Gregory Zolnerowich

Curriculum Vita

Current Position:

Professor and Curator Department of Entomology Kansas State University Manhattan, KS 66506-4004 e-mail: gregz@ksu.edu

phone: 785-532-3799



Appointment: 35% teaching, 65% research (35% research, 30% collection curation)

Degrees:

Doctor of Philosophy, 1995 Department of Entomology, Texas A&M University, College Station, Texas

Master of Science, 1983 Department of Biology, Midwestern State University, Wichita Falls, Texas

Bachelor of Science, 1980 Department of Biology, Midwestern State University, Wichita Falls, Texas

Professional Memberships:

Entomological Society of America International Society of Hymenopterists

Awards and Honors:

K-State College of Agriculture David J. Mugler Outstanding Teacher Award, 2013 K-State Presidential Award for Excellence in Undergraduate Teaching, 2012 Distinguished Achievement Award in Teaching, North Central Branch, ESA, 2007 Commerce Bank Award for Outstanding Undergraduate Teaching, 2005

RESEARCH

Publications:

Raghavan, R. M., D. G. Goodin, G. A. Hanzlicek, G. Zolnerowich, M. W. Dryden, G. A. Anderson, R. R. Ganta. Maximum Entropy-based ecological niche model and bioclimatic determinants of lone star tick (*Amblyomma americanum*). **Submitted to Vector-borne Zoonotic Diseases.**

Burke, A.F., J. M. Leavengood, Jr., and G. Zolnerowich. A preliminary checklist of the subfamily Tillinae (Coleoptera: Cleridae) from the New World. **Submitted to Zootaxa**.

- Burke, A. F., J. Rifkind and G. Zolnerowich. Four new checkered beetle species from central and south Mexico (Coleoptera: Cleridae: Tillinae). **Submitted to ZooKeys**.
- Burke, A. F., and G. Zolnerowich. 2014. *Cymatodera ochlera* Barr, a junior synonym of *Cymatodera wolcotti* Barr, with a comparison to similar species (Coleoptera: Cleridae: Tillinae). Zootaxa 3847(3): 423-430.
- Burke, A. F., and G. Zolnerowich. 2014. Four new species of *Cymatodera* Gray from Mexico (Coleoptera, Cleridae, Tillinae). ZooKeys 387: 33-49.
- Zolnerowich, G., and R. L. Zuparko. 2010. *Copidosoma howardi*, a new name for *Parapsilophrys gelechiae* Howard, 1898. Pan-Pacific Entomologist 8: 135-138.
- Metlevski, J., and G. Zolnerowich. 2009. A new species of *Drasteria* Hübner (Lepidoptera: Noctuidae; Catocalinae: Melipotini) from Arizona. Journal of the Lepidopterists' Society 63(1): 1-10.
- Zolnerowich, G., and M. Rose. 2008. The Genus *Eretmocerus* Haldeman (Hymenoptera: Chalcidoidea: Aphelinidae). pp. 89-110, *in*: Gould, J., K. Hoelmer and J. Goolsby. *Classical Biological Control of Bemisia tabaci in the United States: a Review of Interagency Research and Implementation*. Vol. 4, *Progress in Biological Control* (H.M.T. Hokkanen, series ed.). Springer, Dordrecht, the Netherlands.
- Kula, R. R., and G. Zolnerowich. 2008. Revision of New World *Chaenusa* Haliday *sensu lato* (Hymenoptera: Braconidae: Alysiinae), with new species, synonymies, hosts, and distribution records. Proceedings of the Entomological Society of Washington 110: 1–60.
- Rose, M. and G. Zolnerowich. 2006. *Eretmocerus hoelmeri* new species (Hymenoptera: Chalcidoidea: Aphelinidae) from *Aleuropleurocelus* sp. (Homoptera: Aleyrodidae: Aleyrodinae) on *Hymenoclea salsola* (Asterales: Asteraceae), in the California Imperial Valley. Pan-Pacific Entomologist 82: 275-282.
- Kula, R., G. Zolnerowich, and C. Ferguson. 2006. Phylogenetic analysis of *Chaensua* sensu lato (Hymenoptera: Braconidae) using mitochondrial NADH 1 dehydrogenase gene sequences. Journal of Hymenoptera Research 15: 251-265.
- Ahmad, A., G. E. Wilde, R. J. Whitworth, and G. Zolnerowich. 2006. Effect of coleopteran-specific Cry3Bb1 toxin for corn rootworm control on aboveground insect predators. Journal of Economic Entomology 99: 1085-1095.
- Kula, R., and G. Zolnerowich. 2005. A new species of *Epimicta* Förster (Hymenoptera: Braconidae) from North America and new distribution records for *E. griffithsi* Wharton. Proceedings of the Entomological Society of Washington 107: 78-83.

