



NEWS & VIEWS

The official newsletter of St. Croix Hair Sheep Breeders, Inc.

President's Message:

To Grain or Not to Grain?

Jason Webster

To Grain or Not to Grain? I am no expert on the subject. I only know what I have experienced over the last 13 years as I developed a market selling meat off the farm. Since about 8 years ago, the demand for my lamb meat is high enough that I no longer need to sell to the wholesaler. I'm simply going to tell you the differences I have seen in my critters! I'll start with answering a few questions I get. Again, these are my opinions.

*Is grain evil? No! Should I feed grain? Depends!
Is grass fed better? Kinda!*

Ultimately, grain fed or grass fed is up to you and your chosen management style. I like a combination approach. We have rough winters here in southern Indiana. Therefore, I feed grain over the winter to keep body condition. Can I do it with hay? Yes, if the hay is the right quality and mineral is added. Around here, buying hay for my flock is not cost effective. The bottom line is if you don't make money doing it, then why do it? If it's something you enjoy doing and don't care about it paying the bills, then have fun with it! *(continued)*

INSIDE THIS ISSUE:

To Grain or Not? - 2

If You Can't Beat the
Heat - 3

How do I lamb thee? -
5

Genomics Project
Update - 7

Health: Coccidiosis - 8

Fall Lambing - 10

New Members - 11

Membership Report -
12

Upcoming Events - 12



2022 Annual Meeting & Hair Sheep Sale

Sept 30-Oct 2

Salem, Indiana

Washington County Fairgrounds



To Grain or Not to Grain? (continued)

My goal is to pay my bills while providing a quality product. We make our own grass hay and supplement with a custom mix that has heirloom nonGMO corn at its base. My flock only gets that for about 4 months of the year. Everything I butcher is finished on grass. What I have seen on grain finished product is large fat rinds and caps. Unless you are a gristle fan this is not the way to go. When I have grass only and hay, it seems as if they don't hang as much muscle. When they get grain early in their life and finish on grass, they seem to develop better and grow more muscle. The texture and flavor of the meat speaks for itself!

If your market cares more about quantity over quality, grain is the way to go. I used to sell to the wholesaler and he kept telling me I needed more groceries. I discovered very few graders know how to grade St. Croix due to their thinner bone structure. If you were to take a 100lb St. Croix in at the same time as a 100lb Kahtadin, you would actually get a little more meat back from the St. Croix. I prefer quality over quantity.

Breeders! St. Croix is a breed that should be able to thrive with little interaction. After my ewes are weaned, they go to open grass pastures. If they can't put their body condition back with grass they get a V.I.P. ticket to the next food stand or catering event. I have culled for that over the years and I find my ewes produce longer and longer! I have a ewe that is over 12 years old, just gave me twin ewe lambs, and was the first to put her weight back on after weaning.

In conclusion: do St. Croix need grain? NO. Can you feed them grain? Absolutely! But the million dollar question can only be answered with another question: Should you feed grain? It just depends on what you want out of your flock and what management style is cost effective for you.



If You Can't Beat the Heat

Lori Marion

It's just over a month since the last snow melted off the ground in some places, but it will be summer soon and temperatures are rising – higher and more often than ever. And the hottest topic in recent sheep research is heat stress tolerance (every pun intended). Knowing what extreme heat does to your sheep can guide actions to reduce the negative effects.

Heat stress causes increasing internal body temperature, surface temperature, and mucous membrane temperatures. Do hair sheep tolerate heat better than wool sheep? A 2021 Brazilian study found that Santa Ines hair sheep and a cross with a wool breed experienced about the same rise in body temperature when exposed to 110 degree heat with sun. A 2018 study, though, also from Brazil, found that wool Texel rams experienced greater loss of sperm quality and motility compared to 3 hair breeds: Santa Ines, Morada Nova and Dorper.

Does lighter color hair mean more heat tolerance? A Brazilian study done on Morada Nova hair sheep, found that white, red and black ewes showed about the same response and recovery to heat stress in their body temperature and respiratory rate. A Saudi Arabian study found that a native black breed actually experienced less rise in body temperature than a white-coat breed. The researchers surmised that the black-coat breed may have better evaporative cooling from sweating or other coat characteristics that leads to more resilience, and that white color by itself does not lend heat tolerance to sheep.

"Hair sheep ... experienced about the same rise in body temperature when exposed to 110 degree heat with sun."



