Raising beef cattle in Iowa
CONTENTS

Prospects for the beef producer ......................................... 460
Iowa beef producer has competitors .................................... 463
Why raise beef cattle? ..................................................... 464
Where beef production fits ............................................. 465
The successful beef producer ........................................... 466
Feed costs must be kept down ....................................... 467
Feeds needed for beef cows ........................................... 467
Good pasture cuts costs ............................................... 469
A calf from every cow .................................................. 470
Plan on early calves .................................................... 470
Make sure the bull is a breeder ...................................... 471
Good pasture at breeding time boosts the calf crop .......... 472
Guard against abortion and sterility ......................... 473
Be on the job at calving time ....................................... 473
Keep overhead costs low ............................................. 474
Some labor saving practices ........................................ 477
Fly and parasite control pays ..................................... 477
Cattle like shade ......................................................... 478
“Quality” pays dividends ........................................... 478
Getting a start in beef cattle ....................................... 479
Maintaining the herd .................................................. 480
Age to breed heifers ................................................... 480
The bull is more than half the herd ......................... 482
Crossbreeding of beef cattle ...................................... 483
Does creep feeding pay? .......................................... 483
What to do with the calves ....................................... 484
Marketing home-grown feeder calves .................... 485
Put up an attractive package ................................... 486
Cooperative selling of feeder calves ...................... 486
Raising Beef Cattle in Iowa

By Rex Beresford

Beef cows, grass and roughage are a natural combination. They fit together. No smart farmer thinks of raising beef cattle unless he has considerable pasture and roughage. Most range men and even some Iowa farmers with mainly one product to use—grass—have little choice as to means and methods. With them it is either beef cattle or sheep. But most Iowa farmers have several alternatives as to what they may do with their land and crops—even their grass.

It is small wonder, therefore, that interest in beef cattle and numbers of beef cows in Iowa fluctuate. Numbers kept have been affected in confusing ways sometimes, by such things as relative returns compared with other available enterprises, prices of feeder cattle, changes in land use, and by feed supply, labor and income situations.

High feeder cattle prices stimulate interest in cattle raising in Iowa. High prices for grain, hogs and dairy products tend to increase crop acres, cut grass and roughage production and pull in the opposite direction. Good farm income and labor shortage induce some farmers to look for less intensive enterprises and consider beef production. Uncertainty as to future price trends and expectation of lower prices cause many to want to “play it safe” with cows rather than invest in feeder cattle.

The argument is perennial as to whether so-called high priced Iowa land can be used profitably to maintain beef breeding herds and produce feeder cattle in competition with the range states. Probably it will never be settled to the satisfaction of everyone. It may surprise some Iowans, however, that a survey made by a farm and ranch loan representative of one of the big life insurance companies showed only slight differences in total investment in land and equipment used per breeding beef cow as between range areas as a whole and midwest farms. Capital investment per cow was actually somewhat higher in some well known range areas than on most Iowa beef-producing farms.
Beef cattle price levels and returns to the beef producer depend even more on the consumer’s ability and willingness to buy beef than on the relative numbers of beef cattle and the beef supply. But the latter also is usually extremely important.

As most cattlemen know, we have had for many years in this country pretty clearly defined and more or less regular up and down swings or cycles in cattle production and numbers. These cycles have at times been shortened or lengthened by drouths, wars, depressions and other extraordinary situations. We have had seven such cycles in the past 90 years, with some indications of a tendency for them to shorten in recent decades.

During the periods of upswing in production, cows, heifers and young cattle are held back from market to rebuild breeding and stock herds. Marketing lags behind production so slaughter supplies are curtailed and prices are supported by the triple demand for breeding, feeder and slaughter stock. As numbers build up, available feed supply per head generally shrinks and marketing is stepped up. On the downswing of the cycle, cattle are marketed faster than they are being produced and prices tend downward unless supported by extraordinary demand.

In 1949 there is considerable evidence that we have reached the bottom of a short and unusually painless—from the price standpoint—downswing in the cattle cycle. We are about to start or perhaps have already started to rebuild cattle numbers.

This, barring drouth or a major depression, should curtail marketings for slaughter and tend to sustain prices for a period of perhaps 4 or 5 years. This does not mean that cattle prices will be immune to the effect of general price level changes. But it is likely to maintain the beef producer in a good trading position in relation to most other farm products.

The descending half of the cycle this time, if complete, has been short and the cut in numbers relatively light. Total cattle numbers have dropped from just under 86 million in
Iowa stands second only to Texas in total numbers of cattle. In addition to being the top cattle-feeding state, Iowa ranks sixth in the number of beef cows and heifers 1 year old or over with a total of 840,000 head in 1949. Only the states of Texas, Nebraska, Kansas, Montana, and South Dakota have more breeding beef cattle.
1945 to around 78.5 million in 1949. The previous downswing in the mid-thirties, accentuated by drouth and depression, was from a high of around 75 million head to a low of under 66 million at the start of 1938.

