

Long Program

**The Dimensions of
Political Ecology
Conference**



University of Kentucky
February 26 – 28, 2015

Cover Image:
2012
Photography by Virginia S Smith

Welcome to The Dimensions of Political Ecology Conference

The Dimensions of Political Ecology Conference (DOPE 2015) is organized by an interdisciplinary group of graduate student volunteers at the University of Kentucky through the Political Ecology Working Group (UKPEWG). The conference organizing committee works throughout the year to make this conference possible.

DOPE 2015 CONFERENCE ORGANIZING COMMITTEE

Core Organizers:

Dan Cockayne (Geography)
Virginia Salisbury Smith (Anthropology)
Kenny Stancil (Geography)
Matthew Rosenblum (Geography)

Organizers:

Lilian Brislen (Sociology)
Lee Bullock (Anthropology)
Brittany Barrineau (Geography)
Hugh Deaner (Geography)
M. Ruth Dike (Anthropology)
Eric Huntley (Geography)
Chhaya Kolavalli (Anthropology)
Jessa Loomis (Geography)
Lilian Milanes (Anthropology)
Nate Millington (Geography)
Christopher Moore (Anthropology)
Lauren Moore (Anthropology)
Lydia Shanklin Roll (Anthropology)
Karen Stevens (Anthropology)
Sarah Watson (Geography)
Kaitlin Zapel (Anthropology)



DOPE 2015 LOCATIONS

The Registration and Information Desk will be located immediately upstairs from the UK Campus Book Store in the Student Center. Check in, grab your nametag, and say hello. A friendly volunteer will be available all day on Friday and until 12pm on Saturday to answer questions and welcome you to DOPE 2015.

Paper Presentations will be held primarily in the UK Student Center; panels, workshops, and the Undergraduate Symposium will be held in Patterson Office Tower.

The UK Student Center is located on Avenue of Champions between Limestone Street and Martin Luther King Boulevard.

Patterson Office Tower (POT) is located a short distance from the Student Center and is easily visible as the tallest building on campus. You can take any of the walkways up the hill from the Student Center, or walk Patterson Drive away from Parking Structure #5.

The Welcoming Address by Dr. Paul Robbins will be held in **Whitehall Classroom Building**, room 118 at 2:00pm on Friday. Whitehall is located directly behind the Student Center, to the left of Patterson Office Tower.

The Plenary Panel and Keynote Address will be held in **Memorial Hall** at 5:30pm on Friday and 5:15pm Saturday. Memorial Hall is located a short walk from Patterson Office Tower. From the POT, walk in the direction away from the Student Center, passing Miller Hall on your left and then Gatton Business School on your right. Continue on that path until you reach Memorial Hall.

The Friday Opening Reception will be held at the **Boone Center**, which is located at 500 Rose Street on the way to the UK Young Library.

The Saturday After Party will be held at **Soundbar**, which is located at 208 South Limestone Street, a short walk north from campus on Limestone St.

For conference attendants with children, the DOPE Organizing Committee is providing a **child-friendly space in Student Center Room 113**. The room will be staffed with a volunteer and activities and books will be provided. Due to liability restrictions our volunteers cannot offer childcare, therefore children must be accompanied by a caregiver while in the child-friendly space.

The DOPE Organizing Committee is pleased to provide a **lactation/quiet room in Student Center Room 115** for use by conference participants and attendees. This space has been set aside as a place for nursing mothers or those who need a space away from the hustle of the conference to calm your nerves before your presentation, pray or meditate, or rest briefly for medical-related reasons.

Participants in need of a **quiet workspace** to prepare for their presentations or attend to other work may utilize **Student Center Room 251**.

In response to participant feedback from previous conferences, conference attendees interested in gathering to discuss specific topics and issues raised in sessions, panels, and talks are invited to gather in Student Center Room 203. Please note the room will not be available on Friday from 12:00pm – 2:00pm.

DOPE 2015 RESOURCES

Campus Maps

Printable campus maps can be found here: <http://www.ppd.uky.edu/CampusMaps/>

Parking on Campus

If you are driving to campus, please park in Parking Structure #5 (\$10 all day), which is across Limestone Street from the Student Center. The Student Center parking lot, which is immediately adjacent to the Student Center with entrances on Avenue of Champions, is free on Saturdays.

Lexington Public Transportation

For information about Lexington's public transportation services:

<http://www.visitlex.com/trolley.php> and <http://www.lextranonthemove.org/>

Internet Access on Campus

UKYEDU is a campus-wide wireless network that is accessible to guests. After connecting to the network open your web browser and you will find a guest log-on option to use. The web address for the University of Kentucky is: <http://www.uky.edu> .

Taxi Service

Bluegrass Cab - (859) 223-8888

Yellow Cab – (859) 231-8294

Printing

Ricoh Document Service Center

White Hall Classroom Building Room 29

Phone: (859) 257-1813

Mon-Friday 8:00am – 5:00pm

Ricoh Document Service Center

Young Library Room 156A

Phone: (859) 257-9376

Mon-Fri 8:00am – 5:00pm

Kinko's 333

E Main St, Suite 130

Phone: (859) 253-1360

Mon-Fri 7:00am – 11:00pm

Saturday: 9:00am – 9:00pm

DOPE 2015 CONFERENCE HIGHLIGHTS

Thursday, February 26th

Field Trips

Bourbon Tour

The following fieldtrip is sponsored by the UK Appalachian Center:

Local Agricultural Tour

Informal Welcome

Silks Lounge, 121 N Mill St, 7:00pm – 10:00pm

Join us for an informal gathering of DOPers at Silks Lounge.

Friday, February 27th

WELCOMING ADDRESS: Paul Robbins

“Trickster Science or Why Political Ecology Won’t Go Away”

2:00pm – 3:00pm, Whitehall Classroom Building Room 118

Dr. Paul Robbins is the director of the Nelson Institute for Environmental Studies at the University of Wisconsin - Madison. He is the author of the textbook *Political Ecology: A Critical Introduction* and numerous research articles in publications that address conservation science, social science, and the humanities. His award-winning book *Lawn People: How Grasses, Weeds, and Chemicals Make Us Who We Are* is widely recognized as one of the most accessible books on the environmental politics of daily life. Robbins has years of experience as a researcher and educator, specializing in human interactions with nature and the politics of natural resource management. His research addresses questions spanning conservation conflicts, urban ecology, and environment and health interactions. He has done extensive fieldwork in rural India, where he has focused his work on the politics surrounding forestry and wildlife conservation in Rajasthan, India, as well as recent research examining the wealth of biodiversity (frogs, birds and mammals) in commercial coffee and rubber plantations throughout south India. Robbins has also led national studies of consumer chemical risk behaviors in America, including research on the abiding passion of Americans for their lawns and mosquito management policies in the Southwest. In addition, he has studied the complexities of elk management policy on the settled fringes of Yellowstone Park. Robbins previously led the School of Geography and Development at the University of Arizona, which he helped establish and served for two years as director.

PLENARY PANEL

“Governing Nature”

5:30pm – 7:00pm, Memorial Hall

Since its inception over 30 years ago, political ecologists have been concerned with the various ways nature has been governed. Questions about the various classification and management processes and practices that are used to foster specific relationships with different environments and the successes and failures of each has been at the forefront of the field. With this panel, we hope to push ideas of governance, conservation, and the management of nature to consider the various material and embodied modes of being that are cultivated and neglected by institutional and government interventions. Whether by examining toxic waste, honeybees, or modern zoos, each of the scholars bring together innovative research agendas by examining different human and nonhuman relationships and the messiness that emerges from attempts to govern, oversee, and predict changing ecologies. Throughout the discussion, the scholars will discuss different intellectual and methodological challenges, while also addressing some of the common and divergent governing logics that their work focuses on and how their work may connect to broader political struggles. Foundational to this panel is not only accounting for different arenas of governance, but also the role of nonhumans as they oftentimes debunk, cast off, and challenge any attempts to be managed.

Moderator:

Laura Ogden is an Associate Professor of Anthropology at Dartmouth College. Her work draws on posthumanist philosophy and political ecology to give accounts of the comingling of human and non-human life and the landscapes they inhabit. Her books include *Swamplife: People, Gators, and Mangroves Entangled in the Everglades* (2011) and *Gladesmen: Gator Hunters, Moonshiners, and Skiffers* (with Glen Simmons 1998).

Panelists:

Jake Kosek is an Associate Professor of Geography at University of California, Berkeley. His research draws on varied theories of nature, politics and difference. He is the author of *Understories: The Political Life of Forests in Northern New Mexico* (2006). His current research seeks to develop new approaches to natural history as both an object of critical inquiry and a conceptual tool.

Shiloh Krupar is an Associate Professor of Culture and Politics in the Edmund A. Walsh School of Foreign Service at Georgetown University. Her transdisciplinary research agenda explores topics related to military landscapes; cities in aftermath and the impacts of environmental, juridical, and financial disasters on the urban environment; and, lastly, biomedicine, specifically environmental biomonitoring, medical hot spotting, and medical geographies of waste. She is the author of *Hot Spotter's Report: Military Fables of Toxic Waste* (2013).

Irus Braverman, Professor of Law and Adjunct Professor of Geography at SUNY Buffalo, focuses her research on themes such as the governance of populations through nature and the physical and the symbolic of the public/private divide, drawing from scholarship in law, geography, anthropology, and posthumanism. Her most recent book *Zooland: The Institution of Captivity* (2012) explores the complexities of managing zoo animals.

Special events will be held throughout the day:

WORKSHOP: Teaching Environmental & Agricultural Issues

8:30am, Patterson Office Tower 18th Floor, West End Room

Organizer: Ali Meyer Rossi (College of Agriculture, Food, and Environment, University of Kentucky)

PANEL: Contesting Control Over Conservation in Tanzania

10:25am, Student Center 211

Organizer: Betsy Beymer-Farris (Geography, University of Kentucky)

Participants: Chris Maina Peter (Law, University of Dar es Salaam, Tanzania & UN International Law Commission), Ian Bryceson (Ecology Norwegian University of Life Sciences), Tor Arve Benjaminsen (Development Studies, Norwegian University of Life Sciences), Faustin Maganga (Institute of Resource Assessment (IRA), University of Dar es Salaam, Tanzania), Betsy Beymer-Farris (Geography, University of Kentucky)

Moderator: Betsy Beymer-Farris (Geography, University of Kentucky)

PANEL: Agrarian Questions of Labor

10:25am, Patterson Office Tower 18th Floor, West End Room

Organizers: Karen Rignall (Agricultural Economics, University of Kentucky), Sarah Lyon (Anthropology, University of Kentucky), Garrett Graddy-Lovelace (School of International Service, American University)

Panelists: Tom Bassett (Geography, University of Illinois-Urbana-Champaign), Sarah Lyon (Anthropology, University of Kentucky), Lisa Markowitz (Anthropology, University of Louisville), Garrett Graddy-Lovelace (School of International Service, American University), Betsy Beymer-Farris (Geography, University of Kentucky)

Moderator: Karen Rignall (Agricultural Economics, University of Kentucky)

FARMER/ACTIVIST PANEL: Agrarian Questions of Labor in Kentucky

3:15pm, Patterson Office Tower, 18th Floor West End Room

Organizers: Karen Rignall (Agricultural Economics, University of Kentucky), Heather Hayden (University of Kentucky)

Panelists: Stephen Bartlett (Director of Sustainable Agriculture of Louisville (SAL), Coordinator for Education and Advocacy for Agricultural Missions, Inc. (AMI), & founding member of the US Food Sovereignty Alliance (USFSA)), Andre Barbour (Barbour Farms, Hart Co. Kentucky), Laura Peot (Program Coordinator for the Catholic Charities Refugee Agricultural Partnership Program), Community Farm Alliance

Moderator: Garrett Graddy-Lovelace (School of International Service, American University)

SOCIAL THEORY LECTURE - *Presented by the UK Committee on Social Theory*

2:00pm, Singletary Center, President's Room

"The Cowboy and the Goddess: News Myth-making about Immigrants"

Professor Otto Santa Ana (University of California - Los Angeles)

Opening Reception

University of Kentucky Boone Center, 500 Rose Street, 7:00pm – 11:00pm

Appetizers provided. Cash bar.

DOPE 2015 CONFERENCE HIGHLIGHTS

Saturday, February 28th

UNDERGRADUATE SYMPOSIUM

8:30am – 12:05pm, Patterson Office Tower 18th Floor, West End Room

KEYNOTE ADDRESS: **Kim TallBear**

“Disrupting Life/Not Life: A Feminist-Indigenous Reading of Interspecies Relations and the New Materialisms”

5:15pm – 7:00pm, Memorial Hall

Kim TallBear is a professor of anthropology and Native American & Indigenous Studies at the University of Texas at Austin. She is interested in racial politics, science & technology, and indigenous cultures. The author of *Native American DNA: Tribal Belonging and the False Promise of Genetic Science* (2013), Dr. TallBear’s research focuses on the usage of Native American genetic information in human genome research. Her talk draws on indigenous and feminist scholarship to analyze the usage of Native American genetic information within current scientific research. From Dr. TallBear: “This talk begins with a critical reading of a particular set of human-on-human relations—those involved when scientists (disproportionately white Western men) sample indigenous peoples in the course of human genome research. Many of the bio-specimens in circulation today were taken from indigenous peoples’ bodies during earlier ethical and racial regimes. New bioethical responses are afoot. But when they emerge from non-indigenous institutions and philosophical terrain they cannot fully address indigenous peoples’ interpretations and ethical needs. I propose that indigenous responses to genome technologies and practices can be more fully understood not simply by recourse to “bioethics,” but also by weaving together the approaches of indigenous thinkers historically with newer thinking in indigenous studies, feminist science studies, political ecology, critical animal studies, and the new materialisms. This talk weaves into conversation diverse intellectual threads in order to help us understand how the lines between life and not life, materiality and the “sacred” are not so easily drawn for some indigenous peoples. This implicates how we approach from an indigenous standpoint the ethics of the preservation and new use of old biological samples. More fundamentally, this talk interrogates the underlying concept of “preservation” that emerges from non-indigenous institutions in the form of technological and policy practices. Such practices compartmentalize indigenous history, bodies, and landscapes into a historical before and after that undercuts the very idea of indigenous peoples and landscapes as fully alive today.”

Special events will be held throughout the day:

PANEL: Feminist Research Practices in Political Ecology: A Meditation in Three Acts

1:25pm, Patterson Office Tower 18th Floor, West End Room

Organizer: Rebecca Lane (Geography, University of Kentucky), Jessa Loomis (Geography, University of Kentucky), Sarah Watson (Geography, University of Kentucky)

Panelists: Heidi Hausermann (Rutgers University), Shiloh Krupar (Georgetown University), Rebecca Lave (Indiana University), Juno Salazar Parreñas (Women's, Gender, and Sexuality Studies, Ohio State University)

PANEL: Participation and the Commons: Challenges of Collective Self-Organization

3:20pm, Patterson Office Tower 18th Floor, West End Room

Organizers/Participants: Olivia Williams (Geography, Florida State University), Amanda Huron (Geography, University of the District of Columbia), Dugan Meyer (Geography, University of Kentucky), Michelle Wenderlich (Geography, Clark University)

Panelists: Dugan Meyer (Geography, University of Kentucky), Michelle Wenderlich (Geography, Clark University), Olivia Williams (Geography, Florida State University), Amanda Huron (Political Science, History and Global Studies, University of the District of Columbia)

Moderator: Olivia Williams (Geography, Florida State University)

After Party

Soundbar, 208 S Limestone St, 8:00pm – Late
Cash bar. Food available at nearby restaurants.

DOPE 2015: THURSDAY, FEBRUARY 26TH

Fieldtrips

Bourbon Tour

Time: 10:30am – approx. 3:30pm

Pickup location: Student Center Parking Lot

The following fieldtrip is sponsored by the UK Appalachian Center:

Local Agricultural Tour

Time: 8:00am – approx. 4:00pm

Pickup location: Student Center Parking Lot

DOPE 2015 Informal Welcome Gathering

Silks Lounge, 121 N Mill St

7:00pm – 10:00pm

(cash bar, food available at nearby restaurants)

DOPE 2015: FRIDAY, FEBRUARY 27TH

Light breakfast available in the foyer outside Student Center 230 from 7:45am – 10:30am.

FRIDAY SCHEDULE BLOCK #1:

8:30am – 10:10am

Sessions 1-6 in this block are located in the Student Center. Session 7 is located in Patterson Office Tower.

1. Environmental Injustice: Displacements and Disparities

Location: Student Center 111

Organizer: UK Political Ecology Working Group

Chair: Hugh Deaner (Geography, University of Kentucky)

Dam construction on the Yarlung Tsangpo and potential effects on the Tibetan Buddhist sacred land called Pemakö

Layne Mayard (Theology and Religious Studies, University of Leeds)

Tibetan Buddhist philosophy includes the belief in sacred landscapes or hidden lands. The Pemakö, located in the Tibetan Autonomous Region, is regarded by the Tibetans as one of the most unique of these.

Beginning in western Tibet at Mount Kailash, the Yarlung Tsangpo River flows towards the east and almost directly parallel to the Himalayan Mountain Range. As the river curls around the most eastern point of the Himalayan Mountains at Namche Barwa, it then begins its journey towards India. In and around this curvature approximately 30,000 square kilometres of land comprise the Pemakö region. The surrounding river landscape consists of gorges formed by the mountains followed by jungle terrain as the lower ranges fan out from the highest peaks. This diversity of altitude has fostered one of the most ecologically rich areas in the world.

In recent years the Chinese government has expressed an increasing desire to harness the power of the Yarlung Tsangpo with hydro-electric dams. The most ambitious project is a supposed 50 gigawatt hydropower station at the bend around Namche Barwa mountain. Construction plans are reportedly many, although actual progress is difficult to confirm. Official reports concerning dam construction are confusing at best, with confirmations and denials of developments coming from both the Indian and Chinese governments. This study synthesises the available information on these dam projects and examines their potential influence on the Pemakö's environmental heritage.

From Mangoes to Apples: Discussing the new town of Tehri, Uttarakhand, India

Saakshi Joshi (Anthropology, University of Delhi)

Conceived in 1949 and completed in 2005, the Tehri dam in the Garhwal region of the Himalayan state of Uttarakhand, India, has affected close to one hundred thousand people. The town of Tehri and 35 villages were completely submerged while 74 villages were partially submerged, leading to re-settlement across the state. The rehabilitation and resettlement following the dam's functioning was forked into urban and rural, based on the previous place of stay (Tehri town or a village) and the ownership of shop in the town area. Fourteen rural

resettlement colonies are located in agricultural areas in Dehradun and Haridwar districts whereas urban resettlement has taken place at the new Tehri town, Dehradun, and Rishikesh. Life before the submergence was almost exclusively mountainous, with the exception of the Tehri town which was located in the plains. The resettlement colonies are spread across diverse topographies- mountain, valley, and plain. This paper examines one of these colonies- the new town of Tehri, to show how a shifted landscape has resulted in a transformed living. From being a town in the plains to a resettlement colony in the mountains, this change- not just in altitude, has modified the ways in which the inhabitants navigate their lives. Part of my on-going doctoral research, the paper highlights certain aspects like transformed social interactions and consumption patterns as are now experienced by the people.

Baltimore and the Cherry Hill Urban Garden: The Physical and Imaginative Spaces of Post-Industrial Urban Food Systems

Rebecca Croog (Geography, Temple University)

The tide is changing in food research and food movements. Both academic thought and grassroots mobilization have demonstrated a shift beyond merely the problems of industrial food, and toward an emphasis on issues of justice and equity within food systems. By examining the Farm Alliance of Baltimore City, "a network of producers working to increase the viability of urban farming and improve access to urban grown foods, united by practices and principles that are socially, economically, and environmentally just," I pose the question: what are the historical, geographical, and socioeconomic factors that create the demand for a food justice movement in Baltimore? The question is motivated by food justice and urban political ecology theoretical frameworks that situate current development trends within larger sociocultural, spatial, temporal, and material networks and legacies. In the following analysis, by exploring Baltimore's industrial and racial history I attempt to explain why current socioeconomic and racial inequalities exist in the city's current geographic and cultural landscape, and how those inequalities manifest in the city's food system. The analysis takes on a threefold process of discussing Baltimore's industrial formation/post-industrial transformation, assessing how these transformations have impacted the city's spatial patterns and food system conditions, and presenting action being taken at the grassroots level to improve the city's current food situation. I find that not only are industrialization and institutional racism central forces in creating a demand for food justice in Baltimore, they are deeply intertwined in a way that shapes the city's spatial conditions and food system.

Treadmill of Production and Rural Political Ecology: The Case of Kentucky Coal Extraction and Waste

Pierce Greenberg (Sociology, Washington State University), Raoul Liévanos (Sociology, Washington State University)

Early political-ecological research focused on the role of moral economy, cultural politics, discursive struggles, and strategic use of history and social identity in localized resource conflicts of the rural global South. More recently, political ecologists have examined the entanglements of capital, labor, nature, and space in producing uneven socio-ecological landscapes across the rural-urban continuum in the global North. The goal of this paper is to extend this more recent focus in political ecology while exploring its intersections with environmental justice studies and treadmill of production theory in environmental sociology. We do so in a case study of the relationship between neighborhood-level demographic composition, resource extraction history,

and proximity to coal impoundments in Kentucky in 2000. Coal waste impoundments fill Kentucky mountain valleys and basins with millions of gallons of “slurry” - the toxic byproduct of washing raw coal prior to production. Our spatial regression analyses suggest that neighborhood-level proximity to impoundments is consistently explained by the spatial dynamics of a treadmill of coal production in which neighborhood-level percent rural non-farm population and coal exploration drilling density are significant predictors of impoundment proximity. Results show racial-ethnic composition, economic deprivation, mining employment, and rural farm population are not significant predictors of impoundment proximity. We discuss the implications of these descriptive findings for future political-ecological research in Kentucky and beyond on the underlying and shifting rural power dynamics that contribute to unequal neighborhood proximity to coal waste impoundments.

Perceptions and Politics: Views on the Benefits and Risk of Hydraulic Fracturing from Four Stakeholder Groups in Eastern Montana

Jamie McEvoy (Geography, Montana State University)

Since 2000, the geographic area of the Bakken Shale Formation, which includes eastern Montana, has experienced dramatic socio-environmental change due to innovations in unconventional oil and gas development. As with all extractive industries, there is a range of potential benefits and risks associated with oil and gas development. A political ecology framework requires us to ask how these benefits and risks are distributed and how the industry is regulated. This research uses Mary Douglas’ cultural theory of risk to assess how four different stakeholder groups view the benefits and risk of oil and gas development in eastern Montana. This paper discusses the results of a survey conducted with selected members from the Montana Petroleum Association, Northern Plains Resources Council, elected officials, and landowners with private water wells located within one-half mile of an injection-disposal in eastern Montana. The survey assesses the perceptions of a range potential benefits and risks, with a particular focus on water quality and human health effects. The survey also assesses respondents’ views on the appropriateness of current state regulations for oil and gas development, as well as their general views about the most effective way to regulate extractive industries.

2. Strategic Ecology: Parceling African Nature

Location: Student Center 205

Organizer: UK Political Ecology Working Group

Chair: Malene H. Jacobsen (Geography, University of Kentucky)

Unpacking benefits sharing in collaborative forestry: The political ecology of Joint Forest Management in Northern Tanzania

Mathew Mabele (Human Geography, University of Zurich)

One of the key drivers for evolution of people-centred approach to forest management has been the call for adjacent communities to benefit from the resource management. However, the benefits that communities do get under collaborative forestry have been very contentious, and highly influenced by political economy of society-forest interactions that have been narrowly studied and documented. By using political ecology framework, in this paper, I determine how power relations and competing interests influence benefit sharing amongst the actors involved, drawing on a case study of Nou Joint Forest Management scheme in Babati district. I employ a qualitative methodological approach whereby, narrative interviews, expert interviews, in-depth

interviews, oral stories and focus group discussions build discourse on how benefits shared amongst the actors are shaped by existing power relations and competing pursuits over forest resources. Conversation, narrative and critical discourse analyses are employed to tell the meaning of messages and expressions contained in the built discourse. Results show that state actors, village leaders, influential villagers and local politicians hold more powers over forest resources and benefits than the majority of villagers. In-depth interviews, oral stories and focus group discussions further indicate that such powers have made it easier for those actors to fulfill their interests at the expense of the majority. I argue that benefit sharing in Nou JFM is very much shaped by political economy of forest-society relations. These relations led to the emergence of few powerful actors and winners at the expense of the majority of community members, which allowed these powerful actors to create losers in their own backyard. I aim to contribute to the broader literature and debates on natural resource governance, specifically on the performance of participatory forestry in the developing countries.

The political ecology of pastoral herding in western Burkina Faso

Alexis Gonin (Geography, Université Paris 1 Panthéon-Sorbonne)

In Burkina Faso, livestock industry amounts to 20% of GDP and is the third source of export earnings. With one third of the national cattle, Western Burkina Faso is one of the largest pastoral regions of the country. Nevertheless, the classic transhumance pattern, which is the movement of livestock during the rainy season from the more populated and well-watered Sudanian and Sudano-Sahelian zones in the south to the northern pastures of the Sahel, is threatened by decrease in pasturelands. In an attempt to protect pastoral resources, the state and NGOs delimit pastoral areas and transhumance corridors. However land use and infrastructure policy does not match with grazing patterns. In this paper, I demonstrate that the marginalization of herders in the decision-making process leads to irrelevant pastoral areas and/ or encroachment of agriculture on to key pastoral resources in these areas. A field survey was conducted in two local pastoral areas and along one regional transhumance corridors in western Burkina Faso. The aim was to collect data on land planning policies and pastoral mobility. I interviewed local producers and policy-makers; I conducted a diachronic analysis of the land cover on Landsat images; and I accompanied herd for a 84 km stretch on its way home to the north.

The politics of wild coffee arabica conservation: New forms of plant genetic material control and its impacts on local livelihood in Ethiopia

Kassahun Suleman (Development Studies, University of the Western Cape)

Like many other Sub-Saharan African countries, Ethiopia is dependent on its natural resources for the growth of its economy. In this regard, coffee Arabica, the world's favorite beverage and the second-most traded commodity next oil, plays a predominant role in the national economy contributing to 41% of the country's foreign currency income. It is also a crop with considerable direct and indirect benefits in the social, economic and cultural aspects for over 20 million rural people in the country. Majority these coffee dependent smallholder farmers are found in South Western corridors. Since time immemorial, coffee has offered a substantial means of income and served as a safety asset for these households. The coffee in this area comes from a forest and semi-forest production system, constituting 45% of the total national production, whereby economic success in the sector depends on the existence of the forests. It is up on this mutual interdependence between the wild coffee and the forest forms that the traditional ways of natural resource management, governance, access and use hinged on.

Ecologically, the South West region, particularly Yayo district, is a birth place for coffee arabica consisting of abundant and diverse species of the plant. Economic estimates indicate that the intrinsic value of the wild Coffee's genetic resources to the global coffee industry ranges between 0.5 and 1.5 Billion US\$ per annum. It is also an Important Bird Area (IBA) of Ethiopia, a UNESCO coffee forest biosphere reserve and part of the Eastern Afromontane hot spot. In the past decade, several multi-disciplinary studies have been conducted on the current status of the biodiversity including the wild coffees and the ways of preserving them for future use. The findings revealed that there is severe genetic material erosion due to key anthropogenic factors such as population pressure and commercial use and that the wild coffees may disappear in 2080. As a result of such an apolitical explanation, a number of intentional, national, regional and local actors have paid a great deal of attention to preserve the wild coffees through strict conservation strategies that introduced new forms of control on traditional accesses and uses. However, neither did these new forms of resource control improve, pervasively or significantly, the well-being of the local people, nor did they ensure the long-term protection of the resources. This is because the spatial areas scientifically recognized as “hot-spots” and set aside for conservation were also crucial spaces in the farmer’s livelihood security endeavors.

Another captivating facet of the region is the occurrence of considerable coal deposit with in this conservation and livelihood spaces which has a huge potential for the production of chemical fertilizers and thermal power. A multi-year feasibility study conducted by a Chinese firm indicated that the sizable amount of coal deposit in the area could provide the country with a potential to produce 90 MW of electric power and 300,000, 250,000, and 200,000 tons of Urea, DAP and methanol respectively each year, for the coming several decades. As a result, the ambitious Growth and Transformation Plan of Ethiopia set a target to domestically produce these fertilizers thereby reducing the import bill. Since 2010, the concerned state agencies have put utmost policy attention to explore the coal reserves and construct the first-ever fertilizer factory in the history of Ethiopia. Ironically, these state-led extractive operations are taking place within and around traditional livelihood and wild coffee conservation spaces creating potential danger to the social, economic, and ecological processes of the region.

Indeed, the wild coffee conservation endeavors by pro-environmentalists and the coal-based fertilizer manufacturing by the state actors are essential in terms of enhancing the growth and development of the country. Yet, this could not be archived without creating trade-off among conservation, coal extraction and local livelihoods as well as designing an all-encompassing resource management strategy that fits differing priorities and needs. Within the context of the afore-said vibrant rural transformations, this study attempts to understand, first, the manner in which different actors attempt to control natural resources and how this control temporally shifts from one actor to the other. Second, it explores the social implications of the fortress styles of conservation and the extractive industries such as coal mining on the well being of smallholder coffee producers. Third, it analyses the mechanisms through which villagers resist coercive conservation as well as extractive industries and the ecological, economic and political implications of this oppositions in achieving sustainable development.

Playing the Game of Pastoralism in Southern Kenya: How a Board Game Simulator Contributes to a Political Ecology of 21st Century

Jennifer Coffman (Anthropology/Integrated Science and Technology, James Madison University)

ERAMAT (“mind your cattle” in the Maa language) is a culturally relevant board game that explores dynamics of and individuals’ responses to boom-bust cycles among pastoralist communities in southern Kenya. The phenomena depicted in the game are rooted in greatly

increased population densities in the region, cultural values and evolving pastoralist practices of rural Maasai, and the ebb and flow of the semi-arid environment in which they live. Each player represents a pastoralist household, and the player must manage the cattle herd and other resources in the face of dynamics created by the interactions of an arid climate, family needs, and other social constraints. ERAMAT functions as a learning tool that uses rules, symbols and language attuned to Maasai culture to allow pastoralist players to explore alternative strategies for survival in the presence of those dynamics, while engaging in conversations about past experiences and outcomes. In this regard, the game also functions as an excellent data-gathering tool. ERAMAT also provides a rich environment for U.S. university and high school students to learn about the roles of science, technology, and social context in addressing challenges faced by other cultures. Because of the potential ERAMAT has demonstrated as an educational, data-gathering and analytical tool, the North American Simulation & Gaming Association honored ERAMAT with the “Rising Star” award in October 2014. Using a political ecology framework, this paper will provide the context for the development of the game, as well as analyze results from pilot studies in Kenya and the US that have led to frank conversations about land ownership, wealth management, family planning, and the challenges to, and continuity of, gender roles.

3. Campus Natures: Meaning, Practice, and Activism

Location: Student Center 211

Organizer: Shaunna Barnhart (Interdisciplinary Studies, Emory University)

Chair: Shaunna Barnhart (Interdisciplinary Studies, Emory University)

The Greening of Residence Life: A Program Assessment of Sustainability-Themed Student Housing

Richard Bargielski (Anthropology, Ohio State University)

Living-learning communities are seen as a positive way to enhance the experience of students at colleges and universities. Such communities allow students to forge relationships around a shared value and engage in meaningful learning experiences. However, management of the community is key in ensuring that the purpose is fulfilled, and poor management on the part of university staff can result in student tensions that ultimately derail the mission of the community. I draw from ethnographic data collected from the first year of a sustainability-themed community on a liberal arts university campus to exemplify the importance of such shared roles in promoting environmental education. This data was presented to the university's Student Affairs division with the goal of finding ways to improve student experience in the hall's second year and beyond.

"It's just a problem with perception": Knowledge, Involvement, and Awareness of Sustainability Among College Students

Hannah Dugoni (Psychology, Emory University), Catherine Labiran (Psychology, Emory University)

Climate change, which is exacerbated by human activity, is one of the biggest threats to our environment and quality of life. Governments, organizations, and individuals are increasingly recognizing this and taking a stand towards reducing these effects through sustainability. Moreover, universities are working towards making their campuses more environmentally friendly and encouraging students to adopt sustainable behaviors. Emory University is

committed to being more environmentally friendly through its sustainability initiatives. However, this study aims to understand if students are aware of these steps Emory is taking and how they perceive the effectiveness of Emory's sustainability initiatives. Using a combination of surveys and semi-structured interviews, we find that while students recognize their importance, many of those in our sample are not well-educated about climate change or sustainability and are not involved in the initiatives. Our results indicate that although students state that they have a good understanding of climate change, they actually do not. While students self-report participating in at least one sustainable behavior, they are unaware of the variety of sustainability initiatives Emory offers. In addition, findings indicate that on average students are apathetic towards climate change; they do not think it poses immediate threats to themselves or their community because it is difficult to conceive in everyday life. There was no direct correlation between students' knowledge on climate change and whether or not they thought humans were the biggest contributors to climate change.

“My mock nature go-to spot”: Perceptions of Nature on a College Campus

Shaunna Barnhart (Interdisciplinary Studies, Emory University), Kate Darby (Interdisciplinary Studies, Western Washington University), Trevor Drulia (Global Health, Allegheny College), Anna Rosswog (Environmental Studies & Biology, Allegheny College), Bennett Gould (Environmental Studies, Allegheny College)

Nature is recognized by scholars as a social construct that carries a range of meanings and definitions. This perception of nature can in turn impact one's experience in such spaces. Spending time outdoors and in nature settings can have restorative effects, improve attention and focus, reduce depression, and improve physical health. Experiencing “nature,” even for short periods of time, can contribute to maintaining a healthy life. Yet for college students, increasing demands in their academic studies and associated stress of college life can result in students spending less time outside and succumbing to attention fatigue. Given that research has shown the restorative impact of being outdoors, it is important to understand how college students perceive the nature around them on their college campus and how they use those spaces. In our study, we used online surveys with images of “nature” on campus and participatory mapping to gauge student perceptions of and experience with nature at a small liberal arts college with a “green” reputation. Results demonstrate that students gravitate towards more “wilderness” areas as nature on campus, even when those areas are highly managed. However, the higher the student class standing, the lower “nature” rating they gave to an image. The research thus raises questions on how restorative campus “natural” spaces can be over the span of a college career with shifting perceptions on what constitutes nature.

Justice is the Goal: Fossil Fuel Divestment and the Politicization of Campus Environmentalism

Eve Bratman (International Studies/Political Ecology, American University)

This paper illustrates the case of university fossil fuel divestment movements as a form of ecological resistance. Campus divestment is situated along other forms of climate change activism, which respond to political failures to meaningfully address climate change. Unlike other campaigns, which address infrastructure or specific environmental improvements, the campus divestment movement approaches the political economy of fossil fuels as the foundation for shifting the paradigm of climate change discourse. We use a shared auto-ethnographic approach from student activists' and professors' perspectives to analyze the campus divestment

movement based on the experience of American University's Fossil Free AU campaign. We draw upon the political ecology literature to argue that this issue is one where sustainability politics have become re-politicized as they challenge traditional power relations and conceptualizations of what environmentalism entails. We argue that the campus fossil fuel divestment movement holds significant potential to change the university's expressed values from complicity with fossil fuel usage towards an emergent paradigm of climate justice, stemming predominantly from student activism.

