Current address: Department of Biological Sciences, P.O. Box 599, Arkansas State University, State University, Arkansas, 72467 Work: (870) 972-3082

EDUCATION

Ph.D. in Entomology

Advisor: Dr. A. B. Broce Kansas State University, Manhattan, KS

Thesis: Host size discrimination and oviposition behavior of Muscidifurax zaraptor

(Hymenoptera: Pteromalidae), a parasitoid of filth flies (Diptera: Muscidae).

December 2002

M.S. in Entomology

Advisor: Dr. T. D. Galloway University of Manitoba, Winnipeg, Manitoba, Canada <u>Thesis:</u> Parasitoid wasps (Hymenoptera: Pteromalidae, Ichneumonidae) for control of house flies and stable flies (Diptera: Muscidae) in dairy operations in Manitoba.

December 1997

B.S. Biology Honors Conversion Certificate

Advisors: Drs. O. Kukal and T. Herman Acadia University, Wolfville, Nova Scotia, Canada Thesis: The effect of body temperature on the temporal and spatial distribution of three species of damselflies (Lestidae: Lestes).
 May 1995

B.S. in Biology. Minor: Geology Acadia University, Wolfville, Nova Scotia, May 1994

WORK EXPERIENCE

Associate Professor of Entomology

May 2009 - Current

Department of Biological Sciences, Arkansas State University, Jonesboro, AR

Joint appointment with the University of Arkansas Experimental Station

July 2008 - Current

Assistant Professor of Entomology

Aug. 2004 – May 2009

Department of Biological Sciences, Arkansas State University, Jonesboro, AR

Research Associate (Post-doc) in Veterinary Entomology

Nov. 2002 - Aug. 2004

Department of Entomology, University of Arkansas, Fayetteville, AR

TEACHING EXPERIENCE

Arkansas State University, Jonesboro, AR August - December 2004-12 General Entomology August – December 2004/06/08/10/12 Insect Taxonomy Economic Entomology January - May 2005-13 January - May 2005/07/09/11/13 Aquatic Entomology Forensic Entomology August-December 2007/09/11 Medical and Veterinary Entomology August-December 2005-08, Jan. - Dec. 2010/12 Invertebrate Zoology January - May 2006/08/10 Understanding Macroinvertebrate Biodiversity June 27- July 1, 2005 **Biological Sciences** August-December 2006-07

Teaching Assistant
General Entomology Lab
Teaching Assistant
Economic Entomology Lab
Teaching Assistant
Livestock Entomology Lab
Teaching Assistant
Introductory Entomology Lab

Kansas State University, Manhattan, KS
January - May 2002
Kansas State University, Manhattan, KS
January - May 1999-2001
Kansas State University, Manhattan, KS
August - December 1998-2001
University of Manitoba, Winnipeg, Manitoba, Canada
January - April 1996-1997

PUBLICATIONS

Peer reviewed: (*as corresponding author)

- **McKay, T.,** T. Bianco, L. Rhodes and S. Barrnet. Prevalence of *Dirofilaria immitis* (Nematoda: Filarioidea) in Mosquitoes from Northeast Arkansas, USA. Journal of Medical Entomology (In Press).
- **McKay, T.**, K. Yanowitz, A. Ross and S. Vanderpool. Don't swat that fly! Using house flies in the inquiry classroom. Science Scope (In Press).
- Brown, H., L. Harrington, P. E. Kaufman, **T. McKay**, D. D. Bowman, C. T. Nelson, D. Wang and R. Lund. 2012. Key factors influencing canine heartworm, *Dirofilaria immitis*, in the United States. Parasites & Vectors 5: 245.
- Gaspar, J., **T. McKay*** and M. Huss. 2012. First report of *Aedes japonicus* in natural and artificial habitats in northeast Arkansas. Journal of the American Mosquito Control Association 28: 38-42.
- Fiene, J. G., M. B. Connior, R. Androw, B. Baldwin and **T. McKay*.** 2011. Surveys of Arkansas dung beetles (Coleoptera: Scarabaeidae and Geotrupidae): Phenologies, mass occurrences, state and distributional records. American Midland Naturalist 165: 319-337.
- Yanowitz, K., **T. McKay**, C. A. Ross, S. Vanderpool. 2011. CSI: Creating student (and teacher) investigators: Using popular culture in professional development. Journal of Technology and Teacher Education 18(2): 263-283.
- **McKay, T*.** and T. Herman. 2008. Thermoregulation in three species of damselflies (Odonata: Lestidae), with notes on temporal distribution and microhabitat use. Odonatologica 37 (1): 29-39.
- Milanovich, J. R., S. E. Trauth and **T. McKay**. 2008. Diet of the western slimy salamander *Plethodon albagula* (Caudata: Plethodontidae), from two mountain ranges in Arkansas. Southeastern Naturalist 7 (2): 323-330.
- **McKay, T*.** and A. B. Broce. 2008. Host size and oviposition site effects on the sex ratio of the pupal parasitoid *Muscidifurax zaraptor* (Hymenoptera: Pteromalidae). Annals of the Entomological Society of America. 101 (3): 650-655.

- **McKay. T**, C. D. Steelman, S. M. McElroy, and A. L. Szalanski. 2007. Sustained Mass Release of Pupal Parasitoids (Hymenoptera: Pteromalidae) for Control of *Hydrotaea* aenescens and *Musca domestica* (Diptera: Muscidae) in Broiler-Breeder Poultry Houses in Arkansas. Journal of Agricultural and Urban Entomology. 24: 67-85.
- Dry, F., D. C. Steinkraus, C. D. Steelman, R. W. McNew and **T. McKay***. 2007. Survey of parasitoids (Hymenoptera: Pteromalidae) of house fly (Diptera: Muscidae) pupae from broiler-breeder poultry houses in Northwest Arkansas. Biocontrol Science and Technology. 17 (7): 757-763.
- S. M. McElroy, A. L. Szalanski, **T. McKay**, A. J. Bermudez, C. B. Owens, and C. D. Steelman. 2005. Molecular assay for the detection of *Cochlosoma anatis* in house flies and turkey specimens by polymerase chain reaction. *Veterinary Parasitology.* 127: 165-168.
- Szalanski, A. L., C. B. Owens, **T. McKay**, and C. D. Steelman. 2004. Detection of *Campylobacter* sp., and *Escherichia coli* O157:H7 from filth flies by polymerase chain reaction. *Medical and Veterinary Entomology*. 18: 241-246.
- **McKay, T*.** and A. B. Broce. 2004. Discrimination of self-parasitized hosts by the pupal parasitoid *Muscidifurax zaraptor* (Hymenoptera: Pteromalidae). *Annals of the Entomological Society of America*. 97: 592-599.
- Szalanski, A. L., T. W. Palmer, **T. McKay**, and C. D. Steelman. 2004. Infectivity of *Steinernema* spp. (Nematoda: Steinernematidae) to adult litter beetles, *Alphitobius diaperinus* (Coleoptera: Tenebrionidae) in the laboratory. *Biocontrol, Science and Technology.* 14: 81-85.
- **McKay, T*.** and A. B. Broce. 2003. Response of *Muscidifurax zaraptor* (Hymenoptera: Pteromalidae) to the olfactory stimuli from hosts and their habitat. *Journal of the Kansas Entomological Society.* 76: 31-37.
- **McKay, T*.** and T. D. Galloway. 1999. Biology of *Phygadeuon fumator* Gravenhörst (Hymenoptera: Ichneumonidae), a pupal parasitoid of house and stable flies (Diptera: Muscidae) in Manitoba. *Proceedings of the Entomological Society of Manitoba*. 55:17-27.
- **McKay, T*.** and T. D. Galloway. 1999. Survey and release of parasitoids (Hymenoptera) attacking house and stable flies (Diptera: Muscidae) in dairy operations. *The Canadian Entomologist.* 131: 743-756.

Book Chapters:

McKay, T. Entomological Adventures in Arkansas Poultry Operations. *Adventures in the Wild: Tales from Biologists of the Natural State.* University of Arkansas Publishers. May 2008.

Contributing author of the pedagological features in a new 2008 textbook "Criminalistics: Forensic Science and Crime" by James E. Girard. Jones & Bartlett Publishers.

