GROWING
SOUTH DAKOTA
A MAGAZINE BY SOUTH DAKOTA STATE UNIVERSITY
COLLEGE OF AGRICULTURE & BIOLOGICAL SCIENCES / FALL 2011

iGrow℠
ADDS NEW FEATURES

4-H & EXTENSION
MOVE FORWARD

NATURAL RESOURCE MANAGEMENT
DEPARTMENT DEBUTS
The original Morrill Act, signed into law by Abraham Lincoln in 1862, has been referred to as the "Magna Carta" of education. It marked the first time in the history of mankind that society — through its federal and state governments — accepted responsibility to provide higher educational opportunities to the working class members of society, specifically in the fields of agriculture, science, and engineering.

Visionary leaders of the Territory of South Dakota accepted responsibility for this noble mission in 1881, eight years before statehood. The mission expanded with the Hatch Act of 1887, which created the Agricultural Experiment Stations. These "stations" conduct relevant agricultural research across the state.

In 1914 the third leg of the land-grant mission was organized by the Smith Lever Act, which provided federal and state funding for "extending" the knowledge resources of the university by organizing the distribution of research results and technology to the citizenry of the state through the Cooperative Extension Service.

The success of these three monumental acts is well documented. While the beneficiary is often viewed in terms of farmers and ranchers, it would be more appropriately viewed in terms of the human energy, ingenuity and creativity unleashed by removing the burden of food production from the great majority of members of society.

Consider that in 1930 each farmer in the United States fed fewer than 10 others. By 2010, that number had grown to an estimated 150. In other words, for every farmer or rancher in South Dakota, 150 people can focus their energies on improving things like health care and communication, which enhance the quality of lives of all Americans.

This is the essence and purpose of the land-grant mission — to enhance the lives of all individuals through education, research and Extension.

For the last three years, South Dakota has reduced its financial commitment to the land-grant mission of South Dakota State University, and the federal government is also expected to cut its Hatch and Smith Lever funding in its 2012 budget.

While difficult, events like these provide organizations unique opportunities to examine themselves in terms of their priorities and efficiency. Last spring, the College of Agriculture and Biological Sciences did just that. As a result, SDSU's College of Agriculture and Biological Sciences will function differently as it seeks to accomplish its land-grant mission of teaching, research, and Extension.

The most visible change will be in SDSU Extension. Beginning in October, 4-H/youth and nutrition programming will continue to be delivered at the county level, while programming in areas like competitive cropping and livestock systems, food and families, community leadership, and urban/rural initiatives will be headquartered out of eight regional centers spread across the state.

While not as visible, the budget cuts to agricultural research are the most challenging. Due to the continuing growth in human population, in the next forty years the world will have to produce as much food as it has in the previous 1,500. And that food will be grown on less land, and with less water and energy, than is used in the modern farming and ranching systems and practices employed today. How to meet that enormous challenge as society reduces its investment in both basic and applied agricultural research is worthy of the most serious discussions at the highest levels of state and federal policy makers.

"WHILE SDSU'S COLLEGE OF AG RESOURCES HAVE BEEN REDUCED, ITS COMMITMENT TO DO ITS LAND-GRANT MISSION OF TEACHING, RESEARCH AND OUTREACH IS AS STRONG AS EVER."

In the meantime, we have re-dedicated laboratory space on campus used for analytical services to research. We have also invested more in providing expertise and service to our faculty in grant writing. An external review of our experiment stations and research units has been conducted, and we have implemented cost saving measures.

The impacts of the budget cuts to our academic programs have been buffered by increases in tuition and new fees for the most expensive academic programs in the College. We have also found efficiencies in this area, and have reduced the number of departments and merged faculty from several units to create a new Department of Natural Resource Management. As well, by using the earnings from the endowment provided to me by the South Dakota Corn Utilization Council, we are enhancing the experience of our undergraduate students by increasing opportunities for travel and research.

By every measure of every aspect, South Dakota is a very dynamic place. The appropriate response for its land­grant university is to not only change with it, but to provide leadership for it. While SDSU's College of Agriculture and Biological Sciences resources have been reduced, its commitment to do its land-grant mission of teaching, research, and outreach is as strong as ever. That commitment should not be judged by how tied we are to the past, but how committed we are to our state's future.
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A Quick Response (QR) code is featured on the cover of this issue. This code will direct you to the new iGrow web site, http://igrow.org. To utilize the code with your smart phone, download a code scanner application through your application software (Blackberry App World, iTunes, Google Market, etc.). You can also visit http://scan.mobi on your smart phone’s browser to download the AT&T Code Scanner. The application will take a ‘picture’ of the code and then direct you to the iGrow web site. Some applications are utilizing this software to allow people quick access to web sites, contact information, and item prices. Please note: This feature may not be supported on some devices.
The South Dakota State Fair in Huron is an exciting culmination to summer and the 4-H year for many youth across the state. Throughout the weeklong event which annually concludes on Labor Day Monday, there are public speaking contests, livestock shows, fashion revue and the Performing Arts troupe, along with a plethora of exhibits and experiences in which 4-H members participate.

But the 2011 event will be a bittersweet one for many 4-H families; it marks the final State Fair before restructuring of the South Dakota Cooperative Extension Service – including 4-H – is fully implemented in October. The restructuring, which was announced in April, is the result of state and federal budget cuts.

Going forward, the reorganization will establish eight regional Extension centers across the state (see related story on page 5) and creates Extension 4-H Youth Program Advisor positions to coordinate programs and activities within counties.

SDSU Extension will support one full time 4-H employee per county with more than 10,000 youth, and one-half full time employee per 2,500 youth in one or more counties. Additionally, South Dakota counties have been asked to provide the remaining monetary support for these 4-H/youth positions. Some counties will have a sole 4-H Youth Program Advisor; others will have an individual who serves two, three or four counties.

Adapting for the Future
South Dakota 4-H Efforts Move Forward

Strengthening 4-H
As the details to this new structure emerge, questions over how this new format will affect future Extension and 4-H programs in the state linger.

Paula Hamilton of Hitchcock, SD, acknowledges that, but she also believes South Dakota 4-H has a bright future ahead. Hamilton – who was herself a 4-H’er and whose four children are now involved with 4-H – is the current president of the South Dakota 4-H Leaders Association, and says, “We all know change is difficult for most of us, but we need to look at these changes positively and see opportunities. I believe reshaping and refocusing creates an opportunity to make things better.”

Likewise, SDSU’s Karla Trautman and Rosie Nold are optimistic for the transition ahead for South Dakota’s
4-H and youth programs. Trautman is associate director for SDSU Extension; Nold is the agriculture and natural resources program director for SDSU Extension. Both women are working closely with South Dakota counties to facilitate partnerships between SDSU and county commissions in developing the 4-H/Youth Program Advisor positions.

Nold says the support for 4-H from counties – and constituents – has been largely positive. “The majority are willing to provide monetary support, and in October we should have more than 30 4-H/Youth Advisor positions serving counties across the state. That’s really exciting, and it should provide a stronger 4-H and youth presence within counties,” says Nold. She notes that prior to the restructuring there were only 25 county Extension educators in the state dedicated to 4-H and youth.

Trautman adds, “This new format will require some counties to share a 4-H advisor, but it still gives 4-H and youth programs more focus staff-wise than before.”

