

SREC ADVISORY BOARD MEETING 2007

The Sheridan Research and Extension Center (SREC) Advisory Board met at the Sheridan Research and Extension Center located in Sheridan County on February 2, 2007. The meeting convened at 11:05 am. Board members and UW personnel in attendance:

Jim Bennage
Frank Galey
David Goehring
Steve Herbert
Doug Materi
Steve Miller
Justin Moss
Wendy Owen

The meeting was called to order by Justin Moss, Director of the SREC. Introductions of the staff at the SREC were made, followed by introductions of the board members listed above.

College of Ag Update (Presented by Frank Galey, Dean of the College of Ag at the University of Wyoming)

This is one of the few colleges of Agriculture in the region that has had steady increasing enrollment over the last five years. We set a new record this year of 882 students as an estimate. It goes to show that the marketing and our programs are hopefully relevant. We are really focusing in a couple areas in the college, putting resources into Restoration Ecology and all the things related to Agroecology in that area. We're doing a lot of water work, we've hired several new people in water over the last several years and we hope to continue to hire new people when we have the opportunity. The other area where we were asked to focus in by the state is in Ag Business. The Ag Business department is really growing and doing well. We are in the process of looking for a new leader to be head of that department.

When I went around five or six years ago I asked people what they wanted from the College of Ag and they said, "What can we do about water quality?" So we really looked at marketing. As I mentioned earlier Agroecology and Sustainability all fits very well into our focus on Restoration Ecology.

We have had a lot of turn over in the Plant Sciences department this year and the last few years with retirements primarily. We're lucky enough to have Steve Herbert as a great new administrator running the department and he's with us today. Steve brings expertise in Plant Physiology and a real focus on research, which I think you guys at SREC will appreciate.

As we try to ramp up our efforts in Plant Sciences we are searching right now for a Forage Ecologist. This is someone who can do work with forages. You look at Wyoming and 80% of our crops are forages. We need a Forage Ecologist who can do extension research, applied research and possibly work

with folks at the R&E Centers across the state. Forages are also important in restoration.

The other thing that the College of Ag is searching for is a new Weed Scientist. When Steve Miller left to become the director of the Agriculture Experiment Station, we left a big hole in our weed science research. So we are in the process of searching for a Weed Ecologist.

We're strong in water, restoration and soils. Those are areas that we're trying to continue to build. We just hired Jay Norton as a Soil Fertility Specialist and he will have extension responsibilities. We also continue our interest in weeds. As I mentioned earlier we're looking for a new weed scientist. We also have a new plant pathologist, Dale Woods, whose specialty is actually using the plant pathogens to control weeds in a biological way. He has a 60% extension appointment in applied research.

Agriculture is responsible for all the Molecular Biology, Pre Med, Pre Vet, and Micro Biology on the campus. The Life Sciences are strong, they are well enrolled and students love them. We've got a good research program going there, a little less applied, but just so you know agriculture spans a lot of things.

We also have the Family Consumer Science, Nutrition, and Childcare going on. One of the things we do there is look at stress on the ranch, dealing with family and personal issues. The Agrability program focuses on issues related to disabilities with people who are living in rural areas.

That's an overview of what the college is, where we are. We're about to enter a new academic planning period through the spring and summer. We would like to hear from many of you about needs throughout the state.

A couple things you may be interested in, is that we have reorganized our extension service into area team concept. One of the areas of focus is natural and rangeland resources and that team is working together with our profitable agriculture group to create a publication called Barnyards & Backyards. This publication really tries to reach those people who are small acreage farmers. One of the things I was asked is, "What do I do about that 35 acre weed patch?" People want the information and so we've partnered up with NRCS and some other federal agencies and hopefully we can get some funding so we can make this publication available more broadly. It seems like we're getting great feedback from our clients on this publication. We've rolled out a number of 30 second vignettes on Casper Television about the publication. Eric Peterson in Sublette County, Gene Gade in Crook County, and Tom Heald in Natrona County have taken a lead on these vignettes. The vignettes do two things for the community; first, they are educational to help people understand how to do things in the land. Second they are educational for the city folks so they understand that ranchers aren't out there over grazing and raping the land. We actually have a plan, we need to have grass if we're going to grow our cows, so a lot of issues related to open spaces and the importance that ranching brings to that. This is a PR program for proper range management, so people in towns start getting the other side of the story. We received great feedback from the state Ag Board and they would like to see us ramp these vignettes up and do more of them.

