



# UC Cooperative Extension Humboldt County

“Helping People Help Themselves”



## 2007 Year in Review

June 2008

UC COOPERATIVE EXTENSION  
HUMBOLDT COUNTY AGRICULTURE CENTER  
5630 SOUTH BROADWAY, EUREKA, CA 95503-6905

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The University of California Cooperative Extension Humboldt County office would like to thank all you for your support for our programs.

2007 and the first quarter of 2008 have been very active for us. We have had some challenging changes along with preparing to celebrate our **95th anniversary** in 2008.

First I would like to let you all know how much I appreciate the help given by the Humboldt County Cooperative Extension staff and community at large with my arrival and transition as Livestock/Natural Resources Advisor and County Director. It has been a joy to meet and get to know you all as I have settled in with the many duties facing me.

Over the past year we have had some staff changes. In late June of 2007, funding for the 5 year term position for our Dairy Advisor, Ken Andersen, came to an end. He made great strides during his time here and some of the progress he made will be continued with our current staffing. We also said good bye to Pete Nelson, Marine Fisheries Advisor, in the Sea Grant Office. Pete had great success in his projects during his time with UC, but has moved on to a position in the private sector. Fortunately, Pete is still in the Eureka area as a local resource. We also had some changes in our office support staff and would like to welcome Emily Trutt as our new secretary in the front office. She has been with us since April, 2008 and has proven to be a great asset to our team. So please say “hi” and introduce yourself to her when you come by our office, since she is still getting to know many of our clientele and our area.

Despite these many changes, this has been a very busy year at Cooperative Extension, where the advisors and staff started new projects while continuing on with the

many projects already in progress. In addition, the 4-H program continues to grow as we reach out to even more youth and adults throughout Humboldt County.

I would like to highlight a few of our new and continuing research and educational projects:

- Humboldt Bay Ecosystem management project
- Humboldt Bay eelgrass project
- Aleutian Goose pasture utilization study
- Pasture manure application project
- Sudden Oak Death monitoring and eradication project
- 4-H training and support
- Sponsoring approximately 18 major 4-H events
- Continued Hispanic outreach project for agriculture and business development
- Goat milk producers workshop and milk metering assistance.

Last but by no means least, it is very important to point out, that in 1913, the very first Cooperative Extension Service office was opened in California, **right here in Humboldt County!** As a result we are celebrating our 95th year anniversary in 2008! It is a great honor to be associated with such history, and I am excited to be the Livestock/Natural Resources Advisor and County Director during such a time.

I want to thank all those who have supported this office over all these years and hope the future brings more exciting work and service to the community for years to come.

Alan Bower  
Livestock/Natural Resource Advisor  
County Director

**Inside this issue:**

95TH ANNIVERSARY	2
FORESTRY	3
MARINE SCIENCE	4
PLANT SCIENCE COMMUNITY DEVELOPMENT	5
4-H YOUTH DEVELOPMENT	6
LIVESTOCK NATURAL RESOURCES	7
CALENDAR OF EVENTS	8

See back page for upcoming calendar of events!!!

**VISION:**  
To develop and facilitate the implementation of innovative, useful solutions to agricultural, natural and human resource issues.

# 95th Anniversary of Cooperative Extension

The 95th anniversary of the University of California Cooperative Extension program is particularly significant in Humboldt County. When the University of California created the division of Agriculture Extension on July 1, 1913, the first Extension farm Advisor was placed in Humboldt County.

A young man from Ferndale, Andrew "Andy" Christiansen, welcomed the opportunity to come home to Humboldt County as its first Farm Advisor. Half of his salary and expenses were borne by the University and the balance was contributed by the Humboldt County Board of Supervisors, the chamber of Commerce's Promotion and Development Committee and the Humboldt County Dairy Association.

In 1913 travel was extremely difficult. Humboldt County had no railroad and could only be reached by water, except during the summer months when automobile travel was possible. A railroad was completed the following year from San Francisco to Humboldt Bay. In spite of the hardships, in a very short time period Christiansen had completed an extensive soil survey and began to assist dairymen.



Railroad being built

In October of 1913 Andy Christiansen and Professor B. H. Cocheron, who later became Director of Cooperative Extension, along with two students from UC Berkeley organized the first 4-H Clubs in the State in Humboldt County with the Arcata Club formed October 29, 1913 and the Ferndale and Fortuna Clubs organized the next day.