- Zolnerowich, G., and M. Rose. 2004. *Eretmocerus rui* n. sp. (Hymenoptera: Chalcidoidea: Aphelinidae) an exotic natural enemy of *Bemisia* (*tabaci* group) (Homoptera: Aleyrodidae) released in Florida. Florida Entomologist 87: 283-287.
- Aldrich, B. T., G. Zolnerowich, and S. Kambhampati. 2004. Interspecific morphological variation in the wood-feeding cockroach, *Cryptocercus* (Dictyoptera: Cryptocercidae). Arthropod Structure & Development 33: 443-451.
- Rose, M., and G. Zolnerowich. 2004. *Eretmocerus perseae* n. sp. (Hymenoptera: Chalcidoidea: Aphelinidae) reared from *Tetraleurodes perseae* Nakahara (Homoptera: Aleyrodidae: Aleyrodinae) living on avocado in Michoacan, Mexico. Vedalia 11: 45-52.
- Rose, M. and G. Zolnerowich. 2003. *Eretmocerus picketti* new species (Hymenoptera: Chalcidoidea: Aphelinidae), reared from *Tetraleurodes acaciae* (Quaintance) (Homoptera: Aleyrodidae). Pan-Pacific Entomologist 79: 119-127.
- Zolnerowich, G., and M. Rose. 1998. *Eretmocerus* Haldeman (Hymenoptera: Aphelinidae) imported and released in the United States for control of *Bemisia* (*tabaci* complex) (Homoptera: Aleyrodidae). Proceedings of the Entomological Society of Washington 100: 310-323.
- Rose, M., and G. Zolnerowich. 1997. *Eretmocerus* Haldeman (Hymenoptera: Aphelinidae) in the United States, with descriptions of new species attacking *Bemisia* (*tabaci* complex) (Homoptera: Aleyrodidae). Proceedings of the Entomological Society of Washington 99: 1-27.
- Rose, M., and G. Zolnerowich. 1997. The genus *Eretmocerus* (Hymenoptera: Aphelinidae): Parasites of Whitefly (Homoptera: Aleyrodidae). Technical brochure produced for California Department of Food and Agriculture. 8 pages.
- Noyes, J. S., J. B. Woolley, and G. Zolnerowich. Family Encyrtidae. 1997. pages 170-320 *in* G. A. P. Gibson, J. T. Huber, and J. B. Woolley (eds.), Annotated Keys to the Genera of Nearctic Chalcidoidea (Hymenoptera). National Research Council Research Press. 794 pages.
- LaSalle, J., A. Polaszek, J. S. Noyes, and G. Zolnerowich. 1997. A new whitefly parasitoid (Hymenoptera: Pteromalidae: Eunotinae), with comments on its placement, and implications for classification of Chalcidoidea with particular reference to the Eriaporinae (Hymenoptera: Aphelinidae). Systematic Entomology 22: 131-150.
- Zolnerowich, G., and M. Rose. 1996. A new species of *Entedononecremnus* (Hymenoptera: Chalcidoidea: Eulophidae) parasitic on the giant whitefly, *Aleurodicus dugesii* Cockerell (Homoptera: Aleyrodidae). Proceedings of the Entomological Society of Washington 98: 369-373.

