



PROCEEDINGS

2021 Virtual Virginia Shepherds' Symposium

January 6-7, 2021



Image courtesy Shamoka Run Farm, Mount Sidney, Virginia

Virtual Symposium Program

WEDNESDAY, JANUARY 6, 7–9 P.M.

7 p.m. Introduction

7:05 p.m. Nontraditional Markets for Sheep. Dr. Reid Redden, Sheep & Goat Specialist, Texas A&M AgriLife Extension Service

7:45 p.m. Producer Spotlight.

Joe Gingerich, Gingerich Family Katahdins

Gretchen Frederick, Solitude Wool

Debbie Webster, Whispering Pines Farm Dairy & Cheese.

8:20 p.m. Update from ASI. Jimmy Parker, ASI Executive Board, Region II Director, Alabama

8:40 p.m. VSPA Annual Meeting. Mandy Fletcher, President

THURSDAY, JANUARY 7, 7–9 P.M.

7 p.m. Introduction

7:05 p.m. Proper Use of Antibiotics on the Farm. Dr. Kevin Pelzer, Virginia-Maryland College of Veterinary Medicine

7:45 p.m. Help on the Horizon for Parasite Control? Dr. Anne Zajac, Virginia-Maryland College of Veterinary Medicine

8 p.m. Farming with Labels. Organic, Natural, Humane, Grass-fed: What Does It All Mean? Susan Schoenian, Sheep and Goat Specialist, University of Maryland

8:35 p.m. Update from VDACS. Dan Hadacek, DVM, Northern Regional Veterinary Supervisor

8:45 p.m. Opportunities with the Virginia Sheep Industry Board. Matthew Sponaule, VDACS

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presented by the

Virginia Sheep Producers Association

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Sponsors



Wilmer Stonemason
Virginia Farm Bureau
P.O. Box 27552
Richmond, VA 23261
804-290-1024
wilmer.stoneman@vafb.com



Allison Bagley
Augusta Co-op Farm Bureau, Inc.
1205B Richmond Road
540-885-1265
abagley@augustacoop.com



Anthony Watson
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P.O. Box 594
276-228-8666
awatson@fcvirginias.com



Gene Copenhaver
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P.O. Box 1008
Abingdon, VA 24212
276-356-3276
gcopenhaver@firstbank.com

Individual Sponsors

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John Hall
23315 Chestertown Rd
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410-708-8781
Hallclublambs@gmail.com

Facebook: Hall Club Lambs, Hall Katahdins

Paul Walker Livestock
Paul Walker
1722 Jimmie Kerr Road
Haw River, NC 27258
336-269-8597
dpaulwalker@msn.com

Commercial Dorper ewe lambs and ram lambs

Chesapeake Fibershed
chesapeakefiber
shed@gmail.com
chesapeakefibershed.com

Building a regional fiber system in the Chesapeake Region centered around local fibers, local dyes, and local labor.

Vorac Suffolks at Castle Hill Farm, Peter Vorac
5814 Broad Run Road
Jefferson, MD 21755
301-371-4111
pvorac@comcast.net
www.voracsuffolks.com

Registered breeding stock; ram leasing; project lambs; square bales grass hay

Welcome

We are pleased to offer the proceedings from the first ever virtual Virginia Shepherds' Symposium, and hope you find the speaker presentations and other assembled information we have included useful for your operation. Whether you are located in Virginia or not, we welcome your membership in the Virginia Sheep Producers Association. We will continue to work to serve the needs of the state's producers into the future.

—Mandy Fletcher, VSPA President

Speakers

Dr. Reid Redden is a sheep and goat specialist for Texas A&M AgriLife Extension based in San Angelo. His primary responsibility is to support county-based educational programs and lead statewide efforts that benefit the state sheep and goat industry. Notably, Reid and his team have built a large social media following, compose monthly industry columns, and maintain a strong YouTube presence. His programs are designed to provide solutions to current problems facing sheep and goat



raisers, such as a quantifiable genetic improvement, mitigating predator losses, and improving integrated parasite control. Dr. Redden works to bring all aspects of the industry together and serves on several national committees and boards.

Reid.Redden@ag.tamu.edu

As sheep and goat specialist for University of Maryland Extension, **Susan Schoenian** is sheep and goat specialist. She conducts research with small ruminants at the Western Maryland Research & Education Center in Keedysville. She has animal science degrees from Virginia Tech and Montana State University.



Susan is active on social media and is the author of several web pages pertaining to small ruminants, including the Maryland Small Ruminant Page (sheepandgoat.com), Sheep 101, and WormX, the web site of the American Consortium for Small Ruminant Parasite Control. Susan has traveled extensively on behalf of the University of Maryland, Maryland Department of Agriculture, USDA, and other organizations. She raises Katahdin sheep on her small farm in Clear Spring, MD.

sschoen@umd.edu

Kevin D Pelzer, DVM, MPVM, Diplomate, ACVPM, is professor and associate department head at the VA-MD College of Veterinary Medicine at Virginia Tech in Blacksburg. He teaches production management medicine/epidemiology in the Department of Large Animal Clinical Sciences.



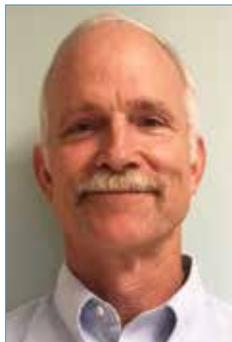
kpelzer@vt.edu

Jimmy Parker is the outgoing ASI Region 2 Director. He grew up on the Appalachian foothill farm where he and his family now run their small flock of wool ewes. He runs a ewe operation, sells a few purebred rams to area producers to help increase weight gains in their hair-sheep operations, and markets some lambs through farmers markets and to the ethnic trade. Parker graduated from Mississippi State University with an animal science degree. Since 2012, he has been managing a family-owned feed mill.



par5farm@yahoo.com

Daniel G. Hadacek, DVM, has been the VDACS Regional Veterinary Supervisor for the Northern (Harrisonburg) Region since 2018. He supervises five livestock inspectors, a field veterinarian, and a poultry specialist. Before coming to work for VDACS, Dan was in private food-animal practice for 30 years in Iowa and Virginia. He and his wife, Sarah (also a DVM) have two sons and live on a farm in Mount Solon where they raise sheep, cattle, and row crops.



dan.hadacek@vdacs.virginia.gov



Anne M. Zajac, DVM, MS, PhD, is professor of parasitology, biomedical sciences, and pathobiology at the Virginia-Maryland College of Veterinary Medicine at Virginia Tech.

Featured Producers



Joe and Silas (pictured above) **Gingerich** manage the Gingerich Family Farm, a diversified livestock operation in extreme Southwest Virginia, where they breed and raise registered Katahdins and Simmental cattle.

Their journey with sheep began in 2005 with a group of 10 commercial lambs, which quickly grew to a flock of 40-plus. They joined the Scott County Hair Sheep Association and marketed through Food City and livestock markets.

In 2010, after purchasing a larger property that lacked adequate sheep fencing, they sold out and focused on cattle, but never could quench their interest in Katahdins. So, in 2018, with a son who had a growing interest in the sheep business, they purchased 10 registered ewe lambs. In September, they attended the ram parasite test sale at the Southwest Agriculture and Research and Education Center and purchased a quality ram, enrolled in the National Sheep Improvement Program, that tested very well for parasite resistance and had good maternal estimated breeding values (EBVs). They believe that was one of the best moves they made. Parasite issues have been next to none thus far.

The flock has now grown to 45 ewes and includes varied genetics; the goal is to produce ewes with good maternal traits that never need deworming. They use rotational grazing as much as possible.

silasfromgfs@gmail.com



Gretchen Frederick is a founding partner of Solitude Wool. During her career as a graphic designer a desire came over her to have a farm. The homestead size farm came to be, and after eight years of commuting, graphic design was left behind for goats, garlic, sheep, and wool.

Starting in 2006 with partner Sue Bundy, Solitude Wool was possibly the first company (in the modern age) to create breed-specific yarns. Working with fleece from small farms in the Chesapeake Fibershed, she has touched many different breeds of sheep and their wool.

Solitude Wool sells nationally and occasionally even internationally, through a website, wool festivals, fiber conferences, and events, and still at farmers markets in the late fall.

Gretchen keeps a small flock of Romneys and dairy goats at a farm near Round Hill, Virginia.

f-solitude@mindspring.com



Debbie Webster bought a few sheep and goats over 20 years ago for a Live Nativity. Today, she has the only licensed sheep milk dairy in South Carolina. She has a meat handler license and sells pastured lamb.

She's president of the South Carolina Sheep and Goat Association, is the state's ASI representative, serves on ASI's Production Education and Research Council, and Genetic Stakeholders Committee, and on the boards of the Dairy Sheep Association and the Forage and Grazing Land Coalition.

She started the first 4-H dairy sheep club in the United States, operates an agritourism program, and holds classes on small ruminant care and cheese making. She uses her sheep for therapy with special needs children.

She founded the nonprofit Whispering Pines Foundation, dedicated to getting children and youth outdoors and involved in dairy sheep, goats, and farming.

Her 180-acre farm is in Seneca, where she lives with her husband and two daughters. They raise horses, cows, sheep, goats, chickens, ducks, livestock guardian dogs, and border collies.

dairysheepdeb@gmail.com

Presentations

Nontraditional Markets of Sheep and Goats

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- ⦿ Twitter: AggieSheepGoat
- ⦿ Reid's Ramblings:
 - ⦿ agrilife.org/sheepandgoat
- ⦿ ASI Research Update Podcast
- ⦿ YouTube: Sheep and Goats at Texas A&M AgriLife Extension



Nontraditional Market Overview

1. Who's the Consumer
2. Market Trend
 1. Lamb
 2. Kid Goat
 3. Ewes/Rams
 4. Nannies/Bucks



Traditional Demand

Why Millennials?



- 80 Million Consumers
- Represent ¼ of the population
- 200 billion in annual buying power
- Nearly half consider themselves foodies
- No biases towards lamb & Adventurous Eaters!

N

Demand - Nontraditional

Minority Rules | Hispanic & Muslim Americans

Minority populations consume more than half of the total lamb supply in the U.S.



Young & Family Focused Population

5.7 Million People



Large Households in Urban Areas

1.7 Million Households



Money to Spend

\$98 Billion Disposable Income



Ethnic Calendar – Be Careful!!!

HOLIDAY	RELIGION	2021	2022	2023	2024	2025
Eid ul-Adha Festival of the Sacrifice	Muslim	July 20-23	July 9-10	Jun 28-29	Jun 16-17	Jun 6-7
Muharram/Hajra Islamic New Year	Muslim	Aug 9-10	July 29-30	July 18-19	July 7-8	June 26-27
Mawlid al-Nabi Prophet's Birthday	Muslim	Oct 18-19	Oct 7-8	Sept 26-27	Sept 15-16	Sept 4-5
Ramadan (month of fasting)	Muslim	April 12-May 11	April 2-May 1	Mar 22-Apr 20	Mar 10-Apr 8	Feb 28-Mar 29
Eid ul-Fitr Festival of Fast Breaking	Muslim	May 12-13	May 2-3	Apr 21-22	Apr 9-10	Mar 30-31
Pesach (Passover)	Jewish	Mar 27-Apr 4	Apr 15-23	Apr 5-13	Apr 22-30	Apr 12-20
Rosh Hashanah	Jewish	Sept 6-8	Sept 25-27	Sept 15-27	Oct 2-4	Sept 22-24
Chanukkah	Jewish	Nov 29-Dec 6	Dec 18-26	Dec 7-15	Dec 25-Jan 2	Dec 14-22
Western (Roman) Easter	Christian	April 4	April 17	April 9	April 17	April 4
Eastern Orthodox (Greek) Easter	Christian	May 2	April 24	April 16	May 5	April 20
Christmas (Western)	Christian	Dec 25	Dec 25	Dec 25	Dec 25	Dec 25
Epiphany, Feast of the Nativity	Christian	Jan 7	Jan 7	Jan 7	Jan 7	Jan 7
Chinese New Year		Feb 12	Feb 1	Jan 22	Feb 10	Jan 29

<https://www.sheepandgoat.com/ethniccalendar>



Nontraditional Demand

- ⊙ Don't try to categorize it
- ⊙ Very Diverse
 - Background
 - Race
 - Religion
- ⊙ Prefer products sourced outside the traditional channel
 - Live Animals
 - Whole/Half Carcass
 - Light Weight Animals to Older/Unblemished Animals
- ⊙ Let the Consumer or Market Dictate Production



Nontraditional Distribution Overview

1. Direct to Consumer
 - Be knowledgeable about on-farm slaughter regulations
2. Buying Stations
 - Buy and Hold Live Animals for Consumers
3. Source Animals at Auction, Harvest at Small Plant, and Distribute to Ethnic Markets
 - Largest Distribution Channel



Texas is a Nontraditional State

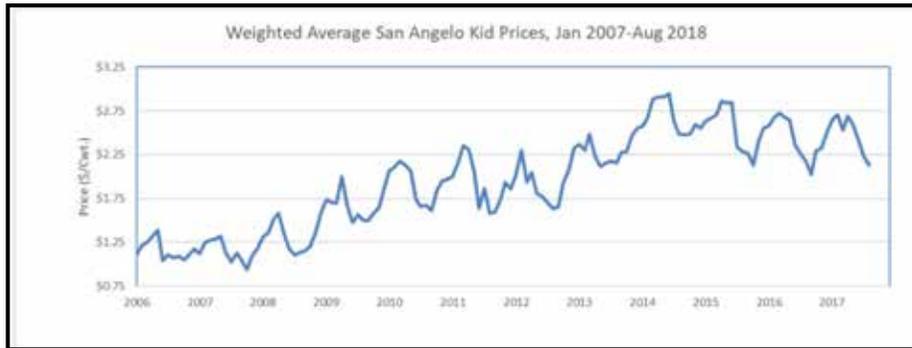
- Why?
 - Supply of Goats (~40% of US)
 - Shift to Hair Sheep (9 to 1)
 - Aseasonal Supply
 - Large Nontraditional Consumer Base
 - DFW, Houston, San Antonio
 - Good Distribution Network to Major Markets



Price Outlook - Light Lambs



Price Outlook - Light Kid Goats



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San Angelo Market Data

- ⦿ Mr. Bill Thompson, Dr. Justin Benavidez
- ⦿ <https://sanangelo.tamu.edu/extension/west-central-agricultural-economics/small-ruminant-mpa-project/>

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Figure 7. Monthly Weighted Average Slaughter Lambs Price at San Angelo, TX Auction.

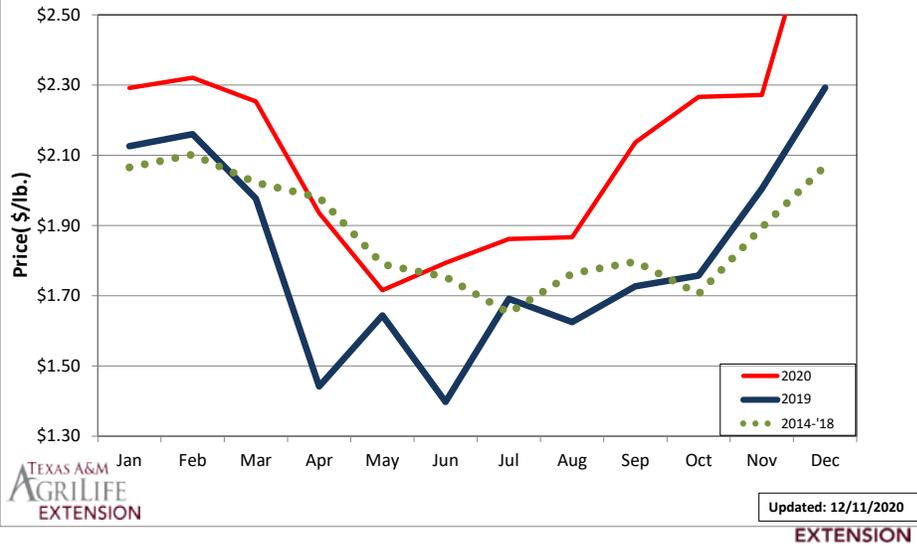


Figure 1. Monthly Weighted Average Price for All Kids at San Angelo, TX Auction.

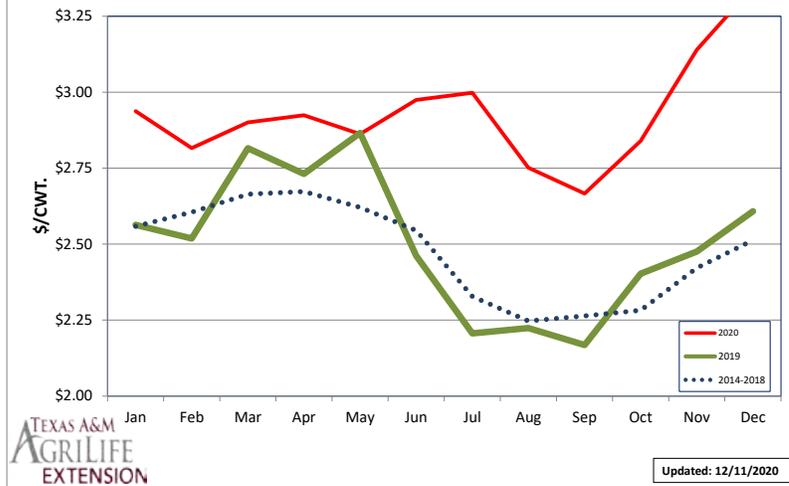
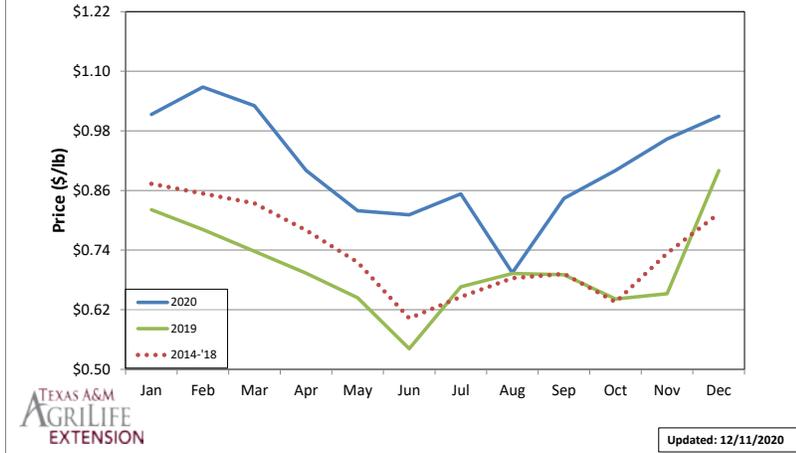


Figure 9. Monthly Weighted Average Price for All Cull and Utility Ewes at San Angelo, TX Auction.

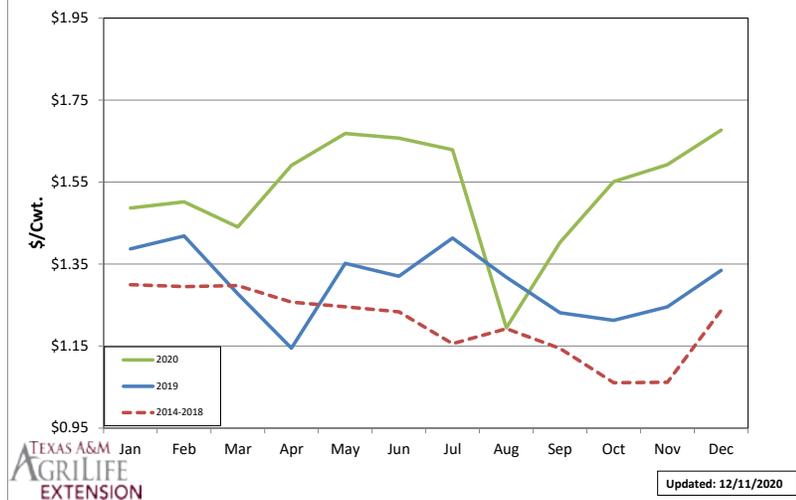


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Figure 3. Monthly Weighted Average Nanny Price at San Angelo, TX Auction.



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Updated: 12/11/2020

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Table 2. Weighted Average Lamb and Ewe Prices at San Angelo, TX Auction.

	Feeder Lambs			Slaughter Lambs			Ewes, All Cull and Utility			
	Total Hd	Avg Wgt	Price (\$/Cwt.)	Total Hd	Avg Wgt	Price (\$/Cwt.)	Total Hd	Avg Wgt	Price (\$/Cwt.)	
Annual	2011	18,894	69	\$ 221.97	47,895	65	\$ 171.89	17,537	125	\$ 67.84
	2012	10,291	81	\$ 128.71	33,335	76	\$ 134.78	9,549	133	\$ 61.12
	2013	27,739	79	\$ 129.04	42,858	75	\$ 122.77	11,862	136	\$ 50.33
	2014	24,572	78	\$ 186.02	45,126	74	\$ 181.03	9,306	136	\$ 67.32
	2015	23,508	77	\$ 185.95	51,473	72	\$ 194.07	5,330	133	\$ 81.69
	2016	26,874	77	\$ 173.61	67,916	72	\$ 185.61	7,493	143	\$ 76.33
	2017	20,930	74	\$ 190.00	83,805	69	\$ 196.04	15,965	131	\$ 70.02
	2018	13,465	74	\$ 168.70	90,857	67	\$ 179.04	21,041	128	\$ 58.78
	2019	12,246	80	\$ 166.16	114,760	72	\$ 177.54	16,907	129	\$ 68.97
	2020	12,708	77	\$ 170.48	121,577	69	\$ 204.10	25,817	125	\$ 87.73
Quarterly	2018 I	1,960	79	\$ 195.02	22,059	64	\$ 210.57	2,830	133	\$ 76.55
	2018 II	4,985	67	\$ 186.10	32,397	65	\$ 182.39	7,846	131	\$ 56.58
	2018 III	2,930	74	\$ 145.61	23,757	70	\$ 151.38	7,188	124	\$ 54.14
	2018 IV	3,590	82	\$ 152.08	12,644	73	\$ 173.17	3,177	125	\$ 58.00
	2019 I	1,091	87	\$ 166.01	27,310	69	\$ 205.63	3,068	134	\$ 77.23
	2019 II	3,834	83	\$ 159.22	39,173	77	\$ 152.23	5,102	132	\$ 61.73
	2019 III	3,466	75	\$ 164.09	23,507	74	\$ 167.98	4,383	128	\$ 68.37
	2019 IV	3,855	78	\$ 175.34	24,770	65	\$ 202.11	4,354	124	\$ 72.30
	2020 I	1,404	74	\$ 197.03	32,030	62	\$ 228.18	4,640	116	\$ 103.56
	2020 II	4,561	82	\$ 156.22	41,079	70	\$ 181.46	7,439	129	\$ 83.44
	2020 III	6,594	76	\$ 174.38	32,794	72	\$ 192.88	9,284	126	\$ 80.59
	2020 IV	149	55	\$ 246.37	15,674	75	\$ 241.18	4,454	126	\$ 94.82

Table Updated: 12/11/2020



Table 1. Weighted Average Kid and Nanny Prices at San Angelo, TX Auction.