She continues, “These positions will allow for 100 percent, year-round attention to 4-H and youth programming. As a result, I think innovative programs for youth will be offered, and local programs are going to grow.”

Additionally, eight 4-H Youth Extension field specialists will work from the regional Extension centers being established within the state to support the program delivery by the county 4-H staff. Two 4-H Youth Extension state specialists and a program director will oversee efforts statewide.

New Partnerships
Trautman and Nold say that as 4-H looks to the future, partnerships will be essential. Already, some of those are being forged with county commissions across the state.

Trautman, whose background is in community development, says one like many, PAULA HAMILTON is both a 4-H parent and a 4-H leader. She’s also the current president of the South Dakota 4-H Leaders Association. What’s her take on the changes taking place within South Dakota 4-H and Extension?

Hamilton remains realistic and upbeat. She says, “We all recognize that because of the economics something had to be done. The restructuring plan put forth is what was chosen.”

Of the plan, she adds, “I think there’s huge potential. There is the opportunity for more than 30 county 4-H staff; 4-H has never had staff hours like that before.”

Hamilton calls the cooperative spirit occurring across the state among many different groups “one of the positives” that has resulted from the Extension restructuring. Her advice for others in the future is to “speak up and be involved.”

Hamilton says, “Future success will be up to 4-H advisors, parents and volunteers and how they want to shape a strong program. Involvement and sharing ideas is key.”

Get involved with the SD 4-H Leaders Association by visiting their website at http://www.southdakota4hleaders.com/

CONTINUED COMMITMENT TO THE STATE FAIR

With the changes taking place in Extension and 4-H, will the State Fair change as well? South Dakota Secretary of Agriculture Walt Bones hopes the only changes that occur will be for the better. The South Dakota Department of Agriculture oversees the State Fair and its budget.

Bones says, “We have developed a tradition of the South Dakota Department of Ag, Cooperative Extension, 4-H and many other entities all working together to pull off a successful State Fair – and we will continue to work closely with these entities this year and in the future.”

He notes that the State Fair is a beneficial opportunity to showcase agriculture and the future of agriculture through youth, 4-H and FFA exhibits and showmanship. Additionally, the fair offers an opportunity for the general public to connect with agriculture, while also enjoying family entertainment at a great value.

Bones cites the Wine Pavilion and the Legislative Beef Showmanship Competition as new offerings that have added value to the fair, and he says new ideas and partnerships are always being sought to help the State Fair evolve and change with the times.

Looking to the future, Bones says they will continue to improve the buildings and structures at the State Fairgrounds in Huron, so that the strong traditions enjoyed by fair attendees can continue. He notes that the trends over the past few years have been very positive – with attendance, exhibitors and vendors all increasing. “We’ll work to continue that and keep the State Fair a highlight of summer,” he concludes.
of the unexpected rewards from this restructuring process has been the civic re-engagement between constituents and elected officials. “People are talking again about why these programs [4-H/youth/Extension] are valuable. That conversation has been really great,” says Trautman.

Nold notes that reaching out to all youth will be crucial as well. “With the funding support being contributed by counties, it is important that future programs reach out to all youth in the county.” She cites collaboration with school programs and after-school and summer programs as opportunities to deliver existing 4-H curricula such as Character Counts!, robotics, science and other subject areas to youth. Doing so will also create avenues to introduce 4-H to new audiences, she believes.

Similarly, Peter Niels on, SDSU Assistant Director of 4-H Youth Development says, “We’ve got to serve the entire youth population of the state. If we can see the number of youth served increase, we’ve been successful.”

Niels on calls partnerships with all stakeholders – including industries within the state – imperative to the future success of 4-H youth programs as well. He says, “4-H needs to be a collective voice of all partners, leaders, volunteers and kids. We need to expand the leadership opportunities for youth and connect them with industry.”

He notes that as the 4-H transition occurs, 4-H Promotion and Expansion Committees will be formed within counties by January 1 to replace the traditional Extension advisory board. These new committees will include representation from adults and youth who are in 4-H as well as some who are not.

Niels on says, “We want to maintain local input as we go forward.”

Nold believes the local input and local presence will be preserved with the new structure. She concludes, “I do believe this restructuring keeps 4-H and youth programs very accessible to populations wherever you are in South Dakota. South Dakota 4-H and Extension will still be able to provide face-to-face contact to serve kids and help them build life skills.”

For more information contact, Karla Trautman at 605-688-4792 or karla.trautman@sdstate.edu.

### 4-H ACTIVITIES ACROSS THE STATE

**National Youth Science Day is October 5**

On October 5, 2011, South Dakota youth will have the opportunity to join millions of young people across the nation to become scientists for the day during the fourth annual 4-H National Youth Science Day (NYSD).

The 2011 National Science Experiment, Wired for Wind, will explore how to engineer renewable energy technologies, and the positive impact that they can have in communities across the country and the world. The three part experiment will allow youth to design and build a wind turbine, test different blade pitch variables and create a map for a wind farm within the state.

State and field Extension specialists and county 4-H youth staff will be involved with offering the NYSD activities to South Dakota youth.

**4-H'ers to gather in Rapid City in October**

4-H enthusiasts will head to Rapid City Oct. 5-8 for the 74th annual Western Junior Livestock Show. The event features cattle, sheep, pig, dairy and goat shows and showmanship contests, as well as livestock and range plant judging.

In conjunction, the Western 4-H Family Consumer Sciences Show is held Oct. 7-8 and offers competitions in public speaking, photography, fashion revue, bread baking, place setting, home living center pieces, horticulture, and meats identification, as well as a family consumer sciences skillathon. This event is celebrating its 49th year.
Eight regional Extension centers will open across the state in late October as part of the budget-induced reorganization of the South Dakota Cooperative Extension Service that was announced in April. The state's eight regional centers will be located in Aberdeen, Lemmon, Mitchell, Pierre, Rapid City, Sioux Falls, Watertown and Winner.

Sixty-five Extension field specialists will begin work in October and will be stationed at the eight centers throughout the state. The field specialist position replaces the traditional Extension educator role that was located in individual counties. With this change, Extension field specialists will be expected to have a more specialized level of expertise within specific disciplines, and they will serve statewide needs and communities.

Karla Trautman, associate director for SDSU Extension, explains, “Like the spokes of a wheel, the regional Extension center will serve as a hub where field specialists formalize their work and go out from there and disperse educational and research information among the people.”

Extension field specialists will be hired with expertise in the following five capstone areas: Competitive Crop Systems, Competitive Livestock Systems, Food and Families, Urban and Rural Initiatives, and Youth and Community Leadership. Field specialists will be required to have a Master’s degree – or to obtain one within five years of being hired.

Trautman notes that the specific capstone areas that Extension field specialists are being hired in allow for addressing both traditional and SDSU Extension relevant and accessible. She says, “Technology has changed how people access information, and SDSU Extension must adapt for the future as well.”

She adds, “I envision in five years seeing very vibrant regional centers in which we are continuing to reach emerging needs within the state. As examples, in the competitive crops and livestock areas, field specialists will specialize in soils, precision agriculture, general agronomy, cow/calf production, and livestock business management, to name a few. To address the increasing number of small acreage landowners, a small acreage field specialist is a new specialization being added.

In the Food and Families capstone area a specialist will be hired to work with South Dakota’s elderly population. Agri-business entrepreneurship, community development, healthy living, and youth leadership are a handful of the other key specialties that will be addressed by newly hired Extension staff.

