Q1

College of Tropical Agriculture and Human Resources
Of Innovation, Collaboration, and Compassion

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Aloha,

Sylvia Yuen
Interim Dean and Director of CTAHR

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Wild About Wildlife

Ever wonder who owns the wildlife in this state? You do! It’s managed by the government, in trust for the people. So says Chris Lepczyk, who should know. Dr. Lepczyk, in CTAHR’s Department of Natural Resources and Environmental Management (NREM), has students who have gone on to take part in that very management, or the management and conservation of other vital natural areas and resources. And with degrees in biology, geology, wildlife ecology, ecology, evolutionary biology, behavior, and fisheries and wildlife, Dr. Lepczyk is ideally suited to guide his students’ varying research interests.

An important element of his position is the Environmental Problem Solving (NREM #94) capstone course he teaches. In this independent-learning class students work in small teams, surveying and interviewing stakeholders on a specific environmental topic of contemporary importance. Past projects have studied such pressing issues as invasive species, over-fishing, waste disposal, and designation of agricultural lands. Students often give back what they learn to the community, such as providing a marine debris project to the Kaua‘i Hawai‘i Foundation or sharing findings with non-governmental organizations when they deliver their final presentations. Beyond the classroom, Dr. Lepczyk has a full lab of students engaged in a diverse array of research projects. One recent project, by Breide Duff, charted the introduction of birds and mammals to the islands specifically for hunting purposes. She found that in the two decades following WWII, 44 game species were introduced, coinciding with a national rise in hunting. But since the early 1970s, when the Endangered Species Act was passed, not one animal has been imported for hunting on public lands, offering some hope for native flora and fauna. Hawai‘i’s is unique nationwide in that all game animals are non-native species, with many being invasive, which poses a significant challenge to the State’s desire to protect endangered species and also provide hunting opportunities.

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Dr. Lepczyk with students Davey Swibuts (left) and Alisa Davis (right) holding photos of some friends they’ve made during the course of their work.

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Dr. Ako’s grad students are integral to this process, in Samoa and in Hawai‘i. They test the water chemistry—essential for keeping the system running correctly—and teach others to do it, assist in building growboxes; be everywhere and do everything Dr. Ako may not have time for.

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CTAH IMPACT 2012

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The self-contained nature of aquaponics, in which fish create nutrients for plants, which purify the water for the fish, is appealing conceptually, but it must be done right in practice. A similar system had been attempted, unsuccessfully, in Samoa before the CTAHR group came down. “Education, the human element,” Dr. Ako answers when asked how his methods differed. “We taught them what to do, and then we stayed. Every day we’d watch them and make sure they were doing it right.”

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Good Energy House

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“We don’t just sit around and talk or with the youth—we show them how to do things,” explains Dr. Martini. FETCH’s philosophy Concrete tasks such as carpentry, gardening, and hydropinics give children (and adults) a sense of accomplishment and mastery. This combination of the practical and the idealistic extends to the physical surroundings. Bookshelves bulge with books on gardening, CSA farming, building, nutrition, cooking, crafts, and music. In a small kitchen, hopeful future chefs are mentored—and given a sense of purpose. “W e don’t just sit around and talk or with the youth—we show them how to do things,” explains Dr. Martini of FETCH’s philosophy Concrete tasks such as carpentry, gardening, and hydropinics give children (and adults) a sense of accomplishment and mastery. This combination of the practical and the idealistic extends to the physical surroundings. Bookshelves bulge with books on gardening, CSA farming, building, nutrition, cooking, crafts, and music. In a small kitchen, hopeful future chefs are mentored—and given a sense of purpose. "We don't just sit around and talk at or with the youth—we show them how to do things," explains Dr. Martini of FETCH's philosophy Concrete tasks such as carpentry, gardening, and hydropinics give children (and adults) a sense of accomplishment and mastery. This combination of the practical and the idealistic extends to the physical surroundings. Bookshelves bulge with books on gardening, CSA farming, building, nutrition, cooking, crafts, and music. In a small kitchen, hopeful future chefs are mentored—and given a sense of purpose. …...
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Beyond the classroom, Dr. LePczyk has a full lab of students engaged in a diverse array of research projects. One recent project, by Irin Dufft, charted the introduction of birds and mammals to the Islands specifically for hunting purposes. She found that in the two decades following WWII, 44 game species were introduced, coinciding with a national rise in hunting. But since the early 1970s, when the Endangered Species Act was passed, not one animal has been imported for hunting on public lands, offering some hope for native flora and fauna. Hawai‘i is unique nationwide in that all game animals are non-native species, with many being invasive, which poses a significant challenge to the State’s desire to protect endangered species and also provide hunting opportunities.

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Dr. LePczyk with students Davoea Swabata (left) and Alisa Davis (right) holding photos of some friends they’ve made during the course of their work.

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They called me the Wizard of Oz,” Harry Ako (MBRE) admits, “because when I told them how to do things, it worked.” Dr. Ako and his team, including graduate student Kiana Sakamoto, had gone to American Samoa for six weeks to instruct a group including High Talking Chief Apela Afoa Afoa, on how to build a simple and easily maintained aquaponic system. Created by Dr. Ako, it offers sustainable, low-impact production of tilapia, lettuce, and kai choi, using only 2% as much water as traditional farming methods for six times more productivity. Such a system is well suited to the Pacific islands, where land and fresh water are at a premium.

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But the “energy” in Energy House isn’t just solar electricity. There’s good energy here, purpose and momentum combined with a gentle peace. A participating teen catalogs, in minute detail, the guppies in tanks on the porch, while an upstairs office buzzes with scheduling for the next family event. The programs in the small red building aren’t just working to generate electrical power and food fuel, important though these are—they’re growing sustainable families and communities, too.

Mary Martini (right) with recent CTAHR graduate and program coordinator Adam Baker (left).
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