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Of Innovation, Collaboration, and Compassion







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



"Knowledge is a privilege and the passing on of that knowledge is an important trust."

Learning from each other. I love education. One of the most important things that we in the university community do is facilitate learning. Knowledge is a privilege and the passing on of that knowledge is an important trust.

That is why I am inspired by the three stories in this quarter's Impact Report. While they all are about delivering knowledge, they also emphasize that teaching is not just a classroom-based, top-down, professor-to-student process. Rather, they show the ways we can empower others to share the knowledge they possess.

The Pre-Veterinary Club not only gives students important skills and fun opportunities; it pairs them with practicing vets who can mentor them and bring them into the veterinary community. The new farmers, beekeeping, and agricultural projects on Moloka'i look to the farmers themselves for lessons and improvements needed. And the Forest Stewards are offered opportunities to help their neighbors and peers work toward goals they all share.

I am always learning as I discuss issues and work with those in the CTAHR 'ohana and in the community. I am excited about this evolution of peer knowledge transfer. It is a powerful multiplier that will have significant economic and social impacts for our state.

Aloha,

Maria Gallo

Dean and Director of CTAHR

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Master Stewards of the Forest

e all do it: "Wow, how do you get your tomatoes to grow so big?" "What do you do about whitefly?" Friends and neighbors are often the first ones we ask for advice on matters great and small. They're right there, plus we might not know what professionals to ask or feel comfortable contacting them. "Master" programs such as Master Gardeners and Master Naturalists have taken this concept to the next level, training volunteers to

reach far more people than formal extension programs can. The Hawai'i Forest Stewards program does this on a more expansive scale, training forest landowners to be a trusted source of information for their peers on managing their forests.

Make no mistake: forests need management. The first class of Hawai'i Forest Stewards, which graduated in August in Volcano on the Big Island, was amazed by what goes into taking care of a forest. The program, led by CTAHR extension forester J.B. Friday, covered such topics as Hawaiian natural history, invasive species, silviculture, growing koa, and agroforestry, as well as financial planning, conservation easements, and taxes. Norm Bezona spoke about ecotourism, Doug



CTAHR extension forester J.B. Friday teaches volunteers in the Forest Stewards program how to measure the diameter of forest trees.

Cram taught landowners how to protect their forest lands from fire, Bobette Parsons taught about soil and water protection, and Donna Ball presented on Hawai'i's native species. A program highlight was a presentation on Hawaiian cultural perspectives on the forest and the land by Kamakani Dancil and Keala Kanaka'ole.

The class themselves showed they were already ready to start helping each other, bringing together an array of experiences and skills ranging from tree planting and coffee farming to bamboo culture and invasive species management. Now they're planning outreach events including farm and forest tours, organization of invasive species control efforts, and articles in the local media. The goal is not to advocate for one specific type of forest management, but to help landowners make informed decisions about their land. And with the Forest Stewards program slated to be an annual course, held around the Islands, that information is on the move.

For more information about Hawai'i Forestry Extension, visit their website at www.ctahr.hawaii.edu/forestry

J.B. Friday with his first class of Hawai'i Forest Stewards.

Photo: Bob Krauss

Wouldn't You Rather Be Riding a Tractor on Moloka'i?

or a small island, Molokaʻi's got a lot of arable land ready for farming—over 7,600 acres in Hoʻolehua alone. And there's no doubt the state needs all the farmers it can get. But farming can be tough and lonely, especially for those just starting out. Now CTAHR's Moloka'i Extension office is offering three programs to help hopeful farmers get onto the land and working towards food sustainability.

The Moloka'i Native Hawaiian
Beginning Farmer Program focuses on
creating new family farms on Hawaiian
Home Lands and also responds to the need
for younger farmers to alter the aging
farmer demographic. Participants have
access to irrigation water and a half-acre of
land each, and agents Alton Arakaki, Glenn
Teves, and Jennifer Hawkins offer field
demonstrations, mentoring, and classes on
such topics as windbreaks and plant
diseases. The new farmers develop and



Class I participant Micah Buchanan with parents Moku and Laurie Buchanan planting strawberry plants.

implement a production map and deliver their product to market each week—everything from bittermelon through eggs and strawberries to wing beans. The program's getting raves: "Anyone who's serious about farming should sign up," says participant John Freeman.

Meanwhile, the Native Hawaiian Beginning Beekeeping Class, initiated by Jennifer Hawkins, teaches farmers growing high-value, pollinator-dependent crops such as melons and squash to establish and maintain their own bee colonies. Moloka'i doesn't have the varroa mite that's been decimating hives on other islands, but the small hive beetle has recently arrived, so growers want to be able to monitor their own hives rather than depending on wild pollinators that might succumb to the pest.

The Moloka'i Hawaiian Homes Agricultural Program, begun in the '80s, continues to work on larger-scale infrastructure and other issues identified by the farmers. It includes water delivery improvements, harbor strengthening, a research and demonstration farm, a community processing kitchen for value-added products, a community tractor service, a livestock cooperative, and a community college farm program. The most recent initiatives include other equipment services and the production of fertilizer and compost.

Moloka 'i's been through some hard times in the past, including deforestation, erosion, and the loss of its water table. But now, with this renewed agricultural activity, people aren't just growing crops in the island's red soil; they're growing hope.



Get Vet?

ring pig ears if possible. Not the commonest directive in a club meeting announcement—unless you're talking about the campus Pre-Veterinary Medicine Club.

Members will be learning to suture, and pig ears—or feet—have the right texture to practice on. (Those who can't find them in a local grocery store can bring a hand towel instead.)

Practical, hands-on, and imaginative—these are hallmarks of club advisor Dr. Ashley Stokes's mentorship style. Both a veterinarian and a professor in the department of Human Nutrition, Food and Animal Sciences, as well as last year's *Ka Pouhana* (Mentor) Award winner, Dr. Stokes has also drawn a horse's skeletal system on its skin to show how it looks in 3-D as the horse trots, among other innovative and effective ways to get students interested and keep them learning.



A Pre-Vet Club member learning proper shearing technique.

Due to increased competition and only 28 US veterinary schools, getting accepted to a veterinary program has become far more

difficult than getting into some of the other medical professions. When Dr. Stokes came to CTAHR in 2009, one of the first things the energetic professor did was revive and improve the languishing club, as a step towards positioning students to nab those highly prized spaces.

The PVC offers the option of mentorship by a practicing veterinarian in the state, helping out and seeing what the daily business of caring for and healing animals entails. The club also offers tours and learning opportunities at farms and organizations such as the Hawaiian Humane Society, and hands-on activities at everything from sheep shearing and horse handling to the aforementioned suturing lab. It's not all work, either; members ride horses, bond at beach parties, and make friends with others who have similar interests.

And the club is exceeding in all of its goals: membership has more than tripled, and more and more students are getting accepted into veterinary schools. And any pigs in the Islands with ear-piercing emergencies can surely rest easier, knowing that there are plenty of aspiring veterinarians who will be able to suture them up.

For more information about the club, check out their website at http://manoa.hawaii.edu/rio/prevet/ or email prevet@hawaii.edu.

For information about CTAHR's pre-veterinary medicine program visit www.ctahr.hawaii.edu/hnfas/degrees/undergrad/preVet.html or email prevetprogram@ctahr.hawaii.edu.

Students visiting Ponoholo Ranch on Hawai'i Island to learn about beef herd breeding management.



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