- Rose, M., G. Zolnerowich, and M. Hunter. 1996. Systematics, *Eretmocerus*, and Biological Control. *In* D. Gerling, (ed.), *Bemisia* 1995: Taxonomy, Biology, Damage, Control and Management. Intercept, LTD. pp. 477-497.
- Rose, M., and G. Zolnerowich. 1994. *Eretmocerus furuhashii* sp. n. (Hymenoptera: Aphelinidae), a parasite of *Parabemisia myricae* (Kuwana) (Homoptera: Aleyrodidae) in Japan. Japanese Journal of Entomology 62: 285-292.
- Zolnerowich, G. 1992. A unique *Amycle* nymph (Homoptera: Fulgoridae) that mimics jumping spiders (Araneae: Salticidae). Journal of the New York Entomological Society 100: 498-502.
- Zolnerowich, G., J. M. Heraty and J. B. Woolley. 1990. Separation of insect and plant material from screen-sweep samples. Entomological News 101: 301-306.
- Seiler, G. J., G. Zolnerowich, N. V. Horner, and C. E. Rogers. 1987. Spider fauna of selected wild sunflower species sites in the southwest United States. Great Basin Naturalist 47: 280-282.
- Zolnerowich, G., and N. V. Horner. 1985. Gnaphosid spiders of north-central Texas (Araneae, Gnaphosidae). Journal of Arachnology 13: 79-85.

Online publication:

Brooks, H. L., B. Brown, and G. Zolnerowich. Sugarcane Rootstock Weevil. http://entomology.k-state.edu/doc/misc.-extension-document/sugarcane-rootstock-weevil.pdf

Research Support

- 2015 USDA-SARE. \$199,989. Use of the potential oilseed crop Silphium integrifolium (Asteraceae) to perennialize sorghum borders for enhanced beneficial arthropod services. Co-investigator. **Submitted, pending**.
- 2015 Wiggam, McCornack, Zolnerowich. \$7,500. Pollinator responses to rangeland management practices in the Flint Hills ecoregion. Kansas Department of Wildlife, Parks and Tourism.
- 2011 NSF-Advancing Digitization of Biological Collections. \$150,059. Digitization TCN: InvertNet--An Integrative Platform for Research on Environmental Change, Species Discovery and Identification. Collaboration with Illinois Natural History Survey and 11 other institutions. 2011-2016.
- Institute of Museum and Library Sciences. \$150,000. Enhancing BiodIS, the Kansas State University Biodiversity Information System. \$199,800 total with \$49,800 matching KSU funds. 2011-2015.
- 2007 KSU Targeted Excellence. \$800,000. The K-State Digital Prairie Plant and Insect Collection: Elevating Biodiversity and Bioinformatics to the Next Level.

- Project Director, co-PDs C. Ferguson (Biology), D. Allen (Library), M. Haddock (Library). 2007-2012. Plus \$3,500 additional funding each year from the Kansas Agricultural Experiment Station for this project.
- 2003 NSF-LTER. Konza Prairie LTER IV. \$10,000. Subcontract.
- 2001 NSF-LTER. \$3,600. Subcontract.
- 2000 USDA-CSREES-NRI. \$177,000. Systematics of native and exotic species of *Eretmocerus*. Co-PI with M. Rose.
- 1999 NSF-LTER. \$49,774. Establishment and enhancement of the Prairie Arthropod Collection from the Konza LTER site at Kansas State University.
- 1998 USDA-NBCI Implementation Program. \$15,600. Identification of *Eretmocerus* spp. ex: *Bemisia*. Co-PI with M. Rose.
- 1997 USDA-CSREES-National Research Initiative Competitive Grants Program. \$165,097. Revision of Nearctic *Metaphycus*, with a phylogenetic analysis of Aphycini (Hymenoptera: Encyrtidae).
- 1995 California Department of Food and Agriculture. \$13,310. An illustrated key to nominal North American species of *Eretmocerus* Haldeman (Hymenoptera: Aphelinidae) and to species reared from *Bemisia* (Homoptera: Aleyrodidae) in the USA. Co-PI with M. Rose.
- 1993 USDA-APHIS National Biological Control Institute. \$77,262. Systematics of native and imported *Eretmocerus* (Hymenoptera: Aphelinidae), parasites of *Bemisia*.

