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HoofPrint: The Small Ruminant Magazine is a periodical to promote better animal health, husbandry, and knowledge among sheep and goat producers. *Hoof*Print is the joint effort of members of the sheep and goat industries and serves as a united voice for all small ruminant producers.

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Find the hidden goat head inside the magazine and you could win a **KGPA** Gift Set.

To win you must be the first to email a screenshot of your finds to kyates@kysheepandgoat.org





KGPA Field Day 2021

April 13, 20, & 27 • 8:00 - 9:15 pm EST

April 13th: Fencing Basics Jeremy McGill, Gallagher

April 20th: Using Dewormers Wisely Susan Schoenian, University of Maryland

April 27th: Pasture Establishment Dr. Chris Teutsch, University of Kentucky



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Letter from the President

Dear Goat Producers.

Thope this issue of HoofPrint finds everyone well **L**and surviving our current times with warmer weather and signs of spring. Hopefully we all had a successful and easy (ha!) kidding season! The Board was finally able to meet face to face to discuss and plan out 2021. We set goals for the year: keep producers in business, more marketing opportunities, and educational opportunities. Along with the KSGDO office, we are forming a marketing committee to serve all producers and their products. Kentucky producers are producing multiple goat products, we just need to find ways to get these products easily into the hands of consumers. This committee will work towards finding and implementing ways for your products to reach the mainstream.

Education has always been a main goal to help all producers feel comfortable and knowledgeable about their livestock. Our first educational event of the year is our Field Day Webinar. Since we are still under restrictions, our annual field day will be a virtual three night event this year. Starting Tuesday April 13 with Fencing Basics with Jeremy McGill of Gallagher, April 20 is Using Dewormers Wisely by Susan Schoenian from the University of Maryland, and to round out night three on April 27 is Pasture Establishment with Dr. Chris Teutsch from the University of Kentucky. All webinars will be from 8-9:15pm EST with a live question and answer period with each speaker. Registration is FREE and the link can be found on the KSGDO website.

As an organization, we are planning on being present and more visible at livestock markets and other events to reach producers. Please let us know any ideas you may have or ways we can help you!

Angie Downs KGPA President

CALENDAR OF EVENTS graded sale Bowling Green Jessamine County Goat Producers, 6:30pm, Ag Learning Center Jessamine Co. Fairgrounds 12 graded sale Richmond Start Ramadan 12 13 **KGPA Field Day Night 1: Fencing Basics** 17 graded sale Springfield 20 graded sale West KY 20 Barren County Sheep and Goat, 6:30pm, **Barren County Extension Office** 20 KGPA Field Day Night 2: Using Dewormers Wisely graded sale Bowling Green 22 graded sale Richmond 26 27 graded sale Paris KGPA Field Day Night 3: Pasture Renovation MAY 10 graded sale Richmond **End of Ramadan** 11 12 start of Eid al-Fitr 13 end of Eid al-Fitr 13 graded sale Bowling Green 13 Jessamine County Goat Producers, 6:30pm, Ag Learning Center Jessamine County Fairgrounds graded sale Springfield 15-16 Kentucky Sheep and Fiber Festival, Masterson Station Park Lexington, KY 18 graded sale West KY Barren County Sheep and Goat, 6:30pm, 18 **Barren County Extension Office** graded sale Richmond 24 25 graded sale Paris 27 graded sale Bowling Green JUNE graded sale Bowling Green 10 10 Jessamine County Goat Producers, 6:30pm, Ag Learning Center Jessamine County Fairgrounds 14 graded sale Richmond 15 graded sale West KY 15

Barren County Sheep and Goat, 6:30pm, **Barren County Extension Office** 19 graded sale Springfield 22 graded sale Paris

24 graded sale Bowling Green graded sale Richmond 28

All dates are subject to change due to Covid-19.



TENNESSEE SHEEP PRODUCERS ASSOCIATION

Letter from the President

Dear Tennessee Producers,

reetings from Alaska, I mean Hawaii, no, I Umean Tennessee! What a couple of weeks we have had with the weather. Ten degrees and 1"-3" of ice everywhere to 4-5 days later at 65-70 degrees! Of course, just like clockwork, my ewes waited until the ice came to start lambing. I am sure there is a gene somewhere within sheep that we need to find and eliminate the lambing at the first sign of bad weather!

I hope everyone made it through all the extra hard work of dealing with ice and in a lot of cases, no power for couple days. It sure makes you realize you may not be as prepared as you should be. Hopefully, everyone is already done lambing, just fixing to start lambing or somewhere in between. It is that time of year when we are all busy. The great news if you had lambs in the fall, they are bringing some exceptional prices over the last 30-45 days! If you have not considered fall lambing, for sure this past season will have a lot of people considering it or moving some of the flock that way to try it out. One thing I keep telling people

when they bring up the current pricing is do not build your sheep operation model based on these great prices. Still look for feed cost to increase as well as other expenditures so pay close attention and do not get caught with fool's gold.

The Board has decided to cancel the annual sheep shearing school at this time. It may be possible to reschedule later this year but due to the COVID-19 restrictions at most public venues it makes it impossible to plan for at this time. Visit our website often for updates and changes as the come about.

This winter we were awarded some grant money to apply towards the purchase of a new wool baler! Great news, so now we must figure out how to secure sponsorship or funding for the balance. Hopefully, we can get this done and get back to doing a wool pool for producers in Tennessee. It has been a huge deal in our state for many years and some are feeling the impact of not being able to sell in a pool. If anyone wants to donate or sponsor the project, reach out to myself or other board members and we would greatly appreciate it.

Additional unknowns we are still dealing with

Membership Application		
TENNESSEE	-	State: Zip: E-Mail:
sheep producers association www.tennesseesheep.org ANNUAL DUES: Adult: \$30.00 Junion		Please enclose a check for amount made out to TSPA and mail to: Tennessee Sheep Producer's Association
If you are interested in a committee please sele	ect below:	4233 Poplar Hill Road, Watertown, TN 37184 JOIN ONLINE TODAY!
Jr. Expo Sale Production Education Member Publicity Annual M	-	Pay dues and join online at www.tennesseesheep.org/joinonline.htm

this spring are some spring and summer shows, sales and even some county fairs later. If you are unsure about the events you are interested in, please contact them for the most up to date info as it changes weekly. The events page in this issue will have some that we know of already, but by the time you get the magazine, they may have changed already. Things are starting to open a little more and hopefully not too far away from having some fellowship with fellow breeders.

If you have been approved for Tennessee Ag Enhancement cost sharing this year be sure to stay focused on the following deadlines.

TENNESSEE AG ENHANCEMENT COST SHARE DEADLINES									
Reimbursement Request - Livestock Equipment, Hay Equipment	April 1, 2021								
Request to Decline Funding - Herd Health, Genetics, Row Crop Solutions, Livestock Solutions, Working Facility Structures, Poultry Grower, Producer Diversification	July 1, 2021								
Reimbursement Request - Herd Health, Genetics, Row Crop Solutions, Livestock Solutions, Working Facility Structures, Poultry Grower, Producer Diversification	August 1, 2021								



sheep producers association www.tennesseesheep.org

We are so fortunate to have TAEP program in place for our producers. I catch flak from producers all over the country when I brag about my new equipment every year. Take advantage and max out if possible. This is a great program to increase your management tools, from hay barns, working systems, breeding stock, hay equipment, etc. The application for next round will be Oct 1, 2021, so if you missed out this year or are new and have 50 sheep/goats you will be able to sign up then.

Hopefully, we will be doing some updates to our website and Facebook page for information that comes up or changes so visit often.

Good luck and hope everyone can stay safe and healthy during this stressful time.

> Robert Walker President, Tennessee Sheep Producers

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PRESIDENT'S LETTER

🚺 🐧 Tell, it's finally spring, and I am ready. Overall, we had a pretty mild winter. I know I fed less hay than normal. However, a couple of weeks into February made sure we knew spring had not yet arrived.

Being the great planner that I am, those were the weeks my ewes were lambing. I spent a lot of extra time at the barn ensuring lambs were warm, water wasn't frozen, and everyone had plenty of hay.

We all have to plan our lambing around what works for our market, but sometimes I do envy those that can lamb as the grass greens up.

