

# The North Dakota Sheep Industry

No. 56

**Newsletter**  
www.ndlwpa.com

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

## President's Message

I hope all of you have been able to keep ahead of the cold, wind and snow. Thank goodness that we had a little break in the weather. We were really getting stacked up in the lambing barn and as cold as it was it was hard to send them out to a cold barn. It looks as though the rest of the winter may be a struggle, seems as though everyone is fighting the snow nearly every day. Just a little snow or wind blocks most of the roads around here.



**Lyle Warner**

I would like to thank those that attended the convention and those that worked so diligently to make it a success. I think we had a nice turnout for the "Lamb Cook-off" for the first year. Congratulations to the winners. It was great to hear from Dakota Brekke, the first recipient of the Perpetual Flock. It is great to see such talented young people get into the business of raising sheep. Also, congratulations to the Lawson's on receiving the "Master Sheep Producer Award", they are a very deserving family.

It was announced shortly after the convention that Justin Luther had been selected for the Myron and Muriel Johnsrud Excellence in Extension / Outreach Award at NDSU. Congratulations Justin and thanks for all you do for the organization.

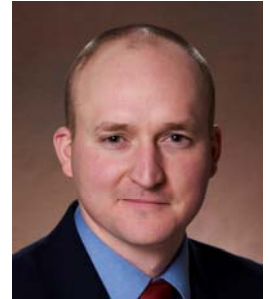
I hope all of you have a great lambing season and that you have plenty of feed to take you through the winter. With all the snow we should have good grass next summer and the lamb prices look as strong as any of the livestock commodities. Take care and stay warm.

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Lyle Warner  
NDLWPA President

## Editor's Note

Another year has come to an end. I would like to take this opportunity to say "Thank You" to all of the sheep producers throughout the state that have made this past year enjoyable. As we move into 2009, the NDSU Sheep Program in Fargo has a secure future. The unit will be maintaining 350 head of mature ewes. Breeds will include Columbia, Hampshire, Katahdin and Dorset. Addition of the Dorset ewe flock will commence in March. Furthermore, our departmental sheep committee is in the process of developing plans for a new facility.



**Justin Luther**

Remember that investment of time and sound management practices are most important during the lambing season. Here are some helpful management tips as you enter the season:

- ✓ Make sure your ewes are in good condition (BCS of 3.0 to 4.0). During late gestation most ewes will need to be consuming 4.5 lbs. of a ration that is 13% protein and 66% energy.
- ✓ Have all necessary supplies on-hand 140 days from when you turned your rams in.
- ✓ Be sure your facilities are sanitary and you have enough lambing pens for 15 to 20% of your ewe flock (i.e. 200 ewes = 30 to 40 pens).
- ✓ Many reports of abortion storms have come in. The article included in this newsletter explains the causes, control and prevention of abortions in sheep.

As always, if management questions or concerns arise in your operation, please don't hesitate to call (701-231-7993).

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Justin Luther, Ph.D.  
NDSU Extension Sheep Specialist

**North Dakota Lamb and Wool Convention  
Secretary Minutes  
Seven Seas Mandan, ND  
Nov. 21st-22<sup>nd</sup>, 2008**

President Lyle Warner called the meeting to order.

Brent Kuss read the minutes from the 2007 convention. Brett Stroh made a motion to accept the secretary's report. Ole Erickson seconded the motion. Motion carried.

Wanda Sheppard presented the treasurer's report, as Mark was not able to attend the meeting. Ole Erickson made a motion to accept the treasurer's report. Nathan Robbins seconded the motion. Motion carried.

ASI Convention- Ole Erickson made a motion to reimburse Dean Swenson \$305.00 for his convention fees. Tim Faller seconded the motion. Motion carried.

Ram Test Awards:

Dr. Luther gave a brief overview of the ram test and the results. The top pen of three rams for their breeds were as follows-

**Suffolk** - Dave Pearson

**Hampshire** - Bev Heir

**Dorset** - Joe Kronberg

**Top Ram Overall** - Misty Steeke

President Warner then called for the election of officers. Brent Stroh chaired the nominating committee.

