



Ag Link



Winter 2002

Linking the MSU College of Agriculture with its Alumni and Friends

ALSO IN THIS ISSUE:

Ag leaders
page 2

Campus farm
page 3

Finding MSU's
oldest tree
page 4

Students learn
in Russia
page 5

Faculty news
page 5

Steer-a-Year
winners
page 6

New develop-
ment board
members
page 6

Thank you,
sponsors!
page 7

Mathre retires
page 8

Ag Link is published
three times yearly by
the MSU College of
Agriculture.

For more information,
contact us at:

MSU College of Agriculture
202 Linfield Hall
Bozeman, MT 59717
tel: (406) 994-7671
fax: (406) 994-6579
e-mail:
sgermann@montana.edu
web: www.montana.edu/
agriculture

MSU students develop Montana products

If you're going to transform Montana agriculture from a commodity economic base to one in which value is added to commodities, you need people who know how to develop products. That's exactly what students are learning in Jane Ann Boles' meats class at Montana State University. The learning isn't just hypothetical either. This fall, the small senior-level meat-processing class took on a project for Montana buffalo rancher Dell Morris of **Kalispell**.

"He wanted a crunchy snack food item from meat," says Boles. "I told him that if he would allow the students to develop the product, it could be done during this semester and it would cost a lot less than otherwise." The number of projects is limited by the number of students in meats classes, which is now offered once a year in the fall.

Morris said "yes" to having students undertake the project, and they went to work.

Willie Samson and Kelsey Groelund during the product presentation of the MSU Meats Class.



Willie Samson of **Three Forks**, Shiann Gliko of **Fort Benton**, Christy Black of **Las Cruces**, NM and Kelsey Groelund of **Tigard, Ore.**

started with a survey of products on the market that might compete with a crunchy meat snack. Then they

brainstormed flavors for the product, which led to product trial runs and altering ingredients and methods to find what was needed. This stage was heavily influenced by Boles, whose expertise in product development and knowledge of federal food standards were two of the reasons she was chosen to re-institute a meats program at MSU in 1999.

In addition, the class developed a hazard analysis plan specific to the MSU facilities they were using, as well as procedures for product handling, flow diagrams and other forms needed to qualify for multi-state sales of a food product. The students finished off with a potential package design and several names for Morris and those involved in his project to consider. About the only part of the project not undertaken was developing the information for the nutrition label, which requires analysis equipment MSU does not have yet, says Boles.



Christy Black stuffs a sausage as part of the product development process for a meat processing class.

From the Dean

We have had another successful autumn at the College of Agriculture. I would like to share some pieces of news with you. Enrollment for fall semester in the College was 853. Students continue to be successful in their coursework, laboratory work and leadership



positions.

The College hosted over 550 high school students from across the state for our annual Ag Days event Nov. 8-10, 2001. It was a great opportunity for the high school students to get acquainted with MSU and to demonstrate their knowledge of agriculture. It was also a good opportunity for the college students to learn leadership and organizational skills.

We saw some of you on campus for Ag Appreciation Weekend. The fund-raising activities brought in over \$11,000, plus \$9,150 was

contributed by corporate sponsors. We are very grateful for your support and generosity. (See the story below and on pp. 6-7 for more news.)

New faculty will be joining us shortly, enhancing and expanding our academic and research endeavors. We invite any of you visiting campus to stop by and see what the College of Ag has to offer.

Sharron S. Quisenberry
—Dean Sharron Quisenberry

Ag leaders honored at Ag Appreciation Weekend

A highlight of the Nov. 9-10 Ag Appreciation Weekend was the recognition of the College of Agriculture Outstanding Agricultural Leaders.

Vern and Naomi Pluhar of **Cohagen** have a diverse operation, with forages, grains, alternative crops and 800 commercial Black Angus cattle in a cow-calf pair operation. They market certified and registered seed, retain ownership of steer calves through slaughter and keep extensive performance records on their cattle. The Pluhars have been at the forefront of exploring ways to sustain and improve the soil and land. Vern and Naomi along with their son and his wife host crop tours each year to let other farmers and ranchers learn about their methods. They cooperate in research with the Montana Agricultural Experiment Station and the Montana Extension Service on small grain variety and forage trials.

