



# Presentations from the Long-Term Ecological Research Program

# 2015 ESA Annual Meeting, Baltimore MD

June 24 draft (for additions, email hart3@fas.harvard.edu)

#### SATURDAY, August 8

TIME	PLACE	<u>SESSION</u>	TITLE
8:00- 11:30am	Johns Hopkins Univ. Homewood Campus	WK 2	WORKSHOP (organizer: Katalin Szlavecz): Life Under the City: Assessment of Urban Soils. (BES)
9:00am- 3:30pm	Meet at BCC – Charles St.	FT 4	FIELD TRIP (organizer: Alexander Felson): Ecological Science and Grassroots Planning: Defining Research Opportunities That Support Diverse Community Interests. (BES)
12:00- 5:00pm	303	WK 9	WORKSHOP (organizer: Alan Berkowitz): Engaging K-12 Educators in Teaching and Learning about Urban Ecosystems. (Multiple sites)

#### SUNDAY, August 9

TIME	PLACE	<u>SESSION</u>	TITLE
9:00am- 3:00pm	Meet at BCC – Charles St.	FT 9	FIELD TRIP (organizer: Alexander Felson): <u>Urban Bioblitz</u> Along Sites of Baltimore's Upper Middle Branch and Watershed 263. (BES)
9:45am- 2:00pm	Meet at BCC – Charles St.	FT 10	FIELD TRIP (organizer: Alan Berkowitz): Green Infrastructure in a Revitalizing Dense Urban Neighborhood. (BES)
10:15am- 3:00pm	Meet at BCC - Charles St.	FT 11	FIELD TRIP (organizer: Peter Groffman): Long Term Ecological Research Sites in Baltimore (BES)
12:00- 5:00pm	307	WK 25	WORKSHOP (organizer: Matthew Lau): Ecological Network Analysis (Network-wide)
12:00- 5:00pm	311	WK 29	WORKSHOP (organizer: Clarisse Hart): Communicating science vividly (Network-wide)

#### MONDAY, August 10

1:30 to 5:00pm	308		SYMP 2	SESSION (organizer: Peter Groffman): An Ecology IN, OF, and FOR the City (Multiple sites)
<u>ج</u> ر		1:30pm	SYMP 2-1	STEWARD PICKETT: The evolution and future of urban ecological science. (Multiple sites)
		2:00pm	SYMP 2-2	MORGAN GROVE: Links between science, design and decision making in urban ecology: Best
		2:30pm	SYMP 2-3	practice and its future refinement. (Multiple sites) <b>NANCY GRIMM</b> : <u>Developing a concept of social-ecological-technological systems</u> to characterize resilience of urban areas and infrastructure to extreme events. (Multiple sites)
		4:10pm	SYMP 2-6	EMMA ROSI-MARSHALL: Beyond the urban stream syndrome: Understanding the ecology IN, OF, and FOR sustainable urban stream ecosystems. (Multiple sites)
3:30 to 5:00pm	345		IGN 2	SESSION (organizer: Margaret Kosmala): Going Macro: Is Scaling Up All the Same? (Network- wide)
<b>_</b> ,			IGN 2-2	ANA DAVIDSON: Biodiversity conservation: From prairie dogs to global mammal extinction (SEV)
			IGN 2-4	ELIZABETH BORER: Metagenomics at the global scale: Plant microbes across the Nutrient Network. (Multiple sites)
			IGN 2-6	JOHN KOMINOSKI: Rivers without headwaters are like trees without branches: Integrating network-

