

2012 ANNUAL REPORT



TABLE OF CONTENTS

LETTER FROM THE PRESIDENT OF THE BOARD OF DIRECTORS	3
LETTER FROM THE EXECUTIVE DIRECTOR	4
THE HEART OF THE MATTER: HEALTH IMPACT ASSESSMENT	6
FOOD SELF-RELIANCE	
Cultivating a Sustainable Future: <i>Hawai'i Island School Garden Network</i>	9
School Garden Spotlight: <i>West Hawai'i Explorations Academy</i>	11
Self-Reliance Is Serious Business: <i>The Lualaba Center for Cooperative Business Development</i>	13
So They Can Reap What We Sow: <i>Hawai'i Public Seed Initiative</i>	15
ENERGY SELF-RELIANCE	
We've Got the Power: <i>County of Hawai'i Energy Sustainability Program Five-Year Roadmap</i>	18
ECOSYSTEM HEALTH	
Starting from the Top: <i>Kohala Watershed Partnership</i>	21
Turning the Tide: <i>Kahalu'u Bay Education Center</i>	23
EDUCATION	
Our Island Classroom: <i>Place-Based Learning Opportunities</i>	27
Our Island Classroom Spotlight: <i>Sapphire Spinner Project</i>	29
Leading Teachers: <i>Frameworks for Success in Science</i>	30
INTELLECTUAL LEADERSHIP	
Fostering Intellectual Leadership: <i>Mellon-Hawai'i Doctoral and Postdoctoral Fellowship Program</i>	33
OPERATIONS	
Buttoning Up: <i>Administrative and Financial Reports</i>	37
It's the People: <i>Staff Profiles</i>	39
THE KOHALA CENTER'S BOARD AND SENIOR STAFF	47
PHOTO CREDITS	48



LETTER FROM THE PRESIDENT OF THE BOARD OF DIRECTORS

It is a pleasure to share the impacts and achievements of The Kohala Center's twelfth year of operations in this Annual Report.

We have come a long way from our humble beginnings: our first-year operating budget was \$7,500. Our organization grew quickly—at times we thought perhaps too quickly—and so we have invested much time and energy in the past two years to streamline our organization, more clearly define our programs, recruit and hire exceptional talent, and upgrade our internal finance and technology infrastructures. With an operating budget of \$3.2 million this past fiscal year, we are today a highly productive, independent academic institute with focused programs, a hardworking team of 25 full- and part-time employees who work with 20 consultants, hundreds of tireless and passionate volunteers, and an ever-growing list of accomplishments and quantifiable contributions to our island, our state, and beyond.

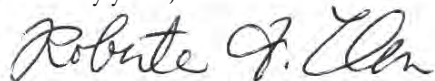
Our hard work, both internally and externally, has paid off: we were honored to be named as the 2012 winner of the Small Business Success Award in the Nonprofit Category by Hawai'i Business magazine. Editor Steve Petranik wrote, "Our independent judges picked The Kohala Center because they felt it is a well-run and effective nonprofit. We agree. [Executive Director] Matt Hamabata and the center are doing great work for the people of Hawai'i Island, and some of those ideas have been adopted statewide. That's an excellent record for such a young organization."

While such accolades are certainly validating, what matters most to us is listening to—and responding to the needs of—our island's natural and human communities. We have proactively worked to fill voids not being addressed by the public sector, not as a renegade leader, but as a facilitator that empowers citizens, businesses, government, community leaders, and benefactors to be the solution collectively.

In the pages that follow, we share the highlights and celebrate the successes of our programs this past fiscal year. While we are proud of our accomplishments, we are keenly aware that our success would not be possible without support and input from our donors, partners, educators, *kūpuna* (respected elders), staff, and consultants, but most importantly, the residents and community leaders of this amazing island we call home.

As has been the case since Day One, we are here not to preach, but to listen. Listening is the key to our comprehensive, systemic, and collaborative approach to addressing critical issues, identifying opportunities, and working toward positive outcomes. On behalf of the leadership, staff, and volunteers who power The Kohala Center, we welcome your input, comments, and ideas. Mahalo for your support of our work, our *āina* (land), and continued improvement of the quality of life in our communities.

Sincerely yours,



Roberta Fujimoto Chu

President, Board of Directors, The Kohala Center



LETTER FROM THE EXECUTIVE DIRECTOR

This whole experience feels like magic to me.

Twelve years ago, when island leaders asked me to review the curious results of a health survey—in which residents asked for education, *more* education, and a diversified economy as the very best ways to address critical health issues on the island—I was astounded by their insights and ambitions. And when Native Hawaiian leaders proposed that we move forward by building greater educational and employment opportunities by caring for—and celebrating—Hawai‘i’s spectacular natural and cultural landscapes, I was moved by their clarity and bold creativity.

Fast-forward to the present, and The Kohala Center is now an organization focused on energy self-reliance, food self-reliance, and ecosystem health. In the last year, we’ve worked closely with the County of Hawai‘i to design a sustainable energy program with the potential to save taxpayers millions of dollars. We’ve worked with over 100 agricultural businesses, assisting them in building cooperatives, gaining them access to business planning services, and securing \$2,900,000 in funds to support our local food system. In the area of ecosystem health, ReefTeachers at Kahalu‘u Bay made contact with over 39,000 visitors, educating them in ways to enjoy the bay while at the same time protecting its fragile coral reef. And through the tenacious work of the Kohala Watershed Partnership, 8,000 native plants have been outplanted, and 3,500 acres of land in North Kohala have been surveyed to significantly reduce the infestation of *Rauvolfia vomitoria*, a noxious, invasive tree.

We’ve created jobs and boosted the local economy. At The Center alone, we now have 20 full-time and five part-time employees, working with approximately 20 independent contractors in knowledge-rich fields such as expert fence-building, marine biology, public policy, curriculum design, geohydrology, geographic information science, Hawaiian cultural praxis, forest ecology, and microeconomics. A recent University of Hawai‘i study indicates that all this good work drives our local economy: at Kahalu‘u Bay, for example, every dollar invested in research and education generates two dollars in local business activity.



To ensure that island youth qualify for the jobs we are creating, we support science, mathematics, and environmental education in Hawai‘i Island schools, reaching 7,000 students last year. They are learning in 63 school gardens. They are learning by being

environmental educators at Kahalu‘u Bay. They are learning by conducting their own research on ecosystem health—right in the forests and the ocean. The island is their classroom!

We’ve also invested in Native Hawaiian scholars and others committed to the advancement of knowledge of the Hawaiian natural and cultural environment, Hawaiian history, politics, and society. Since 2008, the Mellon-Hawai‘i Doctoral and Postdoctoral Fellowship Program has supported 20 scholars with roots in the islands to complete their dissertations or manuscripts. These are tomorrow’s intellectual leaders who will preserve and carry forward our islands’ historical, cultural, and ecological knowledge for generations to come.

Yes, it feels like magic, but honestly, it’s the result of hard work and dedication powered by support from people like you. For believing in us, we thank you! Your support enables our critical work—and inspires great hope—for our island planet’s future. *Mahalo nui loa.*

Sincerely yours,

A handwritten signature in black ink that reads "Matt Hamabata". The signature is fluid and cursive, with a long horizontal line extending from the end of the name.

Matthews M. Hamabata, Ph.D.
Executive Director, The Kohala Center



THE HEART OF THE MATTER

HEALTH IMPACT ASSESSMENT

Twelve years ago, The Kohala Center was founded as a result of concerns expressed by island residents about the health of our society. (To read more about our founding history, visit <http://www.kohalacenter.org/founding.html>.) The approach developed by island leaders to resolve those challenges—that is, to create *‘āina*-based programs for community well-being—was systemic and foundational. Our development of a comprehensive, collaborative Health Impact Assessment (HIA) this year speaks directly to this strategy.

In collaboration with Kaiser Permanente Center for Health Research and the Hawai‘i Department of Agriculture, the HIA details the potential impacts of increasing local commercial food production, promoting farm-to-school procurement, and expanding school, community, and home food production. The HIA was made possible with funding from the Health Impact Project, a collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts. An Executive Summary and the full report are available for download at <http://www.kohalacenter.org/research.html>.



The HIA emphasizes the importance of greater island food self-reliance to community well-being. Some key recommendations from the report include:

- Modifying Hawai‘i State procurement practices to facilitate purchase of locally produced foods for school meal programs and other government institutions;
- Promoting agricultural career pathways at the high school and college levels;
- Making the purchase of fresh local food more convenient in rural areas by increasing acceptance of EBT and credit cards at island farmers markets;
- Increasing local food-processing capacity through public-private partnerships.

The HIA analyzes how the 2010 Hawai‘i County Agriculture Development Plan’s recommendations on institutional buying, commercial expansion of food agriculture, and home production each would affect food security, obesity rates, food-borne illness, economic growth, and cultural connectedness. Its key findings indicate that to maximize health benefits and minimize health risks to Hawai‘i Island residents, there needs to be an expansion of farm-to-school programs, an increase in production of fresh food for the local market, and a promotion of home, school, and community gardening. The report cites research which links the employment that will result from expanded agricultural production on the island to better family well-being and food security outcomes.

“We found that increasing local food production and providing some of that fresh food to our school lunch programs would have positive economic impacts and direct health benefits. For example, shaping children’s preferences for healthy food and making more fresh fruits and vegetables accessible to all island residents could lead to lower rates of obesity and associated chronic diseases.”

Betsy Cole, Deputy Director, The Kohala Center, and report co-author

With the publication of the HIA, Hawai‘i’s legislative and regulatory decision-makers have essential information to positively impact the socio-economic and physical health of Hawai‘i Island residents when implementing the County’s agricultural plan.

In turn, the HIA underscores much of the critical work in which The Kohala Center is engaged. Programs such as the Hawai‘i Island School Garden Network, the Hawai‘i State Public Seed Initiative, the Laulima Center for Cooperative Business Development, and our new Beginning Farmer-Rancher Development Program move our future generations toward a healthier, more self-reliant existence.



FOOD SELF-RELIANCE



“With over 85% of Hawai‘i’s food imported from outside the state, there are many reasons why we must improve and increase the output of our local food system. By training new farmers, promoting school gardens as a means to teach future generations about agriculture and nutrition, and helping rural businesses form and succeed, The Kohala Center takes a comprehensive, yet practical, approach to moving our island toward greater food self-reliance.”

