

## Mahalo to our Sponsors































## **Union of** Science for a Healthy Planet and Safer World





















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#### Association of Tropical Biology and Conservation

The Association for Tropical Biology and Conservation (ATBC) is an international professional society formed in 1962 to promote awareness, research, education, and communication in all aspects of tropical biology and conservation. ATBC publishes a scholarly journal, Biotropica, hosts a website, and organizes an annual meeting each year. The activities of ATBC and its members promote the understanding, education, and conservation of tropical biology diversity for posterity, for its intrinsic worth and for aesthetic and tangible values to humanity.

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www.tropicalbio.org





#### **WELCOME!**

The ATBC has now hosted meetings across all the main regional centers of the tropics, but this is our first meeting on a Polynesian island. It is a timely event, as the biota of tropical islands is particularly vulnerable to invasive species and climate change, among other threats. Hawaii itself has the dubious distinction of being home to more endangered species than any other state in the United States. Islands are, of course, evolutionary centers of biological richness and endemism in both terrestrial and marine realms. Hawaii exemplifies not only this incredible biological diversity, but also the enormous conservation challenges imposed by modern development.

The ATBC has a duty to respond to these challenges, both directly through the actions of its Conservation Committee, and indirectly by supporting the work and communication of scientists who are concerned about the future of tropical biodiversity. With your input, the ATBC has over the last year developed a new Strategic Plan, to be unveiled in Hawaii, that aims to chart a course for expanding and enhancing the ways that ATBC and its members contribute to tropical biology and to conservation science. We are also exploring ways to respond to increased demand for training courses and workshops, mentoring, as well as offering more regional meetings and networking activities.

Our meeting in Hawaii marks the culmination of the first stage of these efforts to better align ATBC's agenda to current environmental challenges in the tropics and the needs of our members. As a society, the ATBC's ability to deliver its agenda is ultimately only as good as its members' participation. The Asia-Pacific Chapter, formed in 2006, provides a model of what can be done at the regional level. Meanwhile, the Student and Early Career Scientists Chapter, formed in 2013, has gone from strength to strength.

This year, we again meet in an exuberant tropical setting that inspires knowledge sharing, collaboration, and conservation activities in response to urgent conservation challenges and knowledge gaps. We see signs of optimism, as the scientific community increasingly recognizes the resilience of natural systems and their ability to bounce back if given half a chance. Moreover, public concern on issues such as climate change has never been higher, and decision makers at all levels are feeling the pressure to respond. It is, therefore, very appropriate that the theme of our meeting is Resilience of Island Systems in the Context of Climate Change. We look forward to exploring these issues with you in Hawaii.

Me kaoiaio (with sincerity),

#### Robin and Jaboury







Chairman's Welcome

Welcome to ATBC-2015, a gathering of the leading researchers and educators in tropical biology from around the world.

University of Hawaii at Manoa and University of Hawaii at Hilo, for their support for this conference, and for the time and energy spent by so many people in the preparation of this event. The Hawaiian Islands have long been considered to be among the greatest of natural laboratories for the study of evolutionary biology and ecology because of their isolation, geologic formations, and tremendous gradients in climate, soils, substrate age, and elevation. Added more recently to this list is Hawaii's classification by some as the endangered species capital of the world where one-third of the flora is endangered or extinct and most of the remaining species are at risk.

What we find in Hawaii is a microcosm of things happening throughout the tropics world-wide. The wonders and intricacies of nature are there yet to be discovered. The things that inspired us in our youth to study the glories of nature are there still and are now inspiring the next generation of biologists. New discoveries are taking place daily in regions where people had thought there were no new discoveries to be made. Species associations that had long been thought an unknowable mystery are being understood. Our capacity for investigating new and novel features of the ecosystem are at a point never before achievable, and the discoveries coming from this are changing the foundations of our understanding. At this same time, the environment is facing new challenges. The extinction rate of species is causing alarm throughout the world, but felt nowhere more severely than in the tropics. Vast tracts of forests and other ecosystems are being lost to an ever-expanding need for societies' growth. The globalization of many aspects of our society has resulted in the introduction of invasive species and the homogenization of ecosystems throughout. And, the reality of global climate change is placing a pressure on our ecosystems as never before; although the degree of change has been faced in ages past, the speed of this change is unprecedented.

Yet, there is hope! As these issues are brought to light, there is now a force ready and able to combat them, people dedicating their lives to the betterment of our world, that no species should go extinct without a fight, and that no more ecosystems should be lost to development. We know that to have a healthy society, we must be surrounded by healthy and diverse ecosystems. We are that force. We are those people. We are the ones that recognize that the study of evolution and ecology is intertwined with the study of conservation biology in all its many facets. And we are the ones that are tasked with determining how to right the wrongs that have taken place and to insure that past mistakes are not repeated in the future!

We welcome all tropical and conservation biologists who have gathered at this meeting. It is a wonderful opportunity to share our scientific findings and learn from others their discoveries or their methodologies that may help us uncover the key to solving the issues we too are facing. Our week is packed with scientific sessions, discussions, and special events to make this event enjoyable and fulfilling for all. We also wish to take this opportunity to thank all those that have helped to make this meeting possible including the administration of the ATBC Society, and especially those members who have served on the scientific and organizing committees to make this a reality.

Ciff WMord

## ATBC 2015 Organizing Committee

Chair Clifford Morden, University of Hawaii, Professor of Botany

Aaron Shiels, USDA National Wildlife Research Center, Hilo, Hawaii

**Alice Hughes**, Centre for Integrative Conservation, Xishuangbanna Tropical Botanical Garden, Chinese Academy of Sciences, Yunan, PRC

Allen Allison, PhD - Bishop Museum, Honolulu, Hawaii

Becky Ostertag, University of Hawaii, Hilo Department of Biology, Hilo, Hawaii

Chipper Wichman - National Tropical Botanical Garden, Kalaheo, Hawaii

Christopher P. Dunn, PhD - Cornell Plantations, Cornell University, Ithaca, NY

**Creighton Litton** - University of Hawaii Natural Resources & Environmental Management, Honolulu, Hawaii

Donald Drake - University of Hawaii at Manoa Department of Botany, Honolulu, Hawaii

Elizabeth Stacy - University of Hawaii, Hilo Department of Biology, Hilo, Hawaii

Maggie Sprock Koehler- State of Hawaii Department of Land & Natural Resources, Division of Forestry & Wildlife, Honolulu, Hawaii

Orou Gaoue - University of Hawaii Department of Botany, Honolulu, Hawaii

Tom Ranker, PhD - University of Hawaii at Manoa Department of Botany, Honolulu, Hawaii



## **ATBC Banquet Luau**

1<sup>st</sup> Time to Hawaii? This is a "Must See"

Thursday evening, 5:45 PM — 8:30 PM, Pacific Beach Hotel Tickets still available, \$65.00 (members), regular price \$80

#### ATBC Council for 2015

#### EX-OFFICIO (non-voting) MEMBERS OF COUNCIL 2015

**EXECUTIVE DIRECTOR** 

**TREASURER** 

SECRETARY (outgoing)

SECRETARY (incoming)

WEBSITE EDITOR

BIOTROPICA EDITOR IN CHIEF

BIOTROPICA ASSOCIATE EDITOR

BIOTROPICA ASSOCIATE EDITOR

BIOTROPICA ASSOCIATE EDITOR

PRESIDENT OF THE AP CHAPTER

SECRETARY OF THE AP CHAPTER

PRESIDENT OF THE ATBC STUDENT

EARLY CAREER SCIENTIST CHAPTER (SECSCI)

CHAIR OF THE MEETING COMMITTEE

CHAIR OF THE STRATEGIC PLANNING COMMITTEE

CHAIR OF CONSERVATION COMMITTEE

CO-CHAIR OF CONSERVATION COMMITTEE

CHAIR OF THE CHAPTERS COMMITTEE

CO-CHAIR OF THE CHAPTERS COMMITTEE

CO-CHAIR OF THE PRESENTATION AWARDS COMMITTEE Julieta Benítez-Malvido

CO-CHAIR OF THE PRESENTATION AWARDS COMMITTEE Kyle Harms

CHAIR OF THE FUND-RAISING COMMITTEE

CHAIR OF THE CAPACITY BUILDING COMMITTEE

CO-CHAIR OF THE CAPACITY BUILDING COMMITTEE

CHAIR OF THE MEMBERSHIP COMMITTEE

**Robin Chazdon** Patricia D Sampaio Ellen Andresen

Julieta Benítez-Malvido

Lian Pin Koh **Emilio Bruna** 

Marielos Peña-Claros

**Bryan Finegan Beth Kaplin** 

Tony Lynam

Alice Hughes

**Erin Kuprewicz** 

Pierre-Michel Forget

**Jaboury Ghazoul** 

Pia Parolin

Joe Fragoso

Kaoru Kitajima

Stephen Turton

Kirsten Silvius

Alice Hughes

Tomás Carlo

**Christopher Baraloto** 

#### **VOTING MEMBERS OF COUNCIL FOR 2015**

PAST PRESIDENT **PRESIDENT** PRESIDENT ELECT

3RD Y COUNCILOR

3RD Y COUNCILOR

3RD Y COUNCILOR 3RD Y COUNCILOR

2ND Y COUNCILOR

2ND Y COUNCILOR

2ND Y COUNCILOR

2ND Y COUNCILOR 1ST Y COUNCILOR

1ST Y COUNCILOR

1ST Y COUNCILOR

1ST Y COUNCILOR

Susan Laurance Jaboury Ghazoul

Kaoru Kitajima Sophie Calme

Stefan Schnitzer

Karina Boege

**Chris Baraloto** Jennifer Powers

**Kyle Harms** 

Yadvinder Malhi

**Nobby Cordeiro** 

Ahimsa Campos-Arceiz

Saara DeWalt Lisa Davenport

**Bettina Engelbrecht** 



## **Conference Information**



#### **Presentation Upload Desk**

Located in front of Room #303, all speakers are requested to check-in their presentation to the AV team at least a half day prior to their presentation. All presentations will be networked from the upload desk to the presentation rooms. The presentation upload desk will be open at the same times as the registration desk (7 AM - 5 PM).



#### Name Badges and Social Functions

Your name badge is entry to all sessions, the exhibition, inclusive social functions as well as morning coffee. Please wear your name badge at all times. Tickets for ticketed events may be tucked into your badge pocket.



#### Catering

The morning coffee refreshment break is included with your conference registration, as well as a \$7.00 concession coupon per day. Concession coupons may be redeemed in Room #307AB from 11:30 AM - 3:30 PM each day for any items on the menu. Coupons are treated like cash, but have no cash value, so change will not be given. If menu items cost more, you will be responsible for the balance due.



#### Messages and Notices

Messages and Notices can be posted on the Message and Notice Board positioned near the Conference Registration and Information Desk. Please check the board regularly on passing. Unfortunately, messages cannot be personally delivered by Conference staff.



#### **Emergency Procedures and First Aid**

In the case of an emergency, pick up a house phone, located inside of each room, and dial 0. Let the security person know what room you are in and the emergency. Do not call 911 from your personal phones.

First Aid is staffed during conference hours with a nurse attendant; located towards Room #318. Traveling and time zone differences can affect the body; feel free to stop in for medications, diagnosis, rest, minor injuries, or even to nurse for new mothers.



#### Wireless Internet

Free wireless internet is available at no cost, with a password, in the Exhibit room, Palolo Room #306AB. The password will be posted in the room. Please be sure to log off when exiting the area. Other areas of the Center have wireless internet available for a fee, under \$15 per day.



#### Intention to photograph

Delegates and others are advised that photographs may be taken during the conference and reproduced for promotional purposes.



General SessionLiliu Theatre #310RegistrationPa Kalihi CourtyardExhibitsPalolo Room #306ABPoster SessionManoa Room #304 AB

**Lunch Concession** Room #307AB **ATBC Office** Room #303AB

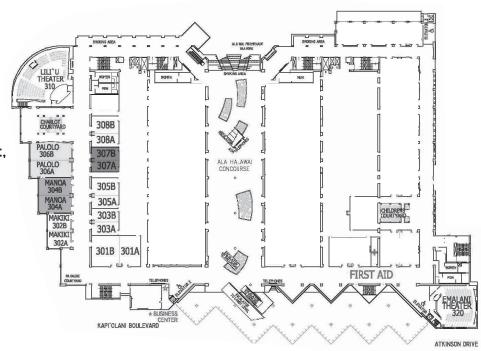
**Breakouts** Room #301A, 301B, 302AB, 305AB, 308AB, 310



Morning Coffee & Refreshment, 09:00 AM - 306AB

Tuesday & Wednesday, 5:15 – 6:30 PM – 304AB

Daily, 11:30 AM – 3:30 PM – 307AB





## Redeem your Concession Coupons

#307AB, Daily, 11:30 AM - 3:30 PM Must try items: Grilled Vegetable Focaccia Sandwich, Curry Rice Bowl, Chef's Plate Lunch Special

