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MORE MAINE MEAT

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ABSTRACT

Maine's abundant rainfall and forage production capability, along with the consumer movement to buy local, buy direct from the farmer, and the recent emphasis on grass based meats indicate that many livestock Northeast enterprises have the capacity to flourish but have not reached their potential. A stakeholder group was assembled by the Maine Sustainable Agriculture Society (MESAS) to determine how to significantly increase the number of animals born, raised, processed and marketed in Maine. University of Maine Cooperative Extension (UMaine Extension) partnered with them and initiated the More Maine Meat project. Challenges to meeting this goal needed to be identified through review of current data and survey of those in the industry. One activity of the project was a survey of livestock producers, to better understand the needs and opportunities within the industry and to help establish and implement an appropriate plan of action. Two-hundred eight producer responses to an electronic survey showed the three primary barriers to increasing herds or flocks were feed costs, access to capital, and processor availability. Additional barriers included labor costs and lack of handling facilities.

INTRODUCTION

The Maine Sustainable Agriculture Society (MESAS) explores, develops, and promotes sustainable agriculture in Maine. They are a farmer led, 501(c)3 organization dedicated to a triple bottom line of profitable farms, healthy ecosystems, and strong communities. Since 1999 MESAS has coordinated research into emerging trends and technologies for best sustainable practices, served as an information "Hub" to help farmers have access to the information they need to make the best decisions possible for their operations, and conduct pilot projects/demonstrations that provide practical experience in a peer to peer learning environment

With the goal of "significantly increasing the amount of meat that is produced, processed, distributed, and sold in Maine, and simultaneously increase wealth among those involved in Maine's meat industry," the University of Maine Cooperative Extension and the Maine Sustainable Agriculture Society initiated a project to try to improve opportunities for everyone involved in Maine's meat industry. (MESAS Website) The More Maine Meat project has a wide array of activities, including implementing a survey of producers to better understand the needs and opportunities within the industry and to help establish and implement an appropriate plan of action.

METHODS

Email and surface mailed cards were sent to UMaine Extension livestock lists inviting producers to participate in the electronic survey located in a Constant Contact™ server. Those that completed the survey were also invited to participate in a drawing for four $50 cash prizes. A total of 3,286 invitations (52% email and 48% surface mail) were sent with 61% to dairy, beef, swine & grass farmers and 39% to sheep and goat farmers.

The survey was kept open and re-advertised at various livestock meetings and events from November 2013 to May 2014. These included the Maine Beef Conference, Maine Agricultural Trades Show, Maine Grazing Conference, and New England Livestock Expo. Links to the survey were announced in the monthly Maine Beef Newsletter and the Piscataquis and Penobscot County Farming Newsletter.

Two hundred and eight completed surveys resulted in a 6% response of all mailed and emailed contacts. An undetermined number of people were encouraged to participate in the survey at events and through newsletters. Approximately 35% of the emails were opened and if assumed 35% of surface mailed cards were read, 1,150 people read to survey invitation and 18% opted to complete the survey.

The Constant Contact™ system tallied responses and produced a number of graphs featuring percentage of responses to the various questions. Due to the small number of responses, some question categories were combined.

RESULTS

INTENT OF LIVESTOCK ENTERPRISE

Results showed the three primary barriers to increasing herds or flocks were feed costs, access to capital and processor availability. Additional barriers included labor and handling facilities. Most producers currently use USDA inspected facilities and sell frozen cuts followed by "on-the-hoof" and frozen sides. While 61% of respondents rated their brand identity as very or extremely important, about 45% are willing to consider selling under a processor or aggregator brand. About 70% would sell more whole carcasses if there were a market. 48% would like to buy feeders in spring. 84% are interested in learning about live grading.

Some comments when asked what they need to market more animals included:

"Where I can get more information to sell my meat at other than private or the farmers market"

"… list of stores/restaurant who are looking for local meat & dairy items."

