



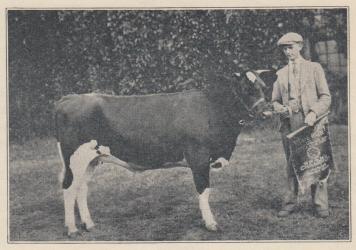
# UNIVERSITY OF MINNESOTA AGRICULTURAL EXTENSION DIVISION

UNIVERSITY FARM, ST. PAUL

### MINNESOTA BOYS' AND GIRLS' CLUBS

T. A. Erickson, State Leader Bulletin No. 9

## THE 4-H DAIRY CLUB CALF



ELMER JOHNSON, NICOLLET COUNTY, GRAND CHAMPION, 1928

Published by the University of Minnesota, College of Agriculture, Extension Division, F. W. Peck, Director, and distributed in furtherance of the purposes of the co-operative agricultural extension work provided for in the Act of Congress of May 8, 1914.

### THE 4-H CLUB CALF

by

# H. R. SEARLES Dairy Extension Specialist

As a dairy calf club member you want to see how well you can grow out and develop your calf. You want to learn to take the best care of her. You are more or less before the eyes of your community and you want it to see you make good. You are setting an example for the other boys and girls of your community. You must make good. You don't have to win the prize, but you should grow a good calf, one that you will be proud of when people come to see it.

Here are a few suggestions on the care, feeding, and fitting of dairy club heifers. Study them carefully and see if you can make some improvement in your own work. This outline is short and does not cover fully all that might be done, but in most cases it will serve as a very good guide. If your father or a near neighbor is a purebred breeder or a good dairyman, his advice will be of great value to you because he knows your special conditions.

### FIRST YEAR PROJECT

### Selection of Calf

Space will not be used to describe the kind of calf to buy. When you get this you have already obtained your calf. We hope it is a good one, and has been carefully selected by some one who knows what a good calf should be.

### Care and Management

Your calf will probably be between 2 and 6 months of age when you get her. You should put her in a clean, dry, light stall or pen with plenty of good clean bedding. Keep her by herself if you can. If she must go in with other calves see that there is room enough for all. Let her out or lead her out for exercise. See that she has plenty of good clean water at all times. Put up a little box for salt. It would be well to put up another box and keep in it at all times a little fine ground bonemeal or spent boneblack, which you can get from the feed store. Add just a little salt to the bonemeal. Bonemeal helps to build big strong bones.

#### Feeding

Milk.—Your calf should have skimmilk, if you have it, until she is 6 to 8 months old. If you are short of skimmilk she will do fairly well without it after she is 3 months old. It is the best calf feed

known. Feed it know how muc amount at first. night and morni calf will take th than this amoun enough skimmill pails every day.

Hay.—Feed a make her eat it a each day and give

Clover hay is Then alfalfa is b in a little timot alfalfa hay may

Clover and to Silage.—Do

months old. She 6 months it may Grain.—Enough

condition and gra all the grain she to keep her in go have a measure know just how the grain may b

Corn and bar meal are growin

The following ground corn or be parts ground co

With mixed ground oats, the bran) one part of

Ground soyb

If your calf is
her back into co

You should to condition; not far a little flesh ove be well to add a time

During the w

known. Feed it fresh and warm from the separator. If you don't know how much she has had before you got her, feed a small amount at first. Start out with about 10 pounds a day, 5 pounds night and morning, and slowly increase up to 15 or 16 pounds if the calf will take that much. There isn't much value in feeding more than this amount at one time. It is much better to feed not quite enough skimmilk than too much. Wash and scald the milk feed pails every day.

Hay.—Feed all the good hay the calf will eat at all times. Don't make her eat it all unless it is very fine. Take out what she leaves each day and give it to the horses. Put in fresh day daily.

ın

st

a

it.

of

a

eat

nen

s a

hen

pen

can.

ugh

has

salt.

mes

get

one-

she

airly

feed

Clover hay is probably the best until the calf is 5 or 6 months old. Then alfalfa is best. If you do not have clover and feed alfalfa, put in a little timothy or prairie hay with it if you can. Nice fine alfalfa hay may be too laxative for the little calf.

