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Creep Feeding Beef Calves

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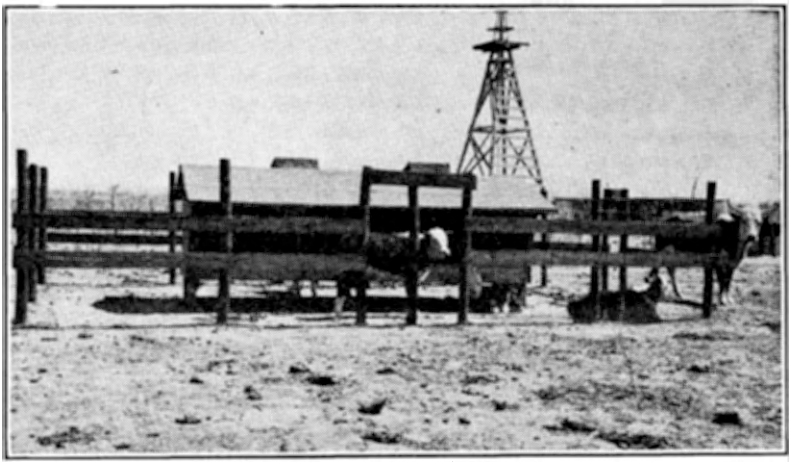

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CREEP FEEDING BEEF CALVES

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The practice of feeding grain to beef calves by the method known as creep-feeding is growing in favor among the beef cattle producers of Oklahoma who wish to sell their calves as a finished product rather than as feeder calves. This method consists of providing grain for the calves, before they are weaned, in an inclosure known as a creep, with openings at the sides or end of the inclosure, which will allow the calves to enter and eat unmolested by their mothers.

This method of producing high quality baby beef has been used by many of the beef cattle producers of Kansas, Missouri, Texas and Oklahoma, during the past few years with very gratifying results. During 1931, county agents in 25 Oklahoma counties reported that there were 122 farms and ranches in these counties using the creep method of producing baby beef. These demonstrations included 5,847 head of beef calves, with an average of 48 head per demonstration.

During 1932, the county agents in 39 counties reported that there were 155 farms and ranches in these counties using this method. These demonstrations included 7,023 head of calves, with an average of 45 head per demonstration.

Since that time the drouth and limited supply of grain together with higher feed prices has caused some fluctuation in the number of farms and ranches employing this method of producing beef. However, reports from county agents in 1935 showed that there were 52 demonstrations in 17 counties which included 1,739 head of calves or an average of 34 head per demonstration.

Consumers Are Demanding Lighter Cuts of Beef

During recent years American consumers of beef have shown an increasing preference for lighter cuts of meat. As a result of this tendency on the part of beef consumers there is a preference on the market for well-finished light weight cattle.

Young cattle that are fat enough for slaughter and weigh from 600 to 800 pounds are greatly in demand at the central markets at the present time. The creep-feeding method, according to the men in this state who have employed it, repre-

sents the most economical and practical method of producing the kind of cattle that the market desires. Creep fed calves may be sold directly from the cows at weaning time or fed in the dry lot for a period of one or two months.

Such young cattle that have sufficient finish and quality have been selling at a price equal to or at times higher than the price received for similar cattle of heavier weights. They will bring more per pound and per head when creep-fed than the same class of calves would bring if they were sold as feeders. Due to the consumer demand for light cuts of beef there seems to be constantly increasing demand for light weight, well-finished young cattle.

Results of Experiments in Creep-Feeding Baby Beeves

Experiments have been conducted by a number of state experiment stations which show that creep feeding is economical and profitable under suitable conditions. The U. S. Department of Agriculture, in cooperation with the Missouri Experiment Station and Sni-A-Bar farms, Grain Valley, Mo., conducted tests on creep feeding during 1925, 1926 and 1927.[1] Calves used in this experiment were sired by purebred Shorthorn bulls and out of high grade Shorthorn cows. The cows were handled under good farm conditions. In addition to blue grass pasture they were fed a small amount of corn silage and other rough farm feeds during the winter months. The calves in the experiment were divided into four lots for the purpose of testing different methods of creep-feeding. The grain used was corn and oats together with a small amount of linseed oil meal during the latter part of the suckling period. The experiments were started late in May or early in June when the calves averaged approximately ten weeks of age and continued until the calves were approximately eight months of age. The calves were divided into four lots as follows:

Lot 1—Calves kept on pasture with dams with no supplemental feed.

