

# UW EXTENSION'S CONNECTION WITH WYOMING

# CONNECT

2016



Diana Tims, fifth grade teacher at Mountain View Elementary School, examines rangeland vegetation during the 2015 Wyoming Resource Education Days. See story page 28



EXTENSION



# COLLABORATIONS, PARTNERSHIPS BUILD STRONG EDUCATIONAL EFFORTS

**T**hat UW Extension's most effective educational efforts are built of collaboration and partnership is apparent to me.

Marquee programs where UW Extension is clearly in the lead are important to us, and great work is also done in collaborations where UW Extension plays a key role in other organizations' programs.

This issue of CONNECT highlights some very successful and innovative extension programs; some are outstanding programs for UW Extension, and, in others, UW Extension is a contributor to another's program. The latter is the case for the Hulett School Farm. A community effort led by the Hulett School, the farm has evolved to provide a rich, hands-on learning environment for Hulett youths, both in school and out. We are pleased to be a part of the Hulett School's outstanding effort.

The WyRED natural resources camp is another such effort. A marquee program of the Wyoming Society for Range Management, the camp has provided Wyoming youths an outdoors, in-the-landscape, learning experience for over 20 years. UW Extension educators and specialists have provided an important part of the educational content of the camp for each of those 20 years.

Certainly, WESTI Ag Days (Worland) and Fremont County Farm and Ranch Days (Riverton) are marquee programs of UW Extension. Bringing extension specialists and educators together with agricultural producers and community members, these events provide forums for true engagement: UW educators and researchers learning from producers and producers learning from UW researchers and educators. Retired area educators Jim Gill and Ron Cunningham developed these events, creating a legacy in their respective communities and for UW Extension.

A particularly innovative program effort is the Wyoming Conservation Exchange. The exchange

acts to create a market for conservation activities that will allow ranchers and other land managers to be paid for their conservation efforts. A true partnership, UW Extension is providing institutional leadership for the exchange.

UW Extension has been invested in nutrition and food safety education since its early beginnings. Nutrition education continues to be one of extension's most appreciated and effective programming efforts. The Expanded Food and Nutrition Education Program (EFNEP) was born of the poverty and hunger initiatives of the 1960s. The EFNEP program and, more recently, the Supplemental Nutrition Assistance Program Education (SNAPed), are USDA-funded nutrition education programs directed at lower income citizens. In Wyoming extension, these programs are jointly branded as the Cent\$ible Nutrition Program (CNP). With the expressed goal of helping people learn to eat well on a modest food budget, CNP education has made a big difference for generations of Wyoming citizens. It was gratifying to me to read of the partnership of extension's CNP and First Lady Carol Mead's "Eat, Read, Grow" program. I have enjoyed several \$2 lunch programs and agree with the First Lady that a \$2 lunch can be a potent learning tool for clients and policymakers alike.

This issue of CONNECT highlights a few of our proudest efforts. Please turn the pages to learn more of these and other UW programs. Extension engagement is a conversation, so if you have questions, comments, or suggestions, please contact me at [glen@uwyo.edu](mailto:glen@uwyo.edu) or (307) 766-5124 and let's talk. I would appreciate hearing from you.

Sincerely,







That UW Extension's most effective educational efforts are built of collaboration and partnership is apparent to me. This issue of CONNECT highlights some very successful and innovative extension programs; some are outstanding programs for UW Extension, and in others UW Extension is a contributor to another's marquee program.  
– Glen Whipple

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## CONNECT

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IS A PICTURE WORTH A THOUSAND WORDS? THEN, HOW ABOUT A VIDEO? Videos, and the interactive 2016 CONNECT edition, which has videos, slide shows, and audio, are available at [www.uwyoextension.org/connect/2016/](http://www.uwyoextension.org/connect/2016/)



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*Kori Amos, right, and Cassandra Vitto select tomatoes from the student farm last fall.*

# LOOK WHAT SPROUTED IN

There's a lot reaching upward, rivaling nearby iconic Devils Tower



**T**here's more growing than tomatoes, corn, carrots, beans, and onions on the student farm at Hulett School.

Twenty-five-year rancher and Hulett vo-ag teacher Jim Pannell's vision of the farm came about in 2010, as a place where students could apply what they learn in the classrooms across the gravel road that separates the school and farm and provide hands-on experience with animals.

He visited with the owner of land adjoining the school about the idea, and a deal was made for the school to

lease the two acres. Grants and large donations provided the foundation to build the insulated barn in 2014, and most of that first summer was spent building corrals and a fence. A chicken house then sprang up north of the barn and a greenhouse and garden area to the west.

## Work with Hands

"The first thing you have to realize," says Pannell, wearing a longish, dark-blue Devils Tower FFA shirt and standing in front of deep-green rows of sweet corn, "is regardless of who the student is, most of these kids whether they

pursue a four-year degree or enter the work force, at some time in their lives will want to do something with their hands."

That could be something as simple as gardening or something not as simple, like working in the coal mines or on ranches.

"Part of our goal was to teach these kids to think, and something like this encourages them," he says. "It's not just book learning. There's a lot of math that goes into building and constructing the things here. Maybe there isn't enough emphasis on that in school – maybe practicality."



A sign made in the school shop greets anyone walking across the road from the school building and entering the farm area. There are individual metal signs with people's names under the words "Devils Tower FFA Farm Sponsors." A wooden sign to its right and attached to 4x4s announces the "Dick and Neil Bush Family Memorial. Hulett School Vocational Training Facility. Devils Tower FFA Chapter."

The Bushes donated the land.

"We are really fortunate to live in Crook County, Wyoming," says Pannell. "It's a rural, agricultural place where they value the

education of the kids and value what's going on down here."

### Applied Learning

There is value placed on standardized tests, but also applied learning.

"We like to think we turn out kids who not only do well on standardized testing but can actually do something when they are done," he says. "I think the community recognizes and appreciates that. They see that these kids are active in a lot of different things."

The local sawmill has offered great support he says, as have others.

Pannell wants to have a

compost pile made of large cement blocks so the farm can use grass clippings from the football field and manure from the corrals and barn.

Pannell relates: "I called a gentleman and asked what he was going to charge for trucking, and he said, 'For you personally?' and I said no, for the school. He said 'I'm not going to charge the school anything.' I said I didn't call him to get this done for free. He said, 'If I can't help a school that's getting things done, I wouldn't be a very good human being.' He was willing to do that free. We are so lucky. There are a lot of people who don't have a lot of money but have a lot of time."



<http://bit.ly/hulettfarm>  
<http://bit.ly/hulettfarm2>  
<http://bit.ly/hulettfarm3>



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# NORTHEASTERN WYOMING



*Student Kori Amos listens as Hulett School vo-ag teacher Jim Pannell recounts the origins of the Julett School farm.*



# EXTENSION EDUCATORS EXTEND EXPERTISE

## 4-H'ers, others reap benefits of learning by doing

UW Extension educators Sara Fleenor and Brian Sebade helped vo-ag teacher Jim Pannell grow the student farm in Hulett.

Vegetables are being raised, livestock being cared for, and students are taking responsibility.

"It's cool. During summer the kids would randomly show up, know where to get feed, take care of

their animals or work in the garden, knowing where they need to pull weeds," says Sebade, who helped select fruit trees and vegetables.

"The kids come in and out as they need to. They learn by doing things hands-on. They have their own little spot to take care of, and the FFA adviser to make sure they are taking care of things."

### Plan to Plant

Pannell was looking at ways to tie the mostly livestock farm a few years ago to horticulture, and contacted Sebade for tree and vegetable advice.

Sebade says he looked at the chance as a learning opportunity, finding out what varieties would survive and do best in northeastern Wyoming, not

that far from Devils Tower.

Kindergartners through senior students planted three plants each of five different varieties of cherry, pear, and plumb trees and five types of currants on the school farm. Goats – tantalized by what must be tasty to goats – escaped their pen and snacked on the young fruit trees. Now that the goats are more securely penned, the fruit trees that survive will help Hulett area residents determine which varieties will survive variable northeast Wyoming temperatures and moisture.

The students also later helped fill and plant raised vegetable beds outside and inside the high tunnel extension educator Jeff Edwards helped construct.

