



KAHO'OLAWE

Ko Hema Lamalama

Newsletter of the Kaho'olawe Island Reserve

Spring 2007

Trust Program Contributions Tax Deductible

by Sol Kaho'ohalahala, Executive Director



Contributions of money or property to the Kaho'olawe Rehabilitation Trust Fund may be deducted as charitable contributions in computing taxable income so long as those donations are used exclusively for public purposes, KIRC has recently learned.

In reporting this information to KIRC, Deputy Attorney General Rowena A. Somerville noted that the Kaho'olawe Island Reserve was created to be held in trust and used solely for public purposes which include "the preservation

and practice of all rights customarily and traditionally exercised by native Hawaiians for cultural, spiritual, and subsistence purposes; preservation and protection of its archeological historical, and environmental resources; rehabilitation, revegetation, habitat restoration and preservation; education."

This clarification comes at an important time in KIRC's fiscal history: Although technically a "state agency" administered by the Department of Land and Natural Resources, KIRC receives no funding from the State of Hawai'i. All KIRC's preservation programs and administrative costs are borne by the Kaho'olawe Rehabilitation Trust Fund which, without replenishment or reinforcement, could conceivably become exhausted by on-going restoration and preservation initiatives prior to KIRC meeting its mandated goal: to care for the island of Kaho'olawe until such time as a Native Hawaiian sovereign entity, recognized by state and federal governments, can assume responsibility for the Reserve.

To prolong the life of the Trust, KIRC is actively working both to trim expenses (see "Designing for Sustainability") and secure outside sponsorships and grants that can provide program resources and reduce the chipping away at the principal of the Trust. To date, the Kaho'olawe Rehabilitation Trust Fund has received grants from the Environmental Protection Agency and the state Department of Health (DOH); a current \$1.5 million DOH - Clean Water Branch grant is enabling 1,800 volunteers to participate in the island's watershed restoration activities.

Just as we are incorporating renewable and sustainable practices into the healing of Kaho'olawe, so too are we looking to sustain our ability to underwrite programs without, wherever possible, diminishing the Trust's principal. The fact that program-specific contributions may be deducted as charitable contributions will help us secure resources, through program sponsorships, from individuals, organizations and corporations that will help protect the Trust. These contributions will also safeguard and advance KIRC's cultural, conservation, restoration and educational programs within the Reserve.

Welcome to *Ko Hema Lamalama*, a newsletter declaring the news from Kaho'olawe. Uncle Harry Mitchell interpreted this name as the southern beacon, which served as a source of light to those weary travelers who voyaged beyond the pillars of Kahiki. Let *Ko Hema Lamalama* aid us in sharing a source of light about the island of Kaho'olawe and the restoration of Hawaiian culture across Hawai'i nei.

In Tribute ...



George Helm Jr. and Kimo Mitchell Memoriam at Hakiowa

If ever two human beings were responsible for a creation, it was they. If ever a sacrifice was made toward the goal of preserving a wahi pana, it was their sacrifice. If ever restoration of life upon Kaho'olawe Island's ravaged shores were measurable, that calculation would begin with two treasured lives given for it.

In this, the 30th year since their disappearance at sea, the Kaho'olawe Island Reserve Commission - and all who join in the continuing work to preserve and protect the land of Kanaloa - pause to honor and remember the sacrifice and legacy of George Jarrett Helm Jr. and Kimo Mitchell.

If always we remember the aloha they lived, their creation and their sacrifice, then the memory of their precious lives will live on in the healing of Kaho'olawe



George Helm Jr.



Kimo Mitchell



Ocean Resources

The KIRC Ocean Resources Management Program (ORMP) manages and monitors the Kaho`olawe Island marine reserve, an area approximating 34 miles of coastal habitat. Shore-based and surveys aboard *Hākilo* are conducted as frequently as possible.

Helicopter surveys augment KIRC's land-based data collection by providing access to otherwise inaccessible shorelines and waters due to rough water conditions and have greatly increased KIRC's ability to survey large areas of the island's treacherous coastal terrain in a relatively short time period.