Clover and timothy mixed is good hay for a small calf.

Silage.—Do not feed silage to your calf until she is at least 6 months old. She does not need it, and it may cause trouble. After 6 months it may be well to feed a little.

Grain.—Enough grain should be fed to keep the calf in good condition and growing. Until she is 5 or 6 months old she can have all the grain she will eat up twice a day. After that give her enough to keep her in good condition and growing well. Weigh the feed or have a measure that holds a certain number of pounds so that you know just how much you are feeding. For the first few months the grain may be fed whole, after that it should be ground coarse.

Corn and barley are more or less fattening; oats, bran, and oil-meal are growing feeds.

The following mixtures are good with alfalfa hay: Equal parts ground corn or barley, ground oats or bran. With clover hay, equal parts ground corn or barley, ground oats and bran.

With mixed hay, three parts ground corn or barley, three parts ground oats, three parts bran (oats may be substituted for the bran) one part oilmeal.

Ground soybeans may be substituted for the oilmeal.

If your calf is thin, feed a little more corn or barley until you get her back into condition.

You should try at all times to keep your calf in good growing condition; not fat, but in good smooth condition so that you can feel a little flesh over the ribs. If you are not feeding oilmeal it would be well to add a little to her grain the last 6 weeks before show time

During the winter, especially, a good brushing once a day will do wonders in keeping her looking well and doing her best.

#### Pasture

During the summer, if your calf is 6 months old or older, let her have a little grass. Do not turn her out in the pasture with the other cattle. Let her out in a small pasture—the calf pasture or the orchard or some such place. It is better to turn her out only at night because the hot sun and the flies are hard on a young calf. If you do let her out during the day put a gunnysack blanket on her to protect her from the sun and flies. If you can not give her grass under these conditions you had better keep her in the barn the first summer.

### Getting Ready for the Calf Show

For several months, ever since you secured your calf, you have been looking forward to the calf show. You have fed and cared for your calf so that she would grow big. You have been feeding her well so that she would carry enough fat for show time. Now you have to put on the finishing touches. But if you haven't taken good care of your calf all the time, your finishing touches are going to be hard.

Training.—Of course, when you first got your calf home you bought a good leather halter or made one of rope. You have been leading her every day. You have worked with her and petted her until she will follow you like a dog. You have gained her love and confidence. She thinks you the greatest of all beings because you feed her, water her, brush her, and pet her. You must also spend some time teaching her to stand correctly. Teach her to stand squarely so that her back and rump are straight, so that she will look her best. You do not need a whip or stick to do this. Do not carry one when you work with or show your calf. Teach her to hold her head up and show herself. A well trained calf has a big advantage at the show. Often, too, there is a showmen's prize. A well trained calf is the result of showmanship.

Hoofs.—Keep them the proper length all the time so that the calf will stand squarely on her feet. Long toes will develop crooked legs. At least see that they are trimmed before show day. A pair of hoof pincers will do it. A wood rasp and a file will help you smooth up the edges. Then have them clean.

Clipping.—Clip the calf all over a month or six weeks before the show, unless her hair is very short. This will give a new growth of fine glossy hair. To clip, make an even start just at the top of the switch and clip the tail, then go carefully over the rest of the body, clipping against the hair. Be careful not to leave patches of long hair or make ridges in the hide. Just befor show day clip the tail, belly, head, and neck again, doing a nice smooth job.

Washing.—Gi
or Ivory soap and
laundry soap as it
stiff brush and ge
the first two week
brush as you get h
last few days befo
skin and give a si

Blanketing .-

summer. It will k
blanket can be mading on strong cloth
under the neck, un
each hind leg. D
calf and will wear
work of putting of
these blankets for
time and washed.
The last mont

bed blanket shoul The under-blanke This heavier bland natural skin oils; it in place, lying fl ance. The blanke important, and yo a couple of weeks

Grooming.—I daily. You can n good for both the to straighten out a and leave the brig of grooming.

