2020 Sheep and Goat Industry Survey Analysis

by

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Analyzed for

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Introduction

Agriculture is Kansas' largest industry and economic driver. The specialty livestock industries in Kansas are relatively small, compared to more traditional livestock production in Kansas; however, the industries that do exist are successful and have benefited from increased consumer demand. Specialty livestock in Kansas is an evolving sector that typically includes bison, goats, sheep, alpaca and llamas, but is also growing to include other species.

As part of the Kansas Ag Growth strategy, leaders from throughout the Kansas specialty livestock industry collaborated in the development and implementation of a long-term strategic growth strategy with input and discussion among key partners. One published outcome includes completing an economic impact study for specialty livestock in the state.

The purpose of the 2020 Sheep and Goat Survey was to investigate the economic impact of the sheep and goat industry in Kansas. This information will be used to advance education, marketing, research, and outreach activities designed specifically for the Kansas sheep and goat sectors. We hope to identify barriers to those markets to allow the Kansas Department of Agriculture to be more responsive to grower and market needs. Producers may use this data to better understand sheep and goat inventory in your area as well.

Figure 1 and Table 1 show the distribution of sheep and goat farms within the state of Kansas. In general, the number of farms increases from west to east. With the exception of those in Butler County, most farms are located in counties with a higher population concentration. This distribution indicates that sheep and goat farms may not require a large acreage. Figure 1 also indicates that these livestock might be used to diversify traditional farm operations.

Figure 1. Count of Kansas Sheep and Goat Farms by County

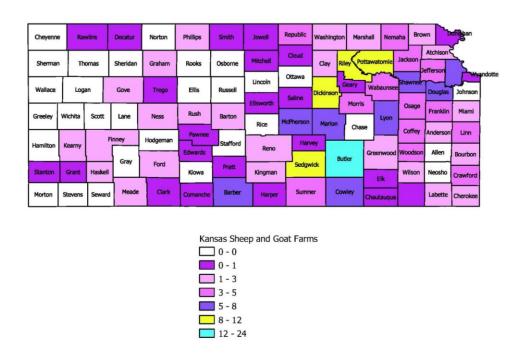


Table 1. Kansas Sheep and Goat Farm Location by Crop Reporting District

Districts		Additional	
Districts	Main farm	Farm	Percent
Northwest-10	4	0	2%
West Central-20	5	1	2%
Southwest-30	15	1	6%
North Central-40	12	6	7%
Central-50	32	1	13%
South Central-60	26	2	11%
Northeast-70	47	5	20%
East central-80	49	2	20%
Southeast-90	50	3	20%
State	240	21	100%

As shown in table 2, most respondents were female. More goat producers responded than did sheep producers. A little over 14 percent of respondents managed both sheep and goats. Almost 70% of respondents were between the ages of 31 and 60 (table 3). Fourteen percent of respondents fell in the 41-45 age group. Around 10 percent of respondents fell into each of the 31-35, 36-40, 46-50, 51-55, and 56-60 groups. No other age groups had more than eight percent of the respondents.

Table 2. Respondent Gender and Role

State	Male	Female	Other	Manage Sheep	Manage Goats	Manage Both
Count	109	124	2	81	118	33
Percent	46%	53%	1%	35%	51%	14%

Table 3. Respondent Age Groups

State	Under 15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60	61-65	66-70	71-75	Over 75
Count	4	8	14	16	24	25	33	23	26	24	17	11	5	5
%	1.70%	3.40%	5.96%	6.81%	10.21%	10.64%	14.04%	9.79%	11.06%	10.21%	7.23%	4.68%	2.13%	2.13%

Questions 83, 84, 86, and 87 of the survey were short answer, open-ended questions. The responses to these questions are included in the Appendix. The remainder of this report will elaborate on the rest of the survey responses.

Sheep Industry Data

Most of the sheep producers are not new to the market. Over 31 percent of the sheep producers have been raising sheep for more than 21 years (table 4). Over 21 and over 15 percent of producers have been raising sheep for 3 to 5 years and 6 to 10 years, respectively. Only about eight percent of producers have been raising sheep less than one year.

As shown in table 5, the operations are fairly small, with an average number of employees of 2.66 not including the respondent. The bulk of that average comes from family members, which averaged 2.30. The averages of paid employees, unpaid volunteers, and interns were all less than one, and the maximum number of employees is six. Income information for the sheep operations is shown in table 6. Fifty percent of the producers indicate that their average annual gross income is less than \$10,000, and 19 percent more indicate that their income is over \$10,000 and under \$50,000. Twelve percent indicate that they do not know their average annual gross income, and six percent prefer not to answer this question.

Table 7 shows the responses to a question about the scope of the sheep operation. Respondents were given four scope options: full-time, part-time, mixed-use farm, or hobby. Full-time sheep operations are defined as providing the main source of income. Part-time is defined as an operation where the sheep operation is a secondary source of income, and an off-farm full-time job is the main source of income. A mixed-use farm is defined as one on which farming is the main source of income, but there are several types of products, not just sheep. A hobby operation is defined as one on which the sheep might pay for themselves, but there is no real net profit. Only six percent of the sheep operations were full-time. Forty-two percent of respondents classify their operation as a hobby operation. Given this percentage, we would expect the lower income, fewer employees, and smaller flock size that we see in those following questions. Growth potential in the market seems possible in the part-time and mixed-use operations, which were 31 percent and 22 percent of responses, respectively.

