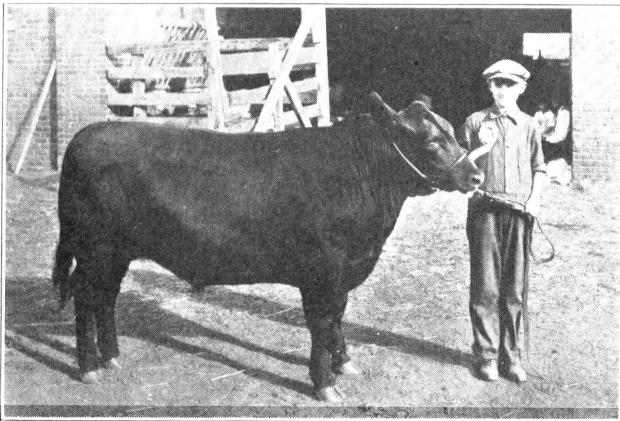


# THE BABY BEEF CLUB

Boys' and Girls' Club Circular 3

COLUMBIA, MO.

FEBRUARY, 1923



**COOPERATIVE EXTENSION WORK IN  
AGRICULTURE AND HOME ECONOMICS**

UNIVERSITY OF MISSOURI COLLEGE OF AGRICULTURE AND THE UNITED  
STATES DEPARTMENT OF AGRICULTURE COOPERATING

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# CONTENTS

Introduction .....	1
Meetings .....	3
Suggested Meetings .....	4
Record Book .....	4
Meeting I	
Organization .....	5
Terms used about Calf .....	5
Explanation of Record Book .....	10
Meeting II	
Obtaining Calves .....	11
Feeding .....	11
Care and Management .....	16
Meeting III	
Development of Calf .....	19
Training .....	19
Feeding Problems .....	20
Elementary Stock Judging .....	20
Meeting IV	
Feeding Problems .....	21
Parasites and Ailments .....	21
Stock Judging .....	22
Record Books Discussed .....	22
Meeting V	
Discussion of Development of Calf .....	22
Continuation of Stock Judging .....	22
Meeting VI	
Tour with Instructions in Grooming .....	23
Meeting VII	
Club Round-Up .....	27
Completion of Record Book .....	27
Credit and Notes .....	28
Suggestions for Roll Call and Demonstration .....	29
Index .....	30

# THE BABY BEEF CLUB\*

The demands of the public for small, juicy, first grade cuts of meat have made cattle that will produce such cuts of meat very popular on the market. The popularity of this class of cattle, which is known as baby beef, and the economy with which young cattle fatten has resulted in the fattening of large numbers of choice calves each year. They are marketed when 12 to 24 months old weighing 800 to 1,200 pounds. While the feeding of young cattle has for some time been an important industry among cattle feeders, boys and girls have fed calves for baby beef as an important club project only during the past few years. In order that club members



Fig. 1.—Winners in the Sullivan County Calf Club, 1921.

may obtain the most information concerning the production of baby beef, it is necessary that each club have its year's program. Meetings should be held to discuss the subject matter contained in this circular and to give the boys and girls a broader view of true club work.

## MEETINGS

The Baby Beef Club members should hold a meeting at least once a month. Meetings may be held at the homes of the members, the school or any other place most convenient for all. At these meetings all the difficulties concerning the project which

\*Prepared by H. M. Garlock, Extension Assistant Professor of Animal Husbandry in collaboration with Mrs. J. K. Fyfer, Special Assistant in Boys' and Girls' Club Work.

the members have found should be discussed and help should be given them. There should be a business program, discussion of work done and to be done, and a social part of the meeting for pleasure and fun. The program of work given below is only suggestive. You and your Local Leader should make it fit the needs of your special club.

- 1st Meeting.—1. Organization
  2. Explanation of Terms Used
  3. Explanation of Record Book
- 2nd Meeting.—1. Obtaining Calves
  2. Feeding
  3. Care and Management of Calf
- 3rd Meeting.—1. Report Development of Calf
  2. Training
  3. Feeding Problems
  4. Elementary Study of Stock Judging
- 4th Meeting.—1. Feeding Problems
  2. Parasites and Ailments
  3. Stock Judging
  4. Record Books Discussed
- 5th Meeting.—1. Discussion of Development of Calf
  2. Continuation of Stock Judging
- 6th Meeting.—1. Tour with instructions in grooming calves for the show ring
- 7th Meeting.—1. Club Round-Up
  2. Completion of Record Book

### RECORD BOOK

The keeping of accurate records is absolutely necessary for club members in order to do the best club work and to receive the most practical training in feeding cattle.

The record should include the weight of the calf at the beginning and close of the feeding period also the amounts of each kind of grain, roughage and pasture used. A simple and accurate feed record can be kept by weighing or measuring a quantity of feed and placing it aside and feeding from it until all is used then weighing out another amount, etc. Feed should be charged to the calf when it is weighed out. In case two calves are fed together the feeds can be charged equally to each calf. All points of interest should be carefully told and the records should be neat as well as correct.

## I. Organization

The boys and girls who have become members of the Baby Beef Club can organize their own club and be making some study of calves before receiving their calves.

The Local Leader should take charge of the Organization Meeting. Officers should be elected: president, vice-president and secretary. The program for the year should be discussed and committees appointed to make out a constitution and a program and to choose the club motto and club name.

The club should be a standard one and every effort should be made to meet the Standard Club Requirements found on page 3 of the Record Book.

### TERMS USED ABOUT CALF

In starting any new project there are always some terms that have to be explained before one can understand the work. The names of the parts of the calf and the location of each part should be learned so that every member will know whether his calf is up to standard or not and to be able to compare his calf with the others.

It would be a good plan to study the diagram carefully for some minutes and then lay it aside. Hang a large picture of a calf where every one can see it then let the leader ask questions and see who will be able to locate a given part of the calf first. For example, Where is the brisket? The first person who can answer might point it out on the large picture. Where is the twist? etc. This little scheme might be reversed and the leader might point to some part and the first person who can name the part will be allowed to ask the next question. This plan of becoming familiar with all parts of the calf can be varied and in a short time every one will know exactly where any particular part is when he reads about it in the circular or livestock papers.

The score card included in this circular shows the value attached to each separate part. Following this with practice each member will soon be able to see quickly the important and the unimportant points to consider in judging a calf.

