





## THE DAIRY HEIFER

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4-H Club Dairy Project

### POINTERS FOR THE 4-H DAIRY CLUB MEMBER

- 1. Select animals carefully with regard to health, type, and production.
- 2. The young calf needs the colostrum milk.
- 3. Feed carefully and do not overfeed; it is too costly.

  One pound of milk for each 10 pounds body weight is suggested.
- 4. Provide dry, clean, well-bedded, and light quarters.
- 5. Sanitation is very important. Sterilize the milk feeding bucket.
- 6. The young calf needs concentrates.
- 7. Calves need green, leafy, sun-cured hay.
- 8. Make feed changes gradually.
- 9. Good pasture will replace only part of the roughage from 4 to 6 months.
- 10. Concentrates should supplement pasture from 6 to 10 months.
- 11. Free access to fresh clean water is important.
- 12. Begin fitting for show at least 6 weeks ahead of time.
- 13. Train your animal before the show and not in the show ring.
- 14. The well-trained calf has the advantage.
- 15. Make every detail of herdsmanship and showman-ship important.
- 16. Strive always to win but be a good sportsman, win or lose.

# Selecting, Raising, and Showing the Dairy Heifer

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Many dairymen owe a large part of their success to the proper selection and raising of the individual animals that make up their herds. Likewise the success of a 4-H dairy project will depend largely on whether or not a good animal is selected and how well that animal is fed and grown out to maturity. The success of the enterprise will be determined by the interest, sincerity, enthusiasm, and judgment of the 4-H member. The cost of raising a calf will vary according to the feeding methods used and the cost of the feeds on various farms. As the average cost for raising a heifer from birth to first freshening is \$60 to \$75, only the calf that shows indications of growing into a profitable cow should be raised. It costs as much to raise a poor calf as it does to raise a good one.

#### SELECTING THE CALF

The breed. The first consideration in the selection of a dairy calf is to determine which of the dairy breeds—Jersey, Holstein, Guernsey, Ayrshire, or Brown Swiss—is desired. This determination should be based on personal desire, adaptability to feeding conditions and product to be marketed, availability, and cost of desirable animals. The availability of sires of the breed chosen and the breed of dairy cattle already on the farm where the calf is to be maintained should also be considered. The calf selected preferably should be a purebred because it would have a better chance of developing into a profitable dairy cow, and the club member will have a better opportunity to exhibit it at Club fairs and shows and compare it with other purebreds of the same breed. A carefully selected high grade calf, however, will do very well for the beginner in a 4-H dairy club if a purebred cannot be obtained.

Health of the calf. It is very important that the calf come from a healthy, disease-free herd, and that it be a healthy, vigorous individual of average size for the breed represented. A calf with a rough, uneven coat of hair, a "pot belly," thin condition, and stunted appearance shows evidence of improper nutrition or ill health and should not be selected. A calf with a healthy, glossy coat of hair, pliable skin, alert appearance, and good thrifty condition, together with a long, deep, evenly developed body and rump is the individual most likely to develop into a productive cow of good type. Whether

the calf is of normal size for the age and breed can be determined by checking with the height and weight information given in Tables 2 and 3.

Type and conformation. The desirable points in type and conformation can best be observed by comparing several calves standing side by side. The desirable individual is one that is clean cut, not too heavy boned, and fairly angular in form. It should be sharp over the withers with a good spread of rib, and a deep, wide chest. The barrel should be well developed in proportion to the rest of the calf. The loin and rump should be long, level, and wide.



After selecting a heifer the 4-H Club members and their club agent study the pedigree provided by the breeder.

There should be some evidence of mammary development with four teats placed uniformly and wide apart. The points of type wherein the various breeds differ are especially shown in the head. A knowledge of the dairy cattle breed score cards for a perfect animal and practice in judging are advantageous to the club member in selecting a calf of good breed type and body conformation.