Unless interfered with by such things as drouth or depression, the prospective upswing in cattle numbers should be rapid and perhaps to the highest level in history. We might readily enough have 90 million or more cattle by 1954 or 1955. Past experience would lead us to expect a total increase of around 10 percent in the first 3 years of ascending numbers with an additional 15 to 20 percent in the following 3 years. So great an increase is hardly probable because it would run into short feed supplies even with good weather conditions.

But feed supplies should be adequate for 90 million or more cattle because the reduction in numbers of horses and mules since the early twenties has released enough hay and pasture lands to maintain 18 or 19 million additional cattle and calves. In addition there has been considerable improvement in pastures, pasture management and increases in yields and production of other feeds.
With normal business conditions, demand should keep up with probable supply since our population has grown at the rate of nearly 2 million a year for the past 5 or 6 years, and we are now a nation of close to 150 million people, with 160 million predicted by 1960.

One fact significant to the beef producer in the present situation is that most of the over-all decline in cattle numbers has been in dairy cattle, steers and young stock. There has been little or no cut in beef cow numbers, which are close to 16 million head, about the level of 1945, compared with but 10 million in 1938. This makes possible a quick comeback in calf production.

**IOWA BEEF PRODUCER HAS COMPETITORS**

The Iowa beef producer or the prospective one may well consider the fact that he does not have the field to himself. There are some 700 million or more acres of range land in the United States, a large part of which is suited mainly to the maintenance of breeding beef cattle or sheep. Wheat acreage limitation may increase this area. There is little choice as to the use of this land. Mostly it is cattle or nothing.

Probable corn and cotton acreage controls and increased emphasis on soil conservation with resulting increases in grass and roughage production are likely to enlarge beef cattle numbers in the Midwest and South. Probably the greatest opportunity to expand beef cattle numbers is in the South. Rapid increases in beef cattle already have taken place in many of the southern states during the period of generally declining cattle numbers. Florida now stands tenth among all the states in beef-breeding cattle numbers; and the three states of Florida, Louisiana and Mississippi together have as many beef cows as Wyoming, North Dakota, Arizona and Utah combined.

The Iowa beef producer will have to depend on increased demand and even more on increased efficiency in production and on improvement in quality to meet such competition.
WHY RAISE BEEF CATTLE?

Most men who have undertaken beef cattle production as a stable and regular part of their farming business have done so for some or perhaps all of the following reasons:

1. They are interested in and like beef cattle and the cattle raising business.

2. They know that the beef herd can use pasture and forage effectively and make the best possible use of large amounts of low-grade roughage.

3. They figure that relatively low overhead and labor costs are involved in the cow and calf business.

4. They believe that financial risks are less in beef raising than in buying and feeding or grazing cattle.
5. They are convinced that they can produce home-raised calves to make use of their grain and high-grade roughage or to sell as feeders at a cost at least no higher on the average than the price of similar range-produced cattle.

While these reasons certainly are not valid for all farms under all conditions, many Iowa farmers have proved to their own satisfaction that they do apply for them.

WHERE BEEF PRODUCTION FITS

Straight commercial beef production is an extensive type of enterprise. Net returns per unit usually are not large and considerable volume is needed to make much income from a beef cow herd. Labor requirements are not large. For these reasons commercial beef cattle production is not satisfactory in any section of the state as the only or even the major enterprise on the small or average-sized Iowa farm which has considerable labor to employ.

But beef cows afford one of the best and in many cases about the only practical means of utilizing large areas of pasture on the rougher sections and many smaller areas on a lot of Iowa farms. In addition they afford the most practical means of using much of the low-grade roughage such as stalk fields, corn stover, straw and other crop residues that otherwise might be wasted, and bring some income from it.

There are two general situations where the commercial beef cow herd has been popular in Iowa.

One is the so-called "general farm," where the beef herd is a sideline no larger than is required to make use of a little permanent and perhaps some rotation pasture in summer and to utilize surplus low-grade roughage and crop residues in winter. Such herds may run in size from 8 to 15 head, or more on larger farms. An average number seems to run about one cow for each 8 or 10 acres of cropland in the farm. The smaller herds usually include the family milk cow, and at times several of the cows are milked and the calves hand fed or raised two to a cow.

Commonly the calves with perhaps some purchased feed-
ers are fed out on the farms where produced to make use of surplus grain and better grade roughage. Others find their way to market as stockers or feeders, mainly through the sale barns or through the hands of traders.

