



Raising Beef Calves



Fig. 1.—A uniform bunch of calves raised in Muskingum County. Such uniformity is highly essential for finishing off home raised calves in the feedlot.

By

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SOIL CONSERVATION programs in Ohio are bringing about an increase in the production of good roughage and a larger acreage of pasture. How to use this pasture and roughage to the greatest advantage must receive consideration along with the program of production. Beef cow herds for raising feeder calves can be maintained almost entirely on pasture and roughage, and are proving to be one satisfactory solution to this question.

Whether such a cow herd will fit into your particular farm scheme is a matter which you alone can decide. Even though your farming and cropping plan may appear to be ideal for it, there still remains one factor far more



Fig. 2.—Home raised heifers produced and being finished for market in their Pickaway County feedlot.

important. Are you personally interested in such a herd, or does it appeal to you only as another cog in the scheme of things which can be operated mechanically? Unless you are the kind of person who gets a thrill out of walking through a bunch of cows in a nice bluegrass pasture where the calves are lying about or nursing their mothers, then this program will probably not work out so well in your case.

Feeder Calves Raised on Ohio Farms.—No particular section of the state seems to be better adapted than any other. However, size of farm does seem to have an important bearing. Small farms that do not afford sufficient pasture, or enough roughages, are not so well adapted to this program.

The opinion has often been expressed that southeastern Ohio was particularly adapted to the raising of beef calves, and that more productive lands in other sections of the state could not afford to maintain beef cow herds for the raising of calves. A recent "Land Use" survey, made by County Agent F. K. Blair of Pickaway county, brought out the fact that there were 207 beef

cow herds on the farms of that county. The herds varied in size from 5 to 75 cows. Although Pickaway county is located in south central Ohio, the character of its soil and the lay of the land would not permit it to be grouped

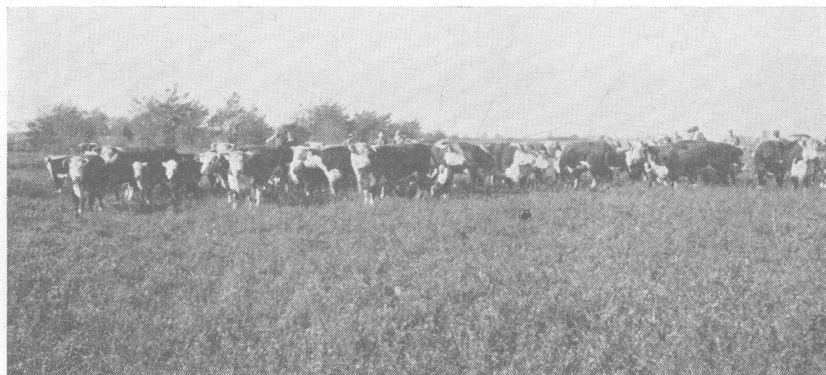


Fig. 3.—This herd of purebred cows in Madison County is grazing on an alfalfa pasture.

Such pastures are widely and successfully used for grazing beef cattle in all parts of Ohio, with the hill counties in southeastern Ohio which are generally thought to be adapted to beef growing.

For several years, feed cost records were kept on beef cow herds from which calves were raised. More of these record herds were located in Madison county than in any other part of the state. Apparently the chief difference in maintaining beef cow herds on more productive and less productive farms is that a herd of given size can be maintained on a smaller acreage of good land than it can be on poorer land.

Size of Herds.—The last year for which feeding cost records were secured on these cow herds was in 1934-1935. At that time, reports were gathered from 25 herds in which there were a total of 800 cows. The herds varied from 8 to 64 cows each. There were two purebred herds of 8 cows each; one was an Angus herd located in Knox county and the other a Short-horn herd in Wood county. Although 64 cows was the largest single herd, one owner had a total of 118 cows, but these were divided into three herds and were located on separate farms.