As this new regional Extension format is put into place, Trautman says her two-fold goal is to keep our strong supporter base and giving them all the components they’ve valued in the past. But along with that, because of where these centers are placed in regional business communities, we will be reaching new audiences whom we’ve never interacted with before.”

Trautman says whether that interaction is face-to-face or through technology the goal is the same: to meet people’s needs and provide the research and information for which Extension is known.

Leases of commercial properties are being negotiated in the eight cities where the regional Extension centers will be located. Building new facilities is not part of the plan. The goal is to open all eight of the regional Extension centers on the same date, Oct. 21. For more information contact, Karla Trautman at 605-688-4792 or karla.trautman@sdstate.edu.
ON THE ROAD TOUR VISITS BLACK HILLS

South Dakota State University officials, including President David Chicoine, Provost Laurie Nichols, and College of Agriculture and Biological Science Dean Barry Dunn, went “On the Road” May 16-19 to the Black Hills. The trip included public events and visits with business and industry partners in Rapid City, Custer, Spearfish and Piedmont.

Events included an open house at the new University Center facility, a breakfast at the West River Ag Center, and a barbecue for alumni and friends at Joe Norman’s ranch near Piedmont.

The Black Hills trip marked the third On the Road tour for SDSU and supports the university’s land-grant mission of service and connection to the state of South Dakota.

Pictured above: Dean Barry Dunn visits with Custer Mayor Harold Stickney at Baker’s Café during the On the Road tour in May.

LIVESTOCK JUDGING TEAMS HOLD REUNION, KICK-OFF $1 MILLION ENDOWMENT EFFORT

Over 175 SDSU alumni and former livestock judging team members returned to campus June 10-11 for a Livestock Judging Reunion. Activities included tours of the Animal Science facility and the SDSU campus, golf, and ample time for reconnecting with alums.

A livestock judging contest was also held, with the team from 1974 taking top honors.

Pictured from left to right are 1974 team members: Mick Varilek, Arlen Sawyer, Dan Gee (former coach), Jim Anderson, and Jim Girard.

RESEARCH FARMS HOST SUMMER FIELD TOURS

South Dakota producers had the opportunity to connect with SDSU researchers and Extension specialists during several agronomy tours held throughout the summer. The events showcase the latest information about crop varieties, weed control, insect control, plant diseases, soil fertility and other ongoing SDSU research.

Locations hosting field tours in June and July included the Dakota Lakes Research Farm near Pierre (pictured below), the Plant Science Farm near Brookings, the Southeast Research Station near Beresford and the Northeast Research Farm near South Shore.

The Southeast Research Station Fall Tour at Beresford will be held Sept. 8 starting at 10 a.m.

The event was also a kickoff to the fundraising campaign to establish a $1 million endowment fund in honor of former longtime SDSU livestock judging coaches Dan Gee and Paul “Buck” Kohler. The endowment will help fund the salary of a full-time livestock judging coach and lecturer, as well as fund summer programming to support 4-H, FFA and youth judging contests and clinics. A silent auction was held and over $30,000 was raised during the weekend.
TEEN LEADERSHIP CONFERENCE HELD ON CAMPUS

Over 150 4-H youth from across the state – including several from the Operation Military Kids program – participated in the 4-H Teen Leadership Conference (TLC) held on the SDSU campus June 6-10. This year’s program used the theme of the popular “Survivor” reality TV show, with the tagline “Outplay, Outlast, OUTLEAD!”

Over 40 different educational and recreational workshops were offered on topics from architecture to veterinary science. Leadership lessons, team building exercises and Survivor-themed challenges were also woven into the schedule.

A highlight of the event was a motivational presentation by Holly Hoffman. The Eureka, SD, native competed on the Survivor TV show during the 2010 season. She shared an inspiring message with the students about ethics and leadership.

SDSU AGRONOMY STUDENT EARNs TITLE DURING COLLEGE NATIONAL FINALS RODEO

Justin Zwiefel, 20, (pictured below) took home the reserve world champion tie down roper title during the College National Finals Rodeo held in Casper, Wyo. June 12-18.

The SDSU student grew up on his family’s farm near Burt, Iowa, and credits his dad, Gerald, with instilling in him a passion for rodeo.

“Dad always told me to try my best and give it my all every time,” says the agronomy major, who is an intern with Pioneer, scouting fields in north central Iowa this summer.

Zwiefel was among 11 SDSU students who qualified to compete at the CNFR this year. Overall the SDSU Men’s Rodeo Team ranked 16 out of 50 teams, which continues the nationally competitive winning tradition of the SDSU Rodeo team. In 2010, Rachel Tiedeman was named reserve world champion barrel racer and the SDSU Women’s Rodeo Team was named reserve world champions. The SDSU Rodeo Team is one of the largest rodeo programs in the country. It was established in 1952. The SDSU Rodeo coach is Ron Skovly.

FACULTY NEWS

> Plant science professor SHARON CLAY is the first woman ever chosen as president-elect of the American Society of Agronomy. Her term as president-elect begins in January 2012 and she will serve as president in 2013. She is also the first SDSU professor elected to the post.

> RUSS DALY, SDSU Extension veterinarian, is also now serving as South Dakota’s state public health veterinarian, which will facilitate his expertise as a resource for health care providers, the state’s Department of Health and other state agencies, and the public when it comes to dealing with diseases that can pass between animals and humans.

> Wildlife and Fisheries Sciences assistant professor KATIE BERTRAND and co-investigator BRIAN GRAEB will receive $92,200 in Competitive Research Grants from the South Dakota Board of Regents. They will build 24 experimental stream units for their research to monitor how climate changes affect the flow of prairie streams and how fish respond to disturbances.

> SUE BLODGETT has resigned as Professor and Department Head of Plant Science and will join Iowa State University as Department Chair of Entomology and Natural Resources. During her five year tenure at SDSU, Blodgett was instrumental in the development of the Seed Technology Laboratory, the Bayer Crop Science/Ducks Unlimited winter wheat research program, and the Monsanto Graduate Fellowships in Plant Breeding.

> Dairy Science professor ARNOLD HIPPEL passed away July 9 after a long battle with cancer. In recognition of his outstanding research accomplishments in dairy cattle nutrition, he was recognized with an award from the American Dairy Science Association at their annual meeting in July.
How does research conducted by South Dakota State University's Agricultural Experiment Station and its five field research stations across the state impact real-life needs?

Mike Arnoldy, a grain farmer from Kennebec, SD, credits it with being life-changing. Arnoldy celebrated his 20th anniversary of using no-till farming practices in his operation in 2011 – a switch he made as a result of the crop rotation and no-till knowledge produced by SDSU research.

Specifically, Arnoldy has worked with the Dakota Lakes Research Station near Pierre, SD, and its manager Dwayne Beck. Arnoldy says, "Most of what I've learned has come from that organization. Dwayne Beck has changed my life in farming. He's done that for a lot of people."

Among the changes Arnoldy has seen on his cropland in the last two decades as a result of no-till cropping practices are reduced erosion, better soil health, improved yields, and the need for less labor to run the operation.

Arnoldy is appreciative of the unbiased research the Dakota Lakes station has produced, and says, "For a study on a six-year rotation, you need four replications to get good data – that's 24 years. Thanks to SDSU's commitment to research, we are just getting to the point where we are getting some really good data."

