

SREC ADVISORY BOARD MEETING

The Sheridan Research and Extension Center (SREC) Advisory Board met at the Sheridan Agricultural Complex located on the Sheridan College Campus on January 5, 2006. The meeting convened at 9:25 am. Board members and UW personnel in attendance:

Jim Bennage	Blaine Horn
Susan Boettcher	Jerry Ista
Sheridan Burgess	Derek Lowe
Dwayne Dillinger	Doug Materi
Lise Foy	Steve Miller
Fred Gray	Justin Moss
David Goehring	Cleve Redding
Scott Hininger	Robert Sorenson
	Bill Taylor

The meeting was called to order by Justin Moss, Director of the SREC. Justin introduced himself and gave a brief update of the SREC. An overview of the SREC website was also given (<http://uwadmnweb.uwyo.edu/uwexpstn/Centers/Sheridan.asp>). Introductions of the staff at the SREC were made, followed by introductions of the board members listed above.

College of Ag Update (Presented by Steve Miller, director of Ag Experiment Station at UW)

The College of Ag was the only college at the University of Wyoming that grew in student enrollment the past school year. This shows that the college's recruitment staff is doing a great job throughout the state as well as Western Nebraska, and Northern Colorado. UW College of Ag was number one in pursuing and receiving grants for the second year in a row, which added up to over 12.3 million in grant support.

The college has seen many personnel changes over the past year. Fred Gray is the new head of the plant sciences department, Rich Olson is the new head of Renewable Resources, and Roger Coupal became the new head of Agricultural and Applied Economics. The college of Ag is currently interviewing for a Reproductive Physiologist, a Wild Life Pathologist, and the Soil Fertility Position. UW as a whole is searching for a new president because former President Philip Dubois returned to Charlotte, North Carolina. Tom Buchanan, the Presidential Interim, has been appreciative of the College of Ag and has earmarked funds specifically for the College of Ag in the amount of 1.5 million dollars. These funds will go toward Vet Sciences, Extension and SAREC.

Agricultural Experiment Station (AES) Update (Presented by Steve Miller)

Justin Moss replaces Roger Hybner as director of the Sheridan Research and Extension Center. Justin has done a great job and has had to deal with many unexpected problems including; well problems, furnace problems and pipe problems. AES hopes the research efforts at UW will expand because of Justin being in Sheridan. Justin also has a great relationship with Sheridan College, which could open up opportunities for both UW and Sheridan College.

Powell R&E had a tragic accident with Alan Gray, the Director. He was harvesting forage plots, and a piece of wire penetrated his brain. He was fortunate to have a graduate student who performed CPR on him. He is currently recovering well and is at home in Riverton. Abdel Mesbah, is currently serving as interim at Powell. Two years ago the State Seed Lab moved to Powell. UW plans to expand the seed lab in the coming year. This lab is set up to test a number of species. Idaho would like to research 7,000 bean samples in Wyoming at the Powell Seed Certification Lab.

Sustainable Ag Research and Extension Center (SAREC) is located in Lingle, WY. This is a new facility, which opened when the Archer Research and Extension Center, and the Torrington Research and Extension Center closed. SAREC would like to integrate livestock, crops, irrigated pasture, and dry land pasture, into a system. This was the first year that research was conducted at this facility. SAREC is in the building stage, currently building a new office, new shop and an animal handling facility. This construction should be complete May 1, 2006. Construction has started on an animal feeding facilities, which will be capable of handling 400 head of cattle and 800 head of sheep. These animals will be used in the integrated management systems.

Plant Sciences Update (Presented by Fred Gray, head of the Plant Sciences Department)

The Department of Plant Sciences currently has 25 personnel. Seventeen of these personnel are located on campus and 8 are located at the research and extension centers throughout the state. The Plant Sciences Department currently offers three areas of instruction. The undergraduate program offers a B. S. degree in Agroecology. The Graduate program offers both M.S. and Ph. D. degrees in the area of Agronomy. The Plant Sciences research and extension priorities include, Plant Species Adaptation, Weed & Disease Management, Cropping Systems Ecology and Plant Breeding. The Plant Sciences Department has many publications available (See section IV on handout below for a list).