**Production.** The dam of the calf should be of desirable type and have a production record on twice-daily milking of at least 300 pounds of butterfat as a two-year-old, or 400 pounds of butterfat at 5 years or older. This production should be made in a 10-months lactation with the cow calving again in 12 months. In case the cow is milked for 12 months the production record should be 50 to 75 pounds of butterfat higher. It is desirable to have good records of

production on full sisters or half sisters of the calf being selected. These records should equal or exceed the records of the dam. It is very desirable to transmit uniformly high production to at least six and preferably more unselected tested daughters.

If possible the calf should be selected from a line of ancestors that have not only high production records for 1 year but also have produced well year after year for at least 5 or 6 years. This indicates the inheritance of good fertility as well as long-time production, and is highly desirable. While it is significant to have a long line of good ancestors, by far the greatest consideration should be given to the sire and dam and the grandparents of the calf. Where calves from a proved sire are not obtainable, the parents of the sire should be more carefully considered. If they have demonstrated their ability to transmit good production and fertility, there is a good chance that the sire of the calf will do likewise.

The female ancestors should be individuals of good type, showing large feed capacity. They should have fairly large, evenly shaped udders that are securely attached front and rear. The teats should be of fair size and spaced well apart. There should be good veining on the udder and fairly large milk veins on the barrel. The sire of the calf should be an animal of desirable breed type and body development, of good size for the breed, and showing dairy character.

#### FEEDING THE CALF

The baby calf should stand and nurse within 2 hours from the time it is born. If it does not nurse of its own accord, it must be assisted. It is necessary that the calf get the first or colostrum milk from the mother. This milk is much higher in protein, minerals, and vitamin A than ordinary milk. It is laxative in nature and contains substances that temporarily protect the new-born calf against certain digestive disturbances. The calf should be left with the mother for about the first 48 hours and then placed in a pen by itself and taught to drink from a pail. After it is away from the cow for 10 or 12 hours, there is usually little difficulty in getting it to drink. When giving the calf its first lesson be sure that the milk is as warm as when it first comes from the cow. Weigh the desired amount of milk into a clean bucket. Back the calf into a corner and then stand with the calf's neck between your legs. Hold the bucket with one hand and moisten two fingers of the other hand in the milk and place them in the calf's mouth; as he begins to suck, lower the hand into the bucket, being careful to hold the bucket up high enough so that the calf will not have to lower its head. Be careful not to cover

the nostrils with milk. As the calf sucks, the fingers may be removed. The lesson may have to be repeated a number of times before the calf learns to drink. The calf will do best if kept on its dam's milk for 4 or 5 days.

Milk feeding. The young calf is a very delicate animal and its careful feeding and handling for the first few weeks are very important. A general rule to follow is to feed 1 pound of milk for each 10 pounds of body weight, or 10 per cent of the calf's weight daily. For example, a 60-pound Jersey calf would receive 6 pounds of whole milk daily and a 90-pound Holstein 9 pounds daily. As the calf increases in weight, the milk allowance is increased. There is greater danger in overfeeding the young calf than in underfeeding. It is desirable to feed the milk to a weak calf three times daily during the first week. Milk should be fed in clean buckets that have been sterilized by placing them over steam, in boiling water, or in chlorine solution. The milk should be fed at regular intervals and at about the same temperature at each feeding.

If a loose condition of the bowels results from feeding milk too high in butter-fat content, a small amount of warm skim milk may be added to reduce the percentage of fat. The amount of standardized milk fed should be kept at the same level. If the calf should have an attack of scours, the milk allowance should be omitted for one feeding and reduced to one-half for 2 days. If the condition improves, the amount of milk may be gradually increased again to the normal allowance. Careful feeding, especially for the first 3 weeks, will go a long way toward preventing digestive disturbances and will result in a more rapid growth as the calf gets older. The thrifty calf can be changed over gradually to skim milk beginning at about 3 weeks of age. A delicate calf should have whole milk somewhat longer. Four or five days should be taken in changing over from whole to skim milk. Skim milk may be profitably fed up to 6 or 8 months of age if available. Ordinarily, however, calves will do well on concentrates and hay or pasture after 6 months.

