# STEWARDS OF THE LAND

#### NEWSLETTER OF GOLD RIDGE RESOURCE CONSERVATION DISTRICT

SUMMER/FALL 2010

Protecting our natural resources benefits our economy and environment, contributing to our quality of life, now and in the future.

VOLUME 10, ISSUE 1

# <u>Save Our Salmon (SOS) – Salmon Creek Habitat Rehabilitation Program – Phase I</u>

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With funding provided by the NOAA Restoration Center through the American Recovery and Reinvestment Act of 2009, Gold Ridge RCD, and partners Prunuske Chatham, Inc and Dragonfly Stream Enhancement, are implementing the Save Our Salmon program – a suite of projects with the goal of attaining self-sustaining coho populations in Salmon Creek, a coastal watershed located in Sonoma County. Salmon Creek supports a newly reintroduced coho population, and is protected as part of the Sonoma Coast State Marine Conservation Area.

Restoration projects implemented as part of the SOS program include installation of large instream wood structures along two key stream reaches to enhance salmon habitat, enhancement of riparian vegetation to provide shading and a future source of instream wood, and erosion control projects designed to reduce delivery of fine sediment to the stream.

The largest element of the program aims to reduce stresses to the stream caused by water diversions during the dry summer months. A number of rainfall catchment and storage projects are being implemented with the goal of supplanting water diversions as outdoor, non-potable water supply. These projects range in size from 10,000 to over 230,000 gallons, and will serve both individual residences and agricultural operations.

SOS is also providing both short and long-term economic benefits to the community of Bodega. In addition to providing employment for local restoration and construction professionals, the program is support the local agricultural economy by providing drought relief for some agricultural operations. In the long run, restoration of the coho will help to revive the local fishery, which has been decimated by the collapse of salmon populations.

#### For more information please contact

John Green (GRRCD) john@goldridgercd.org or Lauren Hammack (PCI) lauren@pcz.com

A special thank you to the landowners and residents of the Salmon Creek Watershed for your support of these valuable conservation programs. Without the support of landowners and active watershed councils, such as the Salmon Creek Watershed Council, none of this work could be realized. So from the Gold Ridge RCD Board and staff—THANK YOU!

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## Coho Salmon in Salmon Creek!!

Historically, Salmon Creek and its tributaries supported thriving runs of coho salmon and steelhead trout, but by the late 1990's coho salmon had been extirpated from the watershed. In an attempt to re-establish coho populations in Salmon Creek, approximately 300 adult coho salmon were released in the mainstem of Salmon Creek in December, 2008, and again in late 2009. These fish came from the California Department of Fish and Game's coho broodstock program at the Warm Springs Hatchery, and were a mix of Russian River and Olema Creek stock. As a follow up to the latest release, spawning surveys were conducted in January and February, 2010, to determine the success of this effort. During the spawning surveys a few carcasses and redds were found in tributaries of Salmon Creek. No spawning coho were observed, but a few steelhead adults were discovered spawning along the mainstem.

Snorkeling surveys are planned for this summer to further evaluate the success of last winter's release. Pools in tributary streams and selected reaches along the mainstem will be snorkeled to document the presence or absence of juvenile coho salmon and their distribution throughout the watershed. During a preliminary survey of a tributary stream this month, approximately 20 juvenile coho were observed. This is exciting evidence that at least some coho successfully spawned. With all of the restoration efforts currently occurring in Salmon Creek we are

> hopeful that this watershed will one day support a viable population of coho salmon.