Speaking of "greening up", I hope you turned in your information for the CFAP program. Thanks to lobbying by American Sheep Industry (ASI), sheep producers were included in this program to offset disruptions caused by COVID-19. Ky producers received over \$2 million dollars.

Your KSWPA membership includes membership to ASI, thus giving Ky producers a say on national issues pertaining to the US sheep industry.

If you missed out, you need to read all the information put out by KSGDO. Kelley and Sharon do a great job keeping us informed, so take advantage of it.

Looking for new ways to make your sheep profitable? Consider direct marketing. Check out the latest information on our website. Click on the menu icon and select "Marketing Resources". Under "Direct Marketing" you will find information on topics like fiber and meat processing, economics and pricing, and the ins and outs of marketing.

Lamb prices remained better than I was expecting over

the past year. The threat of empty shelves at the grocery has prompted consumers to think about where their food comes from, and producers to think about diversifying their income.

I think this bodes well for the sheep industry. There are farmers adding sheep to their cattle operation to diversify their income, and smaller land owners looking at sheep with an eye towards becoming more self-sufficient. I can't think of an animal better suited to fill the role for both.

This is a busy time with all the new lambs to care for, but please take time to think about how KSWPA can help you. What would you like to see from your State organization? You're welcome to contact me with any idea or suggestion about how KSWPA can help.

If you are fairly new to sheep, contact KSWPA about getting paired with a mentor.

If you know of veterans looking to start raising small ruminants, there are now programs to help.

By joining KSWPA you are helping to ensure our voice as shepherds is heard at the State and Federal level. So, let your organization help you be heard.

Now I have a challenge for you. Talk to people about KSWPA and encourage them to join. I have a few nice KSWPA window decals, so send me the name of any new member you signed up and I'll send you one, while supplies last.

Sincerely, Richard Popham, KSWPA President



JOIN or RENEW TODAY! Visit www.kysheepandgoat.org

KSWPA Membership Benefits

- Quarterly issues of HoofPrint Magazine plus the newly designed 2021 Sheep and Goat Management Calendar
- A unified voice for the sheep industry and representation on important state and national committees
- Assistance with new marketing opportunities such as The Kentucky Sheep and Fiber Festival and HoofTrader.com
- Receive a membership to the American Sheep Industry, our national lobbying, marketing and promotional support system

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KY SHEEP & WOOL PRODUCERS ASSOCIATION **•**



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CALENDAR OF EVENTS

APRIL

- 8 graded sale Bowling Green
- 12 graded sale Richmond
- **Start Ramadan** 12
- 17 graded sale Springfield
- 20 graded sale West KY
- 22 graded sale Bowling Green
- 26 graded sale Richmond
- 27 graded sale Paris

MAY

- 10 graded sale Richmond
- 11 **End of Ramadan**
- 12 start of Eid al-Fitr
- end of Eid al-Fitr 13
- graded sale Bowling Green 13
- graded sale Springfield 15
- 15-16 Kentucky Sheep and Fiber Festival, Masterson Station Park Lexington, KY
- 18 graded sale West KY
- graded sale Richmond 24
- 25 graded sale Paris
- 27 graded sale Bowling Green

JUNE •

- 10 graded sale Bowling Green
- graded sale Richmond 14
- graded sale West KY 15
- 19 graded sale Springfield
- 22 graded sale Paris
- 24 graded sale Bowling Green
- 28 graded sale Richmond





An Introduction to Solar Grazing

By Judy St. Leger, owner of Dutch Barn Farm and Board Member of the American Solar Grazing Association (ASGA) Reprinted from The Shepherd

Reasons for Considering Solar Grazing

The landscape of agriculture is ever changing. Farmers need to be prepared to change too - no matter how hard that can be. One important change in the world of sheep is the growth of solar grazing. This change is a real opportunity for shepherds and for farmers new to sheep as well. Solar grazing increases profit per sheep and total profits.

Solar arrays are typically based on land with vegetation to control erosion and the introduction of invasive shrubs and trees. Keeping that vegetation under control is important. If it shades the solar panels, the panels produce less energy. To prevent

this, the vegetation needs to be kept low to the ground. This is where the sheep come in. By using sheep instead of mechanized management of vegetation like mowing and weed eating, solar companies can increase their green footprint, improve site management - especially when the terrain is rough or wet, and sometimes reduce costs for operations and management. So, there is a value to the grazing and tromping done by sheep on solar farms. Some of this value gets into shepherds' pockets through grazing contracts.

Our 100-acre farm has a grazing capacity of about 100 ewes and their lambs, when you take into consideration the pasture size and quality as well as the fields we use for making hay. This capacity is based on a rotational grazing plan. With the addition of solar grazing contracts, we can expect additional grazing land and thus increase the farm capacity for sheep. For every 20-acre solar site we graze from May – October, we have an additional 10-30 ewe capacity for our main flock. We need to be sure that we have barn space for these extra sheep, and that we make more hay. If we do, we can carry more sheep on the same sized farm and still have finished lambs on the schedule we established before solar grazing.

Solar grazing diversifies your farm income stream. We still see most of the income from our flock coming from sales of lamb for meat or purebred animals for breeding and showing. The added income from grazing increases total revenue and provides a buffer against reductions on lamb prices. I often speak to my neighbors going out of dairying due to lower milk prices. If they could shift from cows to sheep, they might be able to stay in farming - just in a new enterprise. They already have barns and pasture that are becoming empty once the sell the dairy herd. The thought of sheep is tough for many of these farmers, but I see opportunities to save family farms through the growth of solar grazing.

What do you need to become a solar grazer?

First and foremost, you need to be (or become) a good shepherd. The tools for solar grazing are sheep. You need a healthy flock with good ewe, lamb, and ram management. You need to consider what animals will go on solar sites and when. It's easiest to use nonlactating ewes. This means considering using open yearlings or ewes after weaning. If you are looking to have dry ewes out in May, you need to schedule lambing accordingly so the ewes can be dried off before placement in the solar array. Foot care needs to be under control. If you are not observing these animals every day, you need to be comfortable that they will remain healthy on the site. Parasite management is as important at the solar site as it is on the home farm. Efficient grazing and trampling of vegetation mean rotational grazing, often with a high stocking density. We figure a stocking rate of at least 1-5 sheep per acre per solar field. The use of internal pens made with electro netting creates smaller spaces for more intensive grazing and an effective stocking density of 3-15 sheep/acre. Just like at home, a well-considered grazing plan is important. As vegetation growth rates change through the grazing season, the sheep rotations need to change as well.

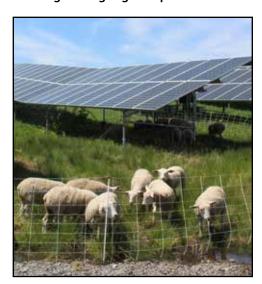
Solar arrays generally have a tall wire mesh perimeter fence that is capable of safely holding the flock. But beware! While most predators don't breach the outside fence, regular monitoring to assure that no coyotes or dogs can get into the array is still important. The internal pens require additional fencing. Movable electro net works well to create small pens within the array. We always add a sign to the entry gates so that folks can easily contact us if there are any sheep questions or concerns.

Once they are at the solar array, the shepherd needs to assure that all of the sheep's needs are met. This includes water and salt/minerals. Most solar sites do not have on-sight water. Getting water to the flock requires hauling water or finding a nearby good Samaritan that will allow you to fill up buckets or tanks near the array to water the sheep. One nice side-effect of the abundant shade under the solar panels is a reduction in water consumption by more than 50%. This means that providing daily water may be easier than on the home farm.

Just having sheep isn't enough. Before considering solar grazing, do you have the ability to move those sheep around? This likely means having a trailer and often some



Grazing site signage for public information and protection of the site and sheep.



Moveable electro net pen keeps the flock safe while panels provide shade.

sort of handling system or dog to make getting animals onto the array and then back into your trailer efficient and safe. Most solar sites weren't designed with sheep in mind. You may need to be able to back up and turn that trailer to get the sheep where you need them. You may also need to be moving more than just sheep. If there is vegetation that the sheep don't effectively control, you may need to do additional mowing or trimming. Consider how you would get this done - and get the equipment to the site.

