

Kansas Specialty Livestock Producer Challenges

Logan Britton (lbritton@ksu.edu) – K-State Department of Agricultural Economics
Nellie Hill-Sullins (nlhill@ksu.edu) – K-State Department of Communications and Agricultural Education
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Overview

Kansas is home to many livestock species such as goats, sheep, bison, alpaca, llamas, and other specialty livestock. The sizes of these industries are relatively small compared to more traditional livestock production in Kansas. In 2021, USDA NASS reported Kansas ranked 12th and 14th in the nation in meat goat and market sheep inventory, respectively (USDA NASS, 2022a). In 2021, the total sheep and lamb inventory was 65,000 head. This consisted of 44,000 breeding sheep and 21,000 market lambs. Meat and milk goat inventories were 37,000 head and 4,400 head, respectively (USA NASS, 2022b). According to the 2017 Census of Agriculture, Kansas ranked 10th in bison with just over 5,727 head raised on 95 farms. At the time of the census, Kansas also totaled 1,551 alpacas, 514 llamas, and 11,318 rabbits in inventory (USDA NASS, 2019).

Specialty livestock producers, specifically those raising sheep and goats, have expressed issues of market accessibility within the state (Kansas Department of Agriculture, 2020). The objective of this study was to gather information about specific marketing and resource issues producers face when sending their animals and/or products to a market.

Methods

A list of more than 250 producers was gathered from the Kansas Department of Agriculture, Kansas Department of Commerce, and species association directories, including both email and physical addresses. The producers received either mailed postcards or emails inviting them to participate in the online questionnaire, which launched in mid-April 2023. Reminder messages were sent through both channels to the producers in late April and early May. K-State Today and KSRE's Tuesday Letter were also utilized to solicit responses to the questionnaire. Due to lower-than-desired response rates, the survey was extended for another month and concluded in June 2023. The survey instrument was comprised of demographic, operational, marketing, and resource questions. Respondents were also



asked to rate their preference of information sources, level of satisfaction with current information by topic, and level of importance for support areas for their operations. The questions used Likert-type scales to collect data, with 1 indicating a low level and 5 indicating a high level for the respective item. Eighty-four responses were collected after filtering out dropouts, incompletes, and non-qualifiers.

Results

Respondents were predominantly white (95 percent) males (57 percent) with an average age of 50. The mean number of years operating was 17.2 (standard deviation of 15.2). Fifty-two percent of respondents had a four-year degree, 26 percent had a graduate or professional degree, and 10 percent had a two-year degree. Half of respondents classified their operations as part-time while another 20 percent classified their operations as a hobby (see **Figure 1** for full results). The average number of full-time employees is 0.59 (maximum of 7) and part-time employees is 0.83 (maximum of 6). The average percentage of household income derived from specialty livestock operations is 19.65 percent. Half of respondents primarily raised sheep followed by 19 percent raising goats, and 13 percent raised other species (see **Figure 2** for full results). Other livestock species included alpaca, llama, bison, and pheasant. **Table 1** presents summary statistics for the number of head by species. Further results are broken down by livestock species.

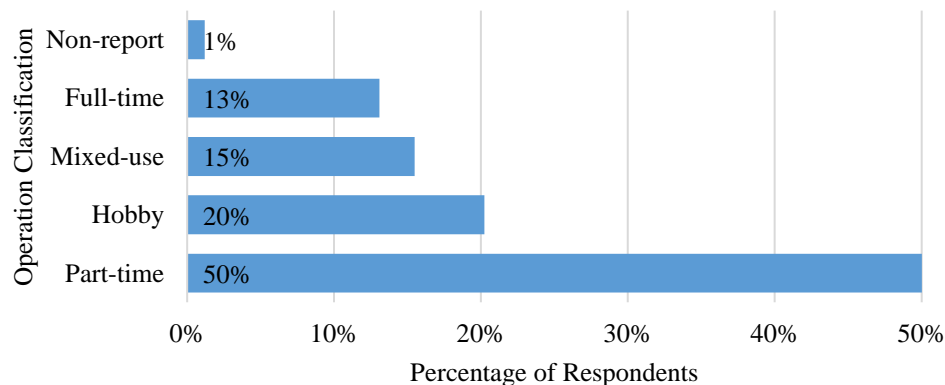


Figure 1. Respondent Operation Classification. *Notes:* part-time defined as part source of income, other full-time job; mixed-use as main source of income, other livestock species are raised; full-time as main source of income.

