21st DSANA Symposium a success

Greetings from West-Central Wisconsin where as of December 16, earthworms were still crawling around, the grass was still growing, and the sheep still grazing.

I T WAS TRULY A DELIGHT to be part of hosting the 21st DSANA Symposium this past November in Madison, the home of the original symposium. There are several highlights that have stayed with me since the symposium that I’d like to share.

Once again, it was a phenomenal opportunity to meet and reconnect with people passionate about sheep dairying and artisanal cheese making from throughout the United States, Canada and Mexico. I am especially excited about the participation of younger people from all three countries. What fun it was for me to spend time with the young people from Canada and Mexico.

Second, although I’ve been involved in the industry and have attended many of the symposiums since the beginning, I continue to learn new things each year. This year was no exception. The research and best practices presented by university faculty in collaboration with sheep dairy farmers and cheesemakers always peaks my interest. This year was especially meaningful to have some of my farm help attend with me. We have already made some changes in practice since the symposium. As a result of attending the cheese making seminar, I have a whole new appreciation for the need to produce high-quality milk. If you did not fill out a paper survey, please complete one online on the DSANA website. Your feedback is important to planning the next symposium.

Third, it was a time to get updated and motivated to address the current challenges to the sheep dairy industry’s future. The DSANA board already has a workgroup developing a plan of action to import semen. The board is also in communication with the University of Wisconsin – College of Agriculture and Life Sciences in support of filling Dr. David Thomas’ faculty position and retaining the sheep dairy flock at the Spooner Research Station. Please read the article in this newsletter pertaining to this topic and take action as you are motivated to do so.

Finally, I want to express my deepest appreciation for the leadership, professional expertise and research, and passionate career commitment Dr. David Thomas has made to the sheep dairy industry. Starting in Wisconsin, his contributions have extended far beyond Wisconsin’s borders reaching across the United States, North and South America, Europe and beyond. He has truly had a global impact. Thank you, Dave. Is there such a thing as DSANA Emeritus status? If not, perhaps we best start the practice!

Thank you to this year’s DSANA planning committee for providing an exceptional opportunity for all. Best wishes for a successful lambing season!

With deepest regards,

Laurel Kieffer
DSANA Board of Directors
President

Thank you! 2015 DSANA Planning Committee

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Terry Felda, editor of the DSANA Journal, asked if I would reflect a bit on the dairy sheep industry in North America — where it has been and where it may be going. I’m not a dairy sheep producer or a sheep milk processor, and I’m not one of the very early pioneers in dairy sheep production like Joan Snyder of New York, Hani Gasser of British Columbia, Axel Meister and Dr. Chris Bushbeck of Ontario, Roger and Lucie Steinkamp of Minnesota, Professor Bill Boylan of the University of Minnesota, or Hal Koller of Wisconsin (my apologies to any of the very early pioneers I have not named). I became aware of dairy sheep production in 1991 just before I moved from the University of Illinois to the University of Wisconsin–Madison when my new sheep research colleague at Wisconsin, Yves Berger, suggested that we should develop a dairy sheep research program at Wisconsin to serve this new, and still very small, dairy sheep industry in North America. We convinced our university administrators that this was a good idea, and we began the transition of the meat sheep program at the Spooner Agricultural Research Station to a dairy sheep program with the purchase of two East Friesian-Arcott Rideau ram lambs from British Columbia in 1993. A sheep milking parlor was built at the station in 1995, and milking started in 1996. Yves Berger chaired the organizing committee of the first Great Lakes Dairy Sheep Symposium that was held on March 30, 1995 in Madison, Wisconsin, which is now known as the Dairy Sheep Association of North America (DSANA) Symposium. Therefore, my credentials that may allow me to make some comments on the dairy sheep industry in North America are that I have conducted research and outreach programs on dairy sheep production from 1996 to the present, and I have attended 20 of the 21 annual dairy sheep symposia and assisted in the organization of most of the symposia.