*Nicole Milne
Agricultural Business
Development Specialist,
the Laulima Center*

CULTIVATING A SUSTAINABLE FUTURE

HAWAI'I ISLAND SCHOOL GARDEN NETWORK

In October 2007, over 300 Hawai'i Island residents—many of them farmers—gathered for two days to discuss the results of a food-systems study conducted by the Rocky Mountain Institute in collaboration with The Kohala Center. In addition to learning that over 85% of the food that we consume on the island is imported, residents and leaders participated in discussions about supply and demand channels, transaction costs, input costs, and the distribution infrastructure. Wanting to move forward in an immediate and practical manner, the group voiced a need for support for school gardens as a way to garner community interest in strengthening the local food system, and to inspire future generations to learn about and embrace agriculture.

We listened. And in 2008, The Kohala Center, with generous support from the Ulupono Initiative, launched the Hawai'i Island School Garden Network.

The Hawai'i Island School Garden Network addresses and combines several of The Kohala Center's goals. By working with teachers to integrate core subjects such as science, nutrition, social studies, language arts, and math with meaningful learning activities in an outdoor setting, students are engaged in interesting, fun, hands-on educational experiences, deepening and increasing the likelihood of retaining knowledge. By educating future generations about agriculture and food production, the program moves the island—and state—closer to food self-reliance. Finally, students gain a more direct awareness of and connection with the food they and their families consume, which over time could lead to healthier nutritional choices and lifestyles.



In just four years, the Hawai'i Island School Garden Network now supports:

- School gardens in 63 out of the 74 public, public charter, and independent K-12 schools on Hawai'i Island;
- Educational efforts in agro-ecology that reach over 6,200 children and youth on Hawai'i Island;
- The cultivation of over 22 acres of fruits and vegetables at school gardens;
- The production of over five tons of fruits and vegetables in the eight gardens that weighed their food production;
- The distribution of \$350,000 in mini-grants to 70 Hawai'i Island schools since 2008;
- Eat-Think-Grow: A garden-based nutritional education program launched in 2012 for teachers and families;

- Ku ‘Āina Pa: A year-long professional training program launched in 2012 for educators in school learning gardens that offers six PDE3 credits through the Hawai‘i State Department of Education;
- Technical assistance for schools in the form of consulting, identifying funding opportunities, volunteer development, grant writing, locating island resources, professional development, media relations, and event planning; and
- Spring School garden tours that are free and open to the public.

“School gardens reconnect our children and youth to the source of their food, expand their nutritional knowledge, and increase their environmental literacy. Our island schools become centers for food production and for educational opportunities that serve our school communities and beyond.”

*Nancy Redfeather, Hawai‘i Island School Garden Network Coordinator,
The Kohala Center*



The Hawai‘i Island School Garden Network has helped spark a statewide “farm-to-school” movement, in which local families are voicing their strong interest in having healthy, fresh, locally grown food served to students. This is an especially important health initiative since over 60 percent of Hawai‘i public school students have most of their nutritional needs met through school meals. In response, the Hawai‘i Island School Garden Network also:

- Convenes a statewide coalition of garden networks, community organizations, and state agencies called the Hawai‘i Farm to School and School Garden Hui;
- Works with the Hawai‘i State Department of Education School Food Authority to advocate for the serving of healthy, fresh food in schools;
- Works with the Office of Child Nutrition to improve the USDA Fresh Fruit and Vegetable Program in 28 schools on Hawai‘i Island; and
- Serves as a participating member of the Hawai‘i School Garden Task Force, organized by the Department of Health, to consider policy improvements that would allow the Department of Education to procure fresh, locally grown food, and expansion of and support for school gardens statewide.

SCHOOL GARDEN SPOTLIGHT:

WEST HAWAI'I EXPLORATIONS ACADEMY

West Hawai'i Explorations Academy (WHEA) is a public school serving students in grades 6–12, founded 18 years ago on a vision of innovation and invigoration of public education. WHEA integrates its curriculum into science projects that encourage students to participate in hands-on activities. Students also gain practical skills to solve problems in the real world. The school's gardening and agriculture projects have expanded significantly in the last five years.

WHEA teachers help students develop garden-based project ideas and advise them on their gardening activities. Currently, WHEA students are experimenting with using deep-ocean water (provided by neighboring Natural Energy Laboratory of Hawai'i Authority, or NELHA) to chill the soil, growing plants in hydroponic and aquaponic systems, using various organic fertilizers such as compost tea, and growing medicinal plants and plants that attract butterflies. These projects give students hands-on opportunities to grow various vegetables, fruits, herbs, and flowers.

One objective of the gardening and agriculture projects is simply to expose students to working with plants. Students also gain an intimate knowledge of scientific methods as they develop problem statements and hypotheses, conduct experiments, collect and analyze data, and draw conclusions. Students learn about natural cycles as they create living systems. Further, as they write topic papers and lab reports, they develop their writing, reading, and research skills. WHEA students strengthen their oral communication skills when they present the results of their science projects to over 1,000 elementary school students who visit each year as part of the school's Aloha Kai tours.

"Given that the Big Island imports nearly 90% of its food, current and future generations have been tasked with developing on-island agricultural projects to make the island more self-sufficient," explains WHEA teacher Ben Duke. "As part of their gardening projects, our students learn about where their food comes from, how to prepare fresh produce, and how they feel after eating fresh vegetables."

Each project has a mentor from the community. Through their mentors, WHEA students draw upon the expertise of The Kohala Center's Hawai'i Island School Garden Network, the Kona Outdoor Circle, 'Ohana Greenhouse, Friendly Aquaponics, Coastview Aquaponics, Dew Point Systems, One-Island Sustainability Center, and the University of Hawai'i's College of Tropical Agriculture. Mentors give students feedback on the experimental design of their projects and help students troubleshoot problems that arise in the course of their projects.

The WHEA Middle School's Ethnic Gardens were founded in 2008, with the aim of making students more aware of their diverse ethnic backgrounds. Students implement the concepts of permaculture as farmers of their own group plots. Under the guidance and mentorship of teachers and community experts, students apply the ideas of recycling, reusing, and renewing to the production of food in their school garden. Students design and build their garden plots, using ecologically sound methods such as heavy mulching, trellising/companion planting, and using bio-waste products from neighboring mariculture businesses at NELHA (such as fish waste, abalone shells, and algae) to make their own fertilizer. They also attempt to recapture



water from air with devices such as solar stills, catchment tanks, and simple condensate chillers utilizing the school's access to cold seawater, to supplement use of county water. Students use simple photovoltaic devices, such as homemade solar cookers, and other off-grid technologies and techniques to help with irrigation and processing of food grown in the gardens.



“Our middle school students are excited about growing food,” says WHEA Middle School teacher Sara Medeiros. “They tell their parents about what they have learned and share some of the produce that makes its way home. The Ethnic Gardens, especially, provide a jumping-off point for students to discuss their ancestry with their parents.”

Here’s what some of Medeiros’ students had to say about their Ethnic Gardens experiences:

“I chose the Americas garden because my ancestry is from Mexico. I like to feel that proud feeling when a plant grows.” —Gigi

“I picked the Africa garden. It’s great because you learn how to help save the Earth.” —Alana

“Our Polynesian garden is doing very well. We have taro, bananas, gourds, sweet potatoes, papayas and liliko’i. We work together to make our garden stay healthy.” —Shione

WHEA students maintain online photo journals to document their work. Visit <http://eatlocal101.blogspot.com>, <http://gotsalsa.blogspot.com>, and <http://eatlocalplantsskylerbailee.blogspot.com> to visit the fruits (and vegetables) of their labor.

SELF-RELIANCE IS SERIOUS BUSINESS

THE LAULIMA CENTER FOR COOPERATIVE BUSINESS DEVELOPMENT

Greater self-reliance for Hawai'i depends on solid, local infrastructure that can produce energy, food, and other necessities here at home, while conserving and nurturing our natural resources. Recognizing that businesses don't just sprout up overnight—and that rural businesses face unique challenges and limited resources—we founded the Laulima Center in 2011, to support the development of cooperative and agricultural businesses through technical assistance and consulting services. Through a Rural Cooperative Development Grant—the first of its kind ever awarded in the state of Hawai'i—from the U.S. Department of Agriculture, as well as additional support from the Ulupono Initiative, the Laulima Center serves all sectors of our rural economy.

Concerns about food security in our remote island chain and the “farm-to-table” movement have spurred increased interest in strengthening the local food system by ensuring that local farms can supply the potential demands of consumers and institutional buyers, such as schools. The Laulima Center fosters the development of agricultural businesses by providing cooperative business education, organizational development, strategic planning, business planning, market analyses, capitalization strategies, legal assistance, and conflict resolution. Since opening its doors, the Laulima Center has:

- Served more than 100 agricultural businesses;
- Assisted with the incorporation of six cooperative ventures, with four more co-ops in the process of incorporation;
- Helped six farmers markets accept Electronic Benefits Transfer (EBT), thus expanding a new market segment of low-income customers, increasing access to local, healthy food, and boosting farmers' income potential;
- Co-produced an integrated pest management educational video and hosted a workshop with an international expert to help coffee farmers struggling with the devastating coffee berry borer beetle's economic impact.

“Co-ops offer many potential benefits to island farmers. Farmers who don't want to build markets on their own or who don't have enough produce from their individual farms can band together in a cooperative to market their produce. Cooperative structures also provide opportunities for farmers to share heavy equipment, to purchase supplies, and to collaboratively process produce into value-added products. For island farmers who lack a local source of safe chicken feed or affordable fertilizer, cooperative structures can provide a means to purchase supplies less expensively or think through ways to produce these inputs locally.”

Melanie Bondera, Rural Cooperative Development Specialist, the Laulima Center

Some of the initiatives served by the Laulima Center include:

- Converting a vacant macadamia nut processing facility in Hāmākua into a certified food processing, packing, and storage facility that meets food safety requirements of Hawai'i's retail grocers;



- Developing a cooperative on Maui that brings together farmers, ranchers, hunters, and USDA inspectors to harvest invasive axis deer. The co-op's activities protect agricultural lands, create an additional income stream, and provide locally sourced protein for island residents;
- Revitalizing abandoned irrigation systems in Ka'ū through the development and incorporation of water co-ops comprised of regional farmers;
- Securing USDA and County of Hawai'i grant funds to create *Ku I Ka Mana*, a beginning farmer and rancher training initiative that will begin in early 2013. The program will train new farmers and help them develop business plans, secure farm leases, gain access to farm equipment and materials, and successfully produce, market, and distribute their crops;
- Consulting with several statewide groups working to revitalize their *loko i'a* (traditional Native Hawaiian ocean fishponds), and investigating the potential for establishing community-supported fisheries so that fish can be marketed regionally beyond the local *ahupua'a* (traditional Hawaiian mountain-to-sea land divisions);
- Assisting with the formation of a Native Hawaiian tea growers' cooperative and securing funds for tea processing technical assistance.