Table 4. Number of Years Raising Sheep

State	<1 year	1-2	3-5	6-10	11-15	16-20	21+
Count	9	9	23	17	10	7	34
Percent	8%	8%	21%	16%	9%	6%	31%

Table 5. Average Number of Employees on the Sheep Operation (Excluding Respondent)

	Average #					
	of	Paid	Unpaid			
State	Employees	Employees	Volunteers	Interns	Family	Max
Average	2.66	0.26	0.08	0.02	2.30	6

Table 6. Average Annual Gross Income of the Sheep Operation

		#4.000	# 40.000	# 50,000	Φ 7 5 000	# 400,000	#050.000	# 500.000	Prefer	
State	<\$1000	\$1,000- \$9,999	\$10,000- \$49,999	\$50,000- \$74,999	\$75,000- \$99,999	\$100,000- \$249,999	\$250,000- \$499,999	\$500,000- \$999,999	not to Answer	Unknown
Count	16	38	21	5	4	1	3	1	7	13
%	15%	35%	19%	5%	4%	1%	3%	1%	6%	12%

Table 7. Scope of the Sheep Operation

	Mixed-use							
State	Full-time	Part-time	Farm	Hobby				
Count	6	33	24	45				
Percent	6%	31%	22%	42%				

The 108 responses to sheep stock breed/breed type were fairly evenly distributed among four of the five options: maternal/seed stock, wether/show stock, feed/finish/terminal, and other options (table 8). Almost 27 percent of respondents classify their flock as maternal/seedstock, and the same amount classify their flock as wether/show production. About 19 percent of respondents chose feed/finish/terminal, and another 19 percent chose other. It is important to explore what type of flocks comprise the almost 20 percent of other. The survey allowed for a text response to accompany the "other" selection. However, no respondents entered information here. Only eight percent of respondents indicate their flock is primarily for wool production.

Table 8. Sheep Stock Breed/Breed Type

State	Maternal/ Seedstock production	Feed/Finish/ Terminal	Wether/ Show Production	Wool	Other
Count	29	21	29	9	20
Percent	27%	19%	27%	8%	19%

As shown in table 9, 62 percent of respondents indicate that their ewe flock is less than 50 head. About the same percent of responses, 21 and 23, went to the 11 to 25 and 26 to 50 head groups, respectively. Thirteen percent of respondents are equally likely to have a herd of 51 to 100 head or 101 to 200 head. Six percent of flocks are larger, with 201 to 500 head, and 6 percent have over 500 head.

Table 9. Average Size of Ewe Flock

State	1-10	11-25	26-50	51-100	101-200	201-500	501+
Count	19	23	25	14	14	7	6
Percent	18%	21%	23%	13%	13%	6%	6%

As shown in table 10, 15 percent of breeding flocks have access to over 160 acres. Similarly, 29 percent and 33 percent only have access to 1 to 10 acres or 11 to 40 acres, respectively. Sixteen percent of flocks have 41 to 80 acres, and 7 percent have access to 81 to 160 acres. This distribution logically follows the herd size distribution.

Table 10. Number of Acres Accessible to Sheep Breeding Flock

State	1-10	11-40	41-80	81-160	161+
Count	31	36	17	8	16
Percent	29%	33%	16%	7%	15%

Fifty-seven percent of lambs are marketed when they weigh more than 50 pounds and less than 90 pounds (table 11). However, twenty-seven percent of lambs are quite a bit heavier. Twelve and 15 percent of lambs are between 111 and 130 pounds and 131 and 150 pounds, respectively, at market. Only one percent of lambs goes to market at less than 50 pounds.

Table 11. Average Weight of Lamb Crop when Marketing

				91-110	111-130	131-	151-
State	< 50 lb	51-70 lb	71-90 lb	lb	lb	150 lb	170 lb
Count	1	28	33	8	13	16	8
Percent	1%	26%	31%	7%	12%	15%	7%

Twenty-two percent of respondents indicate they wean 101 to 115 percent of their lamb crop (table 12). The same percentage indicate they wean 116 to 130 percent of their lamb crop. Fourteen percent of respondents are equally likely to wean less than 100 percent and 131 to 145 percent of their lamb crops. Ten percent of respondents wean 146 to 160 percent of their lamb crop, and another 10 percent wean 161 to 175 percent of their crop. The small increments of the responses may have made selecting a response difficult.

Table 12. Percentage Weaned of Annual Lamb Crop

		101-	116-	131-	146-	161-	176-	191-	206-
State	<=100%	115%	130%	145%	160%	175%	190%	205%	220%
Count	14	22	22	14	10	10	4	1	2
	14%				10%			1%	2%

Over 82 percent of respondents purchase breeding stock, and only 11 percent purchase feeding stock (table 13). Figure 2 shows the states in which individuals purchase their sheep breeding stock. Figure 3 shows the states in which respondents purchase their sheep feeding stock. As one might expect, most respondents purchase both their breeding and feeding stock in Kansas. However, several more states are utilized when purchasing breeding stock than are used for feeding stock. In both breeding and feeding stock, respondents primarily purchase from Kansas and neighboring states.

