Virtual Beef

ISSN 2291-188X VOLUME NO. 24 ISSUE NO. 74 FALL 2024

In This Issue

Utilizing Corn Stover…Utilizing corn stover either by grazing or baling for feeding later is a great way to extend the grazing season and reduce the pressure on limited hay supplies. Grazing stover from high moisture corn provides cattle with a forage that will be higher in energy and is a crop closely integrated with livestock production. In this article, James Byrne (Beef Cattle Specialist, OMAFA) details the benefits of grazing and or baling corn stover and goes through some important things to keep in mind to get the best out of corn stover this fall. ...cover story

Feeding Wheat to Beef Cattle…Wheat is not normally used in cattle feed rations because its milling properties make it desirable for use in breads, pastas and noodles and the usual price of wheat makes it uneconomical as a cattle feed. From time to time, wheat can be competitively priced relative to other feed grains when there are quality issues from disease, drought or sprouting. Cattle producers can take advantage of this to substitute wheat into their cattle rations whether produced on-farm or purchased. In this article, James Byrne, (Beef Cattle Specialist, OMAFA), goes through the benefits and important limitations of feeding wheat to beef cattle. …pg 4

The impact of forage processing on beef cow performance and efficiency…Although forage choppers and bale processors are not new technologies, there is a surprizing lack of data in how they can benefit beef cow performance. Feed is the largest cost to cow-calf producers and winter-feeding costs can account for two thirds of the primary production costs in Canada. To offset these costs lower quality forages can be included in total mixed rations (TMR). In this issue, Madeline McLennan and Dr. Katie Wood, University of Guelph discuss research results of the effects of forage of different chop length on beef cow performance. …pg 6

Benchmarking: Measuring your Farm's Financial Performance…Farm financial benchmarking is a valuable tool for farm operations, providing insights into their financial health and performance. By comparing financial measures against industry standards, beef producers can identify strengths, uncover areas for improvement, and make informed decisions to enhance profitability. In this issue, John Molenhuis, (Business Analysis and Cost of Production Specialist, OMAFA), discusses how to use benchmarking tools to better understand your farms financial and productive performance. …pg 8

This publication is available in electronic format at https://dairyandbeef.wordpress.com/. Single paper copies may be obtained by calling 1-877-424-1300.

Direct general questions and suggestions to: James Byrne, Editor at james.byrne@ontario.ca or call 705-648-1498. For inquiries regarding content of a specific article contact the author.

Ministry of Agriculture, Food & Agribusiness

Ontario

Utilizing Corn Stover

James Byrne, Beef Cattle Specialist, OMAFA

Utilizing corn stover either by grazing or baling for feeding later is a great way to extend the grazing season and reduce the pressure on limited hay supplies. Grazing corn stover can help reduce the winter feed bill provided it doesn't compromise future cow and calf performance through nutritional deficiencies. In the United States, corn stover is widely used for both grazing and as baled forage. It's been estimated that up to ten million acres are used for grazing and a further two million acres mechanically harvested. Grazing corn stover from high moisture grain offers an advantage over stover from traditional corn grain as the earlier cutting date of high moisture grains increases neutral detergent fiber (NDF) digestibility, energy concentration and the crude protein concentration of the stover. Ontario grows approximately nine hundred thousand acres of high moisture corn annually. As a crop intricately linked to livestock production, this presents amble opportunity for beef producers to utilise stover to reduce winter feeding costs.

Figure 1: Beef Cows Grazing Corn Stover, Chatham-Kent, Ontario. Picture: Mike Buis.

Beef cows in their 2nd trimester and in good body condition, (body condition score = 3), are ideal for grazing corn stover as their nutritional requirements can be easily met by this forage. The net energy of maintenance of recently cut corn stover is around 1.29 megacalories, (Mcals), per kgs. A 1,500 lbs 2nd trimester beef cows has a net energy of maintenance requirement of about 15 Mcals per day. A typical corn stover dry matter intake of 2% of bodyweight would provide up to 17.5 Mcal of energy for maintenance, meaning that grazing corn stover from high moisture corn is sufficient to meet the cow's energy requirements. The nutritional value of corn stover declines quickly post corn harvest but in practice most producers will have finished grazing before the decline in nutritional value has any real effect.