	San Angelo Kids*			Nannies 1-2s			
	Total Hd	Avg Wgt	Price (\$/Cwt.)	Total Hd	Avg Wgt	Price (\$/Cwt.)	
Annual	2011	38,510	53	\$ 188.18	51,236	97	\$ 63.07
	2012	35,179	58	\$ 186.75	16,122	113	\$ 91.30
	2013	27,814	58	\$ 194.86	15,049	109	\$ 85.41
	2014	37,479	57	\$ 227.79	18,255	110	\$ 107.75
	2015	25,041	54	\$ 267.67	13,607	109	\$ 131.44
	2016	26,526	57	\$ 252.12	12,632	106	\$ 124.45
	2017	83,905	55	\$ 240.17	15,295	106	\$ 121.26
	2018	72,633	54	\$ 239.77	14,266	106	\$ 110.80
	2019	80,272	56	\$ 248.99	15,579	107	\$ 129.07
	2020	77,210	54	\$ 291.26	17,683	103	\$ 151.16
Quarterly	2018 I	13,768	56	\$ 263.64	2,029	107	\$ 123.55
	2018 II	17,535	51	\$ 255.81	4,530	104	\$ 116.54
	2018 III	19,251	53	\$ 219.01	4,688	106	\$ 107.39
	2018 IV	22,079	55	\$ 230.28	3,019	106	\$ 99.04
	2019 I	11,826	59	\$ 263.26	2,257	107	\$ 133.96
	2019 II	27,627	55	\$ 267.47	4,026	108	\$ 126.72
	2019 III	22,276	57	\$ 219.93	5,992	107	\$ 131.16
	2019 IV	18,543	54	\$ 247.67	3,304	106	\$ 124.77
	2020 I	12,963	53	\$ 289.79	2,777	102	\$ 148.17
	2020 II	22,667	55	\$ 292.10	4,878	103	\$ 164.31
2020 III	24,897	54	\$ 281.87	6,759	103	\$ 139.41	
2020 IV	16,683	55	\$ 305.05	3,269	106	\$ 158.21	

* Prior to 2017 only Selection 1 Kids were reported, Starting in 2017 all kids are reported

Table Updated: 12/11/2020



Questions???



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See the Appendix for a perspective on on-farm ethnic slaughter (page 87), an update on Virginia State University's mobile slaughter and processing unit (page 81) and pages from a report on custom slaughter operations in Virginia (page 87).

Producer Spotlight

GINGERICH FAMILY KATAHDINS

SILAS GINGERICH

[HTTPS://WWW.FACEBOOK.COM/GINGERICHFAMILYFARM/](https://www.facebook.com/gingerichfamilyfarm/)

[SILASFROMGFS@GMAIL.COM](mailto:silasfromgfs@gmail.com)

**EWES GRAZING STOCKPILED
FESCUE & WINTER RYE**



**WEED CONTROL ON RECENTLY
CLEARED PASTURE**

SUPERIOR EBV'S = QUALITY EWES & RAMS

Trait	Value	Accuracy Value
Birth Weight (BWT)	0.24	.88
Weaning Weight (WWT)	2.385	.85
Maternal Weaning Weight (MWWT)	1.445	
Post Weaning Weight (PWWT)	3.359	.84
Yearling Weight (YWT)	1.228	.54
Weaning Fecal Egg Count (WFEC)	-49.77	.67
Post Weaning Fecal Egg Count (PFEC)	-44.56	.65
Post Weaning Eye Muscle Depth (PEMD)	0	0
Post Weaning Fat (PFAT)	0	
Number of Lambs Born (NLB)	0.082	.50
Number of Lambs Weaned (NLW)	0.09	.46
US Hair Index	107.17	

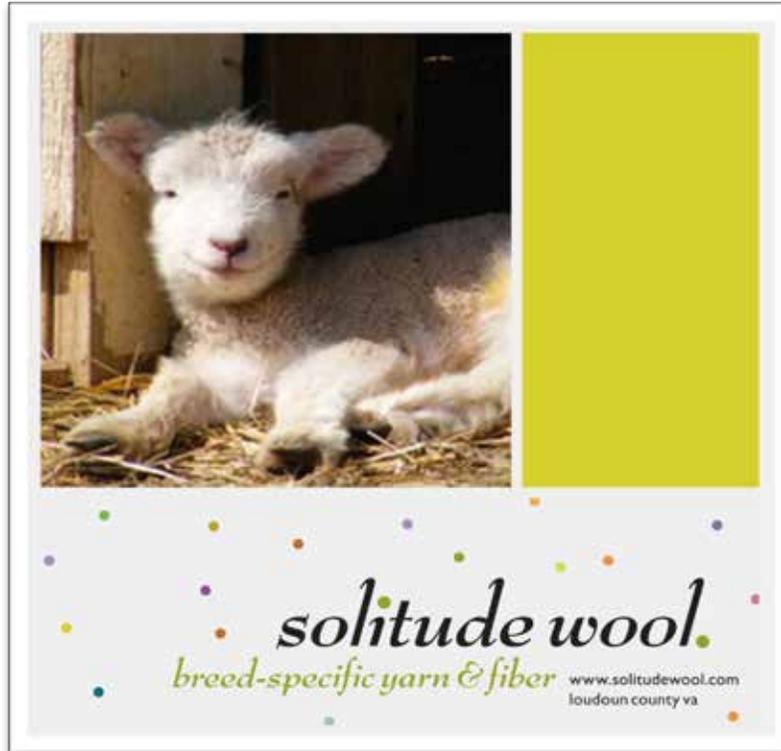
NEW ONLINE STORE

<https://app.barn2door.com/e/9pPx0/all>



QUESTIONS? CONTACT US

Joe & Silas Gingerich
<https://www.facebook.com/GingerichFamilyFarm/>
silasfromgfs@gmail.com
276-870-6234



BY GRETCHEN FREDERICK

founding partner, Solitude Wool

SHEPHERDS WHO LOVE WOOL

That's how we started 15 years ago...and that's what we still are. I believe we were the first company to create breed-specific yarns in modern times. Beginning with two Loudoun County (Virginia) shepherds, myself and Sue Bundy of RedGate farm, we now have five partners: three shepherds and two fiber artists. Focused on local fiber, we like to support small farms and inspire and educate knitters, weavers and other fiber artists with diverse yarns and types of wool.

WHAT WE DO

We buy wool from farms within the Chesapeake Fibershed (which matches the Chesapeake watershed: Maryland, Virginia and parts of Delaware, Pennsylvania, West Virginia and New York). Often we go to the farms on shearing day to skirt and select good wool while it's still warm. Seeing the farms and knowing the sheep are well cared for are important. Plus, we only use lively, lovely fleece in our yarn and roving. Appreciating wool, we pay above market prices and hope that encourages shepherds to pay attention to their fleece. We have seen that year to year, fleece gets better and better when someone appreciates it and is willing to pay for it.



Sue Bundy and Gretchen Frederick way back in 2008, skirting fleeces at Weatherlea Farm in Loudoun County.



Kathy Reed, newest Solitude Wool partner, skirting Dorset fleece in Clarke County, Virginia, 2019.

Next, we design a yarn. We aim to emphasize the characteristics of the breed whether it's luster, elasticity, strength or softness. Then we select a custom mill to work with to spin that yarn. Using mills all over the country, we have created nearly 60 different yarns. Currently we have 20 yarns from 15 different breeds of sheep.

My background is in art and design and I love color. I am the dyer for Solitude Wool and I work at my farm. I use weak acid synthetic dyes for some yarns and natural dyes for others. Color is an attractant! Often that is what first draws customers (and our newest partner!) to the yarns.

SELLING DIRECT

Solitude Wool began selling yarns at farmers markets in Washington, D.C., and Northern Virginia. As our inventory grew, we added fiber festivals (Maryland Sheep & Wool, Shenandoah Valley Fiber Festival and New York Sheep & Wool Festival [aka Rhinebeck]), and shows including the first Vogue Knitting Live in New York City, Madrona Fiber in Washington state, and others.

Because our yarns are so different from commercial yarns, we do a LOT of educating about breeds, yarn construction, and types of wool. In addition to individual conversations with customers, we have developed other ways to teach. We created online "Swatch Alongs" that focus on contrasting yarns to learn about specific breeds of sheep. We have taught classes at



Two shots of our booth at Rhinebeck Sheep & Wool festival in 2019. The below photo (next page) shows our "Shave 'Em to Save 'Em" display. SE2SE is a program from the Livestock Conservancy to promote sheep breeds on the conservation priority list.



Maryland Sheep & Wool Festival, Rhinebeck, and we have made numerous presentations to fiber guilds.



Farm Field Days bring fiber enthusiasts onto the farms where the fleeces grow. [Image courtesy Elysa Darling]

Each year we host a “Farm Field Day” at one of the farms we buy wool from to focus on a different breed of sheep. The shepherd introduces the breed and gives people a chance to see the sheep and their farm. We bring in a spinning instructor and another teacher in a craft skill that best uses that type of fleece whether its knitting, felting or another use. These events may include lamb tastings and vendors of other locally made products, such as wine or cheese, and events such as shearing demonstrations.

In 2010 we created our first website. We are on our third iteration and currently use Shopify (an e-commerce platform for online stores and retail point-of-sale systems). A few years ago, we decided to scale back the number of in-person shows we did and aimed to grow online sales. That has been happening steadily until this year. The pandemic and virtual shows have completely converted our direct sales to the web. We have also done some targeted wholesale and that is an area of possible growth for us.

My best advice, if you have or are starting a business: start an email about what you are doing and encourage your customers to sign up. It is the most effective marketing you can do.

WE ARE LOOKING FOR GOOD WOOL

One of the sad things we've experienced over the last 15 years is farms giving up on their sheep. Many of the yarns we loved we had to discontinue because we no longer had a local source for that breed. Here are some that we are actively looking for:

- *Corriedale or other Medium Wool breeds*
- *Targhee or other Fine Wool breeds*
- *Border Leicester*

- *Dorset Horn (but polled Dorset need love too)*
- *Llama*
- *Lincoln or other very lustrous, coarse end of the Longwool breeds*

Email our newest Solitude Wool partner, Kathy Reed at kreedknits@gmail.com if you, or someone you know have these breeds and want to sell us wool.

WHAT'S NEXT?

We don't know. We just keep on keeping on because we love wool, we love our yarns and connecting with customers and others who love wool. What we need is help with sales and advertising...and a new partner with ambition, vision and of course, a love of wool. Maybe it is someone here at the symposium? If you are interested, or have ideas, we would really like to talk with you. If you want to experience some wonderful, gently processed yarns or spinning fibers with different characteristics, check out our website:

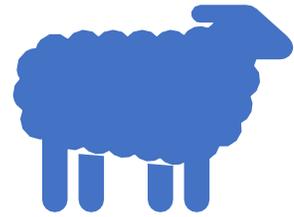
solitudewool.com



[Image courtesy Elysa Darling]

Intro to Dairy Sheep

- Deb Webster
- Owner, Whispering Pines Farm, Dairy and Cheesery
- Seneca, South Carolina
- Farm Entrepreneur, Mentor and Educator
- President South Carolina Sheep and Goat
- Started 1st Dairy Sheep 4H club in US
- 1st Licensed Sheep Dairy in South Carolina
- www.dairysheepdeb.com



Debbie Webster Dairysheepdeb@gmail.com

Dairy Sheep: A Growing Industry

Sheep Milk

- Premium Protein
- Ease of Digestibility
- Great Taste
- Better Cheese Yield
- Freezes Well



Debbie Webster Dairysheepdeb@gmail.com

Value-Added Products

- Fluid Milk
- Cheese
- Yogurt
- Kefir
- Soaps
- Lotions



Debbie Webster Dairysheepdeb@gmail.com

Dairy Sheep- FAQs

Hard to Milk Sheep?

Parasite Resistance?

Big Start Up Costs?

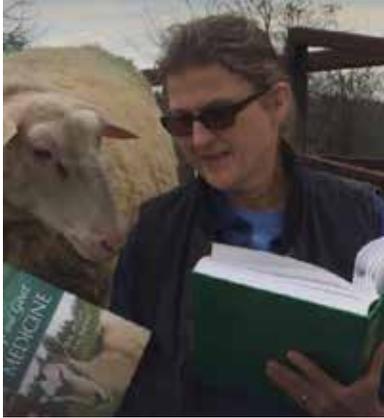
Pure East Friesian Sheep?

Availability of Dairy Breeds?



Debbie Webster Dairysheepdeb@gmail.com

Start Small- Grow Your Flock and Skills



Fluid Milk, Dairy Products and Cheese

- Home use, friends and family, Barter with other Homesteaders, Pet use?
- Growth= More Investment, but Economy of Scale saves time and labor
- Check state laws for Licensing.

Questions?

- **Contact Info and Resources**
- Upcoming Webinars and YouTube Videos
 - Lambing 101- What to Expect When You're Expecting Lambs
 - Milk Sharing Options
 - From Pet to Production
- Past Webinars- www.wpstables.com or www.dairysheepdeb.com
- Mentoring or Dairy Sheep Start Up Flocks
- Contact- Deb Webster Email- dairysheepdeb@gmail.com



ASI Update

American Sheep Industry Association



COVID-19 PANDEMIC

- ASI and 80 volunteer leaders returned from Washington, D.C., March 11; on March 16, restaurants across the nation closed. Food service business for lamb shut down overnight. Retail and textile basically shuttered and what was a very promising market for sheep producers and feeders fell off a cliff.
- ASI responded within days with a formal economic damage projections due to the pandemic, which was filed with Congress and the Trump Administration. It projected \$125 million of sheep, lamb and wool losses at the farm gate level.

CORONAVIRUS FOOD ASSISTANCE PROGRAM (CFAP)

- Wool \$3.87 million
- Sheep \$12.77
- Lambs \$44.36 million

\$61 million total to date to sheep producers and feeders with the first round of CFAP

Second round of CFAP announced in September.

CORONAVIRUS FOOD ASSISTANCE PROGRAM (CFAP) ROUND 2

- On September 18, USDA announced the second round of COVID-19 damage assistance.
- Sign up for both lamb and wool payment was September 21–December 11
- \$27 per lamb inventory – all female lambs that haven't lambed and male lambs not breeding yet included in the largest inventory after April 15 per producer's choice.
- Wool is a percentage of sale in 2019 with the rate dependent on total sale amount

MSR GREELEY COLORADO PLANT

- A bankruptcy filing in March of 2020 results in plant asset sale in July. 15 members of the U.S. House and Senate responded with request for Department of Justice investigation and USDA support of the lamb business.
- ASI met with Undersecretary Ibach and Deputy Secretary Censky following a second joint letter from Congress requesting USDA action.
- Colorado Lamb Processors started lamb slaughter in September.
- Double JJ lamb processing to launch this winter in San Angelo, Texas.

USDA LAMB PURCHASES EXCEED \$5 MILLION

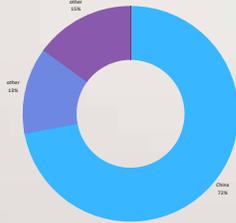
- \$2.675 million paid for in lamb shanks and chops under the Trade Mitigation Food Purchase and Distribution Program. Purchased 200,000 pounds of lamb shanks and 159,600 pounds of bone-in lamb chops.
- A total of 119,700 pounds of lamb chops and 80,000 pounds of lamb shanks were not purchased under the program due to vendor constraints.
- August 11 - LAMB SHANK 160,000.00 LB \$5.0600 - \$5.2000 \$ 822,800.00
- ASI/NLFA and states asked USDA to approve lamb racks which was accomplished in July USDA purchased \$1.9 million of racks in September.



U.S Exports to China

U.S. RAW WOOL EXPORTS

72% to China



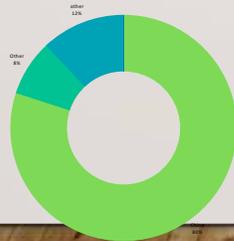
U.S. Raw Wool Exports to China

	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

OBJECTIVE MEASUREMENT OF AMERICAN WOOL

- ASI and wool industry leaders met in July 2019 on a proposal to expand a wool research laboratory to a commercial facility. At the recent ASI convention, ASI raised \$200,000 from its entities and partners towards a lab in Texas for the 2022 clip.
- Sheep Venture Company (for-profit subsidiary of ASI) is raising additional capital to purchase all equipment and approved a usage agreement for commission on all tests by Texas AgriLife in San Angelo TX

WOLF DELISTING

- The Trump administration announced this fall plans to delist Canadian grey wolfs from the ESA in lower 48 states.
- Legal opposition likely

ASI CONVENTION 2021 GOING VIRTUAL

- Registration open in December to sign up for the virtual annual convention and ASI board meeting.
- Thursday January 28 and Friday January 29, 2021, with opportunity for each council to host presentations on industry topics.

MEET YOUR VIRGINIA SHEEP PRODUCERS ASSOC. BOARD

2021

MISSION

To carry on educational and promotional work in connection with the production and sale of commercial sheep, purebred sheep, and wool in Virginia and the mid-Atlantic region.

To aid the sheep industry however possible in conducting educational and promotional work in connection with sheep production and marketing.

To stimulate interest among 4-H, FFA, and other youth groups in good commercial and purebred sheep, and educate all youth on the appropriate husbandry practices applied for the general well-being of sheep.

PRESIDENT

• **Mandy Fletcher**

Mandy owns and operates Beyond Blessed Farm in Abingdon, VA. Currently, she manages a flock of almost 140 Katahdin ewes (mostly registered) and several registered Katahdin rams on a forage-based rotational grazing system with grain supplementation. For several years she has participated in the National Sheep Improvement Program (NSIP), with emphasis being on parasite resistance, maternal traits and growth.

Mandy sells USDA inspected grass fed, grain finished lamb at her local Farmer's Market and specialty meat shop. She has served on the Soil and Water Conservation District Board, Virginia Sheep Producer Association and the Virginia Sheep Industry Board. You may contact her at beyondblessedfarm@gmail.com



VICE PRESIDENT - COMMERCIAL

• **Frank "Pat" Patterson**

Frank raises Polypay and Suffolk sheep with a focus on genetic parasite resistance. He sells rams and ewes.



VICE PRESIDENT - SEEDSTOCK

- **Corey Childs**

Corey is co-owner and operator of Cornerstone Club Lambs and Virginia Lamb and Meats, raising club lambs, breeding stock and direct marketing lamb and other meat products.



VICE PRESIDENT - WOOL

- **Martha Polkey**

Martha raises Merino sheep in Loudoun County, marketing breeding stock and fleeces. She has served multiple terms on both the Virginia Sheep Producers Association and on the Virginia Sheep Industry Board, and currently is vice president of the new VSPA Wool Council. She coordinates the Make It With Wool, Virginia! competition, is on the steering committee of Chesapeake Fibershed (chesapeakefibershed.com) and edits the quarterly newsletter of the Maryland Sheep Breeders Association.



EDUCATION ADVISOR

- **Dr. Scott Greiner**

Dr. Greiner is a Professor and Extension Animal Scientist in the Department of Animal and Poultry Sciences at Virginia Tech. Dr. Greiner was raised on a diversified livestock farm in Eastern Iowa, and attended Iowa State University where he earned a B.S. in Animal Science in 1989. His graduate studies included an M.S. from Michigan State University and a Ph.D. from Iowa State. His graduate work at ISU was fundamental to the incorporation of ultrasound as a genetic improvement tool in beef cattle. In 1998, Greiner joined the faculty at Virginia Tech and now serves as Extension Project Leader for the department as well as chair of the interdisciplinary college Animal Production Program Team. As an Extension Animal Scientist, he designs and delivers educational programs in beef cattle and sheep to adults and youth, and conducts applied research. This objective is accomplished by providing research-based education to livestock producers, extension agents, and allied industry professionals. Specific responsibilities include design and delivery of educational programs and materials related to beef and sheep genetics and associated production and marketing issues, providing leadership for statewide programs in beef cattle and sheep, and maintaining strong working relationships with the beef and sheep industries and allied organizations. He resides outside Christiansburg, VA along with his wife Lori and daughters Kaylee and Leah. The family is very involved in 4-H youth livestock activities. Greiner has judged state fairs and major junior livestock shows in over 30 states, and since 2006 has been Superintendent of the National Collegiate Livestock Judging Contest.



MEET YOUR BOARD OF DIRECTORS -
SOUTHWEST REGION

Mandy Fletcher owns and operates Beyond Blessed Farm in Abingdon, VA. She raises registered Katahdin sheep with a focus on growth and parasite resistance.

Lisa Lewis is the owner and operator of Shepherd's Way Farm located in Glade Spring VA, raising fall and spring lambs from registered and commercial Katahdin hair sheep.

Jennifer McCellan and husband Phil own Nolley Wood Farm in Riner VA. They have around 150 Katahdins, Charolais cattle, and a few goats. You may reach them at 540-392-6067.

MEET YOUR BOARD OF DIRECTORS -
NORTHERN REGION

Gary Hornbaker operates Mutton Bust'n Farm in Berryville. He raises purebred Dorsets and commercial ewes.

Jim Hilleary is the Cooperative Extension agent for Loudoun County and serves on the Virginia Sheep Industry Board as a Northern Region representative. His farm is in Marshall.

MEET YOUR BOARD OF DIRECTORS -
VALLEY REGION

Kate Mahanes owns Indigo Hills Ranch in Staunton. She is a retired elementary art teacher. Her husband and she have been breeding and raising commercial hair sheep for 15 years. Experiences and awards include Howard Wyma Sheep Industry Leadership School in 2010, Valley Conservation Farmer of the Year and Valley Clean Water Award for 2017.

Dan Woodworth – Waynesboro, VA

MEET YOUR BOARD OF DIRECTORS -
SEEDSTOCK

Corey Childs – Vice President Seedstock. Corey is co-owner/operator of Cornerstone Club Lambs and Virginia Lamb and Meat, raising club lambs, breeding stock, and direct marketing lamb and other meat products.

Barry Allen – Owner/Operator of Long and Allen Dorsets

Daniel May – Owner/Operator of May Valley Club Lambs

MEET YOUR BOARD OF DIRECTORS-
AT LARGE

Tom Stanley

Tom has had his current commercial ewe flock in Rockbridge since 2002 and is rebuilding the current flock of 50 ewes with NSIP Polypay and Suffolk genetics from Shepherd's Haven in Raphine. Tom also does custom shearing around Virginia.



MEET YOUR BOARD OF DIRECTORS –
AT LARGE

Larry Weeks – Past President

Larry and his wife Lisa own/operate Triple L Farms in Waynesboro, VA.

