



# Ag Link



Spring 1999

Linking the MSU College of Agriculture with its Alumni and Friends

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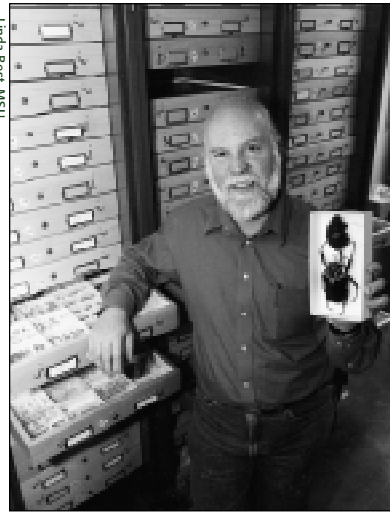
## Bozeman Collector Makes Major Donation to MSU Insect Collection

Beetles, wasps, flies and other insect specimens – 1.3 million of them from all parts of the world – are neatly displayed in drawers at MSU's Leon Johnson Hall and Lewis Hall.

And now, they're joined by 40,000 new specimens, plus accompanying literature, received last December from former MSU entomologist Richard S. Miller.

"The donation is an extremely valuable addition to our existing collection," says MSU entomologist Michael Ivie and curator of the insect collection. "It adds thousands of species to our holdings, including several families of beetles, wasps and flies that we did not have represented."

The donated collection is especially rich in North American, Latin American and Eurasian beetles,



*Mike Ivie displays an elephant dung beetle in front of the case of insects donated by Bozeman entomologist Richard Miller.*

says Ivie. The collection also includes extensive insects from eastern North America and California, filling a "large gap" in the collection we had, he says.

Miller, a Bozeman resident, has spent much of the last 20 years building the collection, which includes extensive biological data, says Ivie. Miller, considered a world authority on net-winged beetles, travels around the world to collect insects. He also receives insect specimens from other researchers and collectors, says Ivie.

Though not open for public viewing, the combined collection will be extremely valuable for research, insect identification and

education, says Ivie.

*For more information, contact Mike Ivie at (406) 994-4610.*

## Biotech is MSU's Fastest Growing Degree Program

One of MSU-Bozeman's fastest growing programs is the undergraduate degree in biotechnology.

The program has gone from three students when it began in 1995 to 55 students in the 1998-99 school year, says Dave Long, an adjunct assistant professor of plant sciences who is involved with the program. The popularity of this major may be because the program combines a broad understanding of biotechnology with the lab experience students need to get a biotech job, he says.

Students in the program take two years of basic courses, starting with "An Introduction to Biotechnology." If they want to continue toward a bachelor's degree in biotechnology, they declare an option in either animal, plant or microbial systems.

"The job market for industrial biotechnologists,

biomedical, agricultural or general, is booming for bachelors' level people," said Long. The program also is good preparation for graduate programs.

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## MSU BioScience Facility Near Completion

The BioScience Facility, while finished on the outside, is still undergoing final construction inside.

The project is in its final stages, though, and in June, faculty are expected to begin moving in. The facility will probably be up and running by the end of the summer, says Don Mathre, retired MSU plant pathologist who has overseen the construction of the facility.

# From the Dean

By **Stuart Knapp**  
Interim Dean of  
the College of  
Agriculture



Welcome to the inaugural issue of *AgLink*. We view this newsletter as an important means of keeping you – our alumni and friends – abreast of the important issues and events in agricultural research and education. We would like to hear your comments about this news-

letter. Please drop me a line or contact one of the newsletter editors.

## Dean Search

It has been a challenging, yet rewarding year as interim dean. I've enjoyed working with the students, faculty and staff within the college as well as many alumni and industry leaders this past year.

I am optimistic about the dean search that is underway. We have just completed the process of interviewing three fine candidates for this position. A dean could be on board as early as July 1.

