

Colorado Natural Resources Conservation Service Employee Newsletter



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Highlights

by
J.B. Martin
Deputy State Conservationist

To the people of the great state of Colorado, I say "hello." It has been a pleasure, thus far, meeting some of you as I begin my journey in the state.

Prior to coming to Colorado, I served as the Assistant State Conservationist-Field Operations for northern Arizona in Flagstaff.

Other positions that I have held include serving as a District Conservationist in Madison, Wisconsin, and as District Conservationist in Burlington, Iowa.

I began my career in NRCS as a co-op student in Red Oak, Iowa, and served two additional tours in Anamosa and Storm Lake, Iowa, before being hired on permanently with the agency in the early 90s.

Over the years, I've seen a variety of accomplishments from people who are passionate about their jobs and who are willing to go that extra mile to help keep conservation on the ground.

From the corn and soybean producers in Iowa, to the dairy operators in Wisconsin, the ranchers and tribes in Arizona, and the employees who serve our agency...NRCS has played a vital role in helping our nation sustain its agricultural production.

Thomas Jefferson once wrote, "agriculture is our wisest pursuit." But today, it has become one of America's least visible pursuits.

We see the fruits of its labor displayed in our grocery stores, but some people rarely see, or understand, what goes on behind the scenes to bring agriculture to the mainstream.

As we enter into this new fiscal year and implement the 2008 Farm Bill, let us remember to keep conservation planning at the forefront of everything we do as it relates to serving our customers across the state of Colorado.

I am excited about the opportunity to continue my service with NRCS in this state and I look forward to hearing from you, our partners, our farmers, our ranchers, and anyone else who shares an interest in the future of agriculture.

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Emphasis

Conservation planning is the foundation of our technical and financial assistance programs. Statewide, NRCS is re-emphasizing the importance of comprehensive conservation planning in our internal and external business processes.

For Fiscal Year (FY) 2009 Colorado EQIP applications, all screening tools include the question: "Does the applicant have a current conservation plan (less than five years) in place for the requested practices that complies with current NRCS conservation planning policy?"

At a minimum, the plan must be completed on all land in the same Farm Service Agency (FSA) tract (or similar unit) and with the same land use that the Conservation Program Contract (CPC) practices would be applied to.

For example, if an applicant applies for a fence and stock tank on a rangeland pasture, all rangeland that is in the same tract as the pasture where the practices will be applied should have a current comprehensive conservation plan.

The conservation plans should address the resource concerns

identified by the NRCS planner and producer on the CPA 52 and the resource concerns and essential practices listed in Technical Guide Section 3, Resource Quality Criteria.

If the landowner is currently treating the concern to NRCS standards, document with appropriate job sheets and tech notes and include in the plan and report as applied.

If the concern is not being treated, develop alternatives for treatment and present to the landowner for decision making.

Record the landowners' treatment decisions in the plan. If the landowner's decision is for no action, document the decision in the tech notes and do not include in the plan.

Comprehensive conservation plans include treatments for all identified resource concerns.

Comprehensive conservation planning is being reemphasized in all our applicable technical and financial assistance programs.

Thank you for your dedication to the conservation of our nation's natural resources.

Allen Soren



One to Grow On



The future depends on what we do in the present.

~ Mahatma Gandhi

Never let the fear of striking out get in your way.

~ George Herman ("Babe") Ruth

Behold the turtle.

He only makes progress when he sticks his neck out.

~ James Bryant Conant

Go confidently in the direction of your dreams.

Live the life you have imagined.

~ Henry David Thoreau

Success seems to be largely a matter of hanging on after others have let go.

~ William Feather

Those that make the best use of their time have none to spare.

~ Thomas Fuller

Better three hours too soon than one minute too late.

~ William Shakespeare

People with goals succeed because they know where they're going.

~ Earl Nightingale

You must look into people as well as at them.

~ Lord Chesterfield

You will never change your life until you change something you do daily. The secret of your success is found in your daily routine.

~ John C. Maxwell

Coloradoans Welcome NRCS Public Input Sessions

by Petra Barnes Walker
State Public Information Officer



“As NRCS in Colorado prepares to administer and deliver numerous conservation programs within the 2008 Farm Bill, we wanted to hear from our customers and partners to ensure that we develop a plan that meets their needs and addresses the natural resource conservation priorities within the State,” replied Allen Green, Natural Resources Conservation Service (NRCS) State Conservationist, Lakewood, CO, when asked the purpose of recently held statewide meetings hosted by the agency.

NRCS in Colorado conducted 10 public input workshops aimed at gathering and sharing information with farmers, ranchers, natural resource agency representatives, political constituents, and many others.

Each meeting provided the opportunity to engage in the exchange of information about past and future NRCS administered Farm Bill conservation program accomplishments and direction.

“We held workshops across the state within the major watersheds because the natural resources infor-

tions aimed at increasing the awareness of the conservation activities within each watershed and the understanding of the new 2008 Farm Bill.

Presentations included information about watershed-specific accomplishments derived from the conservation programs within the 2002 Farm Bill.

“We wanted to share some of the successes and results of the conservation practices and efforts made between 2002-2008,” Carney goes on to say.

“Sharing this kind of information helps people better understand just how efficiently and effectively their tax dollars have been utilized to help conserve soil, water, air, plants, and animal habitats, and this helps set the stage for future possibilities and accomplishments.”

Participants also heard from either the State Conservationist or the Assistant State Conservationist for Programs regarding NRCS managed and administered conservation programs within the newly passed 2008 Farm Bill.

“The 2008 Food, Conservation, and Energy Act, known as the Farm Bill, is authorized by Congress and governs federal farm and food policy, covering a wide range of programs, including commodity price and income support, farm credit, agricultural

conservation, research, rural development, and foreign and domestic food programs, among others. Reauthorization of the Farm Bill occurs about every five years. NRCS administers a number of programs within the Conservation Title of the Bill,” Green further states.

“It was important that Tim or I personally attend every one of these meetings because we wanted to demonstrate the importance of the information being provided as we will use our partners’ and customers’ input to help improve and guide program delivery and direction.”

“When I read about the meeting in my area, I was glad to see it coming,” stated a farmer at the Upper Arkansas River Watershed meeting which was held in Pueblo. *“I am very familiar with NRCS and the Farm Bill. The office in my county has helped me do some good things on my land, so I was glad to come and give my opinion.”*

“We run a pretty large operation,” stated another Pueblo session attendee. *“The Farm Bill is very important to us and getting some early insight as well as having the opportunity to provide input on how the programs are delivered was very much welcomed.”* On average, some 40 people attended each workshop.

The majority of the time at each session was spent with participants

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“The Farm Bill is very important to us and getting some early insight as well as having the opportunity to provide input on how the programs are delivered was very much welcomed.”

-- A Pueblo session attendee

mation we were sharing, as well as hoped to gather, is vital. We wanted to ensure that folks statewide had the opportunity to provide input,” stated Tim Carney, NRCS Assistant State Conservationist for Programs, Lakewood, CO.

NRCS gave several presenta-

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providing input into NRCS identified natural resource priorities, concerns regarding those priorities, and causes for those concerns.

"This was where the rubber really met the road," Carney further states. "NRCS identified the current natural resource priorities within the watershed and shared those findings with input session participants."



A group brainstorms during the Upper Arkansas River Watershed public input session held in Pueblo, CO on Sept. 11, 2008.

"We gathered our information by analyzing information from local Conservation District watershed workgroups, State Technical Committee meetings, Natural Resources Inventories, Rapid Watershed Assessments, various state and local government organizations and agencies, and other sources. We then asked participants for input regarding our synopsis, as well as assistance in identifying barriers to addressing the natural resource concerns."

The overwhelming number one priority identified within each geopolitical watershed was water. Issues ranged from irrigation system improvements and return flows, to water consumptive uses and river compact compliance issues.

