

Resource Kona

RESOURCE KONA

Winter 2013

KONA SOIL AND WATER CONSERVATION DISTRICT

50th Annual State Conservation Awareness Contest, Kauai Kids Take It!!

Each year the soil and water conservation districts across the state hold county wide Conservation Awareness Contests. The purpose of the contest is to introduce students to the science of soils, the characteristics of soil and how different soils can create a different “best use” of the land. The winners of the county level contests move on to the state competition.

This year’s state competition was co-hosted by the Kona SWCD and the Mauna Kea SWCD. The competition was held at **Blue Journey Farm** owned by Stefanie Delmont and her husband John. Stefanie is the president of the Kona County Farm Bureau so it was an opportunity for local organizations with similar goals, the betterment of our farmers lives, to work together for good of the community.



The WINNERS Kauai High School! From left to right: Jacky Lin, Chantal Rusaw, Jasmine Benham, Mr. Herbert Keamoai, Keith Jose

The winning team came from Kauai High School with 729 points, Pahoia High came in second with 598 points and Kamehameha Maui took third with 536 points. The individual high scorer was Chantal Rusaw of Kauai with 267, second place individual high score went to Kauai High’s Jacky Line with 259 points (continued on page 3)



Second Place, Pahoia High School students and coach.

Feral Ungulate Control (update)

Page 3

How a Conservation Awareness Contest Works

Page 4

Using Pesticides

Page 6

History’s Corner

Page 6

Soils

Page 7

FSA News

Page 8

Special points of interest:

- Kona SWCD meetings take place the second Tuesday of the month from 8am-10am and you are invited.
- Stop in or call to see if NRCS conservation programs are right for you. 322-.2484 x 100.

Blue Journey Farm

The hosting farm for the 50th Annual State Conservation Awareness Contest congratulates all the students who participated in the event.

We wish the very best for the Kauai Kids that won and can now move on to the national competition.

Thanks again to all the kids. Good luck in all you do and to the Kauai Kids...go get em" in Oklahoma!

Wishing you the best, Stefanie and John of ***Blue Journey Farm***

WHEN PIGS FLY



Wants to congratulate all the students who participated in the 50th Annual State Conservation Awareness Contest

Special congratulations go to Kauai High School for winning the state contest and being eligible for the national contest.

Check out When Pigs Fly at the Keahou Farmers Market on Saturday mornings at the Keahou Shopping Plaza, 8-12, or contact them at 896-5055

Also, check out our ulu recipe on page 8! Great addition to your holiday menu!

Congratulations!
From Lavapots Hawaii to all the students who competed in the 50th Annual State Conservation Awareness Contest



Congratulations Kauai High School on a job well done.

The Kona County Farm Bureau wishes you the best in Oklahoma at the nationals.

You have made us all proud and we know you will be exceptional ambassadors of aloha.

Mahalo for your hard work.



50th Annual State Conservation Awareness Contest, Kauai Kids Take It!! (cont. from page 1)

and third place in the individual score category went to Gernel Javier of Pahoia High School with 213 points. There were cash prizes for the three high scorers, \$75 for first place, \$50 for second and \$25 for third. All participants, students and volunteers were awarded a \$10 gift card to Starbucks, Jamba Juice or Longs Drug.



Clockwise from top left: Students judge soil pit 1. Students judging soil pit 2. The scorers (from the left: NRCS Civil Engineering Tech Carl Rossetti, NRCS Soil Scientist Amy Koch, Extension Service Agent Andrea Kawabata, NRCS District Conservationist Matt Wung, Kona SWCD Director Jeff Knowles). Students analyzing soil pit 3.

The Kauai students now have to raise funds to travel to the national competition. All of the funds generated through the sale of ad space in this newsletter will be donated to the Kauai students and if you would like to help them out as well you could send a check to the Hawaii Association of Conservation Districts (make payable to HACD) and put in the memo section National CAC. HACD's mailing address is PO Box 1411, Wailuku, HI 96793 (more photos page 5)

Fencing Update

In the last edition of our newsletter we had an article titled ***NRCS No Longer Cost Sharing on Fencing to Exclude Feral Ungulates***. There were some clarifications made the Kona SWCD feels are important to communicate to our readers.

The feral ungulate problem is a nationwide problem, though probably in varying degrees across the country. To address this problem NRCS Headquarters has provided clarity on the issue. NRCS has advised there are instances where fencing is a cost sharable practice for feral ungulate control.

For instance, fencing can be used to exclude feral ungulates from wildlife habitat. It can be used to exclude livestock from environmentally sensitive areas and it can be cost shared on if it is an integral part of a conservation management system such as a prescribed grazing system. Despite these uses of fencing to restrict access to land by feral ungulates, particularly pigs, NRCS has advise us that fencing (continued on page 4)

Fencing Update (continued from page 3)

cannot be cost shared if the purpose is to reduce feral ungulate pressure on cropland nor can fencing be used to manage feral ungulates as pests.

