Resource Kona

RESOURCE KONA **Spring 2011**

KONA SOIL AND WATER CONSERVATION DISTRICT

The Arlington of the Pacific, a Reforestation Project

If you are interested in participating in a hugely successful reforestation project the West Hawaii Veterans' Cemetery is having a planting day on April 16th from 9am – 11am when you will be treated to lunch. Read on for more information about the cemetery and the reforestation project.

West Hawaii Veterans' Cemetery is also known as the "Arlington of the Pacific". It was established in 1997 with the County of Hawaii responsible for its maintenance. Veterans and community volunteers joined forces in 2004 to address the poor conditions of the cemetery which included "dust bowl" conditions and grave sinkage. These unsung heroes formed the West Hawaii Veterans' Cemetery Development and Expansion Association (WHVCDEA) to beautify and reforest the cemetery.

Volunteers, the life blood of this project, are hard at work planting native species and pulling out invasive fountain grass. Picture from www.arlingtonofthepacific.org

One of the first things the group wanted to do was figure out a way to keep feral goats and donkeys out of the 62 acre parcel so that improvements were not damaged by these animals. They also wanted to reforest the Pu'u 'O'o (the hill) that overlooks the veterans in their final resting place. Jeff Knowles, former District Conservationist for Natural Resource Conservation Service (NRCS), found a solution that would not only bring fencing to the parcel but would also kick off the native plantings project, a Wildlife Habitat Incentives Program (WHIP) contract with NRCS.

With the fence installed, proper planting could begin. The first planting day was March 5, 2005, and in the six years that have passed since then approximately 10,000 plants have been introduced to the hill. NRCS Civil Engineer Drew Stout prepared designs for an irrigation system and (continued on page 2)

Inside this issue:

Special points of interest:

- Do you want to learn more about protecting your natural resources, call us.
- If you want to become active in the Kona Soil and Water Conservation District please give us a call at 322-2484 ext 100

The Arlington of the Pacific (cont. from pg. 1)

the materials were paid for through a number of smaller grants including money from the county. Volunteers again played a major role and Kukio Resorts helped tremendously by providing the water for the irrigation system.

The "Arlington of the Pacific" has received 27 commendations and awards from a variety of organizations. The most recent was from the US Department of Veterans Affairs when they honored the cemetery with "shrine status". Only three state veterans' cemeteries, out of nearly 100 from across the country, have earned this honor by having a design and features that meet the National Cemetery Administration standards.

All ages are welcome. This is a great opportunity to have your kids give back to the community they live in. Picture from www.arlingtonofthepacific.org

Anyone involved in the project will tell you no one person or organization can receive all the credit for the project's success though there are some key contributors. NRCS, with its ability to put together the contract to cover most of the fencing costs, their ability to provide an irrigation design and the willingness of NRCS staffers to participate as volunteer planters and irrigation installers was, and continues to be, a very important factor in the project's success. The veterans, in fact, regard NRCS as the "godfather" of the project.

Local schools, which start many of the native plantings from seed and provide them to the reforestation efforts, have also been invaluable. Teachers from several schools regard this reforestation project as a living laboratory that provides them an opportunity to show their students why what they learn in school is important for their lives outside of school.

Take advantage of this opportunity to give back to your community and give back to our veterans. For additional information you may contact Mary at the Kona SWCD, 322-2484 ext. 100 or Richard Stevens, coordinator of the project, at 323-3860. Mahalo!

Above left and right: more volunteers helping to make the West Hawaii Veterans' Cemetery reforestation project the success that it is. Many thanks to all the volunteers who turn out to help make the veterans' final resting place a place of beauty.

Earth Day Festival Events, Kealakekua Heritage Ranch Tour

The Kona SWCD is participating in this year's Earth Day Festival by hosting a 4x4 tour of Kealekekua heritage Ranch on April 30th and by participating in the Earth and Ocean Fair on April 23rd.

Our tour of Kealakekua Heritage Ranch will take us through native forest and grazing land with stops at the fully functioning saw mill. Here we will see what types of products they are producing. In the past we saw the desks they built for a local school, examples of hardwood flooring they create and cabinet work they do.

We will also stop at what is known as the Mare Motel, an equestrian center, where we will have lunch and be given the opportunity to walk through the forest, or just sit and enjoy the beautiful scenery.

If you are interested in joining us please give the Kona SWCD office a call at 322-2484 ext. 100, Mary will be happy to assist you. The cost of the tour is $80 per person and $50 for children under 10.

Guests of the Mare Motel enjoy their space.

One of the newest guests at the Mare Motel

Top Left, lower left and lower right: Protea flowers, some of many varieties we have seen at the plant nursery and in the surrounding protea fields.

