



ENVIRONMENTAL SCIENCES SENIOR THESIS SYMPOSIUM

SATURDAY, APRIL 23RD, 2016 - 9AM-4:30PM

9:00-9:30 - WELCOME

[159 MULFORD]

Kurt Spreyer
Dennis Baldocchi
John Battles
Patina Mendez

Anne Murray & Abigail Cochran, GSIs

159 Mulford

SESSION AM1: 9:30-10:45

101 Morgan

MODELING & GIS

FOOD SYSTEMS

Ryan Avery How Does DEM Source Effect Error Distribution of Hydrological Networks?

Annika K. Min Remotely Sensed Forest Cover Change in South Gondar, Ethiopia, 1985-2015

Hannah Hagen Eddies Aloft: Improving Cloud Turbulence Modeling

Jo-an Chen Climate Change Indicators: Sensitive Freshwater Insect Responses to a Warming California

Jimmy Dunn Whose Footprint is it Anyway?: Ecological Footprint Allocation at the Subnational Level

Deborah Yang Hedging Our Bets on Urban Agriculture: A Cost-Benefit Analysis of the UC Gill Tract Community Farm

Maritza Sazo Commercial Urban Agriculture in the United States: Growing More than Just Food

Samantha Ov The Urban Agriculture Incentive Zones Act (AB551): Implementation & Stakeholder Perceptions in Northern California

Sarah Atkinson The Discourse of "Food Deserts" in Popular Media

Hannah Krovetz Labeling & Information Effects on Consumer Valuation of Water Efficiency in Food Choices

10:45-11:00 - MORNING COFFEE BREAK [139 MULFORD]

159 Mulford

SESSION AM2: 11:00-12:30

101 Morgan

COMMUNITIES, HEALTH & JUSTICE

ECOLOGY, EVOLUTION & BEHAVIOR

Perth Silvers Air Pollution & Environmental Injustice: Differential Burdens in San Francisco Bay Area Communities

Timothy Urso Climate Change and Respiratory Risk in California's San Joaquin Valley

Mikela Topey The Association Between Lung Cancer & Air Pollution in Trinidad

Jose Jacuinde Perceptions of Climate Change in a Los Angeles Hispanic Community

Hannah Totte A Long Time Coming: Toward a Comprehensive Chlorpyrifos Ban and Beyond

Samantha L. Nguyen Expectation Versus Reality: Contested Goals & Pedagogy in K-12 Environmental Education

Paras Kumar Challenging Climate Change Skepticism through Graphical Curricula

Brittni L. Bertolet Lake TEA: Changing Dynamics of Terrestrially Derived Dissolved Organic Carbon in Lakes of Northern Wisconsin

Gyan Rusconi-Rodrigues Diurnal Vertical Migration of Zooplankton in Perialpine Freshwater Lakes

Linda Saunders Climate Change Impacts: Shifts in Western Blue Bird Reproduction

Rong Xu The California Orb Weaving Spider: Where & When Does Pheromone Production Happen?

Ian Utz Estimating the Contribution of Aquatic Autotrophs to the Carbon Budget of Constructed Wetlands in the Sacramento-San Joaquin Delta

Lindsey Agnew The Role of Environmental & Evolutionary History on California Fern Leaf Morphology

12:30-1:30 - LUNCH [MORGAN LOUNGE & PATIO]

159 Mulford

SESSION PM1: 1:30-3:00

101 Morgan

ENERGY & INFRASTRUCTURE

Wai Ting Isabel Chan Life Cycle Assessment of Shanghai's Electric Vehicle Subsidy Programs

Jordan Cheng Chasing the Tesla Standard: Projecting Mass Market Battery Electric Vehicle Adoption

Sanya Wun Seong Lam Life Cycle Greenhouse Gas Emissions Calculations for Hydrogen Fuel Cell Vehicles in California

Tyler Shiqiao Yan Greener, at What Cost? Evaluating Energy Dispatch Alternatives in China

Akmaral Zhakypova Dissecting Corporate Sustainability Reporting: A Case Study of the Volkswagen Emissions Scandal

Hillary Kimly Buntara Infrastructure Interdependency: A Jakarta, Indonesia Case Study

WILDLIFE & FORESTRY

Kaelin Pukke Population Biodiversity of Small Rodents in Eucalyptus and Oak/Bay Woodlands in Tilden Regional Park, Alameda & Orinda Counties, California

Varya Fedorova Tree Mortality Patterns in the American Fire Footprint

Emily Shafer Lynx to the Future of Mammalian Conservation: Camera Trap Monitoring of Bobcat (*Lynx rufus*) Activity at Watering Sites

Jonathan Reader Me & My Mates: Understory structure of the Novel Eucalyptus-Bay-Oak Forest in Tilden Regional Park

Jenna Keller Carbon Dynamics of Forest Management Approaches in the California Sierra Nevada

Sarah Whitelock Monitoring Progression of Sudden Oak Death in East Bay Regional Parks over a Four Year Period

3:00-3:15 - AFTERNOON COFFEE BREAK [139 MULFORD]

159 Mulford

SESSION PM2: 3:15-4:30

101 Morgan

URBAN ECOLOGY & RESTORATION

Adrian Ka Hei Lee Investigation of Residential Block Layout on Urban Trees Population in San Jose, California

Manda Au Tidal Marsh Restoration in the South Bay Salt Ponds: a Case Study of Vegetation Re-establishment Patterns in Two Breached Ponds

Alexander C. Makabeh Optimizing a Low-cost Monitoring Method for Optical Brighteners in Urban Streams for Use by Community Monitoring Groups

Tammy Ho Ting Leung Benthic Macroinvertebrate Community Responses to Restored Step-Pool Habitats in Strawberry Creek

Sean Pagnon Differential Growth of Riparian Plant Species in the Strawberry Creek Ecological Stabilization Project

AGROECOLOGY

Niamh Murphy The Effect of Compost on Arsenic Uptake in Crops

Katherine Patterson Does drought affect Walnut Aphid Population Dynamics on Walnut Seedlings?

Trevor Fischer El Niño Rainfall Influences on Winged Aphid Morphs

Ramji Pasricha Comparing Japanese, Pearl & Foxtail Millet Performance in the Californian Drought: Potential for a New Staple Crop

Yuanmin Ouyang Agricultural Soil Compaction Effects on Soil Microbes & Faunas

CLOSING COMMENTS: 4:30 [IN SESSION]

OUR SINCERE THANKS TO: The faculty, postdoctoral researchers, graduate students, staff, and community members who generously mentored students - your contributions clearly inspired and enriched the senior thesis experience. We also thank Carina Galicia for help organizing and assisting with this event. Special thanks to ES Director Dennis Baldocchi, ESPM Chair George Roderick, John Battles, Rebecca Sablo, and the Department of Environmental Science, Policy & Management.