Reid’s Remarks

Reid Redden, Newsletter Editor

The spring newsletter is by far my most favorite newsletter to write. Mostly, that’s due to the fact that winter is nearing its end and green grass is right around the next corner. This summer will be my fourth year in North Dakota and it definitely has grown on me, especially the winter. Winters in North Dakota seem to be kind of like family: Although we may gripe and groan about it with each other, it is a part of North Dakota’s identity and we boast about it when talking to outsiders.

In early March, I had the fortunate opportunity to spend almost two weeks in Australia. For a sheep guru like me, it was a wonderful experience to see a vibrant and highly respected sheep industry.

Often in the U.S., those of us in the sheep industry feel like we have to apologize or at least thoroughly explain why it is we do what we do. Whereas, the sheep industry in Australia is very much engrained in the culture of not only the ag community but all Australians. For instance, in the airport, specialty shops called “Purely Merino” market all types of wool and pelt products. Plus, they had a life-size bronze statue of a sheep and sheep shearer in action.

From discussions with industry leaders, they are in a period of change in the Australian industry. Up until the 1990s, their industry was dominated by wool, and lamb was a byproduct. They still produce high-quality wool but have evolved their operations to at least a 50/50 split between wool and lamb production.

This change was met with resistance because “change is difficult.” Change has many bumps in the road and to just keep doing what always has been done is easy.

Modification of sheep farms to place more emphasis on lamb production was a large shift in management. For instance, the percent of the lamb crop per breeding ewe was estimated to be less than 75 percent. We all know that a 75 percent lamb crop will not generate enough farm profits to remain sustainable as a U.S. sheep farm.

The Australians’ major changes in management were not too different from here in the U.S. For the most part, they needed better genetics, nutrition, lambing systems and health plans.

During the last quarter century, they have made gigantic strides in better managing their national sheep flock. The term “precision sheep farming” was used repeatedly. Their leading sheep farmers were relentless at constantly...
Message from the Association

By Nathan Robbins, President

What was that saying about March: “In like a lamb, out like a lion” or “in like a lion, out like a lamb”? Well, how about, “in like a lion, out like a lion”?

As I am sitting here writing this, we are preparing for the impending blizzard that is approaching. Thankfully, we only have five ewes left to lamb, two of which appear to be waiting for the weather to get bad before they completely set into labor.

I hope that this lambing season has been a fruitful one for your operation and that the lambs are doing well. Ours could be summarized with another saying: “It was the best of times; it was the worst of times.” We have enjoyed many successes, including multiple sets of triplets, one set of quads and a lot of really good-looking lambs so far. At the same time, we had a few wrecks along the way.

All in all, it has been a lambing season to be thankful for. We have a good group of lambs to feed and optimism that these prices for feeders and fat lambs will continue to be strong. Ultimately, we are hoping that a few turn out well so we can provide them to others as replacements at the upcoming NDLWPA sales in Jamestown (August) and Hettinger (September).

I would encourage each of you to sort through the crop of lambs and consider making the same decision that we are. Genetic diversity at the two sales provides others an opportunity to improve their flock and allows you the opportunity to showcase the progress made this past year.

The board has been active, working on numerous projects. A committee continues to work on the feasibility of hiring an executive secretary, another committee is working on plans for the annual convention, while yet another stays abreast of the legislative happenings that may impact the association.

Recently, NDLWPA signed on with ASI to support the de-listing of the gray wolf through their comments made during the open session. Julie Mangnall and I get the opportunity to speak about sheep to 250 fourth-grade students this coming week. I look forward to it every year as it is an opportunity to educate a new generation that seems to be getting further removed from agriculture. It is amazing to hear some of the questions during the sessions.

Be proud of the leaders emerging from our state who have taken on additional roles serving on committees within our national organization – ASI. Dr. Chris Schauer, Dr. Reid Redden, Dean Swenson, Paula Swenson, Wes Limesand, Brad Gilbertson, Burton Pfüger and Burdell Johnson have all accepted roles within ASI for the coming year.