Aerial Surveys

Ten coastal aerial surveys were conducted in 2006. Helicopter problems delayed the start of 2007 aerial surveys until February 14, during which, staff recorded nine honu, three koholā, 3 manō (reef blacktip shark), one `ā (Booby species), one koa`e (tropic or boatswain bird), and one `ōmilu (a type of ulua).

B-WET Program

Nine educators from Nānākuli's Kawaihona Charter School accessed the Reserve in January to learn about the cultural, aquatic and land-based resources of the island. Also two community workshops were held for students and teachers of Nānā I Ka Pono and Kaiser High School to teach the survey techniques they would use during the access.



Kupuna Atwood "Maka" Makani discusses the process of umu - the building of underwater piles of stones for fish habitat

Sanctuary Ocean Count

KIRC staff and volunteers participated in the Hawaiian Islands Humpback Whale National Marine Sanctuary's Ocean Count on January 27 and again on February 24 at Keāliialuna, where an average of 15 individual koholā were counted per 30-minute period. In the March count, Kaho`olawe Island's single observation site averaged 10 koholā per 15-minute period (the statewide average was three whales per 15-minute period). Our elevated view of the Maui Nui channels contributes to the relatively high numbers of Kaho`olawe-based sightings.

Fish Tagging

February saw the tagging of an `ōmilu and ulua, the latter among the forth largest ever tagged in the Reserve. To date, 133 fish have been tagged and released within the Reserve.



Restoration



Students of Maui Preparatory Academy

From December 2006 through the first quarter of 2007, 14 volunteer groups contributed a total of 8,400 service hours of work on behalf of the Kaho`olawe DOH Clean Water Project. Volunteers represented Kalāheo, Castle, Maryknoll, Maui and Lāna`i High Schools, the Sierra Club, Nature Conservancy-Maui, graduate students in the UH-Hilo Tropical Conservation, Biology and Environmental Science program, UH-Mānoa, Seabury Hall, Nā Pua No`eau, Ocean Department, Maui Preparatory Academy, Kamehameha Schools Maui, and the

Kapī`olani Community College STEM Program. Together their work helped KIRC reach 51 percent of the grant's goal.

Restoration efforts have moved into areas 9 and 10 at the headwaters of the Hakiowa watershed, where more than 8,500 native shrubs (`A`ali`i, `Āweoweo, Achyranthes, Halapepe and Kului) and grasses (Kāwelu, Kamanomano) were planted as an ongoing portion of the three-year, 100+ acre planting project at the headwaters of Papaka Nui and Hakiowa streams.

Pacific Helicopters were able to fly Ken Wood to Ale`ale on a blustery morning for the check up of Ka Palupalu o Kanaloa. He reports the plant is doing well but no seed was seen for propagation.

Coastal Zone Management

A 2,600 gallon Base Camp tank and 1/2-inch irrigation line is supplying irrigation to recent `Ōhai, Kou and *Vigna oahuensis* plantings along the road above the beach at Honokanai`a. When transporting water from the catchment becomes a challenge the plants are hand watered. They also received almost two inches of rain in March.

Pu`u Moa`ulanui DOH Clean Water Project

The project was able to begin phase two of the three-year grant. In this first quarter of 2007, the United States Geological Survey installed five new soil erosion pin transects in Kaulana watershed, bringing the total to 33 in Kaulana and 42 in Hakiowa watersheds. Data from all 75 units were collected to for a new data set for comparison in six months.

The draft Monitoring Plan, Site Survey and Strategic Plan were submitted to the DOH and will soon be finalized.

A Hui Hou

KIRC would like to bid a fond Aloha to one our Restoration Department members. For 3 1/2 years, Derek Mar Jr. showed a great dedication and work ethic to the restoration of Kaho`olawe. He has celebrated the birth of his first child Kahikikū and has moved back to Oahu. We wish him all the best.



Derek Mar Jr.

Designing for sustainability : Part I



They came with youthful expectation, energy and creativity, measuring tapes, data loggers, digital cameras, sketchbooks and, most important to their purpose, imaginations unfettered by familiarity.

