



## Presentations from the Long-Term Ecological Research Program

### 2014 ESA Annual Meeting, Sacramento CA

Aug 6 draft (for additions, email [hart3@fas.harvard.edu](mailto:hart3@fas.harvard.edu))

Learn more about the LTER Network at <http://lternet.edu>.

\*NOTE: The LTER booth will be in the exhibit hall all week!

#### SUNDAY, August 10

<u>TIME</u>	<u>PLACE</u>	<u>SESSION</u>	<u>TITLE</u>
12:00-5:00	104	WK 17	<b>ALAN BERKOWITZ:</b> <a href="#">Engaging K-12 teachers</a> in authentic ecology and education learning. (Network-wide)
12:00-5:00	301	WK 15	<b>CLARISSE HART:</b> <a href="#">Beyond the written word</a> : Advancing ecology communication through multimedia. (Network-wide)

#### MONDAY, August 11

2:10	204	OOS 3-3	<b>ALEXANDRA WRIGHT:</b> <a href="#">Involving undergraduate students in ecological research</a> : Examples from community colleges and the liberal arts. (CDR)
2:30	311/312	COS 5-4	<b>ERIC SOKOL:</b> <a href="#">A synthesis of LTER biodiversity</a> using simulations to guide the inference of community assembly processes from diversity patterns. (Network-wide)
3:20	308	COS 3-6	<b>SARAH ROLEY:</b> <a href="#">Evidence for nitrogen fixation in switchgrass</a> . (KBS)
3:40	Regency Blrm F, Hyatt	COS 11-7	<b>ZHILI HE:</b> <a href="#">The distribution and diversity of N2O-reducing microbial communities</a> in forest soils along a temperature gradient. (AND, CWT, HFR, LUQ, NWT)
Poster	Exhibit Hall	PS 4-34	<b>KRISTEN DeVANON:</b> <a href="#">The effects of urbanization on state change</a> mediated by predator-prey interactions. (JRN)
Poster	Exhibit Hall	PS 5-46	<b>ZHENG DONG:</b> <a href="#">Hydrochemical and ecosystem responses</a> of the Loch Vale Watershed, Colorado to climate change: A modeling approach using PnET-BGC. (NWT)
Poster	Exhibit Hall	PS 6-55	<b>LAURA LADWIG:</b> <a href="#">Semiarid soil microbial associations with dominant</a> plants across a shrub-grassland transition. (SEV)
Poster	Exhibit Hall	PS 7-57	<b>JIN YAO:</b> <a href="#">Climate change in the American Southwest deserts</a> : Opportunities for invasion by exotic grasses? (JRN)
6:00-7:30pm	<a href="#">Café Bernardo</a> , 10TH & K ST		<b>LTER GRADUATE STUDENT MIXER:</b> All students welcome. First round of drinks + apps sponsored by the Harvard Forest LTER. (Network-wide)

## TUESDAY, August 12

8:00	Gardenia, Sheraton	SYMP 5-1	<b>M. SUSAN MORAN:</b> <a href="#">Grassland resilience</a> during the warm drought of the early 21st century. (JRN)
8:00	204	OOS 9-1	<b>JOHN BRIGGS:</b> <a href="#">The importance of past and recent land use policies</a> in woody plant expansion in Eastern Kansas. (KNZ)
8:30	Gardenia, Sheraton	SYMP 5-2	<b>DEBRA PETERS:</b> <a href="#">Disentangling climatic effects from biotic contingencies</a> during extreme events: Chihuahuan desert responses to droughts and deluges. (JRN)
8:40	Regency Blrm C, Hyatt	COS 26-3	<b>JULIE ZINNERT:</b> <a href="#">Cross-island comparison</a> of temporal variations in shrub-grassland bistability at the Virginia Coast Reserve. (VCR)
9:20	301	COS 19-5	<b>EMILY FARRER:</b> <a href="#">Teasing apart plant community responses to N enrichment</a> : The role of competition and soil microbes. (NWT, SEV, KNZ)
10:50	302/303	COS 20-9	<b>AMBER CHURCHILL:</b> <a href="#">Alpine moist meadow response</a> to regional gradients of nitrogen deposition in the Rocky Mountains. (NWT)
10:50	Regency Blrm D, Hyatt	COS 27-9	<b>LAUREL HARTLEY:</b> <a href="#">A learning progression for community ecology</a> : How students develop systems thinking. (Network-wide)
11:10	Regency Blrm D, Hyatt	COS 27-10	<b>ALAN BERKOWITZ:</b> <a href="#">Learning progressions for effective science teaching</a> . (Network-wide)
1:30	Regency Blrm A, Hyatt	COS 40-1	<b>MATTHEW PETRIE:</b> <a href="#">The ecological importance of seemingly insignificant small rainfall events</a> in desert grassland. (SEV)
1:50	304/305	OOS 16-2	<b>REBECCA SANDERS-DeMOTT:</b> <a href="#">Effects of climate change across seasons</a> on ecosystem nitrogen retention and carbon uptake by maple saplings. (HBR)
2:10	Regency Blrm D	COS 43-3	<b>Y. ANNY CHUNG:</b> <a href="#">Effects of plant-soil feedbacks</a> on intra- and inter-specific competition in desert grasses. (SEV)
2:50	309/310	COS 38-5	<b>LAURA HESS:</b> <a href="#">Changes in simulated rainfall intensity</a> affect nitrogen transformations and leaching potentials in agricultural soils from conventional, no-till, and organic systems. (KBS)
3:20	304/305	OOS 16-6	<b>SERITA FREY:</b> <a href="#">Microbial responses to chronic soil warming</a> in a temperate forest. (HFR)
3:20	Regency Blrm F, Hyatt	COS 45-6	<b>JONATHAN THOMPSON:</b> <a href="#">Scenarios, services, and society</a> : Stakeholder-defined land use scenarios and their consequences in Massachusetts, USA. (HFR)
3:20	Beavis, Sheraton	COS 52-6	<b>BENJAMIN DOWS:</b> <a href="#">Shrub expansion into coastal grasslands</a> : Seed dispersal and environmental filters determine patterns of invasion. (VCR)
4:40	311/312	COS 39-10	<b>KEVIN WILCOX:</b> <a href="#">Assessing ecosystem sensitivity</a> to alterations in precipitation regimes with three long-term experiments in a US tallgrass prairie. (KNZ)
Poster	Exhibit Hall	PS 28-130	<b>DREW SCOTT:</b> <a href="#">Recovery of ecosystem properties</a> during tallgrass prairie restoration. (KNZ)