			IGN 2-7	level ecological connectivity to enhance conservation. (Multiple sites) SHARON HALL: <u>Are cities the same everywhere?</u> Testing homogeneity of human-dominated
			IGN 2-9	ecosystems at continental scales. (Multiple sites) MAGARET KOSMALA: <u>Plants, canopies, landscapes</u> : Plant phenology across scales. (HFR)
	2:10pm	325	COS 11-3	JACOB WALSH: Environmental conditions trigger rapid transition from undetected invasion to high density of spiny water flea in Lake Mendota (WI). (NTL)
	2:30pm	310	00S 1-4	KATALIN SZLAVECZ: Local and global patterns of urban soil biodiversity. (BES)
	2:30pm	327	OOS 6-4	LAUREANO GHERARDI: Contrasting plant-functional type responses to increased interannual precipitation variability. (JRN)
	2:50pm	319	COS 5-5	<b>DEBRA PETERS</b> : <u>Can we use the past as a lens to the future</u> ? Using historic events to predict regional grassland and shrubland responses to multi-year drought or wet periods under climate change. (Multiple sites)
	3:40pm	326	COS 12-7	A. CĂROLIN FRANK: Temporal, spatial, and host-species variability in the conifer foliar endophyte community suggests airborne transmission of nitrogen-fixing symbionts. (NWT)
	3:40pm	314	00S 2-7	OMAR PEREZ-REYES: Decapod communities under the effects of hurricanes, droughts and humans in neotropical streams. (LUQ)
	4:00pm	314	OOS 2-8	TODD CROWL: <u>Community organization and ecosystem response</u> to anthropogenic impacts: Are subtropical, coastal rivers different? (LUQ)
Μ	4:00pm	321	COS 7-8	<b>DANA RICHARD WARREN</b> : <u>Is co-limitation of primary production</u> in headwater streams by light and nutrients a product of aggregate single-factor limitation? (AND)
0	4:20pm	317	OOS 5-9	CHARLOTTE RIGGS: Soil organic matter decomposition response to N enrichment in grassland soils. (CDR)
Ν	4:40pm	342	OOS 10-10	ADAM CLARK: <u>A predictive community ecology model</u> for extrapolating from field observations to novel conditions. (CDR)
D	Poster	Exhibit Hall	PS 7-69	<b>EMILY ADAMS</b> : <u>Blue carbon in freshwater / brackish marshes</u> on the Barrier Islands of Virginia: Aboveground net primary productivity and carbon pools. (VCR)
A	Poster	Exhibit Hall	PS 10-98	<b>MATTHEW SMITH:</b> <u>Belowground decomposition rate thresholds</u> and their relationship to plant community state change along a Virginia barrier island dune/swale transect. (VCR)
Y	Poster	Exhibit Hall	PS 13-126	BRIDGET DARBY: The role of microbes in retaining soil nitrogen with depth at Hubbard Brook. (HBR)
	Poster	Exhibit Hall	PS 14-134	AMALIA HANDLER: <u>Hydrologic and chemical connectivity</u> in urban accidental wetlands: Implications for nitrate removal. (CAP)
	Poster	Exhibit Hall	PS 17-160	AUDREY BARKER PLOTKIN: <u>The Harvard Forest LTERV Program</u> : Long-term trajectories and new results. (HFR)
	Poster	Exhibit Hall	PS 17-161	<b>NATHAN BURRUSS</b> : <u>The ecology of catastrophic events</u> : Understanding abrupt spatial transitions in susceptibility of grasslands and croplands to multi-year drought. (JRN)
	Poster	Exhibit Hall	PS 18-167	<b>NATALIE BOELMAN</b> : <u>Arctic breeding songbirds cope with variability</u> in the timing of spring onset. (ARC)
	Poster	Exhibit Hall	PS 18-177	<b>JIN YAO</b> : <u>Simulated distribution of an invasive grass</u> , Lehmann lovegrass, in the Chihuahuan Desert under future climate scenarios. (JRN)
	Poster	Exhibit Hall	PS 19-198	<b>DOROTHY STEARNS</b> : Effects of drought exposure on belowground productivity in a desert grassland. (SEV)
	4:30- 6:30pm	Exhibit Hall	Social Event	<b>LTER GRADUATE STUDENT MIXER</b> . All graduate students conducting research at an LTER site welcome to attend.
	8:00- 10:00pm	309	SS 10	<b>SPECIAL SESSION (organizer: Mark Kramer)</b> : <u>New Frontiers: Bridging the Gaps</u> Between Continental and Global-Scale Research Networks, A Special AGU-ESA Event and Evening Social (Network-wide)

## TUESDAY, August 11

8:00am	340	00S 21	SESSION (organizer: Katalin Szlavecz): Urban Soil Biodiversity: A New Frontier in Ecological
			Science and Education
8:00am	320	COS 22-1	LINDA PARDO: Using a hydropedological framework to identify carbon and nitrogen cycling
			hotspots in a northern hardwood forest. (HBR)

