Iowa State Fair Lamb Stand 2021

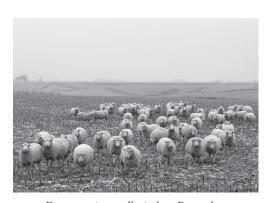
By Duane Sprouse



The 2021 Iowa State Fair Lamb Stand is now history and I for one am glad. This year's stand was challenge for everyone but it was successful even with the high cost of lamb and the issues that were presented to us. Most importantly I want to thank the North Polk FFA Alumni for managing the stand this year. Cindy Twedt, Andrea Walter and Perry Anderson were awesome in leading this group. We don't want to forget the outstanding volunteers from all over the state that came to help work the stand and make it a success. Even though we were a bit lower on income than in the past we did promote our product and had some great conversations about the sheep industry with customers.

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Corn Stover and the Ewe Flock



Ewes grazing stalks in late December.



Pulling out the fence posts is a good kid project.

As the corn harvest continues, it provides grazing opportunities for the ewe flock. While crop field fences are becoming more of a rarity in Iowa, this can be overcome with temporary fencing. Electronet-type fencing is the golden standard for temporary fencing, but hauling it in a cornfield can be a recipe for frustration, I have had good luck with 3 strands of polywire and 3 ft tall ,3/8-inch diameter Step-In FiberRod posts with additional SnapOn Harp clips from Premier. Being able adjust the height of the clips allows flexibility when installing on land with some contour, and the clips allow the polywire to slip out as you roll it up.

Running ewes on cornstalks has its frustrations, and for those that work off the farm, it can also mean in late fall and early winter, checking on the sheep in the dark in a field can be less than ideal. Cornstalks are often baled and used as feed and bedding. Given the reported increases in fertilizer prices, baling of stalks could become more expensive as you remove nutrients from the field. Some estimates that I have seen indicate

that when an animal grazes, around 75% of the nutrients are excreted and returned to the field. This data could provide more incentive to graze those stalks in an era of high fertilizer and feed prices. While setting up the fence can take time and be frustrating, it can provide some economical feed if the weather cooperates.

Below are some highlights from sources on grazing cornstalks.

Grazing Corn Stalks with the Ewe Flock: Dan Morrical & Joseph Rook

https://u.osu.edu/sheep/2020/11/03/grazing-corn-stalks-with-the-ewe-flock/

- When ewes are initially turned into stalk fields they should have restricted daily access of 1-2 hours per day.
- Offering ewes ~0.5 pound of corn for three to seven days before grazing will also help to minimize problems with grain.

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Iowa State Fair Lamb Stand 2021 - Continued



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There are plans being made for the 2022 stand now. We hope to develop some new offerings and possibly bring back some of the old ones. We want to add an "All Iowa Lamb Burger" which would be purchased from Iowa producers, processed by Iowa facilities and sold at the Iowa State Fair. Look for more information about this program and how you could participate in the coming months.

Here are some interesting facts about the 2021 ISF Lamb Stand. We served 1611 Greek pita's, 1314 leg of lamb sandwiches and 4074 lamb burgers (includes double burgers and cheese burgers). We sold 1389 bottles of water and 1100 soft drinks as well as 425 lamb brats. All food stands and drink stand had to use the ISF "Clover" system which was a computer cash register system that gave not only the sales information but

detailed printouts of the sales. This system gave us some good information for planning for the future. The system also gave us the ability to take credit/debit cards for the first time. We ended up with 26% of our sales was done by cards which really was revealing. We did end up with an inventory of 90 boneless legs of lamb. They weigh between 7-8 pounds each and we are offering them for \$50 each. If you are interested in a large quantity contact Duane Sprouse by phone or text at 319-461-5611 or Regina Frahm at 641-521-0086. The legs are located in Newton and we will try to assist in delivery if we can. As I said earlier thank you to our volunteers because the stand would not be possible without YOU. We will be looking for volunteers next year so if you enjoyed helping, we would be happy to have you back and bring a friend. We are also looking for FFA Chapters and 4-H Clubs that would be interested in helping.

Corn Stover and the Ewe Flock - Continued

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- · Vaccinate against enterotoxemia.
- Can easily provide 150 to 300 ewe grazing days per acre. This can be increased if corn stalk fields are strip grazed in block.
- An excellent way to feed the winter lambing ewe flock for six weeks in the late fall and early winter.

