



MERIT CARD FOR BEEF CATTLE.

Suggestions for a Merit Register for Breeds of Beef Cattle.

A member of the American Hereford association submits to the Breeder's Gazette the following diagram as the basis of a merit card for beef breeds. The points or features of record as here proposed are made with the view of meeting the particular requirements of the Hereford, but with some slight modification in these points this plan, it is thought, might be made equally applicable to other breeds of beef cattle.

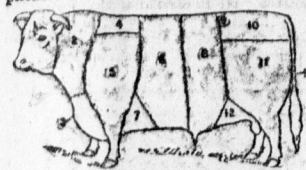


DIAGRAM OF MERIT RECORD.

It is proposed, to begin with, that the body of a bovine be divided into parts something similar to the subdivisions usually made for a scale of points, and that each of these parts be designated by a number, and furthermore that certain features of the animal, as color, markings, set of horns, general appearance, etc., as shown in the diagram herewith submitted. While some of the features here enumerated may be regarded by those of the strictly utilitarian turn of mind as not of sufficient importance to justify a place in the record, yet there are breeders who are largely influenced by and breed for what may be termed fancy features.

As the addition of these fancy features to the records of points may be made without adding materially to the trouble and expense of the same, it would doubtless be thought best to admit them to a place therein, and thus give sufficient latitude and scope to the work to meet the wishes of all classes of breeders. The drawing herewith submitted shows the outlines of the body of a Hereford and the proposed divisions of the same into parts to be scored and the ratings thereof to be recorded, together with the number which may be used to designate each of these parts.

In order to very materially shorten the record made of the scaling of each part it is proposed to indicate the rating given to each part and feature by one of the first five letters of the alphabet, these five letters covering all the degrees of development from the best or highest to the worst or lowest as actually seen (not ideal) in this breed of cattle. With this plan it will be necessary for the association

	A	B	C	D	E
Head	1	2	3	4	5
Neck	1	2	3	4	5
Shoulders	1	2	3	4	5
Fore ribs	1	2	3	4	5
Fore flank	1	2	3	4	5
Loins	1	2	3	4	5
Rumps	1	2	3	4	5
Ham	1	2	3	4	5
Flank	1	2	3	4	5
Legs	1	2	3	4	5
Upper line	1	2	3	4	5
Body	1	2	3	4	5
Feet	1	2	3	4	5
Quality	1	2	3	4	5
Disposition	1	2	3	4	5
General appearance	1	2	3	4	5
Horns	1	2	3	4	5
Color	1	2	3	4	5
Markings	1	2	3	4	5

tion to distinctly define each degree indicated by one of the five letters, as the same is to be applied to each part and feature of the animal, as, for example:

The Shoulders—5—A indicates the most perfect degree of development, wherein there is freedom from coarseness, the points being well in and well covered, the blades smoothly laid and well covered with flesh; B, free from coarseness, with points well in and well covered, blades nicely laid, but somewhat bare; C, points slightly prominent and bare, blades smooth and covered; D, somewhat coarse, with points prominent and blades covered; E, coarse, with points very prominent and blades bare.

The Legs—5—A, short; B, long; C, medium length and size; D, fine; E, coarse; A, D, short and fine; A, E, short and coarse; B, D, long and fine; B, D, long and coarse.

The Upper Line—5—A indicates a reasonable approximation to a straight and level line from crops to tailhead; B, a reasonable approximation to a straight line from crops to tailhead; C, a reasonable approximation to a straight and level line from tailhead to coupling, but deviating somewhat from same between coupling and crops; D, a reasonable approximation to a straight and level line from crops to coupling, but deviating somewhat from same between coupling and tailhead; E, not a reasonable approximation to a straight and level line between crops and coupling, and between coupling and tailhead.

The Color (red)—5—A indicates very light; B, light; C, medium; D, dark; E, very dark.

In order to facilitate reference to this record the definitions might be so arranged that the corresponding letters in their usual order, beginning with A, would indicate the highest or most perfect degree of development, and each successive letter a lower degree down to E, the lowest, as applied to the various parts of the animal, so that the development of the part would be indicated in general terms by A as very good; B, good or above the average; C, medium or average; D, not good or below the average; E, bad, thus affording two degrees of development, and two corresponding ratings above the average, and two below.

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BREED A ONE PURPOSE HORSE.

Choose Your Particular Kind of Horse and Stick to Him.

