizona.
- 2007 Spring Research Symposium. Center for Ecology, Evolution and Behavior, University of Kentucky.
- 2006 2nd Place Ph.D. Student Paper Competition, 19th Annual Forum of the Ohio Valley Entomological Association. Newport, KY.
- 2006 Annual meeting of the Ecological Society of America. Memphis, TN.
- 2006 Spring Research Symposium. Center for Ecology, Evolution and Behavior, University of Kentucky.
- 2006 Ecolunch, Department of Biology, University of Kentucky.
- 2005 Ecolunch, Department of Biology, University of Kentucky.

- 2005 International workshop on the evolution of sexual size dimorphism. Monte Verità, Locarno, Switzerland.
- 2005 Annual meeting of the Ecological Society of America. Montréal, Canada.
- 2005 The Organization for Tropical Studies. Palo Verde Biological Station, Costa Rica.
- 2005 Spring Research Symposium. Center for Ecology, Evolution and Behavior, University of Kentucky.
- 2004 1st Place Ph.D. Student Paper Competition, 17th Annual Forum of the Ohio Valley Entomological Association. Hanover, IN.
- 2004 Ecolunch, Department of Biology, University of Kentucky.
- 2004 Annual meeting of the Ecological Society of America. Portland, OR.
- 2003 Annual meeting of the Entomological Society of America. Cincinnati, OH.
- 2003 Annual meeting of the Ecological Society of America. Savannah, GA.
- 2003 Spring Research Symposium. Center for Ecology, Evolution and Behavior, University of Kentucky.
- 2002 Ecolunch, Department of Biology, University of Kentucky.
- 2002 Department of Entomology Proposal Seminar, University of Kentucky.
- 2001 Sigma Zeta National Convention. Campbellsville, KY.
- 1999 Department of Biology Seminar, Campbellsville University.

Professional Services

Manuscript Reviews for:

Behavioral Ecology, Bulletin of Entomological Research, Ecography, Ecology, Ecological Entomology, Entomologia Experimentalis et Applicata, Entomological Science, European Journal of Entomology, Evolution, Evolutionary Ecology, Evolutionary Ecology Research, Functional Ecology, Genetica, Journal of Insect Science, Journal of Molluscan Studies, Oecologia, Zoology, Australian Journal of Zoology, The American Naturalist, Proceedings of the Royal Society of London B, Ecological Research, Environmental Entomology, Biological Journal of the Linnean Society, Journal of Thermal Biology, PLoS One

Proposal Reviews for:

National Science Foundation (Population and Evolutionary Processes), Czech Science Foundation

Student Mentoring

Undergraduates

University of Arizona

Andrew Daws

(Andrew won 2nd place in the Emerging Research category at the 2010 Annual Undergraduate Poster Session in the Department of Ecology and Evolutionary Biology, University of Arizona)

University of Kentucky

Lisa Hitchcock (Lisa was a co-author on my *Oecologia* et al. 2007 paper)

Denise Johnson

Oriaku Njoku

Scott Serdoz

Kim Carrico

Jennifer Smith

Nathan Correll

Courtney Elkins

Teaching Experience

- 2008 Biology 105: Environmental Biology (Instructor). Pima Community College, Tucson, AZ.
- 2006 Biology 452: Laboratory in Ecology (Guest Lecturer). University of Kentucky, Lexington, KY.
- 2005 Biology 304: Principles of Genetics (Teaching Assistant). University of Kentucky, Lexington, KY.
- 2004 Biology 452: Laboratory in Ecology (Guest Lecturer). University of Kentucky, Lexington, KY.
- 2003 Biology 452: Laboratory in Ecology (Guest Lecturer). University of Kentucky, Lexington, KY.

University Services

University of Arizona

- 2008. Participant in PERT pedagogy workshop.

University of Kentucky

- 2007. Faculty Liaison of Harrison Garman Entomology Club.
- 2006. Coordinator for the Ecolunch Seminar Series.
- 2005-2007. Member of the Seminar Committee.
- 2003-2004. Vice President of Harrison Garman Entomology Club.
- 2003-2004. Coordinator for the Evolutionary Ecology Reading Group.
- 2001-2004. Member of the Blood Donation Committee.
- 2003. Volunteer at the annual Insect Walk at Raven Run Nature Sanctuary.

Campbellsville University

- 1996. Participant in Supplies Over Seas (SOS) – A humanitarian aid program that provides unused medical supplies to underdeveloped countries.

Memberships

American Association for the Advancement of Science
American Society of Naturalists
Entomological Society of America
Ecological Society of America
Gamma Sigma Delta Honor Society of Agriculture
Ohio Valley Entomological Association
Society for the Study of Evolution
Sigma Zeta Honor Society of Science and Mathematics

Scholarships

University of Washington Summer Institute in Statistical Genetics, Tuition & Travel Scholarship, 2006.
Louis F. Ison Memorial Scholarship, 2005-2006.
Campbellsville University Academic Scholarship, 1995-1999.
Larue-Hardin Medical Auxiliary Scholarship, 1995.

Nolin Rural Electric Cooperative Scholarship, 1995.

Honors and Awards

University of Kentucky

Gamma Sigma Delta Honor Society of Agriculture Outstanding Ph.D. Student Award, 2007
Campbellsville University.

Campbellsville University

Campbellsville University Biology Award.
Graduated Summa Cum Laude, 3.96 GPA.
Dean's list, 1995-1999.