# Extension. Connection

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at EPIC banquet

hope you will enjoy this issue of *Extension Connection*. Each of its articles highlights connections between our educators located across Wyoming and our specialists who are mostly located on the Laramie campus of the University of Wyoming.

The Cooperative Extension Service system was created by the Smith-Lever Act in 1914 to provide a bridge between the research-based knowledge of land-grant universities and rural agriculturists and their families. Extension has organized itself for this mission by locating educators in each of the communities in the state where they live and work among the people. Extension places its specialists so that they can be tightly linked to the university community. Each of these linkages, educators with the people and specialists with the university community, are critical to UW CES success in accomplishing its mission.

Equally important are the connections between the educators and the specialists. These associations ensure the flow of research-based information

between the campuses of the land-grant system and the people who can use that knowledge to improve their lives and their businesses. The connections also facilitate the flow of information regarding needs and priorities back to the research community of the university, keeping questions and solutions grounded in real-world challenges and needs.

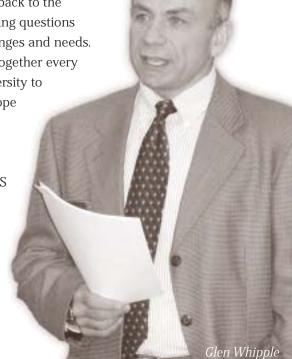
Specialists and educators in CES work together every day to bring the best of the land-grant university to the citizens of the state's communities. I hope you enjoy reading about a few of the connections highlighted here.

If you have thoughts about this issue of *Extension Connection* or other aspects of CES in Wyoming, please e-mail me at glen@uwyo.edu or give me a call at (307) 766-5124.

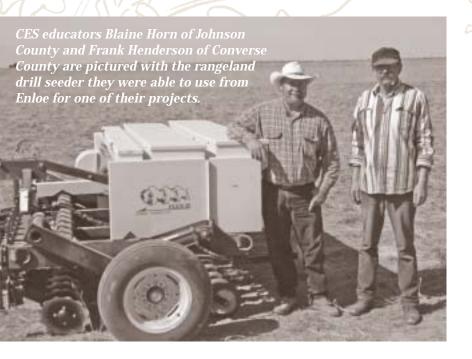
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Glen Whipple CES Director



### Weed watching in Wyoming



By Vicki Hamende, Senior Editor Office of Communications and Technology

In his first year as a weed specialist for the University of Wyoming's Cooperative Extension Service (CES), Stephen Enloe visited many of the state's CES offices to meet the educators who tackle agricultural and rangeland concerns.

"The county agents are the eyes and ears on current issues involving range and agricultural production lands," Enloe says. "They have helped me get a feel for many of the major weed problems and the information gaps that exist concerning those problems."

Although he says he has enjoyed the traveling, the assistant professor in the College of Agriculture's Department of Plant Sciences holds up a telephone receiver and points to his computer to illustrate his most frequent lines of communication with CES representatives.

"I get lots of weed questions from extension educators around the state. Often they will send me digital photographs of unknown plants via e-mail for identification or confirmation of what they think it is," Enloe says of his co-workers.

"What is this?" and "How do I deal with it?" are two of the most common questions Enloe says he hears. Sometimes the plants in question turn out to be native forbs that do not cause major problems and that ranchers need not spend money trying to control. "Frequently, though, plant samples turn out to be serious weed problems, and I work to come up with a recommendation based on the particular situation that a grower is in," he notes.

"Along with working on grants and publications, that's a lot of what occurs in the office," Enloe summarizes, turning then to examples of the kinds of projects he has been involved with on the road.

He has been invited to give talks on specific weed issues, to work with Master Gardeners in Campbell and Natrona counties, and to join with representatives of CES and government agencies to make presentations.

He is also building on the research of former UW CES weed specialist Tom Whitson by continuing, for example, to collaborate with Wayne Tatman of Goshen County and Tammie Jensen of Niobrara County on an Integrated Pest Management-funded project aimed at understanding the ecology and management of the toxic native plant riddell groundsel (*Senecio riddellii*).

Enloe has teamed with CES Educator Bill Taylor of Weston County to help producers manage a pasture problem involving showy milkweed,

## comections

another poisonous native plant. The two are cooperating to set up test plots to study the problem. "Bill has been great to work with. I designed and sent him the research protocol and materials, and he went out with the cooperator and prepared the whole study," Enloe explains.

The specialist was able to provide a rangeland drill seeder to CES educators Blaine Horn of Johnson County and Frank Henderson of Converse County for a range reseeding IPM project the two are working on.

With the help of Platte County CES Educator Dallas Mount, Enloe will be working with local ranchers in the Wheatland area on weed-control issues involving cheatgrass and yucca. "Dallas located good cooperators for me to visit to get a few studies going," Enloe says.

He adds that he has also enjoyed working with several of the agents on the CES Sustainable Management of Rangeland Resources initiative team.

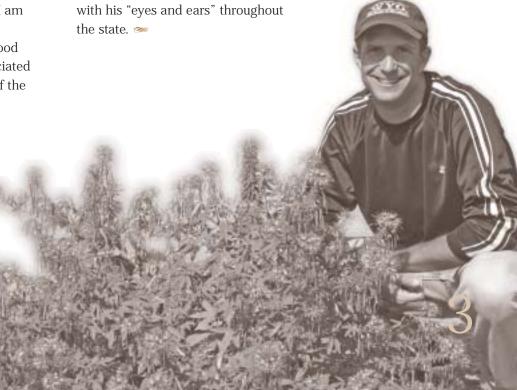
"It has been very beneficial because the team deals with many different range issues that I am not the expert on. It is nice to see how I can contribute on weed issues and to see how good these folks are in terms of other issues associated with range. I'm impressed with the quality of the team and the contributions these agents are making," Enloe notes.

From educators Ron Cunningham and Alex Malcolm of Fremont County and Range Management Specialist Paul Meiman of the Department of Renewable Resources, Enloe has received a history of many of the weed projects that have been pursued in Fremont County in the past. "It's good to just get out with the agents and see some of the projects they have worked on," Enloe notes. "It helps me to get a better feel for innovative approaches that have already been tried so that I am not reinventing the wheel."

He jokes that it will take him a long time to emerge from the shadow of Whitson, who spent 22 years as a weed specialist, winning numerous accolades along the way. "Even though the population of the state is about half a million, I have heard at least a million times that I have some big shoes to fill."

For the research portion of his appointment, the faculty member says he has greenhouse projects underway to study the root dynamics of Canada thistle and Dalmatian toadflax. With the help of graduate students, he is looking at the impacts of biological control agents and herbicides to understand what's going on with the weeds below the ground.

What he discovers, he says, will be shared



UW Cooperative Extension Service Weed Specialist Stephen Enloe



RAATs has been proven to provide chemical control in which grasshoppers are destroyed in the treated areas and conservation biological control in which predators and parasites preserved in the untouched spots also help suppress the pests.

"This integrated approach reduces the amount and thus the cost of pesticide use and treatment by more than half," says UW Assistant Professor Alex Latchininsky, an entomology specialist with the Department of Renewable Resources. In addition to

### Staying one jump ahead of grasshoppers

By Vicki Hamende, Senior Editor Office of Communications and Technology

Staying one jump ahead of grasshoppers in Wyoming requires a proven management program and a way to spread the word about it.

The College of Agriculture has the program – and an internationally renowned one at that. The goal now is to train trainers throughout the counties so that they can explain to their constituents what it is, how it's done, and why it works.

The Reduced Agent and Area Treatments (RAATs) system for controlling grasshoppers was developed by University of Wyoming entomologist Jeff Lockwood and his colleagues to reduce the amount of pesticide used by alternating untreated swaths with treated ones.

Alex Latchininsky

the savings it offers to producers, slashing chemical applications helps preserve the environment and lower the risk of contamination to native species, water, and humans, he notes.

"RAATs is now the accepted method of control in all federal grasshopper treatment programs funded by the U.S. Department of Agriculture (USDA) and the preferred method used in many western states," he adds.