## College Enrollment

We are pleased to report continued high enrollment in the College of Agriculture. As of fall semester, we had 814 undergraduates and 118 graduate students. This is the highest enrollment in 15 years.

The opportunities for careers in agriculture are increasing as we become more dependent upon biotechnical processes in production agriculture. We look forward to continued student growth within the college.

## 12 MSU Students to "Follow the Grain" to Taiwan

In May, 12 MSU students will see first-hand what happens to Montana grain that is shipped to the Far East. They, along with three MSU professors and a Montana farmer, will spend seven days in Taiwan as part of a unique MSU class called "Follow the Grain."

The class is designed to teach students how seed is bred, sowed, sold and used, says course instructor Vince Smith, MSU professor of agricultural economics. The highlight will be to meet with some of the end-users of Montana grain, he says.

"MSU wants its agriculture students to have the 'big picture,'" he says. "We want them to understand local and global grain markets, the roles of science, wheat

breeders, grain handlers, millers, bakers and the policy environment."

For John Russell Peterson, a sophomore in ag business, the course offers exactly the kind of knowledge and experience he hoped to get at MSU. Peterson, whose parents Tom and Carrol Peterson (both MSU grads) produce grain in the Shields Valley, is planning a career in international grain marketing.

Peterson says the course is teaching him about the whole spectrum of the grain industry, "from breeding to marketing and a lot in between."



Montana grain headed for the Far East is often shipped from the Port of Tacoma, Washington.

For more information, contact Smith at 994-5615 or course co-instructor, Debra Habernicht, head of MSU's Cereal Quality Lab, at 994-5377.

## The Montana Beef Network

For producers who want to add value and quality to their beef products

Montana is pioneering an innovative new program aimed at increasing the quality and value of beef products.

The Montana Beef Network, spearheaded by the Montana Stockgrowers Association and the MSU Extension Service, is an effort to help producers improve their beef cattle performance in feedlots and processing plants.

By consistently meeting quality goals, participating producers are positioning themselves to earn premium prices in the future, says the



Stockgrowers' Quinn Holzer, the network's coordinator.

The foundation of the network is beef quality assurance certification. To become certified, producers can attend training sessions held around the state the next several months. The sessions address health programs, cattle handling, culling cows, environmental guidelines and specifics about the network.

MSU Extension beef specialists John Paterson and Rick Funston are conducting the

training along with Extension agents and the MSGA.

■ **BQA Training** – 22 sessions in April, June 9 in **Kalispell** during the Stockgrowers' meeting, during Montana Beef University August 26 in **Lewistown**, and at the Stockgrowers' annual convention in December in **Billings**.

■ **Beef Nutrition Conference** – April 22, 23 at the MSU Football Stadium Club.

For information, contact John Paterson at 406-994-5562.

## The Western Agricultural Research Center: Herbs, Mint, Insects & Legumes

“Traditional with a twist,” might be one way to describe the Western Agricultural Research Center at Corvallis.

It, like other research centers in the Montana Agricultural Experiment Station system, has its unique programs while also helping to meet common objectives, says Mal Westcott, Western’s superintendent and the department head for the Station’s seven research centers.

At Western, insect rearing and work with alternative crops distinguish it from most other research centers, while it con-

ducts trials on all kinds of crops as part of that system.

“Each research center is important for its place in the overall Experiment Station team as well as for what is unique about it,” says Westcott, whose own specialty is crop nutrient management including small grains.

For about a decade, perhaps Western’s highest profile program has been rearing insects to control spotted knapweed. The rearing and adaptation research run by Jim Story may sometimes look like a crop

of spotted knapweed, but it’s actually a crop of critters like weevils, flies and beetles that each take a bite out of knapweed’s ability to reproduce.

One of the “oldest” nontraditional crops studied at Western is peppermint, a crop that gets its tang from long summer days, where Montana has an advantage over many states. However, other flavorings, herbs and food supplements have the potential to use growers’ oil distillation equipment already in place, helping offset fluctuations in the mint oil market.

