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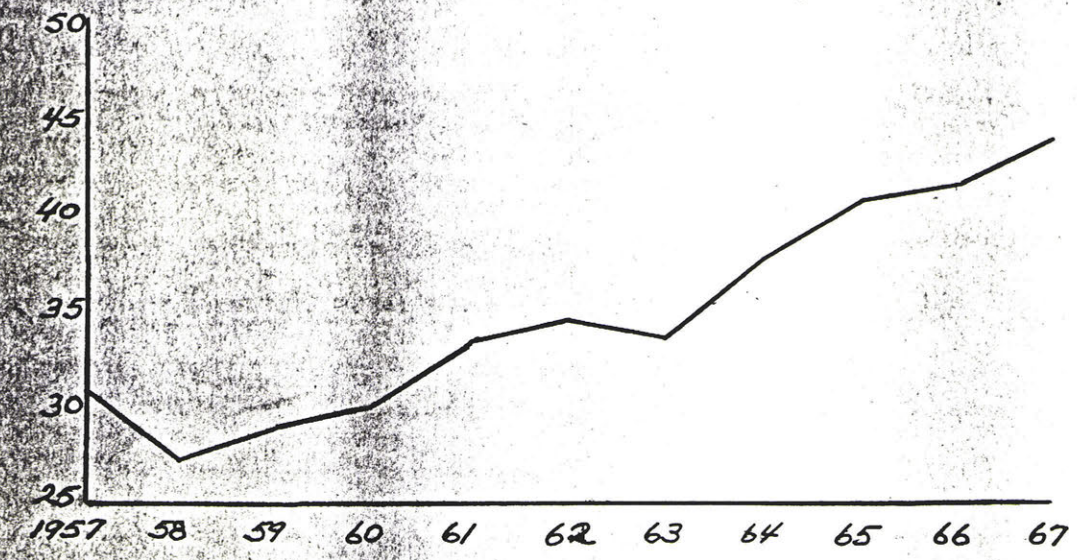
BEEF PRODUCTION IN HUMBOLDT COUNTY

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Introduction

Beef cattle production is a major livestock enterprise in Humboldt County. An enterprise that has increased markedly during recent years and now constitutes the third most important agriculture commodity in the county. In 1966, the sale of cattle and calves returned producers over $1,586,772. Some indication of the growing importance of this commodity can be made by comparing the inventory of beef cattle and calves from 1957 to 1967.

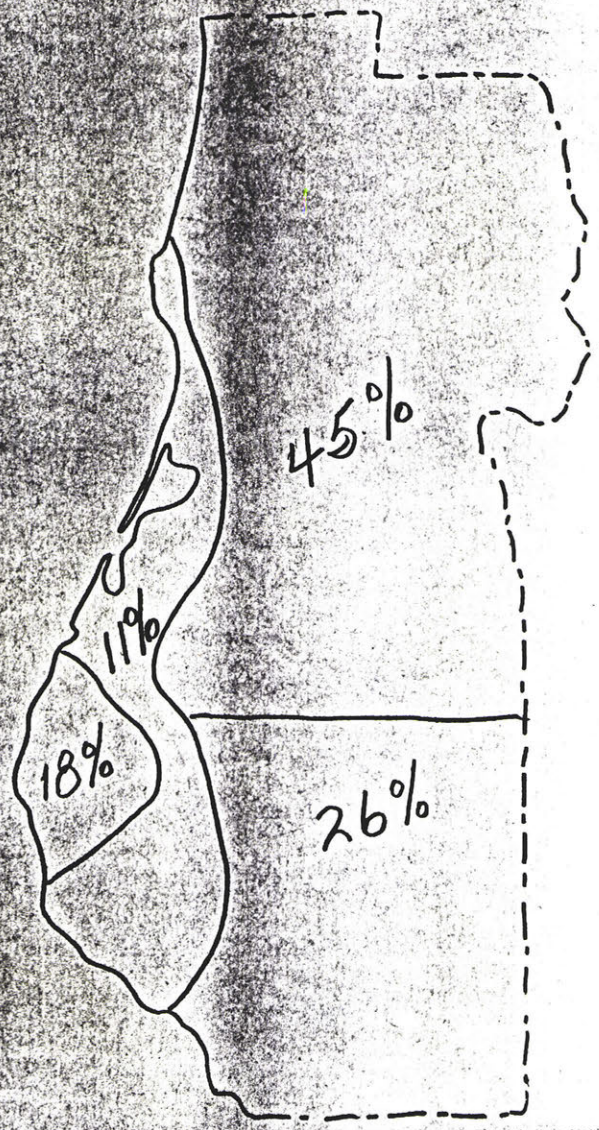
Figure 1. Number of Beef Cattle and Calves in Humboldt County 1957-1967*