Spring/summer brings on a lot of activities, both on and off the farm. Plans are in the works to have a symposium Friday before the Jamestown Ram and Ewe Sale. Dr. Redden and committee did a phenomenal job last year in the inaugural event, and we are trying to make it an annual opportunity to gather, educate, share stories and socialize. There is also discussion regarding a picnic during the North Dakota State Fair for sheep enthusiasts.

Finally, an event that is relatively new to the organization but is growing in attendance annually is the Fiber Arts Festival in Fargo. This year we have gained support from the organizers to have a lamb cookoff both Saturday and Sunday. I feel this is a great opportunity to grow acceptance of lamb in the average family’s kitchen. Saturday will showcase producer lamb dishes, while Sunday will see area chefs competing for bragging rights and top dish.

With any of these events, and others that come up, we are always looking for committee members or volunteers to assist in the success of the event. Let someone know if you would like to be a part of any of the scheduled events that come up on the calendar posted on the NDLWPA website.

Finally, the deadline for starter flock applications is coming up May 15. If there are youth in your area who would be good candidates for this program, encourage them to apply. There may be up to 10 flocks awarded again this year. Guidelines and application can be found on the website.

This is our opportunity to get the next generation actively involved in production agriculture. Mentorship is a huge part of the success of this program, so work with that individual by answering questions during the application process and be a cheerleader by encouraging participation. We need new producers to grow our national flock, and this program has been a wonderful success story for the state. It is our mission to see it become even better each year.

Signing off, I will say thanks for the continued support of the organization, and if there are any comments, questions or concerns to be addressed, please let me know and we, as a board, will respond accordingly.
Flock Health

Deer Liver Flukes

Neil Dyer, NDSU Diagnostic Laboratory director

Recently, the NDSU veterinary diagnostic laboratory reported four cases of fluke infection in adult Katahdin ewes. Significant changes in the affected animals included massive hemorrhage in the chest or abdominal cavities and considerable tissue destruction due to fluke migration, particularly in the livers, abdominal cavities and lungs.

Adult flukes were recovered from most of the animals. The size and shape of the fluke allowed the VDL to identify them as the deer liver fluke, *Fascioloides magna*.

*F. magna* is a large, oval fluke measuring up to 100 millimeters (mm) in length, 2 to 5 mm in thickness and 11 to 26 mm in width. It is found in domestic and wild ruminants, and deer are the natural hosts.

The life cycle is not completed in sheep; therefore, infected animals do not pass eggs in their feces. Just a few parasites, as few as two or three flukes, can cause death in sheep due to extensive migration in internal organs. Infected sheep livers often show black tracts caused by the migrating flukes. In deer, however, the parasites cause minor inflammation and are enclosed in cysts connected to the bile ducts. Exposure occurs in sheep when flocks graze the same pastures frequented by deer.

The life cycles of most liver flukes are very similar. Adult flukes deposit eggs in the liver ducts of the deer host. The eggs then are passed in the feces. Fluke eggs need moisture and will hatch in moist feces or shallow water. Marshy areas that support the intermediate host, the snail, are good places for fluke development.

After about 25 days, the eggs hatch into a stage called a miracidia, which enters the snail (intermediate host). In the snail, development moves through three stages, eventually exiting the mollusk and encysting on vegetation as metacercaria.

Metacercaria are the infective stage ingested by grazing sheep. Once inside the sheep, the larvae penetrate the intestinal wall and migrate to the liver. After about three months, they become adults.

In deer, the life cycle is completed and continued by the shedding of eggs in the environment. In sheep, the life cycle includes extensive migration through tissues and, often, death.

No products are approved for use against this fluke in the U.S., so work with your veterinarian on a treatment plan.

Because deer and snails are needed for completion of the life cycle, attempt to control either one of those species by changing grazing locations.

A diagnosis of a fluke infection usually is made when the parasites are seen under examination of the body cavities or organs of dead sheep. Examination of deer fecal material may reveal fluke eggs. A test also is available for examining snails collected in the field.

This parasite does not infect humans.

Reid’s Remarks

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improving. These improvements were a result of implementation of technology and information generated by university research and private business services.