If You Can't Beat the Heat (continued)

Sheep adapt to the heat stress by breathing faster (panting), and then by breathing faster and deeper to promote heat loss, according to an Egyptian study. That 2021 study on Santa Ines sheep found that this hair sheep breed breathed significantly faster than wool sheep in the same environment (146 breaths per minute vs about 112 bpm). A European study found that panting and seeking shade rather than grazing are reliable ways to detect heat stress in wool sheep, even in the relatively cooler environments of northern Europe. In addition, a 2021 joint Indian and Australian study found that slaughter weight and meat quality was reduced in Malabari goats exposed to high temperatures and sun, even though the goats overcame the adverse physiological responses to heat. Future studies promise a closer look at the biochemical changes occurring in high heat, and how sheep genetics influences heat tolerance.

So this summer, even if the rise in mercury doesn't impress you too much, check your sheep. If they are panting away rather than ruminating, or huddled in the shade rather than out grazing, you might think about heat stress – try for the coolest environment you can get for them. Get enough shade for the flock – even a temporary tarp stretched over the corner of the pasture. Keep the water tank filled and as clean and cool as you can get it. Hopefully the sheep will thank you with better weight gain and reproduction!





How do I Lamb thee? Let me count the ways.

There is really no right or wrong management in most cases; rather, there is a **best** way for a specific set of circumstances, perspectives, and goals. Lambing season is no different. Let's see how our directors prefer to manage this exciting time of year.

Lori Marion, Shasta Ranch, OR

We breed groups of ewes every 2 ½ months, so we have lambs year round. The pregnant ewes move to a ¾ acre 'maternity pen' near the house as their lambing dates approach for better protection from predators. Ewes lamb in a clean-bedded, 3 sided shelter. We bring the ewe and lambs into the barn where they go into a jug with clean bedding. We weigh the lambs, give them a BoSe shot, dip their navels in diluted Chlorhexidine, and tag them. They stay in the jugs 1-3 days depending on how they are doing. In winter, they may stay in the barn for another few days in a larger pen with several other ewes and lambs. In good weather, they usually go right back into their pen outside. By jugging, the dam gets plenty of water and feed, the lambs have easy access to their dam while learning to nurse, and we get to check on them from the comfort of the barn.

SCHSBI Service Award: Eddie Martin

Eddie served as President of SCHSBI for more than 10 years. In honor of his service, the SCHSBI Board of Directors presented him with a special service award when he stepped down as President in February.

Matt Morgan, Grace&Joy Farm, KY

I'm a firm believer and staunch advocate for all natural sheep management. As such, we are 24/7 on pasture. In this management, humans do not do for the sheep what the good Lord intended them to do for themselves. We lamb outside, on their natural pastures, unassisted in May after grasses are growing. The sheep are all grass, all the time, except hay if the fields are out of stockpile in winter. This management also means no vaccinations, no worming, no feed, no feet trimming. Propped up sheep equal weak sheep, and can mask deficiencies that otherwise need to be culled. If the mom or the lambs here can't make it unassisted (as would be how it is in nature) then they don't stick around. St. Croix are remarkable and do not need our meddling..

Sarah Garvin, Shepherds Bluff, IN

We tried lambing at pasture and never moving them into jugs. We found this difficult to manage especially when multiple ewes lambled at once. We have some ewes that try to steal newborn lambs, and jugging prevents that issue. We use a combined approach of penning the ewes in a small pasture near the barn where they can stay with the flock, graze, and be active, yet be nearby so we can watch them closely. The ewes lamb in this pasture, then we move them to the lambing jug. We do not have a set time we leave them in the jugs. We let the ewe and lambs let us know when they are ready to go back to the flock. Jugging them allows us to make sure all lambs are nursing well and the ewe is being a good mother before they return to the flock.



Crystal Criswell, Melwood Farm, OH

I usually have lambs in late February/early March. The ewes stay in a small paddock during the winter and until all the ewes have lambed. Because I work from home, I can keep a close eye on the flock and get newborn lambs out of the weather quickly. If I didn't, I would move lambing to April so that my early intervention would be unnecessary. My ewes usually choose to lamb under our lean-to or in the open paddock under a tree. Unless the weather is really bad, I wait until the lambs are clean, standing, and have latched on before I move them to a jug in the barn. If weather demands, I do so as soon as I see a lamb hit the ground. Wet lambs in cold wind is a recipe for disaster. Regardless of the time of year, I would still jug them so that I can weigh, tag, and record with ease. My first year I didn't, and it was really tough catching them and then figuring out which lambs belonged to which ewes! The lambs were fine, but I was not. Jugging helps me more than it affects their performance.



