

Extension



Colorado
State
University

Extension



For nearly 100 years, Extension has helped people in Colorado find the answers to questions they have about their homes, families, businesses, communities and local surroundings. We have provided the best resources, locally, from the University—and today through our partners at eXtension.org—to address needs and issues.

It has been a productive year for Colorado State University Extension. We have reached 833,000 Colorado residents; 82,090 youth participated in 4-H programs; 10,682 volunteers donated hours to our communities.

From fostering agriculture production while looking to sustainable practices, encouraging financial literacy, investigating clean energy opportunities, supporting youth development through 4-H, addressing urban and rural water issues, and encouraging healthy families and communities, CSU Extension is helping Colorado's people and economy. While the programs highlighted in this report might feature a specific geographic location, many of these educational efforts are offered through offices throughout the state. Check the listings in the back for the location of your local county office.

This past year we participated in a nationwide survey through the National Association of State Universities and Land Grant Colleges (now called Association of

Public and Land-grant Universities: www.aplu.org) on the value of the Extension brand. A total of 335 interviews were conducted from June to July 2008 in Colorado. Interviews were conducted online and lasted about 15 minutes. Participants were members of a representative online panel; criteria included gender, age, urban/rural, ethnicity, education and household income.

Survey participants said that, "Most important for Extension is to reinforce that it is a resource people can TRUST. It provides information/programs that are current/reliable, reviewed by experts and delivered by great staff." Other characteristics valued include convenient access and nearly a century of experience.

As we look to the future of how Extension can play a vital role in local communities, our new Extension strategic plan (available online at www.ext.colostate.edu/staffres/strat-plan.pdf), it's my belief that our vision statement provides the guidance we need to help Colorado residents sustain and improve their quality of life.

Deborah J. Young
Associate Provost and Director of Extension

Vision: Colorado State University Extension is the front door to Colorado State University providing the extensive knowledge, research capabilities and resources of this premier land-grant university to Coloradans from all walks of life. Extension is dedicated to serving current and future needs of Coloradans by providing educational information and programs that safeguard health, increase livelihood, and enhance well-being.

Facts & Figures

Colorado State University Extension

Faculty and Staff

Off Campus

- 203 people
- 92 additional employees paid by county government
- Located in 54 offices representing 59 of 64 counties

On Campus

- 68 people
- Located in five colleges, the majority in the College of Agricultural Sciences
- 18.78 FTEs in College of Agricultural Sciences, 4.83 in College of Applied Human Sciences, 0.75 in the College of Engineering, 1.88 in Warner College of Natural Resources, 0.92 in Veterinary Medicine
- The faculty positions on campus are split-funded with research and/or teaching

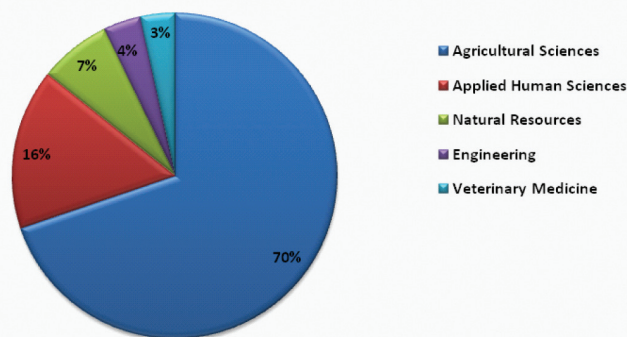
Participation

- 10,682 volunteers including 4-H leaders, Master Gardeners, Native Plant Masters, Master Food Safety Advisors, Master Food Preservers and other programs
- 832,978 face-to-face contacts in 2007
- 4-H enrollment equalling 105,134

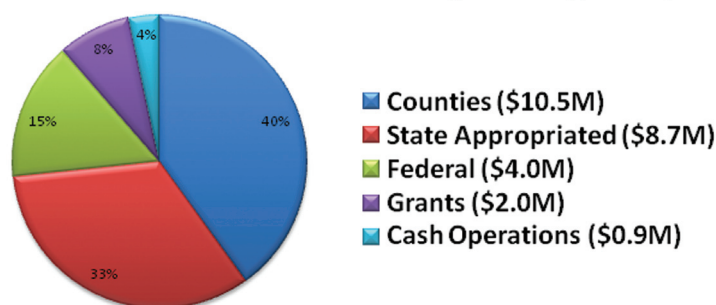
Regional Organization

- 3 regions
- Each region has a regional director as well as several regional specialists
- Northern region–87.35 FTEs
- Southern region–49.85 FTEs
- Western region–44.3 FTEs

CSU Extension Campus Allocations by College FY 2009



Total CSU Extension FY 2009 Funding Sources (\$26.2M)



CSU Extension Historical Funding (excluding in-kind donations)

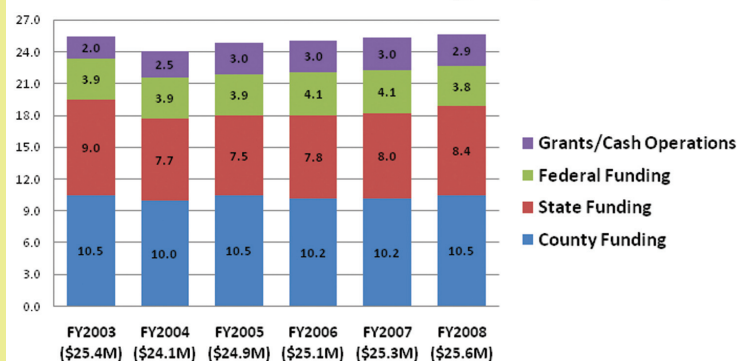


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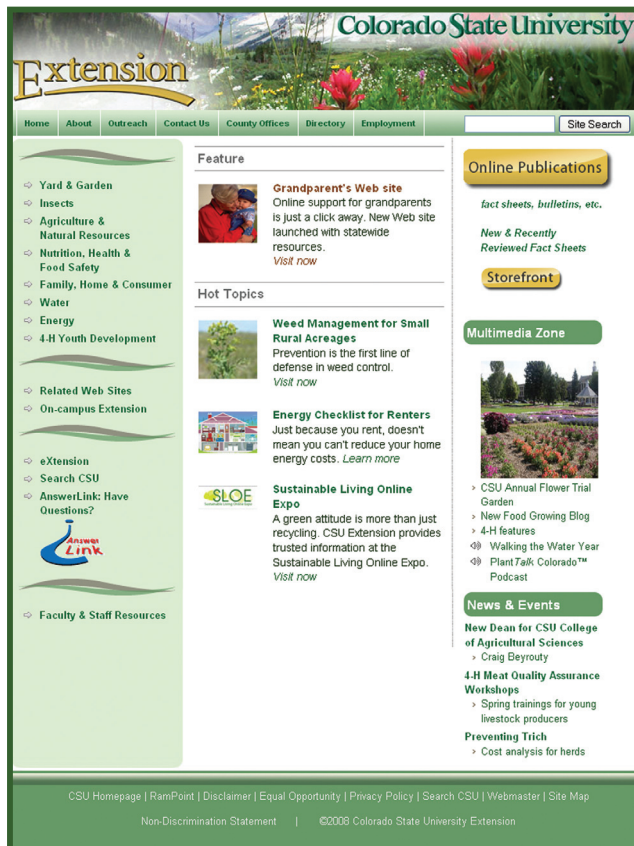
Colorado State Extension Announces Associate Director



Jan Carroll was appointed associate director of CSU Extension in September, 2008. Carroll will provide leadership, strategic planning, project management, and summary evaluation and assessment processes for statewide programs.

To foster interdisciplinary team efforts and increase grant funding, she will work closely with college leadership and Extension specialists on campus and Extension field leadership and agents throughout Colorado.

Carroll completed her Ph.D. in vocational education with an emphasis in human resource development and her master's degree in consumer science, both from Colorado State University. ■



New Extension Website

www.ext.colostate.edu

In a time of high demand for quick information, CSU Extension launched its new website on October 1, 2008 with warmer colors, updated graphic elements and improved navigation.

As part of the website redesign, the Extension communications and information technology staff teamed up with the CSU's Journalism and Technical Communication (JTC) department to undergo usability testing.

This new site includes a multimedia zone and a single navigation button linking to all fact sheets and other publications for each topic area. The site is noticeably more prominent and consistent with easy navigation throughout various levels of the site. It even includes sections for current news and events, as well as related resources, on the campus and nation.

The new site is targeted to both existing and potential Extension clients. Many areas are creating blogs to interact with clientele, such as new ones recently launched on food growing and gardening topics. ■

The Gunnison County Extension site is modeled after this site, and also provides a full Spanish translation. Visit this site at www.gunnison.colostate.edu.

New Energy Economy Electrifies Extension




The intent of the Clean Energy Strategic Initiative Team (CESIT) is to educate Extension agents about a variety of energy issues so they can, in turn, educate people in their communities. To fulfill that mission, seven subcommittees were created. The groups comprise a team leader and participants from both on- and off-campus, representing every corner of the state. Each team will focus on a topic area that includes (but is not limited to) gathering information about:

- Solar: photovoltaics; solar water heaters; urban opportunities; rural opportunities; passive solar
- Wind: large scale leasing; residential (both urban and rural); community
- Biofuels/biomass: crops for fuel; greenhouse gas mitigation; carbon sequestration; methane; anaerobic digesters; woody biomass; algae
- Geothermal/hydropower: new construction with heat pumps; farms with micro-hydrogen
- 4-H & schools: curricula; developing school enrichment
- Homes & communities: energy audits; green building; energy efficiency; green jobs; economic development; community involvement
- Grants & funding: tax credits; renewable energy credits; incentive programs

These groups are responsible for creating fact sheets, brochures, booklets, Web pages, and other easily accessible materials they can distribute through their offices to agents across the state and interested community members. Over time, they will offer workshops. Although agents won't become experts in their topic area, they will stand out as well-informed information brokers who can guide people to find what they need to successfully engage in what Governor Ritter calls the "new energy economy."

