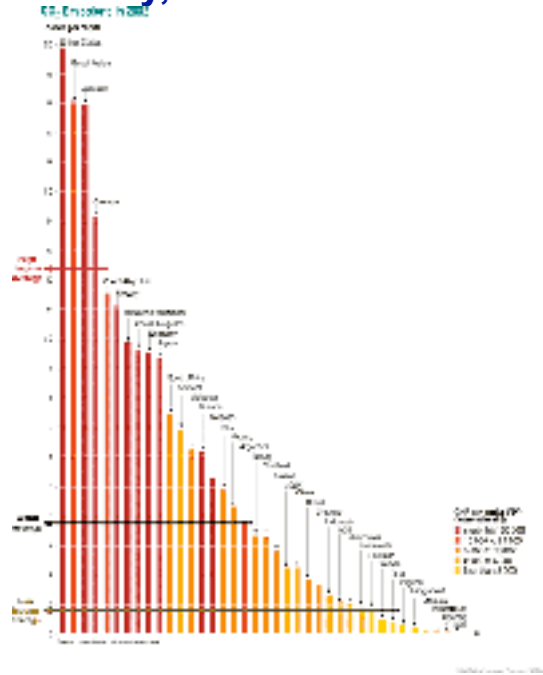


TKC Leaflet: July/August 2007 Newsletter

FRONT

Our Food, Our Community, Our Future



[click to enlarge](#)

Photo: The average American emits 22 tons of carbon dioxide every year, compared to the worldwide average of just 5 tons per year. Calculate your household's annual emissions of carbon dioxide and other greenhouse gases, using the Nature Conservancy's carbon calculator, available online at www.nature.org/carboncalculator. The calculator assesses the relative impacts of your home energy use, driving and travel habits, food choices, and waste generation. Graph courtesy of www.nature.org, based on The World Bank's 2004 online database.

"The time has come to make a strong positive statement for the future of our Island's agriculture. We can assist our island to eat in a healthier way and create a thriving and resilient economy, while preserving our precious natural and cultural resources. We hope this conference will be a catalyst not only for changes in policy and practice at the island level, but a convening of the agricultural community to create a compelling vision for the future of food and farming that stimulates discussion across the State." – Betsy Cole, Deputy Director of The Kohala Center

Increasing food self-reliance in the islands is critically important - right up there in priority with increasing our [energy self-reliance](#). So how can Hawai`i feed itself? The Hawai`i Island Food Summit (HIFS) on October 5-6 at the

Sheraton Keauhou Bay Resort will bring together leading national technical and policy experts, local policy-makers, private-sector stakeholders, farmers, and citizens to explore visions, possibilities, ideas, and practical solutions to this question. Keynote speakers for the October conference include [Michael Dimock](#), Executive Director of the Roots of Change Fund and founder and former President of Ag Innovations Network, and [Claire Cummings](#), Director of the Food and Farming Forum and a former USDA lawyer who specializes in regulatory and environmental aspects of agricultural biotechnology. Read more about the [HIFS keynote speakers](#) on the back page. The second day of the HIFS will invite members of the public to learn from national and local agricultural experts and join the discussions initiated on the previous day, with a special emphasis on educating and training our youth. Dr. William Steiner, Dean of the [University of Hawai'i at Hilo College of Agriculture, Forestry, & Natural Resources](#), will facilitate these sessions.

In collaboration with a diverse coalition of organizations, businesses, and government agencies, The Kohala Center is sponsoring HIFS as part of a larger Kohala Center program, *Planet Hawai'i*. This multi-faceted, multi-year program takes an integrated approach to examining natural, material, and social systems - in order to find pathways to greater sustainability and security for our Island community. Read the [Island of Hawai'i Food System Project Report](#), prepared by the Rocky Mountain Institute, for background on current food production on the Island, including 40 ideas for how to stimulate greater local market share.

Inspiring New Leaders



Photo: Mali`o Kodis enjoys the Kaho`olawe sunset with her mother, after a hard day's work planting seeds and moving woodchips to nourish the seeds. Mali`o and her mother were volunteering with the Kaho`olawe Island Reserve Commission, which is working to restore the island as much as possible and reverse the damage that was done due to the military bombing and goat infestation that occurred there.