Use a fairly so except to clean the hide and leave

Horns.—The

I. Use a rather places. If the holittle. Be careful in mind the properto straighten it on head; but on the

Washing.—Give the calf a good scrubbing with good toilet soap or Ivory soap and water after you clip her. It is better not to use laundry soap as it is a little harsh on the hide and hair. Use a fairly stiff brush and get at the dirt and dandruff. Wash her several times the first two weeks, being careful not to scrub too hard with the stiff brush as you get her hide softer. Unless she is dirty, do not wash the last few days before the show. The natural skin oil will soften the skin and give a shine to the hair.

her

ther

or-

ight

u do

otect

hese

have

d for

her

you

good

g to

you

been

her

and

you

pend

stand

look

carry

hold

lvan-

well

t the

oked

pair

you

efore

owth

op of

f the

es of

p the

er.

Blanketing.—A light gunnysack blanket is a good thing all summer. It will keep off the flies and help to keep the calf clean. This blanket can be made from a bran sack by cutting the stitching and sewing on strong cloth strips to fasten it on the calf. Sew on strips to tie under the neck, under the body, behind the fore legs, and to go around each hind leg. Do not use binding twine, because it may chafe the calf and will wear out quickly. Small rings and snaps will lessen the work of putting on and removing the blanket. Make two or three of these blankets for the calf so that they can be changed from time to time and washed.

The last month or 6 weeks an under-blanket made from an old bed blanket should be pinned or sewed on to the gunnysack blanket. The under-blanket should be washed now and then and kept clean. This heavier blanket will aid in softening the hide by bringing out the natural skin oils; and it will give the hair a soft, silky finish, keeping it in place, lying flat instead of standing on end, giving a rough appearance. The blanketing of the calf for some time before the show is very important, and you will be surprised at the change in appearance after a couple of weeks. It will not replace grooming, however.

Grooming.—During the fitting period the calf should be brushed daily. You can not brush her too long or too often. The brushing is good for both the skin and the hair. It keeps the calf clean and helps to straighten out and smooth the hair. It will remove the old dead hair and leave the bright, healthy, shining hair. Nothing will take the place of grooming.

Use a fairly soft brush that is kept clean. Do not use a curry comb except to clean the brush. As the hide and hair improve, it will injure the hide and leave ridges like the marks of a whip.

Horns.—The horns should be polished so that they will shine.

I. Use a rather fine wood rasp to cut down the ridges and rough places. If the horn is coarse and the shell thick it can be cut down a little. Be careful not to cut through the hard outer shell. Also keep in mind the proper shape of the horn. Try to increase the curve, not to straighten it out. Do most of the cutting on the front toward the head; but on the back, toward the tip.

- 2. Using a steel scraper, smooth up the rough ridges left by the rasp. A piece of glass can be used if you are careful not to cut your hand. Scrape the long way of the horn. Coarse sand paper will also do this smoothing, but not quite so fast as the scraper.
  - 3. Using fine emery cloth now, gives a good smooth surface.
- 4. The polish is made from tripoli (which you can get at any drug store) and olive oil. Mix the two until you have a rather thick paste. Only a very little is needed. Rub some of this paste on the horn with your hand and polish with strips of flannel cloth. Repeat this until you have a bright polish on the horn.

5. Wrap the horns with rags and tie them on so that the horns will not get scratched. Take some of the polish with you to the show and give them another reliable.

give them another polishing just before you enter the ring.

5. Wash the switch of the tail until all stain is removed. Wash it with soap the night before the show and then braid it into three or more tight braids and tie them with string. Just before the show comb it out and it will be all fluffy and white. The soap left on the switch to dry will help make it fluffy and bushy. Stains on the legs and knees should be removed by washing before the show. Constant washing with soap will gradually remove stains. No well fitted calf will have what should be white legs and a white switch all yellow and stained.