Graduate Students In Progress:

Alan Burke, Ph.D., systematics of Tillinae (Coleoptera: Cleridae) Shelly Wiggam, Ph.D., pollinators and patch burn grazing

Research Talks and Posters Presented:

- Wiggam, S.D., G. Zolnerowich, and B.M. McCornack. Patch-burn grazing promotes pollinator diversity through spatially explicit habitat heterogeneity. 68th Society for Range Management Annual Meeting, Sacramento, CA.
- 2014 Burke, A. F., and G. Zolnerowich. Phylogenetic analysis of New World Tillinae. XLIX Congreso Nacional de la SME y IV Congreso Latinoamericano de Aracnología. Mexico City, Mexico.
 - Wiggam, S.D., G. Zolnerowich, A.M. Ricketts, and B.M. McCornack. Pollinator responses to patch-burn grazing. 67th Society for Range Management Annual International Meeting, Orlando, FL.
 - Wiggam, S.D., G. Zolnerowich, A.M. Ricketts, and B.M. McCornack. Pollinator responses to patch-burn grazing in the Flint Hills ecoregion. 7th Annual Kansas Natural Resources Conference, Wichita, KS.

- Wiggam, S.D., G. Zolnerowich, and B.M. McCornack. Pollinator responses to rangeland management practices in the Flint Hills ecoregion. *Invited Symposium Presentation*, 74th Annual Midwest Fish and Wildlife Conference, Kansas City, MO.
- 2013 Burke, A. F., and G. Zolnerowich. Phylogenetic analysis of New World Tillinae (Coleoptera: Cleridae) based on morphological characters. ESA, Austin, TX. Wiggam-Ricketts, S., G. Zolnerowich, and B. McCornack. Pollinator resource use in rangelands managed with patch burn grazing. ESA, Austin, TX.
 - Wiggam-Ricketts, S., G. Zolnerowich, D. Ricketts, and D. Margolies. Pollinator resource use in rangelands that utilize patch-burn grazing as a management tool. Kansas Natural Resources Conference, Wichita, KS.
- 2012 Pollinator use in rangelands that utilize patch burn grazing as a management tool. Wiggam-Ricketts, S., G. Zolnerowich and D. Margolies. Patch Burn Grazing Working Group Annual Conference, Elmdale, KS.
 - The K-State Insect Collection: Strength through Collaboration. InvertNet Spring Conference on Collection Digitization. Zolnerowich, G. University of Illinois at Urbana-Champaign. http://vimeo.com/41848076.
- 2011 An intra-institutional collaboration to develop a Biodiversity Information System (BiodIS). Ferguson, C. J., M. H. Mayfield, D. B. Allen, M. J. Haddock, H. Maringanti, J. K. Oleen and G. Zolnerowich. Society for the Preservation of Natural History Collections/Natural Science Collections Alliance joint meeting, San Francisco, CA.
- 2010 BiodIS: K-State Biodiversity Information System. D. B. Allen, C. F. Ferguson, M. Haddock, G. Zolnerowich, H. Mariganti, J. Oleen, M. Mayfield. Great Plains Plant Systematics Symposium, Manhattan, KS.
- 2008 The K-State digital prairie plant and insect collection: strength through collaboration. G. Zolnerowich, C. J. Ferguson, D. Allen, M. Haddock, M. H. Mayfield, and H. Maringanti. Entomology Collections Network meeting, Reno.
 - Kansas State University's Biodiversity Information System: Combining institutional expertise to enhance access to collections information. Mayfield, M., C. J. Ferguson, G. Zolnerowich, D. Allen, H. Maringanti, M. Haddock. Biodiversity Information Standards annual meeting, Freemantle, Australia.
- 2007 Mapping Museum Records. S. Mohandass, C. Ferguson, M. Mayfield, K. Gido, and G. Zolnerowich. GIS Day at K-State..
 - Find the harpe: Understanding the homologies of male valval structures in noctuid moths (Lepidoptera: Noctuoidea). J. Metlevski and G. Zolnerowich. Entomological Society of America, annual meeting, San Diego, CA.
- 2006 Status of *Eretmocerus* Systematics (Hymenoptera: Aphelinidae). 4th International *Bemisia* Conference, Duck Key, FL.