Sarah Mackay-Smith – White Post, VA

WOOL COUNCIL

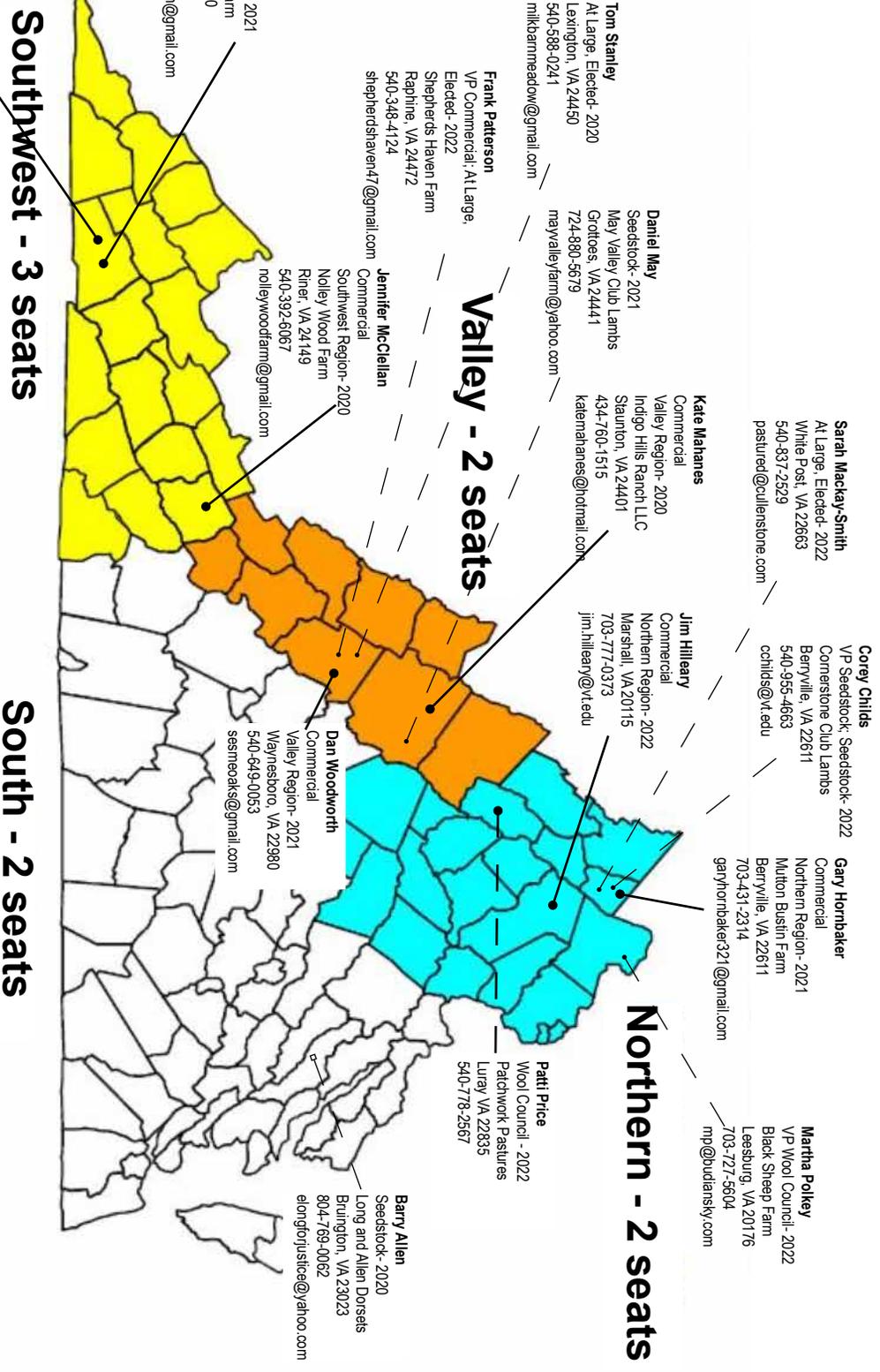
Patti Price

Patti produces wool yarns, blankets and pelts from natural colored mixed-breed wool near Luray.

Martha Polkey – Vice President, Wool Council

Martha owns and operates Black Sheep Farm in Loudoun County. An artificial insemination program using Australian and New Zealand Merino sires has improved the flock's micron count, increased staple length, and enhanced muscling. Stock is marketed nationally, and prime covered fleeces go to hand-spinners and felters.

VSPA Board Members - Officers and Regional Representatives



Sarah Mackey-Smith
At Large, Elected- 2022
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540-837-2529
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Corey Childs
VP Seedstock- 2022
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Commercial
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VP Wool Council- 2022
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Valley - 2 seats

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Luray VA 22835
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Barry Allen
Seedstock- 2020
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Larry Weeks
Past President

Mandy Fletcher
President
Commercial
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beyondblessedfarm@gmail.com

Southwest - 3 seats

Lisa Lewis
Commercial
Southwest Region- 2022
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South - 2 seats

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Vacant
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Antibiotic Use in Sheep Production

Dr. Kevin D. Pelzer

VA-MD Regional College of Veterinary Medicine

THE judicious use of antimicrobials is critical in the prevention of antimicrobial resistance in bacteria. What is meant by judicious or appropriate use of antimicrobials is:

1. Antibiotic use is confined to only when an antibiotic is needed to treat an animal's condition.
2. The specific antimicrobial product is the most appropriate for that condition. This requires a diagnosis, bacterial identification, and antimicrobial sensitivity.
3. Administering the correct dose.
4. Administering the correct frequency and duration.
5. The antimicrobial is given via the correct route, intramuscular IM, subcutaneously SQ, intravenous IV, orally.

There are few antibiotics approved for use in sheep and goats. In order for a drug to be approved for usage in a species, studies must be conducted to determine if the drug works, what the dose should be, are there any safety issues (reactions) and determine a meat and milk withdrawal time. Because of the cost to conduct all of this testing, pharmaceutical companies are not willing to invest in drugs because they will never sell enough to the small ruminant industry to recoup their costs. As a result, most drugs used in the sheep and goat industries are used in an extralabel fashion.

So what is extra label usage? Extra label usage occurs when a drug is administered in any manner that is not stated on the label. In other words, the use in a species or production class not on the label, use of a different route of administration, indication, frequency, dose, or duration.

If one gives a drug to an animal that the drug is not approved for, is given to treat a condition that the drug is not approved for, given at a different dose, route or frequency listed on the label then that drug is being used in an extra label manner. It is illegal to use drugs in any manner other than what is stated on the label.

Veterinarians can use drugs in an extra label fashion if a set of criteria is met. The first criteria is the veterinarian and client must have a VCPR, veterinary-client-patient-relationship. Criteria for a VCPR is as follows:

1. The licensed veterinarian has assumed the responsibility for making medical judgments regarding the health of the patient(s) and the need for medical therapy and has instructed the client on a course of therapy appropriate to the circumstance.
2. There is sufficient knowledge of the patient(s)

by the veterinarian to initiate at least a general or preliminary diagnosis of the medical condition(s) of the patient(s).

3. The client has agreed to follow the licensed veterinarian's recommendations.
4. The licensed veterinarian is readily available for follow up evaluation or has arranged for:
 - i. Emergency or urgent care coverage, or
 - ii. Continuing care and treatment has been designated by the veterinarian with the prior relationship to a licensed veterinarian who has access to the patient's medical records and/or who can provide reasonable and appropriate medical care.
5. The veterinarian provides oversight of treatment.
6. Such a relationship can exist only when the veterinarian has performed a timely physical examination of the patient(s) or is personally acquainted with the keeping and care of the patient(s) by virtue of medically appropriate and timely visits to the operation where the patient(s) is(are) kept or both.
7. Patient records are maintained.

Because the drugs that will be discussed are used in an extra-label fashion, before using any of these products related to the information contained within this article, YOU MUST HAVE APPROVAL FROM YOUR VETERINARIAN. I am not your veterinarian because of item 6 in the criteria for a VCPR.

PENICILLIN

Has been around since 1920. Resistance to this antibiotic was seen in the 1950's and with continued use most bacteria are resistant to the drug. Conditions for which penicillin was initially approved no longer respond to treatment with penicillin, for example pneumonia.

Procaine Penicillin G is an aqueous solution of penicillin and procaine, an anesthetic agent. The amount of Penicillin in 1 mL or cc of Procaine Pen G is 300,000 IU of penicillin. The labeled dosage on the bottle is 3000 IU per pound of body weight, which is equivalent to 1 cc per 100 lb of body weight. It should be given intramuscularly once a day.

Although the labeled dose for penicillin is 1 mL per 100 lb, because of resistance, veterinarians recommend a dosage of 3.3 mL per 100 lb, greater than three times the labeled dose. At this dose, penicillin is being used in an extra label fashion. Veterinarians also often recommend that the penicillin be given twice a day—again extra label

usage of the drug. Injections can be given in the muscle (intramuscularly) or under the skin (subcutaneously). The preferred injection sight is the neck region, in front of the shoulder. The injection site should be different each time an injection is given, and no more than 10 mLs should be given in any one site.

Because of the higher dose and frequency of use, the withdrawal time for meat is 28 days. Milk should be tested for penicillin residue prior to human consumption.

Because of antimicrobial resistance to penicillin, there are a limited number of conditions that will respond to the use of penicillin. These are listed:

- foot rot
- foot scald
- listeriosis
- mastitis
- metritis, uterine infections
- wounds

It is inappropriate to use penicillin for other conditions, because it is very unlikely the penicillin will have any effect and its use could further antimicrobial resistance.

TETRACYCLINE

Brand names include LA 200, Bio-Mycin 200, Noromycin 300, Vetrimycin 100.

Has been available since the early 1950s. Just like penicillin, there is a lot of antimicrobial resistance to tetracycline. I can find no injectable tetracycline product labeled for small ruminants in the United States. Therefore, all use of tetracycline in small ruminants is extra label. There are various products on the market with various concentrations. The good news is that the dose that is listed for cattle on the label is the same dose for small ruminants. Tetracyclines are irritating and do cause muscle damage if injected into the muscle. Most products are labeled for subcutaneous injection. Even when given subcutaneously, it is not unusual to notice a swelling a day or so after the injection at the injection site.

Most products are “long acting,” meaning that the drug blood levels remain high for 2 to 3 days after an injection. Most veterinarians suggest redosing every 48 hours in small ruminants, as they metabolize tetracycline a little faster than cattle.

The dose for the 200 mg/mL preparations are 4.5 mL/100 lb subcutaneously. Injections should be given in the neck area in front of the shoulder, no more than 5 mLs in one spot.

Withdrawal period: 35 days from last injection.
Appropriate diseases to treat with tetracycline:

- foot rot, foot scald

- listeria
- wounds, cuts
- chlamydial abortion
- pinkeye

Although tetracycline is labeled for pneumonia, the organisms involved are now resistant to the tetracyclines. There is very little if any success in treating pneumonia with tetracycline.

Tylosin (Tylan 200) is an antibiotic used mainly in swine but can be used in cattle. It is labeled for respiratory disease and foot rot. Most respiratory bacteria are resistant to tylosin. It may be effective for mycoplasma pneumonia, but mycoplasma pneumonia is only a problem in goats, not sheep. Because of the narrow scope of use of tylosin, penicillin and tetracyclines would be better options.

CEFTIOFUR

General considerations: Its trade name is Naxcel, Excenel or Excede. It is a cephalosporin, and is approved for sheep (Naxcel) to treat respiratory disease. Naxcel must be refrigerated, reconstituted, and has a short shelf life (7 days). It is given daily. Excenel is a suspension, has a relative long shelf life and is given daily. Excede is similar to Excenel but is administered every 7 days. It must be shaken vigorously to resuspend the drug. Dose: 0.5 to 1 mg per pound body weight, or 1 cc per 50–100 lb body weight once a day for Naxcel IM and Excenel, SQ. Excede is 1.5 mL per 100 lb, SQ at base of ear. Naxcel withdrawal time is 5 days, Excenel withdrawal time is 21 days, Excede is 28 days.

Appropriate diseases to treat with:

- lamb diarrhea less than 5 days of age
- pneumonia
- uterine infections (in my opinion, penicillin works better)

FLORFENICOL

Trade name: Nuflor. It came on the market in 1996, and is related to chloramphenicol, but does not have the negative side effects. Is an extra label use in sheep. It stings, especially in goats. Resflor is a combination of Nuflor and Banamine.

Dose is 3 mL/100 lb every 48 hours for 2 injections and it is given intramuscularly or 6 mL/100 lb subcutaneously. Withdrawal time is 42 days for sheep. (For cattle it is 38 days.)

Appropriate diseases to treat with:

- pneumonia
- foot rot, foot scald
- peritonitis

- swollen joints
- bone infections
- listeriosis
- diarrhea, if animal has a fever above 103 f
- encephalitis

Tulathromycin, Gamithromycin, and Tildipirosin

These drugs are in the class called macrolides. They have a very long milk withdrawal time and should not be used in dairy animals. Also, these drugs are designed to concentrate in lung tissue and so are specifically made for respiratory disease.

Tulathromycin. Trade name: Draxin. Around 2008, there was an article about using Draxin for the treatment of Caseous lymphadenitis (CL). The bottom line was that it didn't perform any better than using penicillin or just lancing the abscess. In other words, there is no real treatment for CL.

Dose: 1.1 mL/100 lb subcutaneously, one time.
Withdrawal time: 54 days

Appropriate diseases to treat with: pneumonia.

GAMITHROMYCIN

Trade name: Zactran. Around 2017, an article from Germany described the use of Zactran to eliminate foot rot from a flock of sheep. Zactran works well in treating foot rot but is expensive.

Dose: 2 mL/100 lb, subcutaneously, one time – it lasts for 10 days. The withdrawal period: is 90 days. Appropriate diseases to treat with: Pneumonia and foot rot.

Tildipirosin. Trade name is Zuprevo. Dose is 1 mL/100 lb. Withdrawal period is 54 days. Appropriate diseases to treat with: pneumonia.

THE FATE OF OVER-THE-COUNTER DRUGS

In 2017, due to the amount of unregulated use of antibiotics in feed and the concern for antimicrobial resistance, the FDA instituted a voluntary ban on

subtherapeutic use of antibiotics in feed. Feed companies complied by removing the use of subtherapeutic antibiotics off of their drug labels. Only antibiotics that have a label for use in feed can be added to feed—there is no extra label use. Antibiotics used in a subtherapeutic way were utilized for growth promotion, not disease prevention or treatment.

Also, the FDA wanted some type of oversight in the use of therapeutic, medically important antibiotics in feed. The FDA gave this role of oversight to veterinarians. As a result, in order to have a medically important antibiotic added to feed, a veterinarian must write a Veterinary Feed Directive (VFD). The VFD is then taken to the feed mill and feed can be mixed according to the VFD or the producer can acquire feed grade antibiotic to mix their own feed. In order for a VFD to be written, a veterinary-client relationship must exist. The VFD is valid for 6 months. The feed mill and the veterinarian are required to keep records of the VFD for 2 years.

The FDA has concern not only about antibiotics in feed but also the use of medically important antibiotic usage as a whole. The FDA's goal is to remove all over-the-counter (OTC) antibiotics by 2023. Canada removed all OTC drugs around 2017. In 2018, California did the same and, currently a prescription from a California-licensed veterinarian (within a valid veterinarian-client-patient relationship [VCPR]) is required for the use of all medically important antibiotics in California livestock.

So what does this mean? tylosin, penicillin, and tetracycline will no longer be available for purchase unless one has a prescription from a veterinarian. Producers needing to purchase antibiotics will need to obtain them from their veterinarian or have their veterinarian write a prescription and producers can decide where they want to purchase the antibiotics.

The requirements for a VCPR were listed at the beginning of this article. One other aspect is: A drug cannot be prescribed for a period of time longer than one year from the date the veterinarian examined the animal(s) without examining the animal or the premises again.

December 28, 2020



Antibiotic Use in Sheep Production



Judicious use of antimicrobials

- ❖ Antibiotic use is confined to only when an antibiotic is needed to treat an animal's condition.
- ❖ The specific antimicrobial product is the most appropriate for that condition. This requires a diagnosis, bacterial identification, and antimicrobial sensitivity.
- ❖ Administering the correct dose.
- ❖ Administering the correct frequency and duration.
- ❖ The antimicrobial is given via the correct route, intramuscular IM, subcutaneously SQ, intravenous IV, orally.

Extra label drug usage

- ❖ Drug administered in any manner that is not stated on the label. In other words, the use in a species or production class not on the label, use of a different route of administration, indication, frequency, dose, or duration.
- ❖ Nuflor
- ❖ **For intramuscular and subcutaneous use in beef and non-lactating dairy cattle only.**
- ❖ **Not for use in female dairy cattle 20 months of age or older or in calves to be processed for veal.**

Veterinarians and Extralabel drug use and prescriptions

- ❖ VCPR – Veterinary Client Patient Relationship
- ❖ Criteria
 - ❖ Vet has determined animal needs drug, has instructed client on course of therapy.
 - ❖ Sufficient knowledge of patient by the vet to initiate a general or preliminary diagnosis of the problem.
 - ❖ Client agrees to follow vet's instruction
 - ❖ Vet provides over sight of treatment
 - ❖ **Relationship can exist only when the vet has performed a timely physical exam of patient or is personally acquainted with the keeping and care of the patient by virtue of medically appropriate and timely visits to the operation where the patient is kept.**
 - ❖ Patient records are maintained.

SO

- ❖ I am not your vet unless I have come to your farm within the year.
- ❖ The drugs in this presentation are all used in an extralabel fashion in sheep.
- ❖ **YOU MUST HAVE APPROVAL FROM YOUR VETERINARIAN to treat any of your animals utilizing information contained within this presentation.**

Penicillin

- ❖ Uses – bottle says: treatment of pneumonia and shipping fever in cattle and sheep
 - ❖ Wounds, cuts, uterine infections, broken horns, foot rot, foot scald, listeriosis, mastitis and soremouth?
- ❖ Inappropriate uses
 - ❖ Pneumonia, diarrhea, anemia, abscesses, and those things not listed above.
- ❖ Dose Procaine Penicillin G
 - ❖ X 3 cc/100lbs twice a day IM or SQ
 - ❖ Withdraw 28 days
 - ❖ Shake, Shake, Shake
 - ❖ \$ 0.13 ml Cost = \$1.04/day x 5= 5.20



Tetracycline

- ❖ Uses – bottle says: treatment of pinkeye, footrot and pneumonia
 - ❖ Wounds, cuts, foot rot, foot scald, pinkeye, Chlamydia abortions, listeriosis
- ❖ Inappropriate uses:
 - ❖ Pneumonia, diarrhea, anemia, abscesses, and those things not listed above.
- ❖ Dose Oxytetracycline Long Acting
 - ❖ X4.5 ml /100 lbs, SQ repeat every other day
 - ❖ Withdraw 34 days
 - ❖ \$ 0.21 ml Cost = \$1.37 x 2 = 2.74



Tylosin

- ❖ Uses – bottle says: treatment of pneumonia, Shipping fever, Metritis, diphtheria, foot rot
 - ❖ Foot rot, mycoplasma in kids
- ❖ Inappropriate uses:
 - ❖ Everything
- ❖ Dose
 - ❖ X20mg/kg or 5ml/100lbs once a day
 - ❖ Withdraw 28 days
 - ❖ \$ 0.18 ml Cost = \$1.17 x 5= \$5.85



Prescription Ceftiofur- Naxcel, Excenel, Excede

- ❖ Cephaloprin
- ❖ Uses – bottle says: treatment of metritis, pneumonia, cattle foot rot
 - ❖ Pneumonia, metritis, wounds, cuts, foot rot, foot scald, diarrhea less than 5 days old
- ❖ Inappropriate uses:
 - ❖ Diarrhea, anemia, abscesses, and those things not listed above.
- ❖ Dose Excenel
 - ❖ X 1 -2 ml /100 lbs, SQ once a day
 - ❖ Withdraw 21 days
 - ❖ Shake,Shake,Shake,Shake,Shake
 - ❖ \$0.95/ml Cost = \$1.24 – 2.40 x 4 = \$4.96 – 9.92



Prescription Florfenicol – Nuflor

- ❖ Uses – bottle says: treatment of pneumonia and foot rot
 - ❖ Pneumonia, listeriosis, joint and bone infections, wounds, cuts, foot rot, foot scald, diarrhea, encephalitis
- ❖ Inappropriate uses:
 - ❖ Skin infections, anemia, abscesses, and those things not listed above.
- ❖ Dose Nuflor
 - ❖ X 6 ml /100 lbs, SQ repeat every other day
 - ❖ Withdraw 45 days
 - ❖ \$ 0.82/ml Cost = \$6.40



Tulathromycin– Draxin

- ❖ Uses – bottle says: treatment of pneumonia and foot rot
 - ❖ Pneumonia
- ❖ Inappropriate uses:
 - ❖ Everything except pneumonia.
- ❖ Dose Draxin
 - ❖ X 1.1 ml /100 lbs, SQ
 - ❖ Withdraw 54 days
 - ❖ \$ 4.89/ml Cost = \$ 7.00



Gamithromycin– Zactran

- ❖ Uses – bottle says: treatment of pneumonia
 - ❖ Pneumonia and foot rot
- ❖ Inappropriate uses:
 - ❖ Everything except pneumonia and foot rot
- ❖ Dose Draxin
 - ❖ X 2 ml /110 lbs, SQ – lasts 10 days
 - ❖ Withdraw 90 days
 - ❖ \$ 1.99/ml Cost = \$4.70

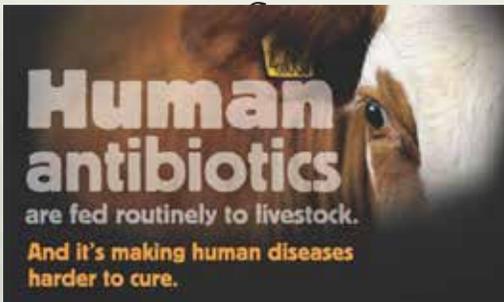


Tildipirosin– Zuprevo

- ❖ Uses – bottle says: treatment of pneumonia
 - ❖ Pneumonia
- ❖ Inappropriate uses:
 - ❖ Everything except pneumonia.
- ❖ Dose Zuprevo
 - ❖ X 1.0 ml /100 lbs, SQ
 - ❖ Withdraw 54 days
 - ❖ \$ 4.71/ml Cost = \$6.12



Looking into the future of antibiotic use.



Save antibiotics.org

Dr. Mike Apley, Range Beef Cow Conf.

Dispute over drug in feed limiting US meat exports



Fed to an estimated 60 to 80 percent of pigs in the United States, ractopamine has sickened or killed more of them than any other livestock drug on the market. (Paylean, Optaflexx)

Public is presented with

- ❖ Many scientific studies confirm that the nontherapeutic use of antibiotics in agricultural animals contributes to the development of antibiotic-resistant bacterial infections in people.
- ❖ 84 percent of grower-finisher swine farms, 83 percent of cattle feedlots, and 84 percent of sheep farms administer antimicrobials in the feed or water for health or growth promotion reasons.
- ❖ Antibiotics were present in 48 percent of the streams tested nationwide and almost half of the tested streams were downstream from agricultural operations.
- ❖ Precautionary Rule: states that because evidence of harm is uncertain, & error costs are very high (potentially), it is acceptable to take precautionary action.

Guidance 209 - FDA

- ❖ The use of medically important antimicrobial drugs in food-producing animals should be limited to those uses that are considered necessary for assuring animal health.
- ❖ The use of medically important antimicrobial drugs in food-producing animals should be limited to those uses that include veterinary oversight or consultation

HR 1549 Preservation of Antimicrobials for Medical Treatment Act

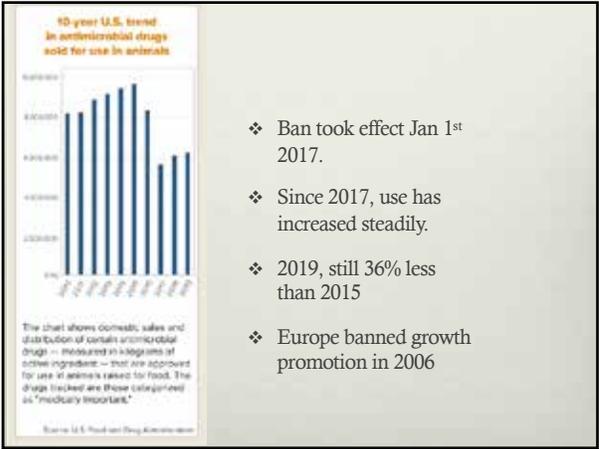
- ❖ essentially ban the “subtherapeutic” use of seven classes of antimicrobials in food animals.
 - ❖ Penicillin
 - ❖ Tetracycline
 - ❖ Tylosin
 - ❖ Lincomycin
 - ❖ Virginiamycin
 - ❖ Neomycin
 - ❖ Sulfa

Cephalosporins

- ❖ In humans - treat pneumonia, skin conditions, diabetic foot conditions, urinary track infections.
- ❖ Discussion of withdraw from market – by some groups
- ❖ Discussion to limit to label use only - FDA
- ❖ Can't be used in an unapproved dose, frequency, duration or route of administration.