**SCORE CARD.—BEEF CATTLE—(FAT STEERS)**

## SCALE OF POINTS

Possible  
Score

Age, estimated .....	yrs., actual .....	yrs.	
<b>GENERAL APPEARANCE—26 Points</b>			
Weight, estimated .....	lbs., actual .....	lbs.	
score according to age .....			6
Form, straight top line and underline; deep, broad, low, medium length, symmetrical, compact, standing squarely on legs .....			8
Quality, bone of firm texture; fine skin; silky hair; clearly defined features and joints; mellow touch .....			6
Condition, thick, even covering of firm flesh, especially in regions of valuable cuts; indicating finish; light in offal .....			6
<b>HEAD AND NECK—8 Points</b>			
Muzzle, good size, lips thin; nostrils large and well apart; jaws wide .....			1
Face, short, broad, profile straight .....			1
Forehead, broad .....			1
Eyes, large, full, clear, bright .....			1
Ears, well carried, fine, medium size .....			1
Neck, thick, short, throat clean, dewlap slight .....			3
<b>FOREQUARTERS—12 Points</b>			
Shoulder Vein, full, smooth .....			3
Shoulders, smoothly covered with firm flesh; compact .....			5
Brisket, broad, full; breast wide .....			2
Legs, straight, short, strong, wide apart; forearm full; shank fine; feet sound .....			2
<b>BODY—32 Points</b>			
Chest, deep, broad; girth large; fore flank full .....			4
Crops, full, thick, even with shoulders .....			5
Back, broad, straight, medium length; thickly, evenly and firmly fleshed .....			7
Loin, broad, straight; thickly, evenly and firmly fleshed .....			7
Ribs, deep, well sprung, closely set, thickly, evenly and firmly fleshed .....			7
Flanks, full, low .....			2
<b>HINDQUARTERS—22 Points</b>			
Hips, smoothly covered, proportionate width .....			3
Rump, long, level, width well carried back; thickly, evenly and firmly fleshed .....			5
Pin Bones, wide apart; not prominent .....			1
Tail, fine, tapering, medium length .....			1
Thighs, deep, wide, well fleshed .....			4
Twist, deep, broad, well filled .....			6
Legs, straight, short, strong, shank smooth, feet sound .....			2
Total .....			100

**Score Card Explained.**—You will notice by continued study that the score card gives 22 points for the hindquarters while there are only 12 points given for the forequarters. This difference is due to a large percentage of the hindquarters being sold as round steak and rump roast which are more valuable cuts, containing less waste than the brisket, chuck and plate, which are cheap cuts obtained from the forequarters. Cuts from the forequarters are usually sold for roasting and boiling because of the large amount of bone and waste. You will also notice that 32 points are given to the body with 7 points to each, the back, ribs and loin. This large

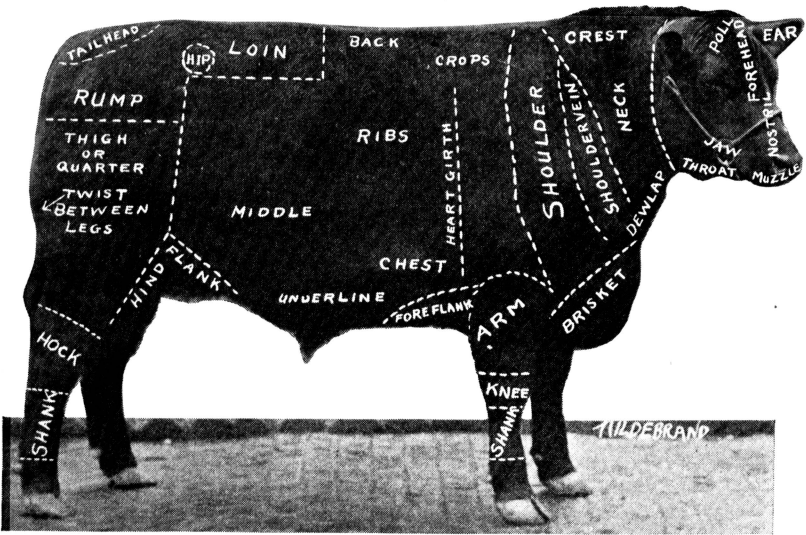


Fig. 2.—Diagram showing location of various parts of baby beef.

number of points is given to those parts because they contain some of the high-priced cuts of the carcass, the most valuable one being the loin. Although the ideal feeder head is an indication of feeding capacity in the feeder calf it is not so important in the finished baby beef, for in the judging of fat animals emphasis is placed on (1) quality, (2) thickness, firmness and smoothness of flesh, (3) mellowness of touch, (4) small amount of offal or waste at butchering time.

You will find after studying the calf by means of the diagram and score card that there are certain characteristics which you will look for in purchasing or selecting your calf.

**Form.**—The form of the calf is of great importance. It should have: (1) deep, broad, compact body; (2) well sprung ribs; (3) full heart girth; (4) back wide and well fleshed; (5) middle deep and not cut up in the hind flank; (6) straight top and underlines;

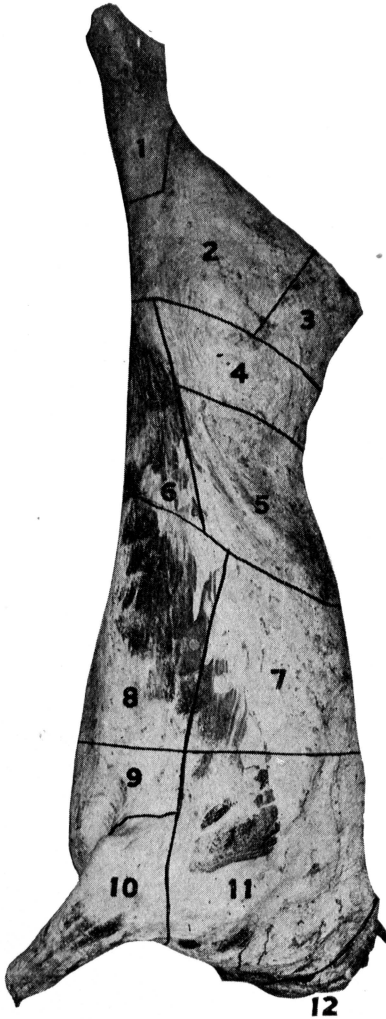


Fig. 3.—Wholesale Division of Beef Carcass.

- 1. Hind Shank,
  - 2. Round, Rump and Shank off.
  - 3. Rump.
  - 4. Sirloin end of loin
  - 5. Porter House or Short Loin
  - 6. Flank
  - 7. Ribs
  - 8. Navel end of Plate
  - 9. Brisket end of Plate
  - 10. Fore Shank
  - 11. Chuck
  - 12. Neck
- } Loin
- } Plate

(7) well developed hindquarters; (8) thighs full; (9) twist deep; (10) short, straight, well placed legs; (11) medium sized bones and horns.

**Head.**—The head should be short and wide with a broad muz-



zle, large nostrils, and large, quiet eyes. These characteristics indicate great feeding capacity.

Neck.—The neck should be short and thick and blend smoothly into the shoulder.