You need to be able to get to the solar site on a regular basis. This travel costs you in terms of professional time, vehicle wear and tear, and fuel. When considering bids for grazing contracts, it is important to estimate the cost for your time travelling back and forth to the array as well as the time for animal management and movements. We estimate a minimum site visitation of 3



Watering the solar grazing sheep. Photo courtesy of Lexi Hain.

times/week. We include an estimate for fuel based on our miles per gallon and include the wear and tear at an estimate of \$0.37cents/ mile. These figures are important in assuring that the grazing contract covers our costs and provides a profit. It also keeps us from bidding on contracts too far from home.

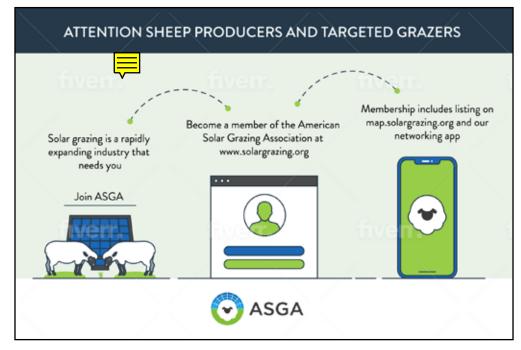
Solar grazing is more than just grazing. Shepherds need to be comfortable with contracts, bidding, and able to present a professional persona. You are being paid for your professional management as well as the vegetation management the sheep are doing. The shepherd is the "eyes on the ground" at the array. Contacting and communicating with energy companies may mean presenting your farm in a manner that's new as a service provider. But contracts and billing aren't hard to learn, and they are important to successful solar grazing. Remember that having sheep away from the farm means that they have a new set of eyes on them. It's important for the future of solar grazing that everyone working in this field is seen to provide good animal care while the sheep are doing their job. They serve as agricultural ambassadors.

Insurance can present another new element for many farmers. The standard policy you have on the farm isn't likely to cover solar grazing. Many solar companies request or require an umbrella liability policy. Umbrella insurance is a type of liability insurance that covers claims in excess of regular farm coverage. It covers you if the sheep should injure someone on the solar array, and if they should do damage to the infrastructure by rubbing, jumping, or chewing. This insurance doesn't cover damage to the sheep.

Where to learn More and how to get into solar grazing

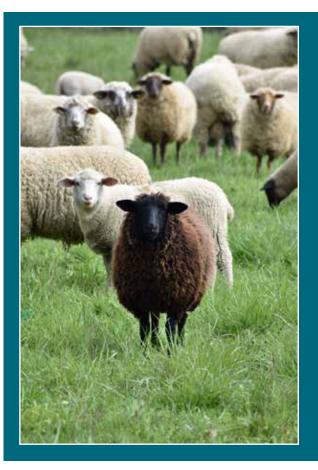
As more farmland is used for solar arrays, there are more opportunities for solar grazing. We've just touched in the tip of the iceberg here. To learn more about solar grazing and get questions answered about how to add a vegetation management program to your farm enterprise, consider joining the American Solar Grazing Association (ASGA). ASGA is made up of solar professionals and farmers interested in solar grazing. ASGA

www.solargrazing.org



members are developing best practices that support shepherds and solar developers to both effectively manage solar installations and create new agribusiness profits.

Judy St. Leger, owner of Dutch Barn Farm and Board Member of the American Solar Grazing Association (ASGA)



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Fiber and Meat Processing



Product Marketing



Economics

PRODUCTION BASICS FOR DIRECT MARKETING GOATS

by Kelley Yates

amb and goat meat sold in the United States is categorized as either in the Traditional or Non-traditional market sectors. Goat meat is mostly sold as Non-traditional as this encompasses the ethnic market, as well as freezer meats, Farmers' Markets and roadside stands. Therefore, goat meat is sold to meet ethnic holidays like Easter, Ramadan, and Cinco De Mayo, or is sold directly to consumers by the producer.

Most of all the goats in Kentucky are sold for the ethnic market. The ethnic market is generally looking for lighter weight kids in the 40-60lb/head weight range. The kids do not have to be disbudded or castrated. Reaching customers in the ethnic market is fairly easy as our state's graded sales reach this market quickly and efficiently. To find the dates of the next sales, review the "Upcoming Dates" on the KGPA or KSWPA pages of this issue or look in the 2021 KY Sheep and Goat Management Calendar.

Production of meat goats for markets like freezer meat, Farmers' Markets, and/ or roadside stands, will look very different than the production of kids for the ethnic market.

First, if you want to sell freezer meat either from your farm or from a Farmer's Market, you are going to want to slaughter the goats at their mature size. What does mature size mean? Mature size is the weight in which the animal has produced the highest amount of muscle and the least amount of fat. Why is this important? When you take your animals to the processing plant, you are going to first pay a flat slaughter fee. The slaughter fee is determined by the processing facility, thus I have seen a range of prices from \$50-\$150. Then, you will pay for packaging and labelling on top of the slaughter fee. So, let's look at Figure 1 to see the impact.

Clearly, processing a heavier weight animal makes the cost of slaughter per pound less expensive. So, if you are going to sell a pound of goat burger for \$10/lb, your profit margin would automatically have to take into account the \$5.56/lb or \$2.42/lb cost of slaughter. For those of you who are selling direct to consumer, a helpful calculator to determine the price for

Figure 1: Determining the Cost of Slaughter/Pound of Meat

Pound of live animal	Dressing Percentage				
60lbs	45%	27lbs	\$150	\$5.56/lb	
120lb	52%	62lbs	\$150	\$2.42/lb	

Figure 2: Nutrient Requirements for Weanling Kids at a Moderate Growth Rate WEANLING - Moderate Growth, .4-.6 lbs. per day

Pounds of daily dry matter needed by weight	% Protein	% TDN	Examples of diets that meet requirements			
45-65 lbs – 2.0-3.0 lbs. per day	14.5-16%	75-80%	High quality grass or medium quality legume hay or pasture			
65-90 lbs – 3.0-3.5 lbs. per day	13.5-15%	75-80%	legume hay or pasture supplemented with a 15% to 16% protein concentrate mix.			

Figure 3: Percentage of Nutrient Available in a Variety of Feedstuffs

Feedstuff	% Dry Matter	% Protein	% TDN
Fescue pasture (not mature)	22%	12%	70%
Fescue Pasture, stockpiled (Nov. – Dec.)	49%	15%	65%
Fescue hay (not mature)	90%	11%	54%
Alfalfa hay (mid-bloom)	91%	18%	58%
Orchardgrass hay	89%	13%	65%
Shelled Corn	88%	10%	88%
Soybean Meal (44%)	89%	50%	84%
Soybean Hulls	91%	12%	80%
Distillers Grain (dried w/ solubles)	89%	30%	88%

your product can be found at https://www.kysheepandgoat.org/economics.

Secondly, to get goats to a heavier weight, you will need to feed a concentrate (grain) to meet the nutrient requirements necessary to reach a mature weight. The key to remember, high quality feeds (forage and supplement) + Balanced diet with many nutrients = Maximum Profit Potential. Figure 2 shows the nutrient requirements for a weanling goat at a moderate growth

rate of .4-.6lbs of gain per day.

Notice the chart says, "High quality grass or medium quality legume hay or pasture supplemented with a 15% to 16% protein concentrate mix." For a 65-90lb kid to gain 3-3.5lbs per day, they need 13.5-15% protein and 75-80% TDN (total digestible nutrients)

Figure 3 shows the percentage of dry matter, protein and TDN in a variety of feedstuffs. Notice that fescue pasture (not

mature) only has 12% protein and 70% TDN. Based on the nutrient requirements for the 65-90lb kid, the fescue pasture does not provide the protein or TDN necessary to get a gain of 3-3.5lb/day. In fact, fescue pasture doesn't even provide enough nutrients for 2-3lbs/day gains in a 45-65lb kid. Even kids on alfalfa hay (mid-bloom) will not be able to get enough TDN to meet their requirements.