Extension was already working closely with the Governor's Energy Office (GEO) before the formation of CESIT. With the formation of the group, however, the GEO created a workshop specifically for Extension agents. In it, they learned about the programs offered by the GEO so agents could distribute that information through Extension offices and into communities.

The GEO isn't the only CESIT partner. Members of the Colorado Harvesting Energy Network will participate on two subcommittees, while a representative of Flux Farm, a non-profit educational organization that educates farmers and ranchers about renewables, will join another team.



The CESIT group understands that Extension has an influential and important role to play in helping usher in this new era. Traditionally, Extension agents have been the most trusted and well regarded experts in agricultural matters. As such, we have the ear of those farmers and ranchers who own the very resources necessary to effectively build a new energy economy. Once trained, agriculture agents will be the information brokers to producers about everything from how to make their operation more energy-efficient, to the range of value-added opportunities that could help boost their bottom line. Essentially, agents will provide basic information and then link producers to professionals who can help erect a single wind turbine, lease their land to a utility for a large wind facility, grow fuel-producing crops, or construct an anaerobic digester—and more.

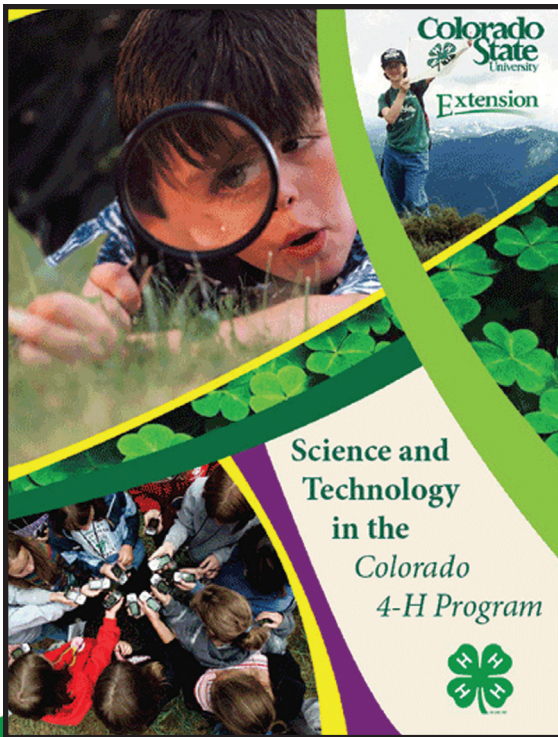
Family and consumer science agents are also tapping into the renewable energy boom. Once educated through the CESIT efforts, they will assist homeowners, businesses, rural operators, and communities with who can help them improve energy efficiency in their existing structures, or how to build new ones that employ geothermal, micro-hydrogen, solar and other clean energy sources.

4-H agents can play a meaningful role. By providing new curriculum for their club members, they can offer cutting-edge programs that could attract an entirely new demographic into the 4-H family. These programs can also be taken into schools throughout Colorado.

Economic development agents will be able to work with communities that may be interested in pursuing the economic benefits of renewable energy. For example, in Logan County, the wind farm produced \$4.16 million for the county. Additionally, annual easement payments to property owners range from \$4,000 to \$6,000 and will add another \$45 million over 30 years. During 2007, nearly 350 construction workers were employed in the area. They purchased temporary housing, food and supplies during their months there. Over 20 full-time, permanent jobs were created for wind technicians to service the wind turbines.

As our economic times become more tentative, it becomes increasingly more important to demonstrate our value to our communities and stakeholders. It makes good sense to invest time, money and necessary efforts to augment the expertise of our agents so that they continue to stand out as Colorado's most reliable and trusted resource in the field. There has never been a better time—or clearer understanding—of how we can play an essential part in supporting our nation's transformation and independence. ■

-Leigh Fortson



Science Technology Engineering Math



STEM Challenges 4-H Youth

Consider this: 66 percent of current Japanese college graduates and 59 percent of college graduates in China are earning degrees in science, technology, engineering, and math. Only 32 percent of U.S. college graduates are receiving degrees in these fields. 4-H is taking a stand to improve these statistics and reaching more than 5 million youth nationwide with the Science, Technology, Engineering and Math (STEM) initiative.

“The STEM initiative provides hands-on learning experiences that encourage discovery, develop young minds, and fill the pipeline of young leaders proficient in science,” Jeff Goodwin, CSU Extension assistant director, 4-H youth development, said. He notes that a nationwide 4-H goal is to prepare one million young people to excel in science, technology, engineering, and math by 2013.

According to Goodwin, 4-H out-of-school opportunities focus on agricultural science, electricity, mechanics, natural sciences, rocketry, robotics, biofuels, renewable energy and computer science. Each of these projects is designed around the 4-H goals of learning, mastering skills, and demonstrating generosity.

A new publication highlights these initiatives and provides a breakdown of the different opportunities to 4-Hers. To view this publication, visit www.ext.colostate.edu/4_h/stem.pdf. ■

-Taylor Stonehouse

Measuring Life Skill Development in the Colorado 4-H Program

The benefits of 4-H programs in Colorado have historically been communicated through anecdotes and success stories. These typically reflected the quality of the programs through the gut feelings of those familiar with the program, but did not demonstrate the public value of the youth development program in quantifiable measures.

“In these economic times, we have to demonstrate our relevance and that the tax-payers’ money is well-spent,” Jeff Goodwin, CSU Extension assistant director, 4-H youth development, said.

In the summer of 2008, data were collected related to life skill development of Colorado 4-H members in organized 4-H clubs. There were 1,843 surveys collected. Surveys were administered at county fairs and regular 4-H club meetings. There was no random assignment of counties involved in the data collection. Instead, 30 counties collected and submitted data on a voluntary basis.

The life skills measured were: record keeping, community service, leadership, public speaking, decision making, and problem solving. The purpose of this study was to gather and provide sound, research-based information to the public about the effect 4-H membership has on the lives of young people.

“This is the first of many impact statements,” Goodwin added. “It was a pilot to find ways we can collect data from across the state.”

Responses rated the following:

1) decision making	98.2%
2) problem solving	97.6 %
3) community service	96.6%
4) record keeping	93%
5) public speaking	92.7%
6) leadership	75.3%

Plans are being made to collect similar data in 2009 using the same sampling technique. The life skills to be measured in 2009 will be related to science, technology, engineering and math. ■

-compiled by Taylor Stonehouse

The major finding in the study was that for all six life skills measured, there was a highly significant difference between the responses of the more experienced 4-H members surveyed and the members with two years experience and less. This difference was in a positive relationship, meaning that the more experienced 4-H members scored higher on the scale than did less experienced members. This finding would suggest that 4-H members acquire proficiency in life skills as they participate in the 4-H program.

County Partners

Data for this study were collected in the following Colorado counties:

Adams	Douglas	Kiowa	Montrose	Prowers
Arapahoe	El Paso	La Plata	Morgan	Sedgwick
Baca	Elbert	Larimer	Otero	Summit
Cheyenne	Garfield	Lincoln	Ouray	Washington
Crowley	Grand	Logan	Park	Weld
Custer	Huerfano	Mesa	Phillips	Yuma

Eagle's Nest Owl's Roost

Young campers get the chance of a lifetime to explore
Colorado's great outdoors

The Eagle's Nest Owl's Roost (ENOR) environmental day camp provides a positive experience for Colorado youth to explore and enjoy the outdoors. Over the last 35 years ENOR has educated nearly 15,000 participating youth while exploring Colorado's outdoors in the mountains of Jefferson County.

Children set to enter 4th grade participate in the Owl's Roost program, while children entering the 5th grade are in the Eagle's Nest program.

**"Every one of the activities was so fun,
and every day I learned more about
the environment."**

-ENOR camper

Every year, small groups of these students partake in hands-on activities and real life experiences such as team-building, communication, and listening exercises. The youth are also engaged in many other instructive lessons including learning about animal habits and tracking, outdoor survival skill training, and touring historical sites.

Last summer, Eagles were able to visit The Colorado School of Mines' Edgar Mines, and Owls had the chance to tour Chatfield Dam.

Each of the events the ENOR team takes on furthers the group's objectives. The five core objectives the programs are based around increasing the knowledge, skill, attitude, awareness and participation level of the young day-campers.

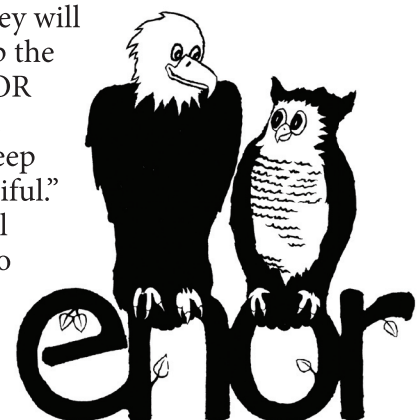
The groups are challenged with team-building activities and learn several ways they can help take care of the environment.

