

MO-PORK: Increasing Pork Production in Missouri

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V(A). Planned Program (Summary)

1. Name of the Planned Program

MO-PORK: Increasing Pork Production in Missouri

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
301	Reproductive Performance of Animals	30%			
302	Nutrient Utilization in Animals	40%			
303	Genetic Improvement of Animals	5%			
305	Animal Physiological Processes	2%			
306	Environmental Stress in Animals	3%			
307	Animal Management Systems	15%			
308	Improved Animal Products (Before Harvest)	3%			
315	Animal Welfare/Well-Being and Protection	2%			
Total		100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	8.0	0.0	0.0	0.0
Actual	4.0	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c 253599	1890 Extension	Hatch	Evans-Allen
	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)**1. Brief description of the Activity**

The MO-Pork program will include the following activities: Promotion of efficient production and management practices (Pork Industry Handbook, MU guide sheets and Midwest Plan Service Handbooks); Use of Manual 144/202 "The Missouri System of Swine Production"; On-farm data collection used to evaluate production and economic endpoints; Focused Management Schools for MO-Pork participants, artificial insemination course, Back to the Basics: Farrowing School, Sow Manager's Conference, Pigs to Plate: Adventures in Meat Quality Seminar, Health Summit, finishing short course, nursery management course, ventilation short course; Delivery of Pork Quality Assurance Program for MO-Pork participants; Delivery of new technologies in the swine industry to MO-Pork participants; Computer models/PDA record keeping programs; World Pork Expo and other conferences; Education about niche production markets and specialization opportunities; Media coverage of the MO-Pork program; Farm visits; On-farm research trials; Workshops; Meetings; and Consultation.

2. Brief description of the target audience

The target audience will include people who own swine operations, work on swine farms, or provide technical support to people who own or work on swine farms (e.g., veterinarians, feed dealers). In addition, MO-Pork will target beginning Missouri pork producers, expanding Missouri pork producers, and industry personnel such as Missouri grain producers (interested in adding value to their crops).

V(E). Planned Program (Outputs)**1. Standard output measures****Target for the number of persons (contacts) reached through direct and indirect contact methods**

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	750	1500	300	0
2007	738	2107	335	1565

2. Number of Patent Applications Submitted (Standard Research Output)**Patent Applications Submitted**

Year	Target
Plan:	0
2007:	0

Patents listed**3. Publications (Standard General Output Measure)****Number of Peer Reviewed Publications**

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

Provide two in-service training sessions for regional Extension specialists on an annual basis.

Year	Target	Actual
2007	2	3

Output #2

Output Measure

Develop or revise five guide sheets on an annual basis for regional Extension specialists to use in producer meetings.

Year	Target	Actual
2007	5	3

Output #3

Output Measure

Develop or revise 1 manual on an annual basis for regional Extension specialists to use in producer meetings.

Year	Target	Actual
2007	1	1

V(G). State Defined Outcomes

O No.	Outcome Name
1	Participants will maintain or increase pork production efficiencies and profitability in Missouri.
2	Participants will have improved economic viability and profitability through enhanced marketing opportunities for their operation.
3	Participants will maintain or increase pork operations in Missouri.
4	Participants will acquire knowledge and skills to aid in the successful adoption and implementation of existing management practices or emerging technology to improve pork production efficiency and productivity.
5	Participants will be able to identify and discuss the economic implications of implementing production practices such as marketing/contracting opportunities.

Outcome #1

1. Outcome Measures

Not reporting on this Outcome for this Annual Report

2. Associated Institution Types

3a. Outcome Type:

3b. Quantitative Outcome

Year	Quantitative Target	Actual
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3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
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V(H). Planned Program (External Factors)

External factors which affected outcomes

- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Programmatic Challenges

Brief Explanation

No information found.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Retrospective (post program)
- Before-After (before and after program)
- During (during program)
- Case Study
- Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.

Evaluation Results

External factors played a significant role in Missouri swine production in 2007. Continued efforts to subsidize ethanol production from corn have ended the profitability of pork production. Lack of adequate support to implement larger programs has limited some potential efforts.

In general, pork producers are paid by the pound and by other measures of quality, most with a large genetic component. Economic models have shown repeatedly that increasing reproductive performance, measured as litter size weaned, will have the most profound economic impact among production traits. Use of artificial insemination (AI) has increased from less than 25 percent to more than 85 percent in the past 10 years. This, coupled with tighter profit margins, has led producers to provide much higher levels of management to the farms. In most cases, boars are housed in separate facilities where they can be provided the optimal management, but there is little data to identify optimal management of boars. AI systems allow a single boar to be used in mating 10 to 20 times as many sows as is possible with natural service. This allows the use of superior boars, but also means that inadequate identification of merit will result in the more widespread use of inferior boars. Another economic measurement is feed efficiency, as feed cost represents about 70 percent of the total cost of pork production. Any feed management practice that will improve growth performance and feed efficiency enhances the bottom line for pork producers' profit margins. Other pork production issues of importance to producers are ensuring quality food product; product safety from agroterrorism; prevention of disease outbreaks; antibiotic feeding concentrations; neighborhood acceptance of swine operations; health of employees, owners, pigs or public; labor shortage; and lack of quality and skills of labor. Therefore, producers need to continually be educated and challenged to adopt new technologies. Otherwise, they may opt to leave the pork production industry due to the increasing costs of environmental regulations, limited market access and the smaller profit margins.

Key Items of Evaluation

Exit surveys are conducted with participants at the conclusion of conferences, seminars and programs, as well as many follow-up farm visits and phone conversations. These evaluations indicate more than 95 percent of the pork producers in attendance at a conference, seminar or program have adopted new technology or changed their production practices based on what they learned.