

August 2016

AGADEMICS

AUGUST 2016



COLLEGE OF
AGRICULTURE AND
NATURAL RESOURCES

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Proposals Submitted

By Ann Tanaka | August 2016

Beck, Jeffrey: \$134,663 to Wyoming Game & Fish (WGF) for “Identification of Winter Concentration Areas in South-Central Wyoming: Abundance and Resource Selection,” and \$50,000 to Bureau of Land Management (BLM) for “BLM Wyoming, (CESU) Rawlins Field Office Response of Pronghorn Population Productivity in the Red Desert, Wyoming to Anthropogenic and Environmental Change.”

Garrelts, Ashley: \$20,000 to U.S. Department of Agriculture (USDA) Risk Management Agency (RMA) for “Wyoming Women in Range: Empowering Women to make on-the-ground Decisions in Range Management.”

Cotton, Scott, and Caleb Carter: \$119,650 to USDA National Institute of Food and Agriculture (NIFA) for “Western Region Area Livestock and Agriculture Risk Mitigation Project.”

Hess, Bret: \$26,784 to USDA NIFA for “Animal Health and Disease Research,” \$719,288 for “Hatch Multistate,” \$1,284,393 for “Hatch Regular,” and \$373,504 for “McIntire Stennis Forestry Research.”

Hewlett, John: \$263,000 to USDA RMA for “Risk Management Education Addressing Malt Barley Operators; Enterprise Risk Analysis; and Risk Management for Beginning, Retiring/Transitioning, and Other Farmers/Ranchers and Interested Individuals in Wyoming 2016-17.”

Hilgert, Christopher: \$8,475 to Wyoming Department of Agriculture (WDA) for “Wyoming Specialty Crop Distance Diagnostics Network.”

Hufford, Kristina: \$22,781 to WGF for “Sage-Grouse Habitat Restoration in Northeastern Wyoming: Evaluating Revegetation Outcomes,” and \$11,780 for “Evaluating Seeding Outcomes at Reclaimed Well Sites in the Powder River Basin: Consequences for Greater Sage-Grouse Habitat Conservation.”

Maczko, Kristie, and John Tanaka: \$490,600 to USDA Natural Resource Conservation Service for “Evaluating Economic Impacts of Conservation Practices for Greater Sage-Grouse on Ranching Operations in the Context of Rangeland Sustainability,” and \$140,000 for “Phase II: Rangeland Soil Health Economic Modeling, Case Studies, and Soil Health Tour.”

Moore, Mike: \$7,160 to WDA for “Development of Gluten Free Dry Bean Production Manual.”

Nathanielsz, Peter: \$95,025 to National Institutes of Health (NIH) for “The Southwest National Primate Research Center.”

Nathanielsz, Peter, Cun Li, Kenneth Gerow, Geoffrey Clark, Steve Horvath, and Matteo Pelligrini: \$2,961,382 to NIH for “Development of a Nonhuman Primate Frailty Index across the Life Course.”

Nathanielsz, Peter, Cun Li, Kenneth Gerow, and Karen Rice: \$2,470,578 to NIH for “An IUGR Baboon Cohort Resource for Multiple Life Course Programming Life Course Studies.”

Nathanielsz, Peter, Cun Li, Laura Cox, and Karen Rice: \$422,744 to NIH for “Effects of IUGR on Nonhuman Primate Pregnancy Outcomes.”

Norton, Jay: \$23,298 to Utah State University for “Effects of Tillage-Systems and Nitrogen Fertilizer on Yield and Quality of Malting Barley in the Big Horn Basin, Wyoming,” and \$24,992 for “Cover Crop Plant Population, Termination Date, and Interactions with Compost in High Plains Winter Wheat Production.”

Rashford, Benjamin: \$35,000 to the Nature Conservancy for “Conservation Easement Research Program.”

Sbatella, Gustavo, and Pete Forster: \$5,000 to Syngenta for “Weed Control in Small Grains.”

Scasta, John: \$24,970 to Utah State University for “GW17-059 - Cattle Diets and Performance: Enhancing What We Know with Advanced Plant DNA Technology.”

Schumaker, Brant: \$203,830 to Wyoming Livestock Board for “Brucellosis Diagnostic Testing Support FY17-18.”

