

HE WA'A HE MOKU MALAMA HONUA

CARING FOR OUR ISLAND EARTH

24TH ANNUAL HAWAII CONSERVATION CONFERENCE

JULY 18-20TH, 2017



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POWERED BY  HAWAI'I CONSERVATION ALLIANCE

Aloha mai kākou



Welcome to the 24th Annual Hawai'i Conservation Conference, co-sponsored by the Hawai'i Conservation Alliance and the Hawai'i Conservation Alliance Foundation. The Conference brings together the largest gathering of natural and cultural resource managers, scientists, education specialists, and community conservation practitioners who are working to conserve and protect biocultural resources in Hawai'i. For those of you who have participated in past conferences, welcome back. For those attending for the first time, mahalo for joining us in what promises to be a truly inspiring event.

This year's theme, *He Wa'a, He Moku – Mālama Honua: Caring for Our Island Earth*, reminds us of the need to treat the biocultural resources of our island home and earth as carefully as we would the limited provisions of a wa'a (canoe). "He wa'a he moku, he moku he wa'a" translates as "the canoe is an island, and the island is a canoe." In Hawai'i, like on a voyaging canoe, we must work together to ensure the sustainability of our communities, islands, and planet. Effective stewardship requires integration of cultural knowledge and practice with the best available science and technology, as well as collaboration across sectors. This conference is a place to build and share our collective toolkit for conservation at home and around the globe.

The conference will also commemorate the return of Hōkūle'a, the Polynesian Voyaging Society's wa'a kaulua (double-hulled voyaging canoe), following her inspirational worldwide voyage, that shared the message of mālama honua, the need to care for our earth and grow the movement towards a more sustainable world. We will also assess strides made since the International Union for the Conservation of Nature World Conservation Congress (IUCN Congress), held in Honolulu last year. The IUCN Congress put our islands on the global stage, compelling us to think of our impact across the planet and resulting in a series of commitments towards the stewardship of natural and cultural resources in Hawai'i and around the world. We will reflect on collective achievements and chart our course to protect our Island Earth for generations to come.

We are honored to welcome our keynote speakers: Nainoa Thompson, Ocean Elder and President of the Polynesian Voyaging Society that recently completed the Mālama Honua Worldwide Voyage; famed New Zealand naturalist and entomologist, Ruud Kleinpaste, host of Animal Planet's *Buggin' with Ruud* and an advocate for environmental education; and, an esteemed panel of Hawai'i leaders involved with the formation and implementation of the Hawai'i Commitments. The Conference will also provide opportunities to learn about new technologies, different methods and approaches to conservation, advances in research, and will showcase successful partnerships between communities, youth, the private sector, governmental agencies, and conservation organizations.

Thank you again for joining us in what promises to be a memorable and successful event. Effective conservation is only possible when done with the spirit of laulima when all work harmoniously together. We hope the 24th Hawai'i Conservation Conference fosters progress in tackling some of Hawai'i's most pressing conservation issues as well as the formation of connections that will endure for years to come!

Mahalo!

Emma Anders
Program Director
Hawai'i Conservation
Alliance

Emily Gardner
Executive Director
Hawai'i Conservation
Alliance Foundation

Randy Kennedy
Chair
Hawai'i Conservation
Alliance Foundation

Nāmaka Whitehead
Chair
Hawai'i Conservation
Alliance



HAWAI'I CONSERVATION ALLIANCE

A Partnership Dedicated to Environmental Stewardship, Community Engagement, and Conservation Capacity

The Hawai'i Conservation Alliance envisions thriving, abundant lands and seas with their native ecosystems actively cared for by generations of stewards, steered by excellent science and Hawaiian values and practice.

We provide unified leadership, advocacy, and collaborative action to conserve and restore native ecosystems and the unique biodiversity of our islands.

Bernice Pauahi Bishop Museum

Allen Allison, Norine Yeung

Conservation International – Hawai'i

Ulu Ching, Aarin Gross

Hawai'i Association of Watershed Partnerships

Chris Brosius, Colleen Cole

Hawai'i Department of Agriculture

Hawai'i Invasive Species Council

Joshua Atwood

Hawai'i Invasive Species Committees

Lori Campbell

Hawai'i Department of Land and Natural Resources, Division of Aquatic Resources

Elia Herman, Bruce Anderson

Hawai'i Department of Land and Natural Resources, Division of Forestry and Wildlife

Emma Yuen

Kamehameha Schools

Nāmaka Whitehead, Jason Jeremiah

National Park Service

Melia Lane-Kamahele, Natalie Gates

National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Pacific Islands Regional Office

Michelle Mansker

National Ocean and Atmospheric Administration, National Ocean Service

Athline Clark, Jean Tanimoto

National Tropical Botanical Garden

Chipper Wichman, Kawika Winter

The Nature Conservancy Hawai'i

Samuel M. 'Ohukani'ōhi'a Gon III,
Manuel Mejia, Jason Sumiye

Office of Hawaiian Affairs

Blake "Brutus" LaBenz, Olu Campbell

Pacific Islands Climate Change Cooperative

Deanna Spooner, Jeff Burgett

Pacific Islands Climate Science Center

David Helweg

University of Hawai'i at Hilo

Sharon Ziegler-Chong, Jim Beets,
Don Straney

University of Hawai'i at Mānoa: Center for Conservation Research and Training

Kenneth Kaneshiro, Rob Cowie

U.S. Department of Agriculture, Forest Service, Institute of Pacific Islands Forestry

Ric Lopez, Christian Giardina

U.S. Department of Agriculture, Forest Service, Pacific Southwest Region

Jodi Chew

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

Jennifer Higashino

U.S. Department of Agriculture, Animal Plant Health Inspection Service

Craig Clark

U.S. Department of Defense, Army Garrison, Hawai'i Natural Resources Program

Kapua Kawelo

U.S. Fish and Wildlife Service, Ecological Services

Kristi Young, Mary Abrams,
Stephen Miller, Dan Polhemus

U.S. Fish and Wildlife Service, National Wildlife Refuge Complex

Barry Stieglitz

U.S. Geological Survey, Pacific Island Ecosystems Research Center

Gordon Tribble, Jim Jacobi



Hawai'i Conservation Alliance FOUNDATION

Founded in 2006, the Hawai'i Conservation Alliance Foundation (HCAF) is a registered 501(c)(3) non-profit with the purpose and mission to support and advance the capacity-building, native ecosystem and biocultural conservation work of the Hawai'i Conservation Alliance through fundraising, advocacy, and strategic outreach and communications.

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Scott Van De Verg, Americorps Outreach Intern

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Lisa West, Operations Manager

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2017 CONFERENCE PLANNING COMMITTEES

Mahalo nui loa for making the conference possible!

CONFERENCE MANAGEMENT TEAM

Emma Anders, Emily Gardner, Tina Lee, Kawena Elkington, Scott Van De Verg, Tara Meggett, Lisa West, Lee-Ann Choy, Kanoolehua Renaud, Māhealani Bambico

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Nāmaka Whitehead, Sam 'Oahu Gon, Christian Giardina, Brutus LaBenz, Joshua Atwood, Kristi Young, Tina Lee

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Noelani Puniwai, Tara Meggett

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Amanda Corby, Under My Umbrella Public Relations, Marketing & Events

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Tiffany Mathews Design
Merlin Edmonds, Cultivate Hawai'i
Nā Mea Hawai'i
Randy Bartlett

WORK EXCHANGE PROGRAM

Kawena Elkington, Erin Feeney

OTHER KEY CONTRIBUTORS

Randy Tanaka
Dorothy Iwamoto, The Office Manager
Polynesian Voyaging Society
Nā Kālai Wa'a

SPECIAL MAHALO TO OUR WORK EXCHANGE PROGRAM VOLUNTEERS

Team: Kawena Elkington, Erin Feeney

Team Leads: Giancarlo Baffaro, Christine Elliott, Nakoa Goo, Taylor Smith, Cassandra Springer, Melissa Valdez

Volunteers: Giancarlo Baffaro, Ashton Bandy, Corey Bassett, Gabriela Benito, Betsy Black, Chai Blair-Stan, Donna Brown, Joel Brunger, Heath Carolyn, Daniela Casillas, Bethany Chagnon, Elena Chang, Avalon Coley, Weber Danya, Christa DeRaspe, Edna Diaz Negron, Christine Elliott, Julia Espaniola, Annalea Fink, Nakoa Goo, Whitney Goodell, Sydney Hahn, Gretchen Hardy, Keely Hassett, Kiefer Hermann, Kristen Hofer, Yu-Fen Huang, Angela Huntmer-Sidrane, Andrew Jansen, Kristina Jenkins, Makana Kahā'ulelio, Ekela Kaniaupio-Crozier, Kahoali'i Keahi-Wood, Joseph Kern, Kim Kido, Diana King, Nalani Kito-Ho, Kaili Kosaka, Lance La Pierre, Kristy Lapenta, Steven Leone, Kawehi Lopez, Gabrielle Lout, Jeannie Lum, Tristan Luxner, Caitlin Manley, LorMona Meredith, Alyssa Miller, Laura Mo, Margaret Morrison, Tamara Musselman, Stephanie Nagal, Calley O'Neill, Anthony Olegario, Rebecca Pan, Courtney Payne, Amberly Pigao, Daniel Plankenhorn, Jessica Pojas, Andrea Rey, Aisha Rickii-Rahman, Randi Riggs, Paul Riley, Pia Ruisi-Besares, Solange Saxby, Allison Shafer, Christina Sloss, Taylor Smith, Jody Smith, Donna Spix, Cassandra Springer, Andrei Stanesco, Laura Stanley, Evan Strouse, Jamie Tanino, Eric Tong, Josephine Tupu, Jermy Uowolo, Melissa Valdez, Lindsay Veazey, Lynette Williams, Kelly Williams, Cody Yamaguchi, Michael Yee, Lukanicole Zavas

The Hawai'i Conservation Conference Program has gone digital!

