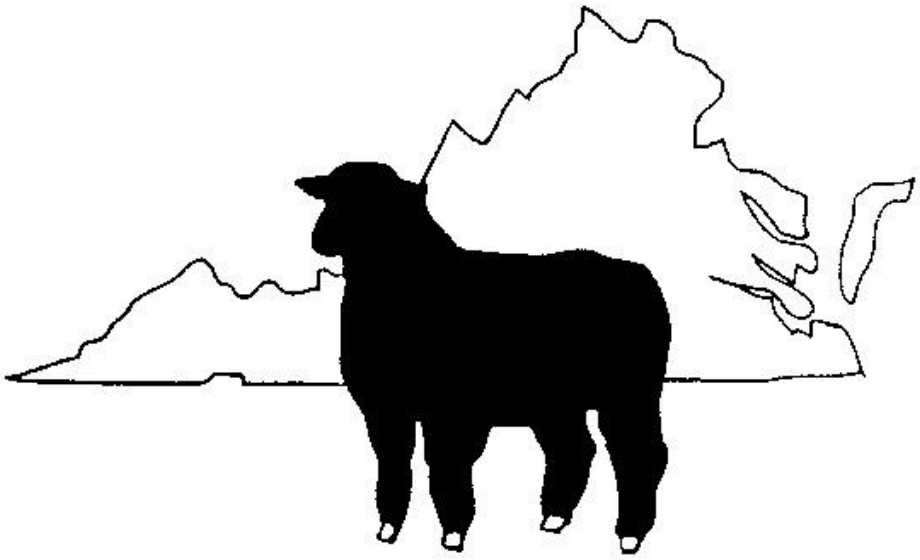
Proceedings

2020

VIRGINIA SHEPHERDS' SYMPOSIUM



January 10 - 11, 2020

ALPHIN-STUART LIVESTOCK ARENA
BLACKSBURG, VIRGINIA

Friday, January 10

PM ***Alphin-Stuart Livestock Arena***

3:00 Virginia Sheep Industry Board Meeting (Open to the public)

6:00 Virginia Sheep Producers Association Board Meeting (Open to the public)

Saturday, January 11

ADULT SESSION

AM ***Alphin-Stuart Livestock Arena***

8:30 Registration and Commercial Exhibits

9:30 Morning Session –

"Key Components to Flock Health: Do's and Don'ts"
Dr. Hollie Schramm, Virginia-Maryland College of Veterinary Medicine

"Guard Dogs: Selection and Care Strategies for Success"
Lee Wright, Rolling Spring Farm, Glade Spring, VA

"Alternative and Niche Marketing Opportunities"
Nick Forrest, Oxford, OH

"**NRV Sheep & Goat Club Experiences with Wool Marketing"**
Cecil King, Pulaski, VA

"Update from ASI"
Mr. Jimmy Parker, ASI Executive Board- Region II Director, Alabama

12:00 ***Roy Meek Outstanding Sheep Producer Award Presentation***

Virginia Sheep Producers Association Annual Meeting (including vote on by-laws revision)

12:15 Lamb Lunch

Saturday PM

1:00 travel to VT Meat Center on campus for workshops and demonstrations using lamb carcasses and product

"Understanding our Product- American Lamb vs. the Competition" and
"Cooking with Lamb"
Nick Forrest, Oxford, OH

"Lamb Carcass Merit 101" and
"VT Meat Center Marketing Experiences"
Dr. Scott Greiner, Animal & Poultry Sciences, Virginia Tech
Jordan Wicks, Animal & Poultry Sciences, Virginia Tech

YOUNG SHEPHERD SYMPOSIUM & YQCA CERTIFICATION

REGISTRATION REQUIRED

Youth Session will be concurrent with adult session amd focus on Youth for the Quality Care of Animals (YQCA) quality assurance training. Hands-on and interactive sessions will be included. 4H and FFA youth of all experience levels are welcome.

AM ***Alphin Stuart Livestock Arena***

9:00 Registration

9:30 Morning Session –

Youth for the Quality Care of Animals (YQCA) training

12:00 Lunch – ***provided***

PM

1:00 Afternoon Session – VT Meat Center on campus

Hands-on lab practicals asscociated with YQCA

3:00 Adjourn

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2020 VA Shepherds' Symposium
Presented By
Virginia Sheep Producers Association

Page Number

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Key Components to Flock Health: Do's and Don'ts

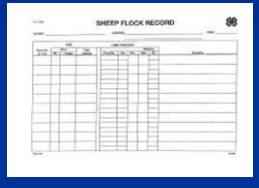
Dr. Hollie Schramm
Production Management Medicine, VMRCVM
Clinical Professor

Virginia-Maryland Regional College of Veterinary Medicine

Do have a Flock Health Program

- Why (goals)?

How to Measure the Success of your Flock Health Program?



- Set goals for production parameters
  - Growth rates
  - Morbidity
  - Mortality
  - Culling (Don't keep poor)
- Keep records

Do have a Relationship with a Veterinarian

- VCPR

Why is the VCPR so Important?

- A better understanding and working knowledge of your animal management practices
- Improved medical judgments
- Assist with withdrawal time determination
- Do Not make extra-label drug usage decisions
- Do Not determine dosages of medications without guidance from your vet

STARTS WITH PREVENTATIVE Health Care!

- Biosecurity
- Vaccination program
- Good nutrition and feeding management
- Parasite control program
  - Endo and Ecto Parasites
- Hoof care
- Predator management

Biosecurity

Practices that are put in place in order to protect the health of your animals!

- **Bio-exclusion**
- **Bio-management**
- **Bio-containment**

Applies to everyone and everything used on the farm
Encompasses disease management, excellent husbandry, and routine health care

What is your herds level of risk?

- ***Lowest Risk*** -Closed flock
  -Animal from known low-risk status flocks, single contact
  -Borrowing or lending animals with low-risk flocks, multiple contacts with other flock(s)
  -Animal from farm of unknown-health status
- ***Highest Risk*** -Animal from sales barns or in contact with accumulations of animals (*shows*) of unknown health status

Do Reduce Risks
Don't be Slack on Biosecurity

- What steps can be taken to reduce risks for disease/loss in your herd?



Do Vaccinate for Clostridial Diseases!!

