



2018

EXTENSION
IMPACTS



UNIVERSITY
OF WYOMING

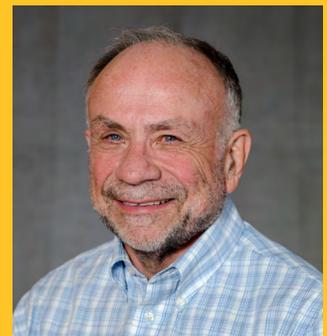
The impacts of University of Wyoming Extension are statewide, regional, and even international, yet always local. 4-H'ers, ranchers, and gardeners can log onto extension-sponsored Zoom conferences or online trainings from across the state. And every day, UW Extension educators and specialists show up at community centers, community colleges, homes, farms, ranches, gardens, and schools to explore current needs and deliver programs with lasting results.

The Extension approach is always research-based, results-oriented, and collaborative.

UW Extension educators taught or facilitated 4,109 educational programs and reached 257,08 adults and youth in 2016–17 through initiatives in range management, agriculture and horticulture, nutrition and food safety, community development, 4-H youth development, Cent\$ible Nutrition, and Master Gardeners.

In 2017, extension employees submitted 100 impact statements that formed the basis for reporting to the USDA National Institute of Food and Agriculture.

The 11 stories selected for Extension Impacts 2018 represent snapshots of UW Extension from educators and specialists, participants and partners who believe people have the ability to enlarge their lives and change their futures.



Glenn Whipple

If you want to learn more about any of these UW Extension programs or a program not included here, contact your county office or educator or Director Glen Whipple at (307) 766-5124 or glen@uwyo.edu.



2018 Extension Impacts

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“TREBLESOME” TEEN CONTEMPLATES CAREER IN AG

WORLAND – Rachel Drake wanted to be a vet. Now she thinks she’d like to pursue music...or something in agriculture, perhaps animal care.

“When thinking about careers in high school, it can be challenging and overwhelming,” says Amber Armajo, UW Extension youth educator in Washakie County. Through informal discussions with local 4-H Council members and parents of high school-aged youth, she learned there was a desire to learn more about careers in the agricultural industry.

Meanwhile, extension educator Caitlin Youngquist, one of the planners of UW Extension’s Strategically and Technologically Informative (WESTI)

Ag Days, wanted to get the youth of the community more involved.

UW specialists, area educators, and industry specialists would already be there for the two-day conference held in February at the Worland Community Center.

“It seemed like a great way to use the resources available,” says Armajo. They billed the new WESTI session as an Agriculture Career Extravaganza. Dinner was provided by the WESTI Ag Day sponsors.

Drake, who was 16 at the time, visited with adults at each table about what they do every day on the job. The careers covered animal nutrition, ag





▲ To get their “passport” stamped and win prizes, students asked prepared questions: “What education does this career require?” “What is the least favorite part of your job?” and “What advice do you have for graduating seniors?”

economics, extension, ag engineering, ag communications, agronomy, technology, and research.

“It was interesting to see how people got to their careers,” observed Drake. “I met a lady who wanted to study human cells but found something in agriculture and switched.”

After the two-hour careers extravaganza, parents wrote comments such as “My daughter loved learning about livestock genetics research and plans to pursue it in college,” “My son really had no idea all of this existed,” and “My kids enjoyed rotating around to visit with different people and get tidbits of information.”

A year later, Drake remembers equipment dealer Chris Schmeltzer.

“How he described what he does and how much he enjoys it caught my attention,” she says. “To see that passion was really intriguing.”

Another career has captured Drake’s notice. “Amber Armajo does a great job getting programs running and kids in our county involved,” she says. “If not, I’d probably be at home watching TV.”

In 4-H, Drake has raised alpaca, poultry, market and dairy goats, and swine. She is involved in youth leadership. Outside 4-H, she sings with Treblesome, an audition-only girls’ choir.

For her, the career question remains: ag or music?

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◀ Mykle Baugh of Diesel Pickup Specialists in Worland shares details about his work with Brooke Wright.



CHICKS TEACH K-4 SCIENCE, TECHNOLOGY, ENGINEERING, MATH

TORRINGTON – After a 2016 fourth-grade ag expo sponsored by the Goshen County Conservation District, teachers wondered how to integrate more agriculture opportunities into their classrooms while also meeting academic content standards.