Powdered skim milk, reconstituted by adding 1 pound of the powder to 9 pounds of warm water, is a good substitute for separated skim milk if it can be purchased at a reasonable price.

When the amount of skim milk is limited or when whole milk is sold from the farm, the calf can be grown out after the whole milk-feeding period on a special concentrate mixture usually known as a calf meal.

Concentrates with skim milk. The calf should have concentrates beginning with the second week of age. A concentrate

mixture of whole, rolled, or coarsely ground home-grown grains will give very satisfactory results in supplementing skim milk. Likewise oats alone, fed whole, rolled, or coarsely ground, supplements the skim-milk ration. An easy way to start the calf eating concentrates is to place a small handful in the bucket or manger as the calf finishes its milk. At 3 weeks of age the calf should be given all the concentrates it wants. By the time the calf is 6 weeks to 2 months old it usually will eat about 1 pound of concentrates daily; at 3 months, 2 pounds daily. This amount is sufficient to keep the calf growing if a good-quality hay is fed. Any of the following concentrate mixtures fed with good hay and skim milk will keep the calf growing vigorously:

- 1. Ground barley 50 pounds; ground oats or wheat bran 50 pounds; and 1 pound each of salt and sterilized bonemeal.
- 2. Ground oats 60 pounds; ground barley or corn 20 pounds; wheat bran 10 pounds; linseed meal 10 pounds; and 1 pound each of salt and sterilized bonemeal.
- 3. Equal parts of oats, wheat, barley, and bran with 1 per cent each of salt and sterilized bonemeal.

Calf meals. When skim milk is not available, a calf meal should be fed. A calf meal must be palatable and supply animal protein. The following calf meal has given very good results at the Oregon Agricultural Experiment Station:

35 per cent ground oats

25 per cent ground yellow corn

12 per cent wheat bran

10 per cent linseed oil meal

10 per cent dried skim milk powder

5 per cent blood meal

2 per cent sterilized bonemeal

1 per cent salt

This calf meal is fed dry. At the beginning of the second week of the whole-milk-feeding period, the young calf is fed calf meal as well as good-quality hay. The calf should be consuming from 1 to  $1\frac{1}{2}$  pounds of the calf meal daily when whole-milk feeding is discontinued at 4 to 6 weeks of age. Two pounds of calf meal per day should be the average consumption at 7 to 8 weeks of age. After 12 weeks of age the amount of calf meal should be limited to 3 or 4 pounds daily, depending on the size of the calf and the quality of the roughage. Fresh water in unlimited quantities should be available at all times.

Hay. The calf will become interested in hay at about 2 weeks of age and should have free access to it. The hay may be either legume, mixed, or nonlegume provided it is green, leafy, fine-stemmed, and sun-cured. At first a fresh handful of hay daily will be all that is needed but at 5 or 6 months of age the calf should be eating from 3 to 5 pounds per day. Hay such as described above is a very good source of vitamins A and D which the young calf needs. Legume hays are superior to grass hays for calves more than 3 months of age. They are somewhat more laxative than grass or grain hays and should be fed with care to very young calves. When grass hays are to be used, they should be cut before too mature and well cured, taking care to retain as much color as possible.

Succulent feeds. Silage or root crops may be fed to calves in limited amounts after 4 months of age. At this time, 2 or 3 pounds of silage or roots may be fed daily along with hay and the amount increased to 5 or 6 pounds at 6 months of age. After this, increasing amounts may be fed.

Pasture. Calves will begin to use a small amount of pasture at 3 to 5 months of age but must have plenty of additional feed to keep them growing. After 6 months of age, the heifer will utilize increasing amounts of pasture so that at 1 year she may be expected to grow normally on good irrigated pasture alone. Early dry-land pasture may be sufficient but the heifer's growth must be watched closely and supplemental feed given before the pasturage becomes limited. If necessary to prevent a stunting in growth, concentrates and hay should supplement the pasture. For the best growth a small amount of concentrates should supplement good pasture between 6 and 10 months of age.