Where well managed such herds have relatively low feed and production costs which compare favorably with those of range or other cattle-producing areas. Their chief handicap is likely to be lack of breeding, quality and uniformity. The small herd owner rarely feels justified in investing in a beef bull good enough to sire top-grade calves. Calving dates are often spread over too long a time and calves are uneven in age and size. In spite of these handicaps relatively low feed, labor, risk and equipment costs make this type of beef production surprisingly general and apparently satisfactory even in high land value areas. Such “sideline” herds are found in every county and probably make up at least half of Iowa’s beef cow population. Even such corn-hog-cattle-feeding counties as Iowa, Tama and Johnson regularly stand high on the census list in numbers of beef cows on farms. Considerable numbers of small purebred beef herds also are maintained on such general farms.

The other major situation in which we find successfully operated cow herd enterprises is on the larger farms, from a half section up, in areas with a high percentage of permanent pasture. Here the beef herd is often the main enterprise and chief source of income. Even here the most successful operators are those who have a reasonably good balance between crop and pasture acreages with opportunity to engage in some other types of livestock operations in addition to the beef cow herd. Many of them fatten out the calves they produce, either on home-raised or purchased grain, rather than sell the calves as feeders. Such a farm is also suited to the handling of the larger specialized purebred herd.

THE SUCCESSFUL BEEF PRODUCER

Visits with considerable numbers of Iowa farmers who have made beef cattle raising a part of their long-time successful farming operations and a study of their methods and results provide the basis for most of the following sugges-
tions. Some experimental work, surveys and costs and methods studies in Iowa and other Midwest states also have been drawn upon. Study of the production records of some 75 entries in 3 years’ work with the Iowa Carlot Baby Beef Production Contest has been another source of information.

Here are presented some of the essentials which these sources show contribute toward the success of an Iowa beef production enterprise.

**FEED COSTS MUST BE KEPT DOWN**

Profits are not made from starved cattle. A beef cow must be fed well enough through the winter to produce and care for a vigorous calf in the spring, if she is to pay her way. But perhaps the most common mistake among Iowa cattlemen is that they winter-feed their beef herd too well and too expensively. We might well take a leaf from the range man’s book. He tries to have his cows in good condition in the fall, but winters them on dry range with some prairie hay and protein cake during storm periods and toward calving time. Then he furnishes the best possible pasture through the rest of the year.

To keep down feed costs, the Iowa beef cow man must keep his cattle and feed in pretty accurate balance, with a fair reserve supply of roughage and pasture for drouth or other emergencies. It is important to carry no more cows in the breeding herd than can be maintained on the feed and pasture it is desired to market through such cattle.

**FEEDS NEEDED FOR BEEF COWS**

Feed and pasture requirement records and feeding standard figures for breeding beef cattle can be taken only as
general guides in estimating feed needs. Quality, yields, length of season and carrying capacity of pastures vary widely. Relative values of hays, straw, stover and “salvage” feeds are so variable that it is difficult to arrive at any definite standard quantity figures for practical use. Digestibility and amounts of feed consumed or wasted by the cattle depend on both quality and kinds of feeds used.

In a year of average rainfall and growing conditions pasture requirements for a beef cow and calf may run from 1½ acres of well-improved, high-quality legume-grass mixtures to as much as 6 acres or more of the unimproved, brushy pasture found on many farms where beef cattle are raised.

Feeding standards for wintering dry beef cows well enough to gain in 5 months approximately the weight of the new calves when dropped call for 1,300 to 1,500 pounds of total digestible feeds. Of this about 8 percent needs to be digestible protein. For example, a relatively cheap winter ration of 1,200 pounds of clover hay, 1,500 pounds of corn stover and 500 pounds of oat straw would furnish about 1,500 pounds of total digestible feed of which around 8 percent would be digestible protein. Or it would take about 3,200 pounds of average mixed clover and grass hay to furnish approximately the same amounts and ratio of digestible protein and non-protein feed units.

With straight high-quality clover or average alfalfa 3,000 pounds would furnish about the required amounts of total digestible feed needed, but the protein level will be higher than necessary. Two tons of corn silage plus 1,500 pounds of legume hay, or 2½ tons of silage and 125 pounds of one of the oilseed meals will meet the feeding standard requirements. But unless the legume hays are plentiful and relatively cheap it rarely pays to use them for more than half the feed for the wintering beef cow. They can be replaced partly by cheaper feeds for the cows and used to better advantage by young stock. The same is true for corn silage, which because of its corn content is a relatively expensive feed for beef cows. Fed heavily it gives them more corn than they need.