In the early 1990s, the gross value of the products from lambs slaughtered was $500 million, and by the late 2000s, it had risen to $1.5 billion. During the same time, the amount of Australian lamb exported to the U.S. went from 5,000 to 40,000 tons. Additionally, the Australian national flock went from 150 million to 75 million sheep. Granted, a majority of this change in sheep population was a result of fewer wethers being retained for wool production and more ewes being retained for lamb production.

The strategic planning that initiated the change in the Australian sheep industry is remarkably similar to the American Lamb Industry Roadmap. Therefore, I highly encourage all U.S. sheep producers to read the roadmap on the American Lamb Board website (www.lambcheckoff.com). This is a critical time for our national sheep industry. I firmly believe that if our industry will actively engage in the recommendations of the roadmap, we can change the trends of the declining U.S. sheep industry.

Our biggest advantage over Australia or any other lamb importers is the American consumer. Although consumption of lamb is low per person, the massive size of the U.S. creates a demand for lamb that we cannot meet. But we must provide a consistent product that consumers want and for which they are willing to pay.

I firmly believe that the U.S. sheep industry has a bright future. However, no one individual or organization can change the future of the industry. It requires a concerted effort by all segments of the industry. Are we up to it?
Lamb Prices Rebound

Tim Petry, Livestock Marketing Economist
NDSU Extension Service

Like most agricultural commodities, the sheep industry is experiencing good news and bad news. The good news is that lamb prices have returned to profitable levels. The bad news is that weather continues to challenge U.S. sheep numbers.

Feeder lamb prices (3-Market: CO, TX, SD) at $235 per hundredweight (cwt) are about $100 higher than the severely depressed prices for the same time last year. So far, feeder lamb prices in 2014 have averaged 50 percent higher than last year. Prices have been buoyed by lower corn prices, stronger fed-lamb prices and fewer feeder lambs available.

Record high corn prices declined sharply in the last half of 2013 as prospects for the record 13.9 billion bushel crop materialized. The U.S. had more than 2 percent fewer lambs on Jan. 1, 2014, than in the previous year.

Fed-lamb prices (National Direct, Hot Carcass) generally have been increasing since September 2013 and are about $75/cwt higher than during last year’s depressed market. So far in 2014, fed-lamb prices have averaged 35 percent above last year, with current prices at $301/cwt, compared with $230 last year. Prices were spurred by lower lamb production, fewer imports and increasing consumer demand.

Although lamb slaughter has been near last year’s levels, dressed weights have been almost 2 pounds lower: 72.3 pounds in 2013, compared with 70.4 pounds in 2014. So far, 2014 lamb production has declined more than 1 percent, compared with last year.

Consumer demand for lamb, especially at the high-end restaurant level, has improved nicely. That is welcome news because producers were concerned about when and how much consumer demand would return after the problems with overfinished lambs that occurred in late 2012 and the first three quarters of 2013.

Lamb racks are a favorite restaurant menu item, and wholesale lamb rack prices are fully $3 per pound higher than they were last year. Wholesale leg prices are up about 45 cents per pound, and wholesale loin prices have increase about 20 cents. The national lamb cut-out value, at $370/cwt, is up $80 from last year’s $290 pre-holiday level.

Northern Plains sheep and lamb markets are reporting seasonally light receipts of feeder and fed lambs. Most marketing activity is centered on cull ewes, and replacement ewes and ewe lambs. The U.S. Department of Agriculture’s Agricultural Marketing Service is not reporting western South Dakota markets due to light receipts. And no Midwest Electronic Lamb Auction sales for Northern Plains lambs were reported in the last two months. Limited current sales of fed lambs at Worthing, S.D., were reported in a 5 plus or minus range around $160/cwt live weight.
Fed-lamb prices would be even higher if pelt prices had not declined. No. 1 U.S. lamb pelt prices exceeded $11 last year at this time but have declined to under $8. China is a major world destination for pelts and wool. Demand there has declined mainly due to world economic conditions.

Australia dominates the wool market and is a major exporter of wool, with 75 percent going to China. Wool prices normally increase seasonally from October to April, but prices in Australia have been declining contra-seasonally and are 15 percent below last year.