The nominating committee nominated Lyle Warner for President. The floor was then opened for other nominations from the floor. Seeing none, Paula Swenson moved to cast the unanimous ballot for Lyle Warner for President. Seconded by Curt Stanely. Motion carried.

The nomination committee then nominated Wyman Scheetz as Vice President. The floor was then opened for other nominations from the floor. Seeing none, Tim Faller moved to cast the unanimous ballot for Wyman Scheetz for Vice President. Seconded by Ron Hewson. Motion carried.

The nomination committee then nominated Mark Sheppard as treasurer. The floor was then opened up for other nominations. Seeing none, Brett Stroh moved to cast the unanimous ballot for Mark Sheppard for treasurer. Seconded by Curt Stanely. Motion carried.

The nomination committee then nominated Brent Kuss as Secretary. The floor was then opened up for other nominations. Seeing none, Ole Erickson moved to cast the unanimous ballot for Brent Kuss for secretary. Seconded by Brett Stroh. Motion carried.

Resolution committee: Wyman Scheetz-chair, Matt Benz and Joana Friesz. The Resolution committee presented the following resolutions:

1. Whereas the NDLWPA supports sheep education, extension, and research at ND State University. Be it resolved that we continue to support their efforts to provide the producers of ND with the best programs to meet their needs. I, Wyman Scheetz, move we adopt this resolution. Seconded by Brent Stroh. Motion carried.
2. Whereas the NDLWPA thanks Bert Moore for his years of coaching the livestock judging team at NDSU. Be it is resolved that we instruct the secretary to draft and send a letter to Dr. Moore. I, Wyman Scheetz, move we adopt this resolution. Seconded by Ole Erickson. Motion carried.
3. Whereas the NDLWPA thanks Wes Limesand for his years of service and contributions to the NDLWPA and the sheep industry of ND. Be it resolved that we instruct the secretary to draft a letter and send to Mr. Limesand. I, Wyman Scheetz, move we adopt this resolution. Seconded by Matt Benz. Motion carried.
4. Whereas the NDLWPA recognizes and thanks Burdell Johnson for his service as President of ASI and also to the Sheep Industry of ND and our Nation. Be it resolved that we instruct the secretary to

draft a letter and send to Mr. Johnson. I, Wyman Scheetz, move we adopt this resolution. Seconded by Ole Erickson. Motion carried.

President Warner asked if there was any other business, seeing none the four districts split into their groups for the election of directors. The voted-in directors for 2009 will be:

SE: Todd Sears  
SW: Misty Steeke  
NE: Don Osborne NW: Curt Stanely  
NE: Luke Lillehaugen will finish out Lee Gessner's term of one year.

Curt Stanely made a motion to adjourn the meeting. Wyman Scheetz seconded the motion. Motion carried.

**North Dakota Lamb and Wool Producers  
Secretary Minutes  
Gladstone Inn, Jamestown ND  
December 11, 2008**

President Lyle Warner called the meeting to order.

President Warner called for the treasurer's report. Mark Sheppard gave the Treasurer's report and highlighted some items that the board may want to consider. Curt Stanley made a motion to accept the Treasure's report. Nathan Robbins seconded the motion. Motion carried

President Warner then called for the secretary's report. Brent Kuss read the secretary's report from the annual meeting in Mandan on November 22nd. Mark Sheppard made a motion to accept the minutes as read. Don Osborne seconded the motion. Motion carried.

There was some discussion on the resolutions from the annual meeting. President Warner stated it was on the agenda and it could be discussed at that time.

Old Business:

NDSU sheep unit: President Warner assigned the chair to Vice President Scheetz.

Lyle Warner then made a motion stating: I move that the NDLWPA Board of Directors goes on record "Supporting of NDSU in there efforts to provide the best programming possible to meet the needs of the sheep industry in ND in the areas of education, extension, and research." The motion was second by Curt Stanley. Discussion followed. After much discussion Lyle Warner withdrew his motion. Don Osborne seconded the withdrawal. Motion withdrawn.