"I heard about BELL scholarship opportunity through the paper (Hawai'i

Tribune-Herald). I was prompted to apply by my mother, as well as by the thought of the incredible experience awaiting me if I was lucky enough to receive the scholarship. There is no way I would be able to attend if I had not gotten the scholarship, and I will be forever grateful to The Kohala Center for giving me this awesome opportunity.” - Mali`o Kodis, BELL Rhode Island scholarship recipient, summer 2007

Six Island students are en route to the East Coast this July, where they are spending part of their summer break attending science programs for high school students at two prestigious Ivy League universities. Four students, Scott Farmer, incoming junior at Kealahou High School; Mali`o Kodis, incoming sophomore at Waiakea High School; Halena Kapuni-Reynolds, incoming junior at Ke Ana La`ahana Public Charter School, and Kanoe Phillips, incoming sophomore at Parker School, are attending the [Brown University Environmental Leadership Lab \(BELL\) Program](#) at Narragansett Bay, near Brown's campus in Providence, Rhode Island. Scott, Mali`o, Halena, and Kanoe are joining high school students from across the country to learn more about human impacts on the natural environment and how environmental policies and practices, as well as new technologies, can help to lessen our impacts on the planet.

Akela Kuwahara, an incoming junior at Hilo High School, and Denyce Kathryn Malia Donaghy (Malia), an incoming junior at Ke Kula `O Nawahiokalani `Opu`U Iki Laboratory Public Charter School, are traveling to Cornell University's campus in Ithaca, New York, where they will be attending the [CURIE Academy](#) for girls from July 21-28. The 2007 CURIE Academy focuses on [Joint Bioengineering - Understanding Sports Injuries and Arthritis](#). Akela and Malia will be learning more about a variety of modern engineering tools which are used to understand and intervene in living systems. As an added bonus, the CURIE scholarship recipients will spend an evening at the home of Cornell Professors Alexandra (Alex) Moore and Louis Derry. Alex is part of the CURIE faculty, as well as the Director of the [Cornell University Field Program in Earth and Environmental Systems \(EES\)](#) on Hawai`i Island. Alex and Lou graciously agreed to host our Hawai`i students at their upstate New York farm at the end of the CURIE program.

The Kohala Center would like to thank our Circle of Friends, whose generosity supports these scholarship opportunities and opens doors to the world for our Island youth. We invite you to [make a donation](#) to support The Kohala Center's programs.

Read excerpts from the students' BELL and CURIE [admission essays](#).

Reconnecting to Her Roots



Photo: Marisa Chock in Kaloko, where students in Brown University's **Ahupua`a Program** did some outplanting with loulu palms.

As a freshman at Brown, Marisa Chock received an email inviting her to participate in the [Brown University Ahupua`a Program](#), hosted by The Kohala Center on Hawai`i Island in January 2007. Marisa's family has deep Hawaiian roots. Though Marisa grew up in the San Francisco Bay area, her father is from Honolulu, and Marisa visits her large extended family on O`ahu on a regular basis. Her grandfather's family is originally from Kohala and owned the Chock Inn Store in Waimea for several generations (the store is now [Daniel Thiebaut's Restaurant](#)). Back in San Francisco, Marisa has danced with a halau called [Na Lei Hulu I Ka Wekiu](#), directed by Patrick Makuakane, since she was twelve years old. Her knowledge of the ahupua`a system (traditional Hawaiian land divisions running from the mountains to the sea) from her studies in hula motivated her to enroll in the January program.

As part of the Ahupua`a Program, Marisa visited [Amy Greenwell Ethnobotanical Garden](#), where she met Garden Educator, Noa Lincoln. This visit sparked Marisa's interest in Hawaiian ethnobotany and motivated her to set up a summer internship at the Garden:

"My internship is actually an informal project I have set up with Noa Lincoln, the Garden Educator, through months of emailing. I received a summer internship grant through the Brown Internship Award Program (BIAP) based on a proposal application I submitted. I am also receiving a stipend from the Garden, and although the project is a non-credit internship, it is contributing greatly to my potential focus in the Environmental Studies program."

This summer Marisa is on-Island, working on curriculum development for the Garden's environmental education programs for the roughly 2,100 students who visit the site throughout the year. The Garden does not currently have a

defined set of curriculum materials, so Marisa will be reviewing handouts, lab worksheets, and activities the Garden has received from other gardens to adapt these into site-specific curriculums for age groups ranging from Pre-K to college-level. Read "[Coming Home](#)" to learn more about Marisa Chock's summer internship.