Already partnered with USDA scientists, the state agriculture department, and weed and pest control districts, Latchininsky says his challenge now is to make sure that producers plagued by grasshoppers know about RAATs.

"The extension educational component of this is so important," he notes. "We are trying to use any and every audience we can. It doesn't matter how small the audience is."

With the help of Cooperative Extension Service (CES) educators and weed and pest employees in counties such as Uinta, Sweetwater, Goshen, Fremont, Niobrara, Platte, and Weston, Latchininsky and his UW colleague Scott Schell, an assistant extension entomologist, have made presentations to producers to explain RAATs as well as other grasshopper control options.

"Keeping Grasshoppers from Eating You Out of Your House and Home" was Latchininsky's topic at the last Fremont County Farm and Ranch Days program in Riverton.

"Several farmers and ranchers were extremely interested," says Latchininsky, who noted that in 2003 a huge outbreak of the insects devastated irrigated hay fields in the region.



An all-terrain vehicle is used to spray pesticide to control grasshoppers through the Reduced Agent and Area Treatments system developed at UW. (Photo by Scott Schell)

He also participated in a program in Lander earmarked for people living on small-acreage enterprises.

The educational events in Riverton and Lander were delivered with the cooperation of CES Educator Ron Cunningham and Lars Baker, the county weed and pest control district supervisor.

A new grant from the U.S. Environmental Protection Agency and the Fremont County Weed and Pest Control District will allow Latchininsky to work with collaborators to continue research on developing biological means of controlling grasshoppers with pathogens. "Applied within a RAATs context, grasshopper biocontrol would provide the most environmentally benign strategy to manage these pests," he says.

Latchininsky points out that grasshoppers annually consume about 25 percent of the rangeland forages in 17 western states at an annual estimated loss of \$400 million. "In 2003, about 400,000 acres of land were protected from grasshoppers in Wyoming using RAATs," he says, which saved local agriculturists more than half a million dollars.

"People are somewhat skeptical at first, but when they try it they see that it works and are satisfied with what we offer them," Latchininsky reports. The method is 80 to 95 percent effective, which is 5 to 15 percent lower than the shield provided by standard, blanket-coverage treatments, he adds. "However, this level of control is usually sufficient to suppress the pests, keeping them below the economic threshold and leaving a certain food base available for numerous prairie animals."

In addition to working with CES agents in individual counties, the entomologist says he has attended state extension initiative team gatherings to explain the services offered through RAATs and to ask what else UW can do to help Wyoming producers with grasshopper and other pest control. Brochures on RAATs are available outlining all-terrain vehicle as well as aerial treatment approaches.

The USDA Animal and Plant Health Inspection Service has asked him to provide workshops for neighboring states such as Montana, Colorado, Oregon, Nebraska, and South Dakota. "We are trying to maintain leadership at UW in grasshopper control in the western states," Latchininsky points out.

That leadership extends to overseeing locust and grasshopper management for the Food and Agriculture Organization (FAO) of the United Nations. Latchininsky has been asked to spend six weeks sharing his expertise in Rome at FAO headquarters and also to travel to Africa to help combat a devastating outbreak of desert locusts on that continent. He and Lockwood, a professor of natural sciences and humanities, have also promoted the RAATs system in Russia and central Asia.

"This consultancy allows me to share what the University of Wyoming is doing with an international audience as well as to learn about the best management practices that can be applicable to Wyoming," Latchininsky says.



### Baptism by fire leads to growing

By Robert Waggener, Editor
Office of Communications and Technology

A lan Schroeder's introduction to mediation was a baptism by fire. So was Milt Green's.

The 1980s farm credit crisis had left hundreds of Wyoming farmers and ranchers in financial ruins, which led not only to bankruptcies but also to family fights, divorce, and even suicide. Schroeder, Green, and other professionals with the Cooperative Extension Service (CES) were called to help, and their efforts to mediate crisis situations some 20 years ago are paying big dividends today.

Schroeder, an associate professor in the College of Agriculture's Department of Agricultural and Applied Economics who spends half his time with extension work, has been busy training CES educators and others around the state in how to help resolve disputes both inside and out of the office.

"Mediation does not decide right and wrong.

Its primary function is to find a solution to the conflict that people can not only live with but can thrive in."

Alan Schroeder

"Our goal in extension is to make sure the people have the best information and materials possible to find solutions to their problems," says Schroeder, who notes that the information available today stems in part from what mediators learned during the farm crisis.

"My first contact with mediation was a baptism by fire because we had so many ranch and farm operations in Wyoming that were in dire financial straits," says Schroeder, who started at the University of Wyoming in 1986 as an assistant professor. "We were lucky the Farmers Home Administration was willing to work with the farmers and ranchers to see if there was a solution without going to court."

Many families filed for bankruptcy, but some were able to continue their agricultural operations, and Schroeder says he believes mediation was instrumental in those situations.

"One rancher told me that he was contemplating suicide until a solution was worked out. We provided his family a safe and quiet place to think through what they wanted and valued. That was a very humbling experience," Schroeder says.

The family kept its ranch, and the husband and father who was considering suicide got a new outlook on life.

Green also helped families through crisis situations.

"It was gut wrenching to see these financially strapped families who had worked so hard all of their lives. It was just terrible," says Green, a CES educator for Fremont County and the Wind River Indian Reservation who was working in Goshen County at the time.

"I walked through a lot of mediation processes with farmers and ranchers," recalls Green, who notes numerous successes but some failures. One ended tragically in a suicide.

"The individual was highly stressed, and the farm crisis helped lead to that stress," says Green. "No human can know why the man committed suicide, but mediation might have helped relieve the stress of the situation. I knew this man and I knew his family, and that made the tragedy even more intense."

However, he notes, the mediation skills he has learned in the past year from Schroeder, CES educators Mary Martin from Teton County and Phil Rosenlund from Laramie County, and others have allowed him to work more effectively with people.



### facilitation

### mediation programs around state

"During the farm crisis we were looking for just one option. Since I have taken this training, I now realize there are several options. It's just a matter of taking the time to find them," Green says.

Schroeder emphasizes, "Mediation does not decide right and wrong. Its primary function is to find a solution to the conflict that people can not only live with but can thrive in.

"You have to be careful to not try to 'own' their problem. It is their problem, and it is their solution. You root for them, and you encourage them. Sometimes you have to play the devil's advocate to discourage them from taking the easy solutions. You need to have them think through the 'what ifs,'" he adds.

Schroeder, CES educators around the state, and Wyoming Department of Agriculture mediation coordinator Lucy Hansen have helped mediate conflicts among UW and state employees, livestock grazing permit holders, landowners, energy companies, and other parties in the state.

"The best part of mediation is that it's voluntary for both parties. They both willingly come forward to resolve a conflict," Hansen says.

Schroeder adds, "Sometimes parties have gotten so enmeshed in their battle that they have forgotten what their interests are and what some of their options are. Lucy and I a year ago went out and talked to grazing permit holders about how they can use negotiation skills to satisfy the needs of all involved. I see us partnering with others in the state interested in an alternative to going to court when it best serves the interests of all parties involved."

Schroeder stresses, "We're not 100 percent. The average is in the high 80s, meaning we get an agreement 80 percent of the time or better."

Good communication is a key to all successful outcomes, adds Schroeder, who begins every mediation session by laying out three ground rules.



Alan Schroeder, an associate professor in the Department of Agricultural and Applied Economics, prepares for a mediation conference in Casper with Lucy Hansen, mediation coordinator for the Wyoming Department of Agriculture.

 $\mbox{``I call them the three Cs,"}$  he says with a smile.

"Civility. We won't yell at each other. Only one person will talk at a time. We'll use first names. That sounds schoolish, but I find the most effective communication takes place when we listen to and respect each other.

"Creativity. If we do the same old stuff, we'll get the same old results. I encourage them to try something different.

"Confidentiality. I promise I will destroy any notes I make, and I ask that they not take the conversation out of the room," Schroeder says.