Greg Gould and Aimee Hachigian-Gould, Brandon and Andrew of **Ulm** operate 7 Bar Heart Ranch, a registered Aberdeen Angus seedstock operation; O Bar M Meats - Natural Beef; and 7 Bar Heart Feedlot. The feedlot is part



Vern and Naomi Pluhar of Cohagen

of the “Beefability” program of Montana Stockgrowers Association and MSU Extension that is intended to help cattle producers track their product

from “farm to fork” in order to increase quality. They have had many ranch tours focusing on sustainable and organic agriculture. Tightening operating margins led them to develop their cattle for the certified organic niche market, and they now supply locally raised beef produced without added hormones or antibiotics to restaurants and other organic outlets. The Goulds have converted the entire ranch to organic cattle while improving wildlife habitat and winning farm and land stewardship awards from the American Angus Association, the Farm Journal, AERO, and Cascade County Conservation District.

Other awards went to Virginia Knerr, outstanding agriculture agent for the MSU Extension Service, and to Bill Chiesa, Outstanding Montana 4-H and FFA Alumnus. Seven FFA Friends of the Foundation, two 4-H Volunteers of Excellence and eight 4-H Outstanding Alumni were also honored.



Greg Gould and Aimee Hachigian-Gould, Brandon and Andrew of Ulm

Campus farm offers experience close to home

Just a stone's throw from the MSU campus is a place that perfectly compliments classroom learning: The Livestock Teaching & Research Center. There, just a half-mile west of campus, students practice the skills that earn them jobs, and researchers apply their theories to crops, steers and heifers.

The 520-acre center, once called the Towne Farm (after one of the original property owners, not its urban location), consists of a nutrition center, feed mill, stock pens, and research labs, as well as horticultural plots, Extended Studies' horseshoeing school and the Miller Livestock Pavilion.

The center is home to the rodeo team's practice stock, ag students' horses, Steer-a-Year steers, and six rumen-cannulated cows that are regulars at the Gallatin County Winter Fair, where their accessible innards are a hit with the crowds.

Since 1999, Kim Anderson has managed the center, cruising its dirt roads in an old tan pick-up overseeing projects ranging from feed trials with cull heifers to nitrate testing in crops. The farm employs several student laborers and a handful of permanent employees. Both graduate and undergraduate students make use of the facilities.

Research projects are always in progress, said Anderson, including Jim Berardinelli's efforts to shorten cows' post-partum intervals; John



Kim Anderson manages the Livestock Teaching & Research Center just west of the MSU campus. The MSU College of Agriculture has used the area as a research and learning facility since the 1950s.

Paterson's enzyme-enhanced backgrounding pellet; Jan Bowman's innovative feeds; and Dennis Cash's hay barley field tests, among many others. Berardinelli and Ray Ansotegui teach a pregnancy and artificial insemination class at the farm, where students are often, literally, elbow-deep in their work. The two professors continuously study methods to improve estrus synchronization programs for beef cows.

Exposure to such research projects gives students experience that translates directly into career opportunities, sometimes even on

the premises or with other MSU Agricultural Research Centers.

Anderson says the center's new Calan gates, offering individualized feeding records for calves, have been a great asset. Each calf wears an electronic collar that unlocks its own personal feed gate. Then, researchers can tell exactly how much each calf ate, rather than estimating by observing an entire feed bunk.

"Everyone out here loves the livestock and has a passion for research and learning," Anderson said. "What we do here is not only fun, but really applicable."

Reminder! The College of Agriculture scholarship deadline is Feb. 1, 2002.
www.montana.edu/agriculture

Student detective finds MSU's oldest tree



Emily Plummer and horticulture professor Bob Gough

Horticulture professor Bob Gough was curious about which tree is the oldest on the MSU campus. Is it the Colorado blue spruce looming near Hamilton Hall? Perhaps seniority goes to its spruce siblings near Linfield. Then, there's the willow near the duck pond...

Gough had his hunches, but when College of Agriculture student Emily Plummer entered Gough's Plant Science 431 class this fall, Gough had found his detective.

Plummer, a senior in landscape design and environmental science, was intrigued by the project's interweaving of horticulture and history, as well as the opportunities for research and the creation of something that would benefit the community.

"This kind of stuff helps you get out of the classroom and learn about the resources on campus," she said. "I've learned more about MSU in the last few weeks than I knew before."

Plummer spent a good deal of time in the MSU library archives. By studying historical photos of MSU's oldest buildings (Taylor Hall, 1894; Montana Hall, 1898; Hamilton Hall, 1910 and Linfield Hall, 1912), she

was able to compare trees that were new a century ago to what still stands today.

"In old pictures of campus, there were almost no trees," Plummer said. She added that many of the old photos show trees planted where buildings stand today.

After using the photos to speculate, Plummer and Gough measured the suspected oldest trees and used height, circumference and tree-ring data to confirm the winner: the cottonwood that grows just east of the Plant Growth Center near 11th Avenue. They estimate the tree was planted in 1864—three decades before MSU existed.