Therefore, you need to provide concentrate in the form of grains to provide a balanced ration that meets the nutrient requirements. "Whether grazed or barn fed, goats should be supplemented with a concentrate feed when either the forage that they are grazing or the hay that they are fed do not contain the necessary nutrients to cover their nutritional requirements," Nutritional Feeding of Meat Goats, NC State Extension, https://content.ces.ncsu. edu/nutritional-feeding-management-ofmeat-goats.

The University of Maryland Small Ruminant Program conducted the "Pen vs. Pasture Research Study" and found that 3 out of 4 years, the pen fed kids had an advantage over the pasture fed kids as far

as higher carcass weights, higher dressing percentages, higher ribeye area, higher leg circumferences, and lower to no parasite problems. You can view the summaries of these studies at https://www.sheepandgoat. com/articles.

Does this mean you can't finish your kids on pasture alone? Maybe not. A study called "Finishing Lambs and Goat Kids on Pasture," shows that through highly intensive grazing operations, a finished weight can be obtained in under 1 year of age. However, the kids must graze a large variety of forages and be managed very closely to reach a mature weight. You can download a copy of the study at https:// naldc.nal.usda.gov/download/42329/PDF

The main point is that the kids need a balanced ration. Rations that are too high in energy (high quality forages) will cause excess energy to be stored as fat around the internal organs. Rations that are too high in protein (grain supplementation) will expel the excess protein in the urine. Rations too low in protein will result in lower digestion rates and lower feed intake.

Lastly, whether you provide only pasture or combine with concentrates, you still need to provide fresh, clean water and mineral free choice. Also, if you are providing a concentrate, make sure the calcium: phosphorus ratio is 2:1 to 4:1 to prevent urinary calculi.

In summary, the production method used to create kids for direct to consumer markets will depend on your customer. If you are targeting an ethnic market, you will produce lighter weight kids in the 40-60lb weight range. If you are targeting direct to consumer sales like freezer meat, Farmers' Markets, or roadside stands, you will want to produce a heavier weight kid, which will most likely require supplementation of a concentrate.

Kelley Yates serves as the Executive Director for the Kentucky Sheep and Goat Development Office. Her and her family have raised commercial cattle and sheep in Clark County, KY for more than 35 years. She is a graduate of the University of Kentucky College of Agriculture with a B.S. in Agricultural Communications and an M.S. in Vocational Education.



WS 700 /EW

PRODUCTION BASICS FOR DIRECT MARKETING **LAMBS**

by Dr. Donald G. Ely, University of Kentucky

Introduction

'n preparing to write this paper, I read several publications in which producers described their experiences about direct marketing lambs. In general, they described direct marketed lambs as "finished lambs." But, what is a "finished lamb"? How do we know when a lamb is "finished?" On average across breeds, an ideal slaughter lamb may have the characteristics as those shown below:

Weight at slaughter (harvest): 100 to 120 lb Age at slaughter (harvest): Less than 6 mo

Backfat: 0.15 to 0.25 in

Loineye area: More than 2.5 sq in/50 lb

carcass weight

Boneless retail cuts: 45 to 47% of carcass Does this describe a "finished lamb?" Maybe so, maybe not.

Target Slaughter Weight

Dr. David Thomas, Professor Emeritus at the University of Wisconsin, prepared Table 1 depicting the target slaughter weights that will yield carcasses with maximum lean and optimum fat. Weights of lambs in the table are based on weights of mature ewes (not rams, as would be expected) that produced the lambs to be slaughtered. Mature ewe weights in Table 1 are based on weights of 3 to 5-year-olds when they are dry and open.

Across the top of Table 1 are the mature weights of ewes of the sire breed. In the left column are the mature weights of ewes of the ewe breed that produced the lambs to be slaughtered. Assume that mature, dry, and open Polypay ewes that weigh 160 lb are mated to Hampshire rams (where mature Hampshire ewes weigh 210 lb). If you read down the left column to 160 and across to the column of 210, you find the ideal slaughter weight of Polypay x Hampshire lambs is 120 lb. (Table 2). The formula used to calculate this weight is shown in Figure 1.

Table 1 - Target Slaughter Weights of Lambs

Ewe Breed Mature		Sire	Bree	d Ma	ture !	Weigh	nt, Ib	Weig	ht of	Ewes	of th	e Bre	ed)	
Weight, Ib	250	240	230	220	210	200	190	180	170	160	150	140	130	120
250	163	159	156	153	150	146	143	140	1137	113	130	127	124	120
240	159	156	153	150	146	143	140	137	133	130	127	124	120	117
230	156	153	150	146	143	140	137	133	130	127	124	120	117	114
220	153	150	146	663	140	137	133	130	127	124	120	117	114	111
210	150	146	953	140	137	153	130	127	124	120	117	114	111	107
200	146	143	140	137	133	130	127	124	120	117	114	111	107	104
190	143	140	137	133	130	127	124	120	1174	10	191	1074	100	11/2
180	140	137	9833	130	127	124	120	117	114	111	107	104	101	98
170	137	133	130	127	124	120	117	114	111	107	104	101	98	94
160	133	130	127	124	120	117	114	111	107	104	101	98	94	91
150	130	127	124	120	117	114	111	107	104	101	98	94	91	88
140	3127	124	120	117	114	111	107	104	101	98	94	91	88	85
130	124	120	117	114	111	107	104	101	98	94	91	88	85	81
120	120	117	114	111	107	104	101	98	94	91	88	85	81	78

Table 2 – Target Slaughter Weights of Lambs

Ewe Breed Mature		Sire	Bree	d Ma	ture !	Weigh	it, lb	Weig	ht of	Ewes	of th	e Bre	ed)	
Weight, Ib	250	240	230	220	210	200	190	180	170	160	150	140	130	120
250	163	159	156	153	150	146	143	140	SEY.	183	130	127	124	120
240	159	156	153	150	146	143	140	137	133	130	127	124	120	117
230	156	153	150	146	143	140	137	133	130	127	124	120	117	114
220	153	150	146	143	140	137	133	130	127	124	120	117	114	111
210	150	145	145	140	137	133	130	127	124	120	117	114	111	107
200	146	143	140	137	133	130	127	124	120	117	114	111	107	104
190	143	140	137	133	130	127	124	120	1174	113		177	- 11	0.0
180	140	137	1133	130	127	124	120	117	114	111	107	104	101	98
170	137	166	130	127	124	120	117	114	111	107	104	101	98	94
160	133	130	127	124	120	117	114	111	107	104	101	98	94	91
150	130	127	124	120	117	114	111	107	104	101	98	94	91	88
140	127	124	120	117	114	111	107	104	101	98	94	91	88	85
130	124	120	117	114	111	107	104	101	98	94	91	88	85	81
120	120	117	114	111	107	104	101	98	94	91	88	85	81	78

Figure 1 – Polypay Ewes Bred to Hampshire Rams





Target Slaughter Weight =
$$\frac{160 \text{ lb} + 210 \text{ lb}}{2} \times 0.65$$

= 120 lb

Another example might be when White Dorper ewes are mated to Hampshire rams. Read down the left column of Table 3 to 150 lb (average weight of White Dorper ewes) and across to the number under the 210-lb column (average weight of Hampshire ewes). The answer is 117 lb.

Table 3 - Target Slaughter Weights of Lambs

Ewe Breed Mature		Sire	Bree	d Ma	ture '	Weigh	nt, Ib	Weig	ht of	Ewes	of th	e Bre	ed)	
Weight, Ib	250	240	230	220	210	200	190	180	170	160	150	140	130	120
250	163	159	156	153	150	146	143	140	137	133	130	127	1224	120
240	159	156	153	150	146	143	140	137	133	130	127	124	120	117
230	156	153	150	146	143	140	137	133	130	127	124	120	117	114
220	153	150	146	143	140	137	133	130	127	124	120	117	114	111
210	150	146	143	140	137	133	130	127	124	120	117	114	111	107
200	146	143	140	137	133	130	127	124	120	117	114	111	107	104
190	143	140	137	133	130	127	124	120	1176	16	-171	1074	0.100	14
180	140	137	133	130	127	124	120	117	114	111	107	104	101	98
170	137	133	130	127	124	120	117	114	111	107	104	101	98	94
160	133	130	127	124	120	117	114	111	107	104	101	98	94	91
150	130	127	124	120	117	114	111	107	104	101	98	94	91	88
140	127	124	120	117	114	111	107	104	101	98	94	91	88	85
130	124	120	117	114	111	107	104	101	98	94	91	88	85	81
120	120	117	114	111	107	104	101	98	94	91	88	85	81	78

The calculation that was made to arrive at this number is shown in Figure 2. When 210-lb Hampshire ewes are mated to Hampshire rams (again, 210-lb ewes) in Figure 3, the ideal slaughter weight of these lambs is 137 lb. Other examples might be ½ Katahdin (130-lb ewes) x ½ White Dorper (160-lb ewes) lambs that weigh 94 lb (Table 4) whereas target slaughter weights of Katahdin lambs are 85 lb (130lb ewes x 130-lb ewes) as shown in Figure 4.