Table 13. Do You Purchase Sheep Breeding/Feeding Stock

State	Breeding	Feeding
Count	90	12
Percent	83%	11%

Figure 2. States where Breeding Stock Are Purchased

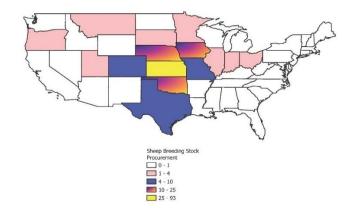
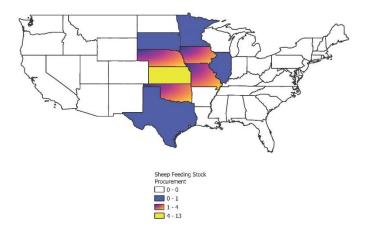


Figure 3. States where Feeding Stock Are Purchased



About 72 percent of respondents are commercial sheep producers, and about half of that are purebred producers (table 14). As shown in tables 15 and 16, both commercial and purebred producers, 63 percent and 56 percent, respectively, favor private treaty to purchase their sheep. Thirteen percent and 6 percent of commercial producers purchase sheep from the sale barn and by word of mouth, respectively. Ten percent of purebred producers purchase animals by word of mouth. However, both groups are fairly open to technology. Eight and five percent of commercial producers use online sales and social media, respectively, to purchase animals. Those percentages for purebred producers are 21 and 3, respectively.

Table 14. Number of Commercial and Purebred Sheep Producers

State	Total Responses	Commercial	Purebred
Count	108	78	39
Percent		72%	36%

Table 15. Ways that Commercial Sheep Producers Purchase Animals

			Private	Online		Social	Word of
State	Sale barn	Consignment	Treaty	sales	Neighbors	media	mouth
Count	10	1	49	6	3	4	5
Percent	13%	1%	63%	8%	4%	5%	6%

Table 16. Ways that Purebred Sheep Producers Purchase Animals

State	Consignment	Private Treaty	Online sales	Neighbors	Social media	Word of mouth
Count	3	22	8	1	1	4
Percent	8%	56%	21%	3%	3%	10%

Most operations lamb early in the year. Table 17 indicates that 50 percent of the respondents lamb in January or February, and 21 percent lamb between March and April. About 16 percent of respondents have an accelerated lambing program. Table 18 shows that the annual or accelerated lamb crop weaned is less than 160 percent for 83 percent of respondents. Most wean between 116 to 130 percent of their lamb crop. Only 17 percent of respondents wean more than 160 percent of their annual or accelerated lamb crop.

Table 17. When Do You Lamb

_			May-		Nov-	
State	Jan-Feb	Mar-Apr	August	Sept-Oct	Dec	Accelerated
Count	54	23	3	5	5	17
Percent	50%	21%	3%	5%	5%	16%

Table 18. Annual or Accelerated Lamb Crop in terms of Percentage Weaned

		101-	116-	131-	146-	161-	176-	191-	206-	236-	>
	<=100	115	130	145	160	175	190	205	220	250	250
State	%	%	%	%	%	%	%	%	%	%	%
Count	9	20	23	14	13	8	3	2	2	1	1
%	9%	21%	24%	15%	14%	8%	3%	2%	2%	1%	1%

Half of the respondents docked their lambs (table 19), and almost half, 47%, castrated their lambs. Three percent of respondents indicate that they alter their lambs in some other way. The other category includes responses such as: ear tagged; females are docked; those for meat are castrated, and those for breeder quality are left intact. Table 20 shows how respondents manage their sheep flock. Fifty-eight percent said they have a small farm flock, and 26 percent employ grazing management methods. Ten percent manage a confined flock, and only 1 percent indicate they follow range management methods.

Table 19. Altering of Lambs

State	Docked	Castrated	Other
Count	75	71	5
Percent	50%	47%	3%

Note: "Other" includes responses: ear tagged; females are docked; those for meat are castrated, those for breeder quality are left intact.

Table 20. Sheep Management Methods

	Small farm			Grazing	
State	flock	Range	Confinement	management	Other
Count	63	1	11	28	6
Percent	58%	1%	10%	26%	6%

Twenty-two percent of respondents indicate that their end use of the sheep is for breeding (table 21). Twenty percent of respondents take their sheep to feeder/finishing facilities, and 18 percent sell sheep live to individuals. Show and personal use are almost equally selected as end uses at 16 and 13 percent, respectively. Eleven percent of respondents sell their lamb meat directly to consumers.