8:20am	325	COS 27-2	<b>TIMOTHY DICKSON</b> : <u>Can the results of biodiversity-ecosystem productivity studies</u> be translated to bioenergy production? (KBS)
9:00am	325	COS 27-4	CASE PRAGER: Plant diversity effects on carbon cycling in the Arctic. (ARC)
9:20am	320	COS 22-5	<b>EMILY BERNHARDT</b> : The forest grows but the ecosystem leaks: Calcium enrichment increases
3.20am	520	003 22-3	both forest biomass and nitrogen export. (HBR)
9:20am	321	COS 23-5	MICHAEL GOOSEFF: Antarctic terrestrial ecosystems abide: Changes in soils, lakes and streams of
9.20am	521	003 23-5	the McMurdo Dry Valleys as the cooling trend ends. (MCM)
10:10am	307	SYMP 4-5	FOREST ISBELL: No systematic local biodiversity loss: Where, when, and relative to what baseline?
10.10am	507	3 TIVIE 4-5	(Network-wide)
10:10am	329	OOS 43-7	SERITA FREY: Effects of warming on soil microbial communities and feedbacks to nitrogen and
10.10411	525	000 40-1	carbon fluxes in a mixed temperate forest ecosystem. (HFR)
1:30pm	301	COS 38-1	JOHN KOMINOSKI: Timing is everything: Understanding short- and long-term variability in light and
1.00pm	001	000 00-1	temperature on inter-biome freshwater ecosystem production. (FCE)
1:30pm	328	OOS 30-1	ALAIN PLANTE: Exploring relationships between microbial ecology and soil organic matter stability
1.00pm	020	000001	in deep tropical soil profiles. (LUQ)
1:30pm	303	COS 40-1	<b>JORGE RAMOS</b> : <u>A new vegetation chamber</u> to investigate the role of macrophytes in the CH4 and
1.00pm	000	000 +0 1	N2O gas fluxes from constructed wetland in Phoenix, AZ. (CAP)
1:50pm	328	OOS 30-2	PETER GROFFMAN: Urbanization effects on nitrogen dynamics in the critical zone. (BES)
1:50pm	322	COS 45-2	MICHAEL HALLWORTH: Temporal and spatial heterogeneity of avian community dynamics within a
1.00pm	022	000 40 2	forested landscape. (HBR)
2:10pm	325	COS 48-3	CHRISTINE SPRUNGER: Differences in fine root production and C allocation among perennial
2.100	020	000 10 0	cropping systems in contrasting soils of the upper Midwest. (KBS)
2:10pm	336	OOS 31-3	LISA TIEMANN: Can we enhance soil services in agroecosystems through rotational diversity?
2.100	000	000010	(KBS)
2:15pm	311	LNG 1-8	BRANDON BESTELMEYER: Geography as destiny? Social and ecological resilience in rangelands
2		2.100 1 0	of the American southwest. (JRN)
2:30pm	322	COS 45-4	NATHAN PIERCE: Location, location, location: The influence of plant neighborhood configuration on
2.000	022		grass-shrub interactions. (JRN)
2:50pm	314	OOS 24-5	ERIC LIND: Combining distributed ecology with phylogenetics to understand global change: Lessons
			from the Nutrient Network. (Multiple sites)
2:50pm	322	COS 45-5	SPENCER BISSETT: Linking vines to woody hosts: Untangling the biotic influences in a physically
1-	-		dominated environment. (VCR)
2:50pm	342	OOS 34-5	LINDA VAN DIEPEN: Using soil metatranscriptomics to understand fungal functioning in a changing
[-	-		climate. (HFR)
3:20pm	344	OOS 33-6	TAD DALLAS: Using niche modeling to detect unobserved interactions in host-parasite networks.
•			(SEV)
3:20pm	321	COS 44-6	JOSHUA DIAMOND: Canopy gaps do not help establish pioneer tree species in a South Florida dry
•			forest. (FCE)
3:30pm	311	LNG 2-1	KRISTINA STINSON: Predicting future plant phenology and distribution: Does ecotype matter?
•			(HFR)
3:30pm	345	IGN 6-6	CORINNA GRIES: Publishing, sharing, and accessing ecological data: A Long-Term Ecological
			Research (LTER) site's approach. (Network-wide)
4:00pm	328	OOS 30-8	WENDY YANG: Controls on potential iron reduction in soils from diverse ecosystems. (SEV, LUQ)
4:20pm	303	COS 40-9	MARK ANTHONY: Garlic mustard invasion increases fungal richness and restructures fungal
•			communities. (HFR)
Poster	Exhibit Hall	OPS 3	POSTER SESSION (organizer: Andrew Fox): Advancing Ecological Understanding Using Network
			Level Science. (Multiple sites)
_、		OPS 3-14	LAUREN ALTEIO: <u>A holistic view of soil ecosystems</u> through integrative eukaryotic and prokaryotic
			metatranscriptome analysis. (HFR)
Poster	Exhibit Hall	OPS 4	POSTER SESSION (organizer: Jonathan Dandois): Drones for Ecology: New Sampling Tools for
			Personal Remote Sensing of Ecosystems. (Multiple sites)
Poster	Exhibit Hall	PS 23-22	AUDREY KIRSCHNER: Grassland species vary in tolerance to stressors associated with climate
			change. (VCR)
Poster	Exhibit Hall	PS 23-23	JUAN ALVIREZ-YEPIZ: Visible and invisible effects of Hurricane Jova in a tropical dry forest
			ecosystem in western Mexico. (iLTER)