- Clostridial (depends on risk of certain diseases)
  - CD&T
  - 8-Way
- Timing depends on:
  - Feeding regimen (at highest risk of CD during change in diet)

Group	Vaccination Timing (CD&T)
Ewes	4-6 weeks before lambing
Lambs	4-8 weeks of age
	Booster 7-11 weeks of age
Rams	4-6 weeks before lambing season 8-way: 4-6 weeks before breeding

Vaccinations

- Camphylobacter (Vibrio)/Chlamydia
  - What flocks should be vaccinated?
  - When should they be vaccinated?
- Foot rot, CL, Soremouth, Rabies
  - Use to contain and decrease disease in the herd

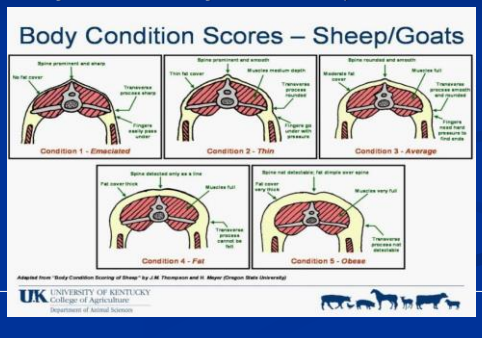
Vaccination for Respiratory Disease (Pasteurella infection)

- No approved vaccines for sheep/goats
- No idea of true efficacy

DO BODY CONDITION SCORING

Best way to Make Nutritional Decisions!

- A tool for producers to increase production efficiency in their flocks



Don't Have Fat and Thin Ewes

- Why are ewes too thin?
  Consequences?

- Why are ewes too fat?
  Consequences?

Research and BCS

Oregon State University

- Ewes with a body condition score of 3 to 4 at lambing lost fewer offspring and weaned more pounds of lamb than those with a condition score of 2.5 or less
- There was a 33% difference in total weight of lamb weaned (64 versus 85 pounds per ewe) between ewes with pre-lambing body condition scores of 2.5 to 3.5

Body Condition Scoring

Review Nutrition at Each Exam

Group	Timing	Ideal BCS	Other Herd Health Events
Breeding Ewes	Pre-Breeding	3	BSE, famacha, palpate udders
	Midpregnancy	2.5-3	US and sort, famacha
	Pre-Lambing Lambing	3 3+	CD-T, other vx, lambing management, famacha
	Weaning/Drying off	2+	Famacha
Rams	Pre-Breeding	3-3.5	BSE, 8-way, famacha
	Summer	2+	famacha

*Most cases of mastitis occur at weaning time

Nutrition for the Pregnant Ewe

- Do not overfeed dams in early or mid-gestation
- Dry matter intake: 3.5-4% body weight in late gestation (increases w/ # fetuses)
- Forage must be good quality
  - If poor quality will only be able to eat 2-3% bw
- Increase concentrate slowly (140 lb ewes)

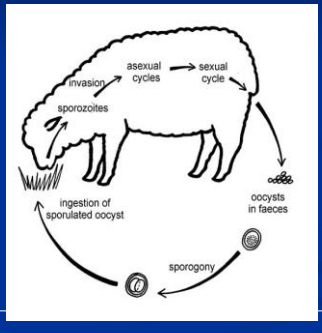
-6 weeks: 0.5-1 lbs

-4 weeks: 1-1.5 lbs

-2 weeks: 2-2.5 lbs

What is this?

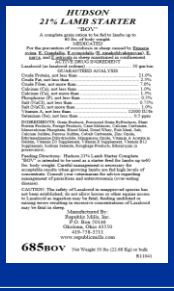
Eimeria species

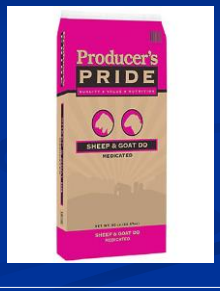


Clinical Signs

Do Treat for Coccidia
But the First Line of Defense is Prevention

Do TRY to Prevent Coccidiosis
THIS IS KEY!





Specifics for Coccidia Prevention

- Sanitation
- COCCIDIOSTATS
- Amprolium
  - Crumbles: 15 mg/kg/day for 3 weeks
  - Liquid: 2 ounces per 10 gallons for 3 weeks
- Deccox (decoquinate)
  - 0.5 mg/kg/day
- Bovitech (lasolocid)
  - 15-70 mg/head/day
- Need to be fed for 4 weeks (except corid)
- Use only during times of risk
- Prolonged use of coccidiostats can cause resistance, use fecals to monitor this

What Causes this Around Here?

Haemonchus contortus

Dewormers

Anthelmintics commonly used in the U.S. sheep and goat industry

1	**BZD**	Benzimidazoles	Thiabendazole Fenbendazole Albendazole Oxfendazole	TBZ®[1] Panacur®, Safeguard®[2] Valbazen®[1] Synanthic®
2	**IMID** **TETR**	Nicotinic agonists Imidazothiaoles Tetrahydropyrimidines	Levamisole Morantel Pyrantel	Prohibit®[1], Levasol[1], Tramisol®[1] Rumatel®[2], Nematel® Strongid®
3	**ML**	Macrolytic Lactones Avermectins Milbemycins	Ivermectin Eprinomectin Doramectin Moxidectin	Ivomec®[1], Primectin™[1] Eprinex® Dectomax® Cydectin®[1], Quest®

[1]FDA-approved for use in sheep. [2]FDA-approved for use in goats.

The Reality of Deworming

- All herds have resistance to all dewormers to some degree (unless closed herd for >25 yrs)
- Do deworm clinical sheep ≥3 on famacha scale
- Do deworm with two classes of dewormers

The FAMACHA© System

For assessing anemia and barber pole worm infection in small ruminants

Clinical Category	Color	PCV	Deworm?
1	Red	≥ 28	No
2	Red-Pink	23-27	No
3	Pink	18-22	?
4	Pink-White	13-17	Yes
5	White	≤ 12	Yes

Do Deworm with TWO Different Classes of Dewormers


Parasite Management Principles

1. Don't overstock pastures/pens
2. Don't overgraze (5" min)
3. Adequate nutrition increases immunity
4. Rest pastures sufficiently: Rule of thumb is 3 months
5. Practice selective deworming, not prophylactic deworming = "smart drenching"

Parasite Management Principles

6. Administer drugs properly (do not under dose)
7. ****Select sheep which are more resistant to internal parasites
8. Practice good sanitation
9. Use coccidiostats
10. Determine which drugs work on your farm


Biological Control of Parasites

Questions?