Stahl, Peter, Kristina Hufford, Karen Vaughan, Jay Norton, and Thijs Kelleners: \$206,875 to Wyoming Department of Environmental Quality for “Geomorphic Reclamation and Landscape Heterogeneity: An Efficacy Assessment of Vegetation Heterogeneity, Geomorphic Stability, Wildlife Habitat, and Economics.”

Monies Awarded

By Ann Tanaka | August 2016

Beck, Jeffrey: \$5,000 from Memorial Resource Development Corporation for “Red Desert Pronghorn Survival and Reproduction.”

Dhekney, Sadanand: \$28,800 from National Institutes of Health (NIH) for “DRRP Subaward: Studying Grapevine Cellular and Physiological Response to Abiotic Stress.”

Eberle, Carrie: \$1,135 from Briess Malting and Ingredients Company for “Briess Variety Trial/Fertilizer.”

Edwards, Jeffrey: \$15,000 from Wyoming Department of Agriculture (WDA) for “Pesticide Applicator Training (PAT) for Weed & Pest Seasonal Workers and Training Trainers for Worker Protection Standard.”

Edwards, Jeffrey, and Brian Sebade: \$24,500 from WDA for “High Tunnel Construction and Maintenance Workshops for Use in Specialty Crop Food Production.”

Gatlin, Jesse: \$264,294 from NIH for “Mechanics of Bipolar Mitotic Spindle Assembly Year 5.”

Guo, Wei: \$108,000 from NIH for “DRRP Subaward: Role of RMB20 in the Regulation of Cardiac Gene Splicing in Heart Failure.”

Hess, Bret: \$17,789 from WDA for “Research to Improve Dry Bean Production in Wyoming,” \$390,847 for “Wyoming State Seed Laboratory Operating,” and \$7,500 from various sponsors for “Crop Research.”

Hess, Bret, John Tanaka, James Heitholt, Vivek Sharma, Gustavo Sbatella, William Stump, and Andrew Kniss: \$15,000 from WDA for “Dry Bean Research.”

Hufford, Kristina: \$14,160 from U.S. Department of Agriculture (USDA) National Institute of Food and Agriculture (NIFA) for “FFY 16 (2015-2017) McIntire-Stennis Grant Kristina Hufford.”

Kniss, Andrew: \$6,480 from Monsanto Company for “MSA Service Order 6: Improved Roundup Formulations.”

Lyuksyutova, Anna: \$36,000 from NIH for “DRRP Subaward: Optogenetic Control of GCS via Micro RNAs as Treatment for Liver Steatosis.”

Murphy, Melanie, and Joanna Harter: \$1,500 from Society of Wetland Scientists for “Effects of Wetlands Ephemerality on Avian Richness Patterns: How Might Biodiversity Hotspots Shift Under Future Climate Change.”

Murphy, Melanie, Wendy Estes-Zummpf, and Rick Henderson: \$20,580 from Wyoming Game and Fish Department for “Comparing Efficacy of eDNA vs. Visual Amphibian Surveys.”

Sbatella, Gustavo: \$6,480 from Monsanto Company for “MSA Service Order 5: Improved Roundup Formulations,” and \$5,000 from Syngenta Crop Protection, LLC for “Weed Control in Small Grains.”

Scasta, John: \$20,000 from USDA NIFA for “FFY 16 (2015-2017) McIntire-Stennis - Advancing Landowner Tools for Use with the Greater Sage Grouse Umbrella Candidate Conservation Agreement with Assurances (CCAA) for Wyoming Ranch Management.”

Shaw, Scott: \$23,386 from USDA NIFA for “FFY16 (2015-2017) McIntire-Stennis Grant Scott Shaw.”

Stahl, Peter, Kristina Hufford, Karen Vaughan, Jay Norton, and Thijs Kelleners: \$207,115 from Wyoming Department of Environmental Quality for “Geomorphic Reclamation and Landscape Heterogeneity: An Efficacy Assessment of Vegetation Heterogeneity, Geomorphic Stability, Wildlife Habitat and Economics.”

Ward, Naomi: \$575,392 from NIH for “Bioinformatics Core.”