For four exploratory days in March, 13 young

men and women of the University of Hawai'i-Mānoa School of Architecture brought fresh eyes and ideas to the service of one of the Kaho'olawe Island Reserve Commission's most persistent challenges: the island's energy dependence on fossil fuels.

Under the able mentoring of architecture professor A. Spencer Leineweber, landscape architect Janet Gillmar and, as their cultural guide, KIRC Commissioner Charles PMK "Doc" Burrows, the students determined that energy sustainability at Base Camp would require reduction of fossil energy consumption through the implementation of efficient power generation, sustainable design concepts, and alternative energy technologies.

Energy savings underway

"Right now, airlifting one fuel-pod holding just 300 to 320 gallons of diesel fuel (current usage is 120-160 gallons per day) consumes nearly 40-percent of Base Camp operations budget," says KIRC's logistics specialist Keone Laepa'a. But help is on the way.

Thanks to the direct efforts of KIRC Commissioner Robert J. Lu'uwai, already on island is an FAA back-up generator, secured through an inter-agency transfer, that will replace existing generators and draw just 60-70 gallons per day while operating at 75-78-percent efficiency, the industry's best.

Hākilo Captain Charles Lindsey also noted that KIRC's forthcoming landing craft will cut transportation expenses: "Just one trip with the new boat will replace four helicopter loads," Lindsey said.

How low can you go?

Reserve Manager Stephen Fulton defined KIRC's challenge, "The state's goal is to reduce fossil fuel consumption by 80-percent by 2050; our goal is to hit that 80-percent reduction within five years." For the students, the question was: how best to redesign living and operations facilities to maximize energy efficiency while, whenever possible, utilizing materials left on island by the Navy – cargo containers, lumber, vehicles, machine parts, etc. – to meet long-term goals?



The students began their experiments by turning off the air conditioning in their own dorm and placing data recorders in their dorm, a vacant dorm, and a cargo container to track internal temperatures and humidity. They measured winds at Base Camp, the communications center and at LZ Squid. And, they measured every square inch of Base Camp, producing preliminary design recommendations.

First takes ...

Among their initial recommendations: Increase natural ventilation to reduce air conditioning usage by installing screen doors at both ends of each building and modifying windows to create a venturi airflow effect. Combine ceiling fans with floor vents to pull in cool air from building bases.



Insulate buildings and roofs, equipping them with radiant barriers to reflect sunlight, thereby cutting internal temperatures by as much as 40-percent. Increase Base Camp landscaping, especially with trees, between buildings; the added shade will help cool buildings. Place water catchments

on all roofs and use gray water to provide landscape watering. Turn "streetlights" off at night and replace them with solar pathway lights and build a trellis over the ROC deck to make it more habitable for meetings and gatherings.

The students also offered energy saving ideas that could be immediately implemented: Naturally ventilate the ROC and barracks, 490 kwh; eliminate barracks' refrigerators, 40 kwh; eliminate mess deck AC by opening up to ocean breezes, 233 kwh; add solar/thermal water heating, 100 kwh. Total savings: more than 700 kwh per day.

More to come ...

Inspired by the natural beauty of Kaho'olawe, these young UH-Mānoa student architects put their imaginations and their hearts into finding practical energy solutions for Kaho'olawe. Their final recommendations will be reported in a later issue of *Ko Hema Lamalama*.



**KAHO`OLAWE REHABILITATION TRUST
SPONSORSHIP OPPORTUNITIES**

Five tax-deductible sponsorship opportunities are now available for those wishing to perpetuate the Kaho`olawe Rehabilitation Trust Fund programs in cultural, restoration, preservation, educational and Reserve operations.

Such program-specific contributions have been deemed deductible when computing taxable income. [As will all contributions, donors should always consult with their tax advisors before claiming any tax-deductible charitable contributions.]

Sponsorship supports archeological surveys; site maintenance; annual plantings and collaborative cultural education programs with high school and college students as well as curriculum development programs for teachers.

Native Hawaiian Cultural Programs

Sponsorship supports archeological surveys – more than 3,000 historic sites and features have been identified to date; the exercise of traditional Native Hawaiian cultural protocols, ceremonial practices and rites such as the annual planting ceremony, marking of solstices; care for iwi kūpuna; and collaborative cultural programs with Department of Education for high school and college students and curriculum development opportunities for teachers.