Abnormally dry weather in major sheep production states continues to challenge U.S. sheep numbers. The USDA National Agricultural Statistics Service reported all sheep and lamb inventory in the U.S. on Jan. 1, 2014, at 5.21 million head, which is down 2.3 percent. Ewes 1 year and older, at 3.07 million, were down 2.2 percent. Market sheep and lambs totaled 1.33 million head, also down 2.2 percent.

Texas is by far the leading sheep-producing state in the U.S. Extreme drought in 2011 caused ewe numbers to decline 90,000 head, from 515,000 to 425,000, by 2012. Somewhat moderating drought conditions saw ewe numbers rebound modestly to 440,000 in 2013 and 450,000 by Jan. 1, 2014.

Drought occurred in much of the U.S. sheep-producing area in 2013. And extreme drought still is prevalent in the Southwest, with ewe numbers last year declining 20,000 head in Colorado, 15,000 in California (the epicenter of current drought conditions) and Utah, and 7,000 in New Mexico.

Lower inventory numbers imply less lamb production in 2014, which would be supportive to prices. The USDA is projecting lamb and mutton production to decline from 156 million pounds in 2013 to 150 million in 2014. However, Mother Nature will be in control of that. Worsening drought conditions could increase production temporarily. Much better moisture conditions could lead to flock rebuilding and lower production.

Another wild card is imports. The USDA is projecting a decline in U.S. lamb imports from 173 million pounds in 2013 to 168 million in 2014. Australia and New Zealand likely will have less lamb to export. However, higher U.S. prices could attract more lamb here.

Feeder lamb prices also will be impacted by corn prices. Another good corn crop will be necessary to prevent prices from increasing.

Seasonal price patterns could return closer to normal in 2014. Fed lambs usually peak in early summer, with feeder lambs peaking earlier, unlike the robust fourth quarter contra-seasonal increase that occurred last year.

Legislative Committee Update

By Brad Gilbertson

Because I’m the last guy to get his article in for the newsletter, I get to give the most up-to-date weather forecast this time. It looks like we are finally getting spring here in northwestern North Dakota, and it’s none too soon.

We were fortunate enough to not have huge snowbanks this year, but we more than made up for it with cold weather. If you live in my area and you still have water, consider yourself lucky. I just heard this morning that the little old town of Sherwood has more than half of the houses without water. They are trying to thaw out lines that are 8 feet in the ground. Now that’s a winter!

The legislative committee has had a quiet winter so far. There have not been any new developments on the butterfly issue, which we expected would be at the forefront of ag news by now. From what I understand, the U.S. Fish and Wildlife Service took public comment and has not acted yet. I would expect them to take some sort of action in the next couple of months, and we will keep you posted on developments.

In February, we met with Amber Boeshans from the state Agriculture Department. We inquired about what route industry comment would take in regard to the animal cruelty bill. There was supposed to be industry comment after the first year, and we will be making comments through the Legislative Council. If anyone has anything they would like to add on the animal cruelty bill, please contact someone on the legislative committee. We would love to have your input.

On April 16, we will be attending a meeting about water quality in North Dakota. The Health Department has some rules about livestock runoff in water, and we will be there to represent you. At this point, we really don’t know what new rules they are going to implement, but we will keep you posted in the next newsletter.

As always, please contact the association if you have any questions or concerns. The legislative committee is made up of Lyle Warner, Wyman Scheetz and me. Our contact info is available on the website.

I hope by the next time I write this column, we are done with spring’s work and thinking about selling $2-pound lambs.

Everyone, please have a safe and happy spring!
We live on a farm/ranch in eastern Oliver County right on the Missouri River about 30 miles north of Mandan, N.D. I have lived here my entire life, as I grew up on this place. We got married in 1965 and we have two children: Shawn, who still lives with us and is handicapped, and Mari Jo, who lives in Bismarck and works for Pella Windows. Mari Jo has two boys, Chance and Brody.

I got a start in the sheep business when I was 10 years old and have had them ever since. Along with raising sheep after we were married, I sheared sheep to supplement our living, along with farming and ranching.