## General Schedule Overview Monday

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08:00	A Opening Welcome			
08:30	A Hawaiian Welcome and Plenary Address - Sam Gon			
09:30	Coffee and tea brea	k		
10:00	A Symposium 1:	Exploring Elemental Limitation of Tropical Biological Processes Across the Entire Periodic Table: An Interactive Symposium (Group Participation)		
	B Symposium 2:	Integrated Landscape Management:From Theory to Practice		
	© Symposium 3:	Marine Mammals in Crisis in Tropical Asia		
	D Symposium 4:	Impacts of Climate Change on Tropical Freshwater and Estuarine Ecosystems		
	E Symposium 5:	Herbivory in Tropical Food Webs		
	F Symposium 6:	Chronic Anthropogenic Disturbance in Tropical Rainforests - Negative Impacts from Population to Ecosystem Level		
12:00	Lunch Meeting ATBC	-SECSCI. Chair: Erin Kuprewicz - <b>303 AB</b>		
	Lunch Training Sessic	on:CV Skills. Tomas Carlo - <b>301A</b>		
	Lunch Training Sessic	on:Paper Writing Skills - <b>301 B</b>		
	Lunch Break = Redee	em your Lunch Concession Coupon in Room - <b>307AB</b> , 11:30 - 15:30		
13:30	O Symposium 7: Weaving Tropical Biology and Culture in Field-Based Education: The first Decade of the OTS NAPIRE Program Session 1: Interface between science and culture in field-based education			
	B Symposium 8:	Functional Diversity of Leaf Traits in Tropical Tree Communities Across Environmental Gradients – Part 1		
	© Open Session 1:	Species interactions: Trophic Ecology - 1		
	D Open Session 2:	Ecophysiology -1		
	© Open Session 3:	Consequences for Climatic Change for Organisms – $1$		
	F Open Session 4:	Seed Dispersal		
15:15	Coffee and tea break	tea break		
15:30	A Symposium 9:	A Symposium 9: Weaving Tropical Biology and Culture in Field-Based Education: The first Decade of the OTS NAPIRE Program Session 2:NAPIRE ecological studies		
	B Symposium 10: Functional Diversity of Leaf Traits in Tropical Tree Communities Across Environmental Gradients - Part 2			
	© Symposium 11:	Interactive Workshop:Indicators of Biocultural Resilience, from Local to Global		
	D Symposium 12:	: Insular Tropical Forest Ecosystems: Documenting Responses to Climate Variability in Hawaii and Puerto Rico		
	E Open Session 5:	Fragmentation and Altered Landscapes - 1		
		6: Disturbance Ecology		
17:30	_	on Committee Meeting (open to all attendees) - 17:30 - 18:30		
18:30	Student & Early Career SClentist Chapter Barbecue and Social (Ticketed), KUPU Net Shed, 18:30 - 20:30			
	ROOM KEY			
	(A) Liliu Theatre 310 (B) 301 A (C) 301 B (D) Makiki 302 AB (E) 305 AB (F) 308 AB			

TIME

## General Schedule Overview Tuesday

**TIME** 08:00 (A) Plenary Address - Catherine Graham 09:00 Coffee and Tea Break (A) Symposium 13: Ecosystem Functions Along Elevation Gradients 09:15 (B) Open Session 7: Diversity (C) Symposium 14: Resilient Landscapes: The Social and Ecological Causes and Consequences of Reforestation in the Tropics (D) Symposium 15: Island Plant-Herbivore Interactions: Evolutionary Ecology of Native Species and Novel Dynamics with Invasive Species (E) Open Session 8: Evolution, Adaptation, and Phylogenetics (F) Open Session 9: Spatial Ecology: Distribution Patterns 12:00 Lunch Meeting: Biotropica Editorial Board. Emilio Bruna - 303 AB Lunch Training Session: Interview Skills. Kasey Barton - 301A Lunch Training Session: Press Releases and Communicating Outside Academia. Ariel Lugo - 301 B Lunch Break = Redeem your Lunch Concession Coupon in Room - 307AB, 11:30 - 15:30 13:30 (A) Symposium 16: Understanding Resilience in Island Ecosystems (B) Open Session 10: Human Dimensions of Tropical Landscapes (C) Open Session 11: Ecosystem Ecology (D) Symposium 17: Insular Tropical Streams: Case Studies to Biotic Responses to Hurricanes, Droughts, and Landuse Changes in Hawaii and Puerto Rico (E) Open Session 12: Animal Population Ecology and Behavior -1(F) Open Session 13: Relating Functional Trait Attributes to Environmental Variables 16:00 Coffee and tea break 16:30 (A) ATBC TOWN HALL MEETING - Liliu Theatre #310 17:15 Poster Session 1 - Manoa Room #304AB (Cash Bar)

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A Liliu Theatre 310	B 301 A	© 301 B	D Makiki 302 AB	<b>E</b> 305 AB	(F) 308 AB

DOOM KEV

## General Schedule Overview Wednesday

#### TIME 08:00 (A) Plenary Address - Richard Corlett 09:00 Transition Break 09:15 (C) Open Session 15: Conservation and Restoration Issues in Human-Dominated Landscapes (D) Open Session 16: Consequences of Climate Change for Organisms (E) Open Session 17: Species Interactions: Trophic Ecology – 2 (F) Open Session 18: Genetic Structure 10:15 Coffee and Tea Break 10:30 (A) Open Session 19: Invasive Species (C) Symposium 18: Seed Fate: Understanding Seed Dispersal, Seed Survival, and Plant Recruitment in a Changing World (D) Symposium 19: Tree Rings, Stable Isotopes, and Wood Anatomy as Environmental and Climatic Indicators for the Tropics (F) Symposium 21: Extinction, Rarity, and Biogeography 12:00 Lunch Meeting "Meet the Editors" of Biotropica. Chair: Emilio Bruna - 303 AB Lunch Training Session: Presentation Skills and Elevator Pitches. Alice C. Hughes - 301 A Lunch Training Session: Moving Forward after the PhD Question and Answer Session Jennifer Powers - 301 B Lunch Break = Redeem your Lunch Concession Coupon in Room - 307AB, 11:30 - 15:30 (A) Symposium 20: Impacts of Non-Native Invasive Ungulates and their removal on Tropical Island Ecosystems 13:30 Conservation of Over-Exploited, CITES-Listed Tropical Species: Can Farming Help? (C) Open Session 22: Ecosystem Ecology: Nitrogen and Phosphorus (D) Symposium 22: Fifty Shades of Grey in Ecological Interactions (E) Open Session 23: Long-Term Observations and Experimentation of Climate Change (F) Open Session 24: Fragmentation and Altered Landscapes – 2 15:15 Coffee and tea break 15:30 (A) Open Session 25: Conservation: In Society and at Large Scales (B) Open Session 26: Ecophysiology – 2 (C) Open Session 27: Ecological Consequences of Climatic Variation (D) Open Session 28: Animal Population Ecology and Behavior – 2 (E) Open Session 29: Species interactions: Mutualisms (F) Open Session 30: Ecosystem Ecology: Ecosystem Function 17:15 Poster Session 2 - Manoa Room #304AB (Cash Bar) **ROOM KEY** (A) Liliu Theatre 310 (B) 301 A (C) 301 B (D) Makiki 302 AB (E) 305 AB (F) 308 AB

## General Schedule Overview Thursday

#### **TIME** 08:00 (A) Plenary Address - Kaoru Kitajima 09:00 Coffee and Tea Break 09:15 Tropical forest Responses to Large Scale Experiments (A) Symposium 23: Linking Field Experiments and Modeling Toward Understanding Changes to (B) Symposium 24: Tropical Ecosystems (C) Open Session 31: Functional Ecology, Community Assembly, and Restoration (D) Symposium 25: The Unseen Majority: What We Know, and Still Need to Know, About Tropical Microorganisms (E) Symposium 26: Translating Ecological Research into Conservation Practice: Managing for Success in Human Dominated Landscapes (F) Symposium 27: Consequences of Rainforest Transformation in the Southeast Asian Archipelago 11:45 Lunch Committee Meetings: Mentoring Follow-Up Event, Capacity Building Committee - Alice Hughes - 301 B Lunch Break = Redeem your Lunch Concession Coupon in Room - 307AB, 11:30 - 15:30 13:30 (A) Open Session 32: Invasive Species - 2 (B) Open Session 33: Community-Based Resource Management (C) Open Session 34: Forest Structure (D) Open Session 35: Microbiology and Disease Ecology (E) Open Session 36: Technology Advances for Conservation 15:00 Coffee and tea break 15:15 Conference Awards and Recognitions 15:40 Closing Plenary: Jaboury Ghazoul, ATBC President 16:30 **END OF SESSIONS** - Prep and Travel to Luau Dinner 17:00 Luau Dinner (Ticketed Event - Tickets still available, \$65 (members), regular price \$80 Pacific Beach Hotel; 17:45 Interactive Cultural Activities; 18:30 Luau Dinner; 19:30 Luau Entertain-Walking travel time to Pacific Beach Hotel (2490 Kalakau'a Avenue) is approximately 30 minutes. See map for directions

#### **ROOM KEY**

(A) Liliu Theatre 310 (B) 301 A (C) 301 B (D) Makiki 302 AB (E) 305 AB (F) 308 AB



"Hawaii Kua Uli:The Sweep of Hawaiian Ecosystems: Scientific and biocultural perspectives on ecosystems, plants and animals of Hawaii"

#### Samuel M. Ohukaniohia Gon, III

Samuel Gon received his bachelor's degree in Zoology at the University of Hawaii at Manoa. He went on to receive his masters in Zoology and doctorate in Animal Behavior at the University of California, Davis. He holds an affiliate faculty post with the Department of Urban and Regional Planning at the University of Hawaii, and regularly lectures at the University of Hawaii at Manoa in the Natural History of the Hawaiian Islands. He is presently the Senior Scientist and Cultural Advisor for The Nature Conservancy of Hawaii and has been part of the Conservancy staff for over 25 years. He was the Ecologist for the Hawaii Natural Heritage Program of the Conservancy from 1986-1999 conducting biological inventories developing biological reports and management recommendations for The Conservancy, being the lead coordinator from 1992-1994. As Director of Science and now as Senior Scientist, he guides the vision and operations of TNC Hawaii and adds his cultural expertise to enhance the organization's mission. His field specialties include field ecology, entomology, arachnology, ethology, natural community classification, ecological modeling, climate change vulnerability analysis, ecological landscape change, and biological database management. He is versed in Hawaiian culture, history, and language, and integrates these with his scientific background.



"Linking Patterns and Processes Across Scales: A Case Study with Neotropical Hummingbirds"

#### Catherine H. Graham

Catherine Graham is an Associate Professor at Stony Brook University in New York. She was born in Washington DC and grew up moving between different countries in Africa. She did her undergraduate work at Eckerd College in Florida, PhD at the University of Missouri and post-doctoral work at the Jet Propulsion Laboratory in California and at UC-Berkeley. Her research focuses on how the spatial and temporal arrangement of habitats influences biological diversity, a fundamental question that has challenged scientists for decades. In addition, she evaluates the impact of land-use and climate change on this diversity. Addressing these challenges requires integrating across multiple fields, including physiology, ecology, evolutionary biology, biogeography, palaeobiology and conservation biology. Much of her recent work has been on Neotropical hummingbirds. Catherine has authored about 85 publications and has been involved in and led various working groups in the US, Europe and Latin America.



"Conservation in an era of rapid global change"

#### **Richard Corlett**

Richard Corlett graduated from the University of Cambridge in 1974, followed by a PhD in plant ecology at the Australian National University, with fieldwork in Papua New Guinea. He has subsequently held posts at the University of Chiang Mai (1980-82), National University of Singapore (1982-87, 2008-2012), and University of Hong Kong (1988-2008). In 2012 he moved to the Xishuangbanna Tropical Botanical Garden, Chinese Academy of Sciences, in Yunnan, to head a new Center for Integrative Conservation. His major research interests include terrestrial ecology and biodiversity conservation in tropical East Asia, plant-animal interactions, urban ecology, and the impacts of climate change. In addition to many scientific papers, he is the author or co-author of several books, including The Ecology of Tropical East Asia, with a second edition just published by Oxford University Press, and Tropical Rain Forests: an Ecological and Biogeographical Comparison, co-authored with Richard Primack, with a second edition published by Wiley in 2011. He was a lead author for the 'Asia' chapter in the Working Group II contribution to the Fifth (2014) Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) and is on the steering committee of the IUCN Species Survival Commission's Climate Change Specialist Group.



"Sustainable growth is inevitably slow: Lessons from plant carbon allocation strategies for structural defense and storage in tropical forests"

#### Kaoru Kitajima

Kaoru Kitajima is currently a Professor at the Graduate School of Agriculture, Kyoto University, Japan. She also is a Courtesy Professor at University of Florida and a Research Associate at the Smithsonian Tropical Research Institute. She graduated from the University of Tokyo with BS in Botany, then received MS and PhD from the University of Illinois at Urbana-Champaign in Plant Biology. After conducting postdoc research at the University of Minnesota and Smithsonian Tropical Research Institute, she worked as an Assistant, Associate and full Professor at the University of Florida till 2013. She currently serves ATBC as the President Elect and a Country Representative for Japan at the ATBC Asia-Pacific Chapter. She also served ATBC as a Councilor (2007-2009), the Treasurer (2009-2013), and Program Chair for the joint ATBC-OTS 50th Anniversary Meeting (2013). She is known for her comparative work of functional traits of seedlings and adult trees in tropical forests, in particular, the first demonstration of the functional basis for growth-survival in tropical tree seedlings. Her work has been conducted mainly in Panama and other Neotropical locations, but after moving to Kyoto University recently, she is actively engaged in new research collaborations and tropical ecology education in East and South East Asia.