What are the lessons to be drawn from recent sales as applied to our home interest? The most patent one is that many men have been breeding types of animals that are not suited for either the track or road, and surely not for breeding purposes. Many of these men have carelessly bred, hoping to get a chance racer, and failing in that expected to get a roadster. Such haphazard breeding does not pay and should never pay. There is no chance whatever of such a breeder ever being able to compete in supplying either the field for racers or for roadsters.

We do not care to be misconstrued and quoted as authority that the trotter is not suited for a roadster. On the contrary, we do believe that the breeder who intelligently tries to produce great campaigners and racers will find a large proportion of his animals to be great roadsters, although not up to the standard of racers. But remember such men are those that are breeding for trotters and not trying to breed several different things at the same time.

We are all agreed that the size, perfect conformation and speed are special requisites desired in the racer, and the same things make a good roadster when the speed ability fails to reach the racing requirement. Many racing breeders in speaking of size in the trotter sneeringly state that "they go in all shapes and sizes." This is true, but all of us admit that size is desirable when it does not carry with it awkwardness and too much height or weight. This is an important quality in the trotting ranks and still more necessary when trotters are thrown into the road classes.

We believe the trotter the greatest road horse America has produced, but to fill the bill they must have size and attractive appearance, with style in their movements. The man who undertakes to breed ponies had best start with ponies, as it is much cheaper than to try and push trotting runs off on the public for ponies.

We believe a man can breed for a particular type of animal and succeed best. If for trotters that can race, then keep that clearly before you all the time. If your specialty is for roadsters, let that be the goal to which all your efforts are directed. If for plow horses or ponies, breed what is suited for that purpose.

Many of the animals produced under such intelligent breeding would be suited for other purposes. It is the man who is breeding mares that he knows are not suited for raising trotters or trotting sires, simply because they have no trotting blood in their veins, that we are striking out of business. He does not think for a moment what he is trying to produce, and generally raises a nondescript that is unsuited for any special purpose.

Examine closely your material before trying to produce anything from it, and if unsuited to your purpose sell it, regardless of original cost, and start right—Horseman.

National Fat Stock and Horse Show.

The Illinois state board of agriculture has appointed a committee on fat stock and horse show, and the surrounding state boards of agriculture have expressed a willingness to co-operate in a national fat stock and horse show and get thoroughly organized for November, 1904, as probably no show will be wanted this year by the time the World's fair show is over, and most of the breeders' associations will hold their annual meetings during the World's fair stock show.

A general meeting of state boards of agriculture will be held during the horse and cattle show in August to organize the national fat stock and horse show to co-operate with the Illinois state board of agriculture that has so successfully conducted these shows. Much more liberal premiums will be given, besides state prizes to draw out larger state exhibits and larger attendance from all the stock breeding states thus identified with the management and success of the show, and a deficiency of a few thousand dollars can be easily paid by the several state boards, whereas the Illinois state board alone has heretofore had this deficiency to meet from their own treasury.

It is proposed to have each state board of agriculture appoint their best live stock show managers to this work, and we will have a national stock show that all the states will be proud of—a show to advance the improved stock industry and not a money making scheme. Chicago can and will provide the building, but cannot run the show successfully—Farmers' Institute.

Live Stock Points.

It is mentioned as the greatest praise bestowed on a certain fashionable hackney horse that he is such a thundering high stepper that his knees strike his neck yoke. Really, is not this a little bit too?

In Prussia, France and Austria cavalry and other horses for the army are bred in stables owned by the government. Every stallion must pass the severest veterinary examination. They are allowed to serve approved mares belonging to farmers and breeders. If the colts from these mares come up to the required standard, then the government buys them to educate them for cavalry horses.

Green food at this season of the year keeps off disease and makes young chicks grow rapidly.

Spring broilers should be ready for market in fine shape at 6 weeks to 2 months old.

Do not forget about sowing the ensilage corn to be ready to make fine butter in winter.

No judge or jury at a fair can decide which is the best beef breed or dairy breed, or which is the best breed of any kind of animal. That is something the individual must decide for himself by trial. The breed that is best in one locality will often turn out poorly in another.

Sorghum fodder contains substantially the same amount of nourishment as corn fodder, but the stock likes it better on account of the sweet taste.

If you are free from indigestion you need not fear cholera. If you are not free, you are in danger. K. D. C. will free you from indigestion and cholera.



A CREAMING EXPERIMENT.

May We Mix Last Night's Cream With This Morning's Milk?