Torrington-based youth development educator Megan Brittingham recognized an opportunity.

She identified Chick Quest, a research-based, peer-reviewed curriculum from Ohio State University Extension. Goshen County School District #1

curriculum specialist Donna Fields supported the hands-on approach to science, technology, engineering, and math (STEM) skills and gave the go-ahead for the 4-H in the classroom partnership in 2017.

COMMUNITY JOINS THE QUEST

A donation of \$1,500 from 21st Century Equipment, the local John Deere dealer, and \$750 from the Goshen County Master Gardeners got the chick project started. Incubators, egg turners, brooder supplies, and curriculum were purchased.

▼ *Students from LaGrange Elementary School show off their newly hatched chicks.*





► *LaGrange Elementary teacher Katrina Eisenbarth said her students were “engaged and full of questions.”*

Local 4-H member Jakob Llewellyn donated 77 fertilized eggs and 4-H'er Emily Zavorka supplied the brooders. Z&W Mill contributed chick starter and hay.

Eight teachers and more than 150 students from kindergarten to fourth grade followed the life cycle of embryonic chicken eggs to fluffy chicks to developing chickens. Brittingham and Llewellyn provided support via phone, email, and classroom visits.

DIDN'T WANT IT TO END

“This has been a remarkable experience for me and my students,” reported Trail Elementary School third-grade teacher Sharon Stalboerger.

After completing the 21-day program, students, teachers and staff agreed the chicks should stay in the classrooms until the end of the school year.

Teachers reported Chick Quest improved students' STEM abilities, pointing to improvements in developing research questions and hypotheses, measuring skills, and recording observations.

“We were getting quite good at thinking scientifically,” said Laurie Reichert

and Connie Krueger, teachers at Valley Christian School.

Brittingham says 100% of teachers indicated the program increased their students' ag literacy.

To keep the momentum going, Llewellyn exhibited many of the chickens at the 2017 Goshen County Fair, fitting the birds with leg bands that corresponded to each classroom.

In recognition of the success of the 4-H in the Classroom initiative, 21st Century Equipment increased their donation to \$2,000, and the Community Pride Foundation awarded a \$1,250 grant for the 2018 project.

The 4-H in the Classroom partnership picks back up in the spring with more Chick Quest sessions and the addition of a Junior Master Gardener program.

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4-H YOUTH MAKE HUNTING, CONSERVATION CONNECTIONS

THERMOPOLIS – Lexi Overfield, 12, says she likes shotgun because that’s what she shoots at state and county 4-H shoots. Her other favorite is archery.

“I like how you feel like you’re in control,” she says. “You get the bow, get the targets, make sure they’re all lined up. You adjust the string and cams on the bow based on your strength and how far you want to go.”

During the 4-day Hot Springs Shooting Sports Camp last June, Wyoming Game and Fish officials showed how to identify wildlife furs, tracks, and skulls. Volunteers from the Rocky Mountain Elk Foundation talked about elk habitat and land conservation. “We also talked about elk migration,” says Overfield, “how they move, their patterns, and how they’re collared and tracked.”

Hot Springs County Extension youth development education educator Joey Johnson, who organized the camp, says teaching outdoor awareness is one of the primary goals, along with fundamentals of firearm safety and marksmanship skills. “The foundation of hunting ethics and basic wilderness skills will last the youth a lifetime,” he says.



◀ *Charlie Ferree, shotgun leader, assists 4-H member Ellis Webber at H<>W 4-H Camp at Grass Creek, Wyoming.*

In 2017, the camp attracted 37 youth, most between the ages of 10 and 14, and 23 4-H leaders and volunteers. They also increased their stay at the H<>W 4-H Camp from three to four days. A grant from the Rocky Mountain Elk Foundation helped keep the cost for campers low.

Activities were aimed at improving shooting and sportsmanship skills in the five shooting disciplines offered in the state 4-H shooting sports program. Shooting camp participants demonstrated firearm safety and handling procedures and range commands by passing a skills check list.

Johnson notes Hot Springs County 4-H has seen a 500 percent increase in the muzzleloader discipline because of campers’ experience shooting traditional muzzleloaders.

Camp is also a time for building supportive relationships with other youth and adult leaders, says Johnson.