Matt Mintmier, Beulah Land Farm, NC

I prefer for the ewes to lamb in a smaller paddock close to my house where I winter them on hay and allow spring grass to get ahead before I begin rotational grazing. The time and effort to jug ewes is cost prohibitive for my farming operation. I originally sought out the St. Croix breed due to their strong mothering instincts and low maintenance requirements, so taking feed and water to each individual animal would be counter intuitive. I also believe it's important to judge the ewe on her mothering ability to care for her lambs and not prop them up with assistance in this area. Ewes and lambs that require jugging would be culled. Another reason that I do not jug ewes is for their health. Sheep confined in barns are susceptible to more illnesses (coccidia, pneumonia, mastitis).

Ryan Ridgley, Good Harborage Farms, MI

So far we have focused on spring pasture lambing. On December 1st we bring in the ram(s) which put us into a late March, early April lambing season. Our goal is for 100% of the lambs to be born on pasture to ensure natural results that line up with spring grasses and an optimum bonding experience between lamb and momma ewe. Occasionally, there is a need to assist new mommas who may reject their lamb(s) for multiple possible reasons. They may need to be bottle feed or barn isolated to attempt a reestablished bond and natural parentage. In the future we may consider exploring a fall lambing to contrast our results in the spring. Blessings!



St. Croix Genetic Fingerprint Project Update

Lori Marion

The project directors have started contacting members who have sheep selected for testing! Selected members from across the USA will sample ear tissue of SCHSBI-registered sheep for DNA analysis using 2 different testing systems.

We cannot use all sheep for this project, so your flock may not be selected. Many of the sheep selected are 'foundation' sheep – sheep that have sired or lambed the highest number of registered lambs. Others may be unique in some way or only barely meet the breed standard. Using both pools of St Croix sheep will yield DNA that represents the full spectrum of the breed in the mainland USA today.

This genetic analysis will tell us much about the breed and could be used in many ways in the future. Researchers are doing similar genetic analysis of Morada Nova sheep, a Brazilian hair sheep breed that also developed over many centuries from the Spanish Churra and the West African Djallonke. The study has identified genetic differences and similarities in various flocks. Researchers plan to use this data to maintain and even increase genetic diversity of this breed. In addition, researchers are in the early stages of linking specific genomes with physical traits (Nunes et al, 2022).

Stay tuned for further progress reports on this project. If you have a particular interest in assisting or participating, please contact directors Lori, Beth or Crystal.

Nunes, et al. "Fine Genetic Structure of Brazilian White Morada Nova Hair Sheep Breed from Semi-arid Region." *Small Ruminant Research*. vol. 211, 2022, 106694

"This genetic analysis will tell us much about the breed and could be used in many ways in the future."



Health Brief: Coccidiosis

Mike Metzger, Michigan State University Extension - Aug 23, 2017 - reprinted by permission

Coccidiosis is a serious problem that commonly causes death in kids and lambs. Knowing the facts about coccidiosis can help producers develop a plan for prevention and/or treatment of the disease.

Coccidiosis is not caused by a bacteria, virus or roundworm but by single cell protozoa. There are multiple coccidia species that are found in the environment. Some of these are non-infective, some moderately infective and others are highly infective. Strains of coccidia are animal species specific with some very limited crossover between sheep and goats.

Coccidia facts:

- Coccidia are always present in the herd or flock, and most adult animals carry coccidian but are immune to clinical disease.
- Immunity occurs more in sheep than in goats.
- Lambs and kids develop immunity about four weeks after exposure.
- The protozoa are present in the small intestine, and young animals are most susceptible (30-60 days of age).
- Stress can trigger severe infections that can result in death.
- Chronic infections result in "poor doing" lambs/kids and create long-term intestinal damage.



