

CURRICULUM VITAE

Tracie Marie Ivy

Zoologisches Museum der Universität Zürich
Winterthurerstrasse 190
CH-8057 Zürich, SWITZERLAND

BIOGRAPHICAL INFORMATION

Born: October 6, 1972 in Bloomington, Illinois, USA
Citizenship: American
e-mail: tracie.ivy@access.unizh.ch
Telephone: Office: +41 44 635 47 46; Fax: +41 44 79 635 47 80

ACADEMIC HISTORY

NSF Postdoctoral Research Fellow, Universität Zürich, March 2006-present (funded for 22 months)

- Research topic: The evolution of polyandry in heterogeneous environments
- Advisor: Prof. Dr. Paul I. Ward

Ph.D., Biological Sciences, Illinois State University, 2000-2005

- Dissertation topic: The evolution of polyandry in the decorated cricket, *Gryllodes sigillatus*
- Advisor: Dr. Scott K. Sakaluk

M.S., Biological Sciences, Illinois State University, 1995-1998

- Thesis topic: Hydration benefits to courtship feeding in decorated crickets
- Advisor: Dr. Scott K. Sakaluk

B.S., Ecology, Ethology, and Evolution, University of Illinois, 1990-1994

- Undergraduate research on population dynamics of prairie voles
- Advisor: Dr. Lowell Getz

RESEARCH INTERESTS

Behavioral ecology, evolutionary biology, sexual selection, quantitative genetics, speciation

GRANTS AND AWARDS

- National Science Foundation, International Research Fellowship, 2005. OISE-0502224: The evolution of polyandry in heterogeneous environments: when one male with good genes isn't good enough, \$121,227
- Phi Sigma Biological Honor Society, Beta Lambda Chapter, 2005, Outstanding Ph.D. Student Award
- National Science Foundation, Doctoral Dissertation Improvement Grant, 2004; IOB-0407690: Polyandry in crickets: disentangling the genetic benefits, \$9,930
- Sigma Xi Grant-in-Aid of Research, 2002; The evolution of female multiple mating in the decorated cricket, *Gryllodes sigillatus*, \$265
- The Orthopterists' Society, 1999; Geographic variation in sperm precedence in *Allonemobius fasciatus* and *A. socius*, \$800

- Sigma Xi Grant-in-Aid of Research, 1996; Courtship food gifts in decorated crickets: the spermatophylax as a source of water, \$350
- Internal grants and awards from Phi Sigma Biological Sciences Honors Society, Illinois State University Graduate Student Association, Department of Biological Sciences at Illinois State University and New Mexico State University Biology Department, 1995-2005, 17 awards totaling \$9,010

PUBLICATIONS

- Ivy, T.M. and S.K. Sakaluk. In press. Sequential mate choice in decorated crickets: no evidence that females ‘trade-up’ in pre- or postcopulatory mate choice. *Animal Behaviour*.
- Ivy, T.M. In press. Good genes, genetic compatibility, and the evolution of polyandry: a quantitative genetics approach to address competing hypotheses. *Journal of Evolutionary Biology*.
- Gwynne, D.T., L.F. Bussière, and T.M. Ivy. In press. Female ornaments hinder escape from spider webs in a role-reversed swarming dance fly. *Animal Behaviour*.
- Kindle, T.K., Johnson, K.M., Ivy, T.M., Weddle, C.B. and S.K. Sakaluk. 2006. Female mating frequency increases with temperature in two cricket species, *Grylloides sigillatus* and *Acheta domesticus* (Orthoptera: Gryllidae). *Canadian Journal of Zoology* 84: 1345-1350.
- Ivy, T.M., C.B. Weddle, and S.K. Sakaluk. 2005. Females use self-referent cues to avoid mating with previous mates. *Proceedings of the Royal Society of London B* 272: 2475-2478.
- Ivy, T.M. and S.K. Sakaluk. 2005. Polyandry enhances offspring survival in decorated crickets. *Evolution* 59: 152-159.
- Sakaluk, S.K. and T.M. Ivy. 1999. Virgin male mating advantage in sagebrush crickets: passive mate attraction or active female choice? *Behaviour* 136: 1335-1346.
- Ivy, T.M., Johnson, J.C., and S.K. Sakaluk. 1999. Hydration benefits to courtship feeding in crickets. *Proceedings of the Royal Society of London B* 266: 1523-1527.
- Johnson, J.C., T.M. Ivy, and S.K. Sakaluk. 1999. Female remating propensity contingent on sexual cannibalism in sagebrush crickets, *Cyphoderris strepitans*: a mechanism of cryptic female choice. *Behavioral Ecology* 10: 277-233.