“We get to go fishing in the pond and play group games like hide and seek in the dark,” says Overfield. “It feels more free than in a town with schedules. It’s a small group, so we get to know everyone better.”

“It’s just nice,” she says.

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KIDS COOK UP HEALTHY HABITS

NEWCASTLE – Parents in Weston and Crook counties may be getting more help in the kitchen. The report comes after 249 5- to 14-year-old students took cooking classes in 2017 with Vicki Hayman, UW Extension nutrition and food safety educator for the northeast area of the state.

“I love to cook!” said third-grader Rylee Donner, who says she’s had the classes every year since she was in kindergarten. “Lots of kids like cooking,” she says.

Hayman teaches a variety of hands-on classes throughout the year in the kitchens at Newcastle, Upton, and Hulett high schools. She is assisted by parent volunteers, community coordinators, and summer recreation interns.

A primary goal of the Cooking with Kids program is countering grim statistics relating to childhood obesity, fast food calories, and diet quality of youth.

Hayman says cooking can be a springboard to improved health and wellbeing and increased social connections, especially when food is shared with family and friends.

“Preparing food in small group settings contributes to personal

and social development,” she says. “Besides being a basic life skill, cooking can instill a feeling of accomplishment and pleasure.”

“I like measuring flour,” and “When do we get to cook again?” are comments Hayman heard last year. Of the 249 students Hayman taught in 2017, 169 reported they would help cook at home. Brandi Donner, Rylee’s mom, says they make pizza using a recipe they learned in Hayman’s class. Says Rylee, “I would give it five stars!”

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▼ *Alison Auch and Claire Beastrom prepare to cook at Newcastle High School. Lilly Lopez looks on.*



FAMILY EATS HEALTHIER, AVOIDS SKY-HIGH FOOD COSTS

DOUGLAS – The story is familiar: Two working parents and a family to feed. For Jason and Vanessa Sanchez, there are a lot of kids – and planes to build.

“Jason knew how to cook Hamburger Helper and that’s all,” says Vanessa Sanchez. “That stuff is disgusting. I wouldn’t even eat it.” For her part, she admits she was blinded by health claims on food packaging.

Then she heard about the Cent\$ible Nutrition Program (CNP) classes offered by Tammy Ware, the CNP educator in Converse and Niobrara Counties. The couple signed up and attended the classes over their lunch hour.

“Vanessa and Jason stood out to me because they worked well as a team and talked about how what they were learning would work for their family,” says Ware, a CNP educator for ten years. “They were enthusiastic and seemed happy to be there.”

“We enjoyed it a lot,” says Vanessa. “We got to spend time together and learn to cook.” Their younger kids joined them when school was out for spring break.

Jason is a fabricator and partner in a company that produces Alaska bushwheel-type backcountry airplanes, kits, and parts in Douglas. Vanessa works on parts production and interiors.

When the couple married three years ago, Jason brought four children into the family and Vanessa five. At the time they took CNP classes, they had children at home ages 17, 16, 15, 12, 10, 9, and two eight-year-olds.

“Yes, it is a big family!” says Vanessa. Resources have to stretch far.

She, Jason, and other class participants learned how to save money through menu planning, smart shopping, and awareness of misleading marketing techniques. They also learned safe



◀ *Cent\$ible Nutrition Program participants at Eastern Wyoming Community College, Douglas campus: Shyann Dysart with son Tayson, Seth Hamilton and Tessa Lindblom with their son Anthony, Coral Horr with son Dautry, and Jason and Vanessa Sanchez with Gauge and Adaline. “The younger kids loved the cooking classes,” says Vanessa.*



“Thank you so much for the class. It made me think twice about food. I found fast and easy ways to cook, which, with my family, saves me a lot.”

—Vanessa Sanchez

food handling and how to use nutrition labels to make healthier choices. The CNP cookbook, which all participants receive free, gives practical tips and go-to recipes, many of which can be combined, extended, or made ahead.

Almost a year after the class, Vanessa says she still reads nutrition labels and looks for vitamins, whole grains, and sugar content. Now, the hamburger goes into spaghetti, sloppy joes, and taco soup they prepare themselves using whole ingredients.

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CNP MAKES THE HEALTHY CHOICE THE EASY CHOICE

In Wyoming, 23 CNP educators provide nutrition and physical activity education to income-qualifying adults and youth in every county and on the Wind River Reservation.

