Vision
The College of Tropical Agriculture and Human Resources will be the premier resource for tropical agricultural systems and resource management in the Asia-Pacific region.

Mission
The College of Tropical Agriculture and Human Resources is committed to the preparation of students and all citizens of Hawai‘i for life in the global community through research and educational programs supporting tropical agricultural systems that foster viable communities, a diversified economy, and a healthy environment.

Initiatives
• Provide an excellent and relevant student-centered learning environment.
• Create new economic opportunities through research.
• Transfer useful knowledge responsively to the community at large.
College of Tropical Agriculture and Human Resources—
REACHING OUT AND MAKING A DIFFERENCE

The number one responsibility of the College of Tropical Agriculture and Human Resources is to educate students in the many areas of tropical agriculture and family and consumer sciences. As a land-grant institution, however, our mandate goes beyond instruction to include research and extension. In fulfilling that mandate, CTAHR reaches into and makes a difference in the lives of thousands of Hawaii’s citizens every day, often in ways that people do not even know. This annual report of the college’s impact focuses on some of the programs that make a difference in the quality of life around Hawaii but are not necessarily readily identified with CTAHR.

Are you aware, for example, that the 4-H Youth Development Program is administered by Cooperative Extension Service agents from CTAHR? 4-H is a vital program throughout the state, one that helps to train youths as caring citizens and future leaders. Many communities would be at a loss without the outreach of this popular CTAHR program.

The federal government’s regulation of pesticides is a bureaucratic tangle that no one farmer can negotiate by himself. Our state’s farmers would have no access to the pesticides they need to grow healthy, abundant crops if it were not for the work of CTAHR’s Pesticide Registration Program.

On the Big Island, livestock operators have benefited tremendously over the past three years from the annual Mealani Forage Field Day and Taste of the Hawaiian Range show. The show, the brainstorm and annual labor of love of CTAHR faculty and CES agents, has helped to increase beef sales on the Big Island and has brought Hawaii range-fed beef to the attention of New York City restauranteurs.

In these pages, you will read of these and several other examples of the reach of CTAHR into Hawaii’s communities. CTAHR’s programs make a daily difference for thousands of Hawaii’s residents. The college not only trains good citizens—it is a good citizen, reaching out to form partnerships with the public and private sectors for the benefit of the entire state.

With warmest aloha,

H. Michael Harrington
Interim Dean and Director
College of Tropical Agriculture and Human Resources
University of Hawaii at Manoa
CTAHR’s web site . . .

www2.ctahr.hawaii.edu

Your link to the college and Hawaii agriculture. Visit our site often and stay informed.
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Who hasn’t seen the headlines lately? *Time* features a cover story on the newest fad diet. Obesity has reached epidemic proportions in the United States. Native Hawaiians suffer from diabetes at one of the nation’s highest levels in proportion to their numbers. CTAHR faculty clearly see that reliable information about and experts trained in diet and nutrition are urgently needed. Two related programs in CTAHR’s Department of Food Science and Human Nutrition are meeting both those needs for Hawaii. Over the past five years, nearly 5000 students have taken FSHN-185, “The Science of Human Nutrition,” a course that provides a science-based nutrition background to help students make informed choices from the vast array of foods available today. Instructors Dian Dooley, Karen Hastings, Patti Lee-Robinson, and C. Alan Titchenal have made the course one of the most popular at UH-Manoa. Each year, 10 to 20 FSHN-185 students decide to pursue studies in dietetics and move on to CTAHR’s dietetics program, the only such program in Hawaii. Under the leadership of program director Anne Shovic, the dietetics program has grown 300% in nine years. Many dietetics graduates pursue their careers in Hawaii—more than 50% of the graduates of the program since 1991 are working within Hawaii’s health care system. The impact of CTAHR’s Department of Food Science and Human Nutrition is far-reaching, indeed.
Without Kawate’s work, Hawaii’s farmers often would be hard pressed to overcome plant pest and disease problems.

Mike Kawate, camouflaged for safety, testing chemicals for use on Hawaii’s crops.