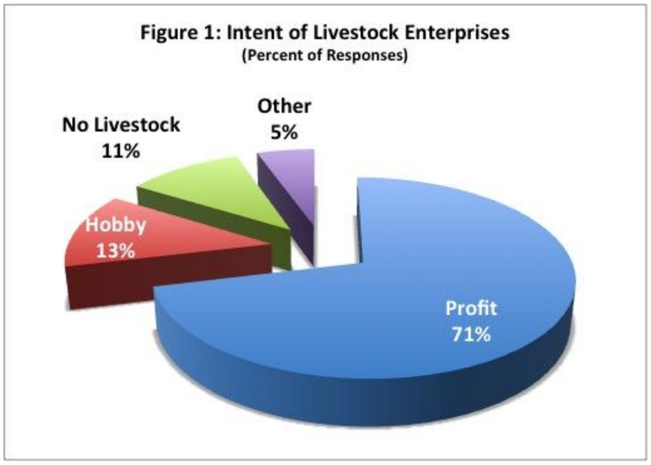
"I would need better processing (intrastate label with more suitable standards)"

"… a more efficient system for storage and distribution."

"I lack handling and storage facilities."

"I need more capital to cover the expenses of fencing and equipment to move and corral more animals."

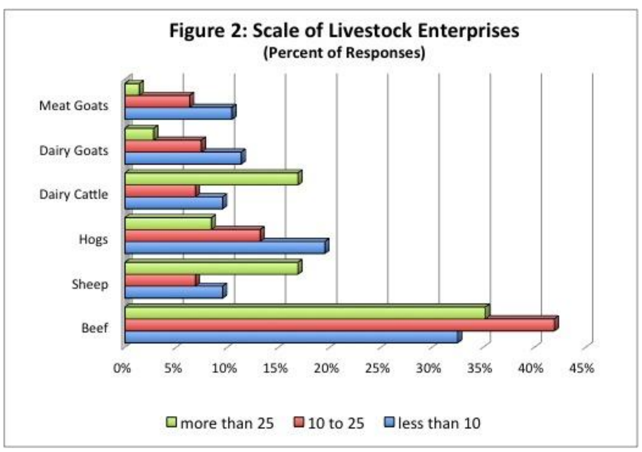
Of the 208 respondents, Figure 1 shows the vast majority, are engaged in raising livestock for profit.



SCALE OF THE LIVESTOCK ENTERPRISE

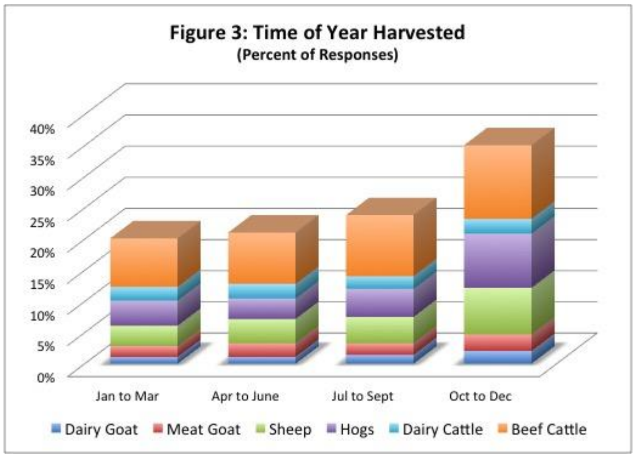
When asked about the size or scale of their livestock operation (number of animals raised) the majority (64%) of farms indicated they were small-scale with less than 10 animals, 25% were mid-scale with between 10 and 25 animals and 10% were large-scale with more than 25 animals. They were asked the number of animals in three categories: breeders, young-stock and feeders. These three categories were added together for the type or species of animal. Some producers carry all three categories of animals.

Figure 2 compares the percent of farms by species within the three scales or sizes of operations most mid-scale and small-scale operations raise beef, while sheep and beef producers tie in the large-scale category. Producers were provided with four operation sizes including: less than 10 animals, 10 to 25 animals, 26 to 75 animals and over 75 animals. Since the last two categories had few responses these categories were combined into the "more than 25 head" category.



