**Alysha Marie Soper**, alyshaso@ksu.edu, (651) 304-7680

**EDUCATION**

**M.S. Kansas State University, Department of Entomology** Manhattan, Kansas

GPA: 3.70; June 2009- December 2011

* *Thesis Advisor:* Dr. Brian McCornack
* *Thesis Title:* Integrated pest management of noctuids in Kansas sorghum: A bioecomonic approach to agricultural pest management.
* *Relevant Coursework:* Insect Taxonomy, Landscape Ecology, Ecological Genomics, Integrative Behavioral Ecology, Insect Physiology, Intro to Geostatistical Analysis, Demographic Methods, R/Splus Computing, Agricultural Resources and Environmental Management, Soil Microbial Ecology

**B.A. Biology, Luther College,** Decorah, Iowa

 GPA = 3.47 (May 2009)

* *Major focus*: Ecology, Environmental Science
* *Study Abroad*: Australia, Bahamas, Ecuador and Galapagos Islands
* *Relevant Coursework:* Entomology, Botany, Geographic Information Systems (GIS), Ecology, Evolution, Zoology, Geology, Biostatistics, Public Speaking

**WORK / RESEARCH EXPERIENCE**

Kansas State University, Department of Entomology

**Graduate Research Assistant** (June 2009-Present), Dr. Brian McCornack and Dr. Jeff Whitworth

* Independently develop and conduct MS level research in agricultural entomology.
* Synthesize, interpret, and communicate complex scientific information to audiences of 10-50 adults.
* Coordinate logistics for field work of 5 projects (Organize field schedules, equipment, and 6 personnel).

University of Virginia, Blandy Experimental Farm

**National Science Foundation REU Fellow** (Summer 2008), Advised by Dr. T’ai Roulston

* Investigated the effects of the fly parasitoid, *Myiopharus infernalis,* on the population dynamics of the beetle, *Lema daturaphila*.
* Performed field surveys of native and invasive eastern U.S. plant communities.
* Lived and worked closely with fellow researchers for 8 weeks while maintaining good humor

Luther College, Department of Biology

**Academic Administrative Assistant** (Sept 2008-May 2009)

 Luther College Entomology Lab, Supervised by Dr. Kirk Larsen

* Identify insects to family and species level when possible.
* Curation of insects for the research and teaching collections.
* Database the research collection using Specify® software.

**Collections Assistant (**Sept 2008-May 2009)

Luther College Hoslett Museum of Natural History, Supervised by Dr. Tex Sordahl

* Curation of skins for the vertebrate research and teaching collections.
* Accession vertebrate specimens using Specify®.

**Teaching Assistant**, (2008-2009)

*Environmental Conservation, Vertebrate Natural History,* and *Ornithology,* Supervised by Dr. Tex Sordahl

* Daily lab preparation.
* Participate in class discussions.
* Grade assignments.

**ADDITIONAL EDUCATION**

 **Study Abroad Courses**

* Human-Environmental Interactions (Australia, June 2006)
* Marine Biology (Bahamas, January 2008)
* Ecology of Ecuador (Amazon Rainforest and Galapagos Islands, January 2009)

 **Workshops**

* Conserving Beneficial Insects with Native Plants, Iowa State University, Ames, IA (2011)
* Anthrone Testing Biological Control Agents, Iowa State University, Ames, IA (2011)
* Pollinator Conservation Planning, Xerces Society, Lincoln, NE (2011)
* Introduction to Beekeeping, Kansas Honey Producers Association, McPherson, KS (2012)
* Beginning Beekeeping, North Eastern Kansas Beekeepers Association, Olathe, KS (2012)

**SKILLS**

* Strong oral and written communication skills.
* Work as a team player to achieve common goals.
* Utilize social media as an outreach tool.
* Conduct species abundance and diversity surveys for plants and insects.
* Identify/key out insects to family and species.
* Organize a pest-monitoring network throughout central Kansas.
* Present critical information to collaborators and stakeholders.
* Multi-factorial experimental design and analysis.
* Experience with software such as SPSS, SAS, R (popbio, geoR), ArcGIS, ArcPad, Google Earth, FRAGSTATS, Microsoft Office suite, Specify®, MARK, and PRESENCE.

**ORAL PRESENTATIONS**

Local

**2011** Soper, A., R.J. Whitworth, B.P. McCornack. 2011. *Multiple species recommendations in sorghum- is a one-model-fits-all strategy the best approach?* Kansas State Research Forum, Manhattan, KS (10-min). **1st Place.**

**2010** Soper, A., R.J. Whitworth, B.P. McCornack. 2010. *An update on headworm management in Kansas sorghum.* K-State Research and Extension Update. Manhattan, KS(20-min).

**2009** Soper, A., R.J. Whitworth, B.P. McCornack. 2009. *Isopod damage and control in no-till soybean*. K-State Research and Extension Update. Manhattan, KS (15-min).

Soper, A., R.J. Whitworth, B.P. McCornack. 2009. *Headworm management in sorghum: spatial distributions and pheromone trapping.* K-State Research and Extension Update. Manhattan, KS (15-min).

**2008** Soper, A., T. Roulston. 2008. *Effects of the tachinid,* Myiopharus infernalis*, on the population dynamics of* Lema daturaphila *(Coleoptera: Chrysomelidae) in northern Virginia.* UVA Blandy Experimental Farm Research Forum. Boyce, VA (12-min).

Regional

**2011** Soper, A., R.J. Whitworth, B.P. McCornack. 2011. *Multiple species recommendations in sorghum- is a one-model-fits-all strategy the best approach?* Entomological Society of America, North Central Branch (10-min).