**WEDNESDAY, August 13**

8:00	Gardenia, Sheraton	SYMP 11-1	<b>AARON ELLISON:</b> <a href="#">Statistical software and ecology</a> : Paths and impediments for scientific progress and thought. (Network-wide)
8:20	Carmel AB, Hyatt	COS 66-2	<b>PAIGE BARLOW:</b> <a href="#">Multi-scale effects of exurban development on birds</a> at protected and unprotected sites: An application of an occupancy model accounting for false positive and false negative detections. (CWT)
10:10	304/305	OOS 23-7	<b>TIFFANY TROXLER:</b> <a href="#">Understanding an iconic landscape</a> through comparative international long-term ecological research. (FCE, iLTER, Network-wide)
10:10	203	OOS 21-7	<b>ROSE ABRAMOFF:</b> <a href="#">What is the relationship between above and belowground phenology?</a> : A meta-analysis and case study. (HFR)
10:30	304/305	OOS 23-8	<b>ERIC LIND:</b> <a href="#">Impacts of global change on grassland ecosystems</a> : Generalized responses revealed by collaborative network science. (Multiple sites; NutNet)
10:30	301	COS 54-8	<b>BRAD GOTTSALL:</b> <a href="#">Legacy effects of agronomic management</a> at the Kellogg Biological Station LTER. (KBS)
10:30	308	COS 56-8	<b>QIANG YU:</b> <a href="#">Stoichiometric homeostasis</a> underlies species dominance, stability and responses to global change. (KNZ)
11:10	315	COS 70-10	<b>JULIE RIPPLINGER:</b> <a href="#">When the economic engine stalls</a> : an examination of plant communities in post-recession urban landscapes. (CAP)
1:30	Gardenia, Sheraton	SYMP 14-1	<b>PETER GROFFMAN:</b> <a href="#">Ecological convergence of hydrological systems</a> in urban landscapes. (BES)
2:10	Regency Blrm E	COS 80-3	<b>LAUREANO GHERARDI:</b> <a href="#">Effects of interannual precipitation variability</a> on aboveground net primary production in global grasslands.
2:30	311/312	COS 75-4	<b>BRADLEY TOMASEK:</b> <a href="#">Climate change at experimental range limits</a> : Too hot, too cold, or competition? (HFR)
2:50	306	OOS 30-5	<b>KRISTEN DeANGELIS:</b> <a href="#">Soil microbial oligotrophs</a> respond to long-term warming in temperate forest soil. (HFR)
2:50	Regency Blrm A, Hyatt	COS 76-5	<b>NATALIE van DOORN:</b> <a href="#">Understanding neighborhood effects</a> on growth and competition in a temperate forest. (HBR)
3:10	Magnolia, Sheraton	SYMP 15-4	<b>OSVALDO SALA:</b> <a href="#">Lags in the response of ecosystems</a> to directional changes in water availability. (JRN)
Poster	Exhibit Hall	PS 30-7	<b>JOY SEMIEN:</b> <a href="#">Estimating sediment carbon accumulation rates</a> in the Plum Island Estuary (MA) salt marsh. (PIE)
Poster	Exhibit Hall	PS 36-80	<b>KEE DAE KIM:</b> <a href="#">Factors influencing the spread of false brome</a> from streams and roads in the Andrews Forest, western Oregon. (AND)