Calf Crop Better Than 90 Per Cent.—During 1934-35, these 800 cows raised 757 calves to weaning age. This gave a calf crop of 94.6 per cent. Eight of these 25 herds raised a calf for every cow, that is, a 100 per cent calf crop. The lowest was 79 per cent. During five years in which records were kept on such herds in Ohio, the average calf crop raised in all the herds has never been below 91 per cent, and the lowest individual record of a single herd was 70 per cent. This latter occurred in a herd affected with Bang's disease. According to the weight reports given by the 25 owners when the calves were weaned, the average weight was 441.6 pounds per calf.

Rations Vary Widely.—The kind and amount of feeds used by different breeders varied widely, depending upon what they had available on their farms. Cheap roughage, which for the most part was unsuitable for other

classes of livestock, made up the bulk of the feed for winter maintenance in many of these herds of dry cows. In those cases where calves are dropped in the fall or early winter, the cows must be more liberally fed. Some of the



Fig. 4.—These Shorthorns are in a good bluegrass pasture in Miami County.

herds included in the summary were of this type. One of these consisted of 48 cows on which the yearly feed cost was \$20.97 per cow. The following four rations are taken at random from those in use with the different herds:

1. Corn silage, 30 pounds; oats straw, 5 pounds; with some corn stover for a short time.
2. Mixed hay, $5\frac{1}{2}$ pounds; corn stover, $\frac{1}{3}$ shock per cow daily.
3. Corn stover, $\frac{1}{2}$ shock per cow daily, plus winter bluegrass pasture.
4. Mixed hay, 10 pounds; corn stover, $\frac{1}{4}$ shock; ear corn 1.8 pounds per cow daily.

The last ration is from one of the herds from which fall and winter calves were raised. In two instances where corn stover and poor quality hay made up the bulk of the winter ration, $\frac{1}{4}$ pound of protein supplement was fed per cow daily after the calves began coming in early spring. In most of these herds the calves began coming in March, with the greater number being dropped in April and May. Calves that come later than June are too small to go into the feedlot and do well after being weaned in October or November. Calves coming in April or May are most satisfactory on this point.

Uniformity of Calves Desired.—The more uniform the calf crop can be kept, the more satisfactory the calves will feed out. Maintaining this uniformity has been one of the big problems in herds that have been established for several years. The usual tendency is for the calf crop to string out over a period of 3, 4, or even 5 months. To avoid this, the bull should be turned with the cow herd for only a definite period of 2 or 3 months, then removed entirely. Following his removal from the breeding herd some cows may show up that are not bred. Such individuals should be culled out and sold in the fall when they are grass-fat. In this way the overhead is cut down. Young heifer calves can be selected to make replacements.

Time of Breeding.—With reference to turning the bull with the cow herd, first decide when the calves are to come, then determine when the bull

should first be placed with the cows, figuring ahead approximately 283 days. At the end of 2 or 3 months, remove the bull from the cow herd. This makes for the desired uniformity in the calf crop as already referred to.

There is a second and very important reason for removing the bull. If he is allowed to run with the herd indefinitely it invariably happens that some of the heifer calves will be bred at the age of 6 to 7 months, while still nursing their dams. Many beginners in this business have to be "shown" on this particular point, but one experience convinces them.

The question is often asked whether beef cows of this kind will breed while they are nursing their calves. The percentage calf crop already referred to is the best answer that can be given to this question. All of these cows were bred while they were nursing the preceding calf crop.

One breeder has succeeded in getting his cows bred very quickly by separating the calves from their dams during the day, keeping them in a lot or corral where they are grain-fed. They are turned with the cows in the evening and remain with them over night. The bull is also allowed with the cows only at night, being kept in a lot during the day time where he is liberally fed. Under this plan the cows have settled in a shorter period of time and they have produced a higher per cent calf crop than they did by allowing the bull and the calves to run with them twenty-four hours per day.



Fig. 5.—Home raised yearling steers on the farm of Ralph Yost, Perry County. An Angus bull crossed on grade Hereford cows produced these black, polled whitefaces.