**Water.** Fresh clean water should be accessible at all times or at least twice daily after the calf is 6 weeks of age.

Minerals. When calves are raised in the manner described, there will be little or no lack of minerals except salt, which should be available. While on normal milk rations, calcium and phosphorous requirements are well supplied. After the milk-feeding period, heifers should have access to sterilized bonemeal placed in a box in their exercise yard or pasture as further assurance that they will have plenty of minerals.

Vitamins. Vitamins A and D are the only ones likely to be lacking in the feed of young calves. Calves on whole milk receive plenty of vitamin A if the cows are fed green, leafy hay or are being pastured. As the calf gets older, it will obtain ample vitamin A

Table 1. Daily Feeding Schedule When Skim Milk Is Available

Age of calf	Milk	Grain	Good quality hay	Silage or roots	Water, salt, bonemeal	Pasture*
First 48 hours	Nurse dam					
3 days to 14 days	Whole milk— 6 to 10 pounds					
Third week	Whole milk— 6 to 14 pounds	Handful	Handful		_ <del></del>	
Fourth week	Gradually change to skim milk	Accessible	Accessible	·		
Second month	Skim milk— 10 to 16 pounds	1 pound	All calf will eat		Accessible†	
Third month	As above	1½ pounds	All calf will eat	***	Accessible†	Small amount
Fourth month	As above	2 pounds	All calf will eat	Small amount, 2 or 3 pounds	Accessible†	Small amount
Fifth month	As above	As above	All calf will eat	4 to 6 pounds	Accessible†	Increasing amount
Sixth month	As above	As above	All calf will eat	5 to 10 pounds	Accessible†	As above
6 months to 12 months	Skim milk to 8 or 10 months if available	1 to 3 pounds as needed for good growth	All calf will eat	10 to 18 pounds	Accessible†	After 6 months good pasture may serve as only roughage

<sup>\*</sup> Pasture can be utilized in increasing amounts in place of hay alone, or hay and succulent feeds as the calf gets older. † Water may be supplied twice daily.

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from its own roughage intake. Vitamin D is obtained from suncured roughage. Young animals should be given the benefit of direct sunshine as an additional source of vitamin D.

Daily feeding schedule. The following feeding schedule may be used as a guide in feeding the calf from birth to 12 months of age when skim milk is available. Any feeding program, of course, must be based on the health and appetite of the individual animal. Several other methods of feeding, based on whole milk only for 3 to 4 weeks, followed by limited skim milk or calf meals, as already discussed, may be used.

#### NORMAL GROWTH OF DAIRY CATTLE

Table 2 gives the normal weight and height at withers for female calves of different breeds at various ages. Individual calves cannot be expected to correspond exactly in weight and height with the figures given but they should be close enough to use the table as a guide to normal growth.

When stock scales are not available so that cattle weights can be obtained, very close estimates may be made of the weights of dairy

	Ayrs	hires	Guerr	nseys	Hols	teins	Jers	Jerseys		
Age in months	Weight	Height at withers	Weight	Height at withers	Weight	Height at withers	Weight	Height at withers		
-	Pounds	Inches	Pounds	Inches	Pounds	Inches	Pounds	Inches		
Birth	72	27.6	65	26.6	90	29.1	53	25.7		
1	89	28.6	77	28.2	112	30.6	67	27.0		
2	119	30.2	102	29.8	148	32.3	90	28.9		
3	158	31.9	133	31.6	193	34.3	121	30.6		
4	198	34.0	173	33.5	243	36.2	158	32.6		
5	245	35.5	216	35.3	297	37.7	199	34.5		
6	293	37.2	260	36.9	355	39.7	243	36.2		
7	344	38.5	305	38.4	410	41.1	286	37.7		
8	389	39.9	350	39.9	462	42.3	324	39.0		
9	433	40.9	389	40.9	509	43.5	360	40.1		
10	469	41.7	427	41.7	552	44.4	393	40.9		
11	502	42.5	459	42.6	593	45.3	420	41.7		
12	538	43.2	490	43.3	632	46.0	450	42.2		
14	611	44.8	556	44.6	705	47.3	507	43.3		
16	669	45.7	605	45.3	782	48.5	558	44.4		
18	725	46.5	663	46.4	845	49.3	601	45.2		
20	793	47.4	712	47.0	912	50.2	642	45.9		
24	902	48.3	818	48.0	1,069	51.7	733	46.9		