Table 1: Typical Nutritional Composition of High Moisture Corn Stover

Nutrient Composition,	**Value**
DM, %	74 - 80
Crude Protein, %	9 - 11
NDF, %	55 - 64
Starch, %	4 - 12
TDN, %	55 - 60
NEmaintenance, Mcal/kg	1.29
NEgain, Mcal/kg	0.73

One acre of corn stover has the potential to provide sufficient forage to last one beef cow thirty to thirty-five days. Corn stover quality can be very variable as it's made up of a combination of broken stems, leaves, husks, cobs, and spilled corn grain. Stems have the least amount of nutritional value and spilled corn grain having the highest. The true feeding value of corn stover is dependent upon the proportion of stems, leaves, husks, cobs, and grain in the mix.

Given a choice, cattle graze corn stover in a hierarchical manner – feeding on corn grain, corn cobs, leaves, husks and stems in that order. To ensure good stover utilization and prevent grain overload, it's important to restrict the area for grazing using temporary electric fencing. Ideally an area equal to one day's worth of grazing should be provided but this

will depend allot on labor availability. The aim of grazing is to use as much of the stover as possible without causing nutritional upset by grazing to much grain but also preventing a situation where only poor quality stems are available. Spilled grain piles must be scattered before grazing commences. Depending on labor availability the stover can be either strip grazed or grazed in paddocks. Once the grain, cobs and leaves are eaten livestock should be moved to the nest strip or paddock. Supplementary hay or grain will be required if cows are forced to graze stems, which are very nutritionally poor.

In all cases cattle must have access to clean fresh water, mineral and salt supplementation. Due to the nutritional variability of corn stover and the fact that it's feeding value declines over time, it's important to keep a close eye on body condition scores. If cows are seen to be losing body condition, supplementation with hay or grain should be provided. Weather and soil conditions must also be considered. Supplementary hay may be required during periods of very cold weather. If underfoot conditions become very wet and muddy it's best the remove livestock to a drier area until soil conditions improve. This will minimise the risk of soil compaction and give better forage utilisation.

In Ontario, corn stover is typically grazed in situ. However, in Western Canada and in the US, corn stover is often rolled into windrows and swath grazed. This has the advantage of improving forage utilisation, controlling daily dry matter intake and enables the forage to dry out, improving its dry matter content. The big drawbacks to this system is the time and cost of creating the windrows and that environmental losses during windy conditions can be very high.

Baling of corn stover is another option. The key to successfully baling corn stover is to be able to collect and bale as many leaves, cobs and grain as possible with the least amount of stem. The stover is best rolled into windrows and let dry for three to five days. Bales should be treated with propionic acid at baling to inhibit mould growth. Bales can be stored outdoors without a cover but due to the high moisture content freezing will be a risk.

Due to the nutritional variability of corn stover bales, feed analysis is recommended. This way the corn stover forage can be balanced to meet the cow's nutritional requirements. Corn stover is and can be used as bedding.

Baling corn stover removes organic matter and fertility. Grazing has less of an impact as the organic matter and fertility is returned quickly in manure. Baling also increases the amount of soil that is exposed to the elements. To protect soil health and prevent erosion, there should be a minimum of 30% ground cover after baling. Where the corn stover is reapplied to the field from where is came as manure or compost, then fertility is not an issue. However, if the corn stover manure or compost is applied elsewhere, there will be a loss of fertility to the corn stover field. The International Plant Nutrient Institute estimates that 1 metric tonne of corn stover contains 18 lbs of nitrogen, 6.5 lbs of phosphorous and 44 lbs of potassium on a dry matter basis which will need to be replaced to maintain soil fertility.