Brent Stroh made a motion to use the Mission of the Sheep Unit from the Executive Summary as the board's show of support for the sheep unit. The mission statement states "Mission of the sheep unit. The NDSU sheep unit along with the animals exists to serve the mission of NDSU and the Animal Science Department in four major areas: Research, Teaching, Outreach and Public Service." The motion was seconded by Misty Steeke. Discussion followed. After much discussion Brent Stroh made a motion to withdraw his motion. Todd Sears second the motion to withdraw. Motion withdrawn.

After much discussion the board of directors felt that resolution #1 from the annual convention stating "Whereas the NDLWPA support a resolution to support education, extension, and research at ND State University. Be it resolved that we continue to support their efforts to provide the producers of ND with the best programs to meet their needs. Was voted on by the full membership present, and passed unanimously at the annual meeting is a very clear statement of the NDLWPA position on this issue.

BBQ Boot Camp: There was a request from the organizers of the BBQ Boot Camp for financial support to get the program up and running. Matt Benz made a motion to support the BBQ Boot Camp program. Wyman Scheetz seconded the motion. Discussion followed. Misty Steeke made a motion to amend the motion, and add the board of directors give \$500.00 and that the organizers must report back to the board how the money was spent. The amendment was second by Wyman Scheetz. Motion Carried.

## Abortions in Sheep – Causes, Control and Prevention

New Business:

NDSU Faculty: Bert Moore's position will be vacated as he is retiring and will be taking on the job as Executive Secretary for the American Shorthorn Association. Discussion followed. Matt Benz made a motion stating "The NDLPWA supports that the position be filled and that the person have a strong sheep interest." Curt Stanley seconded the motion. Motion carried.

The report to President Chapman: Don Osborne made a motion to talk about the report at a later date after all the board members have a chance to look it over. Todd Sears seconded the motion. Motion carried.

ASI Representative: There was some discussion to give the state ASI representative the ability to vote on the board of directors. Don Osborne made a motion to table the issue till a later date as this may take an amendment to the By-Laws. Curt Stanley seconded the motion. Motion carried. President Warner appointed Mark Sheppard, Brent Kuss, Dean Swenson and Don Osborne as a committee to look at some possible by-law changes.

Perpetual Flock: There was some discussion on possible changes for next years applications, one being including a budget showing how much they could pay for the ewes and still get their program to cash flow. This amount could possibly then be used as a pricing base for the purchase price of the ewes. President Warner asked the board to think about the program and any other ways to make it better in the future.

Seeing no other business Nathan Robbins made a motion to adjourn. Brent Stroh second the motion. Motion carried.

Board members in attendance: Curt Stanley, Wyman Scheetz, Lyle Warner, Brent Kuss, Nathan Robbins, Todd Sears, Luke Lillehaughen, Mark Sheppard, Don Osborne, Brent Stroh, and ASI Representative Dean Swenson. Board members on conference call: Matt Benz, Bob Hewson, and Misty Steeke. Guests in attendance: Mary and Shawn Scheetz, and Ann Osborne.

Justin S. Luther, Ph.D.

NDSU Sheep Extension Specialist

The lambing season can be the most exciting time of the year for a sheep producer. The long awaited opportunity to evaluate that new ram or great set of replacement ewes finally arises. So, when the first two ewes abort, the next ewe has a still born lamb and the fourth ewe has a set of twins that are weak at birth and soon die, it can be a very depressing and frustrating experience. These are all signs of an infectious abortion outbreak that should motivate you to: 1) identify the *cause(s)* of abortion in your flock and 2) develop a plan to control or prevent abortions from occurring in the future.

### Identifying the Causes of Abortion.

Identifying the exact cause of abortion in your flock requires knowledge of the clinical signs, flock history and laboratory diagnostics. Delivery of the proper samples (fetus and placenta) to your local veterinarian or state diagnostic laboratory is recommended. Samples should always be placed on ice in a spill-proof insulated container. It is likely that your diagnostic laboratory will provide results for one of the four common types of infectious abortion. The clinical signs and mode of transmission for each of these four types will be described.