Other highly ranking priorities included invasive species, forest health, grazing lands, technology, specialty crops, and energy.

"I can't say that I was surprised by the participants' concurrence with most of our identified issues and their rankings of importance," Carney finally states. "Particularly water. It is precious here in the West."

"I was, however, pleasantly surprised to hear that our attendees, especially our customers, were very supportive of our efforts to reinforce the NRCS commitment to sound conservation planning as the foundation of the Farm Bill conservation programs."

Conservation planning is a process by which a plan is developed utilizing state of the art technology by technical experts who work one on one with landowners to help them reach as many of their natural resource goals as possible. Conservation plans make good business sense as they can have a positive impact on your bottom line and can help improve the condition and quality of soil, water, air, plants and wildlife habitat.

"We wanted to hold these sessions now," Green finally states, "because although the 2008 Farm Bill passed, the Bill's rulemaking process is ongoing in Washington DC."

"However, once these programs are finalized, NRCS in Colorado will be poised and ready to serve our customers, partners, and natural resources in a fashion that meets their needs."



Members of the State Technical Committee listen as NRCS staff shares public input sessions findings.

State FFA Range Judging Contest Held in La Junta

By Ben Berlinger
Area Rangeland Management Specialist

Future Farmers of America (FFA) students and their advisors from all parts of eastern Colorado were in La Junta for the State Range Judging Contest recently.

The purpose was to compete in a native plant identification exercise and participate in judging the soundness of the rangeland. Otero Junior College hosted this all-day competition.

The state contest draws in around 100 students representing approximately 15 FFA Chapters, some from as far away as Idalia to the north and Pritchett to the south.

The state contest rotates among three locations in eastern Colorado; Akron, Flagler or Stratton, and La Junta. Last year in Stratton 120 students participated!

The FFA rangeland judging contest is divided into two parts. The native plant identification involves the naming of 50 rangeland plants common to eastern Colorado, together with rating important plant characteristics such as life span, grazing response, and palatability for cattle.

The second part of the contest takes place in the field and requires the students to judge the condition of two different rangeland sites.

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Let's Honor and Support Our Troops!

Veteran's Day
November 11, 2008



Recycling and Waste Reduction in Area 4

by Marianna Young,

Area Resource Conservationist for Technology, Area 4

Employees at the Area 4 Office have been recycling various materials since early 2005.

The nearest recycling facility is in Alamosa, about 15 miles east of the Area Office (AO) in Monte Vista.

The city-operated Alamosa facility accepts the following materials:

- Corrugated cardboard,
- White office paper (including envelopes and bags of shredded paper)
- Newspaper, magazines, or catalogs
- Steel and aluminum cans
- Numbers 1 and 2 plastic (all drink bottles, milk jugs, and more)



In summer of 2005, Area 4's recycling efforts were extended to area field offices, one or two of which were already recycling.

The first step was to solicit a volunteer from each office to lead the recycling process.

This volunteer was tasked to set up the appropriate containers, educate employees about recycling and waste reduction, and take materials to the local recycling center (preferably as part of a combined trip unless the center is close by).

The area office purchased inexpensive, blue recycling bins and the Area Resource Conservationist for Technology distributed them and helped with signage.

Recycling drop-off availability differs between field offices. All San Luis Valley offices (currently five) deliver items to the Alamosa facility, and the cities of Pagosa Springs and Durango also offer fairly comprehensive recycling services.

The Dove Creek District Conservationist recycles materials from his office when he travels to Farmington.

The Cortez area has the spottiest recycling facilities. Currently, the city offers drop-off containers for glass (unusual), cardboard, aluminum cans, and newspaper.

Area 4-wide, the following items are also collected for recycling:

- All types of batteries (nicad, lithium, rechargeable, etc.)
- All printer cartridges, including laser, copier, and inkjet
- Computer media such as CDs, diskettes, and tapes
- Scrap metal
- Telephone books

Why is it a good idea for NRCS offices to recycle?

The reasons are numerous:

- The Colorado NRCS Energy Strategic Plan 2006-2010 (Draft) requires it;
- A Presidential Executive Order signed by the current President in January 2007 requires it;
- To increase recovery of used materials (less energy is needed to reuse than to create new);
- To reduce our waste going to the landfills;
- To set a good example for the

public;

- It's relatively easy and painless to do;
- It's the right thing to do; and
- It's contained within our Agency name (Natural Resources Conservation).

In the near future, Area 4 hopes to adopt more of the items in the NRCS Energy Strategic Plan and the Presidential Executive Order, such as using recycled-content paper products, turning off electrical equipment during weekends and evenings, and recycling mercury-containing fluorescent bulbs.

Area 4 offices and their recycling coordinators:

- **AO and Monte Vista Field Office:** Marianna Young
- **Alamosa FO:** Andy Laca
- **Center FO:** Larry McBride
- **San Luis FO:** Ray Gekosky
- **La Jara FO:** Cathy Dix
- **Pagosa Springs FO:** Cynthia Purcell
- **Durango FO:** Doug Ramsey
- **Cortez FO:** Russell Klatt
- **Dove Creek FO:** John Lestina

For more information on how you can help your office start or expand recycling, please contact Marianna Young via email or at 719-849-1764.



Recycling bins at the Area Office in Area 4.

Colorado Commissioner of Agriculture Hosts 6th Grade Poster Tour



John and Jane Stulp, along with their son, Jeremy, and his wife, Christi, shared their knowledge of dryland farming with area 6th graders on Thursday, October 2, 2008, at Stulp Farms.

Sixth grade students from Lamar, Wiley, and Alta Vista attended the tour, arranged by long-time Prowers Conservation District Manager Danielle Wollert.

Students were shown terraces and conservation tillage and were educated on the Dust Bowl, which wreaked havoc back in the 30s in our region.

John talked to the students about the use of global positioning systems in tractors, which control the proper application of fertilizer and pesticides.

He demonstrated that farmers can produce wheat and leave a lot of residue to protect fields from blowing and capture moisture.

Students learned from Steve Shelton that farmers no longer use one-way plows to till the soil.

Don McBee talked about irrigated farming practices and the children learned that farmers level their fields to uniformly spread water to crops.

NRCS staff members Karen Conrad, local District Conservationist; Kyle Wait, Soil Conservationist; and Susan Hansen, Soil Conservationist, visited all students at their schools to help them become familiar with local conservation practices and to explain the differences between irrigated cropland, dry cropland, and rangeland practices.

Colorado SRM hosts Grazing Conference

The Colorado Section Society for Range Management (SRM) is pleased to announce that they will be hosting a **“Strategy vs. System: Grazing for Desired Outcomes”** symposium.

The symposium will be held at the Fort Collins Marriott, **December 2-4, 2008.**

The meeting will begin at 12:30 on the 2nd and end at 3 p.m. on the 4th.

Registration until November 25 is \$100 for SRM members, \$150 for non-members, and \$60 for students.

The speakers are an outstanding lineup of “who’s who” in the grazing profession and, as far as we know, have never all been in the same place at the same time. They will be coming from all over the West and even Australia.

This symposium will focus on the “system” concept of planned or prescribed grazing versus the “strategy” concept.

The speaker lineup is outstanding and includes: Brien Norton, Richard

Teague, Fred Provenza, Bill Krueger, Patrick Reece, Justin Derner, Frank “Fee” Busby, Rich Danvir, and many more!

As an added bonus, we will hear from ranchers and practitioners on the last day. The ‘CSSRM-brochure’ pdf document gives the highlights of each speaker’s presentation.

Don’t miss this chance to hear from and visit with this outstanding cadre of speakers.

We are also offering those who have done research or observational work regarding grazing management to put up a poster.

Abstracts are due October 20, 2008. Visit http://www.cssrm.org/documents/Final_call_posters.pdf for more information.

Rooms are being held at the Marriott for \$85/night until October 20. To make a room reservation, call the hotel at (800) 342-4398.

For more information about this conference, please visit <http://www.cssrm.org/toursmeetings.html>.