"When I get someone saying 'no' to me at any point during the mediation, I go back to that second 'C.' I tell them, 'You said you would be creative, help me think about another solution,'" he continues.

"One of the great satisfactions of being a mediator is to watch people get beyond impasse and try to work things out, to be creative. Sometimes an apology alone can transform what is going on."



By Robert Waggener, Editor Office of Communications and Technology

Fifteen Cooperative Extension Service educators were trained in mediation skills a year ago, and they have already produced success stories across the region.

"I have done close to a dozen mediations in Teton County and Idaho, and in all of the situations involving participants who were willing to work their issues out they reached outcomes they agreed would work," says Mary Martin, an extension educator serving Teton, Lincoln, and Sublette counties.

Milt Green, an educator covering Fremont County and the Wind River Indian Reservation, helped mediate two conflicts involving employees.

"In both situations the parties really didn't understand the issues. They were blaming each other for the problems," Green says.

"The first thing you have to do is get them to agree there is a problem and get them to agree to the mediation process. Then you sit down and talk about it. You allow each party to express how they see the situation," he adds.

Phil Rosenlund, an educator in Laramie, Goshen, and Platte counties, developed a mediation program with Alan Schroeder, an associate professor in the Department of Agricultural and Applied Economics, for Laramie County and city of Cheyenne employees.

"We presented the idea to human relations people for the city and county, and they thought it was great because they believed a certain amount of turnover was occurring because some people weren't happy with their

jobs, and that often stems from conflict in the office.

They also wanted to improve customer satisfaction," Rosenlund says.

Ninety city and county employees went through 16 hours of training.

"We taught them some of the mediation principles including listening, conflict resolution, and how to diffuse hostile customers by understanding what they want. We received some very good responses from employees and managers," he notes.

One participant wrote, "I didn't realize how inept I was at **not** picking sides. I really didn't feel comfortable in seeing 'gray' while my favorite colors are black and white."

Another commented, "I believe all civil servants should attend this or a similar workshop. Those who pay attention should receive a fair amount of knowledge to deal with others."

A third stated, "This has really opened my mind to options available for conflict."

Rosenlund notes, "We stressed to them that mediators aren't judges, but they are in charge of a process. It means that if you have two people willing to resolve their conflict, the mediator sets the ground rules."

Martin explains that mediators must remain neutral and keep the details of the conflict confidential. She adds that most of the conflicts she has worked with involved "disconnects" in communication between the messages being sent and received by those involved in the conflict.

A mediator never comes in with solutions, she emphasizes.

"I've experienced that solutions rattling in the back of my mind which seem logical to me aren't even brought up as an option by the participants," Martin says.

"Mediators just set the stage for a process. We aren't in the business to decide the solution to a problem. One of the wonderful things about mediation is that people are able to work out a win-win if they are willing to go into a conflict and smooth out the rough edges."



## partnerships

# What's the beef? Partnering to help cattle producers

By Vicki Hamende, Senior Editor Office of Communications and Technology

If a producer contacts Steve Paisley about a cattle problem, one of Paisley's first calls is to a county Cooperative Extension Service (CES) agricultural educator to gather background information.

"I respect the 365-day-a-year job that they do," says Paisley, a beef cattle specialist in Laramie with the University of Wyoming's Department of Animal Science, of his CES colleagues throughout the state.

"Many of the agents I interact with are very knowledgeable about cattle. I see my role as providing some support to them and also trying to give them any information and tools they need to be successful with their clients," Paisley adds.

The assistant professor says 25 percent of his appointment is for research while 75 percent is for extension work.

Projects for the latter category that he has worked on with CES educators include the beginning and advanced Wyobeef Shortcourse for producers, the Cowboy Youth Classic for young livestock enthusiasts, the Wyoming Beef Cattle Improvement Association feedlot test for consigned livestock, an annual bull sale, an ultrasound workshop, and an upcoming young stock growers' meeting.

Some of his partners include CES educators Wayne Tatman of Goshen County, Dallas Mount of Platte County, and Alex Malcolm and Ron Cunningham of Fremont County.

Paisley also travels to several outlying states to give presentations on behalf of CES.

Much of his interaction with producers, he says, comes by way of phone calls and e-mails. "I might help them with a management or livestock nutrition question. For example, we are running into the time of year when we will get a lot of questions about high nitrate levels in forages and how to manage them," he says.

"There are a lot of calls asking about ration development, feed management, or herd health," Paisley adds.

"I try to make sure that the producer and county educator and I are in communication with each other so that we all know what's going on."

Paisley praises what he sees as the hands-on work ethic of CES agents. "I am here to try and provide any additional information they may need or to help with an idea they would like to try," he says. "It's definitely a two-way situation."



Steve Paisley, a UW beef cattle specialist, checks a computer screen to evaluate the ribeye area and intermuscular fat of a cow during a joint ultrasound project with CES educators Wayne Tatman of Goshen County and Dallas Mount of Platte County as part of annual WBCIA feedlot tests.

### **SUCCESS**

### "Steps to a New You" promotes healthy

"This program creates a framework to move

people away from counterproductive diets

and a sense of forced exercise to a gentler,

non-diet approach based on the enjoyment of

active living in a healthy body." — Suzy Pelican

By Vicki Hamende, Senior Editor Office of Communications and Technology

University of Wyoming nutrition experts throughout the state are hoping that a new community education and research program will teach adults how to better enjoy healthy lifestyles.

With the help of several on and off-campus partners, UW is offering a "Steps to a New You" project designed to improve people's attitudes and behaviors related to food, physical activity, and body image while increasing the time they spend simply walking.

"Since we're trying to help people develop more enjoyable lifestyles, combining the 'A New You: Health for Every Body' classes with an activity program is more likely to help those people be successful," says Suzy Pelican, a food and nutrition specialist with the College of Agriculture's Cooperative Extension Service (CES) and the project's co-leader.

Wellness In (WIN) the Rockies, a community-based research, intervention, and outreach project in Wyoming, Montana, and Idaho that has been supported by the U.S. Department

of Agriculture, is underwriting the new project. It combines the efforts of UW, CES and its Nutrition and Food Safety Initiative Team, the Department of Kinesiology and Health, the UW Health Education and Wellness Center, the Fremont County Public Health Department, the Washakie Medical Center, and WIN Wyoming.

"We are really excited about the partnerships," says CES Educator Christine Pasley of Platte County,

pointing to inter-college cooperation as well as community involvement. Pasley, who focuses on nutrition and food safety, is the other project leader.

The goal is for a group of CES educators in different counties to each recruit 25 participants for a series of classes spread over a nine-week period that will constitute the "Steps to a New You" training. Those signing on will also self-monitor a physical activity component involving the use of a pedometer to measure the steps they have walked.

Pasley says the plan is to work with at least 200 study volunteers during an 18-month period.

Those involved in the project will receive books titled *Intuitive Eating* and *Fitting in Fitness*, stretch bands for strengthening and toning, a personal notebook for journaling and self-reflection, a pedometer, and a binder for handouts.

Topics will include Food/Mood Connection, Mind over Media, Non-Diet Approach, Fit All Over, Making Peace with Food, Motivators to Move,

Nourish Yourself, Hunger and Fullness, Eating Style, and Excuses, Excuses. Students will also set individual and group activity goals. "It's a multimethod experiential

curriculum built around the principles of pleasurable and healthful eating, physically active living, and body size acceptance of self and others," Pelican explains. "It creates a framework to move people away from counterproductive diets and a sense of forced exercise to a gentler, non-diet approach based on the enjoyment of active living in a healthy body."





### lifestyles

The specific objectives regarding food are to have participants increase their intake of vegetables and fruits, decrease their intake of soft drinks and other sweetened beverages, control the size of their food and beverage portions, increase their appreciation and enjoyment of food, and increase their mindfulness, attention, or mental presence while eating.

In terms of physical activity, the project aims to decrease the resting heart rate of those in the study, increase their sense of enjoyment or productivity in being active, and increase the amount, frequency, and duration of their activity.