4. Uneven Burdens, Unequal Benefits: Development Impacts around the World

Location: Student Center 230

Organizer: UK Political Ecology Working Group

Chair: Virginia Salisbury Smith (Anthropology, University of Kentucky)

Assembling Urban Environmental Futures

Anthony M. Levenda (Urban Studies, Portland State University)

At the intersections of political ecology and science and technology studies, this paper considers the roles of various actants in the assembling of urban environments. Recent debates in urban studies have considered the value of both assemblage theory and actor network theory (Swyngedouw 2006, McFarlane 2011, Farias 2011), but this has been met with criticism from Marxian traditions (Brenner et al 2011, Holifield 2012). At the same time, calls from within urban political ecology have attempted to draw on relational conceptions of power beyond class and structure, to also include race, gender and non-humans in an attempt to theorize and instigate radical incremental change (Rocheleau 2005, Lawhon, Silver, & Ernston 2013, Ernston, Lawhon, Duminy & Silver 2014). These more situated political ecologies take engaged approaches to urban environmental problems and encourage reflexive praxis. We see connections between these approaches and work in planning theory that approaches the problems of theoretical and practical significance concurrently (Flyvbjerg 2006, Friedman 1999). In this paper, I seek to address these theoretical issues and attempt to build on problems of bridging theory with practice in the city. The case of a contested urban park redevelopment in Portland, Oregon is used to explore how concepts from merging these theoretical projects is useful for re-opening and re-imagining possibilities for urban processes.

Examining the possibilities of the coexistence of preservation and tourism development as dual policy goals

Anna Gatewood Sharpe (Geography, University of Kentucky)

The Gullah Geechee Cultural Heritage Corridor is a nationally recognized area of historical and cultural significance within the United States, running along the coast from Jacksonville, North Carolina to Jacksonville, Florida. Neither the Corridor nor the Gullah/Geechee Nation have decision-making authority over the land and must therefore work closely with local governments and state and national agencies to achieve goals related to development, preservation, zoning, and other issues that affect life along the coast of Georgia. Of central concern to many government agencies in these areas is claiming a piece of the tourism development pie, so to speak. To most agencies, tourism is synonymous with development and development is synonymous with economic advancement. This paper will briefly examine two ongoing tourism (as) development projects currently contending with the contradictions inherent in tourism (as)

development and its relationship to preservation. The Plan, created by a local commission gathered in 2010 for the purpose of creating a plan for the management of The Corridor, will be contrasted with a similar plan created by the Georgia Department of Economic Development in conjunction with Explore Georgia, Georgia's tourism initiative. Discourse analysis will be used to explore the rifts between the many stakeholders in local tourism (as) development and preservation. The current climate of dissatisfaction with ongoing struggles to find balance between tourism (as) development and preservation set the scene for the development of each plan and its rejection by members of the Gullah Geechee Nation. In each plan, the marriage of development and preservation seems to be an illusion which makes implementation unlikely. Though written documents may be able to hold the two ideals together rhetorically, in practice they are disparate goals and there is little consensus about their relative levels of importance.

In the Shadow of an Inter-Oceanic Canal: The Political Ecology of Tourism in Nicaragua

Carter Hunt (Department of Recreation, Park and Tourism Management, Pennsylvania State University)

Nicaragua exhibits poor economic performance despite having an immense natural resource base. This is due in no small part to the repeated natural and "unnatural" disasters through the 1970s and 80s. Since 1990 the government has increasingly turned to tourism as a means of stimulating economic activity beyond that provided by traditional agricultural exports. While growth in the tourism sector has been impressive, the country's chronic under-performance on economic indicators related to absolute and relative poverty has tempted the current Sandinista administration to wager the country's economic, environmental, and socio-cultural future on the development of an inter-oceanic canal. In June of 2013, the Nicaraguan government came to terms with the Hong Kong based firm HKND on this canal, which if constructed would be one of the largest infrastructural developments in human history. The Nicaraguan government and HKND claim the canal will displace poverty by providing a boon to the country's economy, and in particular, to its staggering unemployment rate. Yet critics of the canal remain concerned about the physical displacement of numerous populations lying in the path of the canal -- many of which are communities of indigenous heritage residing in Nicaragua's autonomously governed Atlantic coast regions. Given the high social and environmental stakes, it is not surprising that communities and organizations have already mobilized in vocal opposition to the canal's construction. In this presentation I share elements of my contribution to *Political Ecology of Tourism*, a forthcoming volume in Routledge's *Studies in Political Ecology* series. Building upon my earlier writing on the political ecology of tourism in Nicaragua, I specifically address the implications of the canal on current and future tourism development. A political ecology perspective helps frame the significant economic, social, environmental, and geopolitical implications at the interface of tourism activities and the canal in Nicaragua.

Hyper-development and Environmental Injustice in Panama City

Natasha Sadoff (Geography, Ohio State University)

Panama City, Panama, represents the epitome of the stark disjuncture between nature and society, between the built environment and the natural environment. Nature has become so commodified that it's nearly invisible. Panama City is experiencing unprecedented urban development, particular in terms of elite real estate and growth associated with the widening of the canal. Not surprisingly, this hyper-growth is exacerbating environmental hazards whose costs are unevenly borne by residents. A case in point is the 2013 Cerro Patacón Landfill fire and

subsequent air quality crisis. While sooty air engulfed the entire city, it was poor residents “unable to escape to air-conditioned indoors and living closest to the landfill” who experienced the greatest impacts of the fire in terms of respiratory and other health conditions. Intriguingly, state response to the fire has not been to address the fundamental question of waste disposal and uneven exposure to waste-related hazards. Rather, the Panamanian government placed responsibility on the individual; when air quality in the city is poor, residents can “choose” to modify their behaviors to avoid health risks. The fire and the response to it, open up rich lines of inquiry for investigating the links between hyper-urbanization, environmental justice, and urban governance. Using Swyngedouw’s (2006) social metabolism framework, I trace how the landfill expresses the costs of growth and illuminates how environmental injustice is intensified under hyper-development. My research explores how peripheral environments - such as landfills - and peripheral peoples - such as often-homogenized indigenous populations - are rendered invisible through a socially pervasive narrative that ultimately does not recognize the social metabolism of the city.

"My neighbor drinks clean water while I continue to suffer:" The intra-community impacts of a rural water project in Mozambique

Emily Van Houweling (Planning, Virginia Tech)

Development practitioners typically assume that the benefits of development projects are shared equally within a community. Likewise, project evaluations are often based on the difference between communities with and without an intervention, rather than an analysis of how the benefits are distributed within intervention communities. This research investigates these issues in relation to a rural water supply project in Northern Mozambique. Combining a large scale survey with ethnographic data, we look at 27 communities that received handpumps to explore the intra-community impacts of the project. Our findings show that only a minority of community members use the handpumps, primarily due to the proximity and the availability of other sources. Gender, class and politics also play a role in explaining who uses the handpump. While handpump users experience multiple benefits of the project, the lives of people who continue to use unimproved sources remain unchanged. We argue that the handpumps reinforced existing social divisions related to gender, class and political affiliation and created new geographic divisions within communities. The implications of these findings for water supply planning and evaluation design are discussed.

Assessing Risk and Inequality in Carbon Credit Production: The Case of Scolel’Te in Chiapas, Mexico

Jonathan Otto (Geography, Miami University)

Forest carbon projects seek to alleviate rural poverty and mitigate global climate change by paying rural farmers to offset CO₂ emissions by establishing agroforestry systems. Payments to farmers are derived from the sale of carbon credits in international compliance and non-compliance (i.e. voluntary) carbon markets. In Mexico, forest carbon schemes have been pursued within the country’s national Payment for Ecosystem Services (PES) program, and through REDD+ pilot projects and separate voluntary initiatives. In this paper I examine one specific carbon forestry project, Scolel’Te, in Chiapas, Mexico. The project, which is managed by the non-governmental organization (NGO), AMBIO, is extremely labor intensive. Its success depends on AMBIO’s ability to enroll farmers to work in Scolel’Te in an extended division of labor necessary for the production of carbon credits - a division of labor characterized by uneven

power relations and the cheap work of local farmers. One group of farmers, referred to as técnicos comunitarios, carries out a variety of tasks including the monitoring of farmer land parcels, responding to farmer discontent, and disseminating project information shared by AMBIO to fellow participants. They are, however, compensated only for the first of these activities, monitoring farmer land parcels. In this paper I demonstrate how the effects of shifting market conditions within voluntary carbon markets influence the formation of such labor arrangements. I demonstrate, moreover, how the nature of this labor arrangement reflects the capacity of those in relative positions of power to push the consequences of shifting market conditions onto those with no ability to influence budgeting and management decisions.

5. Infrastructural Visions and the Politics of Urban Design: Creating and Managing Urban Landscapes in the Era of Climate Change, I

Location: Student Center 231

Organizers: Nate Millington (Geography, University of Kentucky), Kenny Stancil (Geography, University of Kentucky)

Chair: Zina Merkin (Geography, University of Kentucky)

Political Designs: Boundary Making in São Paulo

Nate Millington (Geography, University of Kentucky)

This paper focuses on the creation of boundaries between land and water in a flood prone, deltaic landscape in São Paulo, Brazil's eastern periphery. Specifically, I consider the creation of a line that determines which residents will be removed order to facilitate the development of a linear park designed to prevent flooding in the region. I focus on a simple representation with profound effects - a line on a map - in order to call attention to the representational technologies necessary for urban governance and how these technologies are complicated by the socio-ecological dynamics of urban landscapes. Specifically, I focus on a series of conversations with state representatives and community activists in 2014 about where this line would go. These conversations suggest how conceptions of socio-ecological boundaries are complicated by the dynamism and porosity of urban landscapes. More broadly, I consider the uncertainty that characterizes the relationships between state and society in São Paulo and the politics of obscurity at work in state projects in urban Brazil. I conclude by considering how new imaginaries of urban water and new modes of representing and designing urban waterscapes could be employed in São Paulo.

Infrastructure in Los Angeles: Reinventing the Cyborg City

Kathy Kambic (Landscape Architecture/Architecture, University of Colorado-Boulder)

Urban designers face many problems in their efforts to improve the quality of public space in cities. In Los Angeles, there exists an irony of infrastructure - the highways dominate daily routines and the surface of the city. In contrast, the culverted Los Angeles River is practically invisible to the citizenry, existing as a path for dog-walking and bike riding, clandestine activity, and volunteer ecologies.

Recently there have been efforts to redesign the river, which re-disconnect the water from the surrounding plant communities while allowing limited human interaction with the river, absent of an understanding of intersectionality. Other efforts, which include framing the city as a human/natural cyborg and which engage individual places as opportunities for interaction and exploration of the city, create a new reading of landscapes. Through the lens of political ecology,

the river is framed not traditional urban entity that operates as a by-product of the city as a whole, but as a series places linked through a riparian system. This paper will explore the variety of ways in which the river can be reconnected to the city that can shift the relationship between economy and ecology to more equitably engage the river in the life of the city, and connect citizens to its varied functions. This includes asking what roles do parks fill in the city and what else can they do. It also includes thinking about cultivating infrastructures that not only support human endeavors, but also support hybrid ecologies through civic visibility.

In the Urban Underbelly: Floods, Risk and the Role of Invisible Infrastructure in Shaping Vulnerability

April Colette (Geography, University of Illinois - Urbana-Champaign)

Infrastructure like bridges, dams and embankments play an important role in reducing the risk of fluvial and coastal flooding. Standing as visible achievements of state power, they transform the urban landscape often in unintended ways. Yet, pivotal to the reduction of pluvial flood risk are the invisible infrastructure - those that lie beneath the city. These infrastructure, such as stormwater drains and sewers, drain excess rain and groundwater from urban surfaces, thereby reducing flood risk. But cities in the Global South struggle to keep up with the expansion of drainage networks particularly in newly urbanized areas, which results in uneven effects of this infrastructure across socio-spatial boundaries. Drawing on ethnographic data from a newly urbanized neighborhood in Santa Fe, Argentina - a city with a long history of flooding - I examine the complex interplay between the social, economic, political and ecological processes that shape how pluvial - as opposed to fluvial “flood hazards affect residents’ vulnerability. In particular, I demonstrate the crucial role stormwater drains play in shaping the fabric of the city as well as residents’ views of the state. I argue that the uneven development of stormwater infrastructure across urban space results in a direct causal link between the source of risk and the responsibility of the state.

Barriers and Bridges to Managing for Resilience via Green Infrastructure Implementation: A critical analysis of U.S. EPA’s experimental rain garden project in Cleveland, OH

Brian Chaffin (U.S. EPA), Ahjond S. Garmestani (U.S. EPA)

In 2010, research scientists from the U.S. Environmental Protection Agency’s Office of Research and Development forged a project to convert available, vacant, urban lots to rain gardens to delay stormwater runoff contributing to illegal combined sewer overflows (CSOs) to Lake Erie from Cleveland, Ohio. The project had multiple objectives including an experimental design that would allow researchers to evaluate the effectiveness of urban rain gardens for stormwater infiltration. In addition, the rain gardens would help the Northeast Ohio Regional Sewer District to comply with the terms of a court-decided consent decree that required the sewer district to curb CSO events. Ideally, the experiment would follow prescriptions of adaptive management—a structured decision-making process whereby policies are implemented as experiments and adjusted based on the biophysical monitoring of experimental outcomes. However, a chain of larger-scale forces of political economy derailed the experimental approach of green infrastructure implementation, leading to less-than-ideal citing of rain gardens. This paper explores the political economy and ecological conditions at work as both barriers and potential bridges to employing a green infrastructure approach for hydrologic restoration and the potential transformation of an urban social-ecological system. The analysis informs a larger discussion on

the political ecology of adaptive management and implications for issues of social and environmental justice in urban social-ecological systems.

6. Power Dynamics in Sustainable Foodways

Location: Student Center 249

Organizer: UK Political Ecology Working Group

Chair: Ruth Dike (Anthropology, University of Kentucky)

Linkages between concentrated animal feeding operation (CAFO) expansion and county board politics in rural Illinois

Eric Sterling (Cultural/Applied Anthropology, Northern Illinois University)

Concentrated Animal Feeding Operations (CAFOs) are rapidly expanding in rural Illinois. This research explores the political power linkages between county boards and corporate entities in four Illinois counties. The hypothesis is that collusion and impropriety within county board politics and CAFO expansion in rural Illinois are attributed to stakeholder influence and power at the local county government level. My research revealed a connection between ownership of CAFOs, white male county board political power, and endorsement of expansion. Utilizing Walter Goldschmidt's method of a controlled comparison, the research analyzes two CAFO inundated counties (Pike and Adams) with two less affected counties (LaSalle and Peoria). Considering the political nature of the research, data collection was forced into engaging secondary text sources to "study up" on local government officials. The documents analyzed were public information meeting transcripts, county board meeting transcripts, municipal meeting transcripts, plat maps, public websites, and Freedom of Information Act requests (FOIAs). FOIAs were obtained through government entities and other confidential sources. Citizens are distressed by the proliferation of CAFOs. Through interviews, participant observation, field notes, and archival work, the research indicates that people have knowledge that social stratification is much greater in counties with CAFO proliferation. Citizens that have CAFOs built in close proximity to their property are angered by the permitting system. Considering the amount of pollution and social degradation connected to rapid expansion from livestock farming in Illinois, this research on the linkages between corporate agribusiness and county board politics fills a gap previously overlooked by anthropologists.

The impacts of greenhouse farming technology in the (re)production of gender identities in Jamaica's rural landscape

Alex Moulton (Geography, East Carolina University)

Largely seen as backward and inefficient, the small-scale resource poor farmers of Jamaica are not unfamiliar to government and development agency lead interventions aimed at correcting their perceived inefficiencies. Through these programs of farmer advancement and rural development, considerable attention and resources have been directed to farmers. However the association of farmer identity, and agrarian livelihoods with masculinity has resulted in the exclusion of female farmers and other women involved in agriculture, from projects and related benefits. Among recent programs there has been some efforts to include women; however without associated changes in the gendered subject positions around agriculture, such attempts are questionable. Drawing on insights from feminist political ecology, this paper explores the outcomes from the inclusion of women in recent greenhouse farming projects now being touted as the mechanism for agrarian development. I argue that the costs of adoption are high.

Acquisition of the technology remains out of the reach of most female farmers. Female adopters must work doubly harder than their male counterparts in a highly competitive industry that constantly questions their participation. The consolidation of marketing functions away from traditional female marketers facilitated by greenhouse production undermines the security of rural women. This is especially true for women who are single parents dependent on marketing income for the maintenance of their families. Further, I suggest that the explicit provision of the technology to women stems from certain gender myths, particularly the idea of women as inherently nurturing and given to mundane tasks.

Political ecology of conservation programs under the Farm Bill: Engaging grassroots perspectives

Leah Germer (History & Environmental Studies, American University), Kat Diersen (Environmental Policy, American University), Garrett Graddy-Lovelace (School of International Service, American University)

Political ecology has provided important insights into the ways in which conservation activities can impact historically marginalized groups of people. Much of this literature focuses on the tendencies of top-down, command-and-control models of conservation to displace peoples whose livelihoods depend on the natural resource or habitat in question. However, little research in the field of political ecology has been identified that examines the benefits to historically marginalized groups of voluntary, incentive-based conservation programs, such as the Title II conservation programs under the Farm Bill.

Title II conservation programs under the Farm Bill make up the largest source of United States federal funding for conservation. Farm Bill subsidies to crop insurance and commodity programs have long been controversial due to research showing that they are concentrated in a small number of large-scale farming operations, and because the Agricultural Risk Protection Act of 2000 prohibits USDA from identifying the policyholders receiving the subsidies. Comparable research about the distribution of Farm Bill conservation program spending among different farm types has not been identified.

This paper examines how and why federal spending on Title II conservation programs under the Farm Bill is distributed among different types of farms. Farm types are classified according to the data available about farm acreage, crop or livestock animal, farm income, number of employees, production system, race, ethnicity, and location. The research is based on a review of existing literature and data, key informant interviews with members of the Natural Resources Conservation Service (NRCS) of USDA, and a survey of farmers. The survey is implemented through a partnership with two national grassroots organizations headquartered in Washington DC, the Rural Coalition and the National Family Farm Coalition.

Implicit assumptions behind the discourses on aquaculture development in Europe: food security or enclosure?

Irmak Ertör (Political Ecology, ICTA, Autonomous University of Barcelona)

The increasing demand for seafood and the stagnation of capture fisheries has promoted the growth of aquaculture globally, whereas the European aquaculture has been facing stagnation in the last decade. In order to reverse this pattern, European public authorities are currently encouraging the growth of the sector in Europe while preserving sustainability and food security objectives in the strategy documents. However, the proposed development pattern for aquaculture in Europe seems to be problematic. The expansion of capture fisheries has already

gone towards overexploitation of stocks, where aquaculture enables an expansion of commodity frontiers not in terms of geographical borders, but in terms of marine space enclosure and reconfiguration. We argue that crossing another border of fisheries extraction occurs based on several explicit statements and implicit assumptions underlying the proposed aquaculture development model in Europe. Taking these assumptions for granted leads to an economic and ecological fallacy that intends to disembed marine space and resources from society by enclosing the marine space for fish farms. Based on 35 primary written sources such as European aquaculture planning, strategy or policy documents published by the European Commission, aquaculture sector or NGOs, we have conducted a discourse analysis using the Atlas-Ti software. By examining the discourses present in the official documents on European aquaculture, first, we unearthed and problematized the implicit assumptions, and secondly we derived lessons for the development model European aquaculture is pursuing. In this way, the study has aimed to contribute to the literature establishing the link between aquaculture and other types of resource appropriation.

The Real Food Challenge: Transforming the Food System through Student Activism

Angela Babb (Geography, Indiana University)

Colleges across the United States are beginning to thoroughly research food items on campus and institutionalize sustainable food purchasing guidelines. The American Association for Sustainability in Higher Education (AASHE) provides one framework for college campuses to assess the sustainability of various sectors, including buildings, energy, and food. The Real Food Challenge (RFC) is a student network that has worked closely with AASHE to create a more intensive, food-focused guide for assessing the just sustainability of food on a given campus. The RFC remains a unique strategy to connect students to their food, network them with other students around the country, and ultimately transform the food system through student-led activism. More than 140 colleges across the United States are using the Real Food Calculator to research the origins of their food, and 26 colleges have signed the Real Food Campus Commitment. As yet, there is little critical evaluation of the RFC initiative in the literature. In this paper, I describe the process of performing the RFC at Indiana University and present the results of our first assessments. I discuss the methodological constraints of this research, the implications for institutional purchasing, and the potential for this initiative to transform the food system, beginning with student awareness. Drawing on interviews and participant observation, I describe the underlying values and processes that shape the RFC initiative. I also raise my concerns regarding the implementation of purchasing guidelines that are based on the Real Food Challenge criteria.

7. WORKSHOP: Teaching Environmental & Agricultural Issues

Location: Patterson Office Tower 18th Floor, West End Room

Organizer/Chair: Ali Meyer Rossi (College of Agriculture, Food, and Environment, University of Kentucky)

Teaching environmental and agricultural issues comes with a unique set of challenges. How can an instructor present issues like climate change without an accompanying sense of dread and apathy? What active learning techniques can spark student investment in a topic? Can the classroom environment inspire students to take action on topics that resonate with them? What impact does an understanding of sustainability have on a student's educational and career success?

The purpose of this workshop is to create space to discuss the nuts-and-bolts of teaching environmental issues and critically envisioning sustainable futures. Unlike a traditional conference session or panel, the format of the workshop will depend on the participants. The plan is to break up the room into small groups, which will discuss three questions: What challenges do you face in teaching these types of issues? What are some effective strategies for dealing with these challenges? What specific ideas/assignments/activities resonate with students based on your experiences? After some discussion time we will reconvene as a whole group and report back on these three questions. Finally, we will break back into small groups to discuss specific topics of interest.

Efficient facilitation will be provided, and feedback distributed to all participants. Students, teachers, activists, practitioners, administrators and all others interested in teaching sustainability are invited to participate. The goal is for participants to walk away with tangible methods and activities for teaching environmental and agricultural sustainability.

DOPE 2015: FRIDAY, FEBRUARY 27TH

FRIDAY SCHEDULE BLOCK #2:

10:25am – 12:05pm

Sessions 1-7 in this block are located in the Student Center. Session 8 is located in Patterson Office Tower.

1. Settler Colonialism and Occupation: Political Ecologies of Israel/Palestine and Beyond

Location: Student Center 111

Organizers: Brittany Barrineau (Geography, University of Kentucky), Matthew Rosenblum (Geography, University of Kentucky)

Chair: Brittany Barrineau (Geography, University of Kentucky)

Housing Power on Pine Ridge Reservation

Brent Sturlaugson (Architecture, Yale University)

In the nineteenth century, unsettled lands west of the Mississippi River posed many challenges to establishing a stable state; one of these challenges was managing natural resources. As a growing industrial capitalist economy, the United States required legibility from these resources in order to produce value, a process that required individual labor. However, explanations of value production from this period often discount, if not neglect, the role of Native Americans. Moreover, these accounts lack detail of the mechanisms through which the state asserted itself on American Indian reservations. This paper attempts to bridge these gaps by explaining how the federal government delivered interests to reservation communities. In making this argument, I analyze rhetoric found in government publications in relation to archival evidence from Pine Ridge Reservation in South Dakota during the early stages of settler colonialism. In particular, I examine the role of housing in delivering state interests. As an instrument of power, housing registers the values imbricated in political ecologies, and in the process of delivery, absorbs the interests of designers and transports them to consumers. In this way, housing mediates the interests and effects of power and is used as a tool for both domination and resistance. This paper explores the role of housing in managing resources, creating state subjects, ensuring health, inducing industry, and reproducing relations of production on Pine Ridge.

“Time and the Other” in the Development of Sahel El Batuf/ Bikat Beit Netofa.

Natalia Gutkowski (Environmental Anthropology, Tel Aviv University & University of California - Santa Cruz)

This paper examines the decades-long conflict over the agricultural development of Sahel El Batuf (Arabic)/ Bikat Beit Netofa (Hebrew) in the Galilee region. Through ethnography of the state's planning processes, interviews with state officials and document analysis the paper focuses on contemporary governmental policy design for Sustainable development in El Batuf. This valley's rich agricultural land, mostly owned by Palestinian citizens of Israel, is considered by ecologists and state actors as a unique landscape sight and a scarce ecosystem. For ecologists and planners, the valley represents traditional agriculture patterns and wetland habitats'

characteristics which became rare in Israel due to its history of development. My Fieldwork reveals how ecological narratives as well as extraordinarily long planning procedures fixate the Palestinian land owners and agriculturalists in an unchangeable position. Thus, the paper burrows Fabian's "Time and the other" (1983) form of critique and applies it to planning procedures and policy writing concerning El Batuf. Through this analytic frame I argue that state's officials temporality in their reference to "The Other" in the El Batuf's ecosystem demonstrates an ideological form of control through time. The time as a method of control is lexical, procedural and results in conserving ecological values over developing "the other."

Sustainable Zionism: Nationalism as Environmentalism in Israel/Palestine

Joseph Getzoff (Geography, University of Minnesota)

The Jewish National Fund (JNF) (founded 1901) has been pivotal to the Zionist production of the Jewish nation by actively working to maintain Jewish political, cultural, and demographic dominance in Israel/Palestine through environmental development. Today, the JNF cultivates international partnerships for intense development of the Negev/Naqab Desert, dispossessing Bedouin-Arab citizens from their land. Many scholars have documented the JNF's history as a settler-colonial, environmental institution that pursues exclusionary nationalist goals, ironically at the expense of the actual ecologies of Israel/Palestine. However, few scholars have studied the contemporary processes by which the JNF brands Zionist development as environmentally sustainable. This paper proposes that to understand the full extent of the so-called "greenwashing" of settler-colonialism in Israel/Palestine, the JNF's "sustainable Zionism" must be contextualized within the paradigms of green development practices and discourses. This will require showing how "sustainable" discourses and technologies allow the JNF to brand Zionism as a solution to problems associated with changing climate and in turn, attract a bevy of NGOs and private interests to partner with them in the Negev/Naqab. In this way, the Negev/Naqab becomes a space of technological innovation and experimentation, a desert to represent other actual, or potential, deserts.

The entanglement of megadevelopment projects and colonization in the TIPNIS National Reserve in Amazonian Bolivia

Jimmy Beveridge (Anthropology, University of Texas)

The dispute over the Bolivian government's plan to build a superhighway through the TIPNIS national park and autonomous indigenous territory has become an important test case for the rights of Amazonian groups to reject mega-development projects in protected areas. While scholars have honed in on the TIPNIS resistance movement against the proposed highway project, they have for the most part overlooked the larger historical and geographical context. I argue that the proposed highway is only one component of the sustained colonization of the TIPNIS by highland coca-growing farmers seeking new lands. While these highland coca-growers have been migrating into the TIPNIS since the 1970s, in recent years their encroachment has been legitimized and directly supported by the Evo Morales-led Bolivian government. President Evo has called for the outright "conquest" of Amazonian women by highland males in an attempt to garner support for the highway project (Rojas 2012). Furthermore, Evo remains the head of the coca-growers union. Through the TIPNIS case, this paper seeks to examine how conflicts and negotiations over development projects in protected areas are shaped by the broader entanglement of land management policies (such as "conservation") and the displacement of local communities. I argue that these processes can only be understood in their greater historical

and geographical context. In the TIPNIS case, I show how the proposed highway is only one component driving the coca-growers' and Bolivian government's colonization of the TIPNIS.

The Ecological Destruction of Palestine

Ben Norton (History, Independent Researcher)

In August 2012, the United Nations released a report indicating that, if Israel's illegal blockade and effective military occupation of Gaza are to persist, the strip will be "unlivable" by 2020. The ecological cost of military conflict is one of the least discussed, yet too one of the most severe. Emphasis tends to be on immediate, short-term loss of life, but the environmental devastation concomitant with war takes a heavy toll on the human and non-human life in areas in which nuclear and chemical weapons were used, or in which land has been rendered non-arable through military destruction.

In its frequent military assaults on Gaza - most recently in 2014, 2012, and 2008-2009 - Israel has consistently destroyed Palestinian farmland, water lines, aquifers, sewage facilities, power plants, and more. Military records demonstrate that many of these attacks are explicitly meant to target civilian infrastructure, leading some scholars to speak of Israel's "scorched earth" policy. 95% of Gaza's water is already undrinkable, and the UN estimates this figure will rise to 100% by 2016. The water on the coast of Gaza is unfishable for miles, given sewage pollution. And Gaza is not the only territory affected. Israel also engages in policies that lead to the deliberate destruction of West Bank farmland. Palestinian human rights organizations estimate that, since the beginning of its illegal military occupation in 1967, Israel has uprooted over 800,000 olive trees, upon which many indigenous Palestinians, still living in a largely agricultural society, depend for their livelihoods.

In August 2014, scholars at Bethlehem University published a longitudinal study describing the decline in biodiversity due to habitat destruction in Palestine as "catastrophic." The scientists characterized the ecological situation in Palestine as an "environmental Nakba." It is to the detailing of this environmental Nakba that this paper is devoted.

2. Critical Political Ecologies of Vulnerability

Location: Student Center 205

Organizers: Jamie Shinn (Geography, Pennsylvania State University), David Ferring (Geography, Rutgers University)

Chair: David Ferring (Geography, Rutgers University)

'I could not be idle any longer': the political ecology of Buruli ulcer in Ghana

Heidi Hausermann (Geography, Rutgers University)

Buruli ulcer is a necrotizing skin disease that largely affects poor people in the tropics. In Ghana, federal policies promise free treatment to all individuals with the disease. Yet, there is a tension between official narratives of early detection and subsidized treatment, and the lived experiences of people with Buruli ulcer and the health practitioners they encounter. This paper examines the conditions under which individuals obtain effective treatment for Buruli ulcer. I argue as top-down government channels struggle to provide sick people with subsidized care, new treatment assemblages emerge in rural areas. Based on ethnographic data collected between June 2010 and December 2012, I use three cases - the pirate, hybrid herbalist, and Buruli ulcer capitalists - to detail the social relationships and practices governing Buruli ulcer treatment. Not only do these treatment assemblages reflect diverse knowledge and economic forms, they also reveal prosaic

state practice in the context of disease management. Moreover, in contrast with existing literature on Buruli ulcer, I argue rural people's engagement with "traditional" medicine is often the result of policy failures. This work contributes to a growing body of critical political ecologies of health by examining the ways non-humans (mycobacterium ulcerans, herbs, anti-biotics, etc.), policy, state practices, and differentiated vulnerabilities combine to shape disease and treatment dynamics.

Uneven vulnerabilities in extractive landscapes: A case from rural Ghana

David Ferring (Geography, Rutgers University)

In the last decade, small-scale mining (SSM) wrought extensive and highly variegated socio-ecological change in rural Ghanaian landscapes. An explosion in global gold prices, combined with lax environmental regulations, resulted in a rampant influx of mining capital and extensive landscape transformation. SSM represents an ephemeral, emergent land use change, characterized by particular assemblages of underlying geology and biophysical landscapes, mining practices and technologies, and labor/social organization. Further, many of these sites are unremediated, resulting in new areas of stagnant, polluted water, including inundated areas via the blocking (mine tailings) and diversion (ore processing) of rivers and the mining pits themselves. Recent work interrogates the human health implications of these mining practices and technologies. However, most of these studies examine the effects of mercury contamination on the health of miners themselves. Thus, impacts on community members living and working proximate to SSM sites remains underexplored.

Therefore, this paper examines the uneven health impacts resulting from radical landscape transformation and contributes to new understandings of community health dynamics in extractive landscapes. Vectored diseases such as malaria and onchocerciasis, represent (re)emerging risks for disease and forms of embodied landscape degradation. Yet, these new risks and environmental exposures occur within already existing vulnerabilities resulting from community and household-level asymmetrical relations of reproductive labor. This paper, relying on semi-structured interviews and surveys conducted in two communities in rural Ghana, demonstrates how contextualized perceptions and experiences of the land-use change and the emergence of pathogenic landscapes articulate with existing unequal socioeconomic relations and risks (i.e. gendered household activities and livelihoods), (re)producing vulnerabilities to disease. This work contributes to scholarship on emerging health geographies and political ecology scholarship more broadly as it seeks to untangle the highly variable and contextualized political-economic processes, environmental practices and socio-ecological change (re)producing uneven and gendered health outcomes.

Possibilities for Adaptation: Vulnerability and environmental change in the Okavango Delta, Botswana

Jamie Shinn (Geography, Pennsylvania State University)

The results of environmental change are already manifesting in local contexts through extreme weather events and increased environmental variability. These impacts are expected to continue to disrupt livelihood practices and have the potential to increase existing vulnerabilities for already marginalized actors, thereby limiting possibilities for adaptive responses. This paper, based on nine months of qualitative fieldwork in Botswana, addresses how the possibilities for adaptive responses to environmental change in the Okavango Delta are simultaneously determined by biophysical dynamics, multi-scalar governance systems, and social vulnerabilities

related to gender and ethnicity. While flooding variability is an inherent part of socio-ecological relationships in the Delta, annual floods from 2009 to 2011 were higher and spatially distinct from previous flooding. This flooding displaced some residents from their homes and inundated floodplain agricultural fields, causing a decline in productivity for multiple growing seasons. My findings indicate that existing social vulnerabilities related to gender and ethnicity, in combination with increasing state control over natural resources, are constraining residents from making culturally-rooted and desired adaptive responses to variable flooding levels. These challenges are particularly pronounced for members of the historically marginalized Bayei tribe and the many female-headed households in the region. This research contributes to scholarship that is working to create a conceptualization of adaptation that accounts for social vulnerabilities while also considering how future environmental changes may exasperate existing inequalities for certain actors. This body of work strives to create possibilities for transformative adaptation, which allow not only for just responses to environmental change but also help expose and mitigate structural causes of existing social vulnerabilities.

“A Simple Swab”: Examining the Scale-Up of Tanzania’s Cervical Cancer Screening Program

Helen Olsen (Geography, Rutgers University)

Cervical cancer remains the leading cause of cancer death among women living in low-income countries across the world, and is the most frequently occurring cancer for women in Tanzania (WHO 2013). This is in stark contrast to high-income countries, where cervical cancer incidence and mortality has dramatically declined in the past decade; a drop attributed to effective screening programs for vulnerable populations and increased access to treatment. Of particular concern is the increased vulnerability of HIV-positive women to developing cervical cancer, especially given a documented higher prevalence of cancer-causing HPV strains amongst this population (Plotkin et al. 2014). As shifts in global health discourse have begun to reframe HIV/AIDS as a chronic rather than acute condition, concerns over the development of additional chronic illnesses amongst already vulnerable HIV-positive populations have been rapidly translated into policy in much of the Global South.