We have a new president at UW Tom Buchanan and he recognized the need to reach out to the state. The upshot of this is that last year he went to the legislator and successfully attracted seven new service positions for the College of Ag. Three of them are full time staff for the State Vet Lab. These staff members deal with everything from brucellosis to VBD in cattle as well as the regular veterinary work. Also a new faculty member for the vet lab, this person will be doing more pathology work, hopefully taking some of the pressure off people. We've got people whose cattle are having abortions in the winter and ranchers just don't know what's happening, so hopefully this person will be able to give fast and accurate information. The position is still in the process of being filled. We were also awarded a new Director for the new research center in Lingle SAREC. We are in the process of recruiting for this position. We will also be hiring a Livestock Extension Specialist, that person will be housed in Lingle at SAREC, but will have statewide responsibility. We just hired a new Agronomist in the Big Horn Basin to do extension up there, her name is Sandy Cross. We did lose our Grazing Specialist over in Lander, Paul Meiman; he was involved with many other CES and US Forest Service folks in the Rangeland Management 101 and 301 schools for ranchers on grazing management and range monitoring. We were awarded that position back so we're in the process of searching. In the service area the college is doing much better than it has in the past.

Agricultural Experiment Station (AES) Update (Presented by Steve Miller, Director of the Agriculture Experiment Station)

We do have four experiment stations strategically located throughout the state. These research centers are located in Laramie, Lingle, Powell and Sheridan. Sheridan's new emphasis is on horticultural, renewable resource type issues, but will still do dryland cropping systems work up here. We are currently working on a third year program with Sheridan College and Whitney Foundation to expand the University of Wyoming (UW) efforts up here. This development will hopefully benefit Sheridan College as well and UW.

(Dean Galey shared the update) We currently have a draft of a memorandum of understanding with Sheridan College. Kevin Drumm (the Sheridan College president) is planning on signing this memorandum, so that's good news, since this has been in the process for two or more years. Whitney Foundation is interested in possibly funding this position. The position would be dedicated to the SREC, it will be a UW faculty position, they will be teaching at Sheridan College for the third year Horticulture program, but will also be doing research at SREC. So there would be a Horticulture Science, and Natural Resource person up here. They will be part of the Plant Sciences Department. Having faculty at SREC will make a big difference. One of my goals is to start beefing up the R&E Centers throughout the state, so this will be a good start for SREC.

(Steve Miller) The newest Research and Extension Center we have is at Lingle and it has just been renamed the James C. Hageman Sustainable Agriculture Research and Extension Center (SAREC). The Board of Trustees at

UW approved the change in name unanimously and it was announced at the stock growers meeting in September. Jim Hageman was always very supportive of education and The College of Ag, so this is a very fitting tribute. Dean Galey mentioned we are looking to fill two positions there. One is a systems analyst, and this person will look at sustainable crop livestock systems and the wildlife interactions and put this all together. Even though this individual will be located at SAREC any data that fits in from Sheridan and the other R&E Centers will be put into this. We are going to be bringing three candidates in to interview for this position and this is a full professor level, so they will have well established programs. The individuals who are interviewing are outstanding, so we're hoping to attract one of them. This person will have general livestock responsibilities, but they will also have responsibilities for the sheep extension program. They will need to have fundamental knowledge on sheep and sheep production. This person will also help our Steve Paisley in Laramie with the livestock program.

In Laramie the R&E Center was created this last year and it does involve the Animal Science Research Farm and the Plant Science Greenhouse and land complex. It has come under the main experiment station. We are making adjustments and trying to standardize charges. We are going to implement charges that the faculty may not be totally happy about. We already have a charge involved with the greenhouse, but we're going to implement yardage charges for livestock and we'll make standard programs for what we charge at SAREC and what we charge in Laramie. We're in the process of developing some of these livestock yardage charges.

The last R&E Center is at Powell and it is designed primarily to look at agronomic systems and the addition of Sandy Frost as the Extension Agronomist has been great and has strengthened the program. Many of you have heard about Allen Gray. Allen Gray was the Director and the Forage Specialist located at Powell. He had an unfortunate accident in the summer of 2005 involving brain trauma. There was a documentary about the accident on Discovery Health. He is recovering well, but is probably going to opt for retirement because he does not feel he can effectively do his job.

