

# Animal Health and Production

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## V(A). Planned Program (Summary)

### 1. Name of the Planned Program

Animal Health and Production

## 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	5%		15%	
302	Nutrient Utilization in Animals	10%		15%	
303	Genetic Improvement of Animals	0%		10%	
305	Animal Physiological Processes	0%		15%	
307	Animal Management Systems	25%		10%	
311	Animal Diseases	30%		25%	
315	Animal Welfare/Well-Being and Protection	5%		10%	
806	Youth Development	25%		0%	
<b>Total</b>		100%		100%	

## V(C). Planned Program (Inputs)

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

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	14.0	0.0	18.0	0.0
<b>Actual</b>	14.0	0.0	23.1	0.0

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

Extension		Research	
Smith-Lever 3b & 3c 595136	1890 Extension	Hatch 919890	Evans-Allen 0
1862 Matching 508859	1890 Matching 0	1862 Matching 919890	1890 Matching 0
1862 All Other 3888532	1890 All Other 0	1862 All Other 12383760	1890 All Other 0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

Investigators found that distiller's dried grains with solubles could be blended with soy hulls as a quite satisfactory replacement for corn feed, collected data that will be used to develop a simulation model to improve trailer design, reduced animal stress levels and reduced economic loss during transportation of livestock, developed unique biotechnological strategies to improve animal growth efficiency, worked to prevent and control enteric diseases in swine and porcine reproductive and respiratory diseases, and investigated an outbreak of respiratory disease with a 30% mortality rate in an Illinois swine herd that occurred after a change in feed [the first reported outbreak of fumonisin induced toxicity in swine since 1989].

Presentations were made to a wide variety of researchers and stakeholders, including the joint meeting of the American Dairy Science Association and the American Society of Animal Science, the Society for the Study of Reproduction, the American Society for Cell Biology, and the 2007 Conference of Research Workers in Animal Diseases.

The use of technology is a growing delivery system for Extension programs addressing animal production and health. The Illinois Livestock Trail website added a Certified Livestock Manager Training section and youth oriented Livestock E-Quiz section. MarketMaker, an interactive multi-state market system developed by the University of Illinois that locates businesses and markets for agricultural products, has expanded geographically with over half the states in the nation considering a formal partnership in developing the network. The data currently encompasses 200,000 profiles of farmers and other food related enterprises in Illinois, Iowa, Georgia, Mississippi, Nebraska, Kentucky, Michigan, and New York. Illinois Horse Breeders Short Course, Swine Reproductive Programming for Spanish Speaking Employees, Illinois Dairy Days, and Pet Extravaganza are examples of programs delivered by Extension staff to audiences at campus and off-campus program sites. Programs on pasture management for livestock production is a continuing focus. This past year the Dairy Grazing Brown Bagger was offered as a distance delivery program on four consecutive Fridays in March. Four different topics were covered by speakers representing Penn State, Purdue, Illinois, and a nationally recognized dairy grazier from Indiana.

**2. Brief description of the target audience**

The target audience includes all members of the animal production chain, from suppliers of inputs to producers to processors to final consumers. Other audiences include youth, veterinarians, owners of companion animals, vaccine manufacturers, animal nutritionists, and livestock trailer manufacturers.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	65000	60500	28000	4600
2007	57699	26914	65870	0

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

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2007:	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>			
2007	0	67	67

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

Number of research publications.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	84	67

**Output #2**

**Output Measure**

Number of completed extension projects.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	19	10

**V(G). State Defined Outcomes**

<b>O No.</b>	<b>Outcome Name</b>
1	Program participants will exhibit/report KASA changes.
2	Number demonstrating/reporting behavior changes including improved decision-making
3	Improved Environmental Control For Biological Structures
4	Decreasing The Risk Of Periparturient Diseases In Dairy Heifers

**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

Competing Public priorities

**Brief Explanation**

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

**1. Evaluation Studies Planned**

After Only (post program)

During (during program)

### **Evaluation Results**

A follow-up evaluation, sent via mail with a self-addressed, postage paid envelope to 21 participants in the Dairy Brown Bagger distance education 4 part-series a few days after the final session, was returned by 15 participants. In response to the evaluation request to "List one technique learned during this program that you plan to implement", thirteen provided a response. The responses are as follows:

- Changes I can make to improve my ration to make it more compatible to the pasture
- Stop buying prepackaged pasture mixes because they are likely to be the wrong specie, wrong variety, and wrong ratio
- Possibly feeding corn cobs to dairy herd or may pick my corn in ear this fall instead of shelling
- Grazing of cornstalks, oats, and turnips
- The use of turnips for late season pasture
- Feeding strategies to compliment higher energy costs
- Estimation of pasture dry matter using a plate meter
- Rotational grazing
- Tri strip grazing
- Summer annuals and multi-cropping
- Monitor pasture growth better and try not to overgraze
- Do more grazing with cattle
- New ideas to reestablish pastures.

### **Key Items of Evaluation**