Download the app HCC 24 to view the program schedule, abstracts, speaker bios, and create your own personalized agenda. The app is compatible with Mac and Android devices.

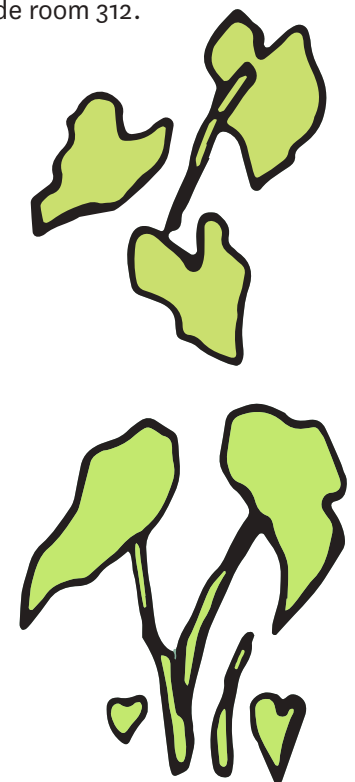
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- 2) Save and load the program on your smart phone or tablet device

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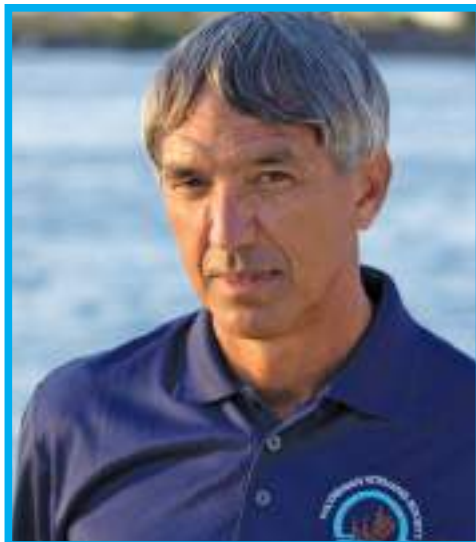
- View the Conference Program by day
- Create your agenda based on sessions that are of interest to you
- Read through complete abstracts

If you need help with the app or finding a session, visit the Hawai'i Conservation Conference Help Desk during conference hours, located right outside room 312.



KEYNOTES

TUESDAY, JULY 18TH - OPENING KEYNOTE
9:15- 10:15AM, ROOM 316 A/B/C



NAINOA THOMPSON
President, Polynesian Voyaging Society

Nainoa Thompson is the President of the Polynesian Voyaging Society and an Ocean Elder. Inspired by his kupuna, his teachers, he has dedicated his life to exploring the deep meaning of “voyaging”. Through his work, he has inspired a global, multi-generational dialogue on the importance of mālama, of caretaking. Nainoa has dedicated his life to exploring the ocean, maintaining the health of the planet and ensuring that the ancient maritime heritage and culture of Polynesia remain vibrant and help guide the world to a sustainable future.

PRECEDING KEYNOTE: Hawai‘i Conservation Alliance Outstanding Leadership Award
This award is given to a person who has demonstrated exceptional leadership in advancing environmental conservation in Hawai‘i over the short to medium term (several years to a decade).

WEDNESDAY, JULY 19TH - KEYNOTE
9:00 - 9:45AM, ROOM 316 B/C



RUUD KLEINPASTE
Naturalist, Environmental Advocate

Born in Indonesia, then raised and educated in the Netherlands, Ruud Kleinpaste migrated to New Zealand in 1978 with an MSc (Hons) in silviculture, animal ecology and conservation from Wageningen University. Entomology was always an important hobby that later became part of his main work activities and ultimately, his media persona: the Bugman. Ruud studied kiwi (New Zealand’s iconic bird) in Waitangi forest (in the far north of the country) and worked as scientist (entomology) with the Ministry of Agriculture (now Ministry for Primary Industries) for 14 years, before tackling the world of media, communication and consultancy on his own.

FOLLOWING KEYNOTE: Hawai‘i Conservation Alliance Conservation Innovation Award
This recognition is given to the instigators or champions of a procedure that leads to significant advances to the structure or nature of environmental conservation in Hawai‘i.

THURSDAY, JULY 20TH - PLENARY PANEL
9:00 - 10:00AM, ROOM 316 B/C

HAWAI‘I COMMITMENTS: INSPIRING CONSERVATION AT HOME AND AROUND THE WORLD

In 2016, the International Union for the Conservation of Nature (IUCN) adopted the Hawai‘i Commitments. Compiled by IUCN’s over 1300 members from 160 countries at the 2016 IUCN World Conservation Congress, the Hawai‘i Commitments set the direction for global conservation priorities over the next four years. This panel will examine the Commitments, Hawai‘i’s role in implementing them, and how Hawai‘i can continue to grow as a global leader in conservation. Panelists will explore ways we can collectively address environmental challenges that threaten our biocultural resources as well as opportunities to foster a strong culture of conservation locally and around the world.

PANELISTS



The Honorable David Ige:
Governor of the State of Hawai‘i



Chipper Wichman: CEO and Director, National Tropical Botanical Gardens; Vice Chair of 2016 World Conservation Congress Host Committee



Denise Antolini: Associate Dean for Academic Affairs, William S. Richardson School of Law; Deputy Chair of the IUCN Steering Committee for the World Commission on Environmental Law



Ulalia Woodside: Executive Director, The Nature Conservancy of Hawai‘i



MODERATOR
‘Aulani Wilhelm: Senior Vice President of the Center for Oceans, Conservation International

FOLLOWING KEYNOTE: The Hawai‘i Conservation Alliance Distinguished Service Award

The award honors exceptional service, personal effort and unselfish interest, embodying long-term dedication and tenacity in environmental conservation for the Hawaiian Islands.

The Hawai‘i Conservation Alliance Legacy Award

The award recognizes early pioneers in modern conservation in Hawai‘i who laid the groundwork to establish conservation programs, create environmental education and advocacy efforts, and mentor conservation practitioners and leaders. This is a posthumous award.

SPECIAL EVENTS

Join us for...

TUESDAY

Poster Session and Opening Reception
Room 311 // 5:30 – 7:30pm

Poster Group 1, 5:30 to 6:00pm

Poster Group 2, 6:00 to 6:30pm

Poster Group 3, 6:30 to 7:00pm

Poster Group 4, 7:00 to 7:30pm

For a list of posters in each group, see page 22



THURSDAY

Closing Pau Hana and Student Awards
3rd floor concourse // 3:15 – 5:00pm

Join us for the official closing reception of the 2017 Hawai'i Conservation Conference. Enjoy pūpū and other treats from our favorite local chefs while celebrating the winners of our 2017 Hawai'i Conservation Conference student awards. Pūpū will be served, no-host cash bar.

LOCAL FOOD AMBASSADORS

Chef Mark "Gooch" Noguchi
Chef & Co-Founder, Pili Group LLC

Chef Ed Kenney
Chef & Owner of Town Hospitality Group

Ehuola Keiki of Roots Cafe
Kokua Kalihi Valley

Chef Ray German
Head Chef @ Four Seasons Resort at Ko Olina

Ono Pops

MUSIC by Keilana and Evan

WEDNESDAY

Conservation Connections
Public Afternoon // 1:00 – 5:30pm

Invite your friends and family to the Hawai'i Conservation Conference during the Conservation Connections Public Afternoon! From 1:00 to 5:30pm, all sessions, posters, and exhibition are open to the public. In addition to our scheduled conference programming, we also invite the public to join a series of special community events, including:

Promise to Pae 'Āina Gallery
1:00 to 5:15pm, 311

Pacific Eco-Poetry Performance
3:15 to 4:15pm, 316 A

My Hawai'i Story Contest Award Ceremony
4:15 to 5:15pm, 316 A

Sustainable Hawai'i Initiative
with Governor David Ige
3:15 to 5:15pm, 316 B/C

Kupu Alumni Pau Hana,
6:00pm, Home Bar and Grill, 1683 Kalakaua Ave



24th Annual Hawai'i Conservation Conference SCHEDULE OVERVIEW

Tuesday, July 18th, 2017

8:00 – 8:45AM	Opening Protocol, 3rd floor concourse
8:45 – 9:00AM	Welcome and Opening Remarks, 316
9:00 – 9:15AM	Hawai'i Conservation Alliance Outstanding Leadership Award, 316
9:15 – 10:15AM	Opening Session: Keynote address from Nainoa Thompson, 316
10:15 – 10:30AM	Break
10:30 – 12:00PM	CONCURRENT SESSION 1
12:00 – 1:00PM	Lunch
1:00 – 3:00PM	CONCURRENT SESSION 2
3:00 – 3:15PM	Break
3:15 – 5:15PM	CONCURRENT SESSION 3
5:30 – 7:30PM	Poster Session and Reception, 311

Wednesday, July 19th, 2017

8:30 – 9:00AM	Opening Protocol and Welcome, 316 B/C
9:00 – 9:45AM	Keynote: Ruud Kleinpaste, 316 B/C
9:45 – 10:15AM	Hawai'i Conservation Alliance Conservation Innovation Award, 316 B/C
10:15 – 10:30AM	Break
10:30 – 12:00PM	CONCURRENT SESSION 4
12:00 – 1:00PM	Lunch
1:00 – 3:00PM	CONCURRENT SESSION 5
3:00 – 3:15PM	Break
3:15 – 5:15PM	CONCURRENT SESSION 6

