

Resource Kona

RESOURCE KONA

Summer/Fall 2013

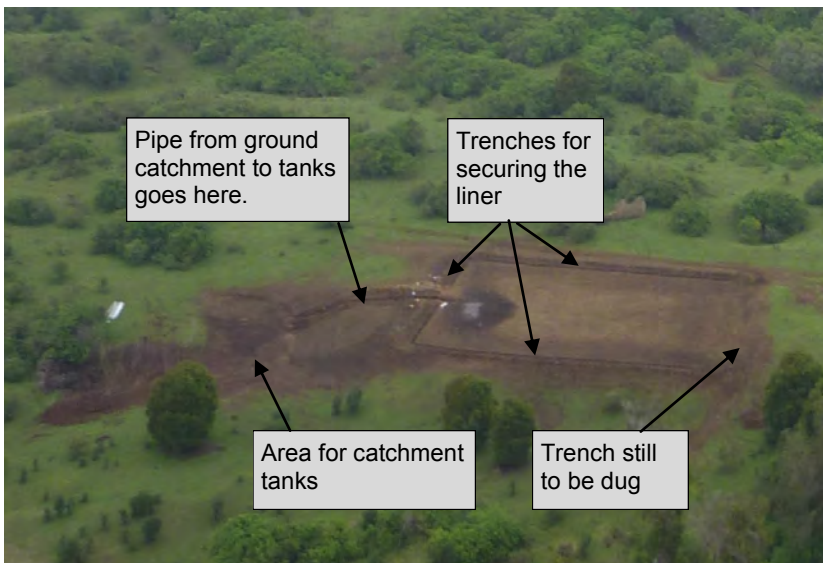
KONA SOIL AND WATER CONSERVATION DISTRICT

Stock Water Options

Ranchers face many challenges when it comes to managing their grasslands. One of the greatest challenges is ensuring all a ranch's animals have adequate water, or stock water as it is called. It is not at all uncommon for a ranch to have grazing land where there is no public water supply or where the land is dry and not suitable for other agricultural purposes. The challenge, how to get water to the animals to drink.

NRCS offers three main options for providing stock water for pastures that do not have access to county water and the solution is dependent on the ranch's individual situation. A rancher may want to do a "ground catchment". Yes, that does sound a little counterintuitive but it does work. Catchment tanks with a roof structure can also solve the problem as can the installation of a pond.

A ground catchment is located on land that can be shaped to divert rain water into storage tanks. The



size of a ground catchment is dependent on the location, rainfall and the size of the herd. It is called ground catchment because the land it incorporates does not create deep water, maybe just a foot deep, NRCS has designed them from 20,000 sq. ft. to 3 acres in size. The one in this photo is 22,000 sq. ft.

This photo shows a ground catchment system being installed. Trenches are dug along the perimeter of the ground catchment area then a liner is set into place. The trenches are then backfilled to secure the liner's position. In this photo three of the four trenches have been dug as well as a

trench for a pipe coming from the catchment area to the catchment tanks. The tanks have not yet been installed at the project site. Rain is collected in the ground catchment area, piped to the catchment tanks then piped to the troughs. The required slope for ground catchment is so slight the land appears flat. It is the slope of the pipe that draws the water down into the catchment tanks using gravity. Gravity is also how most troughs are fed. (cont. on page 2)

Inside this issue:

Native Wildlife

Page 3

Feral Ungulate Control

Page 3

West Hawaii Veterans' Cemetery

Page 4

History's Corner

Page 5

Soils

Page 6

FSA News

Page 7

Senator Hirono

Page 8

Special points of interest:

- Kona SWCD meetings take place the second Tuesday of the month from 8am-10am and you are invited.
- If you want to learn more about how to protect your natural resources, give us a call,

Stock Water Options *(cont. from page 1)*



Catchment tanks with a roof structure are similar to ground catchment but instead of collecting the water on the land it is harvested off of a roof structure. The size of the roof structure will be dependent on the rainfall for the area and the number of animal units that require the water. One animal unit is equivalent to 1000 lbs. It could take more than one animal to be the equivalent of one animal unit.

The photo on the left shows what a roof structure and catchment tank look like. The catchment tank is not required to be under the roof structure.

A pond, the third way to provide stock water, is just that, a pond. It has a liner and for safety sake, a ladder to exit the pond. The liners used are exceptionally slippery when wet, which makes it very difficult to exit a pond should you find yourself in one.

In the photo to the right ground catchment drains into a pond instead of catchment tanks. The pond then supplies water through pipes directly to the troughs located in the paddocks the livestock graze.

One of the greatest challenges to ranchers when it comes to water is drought. Not only is it a challenge to provide stock water to the herds, but without rainfall the grasses the livestock rely on dry up. To deal with drought ranchers have to decrease their herd sizes and ship in feed, which cuts their already slim profit margins even more.