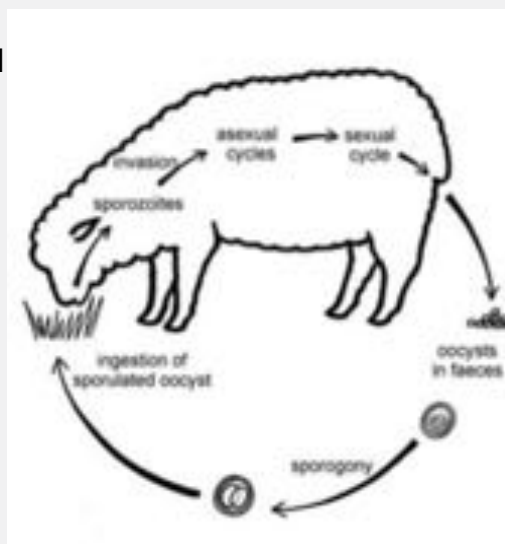


Health Brief: Coccidiosis (continued)

(Continued)

The life cycle of coccidia is quite complicated and has many stages of development. The cycle is 21 days in length and proliferates inside the epithelial cells of small intestine, which causes damage to the cells of the small intestine. Oocytes (eggs) from adult protozoa are released via feces into environment. These oocytes go through a process called sporulation (hatching), which is enhanced by warm, moist conditions.

Early development during the first 16 days following ingestion initiates damage without clinical symptoms. Clinical symptoms, diarrhea with or without blood, occur after day 18. Other symptoms can include stomach pain, decreased appetite, dehydration, rectal straining (can lead to prolapse) and chronic poor doers as a result of small intestine damage.



Animals are infective 14 to 17 days after ingestion. Animals begin to excrete eggs after day 22. The implications of this life cycle are that there is a gap between symptoms (diarrhea) and egg excretion so fecal egg counts are not always a good indicator of infection, as shedding of eggs only occurs at the end of the infection period after the damage has been done. Michigan State University Extension recommends post mortems as the best way to confirm coccidiosis.

In conclusion, coccidiosis is preventable in sheep and goat herds. Knowing the facts of how it is transmitted, and the lifecycle will help producers maintain their herds health.



Breed Soon to Try Fall Lambing

Crystal Criswell

While most St. Croix breeders plan to have lambs born in the spring, there are some who chose to lamb in the fall, even if only doing so with part of their flock. Autumn lambing offers its own set of benefits as well as challenges.

Benefits

Fall lambs often face little or no coccidia or parasite pressure. Ewes that are provided ample forage generally bounce back faster from fall lambing because they don't have to deal with the summer heat. Finally, fall lambs are ready to market during peak pricing season in the spring and summer.

Challenges

When lambing in the fall, ample forage and for most of us, hay, must be provided through the winter months. This generally means added costs. Fall lambs often don't grow as fast as spring lambs because grass is less available. Finally, not all ewes will breed during the summer months, as this is out of season.

Planning

If you want to try fall lambing, try breeding your ewes starting June 9 for lambs beginning November 1. Stock up on extra hay or ensure you have adequate stockpiled forage. Be prepared to re-expose any ewes in December so that those who were not successfully bred will give you May lambs.





Welcome, New Members!

Elizabeth Hernandez
Trillium Family Farm-WV

Morgan Burk
Triple Pine Farm-KY

Billy Beasley
Dairy House Farm-LA

Merritt Oliver
Smith Rock View-OR

Mason Nettles
B's Farm-SC

Sharon & Robert Adelman-TX

Kerri & Jeff Jackson
Hilltop Pastures-MI

Rachel McQuigg-NC

William & Elise Hittinger
Rockin' Chair Ranch-KY

Misty & Lee Lewis
Legacy Farms-AR

Kevin & Jennifer Jones
Jones Heritage Farm-OH

Christopher Prejean
Caddo Springs Farm-TX

Scott and Jacque Cialone
Pack Mountain Acres-OK

Joe Harkness-TX

Kelly Sanford
Creature Comforts Farm-OH





Upcoming Events

- **6/11/22** - [Measuring Lamb Performance Workshop](#) - Melwood Farm - Crown City, OH
- **6/11/22** - [Sustainable Management of Internal Parasites in Sheep and Goats in the Upper Midwest and Northeast Workshop](#) - Lansing, MI
- **8/10/22** - News & Views article submission deadline for 9/1/22 issue (contact Crystal)
- **9/30-10/2/22** - Hair Sheep Sale and SCHSBI Annual Meeting - Salem, IN

Membership Report

All figures from Jan 1-March 31, 2022

Renewed memberships: 29
New memberships: 15
New sheep registrations: 240
Sheep transfers: 119

Directors

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