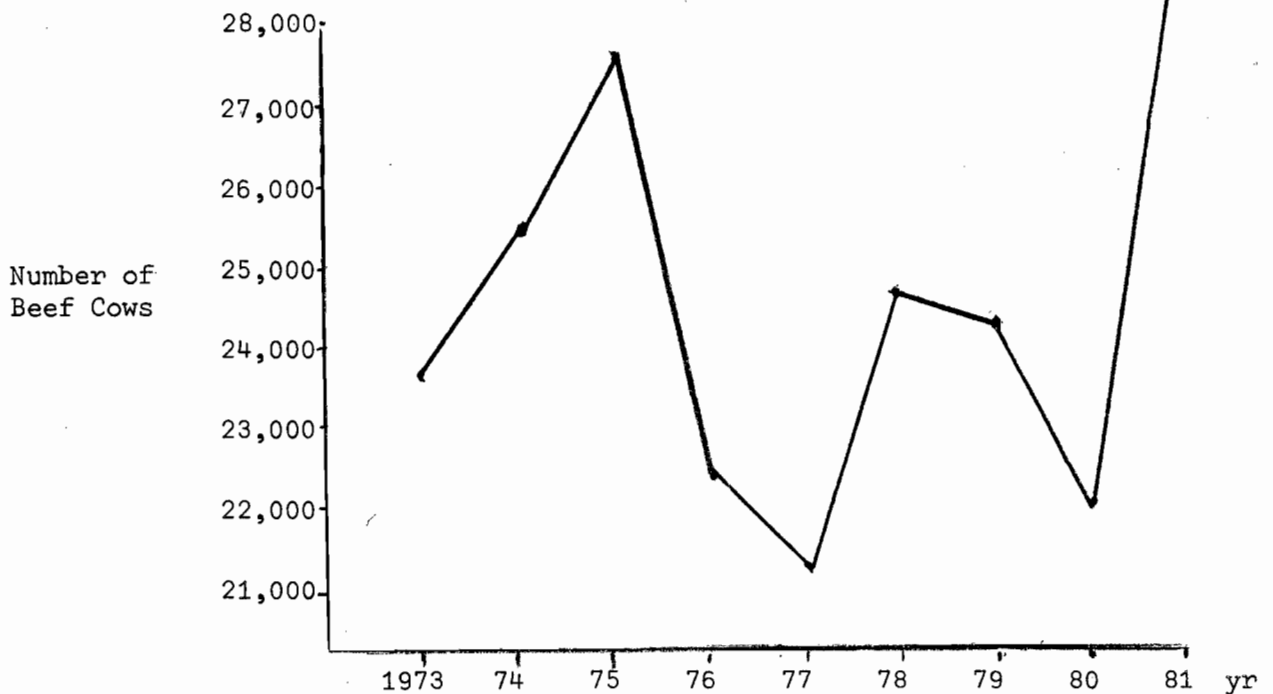


BEEF PRODUCTION IN HUMBOLDT COUNTY (1981)

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Beef cattle production is a major livestock enterprise in Humboldt County. In the last ten years receipts from the sale of cattle and calves have more than doubled--in 1970 they were \$2,377,562 and in 1980 \$5,502,400<sup>1</sup>. It constitutes the third most important agriculture commodity in the county. The numbers of beef cows and replacement heifers have been up and down since 1973; the current trend is up.

Figure 1. Number of Beef Cows and Heifers that have calved in Humboldt County 1973-81\*



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

1. Taken from "Humboldt County Agricultural Crop Report" written by the Humboldt County Agricultural Commissioner.

On January 1, 1981, there were approximately 28,000 head of beef cows and calves (excluding steers). Between 1973 and 1981, beef cattle units increased 15% while sheep units declined. Beef cattle have been increasing in the last five years primarily because of heavy predation on sheep. This has resulted in a shift from sheep to beef cattle in the areas of high predation.

### Types of Operations

We actually have three types of beef operations. The cow-calf operator raises calves and sells most of them at weaning time. The stocker operator buys calves weighing 400-500 pounds, puts them on pasture, and sells them at 700-750 pounds. The third type is a combination of a cow-calf and a stocker operation; in some cases the operator may even retain ownership of the cattle through the feedlot.

### 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 beef cattle operations 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 lacks flexibility in adjusting cattle numbers to meet changes in the market or feed supply.