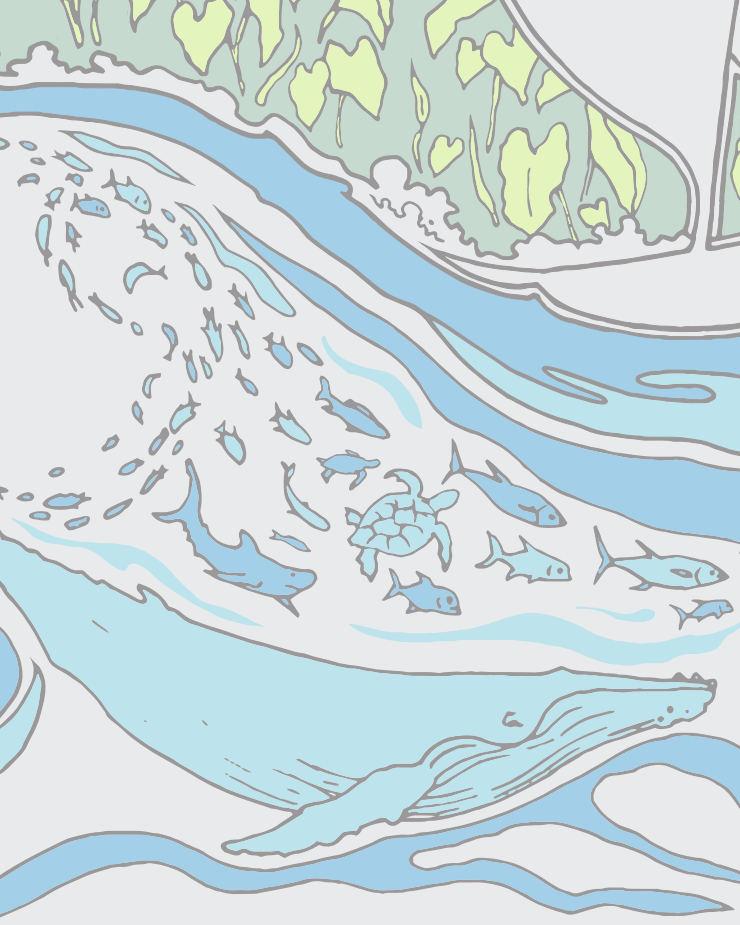
**CONSERVATION
CONNECTIONS
PUBLIC AFTERNOON**
1:00 to 5:30PM

All conference events
open to the public.

Thursday, July 20th, 2017


8:30 – 9:00AM	Opening Protocol and Welcome, 316 B/C
9:00 – 10:00AM	Plenary Panel: Hawai'i Commitments: Inspiring Conservation at Home and Around the World, 316 B/C
10:00 – 10:20AM	Hawai'i Conservation Alliance Distinguished Service Award, 316 B/C
10:20 – 10:45AM	Hawai'i Conservation Alliance Legacy Award, 316 B/C
10:45 – 11:00AM	Break
11:00 – 12:00PM	CONCURRENT SESSION 7
12:00 – 1:00PM	Lunch
1:00 – 3:00PM	CONCURRENT SESSION 8
3:15 – 4:45PM	Student Presentation Awards & Closing Pau Hana Reception, 3rd floor concourse
5:00PM	Closing Protocol, 3rd floor concourse

8:00 - 8:45am >> Opening Protocol, 3RD FLOOR CONCOURSE
8:45 - 9:00am >> Welcome and Opening Remarks, 316
9:00 - 9:15am >> Hawai'i Conservation Alliance Outstanding Leadership Award, 316
9:15 - 10:15am >> Opening Keynote: Nainoa Thompson, 316
10:15 - 10:30am >> BREAK

ROOM 316 B/C		ROOM 316 A	ROOM 315	ROOM 314	ROOM 312	ROOM 311 PAVILION
CONCURRENT SESSION 1 10:30AM - 12:00PM			WORKSHOP: Creative Engagement: Designing effective community outreach programs using social science Moderator: Franny Brewer	SYMPOSIUM: Ka Lama Kuhikuhi o Hā'ena: Research at the foundation of biocultural conservation and community-based co-management initiatives in a 21st Century Ahupua'a Moderator: Kawika Winter	GENERAL SESSION: Nā Meaulu Kāhihi 'Āina - Invasive Plants Moderator: Elliott Parsons	FORUM: The Mālama Honua Worldwide Voyage's Promise to Pae 'Āina o Hawai'i Moderator: Eric Co
			Franny Kinslow Brewer, Big Island Invasive Species Committee	Maximizing the connections between a community in a hybrid forest: Building off an assessment of contemporary relationships with forest plants, Kawika Winter	Where Are They Now? Keeping Track of Hawai'i's Invasive Plants and New Introductions, Jacob Gross	Eric Co, Polynesian Voyaging Society, Harold KL Castle Foundation
			Liz Foote, Project S.E.A.-Link	Restoring to the Future: Aiming for Resilience in Light of Economic, Cultural, and Ecological Tradeoffs in Limahuli Valley, Kaua'i, Kimberly Burnett	The Bedrocks of Botany: Using Herbaria to Inform Early Detection and Prioritization of Invasive Plants in Hawai'i, Kelsey Brock	Eva Schemmel, Conservation International
			Evelyn Wight, The Nature Conservancy	Tracing Social-Ecological Relationships, Cheryl Geslani Scarton	Proving Utility of an Innovative Technology through Action Research in Invasive Plant Species Management, James Leary	Manuel Mejia, The Nature Conservancy
			Kristin Maize, The Nature Conservancy	Ridge-to-reef management to foster coral reef resilience: An assessment of two ahupua'a at opposite ends of the main Hawaiian islands, Leah Bremer	Living Shorelines of Change in Hawaiian Estuaries, Kimberly Peyton	Jean Tanimoto, NOAA Office for Coastal Management
				Pilina – Mālama – 'Āina Momona: A Community-driven Monitoring Program to understand health and well-being of people and place, Emily Cadiz	Albizia Biological Control - the First Steps, Kenneth Puliafico	Elia Herman, Department of Land and Natural Resources

LUNCH
12:00 PM - 1:00 PM

Pūlama Kuamo'o Mentorship Program Lunch *(by invitation)*

CONCURRENT SESSION 2 1:00PM - 3:00PM	GENERAL SESSION: Ka Pale Ola Pae 'Āina - Biosecurity Moderator: Randy Bartlett	 GENERAL SESSION: Nā Manu, Nā Meli - The Birds and the Bees Moderator: Jim Jacobi	WORKSHOP: Ka'ika'i Iwikuamo'o - Nāhululeihwakuipapa Leadership Styles & Pathways Workshop Moderator: Kaimana Bacarse	GENERAL SESSION: Nā Meaulu Maoli - Hawaiian Plants Moderator: Sam 'Ohu Gon	GENERAL SESSION: Nā Laupapa - Coral Reefs Moderator: Elia Herman	FORUM: Kai Kuleana Kākou - working together to care for land and sea in West Hawai'i Moderator: Chad Wiggins
1:00 PM	Hawai'i's Interagency Biosecurity Plan 2017-2027: Pivoting from Planning to Implementation, Joshua Atwood	Skewed Sex Ratios in a Critically Endangered Forest Bird on Kaua'i, Justin Hite	Justyn AhChong, 'Ōiwi TV Pelika Andrade, Sea Grant	Building capacity and collaboration to implement the Hawai'i Strategy for Plant Conservation, Matthew Keir	Artificial Coral Heads for Reef Resilience: Shelter Availability and Reef Context Determine Colonization Rates, Mark Hixon	Charles Young, Kupu
1:15 PM	What Biosecurity Risk Assessment Tools are Being Considered for Aquatic Invasive Stowaways in Ballast Tanks and Attached to Ship Hulls?, Brett Higgins	In Situ and Ex Situ Conservation of Two Critically Endangered Forest Bird Species through Conservation Partnership, Michelle Clark	Kamala Anthony, Honokea Loko I'a Brenda Asuncion, Kua'āina Ulu 'Auamo Keola Chan, 'Aha Kāne Alex Connely, Kua'āina Ulu 'Auamo	<i>Hibiscus waimeae</i> subsp. <i>hannerae</i> : A Case Study on Implementing the Hawai'i Strategy for Plant Conservation, Seana Walsh	Monitoring human behavior and perceptions in Hawai'i through NOAA's National Coral Reef Monitoring Program (NCRMP), Arielle Levine	Malia Kipapa, West Hawai'i Fishery Council
1:30 PM	Vessel Biofouling: International Ocean Law and Hawai'i's Fight Against Aquatic Invasive Species, Andrew Porter	Changes in Hawaiian Bird and Plant Communities across 40 Years, Kevin Brinck	Bryson Ho, 'Ōiwi TV Kim Morishige, UH Mānoa	Temporal variation in movement patterns within the seed dispersal community on O'ahu; implications for conservation, Rebecca Wilcox	Using Proteomics and Genetics to Understand Local Acclimatization and Adaptation of Corals, Kaho Tisthammer	Jeff Coakley, Maika'i Ka Makani O Koh Reggie Lee, Kohanaiki Pii Laeha, Kalahuipua'a Chad Wiggins, The Nature Conservancy Lani Watson, NOAA