CNP also partners with local agencies and organizations on community-level interventions that make the healthy choice the easy choice for people with limited resources.

The program is funded through two USDA grants, the Expanded Food and Nutrition Education Program (EFNEP) and the Supplemental Nutrition Assistance Program - Education (SNAP-Ed).

IMPACTS OF CNP DIRECT EDUCATION

Youth

- 28% ate more fruits
- 30% were more physically active
- 35% ate more vegetables
- 35% ate healthy snacks

Adults

- 33% were more physically active
- 39% drank less soda
- 42% ate more fruits
- 42% ate more vegetables
- 83% of CNP graduates saved on food costs (\$66.55 monthly on average)
- 91% of CNP graduates increased their score on the Healthy Eating Index* (10.15 points on average)

* *The Healthy Eating Index is a measure of diet quality related to the Dietary Guidelines for Americans.*

TRAINING BUILDS LEADERS IN NIOBRARA COUNTY

LUSK –“Every person can be a leader for someone,” says Kaylee Reed, member of the local Farm Bureau board and Young Farmer and Rancher Committee.

A year ago, she might not have said that. She credits Life Leadership in Niobrara County, a six-month program of UW Extension and the Niobrara County Chamber of Commerce, for encouraging her to step out.

Hannah Swanbom of the UW Extension Community Development Team says, “Over the past few years, many individuals, including some in government, have expressed frustration with the lack of civic involvement, while

the same few individuals are counted on to serve and volunteer.”

To address this, University of Wyoming Extension and the Niobrara County Chamber of Commerce partnered on the leadership development effort.

“It couldn’t have come at a better time in my life,” says Reed. “I had been trying to find which path was right for me.”

Once a month from January to June, 2017, Reed and her cohort met to hone leadership skills and expand their perspectives on local and state activities.



Members of the first Life Leadership in Niobrara County graduating class: (back row) Cassandra Matney, Stuart Larson, Brenda Midkiff, and (front row) Candy Dooper, UW Extension Educator Hannah Swanbom, and Kaylee Reed.

“My takeaway from leadership class was to feel strong and empowered for what being a leader is all about.”

–Kaylee Reed

Mornings, they explored board governance, volunteer management, conflict management, and running effective meetings. They heard speakers from the Wyoming Business Council, Wyoming Department of Agriculture, Niobrara County Commissioners and Department of Health, the Fair Board, the Predator Board, and town of Lusk.

Afternoons were designated for community-based experiences. The class toured the county, met with elected officials, and learned about programs and services available. Life Leadership participants attended a board meeting outside of class and delivered a leadership presentation to the group.

“When I was approached to take this class, I wasn’t sure I would have the time or funding,” says Reed. “I made it work, and now I don’t regret any of it.”

“Communities benefit from having empowered and engaged residents,” says Swanbom. She planned the curriculum, taught, and arranged logistics. This year, she is heading the Converse County Leadership Institute and an online/virtual leadership institute for AmeriCorps in Wyoming.

All five Life Leadership in Niobrara participants completed the requirements to graduate and were invited to donate their registration fees to a nonprofit or other organization. Reed chose Santa Helpers, which benefits local youth.

Reed’s dive into civic leadership didn’t take long. An article in the Lusk Herald about the group’s \$1,000 of community donations attracted notice, and soon Reed was invited to join the local Farm Bureau board, serving with other active community members.

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RANCHER EXPANDS OPERATION USING WYOMING RANCH TOOLS

EVANSTON – Second-generation rancher Joe Brown faces the challenges every rancher faces: preventing disease, getting cows bred, fed and moved, and getting calves on the ground and started out right.

“The time and effort it takes for these essential tasks means things like marketing, economic analysis, and risk management get put on the back burner,” says Bridger Feuz, UW Extension livestock marketing specialist.

“This is not a reflection of the importance or value producers place on these activities,” he says. “Consistently, when I ask about topics for workshops, ranchers rate marketing and economic topics as important,” Feuz says.