The cattle inventory of a cow-calf operation consists of mature cows, bulls, and replacement heifers. Operators run 4-6 bulls to every 100 cows, depending on terrain and acreage in the breeding pastures. The percentage of calf crop weaned may vary from 85 to 95% depending on the production zone and

other factors, such as weather at calving, health of the pregnant cow, and fertility of the bull. The weaning weights of the steer calves vary from 450-550 pounds and the heifers from 375-450 pounds. Mortality on the calves range from 1-4%. 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 requires a large capital investment. At current market values this investment may exceed \$1500 per breeding cow. Land constitutes the largest investment item and is one of the main factors limiting the expansion of beef herds. 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 during winter months --in the mountain areas the rancher figures a half ton of hay for each cow. A good set of corrals and other equipment makes it possible to sort, brand, mark, weigh and load cattle with less labor. A pickup, truck and tractor are usually necessary equipment on most ranches in the county.

The income 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

Feed is important in a cow-calf operation. 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 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 in low production in many herds. It is impossible to attain a high calving percent and heavy weaning weights unless the cow herd is fed adequately before and after calving.

Bulls are normally turned in with the cows in April so calves are dropped during January and February. However, some cattlemen are finding it more profitable to calve in November. Calves born in the fall can take advantage of the increased milk supply provided by the flush feed in the spring. In general, cows are in better physical condition to calve in the fall, but feed costs are higher in the winter to maintain the cow and calf.

A good cattleman will calve his first calf heifers at two years of age. This does take a good nutrition program for the heifers, but you get a calf one year sooner than waiting until they are a three year old.

Pregnancy testing is one way to assure that each cow will produce a calf. It can be accurately diagnosed by a trained veterinarian and is normally done at marketing time. Pregnancy testing is accurate and should be used by more cattlemen.

Since selection of replacement bulls is one of the most important considerations in 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 produce semen of low quality. Since it costs approximately \$200 per year to run a bull, the importance of semen testing cannot be over-emphasized.

Crossbreeding is important in commercial cattle operations. Cross-bred cows live longer, produce more milk, have a higher conception rate and a higher calving percent than straightbred cows. Commercial cattlemen are demanding performance tested bulls and are planning systematic crossbreeding programs. Research has shown that crossbreeding can increase weaning weights by 15%.

Spring dropped calves are normally castrated, dehorned and marked at an early age during the months of April and May. Many calves are also vaccinated against various diseases at marking time. Most cattlemen have a regular program to control internal parasites and external parasites, such as lice and flies.

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 use in marketing their calves. Several sell directly to dealers or cattle feeders on the ranch; others sell them at local auction yards or truck them to Cottonwood.

## Stocker Operation

These cattlemen buy feeder calves at about 400 pounds and market them at 700-750 pounds. Most of these cattle grazed the fertile bottomland with little or no supplementation. These producers carry their largest inventory in the spring and summer months. 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. For example, a producer could buy a feeder calf for 64¢ a pound and may only sell it for 57¢ a pound. (This is not uncommon). Let's look at this closer:

Buy 400 lb. feeder steer in January at 64¢	=	\$256.00
Sell 750 lb. yearling in August at 57¢	=	<u>427.50</u>
Margin		\$171.50

The margin must cover all operating costs plus a profit.

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 gain
3. daily gains
4. percent death loss
5. difference between buying and selling price
6. interest rate

## Combination of Cow-Calf and Stocker

This operation isn't too common in the county, but some cattlemen have a "hill" ranch and some land on the bottomlands. Usually they run the cow-calf operation on the hill ranch and run the stocker operation on the bottomland. This operation is more stable than the stocker operation, as the cattlemen can use his own calves to put on the bottomland pastures.

In some cases cattlemen may retain ownership of cattle when they enter a feedlot. This is referred to as consignment feeding. Under this practice, the cattlemen would be billed for the feed costs and a yardage charge. In some years this has been very successful for cattlemen, but other times it hasn't made them much return on their investment. The success or failure of this practice depends on what the market price is at the time.

## Outlook

The present importance of beef cattle in Humboldt County rests chiefly upon the animals ability to convert range forage into food for human consumption. It is not a very profitable enterprise if one expects to obtain a high return on his investment. It would be very difficult for an individual without sufficient capital to buy a ranch at today's prices and pay for it with earnings from the cattle operation. However, to the established ranchers it represents a way of life, and many are content to live off the interest on their 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 new problems and demands. One of these is the increasing need for operating capital. The

important problems that cattlemen face in the future are:

1. increased land values
2. high interest rates
3. increased operating costs
4. reduced demand for beef
5. competition from imported beef
6. increasing government regulations