



Extension FactSheet

Animal Sciences, 2029 Fyffe Road, Columbus, OH 43210-1095

Ownership Options for Feeding Cattle

Stephen Boyles

OSU Extension Beef Specialist

Dan Frobose

OSU Extension Agent Beef Marketing

Brian Roe

OSU Extension Agricultural
Economist

Custom feeding will probably be one of the tools necessary to maintain or expand beef production in Ohio. Custom feeding is paying someone else to feed your calves because you, the cattle owner, do not have the facilities, time or expertise to feed cattle. Custom feeding allows the feedlot operator to use feed, facilities, and labor without large investments in cattle. Cattle owners may benefit from custom feeding because they can take advantage of favorable market situations or reap carcass premiums gained from employing improved genetics they have developed in their cow-calf operation.

There are two situations where custom feeding or retained ownership is often considered:

1. Feeding background or stocker calves to heavier weight (650-800 lbs.)
2. Feeding calves or yearlings to market weights (1000-1300 lbs.)

The custom feeder takes the cattle, feeds them and bills the cattle owner for the costs of feeding and housing the cattle. Each custom feeder will handle the charges for feeding a little differently. Some programs are based on a "cost per pound of gain." Cost of gain programs are common to grass feeding where weighing feed is impossible. The method of measuring shrink, which is the amount of weight an animal loses between the time of sale and the time of placement on feed, is very important in cost of gain agreements. The other option is based upon the actual amount of feed provided to animals and yardage charges. It is probably safer in the long run for feedlots (drylot feeding) to use such a method, though this requires a set of scales to weigh feed going into the pens.

Things to Consider when Developing a Custom Feeding Arrangement

Cost of feed charged by the feedlot – Feed may be marked up a few dollars a ton to cover overhead cost. The cost of the ration the cattle feeder quotes to the cattle owner will include this markup. There are some differences in how feedlots charge for their services. Some mark up the feed a little and do not charge "yardage." Others may charge a little more for yardage and not mark up the feed as much.

Because feed prices can change, some feedlots allow customers to prepay for some or all of the feed. The key point to keep in mind is that IRS regulations do not allow one to pay a true feed bill in advance, but the IRS allows the purchase of commodities such as grain, silage, or hay for future use. Check with your accountant about prepaying commodities if you are feeding cattle into the next year.

Yardage fee – The yardage fee will vary from lot to lot. Some charge a yardage fee and some don't. The important thing is to ask. The two most common ways of charging for services are yardage or yardage plus feed markup. Yardage is usually charge on a \$/head/day basis. The yardage fee may vary from no fee to \$.40 per head per day, depending on what is included in the yardage fees. In yards that have a higher yardage charge the feed markup is less. This may also include the \$1 per head checkoff fee. Be sure to ask about the availability of carcass data and about any associated fees.

Ration composition – The feedlot should provide cattle owners with a report of the ration composition. This report should include not only the amounts of each

feedstuff but also a report on the total ration's energy, protein and major vitamins and minerals. A list of feed additives should also be included. It might also be helpful to know who supplies the feed.

Cost of receiving procedures – Cost of arrival treatments usually includes cost of vaccination, dewormer, implant, etc. plus labor cost.

Receiving management practices – Actual receiving management practices may include vaccination, implants, deworming, and tagging the cattle. A separate charge may be needed if the cattle are reimplanted during the feeding period.

Cost of treating sick cattle – Cattle moved to a sick pen will have additional costs of medication and chute charges. Chute charges can be \$.50 to \$1.50 per head. In some feedlots the yardage fee may cover these costs.

Typical death losses – Death losses will usually be borne by the owner of the cattle.

Selling method – Ask the feedlot operator how the cattle are to be sold and if there will be additional marketing costs. The cattle owner and cattle feeder work together to determine when the cattle are ready for marketing. Transportation cost should be considered. Contingency plans should exist for selling cattle that will receive discounts (e.g., railers) as needed.

Method of billing cost – Billing is usually done every two weeks or monthly. The feedlot operator should send a complete record of the delivered feed and its cost. Billings should reflect changes in ration ingredient cost if feed is continually purchased from another source during the feeding period. The bill should contain details of how much feed the cattle ate and an itemized list of any other cost billed to the cattle owner. The first bill should state the cost of processing cattle on arrival. The cost of the feed will be on an as-fed basis. If the feed is financed through the feedlot, look for a statement of interest on the bill. It is a good idea to specify with the feedlot the exact time when interest charges for feed begin.