Tarantulas in the south-central US: Systematics and phylogenetics of *Aphonopelma henzti*. E. Murray, R. Charlton, G. Zolnerowich, and Y. Park. Entomological Society of America, annual meeting, Indianapolis, IN.

Tarantulas in the south-central US: Systematics and phylogenetics of *Aphonopelma henzti*. E. Murray, R. Charlton, G. Zolnerowich, and Y. Park. Entomological Society of America, North Central Branch meeting, Bloomington, IL.

2005 Morphological variation in *Chaenusa* s. l. (Hymenoptera: Braconidae), with emphasis on character states used to define *Chaenusa* s. l., *Chaenusa* s. s., *Chorebidea*, and *Chorebidella*. R. R. Kula and G. Zolnerowich. North Central Branch ESA annual meeting, West Lafayette, IN.

Eretmocerus and Whitefly as Nontarget Sentinels. G. Zolnerowich and M. Rose. Practice of Biological Control: A Symposium in Honor of Mike Rose. IOBC/Canadian Biocontrol Network meeting, Magog, Quebec. Symposium coorganizer with T. Kring.

Phylogenetic analysis of the alysiine tribe Dacnusini (Hymenoptera: Braconidae) based on morphological characters. R. Kula and G. Zolnerowich. Presented by R. R. Kula. Entomological Society of America, annual meeting, Ft. Lauderdale, FL.

Comparison of two passive collecting techniques for Hymenoptera in a tallgrass prairie. A. Whu, G. Zolnerowich, and R. Kula. Entomological Society of America, annual meeting, Ft. Lauderdale, FL.

2004 *Eretmocerus*, Whitefly, and Nontargets. G. Zolnerowich and M. Rose. Entomological Society of America, annual meeting, Salt Lake City, UT.

Phylogenetic analysis of *Chaenusa* sensu lato (Hymenoptera: Braconidae) using mitochondrial NADH 1 dehydrogenase gene sequences. R. R. Kula, G. Zolnerowich, and C. J. Ferguson. Entomological Society of America, annual meeting, Salt Lake City, UT.

Phylogenetic analysis of *Chaenusa* sensu lato (Hymenoptera: Braconidae) using mitochondrial NADH 1 dehydrogenase gene sequences. R. R. Kula, G. Zolnerowich, and C. J. Ferguson. North Central Branch ESA annual meeting, Kansas City, MO.

- 2003 Little Trap on the Prairie: Insects and the Konza Prairie. Central States Entomological Society, Manhattan, KS.
- 2002 Little Trap on the Prairie: Insects and the Konza Prairie.North American Prairie Conference. Truman State University, MO.
- 2001 Importance and Difficulty of Host Identifications. The Practice of Biological Control: Importation and Management of Natural Enemies and Agents. International Organization for Biological Control, Montana State University, Bozeman, MT.

