

2023 Iowa Dairy Goat Management Seminar Series

December 8 – Kalona & December 9 - Sioux Center

Relevance

Recognizing that Iowa is the third largest dairy goat state there was a necessity to better understand the current dairy goat management practices, characteristics, and needs, along with future direction was identified by the Iowa State University Extension Dairy Team. A comprehensive survey was developed and summarized in 2019 by Dr. Leo Timms, Emeritus Extension Dairy Specialist; Jennifer Bentley, Fred Hall, and Larry Tranel, Extension Dairy Field Specialists.

From that survey, producers indicated that commodity prices, bacteria counts, and somatic cell count are three conditions that have some impact on farm business. The Iowa Dairy Goat Management Seminar series functions to address those issues.

Response

Current research data suggest that most dairy goats in US herds have a bacterial intramammary infection at dry-off. In the absence of antibiotic treatment at dry-off, most of these infections persist through the dry period and into the following lactation resulting in decreased milk quality and the potential for food safety concerns. Antibiotic Stewardship in Dairy Goat to Assure Food Safety and Milk Quality grant will guide improvements in antibiotic stewardship of dairy cattle mastitis by training dairy goat producers in the use of similar principles and approaches in their management systems derived from this research.

Sixty dairy goat herd owners from four states heard four presenters cover the topics of; mastitis identification, setting VCPR goals, identifying functional type, antibiotic use, financials and attended a milk quality workshop.

Demographics

The program was evaluated with a pre/post retrospective evaluation tool with 23 of the 60 attendees responding for a response rate of 38 percent. 91 percent of the attendees were either producers or employees. Nineteen percent self-identified as a show herd or hobby herd. The respondents milked an average of 74 does with a range from 2 to 210. The herds averaged 8.7 pounds per doe per day and while 56 percent could not identify their somatic cell count, two producers have an average of 732,000. The most popular breed was Alpines with 75 percent milking them. Saanens and grades/experimental followed at 40 and 20 percent respectively. We also found they had milked goats for an average of 12.8 years with a range from 1 to 45 years and found that 38 percent were planning on expanding their operations in the next five years plus an additional 31 percent would expand if a milk market was available.

Results

With 95 percent of respondents completely or mostly satisfied with the program, we delved into the results more deeply. We found that 100 percent of the respondents declared an increase in understanding of the topics with an average improvement of .79 points on a 5-point Likert scale.

Topic	After	Before	Improvement
The importance of using a towel only on one animal	4.63	3.9	0.73
Prioritizing the four type categories in mating decisions	4.06	3.47	0.59
Why vacuum and pulsator function is important to udder health	4.53	3.47	1.06
The difference between pre and post dips	4.53	3.95	0.58
Why disposable gloves are important for milking hygiene	4.53	3.9	0.63
How to properly use the California Mastitis Test	4.44	3.35	1.09
How to prepare teats using pre-dip	4.44	3.58	0.86
Cleaning and Sanitizing milking equipment	4.31	3.89	0.42
How to do a profit analysis	3.65	2.81	0.84
Cash flow verses profitability	3.89	2.75	1.14
<i>Average Improvement across all topics</i>			0.794

Plans to adopt a practice as the result of a program is the truest measure of success for Extension programs. From each topic we noted the primary issue and asked attendees their intention to adopt that change. The chart below shows the intentions to adopt.

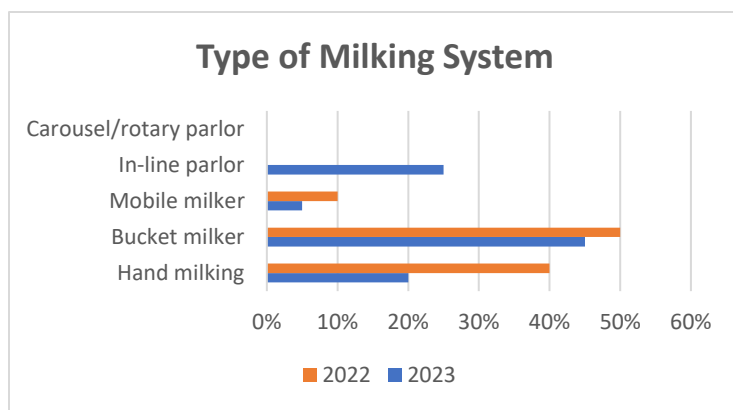
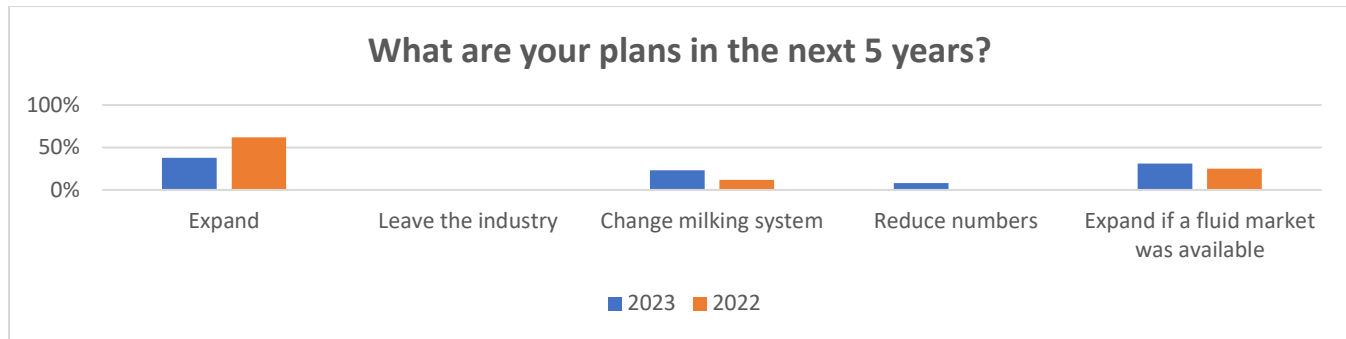
Intent to adopt each technology or practice	Definitely Will	Maybe Will	Will Not	Already Adopted
Changing your milking equipment cleaning protocols	6	3	2	5
Changing your doe milking preparation protocols	5	7	0	6
Changing your genetic decisions on functional type	5	6	1	7
Changing your milk sampling protocols	6	7	0	5
Include milking unit checking on a weekly basis	6	7	2	1
Include teat end checks	8	6	1	3
Doing a year-end profit analysis	7	10	0	2