Table 21. Sheep Product End Use

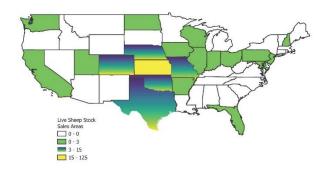
				Direct-to-		
			Feeder/	consumer	Sold live	
			Finishing	meat	to	Personal
State	Show	Breeding	Facility	sales	Individuals	use
Count	46	62	58	30	51	36
Percent	16%	22%	20%	11%	18%	13%

Seventy-one percent of respondents market their live sheep in Kansas, and 29 percent market them outside of Kansas (table 22). Some respondents market both in Kansas and in other states. Figure 4 illustrates that most respondents market their live sheep in Kansas, but they also market in 20 other states. Live sheep from Kansas are marketed from the east coast to the west coast to the Gulf coast.

Table 22. Where Do You Market Live Sheep

State	Kansas	Outside Kansas
Count	99	40
Percent	71%	29%

Figure 4. States where Producers Market Live Sheep



Most respondents, 51 percent, use dedicated marketing outlets, such as livestock auctions, to market their live sheep (table 23). However, 42 percent use social media and 2 percent use a website. Only 5 percent use local advertising, such as a local newspaper, to market their live sheep. Similarly, 54 percent of respondents market their lamb meat through social media (table 24). Twenty-seven percent market lamb wholesale to a retailer. Eight and 10 percent market their lamb through a website or local advertising, respectively. Forty-nine percent of the respondents use a local/ethnic processor (table 25). Almost as many, 45 percent, use a commercial processor. Only 5 percent of respondents use on-farm processing for their lamb. Almost all of the respondents, 83 percent, harvest less than 50 head of sheep each year (table 26). Eight percent harvest more than 500 head.

Table 23. Live Sheep Marketing Methods

	Local Advertising, i.e.	Social		Dedicated marketing outlet, i.e. Livestock
State	Newspaper	Media	Website	Auction
Count	5	43	2	52
Percent	5%	42%	2%	51%

Table 24. Lamb Meat Marketing Methods

	Local Advertising, i,e.	Social		Wholesale to
State	Newspaper	Media	Website	Retailer
Count	6	32	5	16
Percent	10%	54%	8%	27%

Table 25. Lamb Meat Processing Location

.	,	Commercial	On-farm
State	Local/Ethnic processor	processor	slaughter
Count	38	35	4
Percent	49%	45%	5%

Table 26. Head of Sheep Harvested per Year

State	< 50			126- 150		226- 250	326- 350	More than 500
					1		1	7
%	83%	2%	1%	2%	1%	1%	1%	8%

Almost 84 percent of respondents market their sheep products themselves; only 16 percent use some other organization or company (table 27). Sixty-four percent of respondents do not market any sheep co-products (table 28). Thirty eight percent market wool, and 1 percent market other fiber. Table 29 shows that 35 percent of respondents market more than 1,000 pounds of wool/other fiber each year. Thirty-eight percent market 101 to 500 pounds of fiber, 19 percent market 100 pounds or fewer, and 8 percent market between 501 and 1000 pounds of wool/fiber each year. Figure 5 illustrates where Kansas sheep co-products are marketed across the United States, and Figure 6 shows where Kansas sheep co-products are marketed across Kansas.

Table 27. Who Markets the Sheep Products

	Other					
State	Self	Organization/Company				
Count	73	14				
Percent	84%	16%				

Table 28. Types of Sheep Co-Products Marketed

State	Wool	Other Fiber	None
Count	30	1	51
Percent	38%	1%	64%

Table 29. Pounds of Wool/Fiber Marketed Annually

State	<= 100	101-500	501-1000	> 1000
Count	5	10	2	9
Percent	19%	38%	8%	35%

Figure 5. States where Sheep Products are Sold

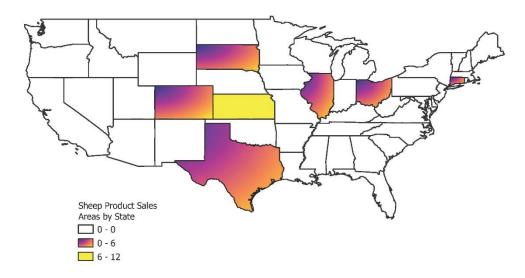


Figure 6. Counties in Kansas where Sheep Products are Sold

Cheyenne	Rav	vlins	Decatur	Norton	Phillips	Smith	Jewell	Republic	Washing	ton Mars	hall Nema	aha Brov	vn Donipl	nane
Sherman	The	omas	Sheridan	Graham	Rooks	Osborne	Mitchell	Cloud	Clay	Riley Po	tawatomie	Jackson	Atchison C	<u></u>
Wallace	Loga		Gove	Trego	Ellis	Russell	Lincoln	Ottawa		Geary	Wabaunsee	Shawnee	m	averimenth Wyand
wallace	Logo	an	Gove	rego	EIIIS	Russell	Ellsworth	Saline	Dickinsor	Morris	٦		Douglas	Johnson
Greeley	Wichita	Scott	Lane	Ness	Rush	Barton			860-01	<u> </u>	Lyon	Osage	Franklin	Miami
					Pawnee		Rice	McPherson	Marior	Chas	e	Coffey	Anderson	⊔inn
Hamilton	Kearny	F 1	inney	Hodgeman	Edwards	Stafford	Reno	Harv		Butler	Greenwood	Woodson	Allen	Bourbon
Stanton	Grant	Haskell	Gray	Ford	Kiowa	Pratt	Kingman	Sedgw		5000	Elk	Wilson	Neosho	Crawford
Morton	Stevens	Seward	Meade	Clark	Comanche	Barber	Harper	. Sumn	er	Cowley	Chautauqua		Labette	Cherokee