- Great reference for parasite control and famacha
  - Southern Consortium of Small Ruminant Parasite Control
  - www.scsrpc.org
  - National Sustainable Agriculture Website
  - attra.ncat.org

THANK YOU!

Guard Dogs:
Selection & Care Strategies for Success

Lee Wright
Rolling Spring Farm
Glade Spring, VA
(276)698-6079

Why do you need a guard dog?

Protection from Common Predators

- Coyote
- Bobcat
- Fox
- Bear
- Turkey Vulture (Red Head) *smell, carcass feeders
- Black Vulture (Black Head) *sight, will kill
- Eagles
- Neighborhood & Stray Dogs (Most lethal)
- Packs of Dogs or Momma Coyote w/ Pups

But I don't see any Predators……

- The job of a good guard dog is not as much to kill a predator, as it is to offer a presence to deter those predators from attacking.
- They need to be seen, heard, and smelled by predators daily.
- Predators are always around, so the guard dog needs to be with the flock, and kept in a normal routine 24/7.

When do I need to get a guard dog?

This is too late, but usually when 90% of people call looking for one. (A Puppy will NOT stop this from happening, and "GOOD" mature dogs can't be bought, so plan ahead.)

Do Your Research

- Find a notable breed you are interested in.
- Cross breeding can offer advantages and/or disadvantages.
- Guardian breed X Guardian Breed **ONLY**
- Guard Dogs and Herding Dogs are genetically wired completely different, it's **NEVER** a 2 for 1 great deal!
- Single purpose is PROTECTION

Do Your Research

- Get to know the Breeder you are thinking of buying from.
- Ask to see the parents (make sure they are working dogs)
- Ask Pros & Cons of the breed & the parents **(All have both, so seek honesty)**
- Make sure they are raised with livestock, and exposed to people (Need to Bond Early in life)
- The best guard dog for you, will be raised as a pup, by you, on your farm! (Preferably 8 to 10 weeks old)

It's NOT easy raising (GOOD) puppies!

- Price = Total Investment / Years service
  - Large Breed Dogs have a typical life expectancy of 8 to 12 years.
  - Guard Animals and expenses are tax exemptions
- Start in smaller confined space
  - Handle liberally, but DO NOT make a pet of this dog!
  - You remain the Alpha in All Circumstances
- Introduce a few ewes & lambs from your flock into this space.
  - Make sure it's a ewe that will protect her lambs.
  - Mature, easy tempered sheep if no lambs available
  - No Flighty sheep to start a pup
- Allow a "Safe Zone" for the pup

It's NOT easy raising (GOOD) puppies!

- **Patience** - the capacity to accept or tolerate delay, trouble, or suffering without getting angry or upset.
- Need to slowly learn expanded boundaries.
  - Yokes or tubs for gate escapers
  - Diggers – Good Luck!
- Pups will play, and sometimes too rough. Typically not over aggressive, but timing of when they are with certain age groups of sheep will make a difference.
- Pairs of pups may do better, playful with one another and not sheep.
  - Can be strategically separated as they get older

Protect Your Livestock Investment

- Must remain with the flock at All times.
- Offer shelter, however many won't use it.
- Good Dogs Instinctively know what to do, it's up to the owner not to screw that up.
- No matter how good the genetics are, how you raise the dog will dictate your success.

Farm Gate To Dinner Plate

Non-traditional markets

Non-Traditional Markets?

Non-traditional market opportunities have been explored by sheep producers for centuries.

Many represent profitable niche markets in local or regional areas for a limited number of producers and a limited amount of lamb and wool.

Non-traditional markets

- The "new" sheep industry doesn't try to get people to buy what it wants to grow; it looks to grow what the highest-paying buyers are already buying. Try growing something you or your family will consume with gusto. If you can't stand to eat the meat you grow, it'll be hard to keep up enthusiasm for it, even when eager customers come calling. If you just don't know how your sheep's meat compares to others, you'll need to find out.

Non-traditional markets

- The famous billionaire J. Paul Getty once advised that the key to success is

"Find a need and fill it."

Non-traditional markets

- ***The first step*** into the "new" sheep industry is to find who's paying extra for a specific sheep product.

Non-traditional markets

The third step:

Get to the people that want your product before someone else does

Non-Traditional Markets

- Freezer market lambs
- Mail orders
- Ethnic market [Kosher/ Halal]
- Direct marketing [Retail / Restaurants]
- Organic/Natural
- Farmers market
- 4H and FFA shows

Reasons to do it

- Don't have to take average prices at sale barn
- Receive a better premium price for a better premium product

Reasons to do it

- Tried of seeing inferior products

At the retail and food service level

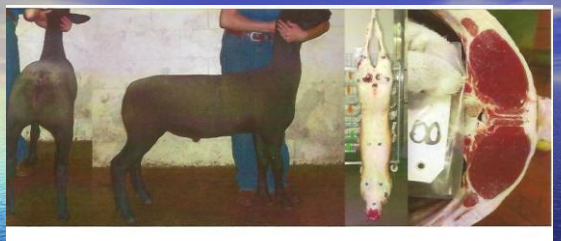
- Better product = better customers
- Locally raised
- 10,000 miles fresher

Reasons for not doing it

- Could be costly
- Does take some time and patience
- Working with the consumers directly
- Helps to be a salesperson
- A lot of patience's

What to do first!