TIME OF YEAR HARVESTED FOR MARKET

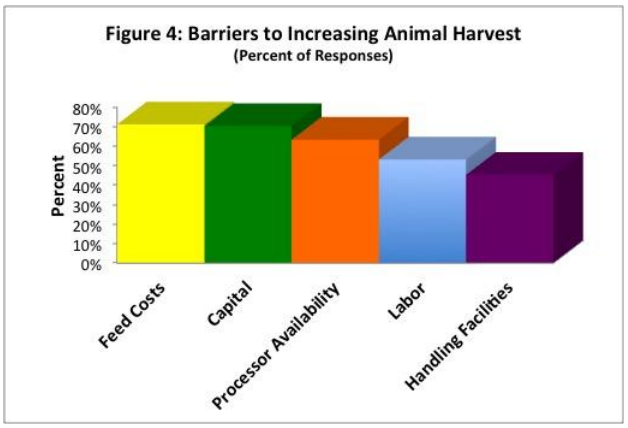
Many livestock producers need to take advantage of summer pastures to finish animals so they can benefit from inexpensive high quality forage. As a result the traditional time to send animals to be harvested and processed is the fall. Producers were asked what season they sent their animals for processing and whether they sent less than 10 animals in that season, between 10 and 25, between 25 to 75 or over 75 animals in that season. The number of producers indicating they harvested animals in each size range, were added together for one value per species per season and this is represented in Figure 3.



Processing facilities are also busy during the October to December time period with customers who have wild game that needs to be processed during this time period, creating a bottleneck and the expressed concern often voiced about the lack of slaughter and processing facilities in the state.

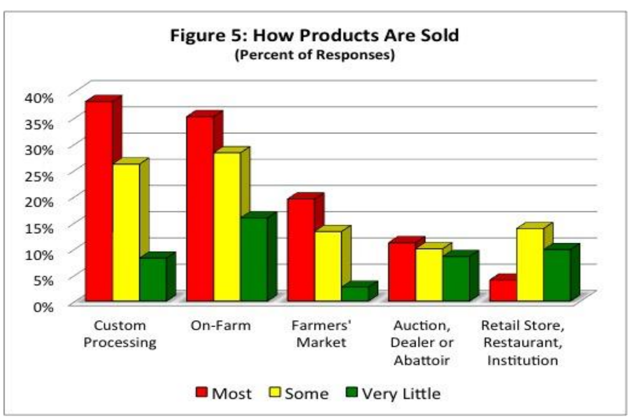
BARRIERS TO MARKETING MORE ANIMALS

Producers were asked whether or not the following items were a barrier to them increasing the number of animals that they sent to be processed. Not all producers responded to each item. Figure 4 shows that feed costs and access to capital are leading barriers to increasing herd sizes followed by processor availability and to a lesser extent labor and handling facilities.



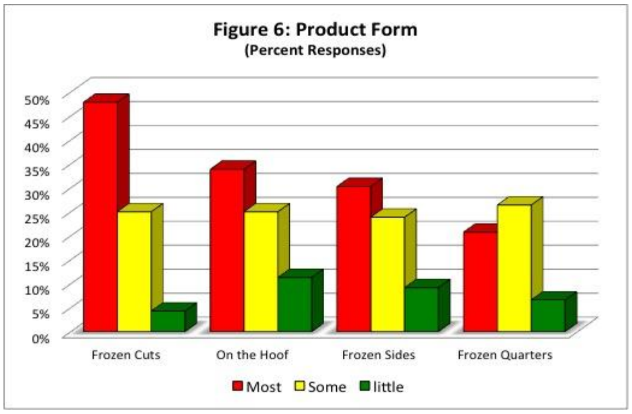
MARKETS UTILIZED FOR SALES

Figure 5 shows most farms most frequently sell their meat/animals through custom processing and on-farm sales. Farmers' markets, livestock auctions, processors or dealers are the next most frequently used sale venue followed by wholesale outlets and institutions.