For the body image component, the objectives are for learners to become more accepting of people with varying body sizes and shapes and to increase their own self-acceptance and respect by basing their feelings on healthy and enjoyable eating and physical activity habits rather than on how much they weigh or how they are shaped.

Pelican says another goal of the project is to foster improved attitudes and behaviors about healthy lifestyles in participating communities.

Questionnaires and heart-rate monitors will be used to help assess "Steps to a New You" in the areas of physical, behavioral, and attitudinal changes.

Those who successfully complete the classes and provide research data will receive reimbursement for the course registration fee, which is \$45 or \$15 for those receiving scholarships. Up to an additional \$45 will be given to each participant who completes various aspects of the project.

On the leadership team along with Pelican and Pasley are Associate Professor Scott Winnail of the UW Department of Kinesiology and Health and Professor Mike Liebman of the UW Department of Family and Consumer Sciences. Mary Kay Wardlaw of WIN the Rockies organized the lesson plans for the new venture.

The program is already being offered to students on campus by Sara Olsen, coordinator of the Health Education and Wellness Center, and graduate assistant Joe Gieck.

County and area-based CES team members include Peg Cullen of Natrona County, Patti Griffith of Fremont County, Phyllis Lewis of Washakie County, Nina Romero-Caron of Sweetwater County, Denise Smith of Niobrara County, and retired educator Debby Johnson of Casper. Their community partners include Cindy Herrera of the Fremont County Public Health Department and Theresa Richardson of the Washakie Medical Center.

Classes are underway in some counties with others slated to start in early 2005. Pasley urges those interested in participating to contact the CES offices in the counties listed above.

"One of the draws for this program for CES educators is that it involves them in a research project that helps them meet some of their professional career needs while providing services to those in their communities as well," Pelican notes.

"This meshing of research with extension and education provides the kind of flexibility we need to have in real-life settings to help educators meet local needs while providing statewide impact data," she adds.

Once the project runs its course, Pelican says the next goal will be to improve "Steps to a New You" so that UW can offer the best possible healthy lifestyles program to all the residents of Wyoming.

"That's part of our dream," she adds. 🥯

# bright horizons

### Schafer works closely with others to help

By Robert Waggener, Editor Office of Communications and Technology

State 4-H Youth Specialist Steve Schafer spends six months of the year in his cramped University of Wyoming office revising 4-H project manuals, completing reports, and fielding telephone calls from throughout the region.

Walls covered with posters of livestock, horses, rabbits, and poultry constantly remind him of the other six months of the year, when he leads clinics for 4-H leaders and youths across Wyoming.

"Conducting educational workshops is one of my favorite things to do. I enjoy the interaction with the kids. I already have workshops scheduled for next summer," says Schafer, who coordinates the

"State legislators were paired with 4-Hers from their districts, and then they showed pigs. It was educational, but at times it also was hilarious. I know it was a good experience for the kids and the legislators."

Steve Schafer

state 4-H livestock, equine, rabbit, and poultry educational programs.

During his favorite time of the work year, he also organizes meat, wool, horse, and livestock judging contests, assists with the 4-H horse and swine camps, judges at county fairs, and oversees several shows at the state fair.

"I remember the first swine camp in Natrona County. The kids made 'pig boards,' and one boy had more paint on him than on the 'pig board.' He was sure having fun," Schafer says. ("Pig boards" are plywood shields that help handlers move their hogs from one location to another. They are also used to break up fights that hogs can have with each other.)

The swine camp was spearheaded by Natrona County 4-H leader Carol Whitney, who received assistance from other volunteers, as well as Schafer and Cooperative Extension Service (CES) staff members.

"It was a great camp. The kids really loved it," adds Schafer, who notes the second annual event is scheduled March 18-20, 2005.

Education and fun go hand-in-hand in 4-H as attested by the state fair's "legislators' charity swine show," one of the many events that Schafer judged this year.

"State legislators were paired with 4-Hers from their districts, and then they showed pigs. It was educational, but at times it also was hilarious. I know it was a good experience for the kids and the legislators," he says.

Schafer emphasizes that what makes his job a success is the help he receives from CES personnel and 4-H volunteers from throughout Wyoming.

"We work together to successfully educate youths. To me, that is the foundation of our program," Schafer says. "I try to do whatever they ask, whether it's a workshop or a judging."

Natrona County 4-H Program Associate Colleen Campbell says that Schafer has helped her office with several events including the "Saturday Project Expo" series held each January through May.

"We ask a variety of speakers and experts in

### 4-Hers develop full potential

different project areas to speak on the selection of animals, care, feeding, grooming, showing, diseases, and industry-related information. Having Steve available has been wonderful. He is so versatile and relates well to the youths and volunteer leaders," Campbell says.

"There are a limited number of experts available, and he is a standout presenter for our clinics. In the poultry

clinic, for example, Steve spoke about poultry diseases and showmanship, and as a result of his training, our youths have done far better at county and state competitions," she adds.

Sweetwater County 4-H Extension Educator Gary Grubb, who is chairman of the Wyoming 4-H Horse Development Committee, says he collaborates with many volunteers and CES staffers including Schafer.

"Steve and I are in communication just about every week. I work very closely with him on the 4-H Horse Project," Grubb says.

Ultimately, Schafer emphasizes, the work that he and his colleagues perform is focused on youth development, and many suggestions for improving programs come from the 4-Hers themselves.



State 4-H Youth Specialist Steve Schafer, center, teaches a poultry clinic at a "Saturday Project Expo" in Natrona County. Among those participating in the hands-on workshop were, from left, Genie Castleman of the Rangers 4-H Club, Maggie Tholl of the Meadow Acres, Amanda Jones of the Country Spiders, and Rick Deephouse and Danielle Julian, both of the Trail Busters.

Asked about the most rewarding aspect of his job, Schafer ponders for a moment and then reaches into a desk drawer full of letters and cards.

"You know what these are?" Schafer asks.
"These are thank-you notes from the kids. Our work apparently means something to them."

Schafer said one card he received this year carried special meaning.

"I've been in extension for 25 years, and for the first time a girl thanked me for judging at a county fair. She said she learned a lot and also had fun. That means a lot to me. That tells me we are interacting with the kids in a positive way."

## potential

#### Changes proposed in 4-H livestock and horse programs

By Robert Waggener, Editor Office of Communications and Technology

Youths and adults voiced their opinions, and state 4-H Youth Specialist Steve Schafer acted.

Based on ideas shared across the state, Schafer says, a number of changes are proposed in 4-H programming.

"All of the proposals are to stimulate the youths' interest in the livestock and horse projects. All of them are designed to increase the educational opportunities while also increasing the 'fun' aspect of 4-H. We're trying to do what we can to keep the programs interesting and exciting," Schafer says.

Asked how the ideas came about, he responds, "My role is to gather the input from the various sources – 4-H youths, parents, leaders, Cooperative Extension Service agents, and other interested people – and bring unified information back to the committees and then share the committees' wishes with the 4-H community, state fair, and other interested groups."

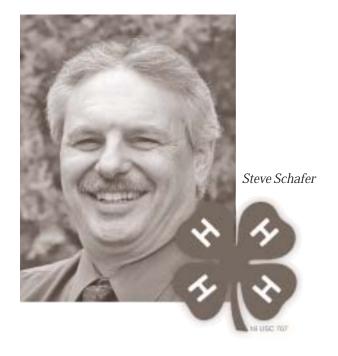
Schafer and the 4-H Horse Development Committee obtained comments from each county across Wyoming concerning the Horse Project, and they have launched a pilot program in Campbell, Goshen, Natrona, Sweetwater, and Teton counties in an effort to improve the 4-H horse levels program.

In order to participate in the state fair, Schafer notes, 4-Hers must first pass level one, which focuses on safety and basic horsemanship.

"So many kids have been freezing up on the tests. There is so much pressure knowing that they must pass to get to the state fair," Schafer says.

"We've taken the same information contained in levels one and two and will allow the tests to be taken in group settings with group leaders. This should allow the kids to have a fun, hands-on experience while still requiring them to know safety."