Three years of cost studies from southern Iowa farms
show that farmers generally feed their beef cows at higher levels and higher cost than necessary according to these standards. Particularly they generally feed more grain than needed. The same records showed that winter feed costs were practically doubled where cows were kept in high condition on such high-value feeds compared with herds wintered mainly on stalk fields, straw, winter pasture and lower grade roughages with grain, better grade roughages and concentrate feeding limited to late winter and spring. But there was no corresponding increase in calf crop or cash return from the higher cost rations.

The yearling heifer needs better winter feed than the mature cow. A ton of good legume hay plus \( \frac{1}{3} \) ton of other dry roughage and 5 to 6 bushels of grain is not too much to figure for her winter feed if she is to be well grown and ready to produce a calf as a 2-year-old. A ton of legume hay and 1 1/4 tons of silage also make a good combination for wintering the yearling heifer.

**GOOD PASTURE CUTS COSTS**

Plenty of good pasture is the foundation for a successful cow-and-calf business. The longer the pasture season the lower is the yearly feed cost. The chief advantage of the southern states in beef production is their year-round pasture program.

Ordinarily it costs twice as much or more per day, even with the best of management, to maintain a beef cow in the lot as on pasture and in the fields. A good goal in Iowa is to have the cows getting their living from pasture and fields for from two-thirds to three-fourths of the year or more. Some good managers in southern Iowa do better than this, with wheat or rye pasture for early spring, bluegrass improved with lespedeza or other legumes for late spring and summer, meadow aftermath for fall and a reserve pasture allowed to grow up for late fall and winter use. This combination, together with stalk fields, straw stacks and fence row and stubble gleanings, furnishes practically year-round feed.

Really good pasture for the cows while they are suckling their calves is a must if the calves are to make good weights
and condition by weaning time and the cows are to settle quickly and uniformly for the next year's calf crop. On many farms a pasture-improvement program is the first step toward a more profitable beef herd.

A CALF FROM EVERY COW

The beef cow usually is kept a full year for the calf she produces. The cost of keeping the "shy" or non-breeder is a part of the cost of the calf crop. Each loafer cow cuts the returns from the herd by the cost of her keep and the loss of a calf. Low feed costs can be more than cancelled by a poor calf crop.

Improvement in management has boosted the national average calf crop from 74 percent 30 years ago to 84 percent at present. A 95 percent calf crop is not too much for the Iowa beef producer to expect, barring disease catastrophe, if he follows a sound management program. Beef producers who consistently come through with a high percentage of calves stress the following points.

PLAN ON EARLY CALVES

Better average calf crops are obtained where the calves are dropped early in a period of not over 60 days, in February and March or March and April, before the cows go to pasture. This is accomplished by turning the bull with the cows in May and June or June and July and taking him out at the end of 60 days. Cows that fail to settle in that time are culled in the fall or as soon as you know they are not in calf and after the calves are weaned. There is no fooling with a slow or "shy" breeder no matter how good she looks. Records and surveys show that higher average calf crops and, of course, more uniform lots of calves are obtained by this method than by leaving the bull with the cows all summer in hopes of catching the late comers.

A 3-year study among southern Iowa beef producers showed too that winter feed costs ran 55 percent higher in herds where calves were dropped throughout the year, and more of the cows had to be fed to maintain milk production.
through the winter than where all calves were dropped in
the spring and all cows were dry during winter. Shelter and
labor requirements also were much less for the early-calving
herds.

MAKE SURE THE BULL IS A BREEDER

The careful cattleman makes every effort to be sure the
bull is fertile, vigorous, aggressive and able to settle the cows
in calf. This is accomplished by having a bull of sufficient
age and size to handle the cows to be bred. Care is taken
to have him in strong, vigorous condition but not fat. A
highly fitted, over-fat, sluggish bull, no matter how excellent
in type or breeding, has no business in a commercial beef
herd until he has been conditioned for the job by lighter
feeding and exercise.

It is a good idea to try the bull on a cow or two before
turning him out with the herd. Then watch closely enough
through the breeding season to see that he is not failing to
find and settle the cows as they come in heat.

The range man with more rigorous conditions than on
most Iowa farms figures on nothing less than a 2-year-old

Fig. 6. Excellent type Angus bull used in Madison County com-
mercial herd.
bull and about 1 bull to each 25 cows. He watches closely all bulls over 4 or 5 years of age and culls those showing lack of vigor and aggressiveness. In small Iowa herds, a well-developed bull as young as 15 months, or a vigorous old bull, is often used satisfactorily where only 15 to 20 cows are to be bred. The number may be doubled if hand breeding is practiced. A fairly mature, vigorous bull is needed for each 30 cows if he is run with the herd.