VFD – Veterinary Feed Directive

- ❖ Veterinarian working under a VCPR examines and diagnoses animal conditions and determines if the condition warrants use of a VFD drug.
- ❖ Vet issues a VFD order
- ❖ Extralabel use is prohibited by everyone.



- ❖ Ban took effect Jan 1st 2017.
- ❖ Since 2017, use has increased steadily.
- ❖ 2019, still 36% less than 2015
- ❖ Europe banned growth promotion in 2006

Here's the future

- ❖ Tylosin, penicillin and tetracyclines are over the counter antibiotics.
- ❖ GFI #263 entitled "Recommendations for Sponsors of Medically Important Antimicrobial Drugs Approved for Use in Animals to Voluntarily Bring Under Veterinary Oversight All Products That Continue to be Available Over-the-Counter."
- ❖ The FDA's Center for Veterinary Medicine stated a two-year phase-in period would be allowed once the FDA Government Guidance document is finalized
- ❖ The plan should be fully implemented by 2023
- ❖ California instituted no OTC in 2018, Canada 2017

Bacterial treatment shows great promise in fighting *Haemonchus contortus* infections

This article is taken from the December 8, 2020, U.S. Agricultural Research Service press release describing the research.

The U.S. Department of Agriculture's Agriculture Research Service (ARS) has announced a groundbreaking treatment that prevents anemia, weight loss, poor wool and meat production, and even death in sheep.

ARS researchers partnered with Virginia Tech and the University of Massachusetts' Medical School to solve *Haemonchus contortus* parasite infection, which also happens to be the number one health problem in the U.S. sheep industry. The parasite infects the stomach of ruminant mammals, feeding and interfering with digestion, before ultimately affecting the animal's overall health and stability.

"The *H. contortus* parasite has developed resistance to virtually all known classes of anti-parasitic drugs," said ARS Researcher Dr. Joseph Urban, who lead the research team in testing and implementation of a para-probiotic treatment to kill the parasite that causes *H. contortus*.

The worm parasite mates within the animal and its fertilized eggs pass through the animal's waste into the soil. The larvae then develop to re-infect other unsuspecting animals, spreading the infection throughout a pasture and creating a cycle of infection that hinders animal growth, development and production.

"This is a major problem and the newly-developed treatment is derived from bacteria normally found in the soil that can produce a protein that binds to receptors in the intestine of the parasite," said Dr. Urban. "The treatment will then kill the parasites and reduce debilitating infection in adult sheep."

Bacillus thuringiensis (or Bt) is a soil-dwelling bacterium that, as part of its life-cycle, produces crystal proteins. These crystal proteins (Cry5b) bind to and disrupt the integrity of the invertebrate gut, ultimately killing it.

You can read the paper, "A new paraprobiotic-based treatment for control of *Haemonchus contortus* in sheep," in the *International Journal for Parasitology: Drugs and Drug Resistance*. 2020, Vol. 14(December), pp. 230–236.

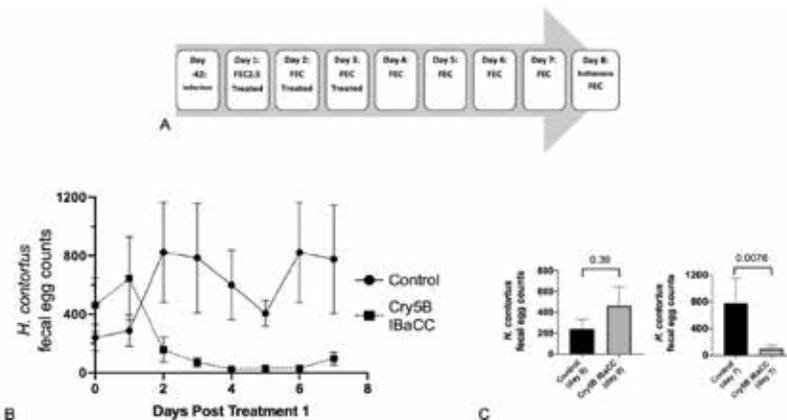
It is available for download at <https://www.sciencedirect.com/science/article/pii/S2211320720300464>.

"When the treatment was given to infected sheep at Virginia Tech there was a rapid and dramatic reduction of parasite reproduction and survival, without any negative effect observed in the sheep," said Dr. Anne Zajac, professor of parasitology at Virginia Tech's Virginia-Maryland College of Veterinary Medicine.

Para-probiotics are "inactive probiotics," or good bacteria that can still provide health benefits. Despite the growing interest in para-probiotic use, these types of treatments are not commercially available. The treatments are currently under review by the U.S. Food and Drug Administration and will likely be commercially produced in large amounts once approved. This will help to protect an even larger population of animals across the country.

"Para-probiotics represent a new evolution and hope in dealing with a malignant and pervasive parasite," said Dr. Raffi Aroian, a professor in the Molecular Medicine program at the University of Massachusetts's Medical School. "The development of new therapeutics for this issue has been extremely difficult to come by and I look forward to watching this new advancement unfold in the global and domestic industry."

This project was supported by the National Institutes of Health/National Institute of Allergy and Infectious Diseases; and the Agriculture and Food Research Initiative Competitive Grant from the USDA's National Institute of Food and Agriculture.



Experimental design and FECs of curative sheep study with IBaCC ($n = 6$ sheep/group). (A) Experimental design of sheep study. (B) Fecal egg hunts (FECs) over time (eggs per gram of feces) relative to the day of first treatment for control (water) and treated (IBaCC) groups (six sheep per group). FECs were always determined before treatment on any given day. The difference between fecal egg counts between control and treated groups based on two-way analysis of variance ($P = 0.0009$) was significant. (C) Comparison of starting and ending FECs for both groups.



Some ugly truths about labels (claims)

Labels (claims) can be confusing, misleading, deceptive, and sometimes false.

Labels aren't always about improving animal welfare or food safety; they're mostly about marketing and profits . . . and politics.

Labels are market-driven and not always scientifically-founded nor necessarily beneficial for animal welfare.

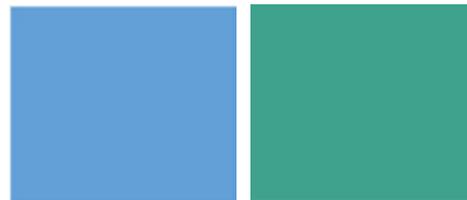
Labels are sometimes used for food shaming or bullying.

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Role of Food Safety & Inspection Service (FSIS)

- FSIS requires approval of all labels (claims) applied to meat and dairy products before their use in commerce.
- FSIS does not require preapproval of point-of-purchase materials, even if these materials contain special statements and claims describing the farm's production practices or product characteristics.
- Special statements and claims should not be used on point-of-purchase materials if they have not been approved by FSIS for use on meat product labels.
- The FSIS has the authority to take corrective action against meat product labels and point-of-purchase promotional materials considered false or misleading.



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Labeling

- Labeling isn't relevant for live animal sales, though some buyers may require assurances, documentation, or certifications.
- There are minimum labeling requirements for processed food and drink (8 requirements).
- There are various USDA and third-party certifications.
- Other claims can also be approved and put on product labels.



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Minimum (mandatory) label requirements

- 1) Product name
- 2) Handling statement
- 3) USDA mark of inspection/ establishment number
- 4) Net weight of product sold at retail
- 5) Signature line
- 6) Safe handling instructions
- 7) Nutrition labeling (can be posted at point of sale)
- 8) Ingredients statement (for multi-ingredient products)



6

USDA Label Approval Process

CLAIMS

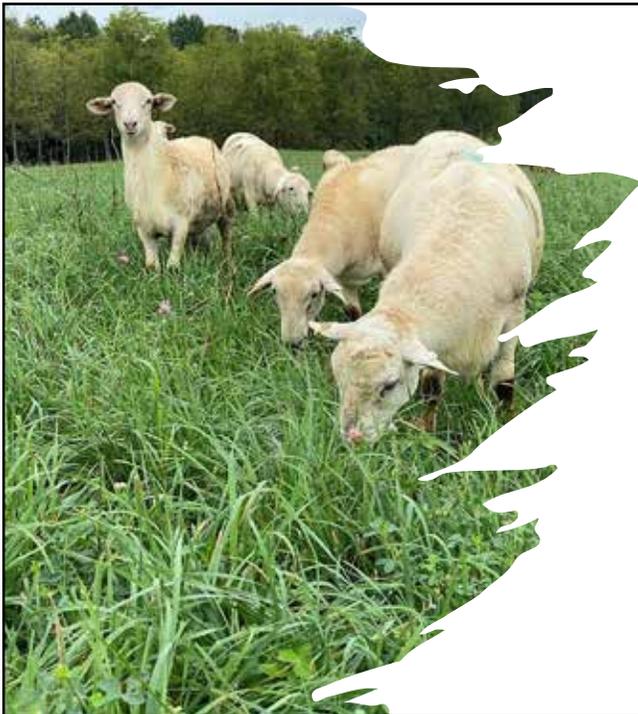
- There are an infinite number of special statements and claims that can be made by marketers.
- All claims must be approved by USDA FSIS in order to be used in commerce.

CERTIFIED CLAIMS

- There is only one USDA certification (organic).
- There are various third-party certifications approved by USDA.
- The number of third-party certifications is growing.

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Examples of claims

- No added hormones
- Raised without antibiotics
- Grass fed
- Grass fed; grain finished
- Pasture raised
- Free range
- Free roaming
- Sustainably raised
- Humanely raised
- Breed claims
- Geographic claims
- Local claims
- Third party raising claims
- Certified claims
- Natural claims
- Nutrition claims
- Source, traceability
- Negative or “free” claims

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Unapproved claims

Cannot be proven; cannot be used

- Antibiotic free
- Hormone free
- Residue free
- Residue tested
- Naturally raised
- Naturally grown
- Drug free
- Chemical free



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Examples of certified claims

USDA

- Certified Organic
- USDA Process Verified

Third party

- American Grassfed®
- Animal Welfare Certified
- Certified Humane®
- Certified Naturally Grown
- Non-GMO Project
- Regenerative Organic Certified

AGW (A Greener World)

- Animal Welfare Approved
- Certified Grassfed
- Certified Non-GMO
- Certified Organic
- Certified Regenerative
- Salmon welfare certified



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USDA Certified Organic

Produced according to the standards of the USDA National Organic Program.

In a nutshell . . .

- No synthetic pesticides or fertilizers
- Organic pasture, feed, and straw
- No GMOs, hormones, antibiotics, coccidiostats, or dewormers
- Access to outdoors (pasture)

<https://www.usda.gov/topics/organic>

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Natural

- USDA does not have a label for naturally grown or raised.
- USDA defines “natural” and “all natural” as a food product that has been minimally processed and contains no preservatives or artificial ingredients.
- Almost all fresh meat is natural.



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Certified Naturally Grown

Third
Party

Certified Naturally Grown (CNG) is a grassroots alternative to USDA certified organic.

- For producers who are “almost organic”
- Tailored for direct market farmers (more affordable)
- More rigid standards for living conditions and access to pasture
- Organic feed does not have to be certified.
- Still can't give medicines or dewormers to slaughter stock.



<https://www.cngfarming.org/>

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Non-GMO

- USDA does not have a label for Non-GMO.
- USDA has approved a non-GMO label for agricultural products.
- Product must meet Non-GMO Project's certification requirements: proof that animals have never eaten anything containing genetically engineered ingredients such as soy, corn, or alfalfa.
- USDA Organic prohibits GMOs.
- AWG also has a label for certified Non-GMO.



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Animal welfare



**GLOBAL
ANIMAL
PARTNERSHIP**

- While USDA regulates the care of research animals, there are no federal standards for farm animal care nor agreement as to what constitutes humane care.
- Several third-party organizations have developed their own standards for animal welfare.
- Standards vary by label and are not necessarily scientifically-based nor more humane.

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- Standards based on Royal Society for Prevention of Cruelty of Animals (RSPCA; United Kingdom) Guidelines.
- Standards developed and reviewed by committee of scientists, veterinarians and producers(?).
- Standards reflect common and recommended production practices.

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Global Animal Partnership (GAP)

<https://www.globalanimalpartnership.org/certified-gap/>

- No antibiotics ever (including ionophores)
- No added growth hormones
- All vegetarian diet



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Grass-fed

- USDA revoked its label for grass-fed in 2016 but still uses same standards to approve grass-fed claims.
- USDA Process Verified offers an alternative to the USDA grassfed label.
- There is a USDA alternative for grassfed for small and very small producers.
- The American Grassfed Association has established its own standards for grass-fed.
- AGW has also developed a label for grass-fed.
- Standards vary by label.



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Process Verified Program (PVP) and label



- Verifies that one or more claims on a label have been verified by USDA auditors.
- Both the claim and standard can be written by the company (producer).
- USDA verifies that the standard has been met, not that the label is meaningful.

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Grass-fed program for small and very small (SVS) producers

- USDA certification for small scale livestock producers who want their ruminant animals certified as grassfed.
- For lamb produced from 99 ewes or less
- Live animal production side
- Provides documentation to back up "grass fed" claim.
- Application process
- \$115 for two-year period



Fed only grass and forage
Cannot be fed grain or grain products
Continuous access to pasture during growing season

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Regenerative

Pertains to agricultural practices that regenerate and revitalize the soil and environment.

- No USDA label.
- Only third-party labels: Regenerative Organic, Certified Regenerative by AGW, and Rodale Institute Approved.
- Labels are often paired with organic standards.

<https://regenorganic.org/>



<https://rodaleinstitute.org/rodale-institute-approved/>



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<https://agreenerworld.org/>



- Animal Welfare Approved
- Certified Grassfed
- Certified Non-GMO
- Certified Organic
- Certified Regenerative
- Salmon Welfare Certified



AGW certifications (A Greener World)

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Getting your label (claim) approved

Generic approval

- Statements and claims deemed factual by FSIS without additional validation or verification.
- No application process
- Example: geographic claims.



Sketch approval

- Labels bearing special statements or claims that cannot be given generic approval require sketch approval:
- There is a formal application process.
- Documentation supporting special statements and claims is required.
- It is the meat processing facility that ultimately receives approval to apply the labels.



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Supporting documentation

- Signed affidavits and testimonials on letter head
- Product identification and segregation system
- Production protocols from birth to harvest
- Feed formulation documentation, including information on animal diet during inclement weather
- Operational protocol for sick and injured animals
- Third party verification and certification
- Scientific evidence that helps confirm special statements and claims

Work with your processor.



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Pros and cons of product labels and certifications

PROS

- Buyer(s) may require it.
- Consumers may demand it.
- May help to differentiate your product(s) in the marketplace
- May allow you to capture a targeted set of consumers.
- May add value to your products.
- May increase profitability

CONS

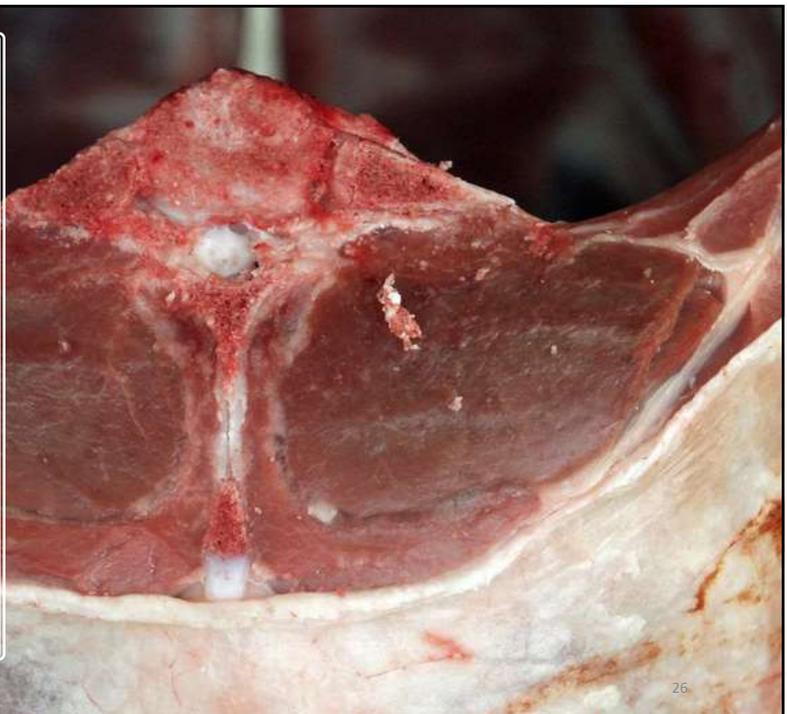
- Certification costs
- Record keeping requirements
- You may not agree with standards.
- You may not be able to meet some of the standards.
- Standards may compromise animal welfare and/or other aspects of production.
- May not be beneficial for your market(s).

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Using labels to market your products

- Follow the rules
- Don't make false or misleading claims.
- Make sure you can back up your claims.
- Promote your farm and products.
- Don't disparage other farms and other methods of production.



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The Power of Labels

Spring Lamb Label Controversy

- In September 2019, the New Zealand Lamb Company petitioned USDA to eliminate the official definition of “Spring Lamb.”
- The official definition is lamb that is slaughtered between March and the first week of October.
- The definition is rooted in the idea that the meat comes from animals on the younger side: between 3 and 5 months of age.



<https://www.fsis.usda.gov/wps/portal/fsis/topics/regulations/petitions>

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Alternatives to labels

- Develop relationships with your customers.
- Describe your production practices.
- Develop truthful point of sale materials.
- Share truthful information on your web site.
- Use social media to cultivate and communicate with your customers.
- Consider a brand instead of a label or certification.
- Share ASI materials with your customers
- Complete Sheep Safety & Quality Assurance Program
- Follow guidelines for animals used for research and teaching.

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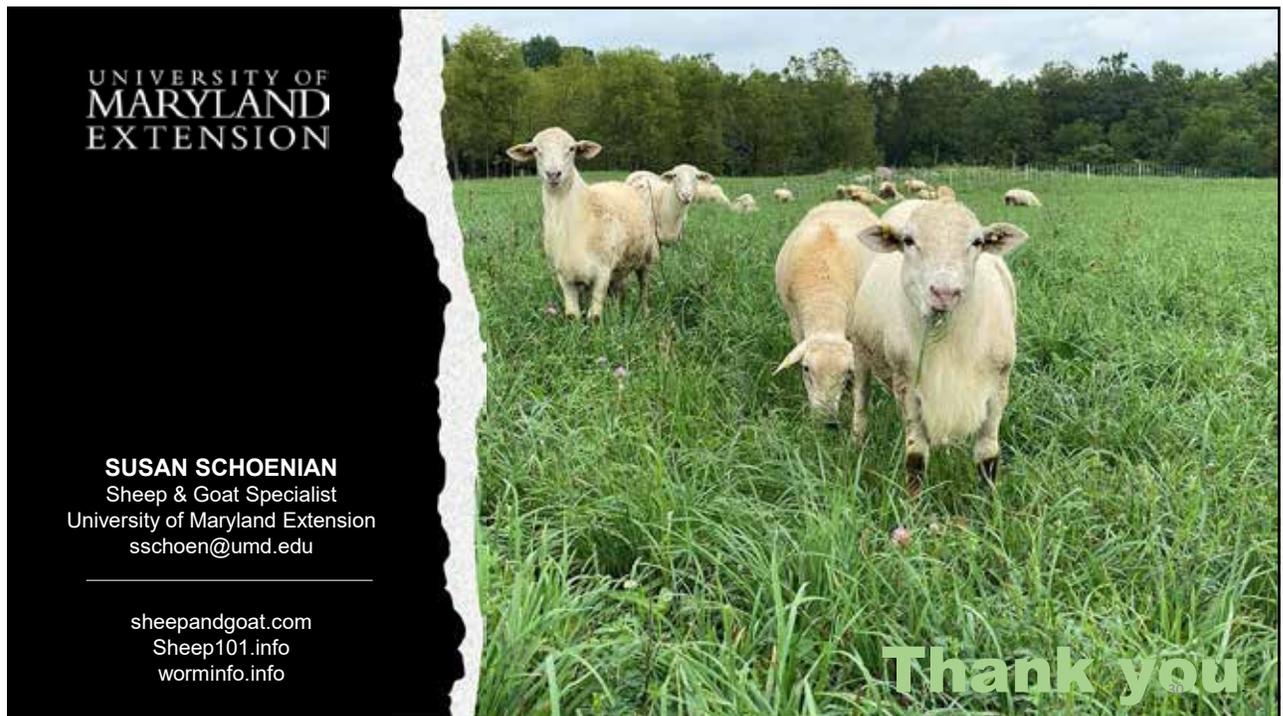
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Suggested resources

- **FSIS Labeling Guideline on Documentation Needed (2019)**
<https://www.fsis.usda.gov/wps/wcm/connect/6fe3cd56-6809-4239-b7a2-bccb82a30588/RaisingClaims.pdf?MOD=AJPERES>
- **Meat Product Labeling Guidance for Direct Farm Marketers (2017)**
<https://foodscience.tennessee.edu/wp-content/uploads/sites/52/2020/03/Meat-Product-Labeling-Guidance-for-Direct-Farm-Marketers.pdf>
- **Grassfed Small and Very Small Producer Program**
<https://www.ams.usda.gov/services/auditing/grass-fed-SVS>
- **Special Claims and the Approval Process for Niche Meat Production (2014)**
<https://content.ces.ncsu.edu/special-claims-and-the-approval-process-for-niche-meat-production>
- **Guide for the Care and Use of Agricultural Animals in Teaching and Research (2010)**
<https://research.unl.edu/orr/docs/AgGuide.pdf>

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UNIVERSITY OF
MARYLAND
EXTENSION

SUSAN SCHOENIAN
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University of Maryland Extension
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sheepandgoat.com
Sheep101.info
worminfo.info

Thank you

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2021 Shepherds' Symposium

Virginia Department of Agriculture
And Consumer Services Update

Dr. Dan Hadacek
Harrisonburg Regional Veterinary Supervisor

National Scrapie Surveillance Update

The National Scrapie Eradication Program continues to document success.
The last infected flock found was in June of 2019.

The USDA has an annual goal of testing 40,000 animals each year.

- A total of 34,815 animals (26,935 sheep and 7,880 goats) were sampled across the US for scrapie testing in FY 2019.
- Slaughter surveillance accounted for 33,056 samples; 1,759 samples were taken on-farm.



On-Farm Surveillance Testing

The National Scrapie Eradication Program establishes annual sheep sampling minimums for each State, and tracks the States' level of compliance with meeting these minimums. On-Farm Scrapie Surveillance Samples are always needed.

Submit whole heads from sheep and goats over 18 months of age that are slaughtered, die or are euthanized on your premises.



Additional information is available on how you or your veterinarian can submit samples or whole heads for scrapie testing. Contact one of the VDACS Veterinarians listed for submission details.

Scrapie Tags





Both plastic and metal tags are acceptable identification.



Orange tags are available from NB&T. White tags are still acceptable. Blue tags are "slaughter only" or "meat" tags and are available from USDA .



