Animal Production

Animal Production

V(A). Planned Program (Summary)

1. Name of the Planned Program

Animal 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	20%		20%	
302	Nutrient Utilization in Animals	20%		20%	
303	Genetic Improvement of Animals	10%		10%	
304	Animal Genome	10%		10%	
305	Animal Physiological Processes	10%		10%	
306	Environmental Stress in Animals	10%		10%	
307	Animal Management Systems	20%		20%	
	Total	100%		100%	

V(C). Planned Program (Inputs)

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

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	3.0	0.0	6.6	0.0
Actual	2.9	0.0	6.6	0.0

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

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
157354	0	193632	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
157354	0	193632	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

Animal Production

- Research procedures and technology •Papers, citations, patents •Train students •Dissemination of research results •Educational workshops •Conferences •Commercialization of techniques and products

Using Methylglyoxal (MG) has been shown by NMSU researcher to haves potential to provide a great tool to producers of cattle. The use of MG as a marker has application to all herds of ruminants around the world where protein availability is deficient and requires supplementation. In New Mexico alone there are estimated to be 1.5 million head of cattle making cattle production the number one agriculture commodity in the state. The majority of the cattle in New Mexico require protein supplementation for a portion of the year representing a large cost to the producer. Typically, New Mexico producer spend an average of $160/hd on protein supplementation, which represents approximately 80% of the cow cost for the year. By gaining a better understanding of cow protein requirements and how forage composition affects rumen fermentation and the rumen microbial population will lead to improvements and reduction of costs association with protein supplementation.

If plasma levels reflect ruminal levels this may represent the beginning of development of a producer friendly assay to assess protein supplementation effectiveness.

- Producers from Acoma, Ramah Navajo, Canoncito Navajo, and Laguna Pueblo sold approximately 40,000 pounds of graded and sorted wool. This method of marketing has shown an increase of up to 1000% over their previous sales.

- A bull selection program was conducted by the Ag Agent at San Juan Pueblo March 1, 2007. Approximately 30 Native American producers attended the meeting and gained an increased awareness for the importance of bull selection.

- This year two major crop production programs were conducted; Zia Reservation March 15, 2007, and Acoma Pueblo, August 23, 2007. A total of 20 producers attended the meetings and participated in a tour of the various fields.

- One major sheep shearing school was conducted at Chinle, Arizona on May 8-10, 2007. Fifteen students participated in the hands-on school for three days. A significant increase in skill was exhibited by the students.

- Four additional workshops were conducted at Farmington, New Mexico. Ramah, Navajo Reservation, Acoma Reservation, and Dini College Tsaile, Arizona. The workshops emphasized importance of proper shearing technique both with hand shears and electric shears; value added lamb and wool marketing and maximizing profits through cooperative wool marketing.
- The 2007 wool price for typical Native American Fine wool was in the .95¢ to $1.00 per pound range which was an increase of approximately 30% over 2006 prices.

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- The long term goal of the Profitable Livestock Program is to show the use of AI as on alternative management strategy on first calf heifers. The results of this program have shown that AI can reduce calving problems on first calf heifers as well as improve overall quality and marketability of the cow herd.

- County agents and two other officials with Utah State University to conduct a loco weed survey in Northeastern New Mexico. The agent was responsible for counting each plant in a specific plot that had been previously selected. As a result of prior spraying and replanting with cool weather grasses an increase in the grass production was evident with a 50% increase in the amount of grass that was grown.

- 2008 Livestock Producer Seminar. The agent worked with local NRCS office, the 4-H Council and several local and surrounding businesses to put together a livestock production seminar for local producers. Evaluations indicated that over 50% of participants rated most presentations as moderately useful in knowledge acquired and another 50% rated presentations very useful in knowledge acquired.

- 2008 Producer Newsletter. The agent produces a newsletter for agriculture producers on a bi-annual basis. The newsletter targets both livestock and crop producers with pertinent information on production strategies, industry and extension educational programs, research trial information, etc. Over 20% of producers who received newsletters merit the newsletter useful as revealed to subject matter and information when surveyed one-on-one.