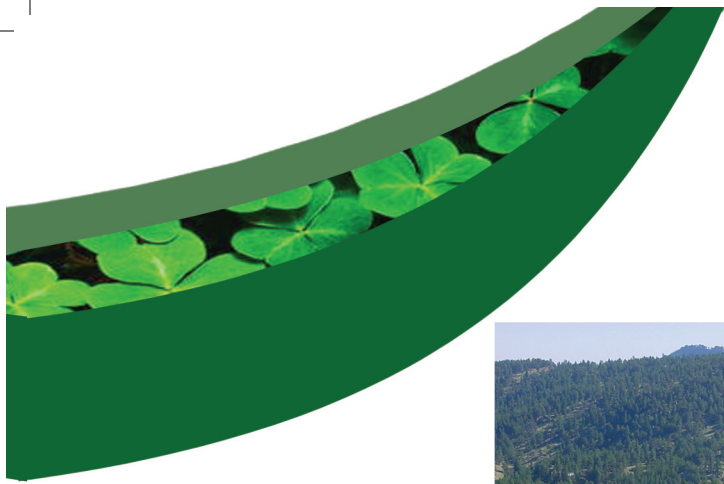
"Every one of the activities was so fun, and every day I learned more about the environment," one camper said last year.

Both participants and parents have the opportunity to fill out surveys and provide testimonial about their experience with the ENOR programs. Last year, a parent said, "This is one of the most organized summer camps we have ever experienced."

When asked what they will do in the future to help the environment, one ENOR participant responded, "Everything I can to keep these mountains beautiful." Another said they "will always be careful not to pollute." ■

*-compiled by
Taylor Stonehouse*





ENOR campers participate in a variety of outdoor adventures, including hiking, measuring lichen, learning knot-tying techniques, and visiting historical sites.

ENOR's Recent Recognition

- Nationally recognized as a 2009 Program of Distinction by 4-H headquarters in the categories of science, engineering and technology literacy and natural resources education with a focus on environmental enrichment
- Recipient of the 2008 Government Award for Excellence in Environmental Education from the Colorado Alliance for Environmental Education (CAEE) which honors leadership in developing effective, cooperative, cross-sector environmental education programs
- Sponsored by the Jefferson County office of CSU Extension and the Jefferson County Public School District

www.extension.colostate.edu/jefferson/4h/enor/enor.htm

4-H Overseas

Sharing the Lessons of 4-H

Dusty Havens did her share of raising livestock and decorating cakes, but after seven years of being in 4-H, at age 14, she decided it was time to broaden her horizons. The Roaring Fork Valley where she lives is nice, but it's not the world.

And so began her quest to discover the world. First it was Europe, then at 16, she was in Australia. Both trips utilized what she had learned in 4-H to embark on such adventures.

"In 4-H, I learned about how to be responsible and independent. Really independent. By the time I was 17, I applied to be an exchange with my sights set on going to South Africa."

Dusty's love of animals inspired the Africa-bound journey, and it also swayed an East Indian family to welcome her into their Durban home. Indians make up a significant population in Durban, and Dusty was grateful to enter a world about which she knew nothing.

"Lots of the exchange students ended up living with white families, but they're really just like us. I loved the fact that my host family was Hindu: they painted red dots on their foreheads and the women wore saris. Everyone ate with their hands."

"It was so different and yet I was totally open-minded about their culture. Luckily, they were open minded about mine, too, so there were no tensions."

One day, Dusty's host father asked her what she wanted to do. She

responded that she liked to help people. He asked her if she was willing to invest \$100 in such a cause, to which she agreed.

The money bought two huge cooking pots and Dusty spent the day cooking a curried chicken dish and rice. When it was finished, she and her host father drove to an impoverished rural area where their dish fed 200 orphans.

"Usually when people donate food, it's bread. But that \$100 gave them a meal they rarely get. I've never seen so many grateful people."

After the meal, Dusty wanted to compare South African toys with those that American kids enjoy.

"First, each child had only one toy. Just one! And they were pretty ragged. One girl had a Barbie doll that was missing a leg, half her hair was torn out, and it was marked up with pen. I had a huge box of Barbie dolls in my garage back home and I thought it would be so great if I could get those dolls over here."

After seven months in Durban, Dusty returned home and decided that sending a box of Barbies to the orphans wasn't quite enough. Instead, she launched a clothing and toy drive. Her intention was to fill a container that was 20' x 8' and send it to the same rural village she had visited. It would cost \$1,000 to ship the huge container across the ocean, but she figured a few fundraisers would cover the cost.

Flanked by devoted 4-H friends as well as other community members, Dusty posted notices in markets and banks between Aspen and Glenwood Springs, and stashed donation boxes at a middle school. The response was overwhelming.

"I said I was going to do it, so I'm going to do it."

-Dusty Havens

Durban



Every night, the 4-H club picked up the boxes and sorted through the items.

“We had clothes and shoes of every size, lots of toys and stuffed animals. But then there were televisions and skis! So we had to pull out the stuff they couldn’t use and then sort the things they could. It took an amazing amount of time. But we raised a little under \$2,000 and thought we were right on track.”

The clothing drive took place in the summer of 2008—right when gas prices escalated. So once the 797 boxes were packed, taped and labeled, filling the container to capacity, Dusty was told that it would now cost \$5,000 to ship the container to Durban. It was a tough blow.

“We thought about giving up. It was really hard. But then I thought, ‘No, I said I was going to do it so I’m going to do it.’”

After months passed with several more fundraisers, Dusty finally had the money to ship the goods. What she didn’t know, however, was that once the container arrived, various storage and customs charges would rack up another \$5,000. Plus, she was required to be present for it to be released. She was struck with another hard blow.

This time, Dusty’s parents loaned her some money to help defray costs. But she still couldn’t make the trip until after more 4-H fundraisers enabled her to repay her parents and cover the remaining costs.

Last December, Dusty finally handed the same little girl with the tattered doll a replacement Barbie

with all its parts intact. Both of them cried. It was then that Dusty knew every obstacle was worth the effort to bring about such joy.

“After all the kids got their toys, they ran a mile or so to the next village and then the next and told the kids what they got. So just as I was ready to leave, there were all these kids from about five different villages running toward us wanting toys, too!”

What could she do but drive back to the container, load up the truck, and return to the village making sure that each child had at least one new toy.

The orphans nicknamed her ‘The White Angel’.

Dusty is now preparing for another adventure. She’s been accepted into 15 different colleges and wants to major in international relations and go into the Peace Corps. But, as she’s well aware, life hands out challenges and Dusty is facing another. Her father fell ill recently and she may have to stay home to help her mother and siblings.

“It’s tough but it reminds me of when I was little and I’d fall off my horse. I’d want to quit but then the leader would tell me to get back in the saddle and keep riding. And during the clothing drive when they told me it would cost \$5,000 to send the container. I wanted to quit. But I guess you have to keep swinging at the ball if you’re ever going to hit a homerun.”

For those who watch how Dusty plays the game of life, we know she’s not a quitter and there’s no doubt that she’ll be making winning points no matter where her feet are planted. ■

-Leigh Fortson



Beef Updates

Beef Day Looks at Changing Ranching Landscape

Ranching in the West has undergone an unprecedented level of change. CSU Beef Field Day offered participants a unique opportunity to hear and interact with industry leaders, local experts and fellow ranchers to discover and chart the future of ranching.

According to Barry Dunn, executive director of the King Ranch Institute for Ranch Management (KRIRM), everything from the price and availability of inputs, to the price and the method of how cattle are being valued in the marketplace is shifting and changing the business of ranching.

“Barry Dunn has really gotten a reputation for

himself as really looking at innovative ways to keep ranching around”, said C.J. Mucklow, Extension director in Routt County “He’s helping newer people become managers themselves and is a real creative thinker about how we keep ranches viable.”

Nationally recognized as a ranching expert, Dunn was a featured speaker at the field day in September at the Lewis Ranch in Kremmling. Participants also learned about the importance of cattle breed characteristics at high altitudes.

The annual event included a tour of the Lewis Ranch and a candid discussion of its operation and intergenerational challenges. ■

Marketing and Identification

Beef weigh-in early in the year signals the beginning of county fair preparations throughout Colorado. According to Baca County Extension agent Deborah Lester, the reason for the weigh-in is to help young people better understand the feeding process involved in producing a viable product for sale in production agriculture.

“We usually weigh-in and ear tag the beef animals approximately 150 days from our county fair dates,” she said. “This means that they will have that long to feed and raise the animal to a proper market weight.”