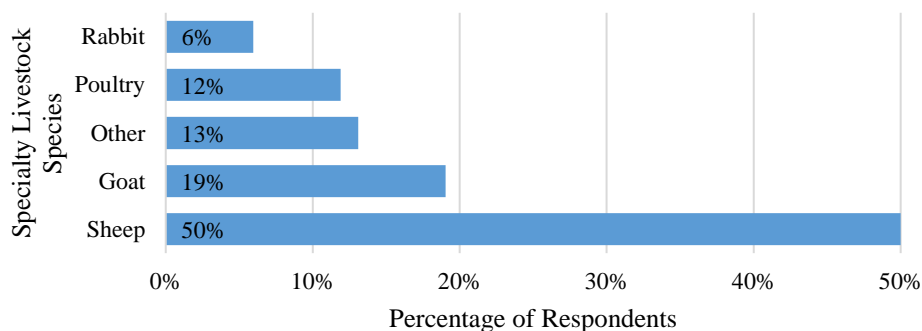


Figure 2. Primary Livestock Raised of Respondents.

Species	Minimum	Mean	Maximum	Count
Sheep	0	129.40	1,500	48
Goat	1	53.39	600	31
Rabbit	0	52.67	200	6
Poultry	20	232.88	800	17
Other	0	29.23	125	13

Sheep

Sheep producers indicated the use of social media and livestock auction to market their livestock (see **Table 2** for full results). Nearly 29 percent of respondents indicated they use a contract to sell their livestock and/or products. Thirty percent of sheep producers had their livestock processed at their local lockers (33 percent) or a licensed facility (66 percent). Livestock auction markets and 4-H, FFA, youth exhibitors, and other producers were the primary customer base for sheep producers (see **Figure 3** for full results).

Sheep producers indicated a strong preference for information from other producers, producer councils and associations, and research and extension from other universities (see **Table 3** for full results). Producers expressed a slight satisfaction with information received regarding general management and animal health and nutrition (see **Table 4** for full results). Sheep producers noted the strong importance of animal health and animal nutrition in their operations (see **Table 5** for full results).

Table 2. Summary Statistics of Preferred Sheep Marketing Channels.

Marketing Channel	Not used to not importantly	Slightly to Moderately Important	Important to Very Important
Local newspaper ads	76%	20%	5%
Social media	34%	5%	61%
Website	41%	27%	32%
Livestock auction	17%	14%	69%



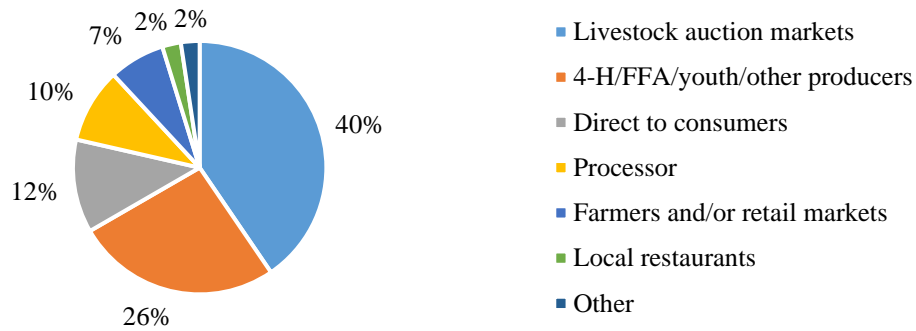


Figure 3. Customer Base of Sheep Producers.

Table 3. Summary Statistics of Preferred Sheep Information Sources.

Source	Mean Preference	Count
Other producers	3.80	40
Producer councils/associations	3.17	41
Research and extension resources from other universities	3.07	41
K-State Research and Extension publications	3.00	41
General Internet search	2.98	41
K-State Research and Extension agents	2.73	41
Kansas Department of Agriculture	2.54	41
Other sources	2.33	3

Table 4. Summary Statistics of Sheep Information Source Topic Satisfaction.

Source Topic	Mean Satisfaction	Count
General management	3.37	41
Animal health and nutrition	3.20	41
Other topics	3.00	4
Financial	2.98	41
Processing	2.95	40
Marketing	2.90	41
Regulations and licensing	2.90	40

Table 5. Summary Statistics of Sheep Support Area Importance.

Support Area	Mean Importance	Count
Animal health	4.31	39
Animal nutrition	4.18	39
Access to a specialized veterinarian	3.85	39
Marketing	3.79	39
General management	3.62	39
Financial management	3.38	39
Labor	3.33	39
Regulations and licensing	2.63	39
Processing	2.49	39
Other	2.33	3



Goat

Goat producers indicated the use of social media and livestock auctions to market their livestock (see **Table 6** for full results). Nearly 13 percent of respondents indicated they used a contract to sell their livestock and/or products. Almost 44 percent of goat producers had their livestock processed at their local lockers (29 percent) or a licensed facility (71 percent). 4-H, FFA, youth exhibitors, and other producers as well as direct to consumers were the primary customer base for goat producers (See **Figure 4** for full results).