The Legislator is currently meeting, and UW has a request in for additional expansion facilities at SAREC. Everything looks fairly favorable for funding on a wet lab and a dormitory facility for students at SAREC. UW has submitted a proposal for a Higher Education Challenge Grant that would put an additional two interns at each of the four stations throughout the state. These would be oriented toward transfer students coming in to the University of Wyoming. This would hopefully be two more opportunities for Sheridan College students.

Questions from Board Members

Question - Doug Materi – We're going through the drought stage and we all agree that we need to cut our numbers back to sustain our grass. That's fine, but there are so many of us that need to make payments with the bank no matter what. I would like to see some programs set up so if you cut back there are options so you can still sustain financially.

Response – Steve Miller – We do have some of those programs going, we're lacking the Ag Economist expertise, but we should have a pile of data that will show some alternatives.

Response – Frank Galey – One of the things we are doing is we are searching for a new Ag Economist who will be doing that very thing. Hopefully we have more people on the ground to deal with that. We do have an Extension Economist, Cole Emkee, who can also help with some of these decisions. Steve and I can carry that back and see what kind of programs are already in place. With the new person coming in hopefully they will be able to beef up this program.

Response – Steve Miller – Mike Smith, in Renewable Resources, does have some pretty good information, but we haven't applied any of the economic analysis to a lot of that. It might answer some of the questions you're posing.

Question – Doug Materi - I feel like I'm in the dark about a lot of this stuff because we're not getting the resources we need very readily. I don't know how you communicate the information to the producer or the guy who lives out in the sticks. The information needs to be available for the people who don't have the TV on every morning or don't have the newspaper delivered to their house.

Response – Steve Miller – we do struggle with distributing information, we are good at generating information, but we're trying to improve on how to get this information out. We are improving the website so that the county agents will be able to get this information out. One of our problems is getting information where it needs to be.

Response – Frank Galey – ideas about how to distribute this information better are always welcome. One of the things we try to do is promote the county agents as a front door to the University. What I've found out is that a lot of people don't know that they can go to the county agents. People can also go to the R&E Centers as well to get information.

Response – David Goehring – It surprises me how many people don't know about the R&E Centers. People don't know that they can get information how to get information about that sick apple tree. Or they'd like a vegetable garden, but they don't know the first thing about planting one. People just don't realize what services are available.

Response – Steve Miller – If you didn't get a Reflections Magazine pick up a copy of that. This year the theme for Reflections is Agriculture at a Crossroads. This is very timely, we've got a lot of problems facing agriculture, natural resource development, the wildlife livestock interaction and a lot of the areas being sold off. We've got an older population of people and we don't have younger people who are interested in taking up the ranch life, so these ranches are being sold off.

Question – David Goehring – Can those publications be made available at the county fairs and at the state fair? It would be a good way to get information out to the public.

Response – Steve Miller – We've only published about 6,000 Reflections in the past and they were mailed out to donors. Your suggestion is very good. This project has been underwritten by Farm Bureau and we've not used the

money, but Frank and I have paid for all the publication cost. We are going to print more.

Response – Frank Galey – These publications are available at the state fair, last year we took a case of them to give away.

Plant Sciences Update (Presented by Steve Herbert, head of the Plant Sciences Department)

Agriculture is in transition and the Plant Sciences department is very much in transition. We are currently in the process of filling two new faculty positions. One in Weed Biology and one in Forage Extension. There will be a CREES review of Plant Sciences in March of 2008.

My background is in basic research. We would like to add a dimension of basic research to the Plant Sciences department as well as continue in fundamental research. Wyoming has very different environments all across the state. We want research to be relevant for all these parts. Funding can be jeopardized if research is irrelevant and cannot be applied.

The Plant Sciences department would like to keep all the colleges in the state in the loop about curriculum changes that occur on the UW campus. Programs at UW can be altered sometimes and the colleges throughout the state get the news after the fact, so there is a lag of a couple of years.