"The main idea of the student farm is to give space for kids who don't have the opportunity to grow their own garden or own lamb for the county fair," says Sebade.

### Farm Tool

The farm is a natural learning tool for the county's 4-H'ers, adds Fleenor.

"This allows kids who are not necessarily able to be in 4-H in the traditional



*Jessee Driskill shows her goat that was at the Hulett School farm. Goats, chickens, cattle, and hogs have been raised at the farm.*



"The main idea of the student farm is to give space for kids who don't have the opportunity to grow their own garden or own lamb for the county fair a place they can."

Brian Sebade  
UW Extension Educator

sense to have livestock," she says. "It allows kids to know where food comes from and participate in the livestock and produce side of it if they choose to. It allows for a wider diversity of kids to be involved in 4-H."

Fleenor says the projects help 4-H'ers learn critical thinking skills and responsibility.

Those who have animals learn how to feed them, what's needed to grow them to market weight, and how to take care of the animal.

"If the animal goes off feed, they have to backtrack and work with the animal to get them back on feed



*UW Extension educator Brian Sebade, right, and Jim Pannell examine one of many fruit trees planted by the students.*



*4-H educator Sara Fleenor says the farm is a natural learning tool for her 4-H'ers.*

and get them going," says Fleenor. "We do different workshops at livestock camps to get the kids involved and keep them involved."

Older kids mentor the younger ones, and Fleenor says the younger ones have someone they can look up to. Classroom skills are also put into practice.

"It all works very well together here," she says. "It helps them be good citizens and be part of something bigger than themselves, like the community garden."



*Chickens know when there is food. Cassandra Vitto and Char Bauman oblige.*





## Josh Willems' cooking and everyday living class

# NO VEGETABLES? THAT HAD TO CHANGE

What's a farm without vegetables?

Still, Jim Pannell remembers when history teacher Josh Willems approached him in the spring of 2015, saying he was going to teach a cooking and everyday living class. He asked if there was any chance of building a high tunnel on the farm and if his students could plant a school garden.

Pannell thought that only meant more work for him.

"I couldn't have been more wrong," Pannell now says. "The kids love it. We had the entire school here filling the high tunnel raised boxes."

Senior Ty Mahoney ("a working bugger," says Pannell) built the raised beds, and Willems' class planted vegetables and were enjoying the bounty early last fall.

"It's been a great class," says Willems, sporting a bright red shirt with a "Lady H Basketball" logo.

"Jim and I saw a need in the school," he says.

"We decided to embark on this project together, and so far it has been really successful."

Willems says he was amazed at how many students didn't have gardens at their homes or had never snapped beans.

He says the experience has been great for the kids.

"Our goal is to not waste anything at all," he says. "We are learning how to preserve the food by canning and freezing it and making salsa and soup. Most of it has come out of the garden."

Willems grew up on the outskirts of Miles City, Montana, where his family always had a large garden.

"My goal is maybe 15 to 20 years from now when the students have families, maybe they can grow food for them," he says. "I have 12 students in the class, which is pretty good for our ninth through 12 student population. It's amazing what they can get done. We have 44 minutes of class, and they can snap five



*History teacher Josh Willems asked Pannell about having a student garden at the Hulett Farm.*

gallons of beans in about 10 minutes. They get to it right away and are excited with it."

All this adds to a well-rounded education, the history teacher says. "The core is important, absolutely, but education is so much more than that."

Pannell and Willems credit school leadership for the farm becoming reality.

"We have absolutely a great leadership team, and that goes all the way to the

school board, who believe in hands-on education," says Pannell. "We have kindergarteners out here learning about how plants grow. This isn't his (Willems') garden or my garden, it's our school's garden. We encourage our elementary teachers to come out here. We want kids to understand there is a lot more to education than just books. That's well-embraced in not just the school, but in our community."





*Vo-ag teacher Jim Pannell observes the welding quality of Trey Svoboda.*

# LEARNING REINFORCED BY DOING MAY BE THE REAL EDUCATIONAL CORE

The Hulett School farm does what core classes would love to do, notes the school's industrial arts teacher.

"Apply the skills they learn!" Dave Letillier exclaims.

Letillier has helped students build the student farm, which, as it does for history teacher Josh Willems (see accompanying story page 8), tugs the rural into school curriculum for students. Letillier spends summers on the family farm and ranch near Kadoka, South Dakota, off I-90 in the central part of the state.

"Kids want to use their hands, especially in a rural community," he says. "They want to get away from textbook and theory and apply

it. That's why vo-ag is great, having a system like this where we all work together gives us a tie-in."

Such work teaches life skills, he says.

"Too often, the education system seems for students bound for a four-year college," he says. "That's not always the case, and the system we have here really helps kids not headed that way. They get something solid for their future."

And even for students who do head for a four-year university.

## High School Student turns College Pro

Tessa Garman was so afraid of sparks as a sophomore welder she worked with wood instead.

By the time she graduated, she had started her own woodworking business that now sparks her creativity.

"My experience in the ag program in Hulett is the reason I am who I am," says Garman, who is majoring in exercise science at UW. "I was able to find my passion within that department, and with the support of my community and family, I was able to ignite my passion into something much larger than I could have ever imagined."

## On Her Way

A basketball game table set her on her way. She found such a table she wanted to build but says she had zero experience in the shop then. Pannell

helped her draw the plans and then guided her step-by-step through the process.

"After finishing my first project, I fell in love with the concept of creating and building," she says.

She would establish Tessa's Messes, which she continues to operate. She and her father plan to expand the business this year.

"If Mr. Pannell wouldn't have offered me the opportunities he did, my high school experience and my personal life would be nothing like what it was or is now," Garman says. "The people in that school have touched my life in a way I cannot express, every last one of them."



# TEAMS PUT CHEATGRASS CONTROL EFFORTS UNDER BRIGHT SPOTLIGHT OF PUBLIC PERFORMANCE

Public and private answer cheatgrass challenge roll call



Search Facebook for Wyoming Restoration Challenge. More information about the challenge is also at [weedcontrolfreaks.com/](http://weedcontrolfreaks.com/).

Wyoming's battle cry reverberating across rangelands and echoing off mountains once may have been "Powder River, Let 'er Buck!" but now could well be "D \_ \_ \_ cheatgrass!"

It's proven a formidable opponent.

Cheatgrass is one of the greatest threats to the sagebrush ecosystem, claims Brian Connely, describing in a more refined way the invasive species flooding across Wyoming and other states. He is the Natrona County Weed and Pest supervisor.

"That's the importance of figuring out how to mitigate the impact of cheatgrass on our systems," he says.

Downy brome – cheatgrass – may be the bully sitting atop the dominant plant pyramid. The plant, which was used by the Romans to provide sod for roofs, is now building cheatgrass seas in the West, dominating weaker, native plant species.

Native species like western wheatgrass battling cheatgrass is like Sweet Pea going against the Green Giant: No contest.

Research has been sparse, not well-documented, and varies because of the plant's adaptability to climate, soil, and temperature, says Connely.

## Innovative Research Proposal

Former UW Extension weed specialist Brian Mealor peered over the edge of the box for solutions and called upon that which makes cheatgrass itself thrive



*Matthew Jolivet and his team's Cheatgrass Challenge plot.*



– competition – to develop the agricultural version of television’s “Survivor.”

Teams answered Mealor’s Wyoming Restoration Challenge roll call at the James C. Hageman Sustainable Agriculture Research and Extension Center near Lingle. Mealor made clear: the winner would rid plots of the most cheatgrass and restore a more productive and diverse plant community.

Mealor, who became Sheridan Research and Extension Center director in 2015, spent years traveling the state and seeing sites invaded by weeds. Traditional research calls for a certain protocol – demonstration plots and research plots. He’s seen many people doing their own cheatgrass management during those trips.

“My thought was, let’s open it up to see if we can put different approaches head-to-head in a fun, competitive environment and see how they do instead of just researchers doing stuff,” Mealor says. “Let’s have other people involved and make it a fun, educational program at the same time. It’s a different model for doing extension.”

### Teams Converge

So Mealor put out the casting call to scientists and members of the public to form teams and apply their remedies. His choice of competition locale was severely twisted: some truly weedy, abused, and disturbed plots at SAREC.