Staffers from the Pacific Islands Area office have been actively working to solve this problem. They participated on a national committee tasked with finding resolution. The committee unanimously agreed on the development of a new conservation practice standard called **Invasive Vertebrate Species Control**. This new practice, if signed off on by NRCS Chief Weller and adopted into the NRCS Field Office Technical Guides, would give NRCS a new tool in the fight against feral ungulates and the damage they do. It is the hope of the Kona SWCD that Chief Weller does see the value in this new practice and that there is a need for it.

What does all this mean? If you have crop land and pigs have denuded it as they have done to this farm's field of taro, you may be able to receive cost share dollars for mulching, conservation cover, and cover cropping to protect and improve your soil. Farmers know those are great at building soil, and for attracting pigs which is the problem this farmer is trying to solve. The best way to prevent this type of damage to the soil is to restrict access to who/what is doing it. This farmer was no where near as concerned over his lost taro as he was at the prospect of losing his soil. His statement, "I can plant more taro but what about my soil? Do you know how long it will take me to re-build this soil?"



Our soils are organic in nature, think compost, so not only does it have to contend with wind and water erosion but if left exposed to the atmosphere, as in the above photo, it will simply become thinner and thinner and eventually will be gone completely. With an average slope across the land of 13%, geologically very young landscapes (the Kona Airport was built on landscape that is not even 200 years old yet!), and with the length of time it takes for nature to develop an inch of soil, hundreds of years, we can assure all of NRCS that the Kona community has a dire need for ungulate control, if for no other reason than we need soil on our cropland to grow food.

How Does a Conservation Awareness Contest Work?

Conservation Awareness Contests begin with a group of volunteers arriving a couple days ahead of time to the host farm in order to dig soil pits and set slope finders. The time it takes to do this is very dependent on the rockiness of the soil. For this year's SCAC it took two people an hour to dig a hole 18"x12"x12", and three holes had to be dug. A Site Condition Sheet is developed for each site as well. A Site Condition Sheet will advise the competitors of information such as rainfall, wind velocity and soil pH just to name a few. The condition sheets may or may not reflect the actual reality of the site. Remember, this is a contest of students' analytical skills and soil and land use decisions can be affected by these variable conditions.

On the day of the contest participating students are broken up into three random groups of students and assigned to a soil pit. They are allowed to have a pencil and a clip board with them, nothing else. At the start of the contest each group heads to their respective soil pit where they will be greeted by a proctor who will hand them a score sheet and make sure no conversations take place between the students. The students have 20 minutes to analyze the soil and answer the question on their sheet.

(continued on page 5)

State Conservation Awareness Contest (cont. from page 3)



Lower left: after all the soil pits were analyzed by all the students it was time to eat. Top left: Bernard Vermeulen, the time keeper. Top center: An overview of Blue Journey Farm. Soil pits were in the northeast, southeast and southwest corners of this field. Right: A student is determining the slope of the land, one of those questions for which there is only one correct answer and if the student doesn't get it points are deducted from their score. Center bottom: The Kamehameha Maui students with their chaperone.

How Does a Conservation Awareness Contest Work? (cont. from page 4)

When time has elapsed they hand their score sheets back to the proctor and move on to the next soil pit. Where the same procedures are followed until all students have analyzed all three soil pits.

Score sheets are rounded up by a volunteer, proctors are not allowed to leave their soil pit, and brought back to the scoring table. Students are provided points for correct answers and points are deducted for wrong answers though if deductions are made a score cannot be lower than zero.

When all competitors have completed their analysis for all the soil pits we have lunch. This year it was a barbeque with hamburgers, hot dogs, veggie burgers, a salad, and cookies for dessert. Toward the end of lunch we have an award ceremony where the winning teams receives a trophy and all students receive a Certificate of Participation.

The contest does focus on land uses related to agriculture though learning soil science is beneficial to many fields, including architecture, construction management, energy production, municipal land planners and civil engineering to name a few. The contest also teaches students the world can be different place than where they are from. Imagine Kauai students living with the red soils of their island coming to Kona and analyzing our rocky soil. This contest required the students use their basic knowledge of soils and analyze something they are not familiar with which is an important skill for young people to develop. All the students in this year's contest did a great job of it!

Using Pesticides

Agricultural pesticides is an all inclusive term referring to insecticides, herbicides, fungicides and rodenticides. Most pesticides are poison unless they are considered organic pesticides, even seemingly harmless Round-Up with its active ingredient of glyphosate is a poison. Fortunately the developer of the chemical, Monsanto, has been able to produce studies showing there is no ill effect of glyphosate.