Schafer adds, "It will be pilot tested in the five counties, and we'll see where it goes. If the kids are more successful with this, we'll keep it."



Adults and youths involved in 4-H also plan to ask the state fair board to add a "meat goat breed" show to the lineup.

"We want to expand the goat show because of increased interest. The cost of a 4-H goat project is much less than other large animals, and 'goats' is a fairly new project and newness creates interest," Schafer says.

Another group is proposing that a mustang class be added to the state fair.

"There is more availability of wild horses, and the cost is low so there is more interest," Schafer says.

Another suggestion is intended to increase participation among older boys in the Horse Project.

"After age 12, we see a large decrease in the number of boys. Members of the horse committee recommended adding faster-paced events that will hopefully stimulate increased interest among that age group," says Schafer, who notes that the proposed events include breakaway, tie-down and team roping, cutting, and team penning.

If approved, the proposals could go into effect in 2006.  $\gg$ 

#### 4-H professionals cross state lines to help Nevada

By Robert Waggener, Editor
Office of Communications and Technology

Collaboration among Cooperative Extension Service (CES) professionals doesn't stop at state lines.

CES educators in Elko County, Nevada, recognized a weakness in their 4-H horse program and started examining programs in other states for ideas.

"I was looking for project materials that would go beyond your regular curriculum. I had heard that the University of Wyoming CES had a good 4-H horse program, and so I went to your Web site right off the bat," says Myrna Fisher, a community-based 4-H instructor for the University of Nevada's CES office in Elko.

"I ordered Wyoming's horse manual, and I thought it was really a good program. I had the book for a year before I got the wild hair to call them," she says.

Fisher contacted Wyoming 4-H Youth Specialist Steve Schafer to see if he could help, and she says the response by Schafer, other CES officials, and the University of Wyoming went beyond her expectations.

Schafer received permission from College of Agriculture Dean Frank Galey and CES Director Glen Whipple to conduct a two-day workshop in Elko County earlier this year. Joining Schafer were Sweetwater County 4-H Extension Educator Gary Grubb and George Howard, coach of the UW rodeo team and coordinator of the state 4-H levels program.

"Elko County liked our levels program, and they called to see if we would be interested in helping them out," Grubb says. "The workshop was very successful. They are very enthusiastic over there."

Fisher says Nevada's 4-H horse program was well suited for youths who already had a horsemanship background when they joined 4-H, but it did not offer levels.

"Our 4-H horse program did not address the basics such as grooming, saddling, bridling, and more importantly the safety aspect of it," Fisher notes.

Attending the two-day levels one and two workshop were Fisher, 15 4-H leaders from Elko County, and a number of 4-Hers and their horses.

The three Wyoming professionals spent the first day explaining horsemanship including going over all the points on the 4-H riding test. Youths went through the testing program the second day.

"All of them passed, so that was great," says
Fisher, who praised the instruction of Grubb,
Howard, and Schafer. "Those guys were so great.
Their teaching was geared toward making sure the
kids had a good experience, and their emphasis to
the leaders who would be raters was all about kids
having a positive experience."

Fisher said 4-H leaders in her county didn't know how to go about the testing, and the three Wyoming instructors were "very instrumental" in changing that. "They showed us how to keep the testing enjoyable, not scary. They really made the kids comfortable."

Since then, she says, 28 of 29 Elko County 4-Hers who have taken the written test passed, and they are now eligible to take the riding test.

"We would like to get Steve, Gary, and George back down here for training level three and four instructors," Fisher adds.

Sweetwater County
4-H Extension
Educator Gary Grubb
evaluates the riding
skills of Cody Lamb,
a member of the
Blazing Trails 4-H
Club in Elko County,
Nevada. Grubb and
constituents from
Wyoming helped
Elko County 4-H
leaders improve their
levels program
earlier this year.





Paul Meiman, center, helps students learn about ecology and natural resources. A range management specialist for the University of Wyoming Cooperative Extension Service, he is based in Lander.

### On the road with a range specialist

By Vicki Hamende, Senior Editor Office of Communications and Technology

When Paul Meiman isn't at his desk, it means he's doing his job.

A Cooperative Extension Service (CES) range management specialist, Meiman's "job" is to go where he is needed around the state.

A typical summons might call him to Sheridan for a range management school, to Meeteetse or Kemmerer for an allotment assessment, to Torrington for a talk on grazing and drought, to Cody for a workshop on small acreages or for WYO Research Education Days, to the Green Mountains for a Northwest Agents Range Tour, or home to his base in Lander for a training session in animal grazing behavior.

After he was hired by the College of Agriculture in October of 2003, Meiman spent several weeks trekking through Wyoming to meet the producers, agency managers, and extension educators he would be collaborating with and to learn about the state's agricultural lands and issues.

He hasn't stopped moving since.

Meiman has worked with a group of educators who have spent a couple of years writing and filming educational television spots about Wyoming's natural resources. He is developing a course in watershed management for an initiative team's range college. He helped lead a group of CES colleagues from around the state as they toured a federal Bureau of Land Management allotment area near Lander and also other locations near Riverton.

His background in the Department of Renewable Resources has prepared him well for the

"If these people come together to figure out how best to support the land, the results are going to be better for everyone." — Paul Meiman

diverse nature of his position. Meiman earned a bachelor's degree from the University of Wyoming in range management, minoring in botany. He followed that with a UW master's degree in rangeland ecology and watershed management. He also has a Ph.D. in rangeland ecosystem science from Colorado State University.

"Agents in the state will call me if they are having a workshop," Meiman says. He will be in eastern Wyoming in December to spend a day talking about grazing management and drought, and he has also shared his expertise with folks living on small acreages. He helped plan a spring program for producers and wildlife biologists on animal grazing behavior as it relates to soils, plants, herbivores, people, and the management of ecosystems.

Meiman has joined other UW representatives in making presentations about natural resource management to secondary agriculture/science teachers who take their students out of the classroom to conduct educational projects.

Another youth-related program he has helped with is WYO Resource Education Days, a camp sponsored by the state's conservation districts that partners with UW, CES, and the federal Natural Resources Conservation Service to teach high school students throughout Wyoming about the environment.

Meiman's name was on the program at the annual WESTI Ag Days event in Worland for a talk titled "Rangeland Monitoring as a Tool to Ensure Effective Management." He has also worked with UW faculty members who have pioneered a range management school to help federal land permittees better preserve grazing allotments.

"Cooperative monitoring is one of the most successful ways to manage the resources," Meiman says.

"The agency manager oftentimes has the right idea of what should happen to care for the natural resources and vegetation but might not have a good idea of how livestock management can fit in. Producers know that and often have a pretty good idea of the importance of being a good manager of natural resources," he explains. "If these people

come together to figure out how best to support the land, the results are going to be better for everyone."

Ultimately it is as this kind of liaison, and a traveling one, that Meiman sees as his job description.

"Extension tries to facilitate bringing together different sources of expertise to help producers, agency managers, and citizens address natural resource questions and issues. That's what I'm happy to do."



Sissy Taylor, a sophomore at Mountain View High School, and Weston Maxfield, a Lyman High School sophomore, learn about warm and cool-season grasses and alternative crops while touring the UW Powell Research and Extension Center. The two participated in a WYO Resource Education Days camp sponsored by the Cody Conservation District and taught in part by College of Agriculture scientists and specialists like Paul Meiman

### Toolbox a "how-to" kit for range

By Vicki Hamende, Senior Editor Office of Communications and Technology

How can a toolbox containing a camera, a global positioning system unit, flags, ground stakes, a 100-foot tape measure, and string help land stewards in Wyoming?

These are the components of a rangeland monitoring kit that Cooperative Extension Service (CES) educators can employ to show producers using private grazing lands how to better monitor and improve their ranges.

"The concept is to provide agents with the training and tools to offer a basic monitoring package to rangeland managers in their area," explains CES Educator Dallas Mount of Platte County. "Not only will this service provide a rangeland condition portfolio for cooperators, but it will also foster relationships with existing or new clientele."