Work Days at Amy Greenwell Ethnobotanical Garden



Photo: Naupaka (*Scaevola sericea*) is essential for stabilizing coastal sand deposits.

Which native plants grow best along the rugged coastline of South Kona? The [Hawai`i Youth Conservation Corps \(HYCC\)](#) is sending 15 students and 4 team leaders from around the Island to Hale Maluhia, an outdoor education center on the south shore of Kealahou Bay, where they will camp and learn about the plants that previously thrived in this coastal environment. The HYCC students will spend the first week in July at the Hale Mahuhia facility, where they will experience a week of culture and fun.

Working closely with Brian Kiyabu and Noa Lincoln of [Amy Greenwell Ethnobotanical Gardens](#), the students will be learning about the naupaka, `akulikuli, and hinahina, all of which flourish along rocky coastlines like those at Ke`ei. Students will have a full week of work study at Amy Greenwell Ethnobotanical Gardens. Students will also participate in a cultural and historical orientation to Ke`ei with *kupuna* (Hawaiian elder) Bill Panui. Cindi Punihaole, The Kohala Center's Outreach and Volunteer Coordinator, helped to coordinate this opportunity for the students.



Photo: Flowers and foliage of the coastal ground cover, hinahina (*Heliotropium anomalum* var. *argenteum*), are used in leis.

HYCC students are selected through a competitive application process, and participants range in age from high school sophomores to college sophomores. The students learn about environmental conservation through hands-on experiences on all the major islands; this year, HYCC is hosting teams on Hawai`i Island, Maui, O`ahu, Kaua`i, and Moloka`i. Students have the opportunity to earn college credits through UH Manoa, and they receive a \$1,000 stipend upon completion of the program. Participants are trained in CPR/First Aid and tool safety, and they participate in several team building/self building activities during a week-long training camp held on O`ahu prior to their field experiences. Each HYCC team also travels to Kaho`olawe to participate in restoration efforts underway there. Learn more about HYCC at www.hawaiycc.com.

La `Ike Kahakai O Kahalu`u: "Riding the Crest of the Wave"

"It was really exciting to launch the iBoat. You can see all the corals and the Bay from a computer on shore. The iBoat has an underwater camera, sonar, and lots of neat stuff for young folks." – Cindi Punihaole, The Kohala Center's Outreach and Volunteer Coordinator



Photo: Reef Teachers help put the iBoat into the waters of Kahalu`u Bay for its maiden voyage. Chris Lochman (**left**), Vince Carr (**middle**), Ken Pool (**right**). In front of the iBoat in the white shirt is HPA student Spencer Chute.

On Saturday, May 26, 2007, Dr. Bill Wiecking of Hawai`i Preparatory Academy and his students, Andrew Erickson and Spencer Chute, launched the iBoat (Internet Boat) on the high seas of Kahalu`u Bay. The iBoat is specially designed and equipped to do depth mapping of the ocean floor. It can be deployed for a wide range of projects, including studies of coral degradation, assessment of earthquake damage, and taking underwater color videos for observing marine mammals and wildlife. The iBoat has a GPS device with integrated mapping programs for tracking and GIS



analysis of data. The vessel also has an on-board sensor suite for testing pH, temperature, salinity, nitrates, phosphates, dissolved oxygen, and other probe sets. These capabilities are useful for studying glacial melt, pollution (acute or chronic), run-off, and temperature profiles for coral growth. The craft is Internet controlled, which means that once it is launched, it can be viewed by, controlled by, and data linked to any classroom - **anywhere in the world with Internet access.**

Kumu Lei Belanio, master lei maker, made the flower lei for the christening of the iBoat. Kumu Lei and her staff then shared the tradition of lei making with visitors to Kahalu`u Bay. To learn more about upcoming events at Kahalu`u Bay, contact Cindi Punahaole at cpunahaole@kohalacenter.org.

Photo: Aunty Lei Belanio, master lei maker with her granddaughter Leilyn Belanio, teaching Leilyn the "tricks of the trade."

Journeys



Photo: Vanessa Parker-Geisman (**front row on the right**) poses for a farewell shot with departing Brown University students in January 2007.