- Awareness was increased of novel management practices and knowledge of current issues by 20% for 10% of Eddy County New Mexico livestock producers through educational programs and direct communications. Bio security was

increased by 100% of the dairies in Eddy County and awareness to 20% of the Beef producers.

- Agent hosted a private applicator training for region wide license holders. Forty-five producers and citizens learned about prairie dog control, brush management and the record keeping and inspection requirements of NMDA. 100% of participants will not have to participate again for at least 5 years. 75% of participants increased their knowledge of brush control on certain species by over 50% as measured by comments after the meeting.

- The North Eastern NM Livestock Association meets annually in Harding County. It is made up of about 5 counties and dues go to support a scholarship for a graduation senior in the area. Producers gained insight into the meat industry and learned about beef tenderness and quality and also enjoyed sampling different beef products. They also learned about carbon credits, livestock disease issues Ag emergency management, and were updated on current policies or legislative agendas affecting cattle producers. As a result, producers left the meeting knowing 75% more about the subject matter and can use the material presented to improve management of operations.

- Management of Cattle through periods of cold stress and winter feeding strategies program. Livestock producers in San Miguel and Mora counties will gain knowledge in feeding their cattle. 100% of producers learned how much feed they should be feeding. 20% of these producers will save on their winter feed because of this program.

- A total of 12 workshops and demonstrations saw a participation rate of 80% of the county producers. Topics ranged from overall management, record keeping, nutritional requirements and feed alternatives as well as marketing strategies, reduction of overhead and financial alternatives. 75% of the producers stated that they were going to adopt some or all of the suggested management changes and 100% were receptive to change in standard supplemental feeding practices. 10% were receptive in addition to management practices to include agritourism and hunting enterprises.

- The Range Improvement Task Force (RITF) has been intricately involved in the Jarita Mesa range analysis since wild horses have been part of the mix of herbivores that graze on land year round. Conflict has existed since the horses have taken advantage of forage resources year round with no management by the USFS. In the past two years approximately 100 out 170 have been removed. Prelimary indications show that range conditions are improving.

- Presentations held for Jicarilla cattle producers covered marketing cattle, vaccination programs, record keeping, best management practices, agricultural statistics, USDA programs, range management and improvements, New Mexico tuberculosis status and budgeting. Over 100 producers have received instruction by attending these presentations.

2. Brief description of the target audience

The target audience includes: ranchers, feedlot operators, and dairy producers.

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	0	0	0	0
2008	0	0	0	0

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

Patent Applications Submitted

Year	Target
Plan:	0
2008:	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2008	2	23	25

V(F). State Defined Outputs

Output Target
Output #1

Output Measure

The specific output measures will vary according to the specific project being monitored. The development of research procedures and technology, training of students, publishing research papers, and disseminating research results via educational workshops, conferences, and Extension media are important outputs for the various projects falling under this planned program.

Year	Target	Actual
2008	0	0

V(G). State Defined Outcomes

O No.	Outcome Name
1	# of trained professionals
2	# of improved animal varieties
3	# of research publications
4	# of methods, technology, and animal varieties adopted by public and private sectors
5	Economic development increased
6	Successful animal agricultural enterprises
7	# Extension publicatons

Animal Production
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

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area

V(H). Planned Program (External Factors)

External factors which affected outcomes

Natural Disasters (drought,weather extremes,etc.)
Economy
Appropriations changes
Public Policy changes
Government Regulations
Competing Public priorities
Competing Programmatic Challenges

Brief Explanation

New Mexico continues in a drought, which affects the price of cattle. Priorities between between urban, industrial, and agricultural uses of water and land continue to create conflict. The state dairy industry continues to grow, putting pressure on our college to increase support for this sector.

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

1. Evaluation Studies Planned

Before-After (before and after program)
During (during program)
Comparisons between program participants (individuals,group,organizations) and non-participants
Comparison between locales where the program operates and sites without program intervention

Evaluation Results

{No Data Entered}

Key Items of Evaluation

{No Data Entered}