Hand breeding sometimes makes it possible to use a mature bull on 40 or more cows. With this method breeding dates can be kept and cows that fail to breed or get in calf can be spotted early. But it involves a lot of extra care and attention at a time when the average farmer is busy with field work. For this reason, it is not generally practiced. Largely for the same reason, artificial insemination, ideally suited in many ways to use by the owner of a small beef herd, has not “caught on” among beef cattlemen as with dairymen. However, such service is now available and is being used to some extent in some Iowa communities.

GOOD PASTURE AT BREEDING TIME BOOSTS THE CALF CROP

Good and plentiful pasture at breeding time puts cows in condition to settle in calf quickly and with a minimum number of services. Fortunately, the normal breeding season is
also the time of peak pasture production, both for quantity and quality on most Iowa farms. If, because of drouth or other causes, pasture is short or of poor quality, extra feeding of good hay, or better yet a pound or so of protein cake per head daily has been found of help. In some sections, self-feeding of simple mineral mixtures, and in some cases additional “trace” minerals, for a few months before and during the breeding season apparently has been helpful in improving the percentage of cows settled and calves produced.

**GUARD AGAINST ABORTION AND STERILITY**

In the commercial herd ordinary cases of sterility or failure of a cow or two to breed are quickly handled through the culling process. A quick trip to market is usually the most satisfactory answer.

But a storm of abortion from an outbreak of Bang’s disease or brucellosis is something else. Prevention of such outbreaks through extreme caution in bringing in new breeding stock, sanitation, isolation of any cow that aborts from any cause and watchfulness of your own and at times your neighbors’ herds all are in order.

In bad outbreaks, particularly in small herds, it may be cheaper to market the whole herd, clean up and start over than to attempt a fight. In other cases it may pay to follow one of the various plans accepted by animal health authorities. These include, in addition to care and sanitation, such procedures as blood-testing, calfhood vaccination or even adult vaccination programs. Competent veterinary advice and help usually are available locally and from the state and federal veterinarians’ offices at Des Moines. Pamphlets of information and suggestions on the subject can be obtained from the county or state extension offices.

**BE ON THE JOB AT CALVING TIME**

Lack of proper shelter and facilities and just the little necessary attention required at calving time in the spring accounts for many poor calf crop counts in the fall. A cow that is worth keeping deserves a clean, safe place in which to calve. A surprising number of calves are lost each spring.
because, through neglect or carelessness, they are dropped in the lot where they may be chilled in bad weather, trampled in the mud by other cattle or even eaten by hogs.

Signs of approaching calving are so apparent to a watchful cattleman that there is small excuse for failure to remove the cow from the herd to a safe and sheltered place. Given that, most cows care for themselves and their calves better than an attendant can do it. But some need a watchful eye to make sure that the calf is cleaned, dried and comfortable and up on his feet to nurse within a few hours. First-calf heifers need a little extra attention to make sure they are doing their part. Watchfulness pays off too, in case calving difficulties arise, because help can be given in time.

Once a beef calf is dry, warm and has a belly full of first milk he is a pretty hardy youngster. But he needs shelter from rain and storms, clean quarters with plenty of bedding to help avoid infections and a little less milk than he wants, rather than too much, until he is well started in life. In the case of heavy-milking cows, it may be necessary to milk out the udder a few times until the calf is ready to handle the entire output. This often is important with late calves dropped in the pasture, since good grass stimulates quick milk production.

Many good cattlemen think highly of painting the navel of the new-born calf with tincture of iodine or other disinfectant as a help in preventing absorption of infections.

**KEEP OVERHEAD COSTS LOW**

The main items in the "overhead" costs in beef production in addition to the investment in the cattle and the charge for the land used are labor and equipment. These two are tied so closely together that it is hard to discuss them separately.

Adequate and convenient equipment in the way of lots, shelter, water supply, feed storage and handling facilities, racks and bunks, sorting and handling pens, manure handling facilities, etc., all save labor. But it often happens that investment in such equipment, especially elaborate and expensive barns, becomes larger than is justified by the use made
of them, the savings they make or the returns they give.

As suggested before, the beef cow herd is best handled out-of-doors through most of the year. Little shelter is needed except in bad winter storms or cold spring rains. Simple low sheds open to the south, straw sheds or even just a straw stack or good brush or tree windbreak has proved sufficient shelter for a lot of herds. In many cases cows have done better so handled than in expensive barns. The most necessary and important building is one with sheltered “maternity” pens where cows and new-born calves may be cared for safely and conveniently.