Removing corn stover either as grazing or baling can make no-till planting the following season easier. Large amounts of stover left in the field can make it necessary to carry out some pre-planting operations to try and bury some of the stover. Research by Penn State University, (Adler et al., 2015), showed that stover harvest tended to increase yields in years with wet springs but decreased them in dry years where continuous corn is practiced. The main reason being stover left over kept soils cooler and wetter during wet springs for longer whereas during dry springs, the large amount of stover helped maintain good soil moisture levels. For this reason, some stover removal is beneficial to make planting easier, allow soils to dry out easier during wet springs but maintain some moisture during dry springs.

Grazing corn stover is an excellent way to extend the grazing season, reduce winter feeding costs, lower labor costs, and utilise a forage that would otherwise go to waste. Corn stover from high moisture corn provides a great opportunity for livestock producers to maximise forage use on their farms.

References:

- Adler, P.R., Rau, B.M. & Roth, G.W. Sustainability of Corn Stover Harvest Strategies in Pennsylvania. Bioenerg. Res. 8, 1310–1320 (2015).

- Carey, R.E., Lardner, H.A., McAllister, T.A., and Penner, G.B. Performance and ruminal fermentation of second-trimester pregnant beef cows fed short-season high-moisture corn stover or barley greenfeed during winter in western Canada. 2024. Can. J. Anim. Sci. 104: 171–183 (2024).
- OMAFA. Using corn stalks for livestock feed or bedding. 2022.
- OMAFA. Grazing corn stover. 2022.

---------- VB ----------

James Byrne, Beef Cattle Specialist
Ontario Ministry of Agriculture, Food & Agribusiness
james.byrne@ontario.ca

---------- VB ----------

Feeding Wheat to Beef Cattle

James Byrne, Beef Cattle Specialist, OMAFA

Wheat is not normally used in cattle feed rations because its milling properties make it desirable for use in breads, pastas and noodles and the usual price of wheat makes it uneconomical as a cattle feed. From time to time, wheat can be competitively priced relative to other feed grains when there are quality issues from disease, drought or sprouting. Cattle producers can take advantage of this to substitute wheat into their cattle rations whether produced on-farm or purchased.

Figure 1: Example of a variety of winter wheat: Picture – OMAFA Field Crop Team.

Wheat grain is an excellent source of energy and protein. Coarse ground wheat is high in starch and has energy values like corn, (TDN%, NEm, NEg), and is higher in protein compared to corn and other small grain cereals. Due to its higher protein content, red wheat varieties are useful in backgrounding rations. Research by Meadows et al, (2023), at Lethbridge, Alberta, demonstrated that steers fed high protein wheat gained 4% more efficiently compared to the control as the higher protein helped grow more muscle. White wheat varieties, which are lower in protein, are more suitable for finishing diets. Wheat is low in fibre and its starch is rapidly fermentable. Consequently, wheat as a feed must be careful managed to prevent nutritional issues such as acidosis, bloat, and founder. Given its nutritional similarity to corn, wheat can successfully substitute for corn in beef cattle rations without any loss in animal performance.

Table 1: Nutritional content of wheat and other cereal grains.

Nutrient	Wheat	Corn	Barley	Oats
Crude Protein %	14.4	10.1	13.5	13.3
TDN, %	88	90	84	77
NEm, Mcal/kgs	2.18	2.24	2.07	1.85
NEg, Mcal/kgs	1.52	1.54	1.41	1.21

Source: NRC Nutrient Requirements of Beef Cattle, 8th Revised Edition, 2016.

Wheat must be processed before feeding. The energy content of unprocessed wheat is between 15 to 20% lower versus processed wheat. This is mainly due to the very large reduction in starch digestibility of unprocessed wheat compared to processed wheat. Whole wheat has the advantage of being very safe to feed but there would need to be a significant

price difference between whole wheat and corn to justify the lower animal performance. Dry rolling is a good processing method for most producers. Where the option is available, steam rolling is better as the addition of moisture reduces the amount of fines produced, (Nixdorff et al, 2020). Regardless of the method chosen it's important to grind the grain coarsely and avoid fines as much as possible to minimize the risk of rumen acidosis. Aim for a coarse roll where the kernel is only broken into 2-3 pieces.

