

INDUSTRY PERSPECTIVE

FEEDLOT

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INTRODUCTION

National Perspective

The size of a feedlot can be described as its total one-time feeding capacity. Since many feeding operations have multiple feedlots, capacity is determined by the maximum number of head that can be fed at one point in time. Capacity is simply a physical measurement and may not be an indication of total value of cattle marketed as different entities will have differing utilization rates. Additionally, capacity utilization will vary with each entity for many reasons, though may be related to the profitability of finishing cattle.

Reported on a monthly basis by the National Agricultural Statistics Service (NASS), cattle on feed are defined as cattle and calves on feed for slaughter market in the United States for feedlots with capacity of 1,000 or more head. As of Dec. 1, 2006, NASS reported 12 million cattle on feed in the United States. The summer 2006 edition of *National Cattlemen* magazine reported the 25 largest feedlot entities in the United States had a total one-time feeding capacity of 5.15 million head. The following is a list of the 10 largest cattle feeding operations in the United States:

Rank	Name	Location of Head Office	Ownership	Capacity	Number of Feedlots
1	Five Rivers Cattle Feeding	Loveland, Colo.	50% ContiGroup; 50% Smithfield Foods	811,000	10
2	Cactus Feeders	Amarillo, Texas	Engler Family and ESOP	510,000	9
3	Cargill Cattle Feeders LLC (Caprock Feeders)	Wichita, Kan.	Cargill	330,000	4
4	Friona Industries LP	Amarillo, Texas	Private – Limited Partnership	275,000	4
5	AzTx Cattle Co.	Hereford, Texas	Private – Jossarand Family	242,000	5
6	J.R. Simplot Co.	Boise, Idaho	Private – Simplot Family	230,000	2
7	Four States Feedyard, Inc.	Lamar, Colo.	Privately Held	195,000	6
8	Heritage Feeders LP	Oklahoma City, Okla.	Private – Tom L. Ward	189,000	5
9	AgriBeef Co.	Boise, Idaho	Private – Rebholtz Family	180,000	3
10	Pinal Feeding Co.	Laveen, Ariz.	Private – Petznick Family	175,000	1

Northwest Perspective

Within the Northwest states, there are 12 feedlots (operated by seven different companies) that have feeding capacities of 10,000 or more.

Company	Location	Capacity
Agri Beef – Snake River Cattle Feeders	American Falls, Idaho	25,000
Agri Beef – Boise Valley Feeders	Parma, Idaho	25,000
Agri Beef – El Oro Cattle Feeders	Moses Lake, Wash.	60,000
Intermountain Beef	Eden, Idaho	15,000
Simplot	Grandview, Idaho	150,000
Simplot	Pasco, Wash.	90,000
Beef Northwest Feeders	Quincy, Wash.	26,000
Beef Northwest Feeders	Boardman, Ore.	40,000
Beef Northwest Feeders	Nyssa, Ore.	30,000
Van de Graaf Ranches, Inc.	Sunnyside, Wash.	50,000
Para Livestock	Othello, Wash.	10,000
Easterday Ranches	Mesa, Wash.	10,000

Marketing Infrastructure

A large majority of domestically marketed beef from the Pacific Northwest is processed through three western facilities: Tyson, Swift, and AB Foods. Tyson is the largest fresh meat processor in the United States and has a facility in Pasco, Wash; Swift & Company processes Northwest beef through its facility in Hyrum, Utah; AB Foods in Toppenish, Wash. is owned by Agri Beef as part of a vertically integrated operation and primarily harvests its own cattle. Some Pacific Northwest cattle are also sent to Cargill Meat Solutions in Fresno, Calif. Other small meat processing facilities that are located in the Northwest are noted below, but none have the head per day capacity to be considered a material market:

- § Tyson Foods, Inc.
 - Head office: Springdale, Alaska
 - Western location: Pasco, Wash. – Tyson Fresh Meats
 - Processing capacity: 2,000 head per day
- § Swift & Company
 - Head office: Greeley, Colo.
 - Western location: Hyrum, Utah
 - Processing capacity: 2,200 head per day
- § Agri Beef
 - Head office: Boise, Idaho
 - Western location: Toppenish, Wash. - AB Foods Washington Beef Processing Plant
 - Processing capacity: 1,200 head per day

DRIVERS

I. Supply Drivers

§ Feed

Feed availability and cost is a primary driver in the cattle industry. Cattle on feed numbers did not follow the traditional pattern in 2006. The spring drought in the southern part of the country resulted in an inadequate supply of grass for raising calves on the range. As a result, many calves were delivered to feedlots early in the year to save the available grass for the production herds. By moving cattle to the feedlots earlier than normal, the cattle on feed number spiked well above normal levels in June through August 2006. Since cattle gain weight faster in a feedlot than on grass, many of these calves that would normally have been slaughtered in the fall, worked their way through the system earlier than usual.