Ocean Resource Program

Sponsorship fosters conservation of marine resources within the Kaho`olawe Island Reserve. Programs include coral reef monitoring, fish tagging and replenishment, and habitat monitoring for the health and proliferation of resident marine life including manō (shark), nai`a (dolphin), `Ilioholoikauaua (Hawaiian Monk seal), honu (sea turtles), koholā (whale), seabirds such as `iwa and koa`e `ula, and literally hundreds of fish species.

Restoration Program

Sponsorship underwrites the revegetation of Kaho`olawe with native species of trees, shrubs, vines, grasses and herbs; invasive species removal; the creation of a “seed bank” enabling a native plant community; controlling erosion and sediment run-off and expanding the island’s rain catchment system to increase water storage capability to supply future irrigation, work and cultural sites.

Reserve Operations Program

Sponsorship advances work currently underway in transitioning the Base Camp and LZ work and storage sites from dependence on expensive fossil fuels to energy self-sufficiency through the purchase and implementation of alternative energy solutions including solar and wind energy technologies.

Kaho`olawe Island Reserve Education, Administration Center & Museum Building Program

Sponsorship will advance the long-awaited Kihei center to permanently house historical, cultural, and scientific information and displays, provide classrooms for educational programs and office space for the Reserve’s administrative staff.

How to contribute:

Please fill out the attached Sponsorship Form indicating how your contribution should be directed and send it along with your tax-deductible check to the Kaho`olawe Rehabilitation Trust Fund, 811 Kolu Street, Suite 201, Wailuku, HI 96793. And, mahalo for keeping the dream alive.



KŪKULU KE EĀ KANALOA

KAHO`OLAWE REHABILITATION TRUST FUND

Contributions of money or property to the Kaho`olawe Rehabilitation Trust Fund may be deducted as charitable contributions in computing taxable income so long as those donations are used exclusively for public purposes.*

SPONSORSHIP FORM

Name: _____
 Company: _____
 Address: _____
 City: _____ State: ___ Zip _____
 Day Phone: _____
 E-mail Address: _____

`Ae! I'd like to kōkua! Please direct my tax-deductible sponsorship contribution to the following program:

	Amount
<input type="checkbox"/> Native Hawaiian Cultural Programs	\$ _____
<input type="checkbox"/> Ocean Resource Conservation Programs	\$ _____
<input type="checkbox"/> Island Restoration Programs	\$ _____
<input type="checkbox"/> Reserve Operations Program	\$ _____
<input type="checkbox"/> Reserve Info, Admin Center & Museum Building Program	\$ _____
Total Enclosed:	\$ _____

Please make check payable to the
Kaho`olawe Rehabilitation Trust Fund
 and mail, with this form, to
811 Kolu Street, Suite 201, Wailuku, Hawai`i 96793
Telephone (808) 243-5020 Fax (808) 243-5885

____ `Ae! I'd like to receive the KIRC newsletter, *Ko Hema Lamalama*, by e-mail and help reduce the Trust's printing, postage and handling expenses.

* Donors should always consult with their tax advisors before claiming any tax-deductible charitable contributions.



Culture

Mauli Hō'ola

A time of healing our land



Naupaka

In the Hawaiian concept of akua we see the great deity Kāne as the creator who instilled in all mankind the “wailua,” dual waters, the physical being and the spiritual. In the Western world it is known as the soul. Kāne's brother is Lono – the great deity of love, peace, fertility and abundance, who makes things grow to yield a fruit-

ful harvest. Lono manifests himself in multiple forms (kinolau) as a healer. In our mother tongue we call Lono, Mauiola, he who casts out ill forms, such as infirmities, physical and spiritual. In the title, Maui Hō'ola, 'ola, the word for life, is preceded by ho'o, the causative verb form, “that which causes life.”

In the traditional manner of our kūpuna, we request spiritual guidance from the eternal forces to bring about healing of our land known as Papahānaumoku.