Non peer-reviewed articles:

- Solis, M. and **T. McKay**. 2010. Forensic entomologists use insects to discover clues about death. *The Jonesboro Sun*. 10 January.
- Gaspar, J., **T. McKay** and M. Huss. 2009. Controlling mosquito larvae using fungi. *The Jonesboro Sun.* 22 November.
- **McKay, T.** 2008. Infestations of bed bugs showing marked increase. *The Jonesboro Sun.* 30 March.
- Fiene, J. and **T. McKay**. 2008. Dung beetles helpful to livestock producers. *The Jonesboro Sun*. 17 February.
- **McKay. T.** 2007. A-State scientist part of team awarded USDA grant to study rice pests. *The Jonesboro Sun.* 19 August.
- **McKay T.** 2007. Parasitic wasps may be helpful in controlling unwanted flies. *The Jonesboro Sun.* 2 September.
- **McKay T.** and A. Romero. 2005. Tiger beetles common during summer months. *The Jonesboro Sun.* 21 August.
- Romero, A. and **T. McKay**. 2006. Scorpions' bad rap dates to prehistoric times. *The Jonesboro Sun*. 3 January.
- Romero, A. and **T. McKay** 2006. Ants said to use 'odometers'. *The Jonesboro Sun*. 23 July.
- Romero, A. and **T. McKay** 2006. Ants can jump farther, faster than others. *The Jonesboro Sun.* 24 September.

Abstracts:

- White, A. L., T. McKay, J. F. Campbell, and F. Arthur. 2011.

 http://esa.confex.com/esa/2011/webprogram/Paper56923.html Population dynamics of stored-product insects at a rice mill in northeast Arkansas. *In: Abstracts, the 59th Annual Meeting of the Entomological Society of America*. Reno, NV, 13-16 November.
- Gaspar, J., T. McKay and M. Huss. 2011.

 http://esa.confex.com/esa/2011/webprogram/Paper57571.html Trichomycete fungi associated with mosquito larvae in northeastern Arkansas. In: Abstracts, the 59th Annual Meeting of the Entomological Society of America. Reno, NV, 13-16 November.
- McKay, T., and T. Bianco. 2010. http://esa.confex.com/esa/2010/webprogram/Paper50023.html Potential vectors of dog heartworm (*Dirofilaria immitis*) in northeast Arkansas. *In: Abstracts, the 58th Annual Meeting of the Entomological Society of America.* San Diego, CA, 12-15 December.
- Gaspar, J. T. McKay and M. Huss. 2010. http://esa.confex.com/esa/2010/webprogram/Paper50652.html Trichomycete fungi

- associated with mosquito larvae in northeastern Arkansas. *In: Abstracts, the 58th Annual Meeting of the Entomological Society of America.* San Diego, CA, 12-15 December.
- McKay, T., T. Bianco and S. Barnett. 2010. Potential vectors of dog heartworm (*Dirofilaria* spp.) in Jonesboro, Arkansas. p. 25. *In: Abstracts, the 13th Triennial State of the Heartworm Symposium*. Memphis, TN 16-18 April. (Abstract also found in AHS Session Heartworm Prevention Efficacy in the Mississippi River Valley, Novartis Animal Health Pamphlet, p. 3).
- McKay, T. 2009. http://esa.confex.com/esa/2009/webprogram/Paper41748.html. Past, present and future of veterinary and medical entomology-results from two surveys conducted in spring 2009. Irin.org/linear.html. Past, present and future of veterinary and medical entomology-results from two surveys conducted in spring 2009. Irin.org/linear.html. Past, present and future of veterinary and medical entomology-results from two surveys conducted in spring 2009. Irin.org/linear.html. Past, present and future of veterinary and medical entomology-results from two surveys conducted in spring 2009. Irin.org/linear.html. Past, present and future of veterinary and medical entomology-results from two surveys conducted in spring 2009. Irin.org/linear.html. Past, present and future of veterinary and medical entomology-results from two surveys conducted in America. Indianapolis, IN, 13-16 December.
- White, A. L., T. McKay, F. H. Arthur and J. F. Campbell. 2009. http://esa.confex.com/esa/2009/webprogram/Paper43051.html. Population dynamics of stored-product insects at a rice mill in northeast Arkansas. *In: Abstracts, the 57th Annual Meeting of the Entomological Society of America*. Indianapolis, IN, 13-16 December.
- Fiene, J. and **McKay, T**. 2009. http://esa.confex.com/esa/2009/webprogram/Paper44682.html Aggregation mechanisms influencing spatial distributions of dung beetles (Coleoptera: Scarabaeidae: Scrabaeinae and Aphodiinae). https://esa.confex.com/esa/2009/webprogram/Paper44682.html Aggregation mechanisms influencing spatial distributions of dung beetles (Coleoptera: Scarabaeidae: Scrabaeinae and Aphodiinae). https://esa.confex.com/esa/2009/webprogram/Paper44682.html Aggregation mechanisms influencing spatial distributions of dung beetles (Coleoptera: Scarabaeidae: Scrabaeinae and Aphodiinae). https://esa.confex.com/esa/2009/webprogram/Paper44682.html Aggregation mechanisms influencing spatial distributions of dung beetles (Coleoptera: Scarabaeidae: Scrabaeinae and Aphodiinae). https://esa.confex.com/esa/2009/webprogram/Paper44682.html Aggregation mechanisms influencing spatial distributions of dung beetles (Coleoptera: Scarabaeidae). https://esa.confex.com/esa/2009/webprogram/Paper44682.html Aggregation mechanisms influencing spatial distributions of dung beetles (Coleoptera: Scarabaeidae). https://esa.confex.com/esa/2009/webprogram/Paper44682.html Aggregation mechanisms of dung beetles (Coleoptera: Scarabaeidae). https://esa.confex.com/esa/2009/webprogram/Paper44682.html Aggregation mechanisms of dung beetles (Coleoptera: Scarabaeidae). https://esa/2009/webprogram/Paper44682.html Aggreg
- Fiene, J. and T. McKay. 2008. http://esa.confex.com/esa/2007/techprogram/paper_31419.htm. Seasonal activity and species composition of dung beetles inhabiting cattle pastures in Arkansas with notes on the mass occurrence of Labarrus pseudolividus Balthasar. In: Abstracts, the 56th Annual Meeting of the Entomological Society of America. Reno, NV, 16-19 November.
- Fiene, J. and **T. McKay**. 2008. A preliminary study on the insect succession on chicken carrion in northeastern Arkansas. *In: Abstracts, The 52nd Livestock Insect Workers Conference,* Kansas City. MO, 15-18 June.
- Loftin, K., S. Brazil, **T. McKay**, W. Watson, J. Edwards, D. Steelman, A. L. Szalanski, J. Pennington, K. VanDevender, and S. Willard. 2007. http://esa.confex.com/esa/2007/techprogram/paper 31419.htm. House fly (*Musca domestica*) and stable fly (*Stomoxys calcitrans*) parasitism following sustained releases of pteromalid wasps in southern dairies. *In: Abstracts, The 55th Annual Meeting of the Entomological Society of America*. San Diego, CA, 10-13 December.
- Fiene, J. and **T. McKay**. 2007. http://esa.confex.com/esa/2007/techprogram/paper_29503.htm. Do dung beetles respond to ivermectin residues? Examination of the olfactory cues used by dung beetles (*Aphodius* spp.) in finding dung pats. Student Competition for the President's Prize, Section D and E. *In: Abstracts, The 55th Annual Meeting of the Entomological Society of America*. San Diego, CA, 9-13 December.
- Loftin, K., **T. McKay**, J. Pennington, D. Steelman, A. Szalanski, K. VanDevender, W. Watson, and S. Willard. 2006. http://esa.confex.com/esa/2006/techprogram/paper_24014.htm. Using parasitic wasps as an IPM approach to manage filth flies in southern dairies. *In:*

- Abstracts, The 54th Annual Meeting of the Entomological Society of America. Indianapolis, IN, 10-13 December.
- Broce, A. and **T. McKay.** 2006. Oviposition behavior of *Muscidifurax zaraptor*, a pteromalid parasitoid. http://esa.confex.com/esa/2006/techprogram/paper_24381.htm. *In: Abstracts, The 54th Annual Meeting of the Entomological Society of America.* Indianapolis, IN, 10-13 December.
- Young, H. L., C. Dowling, and **T. McKay**. 2006. The effects of poultry litter application on the metal body burden of ground-dwelling arthropods.