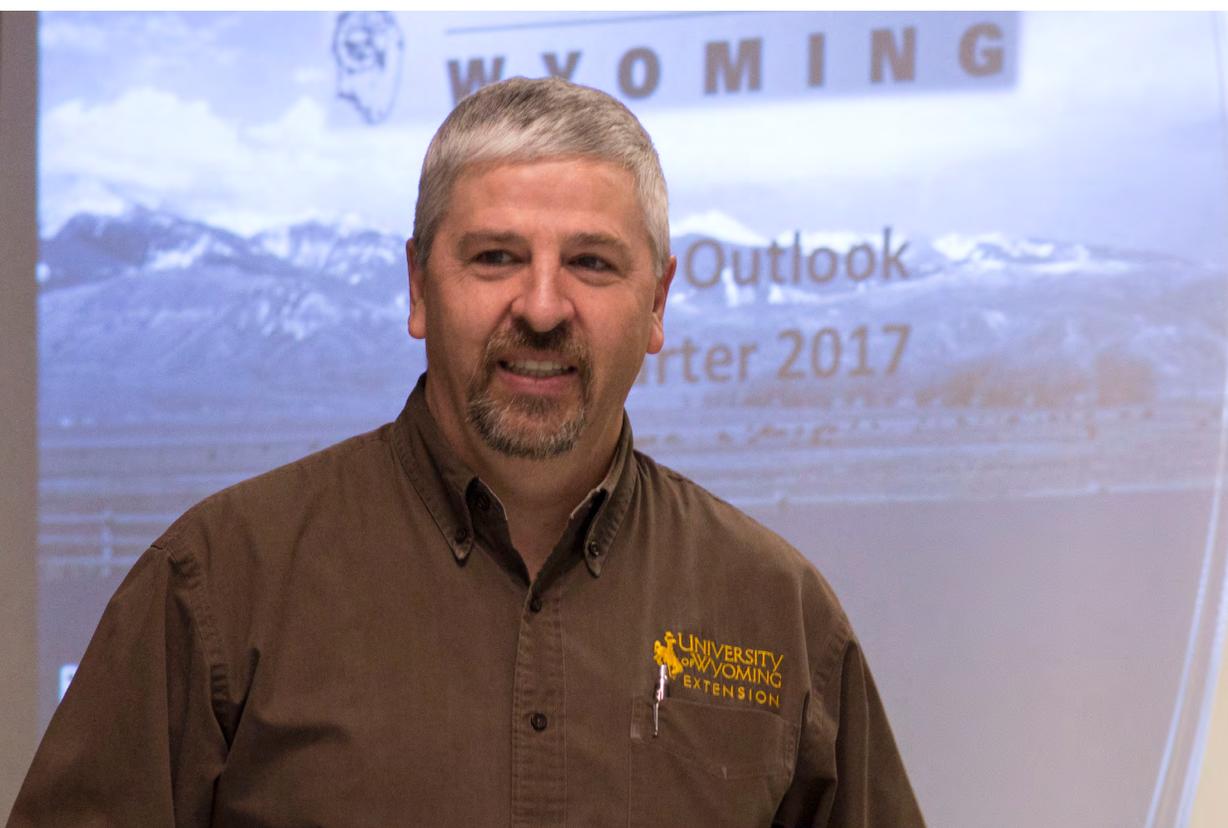
With that in mind, he and other UW specialists developed the calculators

available at the Wyoming Ranch Tools website. (See bit.ly/WYRanchtools) Their purpose is simple: to help producers answer the question, “Will I be better off or worse off if I make a change to my operation?”

“I’ve used them for marketing decisions, banking decisions, and also long-term goals and day-to-day operations,” said Brown at the 2018 UW Extension Wyoming-Utah Ag Days in Evanston in January.

As the site’s functionality has grown, so has usage. Wyoming Ranch Tools was launched with six calculators or tools in 2013. It now provides twelve. Each tool is accompanied by a fact sheet and instructions.

The site recorded 1,500 page views in 2013. In 2017, it attracted 1,894 user sessions and 4,892 page views.



◀ Bridger Feuz

“I’m a small operator, but I would recommend these tools to any operation, from five cows to 5,000.”
—Joe Brown



Wyoming users last year accounted for 529 sessions and 317 new users.

The ranch tools got a boost in 2015 when an article in Beef Magazine highlighted the Break-even Budget Tool. (See bit.ly/Ranchtoolsbeefmag)

In an interview, Matt Hirschi, who worked six years for Western Ag Credit, reported, “Many of the ranchers I worked with had an approximate idea where they were at with their operations, but when I would meet with them and input their numbers in the partial budget, these budgets very clearly demonstrated to the producers where they were at in their production and profitability.