## **EXHIBITORS**

9:00 - 16:00 DAILY PALOLO ROOM #306 AB

Association of Tropical Biology & Conservation

ATBC 2016 Le Corum, Montpellier - France

Center for International Forestry Research (CIFOR)

Conservation Council for Hawaii

IUCN World Conservation Congress 2016, Hawaii

Hawaii State Department of Land & Natural Resources,

Department of Forestry and Wildlife

Hawaii Environmental Education Alliance

Legacy Hardwoods

KUPU Hawaii

National Tropical Botanical Garden

Turtle Bay Resort

University of Hawaii at Manoa, College of Tropical Agriculture and Human

Resources/Natural Resources & Environmental Management

University of Hawaii at Hilo, Department of Biology

University of Hawaii at Hilo, Tropical Conservation Biology and

Environmental Science Program

Union of Concerned Scientists

University of Hawaii Press

U.S. Department of Agriculture, National Wildlife Research Center

U.S. Department of Agriculture, Natural Resources Conservation Service



WIFI Café Available in the Exhibit Room



Tuesday, July 14, 17:15 - 18:30 Manoa Room **#304 AB** (Cash Bar)

POSTER NUMBER	TITLE
P-1	Towards a framework of payment for ecosystem services in São Paulo's sugarcane belt (Brazil) <b>Moara A. Canova Teixeira</b>
P-3	Spatial distribution of Podocnemis expansa nests in the Brazilian Amazon and their level of vulnerability to climate change <b>Shirley Famelli da Costa</b>
P-5	Trajectory, habitat use and selection of the Brazilian snake-necked turtle Hydromedusa maximiliani in southeastern Brazil <b>Shirley Famelli da Costa</b>
P-7	*Large variations in leaf trichome and their adaptive significance in Metrosideros polymorpha <b>Gaku Amada</b>
P-9	Mapping canopy tree species across Barro Colorado Island, Panama, with airborne imaging spectroscopy <b>C.A. Baldec</b>
P-11	Influences of aggressive ants and seasonality on bird foraging in a coffee agroecosystem <b>Peter Bichier, Carolyn Delevich</b>
P-15	Saving the Critically Endangered Spoon-billed Sandpiper in Bangladesh  Sayam U. Chowdhury
P-17	Functional traits variation across different growth forms in high mountain Paramo's plants <b>Marisol Cruz</b>
P-19	How discrepant are the ranking of phylogenetic diversity values between anuran range maps and survey data from Brazilian Atlantic Forest <b>Fernando Rodrigues da Silva</b>
P-21	Private reserves in Brazil: Distribution patterns, logistical challenges, and conservation contributions <b>Fernanda de Vasconcellos Pegas</b>
P-23	Variation in the population structure of strawberry guava, an invasive tree in Hawaiian rain forests. <b>Julie S. Denslow</b>
P-25	The Plant Extinction Prevention Program: Preserving Hawaii's Rarest Plant Species in the Face of Climate Change <b>Joan Yoshioka</b>
P-27	Understanding Spatial Patterns of Diversity in the Abyss: Bigeographical Analysis of over 150 years of sampling from the Deep-Sea <b>Brandon Genco</b>
P-29	Impacts of N enrichment on N dynamics in mangroves <b>Carla Roberta Gonçalves Reis</b>
P-31	*Leaf gas exchange dynamics along forest-savannah transition zones in Brazil and Ghana <b>Agne Gvozdevaite</b>
P-33	Expected effects of an insect bio-control on the short term dynamics of an invasive pest plant in Hawaii <b>Orou Gaoue</b>
	*denotes student presenter



Tuesday, July 14, 17:15 – 18:30 Manoa Room **#304 AB** (Cash Bar)

POSTER NUMBER	TITLE
P-35	*Tree size-dependent insect seed predation drives intraspecific variation in viable seed production in a rainforest tree <b>Christopher Jeffs</b>
P-37	Changes in leaf morphological and physiological traits with tree height in diverse tropical rain forest trees in Malaysia <b>Tanaka Kenzo</b>
P-39	Brown Treesnake Rapid Response Team Year in Review:Training, Deployment, & Lessons Learned <b>Adam Knox</b>
P-41	Tree seedling community composition and dynamics in two lowland forest types on a Polynesian island <b>Wei Kit Lee</b>
P-43	Light environment and photosynthetic response associated with vertical stratification and growth forms in the Colombian Andean Paramos <b>Indira Vanesa León-García</b>
P-45	Reproductive success of Pinus pseudostrobus along an elevation gradient in Central Mexico: Possible impacts of climate change <b>Leonel Lopez-Toledo</b>
P-47	Intraspecific variation of drought responses in tropical trees: Consequences for species distributions under climate change. <b>Eric Manzane-Pinzon</b>
P-49	Rats, mice, seeds, and forest restoration: post-restoration shifts in invasive rodent communities with conservation implications, Maui, Hawaii <b>Arthur Medeiros</b>
P-51	Mycorrhizal variability associated to moorland vegetation as a biological indicator in an altitudinal gradient in the eastern Colombian Andes - South America <b>Omar Melo</b>
P-53	A dynamic online approach to extinction risk assessment of flora in megadiverse countries <b>Lucas Moraes</b>
P-55	Assessing the Eastern Chimpanzee's Habitat fragmentation in Nyungwe National Park (NNP) in Rwanda <b>Dominique Mvunabandi, Shawn Wriston</b>
P-57	A Community-based Project to Restore a Hawaiian Mesic Forest in Wailupe Valley, O'ahu <b>Shaun Wriston</b>
P-59	*Coexistence of two aphid species: thermoregulation  Mitzy Porras
P-63	The degree of disturbance matters for movement behavior of seed disperser birds <b>Danielle C. T. L. Ramos</b>
P-65	Correlations of phenological data with historical and current climatic series as indirect evidence of regional climate change Rute Maria Ribeiro
	*denotes student presenter



Tuesday, July 14, 17:15 - 18:30 Manoa Room **#304 AB** (Cash Bar)

POSTER NUMBER	TITLE
P-67	Climate change and carbon storage by moorland vegetation in an altitudinal gradient in the eastern Colombian Andes - South America <b>Nathaly Rodriguez</b>
P-69	Ecology of bird communities along an elevational tropical gradient in Papua New Guinea <b>Katerina Sam</b>
P-73	*Leaf Traits, Plasticity, and Functional Tradeoffs in Nutrient-Limited Tropical Rainforest Ecosystems <b>Zoe C. Sims</b>
P-75	Spatio-Temporal Patterns of Hawksbill Nesting and Migration in American Samoa <b>Alden Tagarino</b>
P-77	Are unthreatened species at risk? Insights from Cordia millenii (Boragiaceae) regeneration in an Afromontane forest <b>Josh Thia</b>
P-79	Mapping habitat suitability for restoration and at-risk plant reintroduction in dryland landscapes of Hawai'i <b>Amanda Uowolo</b>
P-81	Dioecism and Monoecism in two Psychotria species (Rubiaceae) in the Ryukyu Islands, Japan <b>Kenta Watanabe</b>

<sup>\*</sup>denotes student presenter



Wednesday, July 15, 17:15 - 18:30 Manoa Room **#304 AB** (Cash Bar)

POSTER NUMBER	TITLE
P-2	Amazonian turtles harvest: a participatory monitoring and evaluation program at an Amazonian Sustainable Development Reserve <b>Shirley Famelli da Costa</b>
P-4	*Digital Islands in an Analog Sea: Resurrection of Archival Materials for a World Audience Jesse Adams
P-6	Niche Overlap of Squamata in Savanna of Central Brazil Waldima Alves Rocha
P-8	The Hawaiian Hoary Bat: Challenges and Solutions for Incidental Take Permitting and Implementing Consistent and Effective Mitigation <b>Angela Amlin</b>
P-10	Landscape-level reduction of forest cover affects tree assemblages in the Brazilian Atlantic Forest hotspot <b>Maíra Benchimol</b>
P-12	Landscape structure facilitating the avian cross-habitat spillover <b>Andrea L. Boesing</b>
P-14	Fire resistance of Anadenanthera peregrina var. falcata (Benth.) Altschul (Fabaceae) Osmar Cavassan
P-16	Invasive rodent diets and implications for successful restoration of endangered dryland forest, Maui Island, Hawaii <b>Heather Coad</b>
P-18	Frequent fire effects on regenerating plant species diversity in a transitional forest of southeastern Amazonia, Brazil <b>Roberta Cury</b>
P-20	Thermal analysis as a tool for assessing the fire resistance of Brazilian savanna species <b>Veridiana de Lara Weiser</b>
P-22	The TAMAR Project and sea turtle ecotourism in Brazil:Three decades of gender empowerment and capacity building opportunities via handcraft-making cooperatives  Fernanda de Vasconcellos Pegas
P-24	From where art thou, Clidemia hirta? Tracking down the native source of a dominant invader of oceanic islands <b>Saara DeWalt</b>
	*denotes student presenter



Wednesday, July 15, 17:15 - 18:30 Manoa Room **#304 AB** (Cash Bar)

POSTER NUMBER	TITLE
P-26	*Amazonian floating forests: ecology and traditional knowledge of matupá vegetation islands <b>Carolina Freitas</b>
P-28	Species richness and complementarity of herbaceous angiosperms along an elevational gradient in central Veracruz, Mexico <b>Jorge Antonio Gomez Diaz</b>
P-30	Analyzing Invasive Plant Patterns Along the Kalaupapa Coast <b>Jacob Gross</b>
P-32	Assessing the threat of anthropogenic activities on two threatened orchids in Xishuangbanna, China <b>Samuel Herniman</b>
P-34	Are ironstone outcrop plant communities in southeast Brazil resilient to fire?  Claudia Jacobi
P-36	Effect of Forest Fire and Light on Regeneration of Bamboo (Cephalostachyum pergracile) in Kanchanburi, Thailand <b>Panida Kachina</b>
P-38	*Effects of soil nutrient availability on competitive dynamics between non-native invasive and native species in Hawaiian dry forests <b>Amanda Knauf</b>
P-42	Integrated assessment of taxonomic, phylogenetic, and functional diversity reveals opportunities for conservation in the Brazilian Atlantic Forest <b>Priscila Lemes</b>
P-46	Large-scale wind disturbances change soil attributes in a Central Amazon terra firme forest <b>Daniel Magnabosco Marra</b>
P-48	The progress of research in Mexico about the use of biotic resources and their ecological implications <b>Andrea Martínez-Ballesté</b>
P-50	Light environment, structure, diversity and dynamics of tropical dry forests in landscapes of inter Andean Valley, Colombia, South America <b>Omar Melo</b>
	*denotes student presenter



Wednesday, July 15, 17:15 – 18:30 Manoa Room **#304 AB** (Cash Bar)

POSTER NUMBER	TITLE
P-52	Mechanisms promoting diversity in seedling assemblages: results from a long-term seedling dynamics study in an Amazonian rainforest <b>Margaret Metz</b>
P-54	Forest degradation and deforestation dynamics in tropical humid forest over 40 years: a case study in the Osa Peninsula, Costa Rica <b>Lucia Morales-Barquero</b>
P-56	*Litter-layer and decomposition response to litter manipulation in lowland tropical forest, Panamá <b>Sara Fern Leitman Neihaus</b>
P-58	Water dispersal in Amazonian floodplain trees <b>Pia Parolin</b>
P-60	What do we know about ecosystem processes and secondary succession in tropical dry forests?  Jennifer Powers
P-62	How does land use change affect ant biodiversity in different types of Cerrado vegetation?  Antonio Queiroz
P-64	Historical loss of mammal populations of medium and large size in Brazilian Atlantic Forest <b>Leandro Reis</b>
P-66	Revisiting the Interaction of Land Use and the Environment in a Puerto Rican Subtropical Wet Forest <b>Jess K. Zimmerman</b>
P-68	Functional diversity of potential Colombian Andean species for commercial reforestation and ecological restoration, Colombia, South America <b>Nathaly Rodriguez</b>
P-70	Is orchid fitness related to phorophyte selectivity? Edgardo Santiago Rivera
P-72	Effects of coffee farm management practices on arbuscular mycorrhizal fungal communities <b>Gaya Shivega</b>
	*denotes student presenter



Wednesday, July 15, 17:15 – 18:30 Manoa Room **#304 AB** (Cash Bar)

POSTER NUMBER	TITLE
P-74	Liana communities along successional gradients of seasonally dry tropical forest <b>Christina Smith</b>
P-76	Leaf $\delta$ 15N values in diverse tree species in a Bornean lowland mixed dipterocarp forest <b>Ayumi Tanaka-Oda</b>
P-78	Philippine terrestrial plant biodiversity research in the past 15 years: Gaps and trends <b>Ma. Dolores C. Tongco</b>
P-80	The resilience of mangrove forest to major disturbances: A Case Study in Sumatra, Indonesia <b>Ruben Venegas-Li</b>
P-82	Species richness, forest structure, and functional diversity during succession in the New Guinea lowlands <b>Timothy Whitfeld</b>

\*denotes student presenter

# AWARDS FOR STUDENTS AND RECENT PHD DEGREE RECIPIENTS

The **Luis F. Bacardi Award** is open to those who have received a PhD, within 5 years of the meeting dates. To be eligible for the Bacardi Award, an applicant must be a non-student member for 2015 or have just completed the PhD in Spring 2015. For more information on the award, please see http://tropicalbiology.org/luis-f-bacardi-award/

The **Alwyn Gentry Award** is presented to a student presenter (one each – oral or poster). Minimum qualification is to be a paying student member of the ATBC for 2015. For details of the award, please see http://tropicalbiology.org/alwyn-gentry-award/



**F1000 Awards** will be presented to the Top 3 Poster Presenters. The awards consist of the following:

- A personalized F1000 Poster/Talk prize certificate
- A free personal subscription to F1000 allowing access to all recommendations and our new collaborative authoring tool
- A free article submission to F1000Research (http://f1000research.com/articles/2-192/v2) worth up to \$1000
- Showcase of your poster/slides in the open access repository (http://f1000.com/posters) for free,



**New Phytologist Poster Prize**, \$200, will be presented to the Best Poster in Plant Sciences

# Sponsor a Koa Legacy Tree and contribute to the reforestation and biodiversity of Hawai'i

(Visit the Hawaii Legacy Hardwoods table in the Exhibit Room)



## WORKSHOP, FIELD TRIPS AND KEIKI CARE

Workshop, Field Trips and Keiki Care Closed Attendnace, Pre-Registration Required

#### **WORKSHOP**

July 17-21 Fundamentals of GIS for ecology and species distribution modeling (UH Campus)

#### **FIELD TRIP**

July 17-18 Kauai McBryde Garden (NTBG) / Alakai Wilderness Preserve

July 17 Hawaii Maunakea Wet Forest and Alpine Shrubland

July 17 Oahu Lyon Arboretum

July 17 Oahu Northern Wai'anae Mountains (Kahanahaiki)

July 18-19 Maui Haleakala

Oahu Southern Waianae Mountains Montane Mesic Forest July 18







#### ATBC KEIKI CARE -



The ATBC 2015 Committee is pleased to make available to our attendees Keiki Care (Child Care). We have teamed up with Kamaaina Kids and Kahala Keiki Club to provide escorted and supervised child care with a Hawaiian experience for keiki ages 5 - 12 years old.

Keiki will be checked in each day at 8:00 AM at the ATBC conference office (#303AB), and then transported to The Kahala Hotel for a day of fun activities and experiences. Keiki will return back to the Convention Center by 5:00 PM each day.