Figure 2 – White Dorper Ewes Bred to Hampshire Rams





Target Slaughter Weight =
$$\frac{150 \text{ lb} + 210 \text{ lb}}{2} \times 0.65$$
$$= 117 \text{ lb}$$

Figure 3



Table 4 - Target Slaughter Weights of Lambs

Ewe Breed Mature		Sire	Bree	d Ma	ture !	Weigh	nt, Ib	(Weig	ht of	Ewes	of th	e Bre	ed)	
Weight, Ib	250	240	230	220	210	200	190	180	170	160	150	140	130	120
250	163	159	156	153	150	146	143	140	5137	133	130	127	124	120
240	159	156	153	150	146	143	140	137	133	130	127	124	120	117
230	156	153	150	146	143	140	137	133	130	127	124	120	117	114
220	153	150	146	143	140	137	133	130	127	124	120	117	114	111
210	150	145	145	140	137	133	130	127	124	120	117	114	111	107
200	146	143	140	137	133	130	127	124	120	117	114	111	107	104
190	143	140	137	133	130	127	124	120	117	114	-	107		(1)
180	140	1E7	DEE	130	127	124	120	117	114	111	107	104	101	98
170	137	1115	130	127	124	120	117	114	111	107	104	101	98	94
160	916353	130	1/27	124	120	117	114	111	107	104	101	98	94	91
150	130	127	124	120	117	114	111	107	104	101	98	94	91	88
140	127	124	120	117	114	111	107	104	101	98	94	91	88	85
130	124	120	117	114	111	107	104	101	98	94	91	88	85	81
120	120	117	114	111	107	104	101	98	94	91	88	85	81	78

Figure 4



Now, are these the same kind of lambs as "finished lambs" that are direct marketed? Maybe so, maybe not. In general, direct marketed lambs usually weigh more, tend to be fatter, and may be older than ideal slaughter lambs. So, how can 100 to 120-lb lambs, and even up to 150-lb, meet the ideal slaughter lamb requirements when they are direct marketed?

Feeding Lambs for Direct Marketing

Regardless of the weight at which lambs are sold, always creep feed whether raised in confinement or on pasture. The younger the lamb, the more efficient it is in converting dry feed into weight gain. An excellent creep mixture is 90% ground shelled corn 10% soybean meal for the first 28 days after birth. Change the creep diet at 28 days to 90% cracked corn 10% soybean meal pellets. Feed this diet until lambs are weaned at 60 to 90 days of age. Send the ewes to low quality pasture after lambs are weaned. Gradually adjust the lambs to a growing/finishing diet over a two-week period. An example of a post-weaning grain mix is shown in Table 5.

Table 5

A Complete Grain Mix

Ingredient	<u>Percent</u>
Cracked yellow corn*	80.00
Soybean meal, 48% CP	12.67
Distillers dried grains	4.25
Ground limestone	0.88
White salt	0.63
Dicalcium phosphate	0.63
Ammonium chloride	0.50
Sheep premix	0.30
Vitamin E, 20,000 IU/Ib	0.10
Vitamin A, 10,000 IU/lb	0.05
Vitamin D ₃ , 15,000 IU/lb	0.05

^{*} Run through hammer mill without screen

All of the ingredients, except corn, are processed into a high protein pellet (40% protein) allowing the complete mix to be 80% cracked corn 20% protein pellet. The protein content of the final mix is 15%. This mix can be fed to all classes of sheep on the farm (even creep-fed lambs), just in different amounts to meet their nutrient requirements. If lambs are raised in confinement, provide ¼ to ½ lb of high-quality grass hay per head per day. If they are on pasture after weaning, the diet in Table 5 can be self-fed or hand-fed once daily at 2% of the average body weight of the group. Hand-fed lambs should gain 7 to 12 lb during each 2-week period. If so, daily intakes can be increased accordingly (2% of new average body weight). Always have available a loose, complete mineral mix and clean, fresh water at 50 to 55 degrees every day of the year whether the sheep are raised in confinement or on pasture.

Generating Direct Marketed Lambs

The following is a January/February lambing system of generating lambs to be marketed directly. Two other systems that can work are April and September/October lambings. The January/February system is a base from which the other systems can be developed. In this base system, allow a ram the opportunity to mate with a group of ewes for a 6-week period in August/September. Vaccinate pregnant ewes with CD/T (enterotoxemia types C and D as well as tetanus) before lambing. Lamb in January/February. Newborns may need a Bo-Se injection if there is a possible selenium deficiency in the soil or feedstuffs. Castrate ram lambs. Wean in March/April. Turn ewes to pasture. Keep lambs in confinement. Vaccinate with CD/T at 5, 8, and 11 weeks of age. Continue to self-feed lambs that are to be marketed first. Limit (hand) feed the same diet to those to be marketed later if they are to be marketed at the same weight as the first group. If all lambs are to be marketed at the same time and weight, instead of small groups, they can be self-fed or limit-fed. We should remember the best way to regulate lamb gain is by regulating the daily intake of high-quality diets. But, don't let lambs become too fat or too thin.

When comparing confinement with pasture production of direct marketed lambs, the following should be considered: Confinement produces faster gains than pasture, which, in turn, promotes earlier marketing of younger lambs. It is easier to regulate gains and market weights in confinement. It is also easier to produce heavier lambs in confinement, but carcasses may be fatter. Higher quality meat may be produced from confinement raised lambs because they are marketed at younger ages. Cost of gain may be higher when lambs are raised in confinement. On the other hand, cost of gain may not be higher in confinement because there is no encounter with stomach worms.

Conclusion

Plan to market the highest quality product possible. If you want return customers, market "finished lambs" at an ideal weight at a young age so carcasses have maximum lean and optimum fat. Develop a grain-mixed diet that can be fed to all the sheep on the farm. Breed in August/September, lamb in January/February, wean in March/April and use management skills to adjust intakes of highquality diets that will produce a high-quality product.

Dr. Donald G. Ely, Professor in the Department of Animal and Food Sciences at the University of Kentucky

Farmer's Market Q & A

Get answers about selling at a Farmer's Market

> April 12, 2021 7pm EST

Presented by: Nancy Monroe, KDA Ag Program Coordinator Direct Farm Marketing Division





Register at https://www.kysheepandgoat.org/event-registration



by Sarabeth Parido

quality wool fleece starts long before shearing. Wool production is a year-**L**round process. Proper harvesting techniques are important, but it relies on good nutrition and care.

A large part of raising wool animals is knowing what to feed sheep in order to obtain good quality wool. Grazing pasture of good quality hay, supplemented with a concentrate grain mixture, along with water, vitamins, and minerals are needed by sheep. The same applies to other wool producing ruminant animals, such as angora goats, llamas and alpacas.

Feeding choices will vary from place to place. Producers who have large acreage will raise sheep differently than the small property owner. All animals require nutrients including protein, carbohydrate, fats, water, vitamins and minerals. Sheep will be getting these nutrients largely from eating plants, primarily grass pasture or hay. The growth of the wool doesn't take a large increase in nutrients but the quality of the nutrients does make a difference in the quality of the wool. Producers will save themselves time, effort and headache by controlling the contamination of fleeces with pasture care. Open pasture will keep the wool the cleanest. Feeders which keep hay and chaff off the backs of sheep should be used. Hav should not be carried or thrown over the sheep. Most belly and neck wool is discarded in the skirting process, but with more care to feeding techniques, more wool can be saved.