“When making key decisions, seeing the pros and cons in the partial budget and break-even was very helpful to the ranchers,” he said.

At the recent Wyoming-Utah Ag Days, Brown said, “I’ve used the partial budget tool, the AUM calculator – pretty much all the tools in one way or other. I’ve been able to budget my operation better, keep track of expenses, and expand,” he said.

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RANCH TOOL CALCULATORS

GENERAL BUDGETING

- **Partial Budget.**
- **NPV Tool.** Use the Net Present Value (NPV) tool to make decisions when a significant capital investment is needed.

LIVESTOCK TOOLS

- **Break-even Budget.** Use to help make market timing decisions for selling livestock.
- **Cow Valuation.** Estimates the current value of a cow/ewe based on a projected number of calves/lambs.
- **Price Slide.** Use to calculate the results of a price slide in a contract for calves.
- **Genetic Investment.** Provides break-even values to aid in bull/ram buying.
- **Stocking Tool.** Calculates stocking rate using the clip and weight method.
- **AUM Value.** Tool to calculate a base value of an AUM for leasing purposes.
- **Stocking Tool.** Use to calculate a stocking rate from past experience with the pasture.
- **Market Comparison.** Calculates an adjusted market price for various auctions, video auctions, and order buyers.

CROPS AND MISCELLANEOUS

- **Wheat Price.** Use to calculate wheat price premiums and discounts.
- **Sprayer Calibration.** Use in combination with the calibration 1/128 method to adjust sprayer for weed control.

WOMEN HAVE A SAY IN MILLIONS OF WYOMING ACRES

DOUGLAS – Tammy Delyea is the managing partner at the Box E Cattle Company, LLC, a cow/calf/yearling operation 20 miles north of Douglas. She makes the long-term and day-to-day decisions. She works outside, calving, feeding, moving cows, and working corrals.

According to the U.S. Department of Agriculture 2012 Census of Agriculture, she's one of 375 women involved in farm and ranch decisions in Converse and Niobrara Counties.

Ashley Garrelts, University of Wyoming Extension range management educator, points to census of agriculture statistics showing women are the sole owner or operator of 1,618 Wyoming farms and ranches and involved in making decisions on 6,400 more.

In 2017, Garrelts and Hannah Swanbom, UW Extension community development area educator, presented Annie's Project workshops in Converse and Niobrara Counties. Annie's Project, which is based on a national model, is designed for women who work in and around agriculture. Courses have been presented in Wyoming since 2011.

The six, three-hour sessions include classroom discussions led by industry professionals on topics such as equine handling, drought preparedness, soil health, agriculture loans, risk management, marketing, and estate planning.

"The goal is to help make farm and ranch operations more profitable and sustainable," says Garrelts.





◀ As part of a value-added agriculture lesson, (left to right) Traci Bruegger joins UW Extension educator Ashley Garrelts, Erica Stewart, Jessica Werner Adams, and Sally Lamb in making jelly.

“We’re a grass ranch. When I had questions about putting cows on an alfalfa meadow, I called Ashley.”

—Tammy Delyea

Delyea says she uses the True Colors personality assessment she learned every day. “It was the coolest thing. I work with four oranges,” she says. “They’re more fly-by-the-seat-of-the-pants, make-a-decision-and-go-on.” Delyea says she’s a green who wants to know why and takes time to think.

Delyea’s daughter, Emily Velazquez, benefited from the session with Esther Clark of Farm Credit Services of America. Velazquez recently bought a screen printing business and according to Delyea, was thoroughly prepared when she presented her business plan to the bank.

“Annie’s Project also gives farm and ranch women the opportunity to learn and connect with others in similar situations,” says Garrelts. In Converse County, Delyea was joined by women who run ranches, her neighbors, and others in her Cow-Belles group.

Again referring to the USDA Census of Agriculture, Garrelts says, “Women potentially have a say in how over twelve million acres in Wyoming are managed.”

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LIVESTOCK PRODUCERS IMPROVE PROFITS BY MATCHING FORAGE, PRODUCTION CYCLES

BUFFALO – at the V Bar F Cattle Ranch east of Buffalo, Trevor Lutterman knows the cattle producer’s dilemma: provide cows with the nutrients they need to remain healthy and perhaps perform better — increased conception rates, for example — but at the lowest possible cost.

