Introduction

Production Trends

The number of beef cows in Louisiana in 1999 was estimated at 645,567. Total cow numbers are changing less dramatically since more restraint in enlarging herd size is occurring than has been seen in previous cattle cycles. The trend in Louisiana is not dissimilar from that of the rest of the nation. The typical ups and downs that were characteristic of the cattle cycles of the past are much less obvious now, when profit and loss depend on economics of production and selling on advantageous markets.

Total gross income for 1999 was an estimated $236.9 million for the approximately 12,958 producers. Louisiana producers operated frequently at or below break-even prices because of harsh environmental conditions.

Commercial Cattle Production

The most popular method of beef cattle production, the cow-calf system, is practiced in all areas of the state, on different soil types and at different levels of intensity and management. Producers maintain and breed a herd of brood cows and sell the calves as weanlings. This segment of the beef cattle industry requires the most land and capital investment per animal unit and is more vulnerable to market depressions. On the other hand, the cow-calf enterprise can be managed with less labor than other segments of the business.

Most cow-calf production in Louisiana is a secondary or tertiary enterprise, thought of as a means of producing supplemental income. Herds are generally small (20 to 50 cows), and few Louisianians depend on them for their primary source of income.

Factors most responsible for profit or loss in a cow-calf operation are weaned calf crop percent, weaning or sale weight of calves and price received per hundred pounds. The break-even sale price for calves (a price or point at which no return is made to machinery, overhead, operator labor and management and land investment) is determined by dividing the annual cost of maintaining a brood cow by calf sale weight and then dividing that number by weaning percent (the calves available for sale expressed as a percentage of the brood cows maintained). Therefore, high reproductive rates, heavy weaning weights and low cow maintenance costs are necessary for low break-even prices, providing an opportunity for profit.

The winter stocker system, another popular system of beef production in Louisiana, involves grazing weanling or yearling cattle to heavier weights on lush pasture. It has its basis in a favorable winter growing season for ryegrass, oats and wheat. These forages provide high-quality pasture (from November to May in a good year) capable of increasing the weights of grazing animals. The general idea is to profit on the increased animal weights produced at comparatively low pasture costs.

The most important factors influencing profit from a stocker operation are final sale price, purchase price and level of daily or seasonal weight gain. Low break-even prices result from low purchase price, high weight gains and low production and pasture costs.

A cow-calf producer who elects to retain the calves he produces and increases their weight on pasture before sale is practicing a combination of the cow-calf and stocker operations. This alternative to selling at weaning is worth considering under some economic circumstances.

Finishing cattle for slaughter in the traditional American way (with grain, to weigh more than 1,000 pounds) is not practiced. This is a high risk, intensive system, requiring management expertise. It generally offers only a small profit on investment. Lack of locally produced grain and slaughtering facilities, coupled with competitive cost of production in other regions, tend to keep the grain feeding and beef finishing industry outside Louisiana.

A few cattle are fed locally on grass and in small feed lots for a short period and sold at local markets as heavy calves. There is good demand for heavy calf meat in southern Louisiana, but the market is easily saturated. Also, some types of lightweight heifer beef produced in other areas are competitive for local markets. The practice of heavy calf production will probably remain small and localized.

Purebred Cattle Production

Probably as many as 10 percent of the beef cattle producers in Louisiana are engaged in purebred or seedstock cattle production. Their primary goal is to sell bulls to producers engaged in the commercial cow-calf business. Some, however, produce high quality seedstock and sell to other producers of purebred or registered cattle as well as to commercial cattlemen. Generally, the seedstock producer is a member of the national association in which he registers his cattle. In many cases he also belongs to state or regional subsidiaries of the national organization.

The actual methods of producing purebred and commercial cattle do not differ greatly, and the same practices generally are recommended for both groups. The usual exceptions are that most potentially registrable male beef cattle are not castrated, and purebred cattle get more supplemental feeding. Intensification of other areas of management (performance and progeny testing, artificial insemination and embryo transplanting, for example) depends on the anticipated value of the stock.

National registry associations, or breed associations, help their members by (1) providing a registry and ancestral history on the purebred animal with registered parents, (2) maintaining rules governing eligibility of animals for registry, (3) promoting the breed to increase sales, (4) providing guidelines for performance and progeny testing and (5) providing many other services of value to the breeder-membership. Those interested in becoming breeders of purebred cattle are advised to contact the national breed associations for information on the particular breed and on the programs they sponsor for the benefit of the breeder-member.