The cattle on feed number will likely rebuild during the winter of 2007, with an overall shift being anticipated in 2007. Corn is a significant portion of feed rations in feedlots. With the dramatic increase in the cost of corn, it is anticipated that cattle will remain on pasture longer to utilize grass for gains to the extent available. Feedlots will likely receive heavier cattle and inventories will turn quicker. However, if drought continues and grass is not available, the cost of gain for feeding cattle will result in loss of profitability for beef animals.

§ Competition

Traditionally, there has been a lot of competition among feedlots for feeder cattle in the 750 to 900 pound range. While this continues to hold true, changing trends in the market are driving more competition for lighter and lighter feeder cattle. As feedlots have been competing for sources of cattle, the trend is toward contracting cattle at lighter weights to secure inventory. While this has been the general tendency, a reduction in the cost of corn may sway operations away from the trend.

The market spread between feeder prices and fat prices increased in recent years. (Feeder cattle are traditionally more expensive per pound than fat cattle.) The spread has historically traded within a \$7 to \$15 per hundred weight range; however, in the past three years, that margin has averaged closer to \$22 per hundred weight. Due to this average, cattle feeders have found it increasingly difficult to generate a profit on heavy cattle and many began competing for lighter weight cattle. The following table demonstrates the economics behind this trend:

	Light Calf	Heavy Calf	Difference
In Weight	480	825	
X Purchase Price / Pound	\$1.24	\$1.08	\$0.16
= In Cost	595	891	
Finish Weight	1,350	1,350	
- In Weight	480	825	
= Pounds to Gain	870	525	
X Cost / pound of gain	\$0.50	\$0.50	
= Total feeding cost	\$435	\$263	
In Cost	\$595	\$891	
+ Total feeding cost	\$435	\$263	
= Finish Cost	\$1,030	\$1,154	
Finish Cost	\$1,030	\$1,154	
/ Finish Weight	1,350	1,350	
= Break Even Sales price	\$0.76	\$0.85	(\$0.09)

§ Backgrounding

The trend for feedlots to purchase and background their own cattle is continuing; however, the economics behind the trend are shifting. With recent increases in the price of corn, feedlot costs have risen substantially since late summer 2006. Many feedlot operators are now purchasing light weight calves and turning them out on grass until they reach traditional finish feedlot weights (running their own stocker operations). The goal is to reduce the cost of the incoming cattle to the feedlot. The economics behind this strategy are summarized in the following table:

	Light Calf	Heavy Calf	Difference
Purchase weight	480	825	
x Purchase price per pound	\$1.24	\$1.08	\$0.16
= Purchase cost	\$595	\$891	
In weight @ feedlot	825		
- Purchase weight	480		
= Pounds to gain on grass	345		
Pounds to gain on grass	345		
- Cost of gain on grass	\$0.40		
= Total cost of gain	\$138		
Purchase Cost	\$595		
+ Total cost of gain	\$138		
= In cost @ Feedlot	\$733	\$891	
In Cost @ Feedlot / Pound	\$0.89	\$1.08	(\$0.19)

In some areas of the Northwest, there are indications that the price of grass (range leases) is responding to the increased demand.

Furthermore, an ancillary benefit to feeding lighter cattle is that the length of ownership is increased, which provides more time and/or opportunities to set profitable hedges.

II. Demand Drivers

Several factors affect consumers' decisions to purchase the 28 billion pounds of beef consumed annually in the United States, and 110 billion pounds worldwide. Nationally, per capita beef demand had been on a long declining trend beginning in 1986. However, the industry has since increased beef consumption by keying in on the following drivers of demand:

§ **Convenience**

With the typical fast paced, busy, American lifestyle of today, consumer-friendly products have become an important component of demand. Since 1999, sales of heat-and-serve products have increased over 100 percent. Additionally, the industry has introduced a new 14 product line of "Beef Value Cuts" selected for their palatability, tenderness, and flavor. These types of products have become essential products to increase demand for beef, compete with substitute products, and target today's consumer who has less and less time to prepare meals.