The three-year challenge



*Members of the USDA-NRCS/Glendo Ranchers team talk with visitors about the team’s methods to transform their cheatgrass-ridden area into a more productive plot with a diverse plant community.*

has 13 teams that include UW Weed Control Freaks, University of Nebraska Lincoln Bromus Eradicators, Carbon County W&P, Natrona+Converse Weed and Pest, UW SAREC, and SMRR (Sustainable Management of Rangeland Resources) Brome Bashers.

Several teams stood by their overwhelmed plots during the SAREC field day in August, ready to explain their plans of attack.

Opening up competition to everyone seemed popular.

“Brian Mealor does an incredible amount of public outreach on rangeland weeds, particularly cheatgrass,” says former student Matt Jolivet who is on the Goshen County Weed and Pest and Wyoming Game and Fish team.

Many agricultural producers are concerned about

cheatgrass, and control options are bleak, he says.

“Having a team atmosphere like this where you are engaging people is a fantastic way to have a visible and tangible experience,” says Jolivet. “We’ll see what happens.”

Eastern Wyoming College (EWC) A and B team members also gave thumbs up to the cheatgrass confrontation.

“I love it,” says Monte Stokes, agriculture instructor at EWC.

Most people he knows in agriculture are competitive anyway, and researchers have their own areas of expertise and interests. Others may not be so restricted.

“There are a lot of smart people in any field,” he says. “I think it’s great opening it up to the private sector and seeing what other people’s ideas are.”

“My thought was, let’s open it up to see if we can put different approaches head-to-head in a fun, competitive environment and see how they do instead of just researchers doing stuff.”

—Brian Mealor





Larry Cundall explains the Cundall Ranch-Platte County NRCS team's approach to knocking out cheatgrass.



<http://bit.ly/cheatgrass1>

<http://bit.ly/cheatgrass2>



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Fellow agriculture instructor Kaitlyn Stoben said EWC put in for two plots: one for faculty members and one for students. Student participation waned, so faculty members took over both.

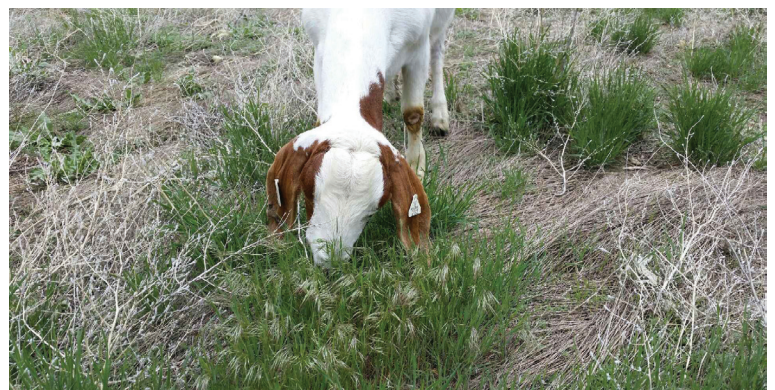
Their plan was to use herbicide on one plot and use goats to mob graze the existing cheatgrass and allow native grasses to get started. They added native plant seed and used the goats to disperse seed to increase the native seedbank. Unfortunately, the plot with the mob grazing and seeding was mistakenly sprayed.

Still, they had good results with the goats eating the cheatgrass, and good spring moisture sprouted native plants.

"I had a strong feeling we were going to win it," says Stokes.

### Forging a Young Science

Natrona County has used application of an herbicide specific to cheatgrass to stop germination in early fall and late winter and conserve native perennial grasses. The team's plan included burning off the duff, applying herbicide, and then using a bacterial product that munches on the plant's roots.



The Eastern Wyoming College team utilized goats to snack on cheatgrass and press native seed into the soil.

Cheatgrass control is a young science, Connely says.

"Because of that, it has been all over the map. People are doing all kinds of things," he notes.

Most efforts have been poorly documented and the data is less than acceptable for sharing to replicate efforts.

"There is not a lot of data collected on the different control methods like there has been on more established control programs, like leafy spurge and spotted knapweed," he says.

Cheatgrass is maddeningly adaptive. The plant in one generation in one year can adapt genetically to threats, such as different climate variables and even fungal and bacterial pathogens.

"That's one of the reasons why it's such a hard critter to learn how to control, Connely says. "It's not just a recipe to the climate and the geographical variables, and that's why good datasets are needed. We hope to learn something from those plots at SAREC."



*Flooding submerged Union Pacific railroad tracks and damaged about a quarter mile of track between Manville and Lusk June 4, 2015.*

# ONCE IN 500 YEARS

Niobrara County extension office responds to 500-year flood

"Denise and Peggy's knowledge of the community and their genuine caring exemplify the best of extension."

Mary Kay Wardlaw  
Associate Director  
University of Wyoming  
Extension



*Denise Smith and Peggy DesEnfants  
of Niobrara County Extension*

Most of us wake up in the morning with plans, expectations, and generalized notions of how the day might unfold. On June 4 at 5:30 a.m., Denise Smith, Niobrara County UW Extension educator, got a phone call.

"Denise, have you heard about the flooding?"

The call came from Peggy DesEnfants, Niobrara County extension office manager. "The overpass is gone. You better get into town now, if you can."

In Manville, residents had begun evacuating around 12:30 a.m.—some by boat. The Niobrara County Sheriff's Office issued the countywide CodeRED evacuation alert around 2 a.m. for those near the Niobrara and other rivers and creeks. Warning sirens sounded in Lusk and strong fists were pounding door-to-door.

Floodwaters battered homes, farms and ranches, highways and bridges, government facilities, water wells and railroad tracks. A gorge was washed out from Highway 20 at Manville; Van Tassell Creek washed out the main road at Van Tassell; and the railroad overpass on Highway 85 in Lusk collapsed.

## Command Post Set Up

The Niobrara County Fairgrounds, where the county extension office is located, is the county's designated shelter site.

"By the time we got there, people were lined up for a dry place and a meal," says Smith.

DesEnfants recalls a girl of about 7 with her mom. "Her cat had kittens the day before. Their house was gone, but all she talked about was finding those kittens."





*The bridge spanning the railroad tracks collapsed in Lusk. The Highway 85 closure compounded the flood's economic toll in this town of about 1,500.*

"By the time we got there, people were lined up for a dry place and a meal."

Denise Smith  
UWE Educator



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connect/2016/](http://www.uwyoextension.org/connect/2016/)

Lusk had no electricity or potable water. Once the generator was fired up, Smith and DesEnfants began cooking bacon and boiling water for coffee.

Niobrara County Emergency Management coordinator James Santistevan designated the extension office as incident command post. By 9:30, the American Red Cross and Wyoming National Guard had also set up there—with cots.

Smith relates, "When I started in extension in 1976, I

was given a federal emergency ID card and a red *Disaster Handbook for Extension Agents*."

No instructions could have prepared her for all she encountered.

Smith and DesEnfants coordinated people and resources, working with Santistevan, other government officials, and relief agencies, and volunteers. UW summer 4-H intern Eilish Hanson and county intern Abbey Larson joined them. Donations and workers began pouring in.

More than 50 agencies, volunteer organizations, and faith groups responded. They included Homeland Security, emergency management coordinators from Goshen and Teton counties, swift water crews from Casper and Laramie, the Wyoming Department of Agriculture, and the Wyoming Department of Corrections (the Wyoming Women's Center, on the north side of the river, was cut off when the bridge washed out).

VOAD, a new word to Smith and DesEnfants, is the Voluntary Organizations Active in Disaster. Its member groups took on a range of organized roles throughout the disaster. Other groups, from Habitat for Humanity to Boy Scouts, to the Torrington lifeguards showed up to help.

Says Smith, "We kept a log of people coming in and incoming calls for the National Guard, answered a million questions, distributed well water test kits, transported and distributed donated supplies, unloaded trucks, and made thousands of copies."