 http://acs.confex.com/acs/mwrm06/techprogram/P38858.HTM In: Abstracts, American Chemical Society 41st Midwest Regional Meeting. Quincy, IL, 25-27 October.
- **T. McKay** and C. B. Dowling. 2006. The effects of metal-rich poultry litter on the metal body burden of ground-dwelling arthropods: with notes on abundance, p. 11, *In*: Wetland perspectives. *The Society of Environmental Toxicology and Chemistry (SETAC), MidSouth Regional Chapter Annual Meeting.* Arkansas State University, Jonesboro, AR. 25-26 May.
- Romero, A., **T. McKay**, T. Risch, and S. Trauth. 2006. Biodiversity Center project at Arkansas State University, p. 58, *In:* The road to productive partnerships. The 21st Annual Meeting of the Society for the Preservation of Natural History Collections and the Natural Science Collections Alliance 2006 Annual Meeting. Albuquerque, N.M. 23-27 May.
- **T. McKay**, C. B. Dowling, B. Rougeau, K. M. Williams, J. W. Klasky, J. S. Wright and K. Vanderpuye. 2005. Impact of poultry litter application on ground-dwelling arthropod populations. http://esa.confex.com/esa/2005/techprogram/paper_22354.htm In: Abstracts, Annual Meeting of the Entomological Society of America, Fort Lauderdale, FL, 15-18 December.
- McElroy, S. C. D. Steelman, A. L. Szalanski, T. McKay, and A. Bermudez. 2004. Molecular assay for the detection of *Cochlosoma anatis* in house flies and turkey specimens by polymerase chain reaction. http://esa.confex.com/esa/2004/techprogram/paper_15928.htm In: Abstracts, Annual Meeting of the Entomological Society of America, Salt Lake City, 14-17 November.
- Broce, A. B., A. Köpf and **T. McKay**. 2004. Adaptive significance of puparial calcification in face flies, *Musca autumnalis* (Diptera: Muscidae). http://esa.confex.com/esa/2004/techprogram/paper_16379.htm *In: Abstracts, Annual Meeting of the Entomological Society of America,* Salt Lake City. 14-17 November.
- McKay, T. and A. B. Broce. 2001. Recognition of own parasitized hosts by individual Muscidifurax zaraptor (Hymenoptera: Pteromalidae) females reduces selfsuperparasitism. http://esa.confex.com/esa/2001/techprogram/paper_2207.htm In Abstracts: Annual meeting of the Entomological Society of America, San Diego CA. 9-12 December.
- **McKay, T.** and A. B. Broce. 2000. The impact of *Nosema* sp. (Protozoa: Microspora) on size and sex ratio of its host *Muscidifurax zaraptor* (Hymenoptera: Pteromalidae). *In*

- Abstracts: Joint Annual Meeting of the Société d'entomologie du Québec, Entomological Society of Canada, and Entomological Society of America, Montreal, Canada. 3-6 December.
- **McKay, T**. and A. B. Broce. 1999. Oviposition behavior of *Muscidifurax zaraptor* (Hymenoptera: Pteromalidae), a pupal parasitoid of filth flies (Diptera: Muscidae). *In: Abstracts, Annual meeting of the Entomological Society of America,* Atlanta, GA. 12-16 December.
- McKay, T. and T. D. Galloway. 1996. Survey and release of parasitic wasps (Hymenoptera: Pteromalidae, Ichneumonidae) for control of house flies and stable flies in dairy operations, p. 39, *In: Abstracts, Proceddings of the Entomological Society of Manitoba, Annual Meeting of the Entomological Society of Manitoba*. Winnipeg, MB, Canada. 25-26 October.

GRANTS RECEIVED (over \$3.27 million)

- **McKay, T.** Integrated Pest Management Programs for On-Farm Rice Storage. The Arkansas Rice Research and Promotion Board. April 1, 2013 March 31, 2014. \$25,000.
- Pratte, J., T. Marsico, A. Hashim and **T. McKay**. The Experiential Learning Fellowship (ELF) Program. National Science Foundation 2011-2016. \$567,185.
- **McKay, T.,** F. Arthur, J. F. Campbell, L. T. Wilson, Y. Yang, B. Adam, T. E. Reagan. Integrated pest management programs to reduce reliance on methyl bromide fumigation in rice mills. United States Department of Agriculture, NIFA, Methyl Bromide Transition Program, Sept. 1, 2011 August 31, 2014. \$450,502.
- **McKay, T.** The efficacy of lufenuron and fipronil used in an integrated flea control program in an Arkansas horse facility: a case study. Novartis Animal Health, July 11, 2011 November 30, 2011. \$15,010.07.
- Yanowitz, K., **T. McKay** and A. Ross. CSI: Classroom Student Investigations. National Science Foundation 04-611 ITEST program, provide training to teachers and students on STEM careers and information technology. June 1, 2011-May 31, 2014. \$1,000,000.
- **McKay, T.** Attraction of natural populations of adult female mosquitoes. Susan McKnight, Inc. Aug. 15, 2010 Nov. 15, 2010. \$5,250.
- **McKay, T.** Survey of mosquito vectors of dog heartworm. Novartis, Sept 2008-May 2010. \$68,000.
- **McKay, T.** Molecular diagnostics of mosquitoes. Arkansas Biosciences Institute. July 2008 June 2009. \$15,000.
- Bednarz, J.C., B. L. Noel and **T. McKay.** The breeding and foraging ecology of Pileated Woodpeckers in the bottomland forests and swamps of eastern Arkansas with reference to the conservation of the Ivory-billed Woodpecker. U. S. Department of the Interior Fish and Wildlife Service. July 2009-June 2010. \$595,000.

- Wilson, L. T., Y. Yang, F. H. Arthur, James Campbell, T. Siebenmorgan, J.-F. Meullenet, B. Adam, T. E. Reagan and **T. McKay**. Integrated post-harvest rice management and information delivery: optimizing insect control and grain quality. United States Department of Agriculture Cooperative State Research Education and Extension Service-Risk Avoidance and Mitigation Program. October 2007-2011. \$612,199.
- Yanowitz, K. S. Vanderpool, **T. McKay** and A. Ross. CSI: Arkansas. National Science Foundation 04-611 ITEST program, provide training to teachers and students on STEM careers and information technology. October 1, 2006-September 30, 2011. \$1,006,800
- **McKay, T.** and D. Gilmore. Survival of experimentally introduced bacteria in the house fly, *Musca domestica* L. Research Faculty Award, Arkansas State University. July 1, 2006 June 30, 2007. \$4,845.
- **McKay, T.** and A. D. Christian. 2006. Macroinvertebrate Biodiversity. 2005-2006 No Child Left Behind Program from the U.S. Department of Education. Arkansas Department of Higher Education. \$27,753.
- Dowling, C. and **T. McKay**. 2005. The Bioaccumulation of Arsenic in Plants and Insects. Arkansas Biosciences Institute. \$61,686.
- McKay, T. and A. D. Christian. 2005. Understanding Biodiversity Using Aquatic Macroinvertebrates. 2004-2005 No Child Left Behind Program from the U.S. Department of Education. Arkansas Department of Higher Education. \$33,700.
- Loftin, K. M., **T. McKay**, K. Vandevender, C. D. Steelman, A. L. Szalanski, W. Watson and A. Chapa. 2004. Using Parasitoids in an Integrated Pest Management Approach to Control Flies on Dairy Farms. Southern Region SARE Grant, USDA. \$288,000.
- Steelman, C. D., **T. McKay** and S. McElroy. 2004. Determine the dispersal of house flies and other flies carrying *Cochlosoma anatis*, *E. coli* and Coronavirus among and within turkey production farms. Arkansas Agricultural Experiment Station, Animal Health Fund, \$12,000.
- Steelman, C. D., A. L. Szalanski and **T. McKay**. 2003. Determine the Epidemiological Significance of the House Fly and other Filth Flies in the Movement of the Pathogen Complex that causes Poult Enteritis and Mortality Syndrome (PEMS) into and among Turkey Flocks. Arkansas Agricultural Experiment Station, Animal Health Fund. \$12,000.