Colorado Association of Conservation Districts

Mark your calendars!

The 64th Annual CACD Meeting will be held
November 17-20, 2008

in Estes Park at the Rocky Mountain Conference Center.

The theme of this year’s meeting is
**“Locally Led Conservation:
Diverse Districts/Common Goals”**

The meeting is packed with informative speakers, workshops, and opportunities to learn more about key natural resource issues and challenges facing Conservation Districts.

on the pulse

State Office News

As many of you already know, I have accepted a position with the National Parks Service (NPS) as the NRCS Revegetation Technical Advisor to NPS.



Pat Davey

My new position became effective on October 14, 2008. I look forward to many new changes and challenges as I move into my new position.

Thank you all for your support and friendship over the last four and one-half years and good luck to all of you.

The Combined Federal Campaign is off to a great start!



This year's goal is \$10,000.

On November 3, 10:30 am to 11:15 am, we will have a guest speaker from Families First, a charitable organization that provides services for protecting children from child abuse and neglect.

For more information, see Tim Carney or Cyndee Hjelmstad, your CFC representatives.

The 2008 Federal Benefits Open Season is coming!

The 2008 Federal Benefits Open Season will be from **November 10 to December 8, 2008.**

What is Open Season?

This is the time for you to think about your health, dental, vision, and tax-saving needs and to make changes to or enroll in one of the programs.

The programs that participate in the annual Open Season are the:

- Federal Employees Health Benefits Program (FEHBP)
- Federal Employees Dental and Vision Insurance Program (FEDVIP)
- Federal Flexible Spending Account Program (FSAFEDS)

Why should you care?

This is the time to make elections you usually can't make any other time of the year. All health or dental or vision plans are not alike.

Open Season is about exercising your right of choice. Failure to consider your health plan choices could leave you without the healthcare services or supplies you need or with a premium you can't afford.

Dental and/or vision coverage can fill in the gaps of any coverage you now have or pay for services you now don't get; and a

flexible spending account lets you save money and pay less tax.

You can find the 2009 **health insurance** rates at www.opm.gov/insure/health/rates/index.asp.

You can find 2009 **dental** rates at www.opm.gov/insure/dental/rates/index.asp.

You can find 2009 **vision** rates at www.opm.gov/insure/vision/rates/index.asp.

For FSAFEDS go to www.FSAFEDS.com to see how much you may contribute.

There will be an Open Season Fair at the State Office on **November 5, 2008**, where representatives will be on hand to answer any questions you may have about health benefits.

Don't miss this opportunity!

Save the Date!

State Office Annual Awards Ceremony/Christmas Party

December 12, 2008

More information will be forthcoming in the near future.

State Office News

Administration Office - What Are They Up To?

Management Services

FAREWELL



On December 3, 2008, NRCS will bid farewell to Steve Boner, Purchasing Agent, as he heads into retirement.

Steve started his career as a district clerk for the Big Thompson Soil Conservation District, Fort Collins Field Office, from 1976 to 1983.

In May 1983, he was hired at the State Office as a Supply Clerk.

After various other jobs, in April 2002, Steve was promoted to his current position as a Purchasing Agent.

In his position, he has managed programs for vehicles, purchase cards, and property.

Three things you may have not known about Steve:

- His middle name is James.
- His favorite Christmas song is White Christmas.
- His favorite candy is Almond M&M's.

Please send Steve an e-mail or phone call to express your appreciation for all that he has done for our agency.

Human Resources

What is Personal Identifiable Information (PII)?

PII is defined as information about or associated with an individual.

Some of this personal information is very sensitive, while some is not considered sensitive when viewed as a single attribute.

However, combinations of the information may create a situation that warrants restriction on its use and disclosure.

It may be difficult to define the level of sensitivity of every combination for PII. Therefore, good judgment must be exercised when handling PII in order to prevent disclosure.

Sensitive PII, such as name paired with the social security number (SSN), must be safeguarded at all times. NRCS employees must know the Incident Reporting Process.

If an employee has lost or had stolen their computer, copier, blackberry, PDA, cell phone, etc., they must immediately call the USDA Security Hotline 1-888-926-2373 within one hour.

Financial Management

Effective December 1, 2008, Bank of America (BOA) will no longer be the contractor for our travel cards. It will be US Bank.

Starting October 1, US Bank will begin issuing new travel cards for all employees who currently have BOA travel cards.

It is important that you keep your address and contact information current with BOA.

Please watch your mail for a plain white envelope that looks like junk mail. It may be your new travel card. This card is not effective until December 1. You will continue to use your BOA travel card until then.

If you do not receive your US Bank travel card by November 7, 2008, please send an e-mail to Helen Abbey at Helen.abbey@co.usda.gov.

We have been told that your GovTrip profile will be automatically updated and you should not have to update your information in GovTrip.

We have received no further instructions at this time, but as we get more information, we will share it with you.



on the pulse

Area Office News

Area Two

Landowners came to the

South Platte Valley Historical Society in Fort Lupton on Saturday, July 12th to learn about weed identification and methods of control with bio-control, mechanical, and chemical.

The date of the event was set by Pulling for Colorado (P4C) in a statewide effort to educate landowners about the impacts of noxious weeds in our natural, agricultural, and recreational lands, all on the same day across Colorado.

Weld County Weed Division Supervisor Tina Booton and NRCS (Natural Resources Conservation Service) Soil Conservationist Deborah Clairmont pooled together to create the event for Weld County.

Guest speaker, Dr. Dan Bean, manager from the Palisades Insectary, demonstrated bio-control with beetles on Salt Cedar (Tamarisk) along the South Platte River.

Tina walked with participants and identified weeds. Sylvia Olivo, student volunteer from Washington State, assisted

Deborah Clairmont with a craft project to help children learn the difference between a weed and native vegetation. In addition, the project taught them the importance of caring for the land by addressing weed problems.

Bob Warner, landowner, farmer/rancher, and president of the West Adams County Conservation District, is also a member of the South Platte Valley Historical Society. He showed his support during the event.



Area Three

The USDA Natural Resources

Conservation Service (NRCS) and many partners again put dollars towards on-the-ground control of tamarisk in Southeastern Colorado.

The Apishapa River Drainage Proposal in Pueblo, Otero, and

Las Animas counties was one of 10 proposals funded earlier this year under the USDA-NRCS Environmental Quality Incentives Program (EQIP) Colorado Invasive Plant Species Program.

According to JR Phillips, Fremont County Weed Manager, whose coordination efforts made the project possible, total cost-share funds contributed by NRCS and all of its partners were approximately \$250,000, which treated 500-600 acres.

NRCS's partners on this project were the South Pueblo County and West Otero Timpas CDs, US Fish and Wildlife Service Partners for Wildlife and Challenge Cost-share Grant, Rocky Mountain Bird Observatory, Colorado State Land Board, Colorado Division of Wildlife Wetlands for Wildlife Grant, and Fremont County Weed Control.



Beginning in 2007, the Fremont and Custer County-

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area news continued

Divide Conservation Districts (CD) decided to work together to manage and control a variety of invasive species in the Fremont/Custer County Drainage Area south of the Arkansas River.

The goal of the project was to manage populations of A and B listed species, such as Diffuse knapweed, Salt cedar, Spotted knapweed, Leafy spurge, and others in the 730,000-acre area.

Through the USDA Natural Resources Conservation Service (NRCS) Environmental Quality Incentives Program (EQIP) Colorado Invasive Plant Program, the districts received approximately \$93,000 to help with cost-share on private land for the five-year project.

Many more partners are involved, including JR Phillips, the Fremont and Custer County Weed Manager, Custer County Colorado State University (CSU) Cooperative Extension, Upper Arkansas Cooperative Weed Management Area, Bureau of Land Management, Colorado State Forest Service, US Forest Service, and private local landowners.