The multiplier effect of participants sharing the information from an educational program is an important aspect of Extension. To determine that number we asked how many people attendees will share the information with from this program. From this information we anticipate at least an additional 87 people will receive the information from this program.

To evaluate the economic impact this program had for attendees we asked them to estimate the benefit on an annual per milking goat basis, the range was from \$2.50 to over \$37.5. With 33 percent indicating a benefit of from \$0 to \$5 per head; 33 percent indicated a benefit of \$6 to \$10 per head and 20 percent \$11 to \$25 and 13 percent a benefit from \$26 to \$50 per head. When aggregated into the total number of goats represented by attendees, the total benefit is \$25,980.

Trendlines

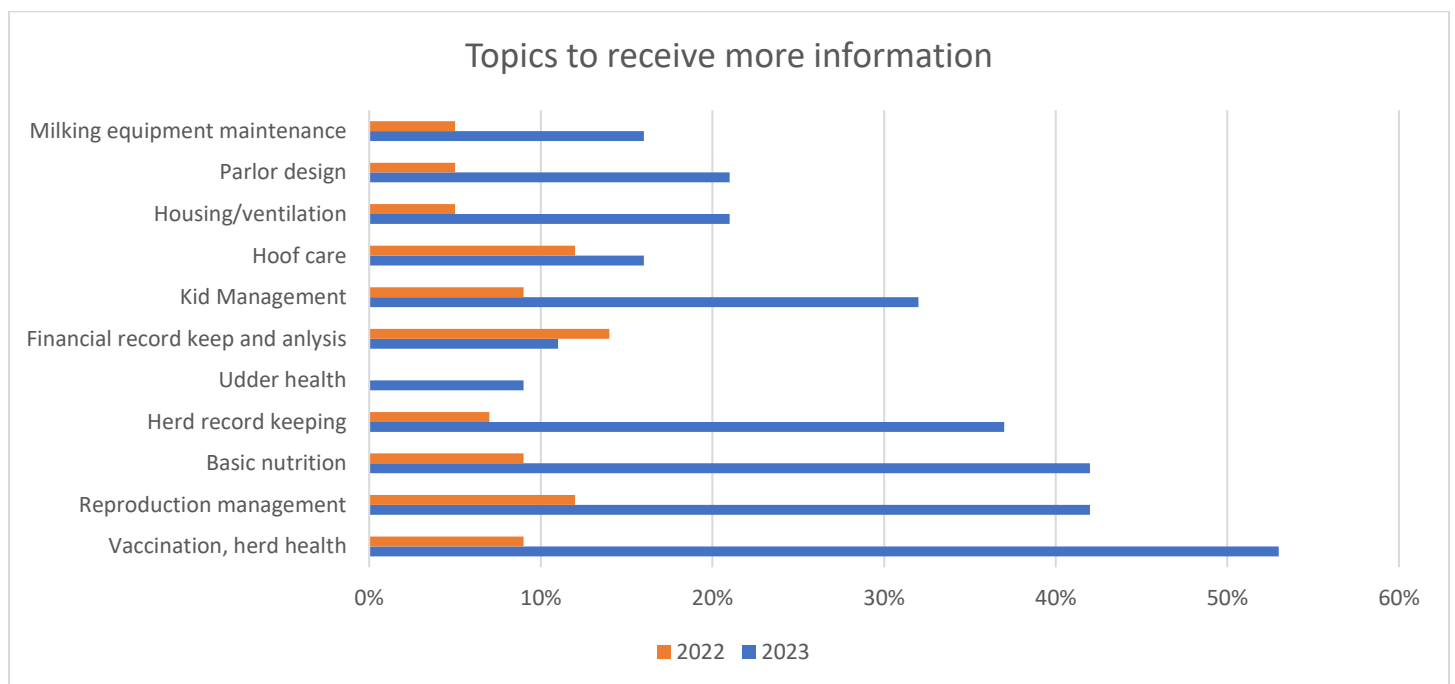
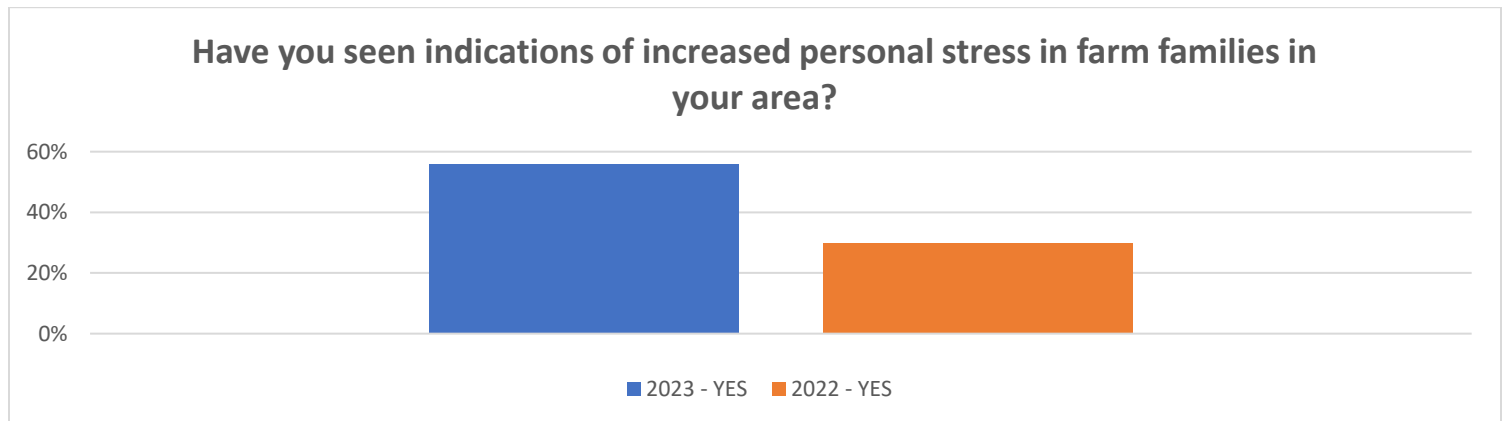
The past two years we have surveyed the attendees to assess the status and management trends of the herds in Iowa. While trendlines are unclear with just two years data, below are several of the topics we covered.



