

Local Beef in Missouri: On-Farm Finishing Budget

any consumers seek a supply of high-quality beef from local sources. The opportunity exists to market animals born, raised and finished on local farms. Producers considering finishing cattle have the choice of selling their cattle into the commodity beef market, or marketing live animals or packaged beef locally direct to consumers. In many cases, a combination of commercial and direct marketing may best suit producer needs in order to capture full value of beef and move the necessary volume to be profitable. This publication helps producers evaluate local beef marketing opportunities.

Selling beef direct to consumer

Cattle producers have marketing options when selling direct to consumers. Producers can sell whole live animals, shares of live animals (halves and quarters), or packaged beef by the cut. Often, the producer's marketing decision depends on the type of processing facilities nearby and the amount of time the producer wishes to spend marketing cattle.

Selling beef by the cut requires producers to work with processing facilities under federal or state inspection.

Beef producers must sell their cattle live as whole beef, halves or quarters if the customers want to process the beef at a custom exempt facility. Custom exempt facilities may only be hired by the animal's owner at the time of slaughter. In this case, processing costs are paid by the buyer or the person taking possession of the beef.

Find more information on Missouri meat processing inspection and exemptions in MU Extension publication MX3001, <u>5 Steps</u> to Buying Meat Direct from the Farm (extension.missouri.edu/publications/mx3001).

Beef cattle producers often find it difficult to market a whole beef as many consumers are not able to store

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Figure 1. Selling half and quarter shares provides convenience to consumers.

or consume that much beef (See Figure 1). To improve marketability for locally finished beef, cattle producers can offer shares of an animal to customers and reduce individual financial and storage obligations. Selling half-or quarter-shares of the animal does increase marketing costs, but it also increases the price farms can charge for the beef due to smaller volumes or packages adding convenience for consumers.

Some consumers prefer specific beef cuts rather than bulk orders that include many cuts. Producers can cater to these consumers by having finished cattle slaughtered and processed under state or federal inspection. Then, beef cuts can be sold by the pound. Producers who elect to sell beef by the cut do incur costs for processing, cold storage and marketing. However, producers can charge premium prices for this added value. Producers with high-quality beef may elect to have their beef quality-

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graded during processing and charge premiums that reflect the quality of their beef.

Costs of on-farm finishing (commercial sale)

Cattle producers interested in local marketing should understand finishing costs. Table 1 shows a cost estimation of raising a 1,300-pound finished beef animal born in fall for live animal sale. This estimation assumes a 75-cow operation finishes all calves through a feedlot program and sells the calves commercially. Table 1 assumes a 50-50 mixture of steers and heifers. These fall-born calves are backgrounded on pasture. Replacements are assumed to be purchased.

Feed costs represent the highest input cost category. Keeping these costs low is key to a profitable local beef business. Small-scale beef finishing does not benefit from lower costs associated with economies of scale, which large feedlots can capture. As such, small

Table 1. Costs of raising a finished steer or heifer born in fall (sold commercially).

	Cost per animal sold	Cost per live pound
Operating costs		
Feed		
Cow-calf stage	646.85	0.50
Backgrounding stage	60.44	0.05
Finishing stage	624.25	0.48
Labor	226.26	0.17
Veterinary, drugs and supplies	67.87	0.05
Machinery	168.85	0.13
Utilities	17.17	0.01
Livestock facility repairs	21.21	0.02
Cow replacement	251.16	0.19
Marketing	44.74	0.03
Bull replacement	17.44	0.01
Professional fees	3.16	0.01
Miscellaneous	11.00	0.01
Operating interest	125.18	0.10
Total operating costs	2,285.58	1.76
Ownership costs		
Depreciation (facilities and equipment)	12.21	0.01
Interest on breeding stock	121.98	0.09
Interest (facilities and equipment)	17.30	0.01
Insurance and taxes on breeding stock and capital items	18.49	0.01
Total ownership costs	169.97	0.13
Total costs	2,455.55	1.89

finishing operations have higher costs per head than commercial feedlots.

The Missouri Beef On-Farm-Finishing spreadsheets evaluate costs and returns for live animal sales commercially, freezer beef, or beef sold by the retail cut. Use the links below to download.