Many of the agencies are helping with funds on public lands and on lands of non-agricultural producers in the area with the total cost of the project close to \$143,000. Thus far, almost 800 acres have been treated through EQIP.

In addition to working on eradicating the invasive species, the partners have sponsored and will

continue to sponsor educational events, such as workshops and tours, to teach landowners how to identify the noxious weeds and the negative impact they have on agriculture production, wildlife grazing, and water quality.

At the end of the five years, the achievement of the partners is that they have been able to get local landowners and managers to a long-term system of noxious weed control and revegetation management.



Twenty-five NRCS field staff attended a two and one-half day Wildlife Short Course in mid August held in LaJunta.

The course was developed and conducted by Area 3 Private Lands Wildlife Biologist, Patty Knupp. The course taught participants about Wildlife Habitat Planning, Wildlife Management Concepts, Wildlife Programs, and Species Biology and Conservation.

Ten partner biologists and NRCS biologists taught the course. In addition to the indoor classroom sessions, participants went on a field trip to see the Colorado Division of Wildlife demonstrated electro-fishing and seining on an eastern plains creek.

Among the catches were Arkansas Darters, central stonerollers, plains killifish, and other plains native fish.

Participants and biologists alike were excited to actually see the elusive Arkansas Darter, which is a state-threatened species.

Two other highlights of the course were an exciting game of wildlife jeopardy, which pitted field offices against each other, and an evening birding field trip to Cheraw Reservoir.

At Cheraw, participants viewed the somewhat rare black neck stilt and phalaropes as well as numerous other shorebirds and waterfowl.

Participants of the Wildlife Short Course earned 13 continuing education units (CEU) towards recertification or certification of wildlife planner.



The Rocky Ford Field Office assisted the Olney-Boone Conservation District with a Range Transect Training session in September.

Ben Berlinger, La Junta Area Office Rangeland Management Specialist, and Natalie Emund-

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area news continued

son, CSU Cooperative Extension Range Specialist in Rocky Ford, taught the full-day workshop.

Participants learned how to monitor and document changes in rangeland conditions and health as they move forward with prescribed grazing plans.

The session was made possible through a Colorado Grazing Lands Conservation Initiative Grant.



Lee Neve demonstrates soil survey equipment to students participating in a Pueblo School District (SD) grant program.

The grant was received by SD 60 to develop a reclamation garden at the Steelworks Museum.

The grant involves elementary, middle, and high school students working together to discuss, design, and implement the project.

The students toured mines and their reclamation as part of the learning process. The schools targeted were those with high minority populations.

NRCS was asked to provide technical assistance on revegetation and soils.

Rich Rhoades, District Conservationist, Pueblo Field Office, provided two classroom lectures on revegetation.



Lorenz Sutherland, Area Resource Conservationist, La Junta Area Office, was the keynote speaker for the technical session of the September meeting of the Arkansas River Advisory Committee to the State Engineer of Colorado.

The advisory committee was established for consultation with the State Engineer of Colorado, Dick Wolfe, in the development of rules and regulations concerning improvements to surface water irrigation systems without violation of the Arkansas River Compact.

The intent of the rules is to provide a legal framework under which farmers can continue to improve their irrigation systems but which does not lead to an expansion of the historical consumptive use in the Arkansas River Drainage Basin of Colorado.

Dr. Sutherland discussed the overview of salinity, salinity control principles, and strategies for maintaining a sustainable irrigated agroecosystem in the basin.

The Northeast Prowers

Conservation District has been awarded a Conservation Innovation Grant to install on-farm wind demonstration projects.

The district hosted an area-wide workshop in Granada on September 22, 2008, which was well attended.

Local interested parties were able to hear from I-Cast, Southeast Colorado Power Association, and Southeast Colorado Resource Conservation and Development.

Grant applications were accepted at the Holly district office through October 3.



Bill Gardiner, District

Conservationist, Salida Field Office, was on the planning committee for the recent Sustainability Showcase and Celebration held in Buena Vista.

He moderated a panel discussion on restoring the local food economy in the Upper Arkansas Valley.

The Northeast Prowers

Conservation District and Holly NRCS office exhibit received reserved grand champion during judging at the recent Gateway Fair held in Holly.

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area news continued

The Sangre de Cristo Resource Conservation and Development Council held a seminar Sept. 13 to show people how to reduce their use of carbon-based energy and reduce their energy costs.

The event was co-sponsored by the Southeast Colorado Resource Conservation and Development Council and the Colorado State University Extension Service and was titled, *"Conservation and Renewable Energy: A Toolkit for Reducing Your Carbon Footprint and Energy Costs."*

The East Central Resource Conservation and Development Council's office in Hugo is assisting four conservation districts with grant proposals for the Colorado State Conservation Board Natural Resources Matching Grants Program.

High Plains and Prairie Conservation Districts (CD) will address conservation projects for livestock water, windbreaks, living snow fence plantings, and earthwork for erosion control.

The Big Sandy Leafy Spurge Alliance will target noxious weeds. Agate CD will address conservation projects for livestock water, windbreaks, and noxious weeds.

Double E1 CD will address projects for most of the conservation practices commonly utilized in the district, with priority to innovative practices and noxious weed activities along Big Sandy Creek.

Finally, Flagler CD will address conservation projects for most conservation practices with emphasis on livestock water, tree plantings, and limited assistance for purchasing flow meters for water conservation in the Ogallala aquifer. The economic impact of each proposal is \$25,000.

Two dozen area cattlemen gathered on the McEndree ranch Tuesday, September 16th, to discuss making range improvements through grazing management. Baca County and Northeast Prowers Conservation Districts sponsored the event.

On the first leg of the tour, participants hiked through the rangeland under management by Storm Casper.

He described the improvements he has seen in the range over the past three years as a result of changing grazing systems.

The discussion was facilitated by Tim Steffens (Springfield NRCS), Roy Roath (CSU Cooperative Extension), Floyd Reed, and Scott Woodall (USFS). Roath and Reed taught range management worldwide.

They agreed that several factors determine range health, no matter whether you are in Brazil or Baca County: the timing (season) the pasture is grazed, the intensity (or stocking rate) used, the duration (length of time), and the recovery (rest) period for a pasture.

The group gathered back at Clyde and Carol Greer's round

top for a barbeque beef sandwich lunch and cookies provided by the Conservation Districts.

The final leg of the tour was led by Steve McEndree on his ranch. He described his grazing management techniques in light of on-going drought conditions.

Thank you to the other event sponsors: Colorado Grazing Lands Conservation Initiative Committee and the Colorado Section of the Society for Range Management.



In September, the Pagosa Springs Field Office and the San Juan Conservation District gave presentations on two aspects of watershed management to the 8th grade Real World Science Class at Pagosa Springs Junior High School.

This class is an elective for students that are interested in how science can help solve real world problems.

The first presentation addressed the effect of high sediment loads on fish habitat and the second presentation dealt with the correlation between water temperatures and dissolved oxygen and how it relates to trout survival.

The students were required to design a study to gather data to address the stated problem.

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area news continued

They were then shown how the presenter gathered data to answer the question/problem.

The students then analyzed the data and came up with solutions to the initial problem.

After discussion about their solutions, the presenter then provided the students with feedback on their solutions.

The goal of the elective class was to situate students in a relevant, real world problem where scientific data collection is necessary to make a decision.

The class promoted critical thinking, problem solving, and the applications of science theories learned in class.

The Southern Ute Indian

Tribe's (SUIT) Wildlife Division recently installed 3,780 feet of pipeline, and three tire tanks to supply water for wildlife on tribal land southwest of Durango.

The project was led by Aran Johnson, Tribal Wildlife Biologist. The NRCS staff of Ignacio and Durango provided engineering design and construction inspection services.

The area consists of the pinyon/juniper woodland foothills and sagebrush valleys with very little water available, especially during late summer and early fall.

The new water system will provide water for mule deer, elk, bear, and a variety of small mammals and birds.