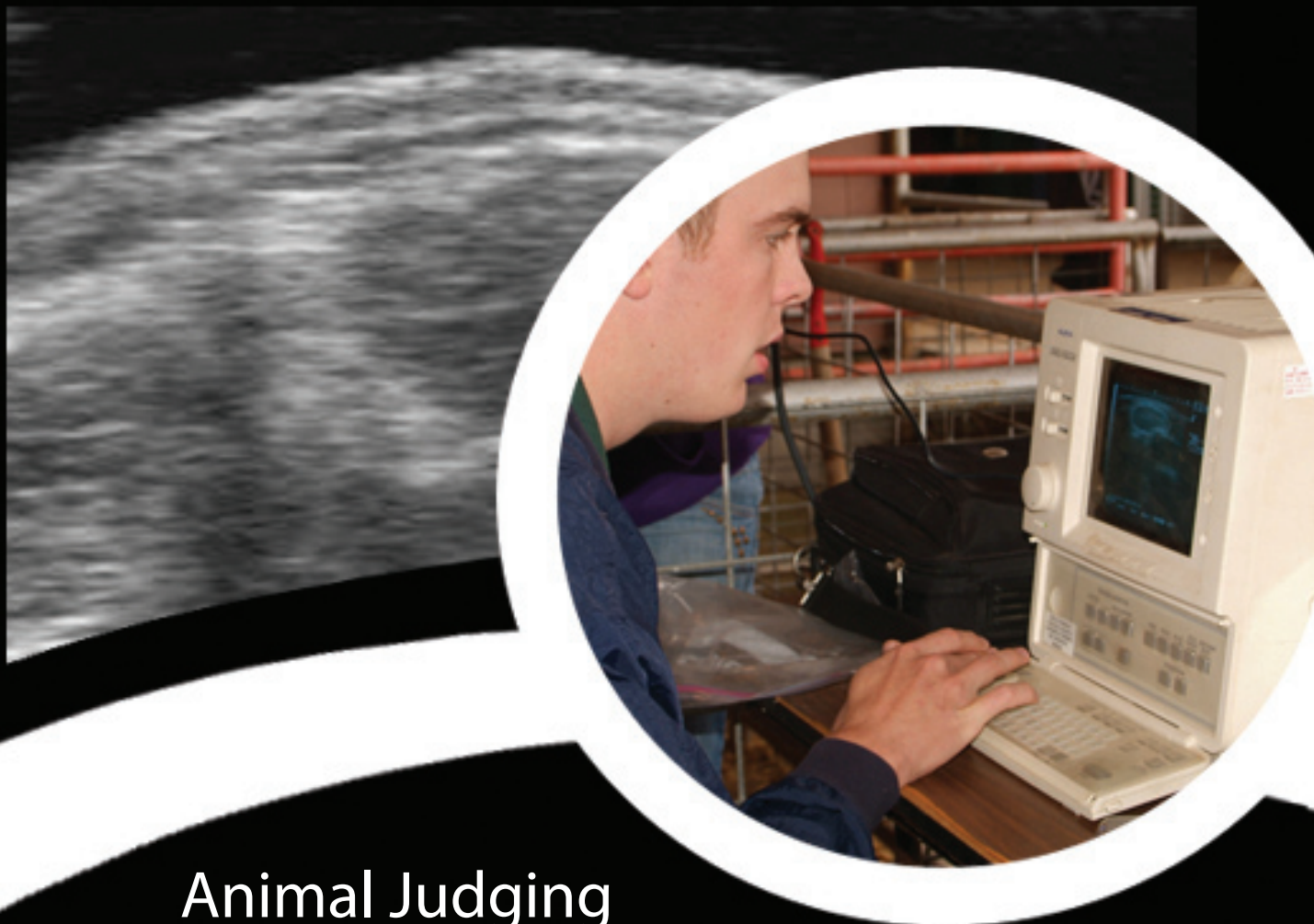
This year all market calves going to the state fair will also be subject to a retina scan. “4-H animals are the property of each 4-Her and we must be able to positively identify each animal,” said Lester. This is especially important with

new regulations on country-of-origin labeling. Retina scans provide a positive identification in that no two are alike. “They are like our fingerprints,” she noted. Retinal scans take a picture of the optic nerve located in the back of the animal’s eye. “We simply shine a bright light into the eye—like your eye doctor does for an eye exam—and take a picture of the optical nerve.”

An interesting note is that the retina of a cow or bull looks like a big oak tree in the winter. Sheep and goats have an optic nerve that look more like a bush in winter. ■

-compiled by Marie Allen





Animal Judging Goes High-tech

The latest in judging technology has been brought to the fair. The outreach program from the CSU meats team in the Department of Animal Sciences allows 4-Hers and judges to not only see the external characteristics of the animal, but get a clearer idea of carcass values as well.

Sheep, goats and swine were evaluated at fairs throughout Colorado using ultrasound machines. Judges used the machines to evaluate fat thickness and rib-eye areas of the animals.

Animals at the Arkansas Valley Fair as well as at 29 other Colorado counties were judged in the show ring, and then again with the ultrasound machines. Prior to the use of ultrasound technology, the carcass value of animals could only be determined after slaughter. Ultrasound allows for non-invasive evaluation. This is especially valuable for animals to be used in breeding stock.

“The carcass or ultrasound information is more

in line with the meat industry and what the packers want,” said Brook Mathew, 4-H youth development Extension agent for Otero and Crowley counties.

Members of the meat team visit a variety of county fairs, and they also use ultrasound judging on the state fair level, so Mathew encouraged the Arkansas Valley Fair Board to participate as well.

“We currently have a carcass contest where we ship off our beef to Tyson and (the carcasses) are graded, but there was nothing for the smaller animals, the sheep and the goats and the swine, so this gave us another way for them to participate,” she said.

“It’s a great opportunity for the kids to learn just a little bit more. Oftentimes they get caught up in the show ring part of it and forget about the industry part. We were just trying to provide another educational aspect to the project.” ■

-Marie Allen

A New Bug in Town



The Japanese beetle (*Popillia japonica Newman*) was first found in the United States in 1916 in New Jersey. The beetle populations have greatly expanded across the country, mainly with the help of transporting nursery plants. The soil and balled/burlap nursery materials around the nursery plants has provided an ideal spot for the beetles to lay their eggs, and as the plants travel across the country, so do the root-feeding larvae.

The beetle is a hazard as soon as it hatches from its egg—larvae chew roots of turfgrasses, and adults feed on the leaves and flowers of many ornamentals, fruits, and vegetables. The Japanese beetle feeds on over 350 plants, including many horticultural and agricultural plants. The plants most commonly damaged include roses, grapes, crabapples, and beans.

The beetle has become a significant pest to Colorado. The first Japanese beetle population was discovered in the state in 2003 in Palisade, and a significant population was discovered near Denver in 2005. By 2007, the beetle had spread to other Front Range counties, such as Denver, Douglas, and Jefferson counties, and populations continue to increase.

Each year, adult Japanese beetles cause \$226 million in damage, and larvae cause \$234 million.

In response, since 2004 the Palisade Japanese Beetle Eradication effort began targeting Western U.S. turf and Palisade lawns with granular insecticides. The effort also included setting up traps around Colorado's Western Slope.

In 2007, CSU Extension personnel in Adams, Arapahoe, Boulder, Douglas, and Jefferson counties, along with Colorado Department of Agriculture, USDA-Aphis-PPQ, Jefferson County Weed and Pest Management Department, the Rocky Mountain Area Golf Course superintendents and nurseries teamed up to form the Front Range Japanese Beetle Task Force. The task force's main objective was to combine efforts tracking the distribution and potential movement of the beetle and promote agency dialogue.

The task force's first step was to set up 330 pheromone traps to determine the distribution of the Japanese beetle. One hundred and ninety-six volunteers helped monitor the traps at no additional cost to the project, saving \$42,000 in wages and fuel. From June 1 to October 5, 2008, the task force used traps and lures from Trece, Inc. that lured beetles with floral and sex attractant (the floral lure is attractive to both sexes, and the sex lure attracts only the male beetles). The traps were distributed across the Front Range in Adams, Arapahoe, Denver, Douglas, Morgan, Boulder and Weld counties.



How to recognize the Japanese beetle

Adults:

- Are approximately 1/2 inch long (About the size of a woman's pinky fingernail)
- Have shiny, metallic-green body and bronze-colored outer wings
- Head, shoulders and body are shiny green and iridescent
- Back is brown or copper
- Five tufts of white hair on each side of the abdomen and two tufts at the end

Palisade Japanese Beetle Eradication Front Range Japanese Beetle Task Force

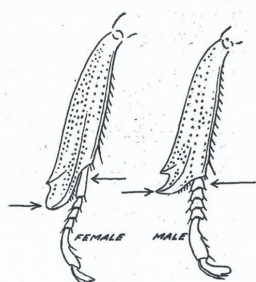
Additionally, the team developed an educational component to train volunteers, schools, homeowners, and green industry personnel on the Japanese beetle and its potential problems to Colorado. "The Japanese beetle Crime Scene Investigation (CSI) Colorado training module helped train volunteers who were assisting with the trapping," said CSU Extension agriculture agent in Adams County, Thaddeus Gourd, "as well as teaching high school students, master gardeners, parks and recreation employees, and landowners in the Front Range of Colorado." One hundred percent of participants were able to pass the 2007-08 Japanese beetle CSI quiz.

The Front Range Japanese Beetle Task Force's volunteers trapped the majority of beetles between July 1 and September 22, with the highest number of beetles between July 13 and July 27, 2008. To save money and monitoring costs, an organization with limited resources could trap only during the July 1 to August 15 time period. The highest densities of the trappings were in Arapahoe and Denver counties, in highly urbanized areas near golf courses.

Tri River Area (TRA) Extension efforts are close to reaching the goal of eradication. The capture totals dropped from 13,000 in 2004 to 12 in 2008. ■

-compiled by Taylor Stonehouse

Japanese Beetle Male and Female Distinguishing Characteristics



The Trap

There are
no poisons
in the
traps, only
attractants.

Floral
attractant:
both males
and females

Pheromone
lure:
attracts
only the
male



A rose by any other name...

would still attract a Japanese beetle

Virginia creeper, apples, roses, peaches, plums, grapes, cherries, raspberries, zinnia and corn are some of the Japanese beetle's favorite foods.