William Douglas Pine, Farm Advisor 1932-1961

For ninety-five years, Cooperative Extension has served the people of Humboldt County through programs in agriculture and natural resources including forestry and marine science, home economics, community resource development and 4-H. Cooperative Extension in Humboldt County provides the bridge that reaches from basic research conducted in University of California laboratories to ultimate field and community uses.



Home Economics Advisor/  
County Director  
Ruth Crawford



Farm Advisor John Lenz near  
Vicenus ranch showing extreme  
height growth of the thistle.



Ranchers repairing fence.  
John Dunbar, Farm Advisor  
on far right



Hofsted, Pine, Riley  
Small Ownership Panel 1955

Cooperative Extension is referred to as "the greatest adult educational effort in the world". Its purpose is to develop, extend, and bring about, through adaptive research and education, the use of research based information to improve specific practices and technologies in agriculture, natural resources, marine science, home economics and youth development.

As we plan for celebrating our 95th anniversary in this region, we would like to solicit your thoughts or memories you would like to share on UCCE and the region's agriculture and natural resource history.

## Yana Valachovic, Forest Advisor

My educational and research programs focus on management and stewardship of forested ecosystems. I work with natural resource professionals from public and private organizations, to landowners managing industrial, non-industrial and public lands, to the general public. While I respond to current needs with specific technical assistance, I also have many long-term projects and roles.

In 2007, I continued to monitor the spread of the disease known as **Sudden Oak Death** in Humboldt County and measure the effectiveness of our 2006 and 2007 treatment experiments aimed at management of this invasive, non-native tree disease. Southern Humboldt County remains the northernmost infested area in California. Because of the scope and variety of our efforts, they are being closely followed regionally, nationally and internationally.



Chris Lee stream sampling for the Sudden Oak Death pathogen

Radoslaw Glebocki expanded our experimental treatment areas to test how effective thinning, pruning, fire and the use of Agri-Fos® (a phosphonate fungicide) can be to control the pathogen. These experiments are in collaboration with USDA Forest Service, California Department of Forestry and Fire Protection, California State Parks, the Southern Humboldt Fire Safe Council/Institute for Sustainable Forestry, several foresters and supportive landowners. We thank everyone involved with these efforts and acknowledge their tremendous support and dedication to this research.



Radoslaw Glebocki  
Sudden Oak Death  
Field Technician

We hope our treatment alternatives will allow us to: 1) learn how to effectively respond to any new disease outbreaks, 2) control pathogen spread from the Southern Humboldt area, and 3)



Yana Valachovic during presentation

develop long-term treatment strategies to manage this damaging pathogen.

We maintain ongoing monitoring efforts to determine if these treatments are effective. The results so far are promising, but not yet conclusive. Altogether, these studies represent the largest experimental management effort for this highly publicized disease in California.

On other notes, last fall I offered a workshop for present or prospective **rural property owners**. This series utilized our new published 24-chapter **Forest Stewardship Series**, a free online publication that provides owners of California forestland with a comprehensive source of information pertinent to the management and enjoyment of their lands. Copies of the series can be found at <http://anrcatalog.ucdavis.edu> with a search for publications numbers 8231-8254.

I also offered a workshop aimed at helping people understand the **new fire building codes** that have become effective in 2008. A second workshop was offered in February 2008 hosted by the Humboldt County Builders Exchange. Anyone interested should feel free to call our office for more information. I also offered a regionally tailored workshop on **Woody Biomass Utilization: Techniques and Economic Considerations for the North coast**. If you would like to view any of the presentations or learn more about the topic, visit the <http://ucanr.org/woodybiomass> website.

I continue to offer the weeklong educational program for K-12 classroom teachers known as the **Forestry Institute for Teachers** every July. This program brings essential natural resources curriculum to the classroom, thus providing tomorrow's leaders with the knowledge to make better natural resource decisions. In this fun week, thirty teachers learn about the ecology and management of Humboldt County's forests and streams and meet many of the managers, scientists and landowners in the region.

Other noteworthy efforts included participation with the collaborative **Buckeye Forest Project** team. We are currently planning a new workshop on the Future of Forestry to be scheduled for the fall of 2008.

# Susan Schlosser, Marine Science Sea Grant Advisor

Following is a highlight of four of my projects for 2007.