Arnoldy and scores of other farmers across the region are banking on that data to help them become even more efficient at producing the world's food supply for the future.

Additional ag research produced by Dakota Lakes Research Farm and the four other research stations in the state benefit farms, ranches, businesses and the lives of South Dakotans in countless other ways – from research for new and improved grain varieties or crops that support cellologic ethanol efforts to water quality, grazing and feeding studies for livestock.

Across the state, there is an economic benefit from these research activities as well. A national study conducted in 2009 found that each dollar invested in agricultural research in South Dakota generates a social benefit.

MEET SDSU'S NEW AES DIRECTOR

DANIEL SCHOLL has been named associate dean and director of the Agricultural Experiment Station (AES) in the South Dakota State University College of Agriculture and Biological Sciences. He joins SDSU Aug. 22 and will oversee the research of the Agricultural Experiment Station and facilitate communication between SDSU researchers, stakeholders and clients.

As he prepares for his new role, Scholl says, "My vision is for the SDSU Ag Experiment Station to continue growing as a recognized leader in generating science-based knowledge and technology that meets human populations' increasing food needs, both locally and internationally."

He adds, "The future for SDSU's Agricultural Experiment Station research is to creatively, innovatively and strategically build on our strengths as we engage in meaningful research." Scholl identifies important research areas for the future to include environmentally and financially sustainable food production, value-added multiple-use opportunities for food production systems and products, and natural resource management.

He credits AES researchers at SDSU for their multidisciplinary projects and collaboration and says he will strive to continue to stimulate and facilitate this approach.

Along with this, Scholl intends to emphasize serving South Dakota research interests, while also encouraging scientists to increasingly use their knowledge, expertise and scientific networks to impact populations beyond South Dakota. "This outward orientation combined with a strong local focus will serve to provide new opportunities for research, research funding and student training," says Scholl.

Scholl recognizes that research funding will also be critical to the future success of AES. He states, "Adequate
1. SDSU Cottonwood Range and Livestock Research Station

Located near Philip and established in 1907, this station is located in the heart of South Dakota rangeland. Research at this 2,640 acre facility focuses on range and cow-calf management. Scientists have used the station to address water quality issues during persistent drought, and currently are focusing work on heifer development.

2. SDSU Antelope Range Livestock Research Station

Located near Buffalo and established in 1947, this is the largest of SDSU's research stations. Initially, it was a state antelope preserve. After being transferred to SDSU, the land was used to conduct research to understand how to balance cattle and sheep production with range resources. Today, research at this station focuses on mature cow management and sheep production on rangeland.

3. SDSU Northeast Research Station

At 80 acres, the Northeast Research Station is the smallest of SDSU's research facilities. It is located near South Shore and was established in 1956. Research here has always emphasized crop breeding and solving pest-related problems. Throughout the growing season, local producers stop by and judge the side-by-side performance of small grain, row crops, and alfalfa varieties, numerous herbicide and fertilizer treatments, and other agronomic practices.

4. SDSU Dakota Lakes Research Station

Established in 1990, this 840-acre station near Pierre has quickly earned acclaim for its research focusing on both irrigated and dryland crops – particularly no-till. Irrigation on the farm allows scientists to evaluate varieties and management practices and do breeding work in both high and low moisture environments at the same location in the same year. The station's summer field day has been listed as one of the "10 most exciting field days in the nation" by a major farm magazine.

5. SDSU Southeast South Dakota Experiment Station

Located in the heart of South Dakota's corn and soybean country near Beresford, this station consists of 550 acres of dryland row crops, small grains, and forages, as well as annually feeding nearly 1,000 head of beef cattle and swine. The combination of crop and livestock makes this research station unique in South Dakota, allowing scientists to take a systems approach much like the diversified farms in the area. For example, field peas studied by agronomists looking for alternative crops may also be fed to cattle and hogs by animal scientists seeking new feed sources. This station is often the final testing ground where producers can see and evaluate new technology before adapting it to their operations. The station was established in 1956.

For more information about SDSU AES contact Daniel Scholl at 605-688-4149 or daniel.scholl@sdstate.edu

“ Adequate budgetary support is the motor that makes the Experiment Station perform well.” Daniel Scholl, Associate Dean and Director, SDSU Agricultural Experiment Station

budgetary support is the motor that makes the Experiment Station perform well; strategically growing the budget will be a priority.”

To achieve this, Scholl says communication with all stakeholders and decision makers – at the state and federal levels – will be an important component. He adds, “Cultivating excellent working relationships between South Dakota’s agriculture commodity groups and the SDSU Agricultural Experiment Station researchers will also be key to our future success.”

He concludes, “We will continually seek to improve the way we do things so that there is maximum resource available for AES faculty to do what they do best: high quality research.”

In joining SDSU, Scholl brings with him a broad range of administrative experience including intellectual property protection and licensing, research monitoring, strategic planning and stakeholder relations.

For the past nine years, Scholl has served as the scientific director of the Canadian Bovine Mastitis Research Network and on the faculty of veterinary medicine at the University of Montreal. Prior to that, he spent 10 years in research and instruction at Louisiana State University. Earlier, he was a member of the faculty of veterinary medicine at the State University of Utrecht, the Netherlands.

Scholl completed three degrees from the School of Veterinary Medicine at the University of California, Davis, including a bachelor of science in veterinary science in 1985, a doctorate in veterinary medicine in 1987, and master of preventive veterinary medicine in epidemiology in the department of epidemiology and preventive medicine. He received his Ph.D. in epidemiology from State University of Utrecht, the Netherlands.
The overall economic impact from South Dakota's swine industry — including the direct income, jobs created, taxes paid and indirect economic activity — is estimated to be $2.1 billion annually.

Those are the findings of a recent economic impact study of the state's pork industry conducted by SDSU economic associate professor Gary Taylor.

Using numbers from 2008, Taylor's study revealed that there were 339,000 sows farrowed in South Dakota that year producing a pig crop of 3,297,000 head. With an additional 951,000 hogs imported into the state in 2008, the gross income from the industry totaled over $3.9 million.

Using a multiplier for the pork industry of 1.32, Taylor explains that the 339,000 sows in the state contribute about $1,534 in economic activity per sow to the economy. And, given that pork prices have risen significantly since 2008, Taylor clarifies that the economic impact to the state is much greater today.

Moreover, the economic impact study identified that South Dakota's pork industry currently directly generates 4,371 jobs in the state, produces $17.4 million in total tax revenue, and serves as the number one customer for the corn and soybeans produced in the state.

Additionally, the state's meat processing sector sees nearly $1.7 billion in output, 3,547 in jobs and $2 million in indirect business taxes as a result of the South Dakota pork industry.

"The take home message from this study is that pork production has a tremendous potential for economic development in South Dakota," says Nathan Sanderson from the Office of the Governor.

Sanderson continues, "Livestock agriculture is a great fit for rural South Dakota as we look to build industry and create new jobs within the state. Animal agriculture is already here and can grow."

South Dakota Secretary of Agriculture Walt Bones adds, "We hope South Dakota communities looking at future economic development opportunities will take note of the positive potential swine entities can offer." He points out that adding a swine finishing barn to an existing grain farm can be a great opportunity to bring the next generation into the farming entity.

