31st Annual Konza LTER Annual Meeting

May 28, 2024

Location: Cortelyou Lecture Hall, Konza Prairie Biological Station

8:30 – 9:00	Arrival	Continental breakfast provided
9:00 – 9:05		Welcome (*Jesse Nippert, Konza LTER Principal Investigator*)
9:05 – 9:20		Woody encroachment accelerates the local hydrological cycle (*Jesse Nippert, KSU*)
9:20 – 9:35		Woody and shrub removal in K20A (*Meghan Avolio, Johns Hopkins*)
9:35 – 9:50		Effects of grazing and burning on stream water chemistry for tallgrass prairie watersheds (*Abu Raihan, KSU*)
9:50 – 10:05		Can grazed tallgrass prairie still be resilient to shrub encroachment? (*Zak Ratajczak, KSU*)
10:05 – 10:20		Cascading effect of woody encroachment on prairie stream fish assemblages (*Keith Gido, KSU*)
10:20 – 10:35	Break	
10:35 – 10:50		Using cattle grazing as a conservation tool on restored grasslands (*Greg Houseman, Wichita State University*)
10:50 – 11:05		New study on prairie edge effects for small mammals and update on Konza-based specimen resources (*Andrew Hope, KSU*)
11:05 – 11:20		Bison wallows bolster diversity in tallgrass prairie (*Bess Bookout, KSU*)
11:20 – 11:35		You build it, will they come? Microbiome restoration of agricultural land use legacy (*Ari Jumpponen, KSU*)
11:35 – 11:50		Codominant species drives plant compensation response to the loss of the dominant species (*Francis Chaves Rodriguez, CSU*)
11:50 – 12:05		Planting year climate influences plant community dissimilarity in restored tallgrass prairie (*Zach Storc, KU*)
12:05 – 1:00		Lunch

1:00 – 1:30	Poster Session
1:30 – 1:45	From megaherbivores to microscopic: how the American Buffalo impacts microbial metacommunity dynamics (*Max Zaret, KSU*)
1:45 – 2:00	Solar arrays and grasslands: Are they compatible? *(Alan Knapp, CSU*)
2:00 – 2:15	Effects of fire, grazing, and altered precipitation on shrubs and invasive annual grasses in a grassland-shrubland ecotone? (*Lauren Porensky, USDA-ARS*)
2:15 – 2:30	Break
2:30 – 4:30	Panel Discussion Stephanie Manes, Doug Spencer, Tony Capizzo
4:30 – 4:45	Wrap-up (Jesse)
4:45 – 5:30	Poster Session
5:30	Cookout

Posters

Rachael Brenneman, University of North Carolina, Greensboro, “How do tallgrass prairie plant communities recovery after nitrogen cessation: following Nutrient Network, ChANGE, and PPlots”

Elsa Broemmelsiek, KSU, “Fire and Grazing Management Effects on Soil Nutrient Cycling”

Moupyali Chakravarty, KSU, “Illuminating the past: OSL dating unveils Kings Creek’s dynamic evolution and human impact”

Hannah Dea, KSU, “Precipitation, not land-use history, determines the composition of plant- and soil-associated fungal communities along a steep precipitation gradient”

Carina Donne, Colorado State University, “Assessing seed cultivar performance to inform restoration after extreme drought”

Tania Kim, KSU, “Grazing disturbance alters bee abundance but not alpha or beta diversity in tallgrass prairie”

Mary Colette Linabury, Colorado State University, “ChANGE: Community and production after ten years of nitrogen addition”

Becky Miller, NEON, “Expanding community science by leveraging NEON research support”

Kalea Nippert, KSU, “Is extreme fire the key to reversing grassland loss due to woody encroachment? A test in the tallgrass prairie”

Patrick O’Neil, KSU, “KPBS invasive species management”

Millie Ortiz, University of North Carolina, Greensboro, “Addressing the direct and indirect effects of fire on tallgrass prairie insect communities”

Levi Pruitt, KSU, “Understanding the impacts of woody encroachment on streamflow chemistry and quality”

Elijah Resuello, University of North Carolina, Greensboro, “Investigating the effects of novel patch-burn method on invertebrate biodiversity in the Kansas grassland ecosystem”

Klara Stevermer, KSU, “Aquatic dynamics in bison wallows and ephemeral streams”

Rosalie Terry, University of North Carolina, Greensboro, “What makes a grassland? A synthesis of 252 grassland sites determining grass and forb contribution to biomass and biodiversity in ungrazed and grazed grassland”

Ashley Wojciechowski, University of Kansas, “Environmental heterogeneity maintains plant diversity and community heterogeneity across experimental restoration prairie spatial scales”

Lydia Zeglin, KSU, “Soil type constrains grazing effects on microbial diversity and carbon and nitrogen cycling processes across the Great Plains”