

COOPERATIVE EXTENSION WORK
IN
AGRICULTURE AND HOME ECONOMICS

STATE OF OKLAHOMA

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OKLAHOMA AGRICULTURAL AND
MECHANICAL COLLEGE AND
UNITED STATES DEPARTMENT OF
AGRICULTURE, COOPERATING

EXTENSION SERVICE
COUNTY AGENT WORK
STILLWATER, OKLAHOMA

Distributed in Furtherance of the Acts of Congress of May 8 and June 30, 1914

4-H Calf Club Manual



4-H CALF CLUB MANUAL

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CALF CLUB RULES

1. Any boy or girl in the state who is ten to twenty-one years of age, inclusive, on January 1st of the year in which the work is done and who will agree to abide by the rules of the club is eligible to membership in the 4-H Calf club.
2. Enrollment should be made out on the official enrollment blank and sent to the county agent. Where there is no county agent employed in the county, the official enrollment blank should be sent directly to the Club Department at Stillwater.
3. Each Calf club member will be expected to feed out one or more steer calves.
4. Calves are to be fed and cared for by the club member.
5. The calf should be weighed at the beginning and at the close of the contest.
6. Club members should read carefully all literature sent to them by the county agent or Club Department and follow instructions as nearly as possible.
7. Each club member will be expected to show his calf at the county and state fairs or the spring show.
8. Each club member will be expected to keep an accurate record of the cost and amount of feed fed and submit his record to the county agent at the close of the contest.

FATTENING PHASE

At present only the fattening phase of the Calf club work is being carried on as a 4-H Calf club demonstration. The breeding phase of the Calf club work has been discontinued.

Under the present plan of work each club member should secure a steer calf, either purebred or grade, born on or after September 1st and before January 1st preceding the contest, if the calf is to be shown as a senior calf; if it is to be shown as a junior calf, the club member should secure one born on or after January 1st preceding the contest.

*On leave of absence.

The feeding period begins May 1st. The steer should be weighed May 1st and the record book started.

The importance of getting the calf started on feed early in the year in order that the calf may be properly finished by the time he is ready to be exhibited and sold cannot be emphasized too strongly. The common tendency of many club members is to begin so late that it is impossible to put the proper amount of fat on the calf by the time he is to be shown. The main idea in feeding a club calf is to get him fat. If the calf is fat he will sell well and his owner will have a better chance of making some money. A profit on the enterprise should be the aim of every feeding operation and a well finished calf at the close of the contest may mean the difference between a profit and a loss. Don't be afraid of getting your calf too fat. There has probably never been a club calf shown at the state fair or spring show which was too fat. The greater danger lies in not getting them fat enough.

Start Right

It takes a good calf to make a good baby beef. Proper feed and care will work wonders with an animal but it will not make a winner out of a calf having poor type and quality. The importance of securing a good thick blocky calf having the proper beef conformation and quality can hardly be over estimated.

Calves to be used for making baby beef should be low-set, compact and smooth of form, having good width and depth of body, carrying a straight top and underline. A calf which makes a good feeder is usually a low-set, deep-bodied calf with a loose, pliable, mellow hide; a short, wide head with a broad muzzle, and large, quiet eyes. High-headed, wild-eyed calves which are nervous and easily excited seldom make quiet feeders, even under the most careful management.

Securing the Calf

Where there are a number of club members in the same community or local club who desire to buy calves for the project they may be obtained by selecting a competent purchasing committee who will buy all of the calves to be distributed by drawing numbers, or each member may select and buy his own calf. Either method of obtaining the calves should be satisfactory but the method used in any particular club will depend upon the plan which suits the majority of the club members.

If a sufficient number of desirable calves cannot be secured in the immediate community it will perhaps be more satisfactory to buy the calves in one lot from a breeder who

can supply the number desired. The ones who are selected to buy calves should be men who have had experience in selecting calves for baby beef, or men who are competent judges. Only choice uniform calves having the proper quality and conformation should be accepted. In case the calves are purchased on a weight basis from one man the members should pay for their calves at the average price per pound based upon the weight of their individual calf.