Our flock consists of 45 Rambouillet ewes and 40 Columbia ewes. Our grandson Chance was one of the recipients of a starter flock, and those sheep are also here. Chance trades his labor for facility use and pays for feed. It is a good deal for both of us.

We lamb in January and February in two different bunches, and we keep our own replacement ewes and a few bucks. We lease our entire farm out and we have no pasture for the sheep, so we make arrangements with neighbors to put the ewes at their farmsteads, utilizing their shelter belts, feed yards and calving pastures. We also use our shelters belts and feed yards.

The lambs that we don’t keep for replacements are sent to a custom feed yard and sold directly to the packers.

Q: Can you describe the biggest changes you have seen in the North Dakota sheep industry?

A: We think that the lower numbers are the most obvious one, which has resulted in the loss of many local sheep markets. Nationally, the lamb consumers have demanded that they get a more consistent quality product. The sheep producers, not just locally, did not develop their product as rapidly as the other livestock-producing industries. I think there has been a tremendous amount of effort put into this situation, as we are now seeing at ram sales some data on rams that are being sold, which never was done five years ago. There also has been a lot of promoting to ram buyers the importance of buying a ram that has the data to represent what he really is. This is something that is the hard work of Reid Redden, sheep specialist at NDSU, Chris Schauer, head of the Research Extension Center at Hettinger, N.D., and a few producers in the state.

Q: What key changes have you made on your farm that have had the greatest impact?

A: For many years, we would lamb in March and April, and in the middle of May, they would go to grass. We live two miles from the Missouri River, which has a very dense coyote population, and no matter how hard we tried and what predator control we used, we always lost way too many lambs. We now lamb earlier and never turn lambs to pasture. For several years, we have been selling freezer lambs as people come and pick them up and butcher them themselves. This way, the customers can decide what type of lamb they like and we try to provide it for them. I think too many producers produce the type of lamb they like and not what the consumer wants. As an industrywide issue, this has to change.
Q: Through the years, you have been very involved with the North Dakota Lamb and Wool Producers Association. How has this impacted your family and sheep operation?

A: We have been involved with the NDLWPA for 35-plus years. There is no way to tell all the positive things that have resulted from all the events and conventions that we have attended (I never have missed one). Our family has held some leadership roles through the years. In 1989, Mary won the State Make it With Wool sewing contest, and that same year, Mari Jo, our daughter, was crowned Lamb and Wool Queen. That was one exciting time for us. Mary was director for the North Dakota Make It Yourself With Wool (MIYWW) contest from 1994 through 1999 and enjoyed doing that program very much. This gave her the opportunity to meet several supporters of the MIYWW program. She also had the responsibility of putting on the fashion show at the convention. Many of the participants of the program developed long-lasting friendships with her that she still has today.

I was president of the NDLWPA for three years, and it was one of the greatest and rewarding challenges that I have had.

As many of you know, our handicapped son, Shawn, has attended many conventions and sheep events. He enjoys going and it is a highlight for him because he knows many of the producers and those connected to the sheep industry of North Dakota.

Q: What is your advice for new sheep operations?

A: If you are a young producer, try to apply for a starter flock through the NDLWP Association. This is a program for a young producer who would receive 10 ewes and a network of support for you to get started in your operation. If you want to get started on your own, buy your ewes from a reputable sheep producer. I would try to avoid buying sheep that have been in the show ring. A great resource for finding good commercial breeders is a sheep shearer from your area. There are great programs through the Extension Service for beginning shepherds.

**Timely Tips**

1. **Revisit your worm management plan.**
   Remember that high humidity, warm temperatures and short grass are ideal for parasitic infections. Also, young, growing lambs and lactating ewes are most susceptible to parasitic infection. Dewormers can be quite effective, especially just prior to or after lambing; however, resistance to dewormers is very common. Use them responsibly.

2. **Trim and treat feet.**
   Foot rot issues are common and difficult to manage in wet conditions. Most pathogens that cause foot-related issues are anaerobic (die when exposed to air). Therefore, trimming hooves and treating issues with a disinfectant prior to spring thaw can help prevent foot issues later in the year.