Labor requirements in the handling of a well-managed beef herd are relatively low. A study on southern Iowa farms showed only 6.5 man-hours of labor were used annually per beef cow kept, as compared with 98.6 man-hours spent for each dairy cow. But there were wide variations in labor used between high and low labor cost herds, with little or no additional income from the extra labor used.
Fig. 9. Plan 72411, L-shaped open shed 24 feet wide. Intended for location at the northwest corner of the feedlot. Wings are variable in length. One wing may be used to store hay and bedding. Plan 72401, not illustrated, is identical except it is 20 feet wide for use only as a shelter.

Fig. 10. Plan 72406, two-shed unit. A combination of sheds for a breeding herd. The sheds are identical in construction, 24 feet wide, and may be open, semi-open or closed, depending on climate and use. The size shown will accommodate a herd of about 20 cows, the herd bull and young stock.

Figs. 8, 9 and 10 from North Central experiment stations' regional publication No. 6, "Beef Cattle Housing."
**SOME LABOR-SAVING PRACTICES**

Some labor-saving practices found in use on successful beef producing farms are:

1. Having plenty of pasture and a long pasture season. (This is a top labor saver.) The longer the cattle are kept in the pastures and fields and out-of-doors the lower are the labor requirements. Labor saving comes from less time spent in harvesting, storing and handling of feed and less manure hauling as well as less time spent in caring for the cattle.

2. Moving the cattle to the feed rather than carrying or hauling feed to the cattle. Feeding hay directly from the stack in the field or having hay stacked or stored close to feed racks so only one handling is necessary are examples.

3. Having an adequate, convenient, automatic and dependable water supply. This is probably the greatest labor saver of all. Without a dependable year-round water supply, the beef producer is often in a sad fix. Water comes even ahead of feed in importance.

4. Handling the cow herd as much as possible as a unit instead of in two or more lots. This plan may have other disadvantages, but it does save labor.

5. Having sufficient safe, convenient shelter pens in which to care for cows and calves at calving time. This will save much work and worry and often a good deal of loss.

6. Castrating, dehorning and vaccinating against blackleg while the calves are small and easy to handle—if possible before the calves are turned to pasture. This saves considerable work and helps insure that the job will be done.

**FLY AND PARASITE CONTROL PAYS**

Fly and grub control through use of modern sprays and insecticides pay off in greater comfort for the cattle, better condition, more milk production from the cows and better gains, heavier weights and more "bloom" on the calves. Some cattlemen even claim a better calf crop percentage as a result of fly control during the breeding season. Both fly and grub control cost more in time and effort than in money, but both pay good wages.
CATTLE LIKE SHADE

Shade, natural from trees or brush or that provided by setting up brush or straw-covered pole frames, very evidently adds to the comfort of the cattle in hot weather. It has been hard, however, to prove sufficient financial benefit to justify the cost of much shade building even in shadeless pastures.

"QUALITY" PAYS DIVIDENDS

Success with a beef production enterprise depends not alone on efficiency and economy of production but also on the acceptability and value of the calves produced. This is equally true whether the producer finishes out the cattle himself or sells them as feeders.

The relative value of a crop of calves depends on their weight and condition at weaning or sale time and on their type, conformation, uniformity and evidence of breeding, usually loosely referred to by the over-all term "quality." To get top returns for his calf crop, the Iowa beef producer needs to strive continually to improve both weight and quality. He is up against stiff competition from many good range-cattle-producing sections—particularly on the points of uniformity and quality.

Weight for age depends on a combination of the calf's inherited ability to gain plus his dam's milk supply and whatever pasture and other feeds he may have had. It is hard to overestimate the part of a good milking cow in the production of a heavy calf. But "quality" depends basically on inheritance, although its appearance can be enhanced by condition and "bloom." So the beef producer who wants to meet his best competitor on even terms must breed for conformation, type and the ability to gain and then feed to take advantage of these inherited traits. The best of management and feeding can be nullified to some extent by use of a bull with poor type and inheritance. The best of type and breeding can be short circuited by poor management and lack of feed.
GETTING A START IN BEEF CATTLE

There are several ways of getting started in the commercial beef production business. Each has its advantages and drawbacks.

One of the most satisfactory from the standpoints of a quick start and early returns is the purchase of “pairs” or cows with young calves. In most years dry spots and feed shortages develop somewhere in the good range-producing areas which compel the selling of breeding stock. In 3 out of the last 5 years, it has been possible in July and August to buy rather thin but thrifty cows of good breeding and not too much age, with good calves and mostly bred again, at pretty attractive prices. Similar “buys” are sometimes possible locally for the man who has reserve pasture or feed enough to take them on.

Such a start gives a calf to feed or sell the first fall and a producing cow for the following year. Or as one buyer puts it, he had three cattle instead of one at the end of the first year’s ownership.