I have started to get an interest in the delivery of extension. My prejudice is that we have the bodies and the money that we need, but somehow there are blocks in the system that are making this less effective. I'm probably going to be asking you today about the best ways to organize that delivery. We could possibly use radio, or public access television. There are several individuals, who feel that they need to deliver all this information in person, but it doesn't seem to be very effective and there just isn't enough man power to do that.

The Agroecology undergraduate degree will be reviewed by the Plant Sciences and Renewable Resources departments this year. This review and any revisions will be made with the understanding that a joint horticulture degree will be offered with Sheridan College in the near future. Agroecology is one area where enrollment has the potential to double.

Comments

Jim Bennage – we need to incorporate a systematic approach to delivering resources to community members. Community colleges throughout the state and UW need to combine resources and work together for an effective delivery system. Farm and ranch kids are no longer a source of attendance for agriculture because they're choosing different fields of study. Farms all over the U.S. are decreasing. What Sheridan College is doing is looking to get high school classes and students here to try and increase enrollment in the agriculture department.

***Wyoming Seed Certification Service (Authored by Mike Moore)
2006 Report to the Sheridan R&E Center Advisory Board***

The staff of the Wyoming Seed Certification Service consists of Mike Moore, Manager, and Debbie Nuss, Administrative assistant. Six part-time field

inspectors were employed during the field inspection season of July through August. Windrow inspections on dry beans were performed by Mike Moore during the months of September, October and November.

Seed crops inspected included alfalfa, red clover, barley, grass, millet, beans, oats, sainfoin, native forbs, wheat, and vetch. Alfalfa and beans dominated the program as far as acres are concerned, with 7,885 and 7,938 acres respectively. Winter wheat and grass were also substantial portions of the program, with over 1,000 acres. Total acres in the program was 20,693 acres.

The inspection season went very smoothly, with a significant number of inspectors with previous experience working again this year. The season was hot and dry, which affected yields for crops on lighter soils, but it also meant no disease issues in the dry bean crops. A bean disease training nursery was planted at the Sheridan R&E Center, with training conducted at that location by Gary Franc. Expression of the disease in the plots was poor due to weather conditions, but the classroom portion of the training was effective.

Foundation seed sales totaled \$1,250.00 for oats and \$575.00 for wheat in 2006, with \$625.00 being returned to the Sheridan R&E Center account from those sales.

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

Farm Update

We are a place to do Certified Buckskin Winter Wheat and also Powell Oats. This last year Bryon Nelson (SREC Farm Manager) planted some winter wheat, not for certification, but we got an average of 42 bushels/acre this last year. This is pretty good because it's all dry land crops. For hay we had alfalfa, pubescent wheatgrass, tall wheatgrass, and peas/oats and we got 76 tons per acre. What Bryon has been doing is putting the wheat in grain bins and we've been selling it to bird farms mostly and Pheasant's forever is one of these companies. Pheasant's forever would like to contract with UW SREC to produce all of their wheat for them. It is trouble for them to always have to go out and put seed in the feeders. They would rather have bales that they would just put out in the fields for the birds.

At SREC we have Ed Symmons harvested all of the hay, however we're not quite sure that he'll be able to continue doing this for us. SREC is wondering if there is a way the we could work with some of the other R&E Centers to borrow farm equipment to do our harvesting? Steve Miller responded by saying that it is possible, but the timing with the R&E centers could be a problem. We may also try to work with John Koltiska (a rancher around our area) in borrowing his equipment.

Question: Justin Moss

We have about 230 acres that are in production here at the SREC. With the new forage person coming on, do you administrators expect any new work to be done in dry land research?

Response: Steve Miller

Yes, dry land is going to be one of the emphasis areas that we are going to focus on because of the drought. We've got to be able to increase our dry land forage resources. There are only 600,000 irrigated acres in the state, so there is a need for dry land forage research.