With funding from the U.S. Department of Agriculture's Sustainable Agriculture Research and Education program, the CES Sustainable Management of Rangeland Resources initiative team under the direction of CES Educator Eric Peterson of Sublette County obtained seven toolboxes valued at \$400 each.

The kits were distributed to agents who completed training



UW Professor Mike Smith, right, a range management specialist with the College of Agriculture's Department of Renewable Resources, teaches CES educators how to use monitoring toolboxes to help producers increase forage on private grazing lands. From the left are Barton Stam of Hot Springs County, Hudson Hill of Lincoln County, and Zola Ryan of Carbon County.

programs taught in the Green Mountains between Rawlins and Lander and in Lusk by University of Wyoming Professor Mike Smith, a campus-based range management specialist, and his colleague Paul Meiman, whose office is in Lander.

The program is designed to meet the unique needs of producers using predominantly private grazing land in the

southeast and northeast areas of the state where rangeland monitoring has not received the same kind of emphasis as it has from grazing permittees on public land in western Wyoming, according to Mount.

Based on the positive response received so far from CES educators in the state, Mount says twice as many toolboxes are needed.

Using the kits, the educators can show producers how to establish a record of rangeland conditions by using pictures to capture an image of the rangeland and measurements to record the percentage of ground cover assumed by

8E coordinatio

### monitoring

grasses, forbs, bare ground, and old growth. The same sections can be studied in following years to see how the implementation of range management practices may have affected the percentages of grasses, forbs, and empty ground.

There are different approaches to take in the education process depending on the preferences of the producers and the agents, Mount says.

"Some agents might say, 'I will come out and I will do this for you,'" he explains. "Others might say, 'I will teach you how to do it,' and they can sit down at the kitchen table and talk about some objectives for producing as much forage on the rangeland as possible."

Mount says it is important for producers to establish a database of range conditions to document their efforts to be good land stewards. "We would like to implement programming methodologies which key on the tendencies, desires, and motivation of private rangeland managers," he adds.

"Hopefully in a year or two we will have some impact based on agent training and increased communication with producers." >>>>

# Most Wyoming ag producers use pesticides safely, responsibly

By Robert Waggener, Editor Office of Communications and Technology

Most Wyoming agricultural producers use pesticides safely and responsibly, says Mark Ferrell, state pesticide coordinator for the University of Wyoming's Cooperative Extension Service.

"Data from the Wyoming Department of Agriculture backs this up," Ferrell says. "They just aren't getting a lot of complaints. The complaints they do get usually deal with the unintentional drift of pesticides."

Problems can be avoided by carefully reading and following label directions, Ferrell says. "If you don't understand something, contact your county extension agent or weed and pest control district office."

Ferrell says the majority of ranchers and farmers in the state care deeply about the environment while at the same time they must pay close attention to the bottom line.

"The most important goal of ranchers and farmers is to have a long-term, sustainable operation, which means using the best management practices so they can maximize long-term economic returns," Ferrell says.



Mark Ferrell

Integrated weed and pest management practices involve using a variety of tools to get the job done properly, he notes. Among them are taking preventative measures, applying pesticides in an appropriate manner, practicing biological controls such as using sheep and goats to graze areas infested with leafy spurge, following cultural practices including crop rotations and rotational grazing, and utilizing mechanical methods.

Of the 22 designated noxious weeds in the state, Ferrell says, leafy spurge, Canada thistle, and Russian, spotted, and diffuse knapweed have been the most expensive to battle.

"We're currently in a maintenance program with leafy spurge. We're trying to control it where we can and trying to keep it out of areas that are not infested," he notes.

"One weed that is really becoming a big problem is salt cedar. It's a real water hog and can dry river systems up. It exudes salt from the ground through its leaves, then the leaves drop off and prevent more desirable plants from growing. It grows so thick it can impede recreation."

Turning to the six designated pests, Ferrell says, "Prairie dogs, mountain pine beetles, beet leafhoppers, and ground squirrels are always a problem. Grasshoppers and Mormon crickets are periodic pests, but when they are a problem they are a big problem."

### Communication. Cooperation.

By Vicki Hamende, Senior Editor Office of Communications and Technology

There are some particular words that have a nice ring to Eric Peterson.

In order to unite permittees who graze their livestock on public lands with the federal agencies that supervise the property, Peterson sees a need for communication, cooperation, and consultation, all in the spirit of conservation.

The Cooperative Extension Service educator in Sublette County has helped put together a "4-Cs" pilot project funded by the U.S. Department of the Interior and the county commissioners to monitor the natural resources on 200,000 acres of Bureau of Land Management (BLM) rangeland so that producers can reap what they need to sustain their livestock and the public can be assured that the environment is being properly tended.

Permittees participating in the coordinated monitoring are largely representatives of a Bridger-Teton Silver Creek common grazing allotment association which has been working successfully with the U.S. Forest Service to manage grazing since 1996, Peterson reports.

"It is extremely important to understand and acknowledge that an agency professional and a permittee live in different worlds, react to different pressures, and have different levels of investment in the grazing program," he writes in a booklet he has developed called *Implementing a Cooperative Permittee Monitoring Program*.

"We need to be careful to understand that often agency professionals feel pressure to look at range assessment and inventory issues and other driving forces emanating from within the agency," Peterson adds. "Meanwhile, a grazer is compelled by his need to maintain a financially viable operation. The agency professional has to manage based on regulations, land-planning documents, training, and experience. The permittee has the management of the animals that graze."



Joel Bousman, right, a producer from Boulder, is working with Eric Peterson to promote the 4-Cs monitoring program in Sublette County. He is also a member of the governor's brucellosis task force, shown here touring elk feeding grounds near Soda Lake.

The common ground, he notes, is the desire for healthy land.

By creating measured transects of life forms, Peterson explains, the two sides can identify exactly what is present on plots of representative rangeland, develop predetermined objectives for positive changes they would like to make on particular indicators, and photograph and record data to use in an evaluation of adjusted grazing practices the following year.

"It is important to have these discrete bits of research information that can be tied to grazing strategy and ecological impact," Peterson says. "The indicators need to be valid, reproducible, and statistically defensible. They need to pass everybody's sniff test."

As they have done with the forest service, the producers participating in the 4-Cs program are working with BLM representatives and University of



### communication

### Consultation. Conservation.

Wyoming specialists to set up resource protocols for enhancing the quality of the land. "The agency is able to get more and better information and to develop the trust that goes along with that," Peterson says. "It will undoubtedly result in better management of the resource."

Peterson credits the leadership and enthusiasm of Joel Bousman, owner of East Fork Livestock of Boulder, in touting the success of the Silver Creek monitoring program as a vital stepping stone to the 4-Cs project.

"Monitoring is an attempt to get some sound science involved in determining whether we are taking care of our grazing allotments within the parameters required and also to look at the impact that our grazing is having on resources and critical areas," explains Bousman.

"When the permittees and agency staff are out on the ground looking at the same thing at the same time together, they learn to trust each other. People tend not to realize that until they get involved and see it happen," he adds. "It works for the benefit of the agencies, the permittees, and the resources."

Born and raised in Sublette County and a UW graduate, Bousman is the chairman of the Wyoming State Grazing Board and is active with the Wyoming Stock Growers Association, which honored his family with its 2003 Environmental Stewardship Award. As a producer, he is concerned about the economic issues associated with public land grazing.

He and his fellow agriculturists pay fees based on an "animal unit month," which is determined by the amount of forage (roughly 780 pounds) required to sustain a 1,000-pound animal for a month. The cost, he says, varies from year to year. In addition, Bousman and the other permittees are required to maintain fences, furnish labor, provide water zones, and pay for needed tools and equipment.

"One of our goals is to have better coordination between the agencies we work with," Bousman says.

Problems can develop, he explains, as an example, when cattle that winter on private land and spring on BLM land are required to move off the latter by a certain date.

