A New Era for the Swine Industry

It Starts with Tradition.
It Starts with Vision.
It Starts with You.

Swine Unit Enhancement
South Dakota State University
Department of Animal Science
College of Agriculture and Biological Sciences
The swine industry is an economic powerhouse in South Dakota and the region, generating important jobs and revenue and serving as a valuable customer of locally grown corn and soybeans.

South Dakota State University’s teaching, research and Extension functions are vitally important in preparing tomorrow’s pork producers and leaders for the industry’s promising potential. The SDSU Swine Unit has played an integral role in exposing students from South Dakota, Minnesota, Iowa and surrounding states to real-world swine industry teaching and research experiences. In preparation for the opportunities ahead, efforts are under way to enhance the facilities to reflect modern pig production.

The Swine Unit Enhancement will provide:

• Resources to elevate undergraduate animal science, pre-veterinary science and ag engineering curriculums;

• Expanded opportunities for undergraduate and graduate research projects; and

• Accessible facilities for Extension and public outreach efforts to educate interested stakeholders about swine production.

Friends of SDSU and swine industry enthusiasts are invited to support these important improvements to the Swine Unit.

For more information or to make a contribution, please contact:

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SDSU Foundation
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PLANS FOR A STATE-OF-THE-ART SWINE UNIT

The proposed Swine Unit Enhancement calls for the construction of three new state-of-the-art complexes that will replace the existing “Old Red Barn” and the current grow-finish barn at the unit. The existing sow barn will be redesigned to match the new facilities and will be remodeled into nurseries. The three new buildings will include:

**Complex A:** A teaching, intensive research, and sow building that will provide for training the next generation of pork producers and for conducting research and Extension programming. The complex will include viewing areas that are accessible for public education and outreach efforts to enhance the understanding of the pork production process.

This facility will feature:
- Classroom space for 50 people
- Boar housing and semen collection center
- Sow metabolism stalls
- Individual housing for swine physiology
- Surgery suite
- Laboratory
- Ability to accommodate 120 sows (five groups of 24 sows/group)

This will include:
- Two 24-stall farrowing rooms
- One breeding room with stalls for the first 30 days
- One large gestation pen with electronic feeding capabilities
- Nurseries: Convert existing farrowing rooms into nurseries

**Complex B:** The second complex is a four-room wean-to-finish barn, with each room holding 300 pigs. Two of the rooms will have 48 pens to allow for intensive nutrition research. The two other rooms will consist of 18 pens per room and will be focused on engineering and management research to increase the efficiency of both the pigs and the building. This complex also will have large windows in every room to enhance its viewing capabilities.

**Complex C:** The third complex is a 1,200-head wean-to-finish barn located on a different site than complexes A and B for biosecurity reasons. This will be a commercial barn adapted to do large-scale research and will provide an actual production environment. Also, it will allow better student training on how to manage a modern wean-to-finish barn.

SDSU SWINE EDUCATION ADVISORY COUNCIL MEMBERSHIP BENEFITS

- Develop and/or strengthen business relationships with other Council members.
- Utilize the swine unit classroom for business meetings and presentations.
- Consider and evaluate current students for internships.
- Provide advice to the swine teaching/research/Extension areas of the Animal Science Department and Agricultural and Biosystems Engineering Department.
- Propose and potentially collaborate on research and teaching programs.
- Offer industry education and/or workshops on campus or at the facility.
- Receive recognition from swine education students, industry visitors and others who visit the swine facilities.

**CONTRIBUTION LEVELS**

- **Diamond:** $250,000 and above (includes membership in SDSU Swine Education Advisory Council)
- **Platinum:** $150,000 – $249,999
- **Gold:** $100,000 – $149,999
- **Silver:** $25,000 – $99,999
- **Bronze:** $10,000 – $24,999

Council membership will be active for 10 years from the date the facility opens. Prior to the 10-year expiration, the College of Ag/Bio – Animal Science will evaluate the current needs for facilities maintenance/upgrades and establish guidelines that will enable Council members to extend their membership.
“Without continual growth and progress, such words as improvement, achievement, and success have no meaning.”

BENJAMIN FRANKLIN

PREPARING FOR THE SWINE INDUSTRY’S PROMISING FUTURE

The SDSU Swine Unit Enhancement will contribute countless benefits to students and faculty, pork producers, SDSU, and ultimately, the citizens of South Dakota and the region. Benefits will include:

- **Developing the Next Generation.** More than 300 SDSU undergraduate students will use the state-of-the-art facilities each year to gain hands-on training in swine nutrition and production, nutrient management, livestock reproduction and diseases. This will, in turn, produce knowledgeable, experienced graduates to work within the industry.

- **Enhancing Public Outreach and Extension Program Opportunities.** Observation windows and walkways, along with video cameras, at the new facilities will allow staff, students and the public to share information about modern swine production.

- **Improving Energy and Production Efficiency.** Through research related to nutritional management, energy consumption, ventilation, reproduction and animal welfare, more efficient, sustainable methods and technology for raising hogs will be developed for industry stakeholders.

- **Advancing SDSU’s Competitiveness.** The enhanced facilities will help secure external grant funding; foster opportunities for collaboration among university departments, regional universities, and allied industries and agencies; and attract and retain outstanding students and faculty.

Once the facilities are completed, an endowment will be established to assist with the operational costs.
SDSU’S SWINE UNIT WILL OFFER
PRACTICAL EXPERIENCE | RESEARCH VALUE | PUBLIC OUTREACH

“For South Dakota to responsibly grow its swine industry, SDSU must be a leader in preparing future professionals for the industry. SDSU has produced excellent swine research over the past decades, but the current aging facilities make it more challenging to attract research dollars. A new facility will provide greater opportunities to SDSU students interested in becoming the next generation of pork producers, as well as help SDSU researchers address producer needs. The SDSU Swine Unit has the potential to be a leading example, allowing farm and urban neighbors to see firsthand what sustainable, modern pork production looks like.”

DAVE UTTECHT ’90, MS ’92
PORK PRODUCER AND CONSULTANT, HURON, SD

“The ability to engage in hands-on applications at the SDSU Swine Unit was a valuable tool in my swine education. The science and practical knowledge I gained, along with the expertise provided by SDSU faculty, continue to be useful to me on a daily basis as I work in the industry. The upgraded facilities for the Swine Unit will enable SDSU to continue to be a teaching and research leader in the industry and prepare the next generation of pork producers and professionals.”

CRAIG MOSS ’06
FAMILY PORK PRODUCER, HULL, IA

“Modern pork production is not simply about raising quality products for our consumers. Future pork producers must also be capable of communicating with consumers about our industry and daily production practices, including addressing consumer concern over animal welfare, antibiotic use, and environmental issues. The new facilities at the SDSU Swine Unit will help students understand the pork production process on a deeper level, and with the hands-on experience they receive, they will be able to share that production knowledge with consumers.”

EMILY ERICKSON ’09
PRODUCTION SPECIALIST, NEW FASHION PORK, JACKSON, MN

Photo Courtesy of National Pork Board
“The swine industry offers a great economic opportunity for South Dakota and the region. With state-of-the-art Swine Unit facilities, SDSU will lead in developing the next generation of pork producers and providing the industry with cutting-edge research and technologies, while also helping demystify modern pork production for the public.”

DR. BARRY H. DUNN ’75
SOUTH DAKOTA CORN UTILIZATION COUNCIL ENDOWED DEAN
COLLEGE OF AGRICULTURE AND BIOLOGICAL SCIENCES