2006 SREC Projects

- **Student Internship Program with Sheridan College** – last summer was the first year this program took place. It came about by talking with Jim Bennage and the purpose is to encourage student enrollment in the Ag program. The money for this project came from Sheridan College and UW. The main project that these students worked on was the Formal Gardens at Sheridan College.
- **Annual Bluegrass Control in Creeping Bentgrass greens** – There is a herbicide called Velocity, which is labeled to remove annual bluegrass weed from creeping bentgrass golf course fairways. It is specific for golf courses. What we did last year is we set up plots at the Powder Horn Golf Course in Sheridan and Bell Nob Golf Course in Gillette. We used several different treatments of velocity on the plots and we also had plant growth regulators that we were trying out. We got great data on this project and we plan to continue the trial this summer.
- **NTEP Kentucky bluegrass** – The National Turf Evaluation Program contracts with universities throughout the United States to run cultivar testing. We have 110 different cultivars of Kentucky bluegrass replicated 3 times at this station.
- **Homeowners Grass trial** – This tests several species of grasses. When people come in looking for a turf for their own homes they can look at what species are doing well in this area. The main purpose of this trial is for extension rather than research, but it is helpful in educating the homeowner.
- **Organic Garden** – This is in collaboration with Sheridan College. Working with Renee King, Food and Meat Scientist at Sheridan College, we started a garden right here at the SREC and we grew various vegetables.
- **Specialty cut flowers** – Working with the Association of Specialty Cut Flower Growers (ASCFG) we are conducting a trial on cut flowers. We take data on growth and post harvest life of cut flowers. The main purpose of this project is more for PR and possibly research in the future. Both the vegetables from the organic garden and the cut flowers we took to the Farmers Market and we gave them away, but accepted donations. Because of this PR we were contacted by Clark Fairbanks at the Wyoming Girl School who said that we needed to do a project together. We decided to apply for a Western Sare Grant, working with SREC, Sheridan College, Wyoming Girls School and Jim Hardesty a local rancher. We will do an irrigated grass trial at the Wyoming Girls Schools. It will be a great opportunity to involve the girls. They will help us maintain the plots,

harvest the plots and take samples. We will also have the opportunity to use the greenhouse that is on location at the Girls School.

- **Grape Variety Trial** – There are some grapes at SREC, however we may have five vines of one variety, and only one of another variety, so it's hard to take honest and accurate data on anything out here. So we decided to work with Sheridan College and ordered 4 or 5 different vines of 25 different varieties. These vines are supposed to be here by May. There are a lot of producers across the state and into Montana and South Dakota, so the purpose of this project is to work with these producers. The Zimmerer's have a large vineyard in Torrington, Phil Napoli has vineyards in Powell, and Carl Camper also has vineyards in Colstrip, MT. The Black Hills Grape and Berry Association, and The Wyoming Grape and Wine Association are also interested in working with us on this project. Rick Smith and I submitted a proposal to the Viticulture Consortium West to do some work here in Sheridan, and the funding will help pay for weather data collection and sampling. The nice thing about this is that the producers who will work with us on this project have agreed to collect the data for us so we won't have to make as many trips to these locations.
- **Drip-irrigated shelterbelt tree establishment** – Last year we had several 4-H students come out and plant about 300 trees. It was a great education opportunity for them and for us at the SREC. We are collecting the date of these trees. We've tried several different techniques for keeping the weeds out. We also put up a fence in order to keep out the wild animals.
- **Cool Season Forage Grass trial** – This trial started in 2003 and was first irrigated in 2004, we will be continuing this trial for the next couple years. We have several different varieties and several cultivars of each and if you're interested in this trial I can print out the data.
- **Dryland winter wheat** – Conducted under Jim Krall, and Jerry Nachtman from SAREC. I have the data for this trial if you'd like to take a look at it. This trial is located at SREC and also at Fred Barton's ranch near Arvada.
- **Dryland Irrigated spring grain study** – located at SREC and at Sheridan College. Mike Killan just sent me the data on this trial. I have the information here if you'd like to take a look at it.
- **Cloned lilac phenology study** – Jim Krall mentioned this last year at Ag Experiment Planning meetings. I contacted the guy, since we're a national weather data collection site, he sent over some cloned lilacs. It's a national study out of Minnesota. What he's trying to do is on the national weather stations throughout the country, he's trying to set up clone lilacs to monitor bud break, first leaf, first flower, and leaf drop throughout the year. He uses the data to monitor when spring arrives in our country. From several years worth of data he is trying to determine if there is truly climate change.