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

T U E S D A

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Poster	Exhibit Hall	PS 23-25	KEVIN WILCOX: Two decades of irrigation in a water-limited grassland: Above and belowground C
			responses. (KNZ)
Poster	Exhibit Hall	PS 26-43	ALLYSON DEGRASSI: Effects of hemlock woolly adelgid on small mammal richness and community
			assemblages in eastern hemlock forests. (HFR)
Poster	Exhibit Hall	PS 26-52	JULIE ZINNERT: Functional traits explain ecosystem engineering in dune building grasses. (VCR)
Poster	Exhibit Hall	PS 26-53	ELSEMARIE deVRIES: Vegetation controls on coastal foredune size: Field and remote sensing
			evidence. (VCR)
Poster	Exhibit Hall	PS 26-66	BENJAMIN DOWS: Shrub encroachment and persistence: A case of biofeedback leading to stability
			after state change. (VCR)
Poster	Exhibit Hall	PS 26-70	J. AARON HOGAN: Revisiting the interaction of land use and the environment in a Puerto Rican
			subtropical wet forest. (LUQ)
Poster	Exhibit Hall	PS 37-156	JESSICA KETTENBACH: Willow shrub density affects pollination of alpine forbs differentially and
			nonlinearly. (NWT)

### WEDNESDAY, August 12

8:40am	302	COS 58-3	<b>OWEN McKENNA</b> : Ecosystem controls over deep water percolation beneath desert playa wetlands.
			(JRN)
8:40am	318	COS 60-3	PATRICK SORENSEN: Increased freeze-thaw cycles in winter partially offsets stimulatory effects of
			growing season soil warming on microbial activity in northern hardwood forests. (HBR)
9:00am	319	COS 61-4	JOHANNES ROUSK: Fungal-to-bacterial dominance of soil food-webs in a changing world:
			Consequences for the priming effect and resource-use efficiency. (HFR)
9:50am	319	COS 61-6	MICHAEL ABRAHA: Water use efficiency of annual corn and perennial grasses. (KBS)
10:00am-	Meet at BCC –	FT 14	FIELD TRIP (organizer: Emma Rosi-Marshall): <u>A Hike</u> along the Gwynns Falls Trail (BES)
2:00pm	Charles St.		
10:10am	303	COS 59-7	NICOLE MILLER-STRUTTMANN: When attention deficit pays: Bumble bee foraging breadth
			expands to compensate for declining flower resources under climate change. (NWT)
10:10am	340	OOS 45-7	PAIGE WARREN: Socioecological linkages in cities and the rise in interdisciplinary research. (BES,
			CAP)
10:30am	347	COS 75-8	ZAK RATAJCZAK: The temporal dimension of regime shifts: How long can ecosystems operate
			beyond critical thresholds before transitions become irreversible? (Multiple sites)
11:10am	319	COS 61-10	ALLISON VEACH: Historical precipitation regime and drying-rewetting interval alters grassland soil
			microbial community dynamics. (KNZ)
1:30 to	317	OOS 50	SESSION (organizer: Anita Guerrini): History and Its Uses in the NSF Long-Term Ecological
5:00pm			Research Network (Multiple sites)
	1:30pm	OOS 50-1	ANITA GUERRINI: Ecological histories: Contrasting uses of history at two LTER sites. (AND, SBC)
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	1:50pm	OOS 50-2	ADRIAN HOWKINS: Ecological research in the McMurdo Dry Valleys, Antarctica during the 1960s.
			(MCM)
	2:30pm	OOS 50-4	DAVID FOSTER: <u>Harvard Forest LTER program</u> : The role of historical studies in ecological research
			and conservation planning. (HFR)