Due to it's rapid fermentability, the amount of wheat grain in the diet must be limited. As a rule of thumb, wheat grain must not make up more than 50% of the grain mix for animals on a high grain diet where grain exceeds 50% of total of total diet, (e.g., feedlot cattle). Wheat as cattle feed is often considered in the context of cattle finishing diets but wheat's higher protein % compared to corn makes it a useful feed supplement for beef cows. Wheat grain can be fed as the sole grain to beef cows provided cows have free choice access to forage and wheat is limited to 8 lbs per day for beef cows and 5 lbs per day for heifers. Wheat should not be included in creep rations as the risk of acidosis is too high.

Cattle must be transitioned onto wheat slowly with the amount of wheat in the diet being increased in small increments every 3 to 4 days. The transition period should be between 3 to 4 weeks. This will allow time for the rumen to adjust to the inclusion of wheat in the diet. Research by Fulton et al, (1979), showed erratic intakes are sometimes experienced by cattle as they adapt to wheat-based finishing diets. To minimise this, intake should be stable at each increment before moving to the next increment. In addition, practicing good bunk management has been shown to improve wheat intake. Adding buffers such as sodium bicarbonate to the diet has been shown to improve intake and performance.

Wheat that is economical as cattle feed has been discounted for some reason. As a rule, the reason for the discount does not usually affect the potential feeding value of wheat. However, low test-weight weight wheat, (less than 56 pounds per bushel), will have lower energy values, poorer animal performance, and lower feed conversion efficiency. Low test-weight weight wheat can be more difficult to process than higher test-weight grain as many of the smaller grains will simply pass through the roller unprocessed. The feeding value of sprouted wheat, mycotoxin infected wheat, (less than 12 ppm DON), frosted wheat or drought damaged wheat is like undamaged wheat grain. Note – mycotoxin infected wheat, (or any other grain), must not be fed to pregnant beef cows, calves, or cattle under nutritional stress. Ergot levels should be less than 0.1%.

Summary

Wheat is not a traditional cattle feed grain but there are circumstances where damage to the wheat grain allow for it. Wheat is an excellent substitute for corn being similar in energy and a little higher in protein. Due to its rapidly fermentable starch, wheat grain must carefully managed to prevent nutritional issues such as bloat, acidosis or founder. Wheat from red varieties have been shown to be useful in backgrounder diets with wheat from white varieties more beneficial in finishing diets. Wheat must be coarsely processed, and fines kept to an absolute minimum. Some degree of tempering with moisture will help to keep fines to a minimum. Cattle must be transitioned to a wheat-based diet slowly over several weeks. Intakes on wheat-based diets can be erratic but this can be managed by ensuring intake is stable before moving to the next incremental increase and practicing good bunk management.

References:

- Fleet., B., Wilker, N., and Follings, J. 2020. Identifying Phosphorus Use Efficiency Traits in Winter Wheat. Field Crop News.
- Fulton, W. R. ; Klopfenstein, T. J. ; Britton, R. A., 1979. Adaptation to high concentrate diets by beef cattle. I. Adaptation to corn and wheat diets. J. Anim. Sci., 49 (3): 775-784
- Lardy, G., and Dhuyvetter, J. 2015. Feeding wheat to beef cattle. Progressive Cattle.
- Meadows, A., Terry, S., Penner, G.B., Hucl, P.J., McAllister, T.A., and Ribeiro, G. 2023. Effect of dry or temper rolling of high- or low-protein wheat and its impact on rumen parameters, growth performance, and liver abscesses in feedlot cattle. Canadian Journal of Animal Science. 103(3): 234-248, 2016
- National Academies of Sciences, Engineering and Medicine. 2016. Nutrient Requirements of Beef Cattle, Eight Revised Edition. Washington DC: The National Academies Press. doi: 10.17226/19014

