HEXAPOD HERALD

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Congratulations

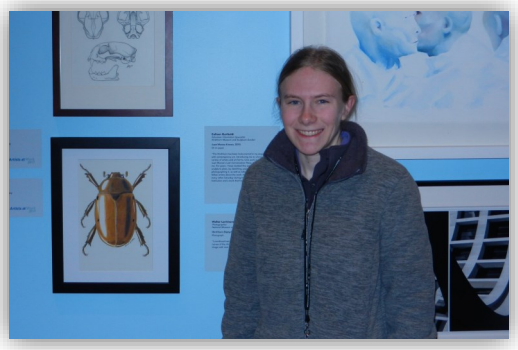
Dr. Bob Wright received the Excellence In Extension award at the Gamma Sigma Delta's Initiation and Awards Banquet held in January. **Dr. Tom Weissling** was initiated into the honor society, and **Kyle Koch** was a finalist for the Outstanding Graduate Student Award. The Nebraska Chapter of the Honor Society of Gamma Sigma Delta honors outstanding individuals in agricultural sciences, natural resources, education, and human sciences, and biological systems engineering by inviting them to become members of the society. This annual meeting is to honor and welcome the new members.

Alex Lehmann, an insect science major, has been awarded two research projects: "The role of carrion beetles in agroecosystems of western Nebraska" for $2,500 through the Agricultural Research Division Undergraduate Student Research Project and "The community of carrion beetles in conventional and no-till agroecosystems of western Nebraska" for $2,400 through the Undergraduate Creative Activities and Research Experiences (UCARE). He will be working under the supervision of **Dr. Julie Peterson** on both projects.

Sarah Zuehlke, an online masters graduate student, had her illustration of a grapevine beetle selected in a juried show for display in the Artists at Work show at the S. Dillon Ripley Center at the Smithsonian in Washington, D.C. Sarah created the colored pencil illustration while enrolled in the Scientific Illustration class at UNL taught by Lana Johnson.

Dr. Julie Peterson and **Westen Archibald** each received a travel scholarship to Beijing, China from the International Organization for Biological Control.

Dr. Bob Wright, Dr. Chuck Hibberd



Sarah Zuehlke with illustration of a grapevine beetle

Publications

Andow, D. A., **Wright, R.,** Hodgson, E., **Hunt, T. &** Ostlie, K. R. 2017. Farmer's perspectives on resistance in western corn rootworm to CRW-Bt maize in midwest USA. Journal of Agricultural Extension and Rural Development 39(3): 27-38.

Baenziger, P. S., Graybosch, R., Regassa, T., Klein, R., Kruger, G., Santra, D., Xu, L., Rose, D., Wegulo, S., Jin, Y., Kolmer, J., **Hein, G. L.**, Chen, M.-s., Bai, G., Bowden, B., Poland, J. (2016). Registration of 'NE05548' (Husker Genetics Brand Panhandle) Hard Red Winter Wheat. *Journal of Plant Registrations, 10(3)*, 276-282. https://dl.sciencesocieties.org/publications/jpr/abstracts/10/3/276

Cruz, P. I., Baldin, E. L.L., Guimarães, L. R.P., Pannuti, L. E.R., Lima, G. P.P., **Heng-Moss, T.**, **Hunt, T.** (2016). Tolerance of KS-4202 soybean to the attack of *Bemisia tabaci* biotype B (Hemiptera: Aleyrodidae). *Florida Entomologist 99(4)*, 600-607. http://dx.doi.org/10.1653/024.099.0403

Feazel-Orr, H. K., Catalfamo, K. M., Brewster, C. C., Fell, R. D., **Anderson, T. D.**, Traver, B. E. (2016). Effects of pesticide treatments on nutrient levels in worker honey bees (*Apis mellifera*). *Insects 7(1) 8;* doi: 10.3390/insects7010008

Publications con't.

Friesen, Kristina, Dennis Berkebile, Brian Wienhold, Lisa Durso, **Jerry Zhu**, and **David B. Taylor**. (2016). Environmental parameters associated with stable fly (Diptera: Muscidae) development at hay feeding sites. *Environmental Entomology 45(3),* 570-576.

Jenson, L. J., **Anderson, T.D.**, Bloomquist, J.R. (2016). Insecticide sensitivity of native chloride and sodium channels in a mosquito cell line. *Pesticide Biochemistry and Physiology 130,* 59-64; http://dx.doi.org/10.1016/j.pestbp.2015.11.012.

Kakumanu, M.L., Reeves, A.M., **Anderson, T.D.**, Rodrigues, R.R., Williams, M.A. (2016). Honey bee gut microbiome is altered by in-hive pesticide exposures. *Frontiers in Microbiology 7*, 1255, https://doi.org/10.3389/fmicb.2016.01255

Nguy-Robertson, A. L., Zygielbaum, A. I., **McMechan, A. J.**, **Hein, G. L.**, Wegulo, S. N., **Stilwell, A. R.**, Smith, T. M. (2016). Developing the framework for a risk map for mite vectored viruses in wheat resulting from pre-harvest hail damage. *Crop Protection 89*, 21-31. http://dx.doi.org/10.1016/j.cropro.2016.06.014

O'Neal, S. T., **Anderson, T. D.** (2016). Dissection and observation of honey bee dorsal vessel for studies of cardiac function. *Journal of Visualized Experiments (118)*, e55029, http://www.jove.com/video/55029

Prasifka, J.R., Marek, L. F., Lee, D. K., Thapa, S. B., Hahn, V., **Bradshaw, J. D.** (2016). Effects from Early Planting of Late-Maturing Sunflowers on Damage from Primary Insect Pests in the United States. *Helia, 39(64)*, 45–56. DOI: https://doi.org/10.1515/helia-2015-0016

Pretorius, R., **Hein, G. L.**, Blankenship, E., Purrington, F., **Bradshaw, J.** (2016). Response of *Pemphigus betae* (Hemiptera: Aphididae) and Beneficial Epigeal Arthropod Communities to Sugarbeet Plant Density and Seed-Applied Insecticide in Western Nebraska. *The Oxford University Press Environmental Entomology*, nvw157.