Grazing Corn Residue: Jeff McCutcheon

https://u.osu.edu/sheep/2009/10/06/grazing-corn-residue-2/

- Sixty days after harvest is the window for maximum feed value.
- Nutrient value of residue declines the longer it is exposed to weathering.

Turn Corn Stover to Low-cost Pasture

http://www.omafra.gov.on.ca/english/livestock/sheep/facts/turncornstov.htm

• Initial the Total Digestible Nutrients (TDN) value could be as high as 70 percent, but as the winter progresses this value will drop down into the 40 percent range.

- Decline is partly due to the weathering of the leaves and stalks, and partly due to the ewes eating high-value grain and leaves early in the grazing, leaving lower-value stalk material for later grazing.
- Once the leaves and husks have been consumed, you should begin
 to supplement with good quality hay. A 150 pound ewe will require
 about three-quarters of a pound of good quality hay to meet her
 protein needs at this time.

Maximizing the value of corn stover: James DeDecker, and Kevin Gould

https://www.canr.msu.edu/news/maximizing_the_value_of_corn_ stover

- Greatest drawback is the fact that it contains only one-third the protein of average quality hay.
- Supplementation of stover with high protein feeds like forage brassicas or dry distiller grains can overcome this deficit.

Classifieds:

FOR SALE: 2 Triple deck loading chutes, 200' cement fence line feed bunks, put on your flatbed with posts and cable come see! Walt Miller - 319-345-2960, millamb@windstream.net (02/16/2021).

FOR SALE: Purebred Suffolk ram lambs all with outstanding pedigrees from a flock that has been raising sheep for nearly 40 years, all will be RR and a breeding soundness exam is available before you take delivery. Moonshadow Farm | Michael and Debbie Jensen | (712) 353-6599 (5/01/2021)

FOR SALE: Yearling Dorset ram. Out of the Cedar Lane flock in Wisconsin. RR nice size & balance. Picture available upon request. \$400.00 Monte Wilson M.H.W. Farms Colfax, IA 50054 | 515-238-8768 (06/23/2021)

FOR SALE: Registered Suffolk ram and ewe lambs. All rams are February born and RR. Fast growing, great pedigree, sheared and ready to go to work. Will work for terminal sires for commercial flocks or purebred and 4-H flocks. Call or text 641 521-7981 or Barb.Stewart.56@gmail.com (9/10/2021)

FOR SALE: Polypay rams for sale. Twin and triplet births. January born. Deerberg Land and livestock 1706 190th St, Clarence, IA 52216 | 563 370 5036 Deerbergpolypay@gmail.com (9/10/2021)

Highlights of the Minutes of Iowa Sheep and Wool Promotion Board Thursday, April 15, 2021 - 9:00pm Conference Call

Roll	Call	ŀ

District#	Name	Present
1	Kevin Goeken, Treasurer	Yes
2		
3	Deb Pullin-Vanauken	Yes
4	Tabatha Shahan	Yes
5	Barb Clawson, Secretary	Yes
6	Dan Smicker, Vice Chair	Yes
7	Janna Feldman	No
8	Jacob Petersen	Yes
9	Kenneth Zimmerman	Yes
	Randall Vos, ISIA	Yes
	Michael Naig, Ex Officio	No
	Lauren Petersen, Bookkeeper	Yes

The meeting was called to order at 9pm on April 15th, 2021.

The meeting minutes from January 21st, 2020 were reviewed. Barb moved to approve the minutes, Deb seconded, motion passed. Financial reports were reviewed. Deb moved to accept the financial reports, Jacob seconded, motion passed.

Proposal #718 for Marion County Lamb Producers for \$100 for the Sheep Fun Day at the Fair was reviewed.

Barb moved to approve, Kenneth seconded, motion passed.

Proposal #719 for Marion County Lamb Producers for \$100 for the Sheep Fun Day at the Fair was reviewed. Deb moved to approve, Jacob seconded, motion passed.

Randall gave an ISIA update. They are currently in full swing working on planning stuff for the State Fair Food Stand. They are looking for new Food Stand managers this year since their previous managers retired. The cost of meat has increased significantly. Dr. Youngs from ISU sent over an idea for a sheep faculty position for ISU & Extension that was discussed. The NSIP sale will be at the end of July. Rusty Burgett is finalizing a proposal for some educational opportunities for the event.