- Nixdorff, C., McKinnon, J.J., Shreck, A.L., Juárez, M., and Penner, G.B. 2020. Comparison of the effects of dry rolling, temper rolling, and steam flaking barley grain on dry matter intake, growth, and carcass characteristics of finishing beef steers. Applied Animal Science 36:820–829

---------- VB ----------

James Byrne, Beef Cattle Specialist
Ontario Ministry of Agriculture, Food & Agribusiness
james.byrne@ontario.ca

---------- VB ----------

The impact of forage processing on beef cow performance and efficiency

Dr. Katie Wood, Associate Professor, Animal Biosciences, University of Guelph and Madeline McLennan, M.Sc. Student, Animal Biosciences, University of Guelph

Although forage choppers and bale processors are not new technologies, there is a surprizing lack of data in how they can benefit beef cow performance. Feed is the largest cost to cow-calf producers and winter-feeding costs can account for two thirds of the primary production costs in Canada. To offset these costs lower quality forages can be included in total mixed rations (TMR). However, these forages can cause palatability, gut fill, rumen fermentation, intake, and digestibility challenges for cattle. One strategy to overcome these challenges is chopping these forages to a smaller and more uniform particle size. This has previously been investigated for ensiled forages and the dairy industry has observed several performance benefits. The chopping of forage can help to improve rumen passage rate, digestibility, and improve feed intake. However, the cow-calf sector has yet to quantify similar performance advantages with the use of bale processing technology. Therefore, this study aimed to investigate the use of forage processing and chopping technology and its impact on animal performance, feeding behaviour, digestibility, and efficiency.

Researchers from the University of Guelph conducted a study that measured differences between the performance of gestating beef cows fed diets containing 33% wheat straw, 64% mixed haylage, and 3% vitamin and mineral pellet, that only differed in terms of the length of straw in the TMR. One group was fed a TMR containing 7-inch unchopped wheat straw and a second group was fed a TMR with 2-inch processed wheat straw. Researchers observed that animals fed the short straw diet consumed 1.43 kg/d (DM basis) more than the animals fed the long straw diet. It was also observed that the cows fed a short straw ration gained or maintained body condition more than the cows fed the long straw diet, likely due to this increased intake. Researchers identified that along with increased intake the groups fed the short straw diet sorted less against large and medium particles compared to the groups fed the long straw diet. This was analysed with a Penn State Particle Separator.

Picture 1: Straw length differences in the TMR fed in the study. Picture: Madeline McLennan, University of Guelph.

Researchers concluded that the processing and chopping of these lower-quality forages in gestating beef cow rations can help to improve palatability, intake, and animal performance. In addition, the reduction in sorting behaviour can help to ensure that each animal in a pen is consuming the same ration and that it is consumed more accurately to its formulation.

Picture 2: Highline LTD. bale processor used in the research project stored at the Ontario Beef Research Centre. Picture: Madeline McLennan, University of Guelph.

This work showed that chopping low quality forages, like wheat straw, increased DM intake, supporting BCS gain in late gestation. Though this work has helped to quantify the key benefits for the use of this technology in cow-calf operations, there is still a question of “Does a bale processor make sense for my livestock operation?”, which likely depends upon several factors. There are not many studies that have quantified the time, cost, and waste reduction that is said to be the advantages of using this technology. Future work with this project will look to at labour and cost analysis, to help provide producers with a better understanding of the value of this equipment to their operation. Further information about bale processors/choppers can be found on the Seven Point Check List for Bale Processors by Blaine Metzger at the Alberta Agriculture, Food and Rural Development AgTech Centre webpage (11).