The Bull Is Half of the Herd.—The bull is of utmost importance, because profits are directly in proportion to the quality of the calves raised. A good purebred bull of acceptable type will bring about remarkable improvement in the calf crop when mated to a rather ordinary herd of grade cows. While cows of good beef type are desirable, extra money need not be spent on buying the best that are available if cows of medium beef type can be secured at a considerable saving in money. It is perfectly correct to economize in buying the cow herd, but economy in buying the bull, if this means sacrificing good beef type, is not a wise procedure. On an average size herd, increasing the investment in the bull by \$50 to \$100 may easily be paid back in a single crop of calves.

Regardless of his breed, the bull should be blocky, compact, square, and low-set. Ideal beef conformation for a bull means that he should be broad over the back and loin, wide and square at the rump, deep in the middle, low in the flank, and possess a plump, full hindquarter. Quite often beef bulls are over-developed in the head, neck, and forequarters, but very light in their development of hindquarters.

It should be remembered that in the beef carcass the highest priced cuts are in the rear quarters. Therefore, the greatest care and attention should be given to the development of these parts in the selection of a bull. While a good head is desirable, yet a good head in itself without proper beef type in the rest of the body is of no particular value. Emphasis should always be placed on shortness of leg, for as one prominent authority has well said: "The legs never grow shorter, they always grow longer."

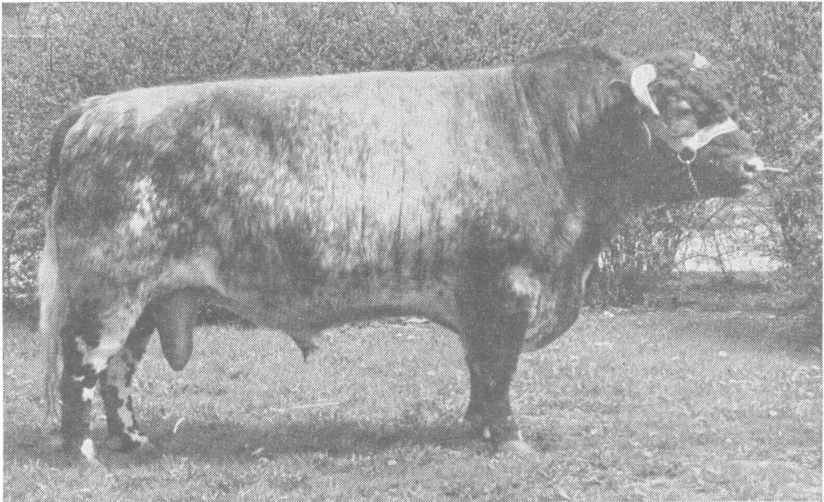


Fig. 6.—Good bulls of this type will produce profitable calf crops. Regardless of breed, the bull should be blocky, compact, deep, thick, and low set.

Foundation Females.—In founding a herd, the start may be made by the purchase of mature bred cows, either with bred heifers or with young, unbred heifer calves. More Ohio herds have been started with heifer calves than in any other way. These heifers are usually bred to calve when they are about 2 years old. During the winter, before dropping their first calves, they need more liberal feeding than mature cows. Also, for the summer, while nursing their first calves, they will need especially good pasture. Such heifers in calving the first time should be closely watched in order to render help if it is needed.

Avoid Bang's Disease.—Bang's disease has been one of the most serious problems encountered in the maintenance of these herds. Carelessness in buying the foundation females or in making additions to the herd has made it possible for this disease to get a foothold. If only blood-tested females are used in starting a herd, and all outside additions later made are also blood-

tested, it will be a safer plan. To avoid this disease at the very start probably one of the best plans is to buy young, unbred, heifer calves, getting them just after they have been weaned from their dams.

Shelter.—After the calves are weaned in the fall, very inexpensive shelter will provide all that is needed for the cows in winter. Open sheds or a straw shed are the types most commonly in use for this purpose on Ohio farms. However, if the plan of fall calving is followed, more protection from storms and bad weather must be given to both the cows and calves.