- Genetics? Know what you are producing
- Get carcass data
- Know the law
- Taste testing
- Price comparison
- recipes

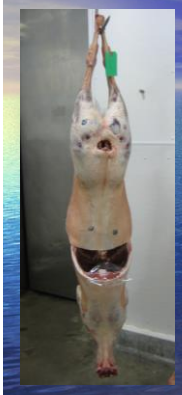


"Ol' Blue"

Live Weight:	132 lbs.	Back Fat Thickness:	0.15
Carcass Weight:	77 lbs.	Ribeye Area:	3.1 Sq. in.
Dressing %	58.3 %	Body Wall	0.70 in.
%BTRC:	47.89	Leg Score:	Low Prime
Yield Grade:	1.9	Quality Grade:	High Choice

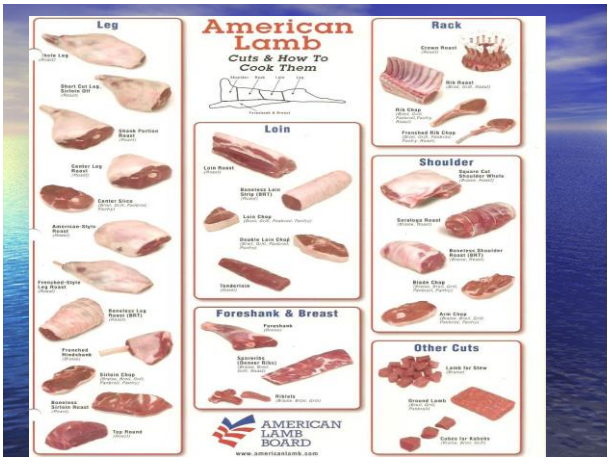
Name	#8 - Ol' Blue				
Live Weight	132	**%BTRC**	47.89	**Back Fat**	0.15
Price/CWT	$1.43	**Lean Quality**	Avg. Choice	**Ribeye area**	3.10
Dressing %	58.3%	**Quality Grade**	High Choice	**Body Wall**	0.70
Carcass Weight	77			**Yield Grade**	1.9

NAMP#	Subprimal	Weight	Percentage of Carcass	Price/cwt	Extended Value
204B	8-Rib Rack (roast-ready; 3 x 3)	3.98	5.17%	$954.33	$37.98
208	Shoulder, Square Cut, BNLS	9.58	12.44%	$280.76	$26.90
209	Breast	9.17	11.91%	$107.04	$9.82
210	Foreshank	3.49	4.53%	$329.85	$11.51
232	Loin (2 x 2) 1/8 inch fat trim	7.07	9.18%	$745.32	$52.69
232E	Flank	0.84	1.09%	$56.84	$0.48
233F	Hind Shank	2.82	3.66%	$332.37	$9.37
234	Boneless Leg (tied)	12.97	16.84%	$470.19	$60.98
234G	Boneless Sirloin	1.85	2.40%	$563.85	$10.43
	Regular trimmings	6.18	8.03%	$310.68	$19.20
	Fat trim	5.42	7.04%	$7.00	$0.38
	Bone	11.83	15.36%	$3.00	$0.35
	Total Carcass Value	75.20	97.66%		$240.10
	Total Adjustment				$0.00
	Carcass value				$240.10
	Drop credit @ 3.55/cwt live wt.				$4.69
	Pelt value				$2.00
	Processing Costs per Head				-$31.50
	Boxed Value of Carcass				$215.29
	Price paid for animal				$188.76
	Net gain or loss				**$26.53**



Tag# 107
REA: 2.45 sq. inches
Back Fat: 0.18 inches
Body Wall: 0.65 inches

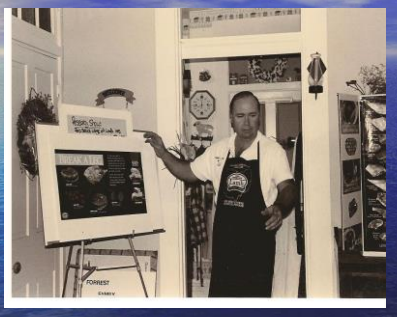
HCW: 66 lbs
Quality Grade: High Ch
Lean Quality: Avg. Ch
Leg Score: Low Pr



UFMIS UPC	PLU	TARE	TRAY SIZE	PKG UPC	PKG SIZE	DESCRIPTION	REGULAR RETAIL	PROMOTION RETAIL	TYPE OF PROMOTI
						27-Nov-11			
						NEW PRIVATE SELECTION LAMB			
						Cry-O-Vac			
21301200000	1330	0.04		1111097055	8pk	PS Cov Shank	$ 5.29		
21301240000	11330					Service Meat Lamb Shanks	$ 5.29		
21300800000	3008	0.1		1111097047	8pk	PS 4x2 French Rack 8 Rib	$ 16.29		
21300840000	13008					Service Meat Lamb Rack	$ 16.29		
21301100000	3002	0.06		1111097042	6pk	PS Lamb Leg Shrt Cut Whl Semi Bnls Shank	$ 7.29		
21301140000	13002					Service Whole Leg of Lamb	$ 7.29		
21296950000	3003	0.05		1111097041	4pk	PS Leg of Lamb 1/2 Leg	$ 7.39		
21296990000	13003					Service Meat Lamb Leg	$ 7.39		
21299100000	3001	0.06		1111097049	4pk	PS Leg of Lamb 1/2 Bnls Rolled Tied	$ 8.29		
21299140000	13001					Service Meat Bnls 1/2 Lamb Leg	$ 8.29		
21297500000	3011	0.05		1111097052	4pk	PS Butterflied Legs - Seasoned	$ 8.79		
21297540000	13011					Service Meat Butterflied Seasoned Lamb Leg	$ 8.79		
21296350000	3006	0.08		1111097377	8pk	PS Lamb Loin - 0" Precut 8pc	$ 11.99		
21296390000	13006					Service Meat Lamb Loin Chops	$ 11.99		
21300700000	1310	0.07		1111097379	8pk	PS Lamb Denver Rib	$ 5.29		
21300740000	11310					Service Meat Denver Rib	$ 5.29		
21294450000	3000	0.2		1111097381	4pk	PS Lamb Rack Crown Roast	$ 19.99		
21294490000	13000					Service Meat Crown Roast	$ 19.99		
						VSP LAMB - CASE READY			
21293700000	3012	0.05		1111097109	8pk	PS Lamb Shoulder Chops	$ 7.79		
21308000000	3010	0.05		1111095717	8pk	PS Lamb Loin Chops	$ 11.99		
21296900000	3004	0.05		1111095718	8pk	PS Lamb Leg Steaks	$ 10.19		
21314100000	3014	0.05		1111097376	8pk	PS Lamb Stew Meat	$ 8.09		

Lamb Home Show

- Customers home
- 10 to 15 people
- 2 hr program
- Where to buy, cut, cook lamb
- Serve 3 to 4 dishes