Oil crop producers can use their equipment to distill oil crops like dill, anise and chamomile. Those alternative crops as well as echinacea, feverfew and coriander are being studied by Nancy Callan at Western, who is working closely with herb producers and laboratories to determine optimum growing conditions to get the desired ingredients.

The work at each research center is combined with the work done at others in the system at Kalispell, Conrad, Havre, Moccasin, Sidney and Huntley, and with the research done from the Station’s headquarters at Montana State University, and the Livestock and Range Research Station at Miles City, which has a combined MSU/USDA staff.

*For more information about the Western Ag Research Center, contact Mal Westcott at (406) 961-3025.*

### Farming Precisely

High School students at Kalispell and Cascade are collecting information from two area farms. Students in South Dakota are doing the same on a farm there. The farms represent three different ecosystems, and the students’ findings will help MSU-Bozeman, South Dakota State University and secondary school teachers develop an instructional module about precision farming, says Van Shelhamer, professor of agriculture education at MSU-Bozeman. The module will be tested in teachers’ classrooms, and then released for general use.

### Bindweed bind

Bindweed, a native of the Mediterranean, came west with waves of settlers. Now it’s well established in croplands, where it wraps around wheat stalks and gets tangled in farmers’ combines. Chemicals can control it, but they’re expensive. MSU plant scientist Bill Grey and entomologist Jeff Littlefield are testing a one-two punch against the weed: naturally occurring molds and a mite from overseas. The molds and mites are showing promise against the weed at a site near Roy, Mont.

### Upping wheat protein

Montana wheat producers can increase their protein – and possibly their profits – by using variable-rate fertilizer applications, according to a MSU study. The researchers also figured out how to reduce the extensive soil testing necessary with earlier site-specific fertilization techniques. The new processes should be practical in Montana when a grain protein sensor is commercially available – perhaps within two years. Conducting the research were Dan Long and Gregg Carlson, both at MSU’s Northern Agricultural Research Center near Havre, and Rick Engle at MSU-Bozeman.



Tara Kappel, MSU

*Mal Westcott, superintendent at the Western Ag Research Center, discusses crops grown at the center during a recent field day. The center was established in 1907 on 20 acres of land donated by the Bitterroot Valley Irrigation Company. Another 9.1 acres were added in 1920.*

## Summer Field Days

**June 23** – Ft. Keogh Livestock and Range Research Laboratory, Miles City

**June 24** – Forage Research Day, Central Ag Research Center at Moccasin

**July 8** – Northwestern Ag Research Center at Kalispell

**July 13** – Northern Ag Research Center at Havre

**July 14** – Central Ag Research Center at Moccasin

**July 19** – Specialty Crops Tour, Western Ag Research Center at Corvallis

**July 21** – Eastern Ag Research Center at Sidney

# Students



Back row, from left: MSU students Perry Johnston, Mykel Matthews, Melissa Kovanda and Rachel Endecott. Front row, from left: Keri Jenkin, Andy Myers, Susan Tomera and Christina Guzman, who was Cal Poly's hostess for the MSU group.

## Ag Ambassadors attend leadership conference in California

Students of MSU-Bozeman and MSU-Northern recently attended the fourth annual Agriculture Ambassadors Leadership conference at Cal Poly-San Luis Obispo, CA.

MSU-Bozeman delegates included Keri Jenkin, a senior in animal science from Bozeman; Andy Myers, a senior in animal science from Frenchtown; Mykel Matthews, a junior in ag business from Roberts; Melissa Kovanda, a sophomore in animal science from Columbus; Rachel Endecott, a sophomore in animal science

from Ennis; Susan Tomera, a sophomore in ag business from Carlin, NV; and Lynn Schledorn, advisor.

Delegates participated in workshops on team building, public relations, impromptu speaking and recruitment techniques.