Lot 2—Calves kept on pasture with dams and fed grain in a creep, starting at approximately 10 weeks of age.

Lot 3—Calves kept in small pasture separate from dams, but fed grain in a creep and allowed to nurse twice daily.

[1] U. S. D. A. Technical Bulletin No. 208, "Beef from Calves Fed Grain Before and After Weaning," November, 1930.

Lot 4—Calves kept on pasture with dams and fed grain in a creep from four to eight weeks before weaning.

The following data show the average results secured through a three-year period:

Lot No.	Ave. age at beginning of period days	Average weight pounds initial—final		Ave. gain for period pounds	Ave. daily gain pounds	Ave. final value per cwt.
1	73	221	490	269	1.66	$ 9.29
2	69	218	593	375	2.31	11.32
3	71	217	588	371	2.29	10.84
4	68	212	522	310	1.91	9.73

Summary: (1) The results of the three-year test show that the calves that were creep fed grain while nursing had more bloom and finish than those receiving no grain and they were valued at an average selling price of $2.03 per hundred more than the non-creep fed calves.

(2) The calves that were kept in a lot away from their mothers and allowed to nurse twice daily made the second largest gains for the period, showed more bloom and finish than the calves fed no grain or those fed grain only a few weeks before weaning, and were valued at an average of $1.55 per hundred more than the calves receiving no grain while nursing.

(3) The calves that were fed grain in a creep four to eight weeks before weaning carried slightly more finish when weaned than those receiving no grain; made an average gain for the period of 41 pounds more than the non-creep fed calves; and were valued at 44 cents per hundred more than calves receiving no grain before weaning.

The Texas A. and M. College, in cooperation with the U. S. Department of Agriculture and the Callaghan Land and Pastoral Company, Encinal, Texas, have conducted tests that should be of especial interest to Oklahoma cattlemen because of the fact that the calves were creep fed on ground milo heads and cottonseed meal.[2]

The calves used in the Texas experiment were high grade Herefords of good quality. The calves were first placed on the creeps during August and the feeding period continued until late in January. The feed mixture was four parts ground milo

[2] Texas Agricultural Experiment Station Bulletin No. 470, "Creep Feeding Range Calves," December, 1932.

heads to one part cottonseed meal. In this test the calves were somewhat older than in the Missouri test and it was considered advisable to allow the cows to enter the creeps and eat some grain early in the feeding period in order tc teach the calves to eat.

The results of the test are shown in the following table:

Lot 1—Creep fed mixture of four parts ground milo heads, one part cottonseed meal. During latter part of period ground ear corn replaced milo heads.

Lot 2—Non-creep fed.

Lot No.	No. in lot	Intial weight pounds	Final weight pounds	Total gain per head	Ave. daily gain pounds
1	48	269.3	492.4	223.1	1.39
2	46	277.3	386.2	108.9	0.68

The creep fed calves in the Texas test under range conditions gained an average of 114 pounds more per calf during a 160-day period than calves receiving no grain. The creep fed calves were valued at 50 cents per hundred pounds more than the non-creep fed calves at weaning time.

Advantages in Creep-Feeding Beef Calves

The idea of creep feeding calves is not new, but only in recent years has this method gained popularity among the producers of market cattle.

Creep feeding beef calves on farms and ranches in Kansas, Missouri, Texas, and Oklahoma indicates that there are a number of distinct advantages in creep feeding beef calves to be sold on the market. These advantages may be summarized as follows:

1. Creep feeding adds additional weight to the calf. Producers in Oklahoma who have creep fed calves state they have been able to make their calves weigh from 100 to 200 pounds more at weaning time than calves of similar age and quality that have not been creep fed. The amount of additional weight will depend upon the amount and kind of grain consumed by the calf. On an average the results of creep feeding demonstrations indicates that each bushel of corn or its equivalent in other grains will produce 10 pounds or more of beef.

2. Creep feeding adds finish to the calf. This additional finish will ordinarily increase the selling price of the calves at weaning time $1 or more per 100 pounds over the selling price of calves that have not been creep fed. The additional finish will place them in the slaughter class rather than the feeder class. Both the packer buyers and feeders who are interested in buying fleshy calves will compete in bidding on such calves when they come to the market.

3. Calves that are creep fed show little or no shrinkage at weaning time. If the calves are to be finished in the feed lot it is a distinct advantage to have them eating grain before they are weaned. Creep fed calves are not subject to the usual shrinkage resulting from weaning and teaching them to eat grain in the feed lot.