Farmers market

- Choose one that is close to farm
- County health regulations
- Ice box/ refrigeration truck
- Handouts/brochures
- Samples
- Cut varieties

Organic or Natural Raised

- Customers are concern how their meat are raised
- Do you know the difference between the two?
- Price?????
- Certified????
- USDA Approved

Mail ordered / web site

- Becoming very popular
- Drawn to web site by tweets, blogs
- New way of getting younger clients
- Very pricey

This leg roast is completely boned, rolled and tied. It is a good option for cutting your own kabobs or stew meat.
Approx 5-6 lbs 1 leg roast (5-6 lbs)$97.00 Qty:
Price: from: Shepherd Song Farm, LLC

- Shanks make a lovely meal. They can be seasoned, slow cooked and serve on rice or pasta. Two per package. Approx. 2.0-2.3 lbs.
- 2 shanks (1.8-2.0 lbs)$28.00 Qty:

Price: from: Shepherd Song Farm, LLC
Ship to:

Ethnic/Religious Meat Markets

- Sheep producers who target ethnic groups gain marketing diversity, says Susan Schoenian, a sheep and goat specialist with the University of Maryland. "Ethnic markets take animals of all sizes, from 20 lbs to a mature adult animal. It's a producer's challenge to see what's available in his area, target it, and produce animals needed for that market."

Ethnic/Religious Meat Markets

- Producers may direct market their sheep and goats to ethnic customers, take their animals to local or regional livestock auctions prior to holidays, sell to middlemen who supply the ethnic/religious trade(s), and/or work cooperatively with other producers to market live animals or carcasses to ethnic markets.

Slaughter options

- On-farm
- Custom exempt
- State-inspected
- Federally-inspected (USDA)

On-farm slaughter

- USDA allows exemption for on-farm slaughter by the owner of the livestock.
- On-farm slaughter is allowed for meat that will be consumed by the owner (or owners) or given to their workers or non-paying guests.
- Most states restate USDA regulations or impose more stringent regulations.

http://newfarm.rodaleinstitute.org/features/2006/1006/onfarm/miller.shtml

Custom-exempt

- Slaughter for owner of live animal.
- Producer sells live animal.
- Exempt from USDA inspection.
- Inspection focuses on facilities, not product.
- Meat must be stamped "not for resale."

State-inspected

- 27 states operate meat and poultry inspection programs.
  - Not Washington state
- Programs must "at least equal to" federal inspection program.
- State-inspected meat is prohibited from interstate movement.

USDA - Federal inspection

- Inspection of facility and product
  - Ante-mortem (live)
  - Post-mortem (carcass)
- Only federally-inspected plants can produce products that are destined for interstate commerce or for export to foreign countries.

A mobile abattoir

- Mobile – travel to livestock farming areas.
- Lower cost to build than stationary facility.
- Lower cost for processing.

3 units in Washington State
6 units nationwide

Allowing on-farm slaughter for buyers

- *The essentials of the site set up by customers when preparing to slaughter for a Muslim holiday on author Sandra Miller's farm include: a simple butchering block and tackle (A); sharp knives and a manual bone saw (B); hose (C); container for offal (innards) for disposal (D); container for edible entrails (E) and a board or tarp (F) to keep the carcass clean after slaughter has begun.*

Spiro Skarlatos, one of Sandra's regular customers, watches over a roasting lamb for his annual family reunion.

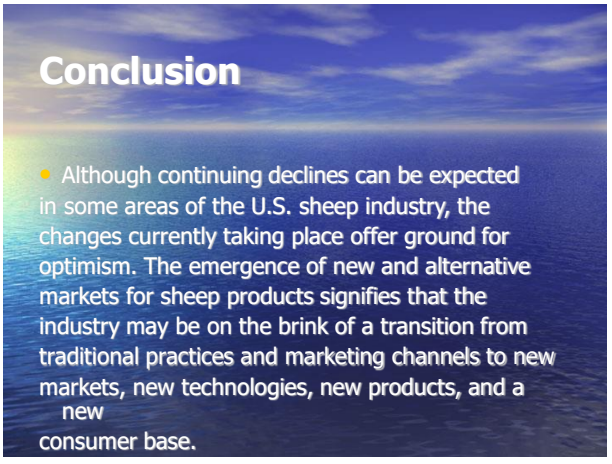
Ethnic Lamb Production

- The ethnic lamb market was valued at **$72,317,774** with 1,075,165 head slaughtered at an average $103.48/cwt. The ethnic lamb market was defined as relatively lightweight lambs less than 100 pounds compared to the average live weight at slaughter of 140 pounds in the commercial market.*

* Juniper Economic Consulting, Inc.

Ethnic Lamb Production

- An estimated 34,411,500 pounds were produced for the ethnic market that "fell through the cracks." At an average 65 pounds per lamb in the ethnic market and a carcass weight of 32.5 pounds, this comes to an estimated 1,058,815 head in ethnic trade. In addition, 10 percent of state-inspected lamb was assumed to go to the ethnic market, which was 16,350 head in 2007. * Juniper Economic Consulting, Inc


Conclusion
• Although continuing declines can be expected in some areas of the U.S. sheep industry, the changes currently taking place offer ground for optimism. The emergence of new and alternative markets for sheep products signifies that the industry may be on the brink of a transition from traditional practices and marketing channels to new markets, new technologies, new products, and a new consumer base.

American Sheep Industry Association

ASI letter to the Trump Administration

- ASI formally shared the sheep industry priorities with President Trump and the transition team in December. Priorities that would impact and benefit the industry promptly include:
- Administration Support for Wildlife Services' role in predation management
- Support for the work of the U.S. Sheep Experiment Station
- Delisting wolves and grizzly bears under the Endangered Species Act
- Withdrawing rules allowing imports from countries with a known history of Foot and Mouth Disease
- Publishing the final rule on scrapie in sheep and goats
- Re-opening markets lost to U.S. lamb. Japan remains closed to our producers and the United Kingdom and European Union maintain significant barriers to lamb trade
- Enhance the key role the H-2A labor program plays in the sheep industry

JAPAN OPEN TO U.S. LAMB

- Confirmation July 11, 2018 from USDA-FAS
- ASI met with USDA Under Secretary McKinney in December and reminded him, by letter in May, of the ASI request to reopen this market lost 15 years ago due to cattle BSE. Japan was the highest value export market at the time. Lamb already shipping and duty free access!

