DAIRY BEEF

LAND O LAKES BEEF FEED · A Steak in the Future ·

LAND O LAKES® Feed

Dairy Beef – the extra income opportunity

There is profit opportunity you may be missing. The increasing demand for lean beef could make feeding dairy beef a natural for extra income from your operation now and in the future.

Is Dairy Beef Production Right For You?

Do you have available family labor and the ability to learn how to properly care for and manage calves? Can you provide adequate facilities with shelter during periods of wet or cold weather? If you can devote adequate management, feeding Dairy Beef cattle can be very profitable.

Advantages of calf-fed Dairy Beef

- ❑ Low initial investment.
- ❑ Consistency of genetics and predictable animal performance.
- ❑ Simplicity of high grain, intensive calf feeding programs.
- ❑ Consistent supply of cattle throughout the year compared to beef breeds. Allows for more frequent marketings and therefore improved cash flow and less market risk.
- ❑ Excellent feed conversion when fed a high energy diet from birth.

Disadvantages of calf-fed Dairy Beef

- ❑Dairy cattle are more vulnerable to inclement weather and poor lot conditions. They have less hair and fat cover for insulation.
- ❑ Higher maintenance requirements than beef cattle resulting at less efficient gains at similar body weight.
- ❑ More prone to bloat and other digestive disturbances (e.g. acidosis).
- ❑ Lower dressing percent than beef breeds due to higher bone content and less fat.
- ❑ Tendency for lower percentage of cattle grading choice.

Every disadvantage is a management opportunity for increased profitability. Where there are no challenges, there are no opportunities to exert management expertise and benefit financially. Implementing the right Dairy Beef production program is key to success. For example:

- ❑ If cattle are never allowed to be fed a high forage diet, but fed a high energy diet from birth to market, maintenance requirements are greatly reduced and overall performance is excellent.
- ❑ If good bunk management is utilized the risk of digestive disturbances is greatly reduced and performance is enhanced.
- ❑ If facilities are properly designed and managed the effects of inclement weather can be negligible.
- ❑ Timely use of the right implant program will definitely enhance performance without reducing quality grade significantly.

Research Proves Dairy Beef's Value

Research conducted by Land O'Lakes Farmland Feeds, as well as land grant universities, prove that dairy beef animals raised and fed on a specific program for maximum gains, can produce high quality beef efficiently. Carcasses grading choice or high select with low amounts of trimmable fat have high consumer acceptance. The beef provides an excellent eating experience because it is flavorful, tender, and juicy.

Opportunities with feeding whole shelled corn

Whole shelled corn is efficiently digested when high concentrate rations are fed and is cost effective.

The incidence of digestive disturbances are reduced when cattle are fed whole corn compared to processed grain. The site of starch digestion is shifted with feeding whole corn. Less starch (the main component of corn) is fermented in the rumen reducing the risk of acidosis. More starch is digested in the small intestines where the digestion process is more efficient. Total tract digestibility is similar. Reducing digestive upsets (acidosis) and increasing intestinal digestion allows for consistently higher feed intake and improved performance.

Young ruminants chew their food more thoroughly than mature animals. This allows growing calves to efficiently utilize whole corn resulting in excellent performance.

Whole corn is applicable to self-feeding. Whole corn flows better and creates fewer fines than processed grains reducing the risk of bloat. When self-feeders are used, whole shelled corn is the preferred grain source.

Whole shelled corn reduces equipment and storage requirements. It is easy to handle and store and no processing equipment is needed.

Think of it this way: If it costs $0.25/cwt to process grain and corn is $2.24/bu ($4.00/cwt), then you feed the corn free every 16 days!