Top Center: An ohia tree with yellow blossoms

Top Right: The view while driving through a native forest.

Kona SWCD 2010 Cooperator of the Year

Every year each of the state's 16 Soil and Water Conservation Districts (SWCD) choose a Cooperator of the Year. This agricultural producer can be either a rancher or a farmer and sometimes an SWCD may choose more than winner.

Our 2010 Cooperator of the Year is the Holualoa Tree Farm managed by Mark Kimball and his son Kanoa Kimball, a botanist, who has done most of the labor and, as Mark says, most of the brain work. Besides the tree farm, they are also managing a Wildlife Habitat Incentives Program (WHIP) project on an abutting 40 acre parcel.

The tree farm has a large variety of exotic hardwoods that will be ready for harvest in the coming years, species include Honduras Mahogany, Pink Cedar, Brush Box and Rainbow Bark among others.

Above: Clearing the fence line in order to protect the native forest that will restored.

The WHIP project they are working on is a 40 acre fenced parcel where the priority is restoring the native forest species. They have been busy for the past few years planting native species such as Ohia Lehua, Koa, Hapu'u, Olomea, Kolea and 'Ohe. They have also been busy removing weedy species such as honohono grass, german ivy, bittermellon, strawberry guava, christmasberry, and morning glories, to name just a few, as part of the WHIP project.

These activities improve the natural environment and are also one of the best ways to prevent flooding. A forest, with its many levels of vegetation actually delays much of a rainfall from reaching the ground and thus preventing runoff. Holualoa is an area that historically has suffered from flood events so this is one agricultural endeavor the residents should truly appreciate.

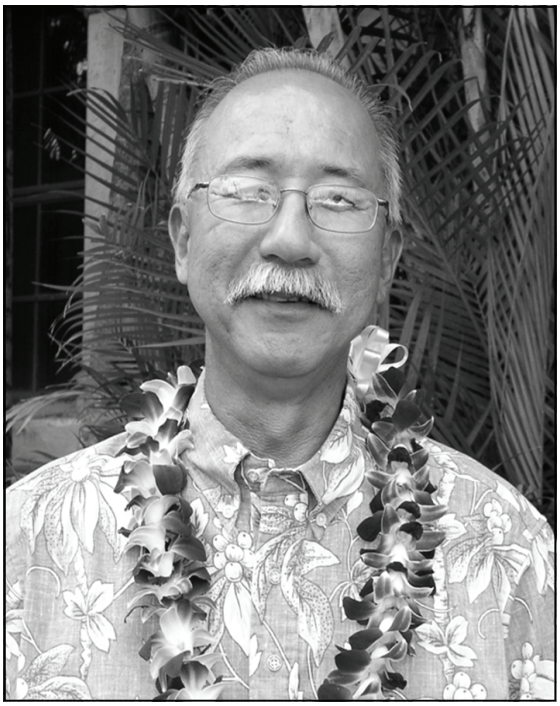
Please join us in congratulating Mark and his son Kanoa on their hard work and continued success.

Far left: Using a jack hammer to install fence posts in pahoehoe. Top center: more holes for fence posts. Bottom center: Fence posts complete, moving on. Far right: completed fence, now for the restoration.

PIA NRCS Director, Larry Yamamoto to Retire

The Pacific Islands Area (PIA) Natural Resource Conservation Service (NRCS) Director, Larry Yamamoto recently announced his retirement effective July 1st. Larry has been with NRCS, formerly known as the Soil Conservation Service (SCS) since being a student at the University of Hawaii, Hilo where he took advantage of student training programs and worked in Hilo and on Maui. His first position after graduating college in 1981 was as a Soil Conservationist on Molokai. Larry also held Soil Conservationists positions on Kauai and Oahu where he became a District Conservationist (DC). As the DC in Honolulu Larry was detailed, or loaned out, to the state Department of Health where he worked on the non-point source pollution program. It was at about this time the federal EPA was granting "319" funds to assist with controlling non-point source pollution.

Other positions Larry had with the SCS and NRCS include Water Quality Specialist, State Resource Conservationist and Assistant State Conservationist for Operations, then State Conservationist. In 2005 NRCS reorganized Hawaii and the Pacific Island territories creating the Pacific Island Area (PIA) and Larry was named the area's Director.



A hui hou Larry, may you have fair winds and following seas.