Listening to the needs expressed by new and existing businesses it serves, the Laulima Center added an additional service in December 2011: Assisting small-scale food producers, processors, and distributors in applying for grants and loans. In the first year of offering this service, \$2.9 million has been secured to support Hawai'i's local food system, with an additional \$300,000 in grants pending.

By fostering the creation of financially sustainable, locally owned cooperative businesses, the Laulima Center brings our island closer to building a more resilient economy.

SO THEY CAN REAP WHAT WE SOW

HAWAI'I PUBLIC SEED INITIATIVE

In 2010, a group of 110 farmers and gardeners from across the state of Hawai'i assembled in Kailua-Kona for the "Hua Ka Hua - Restore Our Seed" Public Seed Symposium. The Kohala Center, the University of Hawai'i at Mānoa and Hilo, and the Organic Seed Alliance and its university partners collaborated to create and host this symposium, the first of its kind in the state.

This landmark event renewed relationships between university researchers and professors, experts from the continental U.S., and farming and gardening communities across the state. Further, the event rekindled fundamental relationships between farmers and gardeners through on-farm seed production, as well as embedded awareness of food security issues in the group's collective consciousness. In seeking new paths toward a more diversified and healthier agricultural future for Hawai'i, the importance of creating locally adapted seed for home production, market production, and value-added niche crops as part of a diversified agricultural cycle of production becomes critical.

A statewide Seed Working Group and a new program spearheaded by The Kohala Center and funded by Ceres Trust emerged: The Hawai'i Public Seed Initiative. Launched in the fall of 2011, the Initiative delivered two-day workshops over two years on the islands of Hawai'i, Maui, Moloka'i, O'ahu, and Kaua'i.

The first round of workshops focused on introductory seed biology. Beginning seed production techniques were demonstrated through instruction on how to grow, harvest, and save varieties of lettuce and wet-seeded crops. Led by experts and educators from the University of Hawai'i-Mānoa College of Tropical Agriculture and Human Resources Extension, various botanical gardens, and producing farmers, the two-day workshops included both lecture presentations and hands-on fieldwork, allowing participants to practice harvesting, cleaning, and storing fresh seed. Discussions also focused on strategies to account for differences in elevation, weather patterns, and rainfall.



The next logical step in the seed-saving process is distribution, so the Initiative also promotes seed exchanges. To date, such exchanges have been facilitated on Hawai'i Island and Kaua'i, allowing farmers and gardeners to come together to share and trade different varieties of fruit and vegetable seeds and cuttings to diversify their crops, as well as to ensure continued proliferation of productive plant species.

Future goals of the Public Seed Initiative include one “Train the Trainers” Workshop for participants from each island in 2013, with the goal of furthering seed production education and promoting sustainable seed networks on each island.

“Open-pollinated seed is being lost at a rapid rate. In the United States, 95% of varieties that were grown in 1900 are no longer available today. By learning to save seed, farmers and gardeners can help to halt the loss of diversity in our food supply experienced over the last century.”

Lyn Howe, The Kohala Center and Hawai'i Public Seed Initiative



THINK SEED SAVING

BY LYN HOWE, HAWAII PUBLIC SEED INITIATIVE WORKSHOP COORDINATOR

Today, chefs at some of the trendiest restaurants in Hawai'i are taking a “step backward in time.” Their menus now feature heirloom varieties of vegetables grown by local farmers. Who wouldn't be enticed by such mouth-watering varieties as a “Jaune Obtuse Du Doubs” carrot, a “Sweet Antigua” pepper, or “Grandma Oliver's Green” tomato? All seem to conjure up images of home gardens, lush and abundant with colorful, full-flavored vegetables grown from seed that was saved and passed on from generation to generation. These “old-time” varieties came from every corner of the earth and were circulated around the globe. Precious as gold, open-pollinated seeds were carefully maintained and selected by farmers and home gardeners, resulting in varieties that were adapted to grow well in many climates and environmental conditions. For instance, a tomato variety from Siberia would very likely do well in the cool, short summers of Alaska.

Today, only a handful of these seeds exist. The scale of this loss is astonishing: 307 varieties of corn existed 80 years ago, now only 12 varieties remain; tomato varieties have dwindled from 408 to 79; peas from 408 to 25; and the list goes on.

How can this continuing, tragic loss of diversity to our food supply be halted? One way that is fun and rewarding is to LEARN TO SAVE SEED! This may sound easy: just grab a few seeds from that squash you bought at the market and plant them—*voila*...oops, it looks and tastes like a gourd! Yes, there are some tricks to the trade of seed saving that are important for success. These are the focus of the Hawai'i Public Seed Initiative.

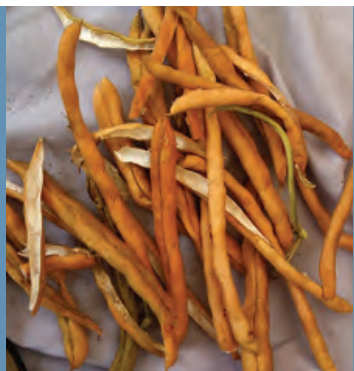


Photo (L): Green beans drying for seed harvesting later.
Photo (R): Jacob's Cattle Bean harvest.

ENERGY SELF-RELIANCE



“Energy costs more in Hawai‘i than in any other state in the country, and Hawai‘i Island’s rates exceed the state average. This creates a significant financial burden on our agricultural producers, small businesses, and our low-income households. Yet Hawai‘i Island has an abundance of sustainable, renewable energy sources that could lessen our dependence on imported fossil fuels. Our collaborative partnerships with the County of Hawai‘i, researchers, and consultants are yielding recommendations and pathways that could move our island society toward greater energy independence.”

Dr. Elizabeth Cole
Deputy Director, The Kohala Center

WE'VE GOT THE POWER

COUNTY OF HAWAI'I ENERGY SUSTAINABILITY PROGRAM FIVE-YEAR ROADMAP

According to U.S. Department of Energy data, the state of Hawai'i has the highest electricity rates in the country. A report by the Center for Industrial Ecology at the Yale School of Forestry and Environmental Studies indicates that Hawai'i Island households spend roughly 6% of their income on electricity, or nearly three times the national average of 2%. Energy prices on Hawai'i Island are an even greater burden for low-income households, who spend, on average, more than 15% of their income on electricity.

	Hawai'i Island	O'ahu	State
Median Income (2009)	\$50,739	\$67,019	\$63,741
Low-income households (2009)	23.7%	15.4%	16.8%
Electricity price (2010)	37¢/kWh	29¢/kWh	-
Income spent on electricity for low-income households	15.2%	13.5%	14.2%



To bring energy prices down and put our island on a course toward greater energy self-reliance, we must, as an island society, identify ways of reducing dependence on energy in general. We must also harness more of the untapped energy resources available here on Hawai'i Island, thus reducing the demand for imported petroleum fuels.

Though many of the key decisions that affect Hawai'i Island's energy future are made at the state level, The Kohala Center, under the direction of the County of Hawai'i Department of Research and Development, produced a draft County of Hawai'i Energy Sustainability Program Five-Year Roadmap. The Roadmap, available for download at <http://kohalacenter.org/research.html>, recommends County actions that will save significant taxpayer dollars, while empowering the County government to lead by example in the transition to energy sustainability. Successful implementation will position Hawai'i County to assume a proactive leadership role for Hawai'i Island residents at critical state-level energy policy proceedings, including those of the Public Utilities Commission (PUC) and the Hawai'i State Legislature.

“Despite the successes of the past 30 years, today [Hawai'i Island] remains overwhelmingly dependent on imported petroleum fuels. The citizens of the island have a compelling interest in eliminating this dependence due to the instability of the petroleum markets, the insecurity of imported energy, the danger of a crippling environmental or natural disaster, and more recently, the high and volatile price of petroleum products.”

County of Hawai'i Energy Sustainability Program Five-Year Roadmap

The Energy Sustainability Roadmap also updates the County of Hawai'i Energy Baseline study, which was sponsored by The Kohala Center in 2006. Key among the Roadmap's findings is that electricity only accounts for 15% of the total energy consumption on Hawai'i Island. Among its other findings:

- Hawai'i Island produced more electricity in 2011 from renewable sources—37%—than any other island in the state.

- More than half (52%) of all energy consumed on the island is used in the transportation sector. This includes, on average, consumption of more than 200,000 gallons of gasoline per day.
- About 24% of the island's energy supply is lost during conventional electricity generation, transmission, and distribution.
- Other petroleum-based fuels for residential, agricultural, and commercial/industrial applications account for the remaining 9% of energy supply.
- Overall, 95% of the island's total energy needs are met with imported petroleum fuels.
- Hawai'i Island possesses abundant—yet untapped—solar, wind, geothermal, hydroelectric, and bioenergy resources. Collectively, these renewable energy resources far exceed the island's total energy needs. The technologies required to harness these resources are commercially available today and, in most cases, the cost of deploying these technologies is below the current cost of petroleum-based energy production.



The Roadmap recommends that Hawai'i County fund a comprehensive mass transit plan, establish a revolving fund from energy cost savings for reinvestment in future energy efficiency and renewable energy projects, and provide enough resources to County energy staff to implement progressive energy policies and practices in its own operations.

ECOSYSTEM HEALTH



“There is great satisfaction in seeing that ‘light bulb’ switch on when people make the connection between the land and the sea. But there is still much work to do in educating the public that what we do on our mountains and to our *‘āina* washes downhill into our streams and ultimately to the ocean. Our work to restore the ecosystem on and around Kohala Mountain, and to protect fragile corals and marine life on the leeward coast of Hawai‘i Island, will ensure our future generations can enjoy this island’s natural beauty while benefiting from the abundance it provides.”

Cody Dwight

*Field Operations Technician,
Kohala Watershed Partnership*

STARTING FROM THE TOP

KOHALA WATERSHED PARTNERSHIP

Given that our islands are peaks of a vast, undersea mountain range, addressing ecosystem health in Hawai'i starts at the mountaintops, for what happens uphill inevitably works its way down. Deforestation, urban development, pesticides, and the introduction of non-native plant and animal species have all had dramatic and detrimental impacts on our rain forests, ground cover, soil quality, and native flora and fauna. And when the rains come, the consequences of these human activities flow downhill and downstream, adulterating our water supplies, farmlands, and ultimately the ocean that surrounds us and the marine ecosystems beneath its surface.

By working proactively and collaboratively to restore our watersheds, the Kohala Watershed Partnership (KWP) is slowly but steadily having positive impacts. Bringing together the goodwill and skills of private landowners, *ali'i* (royal) trusts, non-governmental organizations, and government agencies, KWP continues its vital work in sustaining the forests and the water of Kohala Mountain. The Kohala Center is KWP's fiscal partner.