§ **Food Safety and Product Consistency**

Demand continues to be influenced by the consumers' concerns for food safety, product consistency, nutrition, and palatability. While these factors are difficult to quantify numerically, the industry has recognized these influences as being extremely important in consumer decisions to purchase beef products versus competing products, such as pork and chicken. Changing consumer preferences can greatly impact the market, which was recently evidenced by the impacts of low carbohydrate diets. The industry is attempting to address these items and continue to improve products to compete in the marketplace.

§ **Value**

Another factor affecting demand for beef is the relationship of the price of beef to consumer income levels. While beef consumption per capita has remained fairly consistent around 65 pounds per person per year, the per capita spending for beef has increased dramatically. In 1997, per capita spending was \$165, while in 2006, spending was about \$240 per capita. Consumers have shown willingness to pay for quality and continue to view beef as a premium product. An additional factor would be the price of competing proteins such as pork and chicken. Overall in 2006, beef increased in price by 1 percent, pork dropped 3.2 percent and chicken dropped 13 percent.

Due to the influences on the marketplace, several niche products and branded beef programs have entered the market. These programs all have their specific niche, but in general, are targeting improved convenience, palatability, consistency, nutrition, and food safety. Several of these programs appear to be having success in the industry, and often entice producers to participate in the programs by providing premiums for cattle that fit the specific program.

§ **Food Retailing**

The food retail industry is consolidating at a rapid pace while competition among traditional retailers and new channels of retail is increasing dramatically. Over the past decade, the food retailing industry has undergone considerable consolidation and structural change. However, all this consolidation has not increased food prices due to increased competition

from non-traditional retailers such as Wal-Mart, Costco, and upscale or ethnic stores that serve specific demographic niches.

The competition for food dollars also includes restaurants, especially fast food restaurants. Nearly half of Americans' food dollars are spent at restaurants or takeout establishments. This trend is driven by the increase in dual-income families, time-starved parents, and young adults who lack the know-how or desire to cook. As a result, many buy an increasing share of their food ready to eat or ready to heat. In response to this trend, food retailers are expanding and upgrading their frozen meal selection. Food retailers are also selling ready to eat whole meals or side dishes to compete with restaurants.

III. Animal Health Issues

Major issues relating to animal health also drive food safety including continued concern about BSE and E-coli. These issues have led to the attempted implementation of a national system to trace and identify the sources of diseases that threaten herd health and food safety. Packing facilities are looking toward feedlots to implement traceability. Currently, many packers are paying premiums to feedlots for source verified beef animals. This premium will likely lead to voluntary animal identification as the premium paid by the packer will be passed from the feedlot through the value chain back to the producer.

§ BSE

Bovine Spongiform Encephalopathy (BSE) also known as "Mad Cow Disease" is a slowly progressive, degenerative, fatal disease affecting the central nervous system of adult cattle. A variant form of Creutzfeld-Jacob Disease (vCJD), BSE is believed to be caused by eating contaminated beef products from BSE-affected cattle. Between December 2003 and September 2006 there have been three confirmed cases of BSE infected cattle in the United States.

The USDA has also tried to identify the extent of the existence of BSE within the United States. In April 2006, the USDA released a summary of data from their surveillance program. The data indicated that the most likely number of cases of BSE existing in the United States is between four and seven infected animals out of 42 million adult cattle. In July 2006, USDA announced it was transitioning from an enhanced BSE surveillance program to an ongoing surveillance program to reflect "what we know to be a very, very, low level of BSE in the United States". The Ongoing Surveillance Program will sample 40,000 animals annually. That level of testing is 10 times the level recommended by the World Animal Health Organization.

§ E-coli

During 2006, public awareness of E-coli was heightened by an outbreak of a particularly virulent strain of E-coli 0157, which attacked individuals that were thought to have eaten spinach contaminated by bacterium. E-coli can be a potentially deadly bacterium that lives in the intestines of cattle and other animals and is typically spread through contamination by fecal material. Although the live animal is the point of origin for the bacterium, the source of E-coli contaminated beef products is usually traced back to the processing facility. To avoid E-coli, USDA recommends that consumers eat only ground beef that has been cooked to 160 degrees throughout.