- **Wild oat control in spring wheat** – Dr. Abdel Mesbah in Powell most likely will continue this trial. These plots were evaluated last year and Dr. Mesbah has the results.
- **Irrigated Bean Disease Plots** – Mike Moore from Seed Certification is in charge of these plots. We grow diseased beans and non-diseased beans for him. In the summer he brings over his inspectors so they can id the diseases when the beans are young.
- **Landscape design and installation at SC** – One of the 2006 student interns redesigned the Sheridan College Formal Gardens and all of the student interns had a part in installing it.

2007 SREC Projects

- **Student Internship program** – The new approach is that we are targeting for high school Juniors and Seniors. This is to enhance recruitment in agriculture for Sheridan College and UW. I went to Billings, MT a couple of weeks ago. I talked to 140 students at the career center. I told them about all of the programs at UW in the College of Ag and the programs in Ag at Sheridan College. We have applied this year for the USDA High Education Challenge Grants. Sheridan College is the main PI and UW is the Co-PI on this grant. We applied for the Post Secondary grant rather than the Higher Education grant, so hopefully we'll have a pretty good chance of getting some funding. We will also be working with Little Big Horn College in Crow Agency, MT on this project.
- **Annual bluegrass control in creeping bentgrass greens** – We are going to continue this at Bell Nob and Powder Horn golf courses. Our new approach is to really focus on some of the rates that worked last year. We got a little bit of stunting and chlorosis from the rates. We are going to add in some nitrogen and micro nutrient fertilizers along with our herbicide application to hopefully mask and take care of the chlorosis and stunting.
- **NTEP Kentucky bluegrass trials & Homeowners trials** – we are going to continue those for the next several years.
- **Organic Garden** – we plan to use some high tunnels this year. With the help of Sheridan College we're going to build a couple of these. A high tunnel is an unheated greenhouse out in the field. It is rounded like a greenhouse, but instead it has plastic over it. We'll have the walls and ends where you can roll up the plastic to allow air to flow through when it gets hot. The goal is to give us 3 or 4 extra weeks in the spring and 3 or 4 extra weeks in the fall in order to grow vegetables. There is a lady in Cheyenne who has been using high tunnels and I've asked her how she does it, so hopefully we'll be able to make this work.
- **Specialty Cut flowers** – the ASCFG gives us free seed and we can apply for a small grant for about \$1000. Next year we plan to apply for this grant.
- **Grape Variety trial** – new vines to be planted this summer at Sheridan College

- **Certainty herbicide trial on Kentucky bluegrass** – Monsanto sent us some certainty herbicide. We're going to set up some trials on Kentucky bluegrass and look at a couple issues. One of the issues will be tall fescue as a weed in Kentucky bluegrass. When people buy sod from the sod farm they can either get Kentucky bluegrass sod or tall fescue sod. This causes contamination of tall fescue in the Kentucky bluegrass and even when people seed their own lawns there is tall fescue contamination and there's nothing you can do about it. The problem is that tall fescue has a really wide textured leaf and the Kentucky bluegrass has a fine textured leaf. So we're going to try some certainty herbicide with that.
- **Preemergence herbicide turfgrass trials** – We going to try some preemergent herbicide trials out at the Powder Horn Golf Course. Studying different preemergent controls. We're going to be looking for control in annual grassy weeds and broad leaf weeds.
- **Use of CBM to irrigate grasses** – Greg Smith from Marathon Oil visited some time ago and we decided it would be a good idea for SREC and Marathon Oil to work together. Marathon owns this piece of property right next to our property. They're doing a lot of methane work throughout this area and they have two large coal bed methane reservoirs. There is a third natural reservoir and also six more on the hay property throughout this area, so there is lots of water available to us. Everything they do production wise, passes right next door to us. In addition to that we have two producing methane wells on our property. So it only seemed logical that we work together on doing research with the use of CBM water to irrigate forages and grasses and turfgrasses and whatever else we could think of. So we put together a proposal and submitted it to Pennico Energy and Marathon Oil. We also submitted it to Western Research Institute(WRI) in Laramie to try and get some matching funds for this project and everything was looking good. Then something happened at Marathon Oil and Greg's boss was let go and Greg has been reluctant to get back to me. However I did ask him if we could have access to some water and he told me that we could have all the water we want. So there is no funding as of this time, but we can still conduct research using CBM water.
- **Tall Fescue variety trial**
- **Fine fescue variety trial**
- **Perennial ryegrass variety trial**
- **Irrigated forage grass research/education/extension project at the Wyoming Girls School**
- **Development of turf, ornamental, and garden pesticide handbook for Wyoming** – Working on this at the request of Dr. Enloe. You've probably seen the weed management handbook that recently came out, it will be basically the same thing, but it will be geared toward turf, ornamentals and vegetables. It will also include fungicide, insecticide and herbicide.
- **Drip-irrigated shelterbelt tree establishment** – Continue to collect data
- **Cloned lilac phenology study** – continue to collect data