"When we can come off the BLM land depends on the weather. If we could coordinate it with the BLM that we sometimes might need to stay another

few days, we wouldn't be left with a hole and no place to put our cattle," Bousman says. Private lands are often allocated for hay crops, and forest service land isn't available for grazing until July 1, he notes.

A committee including Peterson, permittees, BLM personnel, and representatives of the federal Natural Resources Conservation Service have earmarked the bulk of the \$259,000 for the 4-Cs project for an extensive soil survey that is currently underway. "If you know the soil and moisture conditions, you have the ability to look at the vegetation and then make some educated decisions about the site's potential," says Bousman.

Since the initial funds were appropriated, the BLM has hired a summer range technician to meet with permittees and establish research studies on their allotments. Peterson, meanwhile, has secured a portion of the money to use for the outreach portion of the program. In addition to preparing his

(Continued on page 22)



UW Cooperative Extension Service Educator Eric Peterson of Sublette County has helped secure materials that can show producers how to monitor their grazing lands.



A. J. Cockrell, left, a summer range technician for the Pinedale area Bureau of Land Management field office, shows permittee representatives Laura Nichols and Walt Bousman how to set up a transect line for identifying and recording basal ground cover at every foot of the line. The instruction helped launch the 4-Cs monitoring studies program in Sublette County.

(Continued from page 21)

informational booklet, he has provided monitoring equipment, developed monitoring plan worksheets for producers and agencies to use, and is creating documentary and instructional videos. "It is a great collaboration involving extension, the permittees, and the BLM. We're really getting this thing done," he notes.

"The term 'pilot project' implies that you have to take it somewhere, though," Peterson says of the 4-Cs plan. He hopes it will become a backbone that can be extended into other parts of BLM land areas in Wyoming and also to other western states.

"When we are looking at the same playbook and the same common base of information, we can begin to understand the objectives, motivation, and pressures of the other person," Peterson adds. "Then we can work with each other toward the stewardship of the land."

### Defining CES roles:

By Vicki Hamende, Senior Editor Office of Communications and Technology

Chris Bastian knows what it's like to teach classes on campus, apply for grants, conduct research, and publish his work. He doesn't know what it's like to guide youths and families through county and state fairs.

As an agricultural marketing specialist for the University of Wyoming, Bastian tries to balance his duties in the Department of Agricultural and Applied Economics with his 50 percent Cooperative Extension Service (CES) appointment.

"We are all feeling our way trying to figure out our best roles," Bastian says of his CES co-workers both on and off campus. "Because we are so pressed for time, we probably don't do a good job of letting people know what we are doing."

Often, he says, specialists and county educators don't always have a good appreciation of each other's roles, duties, issues, and demands. "As a specialist being in a department, there are things I have to deal with that they don't, and they have to deal with things I don't," Bastian notes. "When the era of plenty for resources ended, we all had to become more flexible in defining our jobs."

The agricultural economist says he views educators in the counties as clients as well as colleagues. "I have tried to be responsive when educators have called with specific requests," he explains. "On the other side of the coin, on grant projects and educational programs we have been co-teachers."

Bastian adds, "As a specialist what I hope I bring to the table is specialized knowledge in ag marketing. In some instances I have the answers or am an information broker, and in some instances I try to plan things with the agents in the counties to meet the educational needs of their constituents."



## integration

### "We are feeling our way all the time"

As an example of a collaborative project, he points to working with Weston County's CES agent Bill Taylor and a group of producers to set up a livestock marketing alliance.

He has also been involved in presenting a grant-funded, risk-management program that combines the efforts of CES specialists and educators in Wyoming, Montana, South Dakota, and North Dakota. His College of Agriculture partners in the enterprise include Taylor, CES educators Gene Gade of Crook County, Tanya Daniels of Campbell County, Vicki Hayman of Weston County, and Zola Ryan of Carbon County and UW specialists Gail Gordon, John Hewlett, and Randy Weigel.

Bastian also played a part in the development of a young beef female program spearheaded by the College of Agriculture's Department of Animal Science in cooperation with the Profitable and Sustainable Agricultural Systems initiative team.

He also works with CES specialists in other states to develop educational materials that can be used in producer workshops and state initiative team efforts.

"I get phone calls from producers who want information. I also receive requests from different organizations asking me to present programs," Bastian notes. "I have tried to respond to those as quickly as possible. If I don't have the information, I tell them where they can get it."

The economist points out that larger universities have several separate specialists who each focus on just one particular aspect of agricultural marketing.

"I get questions ranging from how to set up a hay market or a new food product to wanting to know the best time of the year to sell wheat. The diversity is what makes it an interesting job for me," Bastian says. He sees economic constraints pushing CES into more of a regional model that requires new educators to be specialists in their own right.

"My view is that combined teams of educators will work with counties, individuals, and specialists to develop applied research and educational programs that will best meet the needs of the clientele. I hope we are evolving into that kind of model," Bastian says.

"I think the system has worked relatively well, but I think it is time for us to look at a more integrated approach to better allocate our resources. We are feeling our way all the time trying to figure out what we should do." \(\infty\)



Chris Bastian, a UW agricultural marketing specialist, conducts a training program in "RightRisk" for advanced ranch management students. The program uses actual farm and ranch situations to illustrate different economic strategies.

## collaboration

### Noxious weeds and pests on Ferrell's

By Robert Waggener, Editor
Office of Communications and Technology

They sport interesting names like Dalmatian toadflax, musk thistle, ox-eye daisy, skeletonleaf bursage, Dyers woad, and beet leafhopper.

There are 22 designated noxious weeds and six pests in the Cowboy State. They create interesting management problems for Wyoming's agricultural producers and landowners, lead to hundreds of thousands of dollars in damage, and cause headaches for those in charge of trying to control them.

Trays of slides, colorful posters, fact sheets, and dozens of books on weeds and pests fill Mark Ferrell's small office in the basement of the University of Wyoming's College of Agriculture.

Ferrell is the state pesticide coordinator for the Cooperative Extension Service (CES). He organizes training for commercial and private pesticide applicators in Wyoming, works on the management of invasive plant species in the state, and is involved in the Interregional Research Project No. 4, a partnership of government, land-grant universities, and growers trying to increase pest-control options for low-acreage crops commonly called "speciality" or "minor" crops.

All three aspects of his job in the Department of Plant Sciences require collaboration with CES agents and hundreds of other people across Wyoming and the region.

"Collaboration is extremely important. Without the cooperation of federal, state, and local agencies along with landowners and others, these programs wouldn't work," Ferrell says. "It's expensive to control noxious weeds and pests. No one entity could afford to do it by itself. Weed and pest control is heavily subsidized by the state, with assistance from federal and local governments."

Ferrell spends a big chunk of his time working with CES offices and weed and pest control districts

across Wyoming in training private applicators how to properly and safely apply pesticides.

Approximately 800 agricultural producers hold a private license, which allows them to use restricted pesticides to control leafy spurge and Canada thistle, two of the most troublesome noxious weeds, as well as the designated pests prairie dogs and pocket gophers.

"I use Mark a lot in developing programs and in using his new program materials in our trainings," says Fremont County/Wind River CES Educator Ron Cunningham. "I appreciate his support very much. Mark makes our job so much easier, and he keeps us up to date all the time."

Keeping current on rules and regulations is important, Ferrell says, because of continual changes.

For instance, he notes, "Threatened and endangered plant and animal species have a direct impact on our ability to protect agriculture in Wyoming. When wolves were reintroduced, that restricted the ability of many landowners to control predators, including coyotes, on leased government land. The inclusion of plants and animals on the threatened or endangered species list can affect people's ability to manage their own property."

During three-hour private applicator training sessions, Ferrell and other instructors discuss the Endangered Species Act, regulations governing the use of pesticides, equipment calibration, and safety.

"Private pesticide applicator training is an important component of my extension educator role in the Big Horn Basin," says Washakie County CES Educator Jim Gill. "We have a large contingency of row-crop farmers who rely on restricted-use pesticides for their sugar beet, malt barley, dry beans, alfalfa hay and seed, grain and silage corn, and grass-seed production. The diversity of ag operations in the Big Horn Basin requires the use of these products on rangelands and other ecosystems as well as for weed and pest control."