Where has the industry been?
Many producers that started in the early years of the industry are no longer part of the industry. Those that left were generally milking a small number of ewes and the percentage of dairy breeding in the ewes was less than we see today so individual ewe milk yield and total milk volume from the farm were not large enough to be economically viable. Marketing of small quantities of milk was also problematic for these early producers, and an inconsistent sheep milk market (nonexistent in many regions of North America) continues to be a major problem in the industry today. In some regions, the number of producers has not increased as was expected. An example is Wisconsin where there are only about 20 licensed sheep dairy farms today, which is about the same number as in the mid to late 1990’s. However, there also have been many positive developments in the industry. First among these is the development and ready availability of high quality domestic sheep milk cheeses. North American “foodies” now take for granted that U.S.-, Canadian- and Mexican-produced sheep milk cheeses are a part of their food scene. This is an amazing development considering that there were virtually no domestically produced sheep milk cheeses 25 years ago. Many of the top awards from the American Cheese Society annual competition and other international, national, and regional competitions

Past and future • continued on p. 3
Past and future • continued from p. 2

go to sheep milk or sheep milk-blended cheeses. While some successful dairy sheep flocks remain small in the number of milking ewes, the trend is definitely to larger flocks to take advantage of the economies of scale. Some regions have seen an increase in the number of dairy sheep flocks and the output of sheep milk products; notably the northeastern U.S., southern Ontario, and California. Lack of markets for sheep milk, especially in regions where there are not a large number of small- to medium-sized cheese plants interested in the production of specialty cheeses, remains a major roadblock to development of new dairy sheep farms. Potential producers without access to a milk market have no choice but to become a farmstead cheese maker. While there are several successes of dairy sheep farms that are processing their own milk, not all potential dairy sheep farmers have the skills or desire to become a sheep milk processor. Cooperative marketing of sheep milk is a possible solution. The Ewenity Dairy Cooperative in Ontario is an example of a cooperative that provides a stable sheep milk market for approximately 10 small farms while the Wisconsin Sheep Dairy Cooperative has not been as successful and has lost members in recent years.

Where will the industry go?
Domestic sheep milk products are here to stay. Economic sustainability of dairy sheep farms, of course, will depend upon a good business plan and efficient operation of the dairy sheep farm and the farmstead processing plant. While there will still be a place for farms with a small number of ewes (say less than 150 milking ewes) that can cooperatively market their milk or produce farmstead products that highlight the "small family farm" and "naturally produced" aspects of their products in their marketing, the general trend will be for farms milking a larger number of ewes. These larger farms will process their own milk and market their products or will have a contractual agreement with a milk processor. The greatest potential for growth of the industry is in regions where there is a tradition of dairy cow farming, smaller dairy cow herds, and smaller, but numerous, milk processing plants – areas like the upper Midwestern and Northeastern U.S., southern Ontario and Quebec, and the dairy regions of Mexico. There will be successful dairy sheep operations outside of these regions, but they will be fewer in number and will need to be very creative in their milk marketing.

There is progress being made on importation regulations of ram semen from Europe into the U.S., and I predict that access to improved dairy genetics from France and other European Union countries will happen soon. However, continual genetic improvement of the North American dairy sheep flock is imperative for profitability, and this can only be achieved with performance recording of reproduction and milk traits of individual ewes at the farm, calculation of estimated breeding values (EBVs) from these data that are comparable across flocks, and using EBVs in the selection of breeding stock. GenOvis, the genetic improvement program for meat and wool sheep in Canada, may be the best hope for a North American genetic improvement program for dairy sheep – if they can successfully develop a dairy sheep module for their program and if they will allow flocks other than those in Canada to participate.

Research and development of new technology for the industry and outreach to producers will be a real challenge in the future. Sheep are a minor livestock species in North America and dairy sheep are a very small part of the sheep industry. As Federal, State, and Provincial budgets are cut for agricultural research, development, and outreach, the first commodities to not receive support are the minor agricultural commodities like sheep/dairy sheep. With less support expected in the future from government and universities, it is even more important than ever for producers and processors to learn from the experiences of each other and professionals in related fields. The annual Dairy Sheep Association of North America (DSANA) Symposium will become even more important than it is now in facilitation of new knowledge among current and potential dairy sheep producers and sheep milk processors. The industry will need to look to Europe for new technology that can be adapted to local conditions.