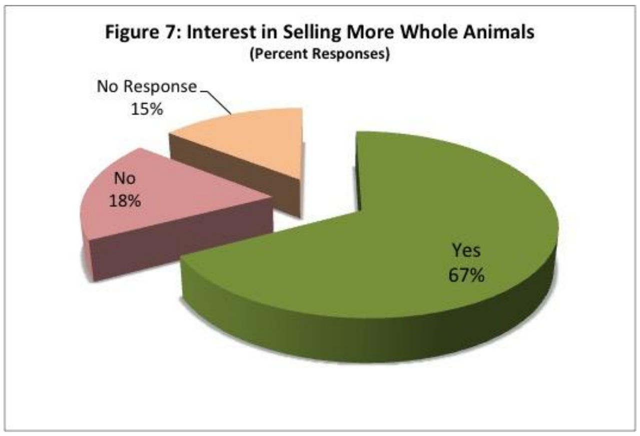
PRODUCT FORM FOR MEAT SALES

A majority of producers sell most of their meat as frozen cuts of meat, followed by "on the hoof" or live. Next most popular product form is sides or halves followed by quarters as shown in Figure 6. Less then 10% sell their meat fresh.



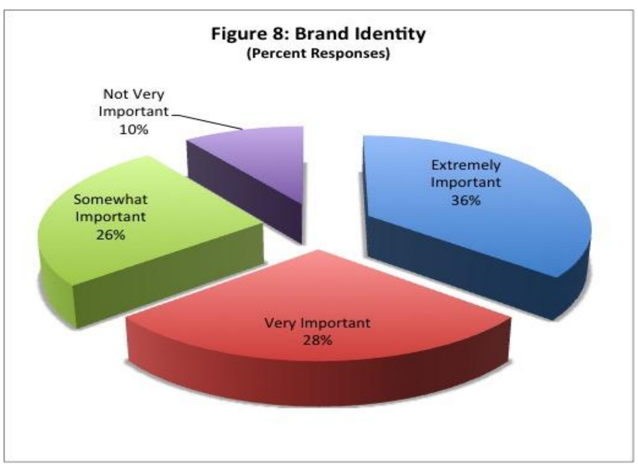
INTEREST IN SELLING MORE WHOLE ANIMALS FOR PROCESSING

There is interest from producers in selling more whole animals for processing off the farm, if there were more market demand. The majority of respondents were interested in increasing their sales of whole carcasses as seen in Figure 7.

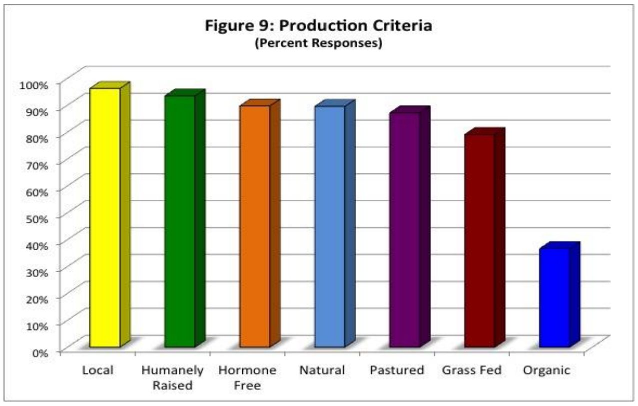


BRAND IDENTITY

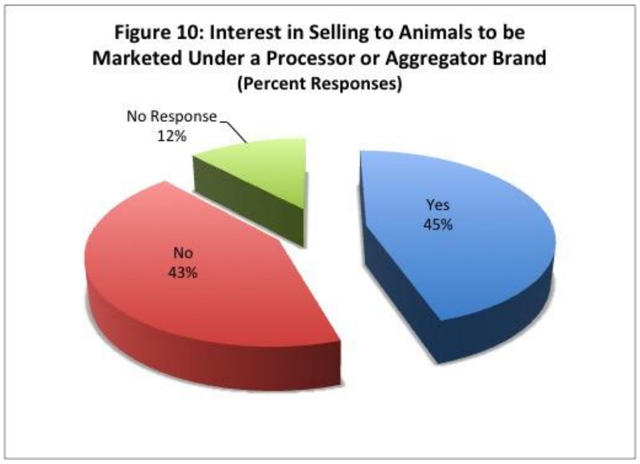
Figure 8 shows that over 60% of producers rank their own farm brand identity as very or extremely important.