"I could say that Hawai'i has reframed, in some ways, the context within which I think. I see this happen with the students that visit. I think it happens any time that you remove yourself from your comfort zone, and place yourself within new surroundings, environmentally, culturally or socially." – Vanessa Parker-Geisman, outgoing Program Manager, The Kohala Center

Near the end of 2005, Vanessa Parker-Geisman was finishing up some projects at Hawaiian Volcanoes National Park when she bumped into The Kohala Center (TKC). The "outside the box" approach of TKC appealed to her, so she sent off a resume. She was quickly hired on as a van driver for the Brown University Ahupua`a Program and Environmental Leadership Labs. Vanessa's science background, people skills, and versatility soon led to an expanded role within TKC programs and, later, within the organization. Vanessa assumed the role of Program Manager for TKC earlier this year, and, though relatively young in age, she has handled the demands of this role with aplomb and good humor. From hauling luggage, to lifeguarding, to teaching back yard science to Waimea youth, to instructing Brown University students just a few years younger than herself – she has mastered everything TKC senior staff have steered her way. Now, Vanessa's path is taking another turn. In the fall she will return to school for her MS in Natural Resource Management, with a focus in Conservation Biology, at the University of Michigan's School for Natural Resources and Environment.

Vanessa will carry her aloha with her to Michigan and she thanks TKC, the Island, and its people for sharing their lessons with her. Read [Vanessa's parting thoughts](#) .

Introducing Sam



Photo: Samantha Birch exploring the active geology of Hawai`i Island

Samantha (Sam) Birch has recently joined The Kohala Center as its new Program Services Coordinator. Sam will be liaising with academic partners and other clients and designing and managing program support services, including logistics for the various educational projects The Kohala Center (TKC) develops. Sam is well prepared for this work. She was a mate and scientific coordinator onboard a research vessel for 3 years, organizing the crew, ship's work, food, and scientific projects all over Asia and the Pacific. Sam has an undergraduate degree in geology and a graduate degree in resource use and management, based on her work with Aboriginal communities in Australia. "I am passionate about the environment and outdoor education and have had many administrative roles. The Kohala Center's educational, scientific, cultural, and administrative focuses are a perfect fit for me," says Sam. Learn [more about Sam](#).

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BACK

Food Summit Speakers

Claire Cummings

*Food and Farming Editor for KPFA-FM radio in Berkeley, California
Director, Food and Farming Forum*



Photo: Courtesy of Claire Cummings.

Claire Hope Cummings is an environmental lawyer and journalist. For the last ten years she has covered food and farming issues for public radio and television, written cover stories for national magazines, and published in other periodicals and on line. Claire specializes in stories about the environmental and political implications of how we eat and how food reconnects people and place. For six years she was food and farming editor at the flagship public radio station of the Pacifica Network and produced and hosted a popular weekly radio show on food and farming. Claire is a highly regarded public speaker who has keynoted national and international conferences.

Claire has been involved in agriculture for over three decades. She was an attorney for four years in the USDA's Office of General Counsel. She has farmed rice in California, and for two years she had an organic farm in the Mekong Delta in Vietnam. For the last 15 years Claire has been active in the local food and farming movement in the San Francisco Bay Area, where she lives and gardens on 10 acres in rural Marin County. She was a founding member of the local food policy council that helped develop policies, Countywide planning tools, and legislative initiatives to support the phenomenal growth of sustainable agriculture in the area. Claire served on the Boards of Directors and was general counsel for [Community Alliance with Family Farmers](#), [Food First](#), [Earth Island Institute](#), and the predecessor organization for [Center for Ecoliteracy](#). Currently, Claire advises the [Columbia Foundation](#) and its sustainable agriculture program. She has been awarded grants and support for her work, including a prestigious two-year [Food and Society Policy Fellowship](#).

As a lawyer, Claire represented and advised environmental and native groups on land trusts and cultural preservation throughout the U.S. In Hawai'i Claire represented the Halawa Valley Coalition and The Hawai'i La'ieikawai Association during the H3 Highway litigation and was a founder of [Hui 'Aina o Hana](#). Claire has been devoted to traditional Hawaiian culture for decades and is a member of [Halau Hula Na Pua O Ka La'akea](#).

Claire has published articles and has contributed to many books and films. She coauthored the Environmental Media Service's Reporters and Editor's Guide to Agricultural Genetic Engineering and wrote the Farmer's Guide to Genetic Engineering for the National Family Farm Coalition and Farm Aid. She is an expert in the regulatory issues involved in agricultural biotechnology. She has been studying its social and environmental impacts in Hawai'i, and for the last 5 years, Claire has been advising local groups and

done several speaking tours throughout the islands including presentations to the Kaua'i Agricultural Advisory Board, to activist and organic farming groups, and to the general public, educating them about the risks of genetically engineered crops and the multiple benefits of a traditional and diverse local food and farming economy.