Management recommendation for feeding whole shelled corn diets

- ❑ Moisture content of corn should be between 13 and 15.5%
- ❑ Overly dry corn becomes unpalatable and fragile resulting in fines.
- ❑ Wet corn doesn't store as well and loses some of its "roughage value".
- ❑ Corn should be clean and high quality.
- ❑ Roughage helps prevent digestive disturbances (bloat and acidosis), maintains health of the ruminal lining (papillae), and will help eliminate "stall out" at 950 to 1000 lb. Overall animal performance will be improved
- ❑ Roughage must be fed regularly in consistent amounts with adequate feeder space so that all animals can consume their share.
- ❑ Feed1-2 lb/hd of some roughage. If ground, roughage should be at least 1 inch mean particle length.
- ❑ Roughage should <u>not</u> be self-fed in a bale feeder when the grain mix is self-fed! Intake of self-fed roughage will be inconsistent from day to day and cause digestive upsets (see table below).
- ❑ Inconsistent and infrequent bedding can create irregular roughage intake.
- ❑ If roughage is included in the grain mix, cottonseed hulls is the preferred roughage source.

Variability of intake caused by free choice feeding of long stem hay

Week	Corn and Supplement intake lb/h/d	Free choice long stem hay intake lb/h/d
1	17.42	Not offered
2	11.68	4.22
3	18.24	4.16
4	19.58	3.86
5	15.15	5.48

Land O'Lakes Farmland Feeds Research

Feeding Management Recommendations (up to 350 pounds)

Land O'Lakes Farmland Feeds has been the undisputed leader in conducting research on calves from birth to 350-400 lb. These research validated feeding programs give you the assurance of excellent and predictable performance.

Phase I Feeding Program: Birth to 350 lb. (23 weeks of age)
(Traditional Program)

Birth to 130 lb.		
First 3 days	- Feed colostrum	
4th day to 5 wks	- Feed Maxi Care or Amplified Select Milk Replacer - Continue to feed until calves are consuming a minimum 1.5 lb dry starter/day for 3 days - During last week of milk replacer feeding, transition to once/day milk feeding to encourage dry feed intake and make weaning easier - Make fresh water available from day 4 on.	
5th day to 6 wks	- Begin feeding Herd Maker Supreme B90 - Introduce hay feeding after calves are consuming 5.0 lb of starter/h/d	
130 - 225 lb.	Intense WSC Calf Mixer B130	700
	Whole Shelled Corn	1300
		2000
225 - 350 lb.	Intense WSC Calf Mixer B130	650
	Whole Shelled Corn	1350
		2000

New Intensive Calf Feeding and Management Program

Land O'Lakes Farmland Feeds has recently developed from over 2 years of research a new intensive feeding and management system. It is specifically designed for those producers who want to get all of the genetic potential bred into their calves! The program features the revolutionary "Cow's Match" milk replacer with its patented blend of nutrients called "Architect". The Architect formulation allows for higher feeding rates of powder and increased calf performance. The program also requires a more nutrient dense dry starter feed program to build upon the advantage gained from the Architect formulation of Cow's Match.

- Calves gained 34 lb. more than conventionally raised calves by 7 weeks of age
- Weight gain advantage was 52 lb by 23 weeks using a properly matched dry starter
- Dairy Beef calves have the greatest opportunity to maintain this advantage throughout their life when raised on an intensive high concentrate program

Feeding Management Recommendations (350 lb to market)

Most efficient performance is obtained with feeding a high concentrate diet throughout the life of the Dairy Beef animal. If the animal is fed a high forage growing diet, the capacity of the digestive tract is enlarged and this accounts for a large maintenance energy requirement to the animal. The key to efficient nutrient utilization is to feed only enough roughage to maintain a healthy gastrointestinal tract.

The correct market weight varies depending on the level of forage in the diet. Growing steers fed a high forage diet will result in a higher finish weight to achieve acceptable levels of choice carcasses. Again, animals are less efficient at converting feed to weight gain at higher body weights as shown below.

Performance of Holstein Steers (430-1100 lb.)			
Corn:roughage	90:10	75:25	60:40
Days on feed	194	202	229
ADG, lb	3.50	3.25	2.95
DM intake, lb/h/d	16.6	16.5	16.2
Feed/gain	5.2	5.4	5.9
Dressing percentage	59.3	59.7	59.1
Yield grade	2.1	2.1	2.2
Choice carcasses, %	67	52	58
University of Wisconsin			

Feeding program	Target harvest Target harvest weight
10-15 lb silage or equivalent roughage/day	1200-1300 lb.
Over 25 lb silage/day	1350-1500 lb.