## **DETAILED SCHEDULE**

Monday, July 13

#### TIME

08:00 **Opening Session** 

08:30 Hawaiian Welcome and Plenary Address: Liliu Theatre 310

Hawaii Kua Uli: The sweep of Hawaiian Ecosystems: scientific and biocultural perspectives on ecosystems, plants and animals of Hawaii.

Samuel M. Ohukaniohia Gon, III

09:30	Coffee	and	tea	brea	k
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	Liliu Theater 310	301 A	301 B
	Symposium 1 Exploring Elemental Limitations of Tropical Biological Processes Across the Entire Periodic Table: An Interactive Symposium Kyle Harms	Symposium 2 Integrated Landscape Management: From Theory to Practice Terry Sunderland	Symposium 3 Marine Mammals in Crisis in Tropical Asia Ellen Hines
10:00	Contributors: Silvia Alvarez-Clare Greg Asner Katie Heineman Mike Kaspari Erika Marin-Spiotta	Food Security and Nutrition: The Role of Forests  Terry Sunderland	Challenges of ecosystem-based approach to conservation for cetaceans in developing countries Jo Marie Acebes
10:15	Rebecca Ostertag Jennifer Powers Sasha Reed Emma Sayer Brian Steidinger Ben Turner	Increasing effectiveness of Kerinci Seblat National Park, Sumatera, through a landscape approach: lessons learnt from Merangin Sonya Dewi	How can MPA's protect marine mammals? Ellen Hines
10:30	<ul> <li>Nina Wurzburger</li> <li>Joe Wright</li> <li>Steve Yanoviak</li> <li>Joe Yavitt</li> </ul>	What are integrated landscape approaches and how effectively have they been implemented in the tropics: a systematic map James Reed	Planning for Increased Stewardship and Education Tara Sayuri Whitty
10:45		The economic value of ecosystem services is not spatially congruent with biodiversity in tropical forests <i>L Roman Carrasco</i>	Training communities in stranding and rescue response Nantarika Chansue
11:00		Tropical Important Plant Areas: directing botanical research and conservation where it matters most <i>lain Darbyshire</i>	Creating regional standards for training communities in stranding response <i>Mridula Srinivasan</i>
11:15		Health and nutrition value of wildlife in a conservation landscape in Madagascar Christopher Golden	*Research priorities to inform the conservation of little-known species. A case study using the Irrawaddy dolphin, Orcaella brevirostris Justine Jackson-Ricketts
11:30		Landscape restoration to support Bornean orangutan rehabilitation and reintroduction <i>Jacqueline Sunderland-Groves</i>	
11:45		Recovery of lowland tropical forest of East Kalimantan thirty years after a major fire episode: species turnover, diversity and C stocks Sonya Dewi	
12:00	Lunch		

Lunch Training Session: CV Skills. Tomas Carlo - 301A

Lunch Training Session: Paper Writing Skills - 301 B

Lunch Committee Meeting: ATBC-Student and Early Career SCIentists (ATBC-SECSCI). Chair: Erin Kuprewicz - 303 AB

<sup>\*</sup>denotes student presenter

TIME

08:00

08:30

	302 AB	305 AB	308 AB
	Symposium 4 Impacts of Climate Change on Tropical Freshwater and Estuarine Ecosystems Therese Frauendorf	Symposium 5 Herbivory in Tropical Food Webs Sarah Maunsell	Symposium 6 Chronic Anthropogenic Disturbance in Tropical Rainforests - Negative Impacts From Population to Ecosystem Level Marcello Tarbarelli
10:00	Potential impacts of climate change on reproduction and dispersal of native Atyoida bisulcata shrimp in Hawaiian headwater streams Richard MacKenzie	Indirect interactions structuring tropical forest food webs Rebecca Morris	Chronic anthropogenic disturbances: from basic concepts to potential effects Marcelo Tabarelli
10:15	An ecological classification of Hawaiian streams:Development and implementation of a tool for conservation in a changing climate Ralph Tingley	Are local plant-herbivore food webs sampled randomly from the regional pool of plant-herbivore interactions?  Legi Sam	Human disturbance and biological invasion:The transformation of Hawaii's dryland vegetation Curtis Daehler
10:30	Climate driven alterations to watershed hydrology mediates sediment and carbon yields from three Hawaiian watersheds Ayron Strauch	*The use of barcoding and meta-barcoding for quantifying trophic links of generalist herbivores and predators in tropical food webs Sarah Maunsell	Reaping the last harvest: predictors of timber species composition and value across 824 Amazonian logging concessions Carlos Peres
10:45	Life-history responses of amphidromous fish to hydrologic variation among Hawaiian streams Peter Lisi	Herbivory and herbivores in enemy free space along a complete elevation gradient in the tropics Katerina Sam	Biotic disturbances cause changes in species composition and plant diversity of Indian dry tropical forest R. Sagar
11:00	Using Stable Isotopes to Assess the Impacts of Climate Change on Food Webs in Hawaiian Streams Richard MacKenzie	*The effect of experimental warming on gall- parasitoid interactions at different elevations Casey Hall	Phylogenetic signal in the response of plants to chronic anthropogenic disturbance: implications for conservation of tropical dry forests and grasslands  Alejandra Martinez Blancas
11:15	Predicted climate driven changes in flow affect stream resources, consumers, and nutrient dynamics Hawaii Therese Frauendorf	Using molecular tools to model cascades of extinctions in plants, insects and mutualistic and parasitic phoretic mites along elevational gradients  Carlos Garcia-Robledo	Tropic cascades? Defoliation by pastoralists alters plant-ant interactions in a tropical tree Orou Gaoue
11:30	Prioritizing conservation lands in the Hawaiian Islands: Implications for management in freshwater ecosystems in the face of climate change Yin-Phan Tsang	Herbivorous and non-herbivorous insects on flowers and leaves: Are leaf-feeding herbivores really the most specialized?  Carl Wardhaugh*, Nigel Stork, Will Edwards	Effects of chronic anthropogenic disturbance on dryland populations, species interactions and communities  Carlos Martorell
11:45		Bat and bird exclusion but not shade cover influence cocoa leaf consumption and arthropods in agroforestry landscape Camila Righetto Cassano	Human disturbances and their multiple ecological effects in the Caatinga vegetation Inara Leal

## DETAILED SCHEDULE

Monday, July 13

TIME	Liliu Theater 310	301 A	301 B
	Symposium 7 Weaving Tropical Biology and Culture in Field-Based Education:The First Decade of OTS NAPIRE Program - Session 1: Interface Between Science and Culture in Field-Based Education Rakan Zahawi	Symposium 8 Functional Diversity of Leaf Traits in Tropical Tree Communities Across Environmental Gradients - Part 1 Roberta Martin	Open Session 1 Species Interactions: Trophic Ecology Paul Banko
13:30	A Strength-Based Approach to Assisting Native American Students in Higher Education Donald Pepion	Protium leaf chemistry variation across phylogenetic, geographic and environmental dimensions Paul Fine	Positive interactions in a tropical semi-arid forest: a multi species experiment Gislene Ganade
13:45	History and Impacts of the Native American and Pacific Islander (NAPIRE) Program Karin Gastreich	Inferring life history strategies of tropical trees from leaf and crown spectral signatures Alexander Shenkin	Omnivores rule: land cover changes promote an omnivore-dominated carnivore community in the Neotropics  Lain Efren Pardo Vargas
14:00	Integrating culture and science in the NAPIRE Program and the value for field-based education. Barbara L. Dugelby	*Tropical dry forests on serpentine soils are structured by cloud line: insights from plant functional diversity and turnover across elevation Catherine Hulshof De la Peña	The importance of caterpillars in the diets, food webs, and conservation of Hawaiian forest birds Paul Banko
14:15	Why send students from tropical islands to a tropical research station? Frank Camacho	Is community assemblage explained by leaf trait variations on forest-savanna transitions? <i>Imma Oliveras</i>	Demography of a palm tree is more affected by superabundance of its predator than by reduction of its habitat Rita de Cassia Quitete Portela
14:30	Comparison of NAPIRE and other tropical field education experiences Peltin Olter Pelep	*Relationships between species traits and whole plant allocation across 71 tropical tree species in Papua New Guinea Yoshiko lida	
14:45	From Alumnus to Mentor: Influence of OTS- style field education experience on scientists perspectives and careers Tamara Heartsill Scalley	Variability in the tropical carbon sink caused by multiple competing representations of photosynthetic traits. Anthony Walker	
15:15	Coffee and Tea break		
	Symposium 9 Weaving Tropical Biology and Culture in Field-Based Education: The First Decade of OTS NAPIRE Program - Session 2: NAPIRE Ecological Studies. Barbara Dugelby	Symposium 10 Functional Diversity of Leaf Traits in Tropical Tree Communities Across Environmental Gradients - Part 2 Roberta Martin	Symposium 11 Interactive Workshop: Indicators of Biocultural Resilience, From Local to Global Eleanor Sterling
15:30	Using acoustic monitoring for rapid assessment of neotropical anuran assemblages in Costa Rica William Culver III	*Are Neotropical forests changing in species and trait composition?  Masha T. van der Sande	Crafting relevant indicators with customary landholding communities in Solomon Islands Eleanor Sterling
15:45	Comparison of Ant Activity on Three Species of Piper Ant-Plants at Las Cruces Julie Anne Duay	On the rarity of cheap leaves and expensive trait measures in tropical forests Christopher Baraloto	A new framework for monitoring social-ecological vulnerability of coral reef fisheries in Pacific Island coastal communities Stacy Jupiter
16:00	*Male Density Associated with Aggressive Interactions in the Emerald Glass Frog (Anura: Centrolenidae Espadarana [Centrolene] prosoblepon)  Hayden Hedman	CHAMBASA: variation in tree functional traits along a 3300 m elevation gradient in the Amazon and Andes Yadvinder Malhi	A biocultural approach to assessing resilienc to climate and environmental change across ridge-to-reef landscapes in Fijian coastal communities Shimona Quazi

<sup>\*</sup>denotes student presenter

TIME	302 AB	305 AB	308 AB
	<b>Open Session 2</b> Ecophysiology - 1 <i>Brendan Buckley</i>	Open Session 3 Consequences for Climate Change for Organisms - 1 Laura Simmons	Open Session 4 Seed Dispersal Don Drake
13:30	Trade-off between light interception efficiency and light use efficiency:implications for coexistence of tree species in one-sided light competition.  Yusuke Onoda	*Population viability modelling to evaluate climate change impacts on the Australian endangered Swamp Orchid <i>Phaius australis</i> Laura Simmons	*The role of seed chemistry in ant-mediated seed dispersal and predation in a Neotropical pioneer tree species, Zanthoxylum ekmanii Selina Ruzi
13:45	*Growth and Photosynthetic Responses of Four Australian Subtropical Rainforest Species: How Tolerant are Shade Tolerant Species? D. Puji Lestari	*The roles of bird traits in predicting bird shifts in response to climate change Nega Tassie	Highly skewed seed rain into gaps strongly influences gap succession John Terborgh
14:00	*Comparative physiology of lianas and trees: Can hydraulic strategies explain increasing liana abundance in tropical forest? Mark De Guzman	Predicting movements of endemic birds among conservation areas in the Albertine Rift under future climate change Robert Bagchi	Frugivore choice and escape from seed predators:the case of Dialium guianense (Aubl.) Sandw. and two sympatric primates Julieta Benítez-Malvido
14:15	Dendro-ecophysiological traits of Northern and Southern originating conifers in Vietnam Brendan Buckley	Extreme climatic conditions in a wet tropical alpine ecosystem (páramo) in Colombia Adriana Sanchez	The effects of mutualist partner identity on plant demography are context-dependent Emilio Bruna*, Thiago Izzo, Brian Inouye, Heraldo Vasconcelos
14:30	Fate and Transformation of Emerging Contaminants in Wetland Mesocosms Planted with Scirpus Validus in a Tropical Area Dongqing Zhang		Seed-dispersal by native and non-native birds on the Island of Kauai, Hawaii.  Monica Kaushik
14:45	More efficient water and nutrient uses of lianas than coexisting trees in tropical rainforest Jiao-Lin Zhang		"Taking the rainforest's temperature": a study case in French Guiana Pierre-Michel Forget
15:15			
	Symposium 12 Insular Tropical Forest Ecosystems: Documenting Responses to Climate Variability in Hawaii and Puerto Rico Tamara Heartsill-Scallery	Open Session 5 Fragmentation and Altered Landscapes - 1 Devin Leopold	Open Session 6 Disturbance Ecology Clay Trauernicht
15:30	Effects of a warming climate on tropical island soil biogeochemistry: Results from Hawai'i and Puerto Rico Sasha Reed	Regeneration drivers in an anthropogenic landscape at Atlantic forest Melina Melito	The Intermediate Disturbance Hypothesis and tropical tree diversity: effects of scale Frans Bongers
15:45	Flux, partitioning and storage of carbon across a mean annual temperature gradient in Hawaiian tropical montane wet forest Creighton Litton	*Avian species loss and persistence in Amazonian slash-and-burn mosaics Jacob Socolar	*Converting wildfires into prescribed burnings in Protected Areas:guidelines for fire management in Neotropical savannas Livia Moura
16:00	Potential climate change impacts in Puerto Rico from 1960 to 2099: Projecting statistically downscaled GCM predictions Azad Henareh Khalyani	*Forest area and connectivity influence root- associated fungal communities in a fragmented landscape on Hawaii Island Devin Leopold	The savannization of an archipelago: people, landscape change, and Hawai'i's novel fire regime Clay Trauernicht