ROOM 316 B/C		ROOM 316 A	ROOM 315	ROOM 314	ROOM 312	ROOM 311 PAVILION	
1:45 PM	E-manifesting and Inspection Facilities: Increasing Efficiency Through Risk-Based Inspections, Jonathan Ho	Securing the Future: How We Founded Conservation Breeding Populations of Two Critically Endangered Endemic Passerines from Kauaʻi, Lisa Crampton	WORKSHOP: Kaʻiakaʻi Iwikuamoʻo - Nāhululeihiwakuipapa Leadership Styles & Pathways Workshop <small>(CONTINUED)</small> Noʻeau Peralta , Hui Mālama i ke Ala ʻŪlili Mikiʻala Pescaia , Kalaupapa National Historical Park Mana Purdy , Queen Liliʻuokalani Trust	Rates and Patterns of Natural Regeneration of Dryland Forest Species in Kaʻūpūlehu Forest Preserve, Reko Libby	Appropriate Spatial Scales to Survey Coral Reefs for Conservation and Management, Robert Schroeder, Gerry Davis	SYMPOSIUM: Clean Water for Reefs Puakō: A Collaborative, Community-Based Effort to Address Wastewater Pollution on Hawaiʻi Island Moderator: Erica Perez Harnessing a Multi-tracer Approach to Map Non-Point Source Sewage Pollution and its Impacts on South Kohala Reefs, Courtney Couch What does success look like? Developing a monitoring plan for wastewater upgrades at Puakō, South Kohala using the open standards, Chad Wiggins Understanding Sustainable Capacity Development and Roles and Responsibility of Advanced Wastewater Treatment Systems at Rural Community Level, Mahana Gomes Clean Water for Reefs Puakō: A Case-Study Using a Multi-Disciplinary Approach in Guiding Community Decision Making Through a Collaborative Network, Erica Perez	
2:00 PM	Researching the Efficacy and Efficiency of a Low-cost and Lay-tech, Small Unmanned Aerial System for Detecting Multiple Invasive Species Targets, Timo Sullivan	Movement and Sexual Dimorphism of the Endangered Hawaiian Coot (<i>Fulica alai</i>) on Oʻahu, Randi Riggs		Impacts of Introduced Leaf-Galling Insects on Reproduction and Seedling Survival of <i>Myoporum sandwicense</i> , a Native Hawaiian Tree, Corie Yanger	Resilience and Recovery of Mounding Porites Species Following the 2015 Bleaching Event on Leeward Maui, HI, Maurizio Martinelli		
2:15 PM	Integrating global and regional species distribution models to improve biosecurity and invasive species management in Hawaiʻi, Lauren Kaiser	The Spatial Distribution of Wēkiu Bugs (<i>Nysius wekiuicola</i>) Within a Cinder Cone on Maunakea Volcano, Hawaiʻi, Jessica Kirkpatrick		Plant conservation from a microbial perspective: Foliar microbiome transplants confer disease resistance and survival to a critically-endangered Hawaiian endemic, Anthony Amend	2015 Coral Bleaching Event on the Coral Reefs of Kaloko-Honokōhau National Historical Park in Hawaiʻi, Sheila McKenna		
2:30 PM	Responding Hard and Fast On Soft Money, Or, How Stable Relationships Killed the Drama and 10,000 Invasive Plants, Springer Kaye	Battles Over Bats and Birds: Links Between Litigation, Legislators, and Community Engagement, Maxx Phillips, Senator Gil Riviere			Monitoring Individual Coral Colonies through Repeated Bleaching Events at Molokini and Olowalu, Maui, Darla White		
2:45 PM	Steps to control mosquito-vectored avian diseases in Hawaiʻi, Jolene Sutton				Effects of the 2015 Mass Coral Bleaching Event on the Reefs of West Hawaiʻi, Dwayne Minton		

BREAK >> 3:00 - 3:15PM

CONCURRENT SESSION 3 3:15 - 5:15PM 3:15 PM 3:30 PM 3:45 PM 4:00 PM 4:15 PM 4:30 PM 4:45 PM	FORUM: Engaging the Sacred - a Hawaiʻi Framework and Bio-cultural Curriculum for Transforming Conservationists and Conservation in Hawaiʻi Moderator: Kekuhi K.K. Kealiikanakaoleohaililani	GENERAL SESSION: Kō Uka, Kō Kai - Ridge to Reef Moderator: Jean Tanimoto	FORUM: What’s Your Punchline? How to Make Your Message Resonate with Different Audiences Moderator: Toni Parras	GENERAL SESSION: Nā Pono Hana - Conservation Tools Moderator: Jim Jacobi	TRAINING: Water Quality Monitoring 101 Training: Citizen Science + Quality Assurance = Actionable Data that improves Hawaiʻi’s waters	
	Kekuhi K.K. Kealiikanakaoleohaililani , Lonoa Honua - Hālau ʻŌhiʻa Stewardship Training	Integrated Landscape Indicators to Evaluate the Condition Of “Ridge to Reef” Systems and Prioritize Hawaiian Watersheds for Restoration, Erik Franklin	Toni Parras , NOAA Papahānaumokuākea Marine National Monument	Follow the Smoke to Find the Fire: Spatially Quantifying and Categorizing Statewide Vegetation Shifts and Trends, Matthew Lucas, Clay Trauernicht	Manuel Mejia , The Nature Conservancy	
	Christian Giardina , U.S. Forest Service - Institute of Pacific Islands Forestry	Mapping supply and demand of coral reef ecosystem services to inform a spatial approach to management, Mary Donovan	Kainoa Kaulukukui-Narikawa , NOAA Papahānaumokuākea Marine National Monument	Forecasting climate and land use/cover change impacts on freshwater ecosystem services in Maui through integration of hydrological and participatory models, Hla Htun	Kim Falinski , The Nature Conservancy	
	Kainana S. Francisco , U.S. Forest Service - Institute of Pacific Islands Forestry	HIReefSim: a novel modeling tool for ridge-to-reef management of Hawaiʻi’s watersheds, Lindsay Veazey	Amy Olliffe , U.S. Fish and Wildlife Service	A Data Driven Approach To Measuring Conservation Impact With Web and Mobile Tools, Sam Aruch	Tova Callender , West Maui Ridge to Reef Initiative	
	Heather L. McMillen , U.S. Forest Service - New York City Urban Field Station	Defining Social and Ecological Interactions in West Hawaiʻi Using Participatory Conceptual Ecosystem Modeling, Rebecca Ingram		A Multi-Sensor Approach to Vegetation Mapping and Monitoring in a Hawaiian Mesic Forest, Will Weaver	Alana Yurkanin , The Nature Conservancy	
		Heʻeia NERRS: A Partnership to Study the Outcome of Large Scale Restoration of a Watershed to Traditional Hawaiian Ahupuaʻa Management, Robert Toonen		Mug Shots: Using Photo Matching Software to Keep Track of Hawaiʻi’s Imperiled Tree Snails, Jenny Prior	Stuart Coleman , Surfrider Foundation	
		Building Capacity of American Samoan Communities to Manage Stormwater, Sabrina Woofter		Traditional Management of Marine Protected Areas of American Samoa, Maria Mauga Vaofanua, Christina Mataaafa Samau	Erica Perez , CORAL	
		Crabbing and Connectivity: Science for Sustainability, Kaleonani Hurley		Mapping Human Impacts to Coral Reefs with Unmanned Aerial Vehicles, Robert O’Connor	LorMona Meredith , Promise to Pae ʻĀina (Polynesian Voyaging Society)	

5:15PM - 5:30PM CLOSING PROTOCOL, 3RD FLOOR CONCOURSE


5:30PM - 7:30PM POSTER SESSION & RECEPTION, ROOM 311

8:30 - 9:00am >> Opening Protocol and Welcome, 316 B/C
9:00 - 9:45am >> KEYNOTE: Ruud Kleinpaste, 316 B/C
9:45 - 10:15am >> Hawai'i Conservation Alliance Conservation Innovation Award, 316 B/C
10:15 - 10:30am >> BREAK

ROOM 316 B/C		ROOM 316 A	ROOM 315	ROOM 314	ROOM 312	ROOM 311 PAVILION	
CONCURRENT SESSION 4 10:30AM - 12:00PM 10:30 AM 10:45 AM 11:00 AM 11:15 AM 11:30 AM 11:45 AM	FORUM: Papahānaumokuākea: Large-Scale Progression of Co-Management and Cultural Integration Moderators: Kalani Quiocho, Brad Ka’aleleo Wong	GENERAL SESSION: Ho’ōla Kaiaola - Managing and Restoring Unique Ecosystems Moderator: Elliot Parsons	FORUM: Collaboration across worldviews: utilizing knowledge coproduction on Hawai’i Island to thrive through change Moderators: Sharon Ziegler-Chong, Becky Ostertag, Steven Colbert Scott Laursen, University of Hawai’i at Hilo Kamala Anthony, University of Hawai’i at Hilo Cherie Kauahi, University of Hawai’i at Hilo Rose Hart, University of Hawai’i at Hilo Joanna Norton, University of Hawai’i at Hilo Louise Economy, University of Hawai’i at Hilo	GENERAL SESSION: Nā Pō’ino Kai- Impacts to Marine Environments Moderator: Eva Schemmel	GENERAL SESSION: Kāhuli Aniau - Climate Change Moderator: Wendy Miles	TRAINING: Rapid ‘Ōhi’a Death Seed Bank Initiative Seed Collection Training Moderator: Matthew Keir Matthew Keir, Laukahi: The Hawai’i Plant Conservation Network Marian Chau, Lyon Arboretum	
	Kalani Quiocho, NOAA Papahānaumokuākea Marine National Monument	Successes and Challenges of Restoring the Landscape of Hawai’i’s largest Ahupua’a, Kahuku, Sierra McDaniel		Working together to understand, quantify and manage for tipping points on the reefs of Hawai’i, Kimberly Selkoe	The Potential of Biodiverse Native Hawaiian Agroecosystems for Food Production Under Climate Change, Natalie Kurashima		
	Athline Clark, NOAA Papahānaumokuākea Marine National Monument	The Restoration and Protection of Kaho’olawe’s Ecosystem, Paul Higashino		Population Threats to Hawaiian Hawksbill Sea Turtles Revealed from Three Decades of Strandings, Shandell Brunson	Integrating Climate Projections into a Population Model for the Hawaiian Green Turtle, Summer Martin		
	Matthew Brown, U.S. Fish and Wildlife Service	Pooling together a comprehensive inventory of Hawaiian anchialine pools, Troy Sakihara		Uncovering the Hidden Blue Economy in Coral Reef Fisheries, Shanna Grafeld	Nowhere to Go: Perceived Barriers to the Use of Assisted Colonization for Climate Sensitive Species, Shannon Noelle Rivera		
	Keola Lindsey, Office of Hawaiian Affairs	Facilitation or Competition? The Role of the N-fixing <i>Acacia koa</i> in Ecological Restoration, Wailea Collins		Mesopredator release: Moray eels inconspicuously predominate heavily fished reefs, Julie Zill	Daily to seasonal plant growth responses to environmental variability in Hawai’i: implications to management under shifting conditions, Lucas Fortini		
	Brad Ka’aleleo Wong, Office of Hawaiian Affairs	Metabarcoding as a Tool for Exploring the Diet of Herbivorous Reef Fishes and Providing Data for Management in Hawai’i, Eileen Nalley			Considering species distribution and life history traits to determine the vulnerability of native Hawaiian plants to climate change, Lucas Fortini, Kevin Brinck		
LUNCH 12:00 PM - 1:00PM					LUNCH SESSION: Overview of Present and Planned Hawai’i Coral Nurseries and Restoration Efforts in Hawai’i, Paulo Maurin, Matt Perry, Dave Gulko, Anne Rosinski, Zac Forman	LUNCH SESSION: Ask Questions and Get Answers About Rapid ‘Ōhi’a Death (ROD)	