4. Creep feeding will shorten the dry lot feeding period from 30 to 90 days if the calves are full fed after weaning, due to the fact that they will carry a great deal more finish than non-creep fed calves when they are weaned. This shorter period in the feed lot permits earlier marketing.

5. Creep feeding will reduce the amount of grain necessary to finish calves. The results of experimental work done in fattening cattle of various ages show very conclusively that young cattle make more efficient use of their feed in producing beef than older cattle. Calves will make cheaper gains on less feed while they are receiving grain and nursing their mothers than they will make in the fed lot after weaning.

6. Creep feeding also tends to make the calves more uniform in size, due to the fact that the calves from cows that give a small flow of milk eat more grain than the calves from heavier milking cows.

7. An important advantage that many of the cattlemen find in creep feeding is having the cows in the herd go into the winter season in better condition than cows that have been nursing calves which have not been fed grain before weaning. The cows go through the winter in much better condition and a larger percent have strong thrifty calves as a result.

Who Can Creep-Feed to Advantage

The practice of creep feeding is primarily for the man who produces his own grain and his own calves from a cow herd, and who wishes to sell a finished product. Every beef cattle owner is not equipped to profitably creep feed the calves which he produces. However, the producer who has a limited area of grass land and who desires to keep a relatively large number of cows will be in a position to carry a much larger number of cows on the same area of grass land provided he practices creep feeding the calves while they are nursing their mothers on pasture.

Important Factors in Creep-Feeding

Perhaps two of the most important factors to consider in creep feeding calves is the age of the calves and the size of the pastures to be used through the summer by the cows and calves. The men who have been creep feeding calves in Oklahoma are of the opinion that calves that are dropped in December, January and February have a decided advantage over late calves if they are to be creep fed, due to the fact that they can be taught to eat grain before they go to pasture with their mothers in the spring. It is quite important to teach the calves to eat grain before they are placed on pasture, due to the fact that after they have received young, tender, and succulent grass it is difficult to get them to eat dry grain. The calf that has considerable size when it follows its mother to pasture in the spring and has already been taught to eat grain will respond much more satisfactorily when creep fed than the late calf.

Location of Creeps in the Pasture

A number of men who are creep feeding their calves in Oklahoma are finding it most satisfactory to place the creeps near the central watering place in the pasture, such as a tank or windmill and where the cows receive salt. If there is some shade around the watering place this will attract the calves and cause them to stay around the creeps. A small pasture allows the cows to congregate at some central point in the pasture more regularly each day than a large pasture.

How the Creep is Made

An inclosure made of woven or barbed wire, boards, or poles, about 30 to 40 feet square, can be made with openings 16 to 20 inches in width and 36 inches in height, either through the sides of the inclosure or at the corners. Some report that