	2:50pm	OOS 50-5	GINA RUMORE: An oak tree conundrum: Field research versus big data in the history of American
			ecology. (Network-wide)
	3:20pm	OOS 50-6	TED GRAGSON: Evolution of ideas and team science at the Coweeta LTER. (CWT)
	3:40pm	OOS 50-7	SAMUEL SCHMIEDING: Untangling the tangled bank: Locating, preserving and interpreting the
			archival history of the H.J. Andrews Experimental Forest. (AND)
	4:00PM	OOS 50-8	DIANE McKNIGHT: The uses of history for ecological research: A scientist's perspective on
			contributions from the heroic age of Antarctic exploration. (MCM)
1:30pm	319	COS 80-1	GEORGE MANNING: Processes influencing community assembly during grassland restoration.
			(KNZ)
1:30pm	314	00S 47-1	CHRISTINE ROLLINSON: Drivers of ecosystem variability across temporal scales: Insights from a
			multi-model comparison of forest dynamics for the past millennium. (Multiple sites)
1:50pm	336	OOS 54-2	JAMES CLARK: Forecasting the forest and the trees: Consequences of competition and climate for

				biodiversity change. (Multiple sites)
	2:10pm	303	COS 78-3	GARY LOVETT: Does de-acidification affect forest floor carbon dynamics? (HBR)
	2:10pm	338	COS 89-3	MAX CASTORANI: Connectivity structures local population dynamics: A long-term empirical test in a
				large metapopulation network. (SBC)
	2:30pm	308	SYMP 14-3	KATY HEATH: Ecological genomics of mutualism decline in response to nitrogen fertilization. (KBS)
	2:30pm	315	OOS 48-4	MARTHA MATHER: Trade-offs between site fidelity and local dispersal create heterogeneity in
W				consumer-mediated habitat linkages in a disturbed seascape. (PIE)
_	3:20pm	319	COS 80-6	ERIC SOKOL: <u>A simulation-based approach</u> to understand how metacommunity characteristics
Ε				influence emergent biodiversity patterns. (Multiple sites)
П	4:00pm	340	OOS 55-8	NATHAN EMERY: Summer fog and plant flammability along the California coast. (SBC)
D	Poster	Exhibit Hall	OPS 5-12	RYLAND TAYLOR: Confluence network dynamics can create a spatial mosaic of predator
Ν				interactions. (PIE)
	Poster	Exhibit Hall	PS 45-48	JULEA SHAW: Patterns of surface rock cover and implications for plant, water, and nutrient
Ε				dynamics at long-term ecological research sites in Phoenix, AZ. (CAP)
	Poster	Exhibit Hall	PS 48-73	TEMPEST McCABE: Ant community level response to soil warming and nitrogen addition in
S				temperate forests. (HFR)
	Poster	Exhibit Hall	PS 48-83	DAVID ORWIG: Initial census, composition, and spatial patterns within the 35 ha ForestGEO Plot at
D				Harvard Forest. (HFR)
Α	Poster	Exhibit Hall	PS 49-90	ELIZABETH HEDRICK: Recording on the fly: Can acoustic monitoring track bumble bees (Bombus
A				spp.) in remote habitats?
Υ	Poster	Exhibit Hall	PS 58-199	NEIL BETTEZ: Denitrification and soil water chemistry in riparian areas along an urbanization
•	0.00	700		gradient. (BES)
	6:00-	TBD	Social	HARVARD FOREST SOCIAL: Past and present researchers, students, and friends of the Harvard
	7:30pm		Event	Forest are welcome to attend.
	8:00 to	314	SS 26	SPECIAL SESSION (organizer: Marissa Weiss): Using Science-Policy Integration to Improve
	10:00pm			Ecosystem Science and Inform Decision-Making: Lessons from U.S. LTERs. (Multiple sites)