3. **Collect lambing records and weights.**
   Keeping good records from lambing and documenting comments regarding each animal are very important. Therefore, shepherds need to collect lamb weaning weights and market weights. These records help us identify what animals need to be culled or retained. They also help benchmark ewe and lamb performance. Breeding and management decisions for the following year will depend on these records.

4. **Protect lambs from overeating.**
   Prior to weaning or any changes in feed, sheep experts recommend that you provide a booster vaccination for overeating. Alterations in lamb diets, especially from forage-based diets to grain-based diets, should be done gradually.

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Sheep Bleat
Managing Pastures for Sheep
By Susan Schoenian, Sheep 101

The pasture resource is often the most neglected part of the sheep enterprise, yet it usually provides the majority of nutrients to the stock. Well-managed pastures that are properly grazed have the potential to minimize feed costs and increase profits. Pasture is the most natural diet for sheep and other ruminant animals. Though pasture is not without its own risks, fewer digestive problems are usually encountered among grazing sheep and lambs.

Pasture plants
A pasture can be comprised of many different kinds of plants. Which species to plant depends upon the purpose of the pasture, the climate and soil type. Soil survey maps can help with the latter. The best pastures usually contain a mixture of grasses and legumes. Selecting one or more grass and legume species is usually preferable to commercial pasture mixes, which may contain plant species which are not adapted.

Cool-season grasses
Cool-season grasses form the basis of most sheep pastures. Cool-season grasses are annual or perennial plants that begin growth during the fall or winter and grow to spring or early summer. Cool-season grasses are not damaged by subfreezing temperatures. However, they go dormant during hot weather. Common cool-season grasses include orchardgrass, Kentucky bluegrass, tall fescue, timothy, reed canarygrass, ryegrass, brome grasses and wheat grasses.

Tall fescue
Tall fescue is the most important cool-season grass in the United States. Most tall fescue is infected with a fungal endophyte that reduces performance in grazing animals and causes reproductive problems in horses. Sheep appear to be less affected by the endophyte than cattle and horses. Animal performance is superior on endophyte-free fescue, but plant persistence suffers. MaxQ tall fescue contains a nontoxic endophyte which improves animal performance while maintaining plant performance.

Tall fescue is the most desirable grass to stockpile for late fall and winter grazing. Unlike the summer forage, fall-saved fescue is palatable and high in digestibility. Forage quality losses after frost are less for fescue than other forages. Endophyte toxicity of stockpiled fescue declines with time.

Legumes
Legume plants are known for their ability to fix atmospheric nitrogen. Legumes have a higher protein content than grasses. They fall into two classes: forage and grain. Forage legumes include alfalfa, clovers, birdsfoot trefoil, lespedezas and vetch. Grain legumes include beans, peas, lupins, kudzu and peanuts. Pasture legumes improve summer pasture productivity.

Legume pastures (alfalfa and clover) are a common cause of bloat. The phytoestrogens contained in some pasture legumes (e.g. red clover) can cause a decline in ewe fertility.

Sericea lespedeza
The high tannin content of sericea lespedeza gives it an “anthelminticlike” effect. Fecal egg counts tend to be lower among small ruminants grazing sericea lespedeza pastures, as adult worms lay fewer eggs and the eggs that are produced have reduced hatching ability. Though it shows great promise for helping to control internal parasites in sheep and goats, sericea lespedeza is classified as a noxious weed in some states.

Warm-season grasses
Warm-season grasses are annual or perennial plants that begin growth during the spring and grow to summer or fall until frost. Common warm-season grasses include bahiagrass, bermuda grass, crabgrass, eastern gamagrass, big bluestem, indiangrass, switchgrass, sudangrass and pearl millet. Most native grasses are warm-season grasses. Sheep have generally not performed as well on warm-season grasses as cattle.

Annuals
An annual is a plant that completes its life cycle in one year. Annuals must be planted every year in order to produce forage for livestock feed. Summer annuals complete their life cycle between spring and fall. Summer annuals include crabgrass, pearl millet, sorghum, sudangrass and sorghum x sudangrass. Winter annuals complete their life cycle between fall and spring. Winter annuals include wheat, barley, winter oats, rye and triticale (rye x wheat).