New style (Shearwell) plastic tags from USDA

New Participants can contact USDA to receive 100 free plastic tags, while funding is available. There is currently no funding to provide tags for existing participants.



In Virginia,
call **804-343-2569** to enroll in the Scrapie
program and receive your free tags

After you receive the free tags, you can contact one of the following retailers to purchase tags.

Allflex USA, Inc.
Website: www.scrapietags.com

National Band & Tag Company
Website: www.nationalband.com

Shearwell Data USA
Web page: www.shearwell.com

Alliance ID, USA
Website: www.microchipidsystems.com

Premier 1 Supplies LLC
Web page:
<https://www.premier1supplies.com/c/ear-tags-and-tattoo-supplies/ear-tags-for-usda-scrapie-eradication-program>

EZid, LLC
Website: www.EZidAvid.com

Help get us (the U.S.) to Scrapie Free!

EDUCATE yourself on the signs of scrapie.

REPORT by contacting your State Veterinarian to conduct testing on your animals over the age of 12 months if you suspect scrapie. This will increase efficiency in identifying those infected.

SUBMIT the whole head from any sheep or goat over the age of 18 months that dies or is euthanized on your farm.

See page 88 for more information.

Who Needs Tags?!?!

Culled Sheep

Culled ewes or rams must be officially identified/ear tagged either before leaving the farm or at an approved livestock market. Cull sheep are defined as greater than 18 months of age.

Lambs

Ewe lambs under 18 months of age leaving slaughter channels need to be officially identified/ear tagged at the birth farm with records that are kept for 5 years.

Lambs under 18 months of age going directly to slaughter *do not need official identification*.

Breeding Ewe or Ram

If going to **show**: Official I.D. required.

If going to **sale**: Official I.D. required.

If staying at **home**: No official I.D. required.

Any show/exhibition is considered interstate movement if out of state animals attend.

Just Remember: When Sheep leave the farm, They need a Scrapie Tag.

Marketing Update

Many Virginia sheep are sold at New Holland Sales in PA. Starting in 2021, they will be utilizing the USDA approved owner/shipper form at right.

In addition to all sheep being scrapie tagged, you will need to provide:

- Flock # or Premises ID
- description of shipment
- complete contact information

The image shows a pink USDA approved owner/shipper form for sheep and goats. The form includes fields for Date Shipped, Tractor, New Holland Sales Stables, Inc. (NO TAG #), 100 W. Fulton St., New Holland, PA 17057, Phone: 717-354-4341, and SHEEP & GOATS. It also has sections for Owner, Address, City/State/Zip, Phone, Premises ID or Flock ID, and a table for recording shipment details. The table has columns for # OF HEAD, PAINT MARKS, Description (Breed/Color - Mark Color, Sex, Age, etc.), Pym #, and # Days. There is a section for Scrapie Tags Applied at Market and a section for Animals in Slaughter Channels Only. The form also includes a section for Owner/Shipper Signature and a section for Buyer's Signature.

Questions?!?!

Contact:



Dr. Dan Hadacek
(540) 209-9120
Dan.Hadacek@vdacs.Virginia.gov

Dr. Tom Lavelle
(276) 228-5501
Tom.Lavelle@vdacs.Virginia.gov

Virginia Sheep Industry Board Update

The Sheep Industry Board was established, by the passage of a referendum in 1995, to further these goals: Additional market development, predator control, research, education, and promotion of the Virginia sheep industry. Its work is funded by a 50-cent-per-head assessment due for for all sheep and lambs sold within the Commonwealth of Virginia.

The 12-member board, appointed by the Governor, includes nine sheep producers and three other appointees; one represents the packing/processing/retail segment of the industry, one represents the Virginia Livestock Markets Association, and one represents the purebred segment of the industry. They serve three-year terms. In addition, the Cooperative Extension sheep specialist from Virginia Tech and the Commissioner of VDACS, or his designee, serves as a nonvoting member.

The board typically meets once or twice a year to allocate funding to promote those goals. In the past funding has been allocated to support predator control efforts of USDA APHIS Wildlife Services, the Virginia State Fair carcass contest and other 4-H and FFA activities, the Shepherds' Symposium, and promotional items from ASI and the American Lamb Board.

You may apply online here: <https://www.commonwealth.virginia.gov/va-government/boards-and-commissions/>.

VSIB Purpose

The Sheep Industry Board shall be responsible for the promotion and economic development of the sheep industry in the Commonwealth. To accomplish this function the Sheep Industry Board is authorized to provide funding for predator control, produce economic reports, develop a sheep industry directory, provide funding for educational programs, provide funding for research, engage in media liaison, collect and analyze data on the sheep industry, disseminate industry-related data, enter into contract and agreements to accomplish the purposes of this chapter, and establish, administer, manage, and make expenditures from the Virginia Sheep Industry Promotion and Development Fund as provided in § 3.2-2111. The Sheep Industry Board may increase the original assessment of 50 cents (\$0.50) for each sheep sold within the Commonwealth no more than 10 cents (\$0.10) per year, up to a maximum assessment of \$1 per head. The chairman of the Sheep Industry Board shall make a report at the annual meeting of the Sheep Industry Board including a statement of the total receipts and disbursements for the year, and shall file a copy of the report with the Commissioner.

Also contact VSPA President Mandy Fletcher (beyondblessedfarm@gmail.com) to indicate your interest. VSPA sends nominations to the Governor's office to be considered for appointment. (Note: There have been some disruptions to the pandemic; if you have problem with the online form contact the Director of Appointments here for help: maribel.castaneda@governor.virginia.gov

About the sheep checkoff

Passage of the 1995 referendum for a state sheep checkoff put into the Virginia Code the regulations for collection of the is 50-cent assessment on the sale of sheep and lambs in Virginia. The handler deducts the assessment from the amount due to the owner or the sheep or lambs.

For the purposes of this assessment, a handler is an operator of a:

- stockyard
- livestock dealership
- slaughterhouse
- packing plant
- livestock auction house

or any person or business purchasing sheep or lambs at the point of trade.

If your farm sells lambs or sheep to individuals (for example, breeding stock or freezer lamb), you (the seller) should be sending in the assessment.

Here's how you file and pay: Complete Form SH-1 and return it with your payment. File Form SH-1 quarterly. The return is due by the last day of the month following the end of each quarter.

Last Day of the Quarter	Return Due by
March 31	April 30
June 30	July 31
September 30	October 31
December 31	January 31

From the 2018-2019 VSIB Report

Expenditures for this period were:

- \$7,499.99 to USDA Wildlife Services to aid sheep producers in predator control efforts to reduce losses due to coyotes, dogs, and vultures.
- \$1,000.00 to help sponsor the Shepherd's Symposium.
- \$970.00 to sponsor different carcass educational support in state (\$490 to MAS carcass contest & \$500 to VA State Meats Judging Team)
- \$1,000.00 to help support Virginia State Fair Lamb Show Carcass Contest.

Cash Balance, June 30, 2018	\$41,093.03
Assessment Receipts 7/1/18 – 6/30/19 (+)	\$ 11,528.87
Interest Receipts 7/1/18 – 6/30/19	\$889.96
Total Balance & Receipts (1+2) (=)	\$53,511.86
Deduct Total Act. Expenditures from VDACS Fin. Analysis (-). (\$1,590 expenses occurred in FY17-18 and were paid in FY 18-19)	\$14,093.58
Cash Balance, June 30, 2019 (=)	\$39,418.28

Sheep Assessment Return Instructions

General: An assessment is levied on sheep and lambs sold in Virginia. The handler (defined as an operator of a stockyard, livestock dealership, slaughter house, packing plant or livestock auction market or any person or business entity making a purchase from a producer at the point at which the sheep or lamb is sold or traded) is responsible for payment of tax on all sheep and lambs. The assessment must be deducted by the handlers from payments to owners of the sheep and lambs. A handler purchasing sheep or lambs in Virginia for resale within 10 days is exempt from the assessment on the subsequent sale.

Filing Procedure: The Sheep Assessment return must be filed and the tax paid by the handler to the Virginia Department of Taxation on or before the last day of the month following the end of each quarter. Quarters end March 31, June 30, September 30 and December 31.

Send completed return below to: **Virginia Department of Taxation
Virginia Sheep Assessment
PO Box 2185
Richmond VA 23218-2185**

Change of Address or Out-of-Business: If you change your business or mailing address, or if you are completely out of business, complete Form R-3, Registration Change Request or notify the department by letter. Send the form or letter to the **Virginia Department of Taxation, P.O. Box 1114, Richmond, Virginia 23218-1114.**

Questions: Call (804) 786-2450 or write the **Virginia Department of Taxation, P.O. Box 715, Richmond, VA 23218-0715.** If you have Internet access you can obtain most Virginia tax forms or even file your return from our Web-site: www.tax.virginia.gov.

Assessment Rate: The assessment is 50 cents per head.

Penalties and Interest: If the tax is not paid when due, a penalty of 5% of the tax due will be added to the tax, and the Virginia Department of Taxation will notify the taxpayer of such delinquency. If the tax and penalty are not paid within 30 days of the notification, interest at the underpayment rate established by Section 6621 of the Internal Revenue Code, plus 2%, will be added on both the tax and penalty.

Declaration and Signature: Be sure to sign, date and enter your phone number on the return in the space indicated.

Work Sheet For Computing Sheep Assessment		
Complete this Worksheet and transfer items indicated by the arrows to corresponding lines on Sheep Assessment Return (Form SH-1) below.		
1 Number of Sheep Enter the total of sheep and lambs handled during the quarter covered by this return. (NOTE: Do not include sheep or lambs purchased in Virginia for resale within 10 days.)		◀
2 Assessment Enter the amount of the assessment, 50 cents per head. (Line 1 X \$.50)		◀
3 Penalty for Late Filing and Payment See instructions above		◀
4 Interest for Late Filing and Payment See instructions above		◀
5 Total Amount Due Enter the total amount due (Add Lines 2, 3 and 4)		◀

DO NOT mail this worksheet.

Detach at dotted line below. DO NOT SEND ENTIRE PAGE.

Form SH-1 Virginia Sheep Assessment Return

(Doc ID 231)

Do NOT staple.

For assistance, call (804)786-2450.

Period	Due Date
--------	----------

Check if Out-of-Business and enter the termination/sold date _____

00000000000000000000 2318888 000000

Account Number	FEIN
Name	
Address	
City	State Zip

1 Number of Sheep	
2 Assessment (Line 1 X \$.50)	
3 Penalty for Late Filing and Payment	
4 Interest for Late Filing and Payment	
5 Total Amount Due (Add Lines 2, 3 and 4)	

I declare that this return (including accompanying schedules and statements) has been examined by me and to the best of my knowledge and belief is true, correct and complete.

Signature _____ Date _____ Phone Number _____
Va. Dept. of Taxation SH-1 AR W REV 5/06

APPENDIX

EXCERPTED

Report on the Status of the Virginia Cooperative Wildlife Damage Management Program

Fiscal Year 2020

Chad J. Fox

USDA Animal and Plant Health Inspection Service, Wildlife Services
105 B Ponderosa Drive, Christiansburg, VA 24073 540-381-7387

For the complete report, contact Fox at chad.j.fox@usda.gov

EXECUTIVE SUMMARY

Initiated in 1990, the Virginia Cooperative Wildlife Damage Management Program (CWDMP) is an integral component of livestock damage management expertise available to Virginians. The program provides direct management services on farms and provides technical information to groups and individuals concerned about livestock predation.

USDA-APHIS-Wildlife Services (WS) provided direct control services to 132 livestock farms and recorded livestock predation in 47 Virginia counties in federal fiscal year (FY) 2020. During FY2020, 195 sheep, 23 calves, and 19 goats were reported and verified killed by coyotes. Additionally, 18 sheep, 71 cattle/calves, and 3 goats were reported and verified killed by black vultures. In FY2020, the average number of sheep killed per farm by coyotes was 3.8. Preventive control was conducted on 54 livestock farms with historic predation, and these farms had no losses in FY2020. Corrective control was conducted on 78 livestock farms to stop livestock predation. In FY2020, WS removed 166 coyotes to stop or prevent coyote predation on livestock. Also in FY2020, WS provided technical and direct control assistance to 151 farms reporting black vulture damage. The program received 143 requests for assistance to reduce black bear predation to livestock. Black bear predation was recorded in 16 counties and included 37 sheep, 3 calves, 34 goats, and 243 fowl.

Funding for the CWDMP provided an equivalent of 5.2 staff years. Seven employees stationed in Augusta, Franklin, Highland, Montgomery, Russell, Culpeper, and Prince Edward counties worked part-time to resolve coyote predation. These employees also worked on other wildlife damage management projects as needed. The program is funded in a cooperative manner by federal funds, state funds from the Virginia Department of Agriculture and Consumer Services, and producers through the Virginia Sheep Industry Board (VSIB).

The statewide availability of the program has increased awareness of, and demand for the program. Additionally, statewide and regional concerns over predation by black bears and black vultures may continue to contribute to increased demand for program services.

Table 1. Sources of funding for the Virginia Cooperative Wildlife Damage Management Program in a sampling of Federal Fiscal Years (FY) 2017, 2019, and 2020, (October 1 - September 30).

Source	FY2017	FY2019	FY2020
VDACS	\$192,525	\$192,525	\$192,525
VSIB	\$5000	\$7500	\$7500
USDA-WS	\$192,525	\$192,525	\$192,525
Total	\$390,050	\$392,550	\$392,550

PROGRAM ACCOMPLISHMENTS

Technical Assistance

Technical assistance was provided to producers statewide through personal consultations on the farm, written/telephone consultations, and educational programs and exhibits (Figure 2). WS distributed hundreds of leaflets to producers, provided information on implementing non-lethal and lethal methods, assisted with locating guarding animals, and evaluated predator-killed livestock to identify the predator.

Prior to the Covid-19 situation, WS conducted 11 educational programs during FY2020 to educate livestock producers and the public about predator ecology and wildlife damage management. These educational programs were attended by 419 people, and several hundred informational leaflets about livestock protection were distributed at these programs (Table 2).

Requests for technical and direct control assistance by species in FY2015-FY2020

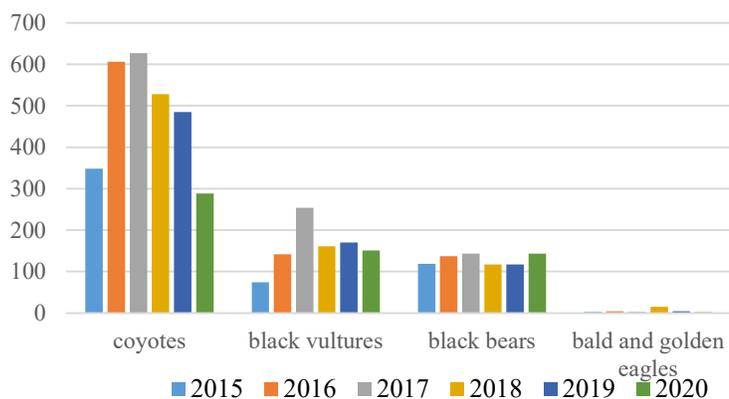


Figure 2. Total livestock related requests by species reported to Wildlife Services, 2015-2020.

Table 2. Educational programs presented and meetings attended by Wildlife Services personnel under the Virginia Cooperative Wildlife Damage Management Program in FY2020.

<u>Requests/Cooperator/Organizations/Governments</u>	<u># of Participants</u>
Greene County Cattlemen’s Association	35
Virginia Farm Bureau’s Real Virginia TV program	unk.
Virginia Farm Bureau Federation Annual Convention	80
Southern Meat Goat Association	20
Highland County High School Fish and Wildlife Class	14
Highland County High School Natural Science Class	14
Tunstall High School Ag Classes	52
Virginia Farm Show	156
Virginia Tech Human Wildlife Conflict Resolution	15
Botetourt County Farmers/USDA-FSA SWCD	18
Renan Young Farmers	15
<u>Total for FY2020</u>	<u>419</u>

Direct Control Services

During FY2020, the CWDMP provided direct control services to 132 livestock producers reporting losses to predation or livestock producers with historic losses. WS provided direct control services to 51 sheep farms, 74 cattle farms, 4 goat farms, and 3 hog farms in FY2020.

The CWDMP implements preventive control to remove coyotes before losses occur to minimize overall livestock losses to predators. Preventive control is implemented primarily from January through April on farms with historic predation. Preventive control strategies remove territorial coyotes before pups are born, which decreases the predatory behavior of coyotes (Wagner and Conover 1999). Of the 132 livestock producers assisted, 54 farms with historic coyote predation losses had coyotes removed to prevent predation. Of the farms receiving preventive control, 12 were sheep farms and 42 were cattle farms. These farms had no livestock killed by predators in FY2020.

Corrective control is the implementation of predator removal after the livestock producer reports losses. These losses can and do occur in all months of the year. Corrective control was implemented at 78 farms to stop predation on livestock in FY2020 (Table 3).

Table 3. Livestock deprecations reported to, or verified by Wildlife Services on farms receiving assistance from the Virginia Cooperative Wildlife Damage Management Program in FY2020 and FY2019.

<u>Resources</u>	Total livestock killed by coyotes, <u>FY2020</u>	Total livestock killed by coyotes, <u>FY2019</u>	No. of farms reporting losses, <u>FY2020</u>	No. of farms reporting losses, <u>FY2019</u>
Sheep	195	241	39	44
Cattle	23	31	29	33
Goats	19	3	4	3

Methods used by WS

Integrated Predation Management is the use of any or all practical and legal methods simultaneously or sequentially to prevent or reduce predation. WS recommends non-lethal husbandry practices, but livestock producers are better able to implement these methods such as fencing, shed lambing, and other husbandry practices. Where appropriate, WS uses non-lethal methods to resolve livestock predation. Infrequently, strobe-sirens are used until lambs are moved to market or lethal methods can be implemented. WS also assists in the placement of guard animals to protect livestock.

Livestock producers can implement some lethal methods. However, producers request assistance from WS when the predation losses are overwhelming or when preventive strategies are appropriate.

When appropriate, WS implements a combination of lethal methods to alleviate predation on livestock at the livestock producers' request (Table 4). Coyotes may be removed by WS using

snares, foot-hold traps, shooting, calling and shooting, decoying with dogs and shooting, M-44 sodium cyanide device, or Livestock Protection Collars.

With the current decrease in use of the M44, WS continues resolving problems using other tools and to remain on call for producers, which is the most important aspect and purpose of the program.

During FY2020, WS continued to rely more on traditional methods including foot-hold traps and snares. WS also modified work schedules to spend more time on farms after sunset, targeting coyotes with forward looking infrared (FLIR) and night vision equipment to take advantage of coyote behavior during corrective control situations. If cooperators are timely with reports of predation, WS is able to utilize these tools and remove offending coyotes.

Table 4. Methods used by Wildlife Services and coyotes removed to protect livestock from predation in Virginia in FY2020.

<u>Method used</u>	<u>Number of coyotes captured per method</u>	
M-44	16	(10%)
Snares	81	(49%)
Foot-hold traps	29	(17%)
Livestock Protection Collar	0	(0%)
Calling/shooting	40	(24%)

Sheep

The average number of sheep killed by coyotes per sheep farm receiving WS assistance during FY2020 was 3.8 sheep per farm (Table 5). The average number of sheep killed by coyotes per participating farm has fluctuated each year. Fluctuations of coyote predation from year to year have human and biological causes. In addition to funding changes, sheep and lamb inventories in Virginia have increased on average in recent years further increasing the likelihood of predation. Some producers lose many sheep to coyote predation before contacting WS to request assistance. Also, coyote predation can be difficult to stop due to irregular occurrence and the ability of some coyotes to avoid capture. Furthermore, coyote populations continue to show increasing trends statewide (Figure 6, 7 and 8).

Coyote and Dog Predation to Sheep

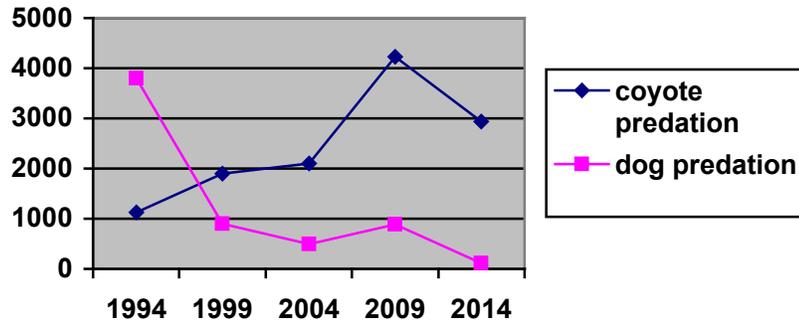


Figure 3. National Agricultural Statistics (NASS and NAHMS) estimates of sheep losses from coyotes and dogs in Virginia.

Livestock Losses From Coyote Predation (FY 2020)

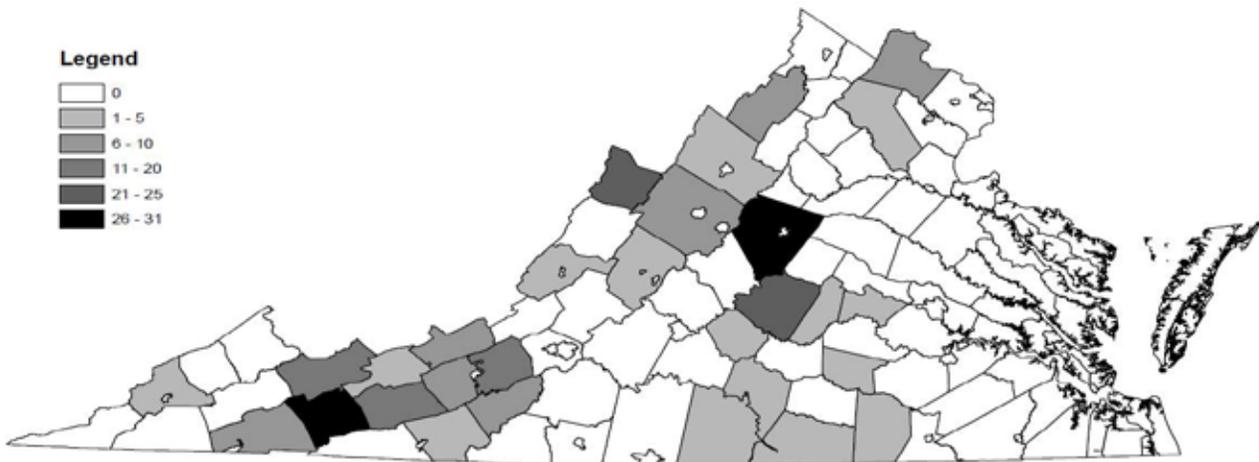


Figure 4. Livestock losses to coyotes reported to Wildlife Services in FY2020.

Table 5. Number of sheep, cattle, and goats killed by coyotes per livestock producer on farms receiving assistance from Wildlife Services, 2001-2020.