### WHAT TO TAKE TO THE SHOW

I. Your records on your calf project. Perhaps these have to be mailed; if so, send them on time to the proper address. Your hard work may bring you no prize if your records are incomplete or missing.

2. Fresh, clean blankets for your calf to wear at the show. Those worn during shipping or hauling will probably be both dirty and worn.

- 3. A lead halter, either a leather or a nice looking rope halter. Be sure this halter lead strap is attached so that you lead the calf from her left side.
- 4. Enough feed for the trip and for the duration of the show, if feed is not furnished.
- 5. A water pail, a feed box or another pail to feed grain in if one is not furnished at your show. Use your own feed and water pails at the show and do not loan them to any one else. Get water fresh from the tap or pump; never water at a tank where other cattle are watered.
  - 6. Soap for washing off stains and for washing the tail.
  - 7. Rags for washing and polishing the horns.
  - 8. Some of your horn polish in a little tin box.
- 9. A gunnysack or a little box to put these small articles in, so they won't get lost.

### WHAT I

I. Be the ready—clean she does not before the sh

2. Come others where

3. Watch Keep her sho

4. Be pre

(1

Watch yo
Do not turn y
How well
you have spen

Try to lead Pay attention

Have you but remember winning calve Congratula

### CARE A

During the but does not plenty of ligh Water and

Silage, if i of ground cor hay is availab three parts co more grain is

If well group to breed at from breed. The sa little younge

WHAT TO KNOW AND WHAT TO DO SHOW DAY

I. Be there at the time set to show your calf and have your calf ready—clean and shining and well fed. She will not look her best if she does not have a good middle filled out with feed and water just before the show.

2. Come out promptly when called and stand your calf with the others where you are told.

3. Watch your own calf. Don't pay any attention to the others. Keep her showing at her best all the time.

4. Be prepared to answer these questions for the judge.

(1) Is your calf a purebred or a grade?

(2) When was your calf born?

y the

ll also

drug

paste.

with

until

s will

w and

ash it

ee or

show

ft on

n the

Con-

fitted

ellow

to be

ssing.

Those

Be

from

w, if

f one

ils at

from

ered.

n, so

(3) How long have you had her?

Watch your calf, keep her standing straight and looking her best. Do not turn your back on your calf.

How well your calf behaves in the show ring depends on the time you have spent training her before the show.

Try to lead your calf or stand her when and where the judge directs. Pay attention only to your calf and to the judge.

Have your calf in such condition that you are proud to show her, but remember that you can't always win. If you don't win, study the winning calves and see in what points they are better than yours.

Congratulate the winner and resolve to do better next year.

## CARE AND FEEDING OF THE YEARLING DAIRY HEIFER

During the winter the yearling heifer should have a good shelter, but does not need a warm barn. She needs a clean dry place with plenty of light, fresh air, and bedding.

Water and salt should be provided all the time.

### Feeding

Silage, if it is available, with alfalfa or clover hay and 2 to 4 pounds of ground corn and oats makes a good ration. If no alfalfa or clover hay is available, 3 to 4 pounds should be fed daily of a mixture of three parts corn, three parts oats, and one part oilmeal. Sometimes more grain is needed. Feed according to condition. Keep her growing.

#### Breeding

If well grown (and she should be well grown) the heifer is ready to breed at from 16 to 20 months of age, depending on her size and breed. The smaller breeds mature a little quicker and may be bred a little younger than the larger. A Jersey may be bred to calve soon

after she is two years of age, the Guernsey a few months later, and the Holstein and Brown Swiss at 27 to 30 months of age.

If she is purebred, have the owner of the bull sign the breeding certificate of the application blank so there will be no trouble later when you want to register the calf.

No attempt has been made here to give instruction on the care or feeding of the milking heifer or cow. However, every dairy calf club member should carry the project through the full three years using the bulletins listed below for information. Every dairy calf club member should be able to talk dairy feeding and management intelligently. He should take an active part in the management of the whole dairy enterprise on the farm. If he can not do this he has failed to grasp the opportunity presented to him in his calf club project.