Sanderson believes a hog facility can be "an investment in the economy and rural communities," pointing out that in addition to the revenue a hog facility can generate, it can also help keep families in the community because of the

**STATE AG STATISTICS**

- Agriculture is the number one industry in South Dakota, generating $21 billion and employing more than 143,000 South Dakotans.
- South Dakota ranks 9th nationally in the number of pigs born in the state (approximately 3.3 million head).
- South Dakota ranks 11th nationally in the total number of hogs in the state (approximately 4.2 million head).
- South Dakota ranks first in sow productivity with an average 10.4 pigs/litter.
- In regard to total cash receipts in South Dakota, swine is the second largest livestock species behind beef cattle.

*Source: National Ag Statistics Service*
jobs created to manage a livestock facility. "There can be a lot of benefits to the community," says Sanderson.

Complementary To Crops, Too
A "win-win" opportunity is how many ag industry leaders describe the future growth potential of the state's farrow and finishing operations as they relate to the state's existing corn and soybean farms.

Current estimates indicate that the state's sow herd consumes 10.3 million bushels of corn and 61 thousand tons of soybean meal annually, while the finishing pigs consume an additional 30.6 million bushels of corn and 214,000 tons of soybean meal – making pigs the number one customer of South Dakota corn and soybeans.

"The potential to grow our pork industry in South Dakota is great. We have ample feed with corn and dried distiller's grain here, and we have the packing plant here. Anytime you add value to our feed grains through livestock you increase the economic input for South Dakota and grow zero discharge," explains Dave Uttecht, a Huron, SD, pork producer and industry consultant.

Brad Hohn is owner of MDS Manufacturing, a Parkston, SD-based business that manufactures equipment for hog facilities and the ag industry, and he notes that through bio filters, feed additives, pit additives, and continuing research, the industry has addressed – and reduced – odors from modern hog facilities.

OVERCOMING ENVIRONMENTAL CONCERNS
Admittedly, many communities initially have concerns about the environmental impact a hog facility may create, but modern agricultural technology and environmental regulations prevent such impacts.

"South Dakota has some of the strictest environmental regulations in the nation. Our state pork industry has been proactive in adopting that. A state permit for a hog facility requires that the buildings are environmentally sound and allow for

SEEING THE OPPORTUNITIES
As communities consider these factors about hog farms, Hohn reiterates the opportunities that they can bring. He says, "From my standpoint, they really are about jobs for the community; they definitely have an economic impact. From manufacturing businesses like mine that employs six people, to the hog facility that employs people, to the business and industry that are affiliated with the facility, it turns an entire wheel of economic activity."

Adding a swine entity to an existing South Dakota grain farm may provide the opportunity for the next generation to return to the family operation as well.

Ag United executive director Steve Dick explains, "Today, it's next to impossible to bring another family into the farming operation without adding 500 to 1,000 acres to generate more revenue. And, with rising farmland prices and rising cash rent prices, which are about $250/acre in eastern South Dakota, that's expensive – if not impossible."

As an alternative, Dick says, "Putting up a 2,400 head finishing hog barn to generate added income and have the benefits of the nutrients from hog manure for the cropland makes sense. In certain areas it has the potential to work and be a boon for rural communities."

Through the South Dakota Pork Producers Council and their "Operation Main Street" program, producers and staff are available to visit with communities about modern swine production and the opportunities it offers. The South Dakota Department of Agriculture and Ag United are also available to assist in providing fact-based information about agriculture to communities. For more information visit their websites at: www.sdppc.org, www.agunited.com, and http://sdda.sd.gov.
Approximately 3.3 million pigs are born in South Dakota annually. Through research related to nutritional management, energy consumption, ventilation, reproduction and animal welfare, SDSU is working to develop more efficient, sustainable methods and technology for raising hogs. Photo courtesy of National Pork Board.

our largest industry – agriculture,” says Lisa Richardson, executive director for SD Corn, which encompasses the South Dakota Corn Grower’s Association and the South Dakota Corn Utilization Council.

Jeremy Freking, executive director of the South Dakota Soybean Association and South Dakota Soybean Research and Promotion Council, adds, “Soybean farmers and pork producers benefit from one another. It’s time for value added agriculture to expand by raising more hogs in South Dakota where the soybean meal can be utilized within the state to grow our ag economy.”

Likewise, Steve Dick, executive director of Ag United, emphasizes that a valuable opportunity to utilize manure from hog facilities as fertilizer on cropland also exists. Dick says a past study put a $30,000 fertilizer value on hog manure from a 2,400 head finishing facility – with increasing fertilizer prices that value is increasing as well.

Generating Economic Buzz

For positive examples of the economic opportunity that swine operations can generate, Dick points to Sioux County, Iowa – right across the Big Sioux River from Alcester – and Rock County, Minnesota, across the border from Sioux Falls. Rock County has three times the number of hogs and Sioux County has nearly 10 times more pigs compared to South Dakota’s largest hog counties, and Dick says, “Those communities are buzzing with business activity all related to livestock.”

South Dakota has the potential to replicate that economic buzz by growing the hog industry in the state, pork proponents believe. Dick reports one recent report showed that six of the top 50 pork producing counties in the nation were within 50 miles of Sioux Falls – but they were in Iowa and Minnesota. None of the top 50 were in South Dakota.

Dave Uttech, a South Dakota pork producer and nutrition and swine management consultant, sees the potential for growth, saying, “South Dakota’s wide open spaces, low people density and low hog density provide an excellent opportunity for raising hogs.” He explains that the ability to have hog facilities that are isolated allows for better biosecurity and ultimately healthier hogs.

Glenn Muller, executive director of the South Dakota Pork Producers Council, concludes, “The positive attributes of the pork industry outweigh any negative, and we are working to help the public learn what modern agriculture looks like.”

For more information about South Dakota’s swine industry, contact SDSU Extension Swine specialist Bob Thaler at 605-688-5435 or Robert.Thaler@sdstate.edu.

“THE TAKE HOME MESSAGE FROM THIS STUDY IS THAT PORK PRODUCTION HAS A TREMENDOUS POTENTIAL FOR ECONOMIC DEVELOPMENT IN SOUTH DAKOTA.”

Nathan Sanderson
South Dakota Office of the Governor

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AT A GLANCE

ECONOMIC IMPACT FROM SOUTH DAKOTA’S SWINE INDUSTRY

> Gross income produced: $3.9 million
> Jobs created: 4,371 directly in swine industry; 3,547 in meat processing
> Taxes generated: $17.4 million
> Other: 1 sow creates a 1.32 multiplier for the economy; equating to $1,534 in economic activity/per sow
> Value of meat processing: $1.7 billion

Source: 2008 study, Gary Taylor, SDSU ag economist
New Department Debuts

Natural Resource Disciplines Join Forces

Natural Resource Management (NRM) is the name of the newest department in SDSU's College of Agriculture and Biological Sciences. The addition was made to the College's roster on July 1, 2011.

While the name of the department is new, its research and curriculum offerings in wildlife and fisheries, ecology, environmental science and range science were already existing programs on campus. They now all come together under the Department of Natural Resource Management umbrella.

David Willis, a distinguished professor in wildlife and fisheries and head of the new department, explains that the merging of these programs was prompted for two reasons. Foremost was in response to the extensive budget cuts to the ABS College.

“We have streamlined the administration and reduced one department head position with the dissolution of the former Horticulture, Forestry, Landscape and Parks Department,” says Willis. The majority of those programs have been moved to the Plant Science Department.