Sheep Product Sales
Areas by County

0 - 0

0 - 1

1 - 2

2 - 3

Goat Industry Data

Most of the goat producers are fairly new to the market. Over 28 percent of the goat producers have been raising goats for 3 to 5 years (table 30). Over 14 and over 25 percent of producers have been raising goats for 1 to 2 years and 6 to 10 years, respectively. Only about five percent of producers have been raising goats less than one year.

As shown in table 31, the operations are fairly small, with an average number of employees of 2.65 not including the respondent. The bulk of that average comes from family members, which averaged 2.45. The averages of paid employees, unpaid volunteers, and interns were all less than one, and the maximum number of employees is six. Income information for the goat operations is shown in table 32. Forty-nine percent of the producers indicate that their average annual gross income is less than \$10,000, and 23 percent indicate that their average annual gross income is less than \$1,000. Eleven percent indicate that their income is over \$10,000 and under \$50,000. Ten percent indicate that they did know their average annual gross income, and six percent preferred not to answer this question.

Table 33 shows the responses to a question about the scope of the goat operation. Respondents were given four scope options: full-time, part-time, mixed-use farm, or hobby. Full-time goat operations are defined as providing the main source of income. Part-time is defined as an operation where the goat operation is a secondary source of income, and an off-farm full-time job is the main source of income. A mixed-use farm is defined as one on which farming is the main source of income, but there are several types of products, not just goats. A hobby operation is defined as one on which the goats might pay for themselves, but there is no real net profit. Only five percent of the goat operations were full-time. Forty-eight percent of respondents classify their operation as a hobby operation. Growth potential in the market seems possible in the part-time operations, which is 34 percent of responses. Only 13 percent classify their operation as a mixed-use farm.

Table 30. Number of Years Raising Goats

State	<1 year	1-2	3-5	6-10	11-15	16-20	21+
Count	7	20	40	36	13	12	13
Percent	4.96%	14.18%	28.37%	25.53%	9.22%	8.51%	9.22%

Table 31. Average Number of Employees on the Goat Operation (Excluding Respondent)

State	Average # of Employees	Paid Employee	Unpaid Volunteers	Interns	Family	Max
Average	2.65	0.08	0.11	0.02	2.45	6

Table 32. Average Annual Gross Income of the Goat Operation

State	<\$1000	\$1,000- \$9,999	\$10,000- \$49,999	\$50,000- \$74,999	\$75,000- \$99,999	Prefer not to Answer	Unknown
Count	31	66	15	1	1	8	13
Percent	23%	49%	11%	1%	1%	6%	10%

Table 33. Scope of the Goat Operation

State	Full-time	Part-time	Mixed-use Farm	Hobby
Count	7	47	18	67
Percent	5%	34%	13%	48%

Sixty-two of the 152 respondents to goat stock breed/breed type indicate they have maternal stock (table 34). The remaining 56 percent were split among feed/finish/terminal, dairy, and other. Twenty-eight percent have dairy stock, 19% have feed/finish/terminal, and 9% are other stock.

Table 34. Goat Stock Breed/Breed Type

State	Maternal	Feed/Finish/Terminal	Dairy	Other
Count	62	27	39	12
Percent	44%	19%	28%	9%

As shown in table 35, 82 percent of respondents indicate that their goat herd is 50 head or fewer. Thirty-five percent of respondents have 11 to 25 head, and 29 percent have 26 to 50 head. Eighteen percent of respondents have 10 or fewer head in their herd. Thirteen percent of respondents have a herd of 51 to 100 head, and only 4 percent have more than 100 head in their herd.

Table 35. Average Size of Goat Herd

State	1-10	11-25	26-50	51-100	101-200	201-500	501+
Count	26	50	41	19	3	1	1
Percent	18%	35%	29%	13%	2%	1%	1%

As shown in table 36, the breeding herds of 50 percent of the respondents have access to 10 or fewer acres. Thirty-three percent and 9 percent of the responses indicate that the breeding herd has access to 11 to 40 acres and 41 to 80 acres, respectively. Four percent of respondents indicate their herd has access to either 81-160 acres or over 160 acres. Sixteen percent of flocks have 41 to 80 acres, and 7 percent have access to 81 to 160 acres. This distribution logically follows the herd size distribution.

Table 36. Number of Acres Accessible to Goat Breeding Herd

State	1-10	11-40	41-80	81-160	161+
Count	71	46	13	5	6
Percent	50%	33%	9%	4%	4%

Forty-one percent of kids are marketed when they weigh 50 pounds or less. About the same percent, 38 percent, of respondents market kids at 51 to 70 pounds. Fifteen percent of respondents sell kids that weigh between 71 and 90 pounds. Only six percent of respondents market kids heavier than 90 pounds (table 37).