### Minnesota Dairy Bulletins You Should Have

(Get them from your county agent)

Raising Dairy Calves on Skimmilk—Special Bulletin 108. Raising the Dairy Calf When Whole Milk Is Sold—Special Bulletin 91.

Feeding the Dairy Herd—Agricultural Experiment Station Bulletin 218.

# AGRICULTURAL EXTENSION DIVISION UNIVERSITY OF MINNESOTA

Boys' and Girls' Club Work



University Farm, St. Paul

## 4-H CLUB DAIRY CALF RECORD

Name of club member Misiam C Dallen Age 13 years
Post-office Ruch Creek R.F.D. County
Date enrolled Name of club Pork Crek 44 Club
Name of club leader George Schmitt
Name of county agent 3k4 Hammarara
I. Breed of calf Guernsey 2. Name of calf Beauty"
3. If purebred, give name and number of sire and dam
Sire
Dam
4. Name and address of breeder
5. Date calf was dropped March 1 6. Date record started Apr. 1
7. Value of calf at that time fine dillars.
8. Weight of calf when record began (desirable but not necessary)
9. Date feed record closed
10. Weight when record closed
II. Gain in weight (desirable but not necessary)
12. Total cost 13. Value at end of contest 14. Profit
Additional report for second-year project:
15. Individuality and breeding of bull to which heifer was bred.
Additional report for third-year project:
16. Number of pounds of milk produced
17. Number of pounds of butterfat produced

### OUTLINE OF REQUIREMENTS

- 1. Membership: Any boy or girl between the ages of 10 and 20 years, inclusive, may take part in the dairy calf project.
- 2. Each member must keep a complete record of all operations involved in feeding, care, and management of the calf, on forms provided. The final report for each year must be sent to the County Leader in time for the county exhibit. Records of winners for trip to the State Fair must be sent to the State Leader on or before the opening day of the State Fair.
- 3. Each member must show his calf, heifer, or cow at the Club Show that will be held at the close of each year's project as required by the local or county leader.

### 4. Outline of work:

FIRST YEAR.—This project should start with a calf dropped not later than February 1, and end with a calf club show at the County Fair or special calf show, and with exhibit at State Fair for the state. The calves in the first-year project must be not over 14 months old at the time of the local show.

SECOND YEAR.—This project should start when the calves are approximately one year old and end with a calf show as stated in the first-year project. Heifers must be not over 26 months old at the time of the local show.

THIRD YEAR.—This project should start when the heifer freshens and continue for one year, or through her first lactation period. The cow must be not over 38 months old at the time of the local show.

If young calves are purchased, the members can start directly with the first year's work and continue through the year. If open heifers over one year old are secured, they can start with the second year's project and continue through the third year with the cow and at the same time her calf can be used to complete the first year's project. If bred heifers are secured, the members should start with the third year's project as soon as the heifer freshens. Her first heifer calf can be used to complete the first and second year's work.

5. Awards shall be made on the following basis-

### FIRST YEAR

a. Individuality and condition of animal	50	
b. Records and written story of the methods of feeding, care and management, and		
cost of raising the calf	40	
SECOND YEAR		
a. Individuality and condition of animal	50	
b. Individuality and breeding of bull to which heifer was bred	10	
c. Records and written story of the methods of feeding, care and management, and		
cost of raising the heifer	30	

### THIRD YEAR

a	. Individuality and condition of animal	30
b	Production of milk and butterfat	30
C.	. Records and written story of the methods of feeding and care of the cow, and cost of	
	producing milk	40
	2 20 lbs. 2 2 h 120	

1 200 × 200

20 120 20

Lucy 2 mi

D 40,65

65.