Pasture should be the main source of nutrition for sheep. If pasture is not available, a good quality hay can be supplemented. Hay quality is variable and very weather dependent. Adding small amounts of legume supplement cubes, soybeans, and sunflower seeds will increase the protein intake. You will harvest a better quality of wool if you pay attention

NUTRIENT REQUIREMENTS OF EWES & DOES

MAINTENANCE - Dry Does and Ewes - First 15 Weeks of Gestation

Pounds of daily dry matter needed by weight (weight of doe/ewe when dry and open)	% Protein	% TDN	Examples of diets that meet requirements:
110 lbs 2.2 lbs. per day			
130 lbs. – 2.4 lbs. per day	8-10% 55%	55%	Most medium quality grass pastures and grass hays.
155 lbs. – 2.6 lbs. per day			
175 lbs. – 3.0 lbs. per day			

GESTATION - Last 4 Weeks, 180-225% Lambing / Kidding Rate Expected

Pounds of daily dry matter needed by weight (weight of doe/ewe when dry and open)	% Protein	96 TON	Examples of diets that meet requirements
110 lbs 3.7 lbs. per day	11-12%	66%	High quality grass or medium quality legume hay or pasture supplemented with a 0.5 to 1.5 ibs of shelled corn or other concentrate (needed to meet high TDN requirements of late gestation females).
130 lbs. – 4.0 lbs. per day			
155 lbs. – 4.2 lbs. per day			
175 lbs 4.4 lbs. per day			

LACTATION - First 6-8 Weeks, Nursing Twins

Pounds of daily dry matter needed by weight	% Protein	% TON	Examples of diets that meet requirements
110 lbs 5.3 lbs. per day	15-16%	65%	High quality grass or medium quality legume hay or pasture supplemented with a 2-31bd/head/day (average) 16% to 18% protein concentrate mix or high quality legume hay supplemented with shelled corn or other concentrate.
130 lbs. = 5.7 lbs. per day			
155 lbs 6.2 lbs. per day			
175 lbs 6.6 lbs. per day			

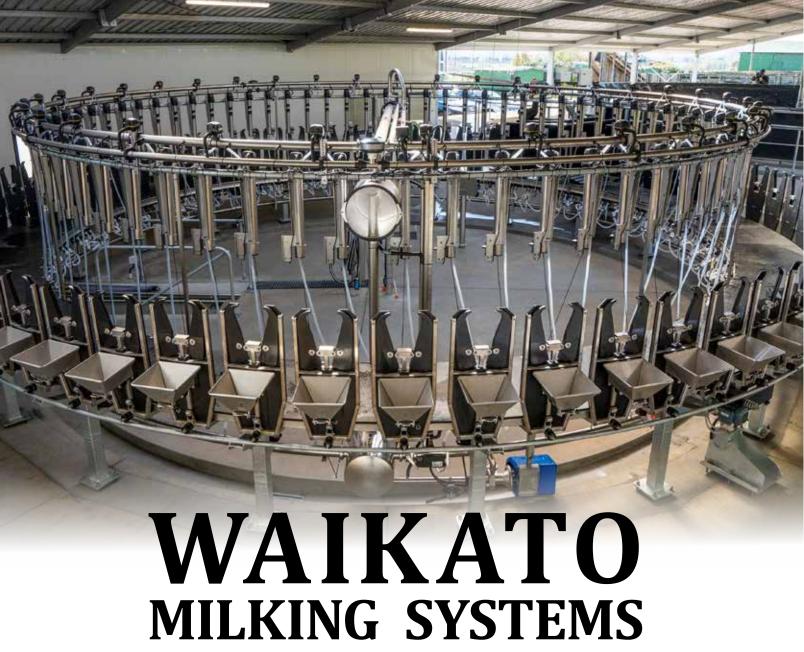
to the quality of the protein being fed to the sheep. Especially watch the protein intake of your pregnant ewes as they will need more protein as they develop their lambs, maintain their bodies and produce wool. Quality nutrition, pasture, feed and mineral will show up in the fleece. Breakage or tender spots in the fleece usually mean nutritional deficits or stress in the sheep at a specific time.

Pasture and barn management are very important to keep contaminants out of your fleeces. Pastures should be monitored for burr and thistle producing plants which will literally be a pain to remove from the fleece. It is not uncommon for sheep who have access to heavily wooded pastures to see whole tree branches imbedded into their wool which can cause distress and discomfort to your

animals. Animals with high quality wool can be protected with coats. Whenever possible, sawdust or wood shavings should be avoided as the sole type of bedding as it will stick into the wool.

A good wool harvest is a year long process and more effort from the producer during the year will make a big difference in the harvesting of your wool during shearing time. A clean, high quality fleece means more profit for your farm and a better value added commodity to offer.

Sarabeth Parido, is the Director of the Kentucky Sheep and Fiber Festival and The Kentucky Fiber Trail. She raises her own small flock of sheep in CLark County, Kentucky along with her husband and four sons.



Options for Those Moving Into Dairy Sheep Industry

by?

ommercial dairy sheep farming is still growing in the United States but a New Zealand company is developing technology to help suppliers meet the rising demand for small ruminant products.

Waikato Milking Systems is a wellknown brand among bovine farmers in the US and is now expanding into the dairy sheep and dairy goat industries.

The dairy technology company already has large-scale cow milking systems operating in North America, plus two goat rotary systems, one each in the US and Canada, all commissioned in recent years.

company's Small Ruminants Specialist Andy Geissmann said like New Zealand, the US has an emerging dairy sheep industry which is becoming an attractive proposition for farmers looking to reduce their environmental footprint but remain profitable for future generations.

In New Zealand, the company is building on its 50-plus years experience in the dairy industry to help farmers convert their bovine milking parlors to ovine systems, or to develop new "greenfield" sheep milking systems from scratch.

In 2020, it commissioned three new sheep milking plants, including its prototype Agili Sheep Rapid Exit parlor and its Ultimo Sheep Internal Rotary inline system.

Andy was confident the positive performance of the new systems in New Zealand could also be adapted to suit those looking to make a more serious move into dairy sheep milking in the US.

Internal rotary future proofs farm

The Waikato Milking Systems new Sheep Internal Rotary is capable of milking up to 960 sheep per hour. It can be easily operated with minimal labour - providing large savings on labor costs.

The prototype of this plant was a 70bail system built for Kiwi farmers Allan and Toni Browne, who are milking 1200 sheep on their property in the Waikato region of New Zealand's North Island.

The Brownes were career sheep farmers, wool and meat, but decided to diversify into dairy sheep in 2019, as well as continuing to run their 450-cow dairy.



They supply their sheep milk to Maui Sheep Milk, one of two major producers in New Zealand. The other is Spring Sheep, which was a guest speaker at the Dairy Sheep Association of North America's virtual symposium in January.

Most of the dairy sheep milk in New Zealand is produced into powder for infant formula with China the biggest customer. Other products made from dairy sheep milk include cheese for the New Zealand high-end market, flavored milks and health supplements.

The Brownes were able to access new European genetics through Maui Sheep Milk for high milk producing ewes. They decided a rotary system was needed to milk their 1200 sheep in the first season and it would give them the scope to move up to 2000 later on.

Andy said the rotary system was constructed from stainless steel which means its longevity was a key point of difference compared to other sheep rotary systems. The system is available in three platform sizes of 60, 70 and 80 bails.

Rubber mats fitted to the deck ensure the animals are comfortable at milking time.

The platform's bolt down option means there is minimal pre-concrete work needed at installation, which speeds up the process.

It's an internal platform which means the operator is standing inside the rotary and can easily observe all of the sheep, all of the time.

Cow to sheep parlour conversion

Long-time dairy cow farmers Paul and Dianne White were looking for an opportunity for their two sons to get into farming. They investigated the dairy sheep industry and

found the numbers stacked up, in terms of profitability and their environmental goals.

They purchased a cow farm which was no longer financially viable but found dairy sheep offered a viable business option.

Andy and the Waikato Milking Systems team of installers were able to convert the farm's existing 18-aside Herringbone cow parlor, to a 40-aside Rapid Exit Sheep Milking System.