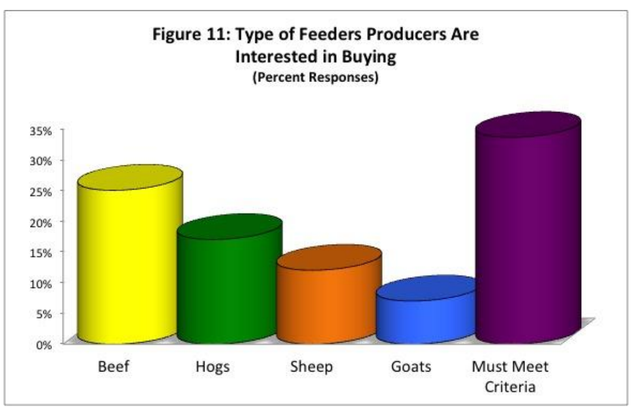
The respondents could select from a list of brand criteria the items that were important in their operation. Figure 9 shows the most important criteria was that animals were “local” followed by “humanely raised”, “hormone free”, “natural”, “pastured”, “grass fed” and “organic.” Percentages are based on the number of responses for each criteria.



In the next survey question, producers were asked if they would be interested in selling their animals under a processor or aggregator brand. In Figure 10 when non-responses and "no" responses are added together 55% were not interested in selling under someone else's brand, but 45% were interested.

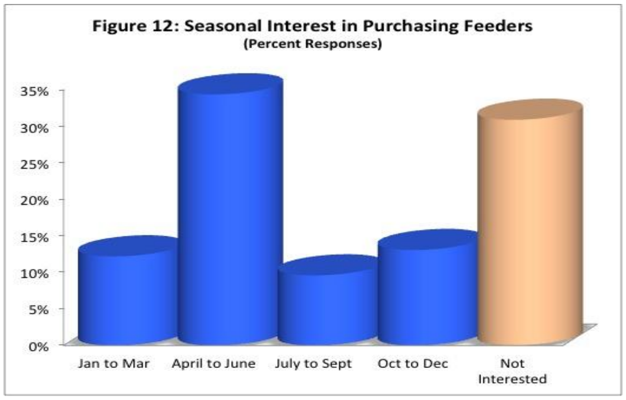


When farms sell under their own brand they may have a need to buy from other farmers to fulfill their marketing contracts when their animals don't gain as expected or their breeding herd has not expanded enough to meet their market needs. Producers were asked if they did purchase animals from other producers and if they had certain quality standards that their supplying farms had to meet. Beef animals were most frequently purchased from others followed by hogs, sheep and goats as seen in Figure 11. Of those that purchased animals from other farms over 30% had standards of quality that the purchased animals had to meet before they bought them.



SEASONAL INTEREST IN PURCHASING FEEDERS

The typical time of year that farmers purchase feeder livestock is usually springtime to take advantage of cost efficient pasture resources. Not all livestock producers keep brood animals to produce their own feeders and some producers need to supplement their own-bred animals with feeders from others. When asked what season they would like to buy feeders Figure 12 shows that as expected, the majority of producers are looking for feeders in spring, followed by fall and winter. The fewest number of producers are looking for feeders during the summer.

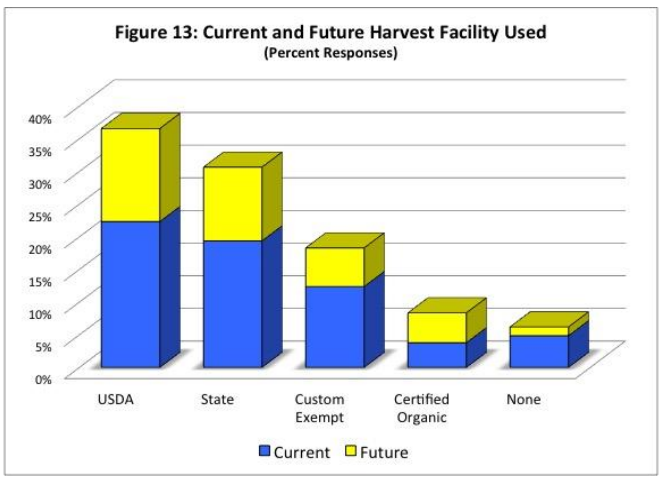


PROCESSING EXPERIENCE

There are a number of different types of harvesting facilities or abattoirs that Maine livestock producers can use to provide meat to their customers. Where the finished product is going, what is purchased and preferences of the customer all influence the type of facility used.

