

# Livestock

Livestock

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

### 1. Name of the Planned Program

Livestock

## 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	10%		10%	
302	Nutrient Utilization in Animals	5%		10%	
304	Animal Genome	0%		5%	
305	Animal Physiological Processes	5%		10%	
306	Environmental Stress in Animals	20%		5%	
307	Animal Management Systems	30%		30%	
311	Animal Diseases	20%		25%	
315	Animal Welfare/Well-Being and Protection	10%		5%	
<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>	10.2	0.0	44.9	0.0
<b>Actual</b>	9.3	0.0	52.4	0.0

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

Extension		Research	
Smith-Lever 3b & 3c 243474	1890 Extension	Hatch 1204746	Evans-Allen 0
1862 Matching 392025	1890 Matching 0	1862 Matching 6889173	1890 Matching 0
1862 All Other 23067	1890 All Other 0	1862 All Other 4447963	1890 All Other 0

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

UMN research and Extension is helping the livestock industry of Minnesota cope with issues of animal health, food security, and public safety in order to maintain public trust and productivity. National and international relationships are important to this program because of the global livestock markets and concern for global safety. In 2007, poultry specialists participated in planning efforts to develop a response to Avian Influenza and design a product movement strategy in the case of an avian influenza crisis. They also provided recommendations to improve production in niche poultry systems, resulting in better profitability and savings in expenses. Applied research has been conducted and disseminated regarding the use of distiller grains with solubles in turkey feeds, allowing producers to utilize higher levels of DDGS in light of increasing feed costs.

Similar collaborations has created an impact through the Quality Count\$ project conducted by UMN dairy specialists since 2002. These efforts have improved SCC counts by 20% since 2003.

Similarly, the U of MN Beef Center led a statewide charge to increase awareness of Drug Residue Avoidance with beef and dairy producers. An independent research firm analyzing results showed that the team had successfully reached its audiences with updated information.

Research on dairy farm drug use has made it possible for Minnesota's dairy industry to lead the nation in safeguards for the quality and safety of milk and dairy products. Researchers have:

- Worked with the industry to identify areas most needing solutions;
- Drafted policies defining the proper veterinary role in prescribing drugs on dairy farms;
- Created a limited-access website for discussions within the profession; and
- Developed protocols for therapeutic and production uses of drugs on dairies.

MAES research on the effects of feeding distillers grains on performance and carcass characteristics were used by university and industry professionals to debunk the myth that distillers grains negatively affects USDA grade of beef carcasses.

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

The livestock teams organize efforts throughout Minnesota to address current issues, including partnerships with national and international organizations, Minnesota dairy producers, pork producers, poultry producers, beef producers, veterinarians, consumers, Minnesota feed industry, forage growers and feeders, and commercial hay producers.

**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>	14600	3800	0	0
2007	37970	128218	2970	0

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

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	2
2007:	0

**Patents listed**

Livestock

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

#### Number of Peer Reviewed Publications

	Extension	Research	Total
<b>Plan</b>			
2007	45	166	211

### V(F). State Defined Outputs

#### Output Target

##### Output #1

###### Output Measure

Through demonstration projects, provide ideas and solutions to producers on such topics as milk house waste, manure rate application on fields, and on-farm demonstrations of forage topics such as alfalfa brown root rot variety screening, and alfalfa fall cutting. (Target expressed as number of demonstration projects.)

Year	Target	Actual
2007	20	0

##### Output #2

###### Output Measure

Provide workshops, training sessions, schools, and other processor specific events. (Target expressed as number of events.)

Year	Target	Actual
2007	80	313

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

O No.	Outcome Name
1	Participants in Beef Home Study Course will report increase in knowledge in pasture management, nutrition, and stocker feeder management. (Target expressed as percentage of participants.)
2	Beef producers make management adjustments based on results of evaluation of their calves. (Target expressed as percentage of producers reporting making changes.)
3	Through the Quality Count\$ program, the average bulk tank somatic cell count in Minnesota dairy operations will be reduced to below 300,000.
4	After attending manure management workshops participants will be able to complete a manure management plan that meets Minnesota Pollution Control Agency requirements. (Target expressed as percentage of participants.)
5	After completion of the on-farm assessment program which evaluates animal welfare for individual swine production sites, producers make changes in facility/equipment or management practices to improve swine welfare. (Target expressed as percentage of participants making changes.)
6	Participants will gain research-based knowledge in the production of livestock--including poultry, dairy, beef and swine, manure management, and workplace safety. (Target expressed as the number of direct person contacts reporting new research-based knowledge.)
7	Participants will change their behavior based on research-based knowledge about livestock management -- including poultry, dairy, beef and swine, manure management, and workplace safety. (Target expressed as the percentage of participants that changed their behavior as a result of workshops and conferences that had behavior objectives.)
8	Research on the manure management and methane digesters will develop options for Minnesota farms.

**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**

Natural Disasters (drought, weather extremes, etc.)

Competing Programmatic Challenges

**Brief Explanation**

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

**1. Evaluation Studies Planned**

Other ()

**Evaluation Results**

**Key Items of Evaluation**