Soybean



Apple



Rose

Fostering New Growth:

Establishing Vegetation During Groundwater Pumping Restrictions in the San Luis Valley

Over 600,000 acres are irrigated in the San Luis Valley (SLV); agriculture is the predominant economy of the area. The water flowing in the Rio Grande River, like many rivers in the West, is over-appropriated—more water is “spoken for” and claimed for use than actually exists in all but the wettest years. The end result is a reduction of water available for irrigation. This can lead to transfer and sales of water rights along with farmland taken out of production.

The Rio Grande River Compact ensures that the river delivers a certain volume of water each year at the border between Colorado and New Mexico. While surface water irrigators, who own senior water rights, have seen their usage cut back year after year, groundwater irrigators have not historically been curtailed. Wells are continually drilled and pumping them affects flows in the Rio Grande.

In order to bring the aquifer back into a sustainable condition, a groundwater management sub-district of the Rio Grande water conservancy district is being formed. It will oversee the retirement of about 40,000 acres.

CSU Extension regional water resources specialist Perry Cabot is part of a research team looking at planting regimes that will protect the land from erosion. Once there is less irrigation water available, Cabot says the question is, ‘How can we make sure this land doesn’t become blighted or eroded in the absence of regular irrigation?’ Some of the land will be eligible for the Conservation Reserve Enhancement

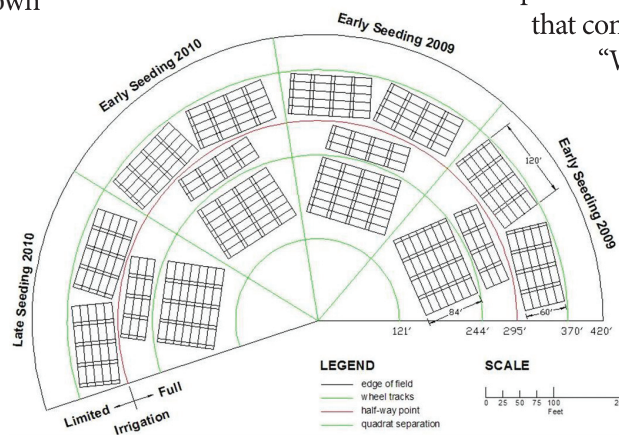
Program (CREP). Administered by USDA’s Farm Service Agency (FSA), CREP is a voluntary land retirement program that helps agricultural producers protect environmentally sensitive land, decrease erosion, restore wildlife habitat, and safeguard ground and surface water.

Cabot notes, “We obviously want to make sure that we choose the right grass species and mixtures that can survive under the CREP stipulations.”

Researchers will evaluate the survival of these species under a full irrigation application that conforms to CREP requirements.

“We would also like to know if these species may survive under a limited irrigation application,” Cabot said.

“The water savings should be significant over such a large area as is being sub-districted,” he said. They also plan to evaluate survival of a dormant season or winter planting of certain grasses.



Two-year planting plan under limited and full irrigation conditions.

“A primary focus of testing the grass varieties is to help ensure that farmers who try to establish grasses will be successful,” said Merlin Dillon, CSU Extension area agronomist. “We don’t want them to waste water and other resources by having to replant these perennial, native grasses.”

Brian Brownell, owner of Zapata Seed Farm is the producer-cooperator who has donated the use of seven acres of land and an existing center-pivot irrigation system for this study. ■

-Joanne Littlefield

Some of the grasses the research team will be evaluating are:

- Indian ricegrass
- Alkali sacaton
- Blue grama
- Sand dropseed
- Bottlebrush squirreltail
- Russian wildrye
- Crested, Streambank, Thickspike and Western wheatgrass

Troubled Waters

Well Water and Septic System Maintenance Education

When George and Betty Karis had concerns about their well water, they turned to the Chaffee County Extension office for information on testing. CSU Extension offers programs on protecting well water from contamination, testing for water contaminants and maintaining septic systems on rural acreages. The Karis' left with testing materials to evaluate for bacterial contamination and general suitability for drinking.

Two weeks later, they brought in their test results. Initial reports indicated bacterial contamination and elevated sodium and nitrate levels. Despite using an initial shock chlorination treatment to get rid of bacteria, a follow-up test still showed elevated levels. With the help of Extension staff, the Karises began an ongoing treatment plan for bacteria and installed filters for minerals. Follow-up testing showed their water was safe to drink, having eliminated the harmful bacterial contamination and lowered the harmful mineral content to acceptable levels.

Tremendous growth in Chaffee and Park counties over the past decade—especially in small acreage landowner subdivision areas—has put increased pressure on groundwater wells and individual septic disposal systems (ISDS). For the past six years, Chaffee County's building department has averaged 149 new septic system permits each year. An Extension working group identified ISDS as a potential source of contamination of source water for Salida. During development of a source water protection plan for that community, it was decided

educational programs for owners was an important mitigation step.

“Many new homeowners are unaware that they are responsible for their own water quality for their family,” says CSU Extension director in Chaffee County, Kurt Jones, “or that their septic system can be a source of contamination for their neighbor's well systems.”

Since 2006, classes have been offered to local residents that help them monitor water quality. The program, funded through mini-grants, also assists with water treatments options through well-testing supplies locally, when warranted.

The mini-grants also allowed classes to be offered at minimal cost, and have reached more than 100 residents each year in Chaffee and Park counties. The Extension office has distributed more than 150 water-testing kits annually. Finally, numerous residents have consulted with their local CSU Extension agent (with support from water quality specialists housed on campus in Fort Collins) for advice on water quality problems for domestic, irrigation and livestock consumption.

Participants involved in the program since it began in 2006 were contacted and Jones learned that within a year of program, 73 percent had started a file system to maintain records of well testing and septic system maintenance. Of those who had gone through the program when it first started:

- 34 percent conducted a microbial water test on their wells
- 22 percent conducted a general chemistry test on their wells
- 33 percent evaluated their well test results with the online interactive tool available at csuwater.info. ■

-Joanne Littlefield

Having safe drinking water is important to Colorado families like the Karises. Extension recommends having individual wells tested regularly; yearly for bacteria and every five to 10 years for dissolved minerals. Test more often if water quality loss is suspected, or if young children or pregnant women are in the home. Keep accurate records of water testing to monitor trends in water quality.

It's Easy to be ~~Green~~ Lavender

A team of master gardeners came together to introduce an exciting and beautiful new crop to Western Colorado. While lavender originates from the Mediterranean region, this team is charged with the collection of data on harvest potential and management of lavender at the Mesa County Extension facility.

According to Tri River Area (TRA) horticulture Extension agent Curtis Swift, the funding for this project was devoted to the purchase of five different varieties of lavender. The five varieties are Royal Velvet and Hidcote (which are English), Provence, Super and Grosso (which are Lavandins). All of the plants came from Cedarbrook Lavender Farm, an organic lavender grower in Sequim, Wash.



The five varieties of lavender planted in the garden are Grosso, Hidcote, Royal Velvet, Provence, and Super (shown above, from left).

In May 2008, the team planted the lavender in a raised bed approximately 40 feet deep and 60 feet wide. There are five rows with 20 plants in each row. The entire garden will be maintained with organic fertilizers and pesticides.

The master gardener in charge of this project received funding from the Tri River Area master gardener scholarship fund to attend the Sequim Lavender festival in Washington for further training.

For more information on this project, visit WesternSlopeGardening.org/Herb_Garden.html. ■

-Taylor Stonehouse

Crushing Growth: Sunflower oil processing in Southwest Colorado

After nearly five years of planning and development, a new biodiesel facility has opened in Dolores County. It started with one farmer and 80 acres of sunflower variety tests in 2005; full operation of the 2.5 million gallon per-year oil crush and biodiesel production facility began in early 2009. San Juan Biodiesel LLC, an integrated bioenergy production facility, operates it.

CSU Extension has been directly involved with the development of the facility since October, 2004, according to Dolores County Extension director, Dan Fernandez. When the doors opened, 50 farmers growing 15,000 acres of oilseed crops stretching from Alamosa to Price, Utah, were participating. The bulk of production is centered close to the facility in Dolores and Montezuma counties, and San Juan County, Utah.

Fernandez says that Extension had two missions in the development of the project. "We wanted to ensure that there was an operational grower base that was educated

with research-based information," he said, "and that the Dolores County Developments Corporations' Weber Business Park was ready to handle a major processing facility."

Extension had two missions in the development of this project; the first was to ensure that we had our grower base in place through education and delivery of research-based information, and second that the Dolores County Developments Corporations' Weber Business Park was ready to handle a major processing facility.

Dolores County Extension personnel serve on the board of directors of the Dolores County Development Corporation (DCDC) which owns the Weber Business Park and on the board of directors of San Juan BioEnergy LLC. For more information, go to www.sanjuanbioenergy.com. ■

-Joanne Littlefield



Financial Literacy

With the economic downturn, media accounts of foreclosures, layoffs and closing businesses have dominated nearly everyone's attention. Concern over finances increased in many areas of personal, home and business during 2008. Because of these and additional factors, Colorado residents have an increased interest in creating financial goals, taking action to prevent identity theft and reviewing their credit reports. Business owners are looking for answers to the challenges of an unstable economy.