Plummer said the project also enabled her to research landscape trends of various eras as well personal preferences of past university presidents.

"You can see how the landscape of campus developed along with the buildings," she said, adding that certain species of trees and shrubs were "fashionable" in different decades.

Gough and Plummer hope to continue the project in the spring, perhaps developing a map and walking tour of MSU's oldest trees.

Faculty Notes

New Faculty

Blair Stringam has joined the Ag Education/AOT division as an assistant professor and is teaching at MSU beginning this spring semester.

Robert Peterson has joined the Department of Entomology as the Agricultural Biological Risk Analyst, starting Jan. 1, 2002.

Expanding Experience

Tom Blake, Plant Sciences and Plant Pathology, began a two-year leave of absence Dec. 31, 2001 to go to Syria. There, he will be the director of Germplasm Improvement for the International Center for Agricultural Research in the Dry Areas responsible for crop systems improvement for Central and West Asia and North Africa. Suzanne Mickelson will run the genetics and breeding program in his absence.

Jim Knight, Animal and Range Sciences, will be on sabbatical spring semester 2002. Knight will be gathering information for his book, *Wildlife Management for Private Landowners in Montana*, a practical guide based on scientific facts.

Retiring Faculty

Peter Burfening, Animal and Range Sciences, retired Oct. 31, 2001 and moved to the Washington, D.C. area to take a job at the U.S. Department of Agriculture. A search for his replacement is in progress.

Don Mathre, Plant Sciences and Plant Pathology, retired Dec. 31, 2002. (See article, page 8)

U.S. and Russian ag students live and work together in Moscow

Studying in Russia with students from all over the United States as well as Russia has been “an inspiration,” says Casey Saxton of his four months of classes in Moscow last spring.

Saxton, from **Chester**, and Wade Taylor, from **Durango**, Colorado are both MSU seniors in agricultural operations technology. They were a part of a student opportunity that continues this January when sophomore Maria Warnich from **Livingston** goes to Moscow to participate in the program.

In this program, two MSU’s College of Agriculture students join eight students from several land grant universities around the country and study with English-speaking Russian students at Moscow Agroengineering University. Except for daily lessons in Russian for the Americans, the courses, labs, field trips and discussion groups are taught in English by professors from Moscow as well as visiting professors from the participating universities. The other universities involved include Pennsylvania State University, Texas A&M University, University of Florida and the University of Nebraska. Each participating land grant university sends both teachers and students to teach and learn at Moscow State Agroengineering University.

“Our goal is to get students global-ready,” says Marty Frick, an MSU associate professor of agricultural education who will teach in Moscow during spring semester. “Explicit in this goal is the ability of graduates

to work effectively and competently in the international community. It’s not just an opportunity to travel abroad, but an opportunity to be with Russian students and students from other U.S. universities.”

Saxton says top students participate in the program, and that the Russian students in particular show a high degree of motivation and interest in international affairs.

“It’s been an inspiration being that close with that group of students,” says Saxton, adding that he hopes to “develop a better drive, to see . . . how far studies can take you if you work hard enough.”

In addition to professionally related field trips such as one to a 300 acre Moscow greenhouse, students visited classic sites such as the Hermitage in St. Petersburg and the Kremlin.

Saxton says, however, that it wasn’t the sites that were most memorable, but the people.

“We were with our own age group, but they have seen the fall of communism and the introduction of the free enterprise system,” says Saxton. He adds that it is very frustrating for Russians to see other countries

succeeding with free enterprise when the still-young system in Russia doesn’t seem to be fully functional. He was told that banking



MSU and other U.S. students at a Moscow cathedral while participating in a semester abroad at the Moscow State Agroengineering University.

and land laws still are difficult, and that agricultural loans are available — if a person repays the loan within a year at 60 or 70 percent interest. Similarly, there is private land, but if the children don’t want to work the land after their parents die, it reverts to the state.

Saxton says he hopes to improve his Russian language skills, and get a job that involves some international travel.

During those travels, he says he’ll keep in mind what a Russian career soldier told him: “Let the governments be governments, and let the people be friends.”

For more information or to support this program, contact Sandra Germann at the College of Agriculture, 994-7671.



Casey Saxton

Steer-a-Year winners announced

Butte City Slickers take first place, Hamilton Ranch is second

During Ag Appreciation Weekend, 45 steers were delivered for the 2001-2002 Steer-a-Year program. The new livestock judging team, coached by Marc King of Big Timber, evaluated the steers for the annual judging contest. Owners of the place winners include:

1. Butte City Slickers, Steer #2
2. Hamilton Ranch (George Trischman)
3. Travis and Robert Kline
4. R bar N Ranch (Rick Kline)
5. E.L. Peterson Ranch (Dean Peterson)

Congratulations! We extend our gratitude to the following companies for their donations of feed supplement and animal health products for the Steer-a-Year program: Pfizer Animal Health, Fort Dodge, Merial and Cargill Animal Nutrition.