The important aspect for applying any pesticide is to follow the label directions. Following labeling requirements include the person spraying the pesticide to have their skin covered. They also include directions to avoid drift. Drift can cause significant waste and is inappropriate use of all pesticides. It can put you, your family and your neighborhood at risk. Pesticides should not be sprayed where there are unprotected people in the area and should not be applied to an area a person may walk through prior to the pesticide drying. Some labels, including Round-Up state spraying should not take place in front of peoples homes or businesses.

Not adhering to labeling requirements can put you at risk for injury. Remember, most pesticides are poisons, intended to kill something. It is not good for your system any more than it being good for the target species a particular pesticide is developed for. Please follow labeling instructions. If it seems the label was written by an attorney it probably was. Their goal is to limit their company's or their client liability. One way to do this is to put restrictions of use on the label. If you use a product in a manner that is not in compliance with the label and you are injured or become ill the manufacturer of the product's first question will be, "Did you follow the label instructions?"

History's Corner



Photo from 4/10/1968. The flood waters are from the Keopu Stream and they are inundating the intersection of Kuakini Highway and Hualalai Road.

It was not uncommon for St. Michael's Church to be flooded as well if this area was flooded.

In the early 1970s, through a cooperative project between the Kona Soil and Water Conservation District, the Natural Resource Conservation Service (called the Soil Conservation Service at the time) and the County of Hawaii a project known as the Keopu Channel Improvement project was undertaken. The result was a sediment basin behind the Hualalai Regency with a concrete channel that provides an outlet for overflow.

You can see the concrete channel along the north western side of the Hawaii Community Federal Credit Union on Hualalai Rd. From where the channel goes underground at Hualalai Road it remains underground until it outlets at the ocean at Hale Halewai.

This type of flood control structure could not be built today because of regulations preventing the channeling of floodwaters directly into the ocean.

The Kona Coffee Farmers Association wants to congratulate our Kauai Kids for a job well done winning the state's 50th Annual State Conservation Awareness Contest.

We wish them the very best in the national competition held in Oklahoma.



KCFA hopes to see you at the 7th Annual Kona Coffee Farmers Expo on January 31, 2014 at the Old Airport Pavilion 9am - 3pm



Come join us at our annual event. Find vendors providing services you may need. Find new products and ideas.

The Coffee Expo, more than just coffee!

'Ulu Spätzle, A Great Addition To Your Holiday Menu

By Chef Devin Lowder of When Pigs Fly, Island Charcuterie Company

Ingredients:

2 cups of mashed `ulu
2 eggs beaten
3/4 cup milk
2 tablespoon water
1 & 1/2 cups flour
1/2 teaspoon baking powder
1/8 teaspoon nutmeg
1/2 teaspoon salt
1/8 teaspoon white pepper

Directions:

Combine `ulu, egg, milk and water. Mix. Combine flour, baking powder, nutmeg, salt and pepper. Mix. Add dry ingredients into liquid. Mix well. Mixture will be sticky. Bring 4 quarts of salted water to a boil, place spätzle maker over pot of water. Add mixture to the spätzle maker, slide back and forth. Cook spätzle 5 minutes. Toss with butter and fresh herbs. Enjoy!

Note, a colander could be used in place of a spätzle maker. Place the mixture inside the colander. While pushing down on the mixture so that it extrudes through the colander holes slide it back and forth so the mixture is 'cut' with each slide past the holes

This is a great side dish to many things. When Pigs Fly can assist you with all your charcuterie needs.

Charcuterie: is the branch of cooking devoted to prepared meat products, such as bacon, ham, and sausage.



Soil Facts

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

World Soils Day took place on December 5th. The day celebrated the importance of soil to our survival. The following are a list of soil facts, and quotes from recognized conservation leaders, that can help people realize the significance of the planet's soils.

- ◆ “We owe our existence to those few inches of living and life-giving top soil.” - NRCS Chief Jason Weller
- ◆ No matter where your water comes from, it's been filtered by the soil!
- ◆ In your lifetime you drink 10,000+ gallons of water. All of it filtered by soil.
- ◆ Soils are a limited natural resource.
- ◆ Healthy soils are important for food security, ecosystem functions, and sustainable development.
- ◆ Keeping soil healthy improves water and air quality, provides for wildlife habitat and reduces flooding.
- ◆ “The nation that destroys its soil destroys itself.” - Franklin Roosevelt
- ◆ “The soil is the great connector of our lives, the source and destination of all.” - Wendell Berry, 1977
- ◆ “To be a successful farmer one must first know the nature of the soil.” - Xenophon, *Oeconomicus*, 400 B.C.
- ◆ “Too many people have lost sight of the fact that productive soil is essential to the production of food.” - Hugh H. Bennett
- ◆ “Productive soil is life, and productive soil is vanishing with each passing year.” - Hugh Hammond Bennett (Between 1982 and 2007 14 million acres of prime farmland in the US was lost to development).
- ◆ Soil health is critical to the vitality of our farms, health of our planet and our ability to feed 9 billion people by 2050.
- ◆ There are more organisms in a teaspoon of healthy soil than there are people on earth!
- ◆ “Increasingly, more and more producers in the Pacific Islands Area and throughout the nation are harvesting a wide range of production, environmental, and business benefits—on and off the farm—by improving soil health.” NRCS Acting Director Carlos Suarez
- ◆ “Without robust soil ecosystems, the world's food web would be in trouble.” Jim Robbins, *New York Times* writer.
- ◆ Healthy soils are high-performing, productive soils
- ◆ Healthy soils reduce production costs—and improve profits
- ◆ Healthy soils can reduce nutrient loading and sediment runoff, increase efficiencies, and sustain wildlife habitat.
- ◆ Healthy soils are high-performing, productive soils