PAPERS PRESENTED (*Invited papers, [‡] Student papers)

- Ross, C. A., K. Yanowitz and **T. McKay**. Crime in the Classroom: A Fun Way to Integrate STEM Content. *NSTA 2013 STEM Forum & Expo*, St. Louis, MO 16 May 2013
- **McKay, T.** Integrated Pest Management in Rice Mills. *RiziCulture Series*, Arkansas State University, Jonesboro, AR 10 April 2013

- *McKay, T. Potential Mosquito Vectors of Heartworm, *Dirofilaria immitis*, in Arkansas. *North American Veterinary Conference*. Orlando, FL 22 January 2013
- *McKay, T. An integrated flea control program in an Arkansas horse facility: A case study. North American Veterinary Conference. Orlando, FL

22 January 2013

- *McKay, T. Teaching inquiry-based entomological lessons to high school teachers and students. The 60th Annual Meeting of the Entomological Society of America.

 14 November 2012
- *McKay, T. An integrated flea control program in an Arkansas horse facility: A case study.

 Novartis Animal Health Recharge Retreat for Veterinarians. Charlotte NC, Pittsboro,

 NC, Irving VA

 May 2012
- [‡]Gaspar, J., **T. McKay** and M. Huss. Trichomycete fungi associated with mosquito larvae in northeastern Arkansas. 88th Kansas (Central States) Entomological Society Annual Meeting 7 April 2012
- [‡]Hampton, R., [‡]J. Gaspar, **T. McKay** and M. Huss. Behavioral and developmental effects of trichomycete fungi (Smittium culisis) on Culicidae (Culex pipiens) larvae. *88th Kansas* (Central States) Entomological Society Annual Meeting 7 April 2012
- **McKay, T**. Integrated Insect Pest Management in Rice Mills. Annual International Research Conference on Methyl Bromide Alternatives and Emissions Reductions. Orlando, FL 7 November 2012
- [‡] White, A. L., **T. McKay**, J. F. Campbell, and F. Arthur. Population dynamics of stored-product insects at a rice mill in northeast Arkansas. *The 59th Annual Meeting of the Entomological Society of America*. Reno, NV 15 November 2011
- **McKay, T.** and T. Bianco. Potential vectors of dog heartworm (*Dirofilaria immitis*) in northeast Arkansas. *The 58th Annual Meeting of the Entomological Society of America*. San Diego, CA 14 December 2010
- [‡]Gaspar, J., **T. McKay** and M. Huss. Trichomycete fungi associated with mosquito larvae in northeastern Arkansas. *The 58th Annual Meeting of the Entomological Society of America*. San Diego, CA 13 December 2010
- [‡]Gaspar, J., **T. McKay** and M. Huss. Trichomycete fungi associated with mosquito larvae in Northeastern Arkansas. *Arkansas Entomological Society Annual Meeting*, Fayetteville, AR

 8 October 2010
- [‡]Gaspar, J., **T. McKay** and M. Huss. Trichomycete fungi associated with mosquito larvae in Northeastern Arkansas. Fall Conference, *Arkansas Chapter of the Wildlife Society*, Arkansas State University, Jonesboro, AR 30 September 2010
- *McKay, T. Arkansas dung beetle study The biodiversity of dung beetles in Arkansas. Dung Beetle Field Day, University of Missouri, Hugo Wurdack Farm, Cook Station, MO

- *McKay, T. Management of fly larvae in livestock systems using parasitic wasps and predators. Dung Beetle Field Day, University of Missouri, Hugo Wurdack Farm, Cook Station, MO 18 August 2010
- Hinkle, N. C. and **T. McKay**. The future of Cooperative Extension and its relationship with the Agricultural Experiment Station scientist as related to control of arthropods affecting livestock. *54*th *Livestock Insect Workers Conference*, Knoxville, TN 27-30 June 2010
- *McKay, T. Potential Vectors of Dog Heartworm in Jonesboro, AR. Sponsored by Novartis Animal Health. Spring 2010 Tour of the Mississippi Delta giving this talk seven times to veterinarians. May 4 Jackson MS, May 17 Greensville MS, May 18 Jackson MS, May 19 Alexandria MS, & Lafayette LA, May 20 Louisiana State University Veterinary School Baton Rouge LA, June 24 Sikeston MO.
- **McKay, T.**, C.A. Ross, S. Vanderpool, and K. Yanowitz. House flies in the science classroom: Perspectives from a summer camp. *84th Annual Meeting of the Southeastern Branch Meeting*, Entomological Society of America, Atlanta, GA 7-10 March 2010
- Ross, C. A., K. L. Yanowitz, **T. McKay**, and S. S. Vanderpool. Crime pays big dividends in the science classroom. *National Science Teachers Association Annual Conference*, Philadelphia, PA 18-21 March 2010
- *McKay, T. A survey of potential mosquito vectors of dog heartworm, *Dirofilaria immitis*, in Jonesboro, Arkansas. Advisory Board Meeting, Novartis Animal Health, Charlotte NC 18 February 2010
- **McKay, T.** Past, present and future of veterinary and medical entomology-results from two surveys conducted in spring 2009. *The 57th Annual Meeting of the Entomological Society of America*. Indianapolis, IN 13-16 December 2009
- Fiene, J. and **McKay, T**. Aggregation mechanisms influencing spatial distributions of dung beetles (Coleoptera: Scarabaeidae: Scrabaeinae and Aphodiinae). The 57th Annual Meeting of the Entomological Society of America. Indianapolis, IN

 13-16 December 2009
- Yanowitz, K. L., **T. McKay**, S. S. Vanderpool and C. A. Ross. Possible selves and career goals: Multiple ways of exploring the question "What do you want to be when you grow up?" Annual American Evaluation Association Conference, Orlando FL 11-14 November 2009
- Ross, C. A., K. L. Yanowitz, **T. McKay**, L. Shott and R. Harbor. Creating crime scenarios to teach science content. Arkansas Curriculum Conference, Little Rock, AR

 5-6 November 2009
- *McKay, T. Livestock entomology: The past, present and future. The 56th Annual Meeting of the Entomological Society of America. Reno, NV November 18, 2008
- [‡]Fiene, J. and **T. McKay**. Seasonal activity and species composition of dung beetles inhabiting cattle pastures in Arkansas with notes on the mass occurrence of *Labarrus*

- pseudolividus Balthasar. Runner up in the Student Competition for the President's Prize, SVPHS: Veterinary Entomology. The 56th Annual Meeting of the Entomological Society of America. Reno, NV

 November 17, 2008
- [‡]Howell, G., J. Fiene and **T. McKay**. A mass occurrence of *Labarrus pseudolividus* (Balthasar) (Coleoptera: Scarabaeidae) in northeastern Arkansas. 16th Annual Meeting of the Arkansas Entomological Society. Fayetteville, AR October 10, 2008
- [‡]Fiene, J. and **T. McKay**. A preliminary study on the insect succession on chicken carrion in northeast Arkansas. The 52nd Livestock Insect Workers Conference. Kansas City, MO June 18, 2008
- Ross, A., K. Yanowitz, S. Scott Vanderpool, **T. McKay**, J. Trautwein, C. Miller, D. Rogers, and L. Kellum. CSI (Creating Student Investigators): Using popular culture to capture future scientists. National Science Teachers Association National Conference. Boston, MA March 29, 2008
- Yanowitz, K., S. Scott Vanderpool, **T. McKay**, and A. Ross. Let's Go to Camp! Coordinating a Residential Summer STEM Program for Teachers and Students. National Science Teachers Association National Conference. Boston, MA March 27, 2008
- *McKay, T. Highlights of veterinary entomology. The 55th Annual Meeting of the Entomological Society of America. San Diego, CA December 10, 2007
- [‡]Fiene, J. and **T. McKay**. Do dung beetles respond to ivermectin residues? Examination of the olfactory cues used by dung beetles (*Aphodius* spp.) in finding dung pats. Student Competition for the President's Prize, Section D and E. The 55th Annual Meeting of the Entomological Society of America. San Diego, CA

 December 10, 2007
- **McKay, T.** A forensic entomology project. 15th Annual Meeting of the Arkansas Entomological Society. Hot Springs, AR

 November 2, 2007
- Yanowitz, K., A. Ross, S. Vanderpool and **T. McKay**. Creating student investigators: NSF summer camp for teachers and students. Arkansas Curriculum Conference. Little Rock, AR

 November 2, 2007
- *Loftin, K., **T. McKay**, J. Pennington, D. Steelman, A. Szalanski, K. VanDevender, W. Watson, and S. Willard. Using parasitic wasps as an IPM approach to manage filth flies in southern dairies. The 54th Annual Meeting of the Entomological Society of America. Indianapolis, IN

 December 11, 2006
- *Broce, A. and **T. McKay**. Oviposition behavior of *Muscidifurax zaraptor*, a pteromalid parasitoid. The 54th Annual Meeting of the Entomological Society of America.