That means ranchers have to understand their cows’ nutrient needs throughout the production cycle, what the rangeland forage provides, and how to develop a supplement program that precisely addresses the nutrient shortfalls in the forage.

UW Extension workshops developed by range management educator Blaine Horn, based in Buffalo, deliver interactive strategies, expert speakers, and exercises to help producers learn

the energy constituents in feeds and rangeland forages and the relationship of degradable intake protein to net energy maintenance.

“How well the nutrient content of the rangeland forage of our region matches up to the cows’ nutrient needs over the course of the year depends on when they calve,” says Horn.

“Based on what I learned, I’m shortening the breeding period and moving the calving date back,” said Lutterman.

Workshop participants learn how to estimate dry matter intake, develop mineral supplement packages to address nutritional shortfalls, and use body condition scoring to evaluate the relative body condition of a cow herd

“Why not test your grass and see what it has to offer your cows? Then you’re not putting money into your cows you don’t need to.”

—Trevor Lutterman

using a nine-point scale. The workshop manual provides tables to help producers assess the nutrient needs of their cows based on mature weight.

Workshops offered in 2016 and 2017 attracted producers from Big Horn, Campbell, Converse, Johnson, and Sheridan counties and Montana’s Custer and Powder counties.

Brent Winter of Sheridan County reports saving \$.25 per cow per day. “The information helped us balance diets in a year when we had to feed cows a combination of hay and cake instead of just hay.”

Sheep rancher Dave Neves from Big Horn County says the workshop helped him more closely monitor what he feeds ewes and lambs during shed lambing and the condition of the rangeland.

Says Lutterman, “I’ve been able to lower my supplement costs by only giving my cows what they need, especially with regard to protein.”

The field rep he has worked with for feed for more than 15 years provides the nutritional analysis at no cost. “We just gave him clippings,” says Lutterman, who’d had hay analyzed before but never forage. “Turns out, that’s been available to us all along. We just never knew.”

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RAATS RESPONSIBLE FOR GRASSHOPPER DEVASTATION YOU NEVER SAW

CHEYENNE – “Scott, Alex, it’s looking bad.”

Slade Franklin, state weed and pest coordinator with the Wyoming Department of Agriculture, had just gotten the 2010 grasshopper outlook. The annual survey of adult grasshoppers from the USDA Animal and Plant Health Inspection Service showed a large-scale outbreak was imminent.

Franklin’s call to Scott Schell, UW Extension entomology specialist, and Alexandre Latchininsky, professor in the UW Department of Ecosystem Science and Management, was to get all available resources working together.

Native grasshoppers damage rangelands and crops in 17 western states, destroying at least 25 percent of all rangeland forage each year. Annual economic losses are estimated to be over a billion dollars. In Wyoming, about a dozen grasshopper species require control on thousands of acres of agricultural land.

In the past, grasshoppers were controlled by blanketing infestations with broad-spectrum insecticides. That was costly, often inefficient, and hazardous for human health and the environment, says Latchininsky.

A partnership between federal, state, and county officials and Latchininsky,

▼ *Grasshopper and locust outbreaks occur on every continent except Antarctica and affect the livelihoods of one in every ten people on earth. Alex Latchininsky’s workshops for the Food and Agriculture Organization of the United Nations were modeled after Wyoming Grasshopper IPM Workshops. Latchininsky, right, uses maps to demonstrate the RAATs approach to officials in Uzbekistan.*





“If not for UW Extension, I don’t think we would have been in a position to treat the large number of acres those two years. And landowners got to talk to people, not just the government.”

—Slade Franklin

Schell, and their team — plus the buy-in of landowners and the state legislature — was about to put in motion a new approach not only for Wyoming and the West but continents around the world.

RAPID RESPONSE

The first step was a hearing before state legislators that led to an increased appropriation for emergency insect management. Says Franklin, “Scott’s testimony gave them the scientific background, and the legislature ensured we were able to make grants to counties to treat the outbreaks.”

Next, extension entomologists led Grasshopper Integrated Pest Management (IPM) workshops to train county weed and pest personnel and landowners on methods they had recently developed. Reduced Agent and Area Treatments or RAATs treat alternating swaths of infested lands with lower than usual doses of insect growth regulator (IGR), an insecticide that targets immature grasshopper populations.