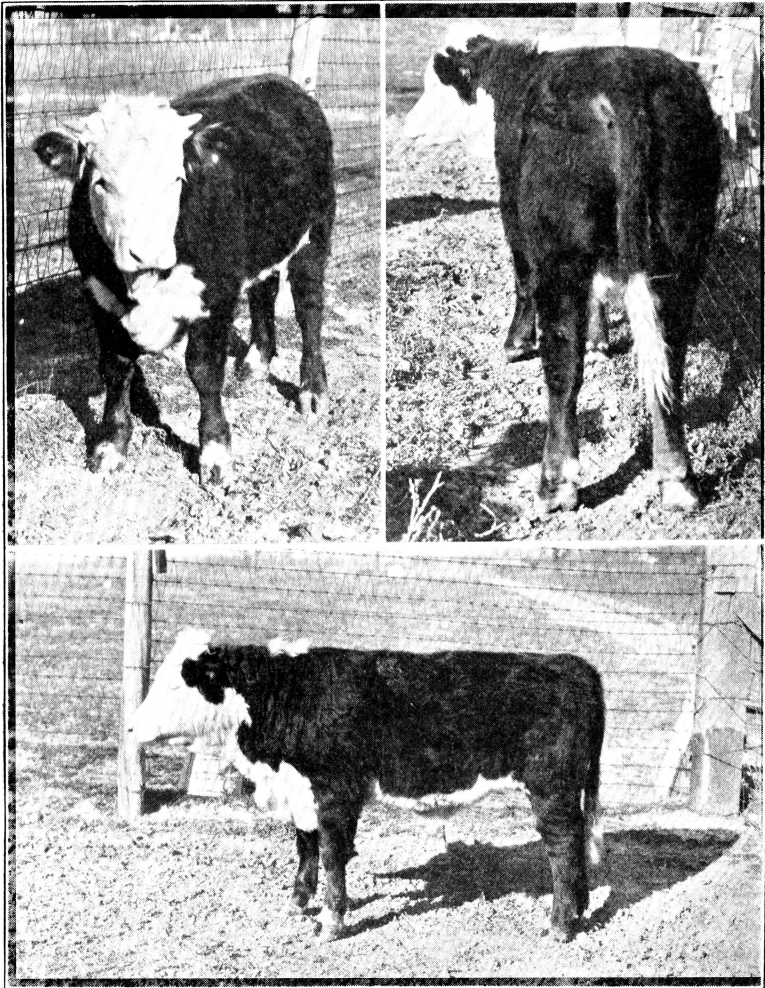


Fig. 4.—Front, rear and side views of a good type of calf for producing baby beef.

Besides form there are other points that are necessary to consider in the selection of a calf. These are constitution, quality, breeding, age and sex.

**Constitution.**—In order to consume large quantities of feed and put on the greatest gains at the least cost, the calf should have a strong constitution. This is indicated by a deep chest, great width between the fore legs and the brisket being extended well forward. The foreribs should be long and well sprung and the fore flank full with no signs of a shallow or narrow heart girth.

**Quality.**—The quality of the calf is shown by its general appearance, smoothness, mellow skin, fine coat and medium sized bones and horns. A calf lacking in quality will become coarse, rough and patchy as it grows and lays on fat.

**Breeding.**—Both the form and quality of a calf are dependent upon its breeding. It is best to select calves whose sires and dams are representatives of the beef breeds, either Shorthorn, Hereford, Aberdeen-Angus or Galloway. At least, the sire should be pure bred. Great care should be taken not to select a calf possessing any dairy blood as it will not fatten quickly over the ribs, back and hind quarters where the highest priced cuts are located.

**Age.**—The calves selected by the club members should be as nearly uniform in age as possible. The exact age should be determined somewhat by the time of marketing and the age requirements of the show in which they will be exhibited.

Calves are classified as Juniors and Seniors depending on the time they are born. A calf to be known as a junior calf must have been born after January 1 and before September 1. A calf born after September 1 of any year and before January 1 of the following year is classified as a Senior. For example a calf born after September 1, 1922, and before January 1, 1923, is considered a senior calf during 1923 and a senior yearling during 1924 while a calf born after January 1, 1923 and before September 1, 1923, is considered a junior calf until January 1, 1924, when it becomes a junior yearling for the year 1924.

**Sex.**—Packers prefer fat steers for baby beef rather than heifers of the same weight and will pay from 50 cents to \$1.50 a hundred weight more for steers. Steers have a tendency to feed more quietly and fatten more evenly though heifers mature more quickly and can be marketed at an earlier age than steers. Heifers carried through a long feeding period are apt to become rough and patchy.

### RECORD BOOK

After the Local Leader has explained the keeping of the Record Book each member should write a careful report of the Organization Meeting giving the number of members, officers elected, committees appointed and any other facts about the meeting.

## II. Obtaining Calves, Feeding, Care and Management of Calf.

### OBTAINING CALVES

When the members are secured the calves may be obtained for the project by selecting a purchasing committee which will buy all of the calves to be distributed by lot, or each member may select and purchase his own calf. Either way of obtaining the calves is satisfactory and the method used in the particular club should be dependent upon local conditions.

Where few calves of desirable form and quality can be obtained in the immediate community it will perhaps be more satisfactory to purchase the calves in one lot from a breeder or on the open market. The purchasing committee should be men with experience in selecting calves for baby beef and should buy only choice uniform animals. The calves should be distributed by drawing numbers. Two sets of numbers should be prepared, one set to be pasted or tied on the calves, the other to be drawn by the members. The number drawn entitles the club member to the calf bearing the same number. The members should pay for their calves at the average price per pound based on the weight of their individual calf. This is a very fair method of distributing calves as it gives every member an equal chance.

In communities where several herds of pure bred cattle are to be found club members should be able to select and purchase their own calves. Where individuals purchase their own calves care should be taken to select animals that will develop satisfactorily. All calves selected in this way should be approved by the County Extension Agent, a livestock specialist or some one capable of passing on them.

If the calves have not been vaccinated to prevent blackleg they should be vaccinated as soon as purchased. For instructions regarding vaccination see page 22.

Club members who do not have money to pay for their calves at the time of purchase may be able to arrange with their local bank for credit. In such cases a note covering the purchase price and bearing the current rate of interest to come due at the close of the project should be signed by the club member. For form of note see page 28.

Losses are not great among young cattle that are vaccinated

to prevent blackleg and receive proper care but occasional losses occur. Club members can insure their calves thus protecting themselves against such losses. For full details see page 28.

### FEEDING

It is well to remember in starting your project that young animals grow as well as fatten, therefore it requires more time to finish a calf than is required in the case of an older animal. A feeding period of at least six months is necessary to fatten a calf sufficiently to meet the requirements of the choice baby beef market. A longer feeding period may be desirable. A calf should be started on feed gradually. Any increase in feed should not be so great as to cause scours or digestive disorders. Once the digestive system is disturbed, the animal is more likely to have later attacks and will not feed so regularly. A mixture of equal parts of corn and oats is a good feed with which to start. This can be changed gradually after the first week to the ration you wish to use. The calf should not receive more than one-half pound per day of the grain mixture at first, for each 100 pounds of its own weight. For example, if the calf weighs 300 pounds it should receive not more than  $1\frac{1}{2}$  pounds of grain per day. This amount should be gradually increased after the calf begins to eat, until at the end of a second or third week, it is receiving about two pounds of grain per day for each 100 pounds of live weight or all the grain it will eat at each feed. For example, if the live weight of the calf is 300 pounds, at the rate of two pounds for each 100 pounds live weight the calf should receive about 6 pounds per day of the grain mixture, or about 3 pounds at the morning feeding and the same at night. If the calf is to be fed 8 or 10 months it should not be started on full feed of grain in such a short time. In addition to the small amount of grain the calf should receive all of the hay it will eat. If it has not been accustomed to alfalfa or clover hay, only small amounts of these feeds should be given as large amounts may cause bloating which is a serious disorder. Remember it is important to change feeds gradually in order to avoid much serious trouble.