## DETAILED SCHEDULE

Monday, July 13

TIME	Liliu Theater 310	301 A	301 B
16:30	Agoutis on the Alert! Sharonda Carson	Changes in Forest Canopy Chemical Traits on a Global Matrix of Elevation Gradients Gregory Asner	Modelling for managing: the social-ecological system of Moorea, French Polynesia Joachim Claudet
16:45	Stressed Out Streams:The Effect of Agriculture on Stream Nutrient Cycling Jennifer Wong-Ala	*Light-induced plasticity in leaf hydraulics, venation, anatomy and gas exchange in ecologically diverse Hawaiian lobeliads Christine Scoffoni	The Pacific Islands Regional Climate Assessment (PIRCA): A proposed framework for tracking physical and social indicators of climate change across diverse Pacific Island environments Victoria Keener
17:00	Ka pilina o haukeuke: Studying the genetic connectivity of Colobocentrotus atratus in Hawaii, USA Melanie Keliipuleole*	Phenotypic and genetic variation in Metrosideros polymorpha across environmental gradients in Hawaii Roberta Martin	Addressing the Challenges of Diverse Knowledge Systems through Landscape Analysis: A Case Study in the Murray-Darling Basin, Australia Amanda Lynch
17:15		How physiological and structural factors determine photosynthetic capacity of Metrosideros polymorpha across altitudinal and soil age gradients in Hawaii Ulo Niinemets	Symposium 11 Sym 11 Discussion with <i>Kealoha Kinney,</i> Lee Joaquim
17:30	Open ATBC Conservation Committee Meeting (Open to all attendees Chair:Pia Parolin		
18:30	Evening Barbecue Social: Student and Early C  Hosted by KUPU at the Kupu Net Shed, Kakaa Chair Frin Kuprewicz		

Chair: Erin Kuprewicz

TIME	302 AB	305 AB	308 AB
16:30	Long-term Patterns of Climate, Tree Growth, and Tree Mortality in Permanent Forest Plots of Hawaii Island Susan Cordell	Area and surrounding forest cover can drive the frog diversity at pasture matrix in Atlantic Forest fragmented areas Mauricio Almeida-Gomes	Long-term interactive effects of elephants, fire and rainfall determine woody plant biomass in African savanna Adam Pellegrini
16:45	Sensitivity of forest carbon stocks and fluxes to altered rainfall in the Hawaiian Islands.  Paul Selmants	*How does habitat fragmentation affect disease susceptibility? Examining the relationships between geography, population genetics, and disease Anat Belasen	The ecological role of lightning in tropical forests Steve Yanoviak
17:00	Ecological and Social Aspects of Tropical Forest Responses to Climate Change in the Luquillo Experimental Forest, Puerto Rico Grizelle Gonzalez	Nitrogen Fertilization Effects on Litter Decomposition and Enzyme Activities in Two Humid Tropical Forests Daniela Cusack*, Whendee Silver, William H McDowell	Small-scale extractive disturbances and its effects on vegetation and birds in tropical forest: A case study from Himalayan foothills. <i>Monica Kaushik</i>
17:15	An observatory approach to enable ecological forecasting: The role of tropical systems in the National Ecological Observatory Network (NEON). Henry Loescher	Habitat amount affects mixed species bird flocks of fragmented Atlantic Forest Danilo Boscolo	*Responses of two tropical seagrasses to shading and smothering by fine sand: implications for port management and Environmental Impact Assessment Claudia Benham
17:30		Can frogs thrive in oil palm? A study of the effects of habitat management on frog diversity David Kurz	Ant responses to cattle grazing in the Australian arid and semi-arid tropics Gabriela Arcoverde

## **DETAILED** SCHEDULE

Tuesday, July 14

#### TIME

Plenary Address: Liliu Theatre 310 08:00

Linking Patterns and Processes Across Scales: A Case Study with Neotropical Hummingbirds Catherine Graham

Coffee and tea break 09:00

	Liliu Theater 310	301 A	301 B
	Symposium 13 Ecosystem Functions Along Elevation Gradients Cécile Girardin	Open Session 7 Diversity Pierre Bonnet	Symposium 14 Resilient Landscapes: The Social and Ecological Causes and Consequences of Reforestation in the Tropics Robin Chazdon
09:30	Using a large Andean elevation gradient to understand ecosystem processes in soil and canopy Patrick Meir	Quantifying long-term changes in diversity and floristic composition over 48 years in a subtropical rainforest, Australia Lina Maria Garcia Florez	Implications of forest concepts and definitions for assessing the degradation and recovery of terrestrial ecosystems  Robin Chazdon
09:45	Insights into ecosystem function from a 3300 m elevation gradient in the Peruvian Andes Yadvinder Malhi	Pl@ntNet platform, a citizen science initiative dedicated to plant identification and biodiversity monitoring.  Pierre Bonnet	Challenges of tradeoffs and synergies in different reforestation scenarios Elena Lazos
10:00	Explaining the low growth rates and biomass of tropical montane forests: A whole carbon budget perspective Cécile Girardin	*Islands of light: Lichen community composition and fluorescence in different UV intensities Klara Scharnagl	Biodiversity recovery in replanted rainforest is constrained by species' attributes and landscape patchiness: a regional case study.  Carla Catterall*
10:15	Productivity of tropical rain forests along two parallel altitudinal transects differing in P availability on Mount Kinabalu, Borneo Kanehiro Kitayama	Assessment of riparian vegetation along selected streams in the University of the Philippines Diliman Campus, Quezon City, Philippines Rafael Angelo Cruz	Tropical reforestation in a changing climate: opportunities and challenges for mitigation and adaptation Erika Marin-Spiotta
10:30	*The soil microbial community and its functional diversity along an Andes-to-Amazon elevation gradient Andrew Nottingham	Comparison of Ground-dwelling Ant Diversity in a Forested Area and a Coconut Plantation in Bacon-Manito Geothermal Production Field, Bicol, Philippines Felipe Del Castill	Ecological Dimensions of Forest Transitions  John Schelhas
10:45	Nutrient limitation determined from a multi-year N and P fertilization experiment along a 3000 m elevation gradient in the Peruvian Andes and Amazonia  Joshua Fisher	The bird community composition and the factors that influence the distribution of bird species in Oahu forests Jason Gleditsch	*Reforestation novelty in Latin America: spatial patterns and implications for conservation and land-use change Sean Sloan
11:00	*Experimental seedling transplants show that factors other than mean temperature may determine tropical treeline shifts Evan Rehm	Changes in liana abundance and long-term impacts on forest dynamics: insight from a 26-year record at La Selva Biological Station Susan Letcher	Hotspots of reforestation in Latin America and Caribbean: drivers and biodiversity implications.  T. Mitchell Aide
11:15	*Does Rapoport's rule apply to the ultramafic flora of Sabah, Borneo? <i>Melissa Whitman</i>	Bamboo Species Inventory in K'laja Karst Area With Notes On Its Local Utilization Maria Luisa Cabrera	*Replanting a future: Ecosystem service scarcity drives local forest transitions in the Ecuadorian Andes Sarah Jane Wilson
11:30	Local adaptation of the landscape-dominant tropical tree, Metrosideros polymorpha, along a steep elevation gradient Tomoko Sakishima	The Diversity of Epiphytic and Lithophytic Lichen Species and the Distribution at Merapi Volcano National Park Rusdi Setiawan	Creating space for large-scale habitat restoration in tropical agricultural landscapes Agnieszka Latawiec

<sup>\*</sup>denotes student presenter

#### TIME

08:00

 	302 AB	305 AB	308 AB
	Symposium 15 Island Plant-Herbivore Interactions: Evolutionary Ecology of Native Species and novel Dynamics with Invasive Species Carina Boege	Open Session 8 Evolution, Adaptation, and Phylogenetics Elizabeth Stacy	Open Session 9 Spatial Ecology: Distribution Patterns Liza Comita
09:30	Double threats: seedling tolerance of simultaneous herbivory and drought in native Hawaiian dryland plants Kasey Barton	*Can phylogenetic structure reveal niche and neutral processes in community assembly? Sara Mortara	The role of climate and soil in controlling tree species distribution in the savannas of central Brazil Renata Françoso
09:45	Why Hawaiian plants are not defenseless: Caterpillar-hostplant interactions in endemic Hawaiian Lepidoptera William Haines	Drivers of incipient sympatric speciation in a long-lived tree (Metrosideros polymorpha) in a riparian zone Elizabeth Stacy	Determinism vs. stochasticity in the coexistence of tree species in tropical rain forests: a study of 21 years  Miguel Martinez-Ramos
10:00	How do hurricanes affect herbivory on Bahamian islands?  Amber Wright	Hyperdiverse insect radiations of the Hawaiian Islands - Why do they exist and why do they matter?  Karl Magnacca	Spatial and temporal variation in density- dependent seedling survival in a lowland Neotropical forest Liza Comita
10:15	Herbivory by introduced Iguana iguana in the San Juan Bay Estuary: landscape patterns, preferences, and cascading effects. Tomas Carlo	Evolutionary drivers of species delimitation in African polyploid complex trees genus Afzelia: insights from molecular phylogeny Armel S. L. Donkpegan	Drivers of tree species richness in New Caledonian rainforests: beta- but not alpha- diversity makes them exceptional Thomas Ibanez
10:30	Invasive social insects shifting the trophic ecology of native species Phil Lester	Plastid genomes in <i>Bignonia</i> L. (Bignoniaceae) <i>Alexandre Zuntini</i>	*A theoretical model for modular level sanctions in fig wasp and plant-microbial mutualisms <i>Brian Steidinger</i>
10:45	*Does the island-wide loss of insectivorous birds initiate a trophic cascade? Haldre Rogers	Testing biogeographical scenarios to understand the evolution of the red mangrove (Rhizophora) species in the neotropics Ivania Cerón-Souza	Active learning methods for efficient surveys of species distribution Lucas Joppa
11:00	Resistance and tolerance to herbivory at early growth stages: determining the key to invasion success in woody species in Hawaii Matthew Lurie	Predictors of the activity range in tropical mammals Bruno Cid	Environmental controls of floristic composition across a hotspot of biodiversity in southeastern Brazil: implications for conservation Marcelo T. Nascimento
11:15	Effects of Dam-Induced Landscape Fragmentation on Amazonian Ant-Plant Mutualistic Networks Carlos Roberto Fonsec	Speciation mechanisms in Hawaiian <i>Drosophila:</i> Assessing the relationships amongst hybrid male sterility, mating behavior, and differential gene expression in <i>D. planitibia</i> and <i>D. silvestris.</i> Eva Brill	Spatial distribution patterns of tree species in a subtropical rainforest, Australia Lina Maria Garcia Florez
11:30	Changes in herbivore communities and predator abundance across forest succession in Chamela, Jalisco Mexico Karina Boege	Eggshell Adaptation of Crested lark and Skylark in Kuwait Arid zones Yahya Al-Shehabi	Life History and the Spatial Structure of Native Bamboos in a Neotropical Forest Maira Padgurschi
11:45		Fruit morpho-anatomical and leaf epidermal parameters as taxonomic features in five varieties of Capsicum annuum L. (Solanaceae)  Abdullahi Alanamu AbdulRahaman	

# DETAILED SCHEDULE

Tuesday, July 14

#### TIME

12:00 Lunch

Lunch Training Session: Interview Skills. Kasey Barton - 301A
Lunch Training Session: Press Releases and Communicating Outside Academia. Ariel Lugo - 301 B
Lunch Committee Meeting: Biotropica Editorial Board. Chair: Emilio Bruna - 303 AB

Lili'u Theater 310	301 A	301 B
Symposium 16 Understanding Resilience in Island Ecosystems Alice Hughes	Open Session 10 Human Dimensions of Tropical Landscapes Shimona Quazi	Open Session 11 Ecosystem Ecology: Ecology Stefan Schnitzer
Assembly of Arthropod Communities On Remote Islands: Evolution of Resilience and Implications for Future Dynamics Rosemary Gillespie	The new agrarian change? Exploring the dynamic interplay between forest conservation, food security and commodity production in tropical forest landscapes  Liz Deakin	Massive carbon source found in tree dynamics of lowland Amazonian forests David C. Marvin
From seabirds to songbirds: the phylogeography of avian resilience in Hawaii and beyond Scott Edwards	Conservation value of managed landscapes in South Asia: Drivers of diversity and structure in secondary forests, plantations, and agroforests. Shimona Quazi	Lianas, trees and the implications for tropical forest diversity and carbon dynamics Stefan Schnitzer
*The past, present and future of Island ecosystems Alice Hughes	Woodcutting activities in Tabuk region : assessment of conservation knowledge Khalid ALMutairi	Characterizing Tropical Forest Representativeness for Optimizing Sampling Network Coverage Forrest Hoffman
Resilience in the Hawaiian flora: the role of bioclimatology and evolutionary origin.  Jonathan Price	Investigating social drivers of ecological resilience in Fijian coral reef systems Rachel Dacks	Floristic composition and tree size-distribution effects on biomass predictions along successional gradients in Central Amazon forests Daniel Magnabosco Marra
Alien Plant Invasion in Southern Africa and Robben Island: The Role of Phylogeny, Functional Traits and Climate Change Kowiyou Yessoufou	*Tracking land-based N to Hawaiian coral reefs: Is submarine groundwater discharge a chronic threat to water quality and reef health? Daniel Amato	Toward a better mechanistic understanding of soil carbon sequestration in tropical and temperate forests  Laëtitia Bréchet
Species number of vascular plants in the largest tropical islands in the Indo-Pacific and climate change Sergey Venevsky	*Ethnic variation in the valuation of ecosystem services Aida Cuni Sanchez	Biomass and Carbon shifts in the Atlantic Forest based on forest type and fragmentation Dora Villela
Complex relationships among substrate, vegetation and seabirds at Kaena Point, a recovering Hawaiian ecosystem Donald Drake	*How to measure and monitor the implementation of Integrated Fire Management in a Neotropical savanna? Livia Moura	*Divergent estimates of biomass carbon in south- east Asian rainforests: a Philippines study Sharif Ahmed Mukul
Sea level rise exposure and scenarios for black- footed albatross colony establishment on the main Hawaiian Islands Michelle Reynolds	Morpho-functional and demographic responses of Brahea aculeata (Palmae) to leaf area loss in northeastern Mexico Leonel Lopez-Toledo	Carbon storage in the Amazonian rainforest: estimates with an individual-based forest gap model Edna Roedig
*Diversification patterns of the ant genus Mystrium on Madagascar: Towards a more universal understanding of mechanisms of biodiversity on islands Natalie Graham	Tropical forest plantations, deforestation and the future demand for wood products Doug Boucher	The Relationship between Aboveground Wood Productivity and patterns of tree turnover in Venezuelan tropical forests.  Emilio Vilanova
Anticipating effects of climate change in the Hawaiian Islands: characterizing plants as habitat generalists and specialists  Alison Ainsworth	Validating People New Environmental Paradigm in Conserving Water Resource Traditionally based on Gender Equality: A Case in Manggarai, East Indonesia  I Made Putrawan	*Above and below-ground carbon storage in the largest peatland complex in Amazonia Frederick Draper
Coffee and Tea break		