CHINA TARIFFS ON RAW WOOL AND SHEEP SKINS

- China announced plans August 2018 to impose a tariff on grease wool and sheepskins from the United States. 10% initially and now 25%
- We export over half of American wool with China, the largest market by far. China is also the largest export destination for sheep skins.
- Sheepskins and beef hides/leather demand is down dramatically with much of the world's production going to landfills or rendered.
- ASI competed successfully to fund $1.5 million to help industry find alternative export markets.

U.S Exports to China

U.S. RAW WOOL EXPORTS

72% to China

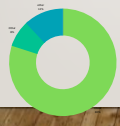
U.S. Raw Wool Exports to China

	US$	% Change
Oct 2017 - Mar 2018	5,711,000	
Oct 2018 - Mar 2019	877,000	-85%

AFTER 10% TARIFF

U.S. SHEEPSKIN EXPORTS

80% to China



U.S. Sheepskin Exports to China

	US$	% Change
Oct 2017 - Mar 2018	7,259,000	
Oct 2018 - Mar 2019	2,425,000	-67%

AFTER 10% TARIFF

SOURCES: USDA/FAS, GATS, ASI

ASI DEFENDS U.S. SHEEP EXPERIMENT STATION

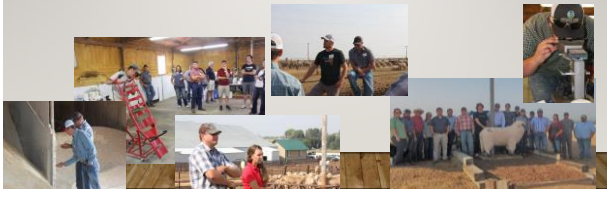
- USDA announced in March 2019 that the Trump budget supports the station and no longer listed on the closure list!
  - Anti-grazing activist groups continue to oppose sheep research on the nation's only sheep research station
- ASI and state associations collaborated in 2019 for new research in return for USDA removing the station from the closure list and allowing to hire more scientists.

ASI SECURES FARM BILL PRIORITIES FOR SHEEP

- ASI secured sheep provisions in the Farm Bill versions now approved by the U.S. House of Representatives and United States Senate. President Trump signed the legislation December 21st.
- Supports the Minor Species Animal Drug Approval Program; ie: parasite control products for sheep.
- Reauthorizes the Wool Loan Deficiency Program for a safety net
- Reauthorize the National Sheep Improvement Center grant fund
- Creates a Foot & Mouth Disease Vaccine bank
- Extended the wool trust for domestic wool manufacturers and wool research and marketing

ASI Young Entrepreneurs

- Large and very active group of young sheep producers (~25-35)
- Focused on participation in the ASI Convention YE attendance at annual ASI conventions is more than 200 individual producers!
- YEs have formed a leadership committee to help develop future programming



Price Reporting and Lamb Insurance top Priorities of ASI

- ASI secured the Mountain States Rosen cooperative data in national price reports this winter after being absent since February of 2016.
- ASI worked with USDA to develop new reports that have allowed for the return of LRP-Lamb Insurance in spring 2017
- Mandatory reporting due for renewal by September of 2020

ASI SUPPORTS USDA WILDLIFE SERVICES

- An incident with a M-44 coyote getter in Idaho spawned a half mile from residence policy for placement of this important coyote control tool. The policy resulted in removal of all devices in West Virginia and 90 % in Virginia, likely 40% in Texas.
- Animal rights activists immediately moved in the media and congress and courts to attack the tool and the entire Wildlife Services protection of livestock.
- ASI pushed back with accurate facts in livestock publications and calls to action in those 18 states to contact their state and federal officials to support use of the second most effective coyote control tool.
- USDA issued policy in February 2018 formalizing the continued use
- Regularly scheduled label review underway as is consistent under EPA rules every few years. ASI commented in support and shared with state associations that use the device.

MEDICALLY IMPORTANT ANTIMICROBIAL DRUGS

- ASI commented to the US Food and Drug Administration regarding policy on over the counter availability of antimicrobial drugs for livestock.
- Pointed out shortage of veterinarians in the US and limited availability of products for sheep and posed two key questions: will a prescription for antimicrobial new animal drugs with current approval as an OTC be per animal or per flock? And, the second, will extra-label use of antimicrobial new animal drugs be permitted?

FARM WORKFORCE MODERNIZATION ACT

- In mid- December, the U.S. House of Representatives approved a bill regarding the H-2A program which included sheep industry H-2A language. Access to a legal workforce for sheep herding and shearing is a top priority of the American Sheep Industry Association.
- As this bill continues to move through the Senate, ASI will continue to work to ensure that any final legislation conforms to our policy; preserving a viable guest worker program and codifying special procedures for range herders and shearers."

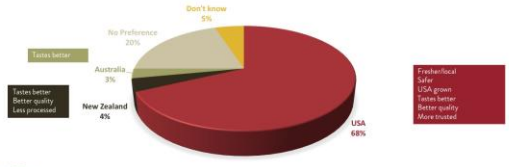
ASI WINS COUNTRY OF ORIGIN LABELING OF LAMB

ASI succeeded in retaining mandatory Country of Origin Labeling for lamb

COUNTRY OF ORIGIN

There is strong desire for lamb to be produced and raised in the US among the General Population who has eaten lamb in the past year. American Lamb is perceived to be fresher (doesn't have to travel as far) and is safer (again, doesn't have to travel far and is regulated). Also, many US consumers want to buy American made.

Preferred Country of Origin for Lamb

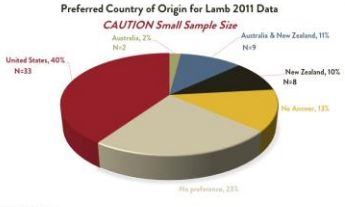


2018 American Lamb Consumer Insights
Industry Webinar | September 6, 2018

2011 data showed that two-fifths of Current Users* prefer lamb from the US. It would be fresher, support the American farmer, it's local and we have the USDA were the most mentioned reasons for preferring US lamb.