Table 2. NORMAL GROWTH OF DAIRY HEIFERS

cattle by the measurement of the heart girth. Table 3 gives the estimated weight of females with heart-girth measurements varying from 26 to 92 inches. For example, a calf that measures 45 inches in heart girth may be expected to weigh approximately 294 pounds. Any accurate measuring tape may be used. The tape should be placed around the animal directly behind the front legs. The animal

should be standing squarely on its legs and the tape should be pulled firmly but not tight in making the measurements.

Table	3.	ESTIMATING	THE	WEIGHTS	OF	DAIRY	Cows	AND	CALVES	FROM	HEART-GIRTH
				M	EAST	REMENT	s.*				

	Heart- girth	Weight		Heart- girth		Weight		Heart- girth		Weight		Heart- girth		Weight
		Pounds				Pounds				Pounds				Pounds
26	inches	 80	43	inches		257	60	inches		637	77	inches		1,285
27	inches	 84	44	inches		275	61	inches		668	78	inches		1,331
28	inches	 89	45	inches		294	62	inches		700	79	inches		1,377
29	inches	 95	46	inches		314	63	inches		732	80	inches		1,423
30	inches	 101	47	inches		334	64	inches		766	81	inches		1,469
31	inches	 108	48	inches		354	65	inches		800	82	inches		1,515
32	inches	 118	49	inches		374	66	inches		835	83	inches		1,561
33	inches	 128	50	inches		394	67	inches		871	84	inches		1,607
34	inches	 138	51	inches		414	68	inches		908	85	inches		1,653
35	inches	 148	52	inches		434	69	inches		947	86	inches	••••	1,699
36	inches	 158	53	inches		456	70	inches	•	987	87	inches	••••	1,745
37	inches	 168	54	inches		478	71	inches	• • • • •	1,027	88	inches	••••	1,791
38	inches	 180	55	inches	••••	501	72	inches		1,069	89	inches		1,837
39	inches	 192	56	inches		526	73	inches	••••	1,111	90	inches	•	1,883
40	inches	 208	57	inches		552	74	inches		1,153	91	inches	•	1,929
41	inches	 224	58	inches		579	7.5	inches		1,197	92	inches		1,975
42	inches	 240	59	inches		607	76	inches		1,241	ll			

<sup>\*</sup> U. S. Department of Agriculture Bureau of Animal Industry Circular.

#### CARE AND MANAGEMENT

Extreme sanitation should be observed at all times as a measure toward preventing disease. The feed buckets and manger must be kept clean. The pen should be well bedded with straw, cleaned every day, and kept as dry as possible. Small calves should be protected from drafts and too great a change in temperature. Any changes in feed should be made gradually. When including roughage in the ration of the young animal, it must be remembered that a calf's roughage capacity is quite limited up to 5 or 6 months of age. Between 6 and 12 months the proportionate size of the rumen changes rapidly and at 12 months of age the heifer is able to consume relatively large amounts of roughage. Young stock should have plenty of exercise and sunshine.

#### FITTING AND SHOWING

The primary object in a dairy project should be to develop a profitable dairy animal. This object is attained through proper selection, care, and feeding. The animal raised may or may not be a show-ring winner. If the club member has showing in mind when he begins his project, he should select his calf with greater care as to show-ring type. Particularly the desirable characteristics of the breed represented, a good body and rump conformation, even teat placement, and straight legs should be looked for. Growth and development will be determined by the feeding and management program.

Leading. One of the first things to do is to teach the calf to lead. This is of value even though the calf is never shown. The calf should first be tied with a halter so that it will become used to this practice. The calf should be taught to follow at a gentle pull on the rope. This may be encouraged by offering the calf feed to induce it to follow. Never strike or drag the calf as this is a sure way to develop stubbornness. The animal should be taught to stand squarely on all four feet with the head up. Always move slowly when teaching and leading the calf and it will be more likely to behave in a similar manner in the show ring.