 Indianapolis, IN

 December 11, 2006
- **McKay, T.** and C. B. Dowling. The effects of metal-rich poultry litter on ground beetles. 14th
 Annual Meeting of the Arkansas Entomological Society. Fayetteville, AR
 October 13, 2006
- *T. McKay and C. B. Dowling. The effects of metal-rich poultry litter on the metal body burden of ground-dwelling arthropods: with notes on abundance. Society of Environmental

- Toxicology and Chemistry (SETAC), MidSouth Regional Chapter Annual Meeting.

 Jonesboro, AR

 May 26, 2006
- Romero, A., **T. McKay**, T. Risch, and S. Trauth. Biodiversity Center project at Arkansas State University. Society for the Preservation of Natural History Collections Natural Science Collections Alliance Joint Meeting. Albuquerque, NM May 23-27, 2006
- **T. McKay** and C.B. Dowling. The effects of metal-rich poultry litter on ground beetles. 80th
 Annual Meeting of the Southeastern Branch Entomological Society of America,
 Wilmington, NC
 March 5-8, 2006
- Broce, A. B., A. Köpf and **T. McKay**. Adaptive significance of puparial calcification in face flies, *Musca autumnalis* (Diptera: Muscidae). Annual meeting of the Entomological Society of America, Salt Lake City, UT

 November 14-17, 2004
- **McKay, T.** and A. B. Broce. Olfactory cues used in host finding by *Muscidifurax zaraptor*, a pupal parasitoid of house flies, with notes on wasp oviposition behavior. 46th Annual Livestock Insect Workers' Conference, Ruidoso NM.

 June 23, 2002
- **McKay, T.** and A. B. Broce. The impact of *Nosema* sp. (Protozoa: Microspora) on size and sex ratio of its host *Muscidifurax zaraptor* (Hymenoptera: Pteromalidae) with notes on wasp oviposition behavior. 45th Annual Livestock Insect Workers' Conference, Cody, WY.

 July 11, 2001
- **McKay, T.** The role of bioluminescence in insects. Entomology Department Seminar series. Kansas State University, Manhattan, KS. March 2000
- **McKay, T.** Intraspecific host discrimination of *Muscidifurax zaraptor* (Hymenoptera: Pteromalidae), a parasitoid of filth flies (Diptera: Muscidae). Entomology Department Seminar series. Kansas State University, Manhattan, KS. April 1999
- **McKay, T.** Factors which limit the northern distribution of mosquitoes in North America (Diptera: Culicidae). Entomology Department Seminar Series. University of Manitoba, Winnipeg, Manitoba. September 16, 1997
- **McKay, T.** Parasitic wasps (Hymenoptera: Pteromalidae, Ichneumonidae) to control house flies and stable flies in dairy operations in Manitoba. Entomology Department Seminar Series. University of Manitoba, Winnipeg, Manitoba. February 1997
- **McKay, T.** The success of *Spalangia* spp., *Muscidifurax* spp., and *Nasonia vitripennis*, parasitoids of filth flies in confined livestock operations. Entomology Department Seminar Series. University of Manitoba, Winnipeg, Manitoba. October 29, 1996
- **McKay, T.** and T. D. Galloway. Survey and release of parasitic wasps (Hymenoptera: Pteromalidae, Ichneumonidae) in dairy operations in Manitoba. Annual meeting of the Entomological Society of Manitoba Proceedings. Winnipeg, Manitoba.

October 25, 1996

McKay, T. and T. D. Galloway. Application of parasitic wasps for control of house flies and stable flies in confinement livestock management systems in Manitoba. Growing for Tomorrow Research Symposium. Portage-La-Prairie, Manitoba.

POSTERS PRESENTED (*Student presentations)

- *Melissa Bailey, L. Starkus, *R. Hampton, and **T. McKay**. Methods of assessing Red Flour Beetle, *Tribolium castaneum*, development and survival in rice fractions. The 89th Annual Meeting of the Kansas (Central States) Entomological Society. Pittsburg, KS

 13 April, 2013
- *Aaron Cato, L. Starkus, *R. Hampton, and **T. McKay**. A comparison of arthropods taking refuge under dome traps in four rice mills. The 89th Annual Meeting of the Kansas (Central States) Entomological Society. Pittsburg, KS 13 April, 2013
- *Gaspar, J. **T. McKay**, and M. Huss. Trichomycete fungi associated with mosquito larvae in northeastern Arkansas. The 59th Annual Meeting of the Entomological Society of America. Reno, NV (President's Award, first place Graduate Student Poster Display Competition, MUVE-2)

 14 November, 2011
- Yanowitz, K. L., **T. McKay**, C. A. Ross, and S. S. Vanderpool. The impact of participating in a STEM camp on career goals. Annual Conference of the Association for Psychological Science, Boston, MA 29 May, 2010
- *Quatermass, K. E., *T. A. Bianco and **T. McKay**. Do heartworm positive dogs increase infection in mosquitoes? Research Internships in Science of the Environment Poster Presentations, Arkansas State University, Jonesboro, AR 6 August, 2010
- *White, A. L., **T. McKay**, F. H. Arthur and J. F. Campbell. Population dynamics of stored-product insects at a rice mill in northeast Arkansas. The 57th Annual Meeting of the Entomological Society of America. Indianapolis, IN, 13-16 December, 2009
- Loftin, K., **T. McKay,** J. Pennington, D. Steelman, W. Watson, K. VanDevender, S. Willard and S. Brazil. Survey and release of parasitoids (Hymenoptera: Pteromalidae) of filth flies (Diptera: Muscidae) in southern dairies. The 56th Annual Meeting of the Entomological Society of America. Reno, NV November 18, 2008
- Loftin, K., S. Brazil, **T. McKay**, W. Watson, J. Edwards, D. Steelman, A. L. Szalanski, J. Pennington, K. VanDevender, and S. Willard. House fly (*Musca domestica*) and stable fly (*Stomoxys calcitrans*) parasitism following sustained releases of pteromalid wasps in southern dairies. The 55th Annual Meeting of the Entomological Society of America. San Diego, CA

 December 11, 2007
- Brazil, S., L. Loftin, J. Farnum, J. Pennington, **T. McKay**, D. Steelman, W. Watson, S. Willard, A. Szalanski, and K. VanDevender. Parasitism of house flies following parasitoid wasp releases. 15th Annual Meeting of the Arkansas Entomological Society. Hot Springs, AR November 2, 2007
- *Young, H., C. B. Dowling, and **T. McKay**. The effects of poultry litter application on the metal body burden of ground-dwelling arthropods. Research Internships in Science of the Environment Poster Presentations, Arkansas State University, Jonesboro, AR

 August 4, 2006

- *Tomic, L.A., C. B. Dowling, and **T. McKay**. The effects of metals within poultry litter as an organic fertilizer on soils and Bermuda grass (*Cynodon dactylon*). Research Internships in Science of the Environment Poster Presentations, Arkansas State University, Jonesboro, AR August 4, 2006
- *Young, H. L., C. Dowling, and **T. McKay**. The effects of poultry litter application on the metal body burden of ground-dwelling arthropods. American Chemical Society 41st
 Midwest Regional Meeting, Quincy, IL
 October 26, 2006
- **T. McKay**, C. B. Dowling, B. Rougeau, K. M. Williams, J. W. Klasky, J. S. Wright, and K. Vanderpuye. Impact of poultry litter application on ground-dwelling arthropod populations. Annual Meeting of the Entomological Society of America, Fort Lauderdale, FL. December 15-18, 2005
- *Vanderpuye, K., C. Dowling, and **T. McKay.** Preliminary work: metal uptake in insects after field application of poultry litter. Research Internships in Science of the Environment Poster Presentations, Arkansas State University. August 4, 2005
- *Williams, K., **T. McKay**, and C. Dowling. The effects of poultry litter application on ground beetle and spider populations in a crop field in Arkansas. Research Internships in Science of the Environment Poster Presentations, Arkansas State University.