Correct feeding is absolutely necessary to keep the appetite of the calf regular and cause it to lay on fat rather than grow. The feed should be palatable, and composed of a variety of fresh, thoroughly mixed feeds, free from dust or mold.

**Classes of Feeds.**—Feeds are divided into two main classes, Concentrates and Roughages.

Concentrates are grains and the feeding stuffs of a condensed

nature, the greater part of which is readily digested by animals, as: corn, oats, bran, linseed oil meal, cotton seed meal, molasses.

Roughages are the bulky feeds, a large part of which is not digested by the animal, as: hay, silage, corn fodder, pasture, straw.

It takes a much greater quantity of roughage to furnish the same amount of digestible food for the animal than is necessary in concentrates. Calves belong to the ruminant class of animals or those chewing cuds and for this reason roughages are very important as they help to keep their digestive systems in order.

### COMPOSITION OF FEEDS

The value of a feed depends upon the things it contains, its digestibility, or the amount of the feed that can be digested, and the palatability or the agreeableness to the taste.

The things a feed contains or the feed nutrients are protein, carbohydrates, fats, fiber, and mineral matter. These nutrients may not mean much to you by name, but they are the parts of the feed that influence the development of the calf.

**Protein** is the part of the feeding stuffs which helps to build blood, tissues, muscles, vital organs, skin, hair, horns, and hoofs.

**Carbohydrates** have as their main duty that of furnishing heat and energy for work. They are rich in sugars and starches and when an extra amounts of carbohydrates is eaten by the animal it is stored as fat.

**Fats or Oils** furnish heat and energy and are stored as fats.

**Fiber** is the woody and less digestible part of a feed. Its chief importance is to give bulk to the feed.

**Mineral Matter or Ash** furnishes the mineral matter for the building of the skeleton.

### FEED STUFFS

**Corn** is rich in carbohydrates and fats and for this reason it is the best of all fattening foods. However, it has only a small amount of protein and ash for tissue and bone building. If the corn is fed with linseed oil meal, wheat bran, and clover or alfalfa hay more satisfactory results will be obtained than when it is fed alone because these supply protein and ash to balance the carbohydrates in corn. Corn may be fed either shelled or ground, the ground corn is preferred when finishing calves for show purposes as they will eat larger amounts and it will mix more readily with other feeds, but it should not be ground too fine.

**Oats** is a feed that is higher in protein and mineral matter than corn. It gives bulk to the ration or feed and is much relished by the calf. Oats should be free from mold or dust and may be fed either whole or ground. Crushed or coarsely ground oats is more palatable than finely ground oats. Oats is a safe feed to use when starting the calf on feed.

**Wheat Bran** is a good feed to add to the ration as it is high in protein, pleasing to the taste and has a slightly laxative and cooling effect on the animal. Although it is valuable in the ration of the show and breeding animal it usually costs too much to be used in large quantities for commercial cattle feeding.

**Linseed Oil Meal or Cake** is of special importance in the ration of the growing calf because it is rich in protein. The amount fed should depend upon the age of the calf and the feed used in the ration. The feeding of linseed meal should be started gradually. Begin by feeding very small amounts and as soon as the calf has learned to eat the meal, gradually increase the amount until the calf is eating  $\frac{1}{5}$  of a pound of linseed meal for each 100 pounds of its weight. If the calf weighs 500 pounds, it should receive  $\frac{1}{2}$  pound of the linseed meal at each feed when it is fed twice each day. The pea sized cake is more palatable than the meal. Cotton seed meal may be substituted for the linseed meal, but it is not so good for the growing calf. In cases where cotton seed meal is fed, the calf should receive not more than  $1\frac{1}{2}$  pounds per day of the meal and that for only a short time.

**Molasses.**—Cane molasses, sometimes called black strap molasses, is well liked by cattle and is often used as an appetizer. It has a feeding value about equal pound for pound to that of corn. Only small quantities should be fed because of its laxative effect. About one-fourth to one-half pint mixed in enough water to moisten the feed is sufficient and should cause no bad effects.

Molasses and alfalfa feeds may be fed in small quantities as appetizers if the cost is not too great to be in keeping with their feeding value. Molasses and molasses feeds are low in protein and should not be fed in place of protein feeds.

**Hay.**—The calf must have some bulky or coarse feed. This should be supplied in the form of some legume hay such as alfalfa or clover. Both are high in protein and bone-building material and are to be preferred to prairie or timothy hay.

**Pasture.**—Grass is a palatable feed and may be used advantageously in producing baby beef. The calf should be allowed the

run of a pasture a few hours each day or at night during hot weather. Grass contains a great amount of water in the early spring and may cause a loss of appetite and scours, if the calf is allowed too much of it. It will eat very little grass while on full feed, but the small amount eaten and the exercise on pasture will act as an appetizer.

You may expect your calf to eat slightly less grain when it is turned on pasture at night but it should be fed and given sufficient time to eat its grain before being turned out. If the amount of grain eaten is decreased too much your calf will not fatten so rapidly as it should. This difficulty may be corrected by placing the calf on pasture where the grass is shorter or by allowing it on the grass only a few hours.

**RATIONS**

It is not possible to suggest a ration that will give the best results in all cases, as individual calves differ in the way they feed. Ration No. 1 suggested below should give satisfaction in most cases, as it is somewhat bulky and contains a variety of feeds. Rations 2, 3 and 4 should give satisfactory results and either one may be fed providing they are more easily obtained by the club member than ration No. 1. If the calf is receiving ration No. 1 or No. 3 and it continues to grow instead of fatten, the amount of corn fed should be increased and the amount of oats and bran decreased. Ration No. 5 is economical and good for commercial cattle feeding, but is not so satisfactory for feeding show or breeding cattle because it may cause them to become hard and patchy and may keep them from taking a high degree of finish.

**RATION NO. 1**

Corn .....	3 parts	Bran .....	1 part
Oats .....	2 parts	Linseed meal .....	1 part

Alfalfa or clover hay—All the calf will eat during the first part of the feeding period and limited amounts during the last half of the feeding period.

**RATION NO. 2**

Corn .....	4 parts	Bran .....	1 part
Oats .....	1 part	Linseed meal .....	1 part

Alfalfa or clover hay (See Ration No. 1)

**RATION NO. 3**

Corn .....	1 part	Bran .....	1 part
Oats .....	1 part	Alfalfa or clover hay (See 1)	

## RATION NO. 4

Corn .....	4 parts	Linseed meal .....	1 part
Oats .....	2 parts	Alfalfa or clover hay (See 1)	

## RATION NO. 5

Corn .....	6 parts	Linseed meal .....	1 part
Alfalfa or clover hay (See Ration 1)			

The calf should be fed at least twice each day. Any feed stuffs left from a feeding should be removed and the trough cleaned before the next feeding. The self-feeder is not recommended for one calf, although it may be used with satisfactory results in feeding carload lots.