E Kāne, auloli ka honua	<i>Oh Kāne transforms the earth</i>
Honu ne'e pū ka 'āina	<i>Let the earth move as in one piece</i>
Ulu nakaka kawahawaha ka honua	<i>The land cracked and fissured</i>
Ulu ka 'ai hapu'u e Lono	<i>The edible ferns grow oh Lono</i>
Ohi malo'ō, kupukupu	<i>Let kupukupu cover the dry lands</i>
Ohi a'a nā 'uala o nā pali	<i>Gather potatoes as stones on the hills</i>
Pali kū kawahawaha ka ua	<i>The rain comes like the sides of cliffs</i>
Ka ua hā'ule mai	<i>The rain falling from heaven</i>
He hā'ule lani ka 'uala	<i>The potatoes fall from heaven</i>
He 'aweu ke kalo	<i>The wild taro is only taro now</i>
He lauoa pili kanawao	<i>The taro of the mountain patches</i>
O wao akua ka 'ai e Kāne	<i>The only foods is that of the wilds oh Kāne</i>
E Kāne! E Lono! Nā akua mahi'ai	<i>O Kāne and Lono, gods of the husbandmen</i>
Hō'ola i ka 'āina	<i>Give life to the land</i>
A poho ka 'ai	<i>until food goes to waste</i>
A 'ulu kupukupu	<i>Until it sprouts in the ground</i>
A 'ulu lau po'o'ole	<i>Until the leaves cover the land</i>
A o ka nui ia o ka 'ai	<i>And such be plenty</i>
Au, e Kāne a me Lono	<i>Of you, Kāne and Lono</i>
Amama, ua noa	<i>The burden is lifted, we are free</i>

The Pule Maui Hō'ola text was taken from David Malo's *Hawaiian Antiquities*, Bishop Museum Press, page 158. A cultural connection to our restoration work that continues on Kaho'olawe mai uka a i kai.

E Ola!

Volunteer Program

Kaho'olawe continues to heal, thanks to all the hard work of our volunteers. Native grasses and shrubs were planted on the slopes of Pu'u Moa'ulanui in the headwaters of Kaulana and Hakioawa streams. Work that entailed a weekly process of laying irrigation lines, digging thousands of holes, checking and re-checking previous plantings, and constructing pili erosion barriers has made a noticeable difference in the healing of Kanaloa. In addition to restoration work, our volunteers have played an integral role in improving roads, calling the Nāulu clouds, and monitoring our ocean resources. Mahalo to everyone for your tireless efforts!

October 1, 2006 - March 31, 2007 Volunteers

Jonnette Adler	Kiki Hee	Mason Miyamoto
Arnold 'Ohana	Dylan Henderson	Jonah Molina
Lucas Arnold	John Henderson	Jordan Molina
January Asbury	Kawelu Higashino	Pā Ku'i a Lua
Christopher Baker	Lihau Higashino	Kūhea Paracuelles
Jolen Ballenti	Robert Hill	Richard Pietroski
Shane Basques	Kuo Hsia	Walter Ritte
Sorin Bejenaru	'Ilio'ulaokalani	Paul Skov
Tom Brennon	Kaiser High School	Ikaika Soares
Dot Buck	John Kaopua	Jocelyn Taal
Charles Cameron	Natalia Kaopua	Anya Tagawa
Connor Cameron	Tiare Kaopua	Nichole Tokishi
Chyna Colorado	Danielle Koch	Jan Tupa
John Constantino	Linda Koch	Jaclyn Valentino
Jennifer Crummer	Madison Koch	Wai'anae High School
Millicent Cummings	Natalie Koch	Terry Weaver
Michael DeMotta	Shawna Koch	Sharilyn Wheeler
Joy Downey	Bethel Kohn	Amber Nāmaka
Cheryl Dacus	Lāna'i High School	Whitehead
Judy Edwards	Allen Ligon	Sarah Whittle
Arthur Goings, Jr.	Jonathan Lindsey	Ken Wood
Ronald Goings	Attwood Makanani	Tian Yu
Ryan Gomes	Jill McIntire	
Shayna Hayashi	Vincent Mina	
Castle High School		Maryknoll High School
Hālau Lokahi Charter School		Maui Preparatory Academy
Hawai'i County Employees		Nā Hanona Kūlike 'O Pi'ilani
Kawaiolimaikamapuna Hoe		Nā Pua No'ēau – Maui
Kalāheo High School Teachers		Seabury Hall Winterm Program
Kamehameha Schools - Maui		Jim Waddington and friends
Kanekoa Kukea-Shultz		Julie Williams and friends
Ethnic Studies Program, UH Mānoa		
Ka'anapali Beach Hotel Employees		
Kapi'olani Community College STEM Program		
Kawaihona Charter School Faculty		
Kua'ana Student Services, UH Mānoa		
Kupu Nā Leo Cohort, UH Mānoa		
Lahainaluna High School Natural Restoration Class		
Maui High School Marine Biology Program		
Moloka'i High School MEPO Club		
Nā Koa Kau I Me Heu O Nā Kūpuna		
The Nature Conservancy of Hawai'i		
Queen Lili'uokalani Children's Center – Maui		
School of Architecture, UH Mānoa		
Tropical Conservation Biology Masters Program, UH Hilo		