Goat producers indicated a strong preference for information from other producers and other university research and Extension resources (see **Table 7** for full results). Producers conveyed slight satisfaction levels with information received about general and financial management (see **Table 8** for full results). Goat producers revealed an importance for animal health and animal nutrition in their operations (see **Table 9** for full results).

Table 6. Summary Statistics of Preferred Goat Marketing Channels.

Marketing Channel	Not used to not importantly	Slightly to Moderately Important	Important to Very Important
Local newspaper ads	100%	0%	0%
Social media	0%	6%	94%
Website	19%	50%	31%
Livestock auction	6%	55%	44%

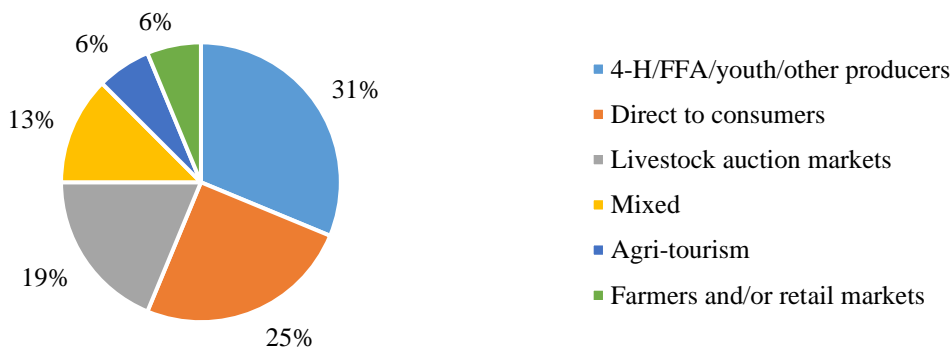


Figure 4. Customer Base of Goat Producers.



Table 7. Summary Statistics of Preferred Goat Information Sources.

Source	Mean Preference	Count
Other producers	4.47	15
Research and extension resources from other universities	3.50	16
K-State Research and Extension publications	3.00	16
K-State Research and Extension agents	3.00	16
General Internet search	2.94	16
Producer councils/association	2.56	16
Kansas Department of Agriculture	2.38	16
Other sources	2.33	3

Table 8. Summary Statistics of Goat Information Source Topic Satisfaction.

Source Topic	Mean Satisfaction	Count
General management	3.63	16
Financial management	3.13	16
Animal health and nutrition	2.94	16
Marketing	2.88	16
Regulations and licensing	2.88	16
Processing	2.69	16

Table 9. Summary Statistics of Goat Support Area Importance.

Support Area	Mean Importance	Count
Animal health	4.44	16
Animal nutrition	4.31	16
Access to a specialized veterinarian	3.81	16
Marketing	3.75	16
General management	3.56	16
Financial management	3.31	16
Regulations and licensing	2.88	16
Processing	2.69	16
Labor	2.63	16

Poultry

Poultry producers indicated the use of social media and websites to market their livestock (see **Table 10** for full results). Thirty percent of respondents indicated they used a contract to sell their livestock and/or products. Seventy percent of poultry producers had their livestock processed at a licensed facility (57 percent), local lockers (29 percent), or on-site (14 percent). Direct to consumers and farmers and/or retail markets were the primary customer base for poultry producers (see **Figure 5** for full results).

Poultry producers indicated a strong preference for information from KSRE publications and agents and other producers (see **Table 11** for full results). Producers conveyed satisfactory levels with information received about general management, animal health and nutrition and processing (see **Table**



12 for full results). Poultry producers reported the strong importance of animal health, animal nutrition and processing in their operations (see **Table 13** for full results).

Table 10. Summary Statistics of Preferred Poultry Marketing Channels.

Marketing Channel	Not used to not importantly	Slightly to Moderately Important	Important to Very Important
Local newspaper ads	90%	0%	10%
Social media	0%	30%	70%
Website	10%	20%	70%
Livestock auction	40%	40%	20%



Figure 5. Customer Base of Poultry Producers.

Table 11. Summary Statistics of Preferred Poultry Information Sources.