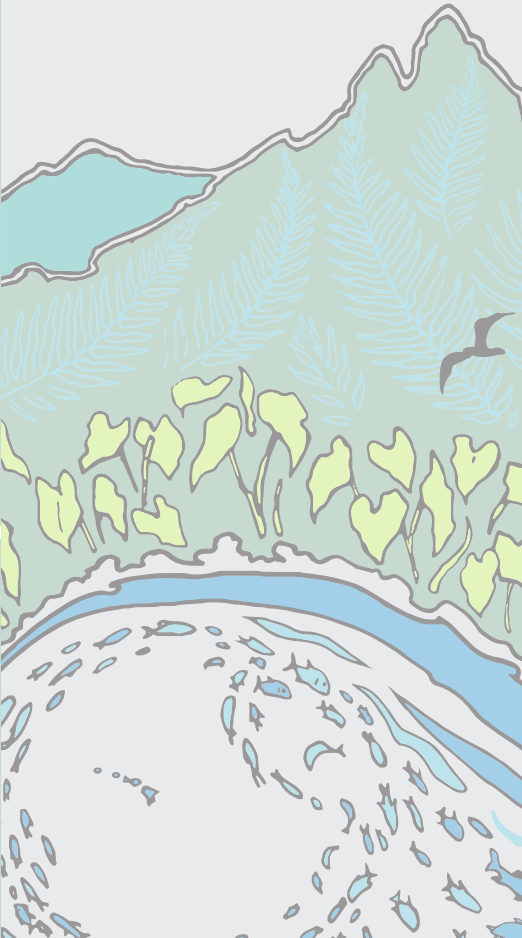
CONSERVATION CONNECTIONS PUBLIC AFTERNOON

CONCURRENT SESSION 5 1:00 - 3:00PM	SYMPOSIUM: Pathology, Genetics, and Biology of Rapid ‘Ōhi’a Death Moderator: James Friday	GENERAL SESSION: Ho’oulu Na’auao - Capacity Building; Education Programs Moderator: Brandi Kiana-Jo	FORUM: Building a Movement for Sustainable Futures: Intergenerational Talk Story Circles Moderator: Elizabeth Fujii		FORUM: A Nuts and Bolts Approach to Community Organizing and Planning: The Maui Nui Network’s Guidebook for Makai Managed Areas Success Moderator: Manuel Mejia	SYMPOSIUM: Turning a corner in Hawaiian monk seal recovery: building on conservation successes to overcome remaining challenges Moderator: Stacie Robinson	FORUM: Seeing Beyond the Horizon: Emergent Trends and Innovation in Mālama ‘Āina Moderator: Mehanaokala Hind	
1:00 PM	Introduction and overview of Rapid ‘Ōhi’a Death, James Friday	Nā Wa’a Mauō Canoe sustainability The application of Hawaiian canoes, in marine resource management, research, and education in the Hawai’i, Hokuokahalelani Pihana			Manuel Mejia, The Nature Conservancy, Maui Nui Makai Network Emily Fielding, The Nature Conservancy, Maui Nui Makai Network	Monk seals and their ecosystems - what factors drive their population dynamics?, Mariska Weijerman	Keoni Kuoha, Papahana Kuaola Pauline Sato, Mālama Learning Center	
1:15 PM	Two New Pathogenic Fungi as the Cause of Rapid ‘Ōhi’a Death, Lisa Keith	The Teaching Change Program – Outdoor, Immersive, Experiential Education Opportunities for Local Students and Teachers, Catherine Spina			John Parks, Marine Management Solutions Sol Kahoohalahala, Maui Nui Makai Network, Maunalei Ahupua’a Community Managed Mauka-Makai Area	#Monkseal: Social media as a tool for science, conservation, and public relations for Hawaiian monk seals, Mark Sullivan	Keola Nakanishi, Mana Mele	
1:30 PM	Infection biology of the <i>Ceratokystis fungi</i> involved in Rapid ‘Ōhi’a Death: Growth, Morphology, and Differential Host Resistance, Marc Hughes, Blaine Luiz	Kamakakūokalani - Mālama ‘Āina and Mālama Honua academic pathways, Noelani Puniwai			Edwin Ekolu Lindsey, Polanui Hiu, Maui Nui Makai Network Claudia Kalaola, Na Mamo O Mu’olea, Maui Nui Makai Network	Prevalence of interactions between Hawaiian monk seals and nearshore fisheries in the main Hawaiian Islands, Tracy Mercer		

ROOM 316 B/C		ROOM 316 A	ROOM 315	ROOM 314	ROOM 312	ROOM 311 PAVILION
1:45 PM	Molecular detection of Ceratocystis species infecting ‘ōhi‘a, Wade Heller, Carter Atkinson	Building a Collaborative Community of Undergraduates, Teachers, Students, and Scientists with Our Project In Hawai‘i’s Intertidal (OPIHI), Joanna Philippoff, Florybeth La Valley	FORUM: Building a Movement for Sustainable Futures: Intergenerational Talk Story Circles (continued)	FORUM: A Nuts and Bolts Approach to Community Organizing and Planning: The Maui Nui Network’s Guidebook for Makai Managed Areas Success (continued)	The power of proactive efforts to help turn a corner in Hawaiian monk seal recovery, Charles Littnan	TRAINING: Rapid ‘Ōhi‘a Death Seed Bank Initiative Seed Collection Training Moderator: Matthew Keir Matthew Keir , Laukahi: The Hawai‘i Plant Conservation Network Marian Chau , Lyon Arboretum
CONCURRENT SESSION 5 1:00PM - 3:00PM (continued)	SYMPOSIUM: Ecology and management of Rapid ‘Ōhi‘a Death Moderator: James Friday	GENERAL SESSION: Ho‘oulu Na‘auao - Capacity Building; Education Programs (continued)		Leimamo Lind-Strauss , Kipahulu ‘Ohana, Maui Nui Makai Network Scott Crawford , Na Mamo O Mu‘olea, Kipahulu ‘Ohana	SYMPOSIUM: Hawai‘i’s Feral Cats Session 1: The Impact of Feral Cats on Hawai‘i’s Native Fauna and Challenges for Management Moderator: Charles Littnan	
2:00 PM	Role of insects in transmitting Rapid ‘Ōhi‘a Death, Curtis Ewing, Gordon Bennett	Bio-Cultural Blitz at Pu‘uwa‘awa‘a Ahupua‘a: Integrating Native Hawaiian Culture and Environmental Education, Melanie Leilā Dudley, Elliott Parsons		James Carpio , Wailuku Community Managed Makai Area, Maui Nui Makai Network Maile Carpio , Wailuku Community Managed Makai Area, Maui Nui Makai Network	The Impact Feral Cats on Endangered Seabirds on Kaua‘i and the Challenges for Managing the Threat, Andre Raine	
2:15 PM	Influences of Rapid ‘Ōhi‘a Death on the current and future status of Hawai‘i’s ‘Ōhi‘a forests, R. Flint Hughes	Stewardship Mapping and Assessment Project (STEW-MAP), a Tool to Understand and Support Environmental Stewardship, Heather McMillen		Lisa Agdeppa , Polanui Hiu, Maui Nui Makai Network	<i>Toxoplasma gondii</i> Infections in Hawai‘i’s Marine Mammals, Michelle Barbieri	
2:30 PM	Management of Forests Affected by Rapid ‘Ōhi‘a Death, Steven Bergfeld, William Buckley	Asking the Public to Spot the Ant, Stop the Ant: Supporting the Little Fire Ant Response, Christy Martin		Robin Newbold , Maui Nui Resources Council, Maui Nui Makai Network	<i>Toxoplasma Gondii</i> in Hawai‘i Kills Native Birds and is Widespread, Thierry Work	
2:45 PM	Fostering Partnerships to Balance Science, Culture, and Urgency in Rapid ‘Ōhi‘a Death Outreach -It’s a Kākou Effort, Corie Yanger			Alex Connelly , Kua‘āina Ulu ‘Auamo, Maui Nui Makai Network Karin Osuga , Maui Nui Makai Network	Free-roaming Outdoor Cats as a Human-made Species and the Challenge of Integrating Conflicting Stakeholder Views Into Effective Management Policy, Kirsten Leong	
3:00 PM - 3:15 PM >> BREAK						
CONCURRENT SESSION 6 3:15PM - 5:15PM	 FORUM: One Canoe, One Island, One Planet: Governor David Ige’s Sustainable Hawai‘i Initiative Moderator: Scott Glenn Governor David Ige , State of Hawai‘i Scott Glenn , Office of Environmental Quality Control David Smith , Department of Land and Natural Resources, Division of Forestry and Wildlife Bruce Anderson , Department of Land and Natural Resources, Division of Aquatic Resources Josh Atwood , Hawai‘i Invasive Species Council Scott Enright , Department of Agriculture Terry Surles , Department of Business, Economic Development & Tourism	COMMUNITY EVENT: Pacific Eco-Poetry Performance Craig Santos Perez Brandy Nālani McDougas No‘o Revilla Travis Thompson Noelani Goodyear-Ka‘ōpua Aiko Yamshiro Serena Ngaio Simmons Jessica Carpenter	WORKSHOP: Cohort after cohort - the Environment as a CONTEXT for Education Moderator: Ruud Kleinpaste	GENERAL SESSION: Ho‘oku‘i ‘Ike - Cultural Integration Moderator: Mililani Browning	FORUM: Hawai‘i’s Feral Cats Session 2 - Panel Discussion: What are pathways for success in effectively managing Hawai‘i’s feral cat dilemma? Moderator: Peter Adler Kate Atema , International Fund for Animal Welfare Grant Sizemore , American Bird Conservancy Kirsten Leong , NOAA Joshua Atwood , DLNR Pam Burns , Hawaiian Humane Society Justin Gruenstein , City and County of Honolulu Chris Lepczyk , Auburn University, University of Hawai‘i at Mānoa	FORUM: The Community Watershed Snapshot: Local Measures of Ahupua‘a Health Moderator: Lihla Noori Lihla Noori , Hawai‘i Conservation Alliance John Parks , Hawai‘i Conservation Alliance Manuel Mejia , The Nature Conservancy Emma Anders , Hawai‘i Conservation Alliance
3:15 PM				Integrating Meaningful Scientific and Cultural Learning Grounded in Place: Experiences of Papahana Kuaola’s Lelekamanu Program, Noelani Lopez, Penny Martin		
3:30 PM				Mālama No I Ka Loko I‘a, Ikaika Lum		
3:45 PM				Kaiaulu: Community, the Growing Sea Perpetuating Presence and Connection to Ancestral Coastal Lands in Halele‘a, Kaua‘i, Mehana Vaughan		
4:00 PM				The Future of Hala (<i>Pandanus tectorius</i>) in Hawai‘i, Michael Opgenorth		
4:15 PM		My Hawai‘i Story Contest Award Ceremony		Enhancing Heritage Management and Food Security through Cultural Revitalization at Maluaka, Jack Rossen, Māhealani Pai		
4:30 PM				Exploring biocultural connections in the Pacific to better monitor the resilience of social and ecological communities, Rachel Dacks		
4:45 PM				The Hawaiian Ecological Footprint, 1870: A Pivotal Period in the History of Ecosystem Change in Hawai‘i, Sam ‘Ohukani‘ōhi‘a Gon		
5:00 PM				Cultivating Conservation and Community Leaders Through the Wai‘anae Mālama ‘Āina Field School, Pauline Sato		