Table 37. Average Weight of Kid Crop when Marketing

State	< 50 lb	51-70 lb	71-90 lb	91-110 lb	131-150 lb
Count	55	51	20	5	2
Percent	41%	38%	15%	4%	2%

Fifty-three percent of respondents indicate they wean less than 116 percent of their kid crop (table 38). Forty-five percent indicate that they wean between 116 and 205 percent of kid crop, with 14 percent falling into the 146 to 160 percent group. Only three percent of respondents market more than 205 percent of their annual kid crop. The small increments of the responses may have made selecting a response difficult.

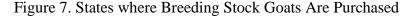
Table 38. Percentage Weaned of Annual Kid Crop

State	<=100%		116- 130%							>250%
Count	36	26	9	7	17	6	6	8	2	1
%	31%	22%	8%	6%	14%	5%	5%	7%	2%	1%

Seventy-nine percent of respondents purchase breeding stock, and only 10 percent purchase feeding stock (table 39). Figure 7 shows the states in which individuals purchase their goat breeding stock. Figure 8 shows the states in which respondents purchase their goat feeding stock. As one might expect, most respondents purchase both their breeding and feeding stock in Kansas. However, several more states are utilized when purchasing breeding stock than are used for feeding stock. In both breeding and feeding stock, respondents primarily purchase from Kansas and neighboring states.

Table 39. Do You Purchase Goat Breeding/Feeding Stock

State	Breeding	Feeding
Count	112	14
Percent	79%	10%



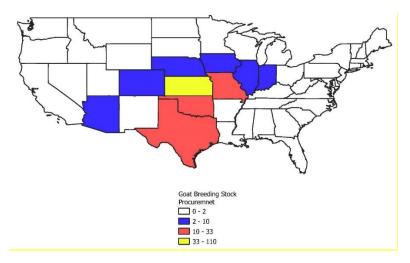
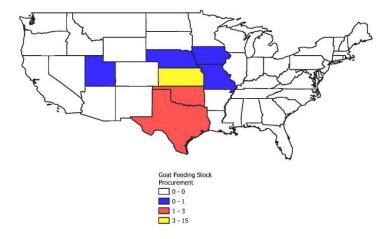


Figure 8. States where Feeding Stock Goats Are Purchased



About 47 percent of respondents are commercial goat producers, and about 53 percent are purebred goat producers (table 40). As shown in tables 41 and 42, 61 percent of both commercial and purebred producers favor private treaty to purchase their goats. Both groups are fairly open to technology. Fifteen and 19 percent of commercial and purebred producers, respectively, use online sales to purchase animals. Six and 13 percent, respectively, use social media. Sixteen and two percent of commercial goat producers purchase their animals from a sale barn or by word of mouth. Only eight percent of purebred goat producers purchase their animals from a sale barn, through consignment, and by word of mouth.

Table 40. Number of Commercial and Purebred Goat Producers

State	Commercial	Purebred
Count	66	75
Percent	47%	53%

Table 41. Ways that Commercial Goat Producers Purchase Animals

State	Sale barn	Private Treaty	Online sales	Social media	Word of mouth
Count	10	38	9	4	1
Percent	16%	61%	15%	6%	2%

Table 42. Ways that Purebred Goat Producers Purchase Animals

State	Sale barn	Consignment	Private Treaty	Online sales	Social media	Word of mouth
Count	1	1	33	10	7	2
Percent	2%	2%	61%	19%	13%	4%

Most operations kid early in the year. Table 43 indicates that 39 percent of respondents kid in January or February, and 35 percent kid between March and April. About 5 percent of respondents have an accelerated kid program. Table 44 shows that the annual or accelerated kid crop weaned is less than 160 percent for 77 percent of respondents. Most wean less than 100 percent of their kid crop. Only 23 percent of respondents wean more than 160 percent of their annual or accelerated kid crop.

Table 43. When Do You Kid

State	Jan-Feb	Mar-Apr	May-August	Sept-Oct	Nov-Dec	Accelerated
Count	50	45	6	17	4	7
Percent	39%	35%	5%	13%	3%	5%

Table 44. Annual or Accelerated Kid Crop in terms of Percentage Weaned

State	<=100 %	101- 115%	116- 130%	131- 145%	146- 160%	161- 175%	176- 190%	191- 205%	206- 220%	> 250%
Count	29	24	8	9	14	7	9	6	1	2
%	27%	22%	7%	8%	13%	6%	8%	6%	1%	2%

Only 13 percent of the respondents docked their kids (table 45), and 63% castrated their kids. Twenty-five percent of respondents indicate that they alter their kids in some other way. The other category includes responses such as: sold as breeding stock, banded, dehorned, and disbudded. Table 46 shows how respondents manage their goat herds. Seventy-six percent said they have a small farm herd, and 36 percent employ grazing management methods. Twenty-six percent manage a confined flock, and about 11 percent indicate they follow range management methods.