Her book *Uncertain Peril: Genetic Engineering and The Future of Seeds* will be published by Beacon Press in March 2008.

Links to Claire's published work are at www.clairehopecummings.com.

Michael Dimock
Roots of Change Fund



Photo: Courtesy of Michael Dimock.

Michael Dimock is Executive Director of the [Roots of Change \(ROC\)](#). The purpose of ROC is to spawn a sustainable food system for California by the year 2030. ROC identifies and leverages resources and opportunities for a diverse alliance of leaders and their institutions, who collaborate in pursuit of ROC's purpose. ROC currently involves fifteen foundations, over 400 leaders from non-governmental organizations and businesses, and over a dozen state and local government leaders.

Michael has focused on agriculture and the food system since 1989 and has worked on both ends of the spectrum: as a marketing executive in Europe for Riverbend International, a global agribusiness company, and briefly as an organic farmer in Sonoma County. Since the early 1990s, he has been helping communities, non-governmental organizations, and businesses to build consensus and implement plans related to agricultural policy and marketing, resource stewardship, and sustainability. Michael is the former Chairman of [Slow Food USA](#), a nonprofit organization dedicated to creating a good, clean, and fair food system, with particular emphasis on food biodiversity, forging meaningful links between producers and consumers, and

the pleasures of the table.

In addition to his U.S. activities, Michael serves on the President's Committee of [Slow Food International](#), where he works with five other international leaders and Carlo Petrini, Slow Food's founder, to set the movement's international strategy. Michael's love and convictions surrounding agriculture stem from early experiences with his cousin's cattle operation in Santa Clara County in the 1960s & 70s and a 1979 stint in Nepal on a development project where he lived with subsistence farming families in a rural village in the Himalayan foothills.

Going Further than We Thought

Excerpts from Scholarship Essays for the BELL & CURIE Programs

According to Vanessa Parker-Geisman, Kohala Center Program Manager, advertising for this year's scholarships was not much different than in years past: i.e., through The Kohala Center (TKC) website, ads in the newspaper, and emails to Island science teachers. What was different this year was the size and quality of the applicant pool. "The process this year was *really* competitive," says Parker-Geisman, "which I think speaks to the growing reputation of TKC. The students selected for BELL seem to be pretty well versed in environmental issues here on the Island, and they have a list of accomplishments to their credit already," she said. The following excerpts from our winning applicants demonstrate the motivation and exceptional qualities of this year's scholarship recipients. Congratulations to these fine young scholars!

Malia Donaghy, an incoming junior at Ke Kula `O Nawahiokalani `Opu`U Iki Laboratory Public Charter School and CURIE Academy scholarship recipient:



Photo: Malia Donaghy doing her homework.

"My grandparents came here to start a new life on the sugar cane plantation, and both my parents went to the local colleges on the Islands. But I want to take this opportunity to see what it's like if I got out of the Islands and what it could be like to be in school on the Mainland. This program encourages others like myself to see that we can go further than our parents did..."

I've always been curious to learn more than what's in the textbook about all sorts of genetic or ecological things, and other subjects that we learned about in class. Many found it tiring when I ask so many questions in class, but I truly am curious about many things."

Scott Farmer, incoming junior at Kealakehe High School and BELL Rhode Island scholarship recipient:



Photo: Scott at a favorite surf spot, "Pinetrees," with his sister Mahina.

"One of the main environmental problems on the Island is over-development. One example is "Pinetrees," a popular beach for surfing and families where I've gone since I was a little kid. Pinetrees is in the process of being developed as a multi-million dollar luxury homes project. I want to learn how to be able to slow these things from happening."

Growing up in Hawai`i, I've been around the ocean, beaches, and mountains all my life. As a surfer I'm at the beach a lot. There I get to experience the clear skies, clean water, and abundant sea life almost every day. The ocean and the `aina (land) are a big part of my life. I really want to learn how to protect and preserve them for future generations."

Mali`o Kodis, incoming sophomore at Waiakea High School and BELL

Rhode Island scholarship recipient:



Photo: Mali`o Kodis riding her bike around the Crater Rim Trail at Hawaiian Volcanoes National Park.