A second reason for the transition is to promote increased interaction – and synergy – among faculty members in various disciplines who all work in the broad field of natural resources.

“We believe this can result in more collaborative research efforts and research funding opportunities, and we are already seeing positive signs of such interaction,” says Willis.

Willis believes the new, larger department will better serve student interests in all aspects of natural resources as well.

A first semester seminar to showcase natural resource-related careers and help students identify their area of personal interest will be offered beginning in the fall of 2012. A graduate seminar exposing students to research efforts within the different natural resource disciplines will also be developed.

Willis emphasizes that changes to existing curricula will be minimal and graduation requirements for specific majors and emphases will remain unchanged.

Currently, undergraduate students in the Department of Natural Resource Management can earn B.S. degrees in ecology and environmental science, range science with an emphasis in rangeland ecology and management, or wildlife and fisheries sciences. Graduate students can enroll in available M.S. and Ph.D. programs in animal and range sciences, biological sciences, or wildlife and fisheries sciences.

Willis is optimistic for the future, saying, “Our established programs in environmental science, range science and wildlife and fisheries sciences will continue to be recognized by employers, while the ecology program will provide opportunities to accommodate students and faculty members with broad interests.”

Over 400 undergraduate and graduate students are expected to be enrolled in the new department this fall. Nels Troelstrup, professor of ecology and environmental science, is the assistant department head.

For more information contact David Willis at 605-688-4784 or david.willis@sdstate.edu.

ENHANCED EXTENSION OFFERING

The creation of the Department of Natural Resource Management will include the addition of Extension specialist staffing to facilitate outreach programs to landowners, youth and others interested in natural resources. This fall, in addition to the one Extension range specialist position that already existed in the state – and is currently held by Roger Gates at the West River Ag Center in Rapid City, two range field specialists and one wildlife habitat field specialist will also be added to the state's Extension staff. As part of Extension's 4-H Youth Development program, an individual with natural resources expertise will also be hired.
A colorful array of red and gold leaves, campus bustling with student activities, and football on Saturdays are among the much anticipated hallmarks of fall – and it’s a wonderful time to return to the SDSU campus in Brookings. Here are highlights to help plan your visit.

**45th Annual Beef Bowl**

For Jackrabbit football fans, Oct. 1 will mark the 45th Annual Beef Bowl with the Jacks matched against Indiana State University.

The day’s festivities include an outdoor barbecue and the game beginning at 6 p.m. “It’s a really big day, especially for ag people,” says Jim Woster who has chaired the event for the past decade. Over 2,000 people are served at the barbecue.

Proceeds from the barbecue ticket sales support undergraduate scholarships in the Animal Science Department. Beef bundles are also sold as a scholarship fundraiser.

SDSU Animal Science professor Cody Wright explains that the Beef Bowl was initiated to promote the beef industry and recognize the cattle producers of South Dakota. “It is a time for people to spend the afternoon enjoying great food and great football while getting to know the staff and faculty of the department,” says Wright.

The Beef Bowl barbecue is held from 3:30 to 5:30 p.m. across from the stadium. Tickets are $8 and are available at the event. For more information about Beef Bowl contact the Department of Animal Science at 605-688-5165.

The 2011 season of Jackrabbit football marks the 50th year at Coughlin-Alumni Stadium. For a full schedule of games visit www.gojacks.com or call 866-GO-JACKS.

**Ag Heritage Museum Showcases History**

Visitors to the State Agricultural Heritage Museum have a unique opportunity to step back in time to gain a better understanding of agriculture in shaping South Dakota’s past, present and future.

Located on the northwest corner of Medary Ave. and 11th Street, the museum’s exhibits include threshing machines and horse drawn equipment as well as early models of tractors and farm equipment. There’s also an original 1882 homestead claim shack, a recreated 1915 farmhouse, and an abundance of historic photographs and documents. The Eugene Beckman Archive is a collection of original tractor and implement sales brochures, operators manuals, and parts lists dating from the 1880s through the early 1960s.

The State Agricultural Heritage Museum is a part of the SDSU College of Agriculture and Biological Sciences.

Throughout the year, the museum offers a variety of programs including book signings, exhibit openings, and lecture series. The Museum Store offers a selection of South Dakota Made products, including SDSU Meat Products, as well as books, children’s toys, and holiday ornaments.

Admission is free, and the museum is open Monday through Saturday from 10 a.m. to 5 p.m. and Sundays from 1 p.m. to 5 p.m. For more information visit www.agmuseum.com.
Education and Visitor Center Opening at McCrory Gardens

Fall is a perfect time to visit McCrory Gardens when the trees, shrubs, grasses, and flowers offer a spectacular display of colors.

In November, the new Education and Visitor Center will open and provide an educational hub for students, visitors and events. The $4.2 million facility is being built through the generous contributions of private donors.

The 9,350-square-foot building will feature space for classes, gatherings and presentations, as well as a help desk and gift shop. The design of the building accentuates an ‘indoor-outdoor’ approach to architecture with a terrace that will feature exposed glass looking out to a perennial garden and the surrounding landscape.

Dairy Manufacturing Addition and Renovation Completed

Enjoying a big scoop of SDSU ice cream is on the itinerary of many folks who visit campus. This fall, you can enjoy that ice cream in a completely new Dairy Bar. The dairy microbiology building and dairy processing plant on campus underwent an extensive renovation that was completed this summer. It was the first major update the facility had seen in 51 years. The renovation added 10,850 square feet of additional space and allowed for the new Dairy Bar.

The $9.5 million project was funded with $8.5 million from donations from producers, processors, alumni and friends.

And what happened to the old Dairy Bar? Well, you can find pieces of it in downtown Brookings. The equipment was moved to a new ice cream shop on Main Avenue. Called the “Campanile Connection” the shop offers SDSU ice cream and cheeses.

The downtown location provides an opportunity for people to sample SDSU ice cream or SDSU dairy products without having to worry about campus parking, says Howard Bonnemann, SDSU instructor and dairy plant research manager.

The downtown shop also offers weekend hours, while the campus store is only open Monday through Friday.

The ice cream-and-cheese outlet is SDSU’s second downtown store. Jackrabbit Central, which sells SDSU apparel, opened on Main Avenue last summer.

Ag Hall Renamed To Honor Sherwood and Elizabeth Berg

If you stroll across campus you might notice that Agricultural Hall has a new name. The building was renamed in honor of SDSU President Emeritus Sherwood Berg and his wife Elizabeth during a ceremony on April 28.

Berg served as president of SDSU from 1975 until his retirement in 1984. He was the university’s 15th president and its first alumnus to hold the office. Berg earned a bachelor’s degree in agriculture economics from South Dakota State College in 1947. During her husband’s tenure as president, Elizabeth Berg was involved in several community and university women’s groups.

The Berg’s are both credited with laying the groundwork for several international initiatives to set a global presence for SDSU.
Today's consumers are increasingly turning to the Internet for information, social networking and e-commerce. Recognizing that trend, this past January SDSU's College of Agriculture and Biological Sciences launched iGrow, an innovative concept designed to offer pertinent research and educational information in one place on the web.

As iGrow initially began to take shape, the legislative budget cuts and the resulting restructuring of Extension throughout the state were simultaneously occurring. And it soon became evident that iGrow would need to evolve as well.