Brassicas
Brassicas are annual crops which can be grazed by sheep. They include rape, kale, swede and turnips. They are most commonly used to extend the grazing season. Performance on brassicas is improved if dry hay is offered. Lamb performance on brassicas has varied.
Small grains
When properly managed, small-grain crops can be used for grazing by sheep and other livestock. Small grains can provide excellent pasture in the fall and early spring. The effect of livestock grazing on small-grain yields ranges from yield reductions to increases in yield.

Forbs
Forbs are nongrasslike, nonwoody, flowering herbaceous plants. Forbs are commonly called weeds. They may be classified as annual or perennial, warm-season or cool-season. When grazing a mixed sward, sheep prefer forbs. Sheep’s preference for forbs makes them well-suited to landscape management.

Browse
Browse includes buds, twigs, leaves, fruit and flowers of woody plants (trees and shrubs). While sheep will eat various browse species, goats are best known for choosing these types of plants.

Crop residues
Crop residues are the materials left in a field after the crop has been harvested. Residues include stalks and stubble, leaves and seed pods. Crop residues offer a low-cost feeding alternative for sheep, while sheep grazing helps to control pests by disrupting insect life cycles.

Pasture Establishment
Planning for a successful pasture establishment should begin months in advance. It can take years to correct severe soil acidity. If lime is needed, it should be applied six to 12 months prior to seeding.

Different seeding methods can be used to establish a pasture: drilling, cultipacking and broadcasting. No-till involves using herbicides to kill the existing vegetation and then seeding directly into the residue. The seed bed is usually prepared by hay removal or hard grazing.

The best time to establish cool-season grasses is in the late summer and early fall. Spring plantings have enough moisture for seed germination, but weed pressure is high. Warm-season grasses should be planted in late spring to early summer after the soil temperature has reached 65 F or above. Seeding rates depend upon the plant species and seeding method. Certified seed is recommended.

Legume seed may need to be inoculated with the proper bacterial strain. New seedings should not be grazed until the plants have developed sufficient root systems. If you can easily pull a plant from the ground, its root system is not sufficiently developed.

Pasture Renovation
Pasture renovation is when you “renew” a pasture by introducing a desired forage species into the existing plant stand. It should be done on a regular basis, as most legumes tend to be short-lived in a pasture. Overgrazing, poor fertility and other adverse conditions tend to favor grass plants over legumes.

Frost seeding is a common method of pasture renovation. This is when seed is broadcast into existing pastures during the late winter or early spring when the soil freezes at night but thaws during the day.

Pasture Maintenance
Maintaining a pasture is similar to maintaining a car. If you want good, long-term performance of your pasture, you need to take steps to properly maintain it. Soil sampling a minimum of every three years is a must. Lime and fertilizer should be applied according to soil test results. Excess lime can cause mineral deficiencies. Excess fertilizer pollutes ground water.

Pastures which are composed of predominantly grass plants should receive nitrogen fertilizer every year. There are numerous sources of inorganic and organic nitrogen. Sheep grazing pastures fertilized with poultry litter or pig manure may be at increased risk for copper toxicity. Pastures which contain 30 percent or more legumes usually do not require nitrogen fertilization.

Broadleaf weeds can be controlled with herbicides and mowing. Controlled grazing and proper soil pH will also help to suppress weed growth.

Poisonous plants
Numerous plants can be poisonous to sheep. Toxicity usually depends upon the growing conditions and stage, plant part and amount consumed. As a general rule, sheep usually avoid poisonous plants. Problems arise when desirable forages are scarce and poisonous plants are abundant.

The effects produced by the ingestion of poisonous plants are extremely variable and depend upon the poison consumed in the plant. Some poisonous plants cause rapid death. Others produce gastro-enteritis or cause nervous symptoms or locomotion problems. Treatment is usually unrewarding.
**Starter Flock Profile**

**Chance Porsborg, Bismarck, N.D.**

Q: What prompted you to apply for a starter flock?