Major Work in “Minor” Crops

Consider this: in the United States a pesticide may not be legally applied to a crop unless the crop is named or described on the pesticide’s label. Because it costs hundreds of thousands (if not millions) of dollars to do the necessary safety testing to add a crop to a label, chemical companies are reluctant to spend the money to add minor crops (that is, those grown on relatively small acreages). Most crops grown in Hawaii are considered minor. What is a Hawaii farmer to do? Here’s where Michael Kawate enters the picture. Kawate, a CTAHR extension specialist, administers the U.S. Department of Agriculture’s IR-4 program in Hawaii. IR-4 provides a mechanism to register pesticides for use in minor crops and a limited amount of funding for that work. Kawate, in close collaboration with CTAHR’s statewide team of Cooperative Extension Service agents, conducts the tests that chemical companies are reluctant to conduct themselves so that Hawaii’s “minor” crops will have access to chemical protection when necessary. Without Kawate’s work, Hawaii’s farmers often would be hard pressed to overcome plant pest and disease problems and obtain the levels of yield they need to stay in business.
Helping to Lead Hawaii’s New Agriculture

They are everywhere in Hawaii— in the state legislature, on county councils, employed by the state’s large agricultural concerns, on the CTAHR faculty, on government boards, in the Hawaii Farm Bureau Federation, working for financial institutions, running their own farms, and more. They are well organized, well trained, and committed. Their ranks are growing. “They” are the 89 graduates of the Agricultural Leadership Foundation of Hawaii, a program coordinated by CTAHR extension specialist Donna Ching. ALFH was founded in 1981 to develop and support effective leaders in the agricultural industry through a multidisciplinary leadership training program. Participants are selected on the basis of demonstrated community and industry commitment to leadership. The program is designed to build on this commitment and develop a cadre of state agricultural leaders who can bring the agriculture industry together to address key issues and influence the legislative decision-making process. Through Donna Ching’s dedication and creativity, CTAHR is deeply involved in training the leaders of Hawaii’s new agriculture.
How Ya Gonna Keep ‘em in the Hotel after They’ve Seen the Farm?

At first glance, it seems an unlikely marriage, agriculture and tourism. Unlikely, maybe—but a well-developed way in many places around the world to make small-farm agriculture profitable and to encourage visitors (and their dollars) to stay longer. Although some farmers in Hawaii have been reaching out to visitors (for example, by selling them their “own” coffee trees) and CTAHR extension agents have developed agricultural fairs such as the Big Island’s “Taste of the Hawaiian Range,” agricultural tourism is underdeveloped in the state. CTAHR economist and extension specialist Kent Fleming sees “ag” tourism as an idea whose time has come. He tested his belief in August ‘99 by chairing the committee that organized, with a grant from the County of Hawaii Office of Research and Development, the state’s first-ever ag-tourism workshop. A capacity crowd of 165 attended the Kona event, and many more had to be turned away for lack of room. To meet this clear expression of widespread interest, more workshops are planned at locations around the state. The Hawaii Tourism Authority is showing active interest. Diverse businesses and commodity groups are cooperating with each other to plan a spring festival in Kona. Enthusiasm and excitement abound, thanks to this CTAHR initiative that is showing the community what it can do to help itself.

Learn more about ag-tourism in Hawaii at our web site: www.agtourism.org
The Hawaiian Range Tastes Good!

Necessity is the mother of invention, it is said. The truth of that old saw is amply demonstrated in the Mealani Forage Field Day and Taste of the Hawaiian Range food show. An invention of CTAHR’s Big Island extension specialist Burt Smith, extension agents Glen Fukumoto and Mike DuPonte, and research farm manager Milton Yamasaki, the event grew out of the necessity to convince consumers that range-fed beef can be tasty and to convince producers that there is a Hawaii market for their range-fed beef. Both goals have been met with rousing success. From 300 attendees at its start in 1996, the festival rapidly grew to 1500, one of the hottest tickets on the Big Island. Chefs now clamor to be featured. Beef producers on the Big Island have seen their markets grow, not only in supermarkets, but also in public schools and military commissaries. A major coup occurred this summer when Gaspar Tatarian, an Argentinian chef from New York, was so impressed with Hawaiian beef that he featured it in his restaurant. His highly discriminating Argentine clientele pronounced the Hawai’i product ono (well, the Spanish equivalent), on a par with Argentine beef—the ultimate compliment. Without the vision and efforts of CTAHR’s team serving Hawai’i’s beef cattle industry, the quality and value of Hawaiian beef would still be an unprofitable secret.
An Agent of Change