 August 4, 2005
- C.B. Owens, A. L. Szalanski, **T. McKay**, and C. D. Steelman. Molecular surveillance of pathogens carried by filth flies associated with poultry facilities. First place student competition (M.S poster competition). 79th Annual Meeting of the Southeastern Branch ESA Meeting, Tunica, MS.

 March 7-9, 2005
- McElroy, S., A. L. Szalanski, **T. McKay**, A. Bermudez, and C. D. Steelman. Molecular assay for the detection of *Cochlosoma anatis* in house flies and turkey specimens by polymerase chain reaction. Annual meeting of the Entomological Society of America, Salt Lake City, Utah. First place student competition: Medical and Veterinary Entomology

 November 14-17, 2004
- **T. McKay**, C. B. Owens, A. L. Szalanski, and C. D. Steelman. Molecular identification of pathogens carried by black garbage flies associated with turkey production facilities. Annual meeting of the Entomological Society of America, Cincinnati, OH.

 October 16-29, 2003
- C. B. Owens, A. L. Szalanski, **T. McKay**, and C. D. Steelman. Molecular diagnostics of pathogens carried by *M. domestica* (Diptera: Muscidae). Annual meeting of the Entomological Society of America, Cincinnati, OH. October 16-29, 2003
- Szalanski, A. L., C. B. Owens, **T. McKay**, and C. D. Steelman. Molecular diagnostics of pathogens carried by flies using PCR. Southeastern Branch ESA Meeting, Baton Rouge, LA.

 March 9-12, 2003
- **McKay, T.** and A. B. Broce. Recognition of own parasitized hosts by individual *Muscidifurax zaraptor* (Hymenoptera: Pteromalidae) females reduces self-superparasitism. Annual

meeting of the Entomological Society of America, San Diego CA. December 10, 2001

- **McKay, T.** and A. B. Broce. The impact of *Nosema* sp. (Protozoa: Microspora) on size and sex ratio of its host *Muscidifurax zaraptor* (Hymenoptera: Pteromalidae). Joint Annual Meeting of the Société d' entomologie du Québec, Entomological Society of Canada, and Entomological Society of America, Montreal, Canada.

 December 5, 2000
- McKay, T. and A. B. Broce. Oviposition behavior of *Muscidifurax zaraptor* (Hymenoptera: Pteromalidae), a pupal parasitoid of filth flies (Diptera: Muscidae). Annual meeting of the Entomological Society of America, Atlanta, GA.

 December 14, 1999
- McKay, T. and T. D. Galloway. Parasitoid wasps to control house flies and stable flies in Manitoba dairy barns. Canadian and Manitoba Agreement on Agricultural Sustainability, in Review. Portage-La-Prairie, Manitoba. December 2-3, 1997

PRESENTATIONS TO PUBLIC FORUMS

Television:

September 15, 2010. KAIT TV8, 6:00 P.M. news broadcast. News clip on: "Grasshopper Biology". Reporter: Justin Logan.

Filmed a show on dung beetles with Mike Rowe, "Dirty Jobs" (Discovery Channel). Aired Nov. 2009.

July 17, 2007. KAIT TV8, 10:00 P.M. news broadcast. News clip on: "Mosquito biology". Reporter: Marsha May.

August 3, 2005. KAIT TV8, 10:00 P.M. news broadcast. News clip on: "Why are we seeing a decrease in West Nile this year?" Reporter: Brad Bean.

November 5, 2004. KAIT TV8, 10:00 P.M. news broadcast. News clip on: "The ballooning of spiderlings and the mysterious thread-like substances floating in the air around Jonesboro, AR." Reporter: Kathy Morris.

Radio:

KASU (NPR) 91.9 FM at 4:44 PM - "Rice Pests".	June 9, 2008
KASU (NPR) 91.9 FM at 4:44 PM - "Jumping Ants".	March 5, 2007
KASU (NPR) 91.9 FM at 4:44 PM – "Tiger Beetles".	Jun 12, 2006
KASU (NPR) 91.9 FM at 4:44 PM – "Scorpions".	Aug 1, 2006

Public Presentations:

Stored product entomology – Insect Festival, University of Arkansas, Fayetteville, AR, October 7, 2010

Insect Presentation, Valley View Elementary School - Mrs. Frank's kindergarten class, Jonesboro, AR April 9, 2010

Nettleton Junior High School, Jonesboro, AR - Annette Holder's 7th grade Science class, how to do a good science fair project. October 9, 2009

Blytheville Intermediate School, Blytheville AR, Talked about Forensic Entomology to 150 7th graders. May 20, 2009

Stored product entomology – Insect Festival, University of Arkansas, Fayetteville, AR, October 9, 2008

Insect presentation, Jonesboro Public Library, Jonesboro, AR – July 15 & 17, 2008

Forensic Entomology for the Lawrence County 4H group—Organized by Bryce Blackman, County Agent, Arkansas State University, April 10, 2007

Butterfly presentation, Bioblizt fund-raiser, Forrest L. Wood Crowley's Ridge Nature Center, Jonesboro, AR April 16, 2005

Women In Technology and Science program, Entomology sessions, Arkansas State University, Jonesboro, AR March 5, 2005

Kansas West Nile Survey Hotline, Spring-Summer 2002

Entomology Presentations, Open house, Department of Entomology, Kansas State University, Manhattan, KS April 1998-2001

AWARDS

Entomological Society of America Distinguished Achievement Award in Teaching 2011

Distinguished Achievement Award in Teaching, Southeastern Branch, Entomological Society of America.

Richard Elmore Brown Outstanding College of Agriculture Graduate Student Teaching Award Kansas State University, Manhattan, KS 2001

Morris (O.W. Spide) Memorial Scholarship

Department of Entomology, Kansas State University, Manhattan, KS 2001

The Entomological Society of Manitoba Postgraduate Scholarship

Winnipeg, Manitoba, Canada 1996

WORKSHOPS AND TRAINING

Grant Proposal Workshop.

College of Sciences and Mathematics, Arkansas State University,

Jonesboro, AR October 23, 2004

Serving Special Needs in an Academic Environment.

College of Agriculture, Kansas State University, Manhattan, KS January 11, 2002

Instructional Techniques and Effective Teaching Workshop.

College of Agriculture, Kansas State University, Manhattan, KS August 15, 2001

PROFESSIONAL AND SERVICE ACTIVITIES

Subject Editor

Journal of Economic Entomology. Veterinary Entomology. December 2008 – Present.

Manuscript review:

Journal of Agricultural and Urban Entomology (Dr. Scott Akins, Editor) 15 November, 2010. The Condor (Michael Patten), 5 April, 2009.

Stored Products Research (Dr. Frank Arthur), 12 August, 2008, Spring 2013.

Annals of the Entomological Society of America (Dr. Timothy Collier, Editor) 31 Dec.2007.

Journal of Agricultural and Urban Entomology (Dr. James Austin, Editor) 30 August, 2007.

Journal of Economic Entomology (Dr. Timothy Lysyk, Editor) 14 April, 2007.

HortScience (Dr. LeRon Robbins, Editor in Chief) 2 December, 2006.

The Canadian Entomologist (Dr. Gilles Boiteau, Editor) 8 September, 2006.

Medical & Veterinary Entomology (Dr. Gabriella Gibson, Editor) 29 April, 2005.

Grant proposal review:

The National Science Foundation, Behavioral Systems Clusters, (Dr. Godfrey, R. Bourne) 23 August, 2005.

Judge for the student poster competitions at society meetings:

Annual Meeting of the Entomological Society of America, Knoxville, TN, November 2012. Annual Meeting of the Entomological Society of America, San Diego, CA, December 13, 2010. Annual Meeting of the Entomological Society of America, Indianapolis, IN, December 10, 2006. Southeastern Branch ESA meeting, Wilmington, NC, March 7, 2006. Southeastern Branch ESA meeting, Tunica, MS, March 8, 2005.