Preferred Country of Origin for Lamb 2011 Data

CAUTION Small Sample Size



**very small sample size

2018 American Lamb Consumer Insights
Industry Webinar | September 6, 2018

ADDITIONAL ISSUES

- **ASI adopted policy for regulating lab meat and is actively working with Congress and the Administration to ensure these products are accurately labeled, regulated, and don't disparage genuine American Lamb, beef, or other livestock proteins.**
- **ASI supported a delay in the enforcement of the Electronic Logging mandate for livestock haulers, and is working on another delay for the upcoming fiscal year until remaining issues with Hours of Service can be resolved to ensure animal welfare during transit consistent with the Transportation section of the Sheep Care Guide. We worked to secure the Congressionally mandated 150 air mile radius exemption for livestock haulers and is supporting 150 air mile radius on the backend**
- **ASI has policy for regulating lab meat**
- **Electronic Log and Hours of Service issues with livestock transportation**
- **Wildlife Services Funding request and continued use of M-44**
- **Secure sheep and wool supply plan development**

EXPERIENCE WOOL!

FOLLOW- US ON SOCIAL MEDIA

- American wool continues to be used by:
  - Military
  - Domestic companies / Socks
  - Foreign markets

ASI works with all sectors to build demand and a brand for U.S. wool

ASI CONTINUES TO BUILD AMERICAN WOOL BRAND

- **New logo launched in June 2016**
  - **Rebranded logo captures the strength and refinement of wool**
  - **Designed for consumers to be able to recognize products made from American Wool**
- **Two Logos**
  - **One for products made in American with American Wool**
  - **One for products made elsewhere using American Wool**
- **New Website Launched at end of 2017**
  - **Gives information about wool, including care tips, American wool brands, etc.**

MADE IN AMERICA WITH AMERICAN WOOL

AMERICAN WOOL

Follow us on Social Media!

@ExperienceWool

ASI MARKETS WOOL AROUND THE WORLD & IN THE U.S.

ASI CONSULTANTS IN:

CHINA
INDIA
EUROPE
UNITED STATES

WHAT IS OLD IS NEW AGAIN

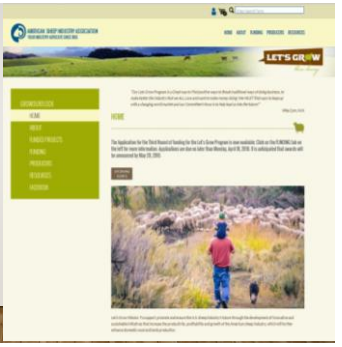
WOOL UNIFORM REINSTATED FOR ARMY!! SAME UNIFORM AS WORN IN WWII

LET'S GROW PROGRAM

State Mentor Program

- 2018 – 22 states approved for a $1000 apiece to assist new sheep producers in their state
- **Lets Grow Webinar Series**

- In total, the 27 webinarsoffered since August of 2012 have resulted in live audience attendance of 3,620 participants
- All webinarrecordings are posted to YouTube and the links on the Let's Grow website point to those recordings.
- Since 2012, the combined total of all webinar recordings being viewed on the internet is 34,977 www.growourflock.org



ASI PUBLISHES HOW TO HANDLE SHEEP VIDEO SERIES

- PERC Council Spearheaded
- Featuring Dr. Temple Grandin, Colorado State University
- Supported by ASI, LMIC and CSU
- To provide an education video for anyone who handles sheep to assure the highest level of animal welfare
- 3-part Animal Handling Video
  - General Principles for Handling Sheep
  - Handling Sheep in Market Facilities
  - Handling Sheep in Processing Facilities
- Available on www.sheepusa.org

ASI SUPPORTS SCRAPIE ERADICATION RULE

- ASI issued comments that are available at www.sheepusa.org/IssuesPrograms_AnimalHealth_Scrapie
- Items recommended for amendment:
  - change risk groups/categories for individual animals/flocks
  - increase use of genetic testing for assigning risk levels
  - reduce movement restrictions for animals found to be genetically less susceptible or resistant to scrapie
  - Specify eartag placement and propose use of plastic tags

Awaiting final rule from USDA and ASI seeking funds to keep id tags free


2020
ASI Annual Convention
SCOTTSDALE, ARIZONA
Reverance for the Past
Innovation for the Future
SAVE THE DATE
JAN. 22-25,
2020

Lamb Carcass Evaluation

Scott P. Greiner, Ph.D.
Extension Animal Scientist, Sheep
Virginia Tech

The following describes traits associated with lamb carcass evaluation and pricing procedures.

Hot Carcass Weight (HCW)

Represents the weight of the carcass immediately following harvest. The desirable weight for lamb carcasses is dependent on the end use of the carcass. Specifically, lamb processors utilize and fabricate carcasses of different weights in various ways depending on demand by the end-user. Carcass weight is an important factor when lamb carcasses are priced, as USDA reports prices for lamb carcasses in weight increment categories. Generally, very light and very heavy carcasses receive a discount in price. Supply and demand changes throughout the year influence which carcass weights are most preferred.

Dressing Percentage (DP)

Calculated by dividing carcass weight by live weight and multiplying by 100. Dressing percentage reflects the proportion of a live lamb's weight that results in carcass weight. Dressing percentage is influenced mostly by the amount of gut fill. Fat cover and muscling also influence dressing percentage. Typically, dressing percentages for shorn lambs range from 52-57%.

Fat Thickness (FT)

Fat thickness is measured over the center of the ribeye muscle after the carcass has been ribbed (split) between the 12^{th} and 13^{th} ribs. This measurement may be adjusted (up or down) to reflect distribution of external fat over the entire carcass. The amount of fat thickness at the $12\text{-}13^{th}$ rib is a strong indicator of the total amount of fat that is trimmed away when the carcass is fabricated into retail cuts. Carcasses with excessive amounts of fat are less desirable because of excess waste. Carcasses with more than 0.36 inches of fat thickness are commonly discounted in price. The industry also discriminates against carcasses that are very lean (less than 0.10 inches of fat thickness), due to increased dehydration and shrink during storage and transportation for these very lean carcasses. Fat thickness is also the determining factor in calculating lamb carcass yield grades. The goal is to produce carcasses that have at least 0.10 inches, but preferably not more than 0.30 inches of fat thickness. Within this range, carcasses meet the preferred minimum yet do not have an excess amount of waste.