§ **NAIS (National Animal Identification System)**

Historically, the United States has had multiple systems for animal identification, but none that were a national, integrated system. A plan for implementing a national identification system was under consideration when BSE was detected in a Washington state dairy cow in December 2003. Confirmation of BSE infected cattle in the United States prompted the United States Department of Agriculture (USDA) to implement a voluntary program to establish a National Animal Identification System (NAIS) with the stated goal of being able to identify all animals and premises that had contact with a foreign or domestic animal of concern, within 48 hours after discovery. An implementation plan was announced by USDA in April 2006. The system is slated to be voluntary. The draft "NAIS User Guide" was published on the USDA website in late November 2006. While highlighting the benefits of participation, the guide emphasizes that NAIS is a voluntary program, calling NAIS "a voluntary state-federal-industry partnership".

Thus far, the NAIS program is designated for cattle, not other livestock species. Groups are currently working on how to incorporate other species including horses, swine, sheep, poultry, deer, llamas, and goats.

IV. Agriculture and Trade Policy

§ **Foreign Markets**

The USDA has been working very hard over the past several years to re-open foreign markets to U.S. beef, which closed several years ago after BSE was found in the United States. Those efforts gained traction in 2006 and resulted in the re-opening of beef shipments to Japan, Korea, and others. Through July 2006, U.S. beef exports were up 72 percent over the same period in 2005. The rising foreign demand is lending support to prices.

§ **Energy Policy**

U.S. energy policy is impacting the cattle feeding industry. The government is providing tax incentives for ethanol producers, and those incentives are helping to drive a significant increase in the amount of ethanol being produced in the United States. The primary input to an ethanol plant is corn. Corn is also the primary ingredient in most cattle feeding rations. As corn demand increases due to rising ethanol production, there should be upward pressure on prices, which will in turn impact costs of gain at the feedlot. There is a potential benefit to feedlots located near an ethanol plant. The byproduct of ethanol production is referred to as "distiller's grains". These distiller's grains are a high protein feed source, and can be blended back into feed rations to help drive down the cost of gain. The downside is distiller's grains are heavy, and hauling costs become prohibitive if the feedlot is not within an easy drive of the ethanol plant. At the present time, these are costs primarily incurred at the feedlot level in cost of feed and have not been absorbed in federal cattle prices offered by the packers.

§ **Environmental and Regulatory Issues**

Environmental issues are a concern in any concentrated animal feeding operation (CAFO). Regulations to build new or expand existing facilities vary from state to state, and sometime county to county, and can often times determine where a new CAFO unit will be built. The biggest concern over concentrated animal feeding is the concentration of waste. If the waste is not properly dealt with it can create some environmental concerns including pollution, odor, etc.

V. Costs and Components of Production

The major cost components of finishing cattle in a feedlot include:

- Cost of the feeder calf (feeder cost)
- Feed
- Non-feed variable costs
- Fixed costs

The benchmark measurement for cost analysis is *Cost of Gain*, measured as:

$$(\text{Total Costs} - \text{Feeder Cost}) / \text{Pounds of Gain}$$

§ Feeder Cattle

Several items can cause variability in feeder calf prices. The supply of calves is affected by seasonality and the cost of holding on to the animals, which includes items such as drought and pasture conditions. Demand from feedlots is often measured by the NASS Cattle on Feed report which provides an idea of the number of cattle currently in the feedlots. The profitability of finishing animals directly affects feeder prices. As the cost of finishing cattle goes up, the demand and price of feeder cattle usually goes down. The benchmark measurement for cost analysis is cost of gain, with prices usually reacting to the largest cost component of growing cattle (corn). The current outlook on increased corn cost will likely cause a ripple effect in the cost and/or price of all stages of cattle.

Growth of the dairy industry in the Pacific Northwest has generated an interest in developing a beef market for Holstein steers born out of the low initial cost of Holstein bull calves. Challenges to this market include longer growing periods in the feed-yard with less efficient gains.

