Instructions for Boys’ and Girls’ Dairy and Beef Calf Clubs

BY

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"The cow is the foster mother of the human race. From the day of the ancient Hindoo to this time have the thoughts of men turned to this kindly and beneficent creature as one of the chief sustaining forces of human life."

—W. D. Hoard.

For information regarding Boys’ and Girls’ Clubs, address M. J. Abbey, state club leader, Bozeman, Montana.
INTRODUCTION

The foundation of the dairy industry rests upon the dairy cow, and cows are only calves grown up. If the products of the dairy are to continue to be one of the chief sustaining forces of human life, then the man who engages in the business of dairy husbandry must increase the output by using greater intelligence in the selection, the development, and the care of the dairy calf.

The dairy industry is rapidly coming to be one of the leading branches of agriculture in Montana, and the only way to meet the growing demand for dairy cows is to raise more calves.

On nearly every farm the dairy enterprise finds a place and quite often is the source of a considerable amount of the family income. The successful raising of the calves is one of the best ways to build up a high-producing herd, and thereby put the dairy business on a paying basis.

The care of the calves is a part of the farm work which is usually assigned to the boys and the girls. This is a duty which they can do well, but it requires careful attention each day if one is to make a success. In the past, a great many calves died from lack of intelligent care, but now the science of calf-feeding and management has revealed many secrets which, if carefully applied, makes the calf losses comparatively few. The young people often have better success than their parents in raising calves, because they learn quickly, readily adopt new methods, and give more attention to details. This is the main reason which justifies the formation of boys' and girls' dairy calf clubs.
PURPOSE

1. To create and stimulate greater interest and a more favorable sentiment in the young people of the State toward more intelligent and profitable dairying, and to make their rural life more pleasant and attractive—to cultivate good citizenship.

2. To teach the boys and girls the fundamental principles of selecting, raising, and caring for dairy cattle, and to instill in them a love for good animals.

3. To unite local dairy activities as cow-testing associations, dairymen's organizations, county fairs, and farmers' picnics with the rural schools, agricultural high schools, and the State College of Agriculture.

How to Organize

If a calf club is desired in a community, the following method of perfecting an organization is suggested:

1. Secure a club leader, and if possible, an advisory committee of three, one of which may be the local school teacher, or county agent.

2. Hold a meeting of the boys and girls interested, together with the parents, and have the club leader present.

3. Select some one chairman and have him secure rules for organizing from the State Club Leader, State College, Bozeman.

The Plan of Organization

1. Age:—Any boy or girl from ten to eighteen years of age.

2. Size of club:—The club should consist of at least five members. If five or more members cannot be secured in one community, individuals may register in the state calf club and receive all instruction and be eligible for prizes.

3. What the club should have:—
   a. A name.
   b. An adult leader and advisor.
   c. A set of officers.
   d. A meeting each month.
   e. A club exhibit.
   f. An annual report to the State Club Leader.

WHAT EACH MEMBER MUST DO

a. Sign an enrollment card and mail the same to the State Club Leader, Bozeman, Montana.

b. Secure as good a calf as possible. This should be done on or before May 1, 1918.

c. Each member must himself feed and care for his calf.

d. A record of the kind and amount of feed must be kept. A record must be kept of the time the calf was pastured.

e. The record must be kept for a period of four months, commencing on the day the club member registers or secures his calf.
f. Two trustworthy persons must certify as to the exact age and weight of the calf on the day that the club member signs his registration card or secures his calf. Notify the State Club Leader at once.

g. At the end of four months, on September 1st, each club member must submit a report to the State Club Leader, which shall include the age of the calf, kind and amount of feed, labor and gains, and weight of calf at end of feeding period. With this report, a brief story of "How I Raised My Calf."

h. When possible, exhibit the calf at a local or county fair. Prizes will be offered.

i. The following basis of award will be used:

1. Daily gain in weight.................................25
2. Cost of feeding and care of the calf for the period.....25
3. Most complete records, reports, and best story...........25
4. Score of calf.........................................25

State-Wide Contest

A state prize of twenty-five dollars will be offered to the club member who, having previously complied with all the requirements of securing, weighing, (weight to be certified by two trustworthy persons), and registering the calf, can show at the end of four months the greatest gain in weight, the smallest cost of feeding, and the most complete record and story on "How I Raised My Calf."