Please contact Sierra Cantor, Ecologist, for more information:

sierra@goldridgercd.org



Creek watershed in 2010



**GRRCD Staff Conduct Snorkel Surveys** Summer 2010



Juvenile coho salmon and steelhead found in Fay Creek summer 2010

# **Insectories for Pollinators**

Bees and other beneficial insects play an integral role in our food supply, pollinating a third of all food crops, as well as numerous native plant species that compose California's agricultural and biological diversity. While managed hives of European honeybees are used extensively throughout the state's agricultural industries, over 1,500 species of native bees also contribute to these efforts. Despite their significance, populations of both native and European bees throughout the world have crashed over the past twenty-five years, as pesticide use, habitat loss, parasites, and other forces have combined to decimate many of these vital species. This has led to a parallel decline in the plant world, as flowering species dependent on insect pollination are also disappearing. International attention began to focus on these losses in 2006 with the recognition of colony collapse disorder, a phenomenon that has affected over a quarter of professional beekeepers, some losing their entire colonies. With our farming industry, food supply and biodiversity at risk, the Gold Ridge RCD and its partners are stepping up to address these problems.

In September 2009, the Gold Ridge RCD received over \$70,000 from the Natural Resource Conservation Service's Conservation Innovation Grants Program to develop and enhance habitat for pollinators on working farms and ranches throughout western Sonoma County. This was matched earlier this year with an additional \$3,750 from the Sonoma County Fish and Wildlife Commission.

The RCD is working with Farm Stewards, Community Alliance with Family Farmers, landowners and volunteers to install hedgerows throughout farming properties, meant to provide habitat refuge and year-round sources of nectar and pollen for honeybees and native pollinators. Thus far over 3,400 plants have been installed, with more plantings scheduled for this fall. Additionally, bee boxes are being constructed to attract carpenter bees, orchard bees, and other cavity-nesting species.

The Xerces Society, an international non-profit focused on invertebrate conservation, has also contributed a bee identification training for Gold Ridge staff members Brittany Heck and Noelle Johnson, and project partners Rose Roberts of Farm Stewards and Kathy Kellison of Partners for Sustainable Pollination. The training has allowed the partners to identify a diversity of native bee species and to monitor hedgerow effectiveness at supporting these species.

If you would like more information about the pollinator plantings, or would like to participate in future planting efforts, please contact Noelle at (707) 874-2907 or <a href="Moelle@goldridgercd.org">Noelle@goldridgercd.org</a>.







Farmhands assist with hedgerow mulching on Dierke Farms

## New Grant for the Estero Americano Watershed Estero Americano Sediment Reduction Project – Phase II

The North Coast Regional Water Quality Control Board (NCRWQCB) recently awarded grant funding to the Gold Ridge RCD to implement projects that will reduce the amount of sediment that enters streams in the Estero Americano watershed. The goals of the Estero Americano Sediment Reduction Project are three-fold: 1) to measurably reduce current sediment loading to the estuary's remaining open water and critical wetland habitat; 2) to reduce long-term sediment loading rates in streams in the watershed; and 3) to provide a replicable model for landowner training.

This project will fund the restoration of actively eroding sites identified as high priority in an extensive erosion survey (UCCE, 2007). The Estero Americano is on the state's 303(d) list of impaired waterbodies due to excess nutrients and sedimentation/siltation. In 2004, the NCRWQCB directed their staff to develop a regional sediment control strategy in lieu of watershed-specific TMDL action plans for sediment impaired watersheds. The *Work Plan to Control Excess Sediment in Sediment Impaired Watersheds* (was completed in 2008, and lists the Estero Americano as a priority watershed. It details multiple tasks to address sedimentation issues, including landowner outreach and education, priority site identification, and the development of sediment control projects.

Project benefits from reductions in sediment loading to the estuary include improvements in freshwater, estuarine, and marine water quality and habitat, as well as improved water quality for recreational uses and





#### **CONTACT INFORMATION**

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NRCS Russian River Office 405 South Orchard Ave Ukiah, CA 95482 Phone: 707-468-9223 ext.3



Please welcome Sierra Cantor, Ecologist, to Gold Ridge RCD!



Sierra Cantor is a biologist recently hired by the GRRCD. After graduating from UC Santa Cruz with degrees in Environmental Studies and Biology, she has spent the last thirteen years working on watershed monitoring, project coordination and resource conservation in the Russian River and coastal watersheds.