The SUIT Wildlife Division also completed two ponds on tribal lands east of Ignacio this summer and NRCS staff provided engineering technical assistance.

A cloudburst in mid-August filled both ponds shortly after construction.

The ponds will provide water for a wide variety of wildlife species on a section of tribal land that is managed specifically for wildlife.

This year, the San Luis Field

Office began a project to document the acequia irrigation ditches of the southern portion of Costilla County, most of which were established in the early days of the village settlements surrounding San Luis, the oldest town in Colorado.

The field office is working in conjunction with the Sangre de Cristo Acequia Association, a representative group of local acequia farmers, and presidents and leaders of individual acequias.

The project is also supported by the Costilla Conservation District. Because of the historical context of these earthen canals, local involvement has been highlighted.

Fifth and sixth-generation acequia farmers have provided important information about the chronology and infrastructure of the ditches, which were dug by hand by their ancestors.

Each acequia is documented

beginning at its diversion point off a natural river or stream. The length of the acequia is then walked, and each structure is pinpointed with a GPS unit.

Photographs are taken to record the conditions of structures, predominant vegetation, land use, ditch condition, and sediment and erosion problems.

Each acequia is around three miles long. Many end in the sub-drainage system of the Vega, San Luis's communal grazing land, where excess water flows back into the Culebra River.

Through NRCS's special Acequia Environmental Quality Incentives Program, acequia users are now eligible for cost-share incentives on a number of conservation practices, including new structures for water control.

This project will help ditch associations and individual acequia users identify problem areas and necessary structural improvements that will promote the conservation of acequia waters.

The information gathered during this project will be made available to acequia users and will be used as background material for forthcoming Acequia EQIP contracts.



SECOND EDITION: Small Acreage Landowner Workshop

By: Val Loose – Morgan Conservation District Manager

"I hope the district has another one" was the chorus after the 2nd edition to the small acreage workshop that the Morgan Conservation District hosted Saturday, September 20.

Over 30 people attended the excellent round table discussions that were held at the County Steak-out.

CSU Extension Agent Joanne Jones talked with the group about landscaping with native plants.

Jones' topics ranged from native flowers to trees and shrubs. Native plants are beautiful and don't use as much water and are easier to maintain than other plants.

Jones talked about Golden Currents and how they are an excellent wildlife food and also a great berry for jelly.

Bill Annan represented Morgan County REA and explained to the group how to save energy in different ways, such as: reducing heat thermostats to 68 degrees during the day and 60 degrees at night.

Every degree above 68 degrees adds 3 percent to your utility bill. Reduce thermostat on water heater to 120 degrees, decreasing 10 degrees can save 7 percent. Do not preheat your oven more than three to four minutes.

Annan also told the attendees about the compact florescent bulbs and how much less wattage they use versus incandescent.

Sheriff's Deputy Cindy Cook told the participants to always be prepared for bad weather, at home and in their vehicles.

Always carry blankets, a shovel and a flashlight with good batteries, water, jumper cables and energy food in your car and never leave your vehicle in a blizzard if you get stuck in a snowdrift. Her words of wisdom

will be invaluable in the months to come.

Ron Neher, Resource Conservationist for NRCS, talked about windbreak design and protection after planting.

In his discussions, Neher told the landowners that a windbreak should be looked upon as a lifetime investment. Young trees need water applied to assist in root establishment and general early growth. How much and how often depends on the soil type.

Walk your windbreak to check for any problems: if a tree needs to be replaced, do it; if weeds are growing next to your trees, pull them.

Composting was a favorite topic that was presented by CSU Extension Agent Bruce Bosley.

Bosley explained that composting can kill pathogens and weed seeds because of the heat a compost pile produces. A compost pile has to be moist and turned frequently to become hot.

Compost is used in the garden to amend soils and build organic matter. It will also help hold moisture. To make a compost pile at home, use cinder blocks to hold the material in and then add vegetables and fruit scraps, leaves, coffee grounds, grass clippings. A person can use manure, but don't apply that compost on root vegetables.

C. W. Scott, District Conservationist for NRCS, talked with the group about backyard conservation.



Marlin Eisenach, CSU Extension Agent, explains to the group how livestock needs to be taken care of in the winter months.

Scott visited with the group about mulching, nutrient management, terracing, and pest management.

Terraces can break your yard into several mini-gardens. Terraces prevent erosion by shortening the long slope into a series of shorter, more level steps. This allows heavy rain to soak in rather than run off and cause soil erosion. Building a terrace is like building a staircase.

Dennis Schwartzkoph represented Sharp Brothers Seed and talked with the attendees about dormant grass seed and fall lawn care.

He reminded everyone that any type of grass seed can be purchased at the Morgan Conservation District by calling 970-867-9659 ext 126.

Josh Saunders, Range Specialist for NRCS, talked with the landowners about rangeland management. He told the group how livestock graze the best-tasting plants in the pasture first and then move on to the next and so on.

He also told them how important it is to rotate the grazing so those "favorites" won't be grazed away. He discussed the importance of only grazing the amount of livestock the

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workshop, continued from page 14

pasture can maintain and not to over-graze.

Marlin Eisenach, CSU Extension Agent talked to the livestock owners about caring for their animals during the winter months.

He told everyone how important it is during the winter to feed livestock high protein feed. It is also important to have some kind of shelter, especially when the wind is blowing. Straw or corn shucks is good for bedding.

It is also important to have water available. In the winter this is hard to do at times with the water freezing, so have tank heaters in the tank – this not only keeps the water from freezing, but you don't have to get out and keep breaking and scooping the ice.

A favorite of the group was the solar and renewable energy talk provided by Next Generation Energy from Lafayette, Colorado.

This group talked about wind generators and how energy is delivered to private homes and businesses.

They explained that site-generated power is far more efficient than running electricity through a power grid that can stretch for hundreds of miles.

They also explained how solar systems will provide a fixed energy cost for the life of the system as fossil fuel prices continue to rise.

The landowner group was able to see what Diffuse Knapweed and other noxious weeds looked like. There was also information available on Farm Service Agency Loans.

The Morgan Conservation District is grateful to all of the presenters for their valuable information. A great learning experience was had by all.

If you have any questions regarding the topics that were presented please call the Morgan Conservation District at 867-9659, ext 126, and Val will help you.

BCCD and SERC&D Fund On-Farm Turbines

*by Misty George, District Manager
Baca County Conservation District*

The Colorado Department of Agriculture (CDA) recently awarded an Advancing Colorado's Renewable Energy (ACRE) implementation grant to Southeast Colorado Resource Conservation and Development (RC&D) Council, and their partners: Baca County Conservation District (BCCD), Rocky Mountain Farmers Union (RMFU), and the International Center for Appropriate and Sustainable Technology (iCAST).

John Stulp, Commissioner of Agriculture, spoke at the August 18th press conference, describing ACRE grants as, *"designed to help rural communities in Colorado by developing agricultural energy related projects which benefit both agriculture and the environment."*

While neither wind nor wind generators are new to the Plains, the advanced technology of today used to convert wind energy to electricity is.

RC&D Councilmen Kim Siefkas likened the award recipients to Columbus, striking out into the great unknown, and paving the way for others to follow.

The ACRE grant awarded to RC&D is a pilot project to demonstrate various sizes of wind turbines on a diverse set of agriculture applications across the Eastern Plains.

Through a competitive application process, experts in the wind technology industry selected five agriculture producers as award recipients.

These five farm-scale wind energy projects will blaze the trail working with local rural electric providers and large power companies, while linking turbine companies with producers, and thus Advancing Colorado's Renewable Energy.

These projects will become the template for other agriculture producers to use as more farmers and ranchers step into the brave new world of small-scale wind generation for agriculture applications.

Producers received awards of up to 25 percent of the expected expenses on each project.

In Bennett, Dallas Gilbert with Eastern Plains Natural Food Co-op will be installing a 1.8kW turbine at their natural poultry processing plant.