## THURSDAY, August 13

318		COS 98-1	REBECCA SANDERS-DeMOTT: Effects of warmer temperatures and a smaller winter snowpack on
			nitrogen retention in a northern hardwood forest. (HBR)
310		OOS 58-1	OSVALDO SALA: <u>Contrasting above-belowground responses</u> to long-term precipitation and nitrogen
			manipulations in a desert grassland. (JRN)
341		OOS 68-1	DAWN BROWNING: Unraveling the mystery of dryland plant phenology through time and space with
			multi-scale remote sensing. (JRN)
303		COS 97-3	ANN OLSSON: Effects of wildfire on soil net nitrification in the boreal forest of interior Alaska. (BNZ)
347		COS 112-3	KRISTEN DaVANON: The effects of urbanization on trophic interactions in a desert landscape.
			(JRN)
341		OOS 68-3	STEVE KLOSTERMAN: Bridging the organism and landscape scales of deciduous forest phenology
			using an unmanned aerial vehicle, PhenoCam, and remote sensing. (HFR)
303		COS 97-5	PAMELA TEMPLER: Effects of warmer growing season temperatures and a reduced winter
			snowpack on water and carbon uptake in a northern hardwood forest. (HBR)
303		COS 97-8	GRACE POLD: Forest soil metagenomes demonstrate chronic soil warming induces changes in
			microbial functional potential. (HFR)
314		00S 71	SESSION (organizer: Valerie Eviner): The Role of Long-Term Studies in Advancing Ecological
			Understanding (Network-wide)
	2:10pm	OOS 71-3	CHARLES DRISCOLL: Effects of changing atmospheric deposition on the structure and function of
			the Northern Forest: Long-term measurements, experiments and future model projections from the
			Hubbard Brook Experimental Forest, New Hampshire, USA. (HBR)
	2:50pm	OOS 71-5	ALAN KNAPP: Long-term research and the future of grassland ecosystems: What have we learned?
			(KNZ)
	3:20pm	OOS 71-6	SUMANTA BAGCHI: Distinguishing linear, nonlinear, transient and persistent vegetation dynamics
	- F	-	to characterize empirical signatures of ecological resilience. (Multiple sites)
	310 341 303 347 341 303 303	310   341   303   347   341   303   303   303   314	310 OOS 58-1   341 OOS 68-1   303 COS 97-3   347 COS 112-3   341 OOS 68-3   303 COS 97-5   303 COS 97-8   314 OOS 71   2:10pm OOS 71-3   2:50pm OOS 71-5