Presentations

By Ann Tanaka | August 2016

Presented at the joint meeting of the Western Agricultural Economics Association and the Canadian Agricultural Economics Society, June 22-24, in Victoria British Columbia:

- “Impacts of Fairness and Same-Side Competition on Factor Market Payment Incidence: Experimental Evidence,” **Christopher Bastian, Amy M. Nagler, Dale J. Menkhaus**, Owen R Phillips (presented by Bastian)
- “Modeling Reservoir Management in the Upper Green River Basin of Wyoming,” **Yoshiyuki Igarashi, Kristiana M. Hansen** (presented by Hansen)
- “Supplementing Cornstalk Grazing with Winter Forage Crops,” **Jenna Meeks, Andrew Kniss, Brian Meador, Steve Paisley, Brian Lee** (presented by Lee)
- “A Supply-Side Analysis of the Pollination Industry Cost and Revenue Structures in the Northern Rockies,” Buddhika Patalee Appuhamilage, **Chian Jones Ritten, Mariah D. Ehmke** (presented by Jones Ritten)
- “Factors and Prices Affecting Colorado and Wyoming Landowners’ Willingness to Accept a Conservation Easement,” **Lukas Todd, Christopher Bastian, Donald McLeod**, Catherine Mae Keske, Dana L. Hoag (presented by Todd)
- “ORV Recreation on U. S. Forest Service Lands versus Non-USFS Lands in Wyoming: A Random Utility Model Analysis,” **Robert Jenson, Christopher Bastian, David Taylor, Amy M. Nagler, Thomas Foulke** (presented by Taylor)
- “Incentivizing Open Spaces in Wyoming to Promote Pollinator Habitat: Applying Agglomeration and Spillover Bonuses to Unite Fragmented Habitat,” **Thadchaigeni Panchalingam, Chian Jones Ritten, Christopher Bastian, Mariah D. Ehmke**, Jason Fredrick Shogren, Gregory M. Parkhurst (presented by Panhalingam)
- “The Gender Wage Gap: The Role of the Mining Industry and Discrimination,” Blessing Ugwuanyi, **Chian Jones Ritten**, (presented by Jones Ritten)
- “Maximizing Returns from Payments for Ecosystem Services: Incorporating Cross-Land Manager External Effects,” Mark Eiswerth, **Kristi Hansen**, G. Cornelis van Kooten, (presented by Eiswerth)
- “The Role of Information Ignorance in Consumers’ Willingness-to-Pay for Local Honey,” Jenny Beiermann, **Chian Jones Ritten**, Linda Thunstrom, (presented by Beiermann).

Calendar

By Ann Tanaka | August 2016

August 13-20: Wyoming State Fair and Rodeo, Douglas

August 22-24: 2016 Range Tour, South Pass area

August 25: James C. Hageman Sustainable Agriculture Research and Extension Center Field Day, Lingle

August 27: Laramie Research and Extension Center Field Day, Laramie at the Greenhouse, 962 N. 30th St., 8 a.m.-noon, and the Livestock Farm, Highway 230, noon-5 p.m.

August 29: Classes and winter hours begin, 8 a.m.-5 p.m.

Farewell

By Ann Tanaka | August 2016

Braman, Mindy: Administrative Business Office, accounting associate, senior (7/21)

Harrison, Lorraine: Agricultural and Applied Economics, accountant (6/1)

Herman, Carolyn: Dean's Office, administrative associate (7/1)

Johnson, Joey: Hot Springs County UW Extension, 4-H/youth development educator (7/1)

Krinkee, Kenzie: Teton County UW Extension, 4-H/youth development educator (8/1)

Lamb, Gail: Administrative Business Office, accounting associate, senior (7/1)

Perry, David: Wyoming Agricultural Experiment Station, grants coordinator (7/1)

How much to water and other videos

By Ann Tanaka | August 2016

[Pesticide Disposal](#)

[Oak Gall Wasp](#)

[Pressure Canner Overview](#)

[Low Acid & High Acid Foods and Canning](#)

[Corn Soup](#)

[How Much to Water](#)

[Soil Management on Wyoming Farms and Ranches](#)

[Sprayer Calibration](#)

Changing Faces, Changing Places

By Ann Tanaka | August 2016

Welcome:

Alvarez, Debbie: Sweetwater County UW Extension, horticulture program assistant

4-H Showcase Showdown

By Ann Tanaka | August 2016

A day in the life of a 4-H'er: a photo essay.