In Walsh, Fred and Kay Lynn Hefley will be use a 50kW turbine to help power an irrigation sprinkler.

In Grover, Diane and Phil McKinley will install a 1.8kW turbine for farmstead use, and to pump water for livestock on their cow/calf operation.

In Holyoke, Paul Mailander's 20kW turbine will help power their farmstead as well as greenhouses used to grow vegetables.

In Seibert, Curtis Sayles is installing a 10kW to offset energy cost for their farmstead, feedlot, and seed business.

The Commissioner of Agriculture, RC&D, RMFU, iCAST, BCCD, and the award recipients echoed elation at being part of charting new waters for small-wind generation in Colorado.



Left to right: Award recipients Kay Lynn and Fred Hefley (Walsh), Curtis Sayles (Seibert), Dallas Gilbert (Bennett), Phil McKinley (Grover), and Paul Mailander (Holyoke), RC&D Council Member Kim Siefkas, Commissioner of Agriculture John Stulp, and iCAST Community Sustainability Manager Raphael Shay.



Employee Spotlight

State Soil Scientist Assists Archeological Field School in Peru

Article and photos by Steve Park
NRCS State Soil Scientist

This summer, I had the unique experience of assisting with an archeological field school excavating a pre-Inca Moche culture archeology site located in the foothills of the Western Andes.

This opportunity arose when my daughter signed up for an archeology field school sponsored by the California Institute of Peruvian studies. She happened to mention to the instructor that I was a soil scientist.

The instructor called me and said he could really use a soil scientist to help teach students about soils, geology, and landforms. It was an offer I could not refuse. After making sure I had enough leave and money, I called the professor and said I would be glad to help out.

On June 18, my daughter and I flew to Houston followed by a seven hour flight to Lima, Peru.

From Lima we took another flight north to the city of Trujillo. We spent one and one-half days in Trujillo visiting some nearby major archeological sites.

The first site was Huaca de la Luna (Temple of the Moon), a Moche culture site where ceremonial human sacrifices were carried out on a large scale.

We also visited Chan-Chan, built by the Chimor (Chimu) culture, and also the largest Pre-Columbian city in South America. From Trujillo we boarded a bus for an hour ride south to the small town of Chao where we would live during our stay in Peru.

Chao is a small agricultural community located along the Pan American Highway, about a mile inland from the coast. When the Chavi-Mochic irrigation canal was completed in 1996, it brought life-giving water from the Andes to many of the dry desert valleys along the coast.

The result was an explosion in irrigated agriculture production and growth of small villages like Chao. I was amazed at the diversity of their crops; corn, rice, chili peppers, cane, potatoes, sweet potatoes, plantains, beans, asparagus, avocados, citrus trees, and numerous other crops I could not even identify.

Of course, coffee is a major crop but it is grown in the Andean highlands and not in the desert region along the coast.

There were some large corporate farms with modern equipment, but the majority of agriculture production is still based on manual labor. Horse-drawn plows were common. Corn was cut, sorted, bagged, and loaded onto trucks by hand.

Alarmingly, I saw many field workers wearing only sandals, shorts, and t-shirts for protection while applying pesticides from hand pumps carried on their backs.



Steve Park, State Soil Scientist, uses a screen to find archeological evidence.

There were twelve people in our group, seven being students. We occupied the 2nd floor and roof of one of the "nicer" homes in Chao. We did have indoor plumbing, but no hot water, cooking facilities, or furniture, and we slept on foam pads.

For our meals, we walked across the village to a small open air "cafe" built of concrete walls and floor with a mud-covered cane thatched roof. On more than one occasion, I found pieces of the roof in my meal.

Numerous dogs, chickens, and spiders also frequented the café during our meals. Breakfast consisted of rolls with butter and jam and a type of gruel, similar to cream of wheat.

Ironically, brewed coffee seemed to be nonexistent in Chao. Nescafe

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Peru, continued from page 16

instant coffee was served instead. Salt, pepper, spices and other condiments were very hard to find in Chao.

Evening meals consisted of boiled soups (very good), white rice, and small portions of fish (Ceviche), chicken, beef, or goat (Cabra).

Fresh vegetables were not served because of possible contamination with bad water. Guinea pigs (called Cuye) are considered a Peruvian delicacy.

After breakfast we were transported, by a local Peruvian boy, to the archeology site in an old 10 passenger Toyota van.

The trip took about an hour depending on how many times we stopped to pick up local Peruvians and their livestock. On one particular trip, we had 22 bodies, 5 chickens, and a lamb crammed into the old rickety van! Flat tires and other mechanical breakdowns were also common.

The van would take us as far as possible and then drop us off. From there, it was about a two-mile, uphill hike, with all our field gear, across the Sechura Desert to the two-acre site located on a debris flow at the base of the Western Andes.

The Sechura Desert is one of the driest in the world with average



Overlooking Chao from the roof of the home we lived in.

annual rainfall of only 0.2 inch. During significant El Nino years an average of about three inches may fall.

It was winter while I was there and the temperatures were mostly constant, about 62 degrees F, but ranged up to 90 degrees F when the marine cloud layer burned off.

The site, named Cerro Pucarachico, is late Moche/early Chimu culture (500-900 AD). It is part of the much larger Santa Rita B complex of sites where previous excavations in the area found ceremonial sacrifice victims and stone corrals for camelids (alpacas and llamas).

The site we worked on was theorized to be a water collection and snail harvesting site used during significant El Nino years.

During our short time at the site we did not find any human remains, but did find ceramics, freshwater snail shells, and some tools made from bone.

I collected charcoal and pollen samples for future analysis and also provided training on the soils, geology, and landforms in the area. All the samples and data we collected will be processed and analyzed by Peruvian scientists at the National University of Trujillo.

I was amazed at the size of the Andes and magnitude of the geologic and climatic forces that shaped the landscapes of the area.

Our Rocky Mountains pale when compared to the Andes. The Peruvian people were warm, happy, and friendly.

It was truly a remarkable experience that I was able to share with my daughter.

Environmental Stewardship Award

Deadline
February 9, 2009

Since 1991, the Environmental Stewardship Award has annually honored seven regional cattle operations for their excellent stewardship and commitment to conservation on the ground.

Entering its 19th year, we ask that you consider nominating a cattle producer in your state, that you work with that exhibits sound conservation and stewardship practices.

The National Cattlemen's Foundation administers the award, along with partners Dow AgroSciences, USDA's Natural Resources Conservation Service (NRCS) and U.S. Fish and Wildlife Service, to recognize cattle producers who are exemplary in their stewardship and conservation practices.

The Environmental Stewardship Award is recognized and supported by a broad coalition of government agencies, conservation groups, and America's farmers and ranchers.

It continues to be one of the best avenues for educating the public on producer and agency conservation efforts.

The award recognizes producers who are at the forefront in conservation and stewardship and in turn serve as examples for other producers to follow.

In 2009, we look forward to continuing to build upon the partnerships and relationships with NRCS. We thank you for your long-standing efforts highlighting the importance of stewardship and conservation.

For more information visit www.EnvironmentalStewardship.org or contact me at 303-694-0305, email jbeitia@beef.org with any questions.

Lower South Platte Watershed Tour a Success

by Joe Crowder, Soil Conservationist
Holyoke Field Office

The Sedgwick County and Haxtun Conservation Districts jointly hosted the Lower South Platte Watershed Tour at the Whiskey Springs Ranch near Sedgwick on July 14, 2008.

Nearly 100 people participated in the tour which included stops highlighting salinity issues, WRP and wildlife, wind energy, water quality, and rangeland issues, ending with a horseback ride and authentic chuck wagon supper.

Mark Cronquist, Conservation Specialist for the Colorado State Conservation Board, facilitated the session by gathering the resource concerns, specific problems, and suggested practices for resolution at each stop during the tour.