Kohala Mountain is home to a number of unique plant and animal species found nowhere else in Hawai'i or the world. Curbing the impacts of deforestation and introduction of non-native species is critical to their survival and to the overall health of the mountain's ecosystem. With a full-time staff of three, over 330 volunteers, and partners such as the State of Hawai'i, Parker Ranch, Ponoholo Ranch, and The Nature Conservancy, KWP has:

- Planted over 8,000 native plants, representing about 30 different species, and established a fenced preserve for—and multiplied by seven times—the wild population of *'oha wai* (*Clermontia singuliflora*), a bellflower once thought extinct;
- Worked to restore the coral reef habitat of Pelekane Bay, on Kohala Mountain's leeward shore, by planting native vegetation to reduce erosion and mitigate the amount of sediment being carried into the bay;
- Facilitated twice-monthly volunteer workdays on Kohala Mountain to remove invasive plant species, plant native ones, and survey the progress of species rejuvenation;
- Assembled the "Ginger Ninja," a team of four Hawai'i Island high school students selected for paid internships in the summer of 2012 to control the spread of invasive kahili ginger on Kohala Mountain;
- Inspected and repaired miles of fencing, controlled feral pigs, and monitored rare native flora and fauna populations; and

- Worked with educators and students at twelve Hawai'i Island schools and colleges to address a range of science topics that meet State educational standards, while also providing opportunities for environmental stewardship.

The dedication of a small but passionate staff, volunteers, landholders, and community members is helping to steer Kohala Mountain back to health. The Kohala Watershed Partnership is yet another shining example of diverse constituents working together to make a positive difference on Hawai'i Island.

"There is almost a sigh of relief from the native plants in areas where we have removed non-native plants and feral animals. The understory plants are starting to fill in the bare ground, or are beginning to emerge from beneath the dense carpet of alien grasses. It is a slow process, but steadily the forest will recover into a healthy, functioning state."

Melora Purell, Kohala Watershed Partnership Coordinator



TURNING THE TIDE

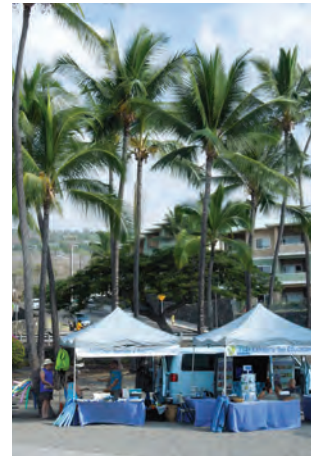
KAHALU'U BAY EDUCATION CENTER

Since 2006, when The Kohala Center adopted the ReefTeach volunteer program started by University of Hawai'i Sea Grant extension agent Sara Peck, our staff and hundreds of volunteers have helped to educate visitors on how to take care of the coral reef at Kahalu'u Bay. Approximately 400,000 visitors come to Kahalu'u yearly, attracted by the shallow waters, easy access to the bay's dynamic reef environment, and ideal snorkeling conditions. Many of these visitors, however, were unknowingly trampling the live corals and killing them. ReefTeach volunteers educate roughly 39,000 of these visitors annually on the beach and in the water. Today, thanks to the dedication, tenacity, and warmth of these volunteers, there is a decrease in coral trampling; coral polyps are growing back, and fish populations are increasing. In 2008, a purple, heart-shaped cauliflower coral appeared in the bay. We like to think this coral is the bay's way of saying "Mahalo."

With the support of our partners at the National Oceanic and Atmospheric Association, Hawai'i Tourism Authority, and Kamehameha Investment Corporation, The Kohala Center assumed responsibility for the ReefTeach program at the bay and began recruiting volunteers from the community, schools, and local businesses to help educate visitors on proper reef etiquette. Other programs emerged in response to the expressed wishes of the community, including: "La 'Ike Day at Kahalu'u Bay," a day of hands-on workshops bringing together regional science and cultural experts; a "Train the Trainer" program that teaches tour and recreation companies about best practices, or "reef etiquette," so they can educate their customers when conducting their own programs; and Citizen Science, a program backed by the U.S. Environmental Protection Agency and Natural Energy Laboratory of Hawai'i Authority, that recruits and trains volunteers and students to collect, analyze, and record water samples to monitor the bay's health.

One program in particular, "Lawai'a 'Ohana: A Sustainable Fish Camp for Families," brings together families from around the island to learn about traditional and sustainable approaches to preserving and managing Hawai'i's marine life. Through in-class and hands-on training experiences, campers are introduced to *mauka-makai* (mountain-to-sea) resource relationships and management principles including monitoring water quality and caring for coral reefs. Participants learn how to identify fish, make and use throw-nets, prepare and rig bamboo poles, and clean and cook the fish they catch. Traditional skills, such as basket weaving and how to store freshly caught fish in hand-woven baskets in order to preserve their freshness, are also taught. At the end of the first Lawai'a 'Ohana, several parents expressed a desire for greater community stewardship of fish populations. Through active listening and collaborative, creative discussion, The Kohala Center developed a *Spawning Guide for the Leeward Coast of Hawai'i Island*. A full-color poster rich with pictures and information, the Spawning Guide teaches youth, community members and visitors how to fish more responsibly, thus preserving Hawai'i's precious ocean resources. A companion website, downloadable version of the Spawning Guide, and possible mobile app are planned for release in 2013.

Given the volume of significant and useful data being collected by ReefTeach and Citizen Science volunteers, The University of Hawai'i at Mānoa and its research agency partners, in a project funded by the National Science Foundation, developed an online Portal allowing for



entry of water, weather, and cultural information. The Portal and its data help scientists, staff, volunteers, and residents track and understand the freshwater cycle in the Kahalu'u ahupua'a (mountain-to-sea land division), as well as social-ecological concerns such as visitor impact on coastal resources, long-range sustainable development, and the effectiveness of coral reef and biodiversity conservation efforts.

Clearly, Kahalu'u Bay became a focal point of success for The Kohala Center's staff, volunteers and partners over the years, with education efforts paying off in rejuvenating the sensitive reef ecosystem, monitoring and improving water quality, and alleviating overfishing. But the community's beloved Kahalu'u Beach Park and its facilities were also suffering from age and neglect. And while hundreds of volunteers, visitors, and several homeless people who frequent the park invested time and energy to make repairs and repaint the main pavilion, the Park needed a plan for the future.



For a week in 2008, through the collaborative sponsorship of The Kohala Center and the County of Hawai'i Planning Department, and with the support of the Keauhou Beach Resort and numerous other Kona individuals and organizations, a group of five University of Washington (UW) landscape architecture students and their professor, Iain Robertson, engaged the Kona community in a design charrette to create a master plan for Kahalu'u Beach Park. Community members were invited and encouraged to express themselves and imagine a park that embraced their wishes. UW landscape architect students evaluated the information they gathered from the community meetings, and created a dynamic master plan that embodied the community's vision. The team captured the highest hopes of the community to restore this special place in the heart of Kona, in a *pono* (respectful, balanced) planning process that serves as a model for engaged, empowered communities.

"My passion to restore this park is due largely to the *kūpuna* that have passed on... many giving their time to share with experts their thoughts on how to take care of this sacred, life-giving place. It has been my desire for many years to help bring back the respect, ambiance, and beauty of Kahalu'u Beach and Bay, according to the wishes of our *kūpuna*."

Cindi Punihaole, Public Outreach and Volunteer Coordinator, The Kohala Center

With this proven track record of positive results, community support and involvement, and sound vision for the future, the County of Hawai'i Department of Parks and Recreation

awarded The Kohala Center a ten-year contract to manage Kahalu'u Beach Park vendor operations, create an educational center, and restore the park. On December 3, 2011, the Kahalu'u Bay Education Center (KBEC) was blessed and officially opened to the public. KBEC conducts educational programs, implements the Kahalu'u Beach Park Master Plan, and manages a snorkel rental concession through which visitors learn how to enjoy the bay while also protecting its fragile environment. All profits from this outreach effort are reinvested in programs at the bay and to the restoration of the park. The creation of KBEC has also created local jobs: in addition to Community Outreach and Volunteer Coordinator Cindi Punihaole, KBEC also has a full-time Manager, Jean BevanMarquez, a Volunteer Coordinator and Trainer, Matt Connelly, and support staff Vincent Carr and Maxwell Adams. The Center also contributes to the local economy: a University of Hawai'i study estimates that every dollar invested in research and education at Kahalu'u Bay generates two dollars in local business activity.

The future is incredibly bright for KBEC and Kahalu'u Bay: 2013 will see the resurrection of The Bay Concert, a celebration of life at Kahalu'u Bay featuring popular Hawaiian musicians; an expansion of the *Spawning Guide for the Leeward Coast of Hawai'i Island*; and the installation of a custom trailer to house the Center's snorkel rental operation and educational materials.

Stay abreast of our progress and successes by connecting with KBEC online at <http://www.kohalacenter.org/kahaluubay>.



EDUCATION



“Hawai‘i Island truly is a remarkable classroom that serves as a model for the world! The Kohala Center opens doors to this classroom to students across the island and around the globe through partnerships with prestigious universities, scholarships, and teacher training programs. Our ‘āina gives back to us in so many ways, including providing meaningful education experiences that expand students’ horizons and help them excel. And we aim to support young people in their interest in caring for the ‘āina.”

*Erica Perez
Expeditionary Learning
Coordinator, The Kohala Center*

OUR ISLAND CLASSROOM

PLACE-BASED LEARNING OPPORTUNITIES

There's truly no place on earth like Hawai'i Island. With 11 of the planet's 13 climactic regions and a continuous rainfall gradient, Hawai'i Island is considered a model of and for the planet, a learning laboratory for studying how climate affects species and ecosystems. The Kohala Center, in partnership with academic institutions from Hawai'i and the continental U.S., facilitates learning opportunities for pre-university students from around the world, harnessing and respecting our magnificent island as an exceptional classroom.

Hawai'i Island Science-based Environmental Education for Students (HI-SEES)

Environmental educators from The Kohala Center and the Kohala Watershed Partnership provided technical, logistical, and educational support during the 2011-12 academic year to classroom teachers enrolled in the Hawai'i Island Science-based Environmental Education for Students (HI-SEES) program. HI-SEES helps teachers integrate state-of-the-art resource management practices, indigenous knowledge and management systems, and technology into their classrooms and fieldwork. Nearly 480 island students engaged in field research opportunities focused on four key *ahupua'a* on Hawai'i Island: Kohala Mountain, Kahalu'u Bay (Kona), Ka'upulehu Dry Forest, and the Hilo Bay Watershed. HI-SEES is supported by the American Honda Foundation and the Atherton Family Foundation.