This contest ends September 1st, 1918. A member may register any time after January 1st, 1918, but the period of feeding must run four months. As soon as a club member signs his registration card and secures his calf, he should send this statement to the State Club Leader, signed by two trustworthy persons:

"This day (date).................................I have weighed a calf belonging to..............................address........................................and certify that said calf weighs.............lbs.

"Signed......................................................"

At the end of four months the calf must be weighed a second time, and a similar statement made by two trustworthy persons. This statement, together with all records and the story of "How I Raised My Calf," must be sent to the State Club Leader at once. Please note page 7 of this bulletin as to method of keeping a record. Immediately after all reports are received by the State Club Leader, the state award of twenty-five dollars will be made. The persons who register in this state-wide contest can take part in all local contests in his county or at the state fair. Members are urged to study very carefully the directions for feeding as given in this bulletin and also the method of keeping a record.

How to Obtain a Calf

It is usually easy to secure heifer calves in communities where
there are dairy cattle. In other localities, dairy calves may be secured through the club leader or county agent. It is essential that each member own the calf, which may be secured by gift or purchase. 

In case financial assistance is necessary, quite often the local bank or other organizations will arrange to advance the money on short time with properly approved notes. If such an arrangement cannot be made, write the State Club Leader, Bozeman, Montana, and he will assist you if possible.

The Breed to Select

It is advisable that each club confine itself to one breed, if possible, and allow the club leader, or someone competent to judge, to make the selections so that the calves will be near the same age, type, and size.

The following will be recognized as dairy breeds: Jersey, Guernsey, Ayrshire, Holstein, Brown Swiss, Red Poll, and Milking Shorthorn, and may be entered in the dairy calf club.

How to Feed the Calf

1. One of the most frequent difficulties in raising calves by hand is over-feeding. It has been found that the average calf will do the best for the first three weeks on from three to four quarts of milk daily, depending on the size of the calf. Don’t feed too much.

2. Feed the calf three times a day, until it is four weeks old. Then, it can get along on two feeds daily.

3. Feed the calf his milk warm, about one-hundred degrees, the same as it is when it comes from the cow. Warm the milk on the stove if it gets cold, but do not add hot water to the milk.

4. Always give the calf sweet milk, and be sure to have the bucket clean so the calf will not become sick.

5. After taking the calf from the cow at the end of three days, give it whole milk for a week or two, then gradually change to skim milk. If the calf is getting ten pounds or five quarts of whole milk per day, make the change as follows:

<table>
<thead>
<tr>
<th>Amount of whole milk</th>
<th>Amount of skim milk</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st day</td>
<td>9 pounds or pints</td>
</tr>
<tr>
<td>2nd</td>
<td>8</td>
</tr>
<tr>
<td>3rd</td>
<td>7</td>
</tr>
<tr>
<td>4th</td>
<td>6</td>
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<td>5th</td>
<td>5</td>
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<td>6th</td>
<td>4</td>
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<tr>
<td>7th</td>
<td>3</td>
</tr>
<tr>
<td>8th</td>
<td>2</td>
</tr>
<tr>
<td>9th</td>
<td>1</td>
</tr>
<tr>
<td>10th</td>
<td>0</td>
</tr>
</tbody>
</table>

6. When the calf is a week or ten days old, give it a handful of grain in the bottom of the bucket after feeding, or put it into the
calf's mouth and it will soon learn to eat grain. Ground oats, barley, or middlings are very good with a pinch of linseed meal if it is on hand.

7. After the calf is three weeks old, allow it to have all the grass it wants and give it fresh, clean alfalfa, clover, or prairie hay.

Care of the Calf

1. Keep the calf in a clean stall or pen where it will keep warm at night.
2. The calf needs lots of sunshine and ventilation. Be sure it has plenty of clean, dry straw to sleep on. Calves will get sick if kept in dirty quarters.
3. The growing calf needs exercise, so do not confine it in a small place for too long a time, but allow it room to exercise. A calf that does not run and play usually is not well.
4. The calf will soon learn to drink water after it begins to eat hay or grass, so be sure to give it plenty of fresh, clean water.
5. After a month or so, the calf will eat a little salt. Give it a pinch of salt once a week or keep a piece of rock salt in a box where the calf can get at it.

Diseases of the Calf

1. Calves will get the white scours if kept in dirty pens.
2. The causes of yellow scours are:—
   a. Feeding the calf too much when it is young.
   b. Feeding in dirty pails or dirty milk.
   c. Giving the calf sweet milk one time and sour milk the next.
   d. Feeding the milk warm one time and cold the next.