It is in this emerging arena of global health engagement and academic inquiry that I situate this preliminary investigation in Tanzania’s national cervical cancer screening programs. This work is based on a combination of informal interviews with government health officials, NGO employees and hospital staff in Tanzania and a critical analysis of policy documents associated with the scaling-up of cervical cancer screenings amongst HIV-positive women in Tanzania. The multiple axes of social difference at play in the discussion of cervical cancer vulnerability (HIV-status, age, income, education level, etc.) are often engaged with individually through vertically implemented global health and development interventions, but are rarely framed as intimately connected and constitutive of structures of violence (Farmer 2004). Given this, I ask: how do the multiple axes of social difference that characterize many HIV-positive women come to constitute new notions of vulnerability to chronic disease? My work builds on recent scholarship in health geography and medical anthropology articulating the contingency of biomedical techniques in uneven landscapes of healthcare provision often characterized by a lack of resources and an overwhelming need for care (Livingston 2012; King 2013; Jackson & Neely 2014). The scaling-up of cervical cancer screenings in Tanzania highlights the unequal burden of chronic disease amongst diverse populations but also illustrates the uneven landscape of cancer care available to those already vulnerable individuals who find their bodies not just HIV-positive but also malignant. This embodiment and actualization of cervical cancer risk raises critical questions

about the broader politics and economics of global health investment in Sub-Saharan Africa, as well as the limitations of already existing landscapes of care provision.

3. PANEL: Contesting Control Over Conservation in Tanzania

Location: Student Center 211

Organizer: Betsy Beymer-Farris (Geography, University of Kentucky)

Participants: Chris Maina Peter (Law, University of Dar es Salaam, Tanzania & UN International Law Commission), Ian Bryceson (Ecology Norwegian University of Life Sciences), Tor Arve Benjaminsen (Development Studies, Norwegian University of Life Sciences), Faustin Maganga (Institute of Resource Assessment (IRA), University of Dar es Salaam, Tanzania), Betsy Beymer-Farris (Geography, University of Kentucky)

Moderator: Betsy Beymer-Farris (Geography, University of Kentucky)

This panel brings together scholars with extensive experience working in Tanzania on issues of contesting control over conservation. This panel will explore how conservation narratives change over time in relation to the political economic contexts in which they are conceived and implemented. The panel will draw up from a diverse set of theoretical perspectives including political economy, ecological resilience, environmental history, feminism, and post-structuralism. In doing so, we seek to illuminate the multiple and contested rationales, rhetoric, and realities of conservation in Tanzania. Drawing upon case studies in Tanzania, we will discuss the unfortunate reality that many local people are experiencing the militarization of conservation resulting in green violence. We then highlight the myriad and multiple responses in which seemingly disempowered local actors are successfully contesting control over conservation and asserting their rights.

4. High Hydro Visions: Political Ecologies of Water in the Himalayan Region

Location: Student Center 228

Organizers: Christopher Butler (Sociology, University of California-Berkeley), Matthaeus Rest (Anthropology, University of California-Los Angeles), Amelie Huber (Political Ecology, Bogazici University, Istanbul & European Network of Political Ecology)

Chair: Matthaeus Rest (Anthropology, University of California-Los Angeles)

Discussant: Matthaeus Rest (Anthropology, University of California-Los Angeles)

Capital Hydro Visions: the Upper Karnali Dam in Nepal

Christopher Butler (Sociology, University of California-Berkeley)

If eventually constructed, the Upper Karnali dam will represent Nepal's first successful mega-hydropower project, generating as much as 900MW of electricity, 88% of which is currently planned for export to India while Nepal works to reduce the many hours of load shedding that are necessary each dry season. This last fact is a major source of contention between Nepal's government, private sector, and civil society actors, many of whom believe the energy should be used first to address Nepal's current power needs.

My paper will discuss the rapid acceleration of hydropower development in Nepal, which is badly needed for economic purposes, but also hotly contested as various parties vie to engage the contract negotiation and construction process to support their interests. My paper will examine how different hydro-related groups (i.e., government, private, civil society) marshal and deploy "official" and scientific information to support their positions regarding the Upper Karnali

project. The forms and extent to which each of these groups view water as serving a particular end may reveal much about how natural resource governance will evolve in Nepal.

The political transition in Nepal from monarchy to democracy and through a ten-year civil conflict has opened new spaces for competing visions of development to stake their claims. The government seems intent on developing hydropower at a speed that will enable them to use hydro to re-establish legitimacy, while also satisfying growing demands for reliable energy. The private sector has used the transition and absence of a strong state to increase its strength and size, and is using its collective voice to push for market reforms and policies that will “make Nepal attractive to foreign investment.” Meanwhile, hydro-related civil society experts warn that rapid development of projects may actually shortchange Nepal in the long run. As such, they encourage the government and private developers to leverage Nepali rivers and water as a political keystone in the country’s relations with India and China.

A micro-political view of Hydropower Development in Northeastern India - the case of Arunachal Pradesh

Mibi Ete (Development Studies, ZEF, University of Bonn)

In 2003, the 50,000MW Initiative was launched by the Government of India. The programme was meant to address the problem of energy quality as well as quantity through the construction of hydropower installations, many of them being large dams, across the Himalayas and other minor ranges. Following this, the debate on large dams erupted again in public discourse, primarily following the narrative from the previous decade, and framing it as another form of destructive development, resisted valiantly by small communities. In parallel, academic interest in large dams has also revived. A few studies have taken a social movements perspective (Arora 2008, Arora and Kipgen 2012, etc.) while others have examined the topic from an environmental governance perspective (Sinclair & Diduck 2000, Choudhury 2014, Erlewein 2013 etc.). Very little, however, has been written about local level resource politics (McDuie Ra 2011). This paper attempts to address this gap. It is based on ethnographic research conducted at two sites for proposed projects in the Siang belt of Arunachal Pradesh in 2012-13. It describes the inter-community as well as intra-community divergences in their response to hydropower projects, and explains these against a backdrop of the emergent “extractive” nature of hydropower, the recent changes in infrastructure policy framework, as well as the “thinness” of the state on the ground. It suggests that communities are not always victims of large development projects, and that contestations need not be interpreted every time as resistance.

The Return of the prodigal Dam: The Resumption of the Arun-3 hydropower project in Nepal

Matthaeus Rest (Anthropology, University of California-Los Angeles)

In November 2014, the Investment Board Nepal signed a contract with the Indian company Sutlej on the construction of the Arun-3 hydropower project. This means that after twenty years of building freeze, the most controversial infrastructure project in the history of Nepal will be resumed. Initially planned to be financed by an international consortium led by the World Bank, the dam was brought down by a complex confluence of events in the mid-1990s that subsequently led to a de facto moratorium on large dams from the World Bank and the creation of the World Commission on Dams. Contrary to the argument brought forward by Sanjeev Khagram (2002), just a cursory look at the Himalayas today shows that large dams have made a

formidable comeback and the next decade will see a tremendous increase in electricity generated from hydropower globally.

Using the Arun-3 project, I will investigate how dams constructed in the 2010s will differ from those commissioned and built before the 1995 hiatus. I will argue that the spaces for public engagement and contestation opened up in the 1990s through institutions like the World Bank Inspection Panel have largely been domesticated and now serve to secure the established business model of neoliberal developmentalism.

The Political Ecology of Clean Energy - Hydropower, Climate Change and the Politics of Risk in Northeast India

Amelie Huber (Political Ecology, Bogazici University, Istanbul & European Network of Political Ecology)

The rapid expansion of hydropower is causing large-scale socio-ecological transformations in the Eastern Himalayas, one of the world's most climate-vulnerable waterscapes. That both climate change and hydropower are fraught with high risk and uncertainty regarding adverse socio-environmental impacts is given little consideration in the policy domains of different Himalayan states. This article studies the politics of impact and risk assessment in the hydropower development trajectories of Sikkim and Arunachal Pradesh, two states of Northeast India. The Northeast region is considered India's future powerhouse, with 200+ agreements for hydroelectric projects signed between private power producers and state governments. This study looks at policy coordination and actual responses to hydro-impacts and climate-water-hazards (e.g. floods, deterioration of water sources), to explain why considerations of climate change and hydro-climatic risks hardly feature in policy debates, nor in many local conflicts over hydropower. Drawing on empirical findings, I illustrate how hydro-proponents (state agencies, private developers, consultants, etc.) navigate the political space around impacts and risks, with two politically disabling outcomes: the social production of uncertainty; and the shaping of social perceptions/imaginings of risks, thereby establishing a common sense of hydropower as an energy-cum-development solution with no realistic alternatives. This paper provides a contextualized reading of the idea of green, climate-friendly hydropower, and of the role of political and techno-scientific elites in driving controversial developments at the commodity frontiers.

Upside down and inside out: How int'l interventions in the water interactions of the eastern Himalaya region affect

Paula Maria Hanasz (Public Policy, Australian National University)

The Ganges Brahmaputra Meghna basin is arguably the least integrated region in the world in terms of state-to-state coordination of transboundary water issues. There is also a pervasive understanding in South Asia that water conflicts are necessarily zero-sum problems. In recent years, significant international effort led by the World Bank (and in conjunction with the governments of the United Kingdom, Australia and Norway) has been put into developing among South Asian policy makers and water governance institutions an appreciation that water is a shared resource with the potential for positive sum outcomes. This is broadly done through the facilitation of bottom-up, stakeholder-led, deliberative processes around transboundary water issues.

This paper provides an evaluation of how effective these foreign-led efforts have been, and questions the rationale of an ostensibly grassroots regime imposed from top-down and non-local

sources. This paper is also a critique of the hegemonic idea, driven by western international institutions such as the World Bank, of “benefit sharing” in transboundary water management.

5. Radical Politics and More-than-humanist Theory

Location: Student Center 230

Organizers: Sophia Strosberg (Geography, University of Minnesota), Eli Meyerhoff (Political Science, Autonomous Researcher)

Chair: Eli Meyerhoff (Political Science, Autonomous Researcher)

Arrested Autonomy: Theorizing postcolonial independence with orangutans

Juno Salazar Parreñas (Women's, Gender, and Sexuality Studies, Ohio State University)

Orangutan rehabilitation centers have a double mission: they offer sanctuary to wildlife displaced by deforestation and they facilitate human encounters with the most elusive and solitary of all great apes. Despite assiduous efforts to train orangutans for autonomous lives within the confines of forest reserves, I found that rehabilitant orangutans experience an indefinitely deferred independence for the sake of freedom. Based on seventeen months of fieldwork in Sarawak, Malaysia between 2008-2010, this paper explores the site's paradoxes between freedom and captivity, independence and dependence. I use the term ‘arrested autonomy’ as a way to understand how subjects are forcibly made dependent while simultaneously regarded as potentially independent. Autonomy here is rooted in biological autonomy, what cyberneticist Francisco Varela (1979) conceived as a living system's distinguishing of self against a background. This sense of autonomy, always situated in systems, differs from “autological” liberal autonomy (Povinelli 2006). Thinking through captivity, this work theorizes postcolonial freedom beyond both humanity and liberalism.

Ecopsychology, new materialisms, and more-than-human ethics: a critical dialogue across traditions

Charles Carlin (Geography, University of Wisconsin - Madison)

Ecopsychology is a field of critical inquiry and social practice whose proponents argue for an understanding of psyche as internal to the world. Ecopsychologists are working to construct a critical ecological politics that ties together human psychological well-being with ecological health. They engage in social critiques such as understanding capitalism as a self destructive psychosis. They also explore how therapeutic practices can address the multiple traumas produced by alienation from 'nature' and ground radical social change. However, ecopsychology has been vulnerable to critique because of its insistence on a transhistorical human nature, unproblematic acceptance of declensionist narratives, and theoretical grounding in humanist psychologies. This paper considers how scholarship concerned with more-than-human ethics and 'new materialisms' may help ecopsychologists productively engage these critiques and further develop the theory of psyche as immanent to the world, inseparable from its material constitution. I suggest that more-than-human ethics can help ecopsychologists deepen their understanding of the human self as an emergent product of relationship, and to differentiate their approach from both problematic constructions of the 'ecological self' and approaches to environmental psychology that continue to assume the autonomy of the individual. I also argue that new materialist theorizing offers a way to further understand the existential and psychic significance of matter and perceptual experience. Finally, by fostering a dialogue between these

fields of inquiry, I argue that ecopsychological practices can foster the felt experience of a more-than-human ethics

Hookworms and Bacteria in More-Than-Humanist Alliances against (Neo)Liberal, Colonial Capitalism

Sophia Strosberg (Geography, University of Minnesota - Twin Cities), Eli Meyerhoff (Political Science, Autonomous Researcher)

Tracing lines of liberation against the contours of particular micro-biopolitical projects, we examine two case studies - human hookworms as a palliative for autoimmune diseases and bacteria in 'eco-sanitation' sewage treatment - that are situated differently along flows of production, consumption, digestion, and disposal. We begin by investigating contradictions that infuse microbial, modern/colonial histories of institutionalization, popularization, state management, and do-it-yourself reclamation. These projects have been continually monetized and abstracted by capitalist, (neo)colonial industry - from the Rockefeller Foundation promoting sanitation and hookworm eradication to cure "lazy" colonized workers to pharmaceutical companies that commodify hookworms and state-corporate 'biosolids' projects. We show how, in the cases of hookworms and eco-sanitation, liberal and traditional Marxist approaches fail to elucidate the political sides of micro-biopolitical conflicts because they take for granted abstractions such as "individuals," "society," the "social-natural" dichotomy, "democracy," and "cooperation." In response, we offer a perspective for destabilizing, rather than reinforcing, (neo)liberal and colonizing subjectivities and institutions: theorizing more-than-human, microbial assemblages without falling into such abstractions. Describing labor and value production in this way, we can highlight more-than-humanist ontological cuts for a more effective struggle against global capitalism. A disruption of hegemonic subjectivities can parallel the material disruption that takes place as human and microbial bodies meet. Against diversions of these disruptions into apocalyptic or charity-based abstractions, we direct attention to our parallel, material involvement with one another, our environments, technologies, and institutions, mediated with the shared, colonial-capitalist-liberal-white supremacist historical relations that have co-constituted the Global North and South.

Species-thinking and responsibility in the Anthropocene

Julian Spector (Journalism/Political Science, Independent Researcher)

The idea of the Anthropocene - a new geological age marked by measurable human influence in macro-ecological systems - allows us to think not just about the ways in which human beings shape non-human environments, but also about how so-called "natural" systems mediate between human-human interaction and conflict. In this sense, the Anthropocene makes possible a more thorough accounting of responsibility; for, when we see humans as geological agents, we can hold ourselves responsible for human suffering that, on the surface, seems to lack a human cause. And yet, the theory of the Anthropocene, as it has been articulated by Dipesh Chakrabarty, replaces Marxist accounts of differential responsibility and uneven destruction with an analysis of collective human responsibility and shared risk. In *The Climate of History*, Chakrabarty concludes that analyses of capital accumulation and its consequences are insufficient to explain the current climate crisis. Instead, he argues, the inauguration of the Anthropocene age forces us to confront our collective responsibility, as a "species," for both human and ecological change, and to develop "a global approach to politics without the myth of a global identity."

Rather than simply refute Chakrabarty's claim with stock arguments from the Marxist arsenal, we want to explore his decision to use "species" as the lens through which to view anthropogenic changes in the environment. What political realities does the idea of species illuminate? What does it obscure? Is it possible to reconcile Chakrabarty's commitment to collective responsibility with a political ecological analysis that attempts to account for power asymmetries, differential responsibilities, and uneven distributions of environmental impacts? Looking further ahead, can we reconcile the tension - present, we think, in all debates about the Anthropocene - between the recognition of human beings as agents of geological change and the evidence, submitted to us by climate change, that we have less control over our world than we thought - that perhaps, in Spinoza's words, we are but a tiny "part of Nature?"

6. Infrastructural Visions and the Politics of Urban Design: Creating and Managing Urban Landscapes in the Era of Climate Change, II

Location: Student Center 231

Organizers: Nate Millington (Geography, University of Kentucky), Kenny Stancil (Geography, University of Kentucky)

Chair: Kenny Stancil (Geography, University of Kentucky)

Flows of water and carbon: A political-industrial ecology of Los Angeles's water supply metabolism

Joshua Cousins (Resource Policy and Behavior, University of Michigan)

This paper develops a political-industrial ecology approach to explore the urban water metabolism of Los Angeles, which sprawls across the American West. Conventional approaches to quantify urban carbon footprints typically rely on global, national, or regional averages and focus narrowly on improving the efficiency of resource flows moving into and out of the city. These approaches tend to "black box" the methodologies that guide the carbon emissions calculus and the social, political, ecological, and economic processes that perpetually reshape nature-society metabolisms. To more fully delineate the water supply metabolism of Los Angeles, this paper combines theory and method from urban political ecology and industrial ecology. Specifically, we infuse spatiality into the traditional life-cycle assessment (LCA) approach by coupling it with GIS. We find that the water sourcing and conveying life cycle phases have the largest carbon footprint. More broadly, this intervention illustrates how decisions about system boundaries, emissions factors, and other building blocks fundamentally shape the end result, but also destabilizes and advances the LCA enterprise by being more geographically nuanced. Then, drawing from interviews and historical sources, we provide a critical analysis of how LA's various water supply infrastructures came to be and illustrate how a sustainable transition based on a narrow carbon calculus is problematized by historical circumstances and strategic new paradigms to secure water resources. The political-industrial ecology approach offers valuable insights into the spatiality of material metabolisms and the socio-political processes (re)shaping the relations between nature and society.

Evaluating the urban sustainability implications of centralized v. decentralized wastewater treatment in Tijuana, Mexico

Rachel Russell (Geography, University of Wisconsin - Green Bay)

Rapid, unregulated urbanization in Tijuana, Mexico outpaces the city's wastewater treatment capacity. Changing global climate patterns has made local freshwater resources scarce, leading to

a call for more sustainable forms of wastewater treatment that reduce water and energy use while providing secondary sustainability benefits to urban residents. Efforts to incorporate water reclamation and resource recovery technologies into the city's treatment network present an opportunity to improve regional public and environmental health without relying solely on the region's limited water resources. I compare two sustainable wastewater treatment technologies used in Tijuana to better understand their contributions to the city's attempts to increase economic, social, and environmental sustainability. A sustainable indicator analysis reveals that both facilities utilize water reuse technologies and support reforestation programs. While the smaller-scale, alternative plant makes important contributions to reforestation, slope stabilization, and community education programs, it lacks the capacity and treatment standards of the large-scale, centralized plant to meet the current and future needs of Tijuana. However, I argue that if the final water quality produced by smaller-scale, alternative technologies can be improved, these types of facilities have the potential to augment larger-scale treatment plants and provide important, localized sustainability benefits in a transborder context.

Dalian's Streetcar System: 1900s to Present

Charles Kwun Sau Chiu (Geography and Planning, University of Toronto)

In cities in China and elsewhere, electrified streetcars emerged as the first mode of public transportation that was affordable to the general population. This paper traces the historical development of the streetcar system in the Manchurian city of Dalian from its inception in the 1900s up to the present moment. Rather than treating the streetcar as an independent utility system, I will examine its dialectical relationship with urban planning ideologies and as an "urban artifact" that structures the urban morphology and park system of Dalian. Specifically, I am interested in understanding the meaning of the introduction of people's mobility to the state and the working class population residing in the city throughout the era Russian control, Japanese colonization, and as an important city in the People's Republic of China after 1949. The paper will sum up with the renewed interests in Dalian's streetcar system in recent years, both as a sustainable transportation solution and a memorabilia of the city's past, in order to rethink about concepts such as "commuting," "mobility" and "everyday life."

"Oases in an Industrial Landscape": Urban Greening as Social Improvement in Germany's Ruhr Valley

Hillary Angelo (Sociology, New York University)

Why do people "green" cities, and what role does this activity play in the transformation of urban environments? As the green city is celebrated as a revolution in urbanism or dismissed as an instrumental policy trend, this project offers a historical-sociological answer to these questions by examining urban greening as a social practice. As part of a larger project that traces a century of greening in Germany's heavily industrialized Ruhr Valley, this talk focuses on two competing urban visions advanced through "nature" in the Ruhr in the 1960s: a series of public sector-built regional recreation parks, and a grassroots movement to save a 19th century industrial workers' housing settlement. A close reading of each project's promotional materials shows how, in a moment of major urban restructuring, green nature was used to realize new urban ideals, and highlights surprising formal similarities between the projects across their very different protagonists and political goals. From this comparison, I argue that greening is a normative practice predicated on power and made possible by a social imaginary of nature that is an outcome of and a variable in urbanization. I show how nature is used as both a symbol of

desired social goods and as a medium through which to achieve them, and how, as a consequence, this imaginary of nature plays a greater role in the transformation of urban environments than accounts of urban change driven by political economy might initially lead us to expect.

7. Food and its relation(s) to placemaking: A look at place/identity building through consumption, I

Location: Student Center 249

Organizers: Jessica Breen (Geography, University of Kentucky), Colleen Hiner (Geography, Texas State University)

Chair: Jessica Breen (Geography, University of Kentucky)

Locating the “local”: The role of food and beverages in place-making

Colleen Hiner (Geography, Texas State University)

Food, including consumables such as beer, wine, and spirits, plays an important role in how places, both large and small, develop, grow, and change. This paper will introduce the conceptual framework for relating food and place and describe how the process of place-making is carried out through food and beverage production and consumption, including input sourcing, processing, and marketing/sales. This paper will investigate how towns/cities/regions mobilize the production of place-marketed goods in the pursuit of economic gain, tourism development, or progress toward sustainability or other goals via the local consumption of those same goods. We ask: How have locally produced and consumed foods and beverages created and/or changed the places in which they are situated and branded? And, moreover, how has place played a role in the development and marketing of “local” consumable goods? Examples from Kentucky, Ohio, California, and Texas will be offered. Using evidence from research conducted by both authors using a variety of ethnographic methods, we argue that food/beverages can be a source of (re)development and driver of environmental and cultural landscape change.

Food Insecurity in Coastal California

Julia Van Soelen Kim (Food Systems, UC Cooperative Extension)

West Marin, a rural coastal region of Marin County, California, includes the Point Reyes National Seashore and seven small, unincorporated communities. The region’s agricultural heritage, present-day working landscapes, and natural beauty attract outdoorsy tourists from afar and nearby city dwellers for day hikes, bicycling, and increasingly, foodie adventures. Food produced in West Marin includes high quality organic milk and award winning cheese, grass-fed beef, fresh produce, and oysters. Producers commonly leverage the uniqueness of this place to market their products directly to consumers, employing place-based descriptive attributes and images that conjure Marin’s pristine nature, the artisanal and hand-crafted qualities of the food, and the ecological benefits that agriculture provides. Yet despite an intimate connection to both the production of place and the production of food, many West Marin residents are food insecure.

Community-based research data indicate that West Marin residents face significant barriers to accessing healthy, affordable, and culturally appropriate food. Primary barriers include the high price point of local food which is marketed to high end consumers coupled with the high cost of food, generally, due to the small size of grocery stores and the long distance distributors must

travel to service the region. While West Marin residents are active producers of food marketed with place-based attributes, these same residents have limited opportunities to consume such food. As such, the foodie economy in West Marin contributes to food insecurity for West Marin residents.

The re-localisation of the dairy industry and the making of “Cow Town”: food, identity and rural revitalization in Australia

Amanda Davies (Geography, Curtin University)

The story of the decline of small rural towns has been well documented. Population decline, economic contraction, the withdrawal of government services and environmental damage is a tale typical of many rural towns in advanced industrial countries, particularly those fundamentally associated with primary production. However, sitting alongside tales of decline are the many documented cases of rural revitalization,” where small rural towns have developed new economic opportunities that have facilitated improved social and economic outcomes. Importantly, as researchers have documented the varied approaches to rural revitalization, considerable insight into the underlying social, economic, political and environmental factors influencing rural community adaptation and revitalization have been gained. A particularly important finding has been the role of individual community members in catalyzing existing capital stock to generate new social and economic opportunities.

This paper will contribute to further illuminating the role of the local community members in influencing rural revitalization strategies, through examining how “local food identities” are produced and reproduced in rural communities. The development of “local food identities” has been a popular approach to rural revitalization and has underpinned the generation of new patterns of production and consumption of rural products, landscapes and townscapes. This paper will specifically consider how, through the development of a local food identity, the social, economic and environmental behaviours and knowledge of locals and visitors have been shaped. It will draw on the case study of the small rural community of Cowarumup and that community’s efforts to create a unique identity for the town as a “clean, green, sustainable dairy town.” Cowarumup is situated within the globally recognized Margaret River wine region located in the South West of Western Australia.

Apples for Development: Adding value and re-making place in Jumla, Nepal

Elsie Lewison (Geography, University of Toronto)

In the global North, strategic invocations of place have a long, well-established history as apparent alternatives to the homogenization of the industrial food system. In the global South, place-based marketing is relatively new, and generally targeted to distant, elite markets. Such approaches have, however, received increased attention in recent years, particularly through the popularization of “value chains for development” models. This paper explores the logics and impacts of recent development initiatives to market apples from Jumla, a remote, mountainous district of Nepal. I highlight both how apples have become central to projects of placemaking in Jumla, as well as emergent tensions in recent, self-proclaimed, “pro-poor”, apple development strategies.

Apples were introduced to Jumla in the 1970s and even as the fruit proliferated across Jumla’s physical landscape and discourses of identity, production remained largely uncommercialized due to transportation and technological barriers. With the completion of a motorable road to the

district in 2006, however, Jumla has seen an intensification of efforts to develop the apple market - specifically with new, organic Jumla branding, targeted to elite urban consumers. These programs have inspired more residents to devote scarce land and resources to apple production, but have offered limited preparation and support for meeting commercial constructions of quality and consistency. Drawing on recent fieldwork in Jumla, I point to the particular rationalities and incentive structures underpinning this niche marketing approach, as well as forms of socio-natural disciplining and recalcitrance that have emerged in and around efforts to commodify and commercialize Jumla's beloved fruit.

Highland Luzon and the Contradictions of Heirloom Rice

Glenn Davis Stone (Anthropology, Washington University)

Heirloom rice has begun to be marketed from various parts of Asia, but none has been as strongly linked to - and marketed on the basis of -- its place of origin as the rices from the terraces of the Philippine cordillera. Indeed the nine-year old export scheme for heirloom rices from Ifugao and other highland areas was actually initiated primarily to preserve terrace rice growing in the highlands. However the scheme embodies several key contradictions. First is that its product is an explicitly pre-Green Revolution rice; the Ifugao word for heirloom rice, tinuwon, means "once a year" while a hallmark of Green Revolution rice is multi-cropping. Yet its production is now being promoted by IRRI, the iconic Green Revolution institute that made its name by replacing such rices. Second is that the scheme is explicitly designed to benefit marginal smallholders and preserve traditional terrace cultivation. Yet it is adamantly opposed by various left-leaning smallholder-oriented NGO's, which object to the commodification of Ifugao rice germplasm and the genetic characterization and seed storage of tinuwon rices by international research institutes such as IRRI. Finally, its main market is half way around the world in the US, where it is marketed to the same consumers who now value locally-sourced foods, and where there is little knowledge of the spectacular cordilleran terrace landscapes. Expanding demand for these inherently unproductive heirloom rices creates pressures for intensification that might place stress on traditional production systems and for the adoption of improved, higher-yielding varieties. This paper will explore these contradictions with a focus on how the actors involved "farmers, NGOs, scientists and entrepreneurs" negotiate a path through them.

6. PANEL: Agrarian Questions of Labor, I

Location: Patterson Office Tower 18th Floor, West End Room

Organizers: Karen Rignall (Agricultural Economics, University of Kentucky), Sarah Lyon (Anthropology, University of Kentucky), Garrett Graddy-Lovelace (School of International Service, American University)

Panelists: Tom Bassett (Geography, University of Illinois-Urbana-Champaign), Sarah Lyon (Anthropology, University of Kentucky), Lisa Markowitz (Anthropology, University of Louisville), Garrett Graddy-Lovelace (School of International Service, American University), Betsy Beymer-Farris (Geography, University of Kentucky)

Moderator: Karen Rignall (Agricultural Economics, University of Kentucky)

This roundtable discussion will address the theoretical implications of changes in contemporary agrarian labor regimes. Questions of labor have been essential to political ecology from the beginning, as scholars foreground labor in contexts as diverse as contract farming, agricultural development projects, pastoralism, the production of landscapes, agricultural commodity chains,

and the industrialization of global food regimes, among other. Arguably, however, labor and related theories of value are often left implicit or undertheorized, while the pace of agrarian transformations speaks to the importance of relating critical/Marxist political economy to contemporary developments in rural labor regimes.

Questions we will address include: how do we understand the relationship between labor and value in contemporary agrarian contexts? What do recent rereadings of Marx and other agrarian political economists have to tell us about the kinds of value currently being created in land or other natural resources? How might recent theorizations of the commodification of nature help us understand changing value dynamics in agrarian contexts? How do globalizing land markets and agricultural commodity chains affect the way we understand rural labor markets and agricultural labor more specifically? In other words, we are interested in theorizing how labor is producing new values in land and other natural resources, and conversely, how changing agrarian formations and governance regimes are producing new forms of labor.

*******LUNCH 12:05pm – 2:00pm*******

(Lunch on your own. There are multiple options in the Student Center and within a short walk of campus.)

WELCOMING ADDRESS

2:00pm – 3:00pm

Whitehall Classroom Building Room 118

“Trickster Science or Why Political Ecology Won’t Go Away”

Paul Robbins

Nelson Institute for Environmental Studies,

University of Wisconsin - Madison

DOPE 2015: FRIDAY, FEBRUARY 27TH

FRIDAY SCHEDULE BLOCK #3:

3:15pm – 4:55pm

Sessions 1-7 in this block are located in the Student Center. Session 8 is located in Patterson Office Tower.

1. Making Nature, Making Subjects

Location: Student Center 111

Organizers: C. Anne Claus (Anthropology, American University), Hande Ozkan (Anthropology, Transylvania University)

Chair: C. Anne Claus (Anthropology, American University)

Why Okinawans Aren't Environmentalists: Indigeneity and Locality in Japanese Conservation

C. Anne Claus (Anthropology, American University)

This paper dissects ideas of progress, modernity, and indigeneity as they play out in struggles over who is most capable of managing Okinawa's aqueous nature. After WWII, Okinawan poverty was cast as a form of noble environmentalism by a new wave of urban romantics. Today however, Okinawans are no longer considered environmentalists by default. The majority of conservation work in Okinawa is managed by mainland Japanese transplants to Okinawa, many who consider Okinawans to be too close to nature. Okinawans are in similar structural positions as indigenous people in other locales, but are unable to draw on the authority of indigenous cultural frames to shore up their authority. In this paper, I look at how mainland Japanese conservationists respond to an Okinawan restorer of coral who utilizes folk restoration methodologies. Aspects of the troubled relationship between the colony (Okinawa) and the metropole (mainland Japan) surface in the responses of mainland scientists to folk restorers of coral. I find that folk restorers in Okinawa, by replacing native-ness with proximity, both play into and subvert the usual narratives about environmental subjects and subjectivities in Japan.

A Sense of Place

Robert Greeley (Geography, University of South Carolina & Middlebury College)

Studies of large-scale conservation projects have long focused on the appropriation of lands for the creation of protected areas and the ensuing marginalization of those living in the area. Often these treatments are concerned with the demarcation of lands, the loss of livelihood practices, and loss of access to lands that provided such livelihoods. This paper contributes to the understanding of conflicts connected to the loss of access to land by exploring in detail the nuances of these negotiations in connection to the leisure practice of sport hunting. The paper is based on fieldwork in and around the UNESCO Biosphere Reserve in the Shouf Mountains of Lebanon and draws from interviews, participant observation with hunters, biosphere personnel, police, politicians, and Shouf residents. This paper finds that there is great variance among hunters' attitudes about the loss of access to these areas. In particular, this paper is concerned with the variance in how hunters articulate discomfort and willingness to commit infractions by

hunting in the reserve. This varied discomfort and willingness serve as the entry point to explore the multiplicity of interactions between the fact of the reserve and how it is implicated in senses of self, conduct, and territoriality.

Goats and Axes: Making Citizens in Negation in Turkey's Forests

Hande Ozkan (Anthropology, Transylvania University)

The overlaps between the processes of state-formation, nation-building and nature-making in Turkey manifest themselves in the discursive and material demonization of goats and axes by the national scientific forestry discourse. As icons of peasantry, goats and axes were conceptualized by the state not only as symbols of rurality, but also as the epitome of backwardness and under-development. They were also useful tropes of deforestation and desertification within the framework of official scientific forestry and conservation. By employing the conservationist discourse the state attempted to counteract deforestation and desertification by intertwining civilization with verdure, thereby projecting its civilizational schemes onto forest villagers. However as in many nation-state projects, the process of state-making is a dynamic process through which a hegemonic state and nation are produced simultaneously. I argue that this hegemonic scientific discourse of deforestation has also been the domain of subject making in Turkey. The discourse of deforestation, which was at its origins a tool of state-making and discipline, has in time transformed itself into a “weapon of the weak”, creating obedient citizens that can nevertheless use the scientific conservationist discourse to their advantage. The process of economic liberalization post 1980s and the proliferation of civil society initiatives have further reinforced this agentive discourse, thereby blurring the lines between the conservationist state and the destructive peasantry.

Rights for Nature

Ariel Rawson (Geography, Ohio State University)

In the midst of proliferating and fragmented critiques of capitalist and colonial relations (re)produced by Sustainable Development, an emerging regime of Rights of Nature presents itself as an ethical-legal alternative through recognizing the inalienable rights of non-human nature and the concomitant extension of juridical personhood. In the dominant discursive framing of this project, the Ecuadorean Constitution, the Bolivian Law of Mother Earth, and the Universal Declaration for the Rights of Mother Earth, are made the most visible cornerstones in the material development of these ideas. However, I argue this representational packaging obscures the entanglement of relations that extends way beyond those narrative events to include the crystallization (becoming, coming-into-being) of a body of environmental law (known as Earth Jurisprudence or Wild Law), which is at once both novel and deeply riddled with historical continuities from western environmentalism. Moreover, the discursive techniques deployed in the advancement of ‘rights’ for saving both ‘people and planet’ over ‘profit’, crucially leverages the (bio)culturally normative indigenous figure in the rationalization of a socionatural order commensurable with liberal rule. Nonetheless relevant scholarly literature, from postneoliberalism to posthumanism, predominantly emphasizes the emancipatory potentiality of these solutions offered as challenges to the subject-object and human-nature dualism (as well as ethno- and anthropo- centrism). Yet the gap in epistemological analysis created by the normative and ontological focus, presents an opening for specifically problematizing the question of jurisprudence, what is opened and foreclosed by this path? If the goal is to move beyond a modern relation to nature, then why the fundamentally modern idea of rights? In my paper I

show how this glaring contradiction fails to be overcome, despite the paradoxical maneuvers that seemingly generate sensibility through both making nature more like humans with legal personhood and making humans more like nature with the image of the pre-social/non-modern indigenous figure.

2. The Political Ecology of Industrial Waste

Location: Student Center 205

Organizer: Hugh Deaner (Geography, University of Kentucky)

Chair: Hugh Deaner (Geography, University of Kentucky)

Discussant: Sarah A. Moore (Geography, University of Wisconsin - Madison)

The Food Waste Paradox. Plenty, Scarcity and Conflict in West Virginia's Emergency Food System.

