

The North Dakota Sheep Industry

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A joint publication brought to you by the North Dakota Lamb and Wool Producers Association and the NDSU Extension Service

-GREETINGS FROM THE PRESIDENT-

I am Lyle Warner and I am very excited about the opportunity to serve as your president. My wife Pat and I live 13 miles north of Bismarck and run approximately 90 registered Hampshire ewes and 30 registered Rambouillet ewes. I am an instructor at Bismarck State College and Pat works for CVS Drug in Gateway Mall.

It appears to me that the future for the sheep industry is very bright: sheep numbers are increasing in ND and numerous other states, lamb consumption is increasing and lamb prices have been very strong. As I reflect on the past year, for us personally, it was the best year we have ever had since we became active in the sheep industry.

I just got back from a 1550 mile trip to 4 states and 7 producers, all were very optimistic about the future of the industry. The price of grain is higher, but all had access to a greater variety of feedstuffs than ever before. Each of the producers felt that last year was one of their best and were confident the new year will be as opportunistic as last.

At the state level, Justin Luther collected 11 rams for the AI project he would like to see

implemented, he is hosting workshops for youth and has a 2 day sheep school scheduled for later on in January. I hope all of you take the opportunity to become acquainted with Justin and utilize his talents to improve your operations. We are very fortunate to have Justin and need to keep him busy and involved.

We are looking at the possibility of an earlier ram sale in the eastern part of the state to meet the needs of those who are moving their lambing dates up. We do not want to take away from Hettinger so we will probably change the look as well as the date. We will keep you posted as this progresses.

Lambing will be getting in full swing for some in the very near future, I hope all of you have a successful lambing season and that you have lots of lambs. Best wishes to all of you in the New Year, may your lives be blessed with health and happiness.

If you have any questions, suggestions, concerns or ideas please contact me. 701-255-1183 (H), 701-224-5419 (O) or e-mail Lyle.Warner@bsc.nodak.edu.

Lyle Warner
NDLWPA President

-COMMENTS FROM THE EDITOR-

The **1st Annual Hettinger Shepherds Clinic** is scheduled for January 23rd and 24th. If you are still interested in attending, but did not pre-register, please call as soon as possible. On February 7th we will also be hosting a **Sheep Field Day** at the Carrington Research Extension Center. This two-hour event will begin at 2:00 p.m.

For many of us the lambing season has began. If questions or problems arise, you can contact me directly at 701-212-8385.

Justin Luther
Extension Sheep Specialist

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Sheep Management Tips

- Early Winter -

Dr. Scott P. Greiner

Extension Animal Scientist, Sheep

Virginia Tech

Breeding to 6 Weeks Before Lambing

1. Mature ewes in average to good body condition should be fed to maintain or slightly increase their bodyweight during the first 3.5 months of gestation. This is the time to take advantage of poor quality pasture or crop residue. If this period occurs during the winter, hay or silage will do the job, with no supplemental grain required.
2. Thin ewes should be fed separately and supplemented with 1 to 1.5 lbs of grain per day to gain 10 to 15 lbs by 6 weeks before lambing.
3. Pregnant ewe lambs should be fed separately from mature ewes. They should gain approximately 25 lbs from breeding to 6 weeks before lambing. Attempts to cause large weight gains in ewe lambs during late gestation may lead to lambing problems.
4. If pregnant ewes are to be brought into the flock, keep these ewes separate from the main flock through lambing when feasible. This will diminish the risk of introducing abortion and other diseases into the main flock.

6 Weeks Before Lambing

1. Start feeding 0.5 lb of grain per head daily as a preventative for pregnancy disease. Grain may be in the form of whole shelled corn or barley. Even if ewes are on good quality pasture, they still require the extra grain. During the winter or when on poor quality pasture, feed approximately 4 lbs of hay in addition to grain.
2. Supplementation of tetracycline pre-lambing has been shown to reduce the incidence of abortions. Consult with your veterinarian on a flock health management protocol.
3. Make sure there is plenty of feed trough

space so that ewes do not crowd each other at feeding time.

4. Check and avoid ditches, sills, narrow gates, or any other objects that would cause ewes to jump, crowd, squeeze, or climb before lambing.