- 2001 Little Trap on the Prairie: KSU and the Konza Prairie Preserve. Entomological Collections Network, annual meeting, San Diego, CA.
- 1999 Chalcidoidea (Insecta: Hymenoptera): Tiny Jewels with Wings. KSU Division of Biology.
- Polyembryony and Parsimony: Phylogenetic Relationships Within Copidosomatini (Hymenoptera: Encyrtidae). Entomological Society of America, annual meeting, Dallas, TX.
- Phylogeny of the Copidosomatini (Hymenoptera: Encyrtidae): Polyembryonic Parasitoids. Entomological Society of America, annual meeting, Indianapolis, IN.
- Diversity of Encyrtidae and Braconidae in the North Rosillos Mts. Addition to Big Bend National Park. J. B. Woolley, R. A. Wharton, and G. Zolnerowich. 4th Symposium on the Resources of the Chihuahuan Desert, El Paso, TX.
- 1990 The 'eyes' have it: an unusual Fulgoridae (Homoptera) that mimics jumping spiders. Entomological Society of America, annual meeting, New Orleans, LA.
- 1989 Removal of plant material from screen-sweep samples. G. Zolnerowich, J. M. Heraty, and J. B. Woolley. Entomological Society of America, annual meeting, San Antonio, TX.
- 1989 Male genitalia: key to unlocking the Copidosomatini (Encyrtidae). Canadian National Collection, Ottawa, Canada.
- 1988 Systematics of the Copidosomatini (Hymenoptera: Encyrtidae). Entomological Society of America, annual meeting, Louisville, KY.
- 1983 Gnaphosidae of Wichita County, Texas.

 IX International Congress of Arachnology, Panama City, Panama.

Curator, KSU Museum of Entomological and Prairie Arthropod Research

Responsible for a research collection of approximately 365,000 insect and arthropod specimens. The insect collection serves as a scientific and reference resource for systematics and ecological research, diagnosticians, and educators. The collection has strong historical holdings of the prairie fauna, and the realization that intact prairies are fragmented, endangered, and disappearing stimulated a renewed focus on the native prairie biota.

Collecting and donations have added \sim 49,500 specimens to the insect collection since 2000. The entire collection has been housed in 53 new 48-drawer insect cabinets (44 cabinets purchased since 2007), which included over 2,200 new Cornell drawers and 50,000+ new unit trays. Work is in progress on moving the final set of specimens into new drawers and unit trays.

352,500 insect specimens representing 15,853 taxa from 109 countries, and over 147,000 plant specimens, have been databased as part of a collaborative project with the Division of Biology and K-State Libraries, and databasing of insects is continuing. In addition, 20,000+ high-resolution digital images of plant specimens have been taken in the KSU Herbarium.

A biodiversity web portal for the entomology museum and herbarium was developed as part of a KSU Targeted Excellence project and is online at http://biodis.k-state.edu. This portal is designed for users who have an interest in or need for biodiversity data, including taxonomic, geographic, and ecological information, or other digital resources. The portal includes search functions for K-State insect and plant specimens, all databased information can downloaded and used by anyone with Internet access, and the specimens are linked to Google Maps if there is enough data present. Relevant literature for insects and plants in Kansas has been scanned and made available at the web site. Educational resources in the form of collecting specimens and using the databases were developed with the aid of public school teachers and are available to the public. These activities are tied to specific state educational standards. The biodiversity portal represents state-of-the-art information delivery regarding insect and plant information and distributions, images, and digital information that a variety of users such as ecologists, conservationists, and public school teachers can utilize.

The museum is collaborating in the one of the first three NSF-funded Advancing Digitization of Biological Collections projects, "Digitization TCN: InvertNet--An Integrative Platform for Research on Environmental Change, Species Discovery and Identification", along with 11 other institutions. InvertNet aims to develop improved high-throughput workflows for digitizing and providing access to invertebrate collections, and capturing and making available data and images for ~56 million specimens, with a focus on the upper Midwest.

TEACHING

Current and Past Courses Taught:

Entomology 301, Insects and People

Three credit hours. Broad overview of insects including their diversity, biology, and impact on human concerns. Students also rear tobacco hornworms and do a PowerPoint presentation on some aspect of insects. This class is listed on the NRES curriculum and is a First-Year Seminar course. Enrollment is restricted to freshmen, and extra assessment and coordination with other FYS classes or activities are conducted.