Lawai'a 'Ohana: A Sustainable Fish Camp for Families

2011 marked the second annual Lawai'a 'Ohana Fish Camp, held at the Ka'upulehu Interpretive Center at Kalaemano, a historic fishing area within the *ahupua'a* of Ka'upulehu. Families from around the island, including 13 *keiki* (children), learned about traditional and sustainable approaches to preserving and managing Hawai'i's marine life through in-class and hands-on training experiences. Campers were introduced to *mauka-makai* resource relationships and management principles, learned how to make and use a throw-net, prepare and rig a bamboo pole, identify fish, monitor water quality and care for coral reefs, and clean and cook fish. Participants also learned the traditional skill of basket weaving and storing freshly caught fish in hand-woven baskets in order to preserve their freshness. Erica Perez and Cindi Punihaole with The Kohala Center served as guest speakers; Punihaole also organized the program. Conservation International's Hawai'i Fish Trust provided support for the Lawai'a 'Ohana Camp for Family Camp.

Cornell University Earth and Environmental Systems Field Program

In early 2012, a cohort of 16 students from Cornell University and Oberlin College arrived on Hawai'i Island for a four-month immersive living and learning experience. The Cornell University Earth and Environmental Systems (EES) Field Program, developed in partnership with The Kohala Center, allows participants to experience life and learning in the amazing outdoor laboratory that the island provides. *Kumu Pa'a I Ka 'Aina* (Earth as Teacher) gives students the opportunity to engage in hands-on internships during their last six weeks on the island. The program strives to be carbon neutral by monitoring the collective carbon footprint of participants' travel and day-to-day living during the program, being as efficient as possible



to minimize the footprint, and offsetting the emissions they can't eliminate through reforestation at several dryland forest restoration sites. Participants are divided into smaller groups and dispersed to locations around the island, such as to Kawaihae to work at the intersection of indigenous and Western scientific traditions with *Na Kālai Wa'a*, a Hawaiian voyaging program; to Hawai'i Volcanoes National Park to explore the dynamic terrestrial ecosystems there; and to Kahalu'u to participate in hands-on education and conservation of the bay's fragile coral reef resources.



Brown Environmental Leadership Lab (BELL)

Brown's Environmental Leadership Lab (BELL) Hawai'i is a long-standing partnership between The Kohala Center and Brown University. BELL Hawai'i offers students with interests in science, leadership, and cultural studies an unparalleled opportunity for place-based education in the world's most vibrant learning laboratory—Hawai'i Island. Early each spring, a cohort of students from around the globe come to Hawai'i Island to kayak and snorkel at some of the island's most pristine coral reefs, hike through lava tubes, explore native rain forests, conduct service work in rare dry forests, and gain environmental leadership insights from respected *kūpuna*. The 2012 cohort of pre-university students hailed from Hawai'i, Turkey, Italy, China, and the continental United States.

Global Environmental Leadership and Sustainability Program

A partnership between the University of California-San Diego (UCSD) and The Kohala Center, the Global Environmental Leadership and Sustainability Program is a weeklong course that examines the diverse ecosystems and climate zones of Hawai'i Island. In July 2011, 22 students and five staff members from UCSD joined The Kohala Center for the first *Alaka'i i ka Mālama Honua* ("Leaders in Caring for the Earth") program. The group participated in learning activities at several different sites around the island and conducted service work in an endangered dryland forest. The curriculum educates students as to how the island thrives ecologically, economically, culturally and socially through direct learning experiences and hands-on work at locations throughout the island: Kīlauea Volcano, Kalaemano Interpretive Center, Ka'ūpūlehu Dry Forest, and Kūki'o.

OUR ISLAND CLASSROOM SPOTLIGHT:

SAPPHIRE SPINNER PROJECT BY ALEX HUTH, CORNELL UNIVERSITY

Michael Augustin and I worked together on the NOAA-funded Sapphire Spinner Project. Spinner dolphins' daily behavioral pattern is to rest in shallow bays during the day and to feed on squid and small fish during the night. There is a social transition time between the day and the night—that's when the dolphins are observed playing and spinning. Scientists theorize that these dolphins spin to remove sucker fish. That's the theory, but we're not really sure why they spin. Our task was to go out at 5:30 a.m. and sit and wait for dolphins to arrive at one of the four bays where we were assigned to do our observations. The four bays were Kealakekua, which is an MPA (marine-protected area), Ho'okena, Makako (at NELHA), and Hōnaunau.

We were supposed to collect dolphin sounds for bioacoustic analysis and to catalog the dolphins based on visual observations and bioacoustic analysis. To date, the project has catalogued 450 spinners: scientists estimate that the Hawaiian population of spinners consists of about 1,000 individuals. Spinner dolphins can be easily identified by their dorsal fins, which are like fingerprints. With high-quality photos it is pretty obvious to identify the fin and, thus, the individual dolphin. Some of their fins are really mangled from shark bites or tangling in fish lines. Most spinners are easy to identify by their fins, since everything is always chomping on each other in the ocean.



Why is this research relevant? Scientists are hoping to determine the effects of anthropogenic influences on spinners. We want to understand the impacts of swimming with dolphins during the daytime when they should be sleeping. An analysis of dolphin behavior in bays where human activity occurs may illuminate negative impacts on dolphins.

Management agencies have suggested interventions to protect the dolphins while they are sleeping, such as time area closures. Hawai'i is one of the few places in the world where swimming with dolphins is allowed—such activities are not permitted in Australia, nor in California. If we practice sound conservation strategies today, then we'll protect Hawai'i's spinner dolphins and have no regrets tomorrow.

LEADING TEACHERS

FRAMEWORKS FOR SUCCESS IN SCIENCE

Dr. Pascale Creek Pinner, a National Board Certified Teacher in science at Hilo Intermediate School and 2008's Hawai'i Teacher of the Year, came up with an idea for a peer-to-peer training and mentoring program for teacher leaders aimed at improving the quality of science curriculum taught at the elementary school level. As the concept took shape, the Frameworks for Success in Science Project was born. The premise of Frameworks is to employ an innovative, teacher-driven professional development model that includes sustained engagement for teachers in science subject matter learning, teacher-generated curriculum development, and a cohort of teacher-leaders who mentor each other with ongoing instructional support. The pilot project was launched in 2009 with financial support from a state-level U.S. Department of Education Math-Science Partnership (MSP) grant in 2009; project partners included the Hawai'i State Department of Education, the University of Hawai'i at Hilo, the AIMS Education Foundation, and The Kohala Center. Since its inception, Pinner has served as the program's MSP curriculum coordinator.

Frameworks uses a teacher-to-teacher approach to provide elementary school educators and students in the Hilo-Laupāhoehoe-Waiākea Complex Area with the skills to increase student achievement. Participating teachers receive training in engaging science pedagogy and content, leadership skill development, ongoing mentorship, and support from numerous organizations and partners. To date, 41 teachers and over 1,200 elementary school students have participated in the project. As Frameworks advances, participants from previous years become mentors to new teachers entering the program.

Pinner and nine other Hilo Complex educators have represented the Frameworks program at annual MSP conferences in San Francisco in 2011 and New Orleans in 2012. The program is having a measureable, statistically significant impact: standardized test scores among students taught by Frameworks participants are demonstrably higher than those of students of non-participating teachers. Evaluations also indicate that the program positively influences teacher confidence and competence.

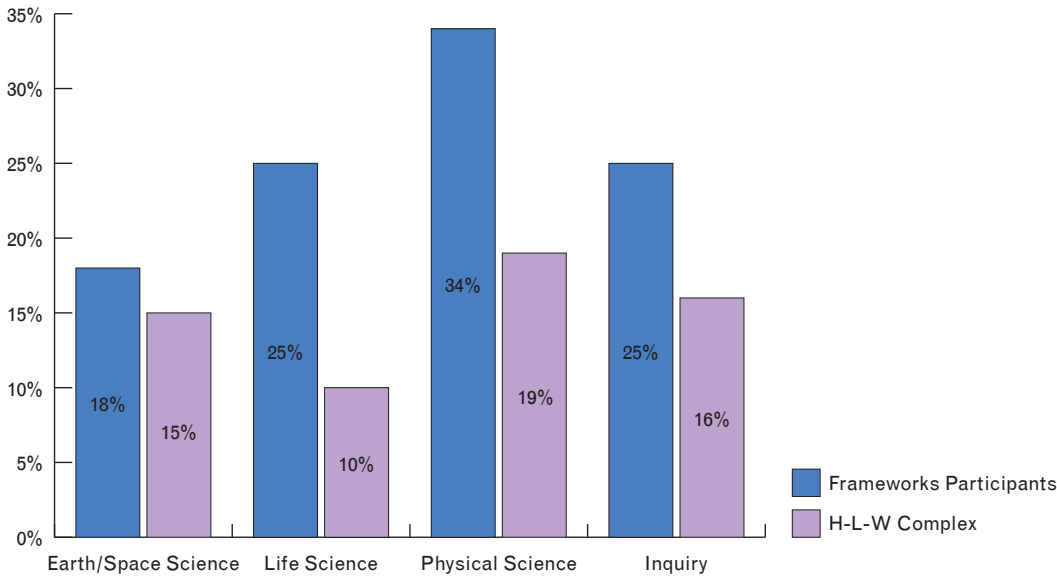
"The participating K through 6 schools in our complex teach the same science curriculum by grade level. Frameworks helps us ensure our students meet grade-level science standards. Teachers who were feeling weak in science curriculum now feel motivated to teach science because of Frameworks and the MSP grant: they leave with curriculum binders, resource materials, pre and post tests. The program empowers us to collaborate, share ideas and materials, and help each other. Frameworks has definitely enriched and enlightened many teachers in our complex. AWESOME!!!!"

Cohort I Teacher

The project currently serves six elementary schools, and state funding will sustain the pilot through the 2012-2013 academic year. The partnership is currently applying to the National Science Foundation's Discovery Research K-12 Program for funding that will support project



expansion and rigorous research into the efficacy of the Frameworks approach in improving science instruction at the elementary school level.



Percentage of sixth-grade students in “meets or exceeds proficiency” range on the four science domains (Schools participating in Frameworks compared to all schools in Hilo-Laupāhoehoe-Waiākea Complex Area)



INTELLECTUAL LEADERSHIP



“The Mellon-Hawai‘i Fellowship program is making an important difference in the lives of everyone in Hawai‘i. By providing fellowships, the program is helping *Kanaka Hawai‘i* (Native Hawaiians) complete their dissertations and go on to do important work in higher education and other arenas. The postdoctoral fellowships are providing the precious time needed for our Kanaka scholars to turn their dissertations into books, which everyone in our communities can read, learn from, teach from, and enjoy.”