- **Cool-season forage grass trial** – Continue to collect data
- **Dryland winter wheat** – Working with Dr. Krall we plan to continue this project and collect data
- **Dryland and irrigated oilseed** – Working with Dr. Krall we plan to continue this project and collect data
- **Dryland spring grains** – Working with Mike Killen we will continue this project
- **Wild oat control in spring grain** – Working with Dr. Mesbah we plan to continue this project
- **Irrigated bean disease plots** – Working with Mike Moore we plan to continue these plots
- **Forensic insect survey** – This will be a new project at the SREC. Wendy Owen, SREC Research Associate I, will be working with Dr. Gill from the UW Department of Anthropology on this project. We will have rotting pig carcass and Wendy will collect date of the insect progression from the pig carcass.

2007 Extension

- **Ag Expo at Sheridan College** – working with second and third graders and teaching them about agriculture and how it applies to their world
- **Grape workshop at Sheridan College** – I need to get together with Jim Bennage to work out the details on a public workshop. The workshop will teach the grower how to plant and maintain grapes.
- **UW SREC Field Day** – We are going to have our annual field day this summer. The date has not been set.
- **Master Gardener – Train-the-trainer** - Working with Karen Panter we plan on doing a train-the-trainer workshop here in Sheridan. Scott Hininger talked to me about developing a master gardener program here in Sheridan as well.
- **Farmer's Market** – We'll continue to do the farmers market with Sheridan College. Renee King has been asked to coordinate the farmers market. It might be possible to investigate to see if there is funding available through the Wyoming Business Counsel. There may also be an opportunity for a buy in from UW in order to promote healthy living. The legislator wants to make Wyoming the healthiest state in the nation. It might be possible to work with Family and Consumer Sciences in this category.
- **Community Garden** – We hope to work with Scott Hininger and the Sheridan Development Association to do some work to make a community garden. This could possibly be at Sheridan College.

Teaching

- **Spring 2006** – Turfgrass Management and Soils
- **Fall 2006** – Landscape Management and Woody Ornamentals
- **Spring 2007** – Turfgrass Management
- **Fall 2007** – Landscape Management

Priorities from 2006 Annual Advisory Meeting

First Tier Priorities

- **Turfgrass/ornamental research** – we are doing this and are going to continue.
- **Small acreage/alternative crops** – we are doing this with.
- **Crop/forage/dryland alfalfa/no-till alfalfa/turf/ornamental/reclamation etc. species adaptation trials** – I rely on Jim Krall and Mike Killen, but we are doing that here.
- **Biofuel oilseed/alternative** – Again I'm relying on Jim Krall for this, but we are doing that here at the SREC.
- **Carbon sequestration in soils** – Cool season grass trials, etc. We haven't looked at a lot of information in this area so we need to look into this.
- **Extended crop rotation system** – No-till. It is important for the people in the area to have this, however this is not my expertise. Jay Norton is interested in establishing some extended conservation tilling work at the R&E Centers. Jay will be at the planning meetings so we will start to see what we can do with this.
- **Weed Control/Pasture management** – This again is not my area of expertise, but we're open to being a site for this kind of research.
- **Annual Field Day, Specific workshops, school field trips, day camp** – We're trying to conduct all of these events.
- **Research information accessibility/regularly update SREC website** – We're just trying to figure out how to get all this information out to the public. I am on The Crop Science Society of America Public Relations Task Force and we're going through this same process on how to get the information out to the public, so I'm hoping to learn a lot of information that will help us do a better job here at SREC. Randy Anderson is the guy who updates all the info for our website and he'll be at the AES planning meeting.