§ Feed

The largest cost component of growing cattle after the cost of the animal is feed. Traditionally, corn is the main source of energy used in feedlot finishing rations in the Midwest and the High Plains and contributes the majority of the cost. The price of corn has a direct effect on the profitability of cattle feeding, with upward movement in corn prices putting downward pressure on cattle prices. Recent upward movement in the price of petroleum has increased the economic feasibility of ethanol as an alternative fuel source to gasoline. Twice as much corn went into ethanol production in 2005 as it did in 2002. It is anticipated that competition for corn between livestock producers and ethanol producers will keep upward pressure on corn prices into the foreseeable future. Increased supply could help compensate for higher demand if the long-term trend of increased corn yields continues. The use of distiller's grains as an energy source could also help replace some of the corn in the ration. The feeding industry is also beginning to look at alternative feed sources to replace corn.

The Northwest is a deficit corn region. On a dry matter basis, corn is 80 percent or more of a cattle finishing ration. To be able to grow cattle competitively with the Midwest and High Plains feedlots, feeders in the Pacific Northwest utilize potato byproducts as an alternative source of energy in the ration. Potato processors need an outlet for their byproducts. Slurry, cooked, and uncooked cut potatoes can be fed to cattle. Because of its high moisture content, it may take as much as four pounds of potato products to replace one pound of corn. If there are 18 pounds of corn in a daily ration, the volume of potato waste

needed does not make 100 percent replacement feasible. Potato waste can usually replace between 25 and 50 percent of the corn needed in the ration.

The other 15 to 20 percent of a finishing ration contains hay, silage, supplement, and other ingredients. Cost variability of these items affect the total cost of the ration but are not nearly as significantly as the price of corn.

Benchmarks used for management analysis of feed as a cost component include:

- Daily Gain
 - § Calculated as: “Pounds of Gain / Days on Feed”
 - § 2.5 pounds to 4 pounds per day is a general range of average daily gain with 4 pounds per day being very good and 2.5 pounds per day being on the low end.
- Feed Conversion
 - § Calculated as: “Pounds of Feed / Pounds of Gain”
 - § There is a wide variability as to what is an acceptable ratio. Influencing factors include age, breed, diet, implants, management and environmental conditions. Probably the most important factor is age. In general, younger animals consume less feed per unit of weight gain than older animals. This is because heavier weight cattle are typically less efficient at utilizing the feed, so feed conversions increase as placement weights rise. Feed conversions average anywhere from 5 to 9 pounds of feed per pound of gain.

§ **Non-Feed Variable Costs**

As feed prices move against profitability, non-feed variable costs increase in importance. Non-feed variable costs include items such as interest expense, death loss, labor, transportation, vet and health costs, marketing, repairs, supplies, and other costs.

Depending on the source of financing used, movements in interest rates can change the cost of feeding by several dollars per head. A death loss of one-half of 1 percent should normally be figured in for feeder cattle in the feedlot. Higher death loss does occur, and is often associated with management of the cattle prior to arrival at the yard. Many feedlots charge their labor expense as part of yardage cost. Recently, stability and cost of reliable agricultural labor has been affected by increased border security, immigration reform, and the appeal of non-agricultural service jobs. Most feedlots do not rely on seasonal labor like other sectors of agriculture, and it remains to be seen if the changing labor environment will have a material affect on the cost of raising cattle.

The cost of transportation of cattle to the feedlot has increased significantly over the last two years as diesel prices have peaked well over \$3 per gallon. Vet and health costs can increase significantly with sickly cattle. The movement to organic and natural cattle may actually decrease costs by eliminating hormones and antibiotics, but may increase the cost of finishing the cattle if gains are slowed and death loss increases. Separately, non-feed variable costs do not have the material significance of the cost of the animal or feed, but together these costs can mean the difference between profitability and loss.

§ **Fixed Costs**

Fixed costs in the feed-yard usually include land, buildings, and equipment. The dominate issues affecting land and facilities center on government regulation. Waste management, along with water rights, use, and availability are increasingly regulated. Urban encroachment has influenced the closure of many facilities. Regulations and isolation have

limited the areas within the United States in which large scale cattle feeding can be accomplished in a profitable manner. In previous eras processors were found close to population centers such as Chicago and Los Angeles. Now, because of regulation, zoning and transportation costs, processing is mainly found in cattle growing regions such as the High Plains.

The cost of high ticket equipment such as front loaders and feed trucks continues to increase on an annual basis, as does capital budgets to maintain facilities and equipment.

FORECAST

Most market experts and agricultural economists agree that the primary factors that will impact the U.S. beef industry in 2007 from a production standpoint are increasing feed corn prices, limited but steady growth in cattle numbers, plus higher interest and energy costs.