She strongly believes in using local knowledge and data collection to build a scientific foundation to assist community members in the identification of locally-driven solutions to a wide range of resource conservation issues.

Having been born and raised and now raising her own children in the Gold Ridge District, Sierra has a passionate interest in and commitment to the conservation of the natural and agricultural resources that make this area such a wonderful place to live. Stewards of the Land Volume 9 Issue 1



# NUTRIENT MANAGEMENT PLANNING GUIDANCE for Small Coastal Dairies

developed by the gold ridge resource conservation district  $\it Iune~2010$ 

A Nutrient Management Planning Guidance for Small Coastal Dairies document was recently completed to capture and summarize the work implemented for nutrient management on dairies in the Estero Americano. Over the last five years, the Gold Ridge RCD and its partners have been working together to overcome obstacles to environmentally sustainable farming practices. Through grants from the State Water Resources Control Board and the State Coastal Conservancy, the Estero Americano Watershed Dairy Enhancement Program was developed to gain a better understanding of the conditions and constraints under which local dairy producers operate, and to identify the types of technical and funding assistance that would be needed to improve nutrient management practices on north coast dairies.

The program provided one-on-one technical assistance, soil and manure sampling services, a series of workshops on nutrient management, and funding assistance to upgrade infrastructure and land application equipment. Through this collaborative planning process, we found that dairy farmers in the region are highly motivated by rising feed and fuel costs to increase the productivity of their pastures and silage fields. This was particularly true for organic dairy producers, who are now required to keep animals on pasture for a minimum of 120 days a year. Over the course of program, we found that the key constraints to improving on-farm nutrient management planning were 1)lack of needed technical assistance 2) inadequate land application equipment, and 3) inadequate grazing infrastructure (i.e., cross fencing and water development). Once these constraints were addressed, the dairy operators in the program were well on their way to

achieving on-farm nutrient balance and applying manure nutrients to farm fields based on plant nutrient requirements (agronomic rate). Key changes in nutrient management on the dairies involved in the program included:

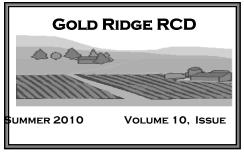
- \* Better understanding of the nutrient content of their manure,
- \* Better understanding of soil nutrient reserves,
- \* Improvements in forage species selection,
- \* Better solids separation and increased use of composting,
- \* More control over the timing and rate of manure application,
- \* Adoption of better stormwater management practices, and
- \* Adoption of grazing best management practices.



The guidance provided in this document grew out of a unique partnership between the Gold Ridge Resource Conservation District (Gold Ridge RCD), USDA NRCS, the University of California Cooperative Extension (UCCE), Western United Dairymen, Clover-Stornetta Farms and a handful of dairy operators in southwestern Sonoma County.

It is the hope of the authors that this information will be used to enhance on-farm productivity and the long-term viability of the dairy industry in northern California.

Nutrient Management Planning Guidance for Small Coastal Dairies will be available on the Gold Ridge RCD website by October 1<sup>st</sup>. **To request a printed copy please contact Brittany Heck, Project Manager, Gold Ridge RCD at** (707) 874-2907 or Brittany@goldridgercd.org.



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#### **RCD Mission and Vision:**

The mission of the Gold Ridge RCD is to assist landowners in addressing concerns by maintaining a presence in natural resource conservation work in all watersheds within the District. The GRRCD can provide a conduit for landowners through whom local, state, and federal monies can be obtained to support and implement restoration programs and practices. The Vision of our District is to ensure the continuation of strong, productive, and viable agricultural endeavors in Western Sonoma County by improving soil and water quality in order to provide an economically and ecologically viable and healthy agricultural community.

BOARD OF DIRECTORS MEETINGS:

Third Thursday of each month at 6:00 pm

14775 'B' Third St Occidental, CA 95465

MEETINGS ARE OPEN TO THE PUBLIC

### THE GRRCD STAFF

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Sierra Cantor

Ecologist
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