At the end of the tour, he had producers summarize and prioritize these concerns. Seven items of concern included dewatering of agricultural lands, continually diminishing water quality, lack of renewable and alternative energy sources in agriculture and small communities, lack of energy conservation, productive range resources for livestock production, and maintaining wildlife populations and habitat in today's changing farming environment.

The problems and suggestions for potential solutions and practices were forwarded to NRCS and will be discussed at the an-

nual CACD meeting as well.

The first stop on the tour was Salinity Issues discussed by Jason Peel, NRCS State Irrigation Water Management Specialist on the Vince Young EQIP project operated by Randy and Ryder Jenik.

Company spokespersons Marc Jacobs and Aimee Leatherman talked about the company's desire to build a number of large systems in the area.

The districts have hosted several producer meetings to provide information to landowners and how to set up a landowner's group to garnish what is best for them and the community. This stop was cut short by the sighting of a funnel cloud in the eastern sky.

The final cropland stop was with local producer, Bruce Gerk. Discussions were held on conversion of flood ground to pivots through EQIP, recharge and augmentation, and other water issues in the South Platte and Republican watersheds.

As the buses rolled back into Whiskey Creek Ranch, a variety of activities were available.

Many chose a horseback or wagon ride on the prairie where Boyd Byelich, NRCS rangeland specialist and Alan Helm, extension weed specialist discussed grazing and best management practices for improving and conserving the native range. Others choose skeet shooting, fishing, or archery.

An old time chuck wagon supper was served to everyone while local historian, Gary Lancaster, entertained the crowd with his authentic attire and stories of the life of a Fort Sedgwick soldier.



The next stop was Kenny's Sitter's WRP where he is restoring a wetland. Matt Filsinger of the US Fish and Wildlife Service and Ed Gorman with the CDOW gave presentations on habitat and walk in hunting.

After that, the group viewed a meteorological (Met) tower, placed by Invenergy, to gather information for proposed wind energy towers to produce electrical power.

Students Learn Importance of Soils

Article and photos by Henry Jackson
State Office Human Resources Specialist

I would like to express my sincere gratitude to Chris Fabian, Soil Scientist from the Ft. Collins MLRA Soil Survey Office, for agreeing to put on a soils presentation on October 24, 2008, for my daughter's middle school, Florida Pitt Waller, located in Green Valley Ranch.

This all started back in early September when Ms. Roach, my daughter's 6th grade Earth Science and Geography teacher, phoned me and stated, "We are studying rock formations and the importance of soils and Jessica mentioned that you worked for the Natural Resources Conservation Service and I was wondering if you would be able to speak with our class?"

I explained that I did not work in the soils division, but I would speak to our State Soil Scientist Supervisor, Steve Park, to see if I could get something arranged.

After speaking with Steve, he indicated that Chris might be able to accommodate this request.

I contacted Chris and after receiving confirmation from him, I spoke with Ms. Roach, put her in contact with Chris, and a school soils presentation was born.

Chris and I arrived at the school and Chris had some volunteers help him unload his truck and set up the presentation outside.

The day was nice and sunny, but there was a cool tinge in the air. Chris started each session by discussing the Dust Bowl and the formation of the Soil Conservation Service, which evolved into the Natural Resources Conservation Service.

The presentations focused on the importance of soils as it relates



Ms. Roach, Earth Science and Geography teacher at Florida Pitt Waller, and Chris Fabien, Soil Scientist, Ft. Collins MLRA Soil Survey Office, hold a soil sample exhibit while students look on.

to food, trees, fabrics, buildings and their footing and foundations, waste and pollution filtering, and the carbon sink.

The material was presented in such a way that the kids seemed very interested in what Chris had to say, and they really liked the experiments he had the kids perform.

Other topics included; what are soils, how soils are formed, different types of soils and rocks, soil variety, characteristics of soils, and soil profile.

There were three classes that experienced the presentation, which ended shortly after noon. We then loaded up the truck and went back upstairs to the classroom for a question and answer session between Chris and the class.

I can honestly say that I was surprised at the level of knowledge and

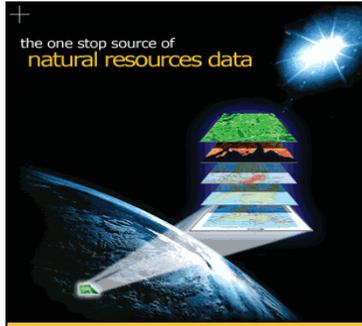
questions asked by some of these 6th grade students.

All-in-all, this was enlightening for both the students and I. After the presentation, Chris and I went to lunch and had a very nice conversation.

Our time was spent talking about our families, hobbies, and interests and just getting to know one another.



Students explain their findings of the three different soil types that were presented. They were tasked to compare and contrast the each soil's consistency.



TECHNO TIPS

Digital Elevation Model

by Marianna Young, Resource Conservationist for Technology
Monte Vista Area Office

Field Office employees frequently have a need for elevation data when doing conservation planning and general, preliminary engineering work.

Most contour data are currently available via digital topographic map layers available in Customer Service Toolkit/ ArcMap. See Image 1.

However, this data layer has the drawback of displaying several other features besides contour or elevation data; these other features usually obscure too much important map information.

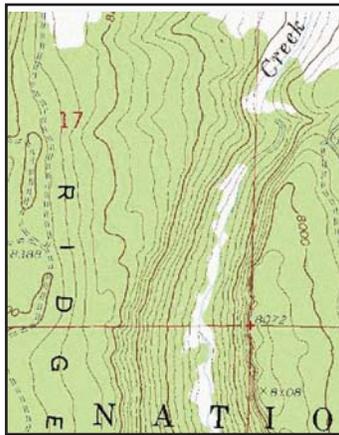


Image 1

Additionally, many of our digital topographic maps have a 20- or 40-foot contour interval, which is often too coarse to be of much use.

Another digital elevation data layer available for use is a Digital Elevation Model, or DEM. A DEM consists of many columns and rows of cells, each of which carries an elevation which can be in feet or meters.

DEMs are commonly available at a resolution of a 30-meter cell or a 10-meter cell; finer resolutions are also available at a price.

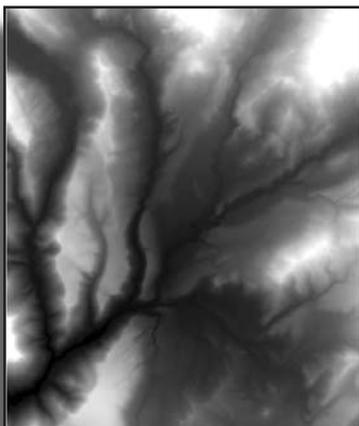


Image 2

DEMs are typically delivered on a quad-by-quad basis, duplicating the names of the matching USGS 7.5-minute topographic map series. See image of a 10-meter DEM from Hinsdale County in Image 2.

Since it is possible to generate contour lines from DEMs, and

some field office employees have expressed an interest in using digital contour data, the Technology Team recently produced for review a draft document describing how to produce 10-foot interval contour lines from 10-meter DEMs.

The actual process of creating contours from a DEM is simple, but the preparatory work can be time-consuming – acquiring the DEMs, verifying projection information, gathering accompanying data such as private land extent, county boundary, and topographic map index, and more.

ArcMap's extension Spatial Analyst is used to create the contour lines – the only information the user has to plug in is the desired contour interval, name and location of output, and whether the Z, or elevation, units in the input are in meters or feet.

If the input Z units are metric, a conversion also must be entered so that the resulting contour values are in feet.

Depending on the number of contours in a particular quad and the user's computer processing power, the actual generation of contour lines can take anywhere from one to 10 minutes. See finished contours in Image 3.



Image 3

A random visual check is performed at the end of the process to verify the accuracy of the new contours as compared to the USGS topographic map contours. They usually are remarkably close.

This new contour-line layer is not intended to replace an on-the-ground survey; it is intended only for general planning and preliminary survey work.