UNIVERSITY OF WYOMING

SHERIDAN RESEARCH AND EXTENSION CENTER

Winter Advisory Board Meeting
January 5, 2006

UPDATE

DEPARTMENT OF PLANT SCIENCES

I. DEPARTMENT PERSONEL (25) – 17 on campus, 8 at R&E Centers

A. FACULTY (7)

Professors (Alan Gray, **Fred Gray**, Jim Krall, **Gary Franc**)
Associate Professors (**Robing Groose**)
Assistant Professors (**Rik Smith, Stephen Enloe**)

B. ACADEMIC PROFESSIONALS (9)

PHD – **Mark Ferrell**, Abdel Mesbah, Justin Moss, **Karen Panter, Bill Stump, Dave Wilson**
MS – Jack Cecil, **Raina Spence** / BS – Gil Waibel

C. TECHNICIANS (4)

MS – **Dave Claypool**, Denny Hall; BS – **Wendy Cecil**, Jerry Nachtman

D. STAFF (6)

Mike Moore – Seed Certification Coordination
Brad Williams – Coordinator Greenhouse Operations
Ginny Alm, Kathy Keeney, Arlene Mascarenas, Norma Murphy – Office

Personnel

E. RECENT LOSSES OR REASSIGNMENTS:

Retirements: **Ron Delaney, Dave Koch**
Extended Sick Leave: Alan Gray
Administrative assignments: **Steve Miller, Fred Gray**

F. ANTICIPATED ADDITIONS:

Plant pathologist (Dale Woods)
Forage Crop Ecologist (replacement for Dave Koch) – CPM process
Weed Ecologist (replacement for Steve Miller) – CPM process
Copping Systems Ecologist (biofuel crops) – College of Energy

II. INSTRUCTION

Undergraduate Program – Agroecology (B. S.) – with Renewable Resources

Graduate Program – Agronomy (M.S. and Ph.D.)

Participate in teaching courses in the Biology & Life Sciences Undergraduate Program

III. RESEARCH AND EXTENSION – Areas of emphasis for forage and row crops and for horticultural crops and landscape plants include:

Plant Species Adaptation
Weed & Disease Management
Cropping Systems Ecology
Plant Breeding

IV. HANDOUTS

- Agroecology Program
- Verticillium Wilt of Alfalfa
- Influence of Late Season Harvesting, Fall Grazing, and Fungicide Treatment on Verticillium Wilt Incidence, Plant Density, and Forage Yield of Alfalfa
- Release of 'Shoshone' Sainfoin.

Sheridan College Update (Presented by Jim Bennage, Department Chair of Ag and Technical Division at Sheridan College)

Sheridan College is thrilled to have Justin working with them. He teaches one class per semester, in exchange for using the resources of Sheridan College. A number of different activities at Sheridan College have involved SREC including; turf plot studies, and re-control studies of many kinds. Sheridan College looks forward to doing more of these projects. The Sheridan College Ag Department has been working with UW to develop upper division instruction primarily in horticulture at Sheridan College. Some of the resources of Sheridan College include the Agricultural Complex, the greenhouse and an abundance of land. The Ag Complex has the wet lab, food sciences department, meats lab, and livestock handling facilities. Sheridan College has 160 acres and access to 500 additional acres from Whitney Benefits at no cost. We also have an educational lease on some land up above Buffalo, which has 4500 acres. Sheridan College has been working with the UW Department of Animal Science on this land in Buffalo. Although Sheridan College is not a research facility, we believe that the students would benefit greatly from involvement in some of these research projects. The Ag department at Sheridan College hopes to do more research activities and involve UW in these areas.

Sheridan Research and Extension Center Update (Presented by Justin Moss)

Roger Hybner left the Sheridan Research and Extension Center in June 2004. Dan Smith became the interim in August 2004 and remained the interim until Justin came in June 2005. Byron Nelson, the farm manager, ran the facility when the center was without a full time director. Justin was originally classified

as an extension educator, which didn't seem to fit what he was doing. After some discussion he became a research scientist, which includes 40% research, 20% teaching, 15% extension, 15% administration, 5% service and 5% professional development. He is now affiliated with the Department of Plant Sciences. Since Justin has come he has been able to negotiate two new positions at the Center. A Research Associate 1, and an Office Assistant Senior. Susan Boettcher filled the position of Research Associate 1 at the beginning of September and Britni Haar filled the position of Office Assistant Senior at the beginning of November. Susan has worked on many projects, one of the projects she has been working on is a Tree Project and she will tell you more about that.

Tree Project (Presented by Susan Boettcher)

The tree project is a map and inventory of all the trees at the SREC. The Shelter Belt, which is located west of the office, was first planted in 1917. Since the project started every tree now has a tag.

Objectives:

1. To find out what kind of trees we have at the SREC
2. To find out how many trees and shrubs are located on the SREC property
3. To help decide which trees to keep and which to get rid of

Both Susan and Dave Claypool used the Trimble PRO-XRS (GPS Unit) to map all of the trees. This device is very accurate, within a couple feet. They discovered that over 30 species of trees and shrubs reside on the SREC property. They also found over 1,000 trees and shrubs located on the property.