If you want to help your local rancher, buy local grass fed beef. The local beef available on the island is from cattle that never left the island.

If you would like assistance with your stock water resources contact your local NRCS office.



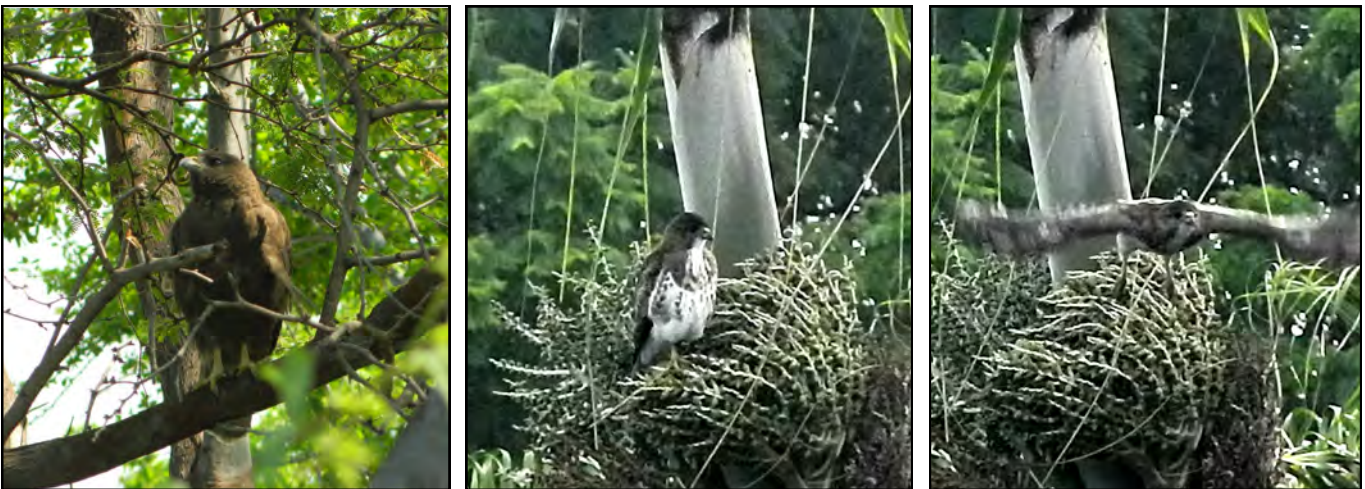
Native Wildlife, the Hawaiian Hawk

Many of Hawaii's native wildlife species are endangered, like many of Hawaii's native plants. One of these endangered wildlife species that is sometimes seen flying around our communities is the native hawk, the l'ō.

The adult l'ō has dark plumage on its head and yellowish feet and legs. An immature l'ō has greenish feet and legs and light colored head. The adult female is larger than the adult male. The l'ō diet includes insects, small rodents and small birds. l'ō eggs are light blue and there is usually a single chick raised by the adults.

In Hawaiian legends the l'ō is a symbol of royalty.

The photo on the left (mature hawk) was taken along Kealakekua Bay the center and right photo (juvenile hawk) were taken in Captain Cook in the Kealakekua ahupuaa at about 1,200' elevation.



If you have any photos that you would like to share with the readers of this newsletter please come forward. One of the goals of this newsletter is to educate its readers to the many natural resource blessings and challenges we face here. If you have something that fits into that mission please feel free to contact us.

NRCS No Longer Cost Sharing on Fencing to Exclude Feral Ungulates.

According to the State Technical Advisory Committee meeting on Wednesday September 18, NRCS will no longer cost share on fencing if the purpose is to prevent damage to your natural resources by feral ungulates. In Kona that generally mean feral pigs. It is likely you can obtain cost share dollars to install a variety of conservation practices to address your resource concerns but all of those could act as an attractant to the feral pigs and as a result they could destroy your hard work and the installed practice.

If you choose to work with NRCS and the federally funded conservation programs despite not being able to control the feral ungulates you do need to know that you are expected to maintain a practice, at your expense, for the life of the practice. That means, if you install conservation cover, a practice with a three year life span, and your visiting pigs come and dig it all up, you have to replant. If NRCS does a spot check to confirm the practice still exists before its life span is over and damage is significant enough so that the practice no longer serves its purpose you could be required to refund the reimbursement you received for the initial installation of the practice. This maintenance requirement is something all producers should consider prior to entering a contract with NRCS.