<sup>\*</sup>denotes student presenter

#### TIME

	302 AB	305 AB	308 AB
	Symposium 17 Insular Tropical Streams: Case Studies to Biotic Responses to Hurricanes, Droughts, and Landuse Changes in Hawaii and Puerto Rico Alan Covich	Open Session 12 Animal Population Ecology and Behavior - 1 Damien Bontemps	Open Session 13 Relating Functional Trait Attributes to Environmental Variables Diego Pérez-Salicrup
13:30	Synthesis of research from the Luquillo Experimental Forest: resilience of riparian and stream communities in headwater streams Tamara Heartsill Scalley	Methodological norms in terrestrial bird surveys current approaches are incomplete, inconsistent and unreliable. David Watson	Relationships between biodiversity, plant functional traits and above ground biomass in secondary tropical montane forests in the Northern Andes Juan Posada
13:45	Feeding microhabitat use and movements of juvenile Mugil cephalus in a lowland Hawaiian stream Kauaoa Fraiola	The role of behavior in species response to landscape change: the case of King Vulture in the Southern Yucatan Sophie Calme	*Functional traits variation across different growth forms in high mountain Paramo's plants <i>Marisol Cruz</i>
14:00	Potential Ecological and Evolutionary Impacts of Climate Change on Neotropical Decapods Todd Crowl	Iridescence in Colombian birds: Patterns, processes and associated mechanisms Gabriel Jaime Colorado Zuluaga	The relationship of leaf venation architecture to life history in tropical dry forest trees: correlations with leaf type and influence on growth rates Lawren Sack
14:15	Long-term effects of multiple hurricanes and droughts on stream detritivores and ecosystem services in Puerto Rican streams  Alan Covich	Birds of Two Oceans? Trans-Andes and trans-continental migration of Black Skimmers (Rynchops niger cinerascens) from the Peruvian Amazon Lisa Davenport	*Drought tolerance as a driver of tropical forest assembly: separating spatial signatures for competition from habitat associations Megan K Bartlett
14:30	Post larvae recruitment were sampled from lao Stream on the island of Maui, Hawai'i from 2000 to 2014 Skippy Hau	Crowding, termite nest use, and body condition in the specialist gecko Gymnodactylus amarali on artificial islands in central Brazil Reuber Brandão	Habitat partitioning among functional groups of tree species in response to topographic variations in a subtropical forest in Brazil Pedro Higuchi
14:45	Impacts of declining rainfall on the hydrological and ecological function of Hawaiian streams Richard MacKenzie	*The interplay between environmental temperatures and locomotor performance of lizards and their preferred body temperatures during reproduction period Buddhi Dayananda	Vulnerability of Scleronema micranthum (Ducke) Ducke, a resistant tree species to wind disturbance in Central Amazon Gabriel Ribeiro
15:00		Adaptive shifts in female mating preferences within in a fiddler crab population Huon Clark	Traits associated with nutrient impoverishment and shade-tolerance in tree juveniles of three Bornean rain forests with contrasting nutrient availability Ryota Aoyagi
15:15		*The population ecology of the lizard Anolis cristatellus in two contiguous but thermally distinct habitats Luisa Otero	Analysis of the past 50 years' tree growth by using 14C dating in an aseasonal tropical rain forest Tomoaki Ichie
15:30		Evaluation of relative condition factor variation in the invasive spectacled caiman (Caiman crocodilus) in Puerto Rico  Damien Bontemp	Dendrochronological reconstruction of establishment history in two tree species in tropical montane moist forests Diego R. Pérez-Salicrup
15:45		Blind toads in paradise:the cascading effect of vision loss on a Tropical archipelago Luis Felipe Toledo	Influence of slope aspect and topographic position on functional composition of a tropical dry forest Moisés Méndez-Toribio
16:00			
16:15			
17:15			

## DETAILED SCHEDULE

Wednesday, July 15

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Transition Break	08:00	Plenary Address: Liliu Theatre 310 Conservation in an Era of Rapid G Richard Corlett	obal Change			
Open Seasion 15	09:00	Transition Break				
Conservation and Restoration Sussess in Human-Dominated Landicaptives   Antalia Kurashima   Antalia Kura		Liliu Theater 310	301 A	301 B		
Colory threes in a tropical social bee   Berjamin Kaluza   Berja				Conservation and Restoration Issues in Human-Dominated Landscapes		
Og.45   The Importance of Traditional Agricultural Lands for Food Security and Resilience in the Face of Climate Change Natalie Kurashima	09:15			colony fitness in a tropical social bee		
10:00  Coffee and Tea break  Open Session 19 Invavi Johnson  Managing the unmanageable evaluating ecological processes that make invasive plant control a challenge Geatha Ramaswami  Invation Paragraphia Session 19 Invavi Johnson  Managing the unmanageable evaluating ecological processes that make invasive plant control a challenge Geatha Ramaswami  Invation Paragraphia Session 19 Invation Paragraphia Session Paragraphia Se	09:30					
Coffee and Tea break	09:45			for Food Security and Resilience in the Face of Climate Change		
Open Session 19   Invasive Species - 1   Tracy Johnson   Seed Survival, and Plant Recruitment in a Changing World Ein Kuprewicz	10:00			of Climate Change Adaptation in Coastal Communities of the Philippines		
Invasive Species - 1   Tracy Johnson   Seed Erate: Understanding Seed Dispersal, Seed Survival, and Plant Recruitment in a Changing World   Erin Kuprewicz	10:15	Coffee and Tea break				
ecological processes that make invasive plant control a challenge Geetha Ramaswami  10:45  *Experimental removal of an exotic canopy-forming tree has mixed effects on native and non-native flora in the Galapagos Islands Gonzalo Rivas-Torres  11:00  Recovery of Hawaii's Native Terrestrial Ecosystems from Ungulate-Induced Novel Grazing Systems Christina Leopold  11:15  Non-native coqui frogs do not affect native birds in Hawaii Robyn Smith  Remote sensing of forest productivity and aboveground carbon along spatial gradients of plant invasion and environmental conditions  11:45  Biological control of weeds in Pacific island forests M. Tracy Johnson  Alexander V. Christian in effects of birds and ants increase the effectiveness of seed dispersal of a tropical shrub Alexander V. Christianini  Seed fate as a function of forest disturbance in Madagascar's rainforest Onja Razafindratsima*  Seed fate beyond the seed stage: Do seedlings act as cues, alerting mammals to underground seeds?  Erin Kuprewicz  11:30  Remote sensing of forest productivity and aboveground carbon along spatial gradients of plant invasion and environmental conditions  Jomar Barbosa  11:45  Biological control of weeds in Pacific island forests M. Tracy Johnson  Seed harvesting of a threatened African tree dispersed by rodents: human-rodent competition and its impacts on regeneration regeneration on regeneration.		Invasive Species - 1		Seed Fate: Understanding Seed Dispersal, Seed Survival, and Plant Recruitment in a Changing World		
forming tree has mixed effects on native and non-native flora in the Galapagos Islands  Gonzalo Rivas-Torres  11:00  Recovery of Hawaii's Native Terrestrial Ecosystems from Ungulate-Induced Novel Grazing Systems Christina Leopold  11:15  Non-native coqui frogs do not affect native birds in Hawaii Robyn Smith  Remote sensing of forest productivity and aboveground carbon along spatial gradients of plant invasion and environmental conditions Jomar Barbosa  feffectiveness of seed dispersal of a tropical shrub Alexander V. Christianini  Seed fate as a function of forest disturbance in Madagascar's rainforest Onja Razafindratsima*  Seed fate beyond the seed stage: Do seedlings act as cues, alerting mammals to underground seeds? Erin Kuprewicz  Factors influencing the dispersal/predation balance in a montane population of the African pouched rat, Crysetomys sp. Hazel Chapman  11:45  Biological control of weeds in Pacific island forests M. Tracy Johnson  Seed harvesting of a threatened African tree dispersed by rodents: human-rodent competition and its impacts on regeneration	10:30	ecological processes that make invas control a challenge		and seedling fate		
Ecosystems from Ungulate-Induced Novel Grazing Systems Christina Leopold  Non-native coqui frogs do not affect native birds in Hawaii Robyn Smith  Remote sensing of forest productivity and aboveground carbon along spatial gradients of plant invasion and environmental conditions Jomar Barbosa  Biological control of weeds in Pacific island forests M. Tracy Johnson  Madagascar's rainforest Onja Razafindratsima*  Seed fate beyond the seed stage:Do seedlings act as cues, alerting mammals to underground seeds? Erin Kuprewicz  Factors influencing the dispersal/predation balance in a montane population of the African pouched rat, Crysetomys sp. Hazel Chapman  Seed harvesting of a threatened African tree dispersed by rodents: human-rodent competition and its impacts on regeneration	10:45	forming tree has mixed effects on nat non-native flora in the Galapagos Isla	ive and	effectiveness of seed dispersal of a tropical shrub		
in Hawaii  Robyn Smith  Remote sensing of forest productivity and aboveground carbon along spatial gradients of plant invasion and environmental conditions  Jomar Barbosa  Remote sensing of forest productivity and aboveground carbon along spatial gradients of plant invasion and environmental conditions  Jomar Barbosa  Remote sensing of forest productivity and aboveground carbon along spatial gradients of balance in a montane population of the African pouched rat, Crysetomys sp.  Hazel Chapman  Seed harvesting of a threatened African tree dispersed by rodents: human-rodent competition and its impacts on regeneration	11:00	Ecosystems from Ungulate-Induced Induced Ind		Madagascar's rainforest		
aboveground carbon along spatial gradients of plant invasion and environmental conditions  Jomar Barbosa  Biological control of weeds in Pacific island forests  M. Tracy Johnson  Biological control of weeds in Pacific island forests dispersed by rodents: human-rodent competition and its impacts on regeneration	11:15	in Hawaii	native birds	act as cues, alerting mammals to underground seeds?		
M. Tracy Johnson dispersed by rodents: human-rodent competition and its impacts on regeneration	11:30	aboveground carbon along spatial graph plant invasion and environmental cor	adients of	balance in a montane population of the African pouched rat, Crysetomys sp.		
*denotes student presenter Norbert Cordeiro	11:45	M. Tracy Johnson		dispersed by rodents:human-rodent competition and its impacts on regeneration		
denoted student presenter		*denotes student preser	ter	Norbert Cordeiro		

08:00

09:00			
	302 AB	305 AB	308 AB
	Open Sessoin 16 Consequences of Climate Change for Organisms - 1 Paul Krushelnycky	<b>Open Session 17</b> Species Interactions: Trophic Ecology - 2 Varun Swamy	Open Session 18 Genetic Structure Renee Bellinger
09:15	Factors influencing seedling drought tolerance and potential response to climate change in the Haleakalā silversword Paul Krushelnycky	Community assembly in coffee agroecosystems: twig-nesting ant colonization under environmental filters and competition from twig-nesting and dominant ants Stacy Philpott	The role of frequency-dependent factors in regulating clonal expansion in Piper cordulatum Eloisa Lasso
09:30	Contemporary and future distribution of epiphytes orchids: the case of Laelia speciosa in Mexico Leonel Lopez-Toledo	*The importance of incorporating plant and herbivore effects into studies of methane flux from neotropical wetlands Scott Winton	*Understanding Coral's Ability to Adapt to Changing Environment Kaho Tisthammer
09:45		Short- and long-term consequences of defaunation on western Amazonian floodplain forests Varun Swamy	*Insights into two colonisation events: Australian fig psylloids on Lord Howe Island and New Zealand Caroline Fromont
10:00			Genome-wide detection of genetic variation reveals insights into population demographics of endemic Hawaiian avian species M. Renee Bellinger
10:15			
	Symposium 19 Tree Rings, Stable Isotopes, and Wood Anatomy as Environmental and Climatic Indicators for the Tropics Dieter Anhuf		Open Session 21 Extinction, Rarity, and Biogeography Margaret Sporck-Koehler
10:30	Ecophysiological relevance of Stable isotope time series of woody C4 plants from Hawaii Gerhard Helle		Mycorrhizal Fungi Composition Study as Environmental Factor Reference for Relocating Endangered Paphiopedilum spicerianum in Yunna China Jessie Yc Han
10:45	Annual Rings in a Native Hawaiian Hardwood Tree, Māmane (Sophora chrysophylla), on Maunakea, Hawaii Kainana Francisco		Determining applicability of genetic rescue via mixed source population translocations of rare plants on Oʻahu, Hawaii Lauren Weisenberger
11:00	Matching dendrochronological dates with the Southern Hemisphere 14C bomb curve to confirm annual tree rings in the tropics Laia Andreu-Hayles		A new Cyanea (Campanulaceae) from the Hawaiian Islands and a novel approach to monitoring remote plant species Margaret Sporck-Koehler
11:15	Identification of timber geographic origin through fast development of tree-ring isotope network data using optimized core-sampling and cellulose extraction methods  Akira Kagawa		*Conservation genetics of the endemic endangered Hawaiian plant species Chrysodracon hawaiiensis in Hawaii Volcanoes National Park Pei-Luen Lu
11:30	Disparities of ecological amplitude about the relationships between ring width, 513C of Pinus massoniana Lamb and climatic factors: a case study in subtropical region of China ZhiYuan Shang		How to keep dark trees afloat:Historical biogeography and conservation status of the Indian Ocean Diospyros (Ebenaceae) Joeri Sergej Strijk

### Wednesday, July 15

#### TIME

#### 12:00 **Lunch**

Lunch Training Session: Presentation Skills and Elevator Pitches. Alice C. Hughes - 301 A

Lunch Training Session: Moving Forward after the PhD Question and Answer Session Jennifer Powers - 301 B

Lunch Committee Meeting: "Meet the Editors" of Biotropica. Chair: Emilio Bruna - 303 AB