"We recognized that changes to iGrow were going to be needed to support the new regional structure of Extension," says Emery Tschetter, assistant director for marketing and accountability at SDSU. He adds that a benefit of web-publishing such as the iGrow site is the fact that technology allows the ability to quickly adapt and change with the times.

SERVING FARMERS & RANCHERS

"It's a very sincere effort to serve our farmers and ranchers at a higher and more sophisticated level." That's how Barry Dunn, dean of the College of Agriculture and Biological Sciences at SDSU, describes ag content that will continually be "refreshed" and archived on the iGrow site.

Dunn says that iGrow's mission is to provide "reliable, ethical and unbiased" information online that will help farmers and ranchers with production and marketing decisions.

With that in mind, Tschetter says the vision for iGrow continues to be offering a web-based communication site offering information people need to know. The difference is that iGrow 2.0 — which began being promoted to the public during Dakotafest in August — offers a broader spectrum of topics and a larger commitment to providing updated content on the site. The site has also been given a visual makeover to make the available content more accessible for the public.
Online Communities
Content is being categorized into specific topic areas called "learning communities" that relate to Extension programs in the state. Presently, the iGrow learning community categories being developed include the areas of Beef, Swine, Corn, 4-H & Youth, Rural Health, Foods & Nutrition, Families, Horizons Communities, Entrepreneurship, Sustainable Food Systems, Strategic Planning, Gardening, Master Gardeners, and Commercial Horticulture.

Within these “online communities” iGrow content will feature production calendars, articles, resources that provide research and management information, audio and video podcasts, and interactive tools such as profit calculators. Online users will also have the opportunity share comments in forums moderated by Extension specialists and purchase publications if they so desire.

Current news and market reports and zip-code specific weather forecasts are also part of the “one-stop” iGrow web offering.

“We want iGrow to be the people’s choice for finding information online,” says Tschetter. Within that goal, he says there is an effort to particularly place emphasis on key audiences such as youth, rural areas, and healthy families.

As one example, he explains that a partnership with Sanford Health will allow for a library of health related data to be available via iGrow. “It’s a great opportunity for SDSU and Sanford Health to team up and share that information with the public,” states Tschetter.

Growing Effort
This October as SDSU Extension moves to a format of field specialists located in eight regional centers across the state, Tschetter believes iGrow will be a valuable tool that helps Extension continue to engage and serve constituents.

To maintain consistently refreshed content on the site, all state and field Extension specialists will devote 20% of their time to content development for iGrow, explains Tschetter. Agronomists, animal scientists, pathologists, economists, and climatologists are all contributing resources to the iGrow effort. “There will be a lot of great information available,” Tschetter concludes.

The iGrow site will feature learning communities in the areas of:
> Beef
> Swine
> Corn
> 4-H & Youth
> Rural Health
> Foods & Nutrition
> Families
> Horizons Communities
> Entrepreneurship
> Sustainable Food Systems
> Strategic Planning
> Gardening
> Master Gardeners
> Commercial Horticulture

Weather, markets and news provided through DTN will also be available on iGrow along with market analysis and commentary.

www.igrow.org

customizable options – through online calculators and management schedules. Individual users can access these tools via their own private password protected account on the site. Dunn explains this will allow information to be localized to each individual producer – making information even more applicable and accurate for their own operation.

Dunn concludes, “The iGrow effort is a continuation of Extension’s long-standing mission to help citizens convert data to knowledge. We live in an era of massive information overload. This program allows us to bring together and prioritize, in one easy-to-use website, all of the agricultural production information that producers need to make profit-oriented decisions.”

For more information about iGrow contact Dean Barry Dunn at 605-688-4148 or barry.dunn@sdstate.edu.
Collective Effort
Despite Budget Cuts, Private Funds Allow For Growth

There's an old adage that suggests when life gives you lemons, you make lemonade. Barry Dunn, SDSU's dean of the College of Agriculture and Biological Sciences, has been borrowing that phrase quite often these past few months as he visits with students, alumni, industry partners and stakeholders about the current state of affairs within the College.

Dunn affirms that the more than $3 million reduction in state support from the South Dakota legislature that befell the College this spring has impacted the University, the Ag Experiment Station and the Cooperative Extension Service, but he is determined to overcome that fate.

Dunn says, "We're going to shrink this time, and then we are going to grow."

To achieve that growth, he notes that a key part of the ABS College's future academic, research and Extension endeavors will come from private partnerships.

"We once had a College of Ag that was funded by state and federal funds; we have now reached a point where we have a College that is supported by state and federal funds. This means that to accomplish our mission going forward we must build private partnerships with individuals, alumni and industry," he explains.

That's where the optimism comes into the picture. Dunn acknowledges that SDSU's College of Agriculture and Biological Sciences has a long history of generous donors, and numerous examples of private donations are already at work helping the College grow and expand research and student experiences.

Dunn says, "Philanthropic gifts have always been appreciated, but now they are becoming a major part of our program and will be even more important in the future."

Examples At Work
As examples of philanthropy to the College, Dunn points to the completion of several building and renovation projects on campus, including the multi-million dollar Seed Tech Laboratory and the dairy processing plant. "These projects were largely
Dean and Harriet Swedlund have established scholarships at SDSU to facilitate student or faculty studies and research abroad. Harriet says, “We have received so much personal return from our gift.”

funded with private money and will enhance research and teaching efforts,” says Dunn.

He notes that facility updates are also being planned for the Cow/Calf and Swine Units and the Ruminant Nutrition Center, and says, “We have aging facilities and need industry partners stepping up to help with the improvements.”

Another unprecedented example of industry support came last July from the South Dakota Corn Utilization Council in the form of a $2 million donation to endow the Dean’s chair for SDSU’s College of Agriculture and Biological Sciences; the position Dunn holds.

The $2 million endowment is set to generate approximately $90,000 in interest annually, and Dunn says the majority of that money will be used to enhance undergraduate experiences. Among the opportunities created will be more scholarships for student to study abroad and within the U.S.; increased emphasis on undergraduate research projects and internships; and “Lead State” a sophomore-level leadership program.

Dunn believes the creation of more endowed positions within the College – and across SDSU – will be essential for the future.

Also being made possible through industry support is the establishment of the Wheat Growers’ Scholar in Agribusiness Management in SDSU’s Department of Economics. For the program, Wheat Growers will donate $80,000 per year for three years to SDSU. The donations will be for the academic years of 2011-12, 2012-13 and 2013-14.

The Wheat Growers Scholar will be named, based on merit, from the university’s Department of Economics faculty. The support provided by Wheat Growers will enable the scholar to dedicate time and energy to current and future challenges regarding management issues in agriculture and agribusiness, including addressing issues of special importance to cooperative associations such as Wheat Growers and their management.

Dunn says, “This grant will enhance our capabilities to build a more robust and competitive agriculture and agribusiness sector in South Dakota and the region.”

He reiterates that the philanthropy of grants and gifts such as these – and many others – are essential to the new business model to grow the education, research and service objectives of the College and SDSU overall.

Giving Back
Dunn believes this new funding model can mean a bright future both for SDSU and those who give. He says, “People are generous, and the power of any gift is how it multiplies and can benefit so many.”