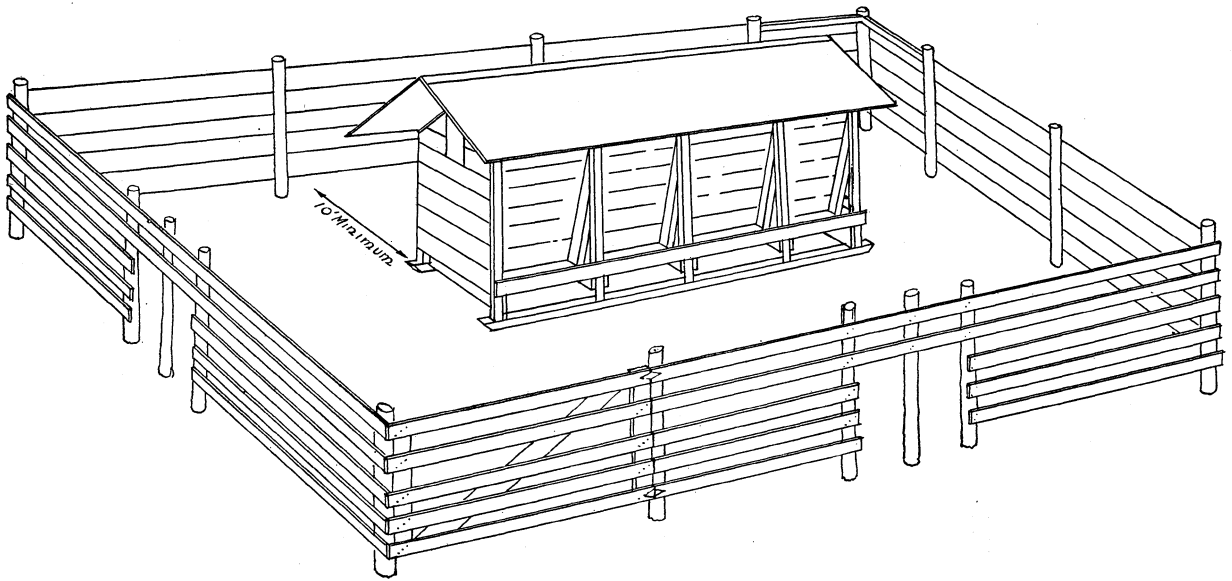


Fig. 1.—The creep should be large enough so that there will be 10 feet or more of space all of the way around the self-feeder or feeding trough. The openings may be made at the sides or ends of the inclosure. They should be 16 to 36 inches high with provision made to increase the width and height of the openings as the calves grow larger. A gate should be provided in the creep of sufficient size to allow a wagon or truck to be driven in for the purpose of filling the feeder with grain.

it is easier to get calves to enter a creep made of woven or barbed wire. The Kansas plan of making a creep calls for openings at each of the four corners of the inclosure in which a self-feeder or trough is placed.

The calves should be taught to eat grain before they go to pasture with their mothers. When the cows are moved to the pasture the creep should be placed in the most favorable place in the pasture.

Construction of the Self-Feeder

If the cows and calves are being kept at some distance from headquarters a self-feeder will eliminate a great deal of time and labor, due to the fact that it is not necessary to fill it with grain more often than once each week to ten days. If troughs are used in the creep, it will be necessary to place grain in them at least once each day. A self-feeder that is 10 feet long and which feeds from both sides is large enough to accommodate from 40 to 50 calves. Self-feeders should have eaves that are wide enough to protect the grain in the feeder from rain and from extremely hot sunshine. In hot summer weather this protection will have a tendency to keep the grain from drying out and becoming extremely hard. This is more particularly true of shelled corn.

Bill of Material for Self-Feeder

2 pieces		4″x 6″x17′
5 pieces		4″x 4″x12′
6 pieces		2″x 6″x16′
2 pieces		2″x12″x16′
5 pieces		2″x 4″x10′
3 pieces		2″x 4″x16′
5 pieces		2″x 4″x12′
4 pieces		1″x 8″x18′
40 pieces shiplap		1″x 8″x10′
20 pieces shiplap		1″x 8″x16′
180 sq. ft. roofing	6 lbs. 16d nails	
18 ft. Galvanized Iron Ridge	10 lbs. 8d nails	
5—½″x4′—10″ Rods		