4 Weeks Before Lambing

1. Shear the wool from around the head, udder and dock of pregnant ewes. If covered facilities are available, shear the ewes completely. Sheared ewes are more apt to lamb inside, the inside of the barn stays drier because less moisture is carried in by the ewes, more ewes can be kept inside, and it creates a cleaner environment for the lambs and the shepherd. Sheared ewes must have access to a barn during cold, freezing rains, and they must receive additional feed during periods of extremely cold temperatures.
2. Vaccinate ewes for overeating disease and tetanus. These vaccines provide passive immunity to baby lambs through the ewes' colostrum until they can be vaccinated at 4 to 6 weeks of age.
3. Check and separate all ewes that are developing udders or showing signs of lambing. Check and remove heavy ewes once a week during the lambing season. Increase the grain on all ewes showing signs of lambing to 1 lb daily, and feed all the good quality grass/legume hay they will clean up.
4. Observe ewes closely. Ewes that are sluggish or hang back at feeding may be showing early signs of pregnancy disease. If so, these ewes should be drenched with 2 ounces of propylene glycol 3 to 4 times daily.
5. Shelter heavy ewes from bad weather.
6. Get lambing pens and lambing equipment ready. There should be one lambing pen for every ten ewes expected to lamb.
7. Stock lambing supplies such as iodine, antibiotics, frozen colostrum, stomach tube, injectable selenium and Vitamin E, OB lube, lamb puller, ear tags, etc.

Article first appeared in Livestock Update, December 2005.

2006 ND Master Sheep Producer

Lyle and Pat Warner

Baldwin, ND

At the 2006 NDLWPA Convention in December, Lyle and Pat Warner were selected to receive the 2006 Master Sheep Producer Award. For details on their operation, please refer to the completed application form below.



HEALTH PROGRAM

What type of vaccination and worm control program does the producer employ?

Ewes: Worming program consists of rotating between Synantic, Valbezen and SafeGuard. They are wormed when they are in the jug at lambing, when they are turned to grass in June and prior to breeding in late August.

Lambs: At birth we give our lambs a battery of Excenel and BoPeep at birth and then a CDT shot when we tag and dock at two days of age and then repeat the CDT every two weeks until weaning. We give the Excenel because we have had ecoli problems in the past. The BoPeep is a product made by Dr. Galbreath of Oakes that seems to work very well for respiratory problems in our lambs. We also give them 2cc of Battle at birth, this product is very high in vitamin A,D&E. Since adopting this program, we have had to give very few shots later in life, it has almost eliminated handling the lambs when they get larger.

What is the major cause of death loss in-

curred in the producer's operation?

Of the lambs that die, the majority do so during the first 24 hours, some due to dehydration and lambing difficulties. Since Pat and I both work, we are not able to check during the day and we are limited to the amount of time we can spend in the barn at night, so we loose a few to birthing problems.

Is predation a problem for the producer and if so, what measures are taken to control the problem?

There are a lot of coyotes in the area, but we have not had any losses. We use a Great Pyrenees dog, electric fences around the pasture and lambs are not turned out on pasture.

Does the producer shear his or her lambs anytime during the feeding periods and if so, when?

All of the lamb that are slated for show and or sale are cut out in early May. The remainder of the lambs that will be held for sale at later dates and or replacement purposes are sheared in early June.

MARKETING PROGRAM

How does the producer market his or her lambs (as feeders, finished, breeding stock, etc.)?

The majority of our lambs are sold as breeding stock. In the past we have sold at the following sales: Ohio Classic, National Cornbelt Sale, National Rambouillet Sale, Midwest Stud Ram Sale, Montana Select Sale, Hettinger Ram Sale and the Newell Ram Sale.

In addition to these sales, we sale many rams and replacement ewe lambs off the farm, most of these sales are to repeat customers. Any lamb not kept for sale or as a replacement is sold in June and July at approximately 135# at the local sale barn.

2006 Master Sheep Producer continued.....

Where does the producer market his or her lambs (privately, auction, stockyards, etc.)?

Privately, this year we sold 45 head off the farm.

- ◆ National CornBelt Sale 7 head
- ◆ Midwest Stud Ram Sale 6 head
- ◆ National Rambouillet Sale 4 head
- ◆ Hettinger Ram Sale 9 head
- ◆ Montana Select Sale 4 head
- ◆ Newell Ram Sale 2 head
- ◆ Sale barn 35 head

How does the producer market his or her sheep (private sales, association sales, national sales, production sales, etc.)?

The majority of our lambs are sold as breeding stock. In the past we have sold at the following sales:

- ◆ Ohio Classic
- ◆ National Cornbelt Sale
- ◆ National Rambouillet Sale
- ◆ Midwest Stud Ram Sale
- ◆ Montana Select Sale
- ◆ Hettinger Ram Sale
- ◆ Newell Ram Sale

In addition to these sales, we sale many rams and replacement ewe lambs off the farm, most of these sales are to repeat customers.