This plan of buying a not too old cow with a heifer calf at foot and rebred to a good bull also is an excellent and generally an economical way to get a start in purebred beef cattle. Such a combination often sells for little if any more at a purebred auction than the same cow alone if she were fat or than a well-fitted yearling heifer.

Others starting in the beef business have bought young bred cows during late winter at the time when some overstocked owners run short of feed. Still others have preferred to make a slower start with a few heifer calves or yearling heifers, or even a single cow or heifer, and grow into the business. Considerable numbers of good commercial and some purebred herds in Iowa had their start with a single purebred 4-H beef heifer. The writer is acquainted with an excellent commercial beef herd of better than 40 cows all descended from one purebred Angus cow bought only 20 years ago.

In general it can be said that a faster start and quicker returns can be had from investment in “pairs” or bred cows
or heifers. But financial requirements and health hazards are sometimes considerable.

On the other hand, starting with heifer calves is a slow process and means a long wait for any return. Yearling heifers usually cost little more per head than heifer calves and save a year’s wait as compared with them. Starting in a small way and growing into the business usually carries less financial and disease risk than does investment in a herd of cows. The prospective buyer must weigh conditions and make his own decision.

Before buying cattle in the state or out of state, it’s a good idea to become familiar with the animal health regulations regarding testing, quarantine or other requirements concerning protection against tuberculosis, Bang’s or other diseases. Making sure that one is buying only tested cattle, calfhood vaccinated heifers, or cattle from accredited Bang’s and tuberculosis-free farms or areas is much simpler and easier than to fight these diseases once they are brought on to the farm.

**MAINTAINING THE HERD**

For practical purposes a herd of grade beef cows selected for good depth of body, strong bone and sound udders should produce choice feeder calves if mated with the right bull. Of course, the more beef type and breeding the better. Constant effort to improve the quality as well as the production of the cow herd is well worth while. But every cattleman knows that the “looks” of a cow are often not too closely related to the quality of the calves produced.

A good grade herd of cows can be maintained and improved by holding back heifer calves from the better-producing cows to replace old, poor or non-producing cows that are culled. Experience has proved that a heifer’s future value can be judged accurately by her performance with her first calf. If she fails to measure up she can be discarded after one calf as a “heiferette” while still of higher value per pound than an old cow.

**AGE TO BREED HEIFERS**

There is considerable argument as to the age at which beef heifers should be bred. But if one follows the suggested
Fig. 11. Well-grown yearling heifers ready to breed at 16 months.

plan of having calves dropped only in a 60-day period in early spring, there are but two choices in the matter. Either they must be bred at around 15 to 17 months and drop their first calves when 24 to 26 months old or be held over and bred at around 27 months of age.

If heifer calves are of rugged type and well grown out, the first plan has a number of advantages. It gains a year in getting the heifers into production. Fewer such heifers fail to breed or become slow or shy breeders than where allowed to loaf and grow fat an extra year before they are bred. While the growth of early bred heifers is slowed up somewhat compared with heifers not bred until past 2 years old, they continue growth longer and usually develop into about the same size cows at maturity.

Only growthy, well-developed heifers should be bred as yearlings, but stunted or slow-growing heifers are not worth retaining in the herd in any case. Where early breeding is practiced successfully, heifer calves are not roughed through with the cow herd their first and second winters but are grown out on plenty of good roughage and perhaps a little grain. While this adds to the cost of feed and labor the
first two winters, it makes separate pastures for cows and heifers at breeding time unnecessary and is more than made up by the year's time saved in getting the heifer started working at her job.

All this does not apply so completely to the breeder who is developing purebred heifers for sale or show. But even here delaying breeding past 24 months of age is a doubtful practice if a good-producing cow is the objective.

THE BULL IS MORE THAN HALF THE HERD

The bull is more than half of the commercial beef herd in making it better or worse. If he is a purebred, of average or better than average size for his age and breed, strong boned with four straight legs "under the corners," has a strong bull head and crest, and has thick natural flesh on his ribs, loin and round, he should do a satisfactory job.

In general it is better to sacrifice a little in low-set-ness and smoothness if necessary to get size, bone and ruggedness. But natural thickness of flesh is a must. He does not

Fig. 12. Hereford bull, sire of top load in Iowa carlot beef production contest.
have to have the breed fine points that would make him a show bull or a candidate to head a purebred breeder's herd. But he should be good enough to be worth at least as much as two fat steers to the man who needs him. Usually he can be bought for that price or less at the auctions or from the smaller breeders over the state. A common complaint of some Iowa beef producers is that they cannot afford to compete for good bulls with the range man because they have only a few cows. A fair reminder is that the range buyer also must keep a bull for each 25 cows.