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.

FSA At Work in Hawaii County: Fiscal Year 2013 Accomplishments

“The USDA Farm Service Agency delivered over **\$10.36 million** in federal program payments and loans in Hawaii County to farmers and ranchers during FY 2013. Farm Service Agency is committed to serving the farmers and ranchers of our region by providing them support in times of economic insecurity or natural disasters and to expand their businesses.” Lester Ueda, County Executive Director

Conservation and Habitat Protection: \$1.69 million: The programs these funds were funneled through include the following:

\$734,096 - Emergency Conservation Program (ECP) provides emergency funding and technical assistance for farmers and ranchers to rehabilitate farmland damaged by natural disasters and carry out emergency water conservation measures during periods of severe drought.

\$820,013 - Conservation Reserve Program (CRP) and Hawaii CREP provides financial incentives, cost-share and rental payments to producers who convert highly erodible cropland or environmentally sensitive acreage to long-term tree and/or vegetative cover.

\$135,921 - Grassland Reserve Program (GRP) and other Conservation Programs funds are used to restore and preserve sensitive native grassland, pastureland and certain other vulnerable areas. The program conserves susceptible grasslands from conversion to cropland and other uses while reducing erosion and improving wildlife habitat. Some limited agricultural uses are allowed and easement or rental contract options are available.

Farm Operating and Ownership Loans: \$4.7 million The FSA loan programs providing this assistance includes:

\$800,455 - In Fiscal Year 2013, **21 Farm Operating Loans (Direct and Guaranteed)** provided capital for Hawaii Island producers to plant crops, purchase livestock or reorganize their operations. **\$3,938,118** - During this same fiscal year, **10 Farm Ownership Loans (Direct and Guaranteed)** provided assistance to Hawaii Island producers for the purchase of farm property or to make real estate improvements.

Of these Direct and Guaranteed Loans, \$3.3 million were Special Qualified Loans. Farm Service Agency focuses credit resources on underserved groups including minorities, women, beginning producers and youth.

Disaster Assistance and Price Support: \$3.97 million through the following programs:

\$ 3,522,053 - Non-Insured Crop Disaster Assistance Program (NAP) provides financial assistance to producers of noninsurable crops in the event of weather-related crop losses.

\$ 89,681 - Supplemental Revenue Assistance Program (SURE) provides benefits for farm revenue losses due to natural disasters.

(Continued on page 10)

81-948 Waena'Oihana Loop
Kealahou, 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 Kealahou 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

FSA Fiscal Year 2013

Accomplishments *(continued from page 9)*

Disaster Assistance Programs (cont.)

\$ 25,494 - Emergency Assistance for Livestock, Honeybees, and Farm-Raised Fish Program (ELAP) provides emergency assistance to eligible producers of livestock, honeybees and farm-raised fish that have losses due to disease, adverse weather or other conditions, as determined by the Secretary.

\$ 14,939 - Livestock Indemnity Program (LIP) compensates producers for livestock death losses in excess of normal mortality due to adverse weather.

\$ 10,944 - Tree Assistance Program (TAP) provides financial assistance to replant or rehabilitate eligible trees, bushes, and vines damaged by natural disasters.

Price Support Programs:

\$ 264,433 - Reimbursement Transportation Cost Payment Program (RTCP) reimburses geographically disadvantaged farmers and ranchers for a portion of the transportation cost for transporting their agricultural commodity, or inputs used to produce an agricultural commodity, during a fiscal year.

\$ 51,089 - Milk Income Loss Contract (MILC) compensates dairy producers when domestic milk prices fall below a specified level.

Contact our local FSA office and see how their programs can help you.

Pacific All American Janitorial & Commercial Cleaning

Congratulates Kauai High
for job well done!
Good luck at Nationals
this spring!

For all your cleaning needs
Pacific All American
Janitorial & Commercial Cleaning

For your ceiling, floors and
everything in between. Contact
Pacific All American
for a cleaning quote today.

PO Box 195
Kailua Kona, HI 96745
(808) 329-1505