Bradley Wilson (Geography, West Virginia University), Joshua Lohnes (Geology, West Virginia University)

Over the past decade the amount of food waste donated through the emergency food system in West Virginia has doubled. While the tremendous growth in food donations flowing through food banks, food pantries, soup kitchens and homeless shelters is touted by Feeding America as a victory for hungry families, we argue that food banks and local assistance agencies have been forced to reconfigure their modes of collection, distribution, auditing and fundraising to conform to this abundance. Paradoxically food donations have strained social and institutional relationships and conflicts have erupted within the existing emergency food networks in West Virginia. In this paper we draw upon key informant interviews, surveys and participant observation to explore the political-economic logics of food waste donations and the role of the state, corporate social responsibility strategies and charitable networks in the disposal of industrial food waste.

“Stop the goddammed waste”: California water transfers and the struggles over ‘wasted’ water

Alida Cantor (Geography, Clark University)

In California, a state with a long history of struggle and contestation over water rights, a key condition of a legitimate water right is that the water is being put to ‘beneficial use.’ ‘Wasting’ water is prohibited by state constitution. But waste is a socially and historically situated concept. When multiple uses of water conflict with one another, who or what defines a ‘wasteful’ use of water, with what consequences? This research considers ‘wasted water’ as a discursive and socio-legal construction as well as a material flow. The research explores the ways in which discourses of waste have been employed to justify the re-allocation and transfer of water - primarily from rural to urban places and uses - and the ways in which certain actors have benefited while others have been marginalized by extension. In this presentation I examine social, legal, and environmental dimensions of water transfers and diversions at three lakes spanning a hundred years of contentious California water politics: Owens Lake, Mono Lake, and the Salton Sea. In particular, I explore the changes over time in how those seeking to justify water transfers have defined certain flows as wasteful, and examine what these changes in the definition of waste in the name of ‘efficiency’ mean for those who rely on these so-called waste flows as resources. By centering concerns of waste, this study critically examines concepts of efficiency and productivity evoked in resource management.

"From Oil Well to Farm" - Industrial Waste, Sick Soil, and the Petrochemical Turn

Adam Romero (Geography, University of California - Berkeley)

This paper traces two stories of agriculture that merge in late autumn of 1944 on a lettuce field in California's Salinas Valley. On that field, two transmuted industrial waste products from California's rudimentary petroleum economy were at once injected into the soil and into agricultural production, spurring a radical transformation of crop rotation and recasting the organizational possibilities of industrial agriculture. Taken together, these two stories tell a tale of capital and chemistry overcoming an ecological contradiction of agroindustrialization. This paper considers an earlier history of petroleum-based agrochemicals - one that is often left untold - situating their development in the interwar years and within the context of California's emerging petroleum complex. It argues that, in the late 1920s, agriculture began its transformation into a new and immensely productive agricultural regime organized around the oil industry and its waste byproducts. The petrochemicals and subterranean chemical warfare that were developed during this time became industrial agriculture's chemical salvation, providing both the soil disinfection power and the soil nutrition that made the massive yield increases in agricultural production following World War II possible. This paper begins an excavation of this earlier history, positioning both the chemicals used in agro-industrialization and the subsoil itself as critical sites of historical inquiry.

Fine crisis: regulation and waste in the Alberta oilsands industry

Hugh Deaner (Geography, University of Kentucky)

This study adds much-needed fieldwork aimed at industrial waste, produced in this case by the oilsands extraction industry in northeast Alberta, Canada. The particular subject is the slurried solids known as 'tailings' which is the waste by-product left-behind after bitumen-bearing oilsands ore is subjected to hot water extraction. Combining interviews and archival study, I locate the state's extensive historical involvement, first to develop technologies that produce tailings, second to control the disposition of tailings into the environment, and third to attempt to remediate the industry's stockpiled profusion of recalcitrant 'mature fine tailings'. This paper locates the depth of state involvement not only in the oversight of industrial waste, but also in waste production as the basis of accumulation.

3. Embodying Conservation Practice

Location: Student Center 211

Organizer: Jairus Rossi (Geography, University of Kentucky)

Chair: Jairus Rossi (Geography, University of Kentucky)

Green Physique: Patagonia and the Discipline of the Environmentalist Body

Adam Henne (Anthropology, University of Wyoming)

What does an environmentalist look like? A recent catalog from outdoor clothing retailer Patagonia©, a pioneer of green business, features a middle-aged surfer returning his beloved board shorts under their lifetime warranty after 15 years of hardcore wear. The accompanying photos show him fit, tan and happy on the beach in his battered but indestructible shorts; the text notes that "his body clearly shows his priorities are in order." In the habitus of environmentalism, the human body plays multiple roles: weapon, billboard, blackboard, target.

Bodies become loci for technologies of environmentalist self-fashioning, forms of ethical subjectivity in which neoliberal logic and romantic discourse tangle, resonate, and reconstitute each other. Body discourse and its technologies of self, in turn, help shape the political rationalities of environmental activism. Commodification of both body and nature, the abstraction and reification of ethics and environmental concern, link environmentalist habitus with the logics of neoliberal governmentality. The environmentalist body contributes in often unexamined ways to the patterns of exclusion that define and constrain contemporary First-World environmentalism. This paper examines snapshots of environmentalist body discourse in, from, around, or about Patagonia; a loose chain linking environmentalisms North and South. I consider the pedagogical aspects and implications of outdoor education and the embodied ethical practice of low-impact outdoor sports; the marketing of sustainable wood products, high-end outdoor gear and alternative consumerism; and the violence practiced on and by activist bodies in local protests against the HidroAysen mega-dams. Each snapshot illustrates a teachable moment, an instance of bodily self-fashioning that materializes the environmentalist discourse connecting Patagonia, “Patagonia,” and Patagonia©. The slippage and transformations that occur along the way highlight the political significance of disciplining the environmentalist body; not a docile body, perhaps, but a body nonetheless articulated with the market.

Embodying conservation in the Nature Connection Movement

Jen DeMoss (Anthropology, University of Georgia)

Over the last few decades, scholars have recognized the growing alienation of North Americans from natural environments (Bickford et al. 2012; Kareiva 2008). People are rapidly migrating to urban areas and human experiences in nature are increasingly rare (Bickford et al. 2012; Miller 2005). Nabhan and St. Antoine (1993:239) write that the lack of contact with flora and fauna is causing “the extinction of experience,” which Adams (2006) relates to a lack of ecological understanding and ecosystem destruction. To address these issues and encourage conservation behavior, members of the Nature Connection Movement (NCM), a 30 year-old international environmental social movement, have designed outdoor programs to immerse child and adult participants in sensory and emotional experiences in local landscapes (Young et al. 2010). NCM mentors use embodied methods, such as imitating animals, feeling, smelling, and tasting edible plants, sensory meditations, and attention to bird calls, among other methods, to teach students how to interact with other species and landscape components. My project is an exploration of the intersections between embodied practices in NCM programs in Athens, GA, and discourse on the role of humans in local landscape. I use participant observation and interviews to ask how participants’ practices, sensory experiences, and broader contexts inform their understandings of normative interactions with species and landscapes. This project relates to recent explorations of embodied experiences in multispecies ethnography (Hayward 2010; Ogden et al. 2013) and critical examinations of ecological knowledge creation and transformation (Ingold 2011; McCarter et al. 2014; Smith 1999; Zarger 2011).

Embodying Discourse through Practice: Restored Ecosystems as Cultural Landscapes

Jairus Rossi (Geography, University of Kentucky)

Restored ecosystems provide unique and stimulating analytical challenges to cultural landscape geographers. In particular, they require geographers to understand how restorationists embody particular ecological theories and normative natures through practice. By analyzing multiple moments in a restoration process, I detail how knowledge- and landscape-making practices are

shaped by 1) participants' direct embodied experience with species in the landscape and 2) the social mediation of embodied experience.

Restorationists' practices are shaped by a multisensory relationship with the plants and other landscape inhabitants. At the same time, participants' interpretations of these embodied cues are shaped by the institutional culture of the restoration group. In this rendering, restoration work challenges strict phenomenological approaches to cultural landscape theory, while situating direct experience as crucial to knowledge-making practices.

In this presentation, I illustrate the particular social, epistemic, and aesthetic conventions volunteer restorationists use to enact their embodied practices. Based on participant observation work with a volunteer restoration project in the US Midwest, I focus on how practices, experiences, and codified knowledge are shaped by a discourse that represents nature as autonomous, unpredictable, and instructive. The restoration group embraces this normative nature as it encourages members to prioritize direct relationship with the landscape and experiential learning.

“Making people love rivers” and “getting to know your watershed”: Embodying Connectedness in Riparian Conservation

Richard Milligan (Geography, University of Georgia)

Over the past two decades, a neoliberal movement for river and watershed conservation has grown rapidly across the United States. This paper examines how such movement in the southeastern state of Georgia has consolidated around efforts to engage grassroots memberships in observation and measurement of riparian environments. A working assumption behind efforts in Georgia to protect watersheds and the rivers they sustain is that people are disconnected from the watersheds in which they live, and that conservation of streams and rivers depends upon first reconnecting them, often through citizen-science monitoring activities, wherein community members are trained and equipped to conduct biological, chemical, and ecological analyses of riparian environments. According to leaders in this conservation movement, the benefits of citizen-science are two-fold. First, the systematic deployment of citizen-science projects provides meaningful data about water quality and environmental problems that can be communicated to state regulators. Second, by participating in an assessment of stream quality, community members are “getting to know” their watersheds, thereby becoming more personally invested in protecting them. The citizen-science model of advocacy assumes not only that practices of scientific assessment will provide greater awareness of the sources and mechanisms of environmental degradation, but also that such contact or connection with streams will cultivate a familiarity, even intimacy, between people and their watersheds. Drawing on several years of participatory ethnographic research, this paper asks how such embodied conservation practices are in fact crucial components in the materialization of neoliberal environments and racialized landscapes. I argue that practices of “making people love rivers” and “getting to know your watershed” do more than simply connect people to watersheds; indeed, these intimate practices amount to powerful biopolitical transformations of the colonial present.

Climate change and social-environmental system governance: collaboration as a mechanism for resilience

Katherine Johnson (Anthropology, University of Maryland College Park)

Climate change impacts pose a significant global problem, but localized effects will differ in scope and magnitude depending upon location and by community. In the United States mid-

Atlantic region, projections for sea-level rise and shoreline erosion drastically exceed those for other coastal locales. Rural communities may be especially vulnerable and planning for coping and adaptation requires the involvement of more-than-local individuals and entities. In one coastal Maryland community, collaborative work is being conducted to set the stage for climate change planning activities to build resilience for marsh and community. This collaborative learning process provides significant space for interactions, participation, and experiences that help to bridge across multiple stakeholder groups and organizational interests. The structuring of social learning across these boundaries to produce effective knowledge sharing and co-creation is difficult. Experience with this project has uncovered problematic mismatches in the scope and emphasis of involvement across our stakeholder network. How can local community members, environmental managers, and academics come together to achieve their own goals as well as produce outcomes supporting resilience for the social-ecological system? How will this resilience-building process alter future environmental governance for this local area? My presentation will focus on diverse understandings gained regarding resilience and its relationship to the interests of collaborative learning participants. The interactions of stakeholders and their ideas about future possibilities help us to better understand resilience as a relational and organic property of the social-ecological system.

4. Mountain Political Ecologies

Location: Student Center 228

Organizers: Shaunna Barnhart (Interdisciplinary Studies, Emory University), Lindsay Skog (Geography, University of Colorado - Boulder)

Chair: Shaunna Barnhart (Interdisciplinary Studies, Emory University)

Discussant: Shaunna Barnhart (Interdisciplinary Studies, Emory University)

Speaking With the Silenced: Unquiet Ecologies in the Appalachian Writings of Denise Giardina

Jordan Lovejoy (English, West Virginia University)

Ecocriticism examines the relationships between human and nonhuman ecosystems and the environment's agency within literature. In her familial novels, *Storming Heaven* and *The Unquiet Earth*, Denise Giardina complicates the assumed divide between Appalachian nature and culture, humans and the environment, by amplifying silenced non/human conversations. The novels explore the intertwining lives and voices of humans and the more than human world in a region where their inseparability is especially prevalent due to the threats of coal mining and mountaintop removal. Giardina's writings attend to these voices by engaging with critical modes - like Marxism and transcorporeality - that speak to the exploitation and silencing of mining communities. Giardina explores Appalachian themes like the disappearing and threatened home as well as the agentive voice of the non/human. By listening to these unquiet moments, I hope to increase the awareness of Appalachian ecosystem destruction to improve the intertwined lives of humans and nonhumans in their fluctuating world.

Emergent Threats to Vulnerable Households from Multiple, Concurrent Development Initiatives: Comparative Research from Ethiopia

Michael Eggen (Geography, University of Wisconsin)

The semiarid highlands of East Tigray, Ethiopia have suffered from recurrent drought, poor agricultural productivity, environmental degradation, and food insecurity for decades. Recently,

a village in these highlands, Abraha wa Atsbaha, was awarded a UN Equator Initiative Prize for its success in environmental rehabilitation and agricultural initiatives at the Rio + 20 UN Conference on Sustainable Development in 2012. This research suggests the apparent success was gained through a destructive combination of hillside closure, grazing controls, microfinance, and food-for-work initiatives. These nominally separate but purportedly synergistic programs are supposed to provide a virtuous pathway out of poverty, however, food-for-work participation was used as leverage by village leadership to coerce microfinance uptake for activities (livestock rearing, beekeeping) which were, for some households, effectively more difficult due to loss of commons access via hillside closure and controlled grazing rules. Benefits of the programs flowed readily to those with greater access to farmland and control of labor, but by contrast, landless and women-headed households were generally left with increased debt obligations for assets they no longer possessed. Comparison is made with another village, Hintalo, where more modest gains were made under similar programs solely under the purview of the Ethiopian government. Evidence suggests the coercive environment in Abraha wa Atsbaha was driven in part by NGO involvement with its metrics- and publicity-driven focus and more capital-intensive orientation.

In the antlers of a trilemma: (re)discovering Andean Sacred Sites

Fausto Sarmiento (Mountain Geography, University of Georgia)

The zoomorphic metaphor of the deer anatomy is used to present the often complex and little-known environmental ethics approach to explain the Andean identity as a coupled environmental system. This is often a result of mystic realism, magic pragmatism that often obscured participation of the local culture of the Andes mountains in (re)defining their Andean self with strong biocultural anchors. Just like the antlers, the trilemma of Andean identity exemplifies the need for a deeper understanding of the stewardship of ecological processes that has been molded to fit geographical and cultural demands of ancestral societies. I review some tenants of traditional ecological knowledge that served as guiding principles to define and implement sacred sites in the region that cherish its heritage landscapes.

By describing the relationship of the triangular representation of cultural identity, associated with the binary concept of the opposite values or Yanantin, and the driver that accentuates spiritual dimension or Masintin, the development of ritualized practices observing natural phenomena creates the wholeness between Andeanity, Andeaness and Andeanitude. By explaining the syncretism observed in contemporary societies of the Andes Mountains, the creation, (re)creation and (pro)creation of harmonious implications between people and the environment are realized. Finally, to determine the extent of the discourse in the sacred narrative of biodiversity conservation, several sites are presented to exemplify the application of the new trend for biocultural heritage as the driver for cultural landscape management and sustainability scenarios in the Andes.

Negotiating the state from above, perspectives from below: Khumbu Sherpa positionings in Nepal's indigenous rights movement

Lindsay Skog (Geography, University of Colorado - Boulder)

Following over twenty years of growing identity-based social movements for democratic reforms leading to democratic elections in Nepal in 2008, the world's last Hindu kingdom became The Federal Democratic Republic of Nepal. Yet, Nepal's democratic transition has been protracted, and at times wrought by violence, as the state struggles with exactly what democracy looks like

in the socially and geographically diverse country. In May 2012, after failing to meet its final deadline to fulfill its charge of drafting a permanent constitution, Nepal's constituent assembly was dismissed and new elections were held in November 2013 to form a second constituent assembly. Among the most contentious issues hindering the constitution writing process since its initiation in 2008 is the specific form of federalism - the division of Nepal into provinces - to be codified in the permanent constitution and the rights to be granted to Nepal's 59 officially-recognized indigenous groups. In this context, and drawing on the support of the global indigenous rights movement, many of Nepal's indigenous nationalities are mobilizing claims of indigeneity in order to secure territory, Access to and control over natural resources, control of development, and access to institutional structures of governance and authority in Nepal's permanent constitution. Yet, Khumbu Sherpas - arguably the most well-known and recognized of Nepal's indigenous groups in the global arena - remain curiously absent from Nepal's identity movements and indigenous mobilizations. At a time when the stakes are so high for Nepal's indigenous peoples, how do we make sense of this silence? In this paper I combine perspectives from cultural politics and political economy, with an emphasis on spatiality, to argue Khumbu Sherpas' positioning vis-à-vis the state and the international community has buffered them from forming the politicized indigenous (adivasi janajati) consciousness spurring other indigenous and marginalized peoples to mobilize.

5. Conceptualizing Local Production in Appalachian Ecologies

Location: Student Center 230

Organizers: Graduate Appalachian Research Community (GARC), University of Kentucky

Chair: Kathryn Engle (Sociology, University of Kentucky)

Discussant: Saakshi Joshi (Anthropology, University of Delhi)

Cultivating Community Economy on Stinking Creek: The Lend-A-Hand Center Grow Appalachia Gardening Program

Kathryn Engle (Sociology, University of Kentucky)

The work of feminist economic geographers Gibson-Graham provide a useful framework for a new language of diverse economy in the Appalachian region exploring the tactics, obstacles, and possibilities of developing community economies. Gibson-Graham provide tools for analyzing the Lend-A-Hand Center Grow Appalachia Gardening Program based in the Stinking Creek watershed of Knox County, Kentucky. The Grow Appalachia program is a privately funded initiative that provides resources and technical assistance for nonprofits in Appalachia (like the Lend-A-Hand Center) to assist with home, community, and institutional (schools, jails, etc.) gardening programs. This project analyzes the Grow Appalachia program through the diverse economies framework considering how the program fosters a variety of class and nonclass processes and has the potential to promote "community economy."

Instruments of Tension: Building Understandings of Local Materials in the Craft of Musical Instruments

Jasper Waugh-Quasebarth (Anthropology, University of Kentucky)

At the crossroads of music and hand craft, musical instrument makers often find themselves situated at the crossroads of two dominant forms of representations of Appalachia. This paper explores another crossroads encountered by instrument crafters in West Virginia, that of international regulations on the movement of endangered species of trees seen as integral to

traditions of instrument craft and the localized habits of consumption and production situated in anti-capitalist and self-sufficient beliefs. By investigating how crafters understand their consumption of locally obtained woods -- both harvested and reclaimed -- as well as international and national regulations regarding import and usage, this paper presents the tension that is built into musical instruments through their politically conditioned material existence.

Community Transitions to Resilience: Berea, Kentucky's Strategies for Localization

John D. Johnson (Sociology, University of Kentucky)

In light of increasing global and national financial instability over the last several decades, and particularly in light of the recession of 2008, many U.S. communities are actively working to make themselves more resilient to economic globalization and the vulnerability they experience related to this economic fragility. This paper is based on ongoing dissertation research examining the lifeworlds of community members taking part in transition efforts, or attempts to transition to greater levels of community resilience. More specifically, the research is a comparative case-study of Berea, Kentucky and Oberlin, Ohio. I am examining the transitions in the communities at large, and also the ongoing collaborative efforts between each college (Oberlin and Berea) and the larger community. Sustainable Berea, the community organization in Berea working on this transition, is a member of the international Transition Town Network. The Oberlin Project is not a member of the Transition Town Network, but is one of 18 global communities in the Clinton Foundation's Climate Positive Development Program, and one of only 3 in the United States. Both communities have set some audacious goals for achieving greater community resilience and localization, particularly related to food, energy and local economies. This paper will focus on Berea's approach to localization and will pose three questions of the data: 1. How do respondents understand their pursuit of resilience and what resilience is? 2. How do community members understand the public and private sectors should respond to threats to resilience? 3. How do respondents understand their path to localization?

Layers of industry, landscapes of violence: Coal seams, prison walls and craft bourbon

Judah Schept (Justice Studies, School of Justice Studies, Eastern Kentucky University)

Along with the Mississippi Delta, West Texas plains and South Central Georgia, Central Appalachia is one of four regions in the United States that has accounted for a disproportionate share of the country's 350 new prisons built since the 1980s. Prison building in rural communities has often been justified through claims to the postindustrial economic development the institutions will bring. Despite the dubious nature of these claims to prison prosperity, neoliberal ideology has effectively naturalized carceral expansion into the political common sense of communities navigating crises of deindustrialization, decline, and devolution. Using photography, visual analysis and perspectives from critical prison studies and carceral geography, this paper looks to three sites representing three stages of the prison in the Central Appalachian landscape - before, during, and after - in order to map a genealogy of uneven development that finds green-washed prison tourism built on top of prisons, themselves built on top of mountain top removal sites and former coal mines. By placing Central Appalachia's prison and coal economies and landscapes into the same visual register and narrative orbit, this paper also considers the kinds of "dialectical images" (Benjamin, 1936) and counter-visual analyses that can denaturalize the structured analytic and visual vantages that produce and insulate notions of prison progress.

6. Infrastructural Visions and the Politics of Urban Design: Creating and Managing Urban Landscapes in the Era of Climate Change, III

Location: Student Center 231

Organizers: Nate Millington (Geography, University of Kentucky), Kenny Stancil (Geography, University of Kentucky)

Chair: Nate Millington (Geography, University of Kentucky)

If you build it, will they come? The political ecology of food deserts and urban agriculture *Gretchen Leigh Sneegas (Human Geography, University of Georgia)*

Within food justice discourse, many activists view urban agriculture as a key tool for combating food insecurity in urban communities by increasing access to fresh fruits and vegetables. This is particularly true in areas known as “food deserts,” where fresh produce is difficult to find due to a paucity of supermarkets or full-service grocery stores. In addition, urban agriculture has been touted as an adaptive strategy for targeting climate change in urban areas that will increase food-producing green spaces in cities, improve urban resilience, and address social justice issues associated with low food access. However, there are risks in viewing urban agriculture as a panacea. I argue that differing values and histories of the diverse communities in which urban agriculture is operationalized can act as subjective limits to its usefulness as a food justice initiative, and as a result also undermine its effectiveness as a climate change adaptive approach. I utilize a political ecology framework to examine urban agriculture as a strategy for addressing both climate change adaptation and issues of food justice. Recent scholarly research has noted that urban agriculture initiatives are not always effective at improving food security or addressing social justice issues. This paper adds to this existing body of literature by bringing these two branches of scholarly study together using the underlying structure of political ecology.

Diffractioning sustainability through Chicago and Melbourne *Julie Cidell (Geography, University of Illinois)*

This paper contributes toward an understanding of how actors in local government conceptualize sustainability and their role in producing it, as well as what difference that understanding makes to their environments now and in the future. In considering the urban response to environmental issues such as climate change and resource availability, the US and Australia are only rarely considered side-by-side, despite their similar physical size, colonial histories, urbanization levels, and automobile dependency. Chicago and Melbourne are prime candidates for such a comparison, both in terms of their similar histories and through their recent desires to be global and highly visible champions of sustainability.

Based on qualitative fieldwork in these two cities, I use Karen Barad’s methodology of diffraction to read these two case studies through each other. Rather than simply making a side-by-side comparison, a diffractive methodology helps us to understand not only what differences exist between these two places, but what effects those differences have on the urban environment. Barad’s agential realism also reminds us that concepts such as “sustainability” or even organizations such as a city’s “Department of the Environment” are not pre-existing, bounded entities, but emerge through what she calls intra-action (as distinguished from interaction). Such an approach avoids the fuzziness of the term “sustainability” by focusing on how sustainability is constructed by the actors involved rather than using pre-given definitions. It

also allows us to consider "how different differences get made, what is excluded, and how those exclusions matter" (Barad 2011).

Governance through indicators of sustainability and eco-labels

Laureen Elgert (Environmental Studies, Worcester Polytechnic Institute)

‘Sustainability Tools for Assessing and Rating Communities’ or ‘STAR Communities’ is a North American-made indicator system that is applied by towns, cities and communities to become certified ‘sustainable’ to varying degrees. The brainchild of ICLEI-US (Local Governments for Sustainability), this program has been adopted by dozens of cities and towns in North America. My research examines: what influenced the development of STAR Communities; how and why the program is mobilized and adopted in different places; how the program becomes transformed by local institutions, ideas, values and norms; and finally, what the implications are for equitable initiatives, policies, and programs. This research will contribute to debates about global environmental governance, particularly through the development of indicator sets and corresponding eco-labels, by improved understanding around how sustainability policy is created in one place, mobilized across space, and transformed by changing context.

Superscribing Sustainability: Urban Political Ecologies of Chinese Landscape Poetry

Jesse Rodenbiker (Geography, University of California-Berkeley)

This paper engages the discursive linkages between nature, culture, aesthetics, and sustainability in urban China by delineating the emergence of shan-shui, (a compound character translatable as ‘mountain-water,’ ‘landscape,’ or ‘nature’ originating in landscape poetry of the 3rd century C.E.) within urban development in contemporary China. Drawing on ethnography, visual, and discourse analysis it illustrates linkages between classical Chinese landscape aesthetics and processes of creating nature in the built environment. The concept of ‘superscription’ provides a conceptual rubric to show how cultural and symbolic elements reformulate in contemporary urban developments as they conjoin with transnational urban design practices. This superscription facilitates multifaceted processes including land-based capital accumulation, the emergence of novel urban forms and neo-classical design in landscape architecture, urban entrepreneurialism, and narration of the nation-state. A discourse of Chinese modernity and futurism emerges amongst elites, urban designers, architects, and state officials as Chinese landscape aesthetics meld with transnational sustainability practices. This paper discusses this discourse and illustrates the aforementioned phenomena through multiple examples of landscape architectural projects and new city development projects in China. It also invokes ethnographic material regarding Tangshan Nanhua Eco-park to highlight the significant cognitive disconnect between the narration of urban space by technocratic producers and the lived experiences of those who consume the space. This exemplifies the transformative flows and blockages of cultural signification, delimiting the scope and tenor of superscription.

Information and infrastructure: mitigating floods and water scarcity in Cali, Colombia

Ashley R. Coles (Geography, Georgia Southern University)

Across Colombia, thousands of homes are destroyed and approximately 1 million people are adversely affected by geological and climatological phenomena every year. Climate change is expected to produce greater precipitation extremes in Colombia, so many entities are preparing to deal with both floods and scarcity. The municipality of Cali is one of the major recipients of

rural-to-urban migrants in southwestern Colombia, so rapid population growth, land use change, and climate change combine to intensify challenges related to water resources and flooding. Many residents live in marginal areas at risk of flooding or with inconsistent access to water as a result of political and economic exclusion, including previous displacement resulting from political, economic, and environmental phenomena. Hence, efforts to reduce vulnerability and support adaptation must take the complex underlying factors into account.

Infrastructural improvements are widely seen as a solution to the challenges of too much or too little water, but decisions potentially involving infrastructure are prone to exclusion on the basis of formal training and expertise. Marginalized residents with little or no formal training therefore navigate a complex terrain of knowledge politics to secure access to water and housing, appropriating infrastructure and other technologies as well as developing informal networks of information exchange. The results of this study demonstrate the need for multidimensional analysis of urban water management issues and the ways in which knowledge politics affect the viability of urban water management strategies.

7. Food and its relation(s) to placemaking: A look at place/identity building through consumption, II

Location: Student Center 249

Organizers: Jessica Breen (Geography, University of Kentucky), Colleen Hiner (Geography, Texas State University)

Chair: Jessica Breen (Geography, University of Kentucky)

'A modern-day farmer:' Food production, discourse, and place-making in Jamaica's breadbasket.

Gary Schnakenberg (Geography, Michigan State University)

The southern portion of Jamaica's St Elizabeth parish is widely referred to as the country's 'breadbasket' due to the large number of small producers of vegetables who take advantage of its favorable climatic conditions and comparative historical absence of large estates. However, effects of economic and cultural globalization have created and/or exacerbated multiple challenges for these farmers. Structural Adjustment Policies (SAPs), a long-running national debt problem, and the current 'free trade' enthusiasm of policymakers in much of the Global North have combined with discourses of efficiency, individualism, modernity, and competition to produce both agricultural subject positions and agricultural landscapes that reflect contemporary neoliberal ideologies. Exhortations by Jamaican government and multilateral development agency officials to leave behind the 'backward practices' of their parents and grandparents are expressed in conjunction with the operations of global political economy in the form of agro-chemical importers, formulators, and distributors to produce food production systems that impoverish many farmers as they create ecological and health problems. Employing fieldwork and drawing upon discourse analysis within a political ecology framework, this paper examines the role of food production in place-making through the decisions and motivations of a variety of actors at multiple scales and their outcomes, as Jamaica's food import bill rises at the same time that locally grown produce is seen as a commodity for either export or corporate supermarket inventories.

The Role Of Farming In Place-Making Processes Of Refugees

Missy Ward-Lambert (Interdisciplinary Studies, Independent Researcher)

This paper explores the ways in which a place-based perspective that emphasizes the interconnectedness of physical environments and social worlds contributes to an understanding of some of the complex ways that refugees integrate into and resist their new environments post-relocation. Qualitative methodology, based on participant observation techniques and in-depth interviews, was employed to examine the agricultural experiences of 30 refugees living in Salt Lake City, Utah. All research participants were recruited through their participation in a local urban farming program for refugees. Seventeen of these individuals - from Burundi, Sudan, Bhutan, the Republic of Congo, Democratic Republic of the Congo, Chad, and Cuba - consented to participation in the in-depth interviewing stage of the project. This paper examines the role of farming activities in the place-making processes of participants, and the ways in which these farming activities represent assimilation and resistance post-transition. Based on research participants' accounts, the paper presents conclusions about the material and emotional benefits of continuing access to agricultural activities for refugees with agrarian backgrounds.

Performing Eden in Community Gardens

Megan Betz (Geography, Indiana University)

Community gardens have been a part of the American effort to become an upstanding, self-regulating citizen for more than 130 years (Bassett 1981). Such projects strive to provide better food for themselves, ultimately interpellating a particular kind of citizen-consumer (Malpass et al. 2007). As discussion of community gardens and other alternative food projects increases, so does a central critique: Are the projects reaching those they aim to serve, or are they serving those who already have access and purchasing power by reinforcing the neoliberal structure of the marketplace they purportedly combat? (Blay-Palmer 2008; Delind 2006; Pudup 2008; Guthman 2011).

Before this critique can be addressed, the subjectivity and performance of community gardens must first be better understood. Jacques Lacan's conceptualization of subjectivity, particularly as discussed by Žižek (2006; 2008), offers a way to unpack the disconnect between individuals' articulated motivations for participating in such projects and what takes place on site. Butler (1990; 1993) and Ettinger (2006) critique Lacanian psychoanalysis and offer a way to challenge subjectivity through performance. This paper first examines the power of the Garden of Eden myth and its persisting form, the pastoral, via several core Lacanian concepts. This paper then argues that these concepts necessitate a research approach focused on performance and intersubjectivity. Finally, this paper concludes that community gardening is currently the performance of a subjectivity that serves to order us in the symbolic and leads to the reproduction of the consumer-citizen; however, this performance also offers a way to reconstruct systems of relations.

Back to the Land: New Agrarians and the Livelihood Ethic in N. California

Ian D. Bailey (Development Sociology, Cornell University)

Re-agrarianization in California occurs at the margins - both figuratively and literally. New farmers start on marginal lands, marginal farming regions, and they operate at the margins of the economy. Their financial existence is based on small profit margins, and the greater they can grow these margins by 'farming economically' the better their chances at survival. The young

farmers movement, I argue, is strongly rooted in what I call a ‘livelihood ethic’. This is similar to Van der Ploeg’s idea of the peasant ethic, but adapted to match the political economic and class make up of new agrarians in California. The livelihood ethic combines entrepreneurial and subsistence impulses. It emphasizes the reproduction of the farm and farm family necessarily above the impulse of capital accumulation and scale expansion. This paper looks at the formation and reproduction of this ethic via agrarian training centers and their networks. It details the histories, practices, and proliferation of these networks, and their role in inculcating and supporting this ethic, so central to the process of re-agrarianization. I draw from ethnographic research of one agrarian network (Living Lands Agrarian Network) in Nevada County, California, to illuminate the ways in which this livelihood ethic transforms both the landscape and cultural practices within this locale.

8. FARMER/ACTIVIST PANEL: Agrarian Questions of Labor in Kentucky

Location: Patterson Office Tower 18th Floor, West End Room

Organizers: Karen Rignall (Agricultural Economics, University of Kentucky), Heather Hayden (University of Kentucky)

Panelists: Stephen Bartlett (Director of Sustainable Agriculture of Louisville (SAL), Coordinator for Education and Advocacy for Agricultural Missions, Inc. (AMI), & founding member of the US Food Sovereignty Alliance (USFSA)), Andre Barbour (Barbour Farms, Hart Co. Kentucky), Laura Peot (Program Coordinator for the Catholic Charities Refugee Agricultural Partnership Program), Community Farm Alliance

Moderator: Garrett Graddy-Lovelace (School of International Service, American University)

In the second panel addressing labor and the agrarian question, activists and farmers consider questions of labor in Kentucky agriculture. Movements towards food system localization, food security, environmental protection and farm land access converge to produce a dynamic justice landscape that questions: Who is able to farm, Where, How and For What purpose? We will hear about efforts to transition Eastern Kentuckians from mining jobs by returning to their agricultural heritage, the experience of immigrant workers in reclaiming access to land, the experience of African-American, multi-generational farm families and we will hear about local and national efforts to organize around farm labor rights. The challenges facing both conventional and alternative agriculture in Kentucky are a mirror into contemporary questions of rural labor in the US and beyond.

DOPE 2015: FRIDAY, FEBRUARY 27TH

Light snacks available in the foyer of Memorial Hall from 4:30pm – 5:30pm.

PLENARY PANEL

5:30pm – 7:00pm

Memorial Hall

“Governing Nature”

Since its inception over 30 years ago, political ecologists have been concerned with the various ways nature has been governed. Questions about the various classification and management processes and practices that are used to foster specific relationships with different environments and the successes and failures of each has been at the forefront of the field. With this panel, we hope to push ideas of governance, conservation, and the management of nature to consider the various material and embodied modes of being that are cultivated and neglected by institutional and government interventions. Whether by examining toxic waste, honeybees, or modern zoos, each of the scholars bring together innovative research agendas by examining different human and nonhuman relationships and the messiness that emerges from attempts to govern, oversee, and predict changing ecologies. Throughout the discussion, the scholars will discuss different intellectual and methodological challenges, while also addressing some of the common and divergent governing logics that their work focuses on and how their work may connect to broader political struggles. Foundational to this panel is not only accounting for different arenas of governance, but also the role of nonhumans as they oftentimes debunk, cast off, and challenge any attempts to be managed.

Moderator:

Laura Ogden (Anthropology, Dartmouth College)

Panelists:

Irus Braverman (Law & Geography, University of Buffalo)

Jake Kosek (Geography, University of California - Berkeley)

Shiloh Krupar (Culture & Politics Program, Georgetown University)

Opening Reception:

University of Kentucky Boone Center

500 Rose Street

7:00pm – 11:00pm

Appetizers provided. Cash bar.

DOPE 2015: SATURDAY, FEBRUARY 28TH

Light breakfast available in the foyer outside Student Center 230 from 7:45am – 10:30am.