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Sheep killed	187	234	142	288	433	242	194	296	294	348	461	170	205	285	218	316	298	340	242	195
Sheep producers assisted	83	113	86	91	100	113	95	110	88	81	89	86	86	86	67	81	82	80	65	51
Sheep killed per farm	2.3	2.1	1.7	3.2	4.3	2.1	2.0	2.7	3.3	4.2	5.2	2.0	2.4	3.3	3.3	3.9	3.6	4.3	3.7	3.8
Goats killed per farm	6.0	6.3	7.3	2.4	3.1	6.1	2.2	3.4	2.5	1.7	1.7	1.5	5	4	3	4	4.3	8.4	1.3	4.8
Cattle killed per farm	0.3	0.6	0.4	0.6	1.2	.53	.37	.27	.39	.47	.66	.34	.71	.8	.52	.67	.60	.59	.42	.32
Number of coyotes removed	231	394	220	403	315	387	364	454	384	298	487	368	339	384	512	471	264	179	215	166

Coyote populations

WS assisted 1,508 different livestock producers from 1990-2020 in protecting livestock from coyote predation. Statewide, coyote populations in Virginia have continued to grow each year (Figures 6, 7, and 8), though they may be in the first stages of stabilization and have been in western Virginia since 2010. Increases in coyote harvest have been documented by hunter and fur dealer surveys from the Virginia Department of Game and Inland Fisheries (VDGIF) (Figures 7 and 8). The coyote harvest increased from 1,295 in the 1993-94 hunting season to 32,811 in the 2015-2016 hunting season. These population expansions resulted in livestock predation on farms that historically never had coyote predation problems. In FY2020, an additional 27 new farms were assisted to protect livestock. This trend is expected to increase in the coming years and in new areas, as technical assistance was provided in nearly every county in the Commonwealth during the same period.

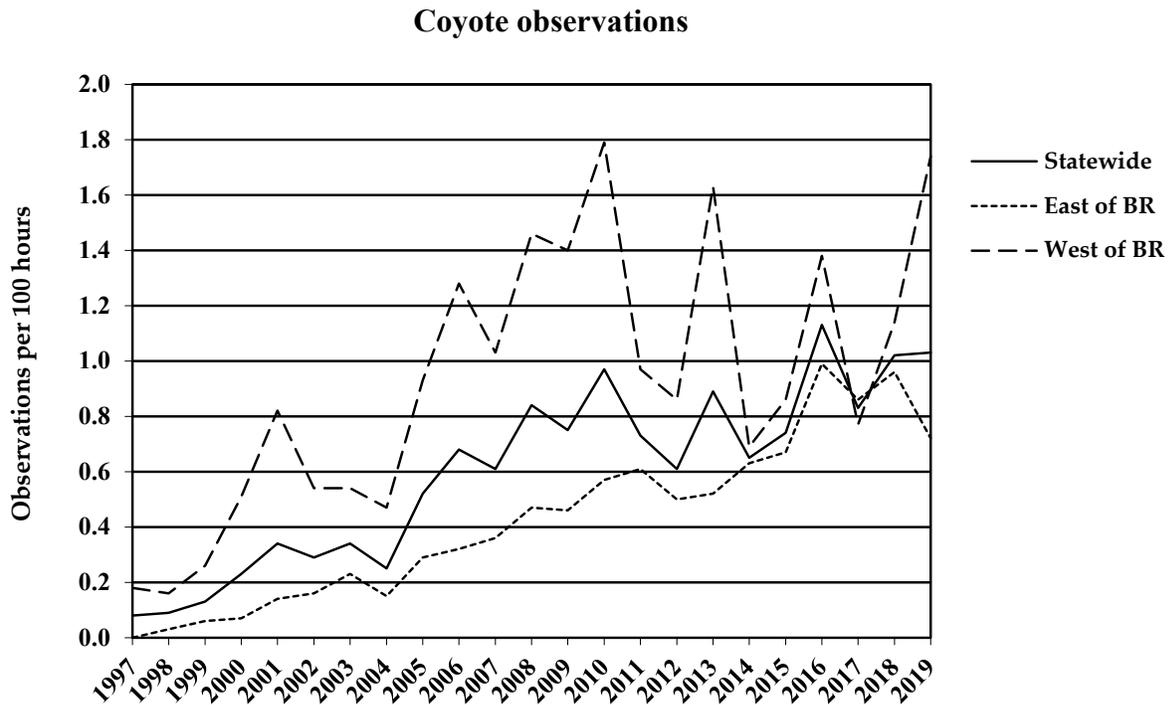


Figure 6. Coyotes observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2019 east and west of the Blue Ridge Mountains and statewide in Virginia (VDGIF Bowhunter Surveys).

BLACK VULTURE DAMAGE

Black vulture damage to livestock is common in Virginia and includes predation, injury, and harassment of livestock. Predation losses to livestock from black vultures usually occur during birth or shortly afterwards. In Virginia during FY2020, 3 cows, 68 calves, 18 lambs, 3 goats, 12 piglets, and 11 chickens were reported killed by vultures. One hundred and fifty-one reports were received from farms calling to report conflicts, report predation, and seek assistance. WS provides technical and direct control assistance to farms requesting assistance with black vultures. Livestock producers are provided with details on how to reduce vulture conflicts, which includes harassing vultures with firearms and effigies, removing dead livestock, and when necessary removing vultures by shooting. Livestock producers are encouraged to obtain migratory bird depredation permits if non-lethal methods are not resolving conflicts. These permits allow limited lethal take of black vultures to supplement non-lethal methods. Obtaining migratory bird depredation permits for vulture take begins with a call to WS, and subsequent permit applications are made by the farmer along with a WS report (WS Form 37). Applications are submitted to the U.S. Fish and Wildlife Service. A fee of \$100 is required annually.

USDA-FSA Livestock Indemnity Program (LIP) provides reimbursement for some livestock predation caused by protected species such as black vultures and eagles. WS may refer producers to the LIP and is often requested to provide statements to assist in the documentation of loss.

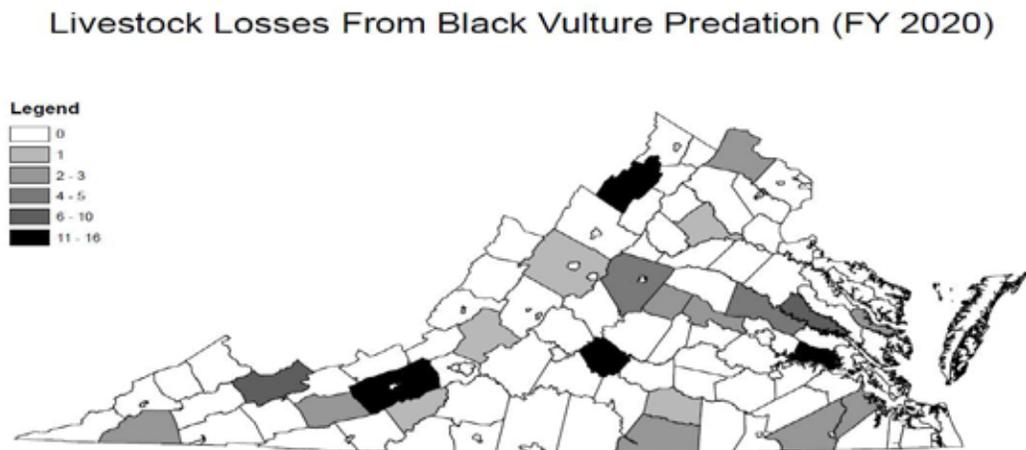


Figure 9. Livestock losses to black vultures reported to Wildlife Services in FY2020.

PROGRAM SCOPE AND FUNDING

During FY2020, the WS program employed 7 part-time livestock protection specialists. Federal funds, state funds (VDACS), and Virginia Sheep Industry Board funds provided salaries and operational expenses during FY2020 for approximately 5.2 staff years. We anticipate that demand for livestock protection services statewide will increase based on coyote population indices, reported predation, black vulture complaints, black bear complaints, and expansion of technical assistance and direct control services statewide. For the last six years, WS has responded to over 100 requests for assistance with black bear damage to livestock. Most bear issues are resolved by providing technical assistance, however, WS will work with cooperating producers to remove offending bears on a limited basis. Reports of predation and coyote sightings by livestock producers in central and eastern Virginia appear to be increasing and requests for services in those areas is occurring. The newest WS position was created to help producers in those areas of the Commonwealth. Reliance on more labor intensive tools may also contribute to an increased staffing need in future years.

GOALS FOR FY2021

WS will attempt to maintain and diversify funding through other wildlife management projects to maintain the expertise, critical infrastructure and current staffing level of 7 employees working part time on the program. Depending on the Covid-19 situation, WS will plan to restart outreach efforts to update program participants on assistance and information as soon as possible. Application of new tools and approaches will be a priority for the program during FY2021. WS will continue to work with livestock production industry groups to develop strategies for assisting producers with livestock protection.

VSU, State Work to Address Custom Slaughter Deficits

Shepherds know that the shortage of custom slaughter plants long predates the pandemic, and regional efforts to remedy the shortage are showing some progress.

In Virginia, where the state (instead of USDA) conducts meat inspection, the drive to serve processing demand has taken a different route, so far.

Virginia State University (VSU) is trouble-shooting a recently completed mobile slaughter and processing unit, which was funded with a USDA grant four years ago. VSU Cooperative Extension small ruminant specialist Dahlia O'Brien and Stephan Wildeus, small ruminants research professor at VSU's Agricultural Research Station, are working with the Virginia Department of Agriculture and Consumer Services (VDACS) to make sure the unit is fully operational and USDA-certified. The need to have a USDA inspector travel with the unit is one challenge.

Hiring of a full-time coordinator and butcher for day-to-day operation has been delayed due to the shutdown. Updates on the unit can be found at: <https://www.ext.vsu.edu/mobile-slaughter-unit>.

At present, the unit will be stationed at VSU. "We anticipate that we will be working closely with counties to develop docking stations on farms, at sale barns, etc., and work out a schedule for its movement around the state," O'Brien wrote in an email earlier this year. The docking station would include electric and potable water hook-ups;



alternatively, the unit does have a water tank on board (pressure issues are being addressed) and a generator (25 gallons of diesel capacity). Additionally, each site would require a compost area for offal, head, hide, etc., and a field on which to apply captured wastewater.

VSU is now developing a coordinated multi-farmer slaughter and food hub market distribution model for potential use by Virginia's sheep and goat producers.

The Virginia Foundation for Agriculture, Innovation and Rural Sustainability (FAIRS) released in September 2020 "A Study of Small-Volume Red Meat Processing in Virginia." The 120-page publication is meant to serve as a guide for new processors considering opening facilities in the state.

"The recent supply chain issues that were revealed in spring of 2020 with the nation's response to the COVID-19 outbreak have increased demand for local meats....In response to this need for processing services, farmers may seek cooperative efforts to implement small volume, red meat processing facilities in rural areas."

The publication includes economic analyses and cost estimates to guide entrepreneurs considering entering the business. The guide is available for download at <https://www.vafairs.com/resources>. — Martha Polkey



Excerpt from the Study: Virginia's Red Meat Supply

The red meat industries nationally and in Virginia have fluctuated over the years, especially in light of the impact that the COVID-19 pandemic has had on the slaughter industry. Data on these industries shows that the total inventory of red meat livestock species (beef cattle, hogs, goats, and lamb/sheep) have decreased since 2000 across all categories except for hogs. Total inventory of beef cattle in the United States decreased by 5.6%, inventory of sheep and lambs decreased by 25.6%, and inventory of meat goats decreased by almost 35%. The inventory of hogs, however, has increased by over 29%.

Production of red meat in Virginia have similarly decreased, except for sheep and lamb. The inventory of beef cattle in the commonwealth has decreased by 3%, while hogs and meat goats have also decreased by 20% and 26% respectively. The inventory of sheep and lambs, however, has increased by over 29% during the time-period between 2000 and 2019. The numbers of sheep and lamb increase is not nearly enough to make up the decline

in beef and hogs, resulting in a decline in overall in red meat production in Virginia.

Red meat slaughter is up nationally, but down for Virginia. Nationally, the red meat slaughter has been on the rise over the past almost 20 years. By 2019, total red meat slaughter has reached 55 billion pounds, an increase of 19% over slaughter numbers in 2000. However, in Virginia, red meat slaughter has decreased significantly since 2000, dropping by almost 26% by 2019. Most of the slaughter and processing facilities located in Virginia are along Interstate 81, with most clustered in Northern Virginia.

Impacts on cattle and hog slaughter from the COVID-19 pandemic have mostly recovered, while prices have not. The number of cattle and hogs processed nationally experienced a large drop during March and April 2020 as many facilities adjusted to new guidelines to comply with new worker and safety requirements in response to the pandemic. Since then, slaughter numbers have started to align to previous years more closely.

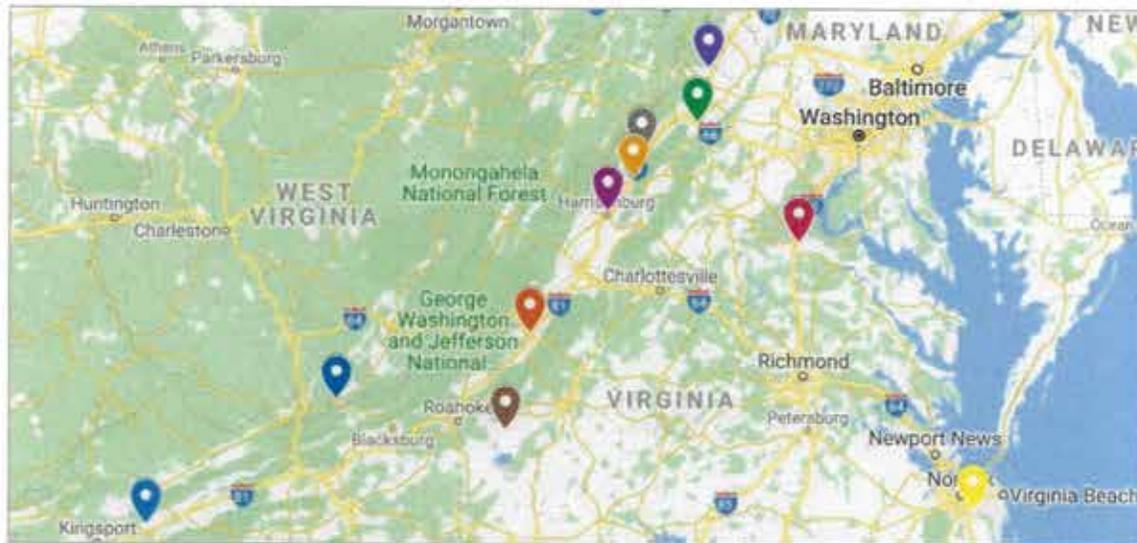
This is an excerpt from the September 2020 report, *Small Volume Red Meat Processing in Virginia*. It can be accessed at: <https://www.vafairs.com/resources>.

VIRGINIA MEAT PROCESSING

The Federal Meat Inspection Act (FMIA) mandates inspection of cattle, sheep, swine, goats, horses, mules, or other equine slaughtered for use as human food. The slaughter and processing of other meat animals are not subject to the inspection requirements of the FMIA but are subject to other federal and state laws. Meat inspection activities in Virginia fall under the auspices of the Office of Meat and Poultry Services (OMPS) within the Virginia Department of Agriculture and Consumer Services (VDACS). It is a state-run meat/poultry inspection program, and USDA certifies its employees. OMPS/VDACS administers the Virginia Meat and Poultry Products Inspection Act and has also adopted federal meat inspection regulations by reference.

The Office of Meat and Poultry maintains a listing of inspected meat slaughter facilities around the state. While the is not comprehensive, it includes those facilities that have responded to VDACS's survey conducted in March 2020.²⁷ The listing is continually updated to reflect new plants that request to be added and this information is current as of September 2020.

Figure 25: Virginia Inspected Processing Facilities, March 2020



As shown in the map above, most of the reported processing facilities are located along Interstate 81, with just one processor serving the southeast Virginia. Many of the facilities are also clustered along the northern portion of I-81 near the top beef cattle counties in the state, Rockingham and Augusta counties. The map shows the potential need for more processing facilities in Central and Southern Virginia to serve farms located in those areas.

The following table further lists the inspected slaughter and processing facilities in Virginia as of September 2020. These facilities are inspected, and the table details the types of animals each facility slaughters, as well as additional inspected services/ products they may provide.

Table 13: TA Slaughter and Processing Facilities in Virginia

²⁷ VDACS Office of Meat and Poultry (March 2020). Inspected Slaughter Plants in Virginia. <https://www.vdacs.virginia.gov/pdf/Inspected%20Slaughter%20Plants%20in%20Virginia.pdf>

Small-Volume Red Meat Processing in Virginia

Name	County/City	Animals/ Services
Washington Co. Meats	Bristol/Washington Co.	Beef, Pork, Sheep and Goats
Central Meat Packing	Chesapeake/Chesapeake City	Beef, Pork, Sheep and Goats; Custom Exempt
Gore's Processing	Edinburg/Shenandoah Co.	Beef, Pork, Sheep and Goats; vacuum seal, flash freezing
Salitan/Cloud (T & E Meats)	Harrisonburg/Rockingham Co.	Beef, Pork, Sheep and Goats; sausage, smoking, and curing
Donald's Meat	Lexington/Rockbridge Co.	Beef, Pork, Sheep and Goats
Blue Ridge Meats of F.R.	Middletown/Warren Co.	Beef, Pork, Sheep and Goats; sausage, smoking, further processing
Ecofriendly Foods	Moneta/Bedford Co.	Beef, Pork, Sheep Goat, Chicken, Turkey, Duck, Ratites, Geese, Guineas
Smith Valley Meats	Rich Creek/Giles Co.	Beef, Pork, Sheep Goat, and Buffalo
Safa Halal Meats	Fredericksburg City	Beef, Sheep, Goats
New Market Poultry, LLC	New Market/ Shenandoah Co.	Chickens
Gentle Harvest Custom Processing	Winchester City	Beef, Pork, and Sheep; sausage, smoking, grinding

Selling Meat Products in Virginia

VDACS provides oversight on all aspects of meat processing and meat sales within the state. Their Office of Meat and Poultry Services (OMPS) provides guidelines on selling meat products in the state, including who can sell meat and what inspections are required. According to their guide,²⁸ all “amenable” species including cattle, swine, sheep, goats, and poultry must be inspected if they are slaughtered and sold, unless exempt. Wild birds and animals cannot be sold for food, only meat from domestic raised birds and animals.

Products that have been processed at a USDA/FSIS facility or VDACS OMPS inspected facility can be sold at farmers markets, to restaurants, at retail stores, and through online stores. A Meat Handlers Permit may be required for any facility that is a broker, distributor, or peddler of meat and/or poultry products. A business that has been inspected by the Virginia Department of Health and/or VDACS Office of Dairy and Foods may sell meat products.

A product that has been inspected should have the appropriate labeling indicating if it was inspected by the USDA or by VDACS. Products that only have state inspection labels are not able to be sold across state lines.

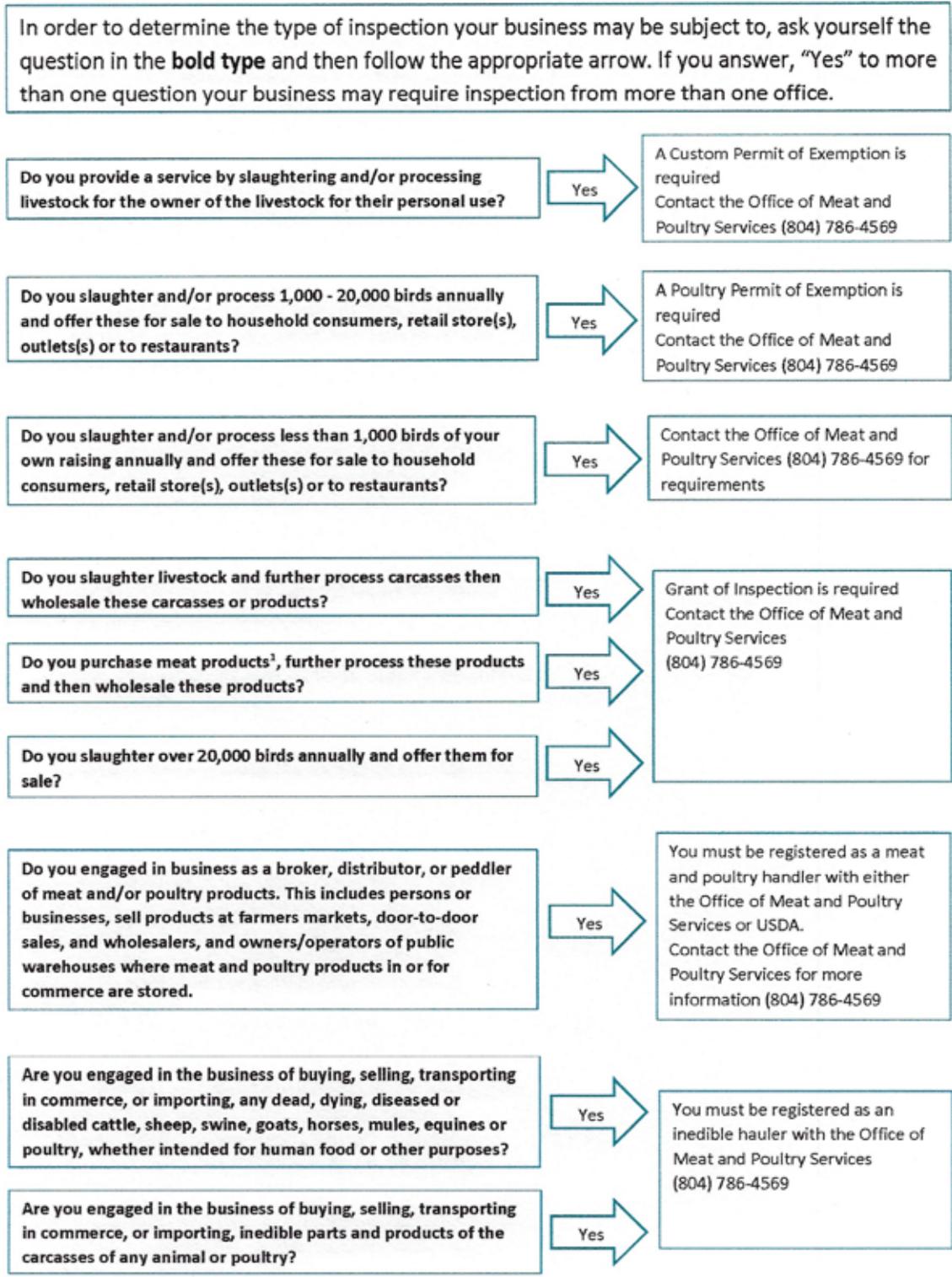
Resource

[A Guide to Selling Meat and Poultry Products in Virginia](#), VDACS Office of Meat and Poultry Services

²⁸ VDACS. “A Guide to Selling Meat and Poultry Products in Virginia.” <https://www.vdacs.virginia.gov/pdf/inspectionguide.pdf>

The following flow chart is provided by VDACS OMPS to determine what inspection permits are required:

Figure 26: Inspection Permit Requirements



Serving Ethnic Communities Through On-Farm DIY Slaughter

Peter Austin

This article is reproduced with permission from the Winter 2020 Maryland Sheep News.

It's not for everyone, but direct sales can be a great way to sell what you produce. You are allowed to self-slaughter an animal you own. States and counties realize it is a huge benefit to the farmer and consumer alike to allow this arrangement on the farm. There are gray areas, however, and difficulties can arise if such activity appears on the public's radar. It helps to avoid scrutiny from suburbia and officialdom.

A couple years ago I gave a slide show presentation of direct sales at a Maryland Sheep Breeders Association field day, and the gist was that there is a passionate demand for farm animals in the Washington metro area, and through finesse you can move your animals and make more money than paying someone to haul them up to Greencastle or a to USDA processor.

One important thing to maintain when you're dealing with other cultures is your patience. If you've ever been in another country, keep in mind what it was like and how much you appreciated the allowances that natives made for you.