Romero, A., **Anderson, T. D.** (2016). High levels of resistance in the common bed bug, *Cimex lectularius* (Hemiptera: Cimicidae) to neonicotinoid insecticides. *Journal of Medical Entomology 53(3), 727-731*; https://doi.org/10.1093/jme/tjv253

Tatineni, S., **Wosula, E. N.,** Bartels, M., **Hein, G. L.**, Graybosch, R. (2016). Temperature-Dependent *Wsm1* and *Wsm2* Gene-Specific Blockage of Viral Long-Distance Transport Provides Resistance to *Wheat streak mosaic virus* and *Triticum mosaic virus* in Wheat. *MPMI, 29(9)*, 724-738. http://apsjournals.apsnet.org/doi/10.1094/MPMI-06-16-0110-R

Wosula, E. N., Tatineni, S., Wegulo, S., **Hein, G. L.** (2017). Effect of Temperature on Wheat Streak Mosaic Disease Development in Winter Wheat. *Plant Disease, 101*(2), 324-330. http://apsjournals.apsnet.org/doi/10.1094/PDIS-07-16-1053-RE

Grants

J. A. Peterson & B.S. Coates

North Central Region Integrated Pest Management Center Critical Issue. $49,995

"Bt resistance screen to inform IPM for western bean cutworm"

Blasts from the Past

Dr. Silvana Moraes started a new job recently as Assistant Professor Entomology at the University of Florida's West Florida Research and Education Center in Jay, FL. Previously, Silvana was a researcher for the Brazilian Agricultural Research Corporation (EMBRAPA). Silvana received her Ph.D. degree from UNL in 2012, under the supervision of **Drs. Tom Hunt** and **Bob Wright.**

Dr. Silvana Moraes

Dr. Jeremy Wagnitz was promoted by BASF to West Coast Field Biologist in California. He will be responsible there for coordinating all west coast field research for BASF including fungicides, insecticides, herbicides, and nutrient management. Jeremy received his M.S. degree in 2009 under the supervision of **Dr. Marion Ellis** and his Doctor of Plant Health degree in 2014.

Dr. Jeremy Wagnitz

Faculty News

Dr. Jody Green has a Courtesy Assistant Extension Educator appointment with the Department, effective March 15, 2017. Jody is the urban entomologist extension educator for Nebraska Extension in Lancaster County. She received a bachelor's degree in gerontology from the University of Guelph and an associate's degree from Sir Sandford Fleming College, before earning master's and doctoral degrees in entomology from Purdue University.

Dr. Georgina Zivanovic has an adjunct associate professor appointment with the Department, effective December 1, 2016. She is a Technical and Product Development Manager, Food Security, with Vestergaard Frandsen S.A., Lausanne, Switzerland & Vestergaard Inc. Washington D.C. Georgina received her bachelor's degree in agricultural and animal science at the University of Edinburgh, her master's degree in animal physiology and tropical entomology from Wageningen Universiteit, Netherlands, and her doctoral degree from Imperial College London & Rothamsted Research, UK.

Dr. Brett Ratcliffe conducted field and museum research in Ecuador in January for his National Geographic-funded project on the dynastine scarab beetles of Ecuador. Below is a picture of a male of *Golofa eacus* collected at lights in Loja, southern Ecuador.

This 'n That

Dr. Justin Schmidt at the University of Arizona and the Southwestern Biological Institute, was a guest seminar speaker in February. Dr. Schmidt investigates the biology, medical importance, and impact of ants, bees, wasps, and kissing bugs on humans. His work includes hundreds of scientific publications and presentations, and the 2015 Nobel Prize in Physiology and Entomology. His book "The Sting of the Wild" was released May 2016. During the time spent with the Department, Justin had lunch with grad students, giving a talk about "The Evolution of Sociality in Ants, Bees, and Wasps." He then met with members of the bee lab, toured some of the facilities, signed copies of his book, and presented his seminar: "A Time to Live, a Time to Die?: Decision Making in Honey Bees." We extend our thanks to Dr. Schmidt…his visit was fun and informative!

Meet an Online Student

My name is **Daryl Goodaker** and I am a Management Analyst. Also, I am a Medical Service Officer in the Army Reserves. I am married, have a daughter and three dogs. I graduated from Murray State University with a B.S. in Biology and a minor in Military Science.

I have always been interested in insects, but became fascinated with them during my freshman year of college while taking Zoology. I have always been curious about the biology, natural history, and evolution of insects and other arthropods. I found out about UNL's online entomology program through the Entomological Society of America's (ESA) website. The online degree program has been a good fit for me due to my work schedule and military obligations.

I enjoy running, reading, and birding. I have completed several 5Ks and a half marathon. I have recently picked up trail running and I am currently training for my second half marathon. I am planning to run in and complete a full Marathon next year.

Golofa eacus

The Bee Lab with Dr. Schmidt

Daryl Goodaker