[slickr-flickr tag="UWShowcase_2016" sort="title" direction="ascending" descriptions="on"]

4-H Horse Clinic

By Ann Tanaka | August 2016

[slickr-flickr tag="HorseClinic_2016" sort="title" direction="ascending" descriptions="on"]

Precautions same whether Zika virus in Brazil or West Nile in Wyoming

By Ann Tanaka | August 2016

<http://wyagresearch.org/agademics/wp-content/uploads/2016/07/Precaution-...-Scott-Schell-mosquitos-diseases.mp3>

That whine you may hear when out and about this summer in Wyoming isn't a dinner bell for mosquitos - it's more like Muzac in a fertility clinic while the females look for a blood meal to produce eggs.

And in areas where viruses like West Nile (WNV) in Wyoming reside and Zika in Brazil and in other South American regions, more like infected syringes flying through the air.

But not all mosquitos are medically relevant - only specific species of mosquitos can carry and transmit specific diseases, says Scott Schell, University of Wyoming Extension entomologist.

Schell, a member of Wyoming Mosquito Management Association, and other scientists use the phrase vector competency to describe a mosquito species' ability to:

- Take up a disease organism while sucking blood from a sick animal.
- Have the disease replicate in them.
- Eventually accumulate in the salivary secretions.
- Retransmit the disease to the next blood meal victim.

The *Aedes aegypti* mosquito in Brazil does that with the Zika virus, just as *Culex tarsalis* does in Wyoming with WNV, said Schell.

C. tarsalis feeds from dusk to dawn in Wyoming. *A. aegypti*, whose common name is yellow fever mosquito, is a daytime feeder that often follows people indoors.

"They often go for the lower legs, are small bodied with a "light touch" so most people don't even know they are being bitten until they start to itch later," Schell says.

Schell's suggestions for those traveling to the Olympics are the same for anywhere there is a chance of contracting a mosquito-borne disease (including Wyoming).

"Wear long pants, use mosquito repellent and try to minimize the opportunity for mosquitos to bite you," he advises. "I imagine most of the Olympic events are not going to occur where high transmission sites are, like the slums."

Mosquito lifecycles play a part in the ability to transmit diseases. WNV is primarily a bird disease, and *C. tarsalis* feeds on nestling birds in the spring. When the birds fledge and leave the nest, *C. tarsalis* readily



UW Extension entomologist Scott Schell helps students identify aquatic insects at a Snowy Range lake during a science camp last school year.

turns to mammals, such as humans and horses, for their next blood meal and transmit the disease.

Environment plays a role as higher temperatures increase the replication of the virus in the mosquitos, Schell says, and temperature also controls the speed of the reproductive cycle of the mosquitos. Some mosquito species' immune systems successfully defeat viruses, preventing them from replicating.

The Zika virus is thought to be a primate (monkeys and great apes) disease from Africa. First detected in a monkey from the Zika Forest in Uganda in 1947, the disease was first isolated from a human in 1952 there, according to the World Health Organization. Maps of the disease's progression shows travel east from Africa to Asia in 1977-78, to Micronesia in 2007, to French Polynesia in 2013 and Brazil in 2014.

Authorities link the Brazilian outbreak to the flow of visitors into the country prompted by the 2014 FIFA World Cup, according to the WHO.

Symptoms include mild fever, skin rash, muscle and joint pain and headaches. The disease can cause microcephaly in babies, an abnormally smaller head compared to other children of the same age and sex. The brain does not develop normally.

Scientists in Brazil only recently found the Zika virus in *A. aegypti* collected from the wild, Schell said. They had suspected *A. aegypti* carried and retransmitted the disease (it did so in captivity) but needed to find some infected in the wild to confirm it is the vector.

1. *aegypti* typically doesn't move far from where they are hatched and keeps to human-created habitat. The Zika virus hot spots are in the tropical northern portion of Brazil while most of the Olympic venues are in the south, around Rio De Janeiro.

"That reduces the risk of infection with Zika while attending the Olympics significantly," says Schell.

An Olympics visitor to Brazil shouldn't fear contracting the Zika virus any more than a Brazilian visitor to Yellowstone National Park contracting WNV, he notes. The risk of infection is low, says Schell, despite some Wyoming counties having been in the top 5 nationally for WNV infections per capita.

"If they are going to visit the irrigated crop fields in Goshen County in the evening - WNV hotspots - on their way to Yellowstone, they should wear appropriate protective clothing, use mosquito repellent to reduce the risk and enjoy their travels," he says. "The same common sense approach applies if you are traveling to Brazil."