THURSDAY July 20th 2017

8:30 - 9:00am >> Opening Protocol and Welcome, 316 B/C
9:00 - 10:00am >> PLENARY PANEL: Hawai'i Commitments: Inspiring Conservation at Home and Around the World, 316 B/C
10:00 - 10:20am >> Hawai'i Conservation Alliance Distinguished Service Award, 316 B/C
10:20 - 10:45am >> Hawai'i Conservation Alliance Legacy Award, 316 B/C
10:45 - 11:00am >> BREAK

ROOM 316 B/C		ROOM 316 A	ROOM 315	ROOM 314	ROOM 312	ROOM 311 PAVILION	
CONCURRENT SESSION 7 11:00AM - 12:00PM	FORUM: IUCN World Conservation Congress Legacy: Lasting Outcomes & Next Steps for Hawaiʻi	SYMPOSIUM: Remote Sensing for Detection and Mapping of Rapid ʻŌhiʻa Moderator: Robert Hauff	FORUM: Conservation Matchmaker: Bridging Minds, Resources and Needs to Enhance Youth Engagement and Program Capacity Moderator: Liana Murillo		SYMPOSIUM: Emerging Issues in Hawaiian Hydrology and Ecology Moderator: Yin-Phan Tsang	FORUM: Lawaiʻa Pono: Implementing intergenerational observation & place-based solutions. The Moʻomomi vision, community co-managed marine areas and fostering monitoring practices Moderator: Kawika Winter	
11:00 AM	Celeste Connors , Hawaiʻi Green Growth, IUCN National Legacy Committee	Monitoring and predicting spatial patterns of Ceratocystis fimbriata across the Hawaiian landscape, Lucas Fortini	Liana Murillo , NOAA		Establishment and maintenance of instream flow standards for the State of Hawaiʻi, Ayron Strauch	Mac Poepoe , Hui Mālama o Moʻomomi (Molokaʻi)	
11:15 AM	Janis Reischmann , Hauʻoli Mau Loa Foundation Neil Hannahs , Hoʻokele Strategies, IUCN National Legacy Committee	Application of Very High-resolution Pictometry Imagery to Assessing Rapid ʻŌhiʻa Death (ROD) in Hawaiʻi, Jim Jacobi	Julia Meurice , Lynker Technologies		Impact of climate change on the natural flow regime of Hawaiʻiʻs streams, Hannah Clilverd	Hannah Springer , Kaʻūpūlehu Marine Life Advisory Committee (North Kona, Hawaiʻi Island)	
11:30 AM	Chipper Wichman , National Tropical Botanical Garden, IUCN National Host Committee	Mapping the progression of Rapid ʻŌhiʻa Death via small unmanned aerial systems, Ryan Perroy			The Future of Water Budget Components under Climate Change for Selected Watersheds of Oʻahu Island, Hawaiʻi, Olkeba Tolessa Leta	Presley Wann , Hui Makaʻāinana o Makana (Kauaʻi)	
11:45 AM	John DeFries , Native Sun Business Group, Inc., IUCN National Host Committee	Detecting and Mapping Rapid ʻŌhiʻa Death Early and Cost-Effectively – DLNRʻs Aerial Survey Program Using Digital Mobile Sketch Mapping, Philipp LaHaela Walter			Na Wai ʻEkolu: Stream outreach education activities in the Ala Wai and Honolulu Watersheds, Cory Yap	Noelani Lee , Ka Honua Momona (Molokaʻi) Shaelene Kamakaʻala , Hoʻāla ʻĀina Kūpono & Kahana Kilo Kai (Oʻahu)	
LUNCH 12:00 PM - 1:00PM			LUNCH SESSION: To Restore a Mosquito-Free Hawaiʻi, Kenneth Kaneshiro, Cynthia King, Chris Farmer				
CONCURRENT SESSION 8 1:00PM - 3:00PM	Hawaiʻi IUCN Members: Talk Story for All Current and Any Curious Prospective Members - Why and How To Get Involved in the IUCN ʻOhana	GENERAL SESSION: Nā Meahulu ʻAeʻa - Invasive Animals Moderator: Craig Clark	FORUM: Environmental Storytelling in the 21 st Century: Communicating in a changing social, ecological, and technological landscape	SYMPOSIUM: Progress in the West Hawaiʻi Habitat Focus Area Partnership: Science, Restoration, Conservation and Community Action Moderator: Lani Watson	FORUM: Linking Indigenous Knowledge and Sovereignty, Emerging Technologies and Conservation Challenges Moderator: Ku Kahakalau		
1:00 PM		Evaluating the Airsoft Electric Gun for Control of Invasive Reptiles: Ballistic Tests and Impact on Brown Treesnakes, Adam Knox	Kauwila Hanchett , Na Puʻuwai Native Hawaiian Rural Health Center, Ka Honua Momona	The Whole is Greater: Unlocking the Collective Conservation Capacity of West Hawaiʻi, Lani Watson, Chad Wiggins			Ku Kahakalau , University of Hawaiʻi Mānoa
1:15 PM		Manipulating Soil Nutrient Availability to Promote Native Species Following Nonnative Ungulate Removal, Jed Sparks	Jeff Orig , Orig Media	Mapping, monitoring, and modeling geomorphic processes to identify terrestrial sources of nearshore sediment pollution in West Hawaiʻi, Corina Cerovski-Darriau			Jaydee Hanson , International Center for Technology Assessment
1:30 PM		Predator Control in The Nature Conservancyʻs Waikamoi Preserve, Laura Berthold	Ehulani Kane , Na Puʻuwai Native Hawaiian Rural Health Center, Ka Honua Momona	Relative Resilience Potential and Climate Vulnerability of Coral Reefs Along the West Coast of Hawaiʻi Island, Jeffery Maynard			Narrissa Spies , University of California Berkeley
1:45 PM		Research and development track toward a toxic bait for management of invasive small Indian mongooses: current work and future needs, Cynthia Payne	Peggy Foreman , Pacific Islands Climate Change Cooperative Wendy Miles , Pacific Islands Climate Change Cooperative	Fishpond Restoration in WestFishpond Restoration in West Hawaiʻi: Connecting Conservation, Community and Culture: Connecting Conservation, Community and Culture, Barbara Seidel			Dana Perls , Union Institute & University
2:00 PM		Assessment of a Hand-Broadcast Rodenticide Bait Trial to Control Rats in the Waianae Mountains, Oʻahu, Tyler Bogardus		Pono Fishing: Sharing messages of sustainable and traditional fishing practices from West Hawaiʻi, Kuʻulei Keakealani	FORUM: Looking to the Horizon for Hawaiʻi Carbon Capture Markets: An Overview of Seed Efforts and Exploration of Promising Paths Forward Moderator: Aarin Gross		
2:15 PM		Laboratory testing of a non-toxic reproductive inhibitor for non-lethal suppression of rat populations, Israel Leinbach		Sea-Level Rise Modeling as a Catalyst for Effective Ecological Management in West Hawaiʻi, Chad Wiggins	Aarin Gross , Conservation International Celeste Connors , Hawaiʻi Green Growth		
2:30 PM		What We Know And What We Need To Know About The Invasive Mullet, Kanda (<i>Mugil engelii</i>) in Hawaiian Estuaries, Eva Schemmel			Mark Fox , The Nature Conservancy Philipp LaHaela Walter , DLNR Division of Forestry and Wildlife		
2:45 PM		Humans and Wildlife in the Same Canoe: Science-guided Resolutions to Human-Wildlife Conflicts on Invaded Pacific Islands, Shane Siers			Darrell Fox , Hawaiian Legacy Hardwoods		
3:00 - 3:15PM		BREAK					
3:15 - 4:45PM		STUDENT PRESENTATION AWARDS & CLOSING PAU HANA RECEPTION, 3RD FLOOR CONCOURSE					
5:00PM		CLOSING PROTOCOL, 3RD FLOOR CONCOURSE					

