The 25th Annual Konza Prairie LTER Workshop

Thursday, June 2, 2016 Konza Prairie Biological Station – Cortelyou Lecture Hall

Morning Oral Presentations

- 8:40 John Blair Welcome and overview of the Konza Prairie LTER program.
- 9:00 Jesse Nippert (KSU) Leaf Area Index predicts canopy N & P in annually-burned tallgrass prairie.
- 9:12 Zak Ratajczak (UV) Interactions between grassland diversity and resilience to changes in disturbance.
- 9:24 Brett Sandercock (KSU) Benefits of patch-burn grazing for Greater Prairie-Chickens.
- 9:36 Bram Verheijen (KSU) Effects of habitat heterogeneity on grassland songbird fecundity in an experimental landscape.
- 9:48 Ellen Welti (KSU) Changes in grassland plant-grasshopper (Acrididae) network structure with fire and grazing.
- 10:00 Jesus Gomez (KSU) Bison grazing in response to forage quality modulates local spider assemblages.
- 10:12 Sophia Bonjour (SIU) Influences of fishes on macroinvertebrate and algal colonization of prairie stream pool mesocosms.
- 10:24 Bryan Frennete (KSU) Physiology and ecology of prairie stream fishes in relation to temperature.
- 10:36 Jill Haukos (KSU) K-Through-Gray: Overview of the environmental education program at Konza Prairie.

Poster Session 11:00-12:00

Afternoon Oral Presentations

- 1:00 Gwen Macpherson (KU) Dynamics of solutes and stream discharge, in a chemical weathering context Part 1.
- 1:12 Pam Sullivan (KU) Dynamics of solutes and stream discharge, in a chemical weathering context Part 2.
- 1:24 Kelly Logan (KU) Diagnosing land-atmosphere coupling strength over grasslands.
- 1:36 Melinda Smith (CSU) Ecosystem response to repeated drought events: the role of legacy effects.
- 1:48 Meghan Avolio (SESYNC) Chronic eutrophication does not change plant community resistance and resilience to drought.
- 2:00 Loretta Johnson (KSU) Ecology meets evolution in grasslands: the role of dominant grass intraspecific variation in grassland function.
- 2:12 Kent Connell (KSU) Staying true to your roots: Testing the applicability of the home-field advantage hypothesis to the rhizosphere priming effect.
- 2:24 Laura Mino (OSU) Soil alterations following woody species encroachment in tallgrass prairie.

- 2:36 Lydia Zeglin (KSU) Burning effects on long term response and resilience to N addition linked below and above ground responses.
- 2:48 Luci Wilson (OSU) *Bothriochloa bladhii* invasion in the belowground plots: Biotic and abiotic assessments and upcoming eradication and restoration.

3:00 - 4:00 - Group discussion, LTER planning, other items

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

- 1. Alice Boyle (KSU) Local and regional patterns of breeding dispersal and habitat selection in a declining grassland bird.
- 2. Allison Veach (KSU) Historical precipitation regime impacts microbial community responses to dry-down/re-wet events
- 3. Andrew Felton (CSU) Asymmetries in ecological responses to positive vs. negative precipitation extremes
- 4. Christine Bielski (UN) Spatial imaging of fire behavior on landscapes
- 5. Christine Carson (KSU) Microbe-managing: Grassland soil microbial community turnover in response to long-term management controlling nitrogen availability
- 6. David Hartnett (KSU) Drivers, dynamics, and floristic diversity of grazing lawns on tallgrass prairie: a new KNZ-LTER initiative
- 7. Drew Scott (SIU) Soil nitrous oxide emissions reduced with cropland to grassland restoration
- 8. George Manning (SIU) Effects of grazing and fire frequency on floristic quality and soil structure and function in tallgrass prairie
- 9. James Guinnip (KSU) Long-term trends of nutrient concentrations in a tallgrass prairie stream network
- 10. Jennifer Smith (NEON) National Ecological Observatory Network (NEON): Prairie Peninsula Domain
- 11. Kevin Wilcox (OU) Scaling soil C processes from local to regional levels across US grasslands
- 12. Kim La Pierre (UC Berkeley) The role of invertebrates in structuring tallgrass plant communities.
- 13. Kim O'Keefe (KSU) Tallgrass prairie ecohydrology: implications for an ecosystem in flux
- 14. Kyle Stropes (KSU) Measurements of Isotopic Exchange using Tunable Diode Laser Spectroscopy in a Tall-Grass Prairie Ecosystem
- 15. Sally Koerner (Duke) Changes in dominance drive global variation in herbivore effects on grassland diversity
- 16. Sarah Black (SIU) Effects of insect herbivory on restored tallgrass prairie plant communities
- 17. Sophie Higgs (KSU) Compound-specific dissolved organic carbon uptake in prairie streams
- 18. Victoria Floyd Soil Microbial Extracellular Enzyme Activity Responses to Long-Term Nitrogen Addition and Annual Burning in Tallgrass Prairie Soil