Feeding twice a day is often enough to feed at first but during the last part of the feeding period the calf should be fed three times a day. During the summer, the morning feed should be given early as the calf will eat better in the cool of the day. The feeds should be thoroughly mixed. Ground feeds may be moistened with water containing some black strap molasses or a pinch of salt. Feeds that are fed moistened should be just damp enough to press into a ball.

Hay should be in limited amounts during the last half of the feeding period. Two or three pounds of hay per day should be sufficient. If the calf has a tendency to be paunchy the hay and grass should be limited during the entire feeding period.

Once a calf is on full feed, stick to the same ration. Don't change from one feed to another. Make any change gradually. Feed the same amount at the same hours each day. Make the ration palatable and keep the calf's appetite vigorous. It is better to feed slightly less than the calf will eat than to get it "off feed" by over feeding.

**Water.**—The calf should have all the clean, fresh water it will drink at all times.

**Salt.**—Calves should always have a plentiful amount of salt kept before them as they consume large quantities when they are fed heavily.

### CARE AND MANAGEMENT

As important as feeding is, there are other things that will help the calf to make large gains, these are care and treatment. Other things being equal, the calf receiving the best care and kept:



in the most comfortable quarters will make the most economical and satisfactory gains.

The calf should be kept in a roomy, well ventilated stall, that has a dry floor and a low, wide manger. The stall should be well bedded so the calf will lie down as much as possible as the calf makes its greatest gains when it is lying down, comfortable and contented.

The manger and feed boxes should be kept very clean, for this not only prevents disease, but also helps to prevent loss of appetite. The calf should be allowed to exercise in a lot on clear days during the winter and early spring, but in the late spring and summer it

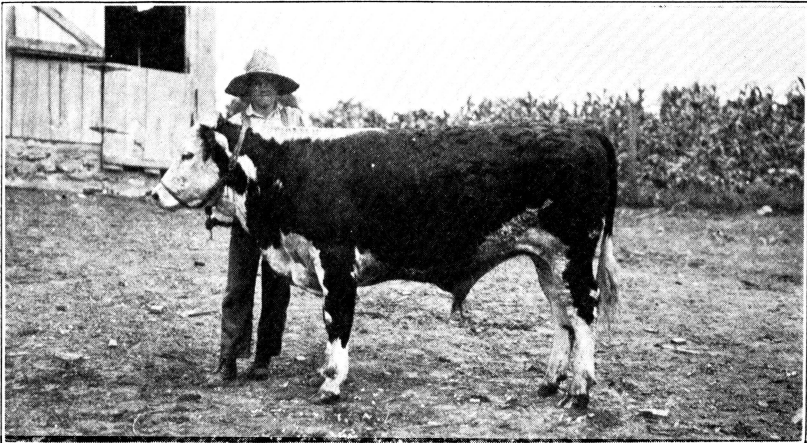
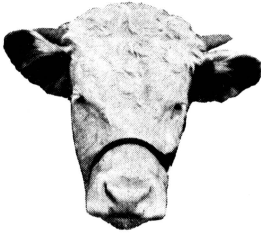


Fig. 5.—William Allgaier and his grade Hereford calf, winner of first prize in Buchanan County show.

should be kept in the stall during the day, and allowed to run in a small pasture at night. If flies bother the calf the stall should be darkened and the calf should be protected by a blanket of burlap. Keep the calf out of the hot sun from June to October in order to preserve the gloss of its hair.

The calf should be taught to lead and stand when tied. If it is very wild it should be left tied for several days and disturbed only at feeding time. A halter made of  $\frac{5}{8}$ -inch rope is serviceable and very satisfactory for this purpose. The calf should be led some each day as soon as it becomes sufficiently quiet. Its stubbornness will be overcome by gentle and patient handling. Do not let the calf get loose the first time it is led. Can you give any reason for this caution?

Horns of the proper shape will improve the appearance of the head very much while a pair of upturned horns are unsightly and will greatly detract from the appearance. If the horns have a tendency to turn up they can be trained to correct position by the use of horn weights while the animals are young and the horns are still growing. In extreme cases it may be necessary to rasp the underside of the horn so it will turn down. If too much is removed with the rasp the shell will be made thin and there will be danger



Up-turned horns



Use of horn weights

(Figure 6)

of the horn being easily broken. As soon as the tips of the horns are slightly below the level of the base, the weights should be removed.

The feet should be kept clean and free from soreness. Very little difficulty will be experienced if the calf is kept in a clean well bedded stall and given plenty of exercise. If the feet become sore and feverish, clean them thoroughly, and wash them in a saturated solution of bluestone or apply tincture of iodine to the affected parts. In making the bluestone solution, stir in all of the powdered bluestone that can be absorbed in one quart of hot water. The amount that can be absorbed will be reached when there is some of the bluestone left undissolved after stirring. Bluestone can be obtained at any drug store.

### RECORD BOOK

After purchasing the calves an interesting account can be written telling how the calves were obtained, how much you had to pay for your calf and what rate of interest you paid on your note. Any other worthwhile points that came up at the meeting should be recorded in your record book, too. Don't forget to keep account of the feeds and weight of calf and make a record at the time of each weighing so that you will not have an opportunity to forget.

### III. Development and Training of the Calf, Feeding Problems, and Stock Judging

#### DEVELOPMENT OF CALF

By the time you have your third meeting there will be much to report on the progress of your calf. It may be of interest to have a discussion of various rations that are being fed by each club member and the gains that have been secured.

#### TRAINING

The calf can be handled with less effort while it is small so the owner should see that the calf is gentled and well-mannered before

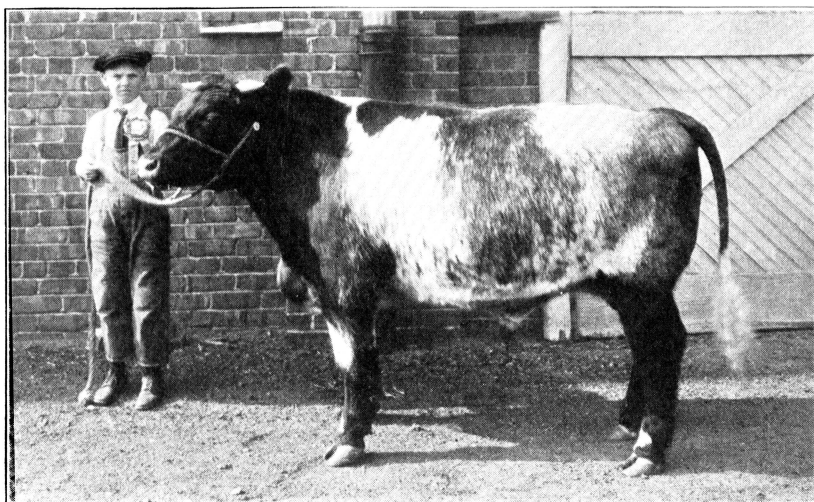


Fig. 7.—Kenneth Lininger, winner of first prize in the Shorthorn class at the third district show, St. Joseph, Missouri.

it becomes too large to be handled easily. In placing the halter on the calf, the lead of the halter should be at the left jaw so the person leading can walk at the left side. The first point is to get the calf gentle, then teach it to lead and to stand squarely on all four feet with its head up and its back level. This can be done by leading the calf to and from the pasture or watering place, stopping occasionally and standing it in proper position. When the calf is standing, the feet should be set squarely under the body and they should not be extended to the front or rear as that stretches the body and causes the back to appear low and the rear flank shallow.