"Growing up hacking Kahili ginger, an invasive plant in Volcano, Hawai`i, I learned the importance of the environment early. When I wasn't killing invasive species to make room for natives, I was learning from my brothers and mom about all of the plants that made up our forest, which was conveniently also our back yard..."

In October 2006 I got the chance to visit and work on Kaho`olawe, to volunteer there and learn about its history. That experience changed my life and made me realize that plants aren't only plants, but they are remnants of history, with cultural importance. I want to preserve and protect the environment. I hope that the BELL Program can catalyze that vision..."

I have very few opportunities to travel or attend programs like this. I was raised in a single-parent household since I was two, and money has always been tight. There is no way I would be able to attend this program on my own, without any financial help, regardless of how much I believe it would benefit me. This scholarship is an opportunity with incredible promise. I would like to take this opportunity and spread it as far as possible – to inform people of what can be done now to take responsibility for our own generation, as well as to heal the wounds that past generations have left on the environment."

Akela Kuwahara, an incoming junior at Hilo High School and CURIE Academy scholarship recipient:



Photo: Akela Kuwahara repotting seedlings.

"Since my earliest years in school, I have had an affinity for math and science. Coming from the small town of Hilo, opportunities for broadening my horizons in these areas are limited. I have done what I can to take advantage of the math and science programs available to me and have benefited greatly from them. I have been an active participant in our Statewide Math League, as well as our Science and Engineering Fair, and have found these programs challenging and rewarding. I am now reaching out to explore my future options in these fields..."

If accepted to the CURIE program, I will welcome the opportunity to meet others with similar interests and build friendships with students from across America. In addition, I will be able to spend a week on the Cornell campus, one of the universities I have been interested in attending after high school. I look forward to the exposure to and experience of college life, which has intrigued me throughout high school."

Halena Kapuni-Reynolds, incoming junior at Ke Ana La`ahana Public Charter School and BELL Rhode Island scholarship recipient:



Photo: Halena Kapuni-Reynolds on the grounds of Ke Ana La`ahana Public Charter School.

"The most important reason I want to go to BELL is to learn more about the effects that humans have had on the coastal environment and what we can do to solve the problems. Since global warming and litter are huge threats to our marine ecosystems, I want to educate myself on how to preclude such threats from destroying the marine ecosystems of Hawai`i. If we don't start changing the way we live, the marine ecosystems of Hawaii will eventually die, and there will be no indigenous underwater life..."

At BELL I would like to learn about how the people of Narragansett Bay have impacted the environment and what techniques are being used to counter their negative effects on the environment. When I return I can share some of the information I learned about the effects of humans on the environment with my community here in Hawai`i."

Kanoe Phillips, incoming sophomore at Parker School and BELL Rhode Island scholarship recipient:



Photo: Kanoe Phillips. Photo courtesy of Andrea Dean.

"As with all children who grow up in Hawai`i, my family and peers have taught me to have great respect for the `aina (land) and kai (sea). I have always wanted a job that is closely related to the water. As I got older I realized that, because of humans, the quality of both the land and ocean are rapidly deteriorating. Ever since I made that realization, I have wanted to be a marine biologist and study the underwater world. That is why I have decided to apply to the Brown Environmental Leadership Lab."

Along with my dream of one day being a marine biologist, I also hope to teach people about the ocean. One of the most effective ways to do this is

by writing. My hope is that, through my writing, people will become educated and join in the fight to protect the land and sea from harm. If enough people are enlightened to what humans are doing, then there may still be enough time to reverse at least some of the damage that we have wreaked on the environment."

Coming Home

By Marisa Chock



Photo: Marisa Chock at Kilauea Caldera in Hawaiian Volcanoes National Park.

"Our travels around the island have helped me to reveal my passion for ethnobotany, the native plants and land preservation practices that have sustained these islands for years. I finally feel pa`a, deeply comfortable with my future. I can make myself a future in this industry while still doing the things I love most – teaching others about my passions in Hawaiian culture while learning more about every aspect of the things that I teach. This trip has introduced a new interest in ka wa kahiko - the ancient ways that I did not fully appreciate before. Traditional Hawaiian land use is a field that truly integrates a strong scientific background with Hawaiian philosophy and a respect for the mana (spirit) of the `aina (land), and I am so excited to begin embarking on my new journey without the doubts or hesitations." – Marisa Chock's journal excerpt from the January 2007 Brown University Ahupua`a Program