Small herds of generally high-quality purebred beef cattle frequently are the result of a family's interest in 4-H or FFA youth livestock projects. In Louisiana, youth livestock projects often become family interests, resulting in the accumulation of project animals. A dynamic system of state-supported livestock shows and other 4-H and FFA activities provide the focal point for competitive and educational experiences as well as continuous motivation of youth and adult interest in purebred cattle production.

Beef Cattle Species, Breeds and Types

Louisiana has about every kind of beef cattle available in the world. Types vary from the Longhorn introduced by the Spanish in the 16th century and the British or English and Zebu types introduced in the 19th century to the Continental breeds imported in the 20th century. Most of the major American breeds and types, formed by crossing some of the above strains, also are present. In addition, unclassified, mixed types, ranging from one extreme to another, have evolved.

For purpose of general classification, the Genus *Bos* is broken down into three categories: the species *Bos indicus*, the species *Bos taurus* and crosses between the two species. The *Bos indicus* is represented by the humped cattle. Most common in Louisiana is the Brahman. *Bos taurus* includes the European cattle, both British and Continental types. The third category, crosses between the species, includes most of the American breeds and numerous crossbred types used in commercial beef production.

Although more than 100 breeds are present in the United States, only a few will be named and only for classification purposes. Examples of the English or British breeds are the Angus, Devon, Hereford and Shorthorn. The polled counterparts of some of the breeds fit that general classification, but some would argue that they are American breeds. Their ancestors, however, definitely are English or British. The Charolais, Chianina, Gelbvieh and Simmental are Continental breeds because of their origin from continental Europe. Most of the American breeds are based on crosses of the Brahman (an amalgamation of several Zebu strains and itself thought of as an American breed by some) and the British or Continental breeds. Beefmaster, Brangus, Santa Gertrudis, Charbray, Brahmousin and Simbrah are examples of American breeds. Other breeds with and without the Brahman influence are being developed now.

The differences we now see between breeds are caused by two primary factors. First, natural, physical barriers isolated or separated cattle into groups centuries ago and allowed natural and man-made selection to produce changes. Within the isolated groups, strong natural forces (cold, heat, rainfall and the availability of feed) caused cattle to evolve into different kinds. Some developed with cold tolerance; others with heat tolerance. Second, humans exerted selection pressure by demanding more milking ability in some cases and more draft strength in other cases. We also superimposed ideals about "breed purity" by selecting for certain color patterns and characteristics thought suitable for the breed. The net result is that genetic differences between breeds did evolve. Now these differences are used advantageously in the design of new breeds and breeding systems.

Generalizing is necessary in any concise attempt to categorize breed differences. Granting that some overlapping may exist, a breed's adaptability to a specific environment or herd management program and its rate of maturing (or potential mature size) will tend to categorize it. The proliferation of American breeds is an attempt to produce geographic adaptability and a maturing rate more satisfactory than the extremes.

In addition to the breed types mentioned above, a current trend in Louisiana is to produce certified F^1 females for use in commercial herds. An F^1 is the first cross of two purebred breeds. The certification is provided by one or both of the registry associations to which the parents belong and is intended to differentiate between crossbred animals of known ancestry and breed composition and mixed cattle of uncertain ancestry. Although the term F^1 is legitimately applied to the first cross of any two breeds, it is almost synonymous with Brahman X British and Brahman X Continental crosses in the Gulf Coast area. Because of its increased fertility, milk production and longevity, the Brahman F^1 female is much in demand.

The relatively new term "composite" is applied to a group of animals originally produced by crossing selected, complementary, existing breeds. After the foundation animals are produced, the new composite is thought of as a breed of beef cattle. National thinking and research are being centered on how best to record composites and evaluate their productivity. In the simplest cases, Brangus and Beefmasters and many other American breeds can be thought of as named composites.

Purchasing Breeding Stock

Health, soundness, reproductive status, age, breed or type and price are important to consider when purchasing breeding stock. Of these, price is the most difficult to specify since it will vary with demand and, to some extent, with the other factors listed above. Therefore, it must be assumed that prices represent fair market value, plus or minus an amount proportional to the uniqueness of the animal or group of animals in question.