I began in the 1980s serving the Greek community. They only wanted spring lambs for Easter. These were folks that had emigrated in the 1950s and 60s. In the 1990s the Islamic community discovered us, and although they had a few important holidays, there were various celebrations that brought them back to the farm throughout the year.

Then the Ethiopian Orthodox Christians started coming and they became as much of a force to be reckoned with as all the others. The Ethiopian population in the metro area is said to be the biggest outside of the homeland. For starters, they have six holidays every year that require fasting and often a feast at the end that requires lamb or goat. I may be wrong on the specifics but it amounts to a robust demand all, year, long.

Ethnic enclaves share info. Once your name is in the pipeline, the word spreads. One handy mechanism I established was that every sale I made was by appointment only. I fought the uphill battle of having customers treat the clock and calendar with respect and I did not tolerate an unplanned visit.

The rules, and where on-farm slaughter fits

There are four levels of meat inspection: federal (U.S. Department of Agriculture), state, custom-exempt, and personal exemption (on-farm slaughter).

1. Federal inspection. This is the "highest" level of inspection. The meat from animals slaughtered in a federally-inspected plant can be sold without restrictions (anywhere and to anyone), so long as the meat is properly labeled. Federal inspection includes a pre- and post-mortem inspection of the animal, along with extensive requirements for the facility in which the animals are slaughtered.

2. State inspection. Though state-inspection must be "at least equal to" federal inspection, the meat from animals slaughtered in a state-inspected facility is usually limited to sales within the state of slaughter. Just 27 states have state meat inspection programs. The rest of the states have turned meat inspection responsibilities over to the federal government. Producers in these states are subject to federal regulations and any additional regulations imposed by their states or counties.

3. Custom-exempt slaughter is exempt from continuous inspection. Facilities have sanitary and inspection requirements, but there is no pre- or post-mortem inspection of the animals. The carcasses and meat from animals slaughtered in a custom-exempt plant are stamped "not for resale" and returned to the owner. Consumption of the meat is limited to the owner and members of his household and his nonpaying guests and employees.

4. Personal exemption slaughter. Federal and state regulations provide a personal exemption, which allows a farmer to slaughter an animal (of his own raising). Similar to custom-exempt, the meat must be consumed exclusively by the owner and members of his household and his nonpaying guests and employees.

This is where we enter the grey area of on-farm ethnic slaughter. States interpret USDA's "personal exemption" differently. Neither USDA nor most states address on-farm slaughter by the buyer, with some exceptions. North Carolina has passed legislation that expressly forbids on-farm slaughter by buyers. Vermont, by contrast, permits such on-farm slaughter of up to 25 sheep. The farmer cannot assist in the slaughter of the animals.

It can be argued—and absolutely has been—that on-farm slaughter is a necessary practice in some cultures and religions, and that prohibition of on-farm slaughter prevents people from practicing their religion. In some religions, the "sacrifice" of the animal may be more important than the meat itself. For example, in Islam, the meat of the slaughtered animal on specific religious holidays is divided into three portions and shared with family, friends, and the poor.

Bottom line: Know what your local jurisdiction (state and county) laws are.

Excerpted with permission from the Maryland Small Ruminant Page, "In Defense of On-Farm Slaughter: Legalities and Discussion." Reprinted with permission.

Yes, it's America where we have business hours and vacations. But where so many immigrants come from, there's no start and stop time. Everyone is hustling around the clock. Early, late, you've got a cold, your dad died....business takes priority. For me, a dry, colorless Yankee who's spoiled by modern American assumptions, it was always a challenge to impose the importance of setting a time and sticking to it. Similarly, agreeing on a price was difficult. Bargaining is a reflexive art and we Americans are rank amateurs...so I never tried. I would always have animals of different prices so if one was too dear, the customer could choose a smaller critter at lower cost. I stuck to my prices and a common response to a lower offer was "how much money would you like me to lose?" On more than one occasion, a new customer was so insistent I offered him (with great sympathy and apologies) \$5 for gas and a suggestion for him to leave. No one ever took the offer. It's important to establish a standard and stick to it. The appointment-only protocol also allows you to tell a troublesome customer that you have nothing available. Life is too short.



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. [image from Nick Forrest's presentation at the Virginia Shepherds' Symposium]

We're so accustomed to our meat coming from the supermarket individually wrapped and either cold or frozen. What if your culture or religion dictated that it was forbidden to eat a female animal? How about one that rubbed elbows with pigs? I've been to auctions where animals were sold for slaughter and the poor blighters were one step from roadkill. In modern America it's a gift to go to a farm the way you would in Senegal and buy a lamb they can see is upright and healthy. After the money is paid and the lamb is theirs, they can slaughter it right there with a prayer and then take the goods home for their family. It's a blessing for all. Most customers try to leave the workspace tidy because they should want to return. Some are clueless and leave a mess in their wake. Keep notes.

PRACTICAL MATTERS

Privacy. It's necessary to have on-farm slaughter shielded from public view, and to give your neighbors only as

Haggling with a difference

Nick Forrest shared with producers at his 2020 Virginia Shepherds' Symposium talk a new price negotiation paradigm he uses with ethnic buyers who persist with aggressive haggling over price. Sample dialog:

He tells a prospective buyer the lamb's cost: \$100.

"\$85," says the buyer.

Forrest gives it some thought. "\$110," he says.

To the buyer's complaint that haggling does not work that way, Forrest responds.

"It does around here," he said. "Time is money, and you're taking up my time."

much information as they can handle. I heard of a farm that offered direct sales and DIY slaughter, but the word got out and the local xenophobes made their opposition known in a threatening manner. Another scenario is that your neighbor loves all humanity but happens to be a vegan fanatic or a PETA activist. In my opinion, it's far more humane to process an animal where it lives. But face it, death ain't pretty.

Other threats to a reasonable farm trade include bureaucratic sticklers. It's thick hypocrisy that state and county officials offer lip-service praises for our illustrious farm heritage, but would render your efforts impractical because of a yard-high stack of regulations that cost time and money to follow. Fortunately, the bureaucracy is under-staffed, complaint-driven, and often sympathetic. Whether it's animal rights or nutrient management, it's important to obey the spirit of the law as best you can.

I have enjoyed what I do but even so, I'm feeling the hand of Father Time on my shoulders. When supported by relative youth, a perfect spouse, and occasional help from my beautiful daughters, I was selling a mess of lambs in the course of a year. Now I'm dialing back and spending more time at the forge and less time wrestling critters. My first Greek customers are rapidly aging out and their kids don't follow the old traditions. But there are other cultures filling the niche, and the demand for on-farm DIY slaughter is as vigorous as ever.

As I said in the beginning, it's not for everyone, but you can make a little money, it's good for the animals, and you are benefitting an underappreciated community.

Ethnic holidays and some 2021 dates

Here is a rundown of ethnic holidays and what customers look for.

Easter

- Roman (May 4, 2021) and Greek Orthodox (May 2, 2021) Christian holidays (date varies in spring)
- Fleshy lambs and kids 20-50 lb, milk-fed
- Greeks prefer them slightly larger and fat

Passover, begins March 27, 2021

- Jewish holiday (date varies in spring)
- 25-50 lb, milk-fed and fat

Rosh Hashanah, begins September 6, 2021

- Jewish holiday (date varies in fall)
- 50-100 lb

Cinco de Mayo, Mexican Independence Day (May 5)

- 18-40 lb live weight
- Milk-fed lamb or kid
- Goat is also served at baptismal dinners year-round

Ethiopian New Year, September 11, 2021

Traditional dish is *doro wat*, a spicy stew made with lamb or chicken

Navadurgara (also called Navratra Dashara or Dassai), Begins October 15, 2021

- Hindu holiday honoring the goddess Durga (date varies, fall)
- Male lambs and goats only
- Size depends on the number of people being fed

Id al-Fitr (Feast of the Fast Breaking signaling the end of Ramadan), May 12, 2021

- Month-long fast practiced by Muslims (date varies according Islamic calendar and the new moon)
- Male lambs and goats, 50-80 lb live weight

Id al-Adha (Feast of the Sacrifice), July 19, 2021

- Muslim holiday follows Id al-Fitr by 70 days
- Unblemished, fully intact male lambs and goats, 60-100 lb live weight

Christmas

- Numerous ethnic groups
- 20-45 lb live weight
- Milk-fed lamb or kid

Caribbean Holidays

- Several Caribbean holidays occur during the month of August
- Large, smelly buck goats preferred

Chinese New Year, February 1, 2022

- Occurs according to the Chinese calendar, usually January or February
- 60-80 lb live weight

Adapted from an article by Sandra Kay Miller (Painted Heart Farm, Newburg, Pennsylvania), accessed at <http://www.newfarm.org/features/2006/0606/ethnicgoatmrk/miller.shtml>.

2021 State graded sale dates

Winchester

April 5 July 12
May 3 September 6.

For more information go to <https://farmerslivestockva.com> or call 540-667-1023.

Rockingham

January 16 July 22
February 20 August 27
March 19 September 24
April 9 October 22
May 21 November 19
June 18 December 10

For more information go to <https://www.rockinghamlivestock.com/sales-schedules>

Madison

January 20 July 7
February 17 August 25
March 1 September 22
April 7 October 20
May 5 November 17
June 16 December 15

For more information contact bjarvis@vt.edu, 540-948-6881 or Matt Sponaugle, 540-383-7983.

Got the app?

In 2013 ASI launched its first mobile application, providing lamb and wool market information to anyone with a smartphone or tablet. The free market app is available for both Apple and Android operating systems.



The app offers a good variety of national reports as well as market results from seven auction barns from around the country.

Producers can access price data as the information

is made available by USDA.

The app is titled ASI Market News. Download it from Apple's App Store or the Android Store.



A "niche" market?

A niche market implies a small portion of trade in a commodity. But former American Lamb Board Chairman Nick Forrest, an Ohio producer who focuses on direct marketing lamb, shared a few statistics at the 2020 Virginia Shepherds' Symposium in January showing that "non-traditional" markets account for almost half of lamb consumption in the United States. (The statistics are from a commissioned study by Juniper Economic Consulting, Inc.)

- 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.

- An estimated 34,411,500 pounds were produced for the ethnic market that is not accounted for in official channels. 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.

Getting Rid of Scrapie Once and For All

Martha Polkey and Patricia Sanville

This article is reproduced with permission from the Winter 2020 Maryland Sheep News, and was funded with ASI scrapie eradication grant funding.

We've been putting scrapie tags in our sheep's ears for nearly two decades.

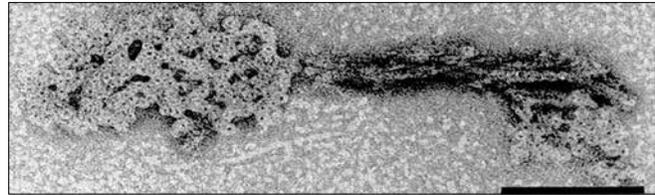
Now's a good time to brush up on why: the disease, its history in the United States, the history of the eradication campaign, and the goals set by the U.S. Department of Agriculture for this year.

Scrapie is a fatal, degenerative disease of the nervous system affecting sheep and goats. It is one of several Transmissible Spongiform Encephalopathy (TSE) diseases (so-called because of the spongelike holes they leave in the brain). Other TSEs are chronic wasting disease in deer, Creutzfeldt-Jakob disease in humans, and mad cow disease—which is believed to have come from cattle feed made in part from rendered scrapie-infected sheep carcasses.

Scrapie was first recognized as a sheep disease more than 250 years ago. The first known case in the United States occurred in sheep in Michigan in 1947, believed to have come from imported stock. The first diagnosed U.S. case in a goat was reported in 1969.

The scientific knowledge to understand scrapie came much later, in the 1990s, when a neurologist at the University of California coined the term prion and the theory that it, and not a "slow virus," was the cause of TSEs. (In 1997 he won a Nobel Prize for the work.) It is the most widely accepted theory of the disease.

And to make things more complicated, there are scrapie variants. "Classical" scrapie is the focus of the eradication effort, with at least two strains known. An atypical



An electromicrograph image of a scrapie prion (stained dark), with an aggregate of "crystal" subunits at each end. The black bar at lower right measures 100 nanometers in length.

version of scrapie identified in Norway in 1998, called Nor98-like scrapie, was diagnosed in the United States in 2007. It is currently considered a sporadic disease of sheep and goats that is either not transmitted or transmitted at levels too low to sustain infection under natural conditions.

Prions are infective proteins, misfolded versions of a normal protein that is abundant in the brain and spinal cord. The scrapie prions force normal proteins to misfold, and those prions then accumulate, causing cell death and a destructive chain reaction in the brain. Prions are smaller than the smallest known virus. They are measured in nanometers (a billionth of a meter) and have not been completely characterized by scientists. But they have been photographed (see image above).

In addition to being resistant to cellular degradation processes, prions are also resistant to degradation in the environment and can withstand exposure to extreme temperatures, mild to moderate acidic and basic environments, and radiation, presenting a challenge to environmental decontamination.

In a nutshell: What you need to know about scrapie

- Scrapie is a fatal, contagious disease of sheep that the U.S. Department of Agriculture and the American Sheep Industry Association want to eradicate from the United States. Accomplishing that goal will help both domestic breeding stock sales and enable export of U.S. stock—as well as stop economic losses to individual producers who unknowingly have acquired infected stock.
- The disease is spread to lambs of infected ewes and other stock that are exposed to birthing fluids and tissues.
- Average onset of symptoms for lambs exposed at birth is after 3 years of age, but the infective agent can be spread before the onset of symptoms.
- The eartags producers have been required to apply since 2001 have helped trace flocks that are harboring scrapie-infected animals. Infected animals identified in source flocks have been disposed of, with steps taken

to ensure the infective agent does not infect other stock.

- That effort has been very successful, and monitoring continues through testing of stock through commercial channels.
- As fewer infected animals go through slaughter channels, the final, more challenging step is getting enough samples for testing of animals that die on the farm. There must be enough samples to guarantee that there are no cases in the nation (for a prescribed period of time).
- YOUR HELP is needed to help the nation achieve this final stage of the eradication process. If you have animals die on the farm, submit samples for testing. If you have an ill animal that exhibits symptoms consistent with scrapie, engage your veterinarian and contact your state's Animal Health Laboratory to arrange for assessment, diagnosis, and testing of tissues.

The most common natural route of transmission is believed to be through oral ingestion of the agent, though it can enter the body through other means, such as by contact with eyes, abraded skin or mucous membranes. The scrapie agent is thought to spread primarily from infected ewes/does to their offspring and other lambs/kids, and less frequently to adult sheep/goats, through contact with the placenta, birth fluids, and/or contaminated lambing/kidding areas at or shortly after parturition.

The average age of onset of clinical signs of scrapie is 40 to 44 months. It is an insidious disease with a 2- to 5-year incubation period, during which time an infected ewe may be shedding the scrapie agent before showing clinical signs. The disease can thus spread to other animals and other flocks before clinical signs are observed in the first infected animal.

Genetics also play a role in susceptibility to infection and the incubation period. Many are familiar with the genetic testing showing that animals with a RR configuration of amino acids at codon 171 are resistant to scrapie. RQ provides some resistance. More than 99 percent of classical “valine-independent” cases of scrapie in the United States have a QQ configuration.

Codon 136 also plays a role in scrapie susceptibility, with animals possessing AA resistant and those with VV susceptible to “valine-dependent” scrapie. There is increasing evidence that in goats, codons 146 and 222 are associated with classical scrapie susceptibility and resistance.

Symptoms. Clinical signs of scrapie vary widely, and initial symptoms are similar to those of many other sheep illnesses, from meningeal worm infections, polioencephalomalacia, external parasites, and consumption of toxins to ovine progressive pneumonia and listeriosis. But unlike with those diseases, once clinical signs are seen, the animal always worsens and succumbs within 2 weeks to 6 months, rarely longer (although some animals die suddenly before the onset of clinical signs).

Signs of the disease are:

- weakness of any kind, not including those with visible traumatic injuries, and no other sign of scrapie. Signs of weakness may include stumbling, falling down, or difficulty rising.
- significant weight loss, despite retention of appetite, in an animal with adequate dentition.
- increased sensitivity to noise and sudden movement.
- tremors, stargazing, or head pressing
- bilateral gait abnormalities (not including abnormalities involving only one leg or one front and one back leg). Signs of gait abnormalities may include: incoordination, high-stepping gait of forelimbs, bunny-hop movement of hind legs, swaying of hindquarters.

- repeated intense rubbing accompanied by bare areas or damaged wool in similar locations on both sides of the animal’s body or, if on the head, both sides of the poll.

Eradication. As far back as 1952 there have been efforts to eradicate scrapie from the United States. The final drive for eradication began in 2001, when scrapie regulations were revised to require the official identification of sheep and goats not in slaughter channels (except low-risk commercial goats) and any sheep over 18 months of age in interstate commerce with some exceptions.

In addition, the revision required states to implement and enforce official identification of most sheep and goats on change of ownership intrastate in order to move sheep and goats interstate with minimal restrictions.

Testing of animals at slaughter, traceback to infected farms, identification, removal, and monitoring infected animals has resulted in a phenomenal drop in cases.

In order to find the remaining scrapie infected sheep and goats and to demonstrate to the world that the United States is scrapie free, the push is on for more sample submissions from mature sheep and goats that die on farm. The three parts of this campaign are:

- Educate yourself on the signs of scrapie.
- Report by contacting your State Veterinarian to conduct testing on your animals over the age of 12 months if you suspect scrapie. This will increase efficiency in identifying those infected.
- Submit the whole head from any sheep or goat over the age of 18 months that dies or is euthanized on your farm.

The latter task is not for the faint of heart—but detailed instructions (“Whole head collection procedure”) are provided (for download as a PDF at https://www.aphis.usda.gov/animal_health/animal_diseases/scrapie/downloads/wholehead_submission.pdf).

Sources

Grady, D. 2003. “Sheep ailment may hold clues to mad cow disease.” *New York Times*, December 3, 2003.

Holger, W. et al. “Structural studies of the scrapie prion protein by electron crystallography.” *Proc. Nat. Acad. Sci.* March 19, 2002, 99(6), 3563–3568. (image of prion accessed online at <https://doi.org/10.1073/pnas.052703499>)

USDA National Scrapie Eradication Program. January 2020 Monthly Report, Fiscal Year 2020.

USDA. 2017. “Control and eradication of scrapie.” NVAP Reference Guide. Accessed 3/2/2020. <https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/nvap/NVAP-Reference-Guide/Control-and-Eradication/Scrapie>

USDA, APHIS, Veterinary Services. 2012. *Scrapie: An overview of the disease and the National Scrapie Eradication Program.*



2020 Virginia Sheep Producers Survey

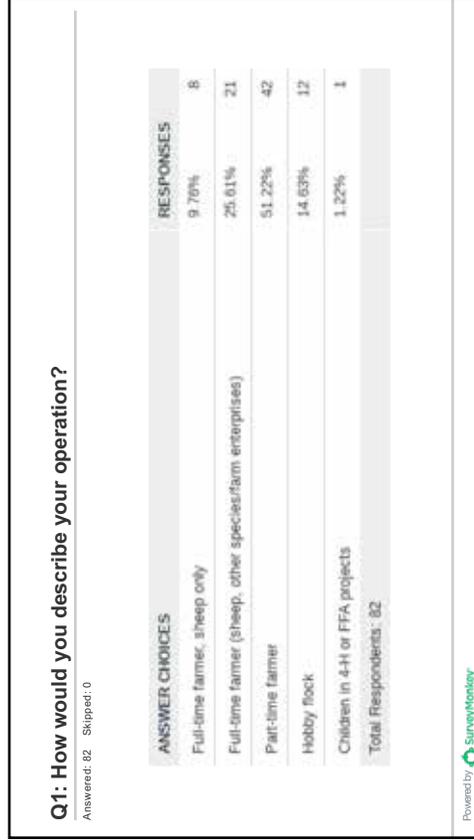
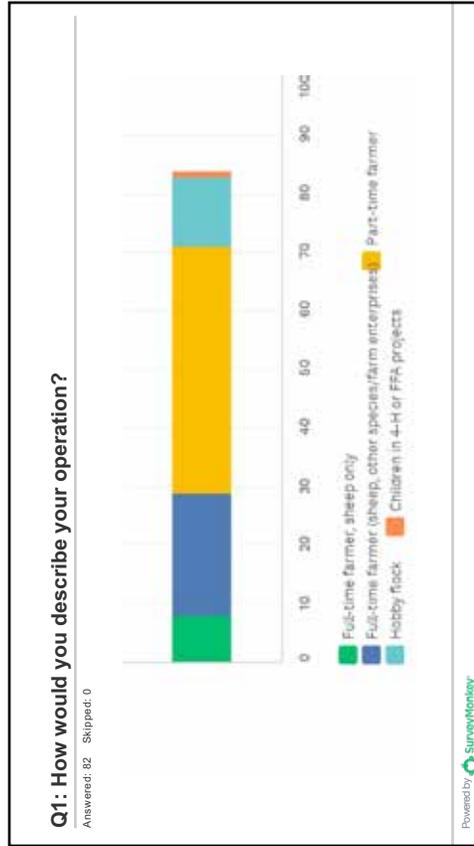
Conducted December 10-31.