TEACHING EXPERIENCE

Illinois State University

- Biological Diversity Laboratory, Teaching Assistant
- Evolution, Substitute Lecturer
- Introductory Microbiology Laboratory, Teaching Assistant
- Human Anatomy and Physiology Laboratory, Teaching Assistant
- Aided in the mentoring of several undergraduate researchers

New Mexico State University

- Evolution, Lecture and Teaching Assistant
- Animal Behavior, Teaching Assistant
- Entomology Laboratory, Instructor
- Introductory Biology Laboratory, Teaching Assistant

Universität Zürich

- Reproduktionsbiologie (team-taught course in Reproductive Biology), Co-Instructor

PAPERS PRESENTED AT CONFERENCES (LAST FIVE YEARS)

2006. International Behavioral Ecology Congress, Tours, France. Genetic benefits to polyandry in decorated crickets: not entirely good, but more than compatible.
2005. Animal Behavior Society, Snowbird, Utah. Genetic benefits to polyandry in decorated crickets: not entirely good, but more than compatible.
2004. International Behavioral Ecology Congress, Jyväskylä, Finland. Females use pheromonal cues to discriminate against previous mates.
2002. International Behavioral Ecology Congress. Montréal, Canada. Polyandry provides genetic benefits to female decorated crickets.
2002. Society for the Study of Evolution, University of Illinois, Champaign, IL. Polyandry provides genetic benefits to female decorated crickets.

SCIENTIFIC COMMUNITY AND PROFESSIONAL SERVICE

- Referee for *Evolution*, *Behavioral Ecology*, *Animal Behaviour*, *Behavioral Ecology and Sociobiology*, *Ecological Entomology*, *Journal of Ethology*, and *European Journal of Entomology*
- Research featured in the popular press: *Quirks and Quarks* radio show (CBC), *New Scientist*, *Discover*, and *Bild der Wissenschaft* magazines, *Spektrumdirekt* science website
- Participant in Expanding Your Horizons, a program to encourage young women to pursue careers in science, 1998, 2000-2005
- Graduate student member of Admissions Committee, Department of Biological Sciences, Illinois State University, 2003-2004
- Grant Reviewer, Phi Sigma Biological Sciences Honors Society, 1998, 2002, 2005
- President, Biology Graduate Student Organization, New Mexico State University, 1999-2000
- Web page designer, Behavior, Ecology, Evolution and Systematics Section, Department of Biological Sciences, Illinois State University, 1997
- Representative, Graduate Student Association, Illinois State University, 1996-1997

MEMBERSHIPS HELD IN PROFESSIONAL SOCIETIES

Animal Behavior Society
 Society for the Study of Evolution
 International Society for Behavioral Ecology
 Phi Sigma Biological Sciences Honor Society

REFERENCES

Dr. Scott Sakaluk, Distinguished Professor of Behavioral Ecology
Behavior, Ecology, Evolution, and Systematics Section
Department of Biological Sciences
Illinois State University, Normal, IL 61790-4120
Office: (309) 438-2161; Fax: (309) 438-3722
Email: sksakal@ilstu.edu

Prof. Dr. Paul Ward, Director
Zoologisches Museum
Universität Zürich
CH-8057 Zürich, Switzerland
Office: +41 44 635 4760; Fax: +41 44 635 4780
Email: pward@zoolmus.unizh.ch
Note: Dr. Ward is often away from the museum at this time thus may not be reachable by phone. However, it may be possible to contact him by email.

Dr. Steven Juliano, Distinguished Professor of Ecology
Behavior, Ecology, Evolution, and Systematics Section
Department of Biological Sciences
Illinois State University, Normal, IL 61790-4120
Office: (309) 438-2642; Fax (309) 438-3722
Email: sajulian@ilstu.edu

Dr. Charles Thompson, Professor of Ecology
Behavior, Ecology, Evolution, and Systematics Section
Department of Biological Sciences
Illinois State University, Normal, IL 61790-4120
Office: (309) 438-2656; Fax (309) 438-3722
Email: wrens@ilstu.edu