* Source: California Crop and Livestock Reporting Service, Sacramento, California

On January 1, 1967, there were approximately 44,000 head in the county. Between 1957 and 1967, beef cattle units increased 121%, while sheep units declined. However, the total number of animal units competing for range land has changed very little during this period. The gain in the total number of animal units since 1960 is due primarily to an increase in beef cattle numbers. This expansion has been possible because of the release of bottom land, a grazing resource normally allocated to dairy production.

Figure 3. Distribution of Cattle in Humboldt County.



Cow-Calf Operation

Commercial cow herds producing feeder cattle for sale as weaners, (7-9 months of age) make up the largest percentage of the cattle population in the county. As the name implies, the cow-calf operator maintains a cow herd the year round to produce calves that are marketed in the fall. All calves are sold except those retained as replacement heifers. It is a stable operation, but lack flexibility in adjusting cattle numbers to meet changes in the market or feed supply.

The cattle inventory of a cow-calf operation will be composed of mature cows, bulls, and replacement heifers. There will be from 4 to 6 bulls

run to every 100 cows, depending on terrain and acreage required per breeding unit. The percentage of calf crop weaned may vary from 85 to 95% with steers weighing from 400-500 lbs. and heifers from 350-450 lbs., depending on the production zone. Mortality ranges between 1% to 4%. To maintain the cow herd, 12 to 15 replacement heifers will be required annually for every 100 cows. Because feed is required the year round to maintain the cow herd, bulls and replacement heifers, production efficiency per pound of beef is low.

To establish a cow-calf operation as an owner-operator requires a large capital investment. At current market values this investment may exceed $1,000 per breeding cow. Land and fences constitute the largest investment item and is one of the main factors limiting the expansion of herd size. Investment in barns, corrals, equipment and livestock is relatively small when compared to land. However, good barns are essential on many ranches for feed storage that is required for the winter. A good set of corrals and other equipment makes it possible to sort, brand, mark, weigh and load cattle with the least expenditure of labor. A pickup, truck and tractor may also be necessary pieces of equipment on most ranches in the county.

The income derived from the cow-calf operation depends on:

1. percentage of calf crop marketed
2. weight and quality of calves at weaning
3. prices received from the sale of calves, cull cows and bulls
4. annual operating costs

Variation in soil capabilities, climate, forage conditions, selling age, management and market trends have a marked effect on these four items.

One of the highest cost items that characterizes the cow-calf operation is feed. Top quality range or pasture provides the most economical supply of feed and is essential for the success of the cow-calf operator. However, there are times when cattlemen need to invest in additional feed to supplement native range in order to maintain efficient production. The

tendency to cut costs by not purchasing supplemental feeds is one of the main factors responsible for low production in many herds in the county. It is impossible to secure a high percentage of calves and profitable weaning weights unless the cow herd is fed adequately before and after calving.

Bulls are normally turned in with the cows in April so that the calves are dropped during January and February. However, some cattlemen are finding it to their advantage to commence calving in November. Calves born earlier can take advantage of the increased milk supply provided by the flush feed. In general, cows are in better physical condition to calve in the fall, but winter feed costs to maintain the cow herd are higher. Consideration could be given to calving half of the cows in the fall and the other half in the spring. This would allow labor to be more evenly distributed throughout the year and fewer bulls would be required. Breeding well grown out yearling heifers to calve as two year olds is another practice that should be considered.