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	Liliu Theater 310	301 A	301 B
	Symposium 20 Impacts of Non-Native Invasive Ungulates and Their Removal on Tropical Island Ecosystems Jed Sparks	Symposium 21 Conservation of Over-Exploited, CITES-Listed Tropical Species: Can Farming Help? Zhang Li	Open Session 22 Ecosystem Ecology: Nitrogen and Phosphorus Richard Norbty
13:30	Twenty years of vegetation growth and recovery following ungulate removal at Hakalau Forest National Wildlife Refuge Patrick Hart	Effectiveness of new cultivation model in restoration of wild orchids used as TCM: experiments from the tropical Yunnan, China Jiang-Yun Gao	*Functional variation in the nitrogen and phosphorus reserves in woody biomass:insights from a sapling defoliation experiment in Panama. <i>Katherine Heineman</i>
13:45	*Invasive feral pigs impact native tree ferns and woody seedlings in Hawaiian forest Faith Inman-Narahari	Cycad propagation by rural nurseries in Mexico as an alternative conservation strategy: 25 years on Hong Liu	Disentangling influences of an invasive species and restoration efforts from precipitation influences on soil biogeochemistry  Jesse Bateman
14:00	*Vegetation response to removal of nonnative ungulates across Hawaiian tropical montane dry and wet ecosystems Rebecca Cole	Cultivation, market and use potentials of Nepal's medicinal plants: Reflections from local to policy level interventions  Joel Heinen	*P and Mo limitation of nitrogen fixing trees are controlled by soil properties, light availability, and CO2 Annette Trierweiler
14:15	Response of soil physical and chemical properties to the removal of nonnative invasive ungulates from Hawaiian tropical montane wet forest Creighton Litton	Of mangroves, bivalves and cultural resource use, a participatory management experiment in a key ecosystem of Southern Colombia Alejandro Rosselli	*The chemical fractions of nitrogen and phosphorus withdrawn from senescing leaves of tropical tree species on Mount Kinabalu, Borneo Yuki Tsujii
14:30	Consequences of feral pig (Sus scofa) exclusion on sediment and bacteria in runoff from native and strawberry guava (Psidium cattleianum)-invaded tropical montane forests in Hawaii Ayron Strauch	Introducing the concept of restoration-friendly culativation: using overexploited medicinal orchids as examples  Hong Liu	Fine-root traits of tropical tree species regulate the fate of fixed nitrogen, with consequences for forest dynamics Ann Russell
14:45	Impact of nonnative ungulate removal on fuels and wildfire dynamics on Pacific Islands Clay Trauernicht		*Tree species more than functional types, and interactions with light explain nutrient limitation in a lowland tropical forest Cleo B. Chou
15:00	In Guam's bird-free forests, invasive ungulates play key roles  Ann Marie Gawel		Relationships between foliar phosphorus, nitrogen and photosynthesis across diverse woody species in Panama Richard J. Norby
15:15	Coffee and Tea break		
	Open Session 25 Conservation: In Society and at Large Scales Hanna Mounce	Open Session 26 Ecophysiology - 2 Jeffrey Chambers	Open Session 27 Ecological Consequences of Climate Variation Aida Cuni Sanchez
15:30	Biological and cultural conservation as a botanic garden conservation imperative Christopher Dunn	Tradeoffs of Stem-Water Storage in a Tropical Dry Forest Tree Steven Sloan	*The importance of fog in forest islands in the desert Aida Cuní Sanchez
15:45	Governance and social inclusion in biodiversity conservation: participatory monitoring and citizen science are not (yet) the same. Kirsten Silvius	*Basal angiosperm species as barometers for climate change in New Caledonia, an ecophysiological and biogeographical approach Santiago Trueba	Landscape-Level Analysis of Canopy Dieback Dynamics in the Montane Rainforest of the Island of Hawaii Teena Michael
16:00	The Production of an Environmental Series Broadcast Over FM Radio:The Earthbeat Experience Maria Lourdes Arroyo Jacinto	Integration of C1 and C2,3 metabolism in Trees Jeffrey Chambers	Twenty-one year patterns of litterfall in relation to prevailing climate variables and typhoons of a subtropical forest in the Northwestern Pacific Teng-Chiu Lin

<sup>\*</sup>denotes student presenter

	302 AB	305 AB	308 AB
	Symposium 22 Fifty Shades of Grey in Ecological Interactions Marco Mello	Open Session 23 Long-Term Observations and Experimentation of Climate Change Catherine Cardelús	Open Session 24 Fragmentation and Altered Landscapes - 2 Andy Jones
13:30	Beyond black and white in mutualistic networks Marco Mell	Linking drought to mortality risk following 13 years of experimental soil moisture deficit in a tropical forest.  Lucy Rowland	*The impacts of ecosystem-level changes associated with habitat size, introduced species and climate on the distribution and abundance of endemic Hawaiian Drosophila species.  *Matthew Mueller**
13:45	Ant-caterpillar interactions in the Neotropical cerrado savanna: Variation at the behavioral and community levels Paulo Oliveira	Reproductive phenology of a seasonally-dry dipterocarp forest in southern Thailand Erin Kurten	Widespread forest vertebrate extinctions induced by a mega hydroelectric dam in lowland Amazonia Maíra Benchimol
14:00		Long-term trends in fine litter production and allocation to reproduction in three tropical forests <i>S. Joseph Wright</i>	The effect of forest fragment size and connectivity on inter- and intragenerational inbreeding in a keystone pollinator resource.  Andy Jones
14:15	A fishing expedition to discover the pollinators of several subtropical Apocynaceae Beyte Barrios	Interspecific variation in responses of tropical tree seed production and seedling establishment to interannual climate variation  Helene Muller-Landau	Landscape impacts on the spatial distribution of the giant honeybees: which type of forest matters most? Charlotte Pavageau
14:30	*Science for the sake of science? a case study in the Colombian lowlands Julieth Serrano	*The physiological and morphological responses of vascular epiphytes to long-term nutrient addition and water exclusion in a lowland wet rainforest in Costa Rica Carrie Woods	Impacts of traffic light and sound on vertebrate activity on a wildlife corridor in Singapore Norman T-Lon Lim
14:45	Feeding ecology of the Ethiopian wolf in the Simien Mountains National Park, Ethiopia Mesele Tamene	Nutrient addition and water exclusion impacts on epiphytes in a lowland rainforest in Costa Rica Catherine Cardelús	Fragility vs. Resilience in Hawaii's upland rainforests and watersheds suggesting a kipuka strategy for silvicultural restoration Dieter Mueller-Dombois
15:00		Dynamics of Polynesian forest recovery following a major cyclone Edward Webb	
15:15			
	Open Session 28 Animal Population Ecology and Behavior - 2 Terry McGlynn	<b>Open Session 29</b> Species Interactions: Mutualisms <i>Amy Hruska</i>	Open Session 30 Ecosystem Ecology: Ecosystem Function Julie Denslow
15:30	*Islands of water: how do fish time the use of temporary ponds alongside Amazonian streams? Helder Espirito-Santo	Pollination ecology, floral biology, and breeding system of the endangered Hawaiian species Brighamia insignis A. Gray (Campanulaceae) Seana Walsh	Performance of species-poor plant communities and implications for response to environmental change John Ewel
15:45	Sneaky thieves are sneaky: furtive food removal behaviors characterize a novel caste of ants Terry McGlynn	Isolation and vulnerability of the fig pollination system on Lord Howe Island James Cook	Silicon cycling via leaf litterfall in experimental tropical forest stands Kaoru Kitajima
16:00	Important Resources of an Endangered Hawaiian Damselfly Elizabeth Henry	The structure of mutualistic networks and its implication to cascading effects Marilia Palumbo Gaiarsa	Root functions of mangrove plants-Keys to the highly productive mangrove ecosystems Tomomi Inoue

### Wednesday, July 15

TIME	Liliu Theater 310	301 A	301 B
16:15	Using historical landscape data for planning tropical forest conservation and restoration Silvio Ferraz	*How old is the storage carbon used for resprouting? Norbert Kunert	*Ecosystem stability is more related to plant diversity than climate at a biogeographical scale Guilherme Mazzochini
16:30	Planning for Kiwikiu reintroduction:Habitat restoration in Nakula Natural Area Reserve, Maui Hanna Mounce	*Effect of Phosphorus Limitation on Tropical Tree Responses to Elevated CO2 Jennifer Thompson	Conservation of Hawaiian Forest Birds under climate change: Considerations for translocation and assisted migration among the Hawaiian Islands  Lauren Kaiser
16:45		Fern gametophytes:ecology, physiology, and conservation biology.  James Watkins	Combining phylogeography and estimates of future climates to inform conservation of Bombus pauloensis (Hymenoptera:Apidae)  Elaine Françoso
17:00		Life on the edge:a comparative study of eco- physiological adaptations of amphibians to seasonally dry tropical forest environments. Catalina Cruz	Drought as well as herbivores and nutrients shape tree distribution in tropical forests: implications under global climate change Bettina Engelbrecht
17:15	Poster Session 2 (Cash Bar) Manoa Room - 304AB		

<sup>\*</sup>denotes student presenter

TIME	302 AB	305 AB	308 AB
16:15	The Use of Species Distribution Models for Improving Jaguar Conservation Katia Ferraz	Frugivory networks of Hawaiian nonnative birds and their role as potential seed dispersers in Oahu forests Amy Hruska	*Predicting change in the nearshore algal community: Responses of calcified macroalgae in Hawaii to variations in aragonite saturation Kendra Hart
16:30		Differential contribution of sunbird species to the structure of a sunbird-tree flower visitation network predicts species survival and network stability. Charles Nsor	*Long-term litter manipulation changes fine root dynamics in lowland tropical forest, Panama Chadtip Rodtassana
16:45			Causality of fine scale soil heterogeneity and its effect on seedling regeneration in a tropical rainforest Shangwen Xia
17:00			
17:15		•	·

Thursday, July 16

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O8:00 Plenary Address: Liliu Theatre 310

Sustainable Growth in Inevitably Slow: Lessons From Plant Carbon Allocation Strategies for Structural Defense and Storage in Tropical Forests

Kaoru Kitaiima

○9:○○ Coffee and Tea break

09:00	Coffee and Tea break			
	Liliu Theater 310	301 A	301 B	
	Symposium 23 Tropical Forest Responses to Large Scale Experiments Aaron Sheils	Symposium 24 Linking Field Experiments and Modeling Toward Understanding Changes to Tropical Ecosystems Jennifer Holm	Open Session 31 Functional Ecology, Community Assembly, and Restoration Rebecca Ostertag	
09:15	Threshold responses to soil moisture deficit by trees and soils in tropical forests: insights from field experiments Patrick Meir	Exploring Interactions between Tropical Forest and the Climate System over the 21st Century <i>Jeff Chambers</i>	Regional distributions of tropical tree species predict seedling responses to phosphorus Paul-Camilo Zalamea	
09:30	Ecosystem responses to plot-scale nutrient and litter manipulations in tropical moist forest, Panama  Joseph Yavitt	GEM-Traits: A new global database linking tropical tree diversity to ecosystem function via functional traits  Alexander Shenkin	Neighborhood interactions and functional trait differences in a hyperdiverse Amazonian forest Claire Fortunel	
09:45	Tropical Response to Altered Climate Experiment (TRACE):adventures in warming a wet tropical forest in Puerto Rico <i>Molly Cavaleri</i>	The AmazonFACE research program: assessing the effects of increasing atmospheric CO2 on the ecology and resilience of the Amazon forest <i>Richard Norby</i>	Toward an improved understanding of assembly rules in tropical tree communities Elodie Allié	
10:00	A hurricane experiment in a tropical rainforest: Cascading effects from canopy opening and debris deposition Aaron Shiels	Drought impact on forest carbon dynamics and fluxes in Amazonia Chris Doughty	Defense against vertebrate herbivores: architectural and low nutrient strategies of woody tree species  Kyle Tomlinson	
10:15	The Amazon Forest Fragments Project at 36 Thomas Lovejoy	Will forests grow back after deforestation? Jung-Eun Lee	Pollination districts in a coffee-producing landscape:conservation and other benefits Ainhoa Magrach	
10:30	Landscape-level experimental decoupling of vertebrate insectivores in Hawaiian forest islands Daniel Gruner	Soils and the nutrient status of lowland tropical forests: implications for modeling forest responses to environmental change Benjamin L. Turner	Interspecific differences in fig functional traits and their ecological correlations Yu-Ting Huang	
10:45	Do Ground-dwelling Vertebrates Promote Diversity in a Neotropical Forest? Results from a Long-term Exclosure Experiment Walter Carson	A trait-mediated neighborhood approach to quantify impacts of warming and drought on successional dynamics of secondary tropical rainforests Robin Chazdon	Functional and phylogenetic diversity relationships behind and beyond defaunated forest landscapes Ricardo Bovendorp	
11:00		Addressing climate change vulnerabilities for sustainable ecosystem services, agriculture and forestry in the Caribbean William A. Gould	Functional traits of pioneer tree species to restore degraded areas in the Colombian Amazon Andres Gonzalez-Melo	
11:15		Model-Data feedbacks in the Congo Basin Stephan A. Pietsch	Testing functional trait theory and invasion resistance in Hawaiian lowland wet forest restoration Rebecca Ostertag	
11:30		Taking off the training wheels: the properties of a dynamic vegetation model without climate envelopes Rosie Fisher		