Table 45. Altering of Kids

State	Docked	Castrated	Other
Count	17	85	34
Percent	13%	63%	25%

Note: "Other" includes responses: sold as breeding stock; banded; dehorned; disbudded.

Table 46. Goats Management Methods

State	Small Farm Herd	Range	Confinement	Grazing Management	Other
Count	101	15	34	48	6
Percent	76%	11%	26%	36%	5%

Twenty-one percent of respondents use their goats for breeding animals (table 47). About 20 percent of respondents indicate that their goats are sold live to individuals, and another 20 percent indicate their goats are show animals. Ten and 12 percent of respondents use their goats for dairy and personal use, respectively. Only seven percent of respondents' goats are sent to feeder/finishing facilities, and 9 percent of respondents' goats are terminal.

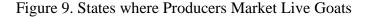
Table 47. Goat Product End Use

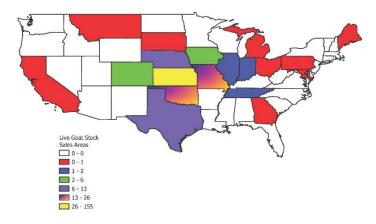
				Feeder/ Finishing		Sold live to	Personal
State	Show	Breeding	Dairy	Facility	Terminal	Individuals	use
Count	80	85	41	28	36	80	49
%	20%	21%	10%	7%	9%	20%	12%

Seventy percent of respondents market their live goats in Kansas, and 30 percent market them outside of Kansas (table 48). Respondents were able to select up to four states in which they market their goats. Figure 9 illustrates that most respondents market their live goats in Kansas, but they also market in 20 other states. Live goats from Kansas are marketed from the east coast to the west coast to the Gulf coast.

Table 48. Where Do You Market Live Goats

State	Kansas	Outside Kansas
Count	129	55
Percent	70%	30%





Most respondents, 57 percent, use social media to market their live goats (table 49). Another 10 percent use a website for marketing. Twenty-nine percent use a dedicated marketing outlet, such as a livestock auction for marketing live goats. Only 4 percent use local advertising, such as a local newspaper, to market their live goats. Similarly, 53 percent of respondents market their goat meat through social media (table 50). Twenty-two percent market goat meat wholesale to a retailer. Seven and 18 percent market their goat meat through a website or local advertising, respectively. Sixty percent of the respondents use a commercial processor (table 51). About half as many, 30 percent, use a local/ethnic processor. Ten percent of respondents use on-farm processing for their goats. Almost all of the respondents, 90 percent, harvest less than 50 head of goats each year (table 52). Seven percent harvest 51 to 75 head. Only three percent of respondents harvest more than 75 head of goats each year.

Table 49. Live Goat Marketing Methods

State	Local Advertising, i.e. Newspaper	Social Media	Website	Dedicated marketing outlet, i.e. Livestock Auction
Count	5	73	13	37
Percent	4%	57%	10%	29%

Table 50. Goat Meat Marketing Methods

State	Local Advertising, i.e. Newspaper	Social Media	Website	Wholesale to Retailer
Count	12	36	5	15
Percent	18%	53%	7%	22%

Table 51. Goat Meat Processing Location

State	Local/Ethnic processor	Commercial processor	On-farm Slaughter
Count	20	40	7
Percent	30%	60%	10%

Table 52. Head of Goats Harvested per Year

State	< 50	51-75	101-125	176-200	200+
Count	78	6	1	1	1
Percent	90%	7%	1%	1%	1%

About 85 percent of respondents market their goat products themselves, and 15 percent use some other organization or company (table 53). Sixty-five percent of respondents do not market any goat co-products (table 54). Twenty-two percent market goat dairy products, and 1 percent market wool. Thirteen percent of respondents market other goat co-products. Table 55 shows that 12 percent of respondents market more than 1,000 pounds of dairy products each year. Sixty percent market less than 100 pounds, and 24 percent market between 101 and 500 pounds of dairy. Four percent market between 501 and 1000 pounds of dairy each year. Figure 10 illustrates that Kansas goat co-products are marketed only within Kansas in the United States, and Figure 11 shows where Kansas goat co-products are marketed across Kansas. The average retail value of goat co-products is about \$47,000 (table 56). The minimum value is \$400 and the maximum value is \$200,000. The goat co-product questions have fewer responses than all other questions, so generalization from these results may be limited.

