



FALL 2021 EDITION

UNIVERSITY OF HAWAII AT HILO
TROPICAL CONSERVATION BIOLOGY
& ENVIRONMENTAL SCIENCE



Year End Newsletter

TCBES Semesterly Newsletter



TCBES Fall 2021 graduates celebrating at hybrid ceremony

INSIDE THIS ISSUE:

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Kaiameaola Club

VISIT THEIR NEW WEBSITE [HERE](#)
OUTPLANTING EVENT RECAP AND
CLUB MEMBERS PG.4

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TCBES Seminars

VISIT OUR WEBSITE TO VIEW
UPCOMING SEMINARS [HERE](#)

STUDENT & FACULTY

Highlights

Congratulations!

William Mautz



William Mautz, Professor Emeritus of Biology, reports on the rediscovery of the azure-tailed skink on Hawai'i Island in the upcoming December 2021 issue of Herpetological Review. This lizard species, once common throughout the Hawaiian Islands, had not been seen in 50 years and was formerly thought extinct in Hawai'i. A population was rediscovered in 2000 on Mokapu Islet off Moloka'i. Click [Here](#) to read his paper!

Maya Munstermann



Maya recently started her PhD in the Department of Biological Sciences at Florida State University. She will be researching the effects of marine heat waves on sea urchins. Maya also recently published her second paper, "A global ecological signal of extinction risk in terrestrial vertebrates". Congratulations! Click [Here](#) to read her paper!



Coral reef biodiversity predicted to shift as climate changes: TCBES graduate, Molly Timmers, lead author on study.

[Click here to read more](#)

Adam Pack awarded grant to support humpback whale research

[Click here to read more](#)



TCBES student Michael Stone launches blog for Hawai'i Wildlife Fund on marine debris survey.

[Click here to read more](#)



TCBES student, Crispin Nakoa, researches coastal water quality.

[Click here to read more](#)



UH Hilo marine scientists say wastewater treatment plant is best option for Puako.

[Click here to read more](#)

UH Hilo biologists publish study on complex ways birds communicate in two tropical wet forest communities.

[Click here to read more](#)



Congratulations Graduating Students!

Keilani Bonis-Ericksen

« Examining Patterns in Coral Demographic Events in Papahānaumokuākea Marine National Monument »

Advisor: John Burns

Sydney Gamiao

« Survival in *Parvocalanus crassirostris* cultures treated with commercial probiotics »

Advisor: Maria Haws

Kelly Goodale

« Monitoring Hawaiian Green Turtles (Honu, *Chelonia mydas*) on O'ahu, Hawai'i »

Agency: U.S Fish and Wildlife Service

Dawn McSwain

« Mixotrophic plasticity in corals: A meta-analysis using innovative text analytic tools »

Advisor: Tracy Wiegner

Kaikea Nakachi

« Heeding the History of Kahu Manō: Developing and Validating a Pono Photo-Identification Methodology for Tiger Sharks *Galeocerdo cuvier* in Hawai'i »

Advisor: Tim Gabrowski

Amanda Navine

« Investigating the role of the cloacal microbiome in Avian Malaria susceptibility in Hawaiian Honeycreepers »

Advisor: Pat Hart

Michael Stone

« Addressing The Issue Of Marine Debris Through Restoration And Advocacy With Hawai'i Wildlife Fund »

Agency: Hawai'i Wildlife Fund

Katie Strong

« Developing a Fourier-transform Infrared (FT-IR) Spectroscopy Classification Tool to Identify Common Beach Plastics on Hawai'i Island »

Advisor: Mazen L. Hamad

Erica Ta

« Invasive species detection from RGB aerial imagery: investigating links between plant characteristics and transfer learning success »

Advisor: Ryan Perroy



Missed a Defense or Presentation?

No worries!

All completed defenses
are on the TCBES
YouTube Page!