Remedy for Scours

1. To cure the yellow scours, put a teaspoonful of blood meal into the milk at each feeding.
2. Put four drops of formalin to each quart of milk.
3. Ordinary white clay mixed with water to the consistency of thick cream and given in doses of a quarter to half-a-pint, three times a day, has been used with excellent results.

EXPLANATION OF RECORD

The record which follows needs some explanation:

a. Use this record for each month. Those club members who care for a calf for four months will need to make four copies. Those members who are in the “State-Wide Contest” will also make four copies. Do not lose your records. They will be required to compete for prizes. A final summary report blank will be sent to you for your report to the State Club Leader.

b. Estimate the value of whole milk at 6 cents per quart.

c. Estimate skimmed milk at 3 cents per quart.

d. Estimate grain.
<table>
<thead>
<tr>
<th>Days</th>
<th>Value of whole milk</th>
<th>Value of skim milk</th>
<th>Pounds of grain</th>
<th>Value of grain</th>
<th>Kind of grain</th>
<th>Days on pasture</th>
<th>Value of pasture</th>
<th>Pounds of hay</th>
<th>Value of hay</th>
<th>Pounds of other feeds</th>
<th>Value of other feeds</th>
<th>No. hours labor</th>
<th>Value of labor</th>
</tr>
</thead>
</table>
e. Estimate pasture at 2 cents per day.
f. Estimate labor at 15 cents per hour.
g. The story "How I Raised My Calf" should be brief, and the facts of your record should be used in writing it.

PRIZES

The State Board of Education has recently made it possible for a large number of boys and girls to win free scholarships at any of the institutions of the University of Montana.

The institutions are the State College of Agriculture and Mechanic Arts at Bozeman, the State University at Missoula, State School of Mines at Butte, and the State Normal College at Dillon.

The county club winner in each of the following contests will be eligible to a free scholarship: Dairy calf, Baby beef, Poultry, Pig, Bread, Garment, Potato, Corn, Garden-Canning, and Wheat.

The state winner in each will receive a four-year scholarship. The second and third winners, three and two-year scholarships.

At county fairs, and also at the state fair, liberal cash prizes will be offered. We expect that club winners in each county will receive free trips to the state fair as in the past.

BABY BEEF CONTEST

In addition to the dairy calf clubs described in the preceding pages, a baby beef club will be organized. The same rules will apply to this contest as apply to the dairy calf contest. Cash prizes, trips to the state fair, and scholarships at the College or at any of the institutions of the University of Montana will be awarded the same as in the dairy calf club. Aside from these inducements, there is an opportunity to make good profits on your baby beef. The records of the Iowa Beef Breeders' Association show that during the last three years, the profits on growing and feeding 2862 baby beefes has been from $7.00 to $16.00 per head, or an average of about twelve dollars profit on each calf after all expenses are paid. The profits in Montana should equal if not exceed these.

Remember that you can enter a club or compete in the state-wide contest as an individual. Send your name at once to the State Club Leader, Bozeman, Montana.
FINAL REPORT OF CALF CLUB*

1. County...........................................Name of school or club.................................
2. Name of member.......................................................... ...........................................
3. Address........................................................................R. F. D. ....................................
4. Weight of calf on May 1st.............................lgs.
5. Weight of calf on Sept. 1st...........................lgs.
6. Gain in weight for feeding period............lgs. (No. 5 minus No. 4)
7. DAILY GAIN...................................................lgs. (No. 6 divided by 123)
8. Total value of whole milk - $..........................
9. Total value of skimmed milk $..........................
10. Total value of grain - - $..........................
11. Total value of pasture - - $..........................
12. Total value of hay - - $..........................
13. Total value of other feeds - - $..........................
14. Grand total value of feed - - $..........................
15. Value of labor - - - $..........................
16. COST OF FEED AND CARE $...........................
   (Sum of Nos. 8, 9, 10, 11, 12, 13, 14, and 15)
17. Is your calf a bull or a heifer?..................
18. Is it pure bred or grade?..........................
19. How old is your calf?..........................
20. What kind of pasture did you use?..................
21. What grain feeds did you use?..................
22. Have you kept your monthly reports?............... 
23. Have you written your story?..................

*This report to be made out soon after Sept. 1st. Use monthly reports for compiling data. Be accurate and neat.