The sheep table at the ISU Animal Learning Day was discussed and the board chose to cancel the table.

The next meeting will be on Thursday, July 8th, 2021 at 9pm. Kevin moved to approve this meeting date, Deb seconded, motion passed.

Deb moved to adjourn the meeting at 9:25pm, Kevin seconded, motion passed.

Respectfully submitted, Lauren Petersen

Contact Information

Please contact board members with questions.

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Iowa Sheep and Wool Promotion Board Chair

Dan Smicker

ISWPB Bookkeeper

Lauren Petersen jacobpetersen29@gmail.com

Title: Lamb and Wool Newsletter Volume #21

Issue Date: 2021 - Issue #4

Iowa Sheep Industry Association P.O. Box 161 Newton, IA 50208

Copper Toxicity and Fertilizers in Sheep

By Scott Radke DVM, MS, DABVT | Iowa State Veterinary Diagnostic Laboratory

There are many toxic agents that sheep may be exposed to through a variety of means. However, copper toxicity is one of the most common toxicity observed in sheep. Although more commonly observed in cattle, sheep are also very susceptible to nitrate and urea poisoning. This article focuses primarily on copper toxicity in sheep but also sheds light on the hazards, potential sources, and clinical signs surrounding fertilizers.

Copper

Adequate nutrition is essential in all species for proper physiological function. Copper is an essential trace mineral that plays a large role in numerous enzymes and biochemical processes. Copper is vital for the oxidation and transportation of iron (ceruloplasmin and hephaestin), immune system function (super oxide dismutase), mitochondrial function (cytochrome C oxidase), and both coat color and quality (tyrosine). Copper is also essential in the development of the myelin sheath surrounding the spinal cord and nerves.

Although essential, excessive copper supplementation can be detrimental in sheep. Of the many livestock species, sheep are the most sensitive to copper. Excessive copper supplementation is commonly unintended. Two of the most common sources of excess. include feed mis-formulations or the use of feed or feedstuffs intended for other species. Feeds intended for other species tend to have higher copper concentrations. Both loose mineral and mineral blocks labeled for use in cattle may also serve as potential sources of excess copper. Many feed products that are labeled for cattle or other species often have signage specifically stating that the product should not be used for sheep. These warnings should be heeded. Mineral drenches and copper sulfate footbaths also serve as potential sources of copper.

Sheep and other ruminants accumulate copper over time within the liver. Animals with toxic concentrations of copper in the liver may not exhibit any outward clinical signs until a stressful event, such as transport or handling occurs, leading to a hemolytic crisis. During the stressful event, copper is released from the liver and enters the blood stream. New liver cells attempt to take in the excess copper but are soon overwhelmed.

Red blood cells are then lysed and destroyed. The resulting serum has a dark brown to black appearance.

Clinical signs of a hemolytic crisis include anorexia, weakness, icterus, and hemoglobinuria (red to brown urine). Acute death within 24-48 hours may also be observed. On post mortem evaluation, tissues may appear icteric and the liver friable. Sheep that succumb to copper intoxication exhibit dark "gun-metal" colored kidneys. Ante mortem sampling to evaluate for copper concentrations and liver enzymes includes serum. Serum copper does not always correlate with liver concentrations. At minimum, a golf ball sized section of fresh and formalin fixed liver and kidney should be submitted for copper analysis and histologic evaluation. Submission of suspect feed and water should also be considered. Since copper accumulates over time, the most recent feed sample may not be representative of what was consumed during accumulation.

Prevention of excess supplementation is critical in avoiding copper intoxication in sheep. Feed and feedstuffs formulated and labeled for other species should not be provided to sheep. Feed intended for sheep should not have a copper to molybdenum ratio >10:1. Ideally the ratio should be 6:1. Feeds possessing ratios of >20:1 provide significant risk of excessive copper accumulation. Reduction of copper in the feed and administration of sodium molybdate can help in reducing further copper accumulation in affected animals.

Fertilizers (Nitrate and Urea)

Fertilizers are commonly used in agriculture to help with crop and plant growth. Two of the most common fertilizer components are nitrate and urea. Poisonings involving either nitrate or urea-based fertilizer commonly occur through the administration of water in large portable tanks that previously contained fertilizer. Poisonings have occurred even after tanks had undergone multiple washings. Another common source is feed that is delivered in vehicles the have been used to transport dry fertilizer, especially in the event that the container has not been flushed prior to feed being added. Careful attention should be paid to the direction of the wind during the spreading of dry fertilizer as strong

winds may blow fertilizer into nearby animal enclosures.