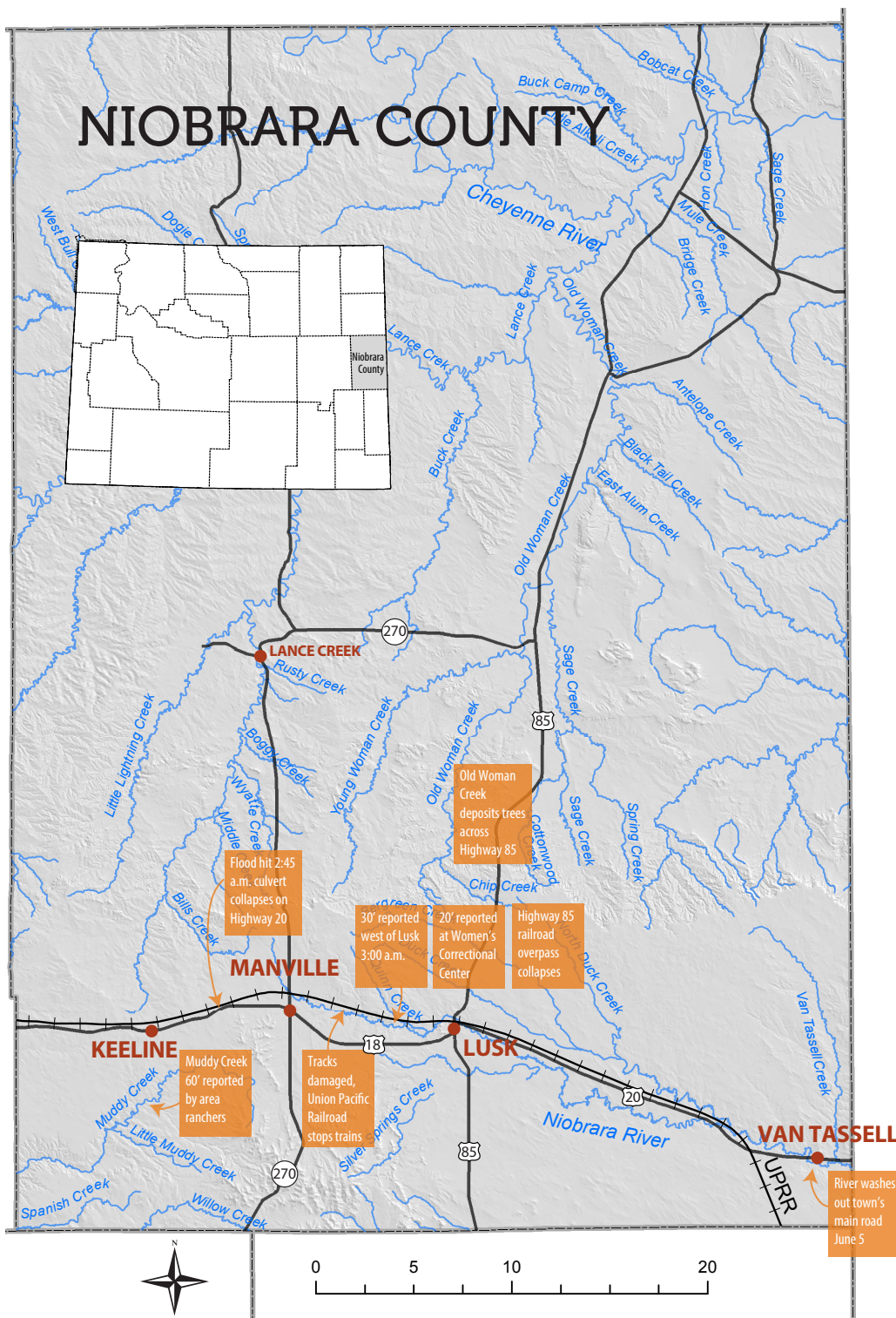
Smith and DesEnfants kept up 14-hour days for 14 days straight.

### Buildings Pressed into Use

The fairgrounds became a hub for the three Rs — rescue, relief, and recovery.

- The auditorium sheltered people displaced by the flood and served as a dormitory for volunteers; two weeks later, it became the logistical operations center for recovery efforts.





## FLOOD LOSSES IN NIOBRARA COUNTY

(approx. \$4 million in federal and state assistance approved)

- 32 businesses (31 reopened)
- 11 homes
- 200 miles of fence
- 100 head of livestock
- 4-H lambs and goats

## WHAT'S NEEDED AFTER A FLOOD?

- Maps showing towns, roads, bridges
- Muck boots and truckloads of tube socks
- Snow shovels for mud, sludge and wet drywall
- Sturdy 30-gallon metal garbage cans
- Garden hoses
- Plastic totes
- Bleach and other cleaning supplies
- Masks to protect lungs from mold
- Porta potties
- Baby wipes and hand sanitizer
- Lip balm, sunscreen, and insect repellent
- Gift cards to hardware and other stores
- Community events and tourism dollars

The Niobrara River rises from a spring about five miles west of Manville. East to the Nebraska border, the river might be a trickle, a series of puddles, or even dry, depending on the season and year. The spring of 2015 was unusually wet. After 7½ inches of rain fell in about four hours the night of June 3, the Niobrara fully lived up to its Omaha and Ponca name, meaning “spreading water.” Lance Creek, Old Woman Creek, Van Tassell Creek, and the Cheyenne River also raged.





*Retreating water left bleak scenes along four blocks of downtown Lusk (and a bicycle in a tree).*

“When you drive through Niobrara County today, the visual effects of the flood are less, but we know we have years of recovery ahead of us.”

—Denise Smith

- Three meals a day were cooked in the kitchen and served in meeting rooms. Meeting rooms were used by residents applying for emergency aid.
- Trained AmeriCorps workers took over the rodeo office. These university students from around the country managed intakes of those in need and volunteers ready to help.
- The big barn was the receiving and distribution site for bottled water, food, cleaning supplies, and building and fencing materials, much of it arriving on semis.
- The small barn and hog pens sheltered pets and livestock, while the steer trimming facility held hay and feed.
- The Shooting Sports Building was taken over by Source Gas, which used it to stage replacement meters for flooded homes and businesses, as its own facilities were under water. The building was next occupied by FEMA, which posted an armed guard and erected a high-security fence to secure its 11 manufactured housing units.

### Gearing Back up in Midst of Cleanup

The Red Cross advises communities to resume normal activities as soon as possible after an event like the Niobrara floods.

By the end of June, Smith – nutrition and food safety coordinator and 4-H and youth development educator – picked back up with a few 4-H events and activities, although most had to be moved, modified, and rescheduled. Horse judging was put off until ranches became accessible again.

When Smith couldn’t use the fairgrounds kitchen





*As this truck with county 14 license plate attests, Niobrara County was hard-hit.*

or sewing machines for a planned home economics day, she moved outside to picnic tables and filled in with activities that didn't require electricity.

The ownership deadline for the county and state fairs was June 1. Smith called the directors, who extended the date for 4-H'ers who had to start new livestock projects. One family lost lambs and goats in the floodwaters. They were helped by a Goshen County 4-H club, a family in Lusk, and a club breeder who donated four lambs. Niobrara County

4-H'ers wore t-shirts to fair that featured a boy and his fair animals in a boat.

In Lusk, organizers staged the annual Legend of Rawhide pageant as scheduled July 10-11. In 1950 and other years, proceeds from the frontier-themed performance were used to upgrade fairgrounds buildings. In 2015, the \$13,000 proceeds were donated to the Enhance Niobrara Committee for flood relief.

A temporary overpass constructed on Highway 85 accommodated motorcycles en route to the 75th anniversary Sturgis

Motorcycle Rally in South Dakota. Without it, the loss of tourist income for the town's businesses would have compounded the devastation.

#### **Six Months Later**

Long-term recovery committee meetings are still held at the fairgrounds. Smith still coordinates with Santistevan and the Wyoming VOAD. Flood-related questions trickle in.

Ranchers still have fences to replace across water gaps and debris to clear from meadows. An unexpected after-effect

has been the introduction of new weeds, and Smith expects a strong enrollment for the next extension private pesticide applicators course.

Santistevan, Smith, and others consider the most significant outcome of the community's response to be that no lives were lost.

Says Smith, "When you drive through Niobrara County today, the visual effects of the flood are less, but we know we have years of recovery ahead of us."