The feet can be placed by touching the calf gently above the hoofs with the foot or a stick. Once the calf is trained it should be accustomed to strange sights and to being handled by strangers. The well trained calf has a great advantage in the show ring or at a sale over the stubborn one which stands improperly, for it shows in the best possible manner the development of the chest, the strength of the back and the fleshing of the hind quarters.

### **FEEDING PROBLEMS**

The feeder's problems become more difficult with the heat of the summer. Unless a bulky and palatable ration is fed the calf's appetite will not be so sharp. The appetite may be improved by increasing the amount of oats and slightly decreasing the amount of corn. While green corn stalks are valuable as an appetizer they should be fed only in small amounts chopped and mixed with the grain ration. The feeding of new corn is not advisable as it causes the calf to refuse dry grains.

### **ELEMENTARY STUDY OF STOCK JUDGING**

An elementary study in stock judging may be made at this time. This will give club members an opportunity to judge other farm animals. Instructions should be given to club members by the Local Leader, some stockman, or a livestock specialist.

### **RECORD BOOK**

The report of the progress and the rations you have been using will be of interest now. Don't fail to give account of any experiences you have had. Perhaps there have been some amusing experiences in teaching your calf good manners. If so, tell about them. Who gave a demonstration on Stock Judging and what did you learn especially about it? Have you kept up the social part of your meetings? The social part is important for there is an old saying, "All work and no play makes Jack a dull boy". Of course, none of you wants to be a dull boy or girl.

## IV. Feeding Problems, Parasites and Ailments, Stock Judging Continued, Record Book Discussed

### FEEDING PROBLEMS

The development of your calf is largely due to the ration you have been feeding. If your calf has not developed as it should it may be advisable to make some changes in the ration but before any changes are made, you should consult the Local Leader, the County Extension Agent or a live stock specialist.

### PARASITES AND AILMENTS

Even if you have been careful in feeding, and in keeping the calf, the manger, and the feed boxes clean, you may have some trouble from such parasites as lice, and from digestive disorders, and disease.

**Lice** and mites causing mange often infest barns and stables, so calves sometimes are much troubled by them. These are not serious if they are treated as soon as discovered. Sponge the animal thoroughly with kerosene emulsion using one part of the following stock solution to 15 to 25 parts of water. To make the stock solution for this emulsion dissolve  $\frac{1}{2}$  pound of laundry soap in one gallon of warm water and stir in 2 gallons of kerosene and use as directed above.

**Warbles or grubs** are first noticed by swellings along the back. To squeeze them out may cause a sore place on the back. They should be left entirely alone.

**Scours** is a digestive disorder caused by over feeding, irregular feeding, dirty feed troughs, impure water or damaged feeds. It has a tendency to check the growth of the calf and can usually be corrected by changing to feed free from mold, or by withholding a part of the feed. If this does not correct the trouble mix two table-spoonsful of turpentine in a quart of raw linseed oil and give as a drench. Care must be taken not to hold the calf's head too high while drenching. If the head is held too high, the calf may become strangled which is very serious and often results in death. Feed sparingly for 24 hours then gradually increase to full feed.

**Bloating** may result from several causes but is very serious and should be relieved at once. To relieve bloating give the calf one

quart of raw linseed oil in which two tablespoonsful of turpentine have been mixed. A gag made of rope should be placed in the calf's mouth. As a last resort the animal may be relieved by tapping but this should be done only by an experienced person.

**Blackleg** is an infectious disease that is common among calves. The animals can be protected against the disease by vaccination and each one should be vaccinated as soon as purchased. Information and vaccine may be secured by writing the veterinary department of the College of Agriculture, Columbia, Missouri.

### STOCK JUDGING

Stock Judging should be continued and members may give demonstrations or judge rings of animals under the supervision of the leader.

### DISCUSSION OF RECORD BOOKS

Record Books should be discussed and where help is needed the leader should be consulted.

### RECORD BOOK

What feeding problems have you had lately? Has your calf had any disorders or ailments? If so tell about them and what you did? Be sure that all of your feed records and expenses are entered in the Record Book under the proper heading. Record Books should be accurate, neat, and interesting.

## V. Discussion of the Development of Calf and Stock Judging

At this meeting there will be a great deal to tell about the development of your calf and a real "experience meeting" will prove most interesting and instructive. More Stock Judging can be done and members of the club should place rings of animals and give reasons for their placing.

### RECORD BOOK

Give results of the meeting on the Development of Calf and tell about the Stock Judging and the part you took. Tell about any other interesting numbers that were on the program.

## VI. Tour With Instructions in Grooming Calves for the Show Ring

At this stage of the club work a tour should be made to all the homes of the members and each calf studied. The final instructions on preparation of the calf for the show ring with demonstrations should be given.

**Grooming.**—When the calf has been fattened, the next important matter is to present it in the show ring in such a way that it will make the best appearance. In order to do this it is necessary

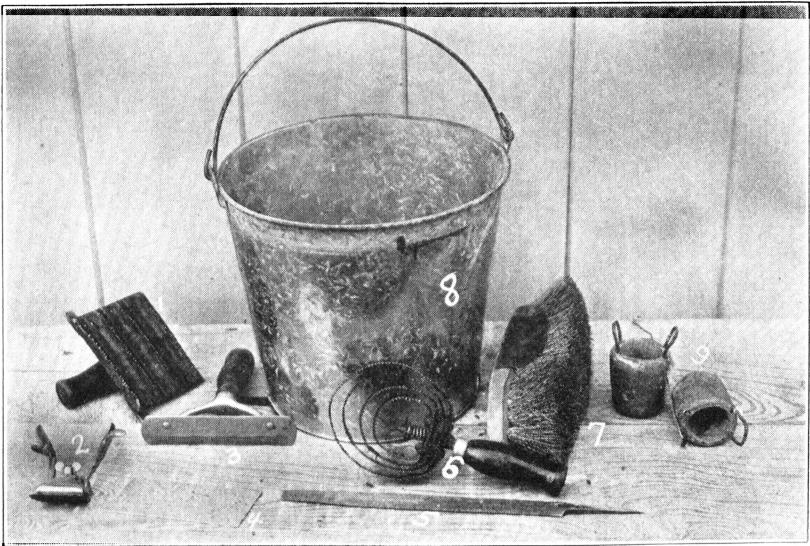


Fig. 8.—Equipment used in grooming calf.—(1) Straight-bar curry comb, (2) clippers, (3) Scotch comb, (4) wood scraper, (5) rasp, (6) round curry comb, (7) brush, (8) pail, (9) horn weights.

that the calf be well mannered, properly groomed and carefully shown. A good calf is often placed or ranked below one that is inferior because it does not stand properly and quietly. You have already been told in Meeting III page 19 how to make the calf stand correctly.

