The 27th Annual Konza Prairie LTER Workshop

Tuesday, May 29, 2018 Konza Prairie Biological Station – Cortelyou Lecture Hall

Morning Oral Presentations

- 9:00 Jesse Nippert Welcome and overview/status of the Konza Prairie LTER program
- 9:15 Drew Scott (SIU), "Soil and plant-induced heterogeneity effects on soil microbial community structure"
- 9:30 Ellen Welti (OU) "The geography of sodium shapes invertebrate communities"
- 9:45 Jesse Gray (CSU), Potential factors and mechanisms behind *Andropogon* and *Sorghastrum* codominance
- 10:00 James Guinnip (KSU), "Exploring causes of an extraordinary shift in water chemistry in a pristine grassland stream network"
- 10:15 Kent Connell (KSU), "Plant-soil history has lasting effects on soil organic matter decomposition"

Break 10:30-10:45

- 10:45 Sarah Winnicki (KSU), "The effect of Brown-headed Cowbird (*Molothrus ater*) brood parasitism on nestling growth and development"
- 11:00 Bryan Frenette (KSU), "Temperature effects on performance and physiology of two prairie stream minnows"
- 11:15 Andrew Hope (KSU), "Stable isotopes demonstrate small mammal consumer niche dynamics among Konza burn treatments"
- 11:30 Eric Duell (OSU), "Using mycorrhizal fungi to facilitate grassland restorations: Past, present, and future directions"
- 11:45 Priscilla Moley (KSU), "The Effects of Long-Term Fire and Fertilization on Belowground Nitrogen Cycling in Tallgrass Prairie"

<u>LUNCH – 12:00 – 1:00</u>

Poster Session 1:00 - 2:00

Afternoon Oral Presentations

- 2:00 Rory O'Connor (KSU), "Fire and browsing effects on woody encroachment"
- 2:15 Seton Bachle (KSU), "Physiological and Microanatomical Responses to Drought on the Tallgrass Prairie"
- 2:30 Sophie Higgs (KSU), "Dissolved organic matter dynamics in grassland streams"
- 2:45 Ingrid Slette (CSU), "Impacts of burn regime on soil CO2 flux"
- 3:00 Kasey Fralick (SIU), "Factors Influencing Variation in Prairie Stream Invertebrate Community Structures"
- 3:15 Gabriel de Oliveira (KU), "Spatio-temporal variability of energy and water fluxes using Landsat-8 and eddy covariance data"

<u> Break 3:30 – 3:45</u>

3:45 – 4:30 – Group discussion, LTER planning, other items

Posters (only 1st author/presenter name listed here)

- 1. Seton Bachle (KSU) "Getting to the Root of Woody Encroachers"
- 2. Emily Barry, (KU) "Characterizing Groundwater Flow Through Merokarst in the N04d section of the Konza Prairie Long-Term Ecological Research Site"
- 3. Mike Bartmess (KSU) "Shrub encroachment in the Tallgrass Prairie: Using high intensity fire to manage resprouting broadleaf species"
- 4. Kathryn Bloodworth (Smithsonian Environmental Research Center) "White-tailed deer herbivory does not impact plant species composition at Konza Prairie"
- 5. Caitlin Broderick (KSU) "Long-term climate as a driver of tallgrass prairie structure, function and stability"
- Tiffany Carter (KSU) "Long-term Effects of Rainfall Manipulation on the Soil Microbial Community of a Native Tallgrass Prairie"
- 7. Bryan Frenette (KSU) "Thermal ecology of prairie stream fishes: upcoming experiments
- 8. Kyle Ismert, (KSU) "The Mass Emergence of 17-Year Cicada Accelerates Litter Decomposition"
- 9. David Hartnett (KSU) "The Rhizosheath: An adaptation to temporal rainfall variability in arid grasslands"
- 10. Laura Mino, KSU "Exploiting an opportunity: preliminary glimpse to soil responses after cessation of 26-year fire suppression"
- 11. Johanie Rivera Zayas (KSU) "Greenhouse gas emissions from beef-cattle grazing systems in grasslands"
- 12. Monica Shaffer (KSU) "Plant architectural shifts contribute to increased forage density on grazing lawns"
- 13. Dylan Smith (KSU) "Effects of brood parasitism on survival and growth of host nestlings"
- 14. Jeff Taylor, KSU "Vascular flora of the Konza Prairie: An update"
- 15. Leena Vilonen, CSU "Microbial Recovery from Climate Extremes in a Tall Grass Prairie"
- 16. Marissa Zaricor, KSU "Can we predict drought tolerance in Poaceae using plant traits"