The following people are Steer-a-Year donors to the College of Agriculture. (Producers may donate to Athletics, College of Ag, and/or Rodeo Team.)

- Blue Ridge Red Angus, Tom and Yvonne Duffey
- Descheemaeker Herefords, Pat Descheemaeker
- Double D Ranch, Elise Donohue
- Dyer Land & Cattle, Scott Wiley
- E.L. Peterson Ranch, Dean and Trudi Peterson
- Edwards Angus Ranch, Dwight Burber
- Elbow Creek Ranch, Ray and Michele Stinnett
- Hamilton Ranch, George Trischman
- Higgins Brothers Ranch, Jim Higgins
- James T. Paugh
- Jim Peterson Ranch, Jim Peterson
- Lynn Cornwell

- Malek Angus Ranch, Morley and Ty Malek
- Miles City Livestock Auction Co., Rob Fraser
- Montana Livestock Ag Credit, Tim Gill
- Ron and Bev Skinner
- Sieben Ranch Co., John Baucus
- Smith 6-S Livestock, Randy Smith
- Snow Creek Ranch, Rod Coulter
- Strawberry Ridge Reds, Jim Frazier
- Taylor Brown
- Ted McIntyre
- Willow Creek Cattle Company, Dan Moore

For more information on donating a steer to the College of Agriculture, contact Lisa Duffey at 994-4323

Development board adds new members

Two Montanans have been appointed to three-year terms on the College of Agriculture Development Board.

Gary Broyles of **Rapelje** is currently vice president of the National Association of Wheat Growers. He has been a board member of the Montana Grain Growers Association for nine years, and is a former member of the advisory council for the Montana Agricultural Experiment Station. Along with his wife Sue and son Paul, he raises wheat, barley, hay and Red Angus cattle. Broyles attended MSU between 1969 and 1974.

David McClure of **Lewistown** is an active farmer and rancher, raising wheat, barley, hay and cattle. He is president of the Montana Farm Bureau Federation, is a board member of five Farm Bureau insurance companies and serves on the American Farm Bureau Board. He also serves on the Mountain States Legal Foundation's executive committee and was a member and chairman of the Montana Agricultural Stabilization and Conservation Service Committee from 1974-1976. McClure graduated from MSU in 1962.



Gary Broyles



David McClure

College to hire recruiting, retention coordinator

The College of Agriculture will soon have its own program coordinator for recruiting and retaining undergraduate students.

The coordinator will visit high schools, community colleges and tribal colleges around the region with information about MSU's College of Agriculture programs. In addition, the coordinator will work closely with teachers, ag commodity organizations and other groups around Montana to offer details on career opportunities in agriculture for young people. The new coordinator will also work to retain students enrolled in the College of Agriculture.

Screening began Jan. 15 and continues until a suitable candidate is hired.

Thank you, sponsors!

For the third year in a row, Ag Appreciation Weekend was a success due to the generosity and support of friends. The event would not be possible without the generous support of our corporate sponsors (listed below), whose contributions cover operational expenses so the money raised directly benefits the students.

2001

Platinum Sponsors (\$1000)

- First Interstate Banks
- Montana Beef Council
- Montana Farm Bureau Federation
- Montana Wheat & Barley Committee
- Northern Ag Network
- Reier Broadcasting
- Ross Products Division, Abbott Labs
- Stockman Bank

Silver Sponsors (\$500)

- Montana Agricultural Business Association
- Montana Stockgrowers Association

Bronze Sponsors (\$250)

- Bozeman Daily Chronicle
- First Security Bank
- Montana 4-H Foundation
- Montana Farmers Union
- Montana Grain Growers Association
- Montana Wool Growers Association
- Rocky Mountain Supply

Other Monetary Sponsors

- Montana Livestock Ag Credit, Inc.
- Simpson Honda
- UAP Northern Plains

2000

\$5000 donation

- Montana Beef Council

Ag Appreciation fundraisers help student activities

The student activities fund earned nearly \$12,000 throughout the weekend. Sharron Quisenberry maintained her three-year winning streak in the Kiss-a-Critter contest. At halftime of the MSU-Idaho State game (MSU won 52-13!), the dean puckered up for May the sheep, provided by Gillian Hatfield. Other contestants included MSU president Geoff Gamble, football coach Mike Kramer, Alumni director Jaynee Groseth and ASMSU president Andy Parker.