National

**2010** Soper, A., R.J. Whitworth, B.P. McCornack. 2010. *Evaluating consumption rates for* Helicoverpazea *and* Spodoptera frugiperda *in Kansas sorghum.* ESA National Conference, San Diego, CA (10-min).

**2009** Soper, A., T. Roulston. 2009. *Effects of the tachinid,* Myiopharus infernalis*, on the population dynamics of* Lema daturaphila *(Coleoptera: Chrysomelidae) in northern Virginia.* National Conference of Undergraduate Research. University of Wisconsin-La Crosse, WI (12-min).

Invited

**2012** Soper, A. 2012. *From pest biology to management: an integrated approach to mitigating yield loss.* Larry Larson Graduate Student Award for Leadership in Applied Entomology Seminar. Dow AgroSciences Headquarters, Indianapolis, IN (30 min).

**POSTER PRESENTATIONS**

Local

**2010** Soper, A., R.J. Whitworth, B.P. McCornack. 2010. *Developing site-specific management strategies for headworms in sorghum.* Kansas State Research Forum, Manhattan, KS.**Top 10 Poster**.

\*Selected for display at theCapital Graduate Research Summit, Topeka, KS.

**2009** Soper, A., T. Roulston. 2009. *Effects of the tachinid,* Myiopharus infernalis*, on the population dynamics of* Lema daturaphila *(Coleoptera: Chrysomelidae) in northern Virginia.* Luther College Biology Poster Symposium. Luther College, Decorah, IA.

Regional

**2010** Soper, A., R.J. Whitworth, B.P. McCornack. 2010. North Central Branch Meeting: *Refining sorghum headworm (Helicoverpa zea) sampling recommendation in Kansas*. Entomological Society of America, Louisville, KY.

Soper, A., R.J. Whitworth, B.P. McCornack. 2010. Southwestern Branch Meeting: *Refining sorghum headworm (*Helicoverpa zea*) sampling recommendation in Kansas.* Entomological Society of America, Cancun, Mexico.

National

**2010** Soper, A., R.J. Whitworth, B.P. McCornack. 2010. *Refining sorghum headworm (*Helicoverpa zea*) sampling recommendation in Kansas.* Sorghum Improvement Conference on North America. Mead, NE.

McCornack, B., A. Soper, and R. J. Whitworth. 2010. *Refining sorghum headworm (Helicoverpa zea) sampling recommendations in Kansas*. Entomological Society of America, Annual Meeting, San Diego, CA.

**2009** Roulston, T.H., B. Lingbeek, **A. Soper.** 2009.*Why does an herbivore crash when its food explodes? The perverse population dynamic of* Lema daturaphila *(*Coleoptera: Chrysomelidae*) on* Physalis longifolia *(*Solanaceae*).* Ecological Society of America,Albuquerque, NM.

Soper, A., R.J. Whitworth, B.P. McCornack. 2009. *An IPM approach to Isopod control in no-till soybean.* Entomological Society of America, Indianapolis, IN.

**AWARDS**

* Entomological Foundation Larry Larson Graduate Student Award for Leadership in Applied Entomology, sponsored by Dow AgroSciences, 2011
* K-State Research Forum 1st Place oral presentation in Agricultural Sciences, 2011
* Graduate Student Council Spring Travel Award, 2011
* Presidential Travel Scholarship, Entomological Society of America North Central Branch, 2011
* K-State Research Forum, Top 10 Poster selection and presentation at the 8th Annual Capital Graduate Research Summit in Topeka, KS, 2010
* Floyd S. and Mary Lou Sollien Scholarship in Natural History, 2008-2009
* Roslien Family Scholarship in Natural History, 2008-2009
* National Science Foundation Research Experience for Undergraduates Fellowship, 2008
* Morris A. Sorenson Family Scholarship in Natural Sciences, 2007-2008

**SERVICE**

Konza Prairie Biological Station (KPBS)

**Konza Environmental Education Program (KEEP) Docent Training** (February 2012- Present)

* Grain specialized training for the Konza Prairie and the tallgrass prairie ecosystem.
* Training opportunities include guiding hikes, guiding van tours of the bison enclosure, educational in-service training, workdays on Konza Prairie, and special projects and events.

**Konza Prairie Burn Training** (March 2011-Present)

* Grain training in prescribed burn techniques for the Long-Term Ecological Research (LTER) on the tallgrass prairie ecosystem.

K-State Department of Entomology

**Popenoe Entomology Club** (2009-Present)

* Club President (May 2010-May 2011)
* Activities include: managing Club fundraising by producing and selling insect kits to the Future Farmers of America (FFA) groups, judging FFA competitions, designing and selling Club T-shirts and Polos, sponsoring a guest speaker annually, coordinating Club sponsored social events, volunteering with the K-State Insect Zoo during Open Houses and public tours to teach guests about insects from around the world.

**Friends of the Insect Zoo Board of Directors**. Student Representative. (May 2010-May 2011)

* Participate and learn how to build the foundations for a new organization.
* Develop methods to educate and excite the public about insects and the natural world.
* Provide limited extension services to eastern Kansas residents.

**Committee on Planning**. Student Representative. (2010)

* Determining critical need faculty and staff positions in the Department.
* Act as the student voice in the hiring process.

Entomological Society of America

**P-IE Section Task Force on Exciting Undergraduates in Entomology**. Student Representative. (2009-2010)

**Organizational Volunteer**

* Career Center. National Annual Meeting, Indianapolis, IN. (2009)
* Registration Desk. Southwestern Branch Meeting, Cancun, Mexico. (2010)
* Preview room. North Central Branch Meeting, Minneapolis, MN. (2011)

 **Linnaean Team**

* North Central Branch Meeting, Minneapolis, MN. (2011)

**REFERENCES**

Dr. Brian P. McCornack

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