KO HEMA LAMALAMA
A newsletter of the Kaho'olawe
Island Reserve Commission (KIRC)
Phone: (808) 243-5020
Fax: (808) 243-5885
Email: administrator@kirc.hawaii.gov
Web: kahoolawe.hawaii.gov

How can I help?

That's a question the KIRC hears often. There are so many ways to help, and among them is to receive *Ko Hema Lamalama* electronically. Each copy of *Ko Hema Lamalama* sent electronically saves the Kaho'olawe Rehabilitation Trust Fund more than \$2 in printing, shipping, taxes and postage costs.

Simply e-mail your name and address, along with your e-mail address, to Administrator@kirc.hawaii.gov. We'll do the rest. And mahalo for caring.



KIRC News bits ...

Mahalo a nui loa ...

The Kaho'olawe Island Reserve Commission would like to send a heartfelt mahalo a nui loa to the following whose kind generosity will help preserve and protect cultural, educational, restoration, ocean resources management, outreach and Reserve programs and operations:

James "Kimo" Campbell of Kentfield, California
Audrey L. Weaver and Michael D. Vogan of Chicago, Illinois
Seabury Hall of Makawao, Maui

E komo mai ...

Welcome aboard to Ocean Resources Specialist II, Cheryl King. Active in KIRC's Ocean Resources Management Program for the past four years, Cheryl has vast expertise in the field of marine protected species with an emphasis on honu (sea turtles). Cheryl completed her undergraduate work in biology and psychology at New York's Southampton College of Long Island University before moving to Hawai'i in 1999 and, while researching turtles in the Reserve, is currently finalizing her master's degree in marine biology from Nova Southeastern University Oceanographic Center in Florida.

Also welcome Nicole McMullen to the position of commission assistant, working with Commission Aide Ka'onohi Lee; she joined the KIRC staff in April. With a background in museum curatorial work, Nicole holds a BA in history from Gettysburg College and a master's degree in American Studies from Penn State University and she is very excited to be involved with the preservation work of the Commission. Nicole also does volunteer work with the Maui Historical Society and is a member of the Maui Choral Arts Association.

Finally, welcome to outreach specialist Ellen Pelissero. Ellen holds a BA in history from UC Santa Barbara and comes to KIRC from her former post as public information officer for the County of Maui. Her professional background includes writing and production in radio, television and the recording industries. Two of her Hawai'i Public Television credits – *Hawaiians* (1989) and *Betrayal* (1993) – received national PBS distribution. She is also the recipient of two Nā Hōkū Hanohano awards for liner note annotation.

KIRC COMMISSIONERS
Noa Emmett Aluli, M.D., Chairperson
Burt H. Sakata, Vice-Chairperson
Milton Arakawa
Charles P.M.K. Burrows, Ed.D.
Robert J. Lu'uwai
John D. Waihe'e IV
Peter T. Young

Sol P. Kaho'ohalahala, Executive
Director



Kaho'olawe Island Reserve Commission
811 Kolu Street, #201
Wailuku, Hawai'i 96793