Ruminants are particularly susceptible to urea and nitrate as a result of the chemistry that occurs within the rumen. Although cattle are the most commonly poisoned species with respect to fertilizer products, sheep are also very susceptible. Due to the acute nature of both urea and nitrate intoxications, ruminants are most often found dead with no observance of clinical signs. Ataxia and tremors may be observed in sheep afflicted by either urea or nitrate. Stiffening of the forelimbs and prostration along within increased urination, frothing at the mouth, and diarrhea may also be observed with urea intoxication. Cyanotic or "muddy" mucous membranes accompanied by respiratory distress are characteristic of nitrate poisoning. The blood and tissues of ruminants afflicted by nitrate intoxication may appear dark or chocolate colored.

For both ammonia and nitrate testing, ocular fluid should be collected from dead animals. In cases were urea toxicity is suspected rumen and urine samples should also be collected, sealed, and frozen immediately. A delay in sample collection can result in loss of diagnostic value. In moderate climates, animals that have been dead for greater than 12 hours have undergone enough autolysis to diminish the diagnostic value of samples. Elevated summer temperatures allow for even less time to collect samples.

A minimum of 250 ml of water and 1 quart of suspect feed/forage should be collected for analytical testing. A dipstick may be used for qualitative testing of nitrate concentrations in ocular fluid or water. Samples should be submitted on enough ice to keep chilled or frozen. Samples that are left to become warm have little diagnostic value.

The administration of water to sheep from tanks contaminated with fertilizer products is known to cause deaths. If sheep require an alternative source of water, the use of fertilizer tanks, even those that are washed, should be avoided to prevent such intoxications. A new tank or one that is strictly designated for water should be strongly considered.

Influence of Sire Breed on Lamb Traits

I was able to attend my first in-person NSIP sale this summer. It was a great event, with a lot of sheep producers supporting it. One of the more interesting topics of discussion that I had with some of the attendees were their experiences with terminal sires and whether or not they used them. Some commercial producers I spoke with used Suffolks or Hampshires, some stay with purebred Polypay because they did not see a lot of differences with terminal sires, and one producer was working on developing Suffolk-Texel crosses.

I started to look for some articles that compared the effects of terminal sires on various aspects of lamb production. The main things I was looking for was comparing terminal sires with maternal sires. I didn't just want to look at the growth difference, but also survivability and other various traits. I did not find every article on the topic, but found three interesting articles that I thought showed some interesting, and sometimes contradictory information. The articles that I am referencing are listed at the end of this article, an all had some link to the USDA and many with the USDA MARC (Meat Animal Research Center) or the Agricultural Research Service's U.S. Sheep Experiment Station.

The first article by Leymaster & Jenkins in 1993 piqued my interest because it was a study done using Suffolk and Texel sires on 50% Finnsheep, 25% Dorset, and 25% Rambouillet ewes (the bulk of my flock is ½ Finnsheep and ½ Dorset). I have always had an eye for Texels with their impressive muscling, and partially because I spent a half a year in the Netherlands. But I had always questioned how applicable they were to raising traditional sized fat lambs from moderate sized maternal ewes. What was interesting in this study was they found that 'Texel-sired lambs had greater survival to weaning (86% versus 77%) and similar birth and weaning weights compared with Suffolk progeny. Lambs by Texel sires grew 11% less rapidly from 63 to 189 d of age.' Some of the comments from producers who were not using terminal sires alluded to an issue with potentially decreased lamb survivability when using terminal sires. The producer producing a Suffolk-Texel cross terminal sires, called SufTex in New Zeeland and

Europe, is hoping get the positives of both breeds: heavy muscling, fast growth, and high survivability.