**Watch them
now!**

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***Check out our
Website!***



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Facebook!***

TCBES's UH Foundation

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Kaiameaola Club



On Friday, September 24th, the Kaiameaola Club (formerly known as the MATERs Club) hosted an outplanting as part of a broader initiative to replace invasive and non-native plants on campus with native plants. William Walters, Director of Auxiliary Services, has been a crucial part of the effort to restore native plants to the University of Hawai'i Hilo campus, as well as Thathmini Kularatna, who designed the plot. The planting was done along the hillside at the Kawili Street entrance, and included kukui, māmakī, ōhi'a, 'a'alii, and many other biologically and culturally important plants. Students began with a plant-briefing during which the identity and significance of each plant was discussed. They then set off to work, digging and chiseling through lava rock and soil to create space for the native plants. In total, 57 native plants were planted on campus to replace the non-native ones that had recently been cleared out of that area. Although continued care is needed to keep weeds from overgrowing the plot, the Kaiameaola club hopes that this plot will leave a lasting legacy: a beautiful array of native plants that people can appreciate every time they come and go from campus. More information on the Kaiameaola club can be found [here](#)

Club Members:

John Graves
Anuheia Robins
Stephanie Mladinich
Jessica Glazner

Contact them
directly with any
questions!



Kaiameaola Club and volunteers during outplanting event.

In The News...

UH HILO AND COUNTY PARTNER TO MAP SEA LEVEL RISE AND COASTAL EROSION

Featuring: Dr. Ryan Perroy, Erica Ta, Aloha Kapono, Hannah Hartmann, and Dr. Stephen Colbert

"The University of Hawai'i at Hilo and Hawai'i County are partnering on a project to catalog the coastline of Hawai'i Island and analyze sea level encroachment to inform future infrastructure decisions."

Click [Here](#) to read more!

THEIR RESEARCH WAS SHOWCASED AT THE UNITED NATIONS' GLOBAL CLIMATE CHANGE CONFERENCE, COP26

Click [Here](#) to read more and watch the video that was presented in Glasgow, Scotland!



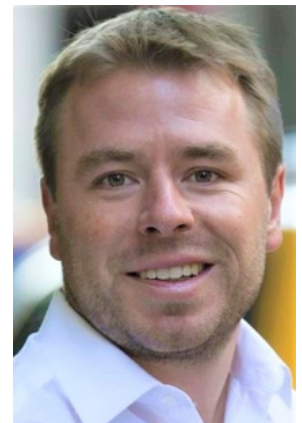
UH HILO LIVESTREAM CAMERA IN WATERS OFF KONA IS REVOLUTIONIZING MARINE SCIENCE EDUCATION AND RESEARCH

Featuring: Dr. John Burns and the MEGA Lab

"A large multi-disciplinary collaboration over many months has resulted in the installation of a high-resolution real-time video monitoring camera in waters off Kona, Hawai'i Island. The camera went live in April of this year and is available to schools, scientists, and the general public as a continuous live stream." Click [Here](#) to read more!



Shark captured on camera. Photo Creds: John Burns (pictured below)



News From Other Departments

RAT LUNGWORM RESEARCH

"In an effort to increase public awareness of rat lungworm disease, and minimize risks of contracting it, a pharmaceutical sciences professor from the University of Hawai'i at Hilo spearheaded publishing layperson friendly research and an informational video." Click [Here](#) to read more and to watch the video!

UH HILO RESEARCHERS RETURN TO KĪLAUEA AS ERUPTION CONTINUES

"Geology students at the University of Hawai'i at Hilo are set to continue their historically important ground studies near the Kīlauea caldera following the start on Sept. 29 of a new eruption at the Westernmost vent of Halema'uma'u crater." Click [Here](#) to read more!



UHHilo Geography students and faculty working on Halema'uma'u crater



Wēkiu bug on Mauna Kea

ANNUAL SURVEY ON MAUNA KEA SHOWS WĒKIU BUG POPULATION BOOM

"The population of the endemic wēkiu bug, which can only be found on pu'u (cinder cones) on the summit of Mauna Kea, remains healthy according to the insect captures recorded during the University of Hawai'i at Hilo [Center for Mauna Kea Stewardship](#)'s annual arthropod monitoring surveys this year." Click [Here](#) to read more!