SATURDAY SESSION BLOCK #1:

8:30am – 10:10am

Sessions 1-6 in this block are located in the Student Center. Session 7 is located in Patterson Office Tower.

1. Code/Nature and the Political Ecologies of Technology, I

Location: Student Center 111

Organizers: Daniel Cockayne (Geography, University of Kentucky), Eric Nost (Geography, University of Wisconsin-Madison)

Chair: Eric Nost (Geography, University of Wisconsin-Madison)

Planetary politics: The Anthropocene, geoengineering, and the subsumption of the biosphere

Kevin Surprise (Geography, Clark University)

This paper argues that the Anthropocene - the term used to signify that humanity has become the primary actor within the earth system - can be conceptualized as the formal subsumption of the biosphere to capital, and the potential for geoengineering understood as the real subsumption of the biosphere. I work up to this argument by exploring the idea of subsumption as it has been employed in Marx's work, as well as that of Antonio Negri, and Neil Smith, particularly focusing on Smith's "production of nature" (2008) and "nature as an accumulation strategy" (2007) theses. I seek to both critique and extend Smith's formulation of the subsumption of nature. Through examining recent developments in market-driven environmental policy, the deeper melding of global environmental governance and Earth System Science, and new planetary-scale discourses such as planetary boundaries and Earth System Governance, I argue that the biosphere - the conditions of possibility for life - has been formally subsumed. Certain physical/biospheric limits have been reached that now require intentional, techno-scientific management to regulate their continued functioning. Thus, the increasingly realistic (Burns and Strauss 2013) prospect of geoengineering - large-scale, intentional interventions into the earth system intended to regulate the earth's surface temperature and counteract climate change - can be usefully considered the real subsumption of the biosphere, as this potential manipulation of biospheric processes would render the biosphere more productive, and circumvent limits that would impede capital accumulation.

Reactionary Ecologies: Chemistry and the Productive Forces

Matt Huber (Geography, Syracuse University)

Standard Marxist theorizations of technology, the productive forces, and the labor process tend to emphasize machinery and the propulsive force of motive powers (e.g., from the conveyor belt to the internal combustion engine) or the living muscle/brains/nerves of human labor power. This paper considers the "power" of chemical reactions in industrial processes as a core (but

undertheorized) element in the metabolism of industrial societies. Chemical reactions not only result in their desired “products”, but also unwanted waste products that often become what we call “pollution.” The requirements for immense amounts of heat and pressure for many kinds of chemical production does not reflect the requirements for these reactions in “nature”, but rather the capitalist and industrial requirements to achieve reactions in short periods of time; or, what Labban (2014: 567) recently called, albeit in a different context, “the annihilation of time by heat.” In considering this kind of labor process that actually requires very little living labor, I develop the concept of “socially necessary reaction time” to examine the strategies industrial capitalist firms deploy to speed up reaction times and the ecological consequences in relation to resource/energy consumption and waste production. As a case study, I examine ammonia synthesis (or the famous “Haber-Bosch Process”). Its “reactants” of nitrogen and hydrogen reveal a stark contrast - natural gas is its primary source of hydrogen and, it being a commodity, comprises 80% of the industry’s cost structure. For nitrogen, it depends upon the “commons” of the air as a “free gift” (78% of the atmosphere contains nitrogen). Getting these two “reactants” to bond in short periods of time to create ammonia (NH₃) requires immense amounts of heat and pressure. Moreover, the vast carbon dioxide emissions of the industry are the result of not only burning hydrocarbons for fuel, but more importantly “process-based” emissions from the chemical reactions themselves. I conclude by suggesting political ecology needs to pay more attention to industrial geographies in general.

The contingencies of control: parasitic information in a smart electric grid

Heather Rosenfeld (Geography, University of Wisconsin - Madison)

With the installation of digital meters, automatic switches and sensors, and other information technologies, the electric grid is becoming “smarter.” Bureaucratic and institutional descriptions of these smart grids emphasize their ability to monitor environments, to manage electricity flows, and to anticipate and automatically “heal” outages. Such descriptions situate smart grids in discourses of a control society (Deleuze 1992) and they are often accused in popular discussions of being an Orwellian Big Brother. In this paper, I use a case study to examine the labor of installing two smart grid technologies and controversies over a third. I find that, while these accusations are somewhat justified, control is more limited and contingent. I elaborate this alternate story with the work of Michel Serres (1982), who associates information not with control and order but with noise and disorder, and thus argues that information is parasitic. Following Serres, when smart grids produce information, they produce many possible messages rather than an inevitable relation of control. Indeed, with the rise of smart grid technologies, the utility was faced with considerable noise, or informational parasites. This noise was produced by technical requirements and constraints, the historical (socio-ecological) landscape, lineworkers’ tacit and experiential knowledge, and multiscalar political debates. Rather than these technologies providing control over citizens, data, and environments, the utility often adopted the position of an accommodating host to noise. When control was even possible, it was partial, tenuous, and sometimes abandoned.

How could people oppose renewable energy? Reframing siting conflicts as “quests for confidence”

Wes Eaton (Sociology, Michigan State University)

Conflict over large renewable energy technologies (RETs) has been studied largely from three perspectives: as inevitable conflicts stemming from a plurality of values, as failed attempts to

achieve social acceptability, and, from the perspective of political sociology, as efforts by interested actors to “naturalize” potentially destructive environmental practices. While these perspectives have been productive, each explains conflict in terms of differences between groups of people, overlooking the way the situation of public disputes shapes the behavior of people involved in the dispute. Rather than casting siting conflicts as matters of group differences, this paper draws on Luc Boltanski and Laurent Thevenot’s sociology of engagement, which instead emphasizes dynamics common to all public disputes: when challenged, actors are required to justify their claims and stances, and they do so by referring not to an infinite number of values, but a limited set of common higher principles in the effort to truncate debate. The justification process draws attention to how claims must be justified under conditions of non-violent disagreement in order for actors whose “eyes are open” (doubt) to “close” them (trust). In this way, we can see how conflict opens and closes around appeals to higher goods, and shifts through phases of trust and doubt. This paper develops this approach with a case study of conflict over a proposed biomass gasification facility in a northern Michigan community. Findings suggest that conflict over RETs are less inevitable or immutable conflicts than they are fluid tests of reality involving humans, non-humans, and common notions of social goods.

The Role of ICTs in the Urbanization of Nature

Dillon Mahmoudi (Urban Studies, Portland State University), Anthony Levenda (Urban Studies, Portland State University), Gerry Sussman (Urban Studies, Portland State University)

Digital technologies are reshaping our the world through qualitative changes in information and communication technologies (ICT). Communication-focused scholars have addressed the form, function and value of labor on new digital platforms (Fuchs 2010, Qiu et al 2014). Geography and planning scholars have addressed the restructuring of urban spaces that coincide with diffusion of digital technologies under cultural-cognitive capitalism (CCC) (Scott 2013, Meagher 2013, and Wyly 2014). Despite expansive work on various digital forms of value production, scholars have not fully explored the critical issue of the materiality and spatial ordering that accompany new forms of value production. Without such an understanding, we are left with a partial understanding of the dialectic relationship between between digital technologies the material ordering of space. Building on previous scholars’ work examining the interrelationships between alienation, subjectivity, labor, production, value, and ICT infrastructures, this paper contributes a fresh perspective on the materiality of ICT through investigation of energy consumption and design of server farms in Oregon. This paper asserts that the material form of technology under CCC takes a dual form: one of miniaturization of micro-circuits resulting in the diffusion and ubiquitization of digital processors; and one of large macro-circuit backbone of infrastructure for growing number of digital processors to communicate. More broadly, we argue that the geographies of ICT infrastructure enact and embed larger circulations of capital, labor, and knowledge through binaries of micro/macro, nature/culture, urban/rural, etc. By creating material “others,” capital is able to exploit “underused” lands in rural Oregon for ICT infrastructure. However, these infrastructures are reflective of the “urbanization of nature” (Smith 1985, Syngedouw & Kaika 2000) placing increasing importance on cities under a "third-wave of urbanization" (Scott 2014). Under these regimes, the logics of capitalist motives, accumulation and profit diffuse to all aspects of life and space. At the same time, capital alienates, exploits, and relies on these relationships of domination, for its very sustenance.

2. Transboundary Collaboration, I

Location: Student Center 205

Organizer: Julie E. Watson (Geography, Oregon State University)

Chair: Julie E. Watson (Geography, Oregon State University)

Beyond Cooperation: Achieving Environmental Justice in Transboundary Water Management

Julie E. Watson (Geography, Oregon State University)

People tend to cooperate over transboundary water resources. We know this from Wolf, Yoffe, and Giordano's (2003) transformative Basins At Risk (BAR) approach, measuring conflict and cooperation in international river basins by categorizing events on a scale from most conflictive (e.g. war or extensive casualties) to most cooperative (voluntary unification). However, a basin can exhibit impressive levels of international cooperation, yet have tremendous environmental injustice toward populations (e.g. indigenous groups, women) within the basin.

Furthermore, while institutions like treaties are key to cooperative (i.e. less violent) basins, they may also solidify and reinforce existing power imbalances and injustices (Zeitoun & Mirumachi, 2008). As such, an ethical question arises: What is the proper role of institutions (treaties, RBOs) in environmental justice? Practically, how can managers, policymakers, and facilitators understand and respond to structural violence related to natural resource policy and management decisions?

This dissertation bridges the gap between pragmatism and social idealism, between real-world politics and the charge to create a more just world. I developed an Integrated Basins At Risk (iBAR) scale of environmental justice in transboundary basins, which draws from Wolf's (2008) work on water and spirituality, Maslow's Hierarchy of Needs, Eastern spiritual traditions, and the Universal Declaration of Human Rights. Applying constructivist Political Ecology theory, I developed a hybrid quantitative-qualitative method including grey literature, interviews, and institutional evaluation. I applied these methods to assess environmental justice in the Mekong River Basin. Deliverables include Environmental Justice timelines and educational/facilitation tools to foster more ethical dialogue about shared water resources.

Tibetan Youth Congress in India

Sneha Thapa (Anthropology, University of Kentucky)

This paper will attempt to understand one of the thousands of exile Tibetan nationalist organization, the Tibetan Youth Congress. Tibetan refugees have been living outside of their country of origin since 1959, and since then, have increasingly gained momentum in voicing their political and human rights to the international community. The objective of this paper is to examine the foundation of Tibetan Youth Congress (TYC) in India. A Tibetan refugee in India established the organization in the 1970 as a grass-root NGO. Today, TYC is one of the largest Tibetan nationalist organizations with 87 regional branches in 12 countries. I will look at the reasons for the rise of an exile nationalist movement, like the TYC, using Olzak's competition, dependency and diffusion theory. Thereafter, I will analyze the techniques applied by the TYC to analyze their high rate of participation, in terms of membership and socio-economic support for the events organized by TYC. The paper will argue that it is the consensus framework for "Free Tibet" that leads to blind participation by the people. Moreover, despite TYC's opposite stance from exile Tibetan leaders, they have used a form of frame bridging to settle down the possible

decline in the popularity of TYC. Finally, I will argue that TYC should be aligned with the theoretical category of “New Social Movement”.

Knowledge Construction, Power, and Environmental Degradation in the Coalfields of Southwest Virginia

Julie A. Shepherd-Powell (Anthropology, University of Kentucky)

This paper examines the role of power in knowledge construction and neoliberal subject-making of individuals in a community affected by environmental degradation caused by natural resource extraction. Based on 18 months of fieldwork in the coalfields of Southwest Virginia, this paper explores how local and regional politicians advocate for and support the coal industry (despite its dwindling role in the local economy) to the continued marginalization of people all along the spectrum of the debate over surface mining. Following the works of Amita Baviskar (2003) and Conrad Kottak (1999), this research recognizes that natural resources and their meanings are not predetermined, but rather are cultural products; and further that clashes between ethno-ecological knowledge and developmentalism are constructed by different stakeholders (some who hold significant political power). This knowledge construction can provide important insight into the different (and sometimes contradictory) ways that local residents situate themselves vis-à-vis the physical environment. I further suggest that collaborations that take place between community members, environmental activists outside the region, environmental lawyers, as well as academics creates a space for local environmental activists to find authority in their arguments against surface mining. Sometimes this validity is found in specific language that local residents adopt to stand up to industry, and other times it is academic studies (such as those exploring the negative health consequences of living in close proximity to surface mine sites mining) that can be employed in settings such as governmental permit hearings to challenge dominant pro-industry discourses.

3. When Species Invade: Towards a Political Invasion Ecology, I

Location: Student Center 211

Organizers: Matthew Rosenblum (Geography, University of Kentucky), Laura A. Ogden (Anthropology, Dartmouth College)

Chair: Matthew Rosenblum (Geography, University of Kentucky)

Discussant: Paul Robbins (Nelson Institute for Environmental Studies, University of Wisconsin - Madison)

Nuisance: The Spatial Biopolitics of Resident Canada Goose Management

Gwendolin McCrea (Geography, University of Minnesota)

Recent work in political ecology has begun exploring the concept of territory, leading to fruitful conceptualizations of relational territory as an object of study rather than background. But there are tensions between “territory” and “territoriality” as used in political geography and their counterparts in ecology — tensions that political ecology would do well to examine. Both political territory and ecological territory are spatially mediated relations of power. Yet ecological territory — animal territory in particular — is temporal, often seasonal, and always reliant on corporeal strategies of boundary making. Political territory, while also an iterative relation, is instead comparatively fixed and reliant on technologies of surveillance and governance. This paper, based on ongoing research in urban ecology management, suggests that spatial conflicts between humans and non-humans can be understood as a manifestation of these

distinctions. Its focus is the territorial biopolitics of the management of over-abundant “nuisance” species. Non-migrating populations of Canada geese now live year-round in the case-study region, eating soft vegetation, intimidating other creatures, and contributing to fecal coliform contamination of surface water. Many Canada geese still pass through during seasonal migrations, but the resident geese stay put - destructive and out-of-place. Local natural resource management responses to “nuisance” animals consist of a stepped method that encourages tolerance, but then escalates through exclusion and harassment to end with removal (a word which is both literal and also a euphemism for lethal methods). These management steps are not only eminently territorial in reaction to the refusal of geese to follow human spatial priorities, they are also increasingly violent. As part of a larger project that seeks to re-territorialize animal subjectivity and push the limits of more-than-human agency, this paper explores the ways in which the tolerance-to-removal strategy follows the contours of a de-subjectification of animals from co-inhabitants, co-producers, and even co-governors of urban space to pests, gradually displacing them while rendering them more and more killable.

Disaster for Whom?: The Politics of Security and Invasion in Urban Stream Restoration
Jennifer Mocos (Community Research & Action, Vanderbilt University)

Many urban stream restoration projects involve the “eradication” of invasive plant species. The scientific and media discourses surrounding these non-native plants are often framed through articulations of disaster, for example through reductions in biodiversity, crowding out native species, and impaired ecosystem functioning. Thus, invasive plant species are constructed as agents of biological disasters that threaten the security of healthy environments and native organisms. These discourses are both material and social in their construction and in their effects. In this paper, I analyze the specific actions and interests that are engendered by framing restoration work through articulations of disaster. I focus on the multiple discursive constructions of *Arundo donax*, a large bamboo-like plant classified as an invasive species by the California Invasive Plant Council. *Arundo* removal is featured prominently in an extensive restoration project underway in the Ventura River watershed in Southern California. By drawing upon interviews with environmental workers and volunteers as well as ethnographic observation during restoration activities, I illustrate how the deployment of disaster operates as a framing device that legitimates the restoration project by naturalizing particular nonhuman entities as dangerous threats and illegitimate inhabitants of the space. I show how these discourses become superimposed onto people who also live within the floodplain, enabling their dehumanization and displacement. Perspective and power play an integral role in defining what counts as a disaster and for whom. Essentializing definitions of disaster may inadvertently reproduce and legitimate less visible forms of marginalization and violence through attempts at their solution or restoration.

Circulating bugs, circulating capital: spatializing the ontological politics of eradication
Jennifer Sedell (Geography, University of California - Davis)

Controversies over invasive insects that threaten agriculture but are harbored and treated in urban areas have opened the “black box” (Latour, 1987) of the science and regulation of insect eradication. Entomologists aligned with anti-pesticide coalitions have raised concern over the “eradication paradigm” (Carey, 2008), the practice and policy of reducing target insect populations to zero within a given range before trade as normal can resume in and out of the infested area. The eradication paradigm depends on the establishment of spatialized present and

future ontologies informed by shifting practices and thresholds. Can and will an insect exist in certain spaces? How, where, and by whom must insects be found in order to officially exist? How, where, by whom, and for how long do they need to not be found to be proven absent? These scientific practices maintain the circulation of capital: for agricultural commodities to move, insects must exist and be made to not exist in ways that are legible to international trade partners. Woolgar & Lezaun (2013) posit that the “politics” of “ontological politics” refers not only to the many possible becomings (Pickering, 2008) and versions (Mol, 1998) of any object, but to the struggle between many actors to establish their version of an object as the singular reality. With the “value of American agriculture” (APHIS, 2013) on the line, competing ontologies of invasive insects become political in the more conventional sense as well. This paper explores these conflicts through the controversy over light brown apple moth in California.

Posthumanism, Animal Liberation, and Invasiveness: Some Entanglements in The Open
Jonathan McConnell (Philosophy/Literature, Purdue University)

Within several years of each other (1997 & 2002), both Jacques Derrida and Giorgio Agamben produced texts that problematize, and yet take seriously, Martin Heidegger’s 1929-1930 lecture course and his famous pronouncement that “the stone is worldless [weltlos]; the animal is poor in world [weltarm]; man is world-forming [weltbildend].” Donna Haraway’s *When Species Meet* (2008) adds to this “discourse of species” (in Cary Wolfe’s vocabulary) to show how “the open” - the contact zone - is a place of messy entanglements of beings, rather than reflecting Heidegger’s facile rubric.

Within these messy entanglements, or perhaps at their unbridgeable aporia, we find the conflicting worldviews of animal liberation and ecology that lie at the heart of the “invasive species” problematic. If the rhetoric of invasiveness denies rights to organisms based on their introduction by human actions, but the goals of animal liberation ethics is to flatten the ontological distinction between humans and other species, then the questions we must ask are not simply about whether the individual, the species, or the environment delineates the primary axis of ethical commitments. The question becomes what exactly the human is, in that it can be the vector of invasion but not itself the object of invasion rhetoric.

This paper proposes to examine the depths of “the open” as conceptualized from Heidegger through deconstructive and posthumanist theory in an attempt to show how the discourse of invasiveness reveals the failures of the kind of subjectivity handed down by Humanism, unveiling the irony that the very ecological paradigm that denies life to species based their being invasive depends on a kind of human subjectivity that has been instrumental to the wide-scale environmental degradation of the Earth itself.

4. Tasting Ecologies: breaking binaries of human/environment and producer/consumer with taste, I

Location: Student Center 228

Organizers: Emma McDonell (Anthropology, Indiana University), Lillian Brown (Anthropology, Indiana University)

Chair: Emma McDonell (Anthropology, Indiana University)

Discussant: Richard Wilk (Anthropology, Indiana University)

Tasting the Farm at the Table: Farm-to-Table Restaurant Sourcing and the Construction of Geographic Imaginaries

Rachel Boothby (Geography, University of Wisconsin)

Allison and Jessica Hayes-Conroy have laid the conceptual foundations for a “visceral politics” that can connect “the links between the materialities of food and ideologies of food and eating” (Hayes-Conroy and Hayes-Conroy, 2008). This paper takes up the Conroys’ charge to read a visceral politics of food in the construction of what I call farm-to-table imaginaries at restaurants serving locally produced food sourced directly from farmers. Though scholars have laid the groundwork for a discussion of the role of restaurants in contemporary local food movements, my research puts the world of farm-to-table restaurant sourcing and the production and consumption of local food at its center. I explore the ways that both farmers and chefs participate in the construction of farm-to-table imaginaries through the mobilization of food itself as a medium transmitting particular ideas about “local” (and “good”) food and the making of particular kinds of eating subjects. Through taste in particular, “farm-to-table” restaurants aim to shape consumer expectations and growers’ practices alike, in turn reshaping local food landscapes in interesting ways that have potential for shifting both popular ideas about food and the socio-ecological relations of its production. However, these same farm-to-table imaginaries risk blinding those involved to the classed dimensions of the imaginary and the unintended ways it has contributed to a growing bifurcation in the food system between small, local, artisanal and large, global, industrial production and the respective eaters of each.

Labor in the Global South and Third-Party Shrimp Certification Schemes

Katie Rainwater (Development Studies, Cornell University)

Consumption of shrimp in the Global North has skyrocketed in tandem with the conversion of paddy land and mangrove forest to shrimp ponds in the Global South. Consumer tastes in the Global North dictate the specifications according to which shrimp is produced. Buyers in the Global North also exert influence over shrimp farming and production processes in the Global South by purchasing shrimp certified by third-party organizations that establish standards for aquaculture facilities regarding environmental and social responsibility, animal welfare, food safety and traceability.

Third-party certification schemes initially developed in response to consumer concern over the safety and sustainability of shrimp produced in the Global South. Labor advocates have long charged that the schemes neglect consideration of labor welfare. This omission is increasingly conspicuous following recent allegations of forced labor in Bangladesh and Thailand's shrimp value chains. Consumers are increasingly wary that, in the words of a recent magazine article, “a slave processed the shrimp in [their] scampi”.

This paper considers how third-party certification schemes attempt to mediate the relationship between consumers in the Global North and labor in the Global South. First, I examine the origins of third-party certification schemes for the shrimp value chain. Second, I discuss the extent to which these schemes exhibit a concern for labor standards. Third, I indicate how the schemes may be changing in response to recent allegations of forced labor in the shrimp processing sector. Finally, I discuss to what extent the schemes are likely to have a real impact on shaping labor conditions.

How to translate and develop a coffee culture in China

ChingLin Pang (Anthropology, University of Antwerp)

Since the ‘Latte Revolution’ (Ponte 2008) from the 1990s onwards coffee production has taken off in China, producing a superior coffee bean, mostly destined for the export (Pang 2014). Not only in production but also in consumption, a veritable coffee craze has emerged (Venkatraman & Nelson 2008; Henningsen 2012), related to the aspirational lifestyle of China’s young(est) generation, labeled as China’s new petite bourgeoisie (xiaozi) (Yu 2014). In this paper I will investigate how producers-international as domestic coffee manufacturing companies-, cultural intermediaries and consumers have the capacity to shape and shift coffee tastes in China, with a particular focus on a burgeoning female neotribe of ‘coffee converts’ in Kunming. The analysis is based on interviews visits to coffee plantations in Pu-Er and Menglian and coffee houses in Kunming, (in January and July 2014) along with literature study, mostly elaboration on coffee consumers in Starbucks in the larger cities of Beijing and Shanghai and the grey literature on coffee as global commodity.

“Meat tastes like murder”: political ecologies of taste in vegetarianism advocacy

Harvey Neo (Geography, National University of Singapore)

Although not immediately apparent nor widely acknowledged, the question of taste is central to vegetarianism and vegetarianism advocacy. Taste (broadly defined) figures, to varying degrees, in the three main lines of inquiry in vegetarian advocacy research. First, why is vegetarianism considered ethical consumption? Second, under what socio-spatial conditions do consumers choose to consume (or not consume) meat and third, to what ends do consumers hope to achieve by (not) consuming meat. Through a series of in-depth interviews with vegetarians (both advocates and non-advocates) in Taiwan, I explore how knowledge and perceptions of tastes in/for meat and meat substitutes complicate vegetarianism advocacy. I show that tastes are variously self-referential, subjective, contradictory and, most importantly, discursively constructed by advocates to political ends. Nonetheless, asserting an expansive and ethical notion of taste remains a key strategy for vegetarianism advocates, even if such a notion is challenging to articulate.

Taste of the Sea

Lillian Brown (Anthropology, Indiana University)

Eating certain foods can provoke powerful memories and emotional affect in the eater. These moments of profound nostalgia are triggered by a particular taste, but also draw forth a myriad of other sensory memories. For the authors, eating crab reminds each of us of a coastal town, one in Oregon and Maryland. Our memories of merroir, or the taste of place in seafood, are rife with sights, sounds, and smells from these two towns. Though our memories take us to two different

places, the taste of crab is nostalgic for both of us. We argue that our respective tastes for crab are significant beyond our individual memories - these embodied sensual experiences actually drive consumer practices. They signify semiosis in consumer decision-making where nostalgia and the senses play an important role in food choice and the construction of cultural tastes. Our approach has broader implications for the study of commodity circulation, links between consumptions and production in the supply-chain, and the relationship between seafood consumerism and fisheries sustainability. We know that some kinds of seafood are more popular than others, and that these more popular species tend to be overfished. We also know that distance between consumers and fisheries increases risk for unsustainable seafood production. The big questions we will explore in this paper are what drives consumer markets for certain species, particularly crab, and what mechanisms allow consumers to dislocate and relocate their tastes from places of production to places of consumption for these species.

5. Pipes + Wires: Green Infrastructure and Urban Metabolism

Location: Student Center 231

Organizer: UK Political Ecology Working Group

Chair: Eric Huntley (Geography, University of Kentucky)

Assembling the "Green Machine": green infrastructure and discourses of urban political ecology

Richard Kruger (Geography, Rutgers University)

The contributions of green infrastructure towards producing a sustainable city lie not just in its material enactment but in its discursive formation. In this paper I examine "Green City, Clean Waters", a 25-year storm-water maintenance program recently enacted within the city of Philadelphia. This radically ambitious green infrastructure project will "green" over 9,000 acres of the urban environment towards the goal of absorbing the first inch of rain water during precipitation events as opposed to building extensive new "grey" infrastructure, such as pipes, tunnels, and sewers. The project has been enthusiastically received by city, state, and federal officials and is being touted as a "game-changer" among environmental policy-makers. The language used by project planners envisions the project as an essential component towards making the city function as a "green machine". Using discourse analysis, I argue that the program, its planning literature, and the green infrastructures themselves generate a situated urban political ecological discourse that articulates a new relationship between the city, its infrastructure, and the urban watershed.

Stormwater Management: Inlets and Street-Sweeping in Philadelphia

Robert McDermott (Geography & Urban Studies, Temple University)

The goal of this project is to use ArcGIS to create a model for identifying specific sewer inlets for additional cleaning based on their susceptibility to accumulate litter and discharge the waste into Philadelphia's Watershed. In addition to the inlet site suitability analysis, this study recommends several 1 mile service area street-sweeping routes near areas of high litter concentration in order to prevent litter from entering nearby inlets. The purpose of the recommended street sweeping routes is to further prevent non-floatable materials - which often bypass the inlets trapping system- from entering the watershed by addressing the litter at its source.

Planning for Capital: Nelson Rockefeller and the Financialization of New York State Infrastructure, 1959-1973

Eric Peterson (Architectural History, Yale University)

Today's metropolitan landscapes are managed by infrastructure that span across the jurisdictions of countless governmental boundaries and bodies, privatized agencies, as well as public authorities who often manage the distribution of resources like water through highly specific financial mechanisms such as municipal bond markets. How do financial and institutional arrangements structure infrastructure and the potentials for shaping political ecology on a metropolitan scale? This paper will look at one case study in the administration of New York State Governor Nelson Rockefeller, who during his fourteen year tenure sought to radically reshape state governance to address a host of challenges, primary among them environmental degradation and the "urban crisis" affecting the state's cities throughout the 1960s and 1970s. To address these issues, Rockefeller, a liberal, big-government Republican, utilized public authorities with vast powers as a means of planning for development on a metropolitan-scale, working on projects to detoxify watersheds and alleviate stratification by building low-income housing in the suburbs and middle-income housing in inner-cities. In order to fund these varied and increasingly costly efforts, Rockefeller financed state authorities by expanding their access to municipal bond markets. He set a precedence in this regard for similar efforts in states across the country, but left an ironic legacy that ultimately restricted infrastructure development through what could be financed through highly-volatile private credit markets. This case study will begin to suggest ways of understanding the history of the financialization of infrastructure and its role in shaping the possibilities for public action.

Visions of Modernity, Contradictions of Development: The metabolic production of risk in a Vietnamese "new urban zone"

Jacob Weger (Anthropology, University of Georgia)

As the most important economic hub in Vietnam, Ho Chi Minh City is at the forefront of the country's modernization and development efforts, with "new urban zones" such as Thu Thiem representing the cutting edge of its modernist aspirations. Following the economic reforms of doi moi, Vietnam has become swept up in the global expansion of capital, a process that has directly influenced the rapid industrialization and urbanization of Ho Chi Minh City. But this process has been highly uneven, producing new socio-natural forms that increasingly link socio-economic inequality to environmental degradation and risk. In recent years, the city has taken steps toward the development of a new central business and residential district, the ambitiously designed Thu Thiem New Urban Area. Bolstered by ideologies of modernization, progress, and "urban civilization," and a discourse of environmental sustainability and "harmony with nature," it stands to increase socio-natural unevenness through the displacement of thousands of people to more at-risk environments. In this paper, I lay out the beginnings of a study of the Thu Thiem development project informed by an Urban Political Ecology framework. This perspective sheds light on the political-economic, symbolic, and discursive processes that together contribute to the production of urban spaces, as well as highlighting the role that nature plays in mediating experiences of power and inequality. As such, it has much to offer to analyses of environmental injustice, and can help to illuminate opportunities and practices of creative resistance and more inclusive forms of urban environmental governance.

6. Agriculture and the Colonial Present, I

Location: Student Center 249

Organizers: Levi Van Sant (Geography/Integrative Conservation, University of Georgia), Emma Gaalaas Mullaney (Geography & Women's Studies, Pennsylvania State University)

Chair: Levi Van Sant (Geography/Integrative Conservation, University of Georgia)

Discussant: Garrett Grady-Lovelace (Geography/Political Ecology/Agricultural Policy, American University School of International Service)

Lessons from Ndee Bikiyaa, the People's Farm: The Healing Potential of Food Sovereignty in White Mountain Apache Territory

Amanda Hilton (Anthropology, University of Arizona, Bureau of Applied Research in Anthropology)

This research explores the possible avenues presented by White Mountain Apache food sovereignty farmer-activists for indigenous self-determination and queries how practicing agriculture might effect meaningful social change. This paper draws on findings from collaborative community-based participatory research (e.g. Austin 2004) with Ndee Bikiyaa (The People's Farm) of the White Mountain Apache Tribe in Arizona to ask: Situated within a particular colonial legacy and political present, what role might the revitalization of “traditional” foodways, like agriculture, play in shaping food sovereignty on White Mountain Apache lands? Ndee Bikiyaa’s mission is to restore personal and cultural health among the White Mountain Apache through agriculture. In this mission statement, the everyday practice of agriculture contains the seeds for healing not only individuals, but an entire community. Ndee Bikiyaa farmers cultivate crops and community amidst rising concerns about public health, especially diabetes and food insecurity, social issues like unemployment and domestic violence, and loss of traditional lifestyles and knowledge. These present-day White Mountain Apache struggles link directly with the colonial violence endured by many American Indian peoples (e.g. Goodwin and Basso 1971). In order to imagine and enact food sovereignty, White Mountain Apache farmers embrace a “decolonized” agriculture (Shah 2014) and plant crops that were familiar to their great-grandparents (Buskirk 1986). Drawing on ethnographic data, this paper addresses how White Mountain Apache agriculture informs indigenous self-determination and how Ndee Bikiyaa’s agricultural enterprise enacts meaningful social change in non-agricultural sectors of the community by exploring the possibilities for food sovereignty to be a decolonizing and healing community force.

GMO politics in Kenya: The making of (bio)technological subjects under 'creative capitalism'

Lowery Parker (Geography, University of Georgia)

In 2012, the government of Kenya banned the import and consumption of genetically modified organisms (GMOs) out of concern for human health, starting a political battle over the commercialization of GM crops to address issues of national food security. Yet, research and development of these crops proceeds unabated, financed in large part by philanthropic organizations like the Bill and Melinda Gates Foundation and implemented through the Kenyan Agricultural Research Institute in partnership with US universities and development agencies. Funding supports not only scientific research, but also lobbying groups who seek to repeal the ban. This paper explores the production of political and economic subjectivities through the practice of GM crop development in Kenya, asking how the proliferation of “public-private”

partnerships in crop biotechnology creates technological subjects that reproduce colonial power relations at the expense of vulnerable populations. The hypothesis is that these partnerships use “innovative funding structures” to produce ideological subjects that, even when holding conflicting personal views on biotechnology as a development tool, reproduce practices of capitalist exploitation by promoting crop science over political debate. It suggests that both Kenyan and American plant breeders, development practitioners, and policymakers tend to identify with this subjectivity, protecting the status quo out of a certain “middle class” fear of losing their own positions of power. With these partnerships becoming standard practice for addressing problems of development financing and accountability, this project seeks to question what “partners” look like in the colonial present.

A Feminist Political Ecology of South Africa’s Colonial Present: Agrarian Transformation and Resource Management at the DCNR

Katie Tavenner (Rural Sociology & Women's Studies, Pennsylvania State University)

The legacy of colonial and apartheid-era rule continues to influence natural resource management and agricultural governance across scales in post-democratic South Africa. The colonial present is particularly salient in the formal homelands, where a history of massive dispossession of land and resources continues to shape the livelihood options available to rural people. This paper uses a feminist political ecology lens to explore the processes through which particular agents actively construct South Africa’s colonial present, how these processes are gendered, and the outcomes these processes have for the future of agriculture and resource management in a rural protected area community. Three factors suggestive of a colonial present are explored in-depth: The enduring presence of male traditional leadership, the transfer of “modern” agricultural knowledge and the devaluation of indigenous knowledge, and the gendered division of labor within and beyond the household.

This paper is grounded in eight months of fieldwork in Hobeni Village, a rural community adjacent to the Dwesa-Cwebe Nature Reserve. This community has been consistently dispossessed since the Colonial era, and forced removals have taken place since the demarcation of the area as a Protected Forest in 1913. During apartheid, residents were displaced again under the Department of Agriculture’s “Betterment Planning” scheme, which led to widespread environmental degradation and loss of indigenous knowledge associated with agro and forest biodiversity. Despite the community winning a land-claim battle in 2001, the current management of the reserve still reflects a “fortress conservation” model, where local residents are completely barred from accessing natural resources - many of which are crucial for agricultural production. This paper examines community level resistance to the colonial present and explores future trajectories for agrarian transformation and resource management through the narratives of Hobeni residents.

Maíz Desmadre and Black Rice: Racial Displacement of Agrarian Knowledge in the Postcolonial Present

Emma Gaalaas Mullaney (Geography & Women's Studies, Pennsylvania State University)

This paper considers the legacy of colonial agricultural systems, and the racial hierarchies they reinforce, in relation to ongoing struggles for access to and control over food. More precisely, this paper examines two sites of persistent agrobiodiverse small-scale farming – Mexico’s Central Highlands and Detroit, Michigan - to show how competing agricultural imaginaries are constituted and contested by the relationships between diverse actors, both human and otherwise.