Milk	2023	2022
1. How is milk used?		
Fed to kids	15%	26%
Fed to other livestock	20%	16%
Shipped to a fluid market	25%	0%
Consumed by family	35%	23%
Made into cheese	40%	10%
Made into other edible products	15%	13%
Made into non-edible products	10%	13%
2. Frequency of milking?		
Less than once a day	0%	0%
Once a day	5%	0%
Twice a day	95%	100%
More than twice a day	0%	0%

Feeding & Nutrition	2023	2022
1. Feeding system?		
Grazing	0%	0%
Grazing with some stored forage	30%	20%
All stored forage	70%	80%
2. Forages used?		
Corn silage	0%	6%
Alfalfa haylage	20%	12%
Alfalfa hay	85%	53%
Grass hay	10%	23%
Other: oat hay baleage, pellets	10%	6%
3. How is grain fed?		
TMR (total mixed ration)	5%	0%
In parlor by hand	85%	72%
In parlor by gravity	0%	9%
In parlor by auger	0%	0%
Outside feedbunk	10%	18%

In 2019 the dairy team started adding the next question to evaluations to understand the significance of stress in farm families. During the pandemic years the concern peaked and has since diminished. However, the past two years it is rising to nearly the same levels as during the pandemic. While we are still seeing indications of personal stress in farm families, in neither years have there been instances that have prompted them to take action or intervention.



1. Would you be interested in attending a summer farm field day?	2023	2022
Yes	89%	100%
2. What "hands-on" program would you be most interested in?		
Breeding/AI	50%	37%
Hoof care/trimming	31%	32%
On-farm cheese processing	50%	26%

Comments

- What vaccination programs do you have for adult goats and kids? How do you prevent pneumonia in kids? Thank-you!
- We have a good neighbor community.
- Great program, I learned a lot.
- Leave yourselves more time! You're full of knowledge and we are grateful you're willing to share. Thank you all.
- How to eliminate CL's in goats.
- So fun and educational. Nice to get the community together.
- Outstanding seminar! Great job!

Summary

With the dairy team part of a USDA grant that researches dry doe drugs. It was logical to focus on udder health, milking protocols and economics. Those attending gained knowledge and understanding of issues and nearly 100 percent planned to implement management practices based on their new understanding. Recommendations from those attending this year will put a high priority on vaccinations, reproductive management and basic nutrition for the 2024 programs.

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