2000

3 of

Menger Saffer

30 6

5

FEED RECORDS

Each time any feed is weighed out the kind and weight should be entered below. By weighing out a sack of feed or several bushels of grain at a time this can be simplified. In figuring cost of production use local market prices for all feeds. Enter in the following table the prices used by you:

Oats\$,28	per bu.	Timothy\$	per ton
Corn	per bu.	Alfalfa	per ton
Barley	per bu.	Prairie hay	per ton
Shorts or Bran	per 100 lbs.	Silage	per ton
Middlings	per 100 lbs.	Pasture	per mo.
Oilmeal	per 100 lbs.	Skimmilk	per 100 lbs.
Clover hay	per 100 lbs.	Whole milk	per 100 lbs.

			Va	lue
Date	Kind of feed	Weight of feed in pounds	Dollars	Cents
0.12	rate	64 Chan		5%
27	earn	34 lbs		500
1				
-1	_ vats	32 lbs.		28
-12	anto	92 lbs.		* 42
ust 3	palo	32 200.		90 2
		Marie Marie		100

### THE STORY OF MY DAIRY CALF

Your story should include any item of interest connected with raising your calf. The following suggestions may be helpful:

Tell why you became a calf club member; How you got your calf; Why you selected this particular breed; How, when, and what you fed it; Who visited you and told you how to care for your calf; What you have learned about feeding calves, producing milk, etc.

barry this spring I decided to herome a dairy and their way to early be of mary use to my farmer to early be of mary use to my farmer to early be a parents. My farmer far our avers. The early to paise far my away. I selected the guerry early because

A. I.

(, 5

12.18

### THE STORY OF MY CALF-Continued

it was the nicest call on our farm. Not only
that but it would shake a yer and short
Calf fel my calfrith great care being sure
- 11 4 : 1 1 for the great care, well sure
nothto give dit too much feed to yetatte,
same I time see soit plad ple tito eat,
I fel it water mulle twice a day
Ials pedit gate, ground car wanda bill
granted barlow
Thru Hammargren visited me and
gave-me afew points on Caringfar
Amueall. 8
De Bor
For,
A CONTRACTOR OF THE CONTRACTOR
List your I had stone 44 Out member
and started, out by targer a quel call
and started, out by targer a quel call
and started, out by targer a quel call
which my father gave to be all leading
which my father gave to be could be of me holy to my parents: I selected this particular find
which my the gave to be all lead for the hours to my parents: I selected this particularly bird he are the was the present cally on over farme
which my there gave to be cault be of one the parents: I selfted this particular find he are former former former to be and the present cally on our farmer former
which my the gave to be all lead for the hours to my parents: I selected this particularly bind he are the was the present cally on over farmer than the build make a very good their of the order of the present call of the present and being
which my there gave to be could be of one they to my parents: I selfted this particularly find he are formed by the one of the would make a very great their sould the other sould make a very great their sould the sould find the sould their sould the sould find the sould be the s
which my the gave to be all lead for the hours to my parents: I selected this particularly bind he are the was the present cally on over farmer than the build make a very good their of the order of the present call of the present and being
which my there gave to be could be of one they to my parents: I selfted this particularly find he are formed by the one of the would make a very great their sould the other sould make a very great their sould the sould find the sould their sould the sould find the sould be the s
which my father a good of a could be of me holy to my parents I selfeted this particularly kind he and the would make a very over the sould make a very fining sure must to feel it too fruch, and of the Sound to seat the sould plenty to eat
which my their gave to be less the find have to my parents: I selected this particular) beind help to my parents: I selected this particular) beind help only that had she would make a very over their sould make a very over their sould being sure must been it too fruch and of the Sould being sure must be feel it too fruch and of the Sould be so
which my there gave to be lead for the sound for the start of the particular formed help to my parents: I selfeted this particular formed help and the would make a very over the sound sound formed the start to eat the sound of the sound selected the sent to eat the sound of the
which my their gave to be less the find have to my parents: I selected this particular) beind help to my parents: I selected this particular) beind help only that had she would make a very over their sould make a very over their sould being sure must been it too fruch and of the Sould being sure must be feel it too fruch and of the Sould be so
which my there gave to be lead for the sound for the start of the particular formed help to my parents: I selfeted this particular formed help and the would make a very over the sound sound formed the start to eat the sound of the sound selected the sent to eat the sound of the