- Missouri Beef On-Farm Finishing Budget for Fall
 Calving (XLSX) (extension.missouri.edu/media/wysiwyg /Extensiondata/Pro/AgBusinessPolicyExtension/Docs/On-farm-finishing-budget-fall-calves.xlsx)
- Missouri Beef On-Farm-Finishing Budget for Spring <u>Calving (XLSX)</u> (extension.missouri.edu/media/wysiwyg /Extensiondata/Pro/AgBusinessPolicyExtension/Docs/On-farm-finishing-budget-spring-calves.xlsx)

Costs of marketing freezer beef live (halves)

Table 2 shows a cost estimation of raising a 1,300-pound fall born steer sold in halves as a live animal. Note that most of the operating costs for this system are similiar to the costs reported in Table 1 for commercial sale. The exceptions are marketing and operating interest. Ownership costs are the same as costs identified in the commercial sale example in Table 1.

Table 2. Costs of raising a finished steer born in fall (sold in halves).

	Cost per animal sold	Cost per live pound
Operating costs		
Production of finished steer	2,126.66	1.62
Marketing	76.95	0.06
Operating interest	127.69	0.09
Total operating costs	2,331.29	1.73
Total ownership costs	169.97	0.13
Total costs	2,501.26	1.85

Costs of marketing beef as retail cuts

When evaluating the opportunity to sell retail cuts of beef directly to consumers, producers incur costs for slaughter, processing, packaging and storing packaged beef. These expenses add to the costs of finishing over animals sold live. See Table 3 for estimated costs of finishing a fall-born beef and selling it as retail cuts to consumers.

Selling packaged beef cuts requires the finished beef animal to be slaughtered and processed under inspection, which costs roughly \$800 per animal. When pricing beef as retail cuts, be sure to account for processing and storage costs.

Custom packaging and labeling will help establish a brand for your beef. Branding increases consumer recognition and the likelihood of repeat customers. Costs of custom packaging or labeling vary depending on the type and level of detail included. Examples include labeled butcher paper, stickers for vaccum packaging or logo-printed tape.

Because producers retain processed beef until it is sold, they must purchase and operate cold storage equipment. Producers may use a walk-in cooler or freezer, but it may be more economical to buy large chest-type freezers if fewer than five beefs must be stored at a time.

Selling beef as retail cuts also increases producers' marketing time. Consider the time needed for delivery to and pickup from the processor, organizing and storing meat, removal from storage and product distribution. Additionally, the producer must also manage inventory and pricing in such a way that both fast- and slow-moving cuts are sold at a similar pace in order to clear storage space to make room for the next

Table 3. Costs of raising a finished steer born in fall (sold in retail cuts).

	Cost per animal sold	Cost per live pound
Operating costs		
Production of finished steer	2,126.66	1.62
Marketing	178.95	0.13
Beef storage	66.67	0.05
Custom packaging	75.00	0.06
Operating interest	141.81	0.11
Total operating costs	2,589.09	1.92
Ownership costs		
Depreciation (facilities and equipment)	19.19	0.01
Interest on breeding stock	121.98	0.09
Interest (facilities and equipment)	27.18	0.02
Insurance and taxes on breeding stock and capital items	19.07	0.01
Total ownership costs	187.41	0.14
Total costs	2,776.50	2.06

animal processed. All of these business practices require time and financial commitment, so consider them before beginning operations.

Returns to on-farm finishing

Prices of locally finished cattle sold as wholes, halves, quarters or retail cuts are highly variable. Prices depend on local supply and demand and the availability of local meat processors. Factors dictating supply and demand include proximity to population centers, competition for local beef, tastes and preferences of local consumers and how beef animals are sold (whole, halves, quarters or retail cuts). Table 4 shows the estimated price received per pound for fall-born cattle by each method of sale assuming a 1,300-pound animal.

Table 4. Estimated gross returns if selling finished steers, born in fall (excluding cull sales).

	Dollars per pound of live weight	Income (dollars)
Live sale	1.62	2,227.50
Whole beef	1.80	2,430.00
Half beef	1.90	2,565.00
Quarter beef	2.00	2,700.00
Retail cuts	2.65	3,579.09

Producers considering finishing beef strictly for direct-to-consumer freezer beef should understand how production scale affects their decisions. The costs in this model reflect operating a small-scale feedlot buying raw feed inputs and mixing and processing them into a complete ration on the farm. A producer may market 10 head a year as freezer beef and sell the remaining cattle commercially. This business model depends on the cost of gain being lower than the opportunity cost of selling the calves at weaning. For example, a 550-pound calf selling for \$1,100 is more profitable than a 1,300-pound steer selling for \$2,100 when the cost of gain is more than \$1.33 per pound. A dedicated freezer beef operation finishing fewer than 10 head a year may be better suited to hand-feeding a premixed ration supplied by a feed dealer due to the fixed costs associated with a dedicated finishing facility. If hand-feeding, feed costs will likely be higher than the costs shown in this budget.



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