The care of the hair and the manner of grooming are important in making the calf appear its best. The hair is an index to quality and every effort should be made to have it appear glossy and full of life instead of harsh and dead. The gloss of the hair

can be preserved by keeping the calf out of the hot sun for a few months before the show, especially from June to October, as during these months the coat will sunburn and appear dead and coarse. A few weeks before the show the calf may be blanketed to advantage. The blanket should be made of burlap and it is used chiefly to keep the flies from worrying the calf and to improve the condition of the hair and skin.

The condition of the hair and skin can be further improved by washing the animal every few days and brushing it thoroughly every day. Occasionally a thick lather made from tar soap should

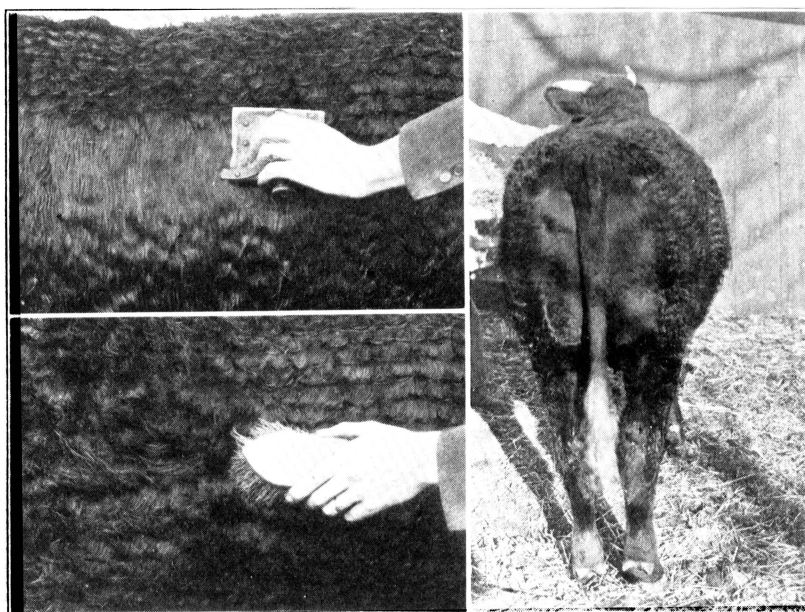


Fig. 9.—Steps in making curl in parallel lines.

be used in washing in order to remove any dirt from the skin and hair. When soap is used care should be taken to rinse the hair thoroughly. Frequent washing keeps the animal free from dirt and serves to stimulate the growth of hair.

The manner of grooming the calf for the show ring will depend upon its breed and individuality. Herefords, Shorthorns and Galloways are usually shown with hair curled, while Aberdeen-Angus are shown either with the hair curled or smooth. The method of preparing for the show ring will depend entirely upon the indi-



vidual, the object being to prepare the calf so it will best exhibit its desirable qualities.

**Curling.**—There are two ways of curling the calf's hair. In either case the animal should be wet with water containing a few drops of some good dip solution. This will stiffen the hair and cause it to stand up. The hair should be parted along the back and brushed down smooth. In making the curl in parallel lines, as shown in the illustration, such as is used on Shorthorns and Aberdeen-Angus, take a straight bar comb and make the lines about  $1\frac{1}{4}$  inches apart, then brush up until the hair stands on end.

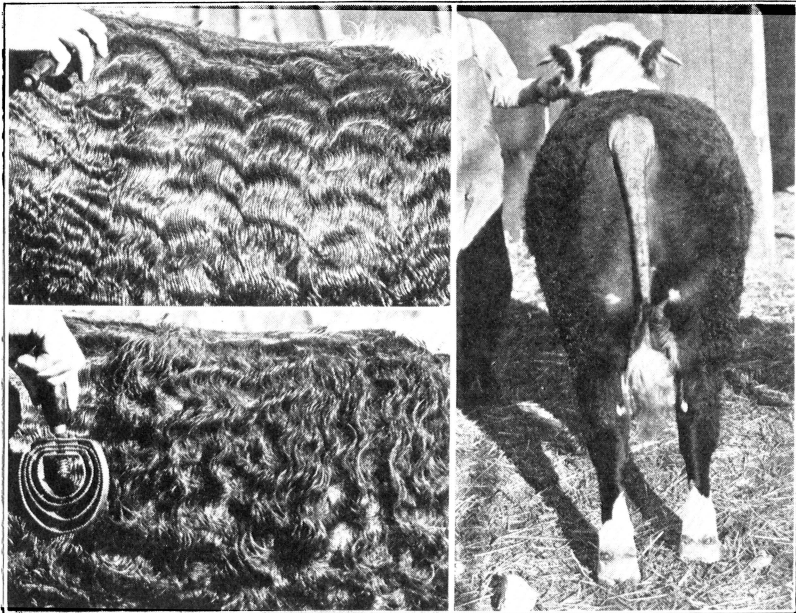


Fig. 10.—Steps in making curl in wavy lines.

If the curl with wavy lines is desired, as shown in illustration below, use a round comb to make the marks then brush up. Herefords and Aberdeen-Angus are usually curled with the wavy lines. The hair covering all depressions on the animal's body should be combed so it will stand on end.

If the calf is smooth and its hair short, it can be shown with the hair smooth. In that case the hair should be brushed down and rubbed with a woolen cloth dampened with equal parts of olive oil and denatured alcohol. This will give gloss to the hair.

**Clipping.**—The heads of Aberdeen-Angus cattle should be clipped a few weeks before the show. The hair should be clipped

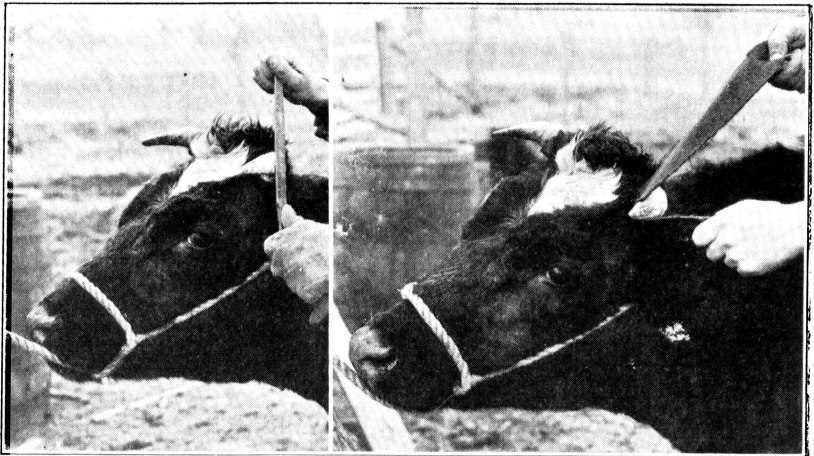


Fig. 11.—Aberdeen-Angus head clipped back to white line.

back to a line which is about one inch back of the jaw bone. The eye lashes, the hair inside the ears and the long hair around the muzzle should not be clipped. The heads of the horned breeds should not be clipped but the hair should be brushed and curled.