Second Tier of Priorities

- **Endowments/local investment in Ag/Whitney, Scott Family** – We rely on upper UW administration for this type of thing as well as Jim Bennage at Sheridan college. If there is anything we can do to help, we're willing to do this.
- **Collaboration with local implement dealers** – we've tried to collaborate with local dealers, and they are willing to sell us anything we want to buy, but it doesn't go beyond that. There could be some opportunities for marketing if we look into it further.
- **Food plots/hunting** – WY Game and Fish, Pheasants Forever. We see these people quite a bit because they come out and buy wheat. There is the possibility of working with Pheasants Forever.
- **Precision Ag/Affordability** – We have slacked in this area, but we do have a proposal in to Arrow Cam and they did some aerial

photography of the property for us. Dave Claypool is working on putting these photos together on a GIS package. There is also an opportunity for GIS funding for students through the Ag Experiment Station.

- **Internships/Grad assistantships/Student recruitment/retention/4-H, Vo-Ag, WY Ag in the classroom, Ag expo** – We're making pretty good headways in this area. I've taken trips to Billings, MT and have students who are interested in UW, Sheridan College, and possibly working here for the summer. I'm hoping to be able to recruit at Sheridan High School, Big Horn High School, and also Tongue River High School. I want to be able to make this job prestigious and hope it to be beneficial for both the students as well as for us.

New Priorities for 2007? Rearrange Previous Priorities?

After much discussion throughout the day, the advisory board decided that we need to be better about making information more readily accessible to the general public. Randy Anderson is head of the Ag website at UW so we need to get him research results so that he can post them on the web. There is also a link on the AES webpage that is supposed to have results from research and the link currently does not work. Other ways to get information out to the public is by making it available at public events such as county and state fairs as well as year round events throughout the state.

Steve Herbert mentioned that when the Ag Advisory Board was in Laramie they asked about what we were doing with Coal Bed Methane water. UW is not currently doing much research with CBM. The board decided that the SREC should be actively participating in CBM research in the agricultural field. Steve Herbert mentioned that we should be testing CBM water on a small scale throughout the state. Dean Galey mentioned that we could just test CBM water throughout this specific area, the Powder River Basin. There are several people available to help with this project including K.J. Reddy, Ginger Page, and Larry Munn. Ginger is the new water extension person and has a lot of really good ideas. Any research you can do in this area would be great. We need to try and get some funding for this project. Contacting George Vance would be a good idea because he is an excellent grant writer. Jim Bennage mentioned that there used to be an organization in existence called Coal Bed Methane Coalition that could possibly be a resource for funding. It is important to get funding outside of the methane companies because it takes so long and the management in these changes frequently so it's not very reliable. Department of Energy and Environmental Protection Agency could be the best source for federal funding. There could be someone in the Energy School at UW who could possibly help facilitate this. Steve Miller mentioned Carol Frost at the Energy School who would be a good person to contact. Steve Miller has talked to Gary Moss, Steve Paisley, and Bret Hess. They are all involved with doing livestock watering with CBM watering. The SREC will be involved in this project with Rick Landis in Sheridan College Animal Sciences. We need a cooperating rancher who will be willing to help with this project because we just don't have the space. There is a possibility of cooperating with Padlock Ranch because we've done work there in

the past and there are probably methane wells on that property. Merrill Rasbeck at the State Vet Lab and he is doing a review for water quality and livestock consumption. He might be a great person to contact. Another person to possibly involve is Kristy Kimack who just got a 4 state ruminant consortium grant funded. She will be looking at the genetics of livestock to see if she could identify markers that make some livestock respond better to poor quality water than others and they are looking at high sulfate water. The states it will involve are South Dakota, Montana, North Dakota, and Wyoming.

Jim Bennage was approached last year by some researchers at Montana State University (MSU) who told him that one issue that's got methane companies running scared is if the sage grouse are put on the endangered species list. Part of the problem is West Nile Virus spread by mosquitoes that feed on CBM water. Once the grouse are threatened, that's it for CBM work. MSU asked me to raise fat head minnows to stock in CBM ponds as a bio remediation for consuming mosquito larva. I would rather raise fat head minnows for research being done at UW rather than MSU.

Now that Wendy Owen is the Research Associate I and has her master's degree in Entomology there could be opportunities to do some research on insects, including the black grass bug, which yellows crops, as well as mosquitoes and the connection between CBM water and the West Nile virus.

The SREC Annual Board adjourned at about 2:15 PM.