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	1:30- 2:00nm	345	IGN 14	SESSION (organizer: Jianwu Tang): Effects of Evolutionary Processes on Ecosystem
	3:00pm		IGN 14-2	Biogeochemical Cycles: Integration of Evolutionary Biology and Ecosystem Science (Multiple sites) JACQUELINE MOHAN: Forests of the future: From Harvard Forest to Costa Rican cloud forests, the
	$\rightarrow$		IGN 14-2	eco-evo role of mycorrhizae for determining ecosystem responses to climate warming. (Multiple
	-			sites)
			IGN 14-3	NED FETCHER: Local adaptation and the response of Arctic tundra to climate change.
			IGN 14-3	JIANWU TANG: Why does forest growth decline with age? (HFR)
			IGN 14-4	PETER GROFFMAN: Plants rule, microbes drool: Evolution and response of biogeochemical cycles
			IGN 14-0	to global environmental change.
			IGN 14-7	EDWARD RASTETTER: Reuniting community ecology, ecosystem biogeochemistry, and ethology.
	3:30 to	345	IGN 15	SESSION (organizer: Evelyn Gaiser): Understanding of the Dynamics and Controls of Primary
	5:00pm	010		Productivity in a Changing World (Network-wide)
			IGN 15-1	AUDREY BARKER PLOTKIN: Long-term dynamics and controls of forest productivity in the
Ŧ	$\neg$			northeastern USA. (HFR)
Т			IGN 15-2	DIANE McKNIGHT: More summer, more nitrogen and thinner ice: Long-term trends in summertime
Н				phytoplankton abundance in an alpine lake in the Colorado Rocky Mountains. (NWT)
п			IGN 15-3	JOHN PRISCU: Long term trends in phytoplankton productivity in McMurdo Dry Valley (Antarctica)
U				lakes. (MCM)
_			IGN 15-4	ERIC SEABLOOM: Food webs control the strength of diversity-productivity relationships. (CDR)
R			IGN 15-5	EMILY STANLEY: Long-term trends in lake metabolism: Heterogeneity and variance. (NTL)
•			IGN 15-6	LAUREN HALLETT: Compensatory dynamics in nature: A stabilizing role for interspecific
S				competition. (NWT)
D			IGN 15-7	TIFFANY TROXLER: C cycling, landscape disturbances and water management: Views through the
U	4.00			marsh grass lens. (FCE)
Α	1:30pm	340	OOS 80-1	AARON ELLISON: The emergence of ecology and the challenges of modernism. (HFR)
	1:30pm	302	COS 115-1	BENJAMIN WILSON: Changes in ecosystem carbon responses to saltwater exposure: Implications
Υ	0.10nm	315	OOS 72-3	of sea level rise in the Florida coastal Everglades. (FCE)
	2:10pm	348	COS 132-5	THOMAS SCHMIDT: Microbial life histories. (KBS) DANIEL CHILDERS: Turquoise infrastructure in cities: How a constructed treatment wetland
	2:50pm	340	003 132-5	provides key urban ecosystem services in Phoenix, AZ. (CAP)
	3:20pm	336	OOS 78-6	<b>ERIN CONLISK</b> : Projecting changes in subalpine tree populations with warming across an elevation
	3.20pm	550	00370-0	gradient. (NWT)
	4:20pm	302	COS 115-9	SUZANNE THOMAS: "Push-pull" assays in the field reveal coupled sulfur, nitrogen, and carbon
	4.20pm	502	000 113-5	cycling in salt marsh sediment. (PIE)
	4:20pm	348	COS 132-9	HANNAH HEAVENRICH: Soil biogeochemical consequences of a 'sustainable' urban grassland to
	1.200111	010	000 102 0	shrubland transition. (CAP)
	Poster	Exhibit Hall	PS 62-31	<b>DAVID RICHARDSON:</b> Environmental data-driven inquiry and exploration (Project EDDIE): A model
				to engage students in quantitative reasoning and scientific discourse. (Multiple sites)
	Poster	Exhibit Hall	PS 63-37	MANISHA PATEL: Ten years of student gains from undergraduate research at the Harvard Forest
				Summer Research Program in Ecology. (HFR)
	Poster	Exhibit Hall	PS 72-116	PETYA CAMPBELL: EO-1 Hyperion reflectance time series tracing the seasonal dynamics in
				vegetation bio-physical parameters. (Multiple sites)
	Poster	Exhibit Hall	PS 77-185	KATIE MILLER: Variation in C:N:P stoichiometry across a climate gradient in worker ants of the
				Aphaenogaster rudis species complex. (HFR)
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### FRIDAY, August 14

8:00 to 11:30am	317	8:00am	OOS 86 OOS 86-1	<b>SESSION (organizer: Benjamin Wilson)</b> : <u>Coastal Wetlands in a Changing World</u> : Drivers of Carbon Storage and Loss (Multiple sites) JAMES MORRIS: <u>Refining estimates of salt marsh carbon sequestration</u> and its dependencies. (PIE)
		8:40am	OOS 86-3	<b>STEVEN PENNINGS</b> : <u>Vegetation regime shift in coastal wetlands</u> affects trapping of wrack subsidies from subtidal habitats. (GCE)