Meat being sold out of the state of Maine needs to be harvested and processed under the USDA inspection program. Meat sold by the cut and to restaurants within the state of Maine needs to be harvested and processed either under USDA inspection or under a certified Maine inspection program. Customers who purchase a whole animal, half or quarter animal that they intend to use themselves, can have their animal harvested and processed at a Custom Exempt facility. Certified organic products need to be processed at a certified organic facility. The USDA or Maine inspected facilities must apply to get organic certification.

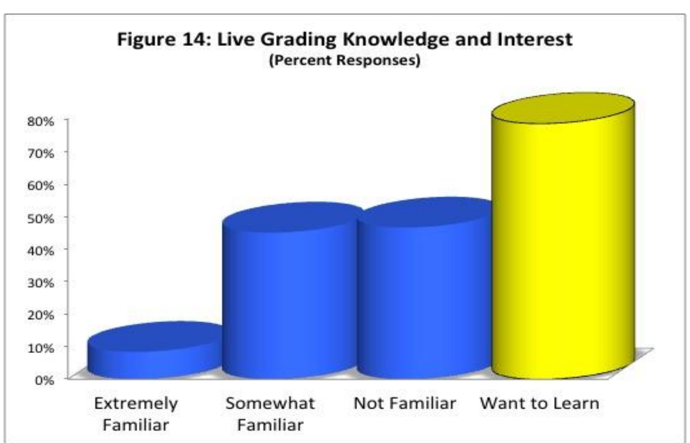
Figure 13 shows that the majority of respondents currently use or would like to use USDA inspected facilities, followed by those who use and plan to use Maine inspected facilities with fewer respondents using or planning to use custom exempt or organic certified facilities.



There were 65 comments to the question about current and future harvest and processing facility use; 32% of the responses related to market need for the type of inspection used; 14% related to the distrust of the available facilities, inspectors or system; 12% expressed a need for additional facilities in Maine; 11% had trouble getting appropriate slaughter times and 11% of the comments related to confusing regulations. Additional questions regarding harvest and processing indicated that travel distances were a hindrance to their operation and potential future expansion.

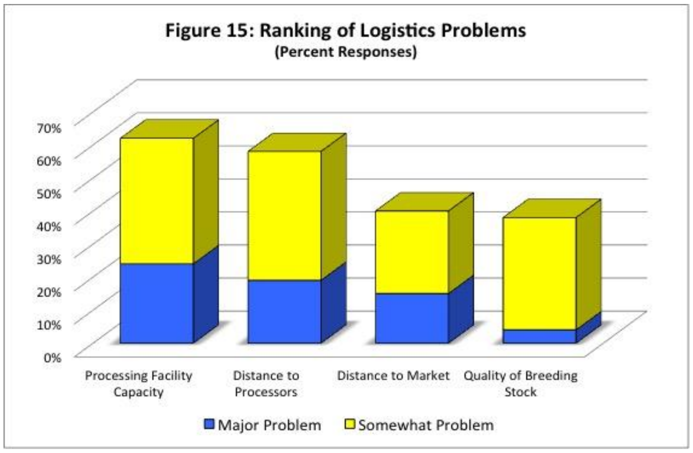
Live Grading Knowledge and Interest

Live grading is a way to estimate the yield of meat from a carcass based on frame size, thickness or muscle, fat cover and thriftiness. Also, live evaluation helps farmers send animals that are in the right condition for processing. When asked how familiar they were with live grading to predict the yield of the carcass prior to slaughter about half were not at all familiar with the process, and about half were somewhat familiar with it and only 8% were extremely familiar with live grading. A very high number of producers were interested in learning how to live grade their animals as shown in Figure 14.



LOGISTICS FOR THE FARM

The logistics of moving supplies and animals from one place to another, quality of feed, quality of breeding stock and/ or the capacity of processing facilities can become overwhelming issues for farm operations. Producers were asked to rank a number of logistic items as major problem, somewhat of a problem, or not a problem. The top logistic issue indicated in Figure 15 was processing facility capacity. Distance to processors was the next logistic issue followed by distance to market.



WHAT INFORMATION IS NEEDED TO EXPAND?