**1) Enzootic Abortion** is caused by *Chlamydia psittici*. This organism will spread through infected fetuses, placentas, vaginal discharges, feces and nasal secretions. The organism enters the blood stream but causes no signs of infection in the ewe unless she is, or becomes, pregnant. During pregnancy, the organism enters the uterus and causes inflammation of the placenta and death of the fetus. If infection occurs before conception the ewe will abort during mid-pregnancy. If infection occurs during early pregnancy, abortion will occur 60-90 days thereafter. If infection occurs during mid- or

late-pregnancy, stillbirths and weak lambs at birth may be observed.

Ewes in their first pregnancy are most susceptible to infection. In the Western U.S., isolated range flocks are highly susceptible when the organism is introduced. Similarly, Western ewes introduced into infected Midwestern flocks are very susceptible. Approximately 25-60% of ewes will abort, depending on the time of the outbreak relative to initiation pregnancy. Older ewes will become immune to *Chlamydia psittici*, thereby minimizing the annual flock abortion rate to 1.0-5.0%. *Chlamydia psittic* infection can also occur in young lambs and may lead to pneumonia.

**2) Vibrio Abortion** is caused by *Campylobacter sp.* The organism is discharged with the membranes, uterine fluids and fetus at the time of abortion. Transmission will occur when ewes ingest infected membranes or fluids, or through consumption of *Campylobacter sp.* contaminated feeds. If infection occurs during early pregnancy, the ewe will likely reabsorb the fetus. If infection occurs during mid-pregnancy, abortion will occur 10-20 days later. A late pregnancy infection will result in stillbirths and weak lambs at birth.

In general, 20% of ewes in a flock will abort following introduction of *Campylobacter sp.*, however some outbreaks have led to 80 or 90% of ewes aborting. As with enzootic abortion, older ewes may become immune, but 5-10% of the infected flock will continue to abort each year.

**3) Toxoplasmosis Abortion** is caused by *Toxoplasma gondii*, a protozoa which causes coccidiosis in cats. Infection will occur following ingestion of feed or water that has been contaminated with oocyst-laden cat feces. If infection occurs during early pregnancy the embryo or fetus will generally be reabsorbed and rebreeding may occur. If infection occurs during mid-pregnancy, abortion will occur and the ewe may be susceptible to a secondary infection. During late-pregnancy, infection will lead to abortion, still births, mummified fetuses or weak lambs at birth.

Abortion can occur in 5 to 50% of the ewe flock, with typical losses averaging 15-20% of the lamb crop. In healthy, non-pregnant ewes toxoplasmosis will not cause clinical symptoms or detrimental effects.

**4) Salmonella Abortion** is a rare occurrence that is caused by various *Salmonella* organisms. Stress and the number of ingested *Salmonella* bacteria will determine whether or not the pregnant ewe aborts. If abortion does occur it is usually during the final month of pregnancy. Most of the ewes will exhibit diarrhea and some will die from metritis, peritonitis, and/or septicemia. Healthy, young lambs may also contract the disease and die.

### Controlling Abortion

When faced with an unexpected outbreak of abortions there are some general practices that can be utilized to minimize the risk of spreading the infectious organism.

- Check feed and water supplies for sheep and cat feces contamination
- Sanitize feeding and watering equipment
- Separate ewes showing signs of abortion and house them separately from the remainder of the flock
- Properly dispose of (burn or bury) the infected placenta and fetus
- Do not feed ewes on the ground

The following treatments can also be used to minimize the number of ewes aborting in an infected flock.

- Immediately vaccinate the remaining pregnant ewes for enzootic and/or vibrio abortion.
- Begin feeding 500 mg of chlortetracycline per head per day for 5 days and then reduce to 250 mg per head per day for the remainder of pregnancy.
- If the outbreak is severe, inject all ewes with long acting tetracycline (LA 200) at the rate of 10 mg/lb s.c.
- If *Salmonella* is the causative agent, inject ampicillin at the rate of 5 mg/lb.

Spectinomycin may also be used at the rate of 5 mg/lb per day for three days.

## Preventing Abortion

After an outbreak of abortions the producer must develop a plan for preventing abortions from occurring in the future. The following guidelines should be considered.