Club members who do not have the money to pay for their calves at the time of purchase in many cases may be able to arrange with their local bank or with the man from whom they purchase the calf for credit. In this case, a note covering the purchase price of the animal and bearing the current rate of interest made out to come due at the close of the project should be signed by the members. Boys and girls today are not generally wanting something for nothing. They want to be treated like men and women and want a full sized job to handle. They appreciate responsibility and covet the confidence of adults in their honesty and ability to make good. For this reason any credit extended to the club member should be extended on a strictly business-like basis. The club member should not borrow money from a neighbor or from relatives but from the local bank, giving such security as would be required by law, or of a total stranger. This experience should be a valuable part of the business training of the club member.

Insurance

It has been the experience of a large number of club members that some form of insurance is very desirable where the member has invested his money in one or more animals or where the member has obligated himself by signing a note. This protection can be secured by insuring the calf against accidental death.

There are two plans which may be followed. First, through regular livestock insurance with a reliable insurance company; second, through a cooperative agreement among the members of the local club. The cooperative or mutual agreement plan provides that each member pay into the insurance fund an amount agreed upon by the members of the club which should be at least one-tenth of the original cost of the calf. If the club member makes a note for his calf, this amount should be added to the note. This fund is to be used only in case of a loss of any calf by death. If there are no losses at the close of the contest, this fund is to be prorated back to the members according to the amount each member placed into the insurance fund at the beginning.

Feeding the Calf

It is well recognized by our most successful breeders and feeders that proper feeding is one of the most important factors in the production of prime baby beef. The feed which the calf receives should not only cause it to grow and increase in size but it should also cause the calf to fatten and increase in weight. Growth alone is not sufficient. The increase in size of the calf should be accompanied by a marked increase in the amount of condition or finish he carries so that by the end of the feeding period the calf will be prime and well finished from the standpoint of the butcher. Since the calf is expected to fatten as well as grow it is quite important that the rations fed should furnish the proper kind and amount of nutrients needed for the fattening as well as the growth of the calf.

Classes of Feeds

Feeds for the calf may be divided into two general classes, namely: concentrates and roughage.

Concentrates include the common farm grown grains and the various mill by-products, containing a high percentage of digestive material.

Roughage includes coarser feeds such as hay, straw, silage and pasture which are low in percentage of digestive material.

Successful calf feeding depends to a great extent upon the proper combination and use of these two kinds of feed. Mature cattle are particularly well adapted to the handling of large amounts of roughage but it should be remembered that the digestive system of a calf has a rather small capacity and if filled with hay or other roughage can hold but little grain. Since the concentrate part of the ration produces most of the gain, particularly the gain due to improved condition, it is important that the calf eat enough grain. It may be necessary to limit the amount of roughage in order to cause the calf to consume enough concentrated feed.

Composition of Feeds

The value of a feed depends upon the amount of nutrients it contains, its digestibility or the amount that can be digested, and the palatability, or agreeableness of the feed to the taste. Feeds contain the following materials, called nutrients: protein, carbohydrates, fats, fiber, and mineral matter. Each nutrient serves a definite purpose in the body of the calf and influences its development.

Protein is that part of the feed which promotes growth by building muscle, tissues, blood, vital organs, skin, hair, horns, and hoofs.

Carbohydrates furnish heat and energy for work. They are rich in sugars and starches and when an extra amount of carbohydrates is eaten by the animal it is stored as fat.

Fats furnish heat and energy and are stored as fatty tissue in the body of the animal.

Fiber is the woody and less digestible part of the feed which adds bulk to the feed.

Mineral matter furnishes the material for building the skeleton of the animal.

Corn is high in fats and carbohydrates and for this reason is considered the best of all fattening feeds. However, it is low in protein and mineral matter for tissue and bone building and should be balanced with other feeds which supply these materials. Wheat bran, cottonseed meal, linseed oil meal, and alfalfa hay, when fed with corn will supply protein and mineral to balance the carbohydrates in the corn.

Feeds for the Calf

Oats contain more protein and mineral matter than corn. It is primarily a growing feed and tends to promote growth rather than fattening. Oats may be used profitably in getting the calf started on grain but the amount of oats in the ration should be decreased and the amount of corn increased as the feeding period advances. Oats may be fed whole or ground. Crushed oats is more palatable than finely ground oats.

Wheat Bran is a good feed to use in the early part of the feeding period since it is high in protein, pleasing to the taste, and has a slightly laxative and cooling effect on the calf. Bran is used a great deal in the rations of show and breeding animals but the price is usually too great to justify its use in large quantities for fattening steers on a commercial basis.