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### hit list



Cooperative Extension Service Pesticide Coordinator Mark Ferrell teaches a private-pesticide-applicator class for the Park County Master Gardeners in Powell.

"Collaboration is extremely important.

Without the cooperation of federal, state, and local agencies along with landowners and others, these programs wouldn't work."

—Mark Ferrell

Gill adds, "Thus, the demand for our training and education is quite strong each year. I'll typically have more than 60 producers and other users attending my educational programs throughout the Big Horn Basin annually. Our weed and pest supervisors in the area are always willing to help with these programs as well."

Cunningham says he also works closely with weed and pest control district personnel in his area.

"We hold three different applicator trainings each year – one in February, one in April, and one in May. Teaching these classes, which date back some 30 years, is an ongoing project," Cunningham notes.

Ferrell says he has trained some extension agents in the state to teach their own private-applicator courses while other agents have asked that he lead classes in their counties.

"We get anywhere from one to 200 participants in each course," says Ferrell, who notes that CES oversees the training while the Wyoming

Department of Agriculture is in charge of certification. "I work directly with the Department of Ag to put on these sessions. We have to have a close working relationship."

Ferrell also provides training for federal agencies that manage public lands. Among them are the U.S. Forest Service and the Bureau of Land Management. "We really have a three-way partnership involving local, state, and federal agencies," he notes.

Ferrell says he enjoys most aspects of his job including working with fellow CES personnel, government agencies, and landowners, but also says that at times it can get frustrating.

"It's impossible not to get involved in the politics. Some people believe pesticides are necessary, but some people don't like them. Some people would like to see all pesticides totally banned while others see them as a valuable tool in helping them make a living."

## relevance

### A Critical Condition: Training teens in

By Vicki Hamende, Senior Editor Office of Communications and Technology

GO" wants you if you're a 14 or 15-year-old teen seeking employment on a farm.

The U.S. Department of Labor's Hazardous Occupations Order (HOO) specifies that youths over 13 but under 16 who want to work on an agricultural farmstead not operated by their own family must complete a 24-hour safety course.

"The idea is to reduce the number of accidents by making safety a priority for young people who are employed on farms," reports Rob Smith, a research associate at the University of Wyoming's Powell Research and Extension Center.

With agriculture cited by the National Safety Council as the second most hazardous industry in the nation, such an emphasis would seem critical indeed.

Smith attended a program at the National Education Center for Agricultural Safety in Peosta, Iowa, sponsored by the council, the U.S. Department of Agriculture, and major universities and aimed at developing national standardized guidelines for preventing injuries caused by such things as cumbersome farm vehicles, poorly maintained equipment and tools, pesticides, fertilizers, excessive noise, severe weather, long hair, and loose clothing.

"Our charge now is to find Cooperative Extension Service agents, ag teachers, and people who have direct contact with the younger generation to train them," Smith explains. "Then they can go out to their individual areas and try to recruit and teach the young people what they need to know to be safe."

Teenagers completing the training will receive government certificates verifying that they have passed the course and complied with the law. The



Rob Smith, a research associate at UW's Powell Research and Extension Center, hopes to share what he has learned about farm safety to Cooperative Extension Service educators throughout Wyoming.

youths will then be eligible to operate up to 20horsepower equipment with attachments and to work with most of the implements that farmers generally utilize.

Part of Smith's own training in Iowa involved using a model tractor complete with added components and smokestacks as a demonstration teaching tool.

"The people who attended the conference didn't necessarily know all of the safety procedures we discussed. People got on tractors and did things they do at home that would cause them to



### farm safety

automatically fail the course," Smith notes. "If that's the case with experienced farmers, it's probably the case with 14 and 15-year-olds who haven't been trained."

UW Professor Alan Gray, director of the Powell Research and Extension Center, says he sees his facility's role as seeking an opportunity to conduct actual hands-on education in the form of a farm equipment operators' safety program.

"We have the farm equipment and tractors for a workshop to get young people qualified, and we have Rob as well as others who have considerable recent experience operating farm equipment," says Gray, pointing to Farm Manager Mike Killen and his assistant Brad May as other knowledgeable sources.

In addition to providing a training program for youths each spring, Gray says, the center hopes to offer a weekend workshop for urban professionals who have purchased small acreages or perhaps large farms and ranches in Wyoming but have little or no experience with agricultural equipment.

He adds, "We also see an increasing number of women who are purchasing land and are also interested in learning more about the safe operation of equipment."

Smith, who was raised on a dairy farm and also worked for an alfalfa and corn producer, grew up understanding the importance of farm safety. He earned a bachelor's degree in ag systems technology at Utah State University and was hired by the Powell station to assist UW research scientists with their projects.

He hopes now to work with Jerry Langbehn, UW farm safety specialist, to train CES agents throughout the state.

"It is definitely going to benefit farmers if they know the young people they have hired have been through the training course," Smith says.

## CES awards presented at EPIC banquet

John Hewlett, a farm and ranch management specialist with the University of Wyoming's Cooperative Extension Service (CES), received the 2004 Jim DeBree "Excellence in Cooperative Extension Award" for his efforts in developing outreach programs and publications for Wyoming's agricultural community.

Hewlett is an academic professional in the College of Agriculture's Department of Agricultural and Applied Economics and has been with UW since 1987. His areas of expertise include integrated ranch/farm management, enterprise budgets, machinery ownership and operation costs, financial management, and agricultural land values.

He was honored at an awards banquet during the fall CES Extension Professional Improvement Conference (EPIC) in Lusk.

Also receiving special CES awards at the gathering were Alex Malcolm of Fremont County (newer employee recognition), Dawn Sanchez of Uinta County (diversity enhancement recognition), and Gene Gade of Crook County, Tom Heald of Natrona County, and Eric Peterson of Sublette County (creative excellence recognition).

Honored for their years of CES service were Phil Rosenlund of Laramie County (35 years); Jim Gill of Washakie County (30); Chris Pasley of Platte County, Peterson, and Rhonda Shipp of Park County (25); Jim Krall of the Department of Plant Sciences (20); CES Director and Associate Dean Glen Whipple (15); Joyce Johnston of Park County and Phyllis Lewis of Washakie County (10); and Bobbie Holder of Park County, Blaine Horn of Johnson County, Steve Schafer of the state 4-H office, Sarah Stoltenberg of Converse County, Jim Thompson of the Department of Agricultural and Applied Economics, and Rindy West of Campbell County (5).

Rosenlund and Vicki Hayman of Weston County received distinguished service recognition from Epsilon Sigma Phi, a CES professional organization. (Continued on page 28)

#### **Awards (continued from page 27)**

Winning 4-H association awards were Malcolm, Sanchez, West, Hayman, Virginia Craig of Weston County, Warren Crawford of Carbon County, Kathy Vann of the Wind River Reservation, Bev Boden of Johnson County, 4-H Program Coordinator Johnathan Despain, Jill Klein of Platte County, Stephanie Moore of Albany County, Stoltenberg, Amber Wallingford of Washakie County, and Laurie Peternal of Lincoln County. Schafer, Vann, and Malcolm were also honored for their years of service.

FCS association award winners included Lewis, Suzy Pelican of the Department of Family and Consumer Sciences, Peg Cullen and Debby Johnson of Natrona County, Gail Gordon of the Department of Agricultural and Applied Economics, Hayman, Betty Holmes and Mary Kay Wardlaw of the UW Wellness in (WIN) the Rockies program, Pasley, Mary Martin of Teton County, Denise Smith and Shirley Huizenga of Niobrara County, Lynn Collins and Helen Gregorio of Laramie County, Gretchen Gasvoda-Kelso of Big Horn County, Lori Jones of Campbell County, Patti Griffith and Mary Lou Vaughn of Fremont County, Ruth Peterson of Natrona County, Nina Romero-Caron of Sweetwater County, and Linda Melcher, Cindy Frederick, and Twila Ortiz of the Department of Family and Consumer Sciences.



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