- Vaccinate. Vaccines are currently available for Vibrio and Enzootic Abortion. *Campylobacter fetus* (cause of Vibrio Abortion) vaccine is given 30 days before breeding and repeated 60-90 days later. *Chlamydia psittaci* (cause of Enzootic Abortion) is given 60 days before breeding and repeated 30 days later. *(Note: Supply of both vaccines has been unreliable in the past so it is recommended to place your order early in the year)*
- Maintain sanitary feed and water supplies.
- Manage first lambing ewes in a separate flock.
- Do not purchase replacement ewes from an infected flock.

## Summary

There are four major causes of infectious abortions. Accurate determination of the infectious agent requires a diagnostics laboratory. Antibiotics, vaccines and sanitary facilities can all be used to minimize the risk of abortions and ultimately improve reproductive efficiency of the ewe flock.

## Creep Feeding Lambs

Scott Greiner

Extension Animal Scientist, Sheep  
Animal and Poultry Sciences, Virginia Tech

Creep feeding young lambs while still nursing the ewe can provide valuable supplemental weight gain. This added weight gain has the most economic value for lambs managed in an intensive, early weaning production system where lambs will be maintained in a dry-lot. Conversely, for lambs that will be developed on pasture throughout the spring and summer, creep feeding would

be of less value due to the relative expense of this early weight gain. Creep feeding also is beneficial for flocks with a high number of multiple births, or flocks with ewes having limited milk production.

Young lambs may be started on creep feed as early as 10 days of age. Although significant amounts of feed are normally not consumed until 3 to 4 weeks of age, providing access to creep feed at an early age allows lambs to develop a habit of eating dry feed, and helps stimulate rumen development. For creep feeding to be economical, lambs must consume enough feed to increase performance. Lambs should eat a minimum of .5 pounds of creep feed per head per day from 20 days of age to weaning.

Intake of creep feed is influenced by the design of the creep area as well as the feed provided. The creep area should be kept dry and well bedded. Place the creep in a high-traffic area where lambs will naturally find their way into it. The creep area should be large enough that the majority of the lambs may be in it at any one time. Observation of the traffic patterns of the ewes and lambs will help identify an ideal location. A light in the creep area will help attract lambs into the creep. Creep gates should provide spaces between 8 to 12 inches to allow lambs in but keep ewes out. Creep gates with rollers allow larger lambs through a smaller space. A small used tire can also be used as a creep gate.

The creep ration need not be expensive or complex. Of critical importance is that the feed be kept fresh and dry. Replace the feed in the creep daily. Old creep feed may be given to the ewe flock. Utilize covered feeders that minimize contamination from lambs standing or playing in the feeder. Young lambs are very sensitive to what they eat, and will not consume stale or contaminated feed.

The principle behind creep feeding is to stimulate lambs to eat and therefore promote weight gain. Therefore, highly palatable feeds must be provided. At a young age, lambs prefer feeds that are finely ground and have

a small particle size. Feedstuffs high in palatability for young lambs include soybean meal, ground corn, and alfalfa hay. These feeds should be replaced daily to keep fresh. A simple mixture of 80-85% ground or cracked corn and 15-20% soybean meal, with free choice high quality alfalfa hay is a very palatable early creep ration. The feed being fed to the ewes may also be included free choice in the creep feeder. Early in the creep feeding period, stimulating intake is of primary concern. These diets should be formulated to contain 20% crude protein.

As the lambs get to 4 to 6 weeks of age and older, coarser feeds become more palatable. Providing feeds early will enhance the lambs' acceptance to these coarser feeds. As the lamb gets older, intakes and growth rates should increase. Additionally, the proportion of the gain that is derived from dry feed versus milk increases. During this time, lambs may be gradually switched to a complete pelleted ration or a ration containing cracked corn and supplement. Over time, the ration should be changed to represent what will be fed once the lamb is weaned. Complete feeds are available commercially, which can be convenient yet expensive. Pelleted supplements to be mixed with cracked corn are generally cheaper, and are also widely available. At weaning, protein requirements of lambs drop to 15-16%. An advantage of the complete feeds and protein supplements is that they are fortified with antibiotics, vitamins, and minerals which are important for lamb health and performance. Lambs should be vaccinated with Clostridium Perfringens C & D to prevent overeating disease prior to weaning at 6 to 8 weeks of age.