## Humboldt Bay Ecosystem Program

Ecosystem-based management integrates the best available scientific, traditional and local knowledge, is geographically specific, and defines management based on ecological boundaries. The purpose of this project is to develop proposals that will enable practical implementation of an ecosystem-based management approach in the Humboldt Bay Ecosystem. After decades of research, improved scientific understanding of ecosystems and increased public involvement in natural resource issues, ecosystem-



The Humboldt Bay Ecosystem – watershed, bay and ocean

based management offers a new paradigm for protecting and enhancing our natural resources. The Advisory Team for the project examined the Humboldt Bay Management Plan and the Humboldt Bay Watershed Salmon and Steelhead Conservation Plan for community-based priorities and recommendations. Proposal topics under consideration are: 1.) Humboldt Bay Sediment Dynamics Model; 2.) Ecological and Socioeconomic Indicators to detect change, trends and develop a predictive model; 3.) Development of an "Agreement of Intent" to continue collaboration on ecosystem-based management; 4.) Development of an organizations design analysis proposal for an EBM "entity." In 2008 we will conduct a strategic planning process for our proposal concepts. All meetings are public, documents, meeting notes and other project information are available on the project website. Also an on-line survey takes comments and suggestions for the project: <http://groups.ucanr.org/HumboldtBayEBM/>.

## Climate Change Media Outreach

In California and throughout western North America, climate change is evident in air and seawater temperatures, more severe storms, and increased wildfires. Climate change has emerged as a top issue for communities seeking information and solutions. The issue is compelling, as the future of California's economy and environment will have to adapt. It is essential for scientific research results to reach government, industry and individuals so that needed public discourse and

policy changes will take place. The overall project objective is to educate the general public in California about climate change through mass media outreach, a project website, and one-page information sheets. We interviewed four University of California climate change researchers and one climate scientist from the Western Regional Climate Center. Topics addressed include Western US climate data, on-line tools for people to look at their local climate trends, expected impacts, snowfall and precipitation trends, alternative fuels and technologies, renewable energy options, biofuels industry, economic and adaptive solutions.

## Humboldt Bay Juvenile Rockfish Project

The Juvenile Rockfish Project has raised many questions about the variations of abundance seen year to year, but has shown the importance of Bay habitats such as eelgrass beds for the young rockfish. Each year, young fish of marine origin (rockfish, cabezon and greenling) use Humboldt Bay eelgrass beds from June through October, highlighting the importance of this habitat. The data from these projects will be used in the Conceptual Model for the Humboldt Bay Ecosystem Program.

This is a collaborative project, working with local fishermen to trap the young rockfish.

## Humboldt Bay and Eel River Estuary Intertidal and Subtidal Habitat Goals Project

Ecosystem-based management, conservation and restoration efforts in Humboldt Bay and the Eel River Estuary are limited by the relative lack of data on intertidal and subtidal habitats. These dynamic, urban estuarine environments provide important habitat for fish, waterfowl and other aquatic organisms and are a valuable commercial, recreational and aesthetic resource. This project includes a synthesis of current information on Humboldt Bay and Eel River Estuary Habitats and a mapping project. The objectives of the habitat information synthesis are to: 1.) Identify, document and describe estuarine habitats; 2.) Develop habitat goals for management; 3.) Identify and prioritize research needs, and; 4.) Identify restoration opportunities.

All project meetings are public and project information is available on the website: <http://groups.ucanr.org/HumboldtHabitatGoals/index.cfm>.



S. Schlosser and L. Massey measuring and weighing Humboldt Bay fish after a day of sampling.

# Deborah Giraud, Plant Science Community Development Farm Advisor



Deborah Giraud

2007 has come and gone ! I organized and spoke at several **workshops** for farmers to gain new information and network with each other. The Holistic Financial Planning for Farmers and Ranchers was a three-session

workshop, with hands-on application to help producers think about and plan for income and expenses in a new way. Several people shared with us that they have changed how they do their record keeping and how helpful the workshop was.

The Rural Lands workshop in December featured both a class day and a field trip. My presentation addressed new ways to generate income on farms and ranches. I shared agri-tourism as one idea. An HSU student assisted me this year in agri-tourism – he made a site visit to a new landowner and evaluated potential for tourism ideas. It was a great experience for him and helped the landowner. I attended the ag and nature tourism workgroup meeting and saw some of the activities that other counties are coordinating. Humboldt has seen an increase in these type of events, and I had a table with Cooperative Extension information on farming and gardening at the Taste of Willow Creek in September.

A grant from the USDA SARE funded several local activities and a statewide workshop for **commercial dairy goat** herd owners. The workshop was held on May 15<sup>th</sup> in Merced and was a success, with 11 speakers presenting. I also had Davis specialist, Steven Berry, come to Humboldt County and work with producers on lameness problems. Steve has spent his career with dairy cattle foot issues, and was fascinated to be comparing the anatomy and maintenance issues associated with goat hoof care. The milk meters I purchased last year with two grants are being used to collect data on herd production in the county.