Plans for Self-Feeder

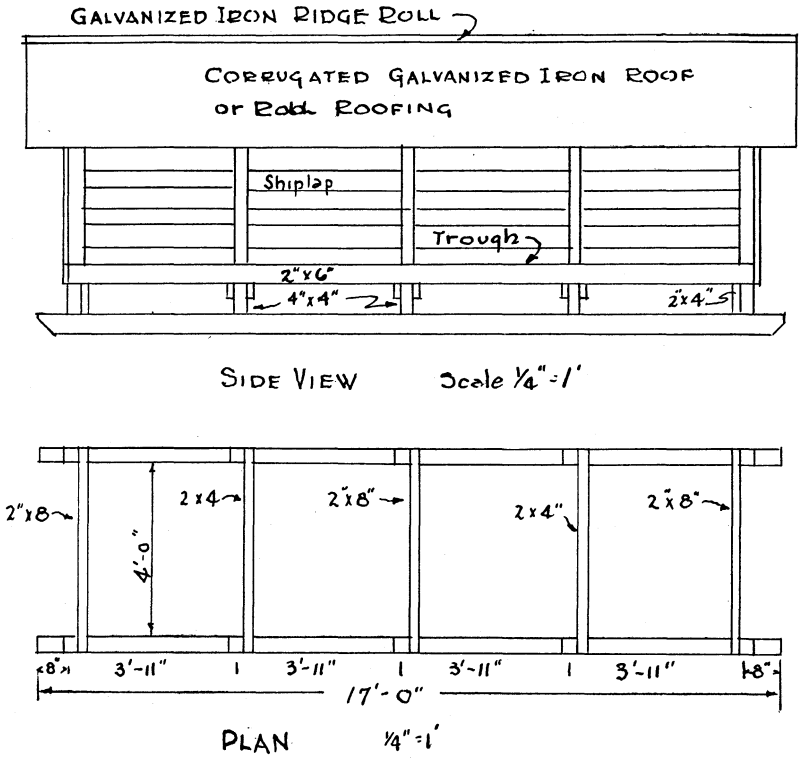
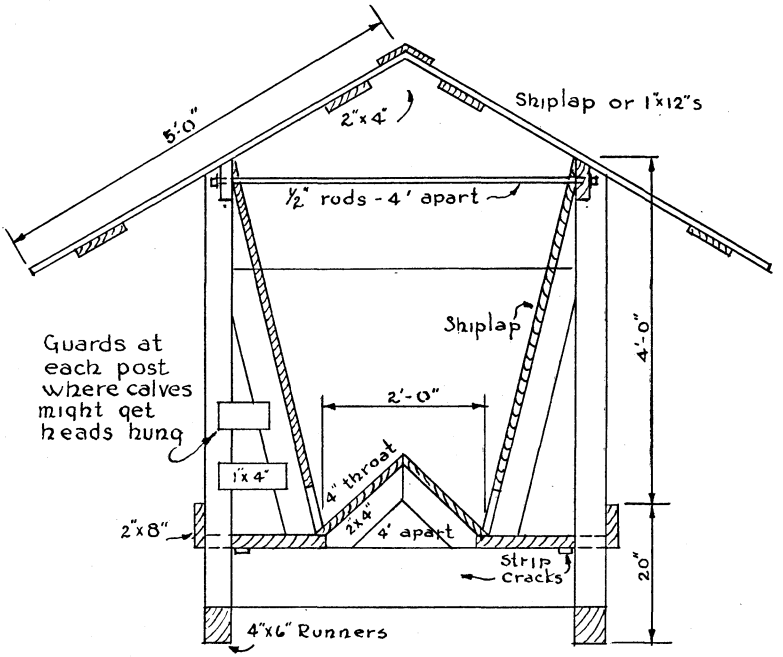
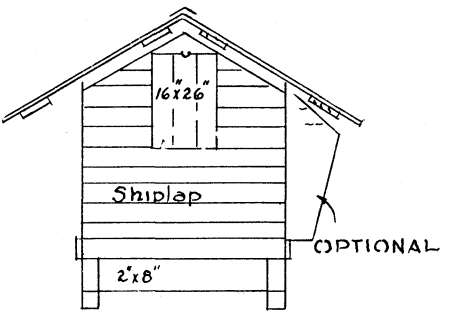


Fig. 2.—Plan of self feeder.



Cross Section of Self Feeder



END VIEW · Scale ¼"=1'

(Ends may be projected as shown at right at each corner to protect feed better in windy regions.)

Fig. 3.—Sectional view of self feeder which has capacity of 125 bushels of grain and will serve 60 to 80 head of calves.

Suitable Feeds to Use in Creep Feeding

In Oklahoma there are many grains being used in creep feeding beef calves.

Corn represents one of the best fattening feeds that we have and shelled corn works very nicely in a self-feeder since it will stand the weather better than many other grains that are being used. A number of the men in Oklahoma who are creep feeding calves have found that equal parts of whole oats and shelled corn make a very satisfactory starting feed. After the calves have been taught to eat grain, the amount of oats should be reduced to about 25 percent of the ration.

Oats, in the sections of the State where they are grown, are one of the most popular starting feeds and in many instances some oats are used throughout the feeding period. Oats, however, are a much better growing feed than a fattening feed, and since the tendency of the calf is to grow rather than fatten, oats will not put on as much finish as is desirable during the creep feeding period. Since oats are bulky, there is not much danger of calves overeating in case the creep is not visited daily. For this reason it is a very safe feed to use at the beginning of the feeding period. As a rule, however, there is little danger of calves overeating if they are getting a fair supply of milk.

Threshed ground kafir, milo or darso have been used to advantage in the grain sorghum producing sections of the state. In cattle feeding tests, the grain sorghums have proved to be from 90 to 95 percent as efficient as corn in producing gains. The grain sorghums as a class contain less fat and slightly more protein than corn, while the total amount of digestible nutrients in corn is about 7 percent greater than in kafir.

Ground milo heads, 4 parts, and cottonseed meal, 1 part, proved satisfactory during the early part of the Texas creep feeding test.

Threshed and coarsely ground kafir, milo or darso work satisfactorily in a self-feeder placed in the creep inclosure. In sections of the state where there are heavy winds, it has been found advisable to project the ends of the self-feeder in order to keep the grain from blowing out of the feeder.

Ground barley may also be used in creep feeding calves. Where it is used many cattle men prefer to use some other fattening grain with it. Where ground barley has been fed

alone, there have been instances of it causing digestive disturbances in calves, and for this reason it is considered more satisfactory to use some other grain such as ground corn, kafir, or milo with it.