How does the producer promote his or her sheep (sales, showing, advertisements, etc.)?

Half page adds in the Hampshire Heartbeat each quarter. We attend the local, regional and national sales listed above. We show at the state fair and allow groups to use our sheep in judging workouts and judging contests.

OTHER

What percent of the producer's farm income is derived from sheep?

100%

How many years has the producer been in the sheep business?

25

What civic activities is the producer involved in (agricultural, community, church, etc.)?

- ◆ Sheep Advisor for the North Dakota Junior Point Show Association
- ◆ Advisor of Bismarck State College Postsecondary Agriculture Student Organization
- ◆ Vice President of North Dakota Lamb and Wool Producers

What unique practice does the producer employ in his or her sheep operation that has increased efficiency or profits and could be a benefit to other North Dakota sheep producers (breeding, production, feeding, housing, health, marketing, etc.)?

Breeding: In 2001 we decided to use nothing but RR rams. In the beginning we went backwards phenotypically, but with perseverance we have brought them to a point where they are as good or better than before and the RR factor is starting to pay off in sales, especially with registered producers.

Lambing: Since we are not able to be home during the day, we turn the lights off and no one goes in the barn. We have almost no lambs born when we are not there. We do the same thing at night. The only problem is that we do have some ewes that start to lamb before we go to work at 7:00am and they are on their own. I feel that if we could be there a little longer we would have 95% of lambs born between 5:00am – 7:00am and 5:00pm – 10:00pm. We have gotten much more sleep and kept our percentage weaned greater than 160.



Techniques for Developing a Fall Lambing Flock

Justin Luther, Ph.D.

Extension Sheep Specialist
Department of Animal and Range Sciences
North Dakota State University

Overcoming reproductive seasonality in the ewe can offer some very appealing benefits to the sheep producer. For example, lambing in the fall (September to November) allows the producer to: 1) make better use of fall forages during late gestation and early lactation; 2) better utilize limited space in lambing facilities; 3) lamb ewes when weather conditions are more ideal; 4) reduce animal losses due to coyote predation; 5) market heavier lambs in the spring when prices are generally higher. Fall lambing relies on both *natural* and *hormonal treatment* techniques. This article will describe some of these techniques, allowing the sheep producer to develop a fall lambing flock.

Natural Techniques

1) Ram Effect. When ewes are spontaneously introduced to a ram outside the normal breeding season an immediate hormonal response will occur. Within 50 hours this will result in ovulation or the release of an egg into the reproductive tract. Since this will be the first ovulation outside the normal breeding season it will not be accompanied by estrus or heat. After the egg is ovulated, a structure called the corpus luteum will develop on the ewe's ovary. This structure produces progesterone, which is the primary hormone supporting gestation in the ewe. In half of the ewes the corpus luteum will regress prematurely within six days of ram introduction. In the remaining half of the ewes the corpus luteum will regress as normal at approximately 15 days after ram introduction. Following corpus luteum regression the ewe will display estrus and ovulate once again, allowing the ewe to be bred and conceive outside the normal breeding season.

When using this technique it is important to: a) use rams that exhibit fertility outside the normal breeding season; b) completely separate rams from the ewes for at least one month prior to introduction. The ram effect is also more successful when using certain breeds of sheep. For example, pregnancy rates will generally be greater if the producer is using Dorset and Rambouillet versus Suffolk, Hampshire and Columbia ewes. All of these factors will contribute to a range in pregnancy rate of 25 to 75% when using the ram effect alone.

2) Selection. Fertility in ewes outside the normal breeding season is partially genetic. Therefore, replacement ewes selected from the fall lambing flock should exhibit greater fertility outside the normal breeding season. This will allow the sheep producer to gradually build-up numbers for a fall lambing flock.

Hormonal Treatment Techniques

1) Progestins. Treatment with commercially available progestins will mimic actions of the naturally produced hormone progesterone. Therefore ewes will exhibit estrus and ovulate following treatment. In the U.S., sheep producers have access to melengestrol acetate (MGA). Ewes are fed 0.15 mg of MGA twice per day (morning and evening) for a period of 10 to 14 days. At least 10 inches of trough space should be provided for each ewe to ensure that a similar amount of MGA is consumed by all ewes in the flock. Rams are introduced to the ewes at a ratio of 1 ram per 15 ewes after the last MGA feeding. The primary advantage of MGA is the low cost. A twelve day treatment will cost \$1.50 per ewe. The sheep producer can typically expect to achieve a 50 to 75% pregnancy rate when using MGA outside the normal breeding season.