**CROSSBREEDING OF BEEF CATTLE**

Uniformity in color, type and size, while not quite so important in a crop of calves which the producer feeds out himself, is a matter of real money in the sale of feeder cattle. Straight bred cattle, or those with that appearance, sell better than lots of mixed colors and types. For this reason, crossbreeding of cattle where calves are to be sold as feeders is a doubtful practice. This is true even though experimental work of the U. S. Department of Agriculture and other crossbreeding work indicate that the “rotation system” of crossing of three beef breeds results in somewhat heavier calves at weaning and faster gains in the feedlot than are obtained from straight purebreds.

**DOES CREEP FEEDING PAY?**

With average grain and cattle price relationships, creep feeding of calves running with their dams on good pasture will produce feeder calves with enough more weight and bloom at weaning time to pay for the extra feed and labor and leave some profit. Where they are sold as feeders, more pounds and a higher selling price are the usual results. Creep feeding is a desirable practice also if the producer wishes to push the calves along as rapidly as possible after weaning and sell as lightweight beeves. But there is no advantage in creep feeding where the calves are to be carried through the winter on roughage and a light grain ration and grown out or fed grain on grass as yearlings. Nor has it paid where the calves were long fed and carried to heavier yearling weights.
For creep feeding a mixture of half and half by measure of shelled corn and whole oats, or straight corn and cobmeal, has proved satisfactory. A quarter to a half pound per head daily of one of the oilseed meals will do no harm, but a calf nursing a good milking cow has his protein needs pretty well cared for until he is weaned.

**WHAT TO DO WITH THE CALVES**

The beef cow’s entire contribution to the farm income is her calf at weaning time. Throughout this discussion it has been assumed that the production of this feeder calf was the farmer’s goal. But the producer still has the problem of what to do with his steer calves and heifers not needed for replacements. It is a decision he must make for himself on the basis of his circumstances and best judgment.

He needs to consider such factors as (1) the feeds, equipment and labor at his disposal; (2) the other opportunities he has for use of these resources; (3) his idea as to probable price levels and outlook; (4) his experience and the risks he is willing to take.

If he has shelter and help available and a surplus of good hay to use with perhaps a little grain to spare he may want to winter the calves well enough to gain 1 to $1\frac{1}{4}$ pounds per
head daily and sell as short yearling stockers or feeders in the spring at usually a seasonally higher price than he can get in the fall. Or if he expects to have a surplus of good pasture to use the next season he may feed to gain a little less though the winter—$\frac{3}{4}$ to 1 pound per day—graze and sell heavier yearling feeders off grass in the fall, or short feed them himself for the early winter market. If he has both pasture and corn available he can winter well and summer-feed on grass for the fall market. Finally he may drylot feed from weaning time on and sell as finished baby beeves. Except for the longer-time programs steers and heifers may be handled together. From short yearlings on they are best run separately.

**MARKETING HOME-GROWN FEEDER CALVES**

It is the writer's observation that one of the main handicaps of the average producer of feeder calves in Iowa is his failure to obtain their full market value when he sells them. Small numbers or lack of volume enough to attract buyers, failure to keep informed on going prices, failure to show his cattle in attractive shape, lack of knowledge of grades and comparative values and neglect in investigating all available outlets, all are factors which work against his getting a good sale.
PUT UP AN ATTRACTIVE PACKAGE

An attractive uniform lot of heavy calves in good sale condition usually results from a combination of a good bull, good milking cows, good pasture and early calving within a period of 60 days or less. But there are other details which help in putting up an attractive package of feeder calves. Early castration of all bulls—10 days of age is not too soon and 2 months should be the deadline—calfhood dehorning of horned breeds with caustic or by use of mechanical dehorners, guaranteed vaccination against blackleg at 2 to 3 months, and even vaccination against shipping fever 10 days before weaning adds a lot to the attractiveness of the package in the opinion of the discriminating buyer. The cost of dehorning, castration and vaccination in time and cash is usually well spent.

COOPERATIVE SELLING OF FEEDER CALVES

Something can be accomplished in the way of sales improvement by the individual producer who is not content with what he can get from the bargain-hunting feeder buyer, the trader or through the local auction. But observation for a number of years of the Missouri Cattle Producers Association's feeder calf sales and, nearer home, the Madison County Angus Breeders' Association feeder sales, leads the writer to believe that cooperative effort can be much more effective. In a number of Iowa counties, or perhaps in larger areas, cooperative organization to work for improvement in pro-
duction methods, quality and sales outlets might well make substantial increases in the returns from the beef cattle herds. In Madison County improved quality through care in breeding and management, proper sorting for sale and sufficient volume to justify enough advertising to attract buyers have paid off in satisfactory prices obtained.