Written contract – It is a good idea to have some form of written agreement even with very reputable feeders. Seek legal advice in forming a contract. It allows each party to know their respective responsibilities.

A contract should make provisions for 1) handling and feeding, 2) division of profit or loss, and 3) marketing of the livestock. When livestock are being financed for feeding, the lender may want to be included in the written contract. The contract should state the approximate delivery date and deadline for delivery. Shrink may need to be

mentioned, especially if rate of gain is the system for paying for the feeding program. Statements about general management practices or expectations of management should be stated. If livestock are not cared for properly, provisions should be made for their repossession.

Generally, the feeder is responsible for the proper manure handling, storage and associated liability. In unique situations, the contract may need to state which party gets the hides.

The agreement should include the type and weight of cattle to be fed. The owner and feeder should agree on the grade to which cattle are to be fed and the approximate time of marketing. A clause should be included for low performing cattle and allow for their early departure.

When feeding cattle under contract, the owner retains title on the cattle. The death loss is usually borne by the owner, except for those caused by negligence of the feeder. Another option is share loss above a certain percentage of deaths. Both parties need to determine whose insurance company will cover losses due to catastrophe.

Some feedlots will finance the feed bill for customers, and some will finance the cattle. However, is not uncommon for the feedlot operator to require a deposit upon delivery. The deposit will be applied to overall expenses. Interest rates vary and are usually based off the prime rate.

Partnerships or Joint Ventures

Another option in custom feeding is a partnership or a joint venture. This offers opportunities for cow-calf producers, stockers, feeders and perhaps even the lender to take advantage of a favorable market situation, and yet spread risk among more individuals. It is an opportunity for other agribusinesses to increase their customer base. It is also a viable alternative when lending institutions are not familiar with cattle feeding or are hesitant about being the sole institution involved.

A joint venture may occur when the producer wants to retain part ownership in the cattle and obtain the management and marketing expertise of another key partner. If you are a cow-calf operator considering retained ownership, yet need cash flow, consider selling a portion of your calves to the feed yard and feeding the rest. The groundwork necessary for undertaking a successful joint venture would include:

1. A document explicitly stating the terms of ownership

2. A statement of understanding concerning management control
3. Guidelines for responding to changes in the cattle market
4. An adequate pool of capital
5. An analysis of tax consequences for all parties
6. Specifications for a preconditioning program

Evaluating a Potential Feedlot Partner

It is important that the bills received from the feeder provide sufficient detail concerning what was fed, when it was fed and how the animal was managed. But correct documentation can only achieve so much. It is also important to work with a reputable feeder. Visit with neighbors, feed suppliers and the local sale barn about the cattle feeder. Check out the financial condition of the feeder. Legal and financial entanglements with a feeder that declares bankruptcy will often derail any potential profit. You might have your lender talk to the cattle feeder's lender. Ask what kind of cattle work best under their management system. Some feedlots handle mostly yearlings while others specialize in weaned calves and still others are set up to care for long-hauled, weaned cattle. It is also a good idea to visit several operations instead of just one.

Visiting a Feedlot

Visiting a lot while cattle are being fed or after bad weather can often reveal much about a feeder's ability to manage cattle during key time windows that critically affect cattle performance. A good lot should be fairly clean and well drained. Ask how often the pens are cleaned. The water and feed should be clean, fresh and available at all times. There should be adequate shelter and bunk space for all cattle in the pen. An astute feeder will put locks on gates and loading chutes when feeding cattle for other people. Beware if you observe a large flock of birds or spilled grain; these are classic indicators of inefficient feed management and increased feed costs. Cattle from different owners should be kept separate for accurate billing sheets. The sick pen should be kept dry and well ventilated.

How to Choose a Feedlot

Cattle producers are, by and large, a reputable group with well-managed operations; hence ruling out an occasional substandard operator will not be that difficult. The more difficult question may be how do I choose among

them? Several key feedlot factors should be considered when making this decision including the feedlot's cost of gain, method of selling cattle, payment arrangements and financing options. Each factor is considered in greater detail below.

Cost of Gain

Since feed costs often dominate potential profitability, a good place to start is to compare expected cost of gain. When you talk about cost of gain, it is important to know how it is calculated. To start with, you need to know if it is figured on pay weights or in-weights. The pay weight is how much the cattle weighed when they got on the truck for the trip to the feeder. An in-weight is what the animals weigh when they arrive at the feedlot. Since cattle shrink due to transport (see Table 1 for examples), in-weights are less than the pay weight. By the end of the feeding period, cost of gain based on the in-weights usually looks more favorable than those based on the pay weight. In-weights are often used because a feedlot may not know what the pay weights are.