Using IGRs and leaving swaths untreated cuts costs, time, and collateral damage to beneficial insects such as pollinators. It’s also safer for humans.

The county weed and pest districts had never been part of a large-scale

program, says Franklin. He credits UW with providing the educational component—scientific background, species, problem, impact, timing, and training for the people applying the treatment.

LASTING RESULTS

In 2010, more than six million acres of Wyoming rangeland and cropland were protected with RAATs, resulting in over \$13 million savings for the state agriculture producers, not including the forage saved for livestock. The average cost was \$1.25 per acre.

The grasshopper IPM methods have been adopted in all western states and in countries from Mexico and Argentina to Uzbekistan, Azerbaijan, Russia, and Australia.

For Franklin, a breakthrough moment came when a county weed and pest supervisor told him, “I’ve been doing this job for 30 years, and that’s the first time we’ve had a landowner come in and say, ‘You did a fantastic job.’”

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WYOMINGITES HELP POLLINATORS THRIVE

CHEYENNE – LaDonna Foley sets out marble-filled saucers of water at her small acreage family farm north of Cheyenne. Besides providing summer watering stations, she grows flowers and shrubs that make her place a haven for butterflies, moths, and native bees. (Honey bees were originally imports from Europe.)

And every March, Foley volunteers at Wyoming Bee College, a two-day UW Extension conference held in Cheyenne that attracts hobby beekeepers (1–10 hives), small sideline beekeepers (50–150 hives), and beekeeper wanna-bees seeking beekeeping education. Pollinator enthusiasts learn insect identification and ways to improve habitats.

“This is considered one of the best bee conferences in the nation,” says Foley.

The event has grown from 127 attendees and three educational tracks in 2014 to

300 attendees, including 25 bee buddies (ages 7–15), 15 vendors, 23 speakers, eight volunteers, and five tracks in 2017. Attendees came from western states and as far away as Tennessee.

Bee College “dean” Catherine Wissner, the UW Extension agriculture and horticulture educator in Laramie County, says feedback from beekeepers and attendees has led to an evolving focus on beekeeping as more than a casual hobby. The animal husbandry approach involves educating beekeepers on honeybee winter survival, the early spring and summer nectar dearth, and the multifaceted causes of hive loss and decline of native bees.

The Bee Informed Partnership in collaboration with the Apiary Inspectors of America annual survey showed 21.1 percent of colonies managed in the U.S. were lost over the winter of 2016–2017, and 18.1 percent were lost the following summer.





In Wyoming, 66,136 hives are registered for 5,470 bee yards, which includes hobbyist and backyard beekeepers, according to the Wyoming Department of Agriculture Technical Services Division.

Hive losses occur for complex reasons, from bee starvation to parasites and diseases, but hobby and backyard beekeepers take the highest losses, says Wissner.

For the 2017 Wyoming Bee College Conference at Laramie County Community College, national and regional experts brought current research, best management practices, and instruction on how to build a business through products, certification, and food safety. New and aspiring beekeepers got hands-on demonstrations of the basics.

“Attendees left with an awareness that the number one problem facing all our pollinators is lack of flowers or flora resources,” says Wissner.

“You don’t have to have a hive to have impact,” says Foley. “I’m not the world’s green thumb gardener, but if one neighbor does something little and simple, like setting out a plate for bees to drink from, another plants flowers that bloom at different times, and another reads the pesticide bee label, pretty soon, you have a larger impact.”

2018 WYOMING BEE COLLEGE CONFERENCE

Saturday and Sunday, March 17–18

Laramie County Community College,
Cheyenne

Beekeeping 101 and 102, Bee Buddies, Gardening for Bees, Products and Marketing, Habitat Heroes, and special guest speakers

PRE-CONFERENCE: WYOMING BEE UNIVERSITY

Friday, March 16

Choice of four all-day workshops: Apitherapy (using bee products as medicine), Make Mead Like a Professional, Long Live the Queen, and Becoming a Master Beekeeper

For information, hotel rates and registration, visit bit.ly/2018WyomingBeeCollege.

Contact

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Download videos and guides from UW Extension, find a class, catch an event, enroll in 4-H, connect with county educators, or keep in touch on Facebook.



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