



ENVIRONMENTAL SCIENCES SENIOR THESIS SYMPOSIUM

SATURDAY, APRIL 23RD, 2011 - 9AM-4:30PM

9:00-9:15 - WELCOME

145 Dwinelle
Kurt Spreyer, ES Lecturer
Steve Welter, ES Co-Director
Patina Mendez, ES Lecturer

Lara Roman & Seth Shonkoff, GSIs

145 Dwinelle

SESSION AM1: 9:15-10:45

155 Dwinelle

ENERGY & THE BUILT ENVIRONMENT

Hayden Wong

Comparative Spatial Analysis of Feeder Bus Networks in San Francisco & Hong Kong

Kellye Larsen

Energy Bill Breakdown: The Influence of Regional Temperature Variations & Construction Age on Energy Consumption

Ana Loera

The Prevalence of Energy Efficiency and PG&E Rebate Programs in Fruitvale, CA

Ryan McCarter

Building a Solar Water Heater Cost & Sizing Calculator: An Innovation Based on Hot-water Consumption Models

Katharine Guan

The Heat Island Effect: Surface & Ambient Air Temperatures Associated with Different Land Cover Types

Jim Gao

Spatial Optimization of Wind Turbines

HABITAT & WILDLIFE

Maybellene Gamboa

Home Range of Secretive Marsh Birds: California Black Rail & Virginia Rail

Stephanie Panlasigui

Choosy Crustaceans: Habitat Preferences of the Terrestrial Isopod, *Armadillidium vulgare*

Carmen Mosqueda

The Effects of Seasonal Drought on Fish Ecology in San Antonio Creek, CA

Clinton Cleveland

Using Stable Isotope Chemistry to Compare the Diets of Two Reclusive Rails

Bryson Marks

Presence of *Ambystoma californiense* within Pools of Varying Benthic Macroinvertebrate Diversity

Caroline Jablonicky

Temporal Partitioning of Carcasses by Mammalian Scavengers in Etosha National Park, Namibia

10:45-11:00 - MORNING COFFEE BREAK

145 Dwinelle

SESSION AM2: 11:00-12:15

155 Dwinelle

CRADLE TO GRAVE: SUPPLY, CONSUMPTION, & WASTE

Yolonda Wright

Relating Recycling: Demographics, Attitudes, Knowledge and Recycling Behavior among UC Berkeley Undergraduates

Punal Bhavsar

Is it Worth Being Green? Green Business Transitions

Nicholas Garcia

Wireless Waste: Cell Phone Recycling Behavior of SF Bay Area Residents & Students

Jennifer Shen

Comparative Assessment of PLA & PET disposable plastics

Meghan Butler

Sustainable Composting Systems: An Organic Waste Management Solution

AQUATIC & MARINE SYSTEMS

Nagi Suzuki

Arsenic in Aquifers: Bicarbonate Ions & the Adsorption of Inorganic Arsenic on Iron Oxide Minerals

Rose Whitson

The Importance of Being Gravelly: Lagunitas Creek Stream Bed Sediment in 1988 & 2011

Andrea Irons

Conserving Surface Water: Trees & Drying Patterns in Alameda Creek, CA

Daphne Szutu

Seasonal Wind-driven Upwelling & Phytoplankton Biomass in Central San Francisco Bay: 1990-2010

Jayhee Chung

The Life History of the Invasive Green Crab (*Carcinus maenas*) in San Francisco Bay

12:15-1:00 - LUNCH

145 Dwinelle

SESSION PM1: 1:00-2:30

155 Dwinelle

ENVIRONMENT & HUMAN HEALTH

Jimmy Lam

Traditional Medicines Can't Harm You: Medicament Use and Awareness of Health Risks Among Vietnamese Immigrants in San Jose,

Xi Yang

Asthma Summer Camp Education Program Effectiveness in Teaching Children to Prevent & Control Asthma Symptoms

Jimmy Dileo

Port of Oakland Particulate Matter Emissions & Incidence of Asthma in Bay Area Communities

Tanya Wenzel

Western and Traditional Medicine Use Practices in Shirati, Tanzania

Sarah Jarjour

Healthy Commute? Traffic Conditions, Ambient Air Pollution, and Cyclists

Michael Young

Disparities in Birth Weight: The Interaction between Air Pollution and Poverty

AGRICULTURAL SYSTEMS

Isabelle Chow

Effects of Floral Resource Availability on *Anagyrus pseudococci*, a California Vineyard Parasitoid

Jabari Brown

Growing Roses from Concrete: A Geochemical Survey of Oakland Soils to Determine Urban Garden Suitability

Johnny Sanvichith

Do Gardens Make You Green? Home Gardens, Identity, & Pro-Environmental Behavior Among Southeast Asian American College Students

Artin Laleian

Phytoremediation of Heavy Metals in Dredged Material from San Pablo Bay, CA

Breanna Baraff

Genetic Diversity & Distribution of Grapevine Leafroll-Associated Virus in California

Erica Fong

Application of Low-Temperature Produced Biochar on Plant Growth in Californian Alfisol Soil

2:30-2:45 - AFTERNOON COFFEE BREAK

145 Dwinelle

SESSION PM2: 2:45-4:15

155 Dwinelle

POLICY, ORGANIZATIONS, & MANAGEMENT

Priscilla Yung

Expanding the Realm of Food Security: Electronic Benefit Transfer use in Farmers' Markets in the East Bay, CA

Christina Cheng

Cleaning up the Oil: Organizations' Rationales for Dispersant Usage in the Gulf Coast Oil Spill

Robin Katz

Who Speaks for the Bees? Narratives of Pollinator Protection in Public Policy

Jose Lopez

Community Organizers Not Activists: Responding to the Social & Environmental Justice Movement

Sylvia Chang

Institutional Discourses on Plastic Pollution in the North Pacific Gyre

Emma Tome

Managing Maps, Making Territory: GIS & Karuk Eco-Cultural Resource Sovereignty

PLANT ECOLOGY

Ya-Ting Chen

From Vanilla to Chocolate: Contributions of Prevalent Tropical Crops to an Ozone Depleting Gas

Sophie You

Assessing Sampling Plot Shape and Size on Measures of Tropical Forest Diversity: A Simulation Study

Lev Stefanovich

Effects of Floral Resource Quality on *Bombus vosnesenskii* Foraging Behavior

Evan Portier

The Curious Case of Perennial Pepperweed: Nitrogen Dynamics in a Pepperweed Invaded Pasture

Melanie Montes

Protein-protein Interactions of ULTRAPETALA1, a Trithorax Group Protein in *Arabidopsis thaliana*

Amanda Carlson

Effects of Grazing on Native Plant Abundance and Diversity in a California Grassland Invaded by *Phalaris aquatica*

CLOSING COMMENTS: 4:15

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