I just finished my first year at Brown and am currently intending to be an Environmental Studies major. I am also seriously considering a second major in either Education or Urban Studies. I haven't decided on a focus within my major, but I have been doing some coursework preparation in ethnobotany, environmental education, and sustainable design. Brown appealed to me above other schools because of its very liberal academic approach and the initiative and exploration it encourages in its students. Brown has no curriculum requirements for graduation outside of individual major requirements, and students can take any class for a pass/fail grade over the

letter grade option. Students are able to take classes that interest them without worrying about the pressure of receiving letter grades or the time restraints of a more structured curriculum. That said, with all of the new classes being offered each semester, I will never have enough time to take every class I'm interested in!



Photo: A picture of a hula demonstration/session Marisa conducted with Ahupua`a Program Assistant Lanakila Mangauil at Ke`ei, South Kona.

I was initially intrigued by the [Brown Ahupua`a Program](#) because of the connection it was attempting to draw between Hawaiian culture, a topic I have been investigating extensively through hula, and the scientific background behind the system's ecological approach. The program itself convinced me to focus on an Environmental Studies degree instead of Biology, which allowed me more freedom in investigating ecological and environmental impacts from a broader, more people-centered standpoint. I am interested in the relationships human form with their environment and their approaches to utilizing natural resources, so Environmental Studies seemed like a more appropriate fit for my interests after completing the Ahupua`a Program and interacting with other Brown students who were more familiar with the University's different majors.

This summer, I am working on curriculum development for Amy Greenwell Ethnobotanical Garden's environmental education programs and the student groups it hosts throughout the year. My goal for the summer is to complete a few different curriculums for various age groups, ranging from Pre-K to college-level. I will be working with the Garden's staff to assess their needs and the Garden's strengths to make the educational programs most effective for visiting student groups.



Photo: Marisa cleaning seeds at Amy Greenwell.

I actually set up this internship through a contact I made with Noa Lincoln when we visited Amy Greenwell during the Ahupua`a Program. Noa is the Garden Educator at Amy Greenwell. He is the main person guiding and overseeing my work, along with Peter Van Dyke, the Garden's Director. To fund my internship, I received \$2,300 from the Brown Internship Award Program (BIAP), which is offered through the Career Development Center every year. As far as I can tell, BIAPs are usually awarded to sophomores and older students who have a clearer direction for their majors and future career paths, so I was quite lucky to receive one.

I chose to pursue an internship at Amy Greenwell because of the size of its staff and the resources I was able to evaluate during my visit in January. The Garden currently has four permanent employees, all of whom have extensive knowledge of the plants within the Garden and the potential of the site's strengths. Working closely with a small, knowledgeable staff of committed individuals will be essential in developing and instituting a strong, site-specific curriculum for my project. Amy Greenwell houses many endemic and indigenous plants that I am familiar with in a single location, allowing me to fully utilize my knowledge of Hawaiian plants in the lessons I create.

The Garden's main objective with student groups is to educate students about the rich, local botany of Hawai`i and traditional Hawaiian cultural practices through interactions with the plants themselves. The Garden's educational programs emphasize the importance of conservation and ecological awareness in preserving these disappearing species, and empower students with projects and activities that encourage them to expand the lessons they acquire at the Garden into their classrooms and homes.



Photo: Marisa weaving hau cordage in preparation for a student group.

Hopefully, I will be able to finish all of the necessary lesson plans, handouts, lab activities, worksheets, and classroom materials for the various curriculums I am preparing. Student groups that visit the Garden will receive a pre-visit packet of background material, participate in an activity on site, and will be able to solidify the knowledge and skills they acquire at the Garden through a classroom activity, all of which will be formalized through my project. I will be working at the Garden for about ten weeks.

I just started the internship, but everything is going well so far. I'm just playing with some activity ideas, which we will be testing on the student groups that come through the Garden in the next few weeks. I'm also assisting with some of the Garden's general events and workshops but am mostly preparing for the visits. Trying to come up with innovative and interesting lessons and activities is probably the most challenging part of my work. I'm really excited to work with the students, and their input and enthusiasm is reward enough for the days I spend preparing in the office and the many mosquito attacks I encounter venturing through the Garden!

Beyond the Box

By Vanessa Parker-Geisman



Photo: Vanessa Parker-Geisman.