Uses and Future Possibilities

1. To create an interactive map for visitors
2. To rate the trees (healthy/poor) to see which need to be replaced

Farm Update (Presented by Justin Moss, filling in for Byron Nelson)

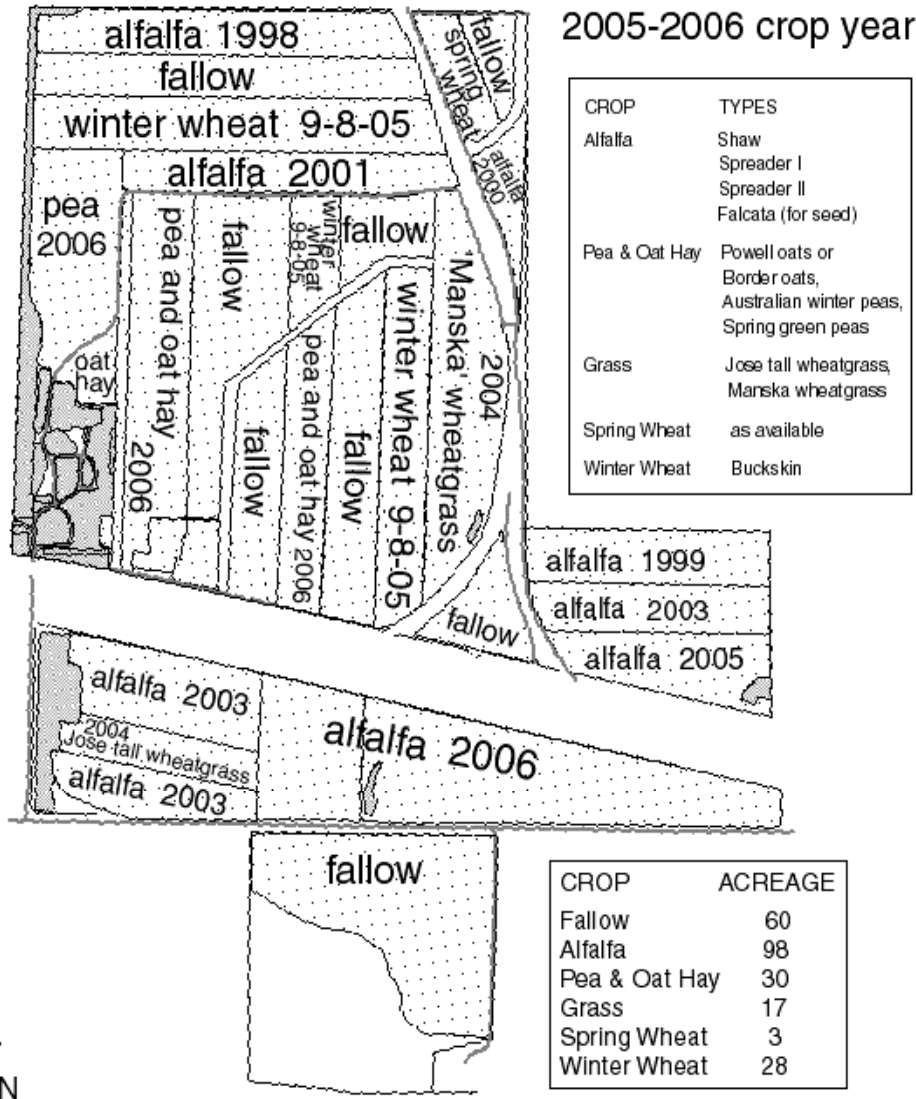
As shown on the SREC 2005-2006 crop year handout (next page) the SREC has 250 acres of cultivated land. The SREC currently does crop rotation, but currently not sure whether this will continue in the future.

SREC Update Continued (Presented by Justin Moss)

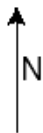
Some of the facilities at the SREC are in poor condition. The water well for the Director's house, Rental house and the office is not drinkable. A filtration system was installed on this well; however the water is still not drinkable. Byron also built a well house for this well. One of the irrigation wells went dry and a new well was drilled this in August 2005. Because the well was dry during the growing season, the crops did poorly. The office building is in good shape and new equipment has been purchased to update to office, including a few new computers and wireless internet capabilities. The furnace in the Rental house needs to be replaced. A new furnace was installed in the Director's house. The bathroom had to be redone in Director's house due to problems with the water sewer pipes.