Pregnancy testing is one way to assure that each breeding cow will produce a calf. It can be accurately diagnosed by a trained veterinarian and is normally done in the county at marketing time. Pregnancy testing is highly accurate and needs to be utilized by more cattlemen. At the completion of the pregnancy test, cattle are turned back on the range to commence another year of the cow-calf operation.

Since the selection of replacement bulls is probably one of the more important considerations towards herd improvement, producers should be encouraged to purchase only high quality bulls. Research indicates that approximately 10% of the bulls in the herd are infertile or producing semen of low quality. Since it costs approximately $150 per year to run a bull, the importance of semen testing cannot be over-emphasized.

Crossbreeding will increase in importance in the cow herds in the future. Crossbred cows live longer, produce more milk, have a higher conception rate and a larger percentage of calf crop than the straightbred. Commercial cattlemen are demanding performance tested bulls and are planning systematic

crossbreeding programs. These trends will intensify in the future.

Spring dropped calves are normally castrated, dehorned and marked at an early age during the months of April and May. At this time calves are also vaccinated against blackleg as a regular management procedure. Control of parasites, such as lice and ticks, represents an additional expense and must be accounted for in budgeting for the operation.

Gathering, sorting and shipping of calves requires considerable time and labor. In an average feed year, calves will be sold in the fall during the months of August, September and October. Transportation and marketing costs are figured in the net price received for the sale of calves.

There are several outlets that producers depend on in marketing their feeder cattle. Several sell directly to dealers or cattle feeders on the ranch. The Humboldt County Cattlemen's Association organized a market outlet for cattle belonging to the members of their Association. Two private livestock auctions also provide an outlet for many producers.

Alternatives

While most cattlemen consider the cow-calf system best suited to the county, others may offer more profit potential. Opportunities may also exist for increasing returns by combining two or more systems. The beef production study compares approximate incomes from three different cattle systems for each production zone.

1. Cow herd, selling weaners
2. Cow herd, selling yearlings
3. Cow herd, selling weaners to yearlings.

This study also presents an analysis of consignment feeding.

Weaners to Yearlings

Weaners to yearling feeders (stocker operation) involves the growing out of young lightweight calves on native feed with supplements purchased as needed. They would normally be obtained in the fall, wintered, grazed during the spring and sold in July. This type of operation offers more flexibility

than the cow-calf operation. However, there is a high risk involved because of the negative price margin between the purchase price of the calves and the sale price of the yearlings. The speculative nature of the operation, the problem of obtaining calves, the amount of capital needed to purchase them, must be considered in this type of operation. Some of the important factors effecting profits are

1. a good job of buying and selling
2. cost and efficiency of gains
3. daily gains
4. percentage death loss
5. difference between buying and selling price

Cow-yearling Operation

The cow-yearling operation merely combines the cow-calf operation with the stocker operation.

Consignment Feeding

Another alternative that cattlemen may consider is consigning feeder cattle to a commercial feedlot and maintaining ownership. Under this practice, the cattlemen would be billed for the feed cost and overage. The risk involved in consignment feeding would be similar to that of the stocker operation, except that it is increased with intensive feeding.

The present importance of beef cattle in the agriculture of the county rests chiefly unpon the animals ability to convert range forage into food for human consumption. It is not a very profitable enterprise if one expects to secure a high rate of interest on his investment. It would be difficult for an individual without sufficient capital to buy a ranch at present prices and pay for it with earnings from a cattle operation. However, to the established ranchers it respresents a way of life and many are content to live off the interest on investment and depreciation. It is vital that all ranchers examine their operation on a business-like basis.

Rapid changes are occurring in the industry bringing along new problems and demands. One of these is the increasing need for operating capital. As bankers, you are in an excellent position to know and evaluate the needs of the cattlemen in the county. The more important problems that will be faced by the cattlemen in the future are:

1. increased land values
2. high taxes
3. increased operating costs and marketing problems.