Significant influences that will impact beef demand in 2007 are continued consumer consumption of beef at higher price levels compared to pork and poultry, the industry's ability to consistently deliver a high-quality, safe product to consumers, and increasing export levels to the re-opening Japan and South Korean markets. All beef producers contribute dollars per head to the Beef Checkoff program which promotes beef to consumers. Consumers continue to show willingness to pay for quality proteins and beef remains as the top protein ordered from restaurant menus.

Assuming reduced feedlot placements due to deterioration in profit margins, increasing supplies of feeder calves related to herd growth, plus a limited increase in domestic and foreign demand, there will be downward pressure on cattle prices in 2007. Considering these bearish market factors, the average price for feeder calves will likely decrease 10 to 15 percent from 2006 levels. This assumes average weather conditions and no extreme economic fluctuation.

Supply Factors

Feeder calf prices will be adversely affected by increasing corn prices in 2007. Feed is second only to the price of the calf as the major production expense in cattle feeding. Historically, a 10 cent per bushel increase in corn prices has resulted in a \$1 per 100 pound reduction in fall feeder calf prices with other factors being constant. Due to record corn production in 2004 (11.8 billion bushels) and 2005 (11.1 billion bushels), average corn prices were low going into 2006, averaging \$2.02 per bushel at Kansas City. Substantially higher gas prices in 2006 resulted in increased demand for ethanol, at which point corn prices began to strengthen. Based on current and proposed ethanol plant production, 2007 ethanol production is expected to displace 25 to 30 percent of the corn traditionally used for livestock feed.

Even with a near record corn crop in 2006 (10.7 billion bushels), the average terminal price of corn is estimated to be at the \$3 per bushel level for 2007 and considering current corn futures prices, the average price in 2007 will be at the \$3.50 per bushel level. Many larger commercial feedlots locked into the lower 2005 corn prices for 2006, which held their feed costs down. The increasing demand for corn for non-feed uses is driving up demand and price. This will force feeders to press for lower calf prices in order to achieve profitability. Two factors that might limit corn price increases is that recent reduction in gas prices might curtail future ethanol plant construction and higher prices will likely increase acreage planted to corn. Another positive factor for feeders that are located in the vicinity of an ethanol plant is the ability to use the corn byproduct for cattle feed as is the case with feeders located near sugar beet and potato processing facilities.

Beef cow numbers for the current cycle bottomed out at 32.86 million in 2004, with herd growth of about 1 percent since that time. It appears that ranchers have not been in a hurry to build cow numbers due to recent drought conditions. However, retained replacement heifers have been increasing since 2003, as is the case with a buildup in the production cattle herds. In 2006, production cow herd expansion was minimal, primarily due to herd sell downs in the drought stricken Southern and Northern Plains. Should these drought areas have favorable

weather conditions in 2007, production cattle herd numbers could show a slight jump in 2007 due to restocking. The USDA beef baseline cattle report indicates beef cow numbers will grow to 33.4 million in 2007, which is about a 2 percent increase from 2004 and are projected to continue slow but steady growth each year going forward, increasing to 34.5 million by 2010.

Marketable feeder calf numbers will naturally increase with higher cow numbers. Year-to-date beef supplies are up 6 percent from the same period a year ago. Feeder calves may be more difficult to place at current prices because many feedlots are showing losses in 2006 and have higher operating costs projected for 2007. The increase in beef production as feeder numbers grow would have to be offset by domestic consumption or exports. However, the higher corn prices may result in lighter slaughter weights, which could limit growth in total beef production.

Availability of investment funds at relatively low interest rates over the past two years has acted as a catalyst to increase cattle inventories from the ranch to feedlot. Low interest expense and capital availability allowed ranchers to increase size and efficiency, and allowed feedlots to buy more calves at higher prices. Higher interest rates and possible limited agricultural growth capital in the coming year will likely press feeders and processors to push for lower calf prices to maintain profitability.

Demand Factors

After several years of substantial gains, domestic consumer demand for beef started to decline in 2005 and that trend continued into 2006 but may level off in 2007. The decline in beef sales in recent years is attributed to increased retail cost of beef compared to pork and poultry and the fall from popularity of high protein diets. Additionally, with increased living costs in the next year related to increased interest and energy, there may be a reduction in the disposable income for consumers, limiting the purchase higher cost meats and eating out at restaurants.