"One of the best ways to take charge of your finances in today's uncertain economy is to build a healthy savings account," said one of the organizers, Laurel Kubin, CSU Extension family and consumer science agent in Larimer County. "No one wants to feel the stress of being only one or two paychecks away from financial disaster."

A county-wide financial literacy summit was planned for Larimer County business owners, educators, government personnel, financial institutions and others involved in helping direct financial literacy efforts in Northern Colorado.

Larimer County commissioners supported the summit with financial support. United Way of Larimer County was a partner in the outreach effort. The goal of the summit was to create a setting to discuss the status of financial literacy, develop strategies for increasing literacy efforts, and show participants quality low or no cost, easily accessed programs and materials to be used to increase financial literacy. Long-term goals are to decrease reliance on payday loans, pawn shops, check cashing service for high cost credit, help consumers increase the amount of their emergency savings and have fewer people experiencing bankruptcy and/or home or business foreclosure.

One hundred and twenty-eight people registered for the one day summit; 109 participated, seeking to advance financial literacy efforts. Two state legislators and one county commissioner participated in all or part of the day. The summit produced a committed and motivated group of people who continue strategic planning on financial literacy issues. ■

-Joanne Littlefield

Diabetes Education

Poor dietary habits and physical inactivity are contributors to the chronic disease of diabetes. The number of persons with Type II diabetes in Colorado has increased over 70 percent in the past 10 years. The Colorado Department of Public Health and Environment (CDPHE) estimates that 143,000 adults are diagnosed with diabetes, but another 74,200 are likely to have the disease and not know it.

Only 25 percent of Coloradans eat the recommended five or more servings of fruits and vegetables, while 54 percent meet the recommended physical activity guidelines for moderate (20 minutes per day, three or more days per week) or vigorous (30 minutes per day, five or more days per week).

CSU Extension has two programs, *Dining with Diabetes* and *Small Changes Make a Big Difference*, which reach those who have pre-diabetes, who have been diagnosed with diabetes, who have a family history of diabetes and who are caregivers of those who have diabetes. Programming focuses on improving knowledge of healthy food choices, increasing awareness of the importance of physical activity, and avoidance of diabetes complications.

During 2008, Extension agents reached 529 participants with diabetes education programming. Evaluation results indicate that 94 percent of participants are aware that diabetes is a risk factor for other chronic diseases, such as coronary heart disease; 75 percent intended to make a change in their food choices, and 64 percent intended to be physically active for 30 minutes each day. Program participants reported greater confidence in preparing meals for their diabetes. ■

-Joanne Littlefield

Overall, these programs fill a void in many local communities. Participant comments illustrate the knowledge that has been gained from these classes:

"Cooking the diabetic way tastes good!"

"I learned that carbs are OK and how to plan menus using carbs, protein and fruit."

Volunteers Encourage Land Stewardship

Owning land is a big responsibility. Grazing management, weed control and soil conservation can all add up to some major questions for small acreage owners, and until recently CSU Extension agents were the only people guiding these landowners to resolutions. But in 2005, Boulder County agents got a helping hand. Volunteers in the Small Acreage Management program (SAM) are trained and willing to help small acreage landowners with their problems.

After completing a class series of 24 hours of instruction on ways to identify and answer common queries that arise on small acreages, the volunteers went to work helping landowners become the best stewards possible for their land. At the latest count, volunteers have logged over 1,000 hours of service to area landowners. "They have worked on projects to educate owners in weed identification, returned phone calls," said Boulder County small acreage coordinator Sharon Bokan, "and written articles for a small acreage management newsletter that is distributed quarterly through an e-mail listserv."

As this program has grown, requests for assistance and weed identification have continued to increase. As of 2006, volunteers identified, dried and pressed over 200 types of noxious weeds that will help with weed identification on local acreages. The work of these volunteers has proven invaluable.

"With the time and assistance they have given, they have had a positive influence on what adds up to over 2,000 acres of land in Boulder County," Bokan said. ■

Farmers Adopt PVY-Resistant Potato

Potato Virus Y (PVY) continues to be an ongoing concern for both seed and commercial potato producers in Colorado. This disease is especially problematic in cultivars such as Russet Norkotah which makes up almost half of the certified seed acreage in the state. PVY can reduce yields and size of tubers harvested and leads to the majority of rejections from the Colorado certification program. Improved management of PVY can reduce rejections and result in an additional \$2.5 to 3.5 million in revenue for certified seed growers.

Certain characteristics of the Russet Norkotah has made it nearly impossible to eradicate PVY from the fields. One solution that CSU researchers have investigated is the introduction of a new, resilient potato cultivar. This led to the adoption of the Canela Russet. To realize the yield and quality potential of the new cultivar, optimum management guidelines are being evaluated and will be distributed to growers.

Extension programs communicate these research findings to the potato industry through workshops, industry meetings and conferences, scientific and technical publications. Interaction with the Colorado Potato Administrative Committee and Colorado Certified Potato Growers Association is helping spread the word to growers about the importance of growing the PVY resistant potato. ■

Wheat; Improved

Since 1963, average wheat grain yields in Colorado have more than doubled, and at least 50 percent of this increase is due to the improvement of wheat cultivars.

In 2008 an experimental line of wheat cultivar called Thunder CL was released. Thunder CL has proven to have superior grain yield under both non-irrigated and irrigated production conditions in Eastern Colorado.

Extension reaches farmers with new crop information through websites, scientific publications, technical reports and workshops and through the Colorado Wheat Growers Association and the Colorado Wheat Administrative Committee. ■

-compiled by Marie Allen

Get Hoppy!

Colorado Poised to Become Hop and Brewing Center

In 2007, the world experienced a hop shortage, and Colorado growers have answered the call. Over 70 people from Colorado and surrounding states attended the first annual hop production conference held in Hotchkiss in June 2008, and attention to the emerging field has only continued to grow.

According to Tri River Area small acreage management Extension agent Edward Page, the hop plant is sensitive to day length, so it typically grows between the 35th and 55th degrees of latitude; the Tri River Area of Western Colorado barely makes this cutoff at 38-39 degrees north. The shorter days of the area have the potential to decrease the amount of production, but the premiums generated by local and/or organic hops should make up for any production uncertainties. In addition, Western Colorado's climate and isolation set a good stage for organic growing.

"Many, if not most of the varieties grown for the beers we like and consume around the U.S. will grow here in Colorado," Page said.

In contrast to the commercial hop yards in the Northwest U.S. that produce 2,000-2,500 pounds of hops per acre, Western Colorado hop growers can expect a yield between 1,500 and 1,000 pounds of hops per acre thanks to lower altitudes and alkaline soils. And even with that smaller yield, hop growers can anticipate a lot of work, money and time to produce the needed hops.

Northwest hop growers suggest that 300 acres is a minimum production unit to be managed in a traditional mechanized manner, according to Page. He also notes that a traditional production unit requires between \$1.5 and \$2 million for the equipment to pick, clean, dry and package the hops. Additionally, growers need to monitor their plants for any mites and/or aphid attacks.

Growers in Colorado can save themselves a great deal of money by completing these processes by hand, although this will require much more labor. Commercial operators can also save about 60 percent of the labor required by using a traditional 18 foot trellis system, Page notes.

Last summer, 20 different hops varieties were evaluated to determine the potential for organic production under irrigated conditions.

"Results indicated that approximately 10 varieties could produce a sufficient quantity and quality of hops to be commercially viable in the arid intermountain west," Page said.

Ten acres of hops were planted and harvested in 2008 for commercial production, and an estimated 50 acres will be added in 2009. ■

-Taylor Stonehouse

Native Plant Master

Educating the Public About the Value of Native Plants

Colorado has a wealth of native plants, colorful wildflowers, grasses, shrubs and trees which are well adapted to variable climate conditions throughout the state. Management of weeds, insect pests and plant diseases is one of the most costly inputs that growers in agriculture, the green industry and households must pay for every year in Colorado.

The mission of the CSU Extension native plant education team is to educate the public about native plants in order to foster stewardship, sustainable landscaping and management of weeds that threaten native ecosystems. Learning about the beauty of native plants and their suitability for landscaping is another benefit of the program.

A diverse and expanding pest complex requires enhanced management skills that often increase production costs. A conservative loss estimate of five to 10 percent due to plant pests could mean a loss to of \$50-100 million annually in both urban and rural settings. There is a long-term need for a comprehensive, high quality, integrated pest management (IPM) system that incorporates the disciplines of entomology, plant pathology and weed science.

Native plant master courses are often held outdoors in local open space parks and other public and private lands. Courses focus on identification, ecology and human uses of Colorado plants.

In 2008, 37 Native Plant Master (NPM) courses (three

four-hour sessions) were taught; the 396 students included both those going on to volunteer and those choosing not to enter the volunteer program.

Pest management training and educational efforts that were evaluated for intention to change behavior included: improved timing of IPM strategies; more effective management of pests; safe use of chemical tools; expanded biosecurity awareness and invasive pest response; change in current pest management program.

Over 1.1 million acres of land have been the target of weed control efforts. Seventy-four percent of the NPM participants reported beginning or increasing weed control efforts; 76 percent began planting or increased planting of native plants. Eighty-four percent educated others about the value of native plants for landscaping and 80 percent went on to educate others about the impact of weeds on native plants. Pest management training evaluations show 67 percent of participants reporting behavior change/use of skills as a result of training and other educational efforts. ■

-Joanne Littlefield

The Buzz about Bees

The mystery of why honey bees are diminishing has not yet been solved, but Tri River Area (TRA) Extension entomologist Bob Hammond is keeping the buzz about it alive.