Performance of Holstein Steers fed a 90:10 Corn:Forage Diet			
Steer Weight (lb)	Dry Matter Intake (lb/d)	Growth Rate (lb/d)	Feed/gain
300	9.1	3.10	2.90
400	11.2	3.65	3.20
500	12.9	3.50	3.70
600	14.4	3.30	4.40
700	15.5	3.40	4.80
800	16.5	3.10	5.30
900	17.2	3.40	5.45
1000	17.8	2.85	6.50
1100	18.2	2.70	7.05
1200	18.4	2.30	7.90
University of Wisconsin			

Self-Feeder management:

- ❑ Keep feed in feeders at all times. Do not let feeders go empty.
- ❑ Clean feed troughs regularly and especially right after a rain or snow. Wet or stale feed will reduce feed intake.
- ❑ Do not allow feed and fines to build up in feed troughs. Open slides only 1-2 finger widths rather than wide open.
- ❑ Allow adequate feeder space. Calves up to 500 lb.: 3"/hd; Calves over 500 lb.: 4"/hd.
- ❑ Use Bovatec in Dairy Beef Grower for improved growth rate
- ❑ Use Rumensin-Tylan in Dairy Beef Finisher for maximal performance and reduced liver abscesses

Management Recommendations

Management recommendations for buying and shipping calves

- ❑ Buy calves with good muscling and conformations weighing 90-115 lb.
- ❑ Buy fresh calves
- ❑ Uniform calves are critical to efficient production
- ❑ Wet navals are undesirable
- ❑ Use a clean truck
- ❑ Handle gently
- ❑ Isolate calves during the first two weeks

Management recommendations after calves are moved from individual pens

- ❑ Calves can tolerate cold if they are dry and protected from wind. Keep environment clean, dry and draft free.
- ❑ Provide adequate space that is well bedded.
- ❑ Provide good hay and clean water. Make certain calves find the feed and water.
- ❑ Observe calves individually. Mark calves that have been treated.
- ❑ Use veterinary services for surgeries, ruptures, etc.

Dairy Beef General Health Program Birth To Market

Birth	• Assure adequate colostrum intake of 12 lb in the first 24 hrs. • Vaccinate • Disinfect naval (7% iodine)
3 weeks	• Vaccinate
First 6 weeks	• Implant (low potency implant) • Dehorn
8th week	• Castrate
16 weeks (300 lb)	• Reimplant (low potency implant) • Vaccinate • Deworm • Delouse

500 lb.	• Deworm • Reimplant (medium potency implant)
800 lb	• Reimplant (medium or high potency implant)
Consult your veterinarian to develop a specific vaccination and health program to fit your needs	

Land O'Lakes Farmland Dairy Beef Programs

Phases II and III Feeding Program: 350 lb. to Harvest

Growing Phase (Phase II)

350 lb. to 500 lb.	Dairy Beef Grower	400
	Whole Shelled Corn	1600
		2000
500 lb. to 700 lb.	Dairy Beef Grower	350
	Whole Shelled Corn	1650
		2000

- Feed 1-2 lb/h/d of long stem hay to help maintain uniform consumption and help prevent digestive problems.
- For calves purchased after weaning, use a Strategic Care product for 14 to 21 days, then switch to the Dairy Beef Grower Program.
- For dairy beef steers fed on a bunk feeding system, a SteakMaker Grower feeding program can be outlined by your Land O'Lakes Farmland Feeds Beef Specialist.

Finishing Phase (Phase III)

700 lb to market	Dairy Beef Finisher	200
	Whole Shelled Corn	1800
		2000

- Feed 1 lb/h/d of long stem hay to help maintain uniform consumption, help prevent digestive disturbances, and prevent stall-out of long fed cattle.
- The Rumensin-Tylan option is highly recommended.
- For dairy beef steers fed on a bunk feeding system, a SteakMaker Finisher feeding program can be outlined by your Land O'Lakes Farmland Feeds Beef Specialist.