*Noenoe K. Silva, Ph.D.
Professor in the Department of
Political Science, University of
Hawai‘i at Mānoa*

FOSTERING INTELLECTUAL LEADERSHIP

MELLON-HAWAI'I DOCTORAL AND POSTDOCTORAL PROGRAM

In our work about and for Hawai'i's natural environment, The Kohala Center and our partners are creating knowledge-rich jobs and, indeed, building a knowledge-based economy and society. Thus, in addition to supporting K-12 education in Hawai'i's public schools so that Hawai'i's youth can qualify for the meaningful jobs being created, we also recognize the need to foster *kama'aina* (native-born) leadership of Hawai'i's schools, universities, and research agencies. With that need in mind, and through the generosity of The Andrew W. Mellon Foundation and Kamehameha Schools, the Mellon-Hawai'i Doctoral and Postdoctoral Fellowship Program was established at The Kohala Center. The Kahiau Foundation provided additional support.

The Mellon-Hawai'i Doctoral and Postdoctoral Fellowship Program is designed for Native Hawaiian scholars early in their academic careers and for others who are committed to the advancement of knowledge about the Hawaiian natural and cultural environment, Hawaiian history, politics, and society. Doctoral fellows are given the opportunity to complete their dissertations before accepting their first academic posts, while postdoctoral fellows are given the opportunity to publish original research early in their academic careers. In its first four years, the fellowship program has supported the work of 17 extraordinarily talented Native Hawaiian scholars.



Each year, fellows are selected by a distinguished panel of senior scholars and *kūpuna* (elders), based on their leadership potential and their dedication to advancing Hawaiian research and knowledge. The 2011-2012 academic year welcomed four fellows who comprised the program's fourth cohort:

- Doctoral Fellow **Kekuewa Kikiloi**, Ph.D. candidate in Anthropology at the University of Hawai'i at Mānoa (UH Mānoa). Kikiloi is completing his research on the overlap between humans and their environment, exploring topics such as island colonization, social organization and cultural change, subsistence strategies, and resource sustainability.
- Doctoral Fellow **Larry L. Kimura**, Ph.D. candidate in Hawaiian and Indigenous Language and Culture Revitalization at the University of Hawai'i at Hilo. Kimura is completing his dissertation, *An Analysis of Obsolescence in Native Hawaiian Speech: Comparing Two Generations of Speakers, the Viable Language of the Parent and the Terminal Language of the Offspring*.

- Postdoctoral Fellow **Renee Pualani Louis**, Ph.D. in Geography (2008) from UH Mānoa. Louis's book project, titled *Sensuality: The Nature of Hawaiian Performance Cartography*, will attempt to make Hawaiian cartography more accessible to the lay person by interweaving personal narrative with methodology and by presenting information in a playbill format.
- Postdoctoral Fellow **Oiwi Hawai'iokalani Parker Jones**, Ph.D. in Linguistics, Philology and Phonetics (2010) from the University of Oxford. Jones completed his dissertation on the phonology and morphology of the Hawaiian language, including the relationships between the two. Jones hopes to publish his dissertation in the Phonologies of the World's Languages series, which to date lacks any Polynesian language.

Fellows worked with mentors of their choice throughout the program year, and also received support and feedback from previous fellows, academic publishers, and community leaders when they traveled to Hawai'i Island in November, 2011 to present their work.

"The Mellon-Hawai'i Fellowship has helped some of the best Hawaiian scholars graduate with their doctoral degrees and publish their work. When I look around me at this year's cohort and at the previous cohorts, I see Hawaiians who are doing amazing things in their communities. It's an honor just to have my name associated with these individuals. I am blessed to have this (Mellon-Hawai'i) Fellowship, as it is enabling me to totally devote myself to researching and writing the best dissertation possible."

—Kekuewa Kikilo'i, Mellon-Hawai'i Doctoral Fellow

Program alumni are securing academic appointments and promotions, as well as publishing contracts. In the academic year 2011-2012:

- 2008-2009 Postdoctoral Fellow **Kamanamaikalani Beamer** was appointed as an assistant professor in the Hui 'Āina Momona Program of the Hawai'i inuiākea School of Hawaiian Knowledge and Richardson School of Law at UH Mānoa. He also has a manuscript, *No Mākou Ka Mana—Liberating the Nation*, under review with Kamehameha Schools Press.
- 2008-2009 Doctoral Fellow **Noelani Arista** is a tenure-track assistant professor of Hawaiian and U.S. History at UH Mānoa. She continues to build her national and international profile as a scholar: Dr. Arista was among the top candidates for the position of assistant professor of history at Harvard University this past year, and she served on the convening committee for the 2012 Society for Historians of American Foreign Relations (SHAFR) conference held in Connecticut in June, 2012. She also has a manuscript, *Histories of Unequal Measure: Euro-American Encounters with Hawaiian Governance and Law 1793-1827*, under review at Oxford University Press.
- 2008-2009 postdoctoral fellow **Sydney Iaukea** published her book, *The Queen and I: A Story of Dispossession and Reconnections in Hawai'i*, with the University of California Press.



- 2009-2010 Postdoctoral Fellow **Ku'ualoha Ho'omanawanui** was promoted by UH Mānoa to the position of associate professor of English with tenure. She also has a manuscript, *Dancing on the Page: The Pele and Hi'iaka Literature, 1860-1928*, currently under review with the University of Minnesota Press.
- 2009-2010 Postdoctoral Fellow **Karin Ingersoll** has a manuscript, *Waves of Knowing: A Seascapes Epistemology*, currently under review with Duke University Press.
- 2010-2011 Postdoctoral Fellow **Leilani Basham** was promoted by UH West O'ahu to the position of associate professor with tenure in the Hawaiian-Pacific Studies Program.
- 2010-2011 Postdoctoral Fellow **Noelani Goodyear-Kā'opua** was promoted by UH Mānoa to the position of associate professor of political science with tenure. Dr. Goodyear-Kā'opua was also among the top three candidates for the position of headmaster of the Kapālama campus of Kamehameha Schools. She also has two manuscripts: *The Seeds We Planted: Portraits of a Native Hawaiian Charter School*, currently under review with the University of Minnesota Press in March 2013; and with Ikaika Hussey and E. K. Wright, editors, *Ea: A History of Hawaiian Movements for Life, Land and Sovereignty*, currently under review with Duke University Press.
- 2011-2012 Postdoctoral Fellow **Renee Pualani Louis** has a manuscript, *Sensuality: The Nature of Hawaiian Performance Cartography*, currently under review with Oregon State University Press.
- 2011-2012 Postdoctoral Fellow **Ōiwi Hawai'iokalani Parker Jones** has a manuscript, *Hawaiian Phonology and Morphology*, currently under review at Oxford University Press.

With each passing year, the network of past fellows and mentors grows, fostering a community of intellectual leaders working to ensure that Hawaiian perspectives are represented in the academy, and that Hawaiian knowledge is preserved and passed down to future generations.

"I do not know of any other fellowship that specifically supports Hawaiian doctoral and postdoctoral scholars focused on Native Hawaiian issues. Anyone getting involved with Hawaiian concerns can easily get bogged down with so much to do. The Mellon-Hawai'i Fellowship offers a privileged and crucial space in time to complete the highest degree awarded by a graduate school."

Larry Kimura, Mellon-Hawai'i Doctoral Fellow

OPERATIONS



“By investing time and resources into upgrading our financial and information technology systems, The Kohala Center operates with greater accuracy and efficiency. This makes us a stronger organization. As a result, we are able to more effectively serve island communities and enhance island environments.”

*Debi Kokinos, CPA
Financial Controller,
The Kohala Center*

BUTTONING UP

ADMINISTRATIVE AND FINANCIAL REPORT

The 2011-2012 fiscal year was one of positive administrative changes for The Kohala Center. We upgraded key accounting and tracking systems, trained our eyes on increasing individual donations, and approached our programs with an entrepreneurial, self-sustaining spirit.

Organizational development. With a robust multi-fund accounting system in place, the capacity to produce near real-time financial reports for program staff, and ongoing efforts to strengthen our grant writing capacity, The Kohala Center remains strong in its ability to compete for grants. This strength has led to our current position, in which 63% of our income is driven by grants, with another 21% from earned and other revenues and 16% from contributions. Over the next two years, senior staff will focus on the organization's capacity to garner financial support from individual donors and events, thus strengthening a traditional nonprofit skill set to fully round out the organization's capacity to generate revenues.

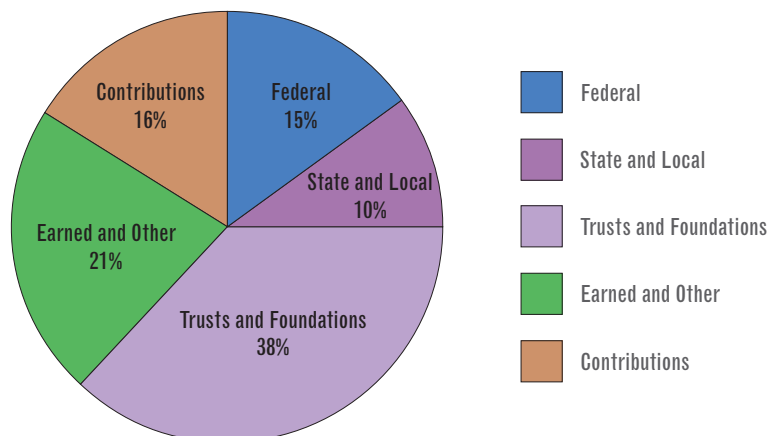
Enterprising programs. Through the agreement with the County of Hawai'i Department of Parks and Recreation, income earned through concessions managed by the Kahalu'u Bay Education Center supports educational and research efforts, as well as park improvements, at Kahalu'u Bay Beach Park. By the end of fiscal year 2013-2014, the basic ecosystem health efforts at Kahalu'u will be self-sustaining; a far cry from its near-total dependence on grant funding in earlier years. Program and administrative staff has been very actively engaged in learning from this entrepreneurial experience, and we expect that more of our programs will convert into enterprise units over the next several years.