In July of 2008, TRA Extension and the master beekeeper team from the University of Nebraska at Lincoln conducted a beekeeping workshop that drew 80 participants. They covered the basics required to successfully tend to bees, but also explored the vexing problem of colony collapse disorder and the need for pollinator conservation. People were so interested in the subject that there's now talk of creating an official association of Western Slope beekeepers. The group already started a Western Colorado beekeepers listserv which acts as an essential communication tool.

Hammond's work continues to evolve. In September, he partnered with the USDA and Natural Resource

Conservation Service (NRCS) along with the Xerces Society to produce a native bee conservation workshop.

Attendees enjoyed a field trip where they witnessed firsthand a ground-nesting bee habitat. After the workshop, Hammond and the Xerces Society produced a PowerPoint presentation on native bee conservation which will provide ongoing education for future meetings. So far, more than 300 people have seen the presentation and provided excellent feedback.

Hammond currently teaches both beginning and advanced beekeeping classes. Meanwhile, he's trying to keep up with his consumer pesticide database (wsprod.colostate.edu/cwis487/hup/) that features 1,000 products and receives up to 20,000 hits per month. ■

-Leigh Fortson

Landscape Specifications Correct 'Green Industry' Inconsistencies

It is difficult to keep up with the 'green industry' demands for improved landscape and irrigation designs when out-dated graphics and narratives have been contractors' only resources. In fact, inadequate landscape and irrigation designs have resulted in loss of plant materials and additional funds were needed to correct the problem, according to TRA Extension horticulture agent Curtis Swift.

Landscape architects, irrigation specialists and several others teamed together in Western Colorado to correct this problem. They created an in-depth set of landscape specifications that incorporate the most recent research on site preparation, demolition, soil preparation and fertilizer needs. It also encourages the selection of quality plant material with special emphasis on street trees and planting techniques.

Swift noted, "The purpose of these specifications is to ensure all entities are using the same information when developing landscape and irrigation designs, when bidding on a project, and when planning departments and zone enforcement entities review the job." These specifications were submitted to all landscape architects, planning departments and contractors in Western Colorado.

"The city of Grand Junction planning staff has already started using these (specifications)," Swift said.

The specifications are online at westernslopegardening.org. ■

Teaching Garden Designed to Teach History

It all began as a demonstration garden two years ago. Now, the native plant teaching garden offers many new opportunities and resources to the Mesa County Extension facility and residents across the state.

Ethnobotany is the study of how people of a particular culture and region make use of indigenous plants. According to TRA Extension horticulture agent Curtis Swift, the development of this ethnobotany garden serves as a demonstration and teaching garden displaying how native cultures and early settlers in the West used native plants in their daily lives. "It will also teach the public about native landscaping and low water use planting techniques in their own landscapes," Swift said. "There will be a learning laboratory and garden available to local schools, clubs, senior groups and visitors to the area."

The project began as an offshoot of the Ute ethnobotany project that the U.S. Forest Service and the Bureau of Land Management initiated in 2007. Today, the scope of the lesson plan is broad, ranging from traditional Native American gardening skills to gardening for people with limited mobility and/or limited space.



"The adaptive gardening portion of this project will provide local agencies a facility accessible to people of all types of mobility," Swift said. "The garden will also feature interpretive signs to identify the various plant types and their uses." □

-Taylor Stonehouse

Colorado Master Gardener Online Training

"It's been exciting watching the trainers evolve in their expertise using the system. It's an adjustment in teaching style but they've been very successful in adapting to new technology."

-Ruth Willson
CSU Extension Assistant Director, Technology

Until recently, one of the primary methods of educating Colorado gardeners was by providing local classes and workshops in urban and rural areas. In 2007 and 2008 a high-tech solution brought Colorado Master Gardener (CMG) to more Colorado gardeners than previously possible. A new online training program allowed gardeners to attend classes at local sites over the Internet, utilizing Adobe Connect software to interact with each other and with teachers over two-way audio and visual transmissions.

"Before the use of distance education technology, the program would invest 75 staff days and \$8,000 in travel costs to reach 100 students in four rural multi-county sites. With distance education technology, the program invests only 25 staff days to reach 225 students in 12 rural county sites," says Extension consumer horticulture specialist and CMG coordinator, David Whiting.

Feedback from participants is overwhelmingly positive. Half of participating students are satisfied with distance learning, and the other half actually prefer distance education to traditional classroom learning. "Distance Education opened up a whole program to counties across the state," said Carol O'Meara, Boulder County Extension agent. "We're able to offer broad-based training and niche topics that excite, motivate, and enrich our volunteers in their work."

Since the start of the distance-learning program, four counties have seen their class sizes double from 2007 to 2008. ■

-Marie Allen

The mission of the Colorado Master Gardener (CMG) program is to be a first-rate gardening resource to home gardeners in Colorado.





Creating a Legacy

Farming and ranching is often a family affair. Children and grandchildren ride horses and all-terrain vehicles, help handle livestock and drive tractors. Parents also have the joy of passing on their deep seated love of the land along with the emotional value of being part of agricultural production or simply riding a good horse.

According to Jeff Tranel, Extension agricultural and business management economist, sharing family stories, hopes, and life experiences among the generations not only enriches the family but ensures that the hard work involved in farming and ranching doesn't go to waste. "Many farm and ranch families work and play together, but they are like many families in the United States," he said. "They often don't talk about the difficult issues in life."

If a sudden death occurred, would someone know how to feed the animals, pay bills, find safe deposit boxes, or know where to find the passwords to Internet accounts? Has the family talked about passing on the family's heirlooms?

CSU Extension has developed interactive seminars to help people organize their legacies. The seminars are based on the course and workbook "A Lasting Legacy." Jeff Tranel and Rod Sharp, another CSU Extension agricultural and business management economist, collaborated with John Hewlett at the University of Wyoming to author the materials. "This is one of the most exciting Extension programs I have conducted," Sharp said. "It's also critically important to today's aging farmers and ranchers."

Designed for farming and ranching families, these materials are also suitable for any family group. Topics include:

- your legacy and why it is important
- the difference between being fair and being equitable
- the importance of family traditions, family history, and belief systems
- ways to transfer and distribute personal possessions of emotional value
- planning for important end-of-life issues

"Many farm and ranch families work and play together, but they are like many families in the United States. They often don't talk about the difficult issues in life."

-Jeff Tranel, CSU Extension agricultural and business management economist

Time between the seminars allows participants to visit with family members, complete parts of the workbook, and prepare to ask questions of their family and at the following sessions.

Sharp notes, "Communication between generations is more vital than ever to ensure that the needs of elders and heirs are aligned." ■

-Joanne Littlefield

Navigating the Roadblocks: Raising Grandchildren in Northern Colorado

Linda Tanner was getting ready to retire and travel the countryside when life drew a new hand for her to play. And even though this hand came with limited resources and countless struggles, she's played a pretty good game.

Linda always played a big role in her two grandchildren's lives. She was there when Gage and Taylor (pictured left) were born, and they all lived in Kansas. In 1998, Gage and Taylor's family moved to California, and Linda went to visit them that Christmas. That's when she knew the children were in danger.

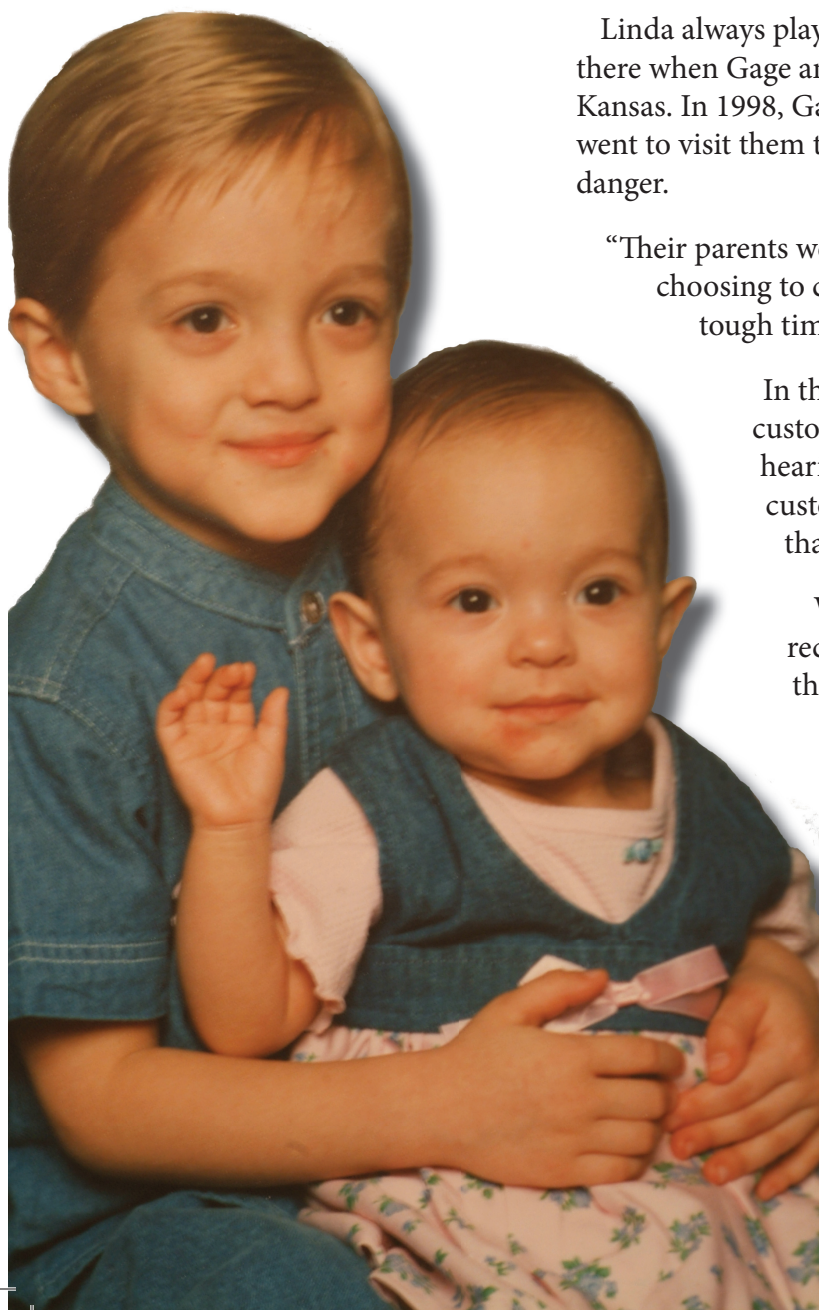
"Their parents were active in drug and alcohol addictions and were choosing to continue on that path," Linda said. "The kids had pretty tough times from birth on dealing with their parents' issues."