I arrived on Island and worked for several government agencies within Hawaiian Volcanoes National Park on various ecological and conservation-minded projects. While the National Park Service and those agencies are quite adept at implementing conservation goals, they must work within a specific delineated area in order to achieve their goals. Should we leave conservation and environmental protection to occur in national parks, or state forests, or the zoo? What could be done beyond the bounds of the Park system on this island to achieve the conservation of our natural resources? This concern brought me to look at groups working on Island with the public, with other groups and people throughout the island. What if scientists had to work outside their designated plots, and with the public, the economists, the industry, the councilmen, and many others?

I think it's crucial to think "outside the box," or "outside the park," or outside the "control," and bring in the externalities that influence our world. That is part of what I really appreciate in The Kohala Center's approach and something I'd like to see more of. Scientists must consider and *respect!* (not ignore!) the context within which they are considering their research. The cultural and social and even political context of this Island is an important thing that some groups focused in the sciences forget to consider. I'm interested in pursuing a science degree, but one that provides me the opportunity to look at scientific concepts, concerns, and ideas within the context of economic, social, cultural, or political frameworks.

Before I came to Hawai`i, I was working in Cambridge, Massachusetts. I served as a Youth Conservation Corp leader in Boston neighborhoods for a

summer, worked for a public policy group on their environmental campaigns (including climate change and invasive species), and taught English to Brazilian immigrants. While I enjoy field research, I prefer to work beyond the confines of scientific inquiry and in the field of application.



Photo: Vanessa about to “bite the berry,” contemplates her future from her desk at The Kohala Center.

TKC has certainly helped me develop as an individual and to connect with this island and its people in a unique way. I'm thankful to Matt Hamabata and Betsy Cole and Carolyn Blake for the mentoring, and support, and continual faith in me to pull off the responsibilities they threw my way. This has been a fantastic work environment. Thank you for the joy that comes from working with a competent, supportive, fun, and diverse team like ours.

A Perfect Fit

By Samantha Birch

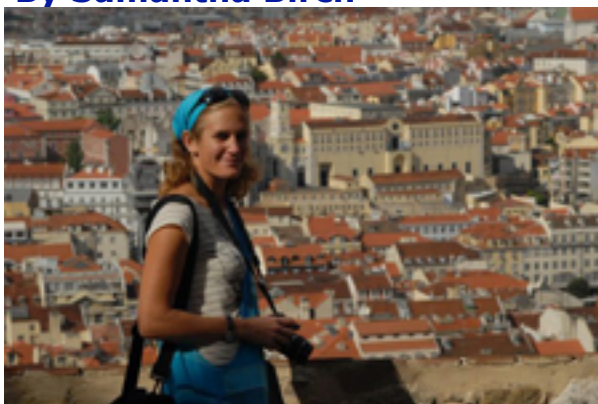


Photo: Samantha Birch taking pictures in her home country of Portugal.

My husband and I decided to move to Hawai`i from Portugal, where my family lives, in November last year, to find opportunities in the marine science and education fields, and to live somewhere a little warmer than

New Jersey or Europe and where we could be close to coral reefs and the ocean. We had both traveled extensively around the world working on marine science and education projects, and we wanted to settle down somewhere where our skills and knowledge would come in handy.

I finished my Masters in Protected Area Management in Australia 2 years ago, after which I worked on setting up an educational non-profit organization based out of New Jersey that aimed to integrate education about sustainable resource use into schools. Last summer I was contracted to manage an educational awareness campaign about marine invasive species in the Seychelles.

I have plenty of field and expedition experience both on and off the water. I have worked with students in Australia, the U.S., and Vanuatu, where I coordinated a resource management project with teachers on a remote island.

Just after we arrived on Hawai`i Island, Cindi Punihaole from The Kohala Center asked me to work with her on the Kahalu`u Bay Project. So for the past few months I have been training ReefTeach volunteers, giving reef talks to schools, and coming up with educational reference material. This was how I learned about TKC.



Photo: Samantha Birch teaching a young volunteer about the coral reef in Kahalu`u Bay.

Even though my academic background is in environmental science and resource management, education has always been very important to me, in particular working with local communities and providing experiential educational opportunities to both students and teachers that enhance

environmental stewardship. Working with TKC allows me to be part of many wonderful educational and research opportunities.

The staff at TKC is incredibly dynamic and motivated and work really well in a small team. They are passionate about what they do and have a lot of energy and initiative. Their motivation and their professionalism are inspirational, and I am honored to be a part of this team.