In the Central Highlands of Mexico, an overwhelming majority of campesinos (peasant farmers) continue to cultivate locally-adapted, open-pollinated, genetically-diverse criollo (creole) varieties of maize that they have bred themselves, despite over ninety years of concerted government attempts to effect the widespread adoption of commercially bred and licensed hybrid varieties. In the hardest-hit neighborhoods of Detroit, working class African American residents are struggling to reclaim agricultural work from the legacy of slavery, tenant farming, and sharecropping, and to establish urban farms as a path to Black self-determination. I draw on a countertopographic approach developed by feminist geographers to trace the connections between these seemingly disparate places, particularly the everyday meanings of Black and campesino agrarian knowledge, and the contestation of the colonial architecture that structures food production.

7. Undergraduate Symposium, I

Location: Patterson Office Tower 18th Floor, West End Room

Chair: Lydia Shanklin Roll (Anthropology, University of Kentucky)

The Construction of Truth Regimes in Indian Agriculture and the Current Anorectic Moment Facing Smallholder Farmers

Zhe Yu Lee (Geography and Environmental Studies, Macalester College)

Community Resistance: Reflections on an Urban Ecovillage in East Price Hill, Cincinnati

John Kendall (Comparative Studies, The Ohio State University)

Composting the city: urban farming and the moral grounds of political ecology

Matthew Abel (Cultural Anthropology, College of William and Mary)

CINARA's Participatory Experience: Exploring the Depths of Community Water Engagement in Cali, Colombia

Zachary Strickland (Civil Engineering, Georgia Southern University)

DOPE 2015: SATURDAY, FEBRUARY 28TH

SATURDAY SESSION BLOCK #2:

10:25am – 12:05pm

Sessions 1-6 in this block are located in the Student Center. Session 7 is located in Patterson Office Tower.

1. Code/Nature and the Political Ecologies of Technology, II

Location: Student Center 111

Organizers: Daniel Cockayne (Geography, University of Kentucky), Eric Nost (Geography, University of Wisconsin - Madison)

Chair: Daniel Cockayne (Geography, University of Kentucky)

Conflict as a land use: On gauging the spatiotemporally explicit environmental conditions and consequences of armed conflict

Jamon Van Den Hoek (Geography, NASA Goddard Space Flight Center)

Relationships between land cover/land use (LCLU) change and armed conflict have long been studied. Sometimes referred to as 'warfare' or 'conflict' ecology, much of this scholarship was born of political ecology and has come in response to local-level perceptions of landscape changes resulting from regional armed conflict. However, such studies have, first, typically focused on spatiotemporally acute LCLU change readily detectable through the satellite's lens to the exclusion of temporally protracted, spectrally subtle, or spatially diffuse environmental change; second, studies have been limited to situational conflicts or circumstances, thereby inhibiting broader theoretical development; and, third, often only considered the environmental consequences rather than the environmental or climatic conditions that may contribute to conflict. As a result, there is little opportunity for methodological or theoretical cohesion between studies. In this presentation, I will use cross-scale satellite imagery, spatial modeling, open-source programming tools, and conflict databases to examine relationships between LCLU conditions prior and subsequent to prolonged regional armed conflict in northwest Pakistan and northeastern Nigeria. I will discuss the spatiotemporally explicit manifestations of long-term environmental change and violent conflict in the semi-arid agricultural landscapes that serve as case studies; limitations to satellite-based observation of conflict-relevant LCLU change; and examine the mechanisms through which agricultural LCLU vulnerability and degradation may give way to conflict as a dedicated land use.

The Problematic Geographies of Big Data: technology and the limits of local representation on global scales.

Jared Margulies (Geography & Environmental Systems, University of Maryland - Baltimore County)

This paper examines the epistemic limits of “scaling up” case study research to discover global patterns of environmental change. Political ecology as a sub-field has long been critiqued for its idiosyncratic case study approach to examining environmental change. Recent developments in managing large databases hold promise for a global “scaling up” of the already existing case study literature. This paper demonstrates the limits of this promise by examining the problems

that arise as land change science attempts to stitch together case study research to make global claims about land use. It does so through an analysis of a novel tool that seeks to link local case study research with global data on land change patterns and processes (GLOBE-www.globe.umbc.edu). It argues that such a technology imposes epistemological limits on how land change and ecological processes can be understood within the limits of a particular geographic cyber-infrastructure system. Doing so, the paper examines how a new technology attempts to reconcile visual mismatches between “big data” and human-environment relations, as well as how relational or process-oriented perspectives of geographical space can confound such efforts. Ultimately, the paper argues that new geo-spatial analytic tools such as GLOBE may fulfill certain promises of linking local empirical research with global data, but also falls short in capturing the relational, process-oriented, or multi-spatial nature of human-environment geographies.

Subjectivity and Resistance: Recording/Recoding Circuits of Affective and Material Energy in Land-based Political Movements

Gabriel Piser (Environmental Studies, Ohio State University)

The effects of resource extraction-based development are increasingly apparent, although to whom they are apparent, and how they become so, remains underthought. Development is changing processes of stakeholder subject formation, this in turn shapes perceptions of, and responses to, these effects. We do not sufficiently understand how subjectivity shapes and is shaped by the inscription of meanings and value onto biogeochemical systems of the earth, nor onto circuits of human and non-human bodies and practices.

Recent work in critical continental philosophy, political ecology, and feminist geography have described various modes of economic, environmental, and political subject formation. (Foucault, Gibson-Graham, Agrawal, Protevi) This work emphasizes how specific material, cognitive, and pre-cognitive forces shape identities and associated practices and how these in turn bolster or disrupt exploitative forms of development. Many people, including community residents, scholars, journalists, and activists celebrate newly emerging digital tools as enabling practices of liberatory subject formation against exploitative and extractive forms of development. While digital technologies have produced new modes of political power in disputes over development interventions, the risk of naïve techno-utopianism here looms large.

In this paper I critically assess my work in creating an ongoing digital collaboration across multiple sites of extractive development that strives to enable the collective analysis and transformation of stakeholder subjectivities. I ask what role new technologies can play in a struggle to ‘rewire’ the circuits of value and meaning creation as they connect biotic and abiotic matter, human identities and practices, and pre-cognitive affective forces. I interrogate the role of ‘the digital’ in recording and recoding subjectivities and socio-natures, affirming Langdon Winner’s caution that technical revolutions do not inevitably bring desirable forms of political change. Through this investigation I consider the politics embedded in digitally mediated ways of knowing our world with an eye towards the forms of life that are prefigured in the design of new media and communications technologies.

Intra-epistemic cultures and techno-scientific imaginaries: ecology as a site of ambiguity and hybridity

Apollonya Porcelli (Sociology, Brown University), Amy Teller (Sociology, Brown University)

This paper defines and disentangles the intra-disciplinary ambiguity and hybridity in ecology tied to the technological processes of fieldwork. Through auto-ethnographic and ethnographic approaches, we compare two ideal types of ecology field research, both our own projects. The first is an “experimental laboratory in nature” - two research farms in the Chesapeake Bay area where experimental design and hand-made instruments are used to analyze recycling of nutrients between chicken production and corn crops. The other field site is a “survey of natural phenomena,” where traditional rod and reel fishing gear are used to examine dietary patterns of juvenile bluefish in Plum Island Sound. Laboratory processing following fieldwork is a commonality between the projects. Our work shows how the techno-scientific imaginaries of the researchers are shaping and shaped by technological processes through the objects used, the social interactions between researchers, the regimen of data extraction, and the moral implications of manipulating environmental processes and killing animals.

We make three significant theoretical and methodological contributions. First, we use ecology, a field of ambiguity and hybridity, to bridge the field and laboratory dichotomy that dominates science and technology studies literature. Because ecology is a diverse discipline focused on the complexity of interactions between organisms, ecologists employ a host of technological processes that blur the line between laboratory and field. Second, we refine theory on “epistemic cultures” (Knorr-Cetina 1999) by investigating how machines, technologies and techno-scientific imaginaries (Marcus 1994) expose diverse “intra-epistemic cultures” within ecology. Third, our situated position as inter-disciplinarians uniquely helps us address the dialectic between internalities, the techno-scientific imaginaries of the researchers, and externalities, the technological processes of field and laboratory work. Being doctoral students in sociology and Masters students in ecology, we use the sociological tools of auto-ethnography and ethnography to reveal new insights into natural science technologies and research.

Imaging Ruin Nature: Cat's Claw and the Flickr-Instagram Subject

Travis Bost (Geography, University of Toronto)

Like the 'ruin porn' of Detroit and other rust belt cities, New Orleans is increasingly depicted through dramatized environmental imagery of ruin ecologies. Though with its own variant themes of disaster, sub-tropicality, and the literal disappearance of the land through subsidence, this imagery is an aestheticization of decline, poverty, or slow-burn despoliation where the ecologies are 'destroyed', 'depleted', 'feral', or even 'vengeful'.

The most obvious of these images are produced through major media outlets, including 24-hour news coverage, recent film and television dramas, and many well known professional photographers. But just how are imaged natures being produced on the ground, in non-professional hands, in everyday production for everyday consumption? Who are these everyday phone camera-in-hand producers and wirelessly-connected consumers of ruined nature? How does camera technology, online media platforms, and even the ruin vegetation itself produce ruin nature subjects?

This paper addresses these questions through a mix of qualitative analysis of ruin imagery content and quantitative examining of image metadata of a set of photographs taken over eight years in New Orleans by a prominent Flickr and Instagram user, 'anthonyturducken'. With Smith (1984, 1996) in mind, I rework Gillian Rose's (2001) formula - meaning is produced in images

through (1) the image itself, (2) the audience, and (3) the space of display - to instead say that nature itself is produced in (1) the producing of photographs, (2) the product of the image and its content, and (3) its consumption through a specific media platform and by a particular audience. Through this framework I find ruin nature is a relation that produces - and is produced by - corresponding ruin nature subjects that are both vegetal and technological. In contrast to the common view of the photographer as explorer-author-exploiter of wild or feral and vengeful nature in major outlets for non-local consumption, the creeping cat's claw vine and the hashtagging, sharing-obsessed Flickr and Instagram platforms are integral agents of an everyday ruin nature.

The limits and value of big data: towards a political ecology approach

Eric Nost (Geography, University of Wisconsin - Madison)

I explore how political ecologists might treat the growing use of new techniques of data collection and storage, algorithmic data mining, and (geo)visualization by conservationists, extractive industries, and international finance. Three vignettes illustrate how different actors employ data for environmental governance, ranging from the use of algorithms to interpret remotely sensed changes in land use to their use in sifting through social media as a way of naming nature's value. I argue that there are several inroads political ecologists might make here: exploring the material impacts and limits of data collection and storage; conceptualizing the tensions between data as waste and data as bearing speculative value; critiquing new technologies' unrealistic expectations of users' abilities; understanding the links algorithms make between different logics of state, science, and capital; illustrating how information technologies rely on and remake ideas of nature. In spite of the seemingly immaterial, "virtual" nature of big data, political ecology is well-positioned here given the field's long emphasis on understanding the actions of land managers and critiquing explanations of environmental change, as well as the relatively new emphasis on the political life of objects. I conclude with a call to focus on three related, yet often overlooked points: the political economic production of new technologies; data analysis as practiced; the actual effects of algorithmic analysis. Without reproducing the discourse that algorithms will fundamentally life as we know it, political ecologists can illustrate the potential and limits of this project as it comes to bear upon the environment.

2. Transboundary Collaboration, II

Location: Student Center 205

Organizer: Julie Watson (Geography, Oregon State University)

Chair: Julie Watson (Geography, Oregon State University)

Women, Justice, and Food Sovereignty in India: A Story of Transdisciplinary Participatory-Action Research

Ian Werkheiser (Philosophy, Michigan State University)

Beginning in May 2014, I have been working on a transdisciplinary research project with La Via Campesina, an international umbrella organization for food sovereignty movements. This is perhaps an unusual project for a philosopher, though there are of course many philosophical issues which arise in Via's work. Most significantly for this project, Via has explicit, strong commitments to gender justice, but many of the local food sovereignty movements associated with Via are not so committed. Our project conducts focus groups of women in food sovereignty

movements in India to learn about the obstacles they have faced to full participation, and the strategies they employ to overcome these obstacles. This is combined with semi-structured interviews of men in the movements for contrast, and in-depth interviews with women central to the movement and women who have left the movement to gather useful background information. The purpose of this research is, on the one hand, to gain awareness of obstacles to participation for women and the ways in which they combat them, both as an academic question and to help via better address these problems in India and around the world. On the other hand, it is hoped that the focus groups themselves will help these women connect with one-another and build capacity to address these problems from the ground up. Thus, this is an example of transdisciplinary participatory-action research bringing together the experiences, values, and goals of activism and academia. This presentation will briefly touch on the project's methods and early findings, but will also focus on the project as an example of transdisciplinary, socially relevant research, and will discuss what philosophy and a philosopher in particular can bring to such a project.

Participatory Action Research, Food Sovereignty, Food Security and Fair Trade Coffee: The Case of an Influential Nicaraguan Smallholder Cooperative

Christopher M. Bacon (Environmental Studies, Santa Clara University)

This paper draws an action research partnership with a smallholder cooperative and then critically reflections on the research process and the relationships among trade, food sovereignty, and food security. I conducted qualitative research with an influential cooperative to identify lessons that scholars and advocates interested in food sovereignty (FS) could learn from fair trade and food security efforts, and explore linkages among these projects. First, most co-op leaders and farmers view these projects as complementary, not contradictory. Second, state-led agrarian reforms and co-ops increased access to land, markets, water, forests and pasture, which have reduced--but not eliminated--seasonal hunger. Third, these diversified fair trade coffee exporting smallholders could be part of a FS agenda. However, the split in fair trade suggests that only specific versions of fair trade are compatible with FS. Fourth, capable cooperatives can enhance fair trade and FS goals, and food security outcomes. Fifth, organized smallholders resisting the fair trade split could learn from the FS social movement's strategies. Food insecurity challenges both approaches, although FS prioritizes it.

U.S. Latina/o Community Engagement and Health

Lilian Milanés (Anthropology, University of Kentucky)

This paper explores the ways in which community is engaged within fields of health (particularly medical anthropology and public health), with special interests surrounding collaborations focused on type two diabetes prevention and management among U.S. Latina/o communities. Typically type two diabetes projects and initiatives tend to center around intervention philosophies, aiming to change behavior and lifestyle choices and educating communities on risks of their behaviors. These interventions often come from places that do not take the community into consideration nor do they take into account the social determinants of health, and the social, political, environmental, and economic constraints that prevent optimal health. Participatory action research (PAR) is a key stepping stone to collaborating with communities, especially when confronting chronic conditions such as type two diabetes. This essay reviews literature of how PAR has been utilized within such health collaborations and other ways of engaging communities, with hopes to co-create future research in more community-centered (and

community-driven) models where the reins are put into the hands of the community. This essay will also address potential issues with PAR, new directions in community work and potential alternatives to engaging communities within health collaboration research.

3. When Species Invade: Towards a Political Invasion Ecology, II

Location: Student Center 211

Organizers: Matthew Rosenblum (Geography, University of Kentucky), Laura A. Ogden (Anthropology, Dartmouth College)

Chair: Matthew Rosenblum (Geography, University of Kentucky)

“Trash Fish”: Depreciative Discourse and Politicized Devaluation of Invasive Lake Trout in Yellowstone National Park, Wyoming

Hannah Gunderman (Geography, University of Tennessee - Knoxville)

For many tourists, Yellowstone National Park evokes images and memories of Old Faithful, grizzly bears, and untarnished scenery. For anglers, however, images of an iconic Yellowstone are often shrouded in Yellowstone Lake’s native population of Yellowstone cutthroat trout (*Oncorhynchus clarkii bouvieri*). Many of these anglers boast fond memories of catching sizable cutthroat trout from the lake while vacationing in the park, and this nostalgia provides the foundation for their attachment to the park itself. However, invasive lake trout (*Salvelinus namaycush*) in Yellowstone Lake have posed a serious threat to the integrity of the lake’s ecological system, presenting significant economic and environmental consequences. The ecologically devastating presence of this invasive fish has severely tainted the experiential aspects of visiting the park for anglers and other individuals who hold special ties to the lake and its native cutthroat trout population. Among these fishermen and other cutthroat activists there is a creation of discourse surrounding the invasive lake trout which frames the species as the “evil” antithesis to the pristine, natural lake ecosystem that once existed. In pursuit of the ecological ideal of a thriving cutthroat population in Yellowstone Lake, gillnetting efforts take place to eradicate the invasive fish in a manner of mass slaughter. In this research, I explore the politicized discourse used to frame the issue of invasive lake trout in Yellowstone Lake and how such discourse contributes to the contestation of the mitigation techniques used to control this invasive species.

Species Invasion or Species Belonging?: The Contested Space and Place of Bison Conservation

Rebecca Garvoille (Environmental Anthropology, Denver Zoo)

Restoring and recovering populations of free-ranging American bison (*Bison bison*) across large Western landscapes is lauded as an important ecological goal by conservation biologists. Ecologically, plains bison are important keystone species who, as large grazers, are central to restoring the ecological processes characteristic of intact grasslands. Yet, bison restoration efforts are often met with unease and uncertainty by certain human communities, including some ranchers and local residents who seek to limit the recovery of bison across Western landscapes, advocating for greater bison control and quarantine measures to ensure that bison remain separate from local communities and livestock. For some ranchers and residents, the presence of free-ranging bison, or the possibility of co-existence with them, is viewed as a kind of species invasion that imperils their way of life, the West that they know and the future of cattle ranching. This push and pull between discourses of species invasion and species belonging frames many of

the conflicts about the management of bison in and around Yellowstone National Park, the site of North America's largest conservation herd. The proposed paper builds on the insights of Douglas and Verissimo (2013) to explore how we can move towards a broader understanding of the ways that plains bison - regarded both as keystone species and as iconic charismatic species - possess "conflict agency" that entangles human and non-humans in power-laden socio-spatial conflicts about who belongs and who does not in the landscapes in and around Yellowstone National Park, and across the West.

Reimagining nonnative plants in the landscape architecture field

Justine Law (Environmental Studies, Denison University)

We are attempting to eradicate nonnative plants (e.g. ailanthus, Russian olive, purple loosestrife, garlic mustard) across thousands of urban and rural landscapes in the United States. However, a growing contingent of landscape architects is resisting this trend. These landscape architects are using design competitions, college courses, and social media to recast nonnative plants as significant sources of ecological services (e.g. Future Green Studio, 2013; Del Tredici, 2010, 2014). To date, such efforts have focused on "spontaneous urban plants," which can be found "sprouting out of cracks" with "little human intervention" (Kordenbrock and Parfenova, 2014). Here I review these efforts from a political ecology perspective, asking critical questions about the politics around nonnative species in the Anthropocene.

4. Tasting Ecologies: breaking binaries of human/environment and producer/consumer with taste, II

Location: Student Center 228

Organizers: Emma McDonell (Anthropology, Indiana University), Lillian Brown (Anthropology, Indiana University)

Chair: Lillian Brown (Anthropology, Indiana University)

Guayakí Yerba Mate: Popular tastes and political realities of exotic forest products

Richard Reed (Social Anthropology, Trinity University)

American desire for super-charged energy drinks has created new opportunities for indigenous peoples to profit from South America's forests. The caffeinated yerba mate (*Ilex Paraguariensis*) is native to Paraguay's subtropical lowlands forests. Over the centuries, the refreshing brew from the leaves has been popular among the Guaraní of the region and became the stimulant of choice for the common folk throughout southern cone. Harvesting the leaf offered the Guaraní cash without undermining the forest environment. Yerba collection did not damage the trees and natives gained access to much desired commodities. The trade dominated the regional economy until plantation yerba gained popularity in the 1950s.

The recent demand for exotic energy drinks has stimulated renewed industry in the forest. With an eye to the "green market," a California based marketing venture has contracted with native producers to collect yerba. Today, Guayakí Brand Yerba Mate offers a wide variety of "biodynamic" organic energy drinks packaged in sleek colorful plastic packaging to American consumers.

Like previous efforts by Ben and Jerry's Ice Cream and The Body Shop, the market depends on American's taste for exotic indigeneity. Not only does his brand market "vitality, clarity and well-being", but it suggests that consumers are aiding one of South America's last primitive

forest groups. The firm offers harvesting forest products offers an economic rationality to protecting the region's subtropical forests. And they might be gaining some traction. By increasing the value of standing forest, they plan to have protected 200,000 hectares of forest by 2020.

Tasting the Other: linking consumer and producer socio-natural worlds in the quinoa boom

Emma McDonell (Anthropology, Indiana University)

In less than a decade, quinoa transformed from a derided "Indian food," produced and consumed almost exclusively in the Andes, to an internationally recognized "superfood." Renowned for its exceptional nutritional profile and its associations with the exotic Inca Empire, the "lost crop of the Inca" is now a staple in the diets of health-conscious Americans and trendy restaurant menus across the US. In Peru, now the world's leading producer, quinoa exports quadrupled between 2006 and 2012, and thousands of smallholder agriculturalists have converted subsistence farms into export-oriented quinoa operations. While food studies scholars have investigated changing tastes in consumer landscapes that produce "demand," and political ecologists have explored the impact of this "demand" on producer communities, this paper seeks to study both sides of the quinoa boom through the lens of taste. By integrating Pierre Bourdieu's classic discussion of taste and class with political ecology's attentiveness to power in human-environment relations, this paper presents a preliminary model to link producer and consumer socio-natural worlds through taste.

Subtle Local Taste, Bold Global Strategy: Protecting Kyoto's Local Food Culture

Greg de St. Maurice (Anthropology, University of Pittsburgh)

Even as they see the subtle taste of Kyoto threatened by recent developments in the globalization of food and agriculture, Kyoto's chefs and consumers are transforming representations of local cuisine in order to protect traditional food culture by articulating an understanding of Kyoto cuisine that whets appetites globally.

The "taste of Kyoto"--known for its subtlety and emphasis on bringing out the best qualities of ingredients rather than forcing an added taste upon the palate--faces threats from two sides. On the one hand, it now competes with an influx of appealing flavors manufactured by "fast" food and industrialized food companies. These accessible tastes are said to dull the palate, are out of synch with the seasons, and profit multinational corporations rather than the local agricultural and food industry. Such trends endanger local agrobiodiversity and culinary heritage. On the other hand, items associated with Kyoto's food and agricultural heritage are now being produced in places far removed from Kyoto. One can now find Kyoto vegetables and Kyoto cuisine in multiple continents, for example.

By proactively bringing Kyoto cuisine into the global limelight, actors in the local food industry aim to transform food and agricultural products into value added craft goods and bolster the local food economy. By teaching eaters across the globe how to taste the "authentic" Kyoto, stakeholders in Kyoto's food industry are trying to preserve local agrobiodiversity and culinary heritage, benefit consumers and producers, and exert influence on food trends.

“It Sticks in Your Throat”: Politics of Taste and Embodied Experience of Aid, Hunger, and Dietary Transition in Karnali, Nepal

Jeffrey Masse (Geography, University of Washington)

The Karnali is Nepal’s poorest and hungriest region. This paper explores Karnali people’s descriptions of food aid rice and local whole grains to understand taste in relation to embodied experiences of aid, hunger, and dietary transition. Other parts of my dissertation research focus on elite narratives that blame food aid recipients’ preference of white food aid rice for causing ‘laziness’ and continued malnutrition and underdevelopment in the Karnali region. In much of the dissertation work I show how dietary transition from coarse grains - such as millet or buckwheat - to white rice and bleached flour are better explained by changes in trade, labor constraints, and endemic limits on local food production than the whims of peasant taste. That said, Karnali locals’ tastes are both varied and changing, and these tastes change in ways both informed by and expressive of changing economy, politics, and agroecology. In this paper I argue that Karnali people’s tastes - while not primary drivers of dietary transition - are politically salient, and listening to Karnali people’s accounts of taste helps understand the moral politics of dietary transition. I explore changing tastes for local grains and refined foods in three ways: by relating tastes to histories of state domination and internal colonialism; by considering how education and the gendered experience of agrarian labor inform tastes, and by discussing ways contestation over the taste and bodily effects of food aid rice reflects Karnali people’s evolving understanding of food as a right. To conclude, I discuss ways understanding these political tastes can inform more just and palatable interventions in dietary transition.

5. Green Spaces, Green Gentrification, and Environmental Justice in the Neoliberal City

Location: Student Center 231

Organizers: Jay Bowen (Geography, University of Kentucky), Kenny Stancil (Geography, University of Kentucky)

Chair: Jay Bowen (Geography, University of Kentucky)

Environmental Justice for Whom

Marisol Becerra (Environmental Sociology, The Ohio State University)

Since 1990, the U.S. Environmental Protection Agency’s Brownfield Revitalization Program has been used as a mechanism for cleanup and land redevelopment of former industrial sites. Historically, low-income people of color live in close proximity to noxious industrial facilities. Dominant narratives on brownfield redevelopment highlight increased property value as a positive economic development outcome for homeowners and reduced urban blight in the neighborhood. However, economically disadvantaged residents living close to redeveloped brownfield sites struggle to afford higher rents as the neighborhoods become more desirable to young professionals and the middle class after redevelopment. The city of Chicago serves as a good place to study the relationship between brownfield redevelopment and gentrification. This study uses geospatial quantitative techniques as well as qualitative methods to explore this relationship in Chicago. As scholars and activists aim to achieve environmental justice, it is important to address the economic and social implications of brownfield revitalization.

It's the collective consumption, stupid: Re-theorizing urban climate justice and the composition of frontline communities

Daniel Aldana Cohen (Sociology, New York University)

Drawing over 120 interviews, and two years of fieldwork in New York and São Paulo, this paper proposes a new theoretical framework for understanding urban climate politics. I argue that a reinvigorated, socio-ecological concept of collective consumption provides an expansive and consistent framework for synthesizing and systematizing the insights of discussions of ecological gentrification, climate gaps, (social) resiliency, urban political ecology, and the differential class contributions to global carbon footprints via consumption practices. Collective consumption may be led from above or below, for the few or the many. I thus map collective consumption in prosperous cities along two perpendicular axes: green vs grey ecologies, and democratic vs luxury ecologies. Grey ecologies are projects and developments like bus rapid transit, affordable housing, or high-end apartment buildings, which by virtue of their energy efficiency are relatively low-carbon. I argue that the pursuit of democratic grey ecologies is the least recognized, but most capacious and potentially most effective, existing mode of climate justice politics in cities. In particular, I demonstrate that poor people's housing movements have acted as low-carbon protagonists, and they too are front-line actors, whether or not their neighborhoods are vulnerable to extreme weather. Some groups are making arguments like these on the ground. But for the most part, existing scholarly and activist discourses lack a vocabulary to articulate this promising trend in terms of climate justice. They could be missing a powerful weapon in the struggle against eco-apartheid.

"I care about the future of my city": Urban gardening, social inequality, and building "green" communities in deindustrial Michigan

Megan Maurer (Anthropology, University of Kentucky)

Throughout Michigan residents of deindustrializing cities are envisioning futures as "green" communities that attract residents and investors by fostering environmental preservation, alternative energy and transit options, and local food production and sales. In one such city these efforts manifest in a new master plan, which calls for greater support to the city's urban gardening and food production activities. These activities, ranging from community gardens to farmers' markets to food processing, engage residents with diverse experiences of racial and class inequality. However, these experiences shape how individuals participate in spatial and environmental practices like urban gardening. Drawing on ethnographic research with urban gardeners in a small Michigan city, I explore how racial and class inequalities become reinscribed in the urban landscape through efforts to create a "green" community by examining the ways residents use gardening to express care for themselves and their environments. With local leaders championing land uses that exemplify the city's desired "green" image, those gardeners who present their activities as an act of care for the natural environment are granted greater inclusion in the city's vision for the future. Gardeners' experiences of racial and class inequality, however, influence what residents express care for through gardening and how they articulate these activities. While city land use priorities continue to spatialize racial and class inequalities, acts of care like gardening at times conflict with the economic logic underlying "green" community building, and shared objects of care offer potential common ground among residents with diverse experiences and visions for the future.

Misappropriated Desires for Food Justice Reinforce Racialized Neoliberal Exchanges: The Contradictions of Urban Agriculture

Lainie Rini (Geography/Women's Gender & Sexuality, Ohio State University)

This paper draws on empirical research of community gardens within Columbus, Ohio, to analyze how environmentalists and food justice advocates are enrolled in a larger societal project to advance urban agriculture (UA) as a solution to uneven food distribution. Using Kojin Karatani's analysis of the triadic force of nation-state-capital, I argue that exchanges constituting urban agriculture reproduce the nation, which simultaneously serves to resist and reinforce exchanges that constitute capital and state. While the resistance mentality is present within the individual growers who seek to push back against the hegemony of agribusiness, many gardens reproduce the capital-state by filling the gaps of roll-back neoliberalism. Growing food in a low-income neighborhood is viewed as positive action toward food security, permitting less state intervention while continuing reliance upon the dominant agricultural exchanges. The gardens rendered the most visible within cities are significant in defining community development, but their composition can reinforce, rather than challenge, existing class and racial hierarchies. This is particularly symptomatic of gardens maintained by white middle-class actors within impoverished areas. This paper concludes by analyzing the potential to harness the resistance mentalities present within urban agriculturalists, and how those can be redirected to sublimate the nation-state-capital triad, drawing on the case study of the Detroit Black Food Security Network and an evolving politics of race, hunger and autonomy.

Gentrification as an Outcome of Progressivism, or the Subjective Position of Eco-Progressives

Eric Wycoff Rogers (Architectural Theory and History, Yale University)

One crucial dimension of gentrification is that the people whose practices add value to the ground rent are often unaware of these consequences of their practices. The motivations of the cultural vanguard that prepares a place for gentrification are wildly divergent from the economic impact of their actions.

In this paper, I explore a much earlier generation of massively influential economic actors whose profound impact for capitalism was not the main motivation of their organizing. The progressive reformers of the late nineteenth century, while acting on the basis that they sought to improve urban conditions and to lift the quality of life for all members of society, ultimately put into place an apparatus of governmental regulatory power that could plan and therefore avoid the self-destruction of market society (with "society" being a concept that these and other reformers actually came to invent through their discourse). Something very similar is occurring today, I argue. While the progressive reformers of the 1890's- 1920's were responding to an economic crisis arising out of an original instance of liberalism, today's "neo-progressives" (as I call them) "many of whom are engaging in gentrifying practices" are perhaps responding to the climate of crisis arising from the contradictions of neoliberalism. The essay uses space "medium that has always been essential for progressive movements" as a way into the dualism that arises between progressive intentions and techniques of power which constitute the ultimate outcome. The main thrust of this essay, then, is to show the ways in which progressivism ultimately saves the cause of the crisis that it addresses.

6. Agriculture and the Colonial Present, II

Location: Student Center 249

Organizers: Levi Van Sant (Geography & Integrative Conservation, University of Georgia),

Emma Gaalaas Mullaney (Geography & Women's Studies, Pennsylvania State University)

Chair: Emma Gaalaas Mullaney (Geography & Women's Studies, Pennsylvania State University)

Discussant: Jake Kosek (Geography, University of California-Berkeley)

Plantation, History, Counter-Archive: Faulkner in the Plantation Present

Alex Chambers (American Studies, Indiana University)

In order to better uncouple “state formation from food production,” Katherine McKittrick suggests, we need to recognize the ongoing role of the plantation both as a capitalist orientation toward soil and as a form of social control that functions as the basis of antiblackness. Although large-scale surplus grain production has been a structural feature of state-making since long before the “invention” of the Americas, the specific form of the plantation, oriented toward capitalist accumulation and export, powered by enslaved labor, and enabled by settler colonialism, continues to shape the colonial present, regarding both race and agriculture. Insofar as the novel arose alongside the plantation in the development of the capitalist world-economy, as Sylvia Wynter has shown (1971), as a form of knowledge it offers an important in-road to understanding what I would call the “plantation present.” I want to suggest, then, that Faulkner’s *Absalom, Absalom* forms an essential counter-archive to agricultural politics that offers insight into the relationship between agriculture and history in plantation societies. In particular the experience of time and scale in the novel, the connections between the Caribbean and the U.S. South, and its conception of legacies and debt suggest the ways white planters and their descendants are structurally unequipped to resolve the contradictions of a racialized plantation society on their own, an insight that continues to be essential in an age of USAID and NGOs haunted - and structured - by twin histories of slavery and colonialism.

Plantation Geographies: Agricultural Governance in the South Carolina Lowcountry

Levi Van Sant (Geography & Integrative Conservation, University of Georgia)

This paper conceptualizes the history of agricultural governance in the South Carolina Lowcountry - the coastal region surrounding Charleston - as a project of settler colonialism. More specifically, it explores the linked processes of racialized dispossession and the reproduction of plantation geographies at two points key points in the 20th century: the early 20th century crisis of the rice and cotton plantation economies, and the late 20th century demise of the region's commercial vegetable industry. The USDA played a central role in the reproduction of plantation geographies at both of these points, but in very different ways. The paper concludes, then, with thoughts on the shifting role of the racial state in US agriculture.

Subsidizing Coloniality, or US Agricultural Policy Disconnects

Garrett Grady-Lovelace (Geography, Political Ecology & Agricultural Policy, American University School of International Service)

Colonialism happened through and because of violently expansionist agricultural impositions, exploitations, and accumulations. Even after revolutions and independence, coloniality continues - again through expansionist agricultural impositions, exploitations, and accumulations. This paper explores one way that coloniality - or colonialist dynamics and subjectivities - persists: in

the international double standard on government supports for farming. What accounts for the schism between US international 'leadership' at WTO in (neo)liberalizing federal support systems for farmers (and ranchers, fishers) - decried as protectionism - and US domestic "safety nets," which predominately serve landed gentry commodity row-cropping? This hypocrisy on 'subsidies' has maddened growers around the world whose regional agricultural economies buckled under falsely cheap crop "dumping." Meanwhile, within the US, the (lone) 2014 US Farm Bill consensus on cutting direct payments ignored their global context (WTO amber box rules) and ignored the previous policy-failures that caused overproduction, price plummets, and the subsequent need for ongoing emergency payments. The layers of disconnect at work here echo colonial agricultural political-economies, wherein powerful, expansionist agribusiness industries wrote and rewrote the laws to survive in and obscure ongoing crises that they themselves caused. All the while, small-scale, minority, and diversified farmers do not qualify for US "safety net" credits and services due to coloniality's lingering structural racism, and the agricultural trade rhetoric of competition - wherein growers in the US are to both feed the world, but also compete with foreign counterparts - continues to parallel the divide-and-conquer strategies deployed during colonialist agriculture.

Confronting the Colonial Present, Through Time

Paul Lovelace (Education Policy Studies and Evaluation, Accokeek Foundation)

Located on the banks of the Potomac River in Prince George's County, MD, the Accokeek Foundation, through a partnership with the National Park Service, uses Piscataway Park to interpret agriculture and environmental stewardship through time. The National Colonial Farm, a well known historic farm museum established in 1958, demonstrates Maryland agriculture during the 18th century, and has been the backdrop for hundreds of school tours each year. The Ecosystem Farm, a certified organic 8-acre farm, teaches about sustainable food production using innovative growing techniques. The Eco Farm works to inspire and engage the larger community through creative sustainable agriculture demonstrations and experimentation. The National Colonial Farm's current efforts to integrate historic preservation and interpretation with agricultural sustainability are complex. We interpret a slave owning family, working and living on land previously home to the Piscataway people. Many otherwise sustainable colonial agricultural practices such as hill culture - a skill transmitted by the Piscataway - seed saving, mixed farming systems based in broad species and varietal diversity, nutrient cycling, and pollinator habitats must be situated within the context of displacement, human enslavement and exploitation.