Barley is similar in composition to corn and is especially satisfactory in the ration if mixed with oats. Barley is rich in carbohydrates and has slightly more protein than corn. Barley should be ground or crushed before it is fed.

Cottonseed Meal is a by-product of cottonseed. It is rich in protein content and tends to produce growth rather than to fatten young steers. It is best for steers above one year of age. If fed in large amounts over a long period it may produce bad results. Cottonseed meal is not a safe feed for young calves, and when fed to this class of stock it should be used in small amounts and along with some laxative feed such as bran.

Linseed Meal is a product left in the manufacture of linseed oil from flax seed. It is very rich in protein and is very desirable to use in the ration of the growing calf. It is laxative

and has the property of producing a sleek, glossy coat. The feeding of linseed meal should be started gradually and the amount increased until the calf is getting one-fifth of a pound a day for each one hundred pounds of its liveweight.

Cane or Blackstrap Molasses is often used as an appetizer in feeding club calves. When used for this purpose it is mixed with water in the proportion of from a pint to a quart of molasses to about three gallons of water. The feed should then be thoroughly moistened with this mixture.

Provide a Feed Box

A box or bin for storing the concentrates or grain feeds for the calf should be provided. If a box is used it should have a hinged lid that will close tight to keep chickens, rats, or other animals out of the feed. It should be large enough to hold the grain supply for several weeks. A simple and accurate feed record can be kept by weighing or measuring a quantity of feed and placing it in the feed box and feeding from it until it is all used, then weighing out another amount, charging the cost of the feed to the calf each time it is weighed. A record of the kind and amount of feed should be entered in your record book at the time of each weighing.

Rations

While a given ration will seldom produce the best results under all conditions, since individual calves respond differently even when fed the same ration, the ones below are suggestive and may be modified to include the feeds which are the cheapest and most available for the feeder:

RATION I

(By weight)

1 part corn, kafir or barley	
1 part oats (ground, preferably)	1 part bran

Alfalfa 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. In the absence of alfalfa, feed all the prairie hay the calf will clean up.

RATION II

1 part corn, kafir, or barley	2 parts oats (ground, preferably)
1 part bran	Hay, same as Ration 1

RATION III

3 parts corn	1 part linseed meal
2 parts oats (ground)	Hay, same as Ration 1
1 part bran	

RATION IV

4 parts corn, kafir, barley	1 part linseed meal
1 part oats	Alfalfa hay, as Ration 1
1 part bran	

RATION V

6 parts corn (ground)	1 part bran
2 parts oats (ground or crushed)	1 part linseed meal
	Alfalfa hay, as Ration 1

RATION VI

65 parts shelled corn	10 parts linseed or cot- tonseed meal
25 parts whole oats	Hay, same as Ration 1

RATION VII

85 parts ground or shelled corn	15 parts linseed or cot- tonseed meal
	Hay, same as Ration 1

(Suitable for the last part of the feeding period.)

Water

Plenty of fresh water should be provided for the calf throughout the entire feeding period. If the calf is kept in a stall or lot by itself, water should be kept before it at all times in a large, clean container.

The calf should be watered at least three times a day and preferably four or five times during the hot summer weather.

Salt

Salt should be kept before the calf at all times. It can be placed in a small box nailed to the side of the stall. Rock salt is a convenient form to use and is usually somewhat cheaper than granular salt.

Mixing salt with the feed is not advisable since it is easy to feed too much in this way. Besides, the calf apparently gets much satisfaction from licking the pure salt.

CARE AND MANAGEMENT

Club members should remember that their success will depend upon the kind of care and treatment they give their club calves. A good calf in the hands of a club member who is indifferent to its care and training is likely to grow to be a mediocre, common-looking calf which will attract no special attention. On the other hand, if the same calf were placed in the hands of a boy who was willing to give it the right kind of care and treatment, it would develop into a creditable individual and possibly into a first prize winner. The boy is often judged by the kind of calf he leads into the show or sale ring. The appearance of the calf is a good index to the diligence and faithfulness of the boy in giving the calf the proper kind of care, feed, and management, because it reflects any negligence on the part of the owner in caring for his calf.