In the raffle, all three prizes—round-trip airline tickets donated by Montana Travel, a sculpture donated by Jim Dolan and an embroidered parka donated by Creative Monograms—were won by MSU students. The silent auction generated nearly \$10,000 for the fund with over 200 donated items.

- Ross Products Division, Abbott Labs
- Double Platinum (\$2000)**

- Reier Broadcasting

Platinum (\$1000)

- Montana Farm Bureau Federation
- Montana Wheat & Barley Committee
- Rocky Mountain Supply
- UAP Northern Plains
- Stockman Bank

Silver (\$500)

- Montana Stockgrowers Association
- Montana Agricultural Business Association
- Montana Meat Processors Association
- First Interstate Banks

Bronze (\$250)

- Bozeman Daily Chronicle
- Montana 4-H Foundation
- First Security Bank
- Montana Grain Growers Association
- Montana Farmers Union

1999

\$2500 donation

- Ross Laboratories

Platinum (\$1000)

- Montana Farm Bureau Federation

Silver (\$500)

- Montana Agricultural Business Association
- Montana Stockgrowers Association

Bronze (\$250)

- Montana Grain Growers Association
- Bozeman Daily Chronicle

We wish to extend a **special thanks to our raffle donors:**

Montana Travel
 Jim Dolan
 Danhof Chevrolet
 Creative Monograms.



*By Sandra Germann,
 Director of
 Development*

In my opinion, the entire Ag Appreciation

Weekend on campus was a huge success! One of my favorite events of the weekend was when nearly 300 people gathered for the Boots & Bow Ties banquet Saturday night. It truly touched me to see so many who are so deserving be recognized. Besides being a lot of fun, this year's program paid tribute to Outstanding Agricultural Leaders, Outstanding Montana Extension Agent, Outstanding 4-H and FFA Alumni, as well as Steer-A-Year winners. In all, when you get that many agriculture people in one room, it is destined to be "outstanding!" If you missed this year's event, plan on attending in November 2002—you won't regret it!

Having said that, I need to say how important our sponsors of Ag Appreciation Weekend are to the college. The fact that they were left off the Honor Roll of Donors (published in the last edition of AgLink) was an oversight to say the least! Please join me in saying "Thank You" to our Ag Appreciation Weekend sponsors and donors (see list this page). The weekend truly would not be possible without their generous support.

Sandra L. Germann

Class of '89 (BS), '91 (MS) AgEd/
 Extension

Mathre Courtyard honors retiring professor

Don Mathre retired from Montana State University at the end of December, but you don't have to look far to find reminders of what he has done for Montana and the campus over the past 35 years.

Mathre, a plant pathologist who has specialized in soil and seed-borne fungal diseases of small grains, came to MSU in 1967. Since then, he has influenced everything from the design of the Agricultural Bioscience Facility to recommended planting dates for grain growers.

Now, there will be a "Mathre Courtyard" as well. Thanks to a donation from Mathre, the courtyard began taking shape this past fall on the southeast side of the Ag Bioscience Facility.

Mathre, who chaired the ABF design committee, says that a courtyard was part of the original plans for the ABF.

"When the bids came in, we had more to do than we had funds, and that was one of the things cut out," says Mathre. "I worked with Dick Pohl who had students develop designs as part of their landscape architecture class. Then the faculty in the building voted on the designs."

The courtyard will let students and faculty use the area for lunches and breaks, plus gentling the transition from building to grounds.

For most of his years at MSU, Mathre has been known to students for both his advising and his teaching of several pathology classes. For several years he was interim associate dean of agriculture.

In addition to work on Cephalosporium stripe and the fungus that causes "Take-All" disease of wheat, Mathre has focused on the smut diseases in grains. He coordinated regional risk assessment work

that led to convincing China that TCK smut is not a threat.

Mathre says the best part of his career has been the people he's worked with, both on campus and growers around the state. His coworkers "made coming to work a pleasure" and working with appreciative growers has been important as well.

Mathre says he plans to continue working with the American Phytopathological Society's foundation, which he chairs this year. The APS Foundation helps provide travel grants for students and international plant pathologists to attend professional meetings.



Don Mathre retired in December after 35 years.

Non-Profit Organization
U.S. Postage
PAID
Permit No. 69
Bozeman, MT 59715

College of Agriculture
Montana State University – Bozeman
202 Linfield Hall
Bozeman, MT 59717
Return Service Requested



Linking the MSU College of Agriculture with its Alumni and Friends

Winter 2002



AgLink