Ground wheat represents a satisfactory fattening feed, which has proved to be a little more valuable than corn on a pound for pound basis in finishing cattle, although the cost of wheat when compared with other feed grains will largely determine whether it can be fed profitably.

Wheat alone is not recommended since it may cause the calves to scour or go off feed. A grain ration composed of one-half ground corn and one-half ground wheat is much more satisfactory than ground wheat alone. When the two are mixed together the ration is more palatable than when wheat alone is used.

Cottonseed meal and cottonseed cake. Most of the cattlemen who have creep fed calves have found it to be a good plan to add some protein supplement to the grain mixture during the summer when the milk flow of the cows has diminished and the grass has become less succulent and nutritious. A mixture of one part of cottonseed meal and 6 to 7 parts of grain is satisfactory.

Cottonseed meal works satisfactorily with ground grain, such as corn, kafir, milo, etc., since it can be distributed uniformly through ground or cracked grains. If whole corn is being fed the pea-sized cottonseed cake will work more satisfactorily in the feeder than cottonseed meal, since it will remain evenly distributed through the grain.

Things to Watch in Creep Feeding Calves

There are a few things that the owner should watch carefully if he expects to secure the best results in creep feeding his calves. It is important that the grain be kept clean at all times, since the calves will not relish grain that has been spoiled by the weather or in any other manner. If a self-feeder is being used in the creep, it should have grain in it at all times. There is always a chance of the larger calves that have been eating considerable grain being thrown off feed if they are allowed to go without grain for several days and then eat too much when the feeder is filled with grain again. If a self-feeder is being used the owner should visit it often enough to see that the calves are responding satisfactorily and that all of the calves have an opportunity to get to the feeder.

Amount of Feed Required to Finish Calves

The experience of those who have creep fed calves indicates that early calves will consume from 10 to 15 bushels of grain from the time they start eating until they are weaned in the fall. Late calves will eat considerably less grain than the early calves. A summary of creep feeding demonstrations in Kansas show that calves dropped during January and weaned October 1, on an average consumed approximately 14 bushels of grain; February calves consumed about 13 bushels; March calves consumed about nine bushels; April calves consumed about six bushels; and May calves consumed two bushels of grain.

The following information reproduced from the results of creep feeding demonstrations conducted in Kansas will give those who are interested in creep feeding a concise idea of what to expect as a result of creep feeding calves.[3]

Average Birth Date	Jan. 1	Feb. 1	Mar. 1	Apr. 1	May 1	May 1
Amount of grain eaten from birth date to May 1, when placed on grass—Bu.	2.5	2.0	1.0	0.5	0.0	0.0
Grain consumed on pasture to weaning date, Oct. 1—Bu.	11.5	11.0	8.0	4.5	2.0	N-creep fed
Amount eaten after weaning in dry lot—Bu.	6.0	11.0	18.0	26.0	32.0	35.0
Total amount grain eaten to reach 700 lbs. finished beef—Bu.	20.0	24.0	27.0	31.0	34.0	35.0
Age in months at 700 lbs.	10	10	10.5	11.0	11.5	12.0
Weight on May 1: when placed on grass	285	236	180	130	80	80
Weight at weaning; Oct. 1	650	600	540	450	380	350
Market weight —pounds	700	700	700	700	700	700

The data include average results obtained during a three-year period in creep feeding calves on Kansas farms and ranches where the herds varied in size from 12 to 125 calves

[3] Data from a summary of results of creep feeding demonstrations in Kansas. Prepared by J. J. Moxley, Manhattan, Kansas.

per herd. The information came from farms and ranches where the pastures were reasonably well adapted to creep feeding. Most of the calves were sold when weighing about 700 pounds as finished calves and for that reason this weight was used as an average final weight in compiling the data. At this weight, most of the best quality calves had a carcass grade of government choice.

The herds of calves being creep fed were divided into five groups according to their average birth date. Group one averaged January 1 in birth; group two averaged February 1 in birth; group three averaged March 1 in birth; group four averaged April 1 in birth, and group five averaged May 1 in birth. Group six represents the average calves born May 1 which were not creep fed.

A study of this table will show that the early calves gave the best results in creep feeding and the early calf did not require as much grain because a cow producing an early calf supplies the calf with milk over a longer period of time than the cow producing a late calf. In the Kansas demonstrations, January, February and March calves have proved to be much more satisfactory than late summer calves for creep feeding.