Plant sciences scientist receives publication honor

By Ann Tanaka | August 2016



Vivek Sharma is an assistant professor and agronomist/irrigation specialist based at the Powell Research and Extension Center.

Plant sciences Assistant Professor [Vivek Sharma](#) has received recognition from the American Society of Agricultural and Biological Systems Engineers.

His publication “Sharma V., and S. Irmak. 2015. Spatial and Temporal Variation of Corn Evapotranspiration across Nebraska” received the American Society of Agricultural and Biological Systems Engineers 2016 Educational Aids Blue Ribbon Award.

The award was presented in July during the organization’s annual conference in Orlando, Florida. The [publication](#) is available for viewing.

Sharma is an agronomist/irrigation specialist based at the [Powell Research and Extension Center](#). He joined the University of Wyoming College of Agriculture and Natural Resources this year, having been a post-doctoral research associate at the University of Nebraska-Lincoln.

Analyzing the long-term spatial and temporal variation of crop evapotranspiration under different climates can help improve estimates of large scale crop water use, its variability, and provide useful benchmarks for evaluating and improving water resources and substantially enhancing agricultural water use efficiency, says Sharma.

Such analysis and datasets can assist water managers and decision makers in planning for future demand, use, and availability of water resources for irrigated and rain-fed agriculture.

Sharma says the Educational Aids Blue Ribbon Awards Competition promotes excellence in informational materials that contribute to the understanding of agricultural and biological engineering subjects outside of the traditional classroom setting.

Wyoming Homemakers recognize Niobrara County extension educator

By Ann Tanaka | August 2016



Denise Smith

Converting the county's extension office into the [command center during the 2015 floods](#), securing a grant to pay for a high tunnel to teach residents horticulture, and leading the nutrition and food safety team has drawn special recognition for a Niobrara County University of Wyoming Extension educator.

The [Wyoming Homemakers](#) in June recognized 40-year educator Denise Smith for her educational and leadership roles in Niobrara County and across Wyoming.

[Smith](#) is a nutrition and food safety educator for Converse, Natrona, and Niobrara counties and is a 4-H educator in Niobrara County. She has served as adviser to the homemaker's association since 1979.

"There is no doubt Denise is a leader in the community and in UW Extension," notes Arlene Rapp, former president of the Wyoming Homemakers for many years, who presented the honor.

Rapp said Smith's focus is on nutrition and food safety but, "When a need arises, Denise readily accepts the challenge of either teaching classes or finding the perfect person to come in and assist the community and meeting its educational needs."

Rapp noted Smith's roles in:

- Securing a 1 percent capital facilities tax to expand the Niobrara County fairgrounds.
- Securing a high tunnel grant for growing vegetables and efforts to teach residents gardening and food preservation.
- Contributing to success of Food Expo projects and writing curriculum for school programs like "Eating Your Way Through Wyoming History" and her involvement in Healthy Heart programs and nutrition education for those with diabetes.
- Providing guidance and support to the Wyoming Homemakers.
- Converting the fairgrounds to a command center during last year's floods in Niobrara County.
- Educational programs for 4-H'ers during the summer Family and Consumer Sciences days

The state homemakers made Smith an honorary Quealy Award recipient in 2006. Washakie County extension educator Phyllis Lewis said the honor recognizes women who are recognized leaders in the extension homemakers program and who are devoted to promoting and expanding the home economics extension program.

Smith has a special knack for observing the needs of a community and developing educational programming to enhance the lives of the people, says Rapp.

She is a positive example for youths, volunteers and peers, she adds.

"She typically remains in the background, never wanting to take credit for all she does," notes Rapp. "She is

most humble and simply wants to do what is best for those she serves.”

Five tips for enjoying Wyoming's farmers markets

By Ann Tanaka | August 2016



Vendors, customers and sightseers mingle at the Laramie Farmers Market Friday. There are 53 farmers markets across Wyoming, according to the Wyoming Business Council.

Farmers market season is in full swing with 53 markets across the state, according to the Wyoming Business Council.

Markets are a good source of local and regional produce, meat and value-added foods, as well as crafts and informational booths, says University of Wyoming Extension educator Cole Ehmke. He noted farmers markets are community events, where locals and visitors can enjoy summer days while supporting the local economy and eating well.