SREC

2005-2006 crop year



Dotted area = cultivated fields = 250 acres



1000 feet

The SREC is currently running a few turf trials on the property. One trial that is currently being run is a Kentucky Bluegrass trial. This trial has 110 different varieties, which are each being tested three times. There are 330 plots total in this trial, which are 5 ft. by 5 ft. Another trial that is being run is the Homeowners variety trial. This is testing 30 different varieties of grass, which can be purchased at different locations such as Wal-Mart, Ace Hardware, Online and other local stores. The SREC also plans to run trials on Tall Fescue starting in fall 2006.

The SREC has some specific needs and wants in order to effectively carry out some of the projects. These include:

Needs:

- Small plot sprayer
- Underground lawn irrigation for research plots
- Utility Vehicle
- Sprayer
- On-site automated weather station
- Reel mowers for turf research
- Research green house

Wants:

- Hay equipment
- Work truck
- Livestock

Pennaco Energy and Marathon oil currently have two methane wells drill on the SREC property and two more are in the plan. Justin is worried about some of the trials because of the methane in the water. Pennaco currently has an office located west of our office. They have been good neighbors for the most part.

Continued research

- Dryland cool season forage grass variety trials
- Dryland winter wheat variety trial
- Dryland winter cereal forage trial
- Dryland winter triticale forage trial
- Dryland winter triticale grain trial
- Dryland spring wheat variety trial
- Wild oat control in spring wheat
- Irrigated bean disease instructional plot
- Bioremediation of coalbed methane waters field trial
- Annual bluegrass control on creeping bentgrass greens
- 2005 – 2010 National Turfgrass Evaluation Program Kentucky Bluegrass Official Test
- Homeowner / lawn grass trial
- Association of Specialty and Cut Flower Growers Seed Trial
- Grape variety observational trial
- Apple, pear, plum, and cherry orchard

- Ornamental grass, shrub, and perennial flower planting
- Organic garden
- Educational gardens
- Shelterbelt plantings
- Shelterbelt rejuvenation project
- Wildlife shelterbelt planting
- Global positioning system / geographic information system educational tree map

Additional research for 2006

- Integrated pest management on golf courses
- Development of irrigation best management practices for golf courses
- Best management practices to reduce nutrient and pesticide losses from turf

SREC 2006 Planning Meeting

SREC SWOT

Strengths

Land
 Sheridan College and UW relationship
 Manpower
 Rancher cooperation
 Golf course cooperation
 Sod farm cooperation
 Cool-season grass variety trials

Weaknesses

Funding

Opportunities

Irrigated/Dryland Biofuel oilseed crop production
 Forage grain variety
 Beardless winter forage
 Grant funding/endowments
 Collaboration with local implement dealers
 Local investment in ag/ Whitney, Scott Family
 No-till research
 Food plots/hunting – WY Game and Fish, Pheasants
 Forever
 Cool-season grass variety trials
 Grasses for reclamation
 Ornamental plant/Tree species adaptation trials (Ex. Plant Select, CO)
 incorporate climate, soil type, precip, etc.

Irrigation management for turf, BMP's, surfactants, etc.
Leafy spurge control
Weed control/Pasture management
Precision Ag / Affordability
Internships
Grad assistantships
Student recruitment/retention
4-H, Vo-ag, WY Ag in the classroom, Ag expo
Annual Field Day, Specific workshops, school field trips, day camp

Threats

SREC Priorities

Priorities

First tier

1. Turfgrass/ornamental research
2. Small acreage/alternative crops
3. Crop/forage/dryland alfalfa/no-till alfalfa/turf/ornamental/reclamation etc. species adaptation trials
4. Biofuel oilseed/alternative
5. Carbon sequestration in soils – cool season grass trials, etc.
6. Extended crop rotation system – no-till
7. Weed control/Pasture management
8. Annual Field Day, Specific workshops, school field trips, day camp
9. Research information accessibility/regularly update SREC web site

Second tier

1. Endowments/local investment in ag/ Whitney, Scott Family
2. Collaboration with local implement dealers
3. Food plots/hunting – WY Game and Fish, Pheasants Forever
4. Precision Ag / Affordability
5. Internships/Grad assistantships/Student recruitment/retention/4-H, Vo-ag, WY Ag in the classroom, Ag expo

Future Advisory Board Meetings

The SREC has not set a definite date for the Summer Field Day. This should be determined at the end of February. Next years Winter Advisory Board meeting will most likely be held in Gillette, WY in January 2007. The meeting adjourned at 3:00 pm.