Thus our tours and discussions with the public both on the National Colonial Farm and the Eco-System Farm are informed by post colonial theory. Particularly, as neither land-grabs nor the exploitation of labor is unique to Colonial times. Global markets and consumption practices continue to incentivize the exploitation of cultures, land and labor. Many contemporary farms, engaged in so called sustainable agriculture, refer to their management of soil, water, and seed, without extending sustainable considerations to land tenure or those who work the land.

Thus our innovative organic farm and our interpretation of Maryland agriculture in the 18th century are equally jumping off points to critically discuss and effectively inform contemporary agriculture, economy and justice. This involves collaborating with representatives of the Piscataway nation, as we recognize and honor their historic and contemporary contributions to agriculture and culture. It involves ongoing discussions about race, class and gender. It requires a revalorization - even a celebration - of skilled manual labor founded upon holistic health, creativity and reciprocity.

7. Undergraduate Symposium, II

Location: Patterson Office Tower 18th Floor, West End Room

Chair: Lydia Shanklin Roll (Anthropology, University of Kentucky)

Firing Morgan’s Canon: How Animal Psychology’s “Most Important Sentence” Kills Animals (And What We Should Do About It)

Caleb Maier (Psychology, Mercer University)

(Un)Fixing Biodiversity: Offsets and the Nature(s) of Politics in the United Kingdom

Colin T. Higgins (Geography, University of Wisconsin, Madison)

Decolonial Alterhumanisms: Toward a Tactile Political Ecology for the Anthropocene

Mark Ortiz (Political Ecology and Religious Studies, University of Alabama)

A “Healthier” Approach for Engaging Undergraduate Students: The Public Health Frame of Climate Change and Motivating Youth

Nathaniel Sawyer (Interdisciplinary Studies, Emory University)

*******LUNCH 12:05pm – 1:25pm*******

(Lunch on your own. There are multiple options in the Student Center and within a short walk of campus.)

DOPE 2015: SATURDAY, FEBRUARY 28TH

SATURDAY SESSION BLOCK #3:

1:25pm – 3:05pm

Sessions 1-6 in this block are located in the Student Center. Session 7 is located in Patterson Office Tower.

1. Can the Spreadsheet Speak?

Location: Student Center 111

Organizers: Rafi Arefin (Geography, University of Wisconsin - Madison), Sarah A. Moore (Geography, University of Wisconsin - Madison), Heather Rosenfeld (Geography, University of Wisconsin - Madison)

Chair: Sarah A. Moore (Geography, University of Wisconsin - Madison)

Globalized Urban Commodity Teleconnections: Using Big Data to Track Corporate Actors across Time-Space

Joshua Newell (Geography, University of Michigan)

Although it is through commodities that we are inextricably linked to distant places, most of us know little about where the products we consume come from, to say nothing of the conditions under which they were produced. This paper brings the wilderness of Russia and factories of China into the home of the urban dweller by uncovering the hidden geographical lives of furniture and flooring sold by Wal-Mart, Lowe's, The Home Depot, and other "Big Box" Retailers. By coupling multiple data sources and methods - including GIS timber concession datasets, statistics from national customs agencies, and field-based interviews -- I develop the methodology of "actor tracking" to spatially and temporally link corporate actors along this global wood commodity chain. This re-linking, from the timber harvester in Russia to Chinese manufacturer to U.S. retail, then provides the basis to interrogate retailer claims of certification and old-growth free wood supply, as well as fresh perspectives on post-Fordist production networks. More broadly, the actor-tracking methodology developed through this case study provides a useful approach for those seeking to map globalized production-consumption "teleconnections" for a wide-range of commodities.

Wikimapping Frac Sand

Carl Sack (Geography, University of Wisconsin - Madison)

Over the past few years, Wisconsin has faced an unprecedented boom in frac sand mining. The sand is a key ingredient in hydraulic fracturing, or fracking, for natural gas in other states. Many residents living near mines complain of ultra-fine silica dust emissions that could cause lung cancer and silicosis, as well as 24-hour noise, heavy truck traffic, and other impacts to rural life. Despite over 300% growth in the number of sand mines in the state since 2011 (to more than 130 today), the industry has been poorly regulated. The spread of mines has been hard to track; the state government only recently made its records of existing mine locations available to the public. In the absence of reliable data on mine sites and their impacts, there is a need for citizens living near mines to report their experiences geographically. The experimental Sand Storm Wikimap will combine the available data on mines from government and non-profit journalism

sources with observational data produced by user-volunteers. The intention of the map is to visualize the under-reported impacts of frac sand mining on the health and well-being of local communities by empowering the local knowledge of mining that exists within those communities.

Locating Power in Guyana's Census: Questions on History, Historiography, and the Political Ecology of Difference and Separation

Joshua Mullenite (Global & Sociocultural Studies, Florida International University)

I attempted to create a map showing how racial difference is spatialized along Guyana's coast. But how do you actually show racial difference? The original goal was to show the uneven impacts of sea level rise along coastal populations, but in presenting a visual representation of the racial landscape I realized that such a representation would, and could, never be complete. I made four maps that "accurately" showed where different racial groups lived but this illuminated only one aspect of climate change vulnerability. With just a few clicks of the mouse I could show gendered separations or religious separations but what I couldn't show was how this differentiated landscape was powerful, at least not without first constructing an essential Guyanese subject. The numbers and their location in the spreadsheet have a history. The numbers beg questions. They force us to ask why and how this landscape came to be, why is that number on that sheet, in that box? How does power operate within this landscape, especially compared to Guyana's racialized state politics? Power is hidden in the data but the data also allows us to locate, or relocate, power through it.

From a carbon copy, in a cardboard box, in a non-climate-controlled room ... to flow maps

Sarah A. Moore (Geography, University of Wisconsin - Madison)

In context of trade liberalization, how can we understand the distribution and flows of hazardous waste in North America? What do these distributions and flows mean for inter- and intranational environmental justice? We use data attained through Freedom of Information Act requests to the United States Environmental Protection Agency to begin to answer these questions. In this paper, we focus on the process of working with these data. We illustrate two main points: First, even in countries with stable regulatory structures (such as Canada and the United States), data on the transfer of hazardous materials are unevenly collected and rarely analyzed. Second, even when the best available data are collected and analyzed, a high degree of uncertainty remains. Following on these two points, we describe how we have attempted to overcome these problems through a current research project that visualizes the flows of hazardous waste across North America. Rather than a data-driven analysis, data is the backseat driver who doesn't know what the map looks like, and that's fine.

2. Political Ecology and Climate Change

Location: Student Center 211

Organizer: Dean Hardy (Integrative Conservation & Geography, University of Georgia)

Chair: Dean Hardy (Integrative Conservation & Geography, University of Georgia)

Adaptation Pathways: Knowledge Controversies, Hybrid Forums, and Democracy

David C. Eisenhauer (Geography, Rutgers University)

Recent research in political ecology has begun to explore the knowledge controversies that

emerge when scientific knowledge makes its move back to the larger world. This research highlights the productive and political nature of scientific knowledge production and technological application. In response to these controversies, well-designed spaces, forums, and processes have the potential to open up these controversies can spark publics that produce new knowledge, novel politics, and, possibly, a more common world. Within this paper, I apply these lessons to the emerging concept of climate adaptation pathways. Pathways represent the various potential avenues of development communities can take in light of local and global environmental, economic, political, and social changes. Approaches employing the pathways concept have the capacity to draw attention to the conditional, contextual, and complex fashion in which adaptation and transformation unfolds in various places and at different times, while at the same time considering the broader relational, structural, and material forces that make some paths more likely to be pursued and implemented. Common within these approaches is a normative desire to open up new, more just and sustainable pathways. However, these approaches typically employ simple conceptualizations of both 'science' and 'politics' that underplay the productive capacities of both. Additionally, pathways approaches obscure the political effects and agency of non-humans in science and politics. By bringing in lessons from recent work in political ecology and science and technology studies, I present a way forward that makes pathways more explicitly political.

How Science May Drive National and International Policies The Role of Non-State Actors and Sub-state Actors in the International Environmental Governance and Energy Security
Paolo Davide Farah (Law & Policy, West Virginia University)

Energy consumption and energy demand are predicted to grow steadily over the next few decades. The international community confronts two great challenges at once: providing secure and cheap energy supplies to meet ever-expanding needs and responding to climate change. There are a variety of national strategies to answer these needs. The impacts of the diverse national strategies on the greenhouse effect are multilevel; they range from the most state-centred to large-scale ones. The nature of the dual problems provides the basis for a review of the diverse approaches based on hierarchies of principles that entail diagonal regulatory strategies on climate change and energy security. These principles should mark the policy priorities to be followed and make it possible to more effectively integrate public laws with differing objectives, such as economic development and the environment. The globalization discourse has fragmented the traditional framework in which the policy-making role of the nation-state is inserted into the international legal system. The coexistence of national, regional and international decision-making levels can be seen to lead to sets of policies which fail to maintain internal consistency. The importance of non-state and sub-state actors may have been inadequately considered, both with respect to their role in global governance and their role in the fragmentation of the modern state into various bureaucratic services interacting across state borders independently from state authority. Especially for energy security issues, the influence of non-state actors and in particular groups with specialized knowledge such as scientists may drive national policies. The perceived scarcity of a natural resource (i.e. oil peak), and the possible solutions to the problem need to be investigated because they determine the strategy each national actor deploys. The function of scientific advice has also been illustrated in the negotiation of international environmental treaties. Politics can employ climate science mainly in an instrumental way. Consequently, using the domestic/international dichotomy as a frame has troubling implications for understanding policy making where the strategies at the domestic level supporting energy security priorities and national economic interests are differently intertwined with those at the

international level combating global warming, according to the diverse national backgrounds. The social and economic costs of the effect of climate change on the environment at the national level may encourage national energy policies against global warming such as investments in technologies for reducing emissions, whilst areas susceptible to a national political agenda are inevitably encountered in the global environmental issues, including questions of State sovereignty over natural resources and private ownership interests in energy resources.

From conservation to carbon markets: The hidden power of carbon accounting

Lauren Gifford (Geography, University of Colorado - Boulder)

The highly political, yet often de-emphasized process of carbon accounting is the point of translation that connects small-scale forest conservation projects with global carbon markets. As both voluntary and compliance carbon markets expand as the primary method of mitigating climate change, the development and implementation of forest carbon projects increases as well—both in instances of REDD+ projects and independent forest carbon initiatives. Forest carbon credits and their related conservation projects are co-produced, meaning the value of an offset credit is completely dependent on the strength of the development project that supports it, and vice versa. If the conservation project fails at slowing deforestation, avoided carbon emissions don't exist, and the project loses its funding stream. This paper uses the example of the Alto Mayo Protected Forest in the northeastern Peruvian Amazon to illuminate the power carbon accounting yields over both forest conservation efforts and the validity of carbon offset credits. In this example, one employee of Conservation International, based in Washington, DC, monitors deforestation in San Martin, Peru and alerts conservation staff to instances of over 1-hectare forest loss. He also calculates anticipated deforestation, and how much anticipated deforestation is avoided—making a case for “saved,” or avoided, carbon emissions, which translate into saleable carbon credits. In this paper, I explain the largely arbitrary carbon accounting process that uses remote sensing, field visits, and evolving verification standards to translate complex social relationships, environmental diversity, and socio-economic legacies, into one-size-fits-all carbon credits (MacKenzie 2008). I argue that, by design, carbon accounting de-politicizes and obscures the political ecological nature of conservation projects, market dependencies, and neo-colonial North/South relationships.

The production of sea-level rise: Uneven state culpabilities and vulnerabilities

Dean Hardy (Integrative Conservation & Geography, University of Georgia)

Scientists studying the ocean and atmosphere have been measuring rising global temperatures and seas since the end of the 19th century. Using paleological and historic data, these scientists have demonstrated a strong empirical relationship between atmospheric greenhouse gas concentrations, global temperature, and global sea levels. Drawing on these data, climate modelers have developed semi-empirical models to forecast a range of accelerating rates for both global temperature and sea-level rise, which are both dependent on local to global policy decisions that affect which climate future will be realized. It is well documented that developed countries have produced the majority of fossil fuel-based greenhouse gases, which has resulted in international debates over curbing emissions. Only recently climate scientists have begun apportioning global warming contributions to states, yet state culpability for sea-level rise has not been assessed. Nearly half of the global population lives within a coastal region, suggesting that the everyday practices and livelihoods of residents are already being affected by changing landscapes as seas inundate shorelines, especially in the lower gradient coastal areas of

developing countries such as Bangladesh and Vietnam. This indicates a need to assess the uneven distribution of state culpability for and vulnerability to sea-level rise. In this paper, we present results from a meta-analysis of published data on state contributions to global warming and global commitment to sea-level rise for the top twenty greenhouse gas emitting countries. We found that the largest total contributor is the United States, while the largest per capita contributor is the United Kingdom. The results have implications for international negotiations over curbing emissions, but in particular as regards social equity, for identifying states most responsible for providing sea-level rise adaptation aid to more vulnerable and less culpable countries.

3. Perceptions of Urban Environmental Health: Narrating Political Ecologies of Disease, I

Location: Student Center 228

Organizers: Creighton Connolly (Geography, University of Manchester & European Network of Political Ecology (ENTITLE), Panagiota Kotsila (Social Science/Development Studies/Political Ecology, Universitat Autònoma de Barcelona & European Network of Political Ecology (ENTITLE))

Chair: Creighton Connolly (Geography, University of Manchester & European Network of Political Ecology (ENTITLE))

Discussant: Jake Kosek (Geography, University of California - Berkeley)

The politicization of ill bodies

Ilenia Iengo (International Environmental Studies/Political Ecology, Norwegian University of Life Sciences), Marco Armiero (Environmental History, KTH Royal Institute of Technology, Environmental Humanities Lab)

Similarly to others, the communities affected by toxic contamination in Campania, Italy, have to confront the challenge of proving the direct causal connection between exposure to pollutants and health issues. Although a few studies have been conducted in that direction, little has changed in terms of the social and political debate. In September 2014, the Italian Ministry of Health repeated once more that the increasing trend of cancer rates in Campania is due to lifestyle habits. The aim of this paper is to cast a light on the politicization of ill bodies of Campania. We will analyze three practices of political action and resistance which have employed the subjectivization of physical bodies and illnesses in order to expose the environmental injustice affecting those communities.

In the neighborhood of Pianura, Naples, people have gathered medical records as evidence for a trial concerning “culpable epidemics”. In the so-called Land of Fires, in the north periphery of Naples, hundreds of the postcards featuring pictures of children killed by rare pathologies were sent to the Italian Head of State and the Pope. Finally, in Acerra, the blood of a dying shepherd became a political object proving exposure to dioxin contamination in that area. The politicization of illness and bodies conflates public and private, challenges the mainstream production of knowledge, and proposes an alternative narrative for affected communities and individuals. Nevertheless, the practices of this politicization have been rather different and not always “political”, as we will show through the three selected cases."

On the autism spectrum: Environmental causes, natural variation, or both?

Catherine Jampel (Geography, Clark University)

One in 68 children in the US have been identified with autism spectrum disorder (ASD) and global median prevalence is estimated at 1 in 160. Public health researchers continue to find significant links between ASD and exposures to air pollution and pesticides. Yet whether and how the prevalence of ASD is growing, explanations for the spatially uneven patterns of diagnosis, and the role of environmental factors remain controversial. Further complicating the landscape of disagreements about whether the rate of ASD has reached epidemic proportions and its and potential causes are the framings of ASD as natural variation rather than disorder. Neurodiversity advocates frame autism as variance in cognitive styles and personality types, and their emphasis on individual acceptance may pose challenges for critiquing population-level trends. Whereas an environmental justice (EJ) approach to ASD examines the role of environmental exposures to critique the effects of industrial capitalism (e.g. pollution, pesticides) and implies a “normal,” post-structural approaches to difference critique the very idea of normal itself. An agential realist approach, following feminist theorist and physicist Karen Barad, offers a way through this tension between ASD as an EJ problem and ASD as natural variation. This case in turn illustrates what agential realism can offer political ecologies of health.

The role of (dis)empowering health education in shaping the risk of diarrheal disease in Southern Vietnam

Panagiota Kotsila (Social Science/Development Studies/Political Ecology, Universitat Autònoma de Barcelona)

Drawing from literature on promoting health through social learning (Bandura, 2004; Rosenstock, Strecher, & Becker, 1988), this article examines the case of (un)hygienic behaviours related to the spread of diarrheal disease in Can Tho City of Southern Vietnam. The discourse construction around the risk of disease is analysed from a post-modern and cultural theory vantage (see Renn, 2008: 61). I am looking at how the content and the communication of public health messages have been shaping people’s understandings around diarrhoea, and how these in turn reflect on their practices around matters such as water treatment and usage, sanitation, food preparation, personal hygiene and self-medication. Informed by others who speak of the top-down, one-directional and ideologically loaded communication practices used by the Vietnamese state (Laverack & Dap, 2003), I question the motives and the consequences of what I observe to be a moralization and stigmatization of disease. As the empirical data show, along with the socio-economic structural constraints that many people face, the ability to protect from disease is also inhibited by the exercise of a sort of Gramscian hegemony by the state. In the particular case of diarrhoea prevention policy and discourse, state hegemony is achieved by excluding the situated meanings and lived realities of people who face the risk of disease. It thus disallows processes of empowerment and emancipation through health education (Wallerstein & Bernstein, 1988) and hence, stands in the way of conscious healthy behavioural change.

All-Aboard the Poo-Poo Choo-Choo: Biosolids, Public Health, and Environmental Justice in Post-War America

Graham Mooney (History, Johns Hopkins University)

This paper is about the political, environmental, and public health aspects of human waste disposal in modern America. It reconstructs the ill-fated, two-month, 3,000-mile return journey

in 1989 of a 63-car freight train containing 4,120 tons of sludge, which traveled from a wastewater treatment plant in Baltimore to Louisiana's "Chemical Corridor" and back again. The train—which a gleeful media dubbed the "Baltimore Poo-Poo Choo-Choo"—became something of a human interest story as it sought to dump its smelly load in Arkansas, Mississippi and Louisiana. Using interviews, newspaper articles, television reports, musical recordings, technical documents, and government hearings, I suggest that the train's journey reflects the shifting terrain of municipal political economics, public health, and environmental justice in modern America. Although the export of human waste across state lines was fairly commonplace in this period, the paper argues that the layered geographies of social environmental justice in the American south propelled the Baltimore Poo-Poo Choo-Choo to national infamy. Activists and poor black southerners were briefly united with state and local government agencies in disgust at this out-of-place rotting matter, at a time when these groups were otherwise at odds over environmental and health injustices to do with garbage disposal, incineration, lead smelting, and petrochemical refineries.

4. Developing a Political Ecology of Education, I

Location: Student Center 230

Organizer: David Meek (Anthropology, University of Alabama)

Chair: David Meek (Anthropology, University of Alabama)

Toward a political ecology of education?

Teresa Lloro-Bidart (Science Education, California State University - Chico), David Meek, Joseph Henderson

This presentation presents an intellectual genealogy of the political ecology of education. It first synthesizes different definitions of political ecology that scholars have enumerated over the sub-field's evolution into a working definition of a political ecology of education. We then provide an intellectual genealogy for a political ecology of education. We describe this as an intellectual genealogy to highlight that it is partial, and ongoing. We conclude the presentation by pointing to methodological possibilities for a political ecology of education as well as areas of emerging research that hold potential to inform this framework.

The politics of learning to keep bees

Eleanor Andrews (Development Sociology, Cornell University)

Since 1859, hobbyist beekeeper associations across the US have been comparing notes, mentoring beginners, troubleshooting members' hives, and socializing. In this talk, I examine these organizations as a site of social and environmental learning. Of course, these sites of learning -- these beekeeping clubs -- cannot be understood without an examination of their political ecological backdrop, the current furor over bee health and a related search for more "holistic" or "natural" ways to keep bees. How might the political dimensions of natural beekeeping interfere with or enhance the process of social learning within these organizations? As beekeepers with different motivations require specific texts and mentors, is traditional authority within the organizations contested or cemented? More broadly, how can these informal social organizations contribute to learning about and action oriented towards global environmental change? Can their particular politics of learning be translated into possibility and progress? This talk is the theoretical foundation of my dissertation, where I will seek to make sense of these real-world sites of social learning (as emblems of socio-ecological resilience and

exemplars of place-based and community-based education, etc.) and situate beekeeping - and beekeepers - in larger conversations on learning and resilience in the face of global environmental change.

Political ecologies of education: self-government and urban environmentalism

John Pitas (Human Geography, University of Maryland - Baltimore County)

This paper focuses on the roles of informal and nonformal education in the creation and implementation of technologies of environmental governance and environmentalities in an urban setting. While there is emerging literature focusing on the intersection of these topics, there is currently little scholarship highlighting the connections between education and environmentalism in urban areas. Such work becomes critical as urban governments and sustainability advocates frequently rely upon education to engage citizens in environmental projects and advance environmental goals. I investigate participatory research, citizen science, community outreach, summer camps, afterschool programs, and other educational methods employed by a NSF-funded research project in Baltimore, Maryland centered on pest infestation and other health hazards. I identify environmental narratives advanced by the project, and public and private sustainability agencies, and the ways in which educational practices serve to reinforce them. Through this analysis, I argue that informal and nonformal modes of education work as powerful tools in the creation of environmental knowledge and narratives. For example, project team members promote self-reliance through resident centered pest management best practices, shifting responsibility for environmental management from city agents and agencies to individual citizens and neighborhoods. Through such narratives, researchers (and public and private agencies) construct techniques of (self) governance, encouraging specific behaviors and attitudes toward the environment. This paper asks whether urban environmental education functions to promote neoliberal subjectivities under the guise of empowerment, or if it opens new possibilities for political struggle and transformative encounters with nature.

Decolonizing Study: Free universities and radical study-in-struggle across the US and Australia

Fern Thompsett (Sociocultural Anthropology, Independent Researcher), Eli Meyerhoff (Political Science, Autonomous Researcher)

Educational institutions have long been strategic spaces in which dominant cultures are asserted and, in turn, resisted. Indigenous peoples in particular have been dispossessed of lands, cultures, and labor by the establishment of schools and universities, both in terms of the occupation of space and the systematic exclusion of certain bodies of knowledge. A key ideology of domination has been the portrayal of formal education as having absolute legitimacy - with its expert teachers, exams, preparation of students for governance, and modernist/colonial imaginary of the 'social' vs. 'natural' binary - whilst de-legitimizing alternative modes of study. As such, alter-educational movements are historically central to the struggles of indigenous and other marginalised communities, such as enslaved and imprisoned peoples, rebellious women, and revolutionary workers. This paper engages 'militant ethnographies' from the U.S. and Australia to explore free universities and radical study networks as contemporary iterations of such movements. Through our embedded, activist research with the Brisbane Free University (Australia), Experimental Community Education of the Twin Cities (Minneapolis), and Inside-Outside Alliance (Durham, NC), we highlight how these projects subvert settler colonialism, white supremacy, and capitalism. Drawing on political-ecological theory, we observe their

reclamation of spatio-temporal commons in contemporary cities, subversive communication across socio-geographic divisions, and radical re-imagination of education as study-in-struggle. We focus on these projects' attempts to intersect with and support indigenous, decolonial, and abolitionist movements, and analyze how they might succeed and/or fail to embody such ideals.

5. The production and circulation of value in, of, and through nature, I

Location: Student Center 231

Organizers: Patrick Bigger (Geography, University of Kentucky), Kelly Kay (Geography, Clark University), Eric Nost (Geography, University of Wisconsin-Madison)

Chair: Patrick Bigger (Geography, University of Kentucky)

Discussant: Matt Huber (Geography, Syracuse University)

Cultivating Risk in the Caribbean

Chris Knudson (Geography, Clark University)

Financial products that are used to manage the effects of climate change, such as weather derivatives and catastrophe bonds, rely upon the valuation of risk. Those who sell such products are willing to take on the responsibility for losses that are determined in the contract. For these financial institutions and those to whom they further pass on the responsibility, risk has a certain value. Using the case study of the sale of weather derivatives sold to low-income people in St. Lucia, this paper examines the value that is attached to risk, and the networks throughout which the risk is traded. In order for there to be a market for personal weather derivatives, St. Lucia must be considered at risk of extreme weather events. The island's vulnerability to climate change is the starting point for the creation of risk's value, and an opportunity for profit. The value of risk is augmented and transformed as it is financialized and passed on through corporations to willing investors. This case study shows how it is necessary to analyze the financialization of risk in specific places so that we can better understand the global networks that link high-risk areas with large financial institutions. An analysis of these networks shows that the transfer of risk in the Caribbean resembles the longstanding transfer of value to Europe and North America, in ways similar to traditional resource exploitation patterns.

“Insurance in the Seed”: Managing risk and Producing Value in International Agricultural Development

Aaron Eddens (American Studies, University of Minnesota)

In the context of increasingly destabilized climate conditions across sub-Saharan Africa, the past decade has seen a surge of international development efforts aimed at addressing food security and climate change. Several large-scale initiatives directed by agricultural development agencies and philanthropies aim to produce drought-tolerant, hybrid varieties of maize and build the private seed sector throughout sub-Saharan Africa. Alongside producing new seeds, economists working on these initiatives have called for the introduction of novel financial tools such as weather index insurance to smallholder farmers. This paper focuses on the intersection of technoscience and financial capital embodied in the drought-tolerant maize/index insurance product “bundle.” Proponents argue that this approach is an essential tool for what they call “climate-smart” agriculture. Yet, as civil society groups point out, important questions remain as to whether or not these market-focused approaches to climate change adaptation are ecologically appropriate and socially just. Central to this debate are questions around what kind of value the “climate-smart” approach yields. What is valued? How is value produced in and how does it

move through the assemblage of the drought-tolerant seed/index insurance product “bundle”? This paper pursues this line of inquiry, by tracing some of the actors, policies, and objects involved in recent efforts to develop and disseminate the maize seed/insurance product bundle. I draw on document analysis of public sector and private sector institutions, key informant interviews, and participant observation at agricultural development conferences. In line with recent scholarship on the financialization of food systems, the paper analyzes the mechanisms through which financial value is produced, how discourses of risk and security buttress these processes, and how climate change is used to generate new sites for the expansion of capital.

Valuing nature, containing environmentalism: catastrophic risk, financialization, and corporate greening in the wake of the Exxon Valdez oil spill

Sara H. Nelson (Geography, University of Minnesota - Twin Cities)

The 1989 Exxon Valdez oil spill is widely recognized as one of the worst environmental disasters in US history, and as a catalyst for the contemporary environmental movement. However, there is another significant aspect of the spill's history that has received less attention, namely its role in inaugurating the era of credit derivatives that has so deeply transformed the contemporary economy. When Exxon received an almost \$5 billion fine in punitive damages (very little of which they would ever pay), the large loan the company requested from JP Morgan exceeded what the bank could lend given existing reserve requirements. Partnering with the European Bank for Reconstruction and Development, traders at JP Morgan executed the first credit default swap, an innovation that, when later standardized, would qualitatively transform the role of finance in the global economy.

This paper begins from this under-examined aspect of the spill's legacy to situate the history of financialization in the capitalist containment of environmentalism. The Exxon spill was, I argue, a key moment in which the question of how the value of nature was to be determined, and by whom, became a topic of significant concern for corporations who found themselves liable for damages to non-market environmental values under new environmental regulations. In hearings, debates, and a NOAA-convened expert panel on controversial methodologies for valuing non-market damages, oil companies poured a huge amount of energy into controlling the terms on which the value of nature would be assessed. The methodologies that were debated and defined in the aftermath of the spill are those used for assessing non-market values of “ecosystem services” today. The heightened regulatory and reputational risk of spectacular environmental disasters prompted the drafting of the Valdez Principles, the first green corporate strategy aimed at instituting “whole-company environmentalism.” By tracing these threads running through the Valdez response, I examine the linked histories of environmental valuation, financialization, and corporate greening that came together in a key moment for containing environmental politics and shaping the trajectory of neoliberal environmentalism as we know it.

A Hostile Takeover of Nature? Placing Value in Conservation Finance

Kelly Kay (Geography, Clark University)

Conservation finance is an emerging field which aims to "deliver maximum conservation impacts while, at the same time, generating returns for investors" (Credit Suisse 2014). Driven partially by the tremendous growth in so-called impact investing, big players like JP Chase Morgan, Goldman Sachs, and Credit Suisse are collaborating with land trusts and other non-profit environmental groups in hopes of finding ways of making conservation pay; eventually aspiring to scale up existing projects and to produce conservation as a standardized and

recognizable asset class of its own. Much of the necessary groundwork for testing the viability of conservation finance programs is happening within vast and resource-rich landscapes of the United States. In this paper, I aim to explain how conservation finance is produced as an asset class and how that asset comes to circulate as a financial product. I explore three questions: (1) what types of 'natures' are better and worse for financial investment, (2) what is the material basis for the value which is being produced, and (3) to whom are financialized ecological values being sold? This paper looks at the Northern Forests of Maine and ranching lands in Colorado as two illustrative cases. Additionally, the author draws upon semi-structured interviews conducted with conservation-minded timber investment management organizations, farm and ranch land investors, restoration ecologists, land trusts, and conservation financiers.

6. Practical Farming in an Era of Climate Adaptation

Location: Student Center 249

Organizers: Lilian Brislen (Rural Sociology, University of Kentucky), Kate MacFarland (Forestry, USDA National Agroforestry Center)

Chair: Lilian Brislen (Rural Sociology, University of Kentucky)

Bridge or Barrier: Extension Educators and Adaptive Capacity Regarding Climate Change

Terrie A. Becerra (Sociology, Kansas State University)

The vulnerability and resiliency of beef cattle production systems in the Southern Great Plains are affected by key social institutions as well as by knowledge, attitudes, and behaviors of agents and producers. Institutional support (e.g., Extension) can be a resource that helps households, communities, and production systems be more resilient to traumatic events, be they biophysical (extreme climate variability) or social (loss of local institutions). This paper examines the social factors that contribute to system vulnerability and resilience. We explore agents' views on climate change, their interactions with their constituents, and we identify gaps in information and/or materials necessary to engage effectively with constituents regarding climate change and beef cattle production in the region. We developed and administered a digital questionnaire to all Extension Educators in Kansas and Oklahoma. We asked about their attitudes regarding climate change, interactions with their constituents, their information sources and needs, and their need for decision-making support tools. Results indicate that Extension educators' information needs are two-fold: they require reliable sources to build a shared knowledge base for educators, and they need the resources to distribute information to clientele. This research addresses gaps and barriers in knowledge related to climate adaptive agricultural production. Results will inform capacity-building resources, including decision-making support, as well as adaptation and mitigation management practices.

Agroforestry adoption for adaptation and mitigation: how does it happen?

Kate MacFarland (Forestry, USDA National Agroforestry Center)

Agricultural lands are currently an important emitter of greenhouse gases, but have the potential to sequester carbon dioxide as well (IPCC 2007). In climate mitigation discussions, researchers cite changes in agricultural land use, including practices that include agroforestry, as potential sequestration opportunities (Montagnini and Nair 2004, Schoeneberger 2008, Udawatta and Jose 2011). The decisions to adopt and implement these practices are made by landowners for economic or cultural objectives often with knowledge gained by other practitioners and available scientific or best practices guidance. Landowners are the gatekeepers to the realization of

agroforestry's climate mitigation and adaptation potential. These climate change mitigation benefits do not directly or immediately benefit landowners who are implementing the changes that create them, but agroforestry practices can also help landowners adapt to climate change. Understanding how landowners make decisions is inherent to understanding the potential for agroforestry to adapt and mitigate the effects of climate change. This presentation reviews research on adoption of new practices by landowners; diverse and complex motivators for conservation decision making reflect the diversity of landowners, land management practices, and ecosystems and provides an opportunity for a variety of approaches to encourage agroforestry adoption.

Climate Adaptation and Agriculture in a Post-2020 Climate Regime: USDA strategies for achieving Social and Ecological Resilience

Michael Ryan Bard (Global Environmental Policy, American University, School of International Service)

This paper begins by discussing the possibilities and realities of agriculture in the post-2020 climate regime informed by the latest discourses, ideological divides and proposed voluntary commitments of actors, specifically focusing on climate adaptation. I examine key drivers and underlying interests, informing and shaping negotiating positions leading into Paris, as well as, the gaps in the commitments between Least Developed Countries and Developed Countries in terms of assessing vulnerabilities and achieving varying degrees of agricultural resilience. My case study is local-level policy synthesis and critique of the USDA Climate Adaptation plan with a focus on the individual adaptation plans of the Economic Research Service, Farm Service Agency, Risk Management Agency and Natural Resources Conservation Service as a strategy for deconstructing the way agriculture risk and resilience is problematized by state power, in this case, Department of Agriculture. In addition, I look to evaluate the Agriculture Act of 2014 passed by Congress, otherwise known as the Farm Bill focusing specifically on the conservation title, commodity title and research title and their efficacy in increasing social and ecological resilience. This research draws particular attention to the role of large-scale, capital-intensive agriculture in combination with crop insurance and risk management strategies employed under global capitalism, as opposed to practices that employ traditional knowledge and alternative farming strategies. As a result, this research produces an important policy analysis of current and proposed "best practices," outlined in primary resource documents for the U.S. agricultural policy under a changing climate and begins to catalog these policies into three political economic categories of adaptation, a) adjustment, 2) reformist and 3) transformation. The presenter has forthcoming research to contrast these policies through key informant data from small farmers, obtained while conducting participatory-action research for the Rural Coalition and National Family Farm Coalition.

A political ecology of agroforestry and adaptation in the Artibonite Valley

Henry Anton Peller (Agroecology & Political Economy, Ohio State University)

In the Artibonite Valley of Haiti, various rural development institutions appropriate the technologies and imaginary of agroforestry. Local constraints are many: pepinye (nursery) operations, uneven peasant classes and adverse environmental conditions. Programs normally operate with a foreknowledge that they will not persist for more than several years, and so communities are seen as needing to compete and survive independently. This dominant neoliberal mentality of autonomous community development is logical in a territory where the

state is occupied by foreign powers and consolidated into the hands of transnational elites. Borrowing from Karatani's modes of exchange framework, development institutions (a collective pseudo-state) are seen to provision ecosystem services such as trees through communal (gift-reciprocity) and commodity (market) exchanges. These exchanges constitute a depoliticized development that diverts peasant consciousness onto their local politics and performance in markets. This is of critical importance at a time when a revolution to seize the state has been violently repressed over the past two decades. As surplus extraction from the periphery is called into question by capitalist ecological crisis, elite institutions now advance agroforestry as a technological resolution to sustaining peasant livelihood. Agroforestry thus serves as an imagined solution to produce "adaptation"; yet the primary mechanism for diffusing adaptation is the ineffective and ineluctable autonomous community development strategy. This paper concludes by considering the appropriation of agroforestry and other adaptive technologies by transnationally articulated Haitian peasant movements through a very different set of exchange relations embedded within the politics of the Artibonite Valley.