A list of farmers markets, hours and days of operation is available on the Wyoming Farmers Marketing Association website (www.wyomingfarmersmarkets.org) under Wyoming Farmers Market.

Ehmke, extension ag entrepreneurship specialist, offers these five tips to help get the most from a market.

1. **Bring your own bags.** Most vendors provide a bag (even if it is not new), but bringing bags or a basket can reduce waste at the market and in one's home. Consider using a cooler to help keep fresh items crisp.
2. **Buy what's in season.** Some people may be surprised to learn fresh apples aren't available in July, nor fresh cherries in October. Neither may be available from local producers in any quantity at Wyoming markets, given the short growing season. Markets are a good way to learn about what can be grown in the area, so talk with farmers about where and how they grow their produce (especially about organic practices if that is important to you). Noting how product availability changes across the season is a good way to teach children about respecting the seasons as well as managing your own expectations, notes Ehmke. Plus, the highest nutritional value in vegetables is from those items that are freshest (preferably picked that day).
3. **Experiment and get advice.** If you spot something unusual, ask for the vendor's insight on storage and preparation. Some vendors might provide recipes and nutrition information, and information can always be found online if you can at least name the item. Also, don't be afraid to ask for a sample or clarify the price.
4. **Be prepared to take it slow.** Farmers markets can be social events, with most participants strolling to see who they see, enjoying the fair-like atmosphere and perhaps picking up a few items. Others will be at the market to do weekly shopping. At some markets, the crowd can be an obstacle to both groups, so know what you'd like to get out of the market and plan accordingly. For example, bring water and wear sun protection, so waiting in line is more comfortable; go at times when the crowds will be less and the parking better; and bring smaller bills for paying vendors.
5. **Offer to volunteer.** Your time and insight can be extremely helpful to a market manager. Most managers put a lot of effort into organizing a market, recruiting vendors, setting up and running a market and advertising, and they're probably not paid. Unfortunately, manager burnout (leading to turnover in a manager position) is a major reason why markets fail, said Ehmke.

Volunteering could provide valuable assistance to the community and be a great way to be engaged with a diverse group of people.

UWAgGuy new president of Association for Communication Excellence

By Ann Tanaka | August 2016

UW Extension Communications and Technology Senior Writer and Editor Steve Miller tweets as UWAgGuy. On June 16, he took up the gavel to represent UW as the 2016-2017 president of the 388-member Association for Communication Excellence in Agriculture, Natural Resources, and Life and Human Sciences, better known as ACE (<http://bit.ly/aceorg>).

Miller describes ACE members as “extremely talented people doing the same jobs and facing the same challenges our group faces here.” Established in 1913 as the American Association of Agricultural College Editors, ACE is dedicated to providing professional development and networking opportunities for communicators, educators and information technologists in land grant colleges, Extension, the USDA, and businesses, organizations, and media.

Agademics readers may be familiar with Miller’s stories and photography in Ag News, Agademics, and CONNECT. He edits Barnyards and Backyards and Reflections magazines. Since 2013, he has released 393 media releases, garnering state, regional, and national attention for UW Extension and the College of Agriculture and Natural Resources. His Facebook posts can be found at <http://www.uwyo.edu/uwe/>.

UW Extension Communications and Technology is at the forefront, says Miller, because the group is exposed to new ways of doing things, new trends and new technologies with its involvement with ACE. “It is good to associate with one’s peers across the country,” he says.

Miller describes ACE members as “unselfish.” The organization is made up of writers, editors, photographers, graphic designers, videographers, online engagement and IT specialists, distance education specialists, and communications faculty members and administrators.

“They are always willing to help and share their knowledge,” he says.

Miller joined UW Extension Communications and Technology in 2005, bringing a depth of newspaper reporting and editing experience gained in Nebraska, Colorado, Montana, and Wyoming. He also joined ACE in 2005.

Miller was raised on a crop/livestock farm in the Brady-Gothenburg area of Nebraska. After earning a degree in journalism at University of Nebraska-Kearney, he took on his first reporting job at his hometown weekly. In 2010, he earned an M.A. in communications from the University of Wyoming.

Says Miller, “I want to thank [Communications and Technology manager] Tana Stith and Glen Whipple [UW Extension director] for supporting my participation in this great organization.”