Fall Lambing continued.....

It is anticipated that controlled internal drug release (CIDR) devices containing natural progesterone will soon be commercially available to sheep producers in the U.S. CIDR devices are inserted into the vagina of the ewe and left in place for 6 to 12 days. After removing CIDR devices ewes will exhibit estrus within 24 to 48 hours. When using fertile rams the producer can expect pregnancy rates of 75 to 90% outside the normal breeding season.

2) Gonadotropins. A 5 ml dose of commercially available PG-600 has commonly been used on the last day of progestin treatments. This dose of PG-600 contains 400 IU of pregnant mare serum gonadotropin and 200 IU of human chorionic gonadotropin. PG-600 will stimulate follicular development and increase the number of eggs available for fertilization. The current cost of PG-600 is \$5.00 per ewe and the producer can anticipate an increase in pregnancy rates of 5 to 10% and an increase in lambing percentage of 10 to 25%.

Conclusions

The natural techniques described above are very cost effective; however successful use of these techniques is heavily influenced by breed of the ram and ewes. Although progestins offer higher pregnancy rates when compared to the natural techniques, they are more expensive and require strict and precise management. It is required for the producer to analyze his or her current flock, facilities and financial resources before choosing a technique to develop a fall lambing flock.

NDSU Sponsors Symposium on Preventing Disease and Cancer Using Functional Foods

"Healthy and Functional Foods: The Role of Regional Foods in Reducing Chronic Disease Risk" is the topic of a symposium scheduled for Jan. 25 at the North Dakota State Univer-

sity Hettinger Research Extension Center.

"The symposium will highlight cutting-edge research conducted by some of the nation's leading human nutrition scientists regarding preventing disease and cancer through the consumption of functional foods," says Christopher Schauer, Hettinger REC director and an animal and range scientist. "We also will highlight new research being conducted at the Hettinger Research Extension Center that strives to produce functional meats from regional feed sources that can be used for the prevention of cancer."

The symposium begins at 9:30 a.m. and will conclude at 5 p.m. (MST).

Topics include:

- * Dakota Diet: Healthy eating patterns based on regional foods
- * Potentials for high-selenium foods in cancer prevention
- * Probiotics versus prebiotics: Are they functional foods?
- * Functional foods: psychological function and behavior
- * Breeding spring wheat to benefit human health
- * What consumers know about functional foods
- * Research at the USDA Agricultural Research Service's Grand Forks Human Nutrition Research Center
- * Functional foods – How locally produced lamb and beef can be utilized

The registration fee for the symposium is \$10. To register, contact the Hettinger REC at (701) 567-4323 by Jan. 17. The event is sponsored by the Hettinger Research Extension Center, Four-state Ruminant Consortium, West River Health Services, University of North Dakota Center for Rural Health, USDA/ARS Grand Forks Human Nutrition Research Center and the NDSU Extension Service.

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NDLWPA Membership Form

This form is a membership application for the North Dakota Lamb and Wool Producers Association (NDLWPA) and American Sheep Industry (ASI) Association

Please Print Clearly

Name: _____

Street Address: _____

City: _____

State: _____

Zip: _____

Phone: _____

Fax: _____

Email: _____

No. of Sheep/Goats: _____

Please check all that apply: Commercial Purebred Club Lamb Dairy
 Lamb Feeder Shearer Allied Industry Business

Please check membership type:

- NDLWPA Annual Membership - \$20
 NDLWPA Annual Junior Membership (under 18 years of age) - \$5
 ASI Annual Membership - \$.04/head or \$25 minimum (whichever is greater)
 Joint NDLWPA/ASI Annual Membership - \$40
 Hardcopy of the ASI Weekly Newsletter - \$10

Note: ASI Annual Membership will automatically get you an email copy of the ASI Weekly Newsletter.

Total: _____

Please make checks payable to: NDLWPA

Send this application and your payment to: NDLWPA
9463 86th St SE
Fullerton, ND
58441

Form more information call: 701-375-6971 or visit: www.ndlwpa.com

Carrington Sheep Field Day

Date: February 7th, 2007

Time: 2:00 to 4:00 p.m.

Location: Carrington Research Extension Center,
Carrington, ND



Topics will include:

- ◆ By-Product Utilization
- ◆ Lambing Management
- ◆ Fall Lambing

THE NORTH DAKOTA SHEEP INDUSTRY

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