Entomology 312, General Entomology

Two credit hours. Basic study of insects that includes their relationship to other arthropods, anatomy, physiology, biology, systematics, and relations to plants and animals.

Entomology 313, General Entomology Lab

One credit hour. Recognition of arthropod groups, and morphology, anatomy, and identification of insects.

Entomology 710, Insect Taxonomy

Three credit hours. Classification, identification, and biology of insects, and principles of systematics used in classifying insects.

Entomology 840, Immature Insects

Two credit hours. Emphasis on the collection, identification, and biology of immature holometabolous insects from laboratory specimens and collections made by the students.

Entomology 850, Scanning Electron Microscopy

Two credit hours. Principles of SEM operation, specimen preparation, and digital enhancement of photographs. Students prepare their own specimens, direct the SEM technician in the acquisition of images, and turn in a portfolio of digital publication-quality images.

Entomology 866, Insect Morphology

Three credit hours. External morphology of insects, including the evolution of structures and mechanics of functional complexes.

Other Teaching Activities

Anthropology 522, Culinary Anthropology, "Entomophagy"

Entomology 932, Preparing for Graduate School and Your Career, "Effective PowerPoint Presentations", "Creating a Course Structure".

Entomology 820, Biological Control, "Systematics and Biological Control", plus two lab sessions on identification of Hymenoptera

General Agriculture 295, Introduction to the Honors Program, "Scanning Electron Microscopy"

Konza Prairie Biological Station Summer REU program, "Insects and the Konza Prairie"

Teaching Improvement Grants:

2010 KSU College of Agriculture. \$27,667.60. Purchase of eighteen new Nikon stereomicroscopes for teaching labs.

PROFESSIONAL SERVICE (previous 3 years only):

2015

National:

American Institute of Biological Sciences-National Science Foundation "Beyond the Box" planning committee, \$1M automated digitization competition (https://beyondthebox.aibs.org/)

Regional:

North Central Branch ESA Local Arrangements Committee

University:

First-Year Seminar Advisory Board

Burn crew leader, Konza Prairie Biological Station controlled burn program

College of Agriculture:

Course & Curriculum Committee

Department:

Graduate Affairs Committee

2014

National:

American Institute of Biological Sciences-National Science Foundation "Beyond the Box" planning committee, \$1M automated digitization competition (https://beyondthebox.aibs.org/)

Regional:

North Central Branch ESA Local Arrangements Committee

University:

Selection Committee, Presidential Award for Excellence in Undergraduate Teaching First-Year Seminar Advisory Board

Burn crew leader, Konza Prairie Biological Station controlled burn program

College of Agriculture:

Course & Curriculum Committee

Department:

Course & Curriculum Committee Graduate Affairs Committee

2013

University:

University Post-tenure Review Committee

Selection Committee, Presidential Award for Excellence in Undergraduate Teaching First-Year Seminar Advisory Board

Burn crew leader, Konza Prairie Biological Station controlled burn program

College of Agriculture:

Course & Curriculum Committee

Department:

Course & Curriculum Committee Graduate Affairs Committee

2012

National:

Chair, Editorial board, Journal of Economic Entomology

University:

Search committee, Dean, College of Agriculture

First-Year Seminar Advisory Board

Burn crew leader, Konza Prairie Biological Station controlled burn program

College of Agriculture:

Course & Curriculum Committee

Department:

Search committee, Dept. Head, Entomology Seminar Committee, Chair Evaluation Protocol Committee, Chair Course & Curriculum Committee Graduate Affairs Committee

Other Affiliations:

Friends of Konza Prairie, 2007-present Board of Directors, 2008-2013, president in 2012 Publications Committee, Nominating Committee, 2013-present Friends of the Kaw, 2013-present





Konza Prairie Biological Station Visitors' Day