Sheridan Research and Extension Center Field Days 2016 Photo Gallery

By Ann Tanaka | August 2016

[slickr-flickr tag="2016_ShREC" descriptions="on"]

UW animal science graduate finesses 21-ton behemoth at PREC Field Day

By Ann Tanaka | August 2016

This 1964 animal science graduate from the University of Wyoming works with a beast.

Keith Murray of Powell has a large collection of antique tractors, but the 42,000-pound 1910 Avery steam tractor might be the most unique. Not because of its heft, but because there are only six in the world and his is one of three that run.

It hadn't in 18 years until a few weeks ago, when Powell Research and Extension Center farm manager Camby Reynolds asked if Murray would be willing to do some disking during the field day.

"It took a couple days to free everything up and pressure test it," says Murray, who graduated from the College of Agriculture in 1964. He farms near Powell. "Some things were stuck on it."

Lance and Jolene Streets of Pryor, Montana, guided the 24-foot long behemoth several times down a strip of ground, the 14-blade disk turning over dirt. A 1941 John Deere B belonging to John Spomer of Powell and pulling a plow joined alongside the tractor at different times, as did the draft horse team of Pistol and Pete, pulling the College of Agriculture and Natural Resources renovated sheep wagon.

Events at the center commemorated the 125th anniversary of the Wyoming Agricultural Experiment Station.

[slickr-flickr tag="2016_Powell" descriptions="on"]

Wyoming 4-H'ers target bee decline in plan formed in Washington, D.C.

By Ann Tanaka | August 2016



Back, from left, Sen. John Barrasso, Rep. Cynthia Lummis, volunteer Mary Hamilton, Meghan Proctor, Molly Moyer, Zoie Dayton, Emma Balstad, Amber Jensen, 4-H educator Brenda McKinzie, Sen. Mike Enzi. Front, Milo Matteson, Taten Gaukel, Andrew Hamilton, James Raube, Kaden Gaukel, Nyckalas Harvey, Teage Dayton.

Wyoming 4-H'ers during a trip to Washington, D.C., applied their heads, hands, hearts and health (4-H'er pledge to better the world) to solve declining bee numbers in their home state.

The group of 12 4-H'ers from five counties won \$500 at the Citizenship Washington Focus (CWF) for a plan to create a beekeeping curriculum and offer \$250 to a Wyoming 4-H'er whose bees produced the best honey. That 4-H'er could then use the money to expand her or his beehive.

Farm Credit provided the money.

The Wyoming group members were:

- Big Horn County - Nyckalas Harvey
- Niobrara County - Taten Gaukel, Kaden Gaukel, Amber Jensen, Meghan Proctor
- Sweetwater County - Andrew Hamilton
- Sheridan County - Emma Balstad

- Teton County - Teage Dayton, Zoie Dayton, Milo Mattson, Molly Moyer, James Raube

Bee numbers in the U.S. have decreased more than 50 percent since the 1990s. From April 2015 to April 2016, beekeepers in America lost 44 percent of their honey bee colonies, according to the Bee Informed Partnership, whose members include the USDA and National Institute of Food and Agriculture.

The 4-H'ers want to help increase numbers in Wyoming by encouraging other 4-H'ers to become involved in beekeeping.

"We will use half of the \$500 to help get the bee project started so 4-H'ers can have their own bee habitat and hives," says Balstad, a member of the Tongue River Roundup 4-H Club.

4-H'ers from across the U.S. are participating in CWF this summer. Wyoming participated with Montana and Nebraska 4-H'ers in the second session, June 11-18. 4-H'ers learn about the legislative process and meet with their state's delegations.

The agenda changed this year to have each 4-H group identify a problem in their state and provide a solution, said Platte County 4-H educator Brenda McKinzie, who accompanied the Wyoming 4-H'ers.

Each 4-H delegation had to present the problem, an action plan and develop a video to post on Instagram. National 4-H Council members judged the efforts.

"I think they did excellent," says McKinzie.

Balstad and others introduced the beekeeping project to 4-H'ers attending the Showcase Showdown in Laramie last month and will work with the state 4-H office to develop a curriculum for next year. Those 4-H'ers in the project will bring their honey to the annual Showcase Showdown for judging.

The Wyoming group has a chance to win another \$500. An overall winner from all the groups attending CWF will be selected at the end of summer. Sessions ended July 15.