I was prompted to apply for the starter flock program because of the exposure I had to sheep at my grandpa’s farm. I thought it would be a great experience and allow me to learn new responsibilities.

Q: What has been the most rewarding thing to come from your flock?

The most rewarding thing was being chosen to receive a starter flock in 2012. All of the Rambouillet ewes bred and had lambs. I did keep one Rambouillet ewe lamb and showed it at two county fairs. My grandpa was gracious enough to give me one of his Columbia ewe lambs, which I showed in 2012 and 2013. My flock count is now at 12. Another rewarding thing is the earning potential. My 2014 came with some great surprises because I had five sets of twins, as compared with last year, when they only had singles. I had only one open ewe this year.

Q: What was the one thing you did not expect to happen, and how did you deal with it?

Nothing went wrong with my ewes at all, and I have been around it for so long, I was prepared for some bad things to happen. Thankfully, nothing did. I only lost one lamb this year and I feel really lucky about that.

Q: Do you think sheep will be in your future?

Yes, I would like to live on a farm. I enjoy being outside and doing chores. Lambing season is so much fun and it is great to watch my flock grow.

Q: What advice would you give someone who was thinking of applying for a starter flock?

I would encourage individuals to apply for the starter flock program. There are so many things to learn, and I have met a lot of wonderful people who are willing to help. If you have a great mentor and access to a facility, then you will have a wonderful experience.
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 __________________________________________________________________________________

Number 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
❑ Printed copy of the ASI Weekly Newsletter – $10

Note: ASI annual membership will entitle you to an email copy of the ASI Weekly Newsletter.

Total $____________ Please make checks payable to NDLWPA

Send this application and your payment to: Julie Mangnall, NDLWPA Treasurer
11936 79th St. S.E.
Stirum, ND 58069

For more information, call (701) 678-2168 or visit www.ndlwpa.com.

By Reid Redden

PULLED LAMB SANDWICH

Ingredients

• Leg of lamb (half)
• 1 onion
• Salt, pepper, garlic to taste
• 1 cup of orange juice
• ¼ cup of Worcestshire sauce
• Coleslaw
• 12 buns
Directions

- Place lamb (thawed), onion (chopped), orange juice, Worcestershire sauce and spices into slow cooker (refrigerate overnight).
- Turn slow cooker on and cook for eight hours on low.
- Turn off slow cooker and use a large kitchen utensil to separate muscle.
- Allow one hour for mixture to cool in the slow cooker.
- Use tongs to grab pulled lamb and place on bottom bun.
- Coleslaw can be served as a side or added to the sandwich.
- Some may prefer to add BBQ sauce to pulled lamb.
- Strain juices and serve au jus in a small bowl for dipping.
Crossword Spring 2014

Across
1. Sheep belong to the genus ______.
5. The species to which sheep belong is Ovis ______.
6. NSIP has a cooperative agreement with Meat and Livestock ______.
11. What mineral is toxic to sheep when fed at required amounts for cattle and goats?
12. The average dressing percentage for _______ lambs is 54%.
13. Ewes should be shorn a minimum of _______ weeks before lambing.
14. Sheep were _______ into the states during the 16th and 17th centuries to develop the wool industry.
15. In 1698, America began to ______ wool.
16. The oldest breed of sheep in _______ is the Navajo Churro.
17. How many breeds are currently registered with NSIP?
18. The industry average for Back Fat thickness is a _________ inch.
19. Lamb is a very ______ meat, with only 175 calories in a 3 oz. serving.

Down
2. The lamb carcass is aged by the presence or absence of a ______ joint.
3. The average _______ area for a 130 pound market lamb is 2.8 square inches.
4. On average, more than 90% of lamb ________ grade at least choice, if not prime.
7. NSIP is a national program involved in the _________ of sheep genetics.
8. Sheep belong to the family ________ or hollowed horn.
9. NSIP calculates estimated breeding values for estimating _________ performance of various traits.
10. The process of cleaning wool is called ________.
14. Humans began _________ wool around 3500 B.C.
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