<sup>\*</sup>denotes student presenter

09:00			
	302 AB	305 AB	308 AB
	Symposium 25 The Unseen Majority: What We Know, and Still Need to Know, About Tropical Microorganisms Rachel Gallery	Symposium 26 Translating Ecological Research into Conservation Practice: Managing for Success in Human Dominated Landscapes Alice Hughes	Symposium 27 Consequences of Rainforest Transformation in the Southeast Asian Archipelago Katja Rembold
09:15	Idiosyncratic plant-microbe interactions in neotropical forests Rachel Gallery	The Effectiveness of Conservation Science Stuart Pimm	*Plant diversity patterns in different forest transformation systems in Sumatra Katja Rembold
09:30	Lack of host specificity leads to independent assortment of dipterocarps and ectomycorrhizal fungi across an edaphic gradient Kabir Peay	The Alpha, Beta, Gamma approach to conservation Alice Hughes	Balancing conservation and development in the last frontier forest of West Kalimantan (Borneo) under less predictable climate conditions Yves Laumonier
09:45	Microbial signatures of tropical trees across a land use gradient and implications for function Krista McGuire	*Bird conservation priorities in Colombia:from preservation to restoration Natalia Ocampo-Penuela	Transpiration in an oil palm landscape: effects of palm age Furong Niu
10:00	Relationships between tree diversity and belowground microbial diversity in a tropical forest Albert Barberan	Distributions of mammal communities in a disturbed Thailand rainforest – effects of edges and isolation Antony Lynam	Tree and palm water use characteristics in forests and transformation systems, Indonesia Alexander Röll
10:15	Seed-associated fungi: Effects on seed survival and germination of tropical pioneer species Carolina Sarmiento	Coupling impacts of livestock grazing on giant pandas with long term economic loss, a way out to coexist Binbin Li	*Functional and taxonomic diversity responses to rainforest transformation across multiple taxa Lisa Denmead
10:30	Disrupting the spatial structure of microbial communities in the Amazon rainforest.  Jorge Rodrigues	MEME – common grounds between scientists and practitioners for an evidence-based conservation of Malaysian elephants Ahimsa Campos-Arceiz	Consequences of tropical land use for multitrophic biodiversity and ecosystem functioning Andrew Barnes
10:45	From microbes to ants, small things and their very large ecosystem footprints Tamara Zelikova	Assessing the Conservation Impact of Industrial Oil Palm Production Varsha Vijay	Environmental efficiency of smallholder palm oil and rubber producers in Indonesia Anna Mareike Holtkamp
11:00	Characterization of active and total fungal communities in the atmosphere over an Amazon rainforest Scott Saleska	Bridging the research practitioner divide: transforming knowledge into action Eleanor Sterling	Tree islands in a sea of oil palms - an effective measure to restore biodiversity?  Miriam Teuscher
11:15	Influence of nutrient availability on greenhous gas emissions and microbial commiunity composition in a lowland tropical raainforest Silvia Alvarez-Clare	Basin-wide conservation planning in Lowland Amazonia:Protection levels fail to track anthropogenic threats Davi Teles	Landscape Fires Caused by Ecosystem Destruction on Sumatra and Borneo Has Major Social and Economic Effects Throughout Southeast Asia Lael Goodman
11:30		A science-practice partnership to improve natural resource planning and management in northeast Australia Steve Turton	

Thursday, July 16

#### TIME

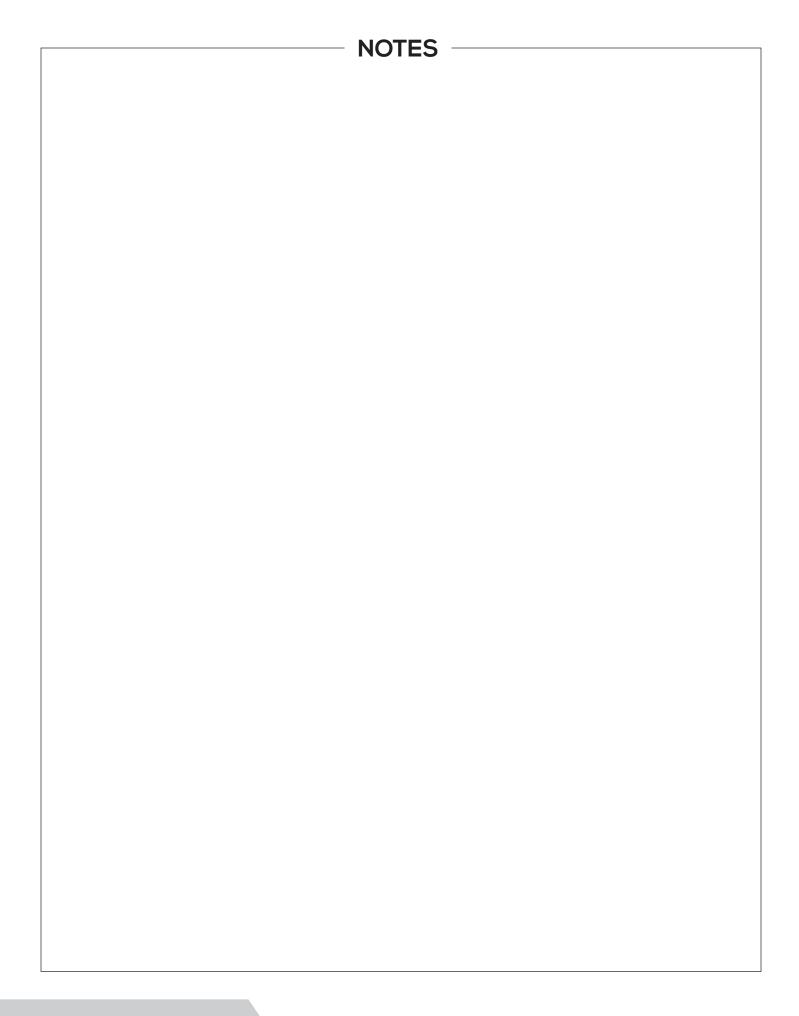
11:45 **Lunch** 

Lunch Committee Meetings: Mentoring Follow-Up Event, Capacity Building Committee Alice Hughes - 301 B

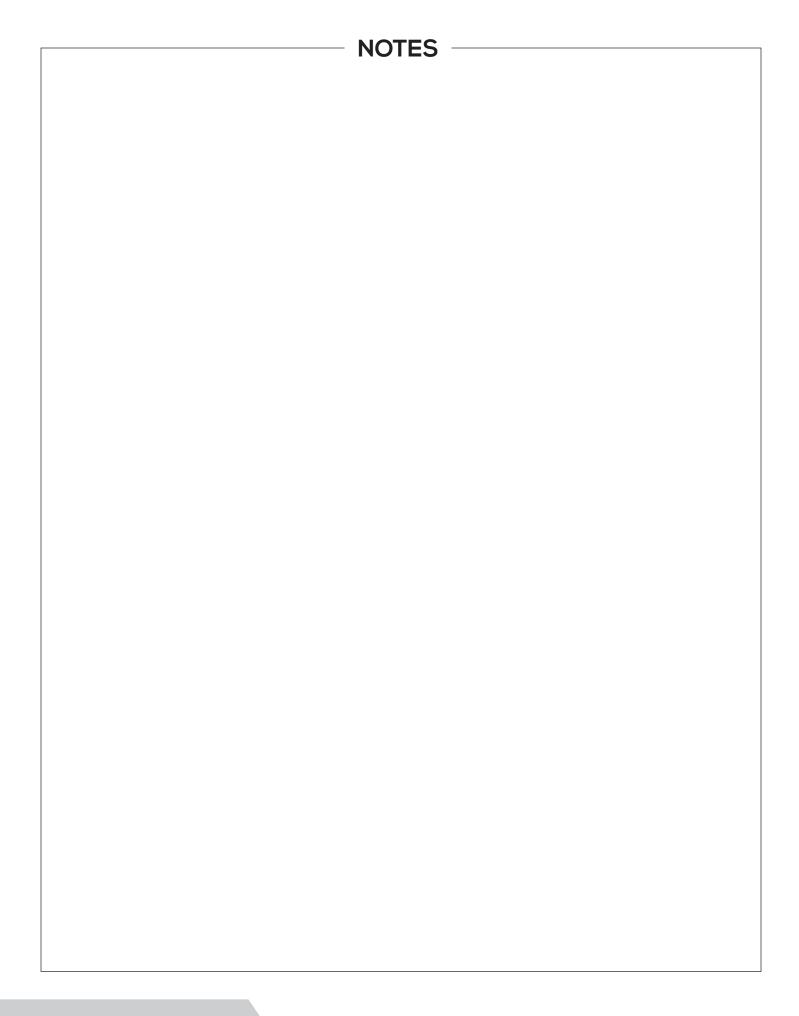
	Liliu Theater 310	301 A	301 B
	Open Session 32 Invasive Species - 2 Noa Lincoln	Open Session 33 Community Based Resource Management Saifon Sittimongkol	Open Session 34 Forest Structure Flint Hughes
13:30	Twenty Years in the Alakai Wilderness – Invasive Species Control in Kauai's Bogs Vickie Caraway	Community-Based Resource Management Drives Rapid Recovery of a High-Value Tropical Freshwater Fishery Joao Silva	The Importance of, and threats to, Hawaii's most abundant native tree, Metrosideros Polymorpha (Ohia):Insights from recent forest plot inventories and ongoing disease studies.  Flint Hughes
13:45	Resilience is in the eye of the beholder:Long-term impacts of invasion on ecosystem processes and species composition Stephanie Yelenik	*Changing use of natural plant resources by an indigenous forest-dwelling group Saifon Sittimongkol	The structure of tropical forests and sphere packings Franziska Taubert
14:00	Invasive Giant African Landsnails (Achatina fulica) have little to no impact in rainforest on an oceanic island Luke O'Loughlin	Monitoring in Support of Local, National and International Environmental Priorities José Manuel (Joe) Fragoso	Community dynamics in a tropical dry forest of southern Mexico: dynamic equilibrium of antagonistic processes Jorge A. Meave
14:15	Patterns of light quantity, quality, and seedling presence in Hawaiian lowland wet forests across an invasion gradient Jodie Rosam	*Multiple stories have different endings: mammal use of protected and community-managed lands in an Indian biodiversity hotspot Nandini Velho	ECOFOR:Biodiversity and Ecosystem Functioning in degraded and recovering Amazonian and Atlantic Forests André Luis Casarin Rochelle
14:30	*A new caledonian paradox:When invasive ants are more efficient than natives to disperse seeds. Maureen Cateine	Conservation values of culturally reserved forests managed by indigenous communities in Borneo <i>Yayoi Takeuchi</i>	Global Forest Survey:creating a global network of permanent sampling plots to freely share knowledge and data on forests Danae Maniatis
14:45	Effect of various monotypic forest canopies on earthworm biomass and feral pig rooting in Hawaiian wet forests  Noa Lincoln		Factors affecting community characteristics of moist forests across a neotropical cattle-ranching landscape restored by secondary succession Bryan Finegan
15:00	Coffee and Tea break		
15:15	Closing Ceremonies Liliu Theatre - 310 Conference Awards and Recognitions		
15:40	Closing Plenary: Liliu Theatre 310		
	<b>The Insecurity of Ecosystem Services</b> Jaboury Ghazoul, ATBC President		
16:30	Walking travel time to Pacific Beach Hotel (2490 is approximately 30 minutes. See map for direct		
17:45	ATBC Banquet Luau 17:45-18:15 - Interactive Cultural Activities 18:30-19:30 - Luau Dinner 19:30-21:00 - Luau Entertainment		

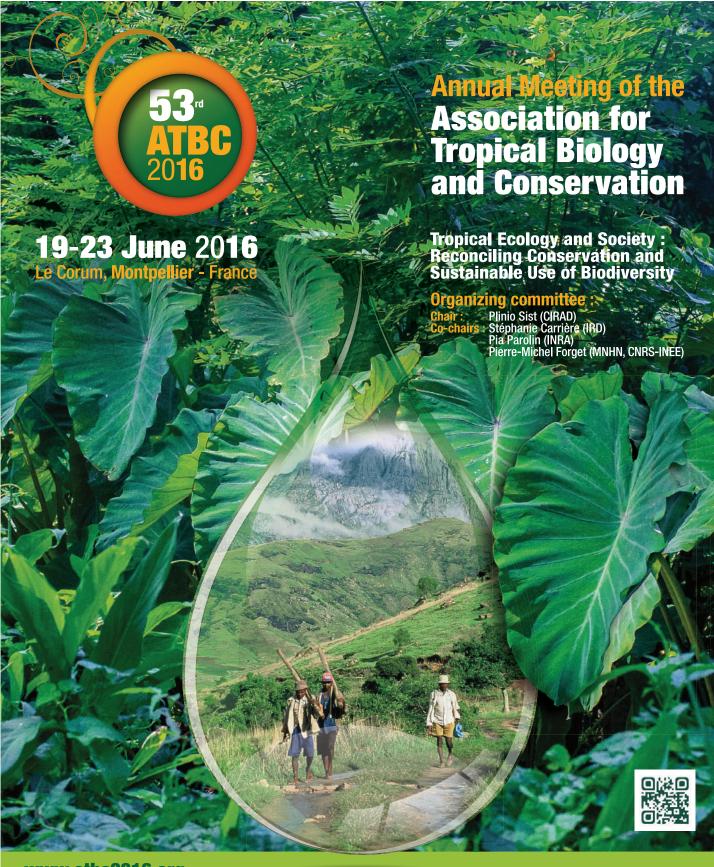
<sup>\*</sup>denotes student presenter

	302 AB	305 AB	308 AB
	<b>Open Session 35</b> Microbiology and Disease Ecology <i>Matthew Kier</i>	<b>Open Session 36</b> Technology Advances for Conservation <i>Rakan Zahawi</i>	
13:30	*Soil fungi increase the diversity of seedlings emerging from the forest seed bank across a rainfall gradient Christopher Jeffs	Bioacoustics for species management: Two case studies with the Hawaii Amakihi Esther Sebastian-Gonzalez	
13:45	An endangered Australian riparian rainforest species under threat of extinction following the introduction of an invasive fungal pathogen (Puccinia psidii)  Tamara Taylor	How to monitor damaged or rehabilitated mangrove forests Shin Watanabe	
14:00	The endangered tree, Eugenia koolauensis, on the road to extinction at the hands of the introduced rust, Puccinia psidii: a lesson of inadequate biosecurity.  Matthew Kier	Using lightweight unmanned aerial vehicles to monitor tropical forest recovery Rakan Zahawi	
14:15		Using UAVs to measure tree height and sun- exposed crown area in tropical forests for growth and biomass estimates Carrie M. Tribble	
14:30		*Biodiversity monitoring for REDD+ in SE Asian rain forests using Landsat images Shogoro Fujiki	
14:45			
15:00			
15:15			
15:40			
 16:30			
17:45			



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CONGRESS OFFICE

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