The Ag Ambassadors' mission is to provide interactive presentations about agricultural careers and technologies primarily to high school and community college students.

## Plant Sciences Grad Student Receives Major Crop Sciences Award

G. James Baley, a graduate student in the Plant Science Department, was one of six U.S. students named to receive the 1999 Gerald O. Mott Meritorius Graduate Student Award in Crop Science, presented by the Crop Science Society of America.



The award is based on academic

achievements, research and teaching contributions, leadership accomplishments, service activities and personal qualities. The award is named for the first president of the Crop Science Society of America, who trained 75 graduate students in his 45-year career.

Baley, a native of Michigan, is pursuing a master's degree under the direction of Phil Bruckner, associate professor and winter wheat breeder. Baley plans to pursue a doctorate at the University of Georgia.

## Animal Science Student Lands Prestigious Internship

A Montana State University-Bozeman student credits her experience at MSU with helping her land a prestigious national internship.



Elizabeth Tow, a senior in animal science, is interning with Certified Angus Beef in Wooster, Ohio. Selected through a national search, Tow is in charge of coordinating and marketing the company's restaurant contests throughout the U.S. Tow works with 86 distributors and about 3,000 licensed programs throughout the U.S.

Tow learned about the opportunity through Mike Tess, MSU animal science professor. She says she submitted her resume and was offered the position after an extensive phone interview and "a very good written and phone reference" from her advisor, animal science professor Ray Ansotegui.

Of her MSU education, Tow said, "the professors are great" and "we get to be involved in a lot of hands-on (projects)." Tow's supervisor at Certified Angus Beef, Deana Scrimger, said Tow is "great to work with, a great team member, hard working and enthusiastic, with a great understanding of the industry."

Good communications skills and a background in the beef industry are important qualifications for an intern, said Scrimger, Food Services Division assistant director. She also looks for project and work experience. Grades and the specific degree are important, but they're not the deciding factor, she said.

Tow says the internship might turn into a summer job. She has two semesters until she completes her degree and after that, she feels the possibilities are "unlimited."

Because Tow has worked out so well, Scrimger said Certified Angus Beef "would like to continue a partnership with MSU."

## Sitz Families Set up Beef Endowment

The families of Bob and Jim Sitz of Sitz Angus Ranch have set up a Beef Endowment through the MSU Foundation.

The endowment will benefit students pursuing degrees in the animal sciences and who demonstrate ability and interest in beef cattle production.

According to Bob Sitz of Harrison, they want to help "get well-trained people back into the ag industry."

Brother Jim Sitz of Dillon said the endowment is to "help ag kids pursue their education."

"We thank both Sitz families for their commitment to agriculture, the agriculture industry as well as Montana State University," said Stuart Knapp, Dean of the MSU College of Agriculture.



*Sitz Ranch Management Team: (from left) Bob, Jenny and Taylre Sitz of Harrison (son Lane not pictured); as well as Tammi and Jim Sitz (daughter Amber not pictured) of Dillon*



**By Sandra Thibault  
Director of Development**

As an MSU College of Agriculture alum, what an honor it is to be back in Bozeman working with alumni and friends as the college's director of development.

Thank you for the generous gifts the college has received through the MSU Foundation this past year. An example of your dollars at work is the new student computer lab in Linfield Hall. Students now have access to 20 state-of-the-art computer work stations. A dedication of the new room is scheduled for April 16<sup>th</sup>.

The new gifts, endowments and scholarships that are coming in to benefit the college and its students are greatly appreciated and needed. Thanks to your support, the College of Agriculture gives out more scholarships than any other college on campus.

And yet, our need for funds continues to rise. With declining state support, additional funds are needed to assure quality programs worthy of our students.

If you are interested in discussing ways to provide a lasting legacy or gift to an area of your choice within the college, please contact me. I'll ensure that your gift goes to the area you intended.