Yield Grade (YG)

Yield grade is calculated by the equation: YG = 0.4 + (10 x fat thickness). Yield grades are used by the industry to categorize carcasses for their expected yield of boneless, closely trimmed retail cuts. Yield grades range from 1 to 5, with a yield grade 1 having the highest expected yield and 5 the lowest. Under normal circumstances, carcasses are yield graded a 1, 2, 3, 4, or 5. However, yield grades have been reported to the nearest 0.1 for this carcass contest. Since yield grades estimate the percentage of the carcass that is saleable retail cuts, they are an important aspect of carcass pricing. Yield grade 4 and 5 carcasses are undesirable because of their excess fat, and therefore lower yield of boneless, trimmed retail cuts.

Body Wall Thickness (BW)

Body wall thickness (inches) is measured over the rib beyond the ribeye, five inches from the midline of the carcass. Differences in body wall thickness between carcasses are due primarily to fat. Carcasses that are similar over the ribeye for fat thickness (FT), may vary considerably in body wall thickness. The body wall thickness measurement is used in the equation to determine percentage boneless, closely trimmed retail cuts (% BCTRC).

Loin Muscle Area (LMA)

Loin muscle area (ribeye area) is used as an indicator of total amount of muscle mass in the carcass. Loin muscle measurements are taken by using a grid to determine the cross-sectional area (in square inches) of the loin muscle at the 12^{th}-13^{th} rib. The loin muscle is a primary muscle in the carcass, and therefore is fairly reflective of total carcass muscling. The ribeye is also the major muscle in the loin, which is the most valuable wholesale cut in the carcass. LMA size is related to carcass weight- heavier carcasses should have larger LMAs.

Leg Score

Leg score is a visual estimate of the amount of muscle in the leg of the carcass. Leg scores are expressed numerically with 15 (Prime+) being the heaviest muscled and 10 (Choice-) being relatively light muscled. The scores are assigned by evaluating the muscle expression, shape, and fullness to the leg relative to carcass weight. Leg scores are not used to calculate percentage of retail cuts (%BCTRC), but are important in determining quality grades (QG).

Percentage Boneless Closely-Trimmed Retail Cuts (%BCTRC)

The percentage of boneless, closely trimmed retail cuts represents the predicted proportion of the carcass that is saleable retail product. The formula to predict %BCTRC uses carcass weight, fat thickness, body wall thickness, and ribeye area as follows:

$$\%BCTRC = 49.936 – (.0848 \times HCW) – (4.376 \times FT) – (3.530 \times BW) + (2.456 \times REA)$$

This percentage varies greatly, with very high yielding carcass being greater than 50% BCTRC and low yielding carcasses less than 45% BCTRC. The two measurements of waste fat, fat thickness (FT) and body wall thickness (BW), have the largest impact on %BCTRC. Lambs with more waste fat will have lower %BCTRC. Muscling also influences the value. Larger ribeyes relative to carcass weight will increase %BCTRC. Although yield grades estimate percentage of boneless retail cuts, %BCTRC is more precise because in includes body wall thickness and also accounts for differences in muscle between carcasses. While BCTRC is not used in the commercial industry, it is routinely used in carcass contests to rank carcasses.

Quality Grade (QG)

Quality grades are an estimation of the palatability characteristics (tenderness, juiciness, and flavor) of the carcass. Final quality grade is determined by three factors: maturity, flank streaking, and conformation. In young lambs, there is normally very little variation in maturity (age). Flank streakings are the fat deposits on the flank muscles. Since lamb carcasses are normally not ribbed, flank streaking is used to estimate marbling. Marbling is the small specs of fat found within the ribeye muscle, and is related to flavor and juiciness. The final component is conformation (muscling), which is primarily determined by leg score. These factors are combined to arrive at a final quality grade. Most lamb carcasses quality grade Choice and Prime. Prime is the highest quality grade, followed by Choice. Each quality grade is further subdivided into thirds: Prime+, Prime°, Prime-, Choice+, Choice°, and Choice-, from highest to lowest in quality, respectively. Carcasses that do not qualify for Choice- quality grade, are commonly referred to as “no rolls” (NR) in the industry. These carcasses are usually from lightweight, underfinished lambs. Due to their inferior quality, no roll carcasses are frequently discounted in price.

Carcass Pricing

When lambs are sold on a carcass basis, the total value of the carcass is calculated by multiplying carcass price/lb. by hot carcass weight. The equivalent live price/lb. can be determined by dividing total carcass value by live weight. Carcass price is determined by market conditions, and premiums and discounts may be applied based on YG or carcass weight. For example, YG 4+ carcass may receive a discount. Carcass weights which are too light or too heavy, based on processors needs may also be discounted.

Outstanding Sheep Producer Award Recipients

2018 – David Fiske, Augusta County
2017 – Burke Simmons, Augusta County
2016 – Cecil King, Pulaski County
2015 – Larry & Lisa Weeks, Augusta County
2014 – Jeff Lawson, Augusta County
2013 – Laura Begoon, Rockingham County
2012 – Sonny and Ashley Balsley, Augusta County
2011 – Leo Tammi, Augusta County
2010 – Bobbi Hefner, Highland County
2009 – Mac Swortzel, Augusta County
2008 – David Shiflett, Augusta County
2007 – Doug Riley, Augusta County
2006 – Mike Carpenter, VDACS
2005 – Jim Wolford, Wythe County
2004 – Martha Mewbourne, Scott County
2004 – David Redwine, Scott County
2003 – Martha Polkey, Loudoun County
2002 – Carlton Truxell, Augusta County
2001 – Corey Childs, Clarke County
2000 – John Sponaugle, Rockingham County
1999 – Bill Stephenson, Page County
1998 – Gary Hornbaker, Clarke County
1997 – Bruce Shiley, Clarke County
1996 - Weldon Dean, Rockingham County
1995 - Bill Wade, Augusta County
1994 - John Henry Smith, Russell County
1993 - Robin Freeman, Chesapeake
1992 - Courtland Spotts, Pulaski County
1991 - Ted Bennett, Halifax County
1990 - Clinton Bell, Tazewell County
1989 - Rex Wightman, Shenandoah County
1988 - Tim Sutphin, Pulaski County
1987 - Zan Stuart, Russell County
1986 - J. W. Riley, Augusta County
1985 - John Bauserman, Fauquier County
1984 - Roy Meek, Pulaski County
1983 - Jonathan May, Rockingham County