Source	Mean Preference	Count
K-State Research and Extension publications	3.90	10
Other producers	3.78	9
K-State Research and Extension agents	3.70	10
General Internet search	3.33	9
Kansas Department of Agriculture	3.30	10
Research and extension resources from other universities	2.78	9
Producer councils/association	2.56	9

Table 12. Summary Statistics of Poultry Information Source Topic Satisfaction.

Source Topic	Mean Satisfaction	Count
General management	3.30	10
Animal health and nutrition	3.10	10
Processing	3.10	10
Financial	3.00	10
Marketing	3.00	10
Other	3.00	2
Regulations and licensing	2.90	10



Table 13. Summary Statistics of Poultry Support Area Importance.

Support Area	Mean Importance	Count
Animal nutrition	4.44	9
Animal health	4.33	9
Processing	4.11	9
Marketing	4.00	9
Financial management	4.00	9
General management	3.78	9
Regulations and licensing	3.78	9
Labor	3.78	9
Access to a specialized vet	3.33	9

Other Species

Producers of other species (rabbit, alpaca, bison, and pheasant) indicated the use of social media and other channels to market their livestock (see **Table 14** for full results). About 42 percent of other species producers had their livestock processed at licensed USDA or Kansas facilities. Direct to consumer and agri-tourism firms were the primary customer bases for other species producers (See **Figure 6** for full results).

Producers of other species indicated a strong preference for information from KSRE publications and agents and other producers (see **Table 15** for full results). Producers conveyed satisfactory levels with information received about general management, animal health and nutrition and processing (see **Table 16** for full results). Poultry producers reported the strong importance of animal health, animal nutrition and processing in their operations (see **Table 17** for full results).

Table 14. Summary Statistics of Preferred Other Species Marketing Channels.

Marketing Channel	Not used to not importantly	Slightly to Moderately Important	Important to Very Important
Local newspaper ads	62%	23%	15%
Social media	25%	17%	58%
Website	31%	38%	31%
Livestock auction	42%	42%	17%



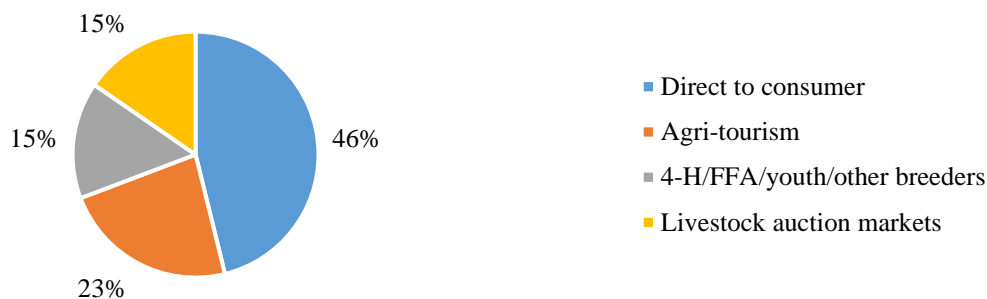


Figure 6. Customer Base of Other Species Producers.

Table 15. Summary Statistics of Preferred Other Species Information Sources.

Source	Mean Preference	Count
Other producers	4.00	12
Producer councils/associations	3.50	12
General internet search	3.00	11
K-State Research and Extension publications	2.82	11
Research and extension resources from other universities	2.82	11
K-State Research and Extension agents	2.55	11
Kansas Department of Agriculture	2.55	11

Table 16. Summary Statistics of Other Species Information Source Topic Satisfaction.

Source Topic	Mean Satisfaction	Count
General management	3.42	12
Animal health and nutrition	3.17	12
Marketing	3.00	12
Regulations and licensing	2.92	12
Financial	2.83	12
Processing	2.50	12

Table 17. Summary Statistics of Other Species Support Area Importance.

Support Area	Mean Importance	Count
Animal health	4.08	12
Animal nutrition	3.92	12
Access to a specialized vet	3.58	12
General management	3.50	12
Labor	3.08	12
Financial management	3.00	10
Marketing	2.75	12
Processing	2.42	12
Regulations and licensing	2.08	12



Conclusions

To bolster the specialty livestock sector in Kansas, educational resources for producers could be provided to support their processing and marketing efforts while also helping them navigate regulations. Additionally, there is a need to enhance marketing efforts through social media and websites as these serve as the main channels for producers to market their animals and/or products to their customers.

While specialty livestock is a small portion of the total livestock numbers within the state of Kansas, it is important to support small businesses to ensure economic growth as demographic dynamics change within the state and region. Few studies have focused on consumer demand parameters of specialty livestock. Future research should examine consumer preferences, demographics, and attitudes toward specialty livestock products as well as drivers of consumer demand for specific products, such as meat cuts from these animals.

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