From the Dead Zone, Up the Mississippi: The Social Worlds of Hypoxia

Brianna Farber (Anthropology, University of South Carolina)

The Mississippi River represents a link between places like Iowa and Louisiana, a seemingly unidirectional flow that carries chemical run-off from industrial corn and soya farms down to the Gulf, creating a "dead zone", where the levels of oxygen become so depleted that the water cannot support aquatic life. This research examines alliance-building efforts over the dead zone in the Gulf of Mexico via the Mississippi River, focusing on knowledges, practices, and subjectivities of non-institutional, institutional, human and non-human actors and groups. Specifically, this study has two main objectives: 1) to identify the human and nonhuman actors entangled in this environmental-social problem and to explore their relationships to their environments and 2) to examine the kinds of emerging and established social networks and how they address issues of land and water management. The Mississippi acts as a major transportation route, municipal and agricultural water supply, a tourist destination, a natural park, and a site of environmental disaster, involving floods, droughts, and poor infrastructure. This project will focus on agricultural and coastal livelihoods, resource management, and the actors involved in these systems. Farmers are seen as major contributors to hypoxia, motivating institutions to try to connect with farmers about their practices. Drawing on political ecology, science and technology studies, posthumanism, and agricultural anthropology, this project utilizes ethnographic methodology to examine the flow and exchange of information, knowledge, and practices of coalitions in disparate places forming mutual interests over one of the most important natural and cultural resources in the U.S.

7. PANEL: Feminist Research Practices in Political Ecology: A Meditation in Three Acts

Location: Patterson Office Tower 18th Floor, West End Room

Organizers: Rebecca Lane (Geography, University of Kentucky), Jessa Loomis (Geography, University of Kentucky), Sarah Watson (Geography, University of Kentucky)

Panelists: Heidi Hausermann (Geography, Rutgers University), Shiloh Krupar (Georgetown University), Rebecca Lave (Geography, Indiana University), Juno Salazar Parreñas (Women's, Gender, and Sexuality Studies, Ohio State University)

This panel will bring together scholars focusing on diverse facets of critical political ecology research, with each scholar discussing how their work aligns with and diverges from conceptions of feminist theories and methods. The panel will be broken into three acts. In Act 1, each scholar will discuss their understandings of feminist research practices and how these inform their work. In Act 2, the scholars will discuss the messy process of actualizing their ideals during field work and then the eventual translation of their field work into publishable formats. In Act 3, the panelists will highlight some of their research experiences that exceed or do not conform to traditional research narratives. Overall, we are hoping to foster an engaged and honest dialogue about the challenges, joys, and unexpected moments in research as well as the ways experimentation and play are part (or not) of feminist research practices.

DOPE 2015: SATURDAY, FEBRUARY 28TH

SATURDAY SESSION BLOCK #4:

3:20pm – 5:00pm

Sessions 1-5 in this block are located in the Student Center. Session 6 is located in Patterson Office Tower.

1. Gender, Space and Development

Location: Student Center 211

Organizer: Emily Van Houweling (Planning, Virginia Tech)

Chair: Emily Van Houweling (Planning, Virginia Tech)

Discussant: Emily Van Houweling (Planning, Virginia Tech)

Gendered space and integrated pest management: perspectives from the house-lot garden in Bangladesh

Maria Elisa Christie (Geography, Virginia Tech)

From a feminist political ecology perspective on the importance of everyday life and gendered space, this presentation considers the participation of women and men farmers in an Integrated Pest Management (IPM) program in several rural districts in Bangladesh. The program is implemented through collaboration between US universities, and a Bangladeshi research institute and NGO. Together, they work to disseminate Trichoderma to farmers to combat soil-borne diseases and teach farmers how to produce Tricho-compost and Tricho-leachate to apply to their vegetable crops. Both are produced in the house-lot garden, a privileged site of cultural and social reproduction in which to observe nature/society relations. There, women spend much of their time due in part to restrictions on their mobility based on religious norms informing gender roles. We look at two approaches, one targeting men and one targeting women. In the first, men are targeted in an IPM program due to their primary role using pesticides in vegetable production. The second targets women through a livelihood approach that aims to increase their incomes using various components including raising animals and making Tricho-compost, all in the house-lot garden. We consider gender roles and farmer's perspectives on the production of Trichoderma in these two different approaches through interviews with men and women farmers at nearly 40 households.

Gendered assets, sense of place, and livelihood strategies in Sank'ayani Alto, Tiraque, Bolivia

Beth Olberding (Urban and Regional Planning and Natural Resources, Virginia Tech), Maria Elisa Christie (Virginia Tech), Ana Karina Saavedra (Fundación para la Promoción e Investigación de Productos Andinos (PROINPA))

Our research will highlight how gender influences assets and sense of place in Sank'ayani Alto, Bolivia. Understanding how women's assets affect conservation agriculture and development programs is essential to closing the gender-asset gap. Although women's assets is the context for this article, the research is conducted through a feminist political ecology (FPE) lens using data collected from interviews, focus groups, and participatory mapping. The latter was used to map

peoples' spaces, livelihoods, and everyday life. Men and women in this community assert that their respective gender had more access and control over assets than the opposing gender claims to be true. Women in Sank'ayani Alto have the most control over their sheep, one of their few assets, which in turn contribute to women's sense place. Although most men interviewed in this community agree that women have control of sheep, the division of assets does not appear to be equal. A gender-asset gap still exists thus understanding how gender affects assets will improve development projects whose objectives include gender equality. Since literature pertaining to the intersection of FPE and gendered assets in conservation agriculture is limited, this paper seeks to expand this literature by exploring gendered assets in Sank'ayani Alto, Bolivia.

Spatial and Gender Dimensions of Grain Storage Pest Management among Ethiopian Smallholder Farmers

Kinsey Blumenthal (Geography, Virginia Tech)

Ethiopia relies heavily on agriculture as the primary source of employment for its labor force and a major contributor to its GDP (over 90% coming from smallholder farmers). Agricultural productivity and food security can increase through decreasing stored crop loss. The Integrated Pest Management Innovation Lab (IPM IL), funded by USAID, is turning attention to reducing post-harvest loss of stored grain among Ethiopian smallholder farmers. This presentation is on proposed student research seeking to aid IPM IL's goal in Ethiopia through providing information to foster mutually beneficial exchanges between local and scientific knowledge regarding stored grain pest management. It will also aim to integrate IPM into farmers' current practices, and determine who should be targeted to receive specific training. Informed by Feminist Political Ecology (FPE), this research aims to examine (1) how the location of the storage unit and a person's gender affect an individual's labor, access, control, and knowledge regarding grain storage pest management; and (2) what the implications of this information are for IPM strategies. The projected methodology is a rapid gender assessment composed of individual interviews with men and women in farming households, focus group discussions (FGDs), and observation of storage sites. Data collection is estimated to take place over a total of four weeks and involve three Ethiopian villages. The findings will inform a quantitative survey for collecting data over a broader area. Audience input is encouraged to assist in the development of a full research proposal for this field work.

Litter Boxes In The Master Bedroom: Inhabiting The Queer Domestic Ecologies Of "Crazy Cat Ladies"

William McKeithen (Geography, University of Washington)

A growing literature has emerged in recent years surrounding the home and its role in the production of intimate spatial orders and sexual norms, as well as the everyday homemaking practices through which various sexual dissidents contest heteronormative domesticity and queer the home. Simultaneously yet separately, a growing collective of scholars have enlisted the analytics of "queer ecology" to excavate the ways in which (hetero)sexual norms have inscribed heterosexuality into natural spaces and human-nonhuman relationships. This paper intersects these literatures in order to produce queerer landscapes of inquiry. On the one hand, queer geographers have been limited in their consideration of non-normative intimacies across the boundaries of human/animal, while on the other queer ecologists have often overlooked the home as an ecology. Thus, this paper offers an exploration of queer domestic ecologies. This paper builds upon research into cultural discourses of "crazy cat ladies" drawn from

predominantly digital archives of United States popular and counter culture. Building on this research, I argue that by examining the homemaking practices of women-with-cats, we can understand how the home becomes a lively ecology in the contestation of not only heteronormativity but also speciesist hierarchies. Indeed, the one mutually constitutes the other. Such insights expand our understanding of the home as a privileged place in the everyday politics of not only human sexualities but also interspecies intimacies.

2. Perceptions of Urban Environmental Health: Narrating Political Ecologies of Disease, II

Location: Student Center 228

Organizers: Creighton Connolly (Geography, University of Manchester & European Network of Political Ecology (ENTITLE), Panagiota Kotsila (Social Science, Development Studies & Political Ecology, Universitat Autònoma de Barcelona & European Network of Political Ecology (ENTITLE))

Chair: Panagiota Kotsila (Social Science, Development Studies & Political Ecology, Universitat Autònoma de Barcelona & European Network of Political Ecology (ENTITLE))

Discussant: Rich Schein (Geography, University of Kentucky)

Cleansing public nature: Homelessness, health, and displacement

Jeff Rose (Environmental Studies, Davidson College)

Through a 16-month critical ethnography, this research engages directly with a group of individuals who reside in and among the margins of an urban municipal park. Facing abject poverty, threats from law enforcement, and the trials of living outdoors, these “Hillside residents” cite the local health department as the primary source of potential displacement from the place they call home. “Health,” in this context, references three interconnected features of contemporary urban homelessness: the material interactions associated with living outdoors, the litter that occasionally accumulates in the area, and human solid waste. Complementarily, health also has specific discursive constructions on the Hillside, where the individuals living there are presented as unclean, particularly vis-à-vis the “natural” unbuilt world in which they live. A logic of needing to sanitize the unclean means that “cleaning” moves beyond the material imposition of humans on nature, or nature on humans. Instead, cleaning speaks to a societal problem: There is a need to cleanse our society of unwanted social detritus, to create a healthy society. “Cleanliness” creates an optimum urban experience to facilitate the transactions of contemporary consumer and financial capitalism, providing a new but central facet of global neoliberal restructuring (Aguiar & Herod, 2006), having particularly devastating effects for the lowest classes (Ahmed, 2011). This research uses political ecology to consider the role of material and discursive cleanliness as an agent of health in the social reproduction of capitalism to create natures and subjects that further support capitalism.

“Bird Cages and Boiling Pots for Potential Diseases”: A Landscape Political Ecology of ‘Swiftlet Farming’ in Malaysia

Creighton Connolly (Geography, University of Manchester)

This paper details the social construction of the ‘swiftlet farming’ industry in George Town, Malaysia. It argues that narratives of health and disease continually police which landscape practices are acceptable for the increasingly globalizing and image conscious city. ‘Swiftlet

farming' refers to the use of inner city shophouses and other commercial buildings for harvesting the edible nests of swiftlets (constructed from their saliva). Due to the high global demand and prices for birds nests, the number of swiftlet farms have exploded in cities and towns across the country over the past decade, as entrepreneurs have been trying to cash in on the lucrative industry. The competing discourses and reactions to swiftlet farming in George Town, particularly in relation to its alleged potential for causing outbreaks of disease such as avian flu or dengue fever offer an apt entry point for studying this contested normative landscape. I draw on recent work in the landscape political ecology literature to analyze how swiftlet farm(er)s have been politicized by various stakeholders as (in)appropriate for the urban landscape. The paper concludes by considering the significance of this form of analysis for studies of urban environmental health and disease, and hybrid landscapes more broadly.

Putting food first: narrating, mapping and analysing food-environment- society nexus in informal settlements of Nairobi

Sohel Jahangir Ahmed (Development and Planning, University College London)

It is now well documented that people in the low income settlements of the Global South are more likely to live and work near areas of higher environmental risks, and much of the food bought and consumed within these settlements in Nairobi also suffer from the same due to long deep interplay of structural drivers and associated maldistribution of resources and infrastructure. We aim to unearth socially constructed knowledge, practices and perceptions around food consumption and livestock keeping practices in a few informal settlements in Nairobi. Drawing on theory of landscape-society and food centred environmental justice, we argue that food vendors who are critical nodes within food-scapes of these informal settlements are often misconceived as obstructionists and public nuisance by authorities and actors who are not only in control of dominant discourses around the nexus of health-environment-society , but are responsible for promoting neoliberal infrastructure trajectories for minority of the city, and thus putting food and health at risk for majority that inhibiting Nairobi. Hybrid approaches placing participatory mapping techniques with focus group discussions, interviews, and other visual tools, representations and narratives are layered to co-produce and solidifying context-embedded knowledge around environmental health conditions where much of the food-scape of the informal settlements are located. These are visual and narrative situated manifestation of practices that the places/landscapes are piling up from such uneven interplay between urbanization and capitalist development, and putting the communities at risk. There are promising signs though, that such knowledge building will actively benefit the community to bring food at the fore of collaborative urban health and infrastructure planning.

3. Developing a Political Ecology of Education, II

Location: Student Center 230

Organizer: David Meek (Anthropology, University of Alabama)

Chair: David Meek (Anthropology, University of Alabama)

Agroecological Education in Alternative Spaces of Convergence

David Meek (Anthropology, University of Alabama)

This presentation draws upon a political ecology of education (PEoE) framework to explore how social movements create alternative spaces for environmental knowledge production. Traditional approaches to agricultural learning are based in a dissemination model, where experts bring

knowledge to rural communities. This presentation highlights an alternative model, where agricultural learning occurs in spaces of convergence. The research focuses on the Jornada de Agroecology (agroecological journey), which is a knowledge sharing, or convergence space, orchestrated by the Brazilian Landless Workers' Movement (MST) in Santa Catarina, Brazil. Drawing upon participant observation and interviews with activists at the 2012 jornada, I argue that the creation of this space, and the production of environmental knowledge is closely linked to the MST's harnessing of political economy. The MST creates a space through which grassroots experiences and alternative forms of environmental knowledge be widely shared by bringing together thousands of activists from across Brazil.

Organize or die: Farm school pedagogy and the political ecology of the agroecological transition in rural Haiti

Sophie Moore (Cultural Studies, University of California - Davis)

The environmental knowledge of the rural poor has long been a central topic in political ecology. For peasants like those of Haiti's central plateau, environmental knowledge is inextricable from political praxis - learning how to live with extreme environmental change, largely in the absence of state or institutional support, is a matter of life and death. This paper illuminates the emergence of new political forms around the principle of food sovereignty in global peasants' movements like La Via Campesina, and asks particularly how the farm school functions as a political and pedagogical site in the new 'agroecological transition' (Holt-Giménez & Altieri 2012). Based on continuing fieldwork with Haiti's largest and oldest peasants' movement, the Mouvement Peyizan Papay (MPP), this case study will demonstrate how organized peasants lay claim to rural autonomous spaces by participating in MPP's farm school pedagogy, thus challenging the dominance of such paradigms as sustainable development in ordering hemispheric relations. While a recent call for a 'political agroecology' (de Molina 2012) promotes a Northern-led effort to effect institutional change towards agrarian sustainability, this paper proposes that it is equally if not more important to identify and support Southern centers of environmental knowledge production. The emergence of a new pedagogy of political agroecology is thus a vitally important process, constitutive of new and potentially liberatory conjunctures of history, nature, and place at 'marginal' sites of metabolic rift. Peasants' mobilization of environmental knowledge goes beyond resilience or resistance, this paper argues, and as such is at the forefront of a new agroecological challenge to centers of power that reproduce inequality in the South.

Schools, Ideology, and Environmental Governance in Rio de Janeiro, Brazil: Radical Opportunities in Public Education from a Gramscian Political Ecology Perspective

Nicolas Stahelin (International Educational Development, Teachers College, Columbia University)

Schools need to be examined as primary sites of ideological formation that serve to produce environmental subjectivities according to specific political-economic agendas. I maintain that schools - as sites of both reproduction and contestation of ideologies - deserve greater attention within a broader political ecological research agenda concerned with the formation of hegemonic environmental regimes. My paper analyzes state-driven environmental education (EE) initiatives in public schools of Rio de Janeiro from a Gramscian approach to political ecology. It is based on a qualitative case study of ELOS da Cidadania ("Rings of Citizenship"), a program run by the Superintendence of EE within the State Secretary of the Environment of Rio de Janeiro (Brazil),

designed to develop capacity for critical EE practices in public schools throughout the state. The ELOS model is centered on reforming public schools as spaces of participatory environmental governance. I will analyze this program as a spatial practice - i.e. producing and restructuring space; reorganizing spatial relations - that challenges inequalities found in the environmental governance practices of capitalist society. I characterize ELOS as an attempt towards radical socio-spatial environmental praxis, aiming to mobilize school communities to resist dominant environmental regimes by democratizing local environmental management and increasing grassroots control over territory. Towards this end, the role of ideological critique is crucial in the formation of a critical territorial consciousness. My discussion engages both the limits and possibilities of this political project, inserting the concerns of political ecology squarely into the literature on public environmental education for democracy and social justice.

Making the Tacit More Tangible: A Critical Analysis of Translating Environmental Knowledge as Heritage for Schools in Belize

Rebecca Zarger (Anthropology, University of South Florida)

Political ecological analyses have seldom been applied to youth as active decision makers or individuals with extensive local environmental knowledge who are remaking and transforming landscapes. Here I argue that considering the intersections between scholarship on children's agency from the anthropology of childhood and the politics of environmental knowledge from political ecology can deepen our understanding of children's lived experiences. In this paper, these issues are examined through discussion of the Toledo Environmental and Cultural Heritage Alliance (TEACHA), a long-term collaborative education project in southern Belize with Maya educators, activists, and children created to develop ways to bring Maya environmental knowledge and practice, in the form of a curricula focused on experiential learning and "heritage," to formal school settings. In this way, I consider the ethical and practical dilemmas of efforts to make tacit learning and intangible heritage more tangible, as well as the ways children are remaking and legitimizing what constitutes environmental knowledge through their participation. Finally, I discuss how this contributes to an emerging political ecology of education.

4. The production and circulation of value in, of, and through nature, II

Location: Student Center 231

Organizers: Patrick Bigger (Geography, University of Kentucky), Kelly Kay (Geography, Clark University), Eric Nost (Geography, University of Wisconsin-Madison)

Chair: Kelly Kay (Geography, Clark University)

Discussant: Betsy Beymer-Ferris (Geography, University of Kentucky)

Carbon in parallax: State mediated values and the incomplete subsumption of nature

Patrick Bigger (Geography, University of Kentucky)

Markets in, of, and through nature have attained a tenuous hegemony in environmental governance in the global North. While some of these markets rely on material interventions into the non-human environment, others, like carbon markets, seek to fashion a relationship between monetary value and greenhouse gases through the fiat creation of credits that represent the right to pollute. Carbon credits can then be traded amongst polluting firms and speculators. Following recent geographic scholarship on incommensurable aspects of value, this paper is concerned with the parallax values that arise in the process of commodifying greenhouse gas

emissions and incentivizing their absence in industrial production. Drawing on fieldwork during the construction of California's cap-and-trade market, I demonstrate that competing practices of valuation in turn reflect on the fundamental incommensurability of more familiar Marxist categories of value. In this case, Value realization relies on the synthesis of use and exchange values that are defined radically differently by the panoply of actors enrolled in their creation and exchange. Carbon credits are imbued with parallax values through two distinct, but entangled, processes: regulatory commodity definition that is shot through with competing performances of symbolic and economic valuation, and the more political-economic challenge of reconciling carbon as a fiat factor of production and as a speculative vehicle. The analysis suggests that each of these gaps, one performative, one structural, limit the ability of carbon credits to unproblematically enter the realm of universal fungibility.

Making Time for Carbon

David Lansing (Geography, University of Maryland - Baltimore County)

Using an example of the role of time in the creation of carbon offsets, this paper discusses some of the precarious assemblages needed to mark time, and their role in the realization of value. Rather than thinking about time as a barrier that capital tries to overcome through the development of exotic forms of "fictitious capital", I propose instead, that by thinking about the ways that time is brought into being, we can see how the techniques of marking time are productive of an orientation toward the world that allow for capital's own moments of becoming. Thinking about the relation between time and capital in this way demonstrates both the resilience and precariousness of capital.

Biodiversity value and abstract social nature - tensions and obstacles to reconciliation

Andy Lockhart (Urban Studies & Planning, University of Sheffield)

'No Net Loss and Beyond for Biodiversity, for business means absolutely nothing,' said Peter Bakker, President of the World Business Council for Sustainable Development at the Business and Biodiversity Offsets Programme's international summit in London in June 2014. As Dempsey (2013) has argued, efforts to demonstrate material risk to business from biodiversity loss has proved incredibly challenging. Despite the development of new tools of measurement, the material connection between biodiversity and ecosystem service provision remains difficult to quantify, undermining part of the economic case for the protection of biodiversity per se. Drawing on in-depth interviews and participant observation around the abortive attempt to introduce biodiversity offsetting into the English planning system, this paper investigates the tensions between attempts to capture and trade the value of biodiversity through offsetting, and the methodological approaches of the broader ecosystem services and natural capital framework through which it was legitimised. Firstly, it argues that the complex epistemological tensions between ecological and economic valuation techniques for offsetting have produced an unstable terrain for the construction of biodiversity as a 'bearer of value'. Secondly, it shows how these ambiguities undermined supporters' attempts at making the economic case for offsetting. Environmental economists argued that a regulated market could be a source of green growth as well as making nature's value visible in economic decision-making. However, advocates ultimately failed to convince the UK Treasury that offsetting would result in anything other than a burdensome regulatory cost to business. The paper concludes that the subsumption of biodiversity as 'abstract social nature' in a world of ecosystem services (Robertson 2012)

remains deeply problematic, and is likely to remain a site of contestation, opening up questions over biodiversity's potentially disruptive or demoted role in ongoing efforts to value nature.

Putting the Green in Bureaucracy: Practices of Quantification and Valuation in Environmental Regulation

Christopher M. Rea (Sociology, University of California - Los Angeles)

While geographers have devoted considerable attention to exploring the ways that intentional environmental reregulation creates new avenues for capital accumulation (e.g. Smith, 2007; Castree, 2008), it remains somewhat unclear how the less grandiose day-to-day work of environmental regulators may also help create these new sources of ecological value. Through an ethnographic study of environmental regulators tasked with enforcing key environmental laws, I shed light on the subtle ways that ideas about ecological value and natural capital work as frames, models, and methodologies used to enact “best professional judgments” about ecological systems, and ultimately to assign particular values to nature. I also show the ways that non-human nature pushes back against such assessments, which in combination with the interpretive work of environmental regulation opens spaces of conflict in at least two arenas: one focused on modes of quantification, where actors contend between economic, ecological, statutory, and moral frames for making value assessments; and one focused on presentations of value, where actors contend between value assessments that best represent their self-defined interests. The ‘value settlements’ environmental regulators reach in these contested spaces allow processes of commensuration to proceed, and ultimately make nature legible for capitalization and exchange. Accounting for the ways that these basic regulatory practice help create ecological value is essential for creating a fuller picture of the ways capital and natural capital relate.

5. Decolonizing agriculture for institutional change

Location: Student Center 249

Organizers: Karen Rousseau (Environmental Sciences, CIRAD – CIFOR), Emily Gallagher (Geography, Clark University)

Chair: Anna Erwin (Government and International Affairs, Virginia Tech)

Discussant: Emma Gaalaas Mullaney (Geography & Women's Studies, Pennsylvania State University)

Farmworker Food Insecurity: Investigations in the Nuevo South

Anna Erwin (Government and International Affairs, Virginia Tech)

Public health scholars have documented that food insecurity in Latino farmworkers populations in North Carolina and Virginia, key states in the Nuevo South, can be up to four times as high as the general US population, with 63-98% of the surveyed farmworkers suffering from food insecurity (Borre, Ertle, & Graff, 2010; Essa, 2001; Quandt, Arcury, Early, Tapia, & Davis, 2004, p. 574). Nonetheless, the majority of the empirical and theoretical literature addressing food insecurity among this group has arisen from studies undertaken in California (Brown & Getz, 2011; Minkoff-Zern, 2014). In contrast, this review paper first examines how scholars are currently conceptualizing Latino farmworker food insecurity, poverty and agency and documents the structural determinants of why those laborers are poor and food insecure in the Nuevo South. Thereafter, the paper argues that the existing literature on farmworker food insecurity can indeed inform initiatives in the Nuevo South aimed at connecting the alternative food movement and farmworker populations. I conclude by comparing the Nuevo South Latino farm laborer

population with such groups elsewhere and contend that it differs from those politically, socially, and economically. Those discrepancies offer both opportunities and challenges for activists and policymakers interested in assisting this population in the Southeastern United States.

Tackling the question of shea tree regeneration: how to bypass colonial legacies?

Karen Rousseau (Environmental Sciences, CIRAD – CIFOR)

In western Burkina Faso, the shea nut trade and shea butter consumption have been important parts of rural livelihoods for centuries. This is even more the case since the shea trade boom in the early 2000s. Although the published evidence is not conclusive, most studies express concern about a lack of shea tree regeneration and hence, the progressive reduction of shea tree density in agroforestry parklands. A majority of farmers from our survey of 280 households in three villages in western Burkina Faso confirmed a decrease in the shea tree density in their fields and fallows. To address the question of shea tree regeneration actors representing commercial companies, NGOs, and governments have shown recent interest in developing grafted and planted shea trees. Shea plantations currently do not exist in agrarian systems in western Burkina Faso. We explore the colonial roots of efforts to regenerate shea parklands, and their impacts in terms of development and environment in the context of contemporary globalization. Plantations of shea tree in managed forest reserves were first a colonial idea to increase and rationalize shea production for exportation. The idea of plantation simply assumes away all of the complex dynamics of shea tree tenure and associated land tenure. As for others NTFP, access is considered as free whereas we demonstrate that shea access is being appropriated and restricted. Finally, we argue for decolonizing the way projects on shea parklands are designed, in order to develop solutions closer to indigenous practices, constraints and representations of the tree.

Sustaining cocoa landscapes, governing cocoa futures

Emily Gallagher (Geography, Clark University)

An emerging literature around postcolonial ecologies attempts to retrace the cultural and ecophysiological production, and persistent reproduction, of postcolonial landscapes and rural livelihoods. This paper presentation explores the institutional terrain and resource management practices that have together produced the cocoa agroforests of Ghana, West Africa, while examining new interventions to green the cocoa industry. Fieldwork for this research was conceived as an ethnographic study of extension practice, designed to examine the landscape perceptions, environmental narratives, and recommended management practices that intervene in the production of cocoa farms. The paper will discuss the ways in which ideas about mixed cocoa-forest landscapes, extension pedagogy, and institutional norms both sustain the cocoa sector and drive landscape processes. It will further describe efforts to launch farmer business training, certification initiatives, and REDD++ (Reduced Emissions from Deforestation and Degradation in developing countries) pilot projects with cocoa smallholders through reformed agricultural extension models. Through this paradigmatic case, I will reposition revised and revitalized cocoa and conservation extension services as common modes of resource governance, now converging around green market-driven approaches to manage forest landscapes and rural livelihoods through public-private-partnerships and transnational agreements for more “sustainable” tropical commodity crops.

National infringement on Ecological Rudiment(s): Bangladesh on Shonar Bangla

Saad Quasem (Political Ecology, Bayaan Collective)

Manifestations of nationalism have long and complex histories in South Asia. Terrestrial entities are imagined within the terms of dense ecological networks which compose the idea of mother nature. Around the world, the transition from colonial to post colonial states have imbibed appropriating nature and ecology into the nationalist agenda. Using the example of Bangladesh and its liberation struggle, I attempt to understand the nexus between the permanent backdrop of ecology as the notion of the ‘free,’ versus a civilized, material world of the oppressors. The fundamentals of free- dom are then simultaneous to nation-building and resort to nature. The questions I ponder over tend to read why the nationalist struggle engages with an ecological narrative? Is it the restraint of movements and regimes which ascertains the struggling class to idealize the movement in lieu with nature? Why is it that the home, the surrounding space and the built environment constitutes utopian national selves. The independence of Bangladesh took place in 1971, after decades of struggle for rights under colonial and post-colonial subjection and a bloody liberation war. Bangladesh adopted the Tagore song as its national anthem “Amar shonar Bangla, Ami tomae bhalosbashi. Chirodin tomar akash, tomar bataash amar mone bajae bashi.” Using a few such examples of harkening for the motherland, I argue that in order to impose the national in a post-colonial state, the narrative forces of the nation imposes hegemony over culture which has to imbibe nature. The idea of Bengal or the state acts as the powerhouse which encumbers the naturally present notions.

6. PANEL: Participation and the Commons: Challenges of Collective Self-Organization

Location: Patterson Office Tower 18th Floor, West End Room

Organizers/Participants: Olivia Williams (Geography, Florida State University), Amanda Huron (Geography, University of the District of Columbia), Dugan Meyer (Geography, University of Kentucky), Michelle Wenderlich (Geography, Clark University)

Panelists: Dugan Meyer (Geography, University of Kentucky), Michelle Wenderlich (Geography, Clark University), Olivia Williams (Geography, Florida State University), Amanda Huron (Political Science, History and Global Studies, University of the District of Columbia)

Moderator: Olivia Williams (Geography, Florida State University)

Participation, collective self-organization, and commoning have become popular approaches for bringing about more socially-just and sustainable social and economic interactions. While scholars like Elinor Ostrom (1990) attempt to delineate specific organizational structures for the effective governing of common pool resources, critics emphasize the embeddedness of all participatory processes within hegemonic paradigms that foreclose opportunities for sincere change. Indeed, a discourse of participatory decision-making is routinely used to depoliticize projects that expand neoliberalism (McQuarrie 2013, Purcell 2008). Some scholars suggest that moments of rupture and resistance may be the only way to re-insert the political into collective decision-making (Purcell 2008, Rancière 2010). Other scholars emphasize the possibility for transformative organizational structures to exist alongside—and despite—neoliberal capitalism, arguing that their entanglements with hegemonic structures should not warrant their rejection as tools of subversion (Gibson-Graham 2008, Harris 2009). They do not, however, propose any specific institutional models for a post-capitalist future. These divergent theoretical traditions suggest that there are still many open questions as to how to think about, critique, and imagine

institutions of participatory self-organization and commoning. This panel will discuss some of the challenges we find relevant to this conversation, offering a number of nagging questions for discussion.

DOPE 2015: SATURDAY, FEBRUARY 28TH

Snack available in the foyer of Memorial Hall 4:30pm – 7:30pm.

KEYNOTE ADDRESS

5:15pm – 7:00pm
Memorial Hall

“Disrupting Life/Not Life: A Feminist-Indigenous Reading of Interspecies Relations and the New Materialisms”

Kim TallBear

Anthropology, University of Texas-Austin

This talk begins with a critical reading of a particular set of human-on-human relations—those involved when scientists (disproportionately white Western men) sample indigenous peoples in the course of human genome research. Many of the bio-specimens in circulation today were taken from indigenous peoples’ bodies during earlier ethical and racial regimes. New bioethical responses are afoot. But when they emerge from non-indigenous institutions and philosophical terrain they cannot fully address indigenous peoples’ interpretations and ethical needs. I propose that indigenous responses to genome technologies and practices can be more fully understood not simply by recourse to “bioethics,” but also by weaving together the approaches of indigenous thinkers historically with newer thinking in indigenous studies, feminist science studies, political ecology, critical animal studies, and the new materialisms. This talk weaves into conversation diverse intellectual threads in order to help us understand how the lines between life and not life, materiality and the “sacred” are not so easily drawn for some indigenous peoples. This implicates how we approach from an indigenous standpoint the ethics of the preservation and new use of old biological samples. More fundamentally, this talk interrogates the underlying concept of “preservation” that emerges from non-indigenous institutions in the form of technological and policy practices. Such practices compartmentalize indigenous history, bodies, and landscapes into a historical before and after that undercuts the very idea of indigenous peoples and landscapes as fully alive today.

After Party:

8:00pm - Late

**Soundbar, 208 S Limestone St
(cash bar, food available at nearby restaurants)**

Dimensions of Political Ecology 2015

Conference Schedule At A Glance

Friday						
Time/ Location	SC 111	SC 205	SC 211	SC 228	SC 230	SC 231
8:30-10:10	1. Environ-mental Injustice	2. Strategic Ecology	3. Campus Natures		4. Uneven Burdens, Unequal Benefits	5. Infrastru. Visions & the Politics of Urban Design, I
					6. Power Dynamics in Sustainable Foodways	7. WORKSHOP: Teaching Environ. & Ag. Issues
10:25-12:05	1. Settler Colonialism and Occupation	2. Critical Political Ecologies of Vulnerability	3. PANEL: Contesting Control Over Conservation	4. High Hydro Visions	5. Radical Politics & More-than-Humanist Theory	6. Infrastru. Visions & the Politics of Urban Design, II
					7. Food and Its Relation(s) to Place- making, I	8. PANEL: Agrarian Questions of Labor
12:05-2:00	LUNCH (ON YOUR OWN)					
2:00-3:00	WELCOMING ADDRESS: "Trickster Science or Why Political Ecology Won't Go Away"					
	Dr. Paul Robbins					
3:15-4:55	Whitehall Classroom Building Room 118					
	1. Making Nature, Making Subjects	2. The Political Ecology of Industrial Waste	3. Embodying Conservation Practice	4. Mountain Political Ecologies	5. Conceptualizing Local Production in Appalachian Ecologies	6. Infrastru. Visions & the Politics of Urban Design, III
					7. Food and Its Relation(s) to Place- making, II	8. FARMER/ ACTIVIST PANEL: Agrarian Questions of Labor in KY
5:30-7:00	PLENARY PANEL: "Governing Nature"					
	Dr. Irus Braverman, Dr. Jake Kosek, Dr. Shiloh Krupar, Dr. Laura Ogden (Moderator)					
	Memorial Hall					
7:00-11:00	OPENING RECEPTION					
	University of Kentucky Boone Center, 500 Rose Street					

Dimensions of Political Ecology 2015

Conference Schedule At A Glance

Saturday								
Time/ Location	SC 111	SC 205	SC 211	SC 228	SC 230	SC 249	POT West End Room	
8:30-10:10	1. Code/ Nature & the Political Ecologies of Technology, I	2. Trans-boundary Collaboration, I	3. When Species Invade, I	4. Tasting Ecologies, I		5. Pipes + Wires	6. Agriculture & the Colonial Present, I	7. UNDERGRAD SYMPOSIUM, I
10:25-12:05	1. Code/ Nature & the Political Ecologies of Technology, II	2. Trans-boundary Collaboration, II	3. When Species Invade, II	4. Tasting Ecologies, II		5. Green Spaces, Green Gentrification, & EJ in the Neoliberal City	6. Agriculture & the Colonial Present, II	7. UNDERGRAD SYMPOSIUM, II
LUNCH (ON YOUR OWN)								
12:05-1:25								
1:25-3:05	1. Can the Spreadsheet Speak?		2. Political Ecology and Climate Change	3. Perceptions of Urban Environmental Health, I	4. Developing a Political Ecology of Education, I	5. Prod. & Circ. of Value in, of, and through Nature, I	6. Practical Farming in an Era of Climate Change	7. PANEL: Feminist Research Practices in PE
3:20-5:00			1. Gender, Space, & Development	2. Perceptions of Urban Environmental Health, II	3. Developing a Political Ecology of Education, II	4. Prod. & Circ. of Value in, of, and through Nature, II	5. Decolonizing Agriculture for Institutional Change	6. PANEL: Participation and the Commons
5:15-7:00	KEYNOTE ADDRESS: Dr. Kim TallBear							
“Disrupting Life/Not Life: A Feminist-Indigenous Reading of Interspecies Relations and the New Materialisms”								
Memorial Hall								
7:00-10:00	CONFERENCE AFTER PARTY							
SOUNDBAR, 117 S. UPPER ST.								

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