Regularity of Feeding

It is important from the standpoint of gains that the calf be fed at regular intervals, since he forms the habit of looking forward to feeding time with as much eagerness as a hungry, growing boy. If fed at the same hour each day he will consume a larger amount of feed and will make more rapid gains than if fed at varying intervals. After having established a certain time for feeding, the system and time of feeding the calf should not be changed.

Amount to Feed

A safe rule to follow in feeding the calf is to give him all the grain he will clean up and still be ready for his next feed. It is unwise to try to get the calf to eat more feed by suddenly increasing the amount. Any change in the amount fed should be made very gradually. A handful may be added each day until the calf is consuming all he will clean up within an hour after feeding. Feeding the calf more than he will eat is a common cause of throwing the calf "off feed." feed which the calf fails to eat should not be left in the feed box or trough until the next feeding or mixed with fresh feed because it may reduce his appetite.

If your calf should go "off feed," miss a feed or two and then begin by allowing him one-fourth to one-third of a full feed. If he refuses the feed take it away from him and try him again at the next feeding time. After his appetite returns he may be put on full feed within two or three days.

Bedding

The calf should receive a liberal amount of bedding. Plenty of straw will not only make the calf more comfortable and thus aid in getting better gains but it will also help to improve the appearance of the calf a great deal. Bedding is cheap and will tend to cut down the feed bill. Use plenty of it at all times.

Training the Calf to Lead

The best time to train the calf to lead is while it is small and can be handled easily. Many club members make the mistake of putting this task off too long. A calf that leads well and stands properly is the one that will show to the best advantage when exhibited. The calf should be properly fitted with a halter and led a little each day.

This is also a good time to train the calf to stand properly with head up and feet placed squarely under the body. By posing the calf every day in the position wherein he presents the best appearance he will soon learn to take this position naturally when standing. The calf should also be accustomed to being approached by strangers. Whenever visitors come to the farm the calf should be led out for inspection and posed with the same care you would use in the show ring.

Handling the Calf

The calf should be kept in a roomy and well ventilated stall during the day and allowed to graze at night for a few months previous to the show. The hot sun from June to September will "sunburn" the hair and cause it to appear somewhat dead, rough and coarse, and to lose its glossy appearance. Burlap bags suspended by wires from above for the calf to brush against may be used to advantage to repel the flies which greatly annoy the calf. The stable may also be darkened and many flies kept out by tacking burlap sacks over the windows and doors.

Grooming the Calf

When a well fed and properly developed calf is brought into the show ring it should present a pleasing appearance. In order to do this it should be clean, well groomed, halter broken, and trained to stand properly. The calf should be groomed, or thoroughly brushed, each day for several weeks before the show. Brushing lengthwise of the body with considerable pressure will help to make the hide loose and pliable and remove the old hair. The final brushing on a short haired calf should be in the same direction as the hair, the hand following the brush each time. The hand will draw the oil to the tip of the hair. A woolen cloth may be used to advantage in remov-

ing the dust and dirt. The final brushing for Shorthorn and Hereford calves should be opposite to the direction of the hair to make it loose and fluffy. Angus calves are shown with the hair smooth.

Care of the Feet and Horns

The feet and horns of the calf should not be neglected. Long untrimmed feet and rough coarse horns will detract from the appearance of the calf regardless of how good he may be otherwise. If the horns tend to grow upward, a pair of horn weights should be used to train them downward. When you get ready to fix the horns of the calf for the show you will need a coarse file or rasp, a piece of broken glass or a horn scraper, and a strip of emory paper or fine sandpaper. The rasp may be used to remove the rough places and round off the end of the horn. The horn scraper may next be used to scrape the horn, beginning at the base and working toward the end of the horn. After the horn has been scraped fairly smooth, a piece of emory cloth may be used to finish the job. For the finishing touch, a little sweet oil rubbed in with a rag will do the work. The sweet oil gives the horn a glossy, healthy appearance.

The feet should be trimmed so that the calf will stand squarely. A pair of hoof pinchers and a good sharp knife or chisel will be needed in trimming the feet. If the toes are too long the hoof must first be trimmed by tapering the bottom properly from back to front, thus leveling the hoof. The hoof may be smoothed off with a file or rasp and polished with sandpaper or emory dust and oil. A mixture of oil and lamp-black makes a suitable hoof polish.

