



Mr. Joseph K. Staples (Joe)

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Biographical Sketch:

Joe joined DES as a Lecturer in 2006. He received his B.S. and M.S. Degrees in Environmental Forest Biology at the State University of New York College of Environmental Science and Forestry at Syracuse University, where he conducted research on environmental physiology and chemical ecology of forest insects. Joe is currently preparing to defend his doctorate in from Illinois State University (ISU) where he won a Scholar Educator fellowship in the Department of Biological Sciences. At ISU he collaborated with researchers at United States Department of Agriculture's Animal and Plant Health Inspection Service in Peoria Illinois to identify unknown pheromone for the Pine False Webworm, *Acantholyda erythrocephala*, an introduced forest pest that is becoming a significant threat to species pine.

Some of Joe's many research interests include research in the areas of entomology, environmental physiology, and chemical ecology. Current research projects include chemical ecology of the Pine false Webworm, *A. erythrocephala*, water balance in overwintering stages of the introduced pine sawfly, *Diprion similis*, and collaborative research with the Maine Medical Center Vector-borne Disease Laboratory Group. Joe enjoys involving undergraduate students in his research.

Formal Education:

Doctoral Candidate: Biological Science, Illinois State University, (expected completion Fall 2009)

M.S. Environmental Forest Biology & Chemical Ecology, SUNY College of Environmental Science and Forestry Syracuse 1999

B.S. Environmental Forest Biology SUNY College of Environmental Science and Forestry Syracuse, 1995

Courses Taught at USM:

ESP 101-Fundamentals of Environmental Science
ESP 102-Fundamentals of Environmental Science Lab
ESP 110-Introduction to Tourism
ESP 125-Environmental Ecology
ESP 125-Environmental Ecology Lab
ESP 280-Research & Analytical Methods
ESP 412-Field Ecosystems Ecology
ESP 413-Forest Ecology
EYE 102-Sustainability Culture and the Environment
LCC 130-The Biology of Human Health
LCC 230-Environmental Science, Policy, & Sustainability
SCI 130-Natural Science Topics
SCI 105K-Biological Principles I
SCI 106K-Biological Principles I Laboratory

Research Interests:

Environmental Entomology, Chemical ecology, Forest Entomology

Representative Publications:

Staples J. K., Bartelt R. J., Cosse. A. A., Whitman D. W. (2009) **Sex Pheromone of the Pine False Webworm *Acantholyda erythrocephala* (Hymenoptera: Pamphiliidae)** Journal of Chemical Ecology. (Submitted in Review)

Staples J. K., B. S. Krall, R. J. Bartelt, and D. W. Whitman. (2002) Chemical Defense in the Plant Bug *Lopidea robiniae* (Uhler). Journal of Chemical Ecology. 28: 601-615

Professional Presentations

Brian Hernandez, Araceli Paz, Dexter Angeles, Joseph Staples and Douglas W. Whitman. (2006) Insect Thermoregulation: Effects of Wind Speed and Body Size Annual meeting North Central Branch of the Entomological Society of America. Bloomington, Illinois

Matthew Ehrich, Jason Siegler, Peter Keorpes, Ryan Vanesh, Kevin Huizenga, Joseph Staples and Douglas W. Whitman. (2006) Mate Choice in a Male Grasshopper. Annual meeting North Central Branch of the Entomological Society of America. Bloomington, Illinois

Cheung H. T., Bettendorf A. F., Staples J. K., Jones H. M. (2006) Illinois State University's 6th Annual University-Wide Symposium on Teaching and Learning
Bloomington, IL.

Staples J. K. (2003) Chemical and acoustic communication in the mating system of the Pine False Webworm *Acantholyda erythrocephala* (L.) (Hymenoptera: Pamphiliidae). Behavior, Ecology, Evolution, and Systematics. Seminar Series in the Department of Biological Sciences at Illinois State University

Staples, J. K., Bartelt, R.J., Cosse, A.A., Teale, S.A., Whitman, D.W. (2003) Identification of a sex pheromone for the conifer feeding sawfly *Acantholyda erythrocephala* (L.) (Hymenoptera: Pamphiliidae). Annual meeting of the Illinois State Academy of Science, Normal, Illinois

Staples, Joseph K., Bartelt, Robert. J., Cosse, Allard. A., Teale Stephen A., Whitman, Douglas.W. (2002) Semiochemistry of the conifer feeding sawfly, *Acantholyda erythrocephala* (L.) (Hymenoptera). International Society of Chemical Ecology 19th Annual Meeting, Hamburg, Germany

Staples J. K., B. S. Krall, R. J. Bartelt, and D. W. Whitman. (2000) Chemical Defense in the Plant Bug *Lopidea robiniae* (Uhler). Annual meeting of the International Society of Entomology, Iguasso Falls, Brazil.

Staples J. K., B. S. Krall, R. J. Bartelt, and D. W. Whitman. (2000) Chemical Defense in the Plant Bug *Lopidea robiniae* (Uhler). International Society of Chemical Ecology Annual Meeting, Pocos De Caldas, Brazil.

Darek Czokajlo, Therese M. Poland, Peter de Groot, Joseph K. Staples, Robert A. Haack, Philipp Kirsch. (2000) Attractant for the larger pine shoot beetle, *Tomicus piniperda*. Entomological Society of America Annual Meeting.

Staples J. K., and Teale S. A. (1997) Semiochemicals of a Pamphiliid Sawfly. International Society of Chemical Ecology Annual Meeting, Ithaca, N.Y.

Staples J. K., and Teale S. A. (1996) Development of a pheromone lure for the Pine False Webworm (Hymenoptera: Pamphiliidae) (*Acantholyda erythrocephala*). Presentation at the Annual Northeast Pest Counsel, Albany, N.Y.