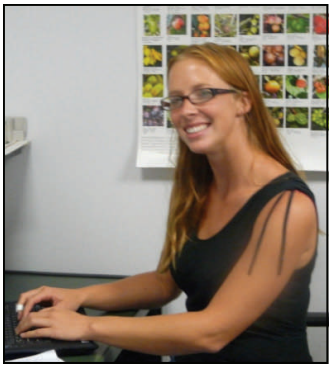
After he retires Larry will be taking care of more projects around the house and visiting family on the mainland. He is also considering obtaining more education, beginning at the community college level since he is not really sure of what he wants to focus on. He is still interested in the field of natural resources but possibly approaching it from a different angle than agriculture, maybe in the marine sciences fields or energy fields.

Larry always encouraged his staff to expand their horizons by taking advantage of opportunities in different offices, different states and in educational pursuits. He believed the greater your knowledge base and the greater breadth of experience you have the better off you will be, not just in your career but in life. It is in this spirit Larry will be off on intellectual pursuits where he hopes to find new and exciting opportunities working in natural resource conservation.

Please join us in wishing Larry the greatest of success in whatever pursuits he follows.

Meet our volunteer, Laurel Lemontt

The Kona SWCD would like to introduce our new volunteer, Laurel Lemontt. Laurel found herself in a position where she was being dropped off for work more than an hour early every day.. She noticed the USDA office and walked in wondering if we could use a few hours of help each week. She is interested in working on projects like improving our website and planting native grasses in our side yard. The Kona SWCD and staff want to give Laurel a big Mahalo for her initiative in coming in to find something constructive to do with the time.



Left, Laurel Lemontt, the new Kona SWCD volunteer, reviewing our website and formulating ideas on how to improve it.

Soils of the Kona District

By Mike Kolman, Soil Scientist, Soil Survey Office Leader, USDA-NRCS

Editor's Note: "The Soils of the Kona District" is a reoccurring column which will highlight the many different soil types within North and South Kona their use and management. As a form of educational outreach, this edition's column will introduce you to some common soil terms and their meanings. We will provide additional terms and their meanings in future publications. If you have any questions regarding these definitions, how they apply to your soil, or general soil questions, please feel free to contact our NRCS Soil Scientist, Mike Kolman at 322-2484 ext. 106

Boulders: Rock fragments larger than 2 feet (60 centimeters) in diameter.

Clay: As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.

Cobbly soil material: Material that has 15 to 35 percent, by volume, rounded or partially rounded rock fragments 3 to 10 inches (7.6 to 25 centimeters) in diameter. Very cobbly soil material has 35 to 60 percent of these rock fragments, and extremely cobbly soil material has more than 60 percent.

Depth, soil: Generally, the thickness of the soil over bedrock. Very deep soils are more than 60 inches deep over bedrock; deep soils, 40 to 60 inches; moderately deep, 20 to 40 inches; shallow, 10 to 20 inches; and very shallow, less than 10 inches.

Fertility, soil: The quality that enables a soil to provide plant nutrients, in adequate amounts and in proper balance, for the growth of specified plants when light, moisture, temperature, tilth, and other growth factors are favorable.

Fine textured soil: Sandy clay, silty clay, or clay

Gravel: Rounded or angular fragments of rock as much as 3 inches (2 millimeters to 7.6 centimeters) in diameter. An individual piece is a pebble.

Humus: The well decomposed, more or less stable part of the organic matter in mineral soils.

Hydrologic soil groups: Refers to soils grouped according to their runoff potential. The soil properties that influence this potential are those that affect the minimum rate of water infiltration on a bare soil during periods after prolonged wetting when the soil is not frozen. These properties are depth to a seasonal high water table, the infiltration rate and permeability after prolonged wetting, and depth to a very slowly permeable layer. The slope and the kind of plant cover are not considered but are separate factors in predicting runoff.

Infiltration: The downward entry of water into the immediate surface of soil or other material, as contrasted with percolation, which is movement of water through soil layers or material.

Infiltration capacity: The maximum rate at which water can infiltrate into a soil under a given set of conditions.

Infiltration rate: The rate at which water penetrates the surface of the soil at any given instant, usually expressed in inches per hour. The rate can be limited by the infiltration capacity of the soil or the rate at which water is applied at the surface.

Large stones (in tables): Rock fragments 3 inches (7.6 centimeters) or more across. Large stones adversely affect the specified use of the soil.

Leaching: The removal of soluble material from soil or other material by percolating water.

Loam: Soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.

Loess: Fine grained material, dominantly of silt-sized particles, deposited by wind.

FARM SERVICE AGENCY

For more information, or to apply for any USDA Farm Service Agency program, please call your local USDA Service Center. NOTE: Fees, eligibility requirements, income and payment limitations may apply with any of the programs listed below. Please check with the nearest FSA office for specific rules. The FSA office in Kealakekua can be reached at 322 -2484 ext 111.