Dean and Harriet Swedlund of Brookings believe in the power of giving back and the personal gratification from helping create opportunities for others. In 2003, the couple established a scholarship in Harriet’s name to facilitate funding toward international travel for a student studying Family Consumer Sciences. Today, they are establishing a second scholarship in Dean’s name within the College of Ag and Biological Sciences to benefit student or faculty studies or research abroad. Both scholarships are awarded annually within their respective College’s at the Dean’s discretion.

Born in South Dakota, Harriet joined the SDSU faculty in the College of Home Economics in 1984. She retired from teaching in 1997, but remained an SDSU employee until this summer. She worked on campus as the director of International Programs until 2003 and then as the Executive Director for South Dakota World Affairs. She continues in that role, but it has now become an independent non-profit organization.

Although neither she nor her husband graduated from SDSU, Brookings and SDSU have been their home for the past three decades, and it was through her international work that the Swedlunds were inspired to help make international travel a possibility for SDSU students. “Dean and I were exchange professors to China in 1993. That made us realize how valuable that experience is,” says Harriet.

“PHILANTHROPIC GIFTS HAVE ALWAYS BEEN APPRECIATED, AND WILL BE EVEN MORE IMPORTANT IN THE FUTURE.”
Barry Dunn, South Dakota Corn Utilization Council Endowed Dean, College of Agriculture and Biological Sciences
She notes that it has been gratifying to help open the door so students can gain a better understanding for global issues and have international exposure early on in their careers. “These experiences will influence their lives in ways we don’t even know,” she says. A side benefit has been the opportunity for Harriet and Dean to get to know some of those students personally.

Her advice to others considering ways to make a difference is this: “You don’t have to be wealthy to contribute. Small amounts can go a long way and can inspire students to pursue an international experience that will change their life. We have received so much personal return from our gift. And, there are lots of opportunities to give.”

Bill Larson is a SDSU alum who has been inspired to give back as well. The Lake Preston, SD, native graduated with his bachelor’s in Animal Science in 1964. After working in the banking industry for a year, he returned to complete his master’s in ’67 and Ph.D. in ’69 both in Animal Science with an emphasis in ruminant nutrition. Larson went on to work in industry and then in the 1980’s joined Midwest PMS, a Colorado-based feedlot nutrition company that manufactures supplements and provides nutritional services to feedlots from Texas to South Dakota.

Larson has contributed to the SDSU Animal Science Department, specifically to enhance facilities at the Ruminant Nutrition Center near campus and the related research being done by ruminant nutrition professor Robbi Pritchard, who is regarded industry-wide for his work. Larson’s gifts have also allowed for facility improvements to the Cottonwood Research Station near Philip.

Of his contributions to his alma mater, Larson says, “I feel a large part of my business success is due to my background and education at SDSU, and that gave me the desire to give something back to the Animal Science Department.”

**HOW CAN YOU CONTRIBUTE?**

Gifts to the university can be in cash or as a charitable contribution in kind, which may offer significant tax benefits to the donor. Land, farm machinery, livestock and crops are all examples of charitable gifts that can be made to the university through planned giving efforts.

Donors of agricultural assets such as these to the SDSU Foundation become members of the Heritage Farm program, which honors donors with a permanent bronze plaque displayed in the atrium of the Northern Plains Biostress Laboratory on the SDSU campus.

“The Heritage Farms wall of honor is designed to provide a lasting tribute to the history of the family farm and the family’s relationship to SDSU,” explains Jeff Nelson, senior gift planning advisor for the SDSU Foundation. “It illustrates how private contributions make the promise of public research, education and Extension a reality for future generations.”

In June, donors of nine legacy gifts of farmland and agricultural assets valued at $6.9 million were formally recognized as part of the Heritage Farms program at South Dakota State University. Sixty-five individuals and families are now members of the Heritage Farms program, which was started in 2001.

The gifts will generate funds to support scholarships, programs and research, all of which are projects of It Starts with STATE: A Campaign for South Dakota State University. The campaign aims to raise $200 million by Dec. 31, 2012, to meet strategic initiatives of the university.

Barry Dunn, Dean of the College of Agriculture and Biological Sciences, says “These gifts give us the opportunity to achieve a new level of excellence at South Dakota State University.”

For more information, contact Keith Mahlum, SDSU Foundation at 888-747-7378 or Keith.Mahlum@sdsufoundation.org.
DSU's Cow/Calf Unit located adjacent to campus has long been an important component of the animal science teaching and research curricula. From hands-on applications in beef cattle evaluation and reproduction to undergraduate research studies and seedstock merchandising for the University’s annual spring bull sale, the Cow/Calf Unit has been a place where SDSU students gain firsthand beef industry experience.

In the future, those experiences will still be offered by the SDSU Cow/Calf Unit – but at a new location. Due to flooding issues and campus encroachment, the SDSU Cow/Calf Unit will be relocated to 640 acres approximately 10 miles west and north of the Brookings campus near Volga, SD. Plans for the Cow/Calf Unit Relocation include:

- A main building with conference center and state-of-the-art, functional working facilities that will also be used for cattle handling demonstrations
- A 40-foot by 150-foot calving barn
- A monoslope barn providing protection for 16 drylot pens
- Replicated pastures for grazing management research

The new location and facilities will allow SDSU to expand its cow herd from 110 to 160 head. Clint Rusk, head of the Animal Science Department at SDSU says, “The new Beef Center will allow us to improve our ability to teach hands-on cattle handling in a modern working facility. The new cattle feeding facility will allow our researchers to collect individual feeding data on cows, heifers, bulls, and steers. We envision this to be a state-of-the-art facility that cattle producers from across the state will be proud to support.”

Additionally, South Dakota beef producer Arnold Wienk says, “The beef industry has a major impact on the economy of South Dakota and surrounding states. As SDSU students prepare for their careers in the beef industry, they need to have access to real-world settings and modern technologies to develop their knowledge and skills in the industry. The SDSU Cow/Calf Unit will be an asset in preparing the next generation of beef producers.”

The Cow/Calf Unit design is being developed by a team of senior students in agricultural engineering, along with agricultural engineering and animal science faculty, and an engineer from the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS). The team has worked closely with NRCS to develop nutrient management plans and a vegetative treatment area, which will also allow for multi-disciplinary research and demonstrations to be conducted.

The new facilities will also allow for expanded Extension program opportunities at the site, along with 4-H and FFA livestock and judging events. Kevin VanderWal has served as manager of the unit since 1990.

For more information about the relocation, contact Cody Wright at 605-688-5448 or Cody.Wright@sdstate.edu

SUPPORT THIS PROJECT

A campaign is underway to raise funds for the relocation of the Cow/Calf Unit facility. This summer a fundraising auction to benefit the Cow/Calf Unit was held for the second consecutive year at Dakotafest in Mitchell. Construction at the site is scheduled to begin during the summer of 2012.

Industry partners are invited to support SDSU's Cow/Calf Unit Relocation through planned giving to “It Starts with STATE: A Campaign for South Dakota State University.” For more information or to contribute, contact: Keith Mahlum, SDSU Foundation, at 1-888-747-7378 (toll-free) or Keith.Mahlum@sdsufoundation.org.
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SDSU'S REGIONAL EXTENSION CENTERS WILL OFFER:
• State and field Extension specialists with expertise in crop and livestock systems, food and families, urban and rural initiatives, youth and community leadership
• Programs available statewide to benefit all South Dakota citizens
• Conference centers to accommodate workshops, classes and meetings, as well as technology for video conference communication

We are dedicated to
Growing
South Dakota's Future