I hope you enjoy this publication as well as those to follow. I hope it reminds you of your time here as a student and updates you on the latest happenings within the college. Please send us your comments or suggestions on *AgLink* and topics you would like to hear about.

Have a happy and prosperous spring and summer, and thank you for your continuing support!

*Sandra Thibault*

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

For information on ways you can contribute to college programs and scholarships, contact Sandra Thibault at 406-994-7671. Or check the college's web site at <http://agadsrv.msu.montana.edu/maes/>

## Attention: Artists in Agriculture

The College of Agriculture is seeking art that depicts agriculture or natural resources for a juried art show in November 1999. Participants must be College of Agriculture students, alumni, former stu-

dents, faculty or staff.

The divisions include photography, water color, oil, pen or pencil, and sculpture. Prizes will be awarded to the top entries in each division. All entries will be on display within the college. Entries are being accepted now until October 22.

*For more information, contact Lynn Schledorn at 406-994-5744.*

## MSU Students Receive Scholarships

Around 187 scholarships totaling \$107,100 were recently awarded to students in the College of Agriculture.

This is the largest number of scholarships given by any MSU college, says Clayton Marlow, associate dean for college academics.

Fifty-six of the scholarships were given to students during a recent scholarship luncheon. Other scholarships will be awarded to students at a later date.

*For more information on scholarships, contact Lynn Schledorn at 406-994-5744.*



**Bill and Anita Jones have set up an endowment to benefit the agriculture education programs at MSU. They are pictured above at their farm near Choteau.**

## MSU Hosts Competition

A team of MSU animal science students competed in the Western Regional Academic Quadrathlon March 18 - 19 at MSU.

Team members included Lance Barney of Sheridan, Mandi Holland of Dillon, Katie Rein of Big Timber and Fred Robinson from Oregon.

They competed against five western universities. Brigham Young University won top honors.



MSU student Arriane Perlinski helped judge at the event.

Carol Flaherty, MSU

# Fast Growing Biotech Program

*Continued from Page 1*

"This is one of the more challenging majors in the College of Agriculture, but it is what the profession demands and what employers want," says Long.

One strength of the program is that it provides an exceptional amount of hands-on, realistic lab work, says Michael White, a veterinary microbiologist who helped design the curriculum.

MSU junior Melanie Higgins is enthusiastic about the program. "I like the hands-on," says Higgins, from Great Falls. "In classes, you learn about all this stuff, but we made antibodies yesterday, and it feels good."

Two other program aspects are unique: a large number of instructors teaching

the labs and high quality lab equipment.

The students use the same lab equipment as the researchers, but it is primarily grant-funded, not tax funded.

"This is an example of research funding undergraduate education," says White. "The state didn't pay for most of the equipment in the veterinary lab the students are using. It was funded by federal and private research grants."

Though the program is organized by the College of Agriculture, instructors in the biotechnology program come from many MSU colleges and departments.

*For information, contact Dave Long at 406-994-5224.*

## Ag Appreciation Weekend is Coming

**Mark your calendars! November 5-6 is Ag Appreciation weekend at MSU! Here are some of the events to look forward to.**

### Ag Days

The weekend begins with the Ag Days student competitions where over 500 7-12<sup>th</sup> grade students from around Montana will compete in contests ranging from public speaking to mechanics, debate to livestock judging.

### Juried Art Show

Art by alumni, students and faculty will be on display in Linfield Hall. Winners will be announced at the Saturday evening banquet.

### Steer-A-Year Banquet

Friday evening is the Steer-A-Year banquet put on through the MSU Athletic Department. The Outstanding Agriculturist Award will be presented.

### Bobcat Football

Saturday's home football game will be centered around appreciation for agriculture, and include special events.

### Auction, Dinner and Dance

On Saturday evening, the grand finale is an elegant candlelight dinner and dance along with a silent auction.

*For more information, contact the College of Agriculture at 406-994-3681, or the Athletics Dept. at 406-994-4221.*