Poster Session



Poster Session and Reception: Tuesday, July 18th, 2017

5:30 – 7:30pm, Room 311

Posters are listed by group number and monitor number. For example, P2-11 is Group 2 (6:00-6:30pm) & Monitor 11

POSTER GROUP 1 (P1-1 TO P1-20), 5:30 – 6:00PM

- P1-1** Fishing Among Sea Turtles: Best-Practice Suggestions for Recreational Shore-based Fishermen in Hawai'i, **Irene Kelly**
- P1-2** Progress in reducing seabird interactions in the Hawai'i longline fisheries, **Sarah Ellgen**
- P1-3** Seed Dispersal in a Novel Hawaiian Ecosystem: Can Mutualisms between Exotic Birds and Endemic Ornithochorous Plants be Cultivated? **Sean MacDonald**
- P1-4** Risky Business: Male Aggression and Female Choice in the Hawaiian Monk Seal, **Thea Johanos**
- P1-5** What is Lurking in O'ahu, HI Harbors: Marine Bioinvasions in the 21st Century, **Justin Goggins**
- P1-6** Determining the Effectiveness of Watershed Management Activities to Reduce Land-Based Sources of Pollution on West Maui, **Bernardo Vargas-Angel**
- P1-7** Effective ex situ Conservation of Hawai'i's Rare Plants with Micropropagation at Lyon Arboretum, **Matthew Keir**
- P1-8** The Conservation of *Polyscias bisattenuata* (Araliaceae), a Rare Critically Endangered PEP Species Endemic to Eastern Kaua'i Island, **Randy Umetsu**
- P1-9** Breeding System of the Kaua'i Endemic *Hibiscus waimeae* subsp. *waimeae* (Malvaceae), **Blanca Begert, Seana Walsh**
- P1-10** Halapepe in Trouble: The Decline of *Chrysodracon hawaiiensis* at Pu'uwa'awa'a, and Potential Recovery Actions, **Elliott Parsons, Edith Adkins**
- P1-11** Impact of Marine Debris Entanglements on Hawaiian Monk Seals, **John Henderson**
- P1-12** Pollination and Breeding System of the Endangered Hawaiian Tree *Hibiscus waimeae* subsp. *hannerae* (Malvaceae), **Susan Deans, Seana Walsh**
- P1-13** CCA and Fleshy Algal Cover as an Indicator of Reef Recovery, **Christina Jayne**

- P1-14** Japanese Tsunami Marine Debris: an Aquatic Invasive Species Perspective, **Brian Neilson**
- P1-15** Human Interventions to Enhance Hawaiian Monk Seal Pup Survival at French Frigate Shoals, **Brenda Becker, Charles Littnan**
- P1-16** Looking Out for the Little Guys: a New Captive Rearing Program for Native Invertebrates, **William Haines**
- P1-17** Pollen Desiccation Tolerance of two Kaua'i Single Island Endemic *Hibiscus* Taxa: Implications for *ex situ* Pollen Conservation, **Seana Walsh**
- P1-18** Emerging In-Water Hull Cleaning Technologies and Policies can Significantly Reduce the Biosecurity Risks Associated with In-Water Hull Husbandry, **Julie Kuo**
- P1-19** Ke Kai Ola: the Role of Rehabilitation in Hawaiian Monk Seal Recovery, **Shawn Johnson**
- P1-20** Distribution of Pueo or Hawaiian Short-eared Owl: Utilizing Citizen Science to Aid Monitoring Surveys, **Javier Cotin**

POSTER GROUP 2 (P2-1 TO P2-20), 6:00 – 6:30PM

- P2-1** Auwahi Wind Predator Control Program: Saving Kahikinui's Last Hawaiian Petrels, **George Akau**
- P2-2** Is an Increase in the Number of Flooding Events Impacting Nesting Success in the Endangered Hawaiian Stilt (*Himantopus mexicanus knudseni*)? **Kristen Harmon**
- P2-3** Community Based Efforts to Promote Native Species Regeneration in a Heavily Invaded Hawaiian Mesic Forest Ecosystem, **Kyle Aukai, Miles Thomas, Shaun Wriston, Mia Melamed, Juli Burden, Nicolas Bly, Wendy Kuntz, Mike Ross, Jason Misaki**
- P2-4** Laulima: Community Partnership in Mapping Invasive Algae Along Moloka'i's Southern Shoreline, **Kendall Teichma**
- P2-5** Persistence of a small population of the endangered Orangeblack Hawaiian damselfly (*Megalagrion xanthomelas*) at Kaloko-Honokohau National Historical Park, **Robert Peck**

- P2-6** The Environmental, Social, and Cultural Benefit Spillovers of the Pūpūkea Marine Life Conservation Districts, **Maxx Phillips, Jenny Yagodich**

- P2-7** Rodent Trapping Drives Down Invasive Rat Populations in Key Endangered Bird Habitat on Kaua'i, **Maria Costantini**

- P2-8** Long-term history of vehicle collisions on the endangered Nēnē (*Branta sandvicensis*), **Christopher Lepczyk**

- P2-9** Collaborative and Integrative Management of Invasive and Rare Species on UH Managed Lands of Maunakea, **Darcy Yogi**

- P2-10** Using Remote Cameras to Augment Hawaiian Monk Seal Survey Data From Hard-to-Reach Islands, **Johann Becker**

- P2-11** Assessing Public Awareness of Rapid 'Ōhi'a Death for Outreach and Education Needs, **Erin Bishop**

- P2-12** Cultivating Capacity through 'Ike Hawai'i, **Rae DeCoito, Hannah Kaumakamānōkalanipō Anae**

- P2-13** Invasive Species Removal at 'Uko'a Pond, **Jacob Dutton**

- P2-14** Wireless Watershed: Internet Protocol Based Video Monitoring Network in Remote Montane Forest on the Island of Kaua'i, Hawai'i, **Lucas Behnke**

- P2-15** Plant Pono, a Proactive Approach to Combatting Invasive Horticultural Species, **Molly Murphy**

- P2-16** Seed Storage and Germination Condition for *Flueggea Neowawraea* (Phyllanthaceae) to Promote Seed Longevity and Increased Germination, **Christina Sloss, Dustin Wolkis**

- P2-17** Conservation Breeding and Reintroduction of the 'Alalā (*Corvus hawaiiensis*): 2017 update, **Bryce Masuda**

- P2-18** Biocontrol of Weeds Releases Current and Pending, **M. Tracy Johnson**

- P2-19** Impacts of Alien Freshwater Turtles on Native Hawaiian Wetland Birds, **Aaron Works**

- P2-20** Preliminary Results from an In-Situ Coral Nursery in Hawai'i: Can Corals of Opportunity be used as a Restoration Tool? **Anne Rosinski**

POSTER GROUP 3 (P3-1 TO P3-20), 6:30 – 7:00PM

- P3-1** Mālama na Honu Educational Outreach and Public Management in Hawai'i, **Irene Kelly**

- P3-2** Herbivore Biocontrol and Manual Removal Successfully Reduce Invasive Macroalgae on Coral Reefs, **Brian Neilson**

- P3-3** Hand-Pollination of Critically Endangered *Schiedea haleakalensis* at Haleakalā National Park, **Monica Lomahukluh, Michelle Osgood**

- P3-4** Composition of Native Forest Birds Captured On East Maui, **Laura Berthold, Chris Warren**

- P3-5** Response of Hawaiian Coral to Long-term Contact with Invasive Gorilla Ogo, Using Non-molecular Biomarkers, **Victoria Sindorf**

- P3-6** Effects of Loss of Seed Dispersers on Rare Lobelioids: Assessment of Seed Viability in Senescing Fruits, **Michelle Akamine**

- P3-7** Banking from Scratch: How to Set up a Seed Bank for Native Hawaiian Plants, **Kaili Kosaka**

- P3-8** Manu-o-Kū of Diamond Head: Breeding Behavior of an Indigenous Seabird on the Kapi'olani Community College Campus, **Paul Alexander Awo, Kristen Feato, Ka'iulani O'Brien, Katie Gipson**

- P3-9** 30 Years of Interns: Benefits to Participants and Endangered Wildlife at Haleakalā National Park, **Raina Kaholoaa, Erika Kekiwi**

- P3-10** Federal Pathways Program Provides Careers in Resource Management at Haleakalā National Park, **Joy Tamayose, Cathleen Natividad Bailey**