I won a travel scholarship to attend the National Sustainable Ag Conference and was able to see and hear many great ideas at the conference. The wood burning stove heating a tomato

greenhouse on a cold March day was the highlight for me on the half day field trip. Someone could have some great early tomatoes here using that set up. I'll try to get some photos from other Extension folks on the tour, as I forgot my camera.

UC SAREP funded a new **web site** that I developed for local sales. The web site location is [www.RedwoodAg.com](http://www.RedwoodAg.com) Local producers can post products with ease and we are encouraging local restaurants, schools and institutions to Buy Local! We have expanded it to include equipment, labor availability or labor needed. Please check it out and spread the word.

My **landscape plant irrigation** study at the UC Hopland field station is attempting to discover answers to some complex water issues, one of which is conserving water while maintaining desirable landscapes in our cities. There are four other sites around California that will give us a statewide look in different climate zones. Through this study, we are stressing some plants to the point of causing undesirable traits, while others enjoy almost full watering regimes. Science-based recommendations will be developed.



Dairy Goats being fed

I have also been exploring ways to help landowners **rehabilitate barns**. Recently we gathered together other interested experts to brainstorm ways to find grants, create classes and assist with saving local barns. If you have any ideas on this or want to join the discussion, please let me know.

A recent farm-to-school activity that I led with the help of a Master Gardener involved sharing the orange juice machine with young kids, and then at the high school with an older group to give them an appreciation for fresh food and farm products.

This summer I will be visiting one of the first CSA farms in the nation. That should be interesting and this time I'll remember to bring my camera!

We are also on the web!  
<http://cehumboldt.ucdavis.edu>

# Sandy Sathrum, 4-H Youth Development



4-H Youth pledge "their heads to clearer thinking, their hearts to greater loyalty, their hands to larger service, and their health to better living for their clubs, their communities, their country and their world." 4-H grows stronger kids, stronger families, stronger communities and a stronger world.

**Mission:** "To engage youth in reaching their fullest potential

while advancing the field of youth development."

4-H teaches real world life skills and workforce preparation while developing civic responsibility and leadership in youth. Families spend quality time together exploring and growing in beneficial activities.

**Program Management:** There are 13 traditional clubs in communities throughout Humboldt County. 4-H is also delivered through the 4-H TRAIL & Hooves for Hearts therapeutic riding program for disabled youth and adults; the Manila Community Services District 4-H After School Program; 4-H Northern Humboldt Eyes for the Blind (guide dog training); Redwood Coast Institute challenge activities for at risk youth; and Coastal Grove Charter School 4-H Science Program. This year Humboldt County 4-H managed the State 4-H Youth in Governance program with 5 youth adult partnership teams making significant impacts on community needs in Humboldt, Lake, and Mendocino counties. Humboldt County's three teams included the Coffee Opp (developing a drug-free & violence-free hang out place for teens), Youth for Positive Change (a teen board working in prevention with Humboldt County Alcohol and Other Drug), and Jacoby Creek Charter School Service Learning Ambassadors (restoring the wetlands on their school site). Outreach efforts are continuously made to serve underrepresented groups within our county. Presentations are given at schools, community events, service organizations, network collaboration meetings and through many personal contacts. In 2008 the Humboldt County 4-H Program hosted the North Section 4-H Teen Leadership WHY Conference.

**Youth Development:** There are 510 youth members in our traditional clubs and many more youth are involved through our other delivery modes. These youth are enrolled in 1563 project

groups ranging from animals, bicycling, computers, gardening, outdoor adventure, robotics, shooting sports to welding. 4-H sponsors 18 major county events focusing on developing skills in public speaking, leadership, problem solving, planning & organization, citizenship, and personal safety and healthy lifestyle choices. The county 4-H All Stars, Teen Ambassadors, provide vital leadership roles and support clubs and county events. They sponsor the annual NORTHCOAST Youth Summit ([www.ysummit.org](http://www.ysummit.org)) to equip and empower teens (and those who work with teens) from all organizations to hone their skills and make our communities stronger. 130 youth and adults from Humboldt, Del Norte, Trinity and Mendocino counties participated in this year's event. Youth (with adult mentors) design and chair major county events including 4-H Summer Camp, Humboldt Equestrian Ride for Life, County and Regional Presentation Day, 4-H Horse Camp, a Domestic Exchange, the Poultry Show, Postal Shoot, Ag Day, and assist with the Tour of the Unknown Coast.