Feeding. The regular feeding methods previously described should be continued when the calf is being prepared for show. The addition of 10 pounds of linseed oil meal per hundred pounds of concentrate mixture aids in getting the hair and skin in condition. For the older animal a little additional grain may be fed. The heifer should be in a thrifty condition but not excessively fat. It is better to have heifers a trifle thin rather than too fat.

Grooming and blanketing. Brushing at least once every day with a soft brush and rubbing down with the palms of the hands will soon take out the long hair and produce a glistening, thrifty coat. The currycomb should be used only to clean the brush and carefully to remove dirt from the legs and flanks. After brushing, the animal should be groomed with a flannel cloth moistened with a vegetable oil. At the beginning of the fitting period it may be necessary to give the animal a bath with warm water and soap. Usually a good thorough wash job at the beginning of the fitting period will be all that is necessary except with animals that have lots of white color. Frequent washing should be avoided as it will remove the natural oil from the skin and hair. Washing should be done on a warm day or in a warm place.

The animal should be blanketed 6 weeks to 2 months before it is to be shown. A light blanket may be used to prevent the hair from becoming sun-bleached. The blanket should be large enough to cover from the front of the shoulders to the very rear of the tail setting. When the hair is long, it may be desirable to use a double blanket or a cotton blanket under one made from duck or burlap. This heavy blanketing will produce quicker shedding of the hair and softening of the skin. Illustration on page 14 shows a blanket made from burlap. Such burlap blankets are entirely satisfactory and should be used during the fitting period even though purchased blankets are owned. This will keep the better blankets clean for use at show time.

Home-made calf blanket. A calf or cow blanket can be made from burlap or light weight (8 ounce) duck material. The blanket may be lined with cheap cotton blanket material or if made from burlap the sacking may be doubled if desired. Burlap is cheap and makes a very satisfactory blanket for fitting an animal for show.

The blanket should extend from the front edge of the shoulders to the extreme rear edge of the pin bones. The blanket should be wide enough to hang about 4 inches below the lower line of the barrel.

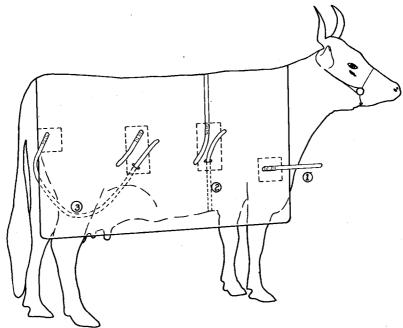
A patch about 6 inches square should be sewed on the blanket for reinforcement where straps are attached on the front and rear of the blanket. The two patches on the side should be 6 inches by 12 inches. Strap 1 should be attached in front of and a trifle below the point of the shoulder with one strap 12 inches long on each side of the blanket. Strap 2 should pass around the animal and may be made to stay on the outside of the blanket all the way around or to pass through, leaving the lower edges free as indicated. This latter method is more desirable for the larger blanket. Strap 3 should be made long enough to pass under the leg and be loose enough that it will not chafe. All straps should be long enough to tie easily. The straps may be made from denim or the same material that is used in making the blanket.

Clipping. The entire animal should never be clipped. Clip the head and neck as far back as the point of the shoulder and withers. Clip the tail from the front of the tail setting down to the top of the switch. It is desirable particularly in a mature animal to clip the udder and under the belly. Scissors should be used to complete the trimming around the horns and ears. All clipping should be done 5 or 6 days before showing.

Horns and feet. The horns of the young animal must be observed, to see that they curve in toward the front and do not point too high, except in the case of the Ayrshire. With this breed the horns are allowed to grow upward. If the horns do not develop in the desired direction, they may be trained into place by regular commercial horn trainers that clamp on the horn and may be tightened in such a way as to cause the horn to grow forward. Home-made devices will serve the same purpose.