Table 1. Time in Transit and Cattle Shrink

Hours in a moving truck	%Shrink	Days required to recover pay weight
1	2	0
2-8	4-6	4-8
8-16	6-8	8-16
16-24	8-10	16-24
24-32	10-12	24-30

Feed yards can estimate the cost of gain on your cattle, but normally **cannot** guarantee a cost of gain. From a feeder perspective it is not encouraged because of the many factors beyond the feedlot operator's control affect gain (e.g. weather). This may be the only option where facilities for weighing feed are not available. Another option under this system is to have a sliding scale in the cost of gain for various weights of cattle.

A main driver of shrink is fat composition, which, in turn, is driven by the animal's age, sex, and type-condition. In short, fatter animals suffer less shrink because fat contains less water than muscle. Generally, older cattle have more fat than younger animals, heifers have more fat than steers of the same age and larger frame cattle have less fat than medium frame cattle of the same age.

Feed efficiency is another factor that affects the cost of gain. Feed efficiency is the amount of feed an animal

Feedlot Budget for 600 lb steer

	Example Price	Your Price
1. Purchase cattle price (\$85/cwt) ^a	\$510 (85 x 6)	
2. Feedlot sale weight	1200 lbs	
3. Estimated days to market	200 days	
4. Interest for cattle @ 10% for 200 days	\$27.94 (\$480 x .1/365 x 200)	
5. Death loss at 1% ^b	\$5.10 (\$510 x .01)	
6. Veterinary and processing	\$10.00	
7. Estimated feed cost 600 pounds of feed at a feed to gain of 6:1 DMbasis (600 x 6 = 3600 lbs DM basis) Feed cost quote: \$5.00-6.00/cwt DM basis	\$180.00-\$216 (3600 x \$.05) to (3600 x \$.06)	*Experiment with different feed efficiency numbers and notice its importance.
8. Cost of Futures contract at \$70 per contract (40,000 pounds/1200 lb steers = approximately 34 head)	\$2.05 commission ^c (\$70/34 hd)	
9. Yardage cost	\$50 (200 days x \$.25/hd)	
10. Interest on operating capital \$140 + \$10 + \$2.05 + \$50 = 202.05	\$5.54 202.05 x .5 ^d x (.1/365) x 200	
11. Total Cost	\$790.63-\$826.63 + \$1(beef checkoff)	
Breakeven	\$66-\$69 ^e (\$791.63/1200) to (\$827.63/1200)	

^aValue of the calf plus freight charges

^bThis value can vary thus you need to consider feed charges while alive

^cYou may want to put a cost for estimated margin calls. This can vary but generally ranges from \$1-2/head.

^dInterest on operating capital (at least feed) in this case is part of the monthly/bi-monthly bill from the feed yard. A rule of thumb is that we can divide the interest bill in half since the previously mentioned billings interest will only accrue on a portion of the bill.

^eOther cost could be freight to packing plant, carcass data collection, etc.

requires to gain one pound of body weight. Knowing the cost per ton of the complete rations is only a starting point for calculating cost of gain because a higher priced ration may improve feed efficiency and provide a cheaper cost of gain. Therefore, cost of gain is the more economically important factor to ascertain than the cost of feed.

Ration costs can be compared three ways:

1. Expected cost of gain (including all costs)
2. Expected cost of gain on a dry matter basis
3. Expected cost of gain on a net energy basis

For evaluating the rations provided by different feeders, it is best to compare diets on a dry matter basis and on a cost-per pound of net-energy basis. To calculate these figures using either method, you must know the ration ingredients and the percent moisture of the ration. The following example is an illustration of comparing rations on a dry matter basis:

<p>Feedlot # 1 Ration cost as fed = \$65/ton Ration dry matter = 50% Ration cost, dry matter = \$130 (65/.5)</p>
<p>Feedlot # 2 Ration cost as fed = \$75/ton Ration dry matter = 60% Ration cost, dry matter = \$125 (75/.6)</p>

Selling Cattle for Harvest

At the start of the feeding period, a market date should be projected. It is important for the cattle owner to be involved in this crucial marketing decision. Allowing the feeder to make all the decision regarding marketing may classify you as a passive investor for tax purposes.