**Volunteer Training and Support:** We have 211 project leaders leading 363 project groups or serving as club or county leaders. All volunteers are screened, oriented and trained to work with youth. Special trainings were presented in Food Safety, Ethics, and Record Books. Research based curriculum and project proficiencies are provided for project work. Adult volunteers guide and support youth as they learn by doing. The County 4-H Leaders Council, composed of adults and youth, assists in overseeing the county-wide 4-H program.



4-H Summer Camp

**Community Collaboration:** 4-H partners with other non-profit youth organizations, businesses, service clubs and educational groups within our county. Some key collaborators this year were the HSU's YES House, the Community Network, Jacoby Creek Charter School Service Learning, Top of the State Service Learning Regional Network, Friday Night Live, Boys and Girls Club, Ink People and the GATE Network.

**Civic Responsibility:** One of the keystones of 4-H is community service. Youth provide countless hours of service through their projects, their clubs and in their communities with beach clean-ups, habitat restoration, pet therapy to seniors, horseback riding for the disabled, Relay for Life, guide dogs for the blind and deaf, Valentines for Veterans, Easter cards for Meals on Wheels, fair clean up, food drives and a host of support for community organizations and events.

## Alan Bower, Livestock and Natural Resources Advisor

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The bulk of my time this year has been spent on getting to know my clientele and learning about some of the major livestock and natural resource issues that face Humboldt County.

One way for me to gather such information has been to attend as many meetings as possible (e.g. cattlemen's meeting, weed management area, farm bureau, resource conservation district, etc.).

I also tried to spend some time with landowners in the field, learning about their operations. This has been very helpful for me to build an active program.

One issue that was clearly a priority has been the effects of Aleutian Geese on local pastures. As a result, I applied for and received a grant from Western Sustainable Agriculture Research Education (WSARE) in conjunction with the Humboldt State University Rangeland Resources Department and three local ranchers.



Aleutian geese on Pete Bussman's property

We will be performing applied research in order to determine the effect geese have been having on the pastures as well as the amount of forage that is lost due to geese grazing. It is anticipated that this research will begin in the fall of 2008.

I have also been in communication with the Humboldt County Resource Conservation District and a local dairy ranch to perform a research project on pasture fertility.

This study will look at varying levels of manure application and focus on the optimum amount of manure to apply to pastures in order to benefit the pasture quality, quantity, and nutrients available in the soil.

Additionally, with the rising cost of fertilizers, I have made myself available to sample soil and vegetation on pastures to help with recommendations regarding adequate application rates.

I have been active in providing education to Humboldt County as well. In the fall I assisted in a workshop for rural landowners, hosted by our forest advisor, Yana Valachovic. Additionally, I hosted a rangeland monitoring workshop.

In the coming month I will be providing a livestock ethics training focused mainly towards our younger and perhaps future livestock producers.

Overall, this first year for me has been focused on getting to know the people of Humboldt County, balancing county director duties with advisor duties, and starting to build a program that is focused on the relevant issues of the region.

If you have any issues that need attention please do not hesitate to contact me at 445-7351.

## CALENDAR OF EVENTS

- \* June 24<sup>th</sup> Carbon Credits: Practical options and opportunities. Ag Center. 10:00-4:30.  
For landowners, foresters and consultants.  
Call 445-7351 for more information and to register.
- \* Fall 2008 Defining Community Forestry. Location TBA. For more info call Yana at 445-7351
- \*  
\* October 24-25 Future Forest II: Maintaining healthy and productive forests on the north coast. Ferndale Fairgrounds.  
\* For more info call Yana at 445-7351  
\*
- \* Winter 08/09: Farm and Ranch Succession Workshop with California FarmLink and the California Institute for Rural Studies  
in Eureka.  
\* Call Deborah Giraud for more info and date TBA
- \* February 2009 Master Gardener Training weekly, starts Thursday Feb. 5th—May 7
- \* Wednesday, August 20, 2008 - Cultural Resources Inventory Roundtable, 9 am to 3 pm.  
This workshop will include results from a cultural resources inventory of agricultural and timber industries as well  
as survey results from current Humboldt Bay users. The project is part of the Humboldt Bay Ecosystem-based  
Management Program. Contact Susan Schlosser for more information. RSVP required.
- \* Humboldt Bay Ecosystem Based Management Advisory Team - 8:30 to 10:30 am - Meets monthly -  
Check project website for agenda and location .Next meeting Friday, July 25.  
<http://groups.ucanr.org/HumboldtBayEBM/>

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