Contact your Area Resource Conservationist (Technology) if you are interested in acquiring a contour layer for your field office.



SCSers May Come and Go, but Earth Team Volunteers are for Life!

Submitted by Kristi Gay, RC&D Coordinator
Hugo Field Office

What happens to a conservationist when they retire or try another career?

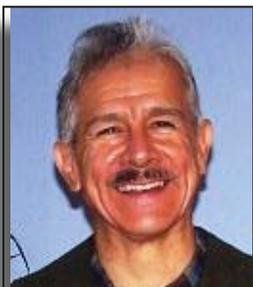
No matter their location, some just can't seem to stay away from the Earth Team!

I recently had the pleasure of working on an interesting volunteer activity; a research project that brought together at least three former Soil Conservation Service (SCS) employees.

I have been honored to know them for over 20 years as employees of the Natural Resources Conservation Service (NRCS) and SCS.

Wendell Hassell, Ken Lair, and Don Hajar are all former SCS employees who came together to help with an idea that developed from discussions with local landowners and volunteer members of the Flagler Conservation District Board.

With a few phone calls and assorted emails, all three were quick to show interest in the idea to begin a cellulosic biofuels study and each played a key role by providing equipment, grass seed, and expertise to install the plots properly for research purposes.



Don Hajar

We have maintained our friendships over the years through our mutual association with the Colo-

rado Chapter of the Soil and Water Conservation Society and Colorado Section Society for Range Management.

Three landowners, Dan Mills, Doug Klann, and the Town of Flagler, Colorado cooperated to allow Earth Team Volunteers to plant replicated plots on their land to four species of tall grasses.

The purpose of doing this was to study the long-term potential productivity for cellulosic biofuels in the



Wendell Hassell

eastern plains region.

Each set of plots amounts to about an acre of cropland donated per participant.

The study is part of a larger project spearheaded by Dr. Ron Follett, Agricultural Research Service at Fort Collins, Colorado.

There is interest by the Flagler Community Development Committee, the Flagler Conservation District, and local producers to entertain the possibility of developing local resources for biofuels production.

The Flagler Chapter of the Future Farmers of America has also volunteered to be involved with the study.



Ken Lair

The Town of Flagler, population approximately 600, is currently offering free land to a suitable business that might be able to bring jobs to the local economy.

With the current interest in biofuels, it is hoped that this project and a companion biodiesel study might one day stimulate new jobs for residents of this rural town located along Interstate 70, two hours east of Denver.

Local farmers are interested in a 'grow your own' fuel source that could diversify common non-irrigated crop rotations of wheat/fallow, and wheat/millet/fallow.

They are also interested in the opportunity to plant low water use crops that would be economically feasible but would benefit from limited irrigation.

Shrinking water tables are a concern in the Colorado eastern plains region of the Ogallala Aquifer.

Finding highly productive and economically feasible alternative crops would help to stabilize the local economy as acres for high water use crops such as corn, are being reduced due to tightening water supplies.

Upper Arkansas Cooperative Weed Management Area Celebrates 10th Anniversary

By Mary Miller, Public Affairs Specialist Area 3

In 1998, the Sangre de Cristo Resource Conservation and Development Council (RC&D) sponsored a planning meeting to initiate coordinated weed management in the Upper Arkansas River Basin.

Since then, partners in the Upper Arkansas Cooperative Weed Management Area (CWMA) have worked together on weed management on a watershed basis.

This includes strategic planning, targeted invasive weed mapping and management, education, and fund raising.

To begin the process of forming the CWMA, the RC&D Council formed a steering committee whose purpose was to devise and carry out a strategic weed management plan for the Upper Arkansas River Basin.

The committee consisted of county weed managers (there were only two at the time), CSU Cooperative Extension directors who were given weed management responsibilities by their counties, representatives from the US Forest Service, Bureau of Land Management, USDA Natural Resources Conservation Service, and private landowners.

Based on the Strategic Weed Management Plan, the steering committee developed, the group focused its first year on developing a regional invasive weed inventory.

Once this was done, the committee identified six species of invasive weeds for management. However, there was not enough spray equipment in the region to manage the weeds on a watershed basis.

The group cooperatively purchased a skid sprayer and two backpack sprayers for each county. The CWMA also held private pesticide applicator training in several locations to qualify landowners to spray noxious weeds.

When the CWMA began, only two counties had weed managers. The group educated county commissioners about the importance of invasive weed management and the consequences of doing nothing.

The specifics differ in each county, but more positions have been added due to this effort.

In addition to doing work on-the-ground through cost-share programs and grants, the CWMA sponsors tours or workshops each year. It has also developed some publications targeting landowners in the Upper Arkansas River Basin.

The success of the CWMA lies in the cooperation amongst all the partners and their commitment to managing invasive weeds in the Upper Arkansas River Basin.

FFA, continued from page 4

Here the students must determine the plant composition of each site, the range condition compared to the reference plant community, the suggested stocking rate, and range trend.

Finally, based on their evaluation of the existing plant community, each student must select the appropriate management practice (or suit of practices) that would be recommended to the landowner for improvement of the rangeland resource and livestock performance.

Team awards and top scoring individuals are recognized at the awards ceremony, which is held at the conclusion of the competition.

The Colorado Section of the Society for Range Management sponsors the individual honors, while several of the Conservation Districts in southeast Colorado sponsor the team plaques and provide lunch for the participants.

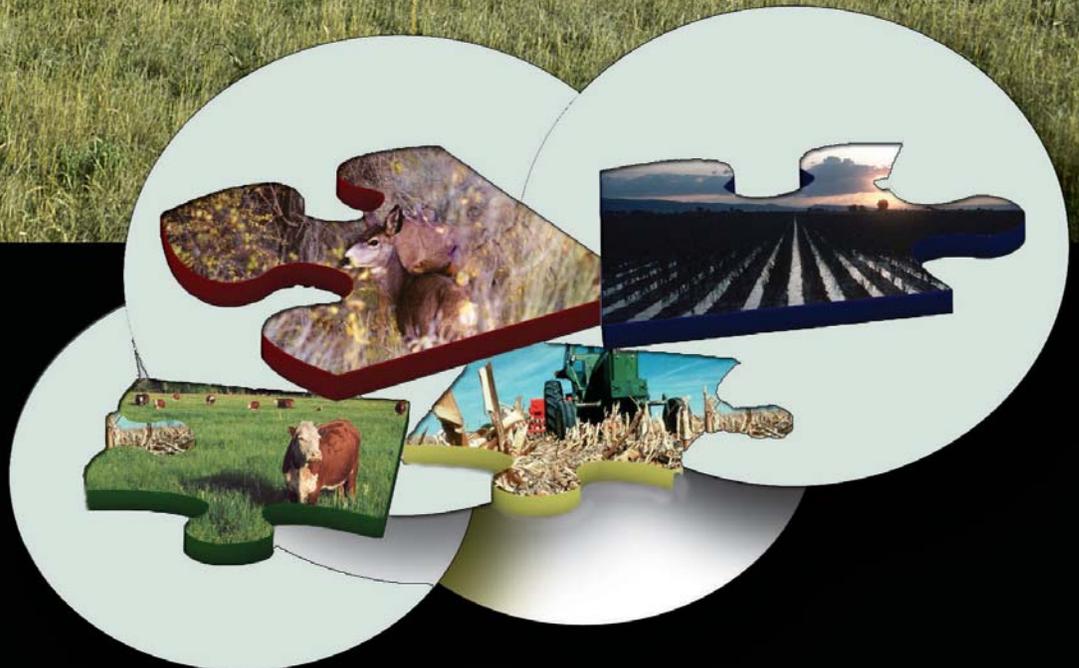
This year, employees from the Natural Resources Conservation Service in Rocky Ford and La Junta and from the East Otero Conservation District helped with the contest.



FFA students compete in native plant identification.



Conservation Planning



...One Piece at a Time

Helping People Help the Land