**THURSDAY, August 14**

8:00	204	OOS 35-1	<b>SARAH HOBBI</b> : <a href="#">Plant species effects on nutrient cycling</a> : 20 (or so) years later. (CDR)
9:50	204	OOS 35-6	<b>LINDA VanDIEPEN</b> : <a href="#">Changes in litter quality and fungal physiology</a> enhance negative effect of simulated nitrogen addition on litter decay. (HFR)
10:10	Camellia, Sheraton	SYMP 16-5	<b>ANDREW MacDOUGALL</b> : <a href="#">Impacts of biotic resistance in grassland habitats</a> . (Multiple sites; NutNet)
10:10	311/312	COS 93-7	<b>CHRISTOPHER HANSEN</b> : <a href="#">LiDAR remote sensing of forest canopy structure</a> and its relationship to forest health and productivity in a northern hardwood forest. (HBR)
10:30	204	OOS 35-8	<b>ELIZABETH BORER</b> : <a href="#">Nutrients and vertebrate herbivores interact</a> to control global grassland productivity. (Multiple sites; NutNet)
1:50	Bondi, Sheraton	COS 125-2	<b>MELISSA McHALE</b> : <a href="#">Carbon lost vs. carbon gained</a> : A study of carbon tradeoffs among land uses in Phoenix, AZ, reveals the inadequacy of statistical spatial scaling techniques and the need for new methodologies for understanding carbon dynamics across cities. (CAP)
2:10	301	COS 108-3	<b>TYLER KOHLER</b> : <a href="#">Hydrologic controls on stream microbial mat abundance</a> over two decades in the McMurdo Dry Valleys, Antarctica. (MCM)
2:10	311/312	COS 111-3	<b>CYNTHIA KALLENBACH</b> : <a href="#">Microbially-derived soil carbon</a> : Experimental evidence links accumulation rates with microbial response to resource quality. (KBS)
2:30	Gardenia, Sheraton	SYMP 20-3	<b>DAVID HOOVER</b> : <a href="#">Resistance and resilience of a grassland ecosystem</a> to varying drought intensities and durations. (KNZ)
2:50	202	OOS 40-5	<b>TODD WILSON</b> : <a href="#">Long-term vegetation monitoring in experimental forests</a> : Example of a functional forest research network in the Pacific Northwest, USA. (AND)
3:40	202	OOS 40-7	<b>RANDALL KOLKA</b> : <a href="#">Climate change effects on hydrologic processes</a> in northern forests. (HBR)
Poster	Exhibit Hall	PS 46-23	<b>YANG YANG</b> : <a href="#">Detecting differences of tissue chemistry</a> in four northern hardwood tree species. (HBR)
Poster	Exhibit Hall	PS 46-26	<b>ELIZABETH LANDIS</b> : <a href="#">Sustained effects of chronic nitrogen addition</a> on the capacity of fungi to degrade lignin. (HFR)
Poster	Exhibit Hall	PS 47-37	<b>ELIZABETH FORBES</b> : " <a href="#">Oxygen Probe</a> ": Using planar optodes to quantitatively measure oxygen concentrations and to describe oxygen dynamics in salt marsh sediments over time. (PIE)
Poster	Exhibit Hall	PS 48-43	<b>JOSHUA HAUSSLER</b> : <a href="#">Water-nitrogen effects on below-ground primary production</a> in a Chihuahuan Desert grassland. (JRN)
Poster	Exhibit Hall	PS 48-45	<b>CLARE KAZANSKI</b> : <a href="#">Differing effects of elevated CO<sub>2</sub>, N addition</a> , and microbial community structure on soil organic matter protection in a Minnesotan grassland. (CDR)
Poster	Exhibit Hall	PS 48-46	<b>ANN OLSSON</b> : <a href="#">Post-fire changes in dissolved organic carbon and nitrate</a> concentration and the effects on nutrient uptake in a boreal forest stream in interior Alaska. (BNZ)
Poster	Exhibit Hall	PS 49-49	<b>GRACE POLD</b> : <a href="#">Long-term warming</a> affects specific lignin-associated soil bacteria. (HFR)

**FRIDAY, August 15**

9:50	302/303	COS 127-6	<b>MICHAEL RYAN:</b> <a href="#">Soil respiration response to precipitation manipulation</a> in piñon-juniper woodland. (SEV)
9:50	311/312	COS 130-6	<b>JENNIE McLAREN:</b> <a href="#">Effects of increasing shrub abundance</a> on litter production and decomposition in arctic tundra. (ARC)
9:50	315	COS 141-6	<b>NINA LANY:</b> <a href="#">Top-down vs. bottom-up is a function of temperature</a> for forest <i>Lepidoptera</i> . (HBR)
Poster	Exhibit Hall	PS 65-83	<b>SYDNEY JONES:</b> <a href="#">Cross-taxa comparative analysis</a> of long-term community data. (SEV, KNZ)
Poster	Exhibit Hall	PS 68-118	<b>NICHOLAS RODENHOUSE:</b> <a href="#">How well do climate and ecosystem characteristics predict bird abundance at the landscape spatial scale?</a> (HBR)
Poster	Exhibit Hall	PS 78-193	<b>LINA SHEN:</b> <a href="#">Temperature drives spatial scaling</a> of soil microbial community. (Multiple sites)

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