References

- Taylor, R. E., & Field, T. G. (1995, December). Achieving cow/calf profitability through low-cost production. In Range Beef Cow Symposium (p. 199).
- Jungnitsch, P. F. (2008). The effect of cattle winter feeding systems on soil nutrients, forage growth, animal performance, and economics (Doctoral dissertation, University of Saskatchewan).
- Kaliel, D., and J. Kotowich. (2002). Economic evaluation of cow wintering systems—Provincial swath grazing survey analysis. Alberta Production Economics Branch, Alberta Agriculture, Food and Rural Development, Edmonton, AB, Canada.
- Males, J. R. (1987). Optimizing the utilization of cereal crop residues for beef cattle. Journal of Animal Science, 65(4), 1124-1130.
- Keady, T. W. J., Gordon, A. W., & Moss, B. W. (2013). Effects of replacing grass silage with maize silages differing in inclusion level and maturity on the performance, meat quality and concentrate-sparing effect of beef cattle. Animal, 7(5), 768-777.
- Zebeli, Q., Aschenbach, J. R., Tafaj, M., Boguhn, J., Ametaj, B. N., & Drochner, W. (2012). Invited review: Role of physically effective fiber and estimation of dietary fiber adequacy in high-producing dairy cattle. Journal of dairy science, 95(3), 1041-1056. [8] Beauchemin and Yang, (2005). J. Dairy. Sci., 88(6), 2117-2129.
- Tafaj, M., Zebeli, Q., Baes, C., Steingass, H., & Drochner, W. (2007). A meta-analysis examining effects of particle size of total mixed rations on intake, rumen digestion and milk production in high-yielding dairy cows in early lactation. Animal Feed Science and Technology, 138(2), 137-161. [10] Leonardi and Armentano, (2003). J. Dairy. Sci., 86, 557-564.
- Tafaj, M., Junck, B., Maulbetsch, A., Steingass, H., Piepho, H. P., & Drochner, W. (2004). Digesta characteristics of dorsal, middle and ventral rumen of cows fed with different hay qualities and concentrate levels. Archives of animal nutrition, 58(4), 325-342.
- Zebeli, Q., Tafaj, M., Steingass, H., Metzler, B., & Drochner, W. (2006). Effects of physically effective fiber on digestive processes and milk fat content in early lactating dairy cows fed total mixed rations. Journal of dairy science, 89(2), 651-668.
- National Academies of Sciences, Division on Earth, Life Studies, & Committee on Nutrient Requirements of Beef Cattle. (2016). Nutrient requirements of beef cattle.

- Metzger, B. (2001). Seven Point Check List For Bake Processors. Agtech Centre, Government of Alberta, Lethbridge, AB, Canada.

---------- VB ----------

Dr. Katie Wood, Associate Professor, Animal Biosciences, University of Guelph and
Madeline McLennan, M.Sc. Student, Animal Biosciences, University of Guelph

---------- VB ----------

Benchmarking: Measuring your farm's financial performance

John Molenhuis, Business Analysis and Cost of Production Specialist, OMAFA

Farm financial benchmarking is a valuable tool for farm operations, providing insights into their financial health and performance. By comparing financial measures against industry standards, beef producers can identify strengths, uncover areas for improvement, and make informed decisions to enhance profitability.

Using a standard farm financial reporting format allows for more consistent comparisons within a commodity and across farm types. Table 1 shows a reporting format being adopted more widely in Canadian agriculture that breaks down farm expenses into five categories showing the types of costs included in each category. The first three (cost of goods sold, direct operating and operating overhead) are operating and the last two (annual cost of capital and interest) are related to managing capital.

Table 1. Standardized Farm Financial Reporting.