The development of the twist and quarters can be shown to the best advantage by clipping the tail. Begin clipping just above the switch and clip up to the tail head, gradually tapering off so it will not be necessary to clip any hair off the rump. The clipping should be done several days before the show. The switch of the

tail should be brushed out by taking hold of the tip and brushing forward. If the hair in the switch is coarse and straight it should be washed the night before the show and braided while damp into



Removing rough surface with rasp.

Polishing with oiled cloth.

(Fig. 12)

three or four braids. It should be unbraided and brushed just before leading into the ring.

**Horns.**—A well polished pair of neatly turned horns improves the appearance of the head and attracts attention. The rough surface should be removed with a rasp or file and the horns finished with emery paper and polished with a woolen cloth moistened with a few drops of oil. The hoofs can also be polished if desired.

### CARE AT SHOW TIME

Every precaution should be taken to prevent the calf from going "off feed" when he is moved to the show. It is a good practice to cut the feed to one-half the regular amount and make the first feed at the show a light one. The calf should be allowed to lie down as much as possible before it is shown. Animals show to better advantage when they are not gaunt, therefore it might be advantageous to give the calf feed and water just before showing.

In the show ring the calf should appear at its best. The showman should watch the judge so as not to be standing between him and the calf. Care should be taken to have the calf stand in the proper position with the head well up and the back level.

### RECORD BOOK

The story of this tour will make a very good report for the Record Book. Don't forget any interesting points and tell about the calves you saw.

## VII. Round-Up

The great day of your Achievement has come when the final Round-up or Show is held. Your work throughout the year will determine to a great extent the way the judge will rate your calf in the show. By far the most interesting part of the program for each member is, "Where will my calf be placed by the judge?" It will be interesting to see how nearly your idea of the calf's placing agrees with that of the judge's. If there are questions you would like to ask after the ribbons are tied, don't hesitate to do so as the answers the judge gives you may help you to do better next time.

### RECORD BOOK

The Record Book should be entirely completed with the exception of stating the premiums won which can be added immediately after the showing. These books should be turned over to the Local Leader when the calf is entered in the local show.

**CREDIT AND NOTES**

A few boys or girls who wish to become baby beef club members may not have the money to pay for their calves at the time the club is organized. They may be able, however, to arrange with their local bank or the man from whom they purchase the calf for credit. In such cases a note bearing the current rate of interest will be required to cover the purchase price. This note should be made so it will come due at the time the project is to close. The note should be signed by the club member and the father or some adult. The note and interest must be paid when the calf is sold.

A bank note can be obtained at the bank and will be similar to this form.

**FORM OF NOTE**

\$....., MO. ...., 1923  
..... days after date ..... promise to pay to the  
order of .....  
..... Dollars  
for calf purchased by me as member of .....  
..... Baby Beef Calf Club ..... County  
with ..... per cent interest from date.  
DUE .....

SIGNED .....

Member

SIGNED .....

Surety

**INSURANCE**

Boys and girls who invest their money in calves and especially those who give notes for their calves feel that they need to be protected against accidental loss. This protection can be given by insuring the calf against death. There are two ways of doing this, through regular livestock insurance with reputable insurance companies or by a cooperative agreement between the members.

The cooperative plan of insurance requires that a fund be set aside from which losses are to be paid. In order to have sufficient funds to pay all losses each member should pay into the insurance fund one-tenth the original cost of his calf. Where all calves are paid for by notes this amount, one-tenth of the original cost, should be added to the note. This fund is to be used only in payment for

the loss of any calf by death. Losses should be paid on the original cost of the calf. Any funds left after all losses are paid are to be prorated back to each member according to the amount he puts into the insurance at the beginning.

### **SUGGESTIONS FOR ROLL CALL**

Below are given a few suggestions that may prove helpful in conducting your meetings. In roll call each member can take part in the meeting by making a report on some part of the topic suggested.

1. Name and locate some part of a Beef Calf.
2. One member can give a nutrient or part of every feed and the next member tell its purpose.
3. One member can name a feed stuff and the next member tell the nutrients or give what it contains.
4. Give a point that will help in the success of raising Baby Beef.
5. Each member name one step in "fitting" calf for the show.

### **DEMONSTRATION FOR CLUB WORK**

Each member should be able to demonstrate every one of the following suggestions:

1. Weighing out and mixing feed.
2. Making a halter from rope.
3. Treating for lice or bloating.
4. Demonstration on grooming for show.
5. Demonstration in judging.

## INDEX

Age .....	10	Introduction .....	1
Ailments .....	21	Insurance .....	28
Ash .....	13	Kerosene Emulsion .....	21
Blackleg .....	11, 22	Lice .....	21
Bloating .....	21	Linseed Oil Meal .....	14
Bluestone solution .....	18	Meetings .....	3
Breeding .....	10	Suggested .....	4
Calf, Development .....	19, 22	Mineral Matter .....	13
Junior .....	10	Molasses .....	14
Obtaining .....	11	Neck .....	9
Senior .....	10	Notes .....	28
Carbohydrates .....	13	Oats .....	14
Carcass, Illustration of .....	8	Organization .....	5
Care and Management .....	16	Parasites .....	21
Care at Show Time .....	27	Pasture .....	15
Clipping .....	25	Protein .....	13
Concentrates .....	13	Quality .....	10
Constitution .....	9	Rations .....	15
Contents .....	2	Record Book --4, 10, 18, 20, 22, 27	
Corn .....	13	Roughages .....	13
Credit .....	28	Round-Up .....	27
Curling hair .....	25	Salt .....	16
Diagram .....	7	Score Card .....	6
Fats .....	13	Explained .....	6
Feeding .....	12, 20, 21	Scours .....	21
Feed Stuffs .....	13	Sex .....	10
Classes of .....	12	Stock Judging .....	22, 20
Composition of .....	13	Suggestions .....	29
Form .....	7	Roll Call .....	29
Fiber .....	13	Demonstrations .....	29
Feet .....	19	Terms Used .....	5
Hay .....	15	Tools for Grooming .....	23
Head .....	8	Tour .....	23
Horns .....	27	Training of Calf .....	19
Preparation of .....	27	Vaccination .....	11, 22
Grooming .....	23	Warbles .....	21
Grubs .....	21	Water .....	16
		Wheat Bran .....	14