DSANA will need to be creative in finding ways to bring money into the association so that the organization can be more active in promoting development of the dairy sheep industry and can afford to hire a permanent full-time or part-time person to run the financial and clerical work of the association. While current management of DSANA by unpaid volunteers has been exemplary, these volunteers have their own farms and businesses to run and cannot devote the time to DSANA necessary to take it to the next level that will be needed in the future.

Conclusion
The most exciting part of my over 38-year career as an Animal Science faculty member has been the past 20+ years that I have had the opportunity and privilege to be involved with research and outreach for the dairy sheep industry of North America. While the industry faces many challenges (just as the more well-established agricultural industries face many challenges), I’m confident the industry is here to stay and that it will grow in the future. Each current dairy sheep producer and sheep milk processor should feel a real sense of pride, as I do, every time I see domestic sheep milk products in a retail store. Each of us had a part in bringing these products to North American consumers where there were none before – we are the pioneers.
6 steps to a successful lambing season

Step 1: Set obtainable goals

Before the first lamb hits the ground, analyze past performance of the flock, set tangible goals and determine a path for achieving these goals.

Consider a 200 percent lamb crop as an attainable goal. Mature and well-conditioned ewes should be able to lamb at least two lambs. Strive for less than 5 percent pre-weaning mortality. The industry target is less than 5 percent, but it’s estimated that 20 percent of lambs are lost before weaning, with 80 percent of those losses in the first 10 days.¹

Step 2: Newborn care

Within the first few minutes after a lamb is born they are exposed to bacteria and pathogens. Two ways to protect lambs against these pathogens are: navel disinfection and quality colostrum.

Dip the newborn’s navel in 7 percent tincture iodine immediately after birth, ensure the disinfectant covers both the outside and inside of the navel.

Colostrum or the first milk in lactation is the primary protection lambs receive against environmental pathogens and bacteria. Lambs should receive 10 percent of their body weight in colostrum by 18 hours of age, fed at 105 degrees F. For example, a 10 pound lamb should be fed 1 pound or 16 ounces of colostrum in the first 18 hours of its life.

Keep in mind that fluctuations in colostrum quality and quantity are probable, a colostrum replacement can be used to ensure all lambs receive a high-quality, disease-free colostrum.

Step 3: Select a lamb milk replacer

After lambs are fed high-quality colostrum or colostrum replacer for the first feeding, they can be transitioned to a milk replacer.

Look for a milk replacer made specifically for lambs. Many options of milk replacer may be available to you, but calves, lambs, kids, pigs, alpacas, puppies and kittens all have different nutrient requirements. Milk replacers formulated for lambs are better able to provide the nutrients lambs require because they closely mimic the composition of ewe’s milk.

By Tom Earleywine, Ph.D., director of nutritional services for Land O’Lakes Animal Milk Products Co.

¹S. Schoenian, University of Maryland, Care of Newborn Lambs, July 24, 2014
**Step 4: Choosing the right feeding system**

Bottle feeding, free-choice feeding or an automated system are the three primary means of feeding lambs on milk replacer. Select which system is the best fit by considering the facilities, size of operation, labor situation and performance objectives. Make sure the system provides enough nutrition such that lambs at least triple their birth weight by 28 days of age. Clean and disinfect the system as often as possible.

**Step 5: Rumen development**

The rumen is the main site for nutrient breakdown and absorption in mature ruminants and in other species has been highly correlated to health and performance of the animal.

When a lamb is born the rumen is not fully developed and neither are the papillae inside the rumen. Growth of the rumen papillae and rumen development can be correlated with what the lamb eats pre-weaning.

If the rumen is not developed appropriately, weaning can be delayed or unsuccessful. Water is a critical ingredient in the development of bacterial growth and the beginning of rumen fermentation. Always provide free choice water.

**Step 6: Weaning management**

Lambs are ready for weaning when they consume an equivalent of 1.5 percent of their body weight in high-quality creep feed along with adequate water. Usually this will occur near 30 days of age or 35 pounds of weight. At weaning time, each lamb should have consumed at least 25 pounds of lamb milk replacer powder.