A short time ago we were asked whether any injustice would result to either creamery man or patron if the latter should mix his evening's milk, skim it in the morning, mix the cream with the morning's milk and send the mixture to the creamery instead of sending the milk of both evening and morning, as is the usual custom. The most satisfactory way to answer all such queries is by practical demonstrations, and it was determined to conduct an experiment bearing on the point in question.

Milk was taken immediately after milking and set in Coolidge cans in water at a temperature of 42 degrees. The temperature of the milk was 98 degrees. The milk set from 7 in the evening until 7:45 the next morning, or nearly 16 hours, when it was skimmed. At that time the temperature of the water was 40 degrees, the ice used having reduced the temperature to 22 degrees. The skim-milk was drawn off by means of siphons provided for that purpose at the bottom of the cans.

The first 12 inches of milk below the cream line were left with the cream. The cream was then well mixed with the morning's milk from the same cows and weighed and tested. The following table shows the weights of the evening milk, morning milk, skim-milk and the mixture of cream and morning's milk, the per cent of fat and the number of pounds of butter fat in each lot of milk:

	Weight.	Per cent fat.
Evening's milk	67	3.30
Skim-milk	62	2.20
Morning's milk	68	3.30
Mixture of cream and morning's milk	63	5.50

In this table the fat in the skim-milk plus the fat in the mixture should equal the fat in the evening milk plus the fat in the morning milk. It will be noticed that there is a difference of .03 of a pound, but with ordinary test bottles the per cent cannot be read close enough to avoid such a small error.

A composite sample of the evening and morning milk tested 3.25 per cent fat. Where creameries are conducted on the separate system the general custom among the patrons is to take in both evening and morning milk and haul back the skim-milk. In this case there would have been 123 pounds of milk to be taken to the creamery testing 3.25 per cent fat, as above noted. For this 4.28 pounds of butter fat, at 20 cents per pound, the patron would have received \$7.6 cents.

By skimming the evening milk and mixing the cream with the morning milk there were 88 pounds of the mixture, which, as shown in the above table, yielded 4.31 pounds fat. At 20 cents per pound this would be \$8.6 cents. Thus is shown that the creamery man would lose nothing if the cream and morning milk was delivered instead of the milk of both evening and morning, and the patron's loss would be only the amount of fat he left in the skim-milk.

Whether this loss would be small or great would of course depend on the efficiency of creaming, and this in turn would be governed mainly by the methods employed in handling the milk.

Whether it will pay patrons to set the evening's milk, skim it and send in the cream with the morning's milk is something that each must determine for himself. The advantages of the plan are obvious. It would save hauling a large quantity of milk, and the skimming of milk would be done when the whole milk is taken several miles, run through the separator and hauled back through the hot sun, often souring before it can be fed. Bulletin Iowa Agricultural Experiment Station.

The Creamery Boiler.

The length of time a boiler will last depends a great deal on the water that is used in it to make steam with—how much lime or mud is in the water. Some writers say that the boiler should be blown out every week and cleaned out, and the lime scraped off the flues inside of the boiler. If very hard water is used all the time, that may be necessary, but if rainwater is used—and every creamery ought to have a cistern and catch all the rainwater that is possible—it does not need cleaning more than four or five times a year, as there will be no lime scales form on the inside of the boiler, and every time you blow off and fill up, with cold water it takes as much fuel as it does to do a day's churning.

If you have a cistern, you should run all the drip from the refrigerator into it in the summer, and if you use much ice the water from the ice will almost run the boiler in the winter. If your creamery is heated by steam, you can empty the return pipe into the cistern when necessary and so save all the soft water.

A short time ago, after I had done the churning and was about through with my day's work, I heard some pipe burst in the boiler room, and the water blowing out of the furnace. Upon examination I found that the feed pipe had burst. The pipe had been in the same place for six years and had done well to last that long. It was put in the back end of the boiler, and every time the flues were cleaned out the water from the flues was started the on it, and when the fire was started the soot was turned off and took a thin scale on the pipe every time.

The feed pipe to a boiler should never be put in the back end, as you have to take down part of the brickwork to get at it, but always at the front end through the hood that forms the lower part of the smokestack, where the pipe can be seen every time you open the door to clean out the flues.—G. B. Lawson in Creamery and Dairy.

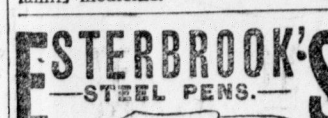
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