That involved keeping the existing building but installing new plant equipment, technology and the new milking system, Andy said.

The new property, now called Green Park Sheep, is stocked with 850 sheep and the Rapid Exit Sheep system is milking about 500 sheep per hour. The animals are milked twice a day, each one taking about three minutes to milk out. Two people can milk the flock in



about two hours.

Andy said the Rapid Exit Milking solution has been designed as a cost-effective, simple, and robust system to provide improved milking efficiency and sheep flow.

It can be configured in bail sizes of eight, up to 128.

Two unique features included the selfindexing gate system and the rapid exit gate, to maximize throughput.

The self-indexing gate ensures only one animal can enter a stall at a time. Once the lead sheep turns to enter the first open stall, it triggers the gate of the neighbouring bail to open, allowing the next sheep to enter.

The rapid exit gate can be customised to be used in two sections, providing the operator with split-row release to maximise sheep flow.

It means the operator can stagger release, to clear the exit lanes when milking a large group of animals, or to make it more efficient if there are narrow exit lanes out of the parlor.

Andy said both the Rapid Exit and Internal Rotary parlors can be fitted with milking automation technology, to help farmers reach their productivity goals each day.

"From entry level farms to large-scale commercial sheep milk farming, we have an option to help people meet their specific goals to run a successful dairy sheep operation."

Author Bio



Do you want to take your milking performance to the next level while maximising comfort and sheep flow?

By incorporating world-renown dairy technology, our **Sheep Milking Solutions** will improve your milking efficiency and productivity. Whether you're adding a sheep milking venture to your farming operation, or running a medium-sized sheep farm, or a large scale commercial sheep operation - we'll help you grow the value of your dairy.

TALK TO US TODAY











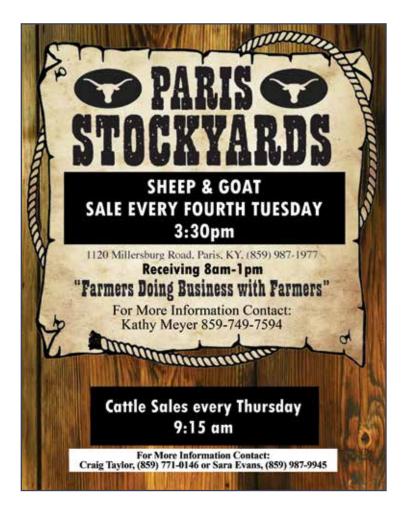
The Cooperative Extension Program at Langston University will host the 36th Annual

Goat & Hair Sheep Field Day

A series of virtual workshops starting Saturday April 24, 2021

The focus will be on *Goat and Lamb Cookery & More*. Virtual sessions will be 1) Cookery: Goat Meat and Lamb, 2) Mobile Processing Units for Small Ruminants, 3) Rent-A-Goat aka Vegetation Management Using Goats, and 4) Producer Roundtable. Featured speakers will be specialists with considerable experience in their fields.

For registration information contact Dr. Terry Gipson at (405) 466-6126 or terry.gipson@langston.edu.
Register online at http://goats.langston.edu/2021-goat-and-hair-sheep-field-day.







Kentucky Organizations Receive Grant to Support Veterans Transitioning Into **Agricultural Careers**

by Kellie Padgett,

SDA announced today awards in the Enhancing Agricultural Opportunities for Military Veterans Program (AgVets). Kentucky Center for Agriculture and Rural Development along with partners Kentucky Department of Agriculture, Kentucky Sheep and Goat Development Office, Kentucky Horticulture Council, and University of Kentucky's Community and Economic Development Initiative of Kentucky (CEDIK) are collaborating on a \$746,567 USDA grant to provide educational opportunities for veterans and transitioning service members interested in agriculture, develop a peer-to-peer network for veterans in agriculture, and construct a pathway that facilitates veterans' entrance into agriculture-related careers. Additional support partners for this grant include the Kentucky Farm Bureau Federation, Kentucky Commission on Military Affairs, and Hopkinsville Community College.

The grant funding will allow for Kentucky's veterans to receive opportunities for hands-on training, classroom workshops, and one-on-one assistance for veterans to enter or increase veterans' knowledge of the agriculture sector. It will also create a network of agricultural producers and veteran mentors in diverse agricultural areas to advise veterans entering agricultural careers. Finally, the grant will design three distinct agriculture training programs, ensuring departing service members have the information and training to enter Kentucky agriculture and agricultural

Funding for the project is provided by the USDA National Institute for Food Agriculture (NIFA) Enhancing

Agricultural Opportunities for Military Veterans Competitive Grants Program (AgVets).

For more information or to learn how you can be a part of this new program, contact Kellie Padgett, KCARD Business Development Specialist at kpadgett@ kcard.info, or at 270-883-0052.

KCARD is one of 17 organizations awarded a 2020 USDA AgVets grant to establish and enhance farming opportunities for military veterans.





n emember your first couple of years in your sheep or goat Roperation? Ever have some nerve wracking experiences and times when you just really needed to talk to someone? Or, maybe you did have a mentor available that helped make the nerve wracking moments much easier to handle with just a simple phone call or email?



KSWPA and KGPA need your help! With the increasing population of goats and sheep in our state, there are lots of people who could benefit from your knowledge. Consider becoming a mentor so that we can continue to strengthen and grow our industries.



MENTOR JOB DESCRIPTION

A KSWPA and KGPA Mentor is a person who:

- ♦ has a passion for the sheep and goat industries in the nation, and more specifically in Kentucky
- ♦ be a person that is willing to help other producers become successful in their operations
- will give time and talent to new producers to help the new producer implement management practices into his/her operation that will ultimately benefit the new producer

Oualifications:

- Mentors must be a KSWPA or KGPA member
- Mentors must have been in the sheep or goat industries for a minimum of 5 years
- ♦ Mentors can have backgrounds in meat, dairy and fiber operations
- ♦ Mentors must be willing to provide contact information to new members seeking a mentor

To become a Mentor, complete the application below and mail to KSGDO, PO Box 4709 Frankfort, KY 40604,

or go to www.kysheepandgoat.org/become-a-mentor **Mentorship Application** Name:______ Farm Name:_____ County: _____ Years in Business:____ Type of Operation (commercial, purebred, dairy, fiber, etc.): **Breeds:** ______Phone:(____)______ Email: Comments (anything else you want people to know):

HEALTH & MANAGEMENT

KEEPING AN EYE ON YOUR POSTPARTUM FEMALES

By Jessy Shanks

ambing and kidding is a special event throughout the winter and spring season for most small ruminant producers. Up until this point, a lot of time and money has been invested in selecting suitable rams and bucks, breeding your females, and ensuring that they get adequate nutrition and care until their lambing/ kidding date. We invest so much money as small ruminant producers, it makes sense to follow this process through until the very end. However, a female's productive life does not end with lambing or kidding. We hope this is merely the beginning of a long successful career. The process of giving birth is quite a big change for females, but there are a few things we can do to ensure that our ewes and does remain productive and healthy. This way they can remain in the flock/herd and raise healthy offspring for years to come.

We spend a lot of time making sure newborn lambs and kids get off to the right start once they are born. They enter the world and want just a few key things, nutrition and warmth. The ewe or doe should see to this and make it easy for the producer. She does all of the work for us, and if she doesn't, then it's time to make a note about her lack of mothering skills. Once the lamb or kid is taken care of, the female also has to take care of herself, and this is where we can ensure that she remains a productive part of the flock/herd. Shortly after birth we need to make sure she has passed her placenta. You should find this in the jug within a few hours, but if it has been longer than 24 hours or so, please consult your veterinarian for guidance on what to do next.

We all know that most goats and sheep are always ravenously hungry, so when they don't eat it raises a red flag. Your female should start eating and drinking pretty quickly after

giving birth so make sure she has access to both feed/hay and water. Most females begin eating quickly while some take a little while, but if you notice that she is not eating at all, this is cause for concern. There are several reasons why a female may not eat. Did she have a difficult time giving birth? Did you have to pull the lamb/kid? Were there multiples that required more assistance than

normal? All of these items factor in to how her postpartum experience will go and how she might feel. Monitor her intake for several days after birth. This is made easier by using lambing/kidding jugs so you know exactly how much she is eating and drinking. Not to mention they help with bonding and keeping the little ones safe. If she goes off feed take her temperature, which should be between 100.9-103.8°F for sheep and 101.3-103.5°F for goats. If it is elevated call your veterinarian for advice on what to do next. She could have a uterine infection (metritis) or there might be another reason for her elevated temperature. Early detection is key in this case and could help both you and her immensely.