### **Lamb Check-Off Program**

The USDA Agricultural Marketing Service will conduct a Request for Referendum on the Lamb Checkoff Program Feb. 2 through Feb 27. Persons who were engaged in the production, feeding, or slaughtering of lambs and who provide documentation, such as a sales receipt or

remittance form showing that they were engaged in the production, feeding, or slaughter of lambs from Jan. 1, 2008, through Dec. 31, 2008 are eligible to vote.

Beginning Feb. 2, persons eligible to vote should obtain form LS-86 (Lamb Promotion, Research, and Information Order Referendum) from a FSA county office or via the Internet at <http://www.ams.usda.gov/lsmarketingprogrms>. Persons must vote in the referendum at the County FSA office where their administrative farm records are maintained. Those who do not participate in FSA programs may vote at the FSA county office where the person owns or rents land.

Form LS-86 and all supporting documentation must be returned to the appropriate FSA county office by close of business on Feb. 27, 2009. The form and documentation returned by mail must be postmarked no later than midnight on Feb. 27, 2009 and received in the FSA county office by March 6.

USDA monitors activities of the American Lamb Board. The mandatory program is financed by producers, seedstock producers (breeders), feeders, and exporters who are assessed one-half cent (\$.005) per pound when live ovine animals are sold. The first handler, primarily packers, pays an additional 30 cents per head on ovine animals purchased for slaughter.

Notice of the referendum was published in the Dec. 16, 2008, Federal Register.

Copies of the Final Rule and Notice are available from the marketing Programs Branch; Livestock and Seed Program, AMS, USDA; STOP 0251 n Room 2628-S; 1400 Independence Avenue, SW; Washington, D.C. 20250-0251; by telephone 202/720-1115 or via the Internet at: <http://www.ams.usda.gov/lsmarketingprogrms>.

For further information on Lamb Referendum contact your local USDA Service.

Reprinted from AG WEEKLY, January 26<sup>th</sup>, 2009.

## Announcements

- Voting deadline for the lamb check-off program is Feb. 27, 2009. Form LS-86 and all supporting documentation must be returned or sent to the appropriate FSA county office by this date.
- An individual in Minnesota has three black-faced ewes and 2 white-faced ewes to give away. Please call 218-596-8812 for more information.
- Dr. Justin Luther has accepted a position with the University of Wisconsin – River Falls as an Assistant Professor of Reproductive Physiology. He and his family will be moving back to WI in July of '09.
- It is that time of year again to renew your membership to the NDLWPA. To save us time and money for postage of mailing out a reminder, I would ask that you send your renewals to the organization and ASI right now while you are thinking about it. Sending your renewal now will insure that you continue to receive this newsletter. With your membership to ASI and an email address, you will also receive an email copy of ASI's weekly newsletter. A hard copy of this letter will be mailed for a fee of \$10. We are also required to inform you that these dues are not tax deductible due to the classification of our organization with the IRS. This is due to the dues can be used to fund lobbying at the legislature. Thank you for your membership in your organization.

## 3<sup>rd</sup> Annual Shepherd's Clinic

**Granville Community Center**  
**Thursday, March 19<sup>th</sup>, 2009**

**10:00 a.m. to 3 p.m.**

**Fee: \$10.00.**

**Pre-registration is not required.**

**Lunch will be served.**

- **Lambing Management**
- **Nutritional Management for Growing and Finishing Lambs**
- **Developing a Fall Lambing Flock**
- **Tour Dustin Seright's Operation**

**Please contact Raquel Dugan-Dibble (701-537-5405) or Justin Luther (701-231-7993) for more information.**

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North Dakota Lamb and Wool Producers**

### **The North Dakota Sheep Industry**

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**Department of Animal & Range Sciences**  
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The Extension quarterly advertisement, posters and other printed materials with minimal space must include "NDSU is an equal opportunity institution."

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