In the year following, Linda filed for emergency temporary custody of the two children. After four months of court hearings and an endless trail of paperwork, she earned full custody in May of 2000. But even though Linda made it over that road bump, she soon found plenty more.

While raising Gage and Taylor, she was looking for jobs, recovering from an injury, and taking college courses. Facing these challenges and others, such as loss of friends and time constraints, Linda said she often felt all alone.

"I felt like I was way out there on a limb and I thought I was the only one ever dealing with this kind of stuff," she notes. Once she attended a local educational series, *Parenting a Second Time Around*, she quickly became friends with other grandparents going through similar situations.

Linda and the others started the Larimer County Grandparent's Raising Grandchildren Support Group in 2005. The program has since grown and reached many families in need of support.



With the additional support and fund raising of the Larimer County Alliance for Grandfamilies (LCAG), coordinated through CSU Extension, the team was able to hire a Kinship Care Systems Navigator, Josh Rabe, to help them through the frustrating road bumps and dead ends that they were all facing.

“Grandparents often lack support they need to fulfill this caregiving role,” said Jacque Miller, Extension agent for Larimer County. “Social support is critical in protecting grandparents from depression, isolation, caregiving overload and life disruptions. Research shows that support networks are crucial for grandparents raising grandchildren.”

Recently, Linda was looking at an old sign-up sheet, from a support group in the fall of 2006, with between 10 and 15 families looking for support services. “By the end of May 2008 with everyone’s effort, we were at 101 families,” Tanner says. That really helped her get a perspective on their progress. “It’s huge,” she says.

Now her grandson, Gage, has started high school. His sister, Taylor, is a spunky sixth grader, and Linda plans on graduating from CSU with a degree in social work by Spring of 2010. She said she has the support of numerous community programs to thank for helping get their family back on their feet.

“It’s so nice to know we’re not alone,” she said. “But we still have needs, and we still have new kin providers who are just starting to experience those struggling stages. Hopefully, we can help them transition through some of it and not go through the pain and the agony of the closed doors and the dead end streets. Maybe we can save them from some of the frustrations and turmoil that we had to go through.” ■

-Taylor Stonehouse

**Visit www.ext.colostate.edu/grg/
for Grandparents Raising Grandchildren
Online Support.**



Website Quick Facts

- This site features links to Extension and agency resources, assistance and benefits, training and educational events, and other support tools.
- CSU faculty, graduate and undergraduate students have contributed literature reviews, coordinated focus groups and gathered information on local and state resources to enhance the site.
- Participants at an evaluation session of the Larimer County Alliance for Grandfamilies (LCAG) said they thought LCAG had increased community awareness of grandfamily issues, built partnerships and empowered grandparents.

Where Are They Now?

An update on stories from last year's annual report



'Electricity Boy' strikes again

Four years ago John Benson of Nederaland expressed his interest in electricity by trying some very risky paperclip-electrical outlet experimentation. Thankfully about the same time, his mom, Fay, also noticed his interest. She suggested that John join the local 4-H club to channel his creative 'energy'.

This year, John is twelve-years old, and his solar panel battery charger won grand prize at the Colorado State Fair.

John's solar panel battery charger is made of multiple tiny solar panels that work together to charge most any battery. But the solar panel isn't John's first electrically charged project, and it is not likely to be his last.

John says that his interest has grown because of his involvement in 4-H and continues to grow. ■



'Building Farmers' programs launched

Most experienced farmers have learned that knowledge of production practices such as soil characteristics and pest management may not be as important as understanding the business side of farming.

The business of small-scale farming is what participants in the 'Building Farmer's Program, Market Farm Track' learned when the program was launched in Fall 2007.

Sponsored by the Boulder County Farmers' Markets, it featured eight class sessions devoted to understanding the components of a business plan as well as hearing feedback from experienced farmers.

On the heels of that successful program, the steering committee and Adrian Card, Boulder County Extension agent, launched the Market Farm Mentorship Program in the winter of 2008. Beginning farmers were paired with experienced mentors who answered questions and guided them through common challenges, fostering a new generation of growers. ■



State Patrol moves on

Listen first, seek to understand, and then speak to provide a less threatening foundation.

Those are the goals of the communication skills curriculum developed from a conversation between CSU Extension director in Elbert County, Kipp Nye, and the chief of the Colorado State Patrol.

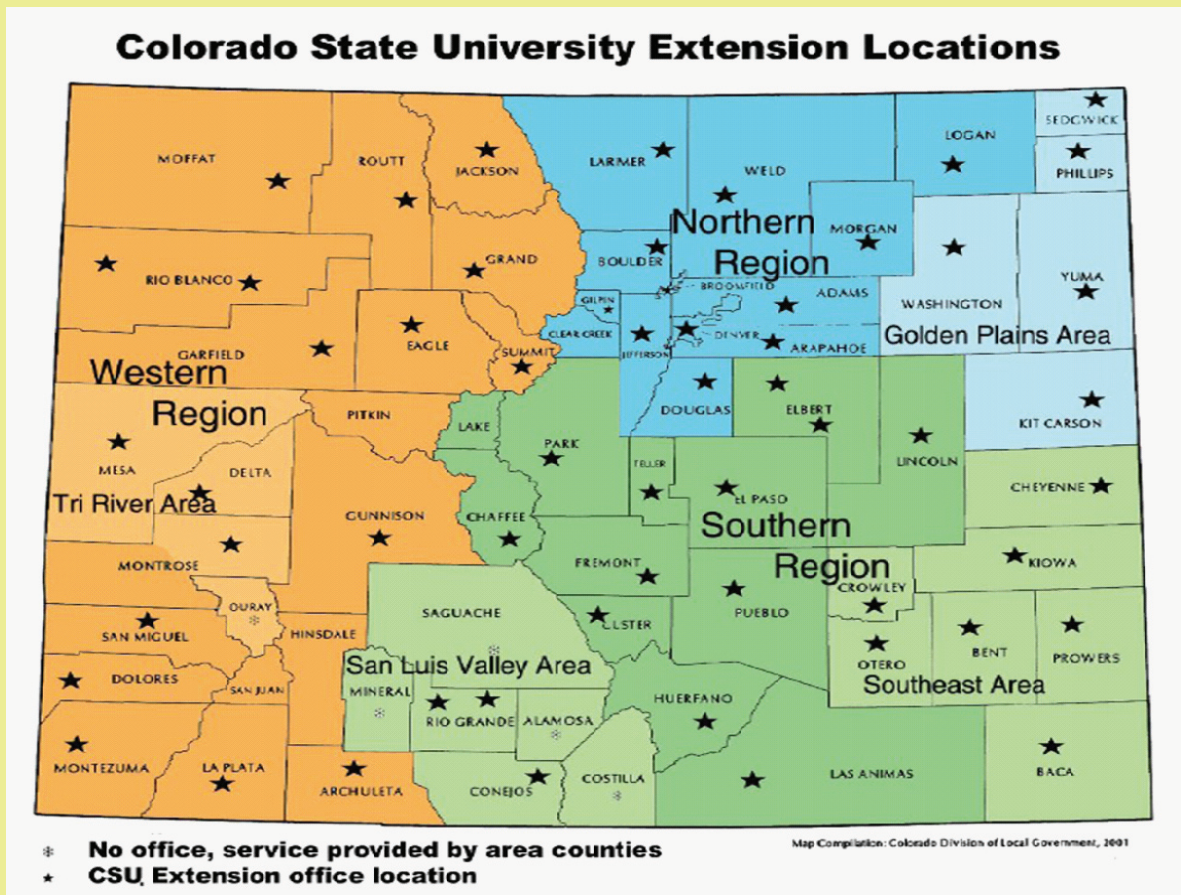
As the program moved through another year of training, they developed an online survey to be administered six months following the courses. The majority of participants indicated that they felt they were better communicators after attending the course.

"The purpose of the post-test survey was to compare respondent answers to a pre-test survey given in class to assess if they were retaining and applying course concepts to their daily work," Nye said.

Procedural justice tools are a key communication theme of the training. ■

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