The final question of the survey was an open-ended question asking the respondents what information they needed to increase the number of animals that they marketed in Maine. When the responses were categorized by similar topic there were 35 comments relating to markets and market prices, 20 relating to processing availability, 9 relating to land and 9 relating to profitability.

DISCUSSION

The majority (70%) of the producers responding to this More Maine Meat Survey were commercial producers, therefore the results reflect the needs of farms that aspire to show a positive net income either now or in the future.

The primary barriers identified by the respondents include the cost of feed, the availability of capital and access to processors both in terms of proximity to farm location and availability when animals need to be harvested.

CONCLUSION

Overcoming high feed costs, access to capital and processor availability are the challenges identified by respondents to the More Maine Meat survey to increasing the amount of meat that is raised and sold in Maine.

The majority of harvesting/processing in Maine occurs in the fall especially with beef, hog, and sheep. This creates scheduling issues for farmers trying to get their animals harvested in a timely manner when they are taken off pasture. Encouraging producers to harvest their livestock on a regular basis throughout the year is a challenge since many producers are utilizing the flush of summer pastures to finish their animals with inexpensive feed. Keeping animals over winter would necessitate the use of more expensive conserved forage (hay, haylage or silage) and/or the use of purchased grain supplements to meet their nutritional needs. Educational programs for producers to learn how to harvest and manage quality stored forages to minimize purchased concentrates would help to potentially alleviate the fall harvest bottleneck.

An option for harvesters/processors to increase capacity in the fall might be to add a second shift and additional cooler and freezer space to accommodate livestock producers. This is also a challenge since finding qualified staff for a second shift for part of the year and would entail increased capital expense for infrastructure.

Producers indicated that the lack of available capital was a barrier to expanding meat production in Maine. The Maine Department of Agriculture, Conservation and Forestry (MDACF) has a detailed publication on locating sources of capital and operating expenses called "Finding Funds for Farmers." Since finding capital is dependent on good business plans, this may be an issue for many of the smaller/part-time producers and University of Maine Extension New Farmer website has information on developing good business plans.

While most respondents are selling whole or part carcasses, a growing number are selling their meat by the frozen cut. Those selling whole carcasses are interested in selling more if there were market demand. Individuals who want to support local farms and purchase meat for their families locally can locate nearby farmers using the search tool on the MDACF website. Consumers who may be new to purchasing whole, half or quarter beef or pork animals can be directed to the “Beef and Pork Whole Animal Buying Guide” PM2076 from Iowa State University Extension.

Selling meat by the cut has challenges with managing the inventory of less popular and/or more expensive cuts of meat. Also, very small operations do not have enough capacity to provide year-round cuts of meat to their customers. There may be opportunities for several small-scale producers who are using the same production techniques to jointly market their meat.

Producers are very proud of their farm brand identity and find it important to maintain their production and farm brand that is associated with local, humanely raised, hormone free, pastured, natural and grass fed. But almost half of producers did express an interest in selling to a processor or aggregator to have them market under the processor or aggregator brand.

Production techniques that utilize Maine’s potential to produce high quality hay and pasture in the production of livestock could provide opportunities to expand meat production. Maine has an estimated 274,000 acres of pasture and hay. (2012 Census of Agriculture) Accessing a variety of sources of funding could provide capital needed to increase meat production, but budgets and cash flows need to be developed to justify the enterprise. Encouraging or supporting processors to add a second shift in the fall season and add cooler and freezer space could provide additional processor capacity.

One educational need is more training on live grading for farmers to be able to quickly and easily identify animals with necessary characteristics for their markets. Live grading is a way to estimate the yield or meat from a carcass based on frame size, thickness of muscle, fat cover and thriftiness. Live grading animals before harvest would also help to provide consumers a consistent quality of meat product. UMaine Extension is working with the Maine Beef Producers Association to develop educational programs on live grading for beef producers throughout the state.

Follow-up surveys of harvest and processing facilities was conducted by MESAS (2014 MESAS), and a Vermont entity is doing a phone survey of white table restaurants to measure their interest in buying meat from local producers. Their hope is to link restaurants with producers. A third on-site survey of processors planned by the Maine Organic Farmers and Gardeners Association

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