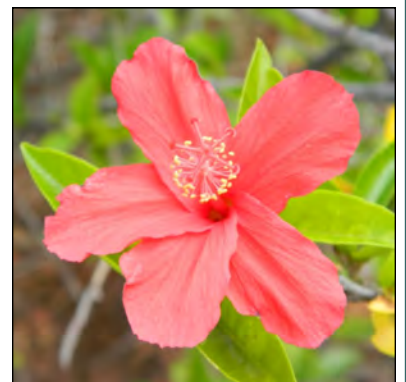
West Hawaii Veteran's Cemetery Reforestation Continues

On Saturday, Sept 21st, approximately 100 people gathered to plant trees and continue making the veteran's cemetery a more beautiful place and worthy of the souls buried there.

There was a crew working on an irrigation system for the new greenhouse and another crew working on the memorial garden. There were a record number of trees available for planting on this day, 500 all together and with 100 people we were finished in time for lunch.

The first planting on the project took place on March 5, 2005. Since then over 10,000 trees and shrubs have been planted at the site with more being planted every year by more and more volunteers. Each planting brings familiar faces together and introduces new ones who will soon become familiar. This has truly become a community project.

This planting day included veterans, civilians and a group of active duty troops from an aviation unit stationed on Oahu and on the Big Island for training. The Rotary Club provided able and willing bodies as did NRCS and the Kona SWCD. Home Depot provided a grant to purchase the materials necessary for the irrigation system in the greenhouse as well as some manpower to install it. There were students from the West Hawaii Community College and families with their kids come and help out too.



From bottom left corner going clockwise: Going up the stairs leads to trails up the hill. Virginia Isbell blowing the pū. Dr. Stevens explaining the history of the project and tips for successful planting. One of the planet's youngest conservationists. The rare endemic Hibiscus Koki'o `Ula. The line of volunteers heading up the hill to plant and dedicate their loved ones.



From bottom left going clockwise: Working on the Memorial Garden. Active duty troops, civilians and veterans helping to create a forest. After work, lunch! Rotarians at work, there were quite a few. Dave Fischer (retired) and Carl Rossetti from NRCS are working on the greenhouse irrigation system. Home Depot crew, Bill in the white shirt and Store Manager, Jack, putting the manifold together for the irrigation system.

History's Corner

A new feature we are going to try in our newsletter is *History's Corner*. In this column we will provide you with an historical photo and as much information pertaining to that photo as we can. For instance, the photo below taken in the mid 60s, shows the participants of a Soil Conservation Service (SCS) staff meeting that took place at the Reef Hotel in Waikiki in Honolulu.



The SCS is now known as the Natural Resource Conservation Service. We will bring you additional and exciting historical photos in our upcoming editions in this *History's Corner* column. We hope you enjoy it. Note all the neck ties and that few woman worked for the SCS

Rapid Carbon Assessment in Hawaii

Mike Kolman, MLRA Soil Survey Leader, USDA, NRCS Kealakekua, Hawaii

As a continuation of the effort to evaluate US national carbon stocks, the Major Land Resource Area (MLRA) Soil Survey Office in Kealakekua, Hawaii and University of Hawaii- Manoa (UH-Manoa) have partnered to collect and analyze soil carbon data for the USDA- Natural Resource Conservation Service (NRCS) sponsored Rapid Carbon Assessment (RaCA) in the State of Hawaii.

Soil scientists Mike Kolman and Amy Koch from the Kealakekua MLRA Soil Survey Office, along with Michelle Lazaro from the UH-Manoa, are the primary team members who worked this past summer on soil sampling. They were trained in RaCA methods by Kari Sever, a soil scientist and RaCA Coordinator from Ft. Collins, Colorado MLRA Soil Survey Office. NRCS Earth Team Volunteers and UH students help by providing support in the field and UH lab as well.



Photos from Hawaii Island sampling. (Left): Range site. Pictured left to right: Michelle Lazaro, Earth Team volunteer Alex Beaton, Amy Koch, and Mike Kolman. (Center): Forest site. Pictured left to right: Amy Koch, Michelle Lazaro, Mike Kolman, and Kari Sever. Photos courtesy of Kari Sever. (left): Pictured left to right: Alex Beaton and Mike Kolman sample and record data at a wetland site. Photos courtesy of Tony Rolfes.

Soils to be sampled are from 48 locations across the Hawaiian Islands using sampling protocols provided by the National Soil Survey Center (NSSC). The sampling protocols are the same as those used on the mainland during the first phase of RaCA and include Visible and Near Infrared (VNIR) analysis.

Each site brings new challenges in logistics, terrain, weather, vegetation, and soil conditions. Sites are located on both public and private lands on the Islands of Kauai, Oahu, Maui, and Hawaii so access must be coordinated with other agencies and land managers to schedule a site visit.