1	9:20am	OOS 86-5	TIFFANY TROXLER: The effects of projected sea-level rise on Everglades coastal ecosystems:
	40.00	000.00.0	Evaluating the potential for and mechanisms of peat collapse. (FCE)
	10:30am	OOS 86-8	NATHANIEL WESTON: Alterations to tidal marsh biogeochemical cycling and greenhouse gas
0.00.1	000		exchange in response to sea-level rise and salinity intrusion. (PIE)
8:00 to	336	OOS 90	SESSION (organizer: Cayelan Carey): Cross-Scale Perspectives: Integrating Long-Term and
11:30am	0.00	000.00.4	High-Frequency Data into Our Understanding of Communities and Ecosystems. (Network-wide)
	8:00am	OOS 90-1	SCOTT COLLINS: <u>Measuring the impacts of climate variability</u> on desert plant communities with in
-			situ sensor networks. (SEV, SGS)
	8:20am	OOS 86-2	KIMBERLY LaPIERRE: Patterns of convergence and divergence: A meta-analysis of the variability
	0.20411	000002	of community responses to global change drivers. (Multiple sites)
	8:40am	OOS 90-3	<b>JACKSON WEBSTER</b> : Long-term data reveals a regime shift in watershed nitrogen export. (CWT)
	9:20am	OOS 90-5	PAUL HANSON: Seasonal lake metabolism and its consequences for long-term organic carbon
	0.200		cycling in lakes. (NTL)
	9:40am	OOS 90-6	STEPHEN CARPENTER: Whole-ecosystem test of early warnings for cyanobacteria blooms. (NTL)
8:00am	317	OOS 86-1	JAMES MORRIS: Refining estimates of salt marsh carbon sequestration and its dependencies.
			(PIE)
8:40am	336	OOS 90-3	JACKSON WEBSTER: Long-term data reveals a regime shift in watershed nitrogen export. (CWT)
8:40am	302	COS 134-3	STEVEN PERAKIS: Disturbance and topography regulate nitrogen availability and stable isotopes
			over long-term forest succession. (AND)
9:00am	320	COS 138-4	MELISSA McCORMICK: Loss of Spartina alterniflora genetic diversity associated with marsh bank
			fragmentation after long-term fertilization. (PIE)
9:50am	328	OOS 88-6	RODRIGO VARGAS: Changes in precipitation intensity and frequency influence carbon dynamics
			in an arid grassland: Results from a multiannual experiment. (SEV)
9:50am	318	COS 136-6	ELLEN WELTI: Changes in grassland plant-pollinator community structure with management and
			scale. (KNZ)
10:10am	328	OOS 88-7	NEIL PEDERSON: Evidence of synchronous extreme disturbance at regional to subcontinental
			scales in a largely asynchronous system. (HFR)
10:30am	316	OOS 85-8	ELIZABETH BORER: Turnover of endophytic microbial communities under environmental change.
			(CDR)
10:30am	326	COS 144-8	ELIZABETH LANDIS: Sustained effects of chronic N addition on the capacity of fungi to degrade
11.10	0.15	0.000.04.40	lignin. (HFR)
11:10am	315	OOS 84-10	DAVID IWANIEC: Sustainable future scenarios for the Central Arizona–Phoenix region. (CAP)
Poster	Exhibit Hall	PS 86-49	AMANDA SUCHY: Exploring the role of soil characteristics and plant traits as drivers denitrification
			in "accidental" urban wetlands in Phoenix, Arizona. (CAP)
Poster	Exhibit Hall	PS 88-86	MATTHEW LAU: <u>Temporal scales of coupled ecosystem processes</u> provide a benchmark for
		<b>DO 00 00</b>	alternate ecosystem states: Photosynthesis and decomposition in a model micro-ecosystem. (HFR)
Poster	Exhibit Hall	PS 88-89	ASHLEY MOULTON: Functional type changes over a disturbance gradient of overwash sites on a
Dest		DO 00 110	Virginia barrier island. (VCR)
Poster	Exhibit Hall	PS 92-116	RAKESH MINOCHA: Long-term trends of changes in pine and oak nitrogen metabolism (foliar and
Destan	E. I. S. M. L. I.	DO 407	sapwood) in response to chronic nitrogen amendments at the harvard forest, MA. (HFR)
Poster	Exhibit Hall	PS 107-	JULIE RIPPLINGER: Ecology of foreclosure: Post-recession vegetation characteristics of urban
		274	landscapes. (CAP)

For additions, email <u>hart3@fas.harvard.edu</u>.

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