Financial matters for the fiscal year ended June 30, 2012

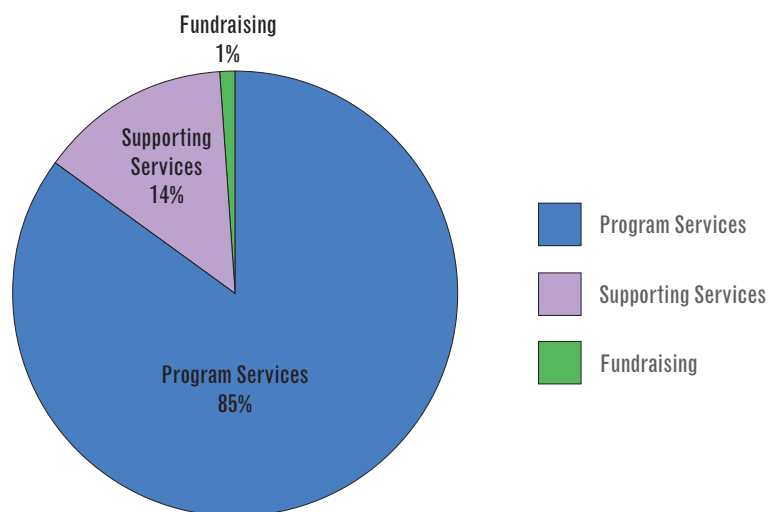
Support and Revenue

Federal	\$462,793
State and Local	\$314,093
Trusts and Foundations	\$1,161,414
Earned and Other	\$672,857
Contributions	\$485,248
Total Support and Revenue	\$3,096,405



Expenses

Program Services	\$2,258,892
Supporting Services	\$364,583
Fundraising	\$29,173
Total Expenses	\$2,652,648



Total assets	\$900,773
Total liabilities	\$405,413
Unrestricted net assets	\$14,226
Temporarily restricted net assets	\$481,134
Total net assets	\$495,360
Total support and revenue	\$3,096,405
Total expenses	\$2,652,648
Change in net assets	\$443,757

Fiscal year 2011-2012 was very productive for us. We thank you for your kind and ongoing support, as we continue our efforts to serve island communities and to care for island environments. *Mahalo nui loa.*

IT'S THE PEOPLE

STAFF PROFILES

Over the years, The Kohala Center has been able to attend to the needs and aspirations of island residents because of a truly dedicated, creative, and competent staff. Ours is a staff that builds strong partnerships, so we can more collaboratively carry out the complex work in which we are engaged. It's a staff that comfortably says, "If our partners succeed, we succeed in serving island communities." In the pages that follow, we'll introduce you to a few of the people who help The Kohala Center make a difference.

Jean BevanMarquez

Manager, Kahalu'u Bay Education Center



I was born in San Jose, California, but spent my early years on the island of Alameda in San Francisco Bay. My family moved to the California capital, Sacramento, a cow town that grew up to be a vibrant, culturally diverse community.

I attended California State University-Sacramento and spent two years studying philosophy, social sciences, and humanities. I left California for a civilian job with the U.S. Army as a substance abuse counselor at Fort Carson, Colorado, returning to Sacramento not only a much better skier, but also with a passion to pursue a more formal education in counseling.

I went to the local community college to catch up on some requirements and thrived in the encouraging environment. At this time I encountered a religious group that piqued my interest and seemed to have more effective counseling techniques, so I enrolled in pastoral counseling training, resulting in ordination. I later moved into marketing and event planning for a consulting firm, managed a specialized dental practice, and became an event coordinator for a publishing and conferences company.

Sixteen years ago, my husband had the opportunity to take over a café in Kona. The chance to move to his mother's homeland was very enticing! While the café is long gone, we became tenacious residents of this amazing place. We've now lived in Hōnaunau for the past 13 years.

After moving to Hawai'i, I held a hodge-podge of jobs: Costco demonstrator, fishing tournament secretary, legal secretary, copier salesperson, administrator of a community chorus, shopping center property manager, even clerk for a county councilmember. I settled in as the office manager for an ocean excursion company, becoming very connected to the visitor experience in Kona and the local marine environment.

I've been a fan of The Kohala Center since its inception. The education programs brilliantly bring together scholars and teachers who merge cultural knowledge with science, both Hawaiian and Western. The opportunity to work with this inspiring group was too good to pass up! At the Kahalu'u Bay Education Center, it's such a wonderful feeling when a visitor comes back to return rented snorkel equipment—often after their first snorkeling experience—and proclaims, "I had no idea how amazing this is! Thank you for doing what you do to protect

this beautiful place!” That is the true payment for our work. That visitor will hopefully carry their experience here to other places with a greater appreciation for the beauty of our natural world.

Our work leads to a lot of “aha!” moments: A child who learns that a turtle has a similar backbone and ribs to theirs; the novice swimmer who discovers an amazing undersea world; the proclaimed experienced diver who says he’s never seen so many fish; the elder of a local family who stops by to say *mahalo* for what we do...my heart is filled each day at the beach!

Melanie Bondera

Rural Cooperative Development Specialist, The Laulima Center



I was born to American parents who were studying in Tübingen, Germany, then raised in Southern California. I spent a lot of time at the beach and hiking in the mountains. After high school I moved across the country and attended Yale University, where I earned a B.A. degree in the history of art with an emphasis on art in indigenous cultures. Completing post-graduate service as a Peace Corps agricultural extension agent in Sierra Leone, I returned to California, where I earned an M.S. degree in international agriculture development from the University of California at Davis.

My work in Sierra Leone focused on women’s vegetable cooperatives. I also worked with Winrock International in Haiti, helping women revitalize the environment with tree planting and village scale water catchment. In Tulare, California, I worked on agroecology research to implement “walking wetlands,” which revitalized the local bird sanctuary and introduced sustainable farming methods.

My experience in tropical international agriculture development, coupled with my and my husband’s desire to raise our children on a farm, brought us to Hawai‘i Island. My husband and I have been farming our five-acre certified organic coffee and vegetable farm in South Kona since 2001. We’ve also been involved in the creation of several different programs and agricultural working groups since establishing our roots here.

I connected with The Kohala Center in 2007 while co-director of a small nonprofit that worked with The Center to put on the Hawai‘i Island Food Summit. The Center’s food self-reliance initiatives were growing, and The Center needed someone who could start programs, had a personal mission for food system development in Hawai‘i, had hands-on agricultural experience, and could talk to anyone. Apparently I was that person, and I was tapped to join the team. As a result of research, planning, and collaboration, the Laulima Center was organized as an official Kohala Center program, opening its doors in January, 2010.

I gain much fulfillment being part of work that is responsive and responsible to the community’s and the *‘āina’s* needs. The Laulima Center gives me the opportunity to meet and collaborate with community members to help them start businesses, particularly businesses that will make our islands self-reliant in food and energy, and that re-localize our economy.

Matt Connelly

Kahalu'u Bay Education Center Volunteer Coordinator/Trainer



I was born and raised in central New York, an area known for its extensive farmlands and the crystal-clear Finger Lakes. I spent the summers on the lakes swimming, fishing, tubing, playing in the surrounding forests, or just cruising around in the boat. I spent the winters sledding and waiting for summer.

I attended Cornell University, where I received a B.S. and M.S. in the science of earth systems with a concentration in oceanography. I felt this path was appropriate because I had a strong interest in all earth science fields, but had a particular passion for the ocean and its inhabitants. As an added benefit, this particular major offered a semester-long field science class taught in Hawai'i. I was invited by my advisor to stay at Cornell to complete my Master's degree while serving as a Teaching Assistant for various oceanography classes and the Hawai'i Field Science program.

I have always wanted to live on a tropical island but wasn't always sure which one. I had travelled to O'ahu and the Caribbean throughout high school and still could not decide which I liked more. When I first arrived on Hawai'i Island for school in 2008, I hadn't even exited the airport parking lot before I decided this was the place for me. Over the next few years, I met so many wonderful people and had so many humbling and amazing experiences that I only felt more and more welcomed here on the island.

I am very fortunate to have joined The Kohala Center straight out of college. I was aware of the Center's work through my experiences with Cornell's Field Science program. Working with The Kohala Center is great because your position within the organization does not exclude you from having input. In all of the situations I have encountered, my ideas are welcomed with open ears and open hearts. At The Kohala Center, everybody has a chance to make a difference.

Hawai'i Island has given me endless good fortune, and sometimes I feel that I am receiving more than I am giving. Many times I want to participate in volunteer activities that benefit the *'āina* or the community, but since I work most weekends I'm not always able. However, all I have to do is remind myself that the work I do not only directly benefits the *'āina* and community, but also creates opportunities for hundreds of others to volunteer their time and energy. It's rewarding knowing that even though we serve hundreds of thousands of tourists each year, we don't exploit the island, but rather protect it and inspire others to do the same.

Cody Dwight

Field Operations Technician, Kohala Watershed Partnership



I was born and raised in Portola Valley, California, which is on the eastern slope of the Santa Cruz Mountains. After high school I attended California Polytechnic State University in San Luis Obispo, where I studied forestry and natural resource management. Growing up where I did, I was fortunate enough to have redwood forests, oak woodlands, and large open-space preserves to play in. I spent the majority of my time as a kid running around the woods, mountain biking, and hiking. I chose forestry as my major because I wanted to work in a field that I love.

I worked as a wildland firefighter for the U.S. Forest Service as part of a “hotshot” crew, until I injured my wrist and couldn’t work the way I used to or wanted to anymore. So I took time off to heal, and worked in photovoltaic solar installation.

Interestingly enough, I had the good fortune of being offered a job in Hawai‘i with the solar company I had gone to work for! Having grown up surfing the cold waters of Santa Cruz and Half Moon Bay in a wetsuit, the idea of surfing in trunks seemed like the obvious choice. Solar wasn’t the career for me, though; I yearned to get back to the forest and mountains. When the Field Ops job opened up with The Kohala Center, it was an ideal opportunity.

I truly enjoy working for a nonprofit that listens to the needs of the community, and gives back through a variety of programs that strive to reach and benefit all of the island’s people. Knowing that my work will benefit future generations gives me great satisfaction, and I am hopeful that the areas we maintain and preserve will have the same positive effects on someone else someday as they have on me.

Lyn Howe

Program Coordinator, Hawai‘i Public Seed Initiative



I was born in Norway, Michigan, one of six children. Our father worked for Kimberly-Clark, and we were transferred to many new places, moving almost every four years. We lived in parts of Wisconsin, southern California, and upstate New York.

After my junior year in high school, I attended college at Niagara University in New York, then transferred to the University of Dallas, majoring in art. Not really ready to “settle down,” I traveled to California for a while, before moving back to Wisconsin and purchasing a 100-year-old farm fully

outfitted with horse-drawn equipment. I learned all there was to know from the elders in the community: how to make butter and cheese, cook on a wood stove, butcher a chicken, farm

with horses, and whatever else I could wrap my brain around. Ultimately I returned to college, graduating from the University of Wisconsin at Green Bay with a B.S. in environmental biology and the University of Minnesota with a M.S. and Ph.D. in physiology.

After receiving my degrees, I tested the waters in the corporate world, where I worked in manufacturing as a researcher and later as the head of a technical services division. I grew weary of the corporate world after several years and accepted a job to get a small, struggling gelato ice cream manufacturing plant back on track in Berkeley, California.

My career experiences gave me the opportunity to travel extensively, meet lots of interesting people, and learn what I did and didn't want in life. Believe it or not, I returned to art! Lyn Howe Architectural Glass in Berkeley was my first independent endeavor and ended up as a successful and exciting business. Many of my works still reside in the Bay Area in private homes, corporations, hospitals, and even the San Francisco Federal building, as well as a number of celebrity residences.