Site characteristics are quite varied and included shield volcanos, `a`a and pahoehoe lava flows, ash fields, alluvial fans, saddles, ridges and valleys. The annual rainfall varies from about 10"/year to 157"/year and the elevation range is from sea level to nearly 7,000'. The temperature variations between the sites run from 51.8 to 78.8 degrees Fahrenheit. Vegetation also varies with ecosystem and land use. Land cover consists of crops, wetland, grasslands, dryland forests, and rain forests. So far, 60 percent of all sites have been sampled on the Islands of Hawaii, Maui and Oahu and sampling trips are currently being planned for the Islands of Maui and Kauai.

The data will be incorporated into summary tables that will be provided to the National Soils Information System (NASIS) the NSSC and others for use in conservation planning; particularly to inform about effects of conservation practices on soil carbon stocks for addressing soil condition resource concerns as well as global carbon accounting.

If you would like more information on this project please contact Mike Kolman at the NRCS Kealakekua Field Office.



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 Hilo can be reached at 933-8381 ext 1.

2013 County Committee Elections

The election of agricultural producers to the Farm Service Agency (FSA) county committees is important to all farmers and ranchers. It is crucial that every eligible producer participate in these elections because FSA county committees are a link between the agricultural community and the U.S. Department of Agriculture (USDA).

County Committee (COC) members are a critical component of FSA operations. The intent is to have the COC reflect the diversity of producers and represent all constituents. This means that minorities, women or lower income producers need to be on the committee to speak for underrepresented groups.

County Committee election ballots will be mailed to eligible voters on November 4, 2013. The last day to return completed ballots to the USDA Service Center is December 2, 2013.

Targeted Funding for Women and Minorities

The Farm Service Agency (FSA) has a number of loan programs available to assist applicants to begin or continue in agriculture production. Farm operating loans are available as well as loans to purchase or improve farms or ranches.

While all qualified producers are eligible to apply for these loan programs, FSA has provided targeted funding for women and minorities. Eligible minority groups include American Indians, Alaskan Natives, Asians, Blacks or African Americans, Native Hawaiians or other Pacific Islanders, Hispanics, and women.

FSA loans are available to applicants who meet all the eligibility requirements and are unable to obtain the needed credit elsewhere.

If producers or their spouses believe they would qualify for these targeted funds, they should contact their local FSA office for details.

Farm Loan Program Interest Rates (subject to change, check with the FSA staff for current rates)	
Farm Operating - Direct	1.875%
Farm Ownership - Direct	4.000%
Farm Ownership - Direct Down Payment, Beginning Farmer or Rancher	1.50%
Emergency	2.875%
Microloan	1.875

81-948 Waena'Oihana Loop
Kealakekua, HI 96750
322-2484 ext. 100
Fax: 322-3735

Board of Directors:
Chairman: Rick Robinson
Vice Chairman: Greg Hendrickson
Treasurer:
Secretary: Denise Light
Director: Keith Unger

Staff: Mary Robblee, Conservation Assistant
Monthly meetings are held on the 2nd Tuesday of the month from 8am-10am 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

Senator Hirono Has Been Hard at Work

Senator Mazie K. Hirono announced earlier this month the United States Department of Agriculture (USDA) will lift a ban on Hawaii Sharwil avocado shipments to the mainland. Earlier this year, Hirono wrote and sent a letter – signed by Hawaii’s congressional delegation – urging the USDA to lift its 1992 ban, arguing that numerous scientific studies have found that the avocados prove to be a very poor host for the fruit flies USDA is trying to prevent from coming to the mainland. Since sending the letter, Hirono has worked closely with avocado farmers, the Hawaii Department of Agriculture and the USDA to lobby for the ruling.

“This USDA ruling will directly benefit Hawaii farmers and our economy,” said Hirono. “The new rule -- advocated by Hawaii’s congressional delegation since 1992 -- will finally allow our local producers to sell avocados to the mainland, opening up a number of new markets for these delicious, Hawaii-grown products. Advancing local food has long been a cornerstone of my push to make our state and economy more sustainable, and I am very appreciative the USDA has made this critical ruling.” This is a great thing.

Another great bit of news that has recently come from Senator Hirono’s office is the funding of one million dollars the USDA is providing for dealing with the Coffee Berry Borer. The funds will be used to educate local coffee growers about preventing the spread of the insect, research into which pesticides best control the pest, the creation a sanitation program for control of the borer and to study the genome of the pest.

This will be science based solutions. Our local coffee growers have been trying many things to fight this problem from cutting down all their trees and starting over to putting out traps and spraying the fungus that provides some control but the fungus is expensive.

It is the hope of the coffee industry that new more effective methods of controlling the berry borer can be established and most feel it is possible, though they all know this pest is here to stay. The goal is to make it economically tolerably, which is actually the goal for most pest species. Eradication is generally not a realistic or cost effective way of dealing with agricultural pest problems.