- P3-11** Development of a Rodent Bait with Slug-repellent Properties, **Stephanie Joe, Tyler Bogardus**

- P3-12** 'Opihi Partnership: Reports on Collaborative Efforts to Monitor, Restore, and Sustainably Harvest Hawai'i's Intertidal Resources, **Walter Pu**

Poster Session

(CONTINUED)

- P3-13** A Community on O'ahu, a Hawaiian Monk Seal, and Toxoplasmosis, **David Schofield**
- P3-14** Abundance and breeding success of Hawai'i elepaio in mesic montane forest in Hawai'i Volcanoes National Park, **Paul Banko**
- P3-15** A Bottom-up Approach to Biosecurity on Kaua'i: the Pono Endorsement Program Partnership, **Tiffani Keanini**
- P3-16** Prioritizing Management Strategies to Alleviate Avian Botulism Impacts on Endangered Hawaiian Waterbirds on Hanalei National Wildlife Refuge (NWR), Kaua'i, Hawai'i, **Tristan Luxner**
- P3-17** Prescriptions for Novel Rodent Control Devices to Protect High Elevation Endangered Species from Non-native Rats at Hawaii Volcanoes National Park, **Heather Coad**
- P3-18** Acoustic Variability of a Native Hawaiian Thrush in a Fragmented Landscape, **Nicole Fernandez**
- P3-19** Population Dynamics of Feral Pigs in a Lowland Wet Forest - Wainiha Preserve, Kaua'i, **Nicolai Barca, Lucas Behnke**
- P3-20** Predator control and monitoring during Year 1 of the 'Alalā reintroduction in Pu'u Maka'ala Natural Area Reserve, **Jacqueline Gaudioso-Levita, Ku'ulei Vickery**

POSTER GROUP 4 (P4-1 TO P4-20), 7:00 - 7:30PM

- P4-1** Habitat Features that Influence Nest Success and Depredation of Endangered 'Alae 'Ula Nests on Hanalei and Hulē'ia National Wildlife Refuges, **Bryn Webber**
- P4-2** Temporal Variation in the Fish Community of He'eia Stream Mouth Estuary, O'ahu, Hawai'i, **Spencer Mallette, Susan Carstenn**
- P4-3** Recent Red Listing Efforts In Hawai'i and Why It Matters, **Maggie Sporck-Koehler**
- P4-4** Comparing a Model Scenario to the Spread of Miconia on O'ahu, **Jean Fujikawa**
- P4-6** A Novel Methodology for Mapping Invasive Species Albizia (*Falcataria moluccana*) Using High Spatial Resolution Satellite Imagery, **Qian Zhang**
- P4-7** Investigating abundance and behavior of black rats (*Rattus rattus*) prior to rodenticide treatment in mesic montane Hawaiian forest, **Kelly Jaenecke**
- P4-8** Evaluating Population Viability and Conservation Options for the Endangered Puaiohi, **Christopher Lepczyk**
- P4-9** Depth is more potent at structuring reef crab assemblages than latitude, geography, or human impact across the Hawaiian Archipelago, **Kaleonani Hurley**
- P4-10** Ulu Lā'au Kahiko. Natural Regeneration of Ancient Natives. A new chapter of rare dryland plant regeneration at Ka'ūpūlehu dryland forest, **Pihanui Brawner, Reko Libby**
- P4-11** Does 'A'a Lava Field Roughness Affect Outplant Growth in the Keaukaha Military Reservation on Hawai'i Island? **Bronson Palupe**
- P4-12** Albizia Rust Gall Fungus - the First Potential Biocontrol Agent for Albizia in Hawai'i, **Kenneth Puliafico**
- P4-13** Invasive Pine Management and Target Detection using Satellite Remote Sensing at Haleakalā National Park, Maui, Hawai'i, **Jonathan Marshall, Woody Mallinson**
- P4-14** Defense Against Invasive Species: Biosecurity in Papahānaumokuākea, **Kristy Lapenta**
- P4-15** Groundwater Recharge from Kaua'i Watershed Alliance Managed Forests, **Stephanie Tom**
- P4-16** Transforming Middle School Science Education: Investigating Culturally Responsive Teaching Through Place Based Education, **Brigitte Russo, Margarita Alo-Chu**

Exhibitors

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Pacific Birds Habitat Joint Venture
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HAWAI'I STATE SCIENCE AND ENGINEERING FAIR HCA AWARDEES

First Place, Senior Division:

OBSERVING THE EFFECTIVENESS OF SEVERAL PLANT COMPOUNDS ON IMPEDING THE GROWTH OF *CERATOCYSTIS FIMBRIATA*

Benjamin K. M. Poppas, Waiākea High School

Runner-Up, Senior Division:

PUBLIC PERCEPTIONS OF INVASIVE SPECIES SALES ON HAWAI'I ISLAND

Jamie Ebersole, Waiākea High School

Junior Division:

MOSS, MUD AND NATIVE KEIKI TREES

Ben May, Parker School

Junior Division:

NATIVE HAWAIIAN PLANS THAT PREVENT WATER RUNOFF

Niccolo Hayashi, Niu Valley Middle School

Map

HAWAI‘I CONVENTION CENTER THIRD FLOOR

Exhibitors

>> 313 A,B,C

Registration/ Help Desk

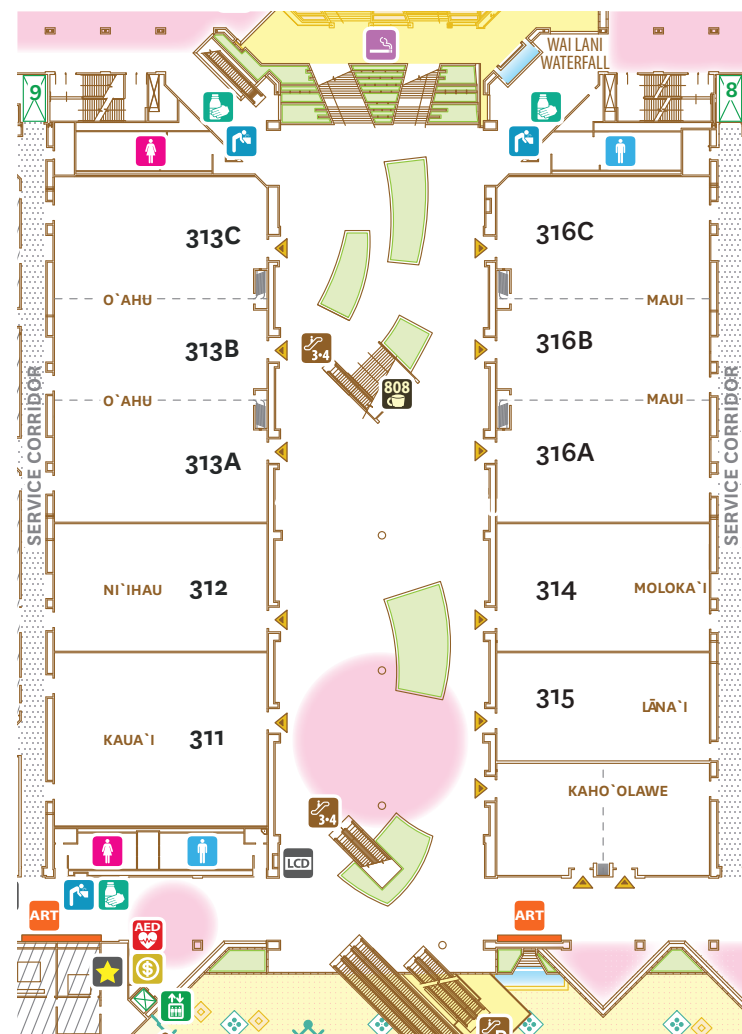
>> outside 311 & 312

Keynotes/Plenary

>> 316A,B,C

Poster Exhibit & Pavilion

>> 311



HAWAI‘I ALOHA

E Hawai‘i e ku‘u one hānau e
Ku‘u home kula‘iwi nei
‘Oli nō au i nā pono lani ou
E Hawai‘i, aloha ē

HUI:
E hau‘oli nā ‘ōpio o Hawai‘i nei
‘Oli ē! ‘Oli ē!
Mai nā aheahe makani e pā mai nei
Mau ke aloha, no Hawai‘i

E ha‘i mai kou mau kini lani e
Kou mau kupa aloha, e Hawai‘i
Nā mea ‘ōlino kamaha‘o no luna mai
E Hawai‘i aloha ē

Nā ke Akua E mālama mai iā ‘oe
Kou mau kualona aloha nei
Kou mau kahawai ‘ōlinolino mau
Kou mau māla pua nani ē

O Hawai‘i, o sands of my birth
My native home
I rejoice in the blessings of heaven
O Hawai‘i, aloha

CHORUS:
Happy youth of Hawai‘i
Rejoice! Rejoice!
Gentle breezes blow
Love always for Hawai‘i

May your divine throngs speak
Your loving people, o Hawai‘i
The holy light from above
O Hawai‘i aloha

God protects you
Your beloved ridges
Your ever glistening streams
Your beautiful gardens



>> **PLENARY PANEL: Hawai‘i Commitments:**
Inspiring Conservation at Home and Around the World
Thursday, July 20th, 9:00 – 10:00am, 316 B/C

>> **FORUM: IUCN World Conservation Congress Legacy:**
Lasting Outcomes & Next Steps for Hawai‘i
Thursday, July 20th, 11:00am – 12:00pm, 316 B/C

>> **MEETING: Hawai‘i IUCN Member Talk Story** for all
current and curious prospective members
Why and how to get involved in the IUCN ‘Ohana
Thursday, July 20th, 1:00 – 2:00pm, 316 B/C

Read about the IUCN Hawai‘i Commitments at
<https://portals.iucn.org/congress/hawaii-commitments>



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