Consultant/Expert Witness:

Novartis Animal Health, Flea talks to veterinarians in NC, and VA, Spring 2012

Novartis Animal Health, Dog heartworm and mosquitoes in the Mississippi Delta, Spring 2010 Tour of the Mississippi Delta.

Species Identification of Arthropods at Rock Creek Natural Area. Arkansas Natural Heritage Commission. May 2009-May 2010.

Parasitic wasp identification for Stephanie Caubet School of Criminal Sciences

University of Lausanne, Switzerland: July 17, 2007. Entomology related court case, United States District Court for the Central District of

California. Started working on case: 13 November, 2006. Consultant: For the City of Jonesboro Mosquito Abatement Program: November 2006.

Research projects helped worked on:

West Nile Surveillance program for the State of Kansas (Kansas State University 2001-02) Stable fly surveillance in Meade Nebraska – June 2002 (Kansas State University, USDA-ARS Nebraska, University of Minnesota)

Society Committees:

Chair for Membership Committee – Rep for SVPHS. Entomological Society of America. 2009-2010.

Vice Chair for Membership Committee – Rep for SVPHS. Entomological Society of America. 2008-present.

Education and Youth Committee, Southeastern Branch of the Entomological Society of America. Fall 2004 – 2006.

Education and Youth Committee, Rep. for Section D. Entomological Society of America, 2006-2008.

Society Symposia Organizer:

Symposium: Biological Control of Muscoid Diptera, for the 2006 Annual Meeting of the Entomological Society of America to be held December 10-13 2006 in Indianapolis, IN (Ten speakers: 8 national, 2 international speakers).

Moderator:

Student Competition for the President's Prize, SVPHS: Veterinary Entomology. The 56th Annual Meeting of the Entomological Society of America. Reno, NV, November 17, 2008.

Science fair judge:

Nettleton Jr. High School, Jonesboro, AR 2009-2012.

Judge for the Northeast Arkansas Regional Science Fair. Jonesboro, AR 2005-2012.

The Science Fair at Blessed Sacrament school, Jonesboro, AR 2006 & 2009.

State fair judge:

4-H insect collections, Kansas State Fair, Hutchison, KS August 2001.

4-H insect collections, Pottawatomie County Fair, Onaga, KS July 2000.

4-H insect collections, Kansas State Fair, Hutchison, KS August 2000.

Mentor for RISE (Research Internships in Science of the Environment) NSF program, Arkansas State University:

Summer 2010. Kori Quatermass, Portland State University, Portland, OR.

Summer 2008. Genevieve Howell, Bard College, Annadale-on-Hudson, NY.

Summer 2006. Heather Young, Truman University, MO.

Summer 2005. Keisha Williams, Xavier University of Louisiana, New Orleans, LA. Kate Vanderpuye, Morgan State University, Baltimore, MD.

<u>Mentor for STRIVE (Science Teachers Involvement for Vital Education), Arkansas State</u> University:

Summer 2006: Linda Clarke. Project: Biodiversity of dung-dwelling insects in Arkansas. Summer 2005: Lee Ann Dickson. Project: Biodiversity of the aquatic macroinvertebrates in Thompson's Creek, Craighead Co., AR.

Department of Biological Sciences (ASU) Committees:

Recruitment Committee Chair, Department of Biological Sciences, Arkansas State University June 2008 - Present.

Recruitment Committee Member, Department of Biological Sciences, Arkansas State University August 2004 – June 2008.

Library Coordinator for the Department of Biological Sciences, Arkansas State University August 2004 – Present.

Member, Graduate Student Selection Committee August 2005 – Present.

Member, Ecotoxicology Research Facility Users Committee Spring 2006.

Member, Non Majors Biological Sciences Committee. August 2006 – current.

Ad Hoc Departmental Awards committee, Spring 2006.

Arkansas State University Committees:

Department of Biological Sciences, PRT Committee, Chair – August 2012 – present. Graduate Council (Environmental Sciences Rep.) – August 2011-Present.

Shared Governance Committee, General Education Committee for 2010-2013. (Sciences & Mathematics Rep.)

Search Committee for Chair Biological Sciences - Spring 2010.

Search Committee for Outreach Coordinator- Arkansas Biosciences Institute Fall 2008.

Search Committee for an Assistant Professor of Forensic Science

Department of Chemistry and Physics, Fall 2007.

Shared Governance Library Committee, Chair Fall 2007-09.

Student representative (Kansas State University, University of Manitoba):

Search Committee for an Assistant Professor of Medical-Veterinary Entomology position Department of Entomology, Kansas State University, Manhattan, KS Spring 2002. Committee on Effective Instruction, College of Agriculture, Kansas State University, Manhattan, KS August 2001-2002.

Graduate student representative for faculty meetings, Department of Entomology, Kansas State University, Manhattan, KS January - August 1999.

Advanced Entomology, Department of Entomology, University of Manitoba, Winnipeg, Manitoba, Canada 1996-1997.

Community Service:

Invited speaker, Beneficial Insects, Master Gardners, Jonesboro, AR March 7, 2013 Girls of Promise, Arkansas State University, Jonesboro, AR March 31, 2007.

Entomology merit badge for Boy Scouts of America, Scout University, Arkansas State University, Jonesboro, AR October 15, 2005.

Future Farmers of America insect collection representative, Entomology Club, Kansas State University, Manhattan, KS, January 2000 – August 2001.

The Insect Zoo and Butterfly Conservatory Department of Entomology, Kansas State University, Manhattan, KS August 2000.

Youth Encouragement and Public Awareness Committee

Entomological Society of Manitoba, Winnipeg, Manitoba, Canada, 1996-1997.

Volunteer for 4-H Entomology activities, Department of Entomology, Kansas State University, Manhattan, KS May 1998.

Entomology Club, Secretary, Department of Entomology, Kansas State University, Manhattan, KS, 1998-1999.

CONFERENCES ATTENDED

The 60th Annual Meeting of the Entomological Society of America Knoxville, TN	November 10-14, 2012
Annual Meeting of the Kansas Entomological Society Arkansas State University, Jonesboro, AR	April 6-7, 2012
The 59 th Annual Meeting of the Entomological Society of America Reno, NV	November 13-16, 2011
The 58 th Annual Meeting of the Entomological Society of America San Diego, CA	December 12-15, 2010

18 th Annual Meeting of the Arkansas Entomological Society. Fayetteville, AR	October 8, 2010
84 th Annual Meeting of the Southeastern Branch Meeting, Entomologic Atlanta, GA	ical Society of America March 7-10, 2010
The 57 th Annual Meeting of the Entomological Society of America Indianapolis, IN	December 13-16, 2009
The 56 th Annual Meeting of the Entomological Society of America Reno, NV	November 16-19, 2008
16 th Annual Meeting of the Arkansas Entomological Society. Fayetteville, AR	October 10, 2008
The 55 th Annual Meeting of the Entomological Society of America San Diego, CA	December 9-13, 2007
15 th Annual Meeting of the Arkansas Entomological Society. Hot Springs, AR	November 1-2, 2007
The 54 th Annual Meeting of the Entomological Society of America Indianapolis, IN	December 11, 2006
14 th Annual Meeting of the Arkansas Entomological Society. Fayetteville, AR	October 13, 2006
Society of Environmental Toxicology and Chemistry, Mid-South SET Meeting, Jonesboro AR	AC 2006 Regional May 24-26, 2006
Southeastern branch of the Entomological Society of America Wilmington, NC	March 5-8, 2006
Rice Processing Program, Industry Alliance Meeting Fayetteville, AR	May 25-26, 2005
Southeastern Branch ESA Meeting Tunica, MS	March 6-9, 2005
Annual meeting of the Entomological Society of America Cincinnati, OH	October 26-29, 2003
Southeastern Branch ESA Meeting Baton Rouge, LA	March 9-12, 2003
Joint S-1005/1006 Multi-State Project annual meeting Baton Rouge, LA	January 6-7, 2003
46 th Livestock Insect Workers Conference	