There is also a changing trend in the way beef is being sold to the consumer and the type of product purchased. Less beef is being purchased at the supermarket to be prepared at home and more is being bought prepared from food service retailers and restaurants. Currently, only a little over half the beef consumed is purchased at a supermarket, with most of the higher quality cuts sold by food service. This reflects the busy lifestyle of the average consumer in two job households where there is limited time for food preparation. This trend is expected to continue and in 2007, there will be a greater demand for pre-prepared beef, high quality beef and natural/organic beef. Overall in the short term, it is not likely there will be a significant increase in consumer demand for beef above the current level.

Prior to the report of BSE in the United States in December 2003, beef exports had grown to almost 10 percent of total production. Due to BSE import bans, that number decreased to 2 percent in 2004, similar to export levels of the 1980s. Prior to the BSE bans in 2003, 60 percent of all U.S. beef exports went to Asian markets, which fell to 3 percent in 2004 and 2005 and 4 percent level for 2006. The limited opening of the Japan market to U.S. beef in July 2006 and the tentative opening of the South Korea market in 2007 will likely not have much impact on exports to those countries in the short term. Since the Japanese import ban on U.S. beef, other countries (primarily Australia) have been able to meet their continuing but reduced beef consumption needs. Additionally, imports of pork and poultry increased to offset the additional loss of beef provided by the U.S. producers. Even after all import bans are lifted for U.S. beef, producers will have to take the market back from other foreign beef producers and other meats/poultry, which will likely be a slow process.

Other export markets have been more favorable to U.S. beef in the near term. For the first half of 2006, shipments to Canada and Mexico increased to three-fourths of all beef exports, which is a substantial increase from the same period in 2005. The increasing middle class in Mexico could create a growing market for U.S. beef as it is generally better quality than the local supply, and that trend should continue. Assuming no new import bans, U.S. beef exports are forecasted by the USDA to increase to 1,320 million pounds in 2007, up 43 percent from 2006, but still only about half the 2003 level. If USDA Baseline Projections are correct, beef exports will not rise to 2003 levels until 2008.

BEST PRACTICES

The federal cattle market is increasingly volatile, and that volatility can be accentuated by reports of animal disease, trade restrictions, cattle supplies, among other influences. Due to these factors, a strong price risk management program is important for cattle feeders. Those with a strong program will often forgo some profits in the good times, but will also limit losses in the bad times. Most importantly, price risk management programs guard against catastrophic losses that can result from extraordinary events such as changes in public policy, bad press, and sudden losses of markets. Sophisticated operators normally employ a risk management program that includes forward contracting or hedging feed purchases, hedging feeder cattle purchases, hedging fed cattle sales, and forward contracting purchases and sale of cattle. Other best practices include calculating breakevens on cattle before purchasing (avoiding purchasing cattle where an ultimate loss is likely), strategic alliances with other feeders and packers, and vertical integration.

Why Feed in the Pacific Northwest?

Cattle feeding is concentrated in several areas of the United States, with the common similarity being the locations have an inexpensive, high quality feed supply. Cattle are fed in the Midwest because of the corn supply. In the Northwest, the cheap feed source is most often potato waste from potato processing operations. The price of potato waste is relatively flat and not impacted by the cost of feed grains. As a result, feeders in the Pacific Northwest tend to be more competitive relative to the Midwest as the price of feed grains rise, and less competitive as the cost of feed grains decline. In recent years, the average costs of gain in the Northwest have been near to slightly above \$0.55 per pound versus around \$0.50 per pound in parts of the Midwest.

Northwest feeders have limited options in sales/slaughter plants. There has historically been a Tyson plant near Boise Idaho, a Tyson plant near Pasco Wash., and the Washington Beef plant in Toppenish Wash. Recently, Tyson closed the Boise plant, which when considering rising shipping costs, will likely have an impact on feeders in that area. Tyson closed that facility due to an inadequate supply of cattle, and noted there have been times where the Tyson Pasco plant has not operated at full capacity. The Pasco plant used to receive a significant share of its cattle from Canadian feeders; however, the supply of those has declined due to increased Canadian kill capacity and rising freight costs. Tyson Pasco has a strong need for cattle from the local feedlots. The downside is that if the locals can not provide enough cattle, Tyson Pasco could be in jeopardy of future closure. The Washington Beef plant is part of the vertically integrated business model of Agri Beef and has its own captive supply of cattle.