After finding this research paper I looked for other similar ones that compared different sires to see if they had the same results. I came across the article 'Breed Matters: Selecting Rams for Rangeland Production' which was

a summary of a study called 'Evaluation of Columbia, USMARC-Composite, Suffolk, and Texel rams at terminal sires in an extensive rangeland production system'. In this study they mated Columbia, Composite (1/2 Columbia, ¼ Suffolk, ¼ Hampshire), Suffolk, and Texel rams to Rambouillet ewes. Interestingly, in this study they did not find any differences in lamb survivability between the different sire breeds. They found that Suffolk-sired lambs had the most rapid gains, were 10 to 16 pounds heavier, and had the most desirable leanness at the end of the postweaning feedlot trial. Additionally, Suffolk-sired lambs required between 5 and 8 percent less feed per unit of growth than the other crosses did during the 90 days in the feedlot. One interesting summary from this was that they encouraged the use of the Columbia, Suffolk, and Texel to develop an all-white terminal sire breed, hoping to produce fast growing, heavy muscled lambs with all-white pelts.

The last article I found did not compare the Texel breed with traditional terminal sires, but rather compared the USDA MARC Composite (1/2 Columbia, ¼ Suffolk, ¼ Hampshire) with Suffolk sires on 50% Ramboullet and 50% Romanov ewes. In this study they found that the Composite sires increased number of lambs born and weaned per ewe when compared with Suffolk sired lambs. However due to the higher growth rate of Suffolk sire lambs there was little difference in pounds of lamb produced to 140 days for the duration of the study.

So, why the difference in some studies indicating some advantages of differing



Suffolk rams at the NSIP Center of Nation Sale.

breeds of terminal sires in terms of survivability? One explanation is that some of these rams were sourced from the industry, it may be some producers prioritized survivability when selecting rams and some producer may not have. Interestingly enough, even though there may be a survivability advantage with some breeds, those gains may be negated by the increased growth of others. I personally am really interested in how some of the terminal ram composites are going to perform. Is it feasible to get the positive traits of survivability, fast growth, and heavy muscling all into one terminal sire?

References:

Breed Matters: Selecting Rams for Rangeland Production. 2013. USDA ARS Online Magazine Vol. 61, No. 7 https:// agresearchmag.ars.usda.gov/2013/aug/rams/

Freking B.A. and G.L. Bennett. 2019. Rambouillet and Romanov reciprocal breed effects on survival and growth traits of F1 lambs and on reproductive traits of F1 ewes. Journal of Animal Science 97(2):578-586

Leymaster K. A. and T. G. Jenkins. 1993. Comparison of Texel- and Suffolk-sired crossbred lambs for survival, growth, and compositional traits. Journal of Animal Science 71(4):859-69

Notter, D.R., Lewis, G.S., Mousel, M.R., Leeds, T.D., Zerby, H.N., Moeller, S.J., Kirschten, D.P., Taylor, J.B. 2014. Evaluation of Columbia, USMARC-Composite, Suffolk, and Texel rams at terminal sires in an extensive rangeland production system. Suffolk Newsletter. 2(8):9-11.

New NSIP Influenced Replacement Ewe Sale Coming Jan. 2022!

This online sale will feature commercial replacement ewes that are sired by rams from NSIP. Data will be available on the sires of the lots that will be offered in the sale. Consignments will be open to any producers using rams with EBVs from NSIP wishing to sell replacement ewes into the commercial sector.

January 25 | Hosted by Willoughby Sales NSIP Influenced Replacement Ewe Online Sale https://wlivestock.com/auction/14188

Highlights of the 31 May 2021 ISIA Board Meeting

Members Present: Randall, Kasey, Mike, Rusty, Duane

Agenda was presented and approved.

Secretary's report was presented and approved.

A scoring rubric was presented and approved to be used for review of the scholarship applications for 2021. For future years, the board may consider changing the name of the scholarship program to place less emphasis on scholastic performance and place more importance on citizenship, sheep industry activities and other criteria.

An update on the agenda for the ISIA/NSIP educational event at the Center of the Nation NSIP Sale in July was given. The agenda is coming together and will be finalized.

ISIA has ordered the meat for the Lamb Stand. The ISU meat lab will process the ground into patties. Chuck will help the North Polk group to get started and running for the first 2-3 days. The volunteer letter will be going out in the next newsletter. Unfortunately, there is no way to get around increasing prices and decreasing the available menu items, simply due to current market conditions and availability.

2021 annual membership meeting: Since the educational sessions planned at the NSIP sale will already have several people attending and the facilities are rented, it is proposed to have the annual meeting on July 30 at the Clay County Fairgrounds following the educational event. Motion passed.