Farm Revenue	**Revenue from farming operations**
Cost of Goods Sold	Feed, livestock purchases, vet, breeding, crop inputs
Direct Operating Expenses	Operating labour, fuel, repairs, custom work, marketing costs
Operating Overhead Expenses	Utilities, insurance, office, professional fees, management labour
Annual Cost of Capital	Depreciation, leases, rent, property taxes
Interest Expense	Operating and term loan interest

The costs included in the categories provide insight into farm performance and help pinpoint areas of strengths and others that may need improvement:

- **Cost of goods sold** are the direct inputs like feed and livestock purchases that are transformed into saleable farm products like weaned calves or market livestock,
- **Direct operating expenses** are what is needed to produce what you sell like machinery and labour,
- **Operating overhead expenses** are those general costs needed to run a business,
- **Annual costs of capital** are the costs to access assets through owning, renting, or leasing,
- **Interest expense** is of course the cost of borrowing operating and term capital funds.

These can be used internally to understand your cost structure and track your progress over time or externally comparing to other similar operations.

The Ontario Business Risk Management program data has been used to produce financial benchmarks using the reporting format with beef cow and beef feedlot farm types. Table 2 presents the results for all the beef cow and beef feedlot farms in the sample. They are reported as a percent of farm revenue. This measures how efficiently inputs (costs) are used to produce outputs (revenue). For example, for every dollar of beef cow sales 45 percent of that dollar goes to pay cost of goods sold.

The differences in cost structures of beef cow and beef feedlot operations are quite clear. Cost of goods sold is much higher for feedlots due mostly to livestock purchases and feed expenses. For beef cow, the top cost categories are cost of goods sold and direct operating. The main costs would be feed in cost of goods sold but less purchased livestock in comparison to beef feedlot. They have heavier reliance on homegrown feeds so the machinery and labour costs for these would be in direct operating.

Table 2. Financial results: As a percent of Farm Revenue, Beef Cow and Beef Feedlot (5-year median: 2018 to 2022).

	Beef Cow All	Beef Feedlot All
Cost of goods sold	45%	83%
Direct operating	32%	9%
Operating overhead	9%	2%
Annual cost of capital	25%	4%
Interest	4%	2%
Earnings before taxes (EBT%)	-15%	0%

The median Net farm income, reported as Earnings before taxes (EBT%), for beef cow farms over this period was negative and the beef feedlot farms broke even. 2018 and 2019 were difficult years financially for both farm types with things improving over the next three years. External benchmarking is measuring yourself against the top producers as well. The top beef farms based on their EBT% were analyzed and the results are displayed in Table 3.

Table 3. Top profit farms: Beef Cow and Beef Feedlot (5-year median: 2018 to 2022).

	Beef Cow Top farms	Beef Feedlot Top farms
Cost of goods sold	33%	73%
Direct operating	26%	8%
Operating overhead	7%	1%
Annual cost of capital	16%	3%
Interest	2%	1%
Earnings before taxes (EBT%)	16%	14%

For both farm types, the top farms are better in all the cost categories to put them in a positive net farm income position. Because cost of goods sold represent such a large portion of beef feedlot costs, the biggest gain for the top farms is in that area. The top feedlots were spending 10% less in cost of goods sold. Spending management time on controlling feed costs and livestock purchases has paid dividends for the top farms.

For beef cow, the opportunity to manage costs more profitably is spread across more of the categories. There were significant gains in cost of goods sold, direct operating and annual cost of capital for the top beef cow herds.

OMAFA's benchmarking effort, the Ontario Farm Financial Analysis Summaries (OFFAS), includes thirteen different crop and livestock farm types. They are posted on the OMAFA site at www.ontario.ca/page/farm-finance-statistics. The summary reports describe in the more detail the reporting format and financial measures presented in the tables.

The OMAFA Farm Financial Analyzer is a farm analysis tool designed to measure profitability and financial efficiency. The program allows you to enter financial information and compares your financial performance to the OFFAS benchmarks. It will be available for download at: www.ontario.ca/page/farm-business-decision-calculators.

---------- VB ----------

John Molenhuis, Business Analysis and Cost of Production Specialist
Ontario Ministry of Agriculture, Food & Agribusiness
john.molenhuis@ontario.ca

---------- VB ----------