*Barton Stam, left, of Hot Springs County, and Ron Cunningham, Fremont County, and now retired*



*Washakie County educator Caitlin Youngquist*



*Uinta County educator Bridger Feuz*

# TURNS OUT YOU REALLY CAN

**Fremont County Farm and Ranch Days, WESTI Ag Days provide a social and educational connection stretching back 31 years**

Calendar printers over the years could have stamped these annual Worland and Riverton events on their January or February templates – for 21 years and 31 years, respectively.

Fremont County Farm and Ranch Days and Washakie County's Wyoming Extension's Strategically and Technologically Informative (WESTI) Ag Days have been a consistent element of Mother Nature's seasonal cycle in west-central Wyoming.

WESTI was prompted by the success of the annual bull test in Washakie County by the Wyoming Beef Cattle Improvement Association and UW.

"That was a lot of fun and a lot of great education went

out because of that," says former extension educator Jim Gill, who helped start WESTI.

The next question, he says, was how to follow.

"We decided to do a program that offered a mix of opportunities for ranchers and farmers and gardeners," he says. "And it took off. The other building block was about the same time we were involved with the Chamber of Commerce and got the local Ag Ambassadors involved."

## Town and Country

The ambassadors present an annual banquet to bring Worland business folks and agricultural producers together and to announce the Big Horn Basin Ag Citizen of the Year.

A group of business people and producers who liked what they saw in the event helped raise funds to start WESTI.

The culinary expertise of the Washakie County Cowbelles was enlisted to cook the day and banquet meals (search Facebook for Washakie County Cowbelles to follow them).

"The Cowbelles became famous for the meals they put on throughout WESTI," says Gill, who retired in 2010. "It came together. It wasn't me by any means. I did try and be the catalyst to make it happen. It took a lot of other people and certainly people in our office."

WESTI brings ag folks and business people together, and





*Agricultural entrepreneurship and personal financial management specialist  
Cole Ehmke*



*Community development educator Tara  
Kuipers*



*Stam and Frank Galey, dean of the College  
of Agriculture and Natural Resources*

# MIX BUSINESS WITH PLEASURE

Gill says he was always proud of that. “We always had great support from the business folks, and it brought business to Worland, too.”

## Thirty-one Years Ago

Years before WESTI, retired Fremont County educator Ron Cunningham was looking for a program beyond the several one-day programs the office offered. He had seen the success the wool growers and stock growers had offering several sessions at a time.

“So, the thought I had was, why don’t we do it?” says Cunningham, who retired in 2015.

The Fremont County extension folks met with local people to gauge interest. “They were excited about it. It started there and kept going,” he says.

Those first years were at Central Wyoming College

during holiday break, but the two-day venue became cramped, and the decision was made to move to the Armory Building at the fairgrounds.

“It was always two days because there were enough people who thought there were enough subjects we could offer, and if people were busy one day hopefully they could attend the other day,” says Cunningham, who adds people from the Lander and Fremont extension offices help with the show.

WESTI started in the Worland Elks Lodge building and moved a few years ago to the new community building.

Long-time Programs a Plus  
WESTI Ag Days is  
February 19-20 this year.

Well-established programs benefit new extension educators, says Caitlin Youngquist, Washakie County educator

now in charge of WESTI.

They provide an opportunity to meet producers and other stakeholders, work with more experienced educators to develop programs, and get a better understanding of local needs, she says.

“When I started my position in Washakie County, it was great to be able to step



*Marlene and David Nicholls at Fremont County Farm and Ranch Days.*





*Those seeking political office often attend Fremont County Farm and Ranch Days or WESTI Ag Days. Pictured, now-Governor Matt Mead, right, at WESTI.*



<http://bit.ly/westi>



[www.uwyoextension.org/connect/2016/](http://www.uwyoextension.org/connect/2016/)

in and quickly get WESTI up and running, and capitalize on the hard work of previous educators,” says Youngquist. “I really appreciated having this kind of ready-made, high-impact program already established in my county.”

Fremont County Farm and Ranch Days is February 10-11. Educator Chance Marshall is guiding the event.

“It is an honor for me to become involved in such a historical and beneficial program for Wyoming folks involved in agriculture,” says Marshall, who transferred from Campbell County to Fremont County in 2015. “I am excited to learn about the history of farm and ranch days and become part of its future

moving forward. I cannot wait for the chance to interact and meet everybody this year at farm and ranch days.”

Learning doesn’t stop when individual sessions end at the events. Both venues allow lots of visiting between sessions.

“Those attending get ideas from educators about what direction we should be working with the university in terms of research and educational endeavors, and from among themselves,” says Gill. “They enjoy getting together and getting ideas from their fellow ranchers and farmers. A lot of that happens.”

Same goes in the Armory Building.

“If they want to come and visit with their neighbors or booth people, that’s fine,” says Cunningham. “But almost without exception, most end up going to a session or two. There was always some topic that sparked their interest.”

“We decided to do a program that offered a mix of opportunities for ranchers and farmers and gardeners. And it took off.”

– Ron Cunningham  
UW Extension Educator, retired

Inclement weather never cancelled either event, although there were times speakers were unable to attend farm and ranch days, notes Cunningham, and Gill adds Mother Nature challenged WESTI several times.

Such events provide social outlets for ag folks if weather has slowed getting out and about.

“The event gives them the opportunity to go and see their neighbors and other people involved in ag and talk about what’s new and what’s affecting them,” Cunningham says.



*Wyoming State Veterinarian Jim Logan*



# COMBINE READING AND NUTRITION AND WHO KNOWS WHAT WILL HAPPEN? A LOT!



*Ron Sniffin, left, executive director of the Wyoming Education Association, and former state superintendent for public instruction Judy Catchpole at a Two Buck event in early 2015 in Cheyenne.*

**H**ow do little girls grow? Provide nutrition and literacy and they could grow up to become First Lady – or governor.

The director of the Cent\$ible Nutrition Program remembers one little girl in the movie documentary “A Place at the Table” who said she was always so hungry in school she would picture her teacher as a banana.

Mindy Meuli has not forgotten that.

On this particular day in Cheyenne last February, First Lady Carol Mead was being honored by the Legislative Spouses/Significant Others Group for being, well, First Lady and her efforts to

improve child literacy and healthy nutrition across Wyoming.

The group honors whoever is First Lady each session and her chosen projects. Their representatives had contacted Mead to find if there was an issue she wanted highlighted.

## Two Buck Event

Mead mentioned a Two Buck Lunch sponsored by CNP she attended the previous year, and the group representatives then contacted Meuli. That event, offering a menu made of CNP recipes, provided “an amazing variety of food for a very small budget,” Mead recalls.

She also requested

Triumph High School’s culinary class prepare the meal for this year.

More than 70 legislative spouses and significant others attended the Cheyenne event. They had to keep meal costs at or below \$2: chicken enchiladas were 90 cents; sour cream 10 cents; corn bread 15 cents; tossed green salad 25 cents; dressing 10 cents; fruit salad 20 cents; milk 15 cents; coffee and pop, 10 cents.

Posters of \$2 alternatives hung on a wall facing those going through the line: coffee and a doughnut; one large order of French fries; one fast food burrito; two vending machine snacks.



<http://bit.ly/twobucklunch1>

<http://bit.ly/twobucklunch2>

<http://bit.ly/twobucklunch3>



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“First Lady Carol Mead has really been a champion for us. Part of her efforts include healthy meals, healthy eating, and she saw CNP as a model for healthy eating.”

– Mindy Meuli,  
Cent\$ible Nutrition Director

*First Lady Carol Mead requested the Cent\$ible Nutrition Program Two Buck Lunch – with food prepared by the culinary class at Triumph High School – be featured during the Legislative Spouses/Significant Others Group program in early 2015 honoring her children’s literacy and healthy nutrition efforts.*



*This meal prepared from Cent\$ible Nutrition Program recipes cost less than \$2.*



*Karen Brooks-Lyons and Mirich Samuel of Laramie County School District One at a Two Buck Event at the district administration building.*

The CNP program, Mead says, extends the ability of families to get a nutritious meal on very tight budgets.

“First Lady Carol Mead has really been a champion for us,” says Meuli. “Part of her efforts include healthy meals, healthy eating, and she saw CNP as a model for healthy eating.”