Showing the Calf

After a club member has succeeded in fitting a calf for the show ring for which he doesn't have to offer any apologies on account of the general appearance or lack of finish of his calf, the place that he wins in the final contest will depend a great deal upon how well he shows his calf at the time judgment is being passed upon the class.

The actual showing of the calf before the official judge is always a trying ordeal which tests the ability of every club member as a showman.

The tying of the ribbons represents the climax of the year's work, and, as to the color of the ribbon which you will receive, much depends upon how well you have prepared yourself as well as your calf for this important event.

In the first place the calf should be clean and well groomed when it enters the ring so that it will be attractive and pleasing in appearance. The judge will notice any negligence on your part in fitting your calf. Don't let a shabby appearance detract from an otherwise outstanding calf.

Watch your own calf while the judge is inspecting the class and see to it that he is standing squarely on all four feet with his back held up properly. You will have plenty to do without spending your time observing how the other fellow is getting along with his calf. He may fare a great deal better than you if you go to sleep on the job. Be alert and on the job at all times and don't watch anyone or anything except the judge and your calf. Just remember that you have a man-sized job if you show your calf to the best advantage.

If the judge motions to lead the calves in a circle or to change positions, respond just as quickly as possible. If your calf doesn't lead or stand well in the ring you may have a great deal of trouble, so remember that it is possible to avoid such trouble by training the calf to lead and stand properly before the show starts.

Remember at all times that you are a cattleman and a gentleman. When the awards are made always thank the man who hands you the ribbon regardless of its color. If you think your calf should have been placed higher in the class, don't "gripe" or "crab" about it. Remember that the judge is passing judgment on the calves and not on the boys who own the calves. Don't take the attitude that he is doing you a personal injury by leaving your calf down the line a place or two. The judge is not interested in personalities but rather in ranking the calves in the order of their individual merit as he sees it. He also has a better opportunity than yourself of seeing the merits as well as the faults of every calf in the class and should be able to pass judgment more accurately.

If you are beaten, take it gracefully and don't try to shift the blame on someone else other than yourself.

You have won a worthwhile prize, even though you do not get the blue ribbon, if you can show the right kind of sportsmanship; if you can be a good loser; and better still, if you can be a good winner.

Judging Beef Cattle

Livestock judging is an art. It is the foundation of all beef cattle shows and is largely the means of determining the value of cattle offered in public sales. Every calf club member should strive to become more proficient in the art of judging. If the club member selects and buys his own calves, a thorough knowledge of judging feeders will enable him to buy the right kind of calves and thereby his chances of making a profit on his feeding operations.

It should also be the ambition of every calf club member to make the livestock judging team which represents Oklahoma in the contests at Kansas City and Chicago each year. For the purpose of assisting club members in becoming more proficient in judging, a score card is printed in the Calf Club Manual. A careful study of the score card will give you an idea of what is desired in a fat steer.