When my husband passed away unexpectedly in 1992, my life took a new turn. I sold my business and spent quiet time reflecting on the meaning of life. With mostly recycled materials and the help of a good friend, I designed and built a simple but beautiful home in the secluded hills of Santa Rosa, California. Working together we fell in love, and Geoff has been my amazing partner for the last 18 years. Together we took over a failing one-acre community garden and transformed it into the "Harvest for the Hungry" Garden. It continues to thrive, still growing tens of thousands of pounds of organic food each year for people in need, including homeless and women's shelters. Unfortunately, the land we lived on ran out of water as the vineyards developing around us drilled wells and cut down acres of 300-year-old live oak trees, destroying the watershed we depended on. After a year of trucking in water, watching our gardens and orchards slowly die, we sadly realized we would have to leave.

A much-needed vacation led us to Hawai'i Island, and we fell in love with the abundant rainfall, lush landscapes, and less-hurried pace. We purchased jungle acreage near the ocean in Puna, and I opened a gallery in the old Hilo Iron Works building. We slowly cleared our jungle property and transformed it into a 2.5-acre, diversified, off-grid eco farm. Eleven years later, we grow over 90% of our food, with enough for outside sales and some to give to needy neighbors. We also began the "Know Your Farmer Alliance," which offered workshops and farm tours every month with an annual seed exchange.

I guess some of us never really retire—we just move deeper into the experiences we love. This is what led me to The Kohala Center. After going to several "listening sessions" led by the Center, I found that their work truly resonated with me. In 2011, I was honored when The Kohala Center asked me to work part time with the Hawai'i Public Seed Initiative project coordinating workshops on seed production and seed saving.

The more I learn about the projects and talent that exist within The Kohala Center, the more excited I become. I find every individual so fully engaged, so in love with their work, constantly infusing high levels of self-motivation, dedication, humor, creativity, and experience into their projects. It's such an exhilarating environment to experience and be a part of.

Nicole Milne

Agricultural Business Development Specialist, The Laulima Center



I grew up in Minneapolis, Minnesota, a long way from Hawai'i. After graduating from high school, I didn't stray too far from home initially; I attended the University of Wisconsin at Madison, where I earned a B.S. in zoology and conservation biology, with a certificate in environmental studies. After graduation, I applied for the Peace Corps and went to Paraguay to establish school gardens.

Somehow, that experience led me back to graduate school for computer mapping. Too much computer mapping led me to work as a deckhand on a 120-foot wooden English trading ship in the Caribbean for a year. Fearful that I wouldn't return from the Caribbean, and might end up curled up in a conch shell on a beach somewhere, I pushed myself to go back to graduate school in Seattle to study marine resource management.

After getting my master's degree, I spent two years in Seattle working as an aquaculture technician for the Suquamish Tribe, growing European flat oysters and geoducks and walking rivers counting dead salmon. One can only count dead salmon for so long, so I went to work for the National Oceanic and Atmospheric Administration (NOAA) as a social scientist—first in Seattle and then in Honolulu. After five years with NOAA, I enrolled in a Ph.D. program at the University of Hawai'i at Mānoa to study the intersection of agriculture and people. I'm fascinated with how humans use natural resources and the relationships that we cultivate with the environment; I tell my parents that I study and work on the political economy of natural resources. They wonder what happened to working with penguins and cane toads at the local zoo in Madison, Wisconsin. Oh well.

When I arrived in Hawai'i seven years ago, I had just learned to shear sheep. On a visit to Hawai'i Island, I ended up meeting a sheep owner at the County Fair, who flew me back over to shear sheep for island livestock owners in 2007. Over the next three years, I flew to Hawai'i Island twice a year to shear for several families who owned sheep. Through "talking story" with sheep owners, I developed my dissertation topic—looking at the relationship between land tenure and the success of diversified agriculture in post-plantation Hawai'i—and moved here in 2009 to do fieldwork.

I learned of The Kohala Center while working at Mala'ai: The Culinary Garden of Waimea Middle School. Over the two years that I worked at the school garden, I had the opportunity to take part in a garden teacher internship program, and run a one-year Crop Swap program that facilitated the sharing of surplus produce from Hawai'i Island residents' gardens and farms. Mala'ai has a close relationship with The Kohala Center, so as the Laulima Center began to take shape, I was fortunate enough to have the opportunity to join the Laulima Center staff.

I enjoy working alongside such a talented group of people, all working towards improving Hawai'i Island's communities and ecosystems. The diversity of projects being conducted by Center staff broadly addresses issues of sustainability through research, education, conservation, and policy.

Agricultural producers in Hawai'i face considerable challenges in their occupations: economies of scale, labor, capitalization, and the high costs of inputs. Despite these challenges, people in the industry have a strong will to succeed and display tremendous creativity in their businesses. It's exciting to work with producers to help them find the technical and financial resources they need to expand and improve their businesses and to help them realize their dreams.

Donna Mitts

Hawai'i Island School Garden Network Coordinator



I was born and raised in Macedon Center, which is in upstate New York near Lake Ontario. I'd always held a strong interest in art and graphic design, so when I graduated from high school I attended Finger Lakes Community College in Canandaigua, New York as a graphics art major. I later attended Cabrillo College in Capitola, California, where I took computer science and fiber arts classes.

While living on the mainland, I met some folks from Pa'auilo and decided to take a vacation and visit them. I really connected with the island, and after several visits and getting to know my friends' neighbors, I was asked to housesit for one of them for nine months in 1989. During that time I fell in love with Hāmākua and decided to stay. I worked for ten years at Pa'auilo School as their Parent Community Networking Center Facilitator and Garden Coordinator, then for five years as a Program Manager at Practical Agriculture for Hāmākua, managing a series of community farm and garden classes. Those experiences connected me to The Kohala Center, and an opportunity to join their staff serving the Hawai'i Island School Garden Network program.

I love The Kohala Center's mission, but I really love our employees. And I also really like working with schools and our island *keiki* to promote an appreciation for agriculture. Lately I've enjoyed managing the Hawai'i Island School Garden Network's social media pages... it's fun to craft and share interesting content, and watch it get "liked" and shared across the nation and around the world!

Because I believe in the work I do through The Kohala Center, I am inspired to continue to give my best. I love helping school gardens thrive and believe strongly that teaching children and adults to grow food is one of the best investments of my time.

Megan Peterson

Full-Charge Bookkeeper



I was born and raised in Santa Barbara, California. The path to my career was full of adventure. I had a knack for numbers at a very young age, but I also held a strong desire to see the world. I decided to take some time to travel before picking my major and ended up going to France, England, and I eventually spent a few months in India. While traveling, I considered many different fields and realized that I loved analyzing businesses and helping them be the best they can be. So I returned home and went to the University of California-Santa Barbara and got to work on my degree, majoring in business economics with an emphasis in accounting.

During my junior year at UCSB, I was recruited by Deloitte and Touche LLP, in Los Angeles as an Audit Associate. I began working there immediately after my graduation and got to see the inner workings of many interesting organizations. My husband, who grew up in Waimea, and I met in Santa Barbara during college. We'd dreamed about moving to Hawai'i someday. The 2008 economic downturn prompted us to do so, and it was the best decision we ever made! I began working at Merriman's Restaurant as a bookkeeper, and eventually became the Marketing Manager for the entire chain; I also helped to manage one of the restaurant locations. The food there is amazing, and I appreciated Peter Merriman's focus on showcasing local farmers in his cuisine. I have always tried to live a sustainable lifestyle and enjoyed getting to know local farmers.

When I saw an advertisement for bookkeeping at The Kohala Center, I jumped at the chance to get involved with a nonprofit that helped the people and environment of Hawai'i Island. I love coming to work knowing that my efforts are benefiting a good cause. Being a "bean counter" is much more fulfilling when you know you are counting actual beans (or seeds, in our case). There are brilliant minds at work here, and I am so glad to be a part of The Kohala Center team. I feel good every day knowing that my accounting background is being used to better my community!

The fact that my work furthers a good cause is extremely motivating. Whether it be organizing school garden programs for children, finding ways to produce clean and sustainable energy sources, or restoring our island's fragile watersheds, I am continually saying to myself, "Wow, the world needs more organizations like The Kohala Center on our planet!"

BOARD OF DIRECTORS

PRESIDENT

Roberta Fujimoto Chu

Senior Vice President, Bank of Hawaii

VICE PRESIDENT FOR GOVERNANCE AND SECRETARY

Herbert M. (Monty) Richards, Jr.

Former President and Chairman, Kahua Ranch

VICE PRESIDENT FOR INTERNAL AFFAIRS AND TREASURER

James Takamine, M.P.A., M.B.A.

President and Chief Executive Officer, Hawaii Community Federal Credit Union

VICE PRESIDENT FOR EXTERNAL AFFAIRS

Richard Ha

President, Hamakua Springs Country Farms

DIRECTORS

Robert Lindsey, Jr.

Trustee, Office of Hawaiian Affairs

John Powers, J.D.

Attorney

Ian Robertson, J.D.

Principal, The Robertson Company

SENIOR STAFF

EXECUTIVE DIRECTOR

Matthews M. Hamabata, Ph.D.

DEPUTY DIRECTOR

Elizabeth Cleary Cole, Ed.D.

PHOTO CREDITS

Doug Sell

Cover page, middle image, Turtle; Page 25, left, Pufferfish

Ka 'Umeke Kā'eo

Cover page, left image, Garden

Hawai'i Community Foundation

Page 3, Roberta Chu

Angy Chesler

Page 4, Dr. Matthews Hamabata

Andrew Walsh

Page 4, left image, Taro; Page 20, Lavender Tang

John Wicart

Page 4, middle image, ReefTeacher; Page 23, KBEC; Page 24, left, Water quality monitoring; right, ReefTeacher; Page 25, right, Monk seal

Erika Haga

Page 6, left image, Market stall; right image, Produce; Page 7, Lemons

Jack Jeffrey Photography

Cover page, right image, 'Ōhi'a lehua; Page 5, 'Apapane; Page 35, 'I'iwi; Page 37, Fern

Pūnana Leo o Hilo

Page 6, middle image, Teacher gardening; Page 8, Gourds; Page 9, left image, Raking

Kohala Watershed Partnership

Page 4, right image, Rainforest; Page 21, left, middle and right images; Page 22, Teacher in forest

Hōnaunau Elementary

Page 9, middle image, Group at table

James D. Watt/Seapics.com

Page 32, Wave

Sally Lundburg

Page 44, Nicole Milne

Olivier Koning

Page 45, Donna Mitts