Virginia Sheep Producers Association December 2020 Survey
 Saturday, January 02, 2021
 Powered by SurveyMonkey

82
 Total Responses

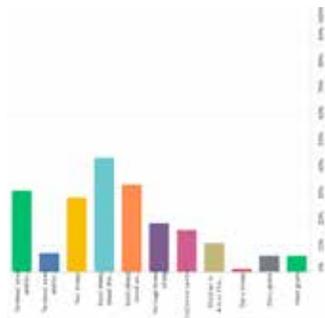
Date Created: Tuesday, December 08, 2020
 Complete Responses: 82

Powered by SurveyMonkey



Q2: Describe your sheep operation (check all that apply):

Answered: 81 Skipped: 1



Powered by SurveyMonkey

Q2: Describe your sheep operation (check all that apply):

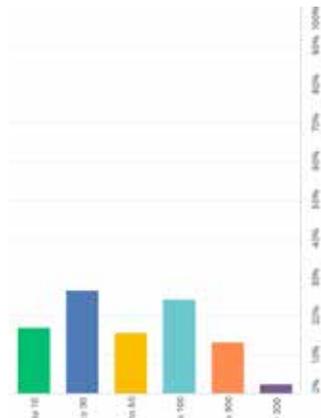
Answered: 81 Skipped: 1

ANSWER CHOICES	RESPONSES
Terminal cross and/or replacement ewes for other operations (wool)	30.86%
Terminal cross and/or replacement ewes for other operations (meat)	7.41%
Wool sheep	28.42%
Wool sheep (wool is primary product)	43.21%
Wool sheep (wool is important product)	33.33%
Heritage breed sheep	18.52%
Club/show lambs	16.06%
Children in 4-H or FFA projects	11.11%
Dairy sheep	1.23%
Dairy goats	6.17%
Mixed goats	6.17%
Total Respondents: 81	

Powered by SurveyMonkey

Q3: Number of ewes in flock

Answered: 82 Skipped: 0



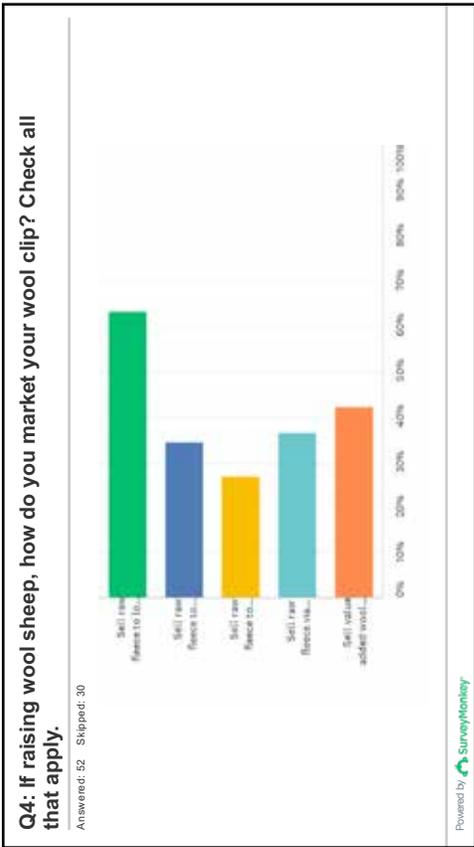
Powered by SurveyMonkey

Q3: Number of ewes in flock

Answered: 82 Skipped: 0

ANSWER CHOICES	RESPONSES
1 to 10	17.07%
11 to 30	26.83%
31 to 50	15.85%
51 to 100	24.39%
101 to 300	13.41%
> 300	2.44%
Total Respondents: 82	

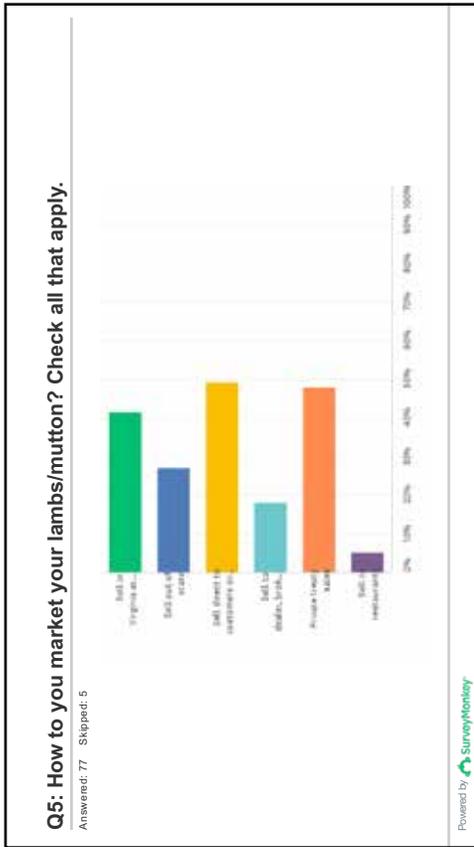
Powered by SurveyMonkey



Q4: If raising wool sheep, how do you market your wool clip? Check all that apply.
 Answered: 52 Skipped: 30

ANSWER CHOICES	RESPONSES
Sell raw fleece to local wool pool or wool buyer	63.46% 33
Sell raw fleece to private buyers at farm	34.62% 18
Sell raw fleece to private buyers through organized fleece sale or as event vendor	26.92% 14
Sell raw fleece via internet (farm website, social media, etc.)	36.54% 19
Sell value added wool products (e.g., roving, batting, yarn, pelts, finished items)	42.31% 22
Total Respondents: 52	

Powered by SurveyMonkey



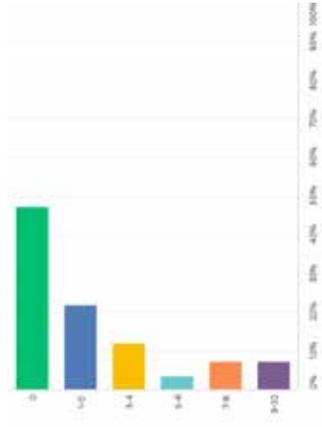
Q5: How to you market your lambs/mutton? Check all that apply.
 Answered: 77 Skipped: 5

ANSWER CHOICES	RESPONSES
Sell in Virginia at auction	41.56% 32
Sell out of state	27.27% 21
Sell direct to customers or at farmers' market	40.35% 30
Sell to dealer, broker, or order buyer	18.18% 14
Private treaty sales	48.05% 37
Sell to restaurants	5.19% 4
Total Respondents: 77	

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Q6: How many times have you attended the Virginia Shepherd's Symposium in the past 10 years?

Answered: 82 Skipped: 0



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Q6: How many times have you attended the Virginia Shepherd's Symposium in the past 10 years?

Answered: 82 Skipped: 0

ANSWER CHOICES	RESPONSES
0	47.56%
1-2	21.95%
3-4	12.20%
5-6	3.66%
7-8	7.32%
9-10	7.32%
Total Respondents: 82	

Powered by SurveyMonkey

Q7: How many times have you entered lambs in the Virginia Ram Test in the past 10 years?

Answered: 82 Skipped: 0



Powered by SurveyMonkey

Q7: How many times have you entered lambs in the Virginia Ram Test in the past 10 years?

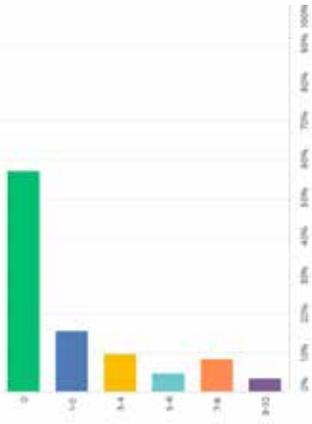
Answered: 82 Skipped: 0

ANSWER CHOICES	RESPONSES
0	92.68%
1-2	3.66%
3-4	0.00%
5-6	1.22%
7-8	1.22%
9-10	1.22%
Total Respondents: 82	

Powered by SurveyMonkey

Q8: How many times have you attended the Virginia Performance Tested Ram Sale in the past 10 years?

Answered: 82 Skipped: 0



Powered by SurveyMonkey

Q8: How many times have you attended the Virginia Performance Tested Ram Sale in the past 10 years?

Answered: 82 Skipped: 0

ANSWER CHOICES	RESPONSES
0	57.32%
1-2	15.85%
3-4	9.76%
5-6	4.88%
7-8	8.54%
9-10	3.66%
Total Respondents: 82	

Powered by SurveyMonkey

Q9: How many times have you entered lambs in the Virginia Replacement Ewe Lamb Sale in the past 10 years?

Answered: 82 Skipped: 0



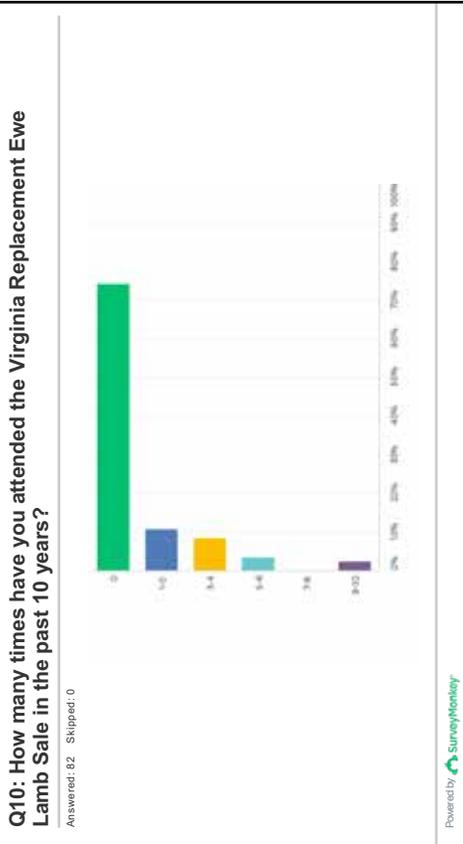
Powered by SurveyMonkey

Q9: How many times have you entered lambs in the Virginia Replacement Ewe Lamb Sale in the past 10 years?

Answered: 82 Skipped: 0

ANSWER CHOICES	RESPONSES
0	93.00%
1-2	3.66%
3-4	1.22%
5-6	1.22%
7-8	0.00%
9-10	0.00%
Total Respondents: 82	

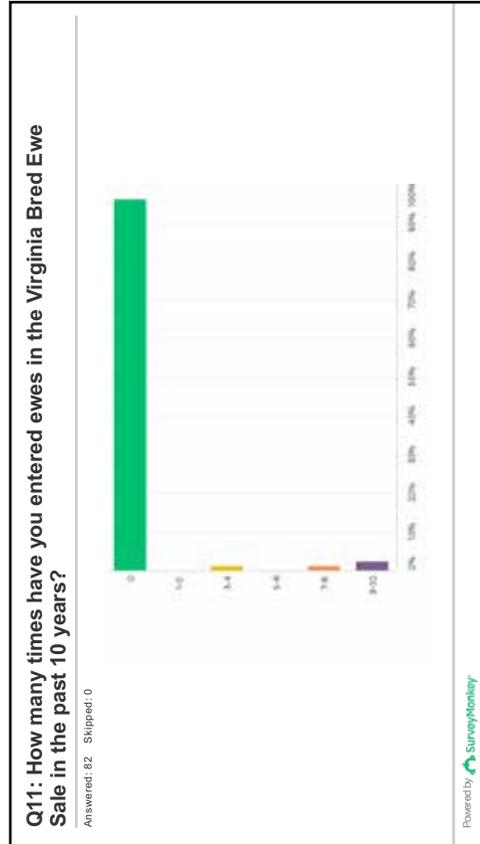
Powered by SurveyMonkey



Q10: How many times have you attended the Virginia Replacement Ewe Lamb Sale in the past 10 years?
 Answered: 82 Skipped: 0

ANSWER CHOICES	RESPONSES
0	74.39%
1-2	10.98%
3-4	8.54%
5-6	3.66%
7-8	0.00%
9-10	2.44%
Total Respondents: 82	

Powered by SurveyMonkey



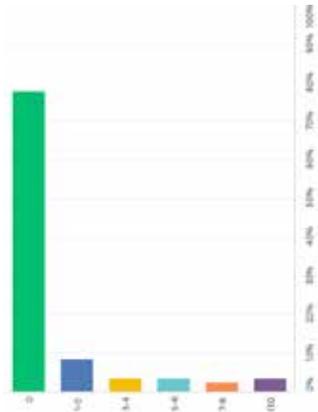
Q11: How many times have you entered ewes in the Virginia Bred Ewe Sale in the past 10 years?
 Answered: 82 Skipped: 0

ANSWER CHOICES	RESPONSES
0	96.34%
1-2	0.00%
3-4	1.22%
5-6	0.00%
7-8	1.22%
9-10	2.44%
Total Respondents: 82	

Powered by SurveyMonkey

Q12: How many times have you attended the Virginia Bred Ewe Sale in the past 10 years?

Answered: 82 Skipped: 0



Powered by SurveyMonkey

Q12: How many times have you attended the Virginia Bred Ewe Sale in the past 10 years?

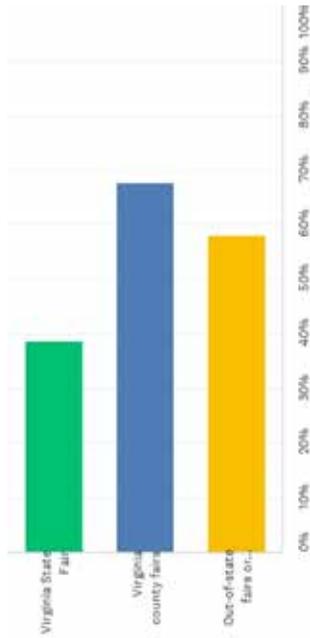
Answered: 82 Skipped: 0

ANSWER CHOICES	RESPONSES
0	78.05%
1-2	8.54%
3-4	3.66%
5-6	3.66%
7-8	2.44%
9-110	3.66%
Total Respondents: 82	

Powered by SurveyMonkey

Q13: Do you (or your children) exhibit stock at:

Answered: 31 Skipped: 51



Powered by SurveyMonkey

Q13: Do you (or your children) exhibit stock at:

Answered: 31 Skipped: 51

ANSWER CHOICES	RESPONSES
Virginia State Fair	38.71%
Virginia county fairs	67.74%
Out-of-state fairs or festivals	58.00%
Total Respondents: 31	

Powered by SurveyMonkey

Q14: Please share which initiatives below that you would like to see VSPA offer to members.

Answered: 80 Skipped: 2



Powered by SurveyMonkey

Q14: Please share which initiatives below that you would like to see VSPA offer to members.

Answered: 80 Skipped: 2

	VERY INTERESTED	INTERESTED	NEUTRAL	NOT INTERESTED	TOTAL	WEIGHTED AVERAGE
Improved website	47.50%	36.25%	12.50%	3.75%	80	1.13
Establish a VSPA legislative committee	27.27%	35.00%	33.33%	3.96%	77	2.14
Contribute with local and regional producers and processors	30.63%	24.00%	18.89%	6.32%	79	1.81
Sponsorship fund for producer education programs	36.36%	20.79%	20.38%	18.60%	77	2.28
Offer more research and production webinars	48.15%	37.19%	14.39%	2.56%	78	1.73
Offer a newsletter	48.15%	30.77%	21.79%	1.29%	78	1.78

Powered by SurveyMonkey

Q14: Please share which initiatives below that you would like to see VSPA offer to members.

Answered: 80 Skipped: 2



Powered by SurveyMonkey

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Powered by SurveyMonkey

Q14: Please share which initiatives below that you would like to see VSPA offer to members.

Answered: 76 Skipped: 6



Powered by SurveyMonkey

Q14: Please share which initiatives below that you would like to see VSPA offer to members.

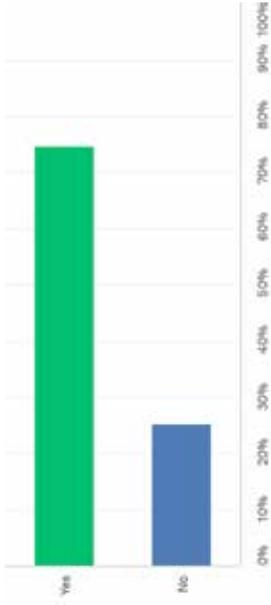
Answered: 76 Skipped: 6

	I HAVE EXPENSE IN MYSELF AND CAN HELP	WILLING TO HELP IN MY FREE TIME	CANT HELP IN MY FREE TIME	TOTAL	WEIGHTED AVERAGE
Improved website	8.00%	16.00%	76.00%	75	2.08
Establish a VSPA legislative committee	1.32%	28.67%	60.00%	75	2.38
Coordinate with Virginia's other local and regional producers and processors	4.11%	43.84%	52.00%	73	2.48
Sponsorship fund for producer education programs	4.48%	28.30%	67.18%	67	2.63
Offer more research and production webinars	2.62%	29.56%	67.81%	71	2.05
Offer a newsletter	1.43%	32.66%	65.71%	70	2.64

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Q16: Would you be willing to increase your dues amount (by \$10) to help us to provide these additional resources to you?

Answered: 79 Skipped: 3



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Q16: Would you be willing to increase your dues amount (by \$10) to help us to provide these additional resources to you?

Answered: 79 Skipped: 3

ANSWER CHOICES	RESPONSES
Yes	74.60% 59
No	25.32% 20
Total Respondents: 79	

Powered by SurveyMonkey

2020 Annual Meeting Minutes

Virginia Sheep Producers Association

Virginia Tech Alphin-Stuart Arena, Blacksburg, VA
Saturday, January 11, 2020

The Annual Meeting was held in conjunction with the Sheep Symposium.

President Larry Weeks called the meeting to order and welcomed all those in attendance. He recognized and thanked the sponsors of the Symposium.

Minutes from the 2019 annual meeting were made available for review. Scott Greiner provided an overview of the 2019 financial report, copies of which were available at the registration desk.

President Weeks gave a President's report. He noted the funding challenge with Wildlife Services, and encouraged producers to get involved by contacting their legislators. Larry highlighted the strong sheep industry in the state, and thanked the board and committees that had for their efforts.

Scott Greiner presented the Roy Meek Outstanding Sheep Producer Award to Jason and Kerri Shiflett. Jason and Kerri have been advisors to the Virginia Junior Sheep Breeders Association for several years.

Frank Patterson overviewed the proposed changes to the by-laws. He noted that the board of directors has unanimously approved the changes at their August meeting, and that the board requested formal approval from the membership. A motion to approve was formally made and seconded. The motion passed, with 1 dissenting vote from the membership.

Director elections were held. Results were as follows: Lisa Lewis (Southwest- 1st term), Jim Hilleary (Northern- 1st term), Sarah Mackay-Smith (At Large- 2nd term), and Frank Patterson (At Large- 2nd term).

The board met briefly following the annual meeting and elected the following officers: President- Mandy Fletcher, VP Commercial- Frank Patterson, and VP Seedstock- Corey Childs. Martha Polkey agreed to serve as VP Wool Council, and Patti Price as director representing Wool Council. The board also agreed to have a meeting in August in conjunction with the Ram Test Sale & Field Day, with details to be determined.

Respectively submitted,

Scott Greiner, Educational Advisor

Virginia Sheep Producers Association

Board of Directors Meeting Minutes

Monday, August 31, 2020

Present: Larry Weeks, Mandy Fletcher, Gary Hornbaker, Kate Mahanes, Sarah Mackay-Smith, Jennifer McClellan, Dan Woodworth, Lisa Lewis, Martha Polkey, Daniel May, technical advisor Kevin Pelzer, educational advisor Scott Greiner, and VDACS representative Matt Sponaugle.

President Mandy Fletcher called the meeting to order at 7:30 PM. The meeting was held remotely via Zoom.

Minutes of the January 2020 board meeting had been distributed prior to the meeting via email. The board properly approved the minutes.

Association Activity Reports:

Scott Greiner reported on the 2019 Ram Test/Ewe Lamb Sale held the August 29. The ram sale was very strong, and ewe lambs sold well relative to historical averages. A Field Day was not held this year due to the Covid-19 pandemic.

Greiner also reported on the Fall Bred Ewe Sale. It was noted that the group needed to make a decision regarding having an in-person vs. online sale. This has been consideration in past, and with the situation this year it was shared that an online sale may be necessary. A survey to potential consignors as well as buyers was discussed to obtain input on how to best structure and conduct the sale.

A brief report on the VJSBA and their summer show held in August was provided.

Greiner reported on Educational Programs. Due to pandemic, and in-person Sheep Basics course was not scheduled for the fall. The Southwest AREC Ram Test did not take place in 2020, however an online Sheep Field Day educational program was scheduled for Friday, October 23.

Martha Polkey shared the 2020 Make It With Wool competition will be virtual this year and scheduled for September 26, however no entries had been received to date.

Committee Reports:

Martha Polkey reported on behalf of the Wool Improvement Committee. The prevailing concern across the state regarding the lack of an active wool market was discussed. In short, due to the pandemic there was not an active market (price) for much of the traditional Virginia wool (medium wools marketed through pools and similar venues). A couple of wool pools have scheduled pick-ups, and plan to wait on the market to become active again prior to selling. It was noted that the market for local and value-added wool products was strong during this same time.

The board discussed the website at length, with general consensus that the site could be better utilized to support the activities of the association and provide more service to members and industry. A committee of Martha Polkey, Mandy Fletcher, Kate Mahanes and Jennifer McClellan was established to further explore communication efforts of the association.

New Business:

Plans for the 2021 Shepherd's Symposium were discussed. The consensus of the board was to hold the Symposium as a webinar/virtual meeting. Potential dates and structure were discussed, and the board brainstormed potential topics. A committee of Lisa Lewis, Martha Polkey, Kate Mahanes, Mandy Fletcher, Jennifer McClellan and Scott Greiner agreed to work on the details and plan the Symposium.

The ASI Convention is scheduled for January 27-30, 2021 in Denver. The board formally designated Lisa Weeks as the official Virginia delegate to the ASI Convention.

Matthew Sponaule provided a VDACS and Virginia Sheep Industry Board update. It was shared that Mike Carpenter had retired, and Tracey Fitzsimmons would begin in his former role in October (Tracey currently Executive Secretary at Virginia Cattleman's Association). Matt indicated the Virginia Sheep Industry Board budget would be similar this year to previous years in terms of funds available to support projects. He shared the VSIB had been in process of starting a Facebook page, and had hired a third party to administrate the page. Some challenges in getting approval to do so at the state level had caused some delays in getting the project underway, but it was anticipated the page would launch soon.

The board briefly discussed funds available through USDA earmarked for Covid relief for sheep producers. It was suggested members be emailed to make sure they were aware.

Additional discussion took place regarding challenges sheep and livestock producers were having finding and scheduling processing to meet demands for locally produced meat products. The question was raised as to if VSPA should play a role in finding solutions for this issue, and what could potentially be done. No formal action was taken.

With no further business, the meeting adjourned.

Respectively submitted,

Scott Greiner, Educational Advisor

Virginia Sheep Producers Association

2020 Financial Report

Balance 1/1/20		\$6,979.00
<u>Income</u>		
2020 Shepherds' Symposium		3,800.00
Sponsors	2,075.00	
Registration	1,725.00	
2020 Ram Test		40,032.38
Ram Consignment Fees	530.00	
Ram Sale Income	33,805.00	
Slaughter Ram Income	1,800.00	
Feed Prepayment	3,715.00	
Feed Reimbursement	182.38	
2019 Glade Spring Ram Sale		1,700.00
Sale Income	1,700.00	
2019 Bred Ewe Sale		764.45
Bred Ewe Sale Income	700.00	
Consignor Sale Expenses	64.45	
2020 ASI Dues (62 paid)		1,550.00
2020 VSPA Membership Dues (87 paid)		1,305.00
2020 VSPA Website Advertising		260.00
2020 Seedstock Council Dues (22 paid)		<u>330.00</u>
Total Income		\$49,741.83
<u>Expenses</u>		
2020 Shepherds' Symposium		3,033.85
Awards	29.95	
Board Meeting Expenses	269.23	
Meals	1,016.24	
Postage	498.12	
Speakers	1,220.31	
2019 Shepherds' Symposium		430.50
Postage	430.50	
2020 Ram Test		39,182.44
Auctioneer/Clerk	400.00	
Blood Testing	649.00	
Consignor Payments	25,079.89	
Consignment Refund	45.00	
Feed	8,490.39	
Minerals	325.25	
Insurance	407.34	
Postage	720.81	
Shearing	539.00	
Supplies	578.54	
Teloauction	85.00	
Transfers	421.00	
Ultrasound	252.00	
Vet	775.37	
Webcast	200.00	
Misc	213.85	
2019 Ram Test		385.50
Postage	385.50	
2020 Bred Ewe Sale		361.55
Postage	361.55	

Expenses Continued

VSPA Membership Mailing		817.38	
2019 Postage	407.50		
2020 Postage	409.88		
ASI		2,382.00	
Dues (2020)	2,382.00		
Liability Insurance		175.00	
Checkoff Taxes		85.33	
2019 Tax Preparation		400.00	
Virginia Registration Fee		25.00	
Agribusiness Dues (2021)		420.00	
Awards and Sponsorships		186.23	
Office Supplies and Postage		55.00	
Office – Bookkeeper		1,200.00	
Website Domain Registration		<u>18.17</u>	
Total Expenses			\$49,157.95
Balance 12/31/20			\$7,562.88

Accounts Receivable

2020 Scrapie Eradication Money	1,000.00
2020 Bred Ewe Sale Commission	330.00

Virginia Sheep Producers Association Outstanding Sheep Producer of the Year Recipients

- 2020 -
- 2019 – Jason & Kerri Shiflett, Augusta County
- 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



Image courtesy Shamoka Run Farm, Mount Sidney, Virginia