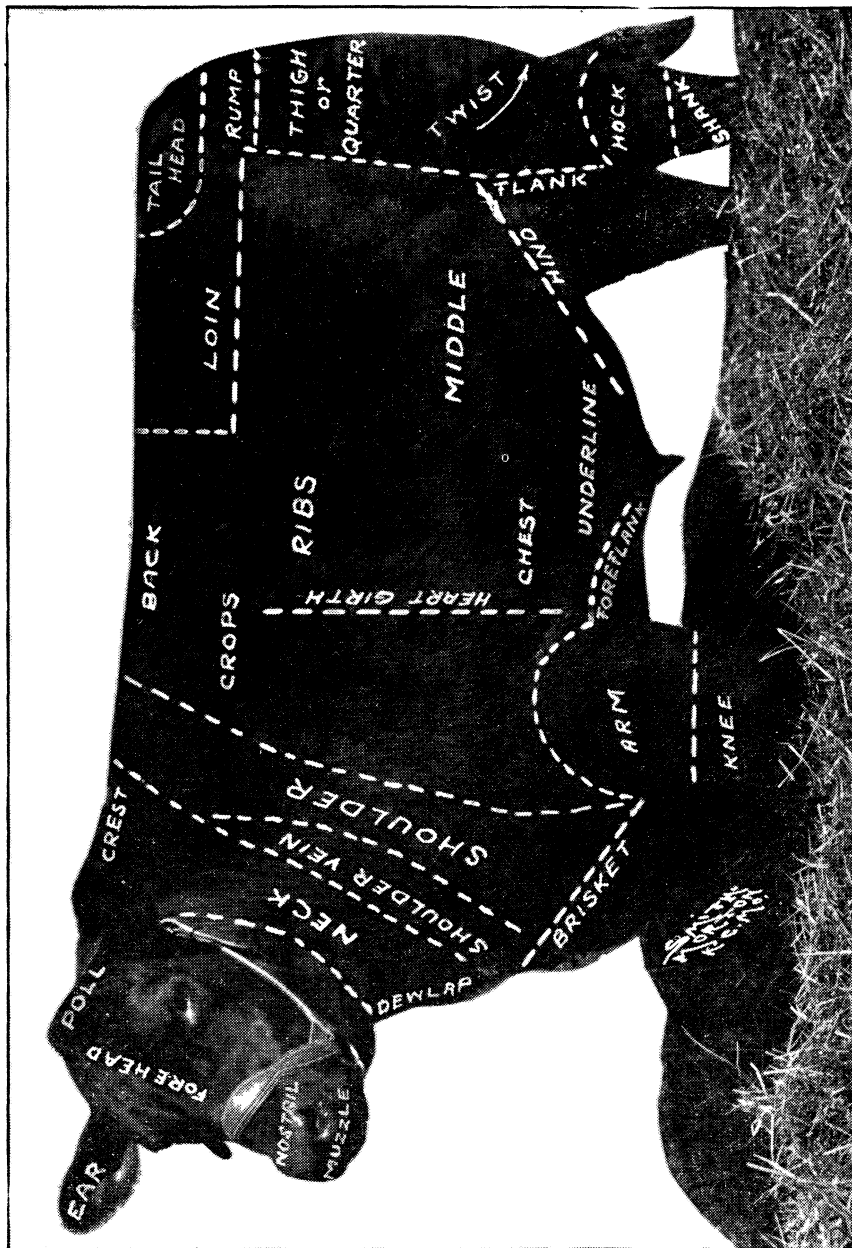


Diagram showing names of the various parts of the live animal.

SCORE CARD FOR FAT STEERS

SCALE OF POINTS	Per- fect Score
GENERAL APPEARANCE—49 POINTS	
1. WEIGHT—Score according to age, estimate weight. 6 months, 450 pounds; 12 months, 850 pounds; 18 months, 1100 pounds; 24 months, 1300 pounds; 30 months, 1475 pounds	9
2. FORM—Straight topline and underline, deep, broad, low-set, compact, symmetrical, stylish, not paunchy	10
3. QUALITY—Hair soft and mossy, hide pliable, bone, head and horns fine, body and flesh smooth and even, neither roly nor patchy	10
4. CONDITION—Degree of fatness, indicated by spinal covering, rib covering, and fullness of purse, flank proper texture and finish indicated by a mellow yet firm and springy touch	10
5. DRESSING PERCENTAGE—High condition, trim middle, thin hide, good quality	10
HEAD AND NECK—5 POINTS	
6. MUZZLE—Broad, nostrils large	½
7. EYES—Large, clear, quiet expression	½
8. FACE—Short, clean cut	½
9. FOREHEAD — Broad	½
10. EARS—Medium size, fine texture	½
11. HORNS—Fine texture, medium size, well shaped	½
12. NECK—Short, thick, throat clean	2
FOREQUARTERS—9 POINTS	
13. SHOULDER VEIN—Full, plump	2
14. SHOULDER—Well covered with flesh, compact on top smooth	5
15. BRISKET—Wide, neat and trim	1
16. LEGS—Straight, wide apart, short, arm full, shank fine	1
BODY—23 POINTS	
17. CHEST—Deep, wide, crops full	5
18. RIBS—Long, well arched, broad across top, covered with thick, smooth firm flesh	8
19. LOIN—Broad, covered with thick, smooth flesh	9
20. FLANK—Full, even with underline	1
HINDQUARTERS—14 POINTS	
21. HOCKS—Well laid in and smoothly covered	1
22. RUMP—Long, wide, level, smooth at tail head, pin bones not prominent, far apart	4
23. THIGHS—Plump, deep, wide and thick	5
24. TWIST—Deep, plump	3
25. LEGS—Straight, short, shank fine	1
Total	100

Name _____ Date _____