CNP is a part of the University of Wyoming Extension and partners with the Wyoming Department of Family Services and other county and local service providers. CNP is funded by the Supplemental Nutrition Assistant Program Education (SNAP-Ed) and the Expanded Food and Nutrition Education Program (EFNEP).



## Body and Mind Nutrition

CNP has collaborated before with the First Lady on the “Eat, Read, Grow” program that has the literacy component. Families are invited for a meal during the evening and books are provided for children.

“We provide a very nutritious meal for these families and show how they can actually take that home [through CNP recipes],” says Meuli. “It’s a great program.”

Some residents are not so fortunate to share in Wyoming’s land of plenty. The Wyoming Food Bank of the Rockies says:

- About 1 in 12 residents struggle to put enough food on the table.
- About 39 percent of Wyoming children qualify for the free or reduced lunch (almost 26,000 children).
- About 9.4 percent of children in Wyoming live in poverty.

Meuli believes hunger is more widespread in Wyoming than many may think.

“I’ll never forget my first class I went to in Jackson,” she says. “The educator asked, ‘How many of you had breakfast this morning?’ and this little boy says, ‘My dad doesn’t get paid for a week so we don’t have anything in the house to eat until he gets paid. So we don’t have breakfast.’ That stuck with me. We just don’t realize it’s common.”

There are other programs similar to Eat, Read, Grow, says Meuli. Dependent upon

each county, they may be called Dine and Discovery or Book and a Bite.

## Leveling the Food Landscape

The event goals are to increase recognition of CNP and build partnerships, says Megan McGuffey, CNP manager.

Events were requested in Laramie, Torrington, and Douglas following the Cheyenne Two Buck Lunch.

“One of the main things we do is partner with other groups that target similar audiences,” McGuffey says. “I thought we had a great showing. Over 70 people were there. Whenever you have a figure like First Lady Carol

Mead backing our program, that’s great.”

There is discussion at the federal level to reduce SNAP-Ed, says Meuli.

“When you get down to working with the people, SNAP benefits may be the only source of money for food,” she notes. “I personally think everyone has a right to food. How can we tell people we are not going to support them being able to buy food?”

The girl Meuli remembers imagining her teacher as a banana could not focus on schoolwork because she was so hungry.

“When we set children up like that, how do we expect them to succeed?” she asks.

“I personally think everyone has a right to food. How can we tell people we are not going to support them being able to buy food?”

– Mindy Meuli, Cent\$ible Nutrition Director



Megan McGuffey, left, Cent\$ible Nutrition Program manager, and Mindy Meuli, CNP director



# Wyoming Conservation Exchange FOR GOOD



Cows and economists in Wyoming may be among the greater sage-grouse's best friends – cows because ranchers managing for healthy rangelands preserve sagebrush habitat and economists because they are helping develop a system, the Wyoming Conservation Exchange ([bit.ly/wyomingconservationexchange](http://bit.ly/wyomingconservationexchange)), that can pay landowners for conservation actions.

"You could think of it like a livestock auction," says Eric Peterson, pilot administrator of the Wyoming Conservation Exchange (WCE). Buyers, for example energy companies seeking mitigation credits or organizations seeking habitat conservation, pay sellers (landowners) for management practices that produce long-term outcomes.

## Wyoming-grown

Collaboration is a hallmark of the exchange, says Kristi Hansen, water resource economist at the University of Wyoming. Hansen, as a UW Extension specialist,

helped landowners and others develop the framework for the exchange.

"This is Wyoming-grown conservation," Hansen says.

The WCE, formed in 2012, creates offsets for habitat impacts that cannot be avoided or minimized during activities such as wind, pipeline, oil and gas, and other industrial development. The values attached to habitat disturbances (debits) and conservation outcomes (credits) are market-based and science-based, Hansen says.

The state of Wyoming has developed a system to quantify debits. WCE partners are refining the exchange mechanism to more closely match the state's mitigation policy, says Peterson. The state plan and exchange meet guidelines established by the U.S. Fish and Wildlife Service.

"Right now we're working on the credit side," Peterson says.

Participation in the exchange for both sides is voluntary.

"By using tools that

encourage collaboration and forward thinking, everyone — including the greater sage-grouse — wins," says Peterson, a former UW Extension educator in Sublette County.

Exchange partners include landowners, University of Wyoming, the Sublette County Conservation District, The Nature Conservancy Wyoming chapter, Environmental Defense Fund, Wyoming Association of Conservation Districts, and the Wyoming Stock Growers Association.

The conservation exchange is conducting pilot projects to refine how transactions will work, says Hansen. While most of the attention has been on sage-grouse, the exchange is also working on projects for mule deer habitat and water quality and flows.

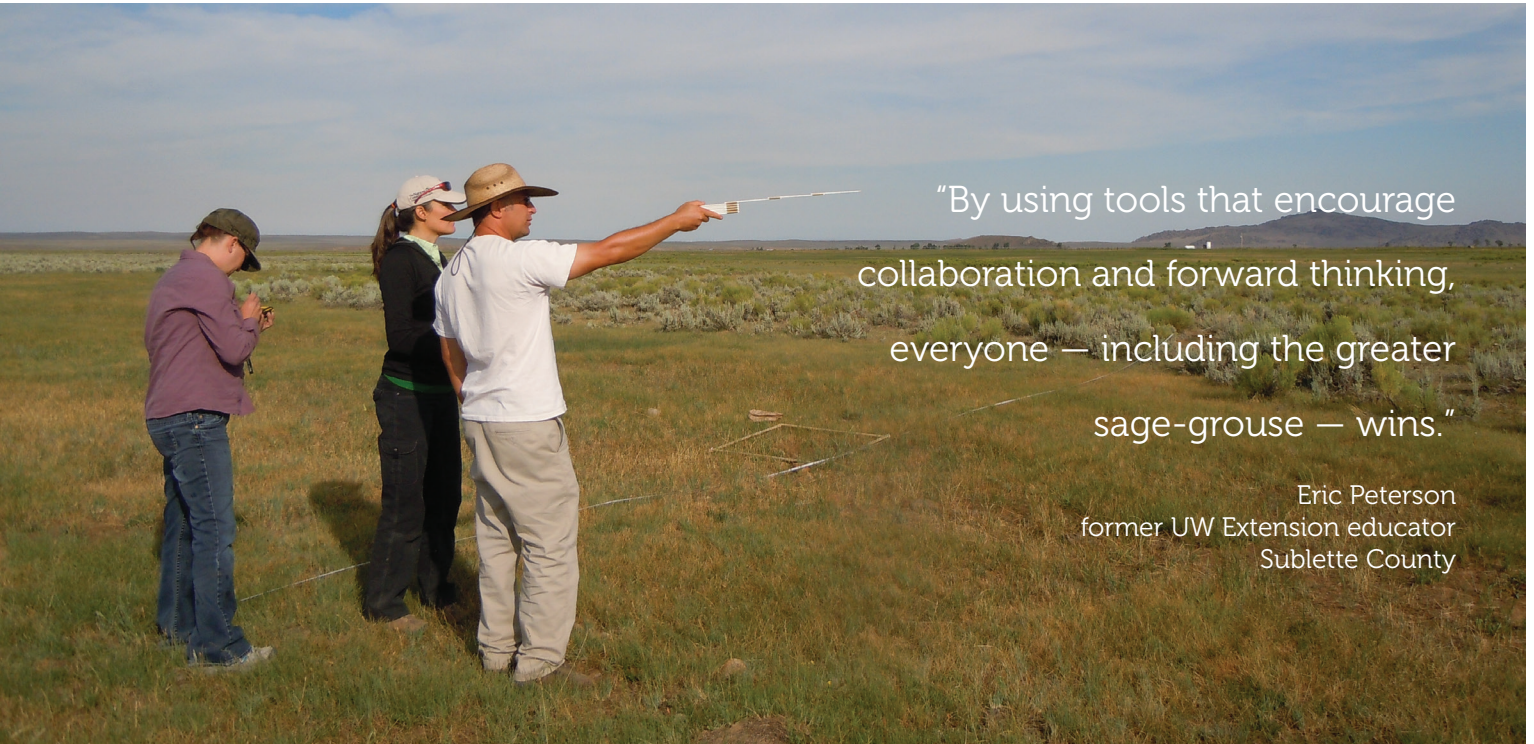
## Exchange Contributes to New Conservation Course

The male greater sage-grouse struts and flaps and swells its yellow air sacs in spring to attract an audience





# to put sagebrush on the market –



"By using tools that encourage collaboration and forward thinking, everyone — including the greater sage-grouse — wins."