The next meeting will be Thursday, June 24 at 8:00 p.m.

Meeting adjourned at 8:52 p.m.

Highlights of the 24 June 2021 ISIA Board Meeting

Members Present: Rod, Randall, Jason, Mike, Kasey, Regina, Duane, Rusty, Kendra

Agenda was presented and approved.

Secretary's report was presented and approved.

Kendra presented the Director of Industry Relations report: The website has been updated as well as the contact list (including missing contact information).

Treasurer's Report was presented and approved.

Jason Seelow introduced himself to the board. Jason recently joined the board of directors and is a 35-year veteran of the sheep industry with registered Rambouillets. He moved to Iowa in 1997 from Illinois and is currently raising registered Lincolns along with their Rambouillets. They market fleeces directly to spinners for the artesian wool market. They have both fall and spring lambing flocks.

There were 5 applicants for the ISIA scholarship for the board to review using the new scoring rubric.

An update was presented about the educational program scheduled for July 29-31 in Spencer, IA. The schedule is coming together and the last loose ends should be tied up in the next few days.

Iowa State Fair food stand. The meat has been delivered to Ames to be processed into patties. After further processing, it will be delivered to Des Moines cold storage. A meeting with the new managers and Chuck will take place to work out final details and start calling on volunteers. All the equipment needs to be in place on August 8 and will start around 9:00-10:00 a.m.

The ASI convention will be January 19-22. If anyone would like to attend to represent ISIA, please contact Randall.

The annual membership meeting will be July 30 at 7:00 p.m. at the Clay County Fairgrounds in Spencer, IA and via Zoom.

Next meeting ISIA Board meeting will be July 22 at 8:00 p.m.

Center of Nation Sale Results

Adapted from: http://nsip.org/wp-content/uploads/2021/08/2021-CNS-Sale-Summary.pdf

This year an in person NSIP Center of Nation sale was held on July 31st, in addition to an online sale. There was a total of 96 rams and 59 ewes that were sold by 32 different consignors and sold to 78 different buyers. Thirteen different states were represented as consigners to the sale. There were buyers from 17 states and 1 Canadian Province including Colorado, Iowa, Illinois, Indiana, Kansas, Kentucky, Michigan, Minnesota, Montana, North Carolina, Nebraska, Ohio, Pennsylvania, South Dakota, Texas, Utah, Wisconsin and Quebec, Canada. The overall sale average was \$992.74.

ASI President Susan Shultz was able to attend the sale in addition to many other state sheep industry leaders. The weather was excellent for the sale and even before the sale the Spencer area received a much-needed rain. Other sale details are listed below.

HIGH SELLING HAMPSHIRE:

Lot 81: U of WI 21-004, \$1,600, Ram Lamb from University of Wisconsin-Madison

Lot 85: Roembke I2030, \$1,400, Yearling Ram from Roembke Hampshires of Cedarburg, WI

HIGH SELLING POLYPAYS:

Lot 73: NJF 2098, \$4,000 Fall Polypay Ram from Shady Lane Farms of Redfield, SD

Lot 27: MSF 1002, \$2,200 Polypay Ram Lamb from Meinders Stock Farm of Buffalo Center, IA

HIGH SELLING DORSETS:

Lot 130: PRPD 2021, \$1,600, Yearling Ram from PR Performance Dorsets, Curt Stanley of Bismarck, ND

Lot 17: VA Tech B041: \$1,150, Fall Ram from Virginia Tech of Blacksburg, VA

HIGH SELLING SUFFOLKS:

Lot 60: MGR 20587, \$2,050, Fall Suffolk Ram from Mint Gold Ranch of DePere, WI

Lot 2: C&S 1490, \$1,300, Yearling Ram from Culham and Stevens of Webberville, MI

HIGH SELLING TEXELS:

Lot 142: WVU A019 & A036, \$900 X 2, Pen of 2 Ram Lambs consigned by West Virginia University, Morgantown, WV

Lot 141: WVU A054, \$800, Yearling Ram consigned by West Virginia University, Morgantown, WV



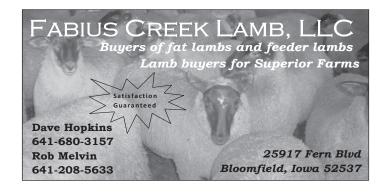




Texel rams from West Virginia sold at the Center of Nations Sale.

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