The cattle or loads of cattle can be sold in different ways. The cattle can be sold on a live weight basis through an auction barn or direct to the packer. Selling direct to a packer could involve selling cattle on a live basis, based on carcass weight/USDA quality grade/USDA yield grade (e.g. formula/grid pricing) or by a forward contract agreement. When making this decision, inquire about shrink and who will incur the trucking charges and possible condemned carcasses. Typically when selling cattle on a live weight basis, the packer will apply a pencil shrink to the live weight and assume trucking charges and condemned carcasses. Pencil shrink accounts for the weight loss that occurs during shipment from the feedlot to the packing plant. Cattle may remain in the yard for a few days after they are sold. The buyer of your cattle can pick

them up any time. The cattle may remain your responsibility and not the buyer's until they leave the yard or until they are officially "transferred." Therefore, you will pay for the feed and incur any losses due to weight loss or death until that time.

You may feel that you have the type of cattle that can take advantage of actual carcass value prices. Within this option you may sell on a carcass/dressed weight basis (in the beef) or on a carcass/dressed weight and grade (grade and yield) basis. If you decide to sell cattle on a dressed weight or dressed weight and grade basis, the cattle owner typically pays the trucking charges and stands the risk of any condemned carcasses but pencil shrink is not a factor in the agreement. The packer assumes the grading risk if the cattle are sold on a carcass/dressed basis. You assume the risk/benefit of carcass grades when cattle are sold on a "grade and yield" basis. Grade and yield marketing are major factors when selling on a "grid" or formula pricing system. Carcass weight is critical when selling to a packer.

Payment

Your receipt of payment can occur in several ways. If you finance everything through a lender, the packer's check can go directly to your lender to pay off any outstanding debt on the loan and then the lender pays you the balance.

The packer may write two checks: one to the feedlot for their feed and service and a second check to the cattle owner. If the cattle owner has been paying a feedlot bill, the check should come directly to the cattle owner.

At the end of the feeding period, after the cattle are sold, you get a final "closeout" report from the feedlot. It serves as a bill plus a summary of the itemization of costs and performance.

Loan Requirement for Retained Ownership

The search for loan money is not the sole responsibility of the cattle owner. The custom feeder should be able to direct the cattle owner to financial institutions that are familiar with cattle feeding. Loan policies can vary. Some financial institutions will loan up to 70 percent of the appraised value of the cattle and 75 percent of the feed bill. Cattle may be appraised when they arrive at the feedlot. A large line of credit will call for a current financial statement. In order to protect its investment in the cattle the financial institution may require the cattle owner to engage in some sort of price protection such as hedging or an option contract. If this is the first time you

have custom fed cattle, the financial institution may want to send someone to visit the operation during the feeding period.

The feedlot operator may carry peril insurance against fire, lightning, tornadoes, theft, etc. Full mortality insurance sometimes is available, but is quite expensive.

A lender may request some of the following:

Of an Individual Cattle Owner

- Current financial statement
- Historical earnings statements
- Loan Application
- Trust agreements (if applicable)

Of a Partnership:

- Current financial statement (for each partner and the partnership)
- Historical earnings statements (for each partner and the partnership)
- Partnership loan applications
- Partnership agreement (if available)

Of a Corporation (LLC/others)

- Current financial statement (corporation and each shareholder)
- Historical earnings statements (corporation and each shareholder)
- Corporate loan application
- Articles of Incorporation or Organization
- Bylaws

The feedlot may send all bills directly to the financial institution for payment. The owner will receive a copy of the bill payment. A computer-generated economic and animal performance predictor model can be used to illustrate how the cattle should perform during the feeding period. This service is available through OSU Extension Animal Science.

Some Precautions

Custom feeding and joint venture projects are viable tools that should be considered.

Although retaining ownership and having cattle custom fed offers an opportunity for increased profits, the practice is not for everyone. You may end up marketing two calf crops in one year (e.g., a set of finished cattle and the next weaned calf crop), which can have significant tax implications for those using cash-basis accounting for tax purposes. You should work closely with your tax professional in order to evaluate opportunities for income averaging before placing cattle on feed. The first time you retain ownership the flow of cash back to your operation can be delayed six to eight months until cattle are harvested. Discuss your equity position with your lender and see if it matches the opportunity to retain ownership of cattle.

Visit Ohio State University Extension's web site "Ohioline" at:
ohioline.osu.edu

All educational programs conducted by Ohio State University Extension are available to clientele on a nondiscriminatory basis without regard to race, color, creed, religion, sexual orientation, national origin, gender, age, disability or Vietnam-era veteran status.

Keith L. Smith, Associate Vice President for Ag. Adm. and Director OSU Extension.

TDD # 1 (800) 589-8292 (Ohio only) or (614) 292-1868

8/02—eam