Eric Peterson  
former UW Extension educator  
Sublette County

*Conservation credits start on the ground. Melanie Purcell, wildlife and habitat program manager for Sublette County Conservation District (in back), Jen Lamb, southwest Wyoming program director for the Wyoming chapter of The Nature Conservancy, and Matt Holloran, senior ecologist with Wyoming Wildlife Consultants, conduct baseline monitoring to measure sage-grouse habitat quality.*

of females. The dominant male takes center stage in an opening in the sagebrush called a lek. The sage-grouse are oblivious to all but their own instinctual business; however, as an indicator species for sagebrush ecosystems, they have created a stir.

The U.S. Fish and Wildlife Service in 2010 determined greater sage-grouse warranted protection under the Endangered Species Act. The agency cited habitat loss and

fragmentation as key threats. Federal action raised a swirl of questions about the future of ranchers and ranching communities, energy development, conservation, and the ability of Wyoming citizens to make a living ([bit.ly/govmeadorder](http://bit.ly/govmeadorder)).

Secretary of the Interior Sally Jewell September 22, 2015 announced the Fish and Wildlife Service would not list the bird. She cited collective efforts of governments,



*Could a conservation exchange work in Wyoming? Representatives from the Wyoming Stock Growers Association, Sublette County Conservation District, The Nature Conservancy, Environmental Defense Fund, and University of Wyoming Extension come to the table at Red Canyon Ranch near Lander to work out the details.*





*Sublette County rancher Albert Sommers says rangeland biodiversity is good for sage-grouse and cattle.*

"The vote was the fed's acknowledgement that state governments, landowners, industry, and conservation interests are working together to develop approaches to preserve the sagebrush habitat."

Albert Sommers



<http://bit.ly/conexchange>



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landowners, industry, and recreational and conservation interests in 11 states as a primary reason.

"This has been an extraordinary effort on a scale we've never seen before," said Jewell. "I'm optimistic we have shown that epic collaboration across a landscape, guided by sound science, is truly the future of American conservation."

#### Encouraging Words from the Range

The announcement made September 22 a red-letter day for many in Wyoming, including Albert Sommers of Sublette County.

"I think the feds for the first time really recognized that the Wyoming process, a collaborative process, has value," he says.

Sommers provided a landowner perspective during

the development of the WCE. The rancher and state legislator has more than a passing interest in the state's wildlife and economic health.

"The vote was the fed's acknowledgement that state governments, landowners,

industry, and conservation interests are working together to develop approaches to preserve the sagebrush habitat," he notes.

He points out ranchers call the sagebrush habitat "range." The area may be core sage-grouse habitat, but it's also where ranch families make their homes and living raising livestock.

Sommers makes clear that by participating in development of the exchange mechanism, he does not represent landowners. For that, you have to talk to the Wyoming Stock Growers Association, he says.

Sommers' ranch is home to greater sage-grouse, mule deer, and other wildlife species. He also runs cattle on allotments leased from the

*Wyoming was the first state to designate greater sage-grouse core habitat areas.*





Bureau of Land Management and U.S. Forest Service.

He has sold a conservation easement on his property that provides protections in perpetuity.

While many landowners say, "That's not for me," he also hears from those who want to do something for 20, 40, or 80 years, he says. "That was the genesis of this process."

The exchange will provide fixed-length "term" contracts as well as perpetual easements.

"An industrial project might create an impact for 60 or 80 years," Sommers points out. "Perpetuity is the gold standard for conservation, but we may not need to mitigate in perpetuity if a landscape can be reclaimed.

"In reality, we won't know the challenges of an idea like the Wyoming Conservation Exchange until we're hip deep in it," he says.

But Sommers knows one thing.

He believes you have to conserve land to conserve wildlife in the West.

"I believe in ranchers and the West," he says. "My task in life is to show that compatibility and preserve that compatibility."



*Wearing his sage-grouse lapel pin, Governor Matt Mead joined Interior Secretary Sally Jewell in Pinedale in 2014 to applaud conservation agreements undertaken by ranching families.*

"This has been an extraordinary effort on a scale we've never seen before. I'm optimistic we have shown that epic collaboration across a landscape, guided by sound science, is truly the future of American conservation."

Sally Jewell, Secretary of Interior

## SCIENCE ON THE LEK

The report issued by the Western Association of Fish and Wildlife Agencies ([bit.ly/sagegrousepopulation](http://bit.ly/sagegrousepopulation)) shows sage-grouse populations vary greatly over time, but the number of male birds documented in 2015 has rebounded from a recent low in 2013.

The greater sage-grouse is the largest native grouse species in North America. Its range covers 11 western states and portions of two

Canadian provinces.

Population estimates are based on male birds counted on traditional mating areas, or leks. In Wyoming, 34,518 males were counted in 2015, which was 43 percent of the range-wide total. The overall number has increased 63 percent since 2013.

The counts have been conducted for more than 50 years by state wildlife agencies with help from partners and volunteers.

The report was prepared by WEST, a statistical and environmental consulting firm in Cheyenne, to provide scientific information to the U.S. Fish and Wildlife Service.

WEST analyzed information from more than a dozen databases from the 11 states. Modeling showed range-wide populations have declined at a rate of about 0.8 percent per year since 1965, but the rate of decline has slowed.



Ricardo Martinez of Worland is first to follow the markers designating various plant species in the identification text.

# Annual program logs 20th year teaching youths natural resource skills

**R**ancher Kelly Guild, sitting on the tailgate of his pickup, was getting ready to answer the question why he was so willing to open up Guild Ranch rangelands near Fort Bridger to youths attending the week-long Wyoming Resource Education Days (WyRED).

Barbed wire, old posts, and other items you'd expect to find in the back of a ranch pickup lie scattered in the truck bed behind him.

The 30-or-so youths and adults were trodding, prodding, and poking plant life and soil on the gentle slope up from the dirt road.

"First of all, it's dealing with youth," he says, his young dog content with back feet on the truck bed and paws on the closed tailgate. "Anytime, it doesn't matter if it's dealing with WyRED or whatever, I think it's very important to educate our young people. And second, I think we need to get the best minds we can back into agriculture. If they're willing to participate in it, I'm sure willing to help them any way I can."

This was the 20th year of the program and the second time at the Uinta County Youth Camp (year 15). The annual program changes location each year.

Youths and adults had

climbed into a Lyman Public School bus during morning cool at the high-elevation camp 20 miles or so south of Mountain View to start a day of tours, plant identification, and soil profiling.

Guild met them at the igloo-shaped charcoal kilns by the side of the road that runs through the ranch. Built in 1867, the kilns – only three of the original 40 remain – provided charcoal to Utah iron smelters. He regaled the group with family stories of the kilns and of a bead purse, an appreciation gift that remains in the family from Chief Washakie.

Connecting youths to landscapes is important, says Windy Kelley, president of the Wyoming section of the Society of Range Management (SRM) and one of the reasons the organization continues the WyRED program. The society this year co-sponsored the program with the Uinta County Conservation District.

Youths learn relationships between soils and vegetation whether they want to become a wildlife manager, a rancher, farmer, or veterinarian, says Kelley, a University of Wyoming Extension educator. Even if they don't want to work in natural or animal sciences, the knowledge gives them a good





understanding of taking care of the land.

WyRED drew youths from as far away as Powell and Sundance.

Taitlyn Bethea is a senior this year at Sundance High School. She wants to pursue a career in rangeland management, botany, or horticulture.

"I thought this would be a good opportunity to expand my knowledge on rangeland plants in Wyoming," says Bethea, joined by fellow students Bailey Middleton, Haley Merchant, and Megan Olson from Sundance. "Not only that but to meet people from around the state who have the same interest as me."

Teachers could receive continuing education credits, and elementary and high school teachers mingled with youths while instructors from resource agencies taught plant identification and anatomy, soils, wildlife and resource management, and water/hydrology.