All animals considered for purchase should meet the brucellosis and tuberculosis requirements specified by the state veterinarian and the U.S.D.A. Requirements of cattle purchased out-of-state will not necessarily be the same as those required for intrastate movement. In addition, a prospective purchaser may require additional guarantees that the animals are disease-free and will function in the anticipated role.

Unthrifty animals are risks. A prospective purchaser must differentiate between inherent unthriftiness and previous mismanagement. Mismanaged, sound, healthy animals will respond to improved management; unthrifty, stunted animals may not.

Most purebred associations have a code of ethics relating to the sale and transfer of breeding animals. In general, breeder members abide by the code and guarantee that animals will reproduce if given proper management. Since purebred, registered animals are generally more costly than commercial cattle, sellers and buyers must have a mutual understanding of the guarantee involved. At purebred auction sales, the guarantee is generally spelled out in the sale catalog.

Females can be sold as open (nonpregnant), exposed (pregnancy status unknown) or pregnant. The pregnancy status can be confirmed with a high degree of certainty. In transactions between individuals, the pregnancy status of females should be confirmed and specified. It is the responsibility of the prospective buyer to request confirmation. Females purchased at public commission barns or stockyards are not usually guaranteed in relation to pregnancy.

If you contemplate purchasing purebred, registered cattle, you should stop, look and listen. Stop long enough to inquire about the uniqueness and usefulness of a particular breed and about the activities of a breed association. Look for the best cattle you can afford, even if it means traveling some. Listen to other breeders whether they are proponents of a particular breed in question or not. A thorough study of the availability of animals, the overall position of the breed in the industry (with emphasis on future potential) and the breed association's activities is recommended. The most common error made when purchasing purebred animals is to purchase before becoming familiar with the breed and the quality and performance levels necessary to be a competitive breeder.

Breed type is an important consideration for the commercial producer. Brahman crossbred F^1 or hybrid females are fertile, long lived and milk well. They may cost more initially but generally produce more over their productive lifetime. Bull purchasing is especially important to the commercial producer. A breed which is nonrelated, or distantly related, to the breed or type of the females in the herd will produce calves with hybrid vigor and added growth.

Quickest returns on investment will usually be realized on purchases of young females nursing four- to six-month-old calves and bred back to calve again on schedule (during the same month her current calf was born). Cows with calves, bred cows and heifers are probably next in order. Virgin heifers are sometimes preferred to establish a disease-free herd or a herd uniform in pedigree composition. A quick return on investment should be given primary consideration in establishing commercial herds. Other factors might be equally or more important in establishing purebred herds.

Marketing

Many producers spend too little time on marketing. Even when considerable effort is expended to achieve maximum production levels, marketing is frequently neglected. It is important to understand that a logical marketing plan will establish goals for the overall management program and is ultimately responsible for its success.

To sell cattle advantageously, you must know the potential markets, their requirements and limitations. This basic concept is the same for both the commercial and purebred producer. Especially for the inexperienced, production for an existing market is tremendously important. With experience, an awareness of more marketing opportunities or specialized markets is gained.

Cattle can be sold from one person to another directly or though a third party. The third party can be an agent, commission house, breed association or breeder production sale. Most commercial cattle are sold through commission houses (auction or sale barns). Most purebred cattle are sold directly or through association or breeder sales. The biggest difference between selling commercial and purebred cattle is the amount of promotion required for purebred cattle. In addition to producing cattle with acceptable conformation, performance levels and desirable pedigrees, the purebred producer must display and advertise cattle to sell them profitably. When selling direct, it is important to have the cattle priced fairly and guaranteed to ensure repeat buyers in the future.

In recent years, the differences between marketing of some special types of commercial cattle (F^1 or hybrid heifer and feeder calf) and purebred cattle have narrowed. Special sales are advertised, and consignments are promoted as extremely suitable for specific purposes.

Although livestock auction sales have played a role in cattle marketing for the last half-century, innovations in marketing may become more important in the future. Video marketing has possibilities for producers with sizeable herds and good management programs. Direct sales and forward contracting should increase as management capabilities increase. But, for most producers, the livestock auction will continue to provide a service in marketing cattle.

Marketing should not be spontaneous. It should be a calculated move based on the best marketing information available. Auction managers, agents, market reports from the Louisiana Department of Agriculture and Forestry, magazine, radio and television market reports and forecasts can contribute to a marketing plan. No matter which market outlet or procedure you take, you must have a plan.