**Follow these steps to weaning:**

1. Plan weaning protocol, timing and facilities 14 to 21 days prior to weaning.
2. Ensure animals are consuming creep feed and utilizing water.
3. Gradually remove milk replacer or remove ewe.
4. Feed a high protein ration (18 to 25 percent crude protein).

Following these six steps provides a total management system for successfully raising lambs, especially when on milk replacer. Setting goals, providing a high-quality colostrum and milk replacer, comfortable housing, and ready access to high quality feed and water to each lamb will help lambs thrive.

To learn more about lamb nutrition and management, contact Tom Earleywine, Ph.D., at (800) 618-6455 or TJEarleywine@landolakes.com, visit www.lolmilkreplacer.com or like We Care for Lambs on Facebook.
Those of you who attended the 21st DSANA Symposium in Madison are aware that Dr. David Thomas, one of the U.S.'s few academic researchers devoting resources to sheep dairying, will be retiring in 2016. You may also be aware that the University of Wisconsin System is facing unprecedented budget cuts. Throughout the state, many faculty positions are being permanently lost when the individuals in those positions retire. As of the publishing of this newsletter, the University of Wisconsin has determined they will not fill Dr. David Thomas' position. In addition, the decision has been made to disperse the Spooner dairy sheep flock at the end of this milking season.

As the sheep dairy industry has opportunities to expand, so does our need for pertinent research grow: genetic improvements, sire referencing models, nutrition, flock health, facilities development, quality milk production, and so forth. I certainly appreciate the hands-on experiences and wisdom that sheep dairy farmers and cheesemakers can bring to the conversation, however, the credibility and replicability of our experiences are questionable without the academic research, literature review, information collection, pilot projects, data analysis, the testing of methods/practices, and the publishing and presenting of results.

The predominant concerns are what can be done to support the continuation of the small ruminant, in particular sheep dairy research, and to retain the sheep dairy flock which represents over 20 years of genetic improvements. Let me propose a few options.

1. DSANA members make contact with the individuals listed in the sidebar. Share the impact that the UW-Madison sheep dairy research has had on your enterprise. Express what impact losing the position will have on you.

2. Send me or any of the DSANA board members your ideas and thoughts for developing a strategy to act in support of continuing the faculty position.

3. The DSANA Board will be exploring options at both the state and national level to identify resources to continue the Spooner station and research position.

It is very unlikely that the budgetary decisions made at UW-Madison will change unless substantial long-term resources have been identified. And even then, it is a long shot. Call or email me (kieftl@tcc.coop, 715-695-3617) with your ideas and concerns.
Thank you sponsors!

The DSANA Symposium would not be possible without the generous support of our sponsors.

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From Your Farms

Bill Halligan of Irish Cream Sheep Dairy in Bushnell, Neb. has found an effective way keep ewes itch-free.

He writes:
“Nothing is as bad as having an itch on the back that you can’t reach. Our ewes have ruined $10,000 worth of gates trying to scratch an itch. It finally occurred to me that a tractor tire buried on end would make a durable scratching post. We used a tire with a 36 to 38 inch inside hole and buried the tire so the top of the hole is about 32 inches from the ground. It is not very important how you do it, the ewes will make it work.

We have put one tire for 100 ewes and the learning curve is 30 minutes with a waiting list of up to 5 ewes. We may go to 2 tires for 100 ewes.”

Have tips and tricks that have worked well on your farm?
Please send photos from your farm to Terry Felda at cewritf@gmail.com for a chance to be featured in the next DSANA newsletter.

Board of Directors

Laurel Kieffer, President
kiefl@tcc.coop
715.695.3617

Brenda Jensen, Vice President
brendachangeagent@yahoo.com

Bill Halligan, Treasurer and Website Manager
bill.halligan@hotmail.com
308.235.5900

Terry Felda, Secretary and Newsletter Editor
cewritf@gmail.com
541.256.0277

Gabby Flores, Director
tataflo@hotmail.com

Brad Gregory, Director
mbgrgry@gmail.com

Sarah Hoffman, Director
sarah@greendirectfarm.com
816.809.3943

Tom Clark, Director

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