Students huddled at separate stations spread over the rangeland at the beginning of the week at the camp, examined plants, and dug holes to examine soil profiles. That afternoon of instruction ended with students walking from red flag to red flag for a plant anatomy and specimen identification test.

Jim Hickey, a fifth grade teacher at Mountain View Elementary, and his wife, Julie, who teaches first grade, were among the students. They participated in all the events the youths did and



*Elizabeth Martinez, left, of Worland, and Marji Patz, rangeland management specialist in the Natural Resources Conservation Service office in Powell.*

listened to a panel of speakers brought to the camp one evening.

What panel members said impressed Jim Hickey.

"It helped these students understand all the opportunities there are in agriculture," he says. "They may never have the opportunity to own a farm or ranch, but if they have an interest in agriculture, there are many more opportunities for them."

While there is little leeway in school curriculum, he may be able to work what he learned during the week into classes, such as in science.

"At fifth grade, they start looking at careers and what to do," he says. "I'll have a better knowledge of the opportunities available to them and direct them."

## THE TAKE-HOME MESSAGE

Windy Kelley, president of the Wyoming section of the Society for Range Management, didn't hesitate when asked what she hoped those attending WyRED would take home at camp's end.

"A new perspective of their environment, what is around them and being more inquisitive of and a great connection to their surroundings," she says. "And ultimately, I hope we are teaching our future natural resource professionals as well; if not, then to be resource stewards."

*The Wyoming section of the Society for Range Management and the Uinta County Conservation District put on Wyoming Resource Education Days with these additional sponsors:*

- Soil and Water Conservation Society
- Natural Resources Conservation Service
- Wyoming Department of Agriculture
- Wyoming Agriculture in the Classroom
- Wyoming Livestock Roundup
- University of Wyoming.



# RANCHER, CONSERVATION SERVICE WANT YOUTHS TO LEARN FACTS, STARE DOWN FALSEHOODS

There are further connections between The Guild Ranch and WyRED than land to tour.

Rancher Kelly Guild emphasizes the need for truth to be told about agriculture, and Briar Harris, education coordinator with the Uinta County Conservation Service, says her board wants to give youths agricultural facts so they can form their own opinions.

Guild talked about how people with roots in agriculture and weary of vitriol thrown against the industry are standing up.

"A lot of people are interested in agriculture for the good and for the negative, a great number of them," he says, the Guild Ranch headquarters sitting a little ways away in a low area.

You can tell he's not done.

"What I think has happened is there has been a rebound of people saying 'Wait a minute, my grandpa was in ag, and I went to grandpa's place or mom's – so many of us can trace our roots back to our ranches and farms in America – they're standing up and saying, 'That's not true what's being told,' " he says.

"Where I think the influx of interest is coming from is there has been such a backlash against ag, you're seeing people willing to stand up and saying, 'I don't think that is right.' Even going to the point they are making a career out of agriculture."

Long-time WyRED instructors say they've seen students take the



plant and soils knowledge gained on to ag-related careers.

"They continue with that same knowledge," says Harris. "It may be in a different aspect, but we are finding them in different agencies – the BLM, Forest Service, NRCS. That's where we see WyRED making an impact. The more the kids learn, the more of an interest they have. They may like plants today, but may go to college and like soils better."

Marji Patz, rangeland resources specialist with the Natural Resources Conservation Service office in the Powell Field Office, spends her vacation to teach at WyRED. Other instructors included Glen Mattke, area resource soil scientist in the Rocky Mountain Region and based in Riverton, Rex Lockman, wildlife and range specialist with the Laramie County Conservation District, Dan

Rodgers, an associate professor in the UW College of Agriculture and Natural Resources (who has taught at every WyRED save once), and Mae Smith, an extension educator based in Big Horn County. Several others joined the program during the week to help teach at WyRED.

Harris approached her board to host WyRED after attending last year's in Harriman.

"I spent one and a half days there, and within that I learned so much, not just about agriculture but rangeland in general and how it affects wildlife," she says. "I thought it important enough I brought it to my board. They are huge supporters of WyRED. Financially, they put a lot of money toward it. For us, it's crucial those kids have the information so they can form their own opinion with facts."



# WyRED MAY CHANGE LOCALE EACH YEAR BUT DRAWS UPON SOLID RESOURCE

Dan Rodgers may TALK about hanging up his rangeland education spurs, but he'll just as readily say how much his enjoyment of teaching kids natural resources might keep those spurs on for at least a little while longer.

Rodgers, a professor in the Department of Ecosystem Science and Management at the University of Wyoming, may be the longest-serving teacher at WyRED, having started in 1980 when he came to UW from Texas. That's only four years after the earliest date he could find of any mention of resource youth camps in Wyoming.

He served pretty much fulltime as the extension range specialist during his first 11 years at UW, and he says he accepted youth education as part of his responsibility. Rodgers had worked with youth camps in Texas and says he had some idea of what a youth camp should be.

"I like to work with youths," he says. "They have enthusiasm for learning. It's easy to get them interested to work a week on the natural resource things regardless of how much education they've had already. It's almost like a bottomless pit to fill up with ideas and information, and they can get excited about it."

## Draws Upon Experience

Rodgers finished his formal schooling 48 years ago and has seen a lot of problems and solutions in many different areas over a lot of years.

Some work. Some don't.

Sometimes people don't want to hear about what worked three states away that might be of use, he says.

Even so, "Sometimes my knowing of what's been tried helps me give them better advice on what they might try to improve their situations," says Rodgers.

"On the other hand, I'm getting awfully old and not sure the kids want to listen to me. So, I might ought to hang up my spurs before long and let other people work with these young folks," he continued. "They might be more effective. No one ever tells that to my face, but they may be thinking it when I'm trying teach them something."

The Wyoming Chapter of the Society for Range Management held the first range camp in 1976 near Buffalo. The name changed in 1996 and, except for 1995, the camp has been held every year. The chapter is the WyRED driver but depends upon

conservation districts or other agencies to host and fund the week-long camp. WyRED shifts location to location, depending upon which organization is a sponsor.

The Uinta County Conservation District (UCCD) hosted in 2015.

## Prompts Uinta Sponsorship

UCCD education coordinator Briar Harris knew she had to bring WyRED from one side of the state to the other after little more than a day at the 2014 camp near Harriman.

She says she's always looking outside the box for opportunities to help inform teachers and, ultimately, students.

"They will make the decisions coming up that will ultimately impact my life and my children's lives," says Harris. "What's more important



*Dan Rodgers, a professor in the Department of Ecosystem Science and Management, has been teaching youths at WyRED camps for more than 20 years.*



than anything is for them to have information, not to force them to form opinions but give them information so they can form their own opinions."

The 2014 schedule included many of the same topics as in 2015, including riparian rehabilitations, an introduction to ecological sites, and range health.

"I spent one and a half days there, and within that I learned so much, not just about agriculture, but rangeland in general and how it affects wildlife," she says. "I thought it important enough I brought it to my board."

Sometimes, old-timers are stuck in their ways and don't want to accept new ideas, says Rodgers, and operate on unproven ideas of range management.

"I have that same trouble in my college classes," he says. "In some cases, young students are operating on some idea they heard growing up. It might have been the latest science 50 years ago, but it's been proven wrong since then. The hardest thing for college classes is to get students to

**"I like to work with youths. They have enthusiasm for learning. ... It's almost like a bottomless pit to fill up with ideas and information, and they can get excited about it."**

Dan Rodgers  
Professor, Department of Ecosystem  
Science and Management

give up old ideas and accept the new sciences based on better research."

#### **Assists Lesson Development**

Several elementary school teachers attended WyRED this year as did several vo-ag teachers. Harris believes teachers are the key to providing unbiased information to children.

Harris may be invited into a classroom once a year, but teachers may work natural resource education into daily lessons. The district provides facts to teachers through workshops. That information can be incorporated

into various subjects – such as reading and history.

Conservation district education coordinators help time-restricted and curriculum-bound teachers find how to work the information into a curriculum by designing lesson plans or finding those lesson plans, notes Harris.

Rodgers plans to remain involved the next few years then hang up those spurs and leave the teaching to the young.

Or, "I still might help them after I retire if they need help," he says. "I wouldn't have any university support, but I enjoy it that much I might agree to help if they still want somebody."



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