Alternative finishing phase self-fed program:

	Ruf-N-Pro	400
	Whole Shelled Corn	1600
		2000

- The Ruf-N-Pro program has a higher level of roughage in the final ration for increased margin of safety and reducing digestive disturbances. The final ration is roughly 10% roughage. The Rumensin-Tylan option is highly recommended.

Land O'Lakes Farmland Dairy Beef Budget

Dairy Beef Budget – 100 to 1300 pounds

Period 1. From 100 to 130 lbs. – 34 days

Calf Purchase Price ($/head)	$_____ (a)	
Vet/Animal Health Expense	$_____ (b)	
Maxi Care Milk Replacer (45 x _____$/lb)	$_____ (c)	
Herd Maker Supreme B90 (34 x _____$/lb)	$_____ (d)	
Death Loss (_____% of Purchase Price)	$_____ (e)	
Total Cost/Calf to 130 lbs. (a+b+c+d+e)		$_____ (A)

Period 2. From 130 to 225 lbs. – 56 days

Corn (3.5 x ____$/bu.)	$_____ (f)	
Intensive WSC Calf Mixer B130 (.052 x _____$/ton)	$_____ (g)	
Hay (.014 x _____$/ton)	$_____ (h)	
Vet/Animal Health Expense	$_____ (i)	
Total Feed & Animal Health Cost (f+g+h+i)		$_____ (B)

Period 3. From 225 to 350 lbs. – 50 days

Corn (6.4 x ____$/bu.)	$_____ (j)	
Intensive WSC Calf Mixer B130 (.082 x _____$/ton)	$_____ (k)	
Hay (.013 x _____$/ton)	$_____ (l)	
Vet/Animal Health Expense	$_____ (m)	
Total Feed & Animal Health Cost (j+k+l+m)		$_____ (C)

Period 4. From 350 to 500 lbs. – 54 days

Corn (10.2 x ____$/bu.)	$_____ (n)	
Dairy Beef Grower B150 (.071 x _____ $/ton)	$_____ (o)	
Hay (.027 x _____$/ton)	$_____ (p)	
Vet/Animal Health Expense	$_____ (q)	
Total Feed & Animal Health Cost (n+o+p+q)		$_____ (D)

Period 5. From 500 to 700 lbs. – 67 days

Corn (16.0 x ____$/bu.)	$_____ (r)	
Dairy Beef Grower B150 (.095 x _____$/ton)	$_____ (s)	
Hay (.033 x _____$/ton)	$_____ (t)	
Vet/Animal Health Expense	$_____ (u)	
Total Feed & Animal Health Cost (r+s+t+u)		$_____ (E)

Period 6. From 700 to 1340* lbs. – 220 days

Corn (84 x ____$/bu.)	$_____ (v)	
Dairy Beef Finisher R250T (.26 x _____$/ton)	$_____ (w)	
Hay (.11 x _____$/ton)	$_____ (x)	
Vet/Animal Health Expense	$_____ (y)	
Total Feed & Animal Health Cost (v+w+x+y)		$_____ (F)

Period 1 to 6. From 100 to 1340* lbs. – 481 days

Total Feed/ Calf/ Health Cost (A+B+C+D+E+F)		$_____ (G)
Total Feed Cost (G – a – b – e - i –m – q – u – y)	$_____ (H)	
Yardage (481 days x _____$/day)		$_____ (I)
Calf Interest (a x ___% interest x .0132)		$_____ (J)
Feed Interest (H x ____% interest x .0066)		$_____ (K)
TOTAL COST (G + I + J + K)		$_____ (L)
SALE PRICE (1300 lbs. x _____ $/lb.)		$_____ (M)
PROFIT/LOSS PER CALF (M – L)		$_____
BREAK EVEN (L/13.00)		$_____

These are estimates only. Actual animal performance can vary, and is influenced by factors beyond the control of Land O'Lakes Farmland Feed. Allowances must be made for other miscellaneous expenses.

*3% Shrink used.

For More Information on Beef Production
Visit Our Website at www.beeflinks.com