It was 1989, and Hawaii Island’s anthurium industry faced extinction from anthurium blight. Into the crisis walked Kelvin Sewake, a newly appointed CTAHR Cooperative Extension Service agent assigned to work with East Hawaii’s cut flower growers. Sewake was young— not “dry behind the ears” in the view of some long-time anthurium growers— but he quickly realized that communication and education were the keys to solving the growers’ problems. He had to convince the growers to change their cultural practices, and he went straight to work and did exactly that. Within three years, anthurium blight was arrested and the industry began an upward climb that continues to this day. From that auspicious start, Sewake has become indispensable to tropical flower growers on the Big Island and around the state. He advises industry organizations including the Hawaii Florists and Shippers Association, and he works closely with the Hawaii Tropical Flower Council, which represents nine commodity associations. CTAHR’s CES agents must be jacks-of-all-trades. They must be prepared to search until they find answers to any problem that faces their particular constituency. Practically speaking, the job very nearly is, as the new saying goes, a “24-7” enterprise. Kelvin Sewake’s unflagging efforts on behalf of Hawaii’s tropical flower industry qualify him as an excellent example of Cooperative Extension at work for Hawaii agriculture.
Imagine you’re a family service provider about to head out for a home visit with a new parent who is overwhelmed with the responsibility of caring for a newborn. Wouldn’t it be a blessing if you had one resource you could go to that would provide practical, easy-to-read, culturally sensitive advice to offer the parent? CTAHR’s Center on the Family has created just such a tool. The Family Resource Kit is a compilation of 92 articles that focus on nurturing and providing for young children, ages birth through five years. Each standalone article provides practical information to help families care for and nurture their children. The project, which was funded by a federal grant to Sylvia Yuen and Grace Fong, involved 18 authors and three translators. English, Tagalog, and Chinese versions have been published to make the kit as widely useful as possible in Hawaii’s multi-ethnic society. A training workshop on the use of the kit has also been developed. The kit is enjoying wide acceptance across the state and requests have come from the Mainland, American Samoa, and Canada. Plans are afoot to begin using the kit in the Philippines. The Family Resource Kit is another way CTAHR faculty have creatively and professionally responded to a community need.

The Family Resource Kit is a compilation of 92 articles that focus on nurturing and providing for young children, ages birth through five years.

The Family Resource Kit’s user-friendly format provides much needed information for Hawaii’s family service providers and new parents alike.
Three students of Asian heritage are about to graduate as CTAHR’s first Multicultural Scholars. They have been the beneficiaries of a generous scholarship program, instituted by the U.S. Department of Agriculture, that is meant to encourage diversification of the nation’s agricultural work force. Thanks to CTAHR Student Services specialist Allene Chun’s efforts to obtain funding under USDA’s competitive Multicultural Scholars Program, CTAHR has been able to offer qualifying undergraduates $20,000 to work toward bachelor’s degrees in one of the college’s majors. Over the past four years, Chun has won $260,000 in grants to fund scholarships for students of Asian and Pacific Island heritage. Five more students are due to graduate in 2001, and a new class of five will enter as freshmen in 2000, to graduate in 2004. Thirteen minority students who otherwise might not have chosen to major in CTAHR programs thus have the potential to provide leadership to Hawaii’s agriculture and human resource programs.

CTAHR multicultural scholar Lyndsey Haraguchi, with Professor Roy Nishimoto.
Going KAMP-ing

Parents of Hawaii’s kindergartners know the scene on their keiki’s first day of school: the place is big, the teacher is a stranger, “big kids” loom everywhere, organized (or sometimes disorganized) chaos reigns. What should be one of the most exciting days of a five-year-old’s life can be, instead, overwhelming and may even inhibit the child’s chances of success in school. CTAHR extension agent Carol Ikeda observed this phenomenon when her own child started kindergarten. She vowed to find a more positive way to welcome kindergartners to school. Armed with a federal grant, in 1992 Ikeda held the first session of KAMP (Kindergartners Are Most Precious) in Kona. At KAMP, parents and children come to school to spend a day before the official opening of the school year. Children and parents meet the teachers and get a feel for the school in a setting that is nurturing, loving, and safe. From that beginning in Kona, and with the enthusiastic involvement of other extension agents and 4-H volunteers, CTAHR’s KAMP program has spread across the state. In 1999, 854 keiki and 934 parents on Hawaii, Kauai, and Oahu participated. With KAMP, CTAHR has reached into communities across the state to support families and children.
What do former Hawaii first lady Jean Ariyoshi and singer Melveen Leed have in common? What do Honolulu Zoo veterinarian Ben Okimoto and state representative David Morihara have in common? All were involved in CTAHR’s 4-H Youth Development Programs when they were young. Actually, one could ask this question of people in all walks of life throughout the state of Hawaii. At this moment, in every region of the state, CTAHR’s many 4-H programs involve 30,000 of Hawaii’s youth in activities that help build a sense of community care and responsibility—and that are fun, to boot. Today’s 4-H programs include the traditional ones—livestock, family and consumer education—but also have been expanded to encompass our new high technology world. There is a program, for example, called the 4-H Technology Leadership Team in which young people with computer and telecommunications expertise teach their skills to other youngsters. 4-H emphasizes the development of leadership skills by encouraging older members to teach younger children: 4-H’ers are a vital part of the success of the KAMP program (see page 10). CTAHR’s 4-H programs help to form a lifelong habit of service that enriches the life of the individual participant and the entire community.
A Pineapple Calabash