Dehorning and Castrating.—Dehorning of all calves is advisable in the case of grade herds. This should be done as early in the life of the calf as is practical. From 2 to 4 weeks of age is a good time if the weather is suitable. On the very young calf, when the tender horn buttons first appear they can be treated with a caustic stick or paste, which will stop further growth. This method must be used before the calf is 10 days old. Beyond that time the horn has made too much growth for it to be effectively stopped by the use of the chemical. The caustic stick must be wrapped in heavy paper to protect the hands of the operator, and it should never be touched to the lips

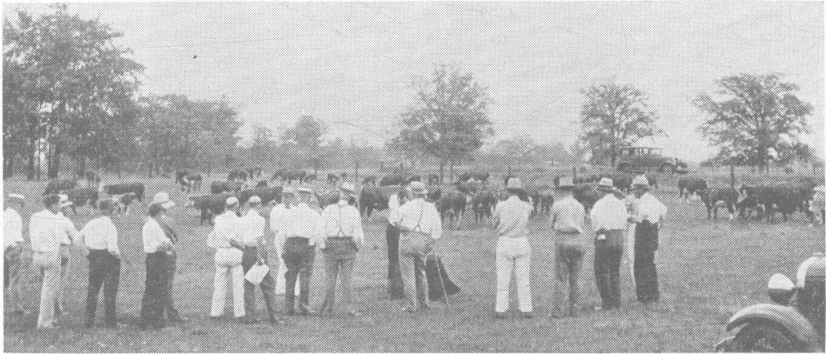


Fig. 7.—This herd of 50 cows was raising 51 calves at the time this picture was taken. Every cow calved and one produced twins.

for moistening. For the inexperienced user, the hair should be clipped around the horn and vaseline applied on the skin surface; in this way the skin around the horn is protected from burning. After using it, the caustic stick must be enclosed in a tightly stoppered bottle; otherwise it will dissolve because of contact with the moisture in the air.

Other methods of dehorning are by the use of the saw, clippers, or cup dehorners. The earlier this operation is performed the easier it is to restrain the animal and the less difficult it is for the operator to do the job. Dehorned cattle are usually more quiet in the feedlot. They also make a more attractive appearance to the buyer and often command a slight premium over horned cattle.

All male calves in the grade herd should be castrated as early as possible. Avoiding fly-time is a wise precaution in doing this work. It should be done between the age of 2 and 4 months. Smaller animals can be handled with

much greater ease than larger and stronger ones. Therefore, castrating should be done as early in the life of the calf as is practical.

The operation may be performed either by the use of the knife or by using the pincer type of emasculator. In using the knife, cleanliness is of utmost importance. In using the pincers, extreme care must be exercised in applying the instrument, otherwise slips will occur, resulting in staggy animals.

Creep Feeding of Calves.—Is creep feeding of calves practical? This is a question frequently raised. If the calves are to be pushed for market soon after they are weaned, then creep feeding heavily on grain will pay. However, if the calves are to be carried on for 6 or 8 months in the dry lot after weaning, creep feeding heavily with grain has been found too expensive. It likewise slows up their later gains in the dry lot because of the extra finish developed by such creep-fed calves. Most Ohio herd owners who formerly followed the plan of creep feeding have abandoned it for that reason.



Fig. 8.—Grade cows of fair quality mated to a good purebred bull will produce choice calves such as shown in this Muskingum County herd.

In the case of purebred calves being developed for sale as breeders, creep feeding will pay. Even though grain feeding in a creep does not ordinarily pay, a few herd owners have had excellent results from feeding legume hay or good mixed hay to the calves in a creep. After getting started to eat it, they will consume surprising amounts, and the outcome has been highly satisfactory. If this plan is started about the time bluegrass pasture begins to get short, the calves will not suffer any setback, which so often happens about that time.

Quality In Breeding Stock More Important Than Breed.—“What breed shall I use in starting such a herd?” Personal preference should play a big part in this decision. If there is no preference, then accessibility of breeding stock and numbers from which selections can be made are important points. A great deal more care should be given to picking the individuals within the breed than the selection of the breed itself. There are good ones and bad ones in all breeds. Never lose sight of the fact that calves of good quality must be produced if any profit is to be realized. A good bull must head the herd to achieve this purpose. What breed he belongs to is not nearly so important as is the question—“How good is *he*?”