Another item to keep an eye on is whether or not she is getting up and moving around regularly. It's easy to go in the barn and see that she is laying down and assume that all is fine, but if she isn't up, then the lamb or kid cannot nurse as effectively. Again, check her temperature and get your veterinarian's advice. What about her udder? Mastitis can creep up unnoticed if her udder is not getting nursed so also be sure to feel her udder and check for heat/cold, swelling, or discoloration. Any of these signs warrant a call to your



veterinarian for quick intervention.

Noticing these small clues can mean the difference between a healthy ewe/doe or a sick one that might die or have to be culled. You may believe that all of this is well known information, but as sheep and goat producers we can often get caught up in the everyday tasks of lambing/kidding and forget about the little things. I have been guilty of this myself sometimes, but with careful note taking, prevention in the form of good nutrition and health care, and early intervention we can make sure our females have the best possible chance for recovery. If you have any questions, please contact your Extension agent, local veterinarian, or myself at jharri50@utk.edu or 865-974-4160.

Jessy Shanks is the Small Ruminant and Youth Programs Specialist at the University of Tennessee, Knoxville. Jessy raises Southdown and Dorper sheep with her husband and daughter just below Knoxville. Her background is in reproductive physiology and she enjoys teaching producers and youth about small ruminants in any way possible.

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HEALTH & MANAGEMENT

WHAT IS SMALL RUMINANT QUALITY ASSURANCE AND HOW DOES IT AFFECT MY OPERATION?

by Dr. Beth Johnson, DVM

uality Assurance is defined as the process where you strive to provide a product that instills trust and confidence in the consumer to encourage continued or increased consumption of your product. The product in small ruminant production can be meat, milk, fiber, or seed stock to current and new producers. So how does your plan to accomplish this incredible feat on your farm stack up to others, and how do you plan to enact this plan to provide the best product possible?

In this article we will discuss the following components of a Quality Assurance Plan:

- To produce your product with no blemishes on the finished product.
- Prevent injury while maximizing effectiveness of antibiotics and vaccines to produce a quality product.
- Provide a wholesome product that the consumer has trust and confidence in consuming or wearing.
- Causes no harm to the consumer!
- Uses best management practices that allows for maximum profit to the producer.
- And finally, how does your biosecurity stack up for prevention of introduction of diseases.

Top Quality Product

Our goal as a producer should always be to provide the best quality product which will ultimately keep us in business by stimulating interest in our products. Not only should we strive to market healthy livestock, we should try to prevent any underlying issues, i.e. blemishes to the carcasses, undesriable wool, and/or off flavored milk/cheeses.

When administering medications to your animals, be sure to follow label directions on the bottle of the medicine you are administering:

- Proper dose
- Proper route of administration
- Proper location of injections; always

put injectable substances in front of the shoulder area.

- Proper needle size
- Proper withdrawal period
- Proper storage
- Know what you are administering and why

By following these simple steps you have initiated the process of going down the pathway of Quality Assurance!

Why would it be important to administer medications in the neck and chest floor area? Where are the most valuable cuts of meat in a lamb or kid? If you administer an injection in the hind leg, not only do you run the risk of hitting the sciatic nerve which controls the hind leg muscle, you may also cause an injection site reaction which may lead to condemnation of the affected muscle. Processors frown upon throwing away the most valuable cut of meat due to negligence by the producer.

When administering medication to your animals, do you know that some medicines stay in the animal's tissue longer than others. This is very important when animals are harvested prior to the drug's withdrawal period, and the meat has residues in the tissue from the product administered. Some of the more common antibiotics that have been identified as residues in meat are: Tetracyclines, penicillins, Sulfamethazines, Cephalosporins, and others. If antibiotics are detected, the carcass is disposed of and it could possibly contaminate other carcasses resulting in recalls of products. This is also true for some anthelmintics. Do not administer animal health products and then sell the animal for harvesting until they are cleared of the product. Know your medicines!!

So let's switch gears and talk a little about Biosecurity. Biosecurity measures are defined as the procedures intended to protect humans or animals against disease or harmful biological agents. Some examples of Biosecurity are:

- Quarantine all new additions to the flock/herd.
- Protect/restrict visitors onto your farm through providing protective

- boot covers or foot baths and disposable gloves.
- Keep confined areas clean and disinfected as much as possible.
- Clean and disinfect all equipment and livestock handling facilities, routinely

These are just a few of the biosecurity measures you can institute on your farm to prevent disease introduction and control. When quarantining, stall the new additions in an area where they have no contact with your animals. They should be quarantined for a minimum of 10 and preferably 14 days. With small ruminants it is recommended that a fecal examination be performed on arrival, animal is dewormed, if necessary, and then a follow up fecal examination performed in 7-10 days to determine if anthelmintic/parasite resistance is present. You do not want to introduce resistant parasites into your flock/herd.

Some of the diseases that have been introduced into naïve flocks/herds are pinkeye, footrot, pneumonia, soremouth, and ringworm through inappropriate quarantine procedures. You would much rather treat one animal then a whole flock with these diseases and many producers have learned the lesson the hard way!

Also while administering antibiotics, vaccines, etc., you can understand why it is important to utilize sterile syringes/needles to prevent injection site reactions/abscesses. Always remember we should strive to prevent blemishes as much as possible on a carcass/hide/wool of our small ruminant animals.

Always remember that a healthy happy animal always performs better than a diseased, distressed one! Our goal as producers should always be to produce the best possible product while maximizing our profit.

Dr. Beth Johnson is a Staff Veterinarian in the Kentucky Department of Agriculture and has 40 years of experience raising and treating small ruminants. Her family farms in Parksville, KY where she raises Gelbvieh cattle and Boer goats.







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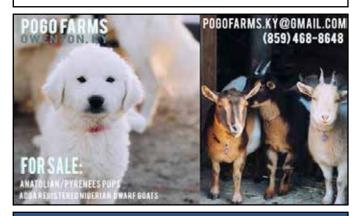


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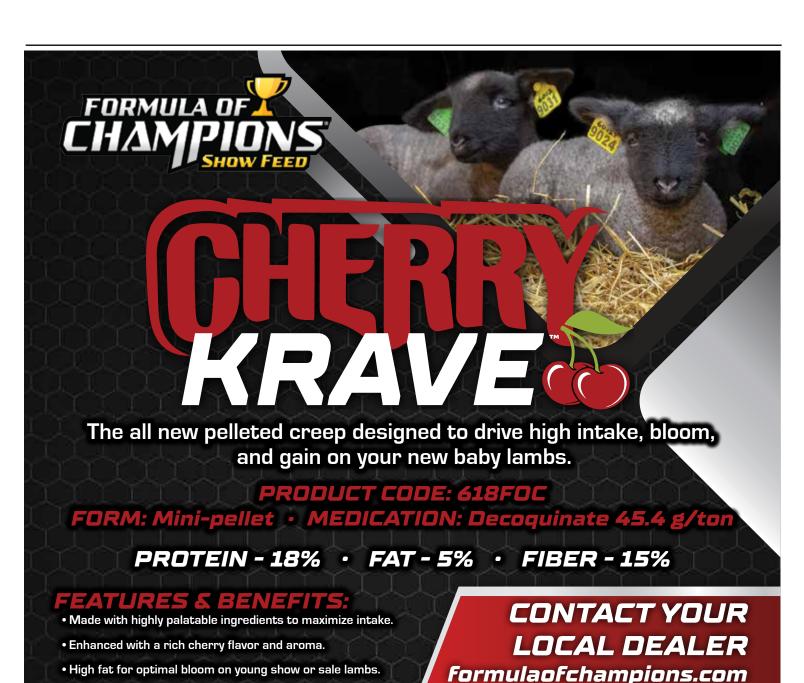
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