Table 53. Who Markets the Goat Products

State	Self	Other Organization/Company			
Count	81	14			
Percent	85%	15%			

Table 54. Types of Goat Co-Products Marketed

State	Dairy	Wool	Other	None
Count	32	1	18	93
Percent	22%	1%	13%	65%

Table 55. Pounds of Dairy Marketed Annually

State	<= 100	101-500	501-1000	> 1000
Count	15	6	1	3
Percent	60%	24%	4%	12%

Figure 10. States where Goat Products are Sold

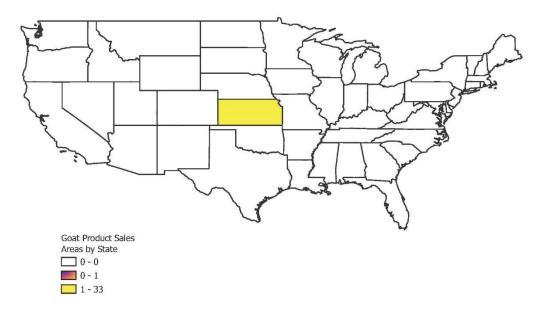


Figure 11. Counties in Kansas where Goat Products are Sold

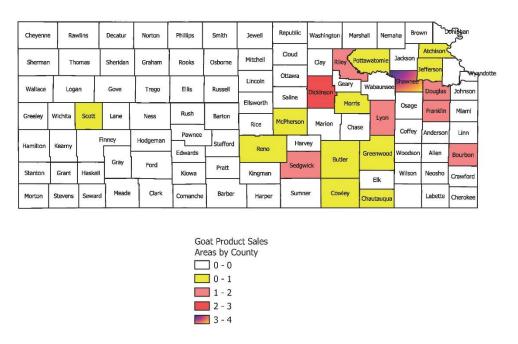


Table 56. Average Annual Retail Value of Goat Co-Products

	Average (\$)	Min	Max
State	\$47,030	\$400	\$200,000

General Data

The final questions on the survey are related to accessibility of various services for small ruminants. Fifty-nine percent of respondents rate access to veterinary service for small ruminants as extremely good or somewhat good (table 57). Most respondents, 69 percent, have veterinary service for small ruminants within 25 miles (table 58). Sixty percent of respondents rate their access to nutrition care for small ruminants as extremely good or somewhat good (table 59). According to respondents, access to consultant service for small ruminants is a different story. Twenty-six percent rate it as somewhat bad, and seven percent rate it as extremely bad (table 60). These responses indicate that this area needs to be addressed. The majority of respondents, 89 percent, prefer for communication to be electronic, either by email or social media (table 61).

Table 57. Access to Veterinary Service for Small Ruminants

State	Extremely Good	Somewhat Good	Neither Good nor Bad	Somewhat Bad	Extremely Bad
Count	51	68	35	36	11
Percent	25%	34%	17%	18%	5%

Table 58. Distance to Veterinary Service for Small Ruminants

State	0-25 miles	26-50 miles	51-100 miles	100+ miles	In-house Care
Count	137	51	7	1	4
Percent	69%	26%	4%	1%	2%

Table 59. Access to Nutrition Care for Small Ruminants

State	Extremely Good	Somewhat Good	Neither Good nor Bad	Somewhat Bad	Extremely Bad
Count	51	71	39	35	5
Percent	25%	35%	19%	17%	2%

Table 60. Access to Consultant Service for Small Ruminants

	Extremely	Somewhat	Neither Good	Somewhat	
State	Good	Good	nor Bad	Bad	Extremely Bad
Count	24	48	62	51	14
Percent	12%	24%	31%	26%	7%

Table 61. Communication Preference

State	Website	Email	Social Media	Local meetings	Other
Count	10	124	43	10	2
Percent	5%	66%	23%	5%	1%

Survey participants were asked about their level of familiarity with and participation in several organizations. Participants were also asked if they are members in several other organizations. Membership is not offered for all of the organizations in table 62. For those organizations that allow membership, a percentage of the survey participants who are members is listed. On average, survey participants are most familiar with K-State Research & Extension (KSRE). Respondents also indicate that, on average, their participation was highest in KSRE. On average, respondents rank their familiarity with and participation in this organization higher than their local 4-H and FFA. The high averages for KSRE may have sample bias, if the survey was publicized through this organization. Some of the interesting results in this table are the low levels of familiarity with, participation in, and membership in the small ruminant associations. Only 20 percent of the respondents are members of the Kansas Sheep Association, and only five percent are members of the Kansas Meat Goat Association. My recommendation for future ways to bolster these segments of Kansas agriculture would be a collaboration among KSRE, KDA, and county 4-H groups. Forty percent of respondents are members of their county 4-H group, and on average, respondents are moderately familiar with and have a moderate level of participation in this group.

Table 62. Familiarity, Participation, and Membership in Organizations

State Averages	Average Rating on Level of Familiarity with the Organization	Average Rating on Level of Participation with the Organization	Member of the Organization (%)
K-State Research & Extension	4.30	3.45	
National Farmers Union	1.60	1.12	0%
Kansas Farmers Union	1.69	1.14	1%
American Farm Bureau Federation	2.48	1.45	
Kansas Farm Bureau	3.43	2.11	
Local County Farm Bureau	3.15	2.21	
Kansas Sheep Association	2.53	1.76	20%
American Sheep Industry Association	2.24	1.41	5%
Kansas Meat Goat Association	2.01	1.35	5%
American Goat Federation	1.62	1.17	0%
Kansas Livestock Association	3.09	1.74	15%
National 4-H Council	2.96	1.53	
Kansas 4-H	3.77	2.52	29%
County 4-H	3.96	3.27	40%
National FFA Organization	3.28	1.78	10%
Kansas FFA Association	3.35	1.97	14%
Local level FFA Chapter National Sheep Improvement Program	3.45	2.46	22%
(NSIP)	1.93	1.24	3%