SURE: The Supplemental Revenue Assistance Payments Program, SURE provides benefits for 2008 through 2011 crop year farm revenue losses due to natural disasters. It is the 2008 Farm Bill's successor to prior ad hoc crop disaster programs. For SURE, a "farm" is eligible when either:

> a portion of the farm is located in a county covered by a qualifying natural disaster declaration (USDA Secretarial Declarations only) or a contiguous county; or, the actual production is less than 50% of the normal production.

Signup for the 2009 SURE began on January 10, 2011.

TAP: The Tree Assistance Program (TAP) provides financial assistance to qualifying orchardists and nursery tree growers to replant or rehabilitate eligible trees, bushes, and vines damaged by natural disasters occurring thru October 1, 2011. Please see your nearest FSA office for eligible tree types and all producer eligibility requirements.

CREP: FSA continues to accept applications for the Hawaii Conservation Reserve Enhancement Program (CREP). Through CREP, program participants receive financial incentives from USDA and the State to voluntarily remove land from agricultural production and convert the land to native grasses, trees and other vegetation.

Conservation Loans

FSA has developed a new loan program, the Conservation Loan (CL). This program will provide farm owners and farm related business operators access to credit to implement conservation techniques that will conserve natural resources. The program provides assistance with the upfront costs of installing conservation practices and can be used implementing practices approved by NRCS. This loan program can help reduce soil erosion, improve water quality and promote sustainable and organic agricultural practices.

Direct CLs can be obtained through the FSA with a loan limit of $300,000. Loan can also be obtained from lenders working with FSA for up to $1,112,000. This is a great opportunity for our producers who have not been able to put conservation on the ground because they lack the funds for the initial investment.

For more information on this program and other loan programs offered through FSA contact John Tamashiro at 933-8342 or Miki Miyasato at 933-8344 in the Hilo FSA office."

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Board of Directors:
Chairman: Rick Robinson
Vice Chairman: Greg Hendrickson
Secretary: Virginia Isbell
Director: William "Skip" Cowell
Director: David "Kawika" Marquez

Staff: Mary Robblee, Conservation Assistant
Monthly meetings are held on the 2nd Tuesday of the month from 7am-9am at the USDA Kealakekua Service Center below the post office. All are welcome and the facility is ADA accessible.

Organization: The Kona Soil and Water Conservation District (KSWCD) is a government subdivision of the State of Hawaii organized under Hawaii State Law, HRS Chapter 180

Function: To utilize available technical, financial and educational resources to focus or coordinate them so that they meet the needs of the local land users with regards to conservation of soil, water, and natural resources.

Service: The District serves the communities and land users within North and South Kona

Why: The District is committed to the promotion of wise land use and resource stewardship.

Were on the web at
www.kswcd.org

Agroforestry Practices and How They Benefit You

Agroforestry is a type of land use that involves using a mixture of trees or other woody perennials in crop land or pasture/grazing land for ecological and economic benefits.

Nitrogen fixing trees can be used throughout some croplands lowering the need for commercial fertilizer and lowering an agricultural producer's input costs. Timber trees could be planted throughout crop land providing for better recycling of nutrients over time and also creating a long term investment strategy. Successful agroforestry systems are sometimes said to be as much an art as a science but one thing is sure, successful agroforestry producers have healthier ecosystems on their land and with that healthy crops and animals.

There are a number of forestry practices that can be incorporated onto crop land or grazing land that have benefit not only the agricultural producer but to the community as well. A few are described below.

Alley Cropping: This is where a producer will plant trees or shrubs in rows and produce agronomic horticultural crops or forage for livestock in the alley between the rows of trees/shrubs. Some of the benefits include enhancing the microclimatic condition to improve crop or forage quality and yields, reducing surface water runoff and erosion, improving soil quality by increasing utilization and cycling of nutrients and enhancing wildlife and beneficial insect habitat.

Multi-Story Cropping: A producer uses existing or planted stands of trees or shrubs that are managed as an overstory with an understory of woody and/or non-woody plants that are grown for a variety of products. Multi-story cropping does not apply on land that is grazed.

Forest Stand Improvement: For removing unwanted trees and shrubs from forest stands that contain desirable vegetation. This is primarily done by hand or with a chainsaw, and includes herbicide applications. The practice may also be used to thin dense stands of koa resulting from scarification.

Windbreak/Shelterbelt Establishment: For establishing linear plantings of woody plants using native or non-invasive species. Benefits of the practice include the reduction of soil erosion due to wind, protecting plants from wind related damage and enhancing wildlife habitat, just to name a few.