Ruidoso, NM June 23-26, 2002

Annual meeting of the Entomological Society of America San Diego, CA

December 9-12, 2001

45th Livestock Insect Workers Conference Cody, WY

July 8-11, 2001

Joint Annual Meeting of the Société d' entomologie du Québec, Entomological Society of Canada, and Entomological Society of America, Montreal, Canada December 2-7, 2000 Annual meeting of the Entomological Society of America

Atlanta, GA

December 12-17, 1999

Annual meeting of the Entomological Society of Manitoba Winnipeg, Manitoba, Canada

October 25-26, 1996

40th Livestock Insect Workers Conference Kerrville. TX

June 17-20, 1996

Annual meeting of the Entomological Society of Manitoba Winnipeg, Manitoba, Canada

November 1995

Entomological Society of Canada Meetings Victoria, British Columbia, Canada

October 1995

SOCIETY MEMBERSHIPS

Entomological Society of America Women in Science, Arkansas State University Arkansas Entomological Society Entomological Society of Manitoba January 1998 – Present August 2004 – 2006 October 2006 - Present 1995 - 1998

OFFICES HELD IN PROFESSIONAL ORGANIZATIONS

President. (2006-07) Arkansas Entomological Society. Organized the 15th Annual Meeting of the Arkansas Entomological Society in Hot Springs, AR.

THESIS COMMITTEES

Undergraduate Honor's Thesis:

Committee Member for Brittany Wilson. BS Honors Program. Genetic variation and structuring of bass (Micropterous) in the Southwest Power Company Lake in Northwest Arkansas. Major advisor: Ron Johnson (August 2009 - present).

Committee Member for Adam Skarda. BS Honors Program. Genetic Diversity of *Phragmatopoma californica* and *Nereis grubei* as Measured by Inter Simple Sequence Repeats. Major advisor: Ron Johnson (Spring 2010 - present). Committee Member for Thomas Oguin (graduated). BS Honors Program. Molecular analysis of blood meals in mosquitoes from northeast Arkansas. Major advisor: Jeannette Loutsch (Aug. 2006-Graduated May 2007).

Graduate:

Major Advisor for Brook Hale. MS Program (Biological Sciences). August 2011 – Present.

Major Advisor for Martine Toko. MS (Biological Sciences). January 2013-present.

Major Advisor for Jason Gaspar. MS Program (Biological Sciences). Trichomycete/mosquitoe associations in northeast Arkansas. August 2009 - present.

Major Advisor for Amanda White. MS Program (Biological Sciences). Stored-product insects. August 2008 – graduated May 2011.

Major Advisor for Daniel Sappington. MS Program (Environmental Science). A crime scene investigation at Forrest L. Wood Crowley's Ridge Nature Center. Practicum Research Report. May 2010 – graduated August 2010.

Major Advisor for Justin Fiene. MS Program (Biological Sciences). Off-target effects of endecticides on dung Beetles in Northeast Arkansas. (Graduated August 2009).

Major Advisor for Allison Asher. MS Program (Environmental Science). The use of microsatellite analysis to determine paternity in freshwater mussels. (Graduated May 2009)

Major Advisor for Kentaro Inoue. MS Program (Environmental Science). Molecular phylogenetic, morphometric, and life history analyses of special concern freshwater mussel: *Obovaria jacksoniana* (Frierson, 1912) and its closest congeners *Villosa arkansasensis* (Conrad, 1862). (Graduated May 2009).

Sarah Webb. MS Program (Biological Sciences). The histology, histochemistry, and ultrastructure of Rathke's glands in the Mississippi Mud Turtle, *Kinosternon subrubrum hippocrepis* Major Advisor: Stan Trauth. (Graduated August 2010).

Jonathan Stanley. MS Program (Biological Sciences). Sperm Competition in the Diamond-backed Watersnake, *Nerodia rhombifer*. Major Advisor: Stan Trauth. (Graduated December 2009).

Jeremy Brown. MS Program (Biological Sciences). Macroinvertebrate communities and vegetation characteristics of the Swainson's Warbler, in White River National Wildlife Refuge. Major advisor: Jim Bednarz. (Graduated May 2008).

Jacob Sawyer. MS Program (Biological Sciences). Skeletaochronology and age estimation of an urban population of *Siren intermedia nettingi* (Goin) with an examination of tissues affected by aestivation. Major Advisor: Stan Trauth. (Graduated August 2008).

Matt Connier. MS Program (Biological Sciences). Home range, dispersal and survival of the Ozark pocket gopher. Major advisor: Tom Risch. (Graduated Fall 2008).

Troy Badder. MS Program (Biological Sciences). Reproductive success, causes of nest failures, and habitat uses of the Swallow-tailed and Mississippi kite in the White River NWR., AR. Major advisor: Jim Bednarz. (Graduated 2007).

Mickey Matthews. MS Program (Biological Sciences). Freshwater mussel (Bivalvia: Unionidae) assemblage structure and their role in nutrient recycling along an Ozark river. Major advisor: Alan Christian. (Graduated 2007).

Nathan Wentz. MS Program (Biological Sciences). Assessment of a proposed *Potamilus capax* (Green 1832) refuge: the use of biotic and habitat indices as indicators of freshwater mussel (Bivalvia: Unionidae) habitat in the Tyronza River, Arkansas. Major Advisor: Alan Christian. (Graduated May 2007).

Joe Milanovich. MS Program (Biological Sciences). Effects of Prescribed Burning on the Reproduction of the Western Slimy Salamander (*Plethodon albagula*) in the Quachita National Forest of South-central Arkansas. Major advisor: Stan Trauth. (Graduated 2006).

Rex Medlin. MS Program (Biological Sciences). Population and distribution of Rafinesque's big-eared bat and the Southeastern Myotis in the bottomlands of Arkansas. Major advisor: Tom Risch. (Graduated 2006).

Tracy Klotz. BS. Program (Biological Sciences). A mist survey of bats in the Donaldson Point Conservation Area with emphasis on potential roost trees. Major Advisor: Tom Risch (June 2008 – present).

Scott Chiavacci. BS Program (Biological Sciences). Nesting Ecology and Habitat Use of Mississippi Kites in the White River National Refuge, Arkansas. Major Advisor: Jim Bednarz. (March 2009 – present).

Freeman-Nelson, Kellie. MS Program (Biological Sciences). Are Brighter Bluebirds More Defensive? Major Advisor: Tom Risch (September 2009 – present).

John Phillip Stewart. MS Program (Biological Sciences). Microhabitat Selection and spatial ecology of an introduced population of Eastern Collared Lizards (*Crotaphytus collaris*) on Cedar Glades within the Sylamore Ranger District, Ozark National Forest. Major advisor: Stan Trauth.

Charles McDowell. MS Program (Biological Sciences). Comparison of Chelonian spermatazoa using scanning electron microscopy. Major advisor: Stan Trauth.

Stephen Brandenbura. MS Program (Biological Sciences). Roosting ecology of Indiana bats in Arkansas. Major advisor: Tom Risch.

DISSERTATION COMMITTEES

PhD Committee Member for Brandon Noel. PhD Program (Environmental Science) The breeding and foraging ecology of the Pileated Woodpecker (*Dryocopus pileatus*) in eastern Arkansas, with an emphasis on the conservation of the Ivory-billed Woodpecker (*Campephilus princepalis*). Major Advisor: Jim Bendarz. (Since Spring 2007)

PhD Committee Member for Teresa Ruth Brueggen. PhD Program (Environmental Science) Investigation of land use and best management practices on the Upper Strawberry River Watershed, Fulton Co., AR, USA. Major Advisor: Jennifer Bouldin (Spring 2010).

PhD Committee Member for Narinderpal Singh. PhD Program (Entomology, University of Arkansas). Chemical ecology, population dynamics and insecticide susceptibility of lesser meal worm, *Alphitobius diaperinus* (Panzer) (Coleoptera: Tenebrionidae). Major Advisor: Don Johnson (Spring 2009 - present).

Major Advisor for David Hayes. PhD Program (Environmental Science) Molecular phylogenetics of Interior Highland Pleuroceridae. (Graduated Spring 2010)

Major Advisor for Andrew Peck. PhD Program (Environmental Science) Programmatic Biological Assessment for *Potamilus capax* in AR. (Graduated Spring 2010)