When the horns are being fitted for show, they should be smoothed first with a fine wood-rasp and then scraped with a metal wood scraper or a piece of glass. On the young animal the rasp is not needed. Be careful not to weaken the horn by scraping too thin. Following the scraping fine emery cloth can be used to give a very

smooth finish. Final polishing can be done with any metal polish or with a paste made by mixing pumice stone and vegetable oil and applied with a flannel cloth.



Pattern for home-made cow blanket.

The feet may need to be trimmed if the animal has been on soft earth or has been inside a large part of the time. A hoof nipper or chisel and a rasp will be all that is needed. The toes should be short enough to allow the animal to stand in a normal position without obviously bent pasterns. The hoof should be cleaned and polished similar to the horns. An oiled cloth may be used to wipe the hooves and horns to provide a glistening finish.

Final show preparations. The night before showing the ears and the switch should be washed and on older animals the switch braided into three or four braids. These are left in until just before showing. The morning of the show day the animals should be given a liberal feed of roughage. Care must be used in watering just before showing as too much cold water may cause the hair to stand on end or cause the animal to shiver and hump its back. Be sure that the animal before entering the show ring is thoroughly clean and wiped off with a cloth having a little oil on it. Avoid using too

much oil. The switch should be unbraided and fluffed out just before going into the ring.

Showmanship. Keep the lead strap coiled or folded neatly in the hand. Keep the lead hand about a foot from the animal's head. Watch the animal closely and always keep it under control. The animal should always be between the leader and the judge so as not to obstruct his view. Keep the judge in view so that you will always be ready to obey his commands. Never jerk or strike any animal in the show ring. Never try to make your animal back up more than a step or two. If necessary lead out in a circle and back into position. Remember that you are showing your animal from the time you leave the barn until you return.

A good showman is always neat and clean, particularly when in the show ring. He is a good sportsman, win or lose, and makes progress by observing his own faults and those of his animal as well as those of the other showmen.

Herdsmanship. Good herdsmanship consists in knowing how properly to feed and care for stock and then in doing it. Keep your exhibit on good display at all times. Have a place for feed, for equipment, and for personal belongings and keep each item in its place. Do each day's feeding and cleaning without delay. Tie the animal so that it is comfortable yet not loose enough to back out into the alley or annoy other animals. Keep your equipment out of sight as much as possible. Keep the alleys clean and attractive. Be generous and helpful toward your fellow herdsmen. Know your animals and be ready to answer questions about them.

The following score card should be studied and followed closely by those who wish to do the best possible job of fitting and showing their dairy animals.

#### HERDSMANSHIP SCORE CARD

The purpose of a herdsmanship contest is to develop more knowledge and skill in the proper handling and stabling of livestock and in the proper care and use of equipment.

2. Tying

B. Care
1. Cleanliness and grooming

Bedding
 Regularity

a. Feedingb. Blanketing

c. Cleaning stalls

II. Barns	40
A. Equipment, feed, and supplies	
1. Arrangement	
2. Cleanliness	
3. Neatness	
B. Alleys and stalls	
1. Cleanliness	
2. Bedding	
3. Neatness	
C. Stall cards	
1. Legibility	
2. Neatness	
III. Club member	20
A. Appearance and attitude	
B. Skill in handling animals	
C. All work to be done by club members	
Total	100
4-H Livestock Showmanship Score Card	
The purpose of a showmanship contest is to create more inter	est in, and
better knowledge of, proper fitting, training, and showing of anim	als.
Breed type and conformation will not be considered.	
All training and preparation of the animals both prior to an	d during the
fair to be done by the contestants.	a daring in
Entire body clipping of dairy animals is objectionable.	
Either rope or leather show-type halters are recommended.	Cleanlines
and condition of the halter to be considered.	Cicamines
and condition of the natter to be considered.	
Basis of Awards	
	30
I Preparation for showing	
I. Preparation for showing	00
A. Condition of feet and horns	
A. Condition of feet and horns B. Cleanliness and grooming	
A. Condition of feet and horns B. Cleanliness and grooming 1. Condition of coat	
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