When all the parties involved in the Pineapple Genetic Engineering Program get together, it is a varied bunch, indeed! The program, headed by CTAHR’s Ken Rohrbach, professor and chair of the Departments of Plant Pathology and Entomology, includes the public sector (University of Hawaii), the federal government (USDA Agricultural Research Service), the private sector (Hawaii Agriculture Research Center and Pineapple Growers Association of Hawaii), a California connection (DNA Plant Technologies), and it even has an international component (University of Leeds, United Kingdom). In a model of public/private, state/federal, Hawaii/Mainland, and U.S./international collaboration, all these disparate groups have worked closely over the past four years to use genetic engineering and molecular biology techniques to address the major stumbling blocks limiting the development of Hawaii’s pineapple industry: pest and disease problems, flowering control, and fruit quality. The effort is beginning to pay off. Progress has been made in developing resistance to mealybug wilt virus and nematodes and in controlling flowering. Work remains to be done, and many hands at CTAHR, as well as around the state, the nation, and the world are dedicated to its successful completion.
A Matter of ADAPtation

Q: In addition to their native Pacific Islander populations, what do American Samoa, the Federated States of Micronesia, the Northern Marianas Islands, and Guam have in common with Hawaii?

A: They all support United States land-grant colleges or universities. Also, all must adapt agricultural research and technology from temperate-climate research institutions—or create new information—for use in the subtropical and tropical Pacific. One vehicle for promoting such adaptation is ADAP (Agricultural Development in the American Pacific), a project of the U.S. Department of Agriculture attached to and administered by CTAHR. According to agricultural economist and project manager James Hollyer, “ADAP’s mission is to address common Pacific Island-based agriculture and community issues through programs that are culturally appropriate, socially acceptable, economically viable, and environmentally compatible.” One of ADAP’s most important contributions has been to establish a strong link between UH-Manoa’s Hamilton Library and the other four land-grant institutions. Another major success has been to facilitate the introduction into American Samoa of disease-resistant Palauan taro varieties, an action that saved the Samoans’ staple crop. Through ADAP, CTAHR’s reach extends to Hawaii’s Pacific Island ohana.
Early on, Hawaii’s sugar planters saw the value and reaped the benefits of a strong growers’ organization. Their successors, the farmers who are building Hawaii’s new agriculture, are learning the same lesson with invaluable assistance from CTAHR commodity extension specialists. For example, over his 15 years at CTAHR, extension specialist H. C. “Skip” Bittenbender has actively worked with grower organizations and even helped to create several of them. He effectively helped a struggling macadamia association to get back on its feet. He helped establish the Hawaii Coffee Growers Association. After that success, he was instrumental in creating the Hawaii Coffee Association, an organization that deals with coffee from “seed to cup.” Along the way, he also assisted guava growers to form an association, now absorbed into the Hawaii Tropical Fruit Growers Association. Most recently, Bittenbender has nurtured development of a Hawaii Awa Council, whose members represent the growers, processors, and “friends” of Hawaii’s revived kava industry. There is strength in numbers and economic benefit in cooperation. Hundreds of Hawaii’s farmers have profited from the impact of Skip Bittenbender’s and CTAHR’s dedication to those principles.
“Agriculture and the environment are not the entire story for CTAHR. People are the rest of the story. An educated and empowered populace is critical to the success of a modern economy.”
1999 IMPACT REPORT

Reaching Out and Making a Difference