

MARCH 4, 1915

THE DAIRY.

Methods of Valuing Dairy Males for Breeding Purposes.

Editor "The Farmer's Advocate":

It is frequently a puzzling matter to know how to value a dairy bull to be sold or purchased for breeding purposes. Some would say, "Oh, that's easy; when selling get all you can and be sure to ask enough; when buying buy at as low a price as possible, and in all cases beat down the price, no matter what is asked." This is the ordinary method of procedure, but as dairy-breeding progresses, something better should take its place. The honest, fair buyer does not care to engage in the "beating" game; neither does he wish to deal with a man who thinks it a joke or an evidence of smartness to "stick" or "do" a purchaser. What we shall aim at is a few guiding principles to help a man, buyer or seller, to estimate the value of a dairy bull. It is a hard proposition, yet one we must tackle, if we are to continue the breeding of improved dairy cattle on a sound basis.

We may say at the outset that we do not intend to discuss the question of "fancy" prices. Bulls which sell for from \$5,000 to \$50,000 are away beyond the reach of the ordinary dairy farmer. Whether or not these animals are actually worth the price reported to, have been paid, we shall not attempt to decide. This is a matter in which experts in dairy cattle finance only are competent to judge.

The first principle to be kept in view is that the bull shall be a good representative of the breed. This involves a knowledge of breed characteristics. For example, a person would not be acting wisely to purchase a "pony-built" bull if the breed be Holstein-Friesian. No matter how well bred the animal, if he be small, he is not representative of the breed, and is not a desirable animal for a "herd-header." A mature Holstein bull should weigh at least 1,800 to 2,000 lbs. In the standard description or scale of points adopted by the Holstein-Friesian Association of the United States and Canada, we read: "A bull that, in the judgment of the inspector, will not reach at full age, and in good flesh, 1,800 pounds live weight, and scale at least 80 points, shall be disqualified for entry, with description, in the Advanced Register."

The second principle or point to look for is good constitution, vigor, vitality, health, etc. An animal lacking these characteristics is not likely to prove a satisfactory sire. The indications of these are difficult to describe on paper, yet are known to the experienced man. Good development in the heart and lung region; easy, regular breathing, bright eye; skin and hair mellow and soft, although one needs to be on guard at this point and not be deceived by an over-fat condition and the use of oil and other cosmetics, with which some men are as adept in using on animals as women are said to be on persons.

The third point to look for is indication of prepotency or power to impress himself upon the offspring. While masculinity, as shown by good crest and strong development of head and neck, are commonly accepted indications of prepotency, the only sure test is found in the character of the progeny. It is for this reason that tested sires may frequently be purchased to advantage, although in practice, it is very difficult to sell an aged bull. The dairy public, will not as a rule, buy a bull over three years old and because of this fact, many useful and valuable sires have been sacrificed to the butchers. While there are undoubtedly risks in buying an aged bull, such as danger of disease, bad disposition, etc., if we have an opportunity of buying a known animal, or of dealing with a strictly honest seller, such a bull is often a "better buy" than the purchasing of a young, untried animal, no matter how good his breeding.

The fourth point is pedigree, in which we include record of blood lines and record of performance of ancestry, particularly those of dam and grandam. At this point, what is known as official testing is very valuable. By referring to the government report of Record of Performance for the various pure-bred dairy breeds, we can learn the milk and fat production as determined semi-officially by government inspectors. There is also a breed record on Record of Merit, kept by the Holstein Association for 7, 30 and 60 days, and for eight months after calving, which is a valuable guide. Then, too, the private record of an honest, careful breeder is a great help in deciding the value of ancestry.

In order to bring the question of records to a dollar and cents value, we saw a plan outlined recently which has been adopted by the Red Poll Association in Australia. The young bull calves are valued according to the record of the dams in milk-fat, and the value of the milk-fat is determined by the commercial value of a pound of milk-fat. For instance, if we understand the plan, it would work out somewhat as follows:

Record of dam, 250 pounds fat in one year;

value of fat, 25 cents per lb.= $\$62.50$. Value of the bull calf $\$62.50$. Record of dam, 300 lbs. fat at 25 cents per lb., $\$75$ =value of calf. Whether or not this is a fair method of valuation, we are not prepared to say, but it looks like a start in the direction of some definite basis on which bull calves can be valued for breeding purposes. Personally, we consider that other constituents of the milk than fat should be considered, except where the milk is used or sold for cream or butter-making only, but this need not prevent us making a start on some such plan of relative value for dairy bulls as suggested by the Australian practice.

H. H. DEAN.

FARM BULLETIN.

The Ontario Budget.

As announced in the press last week the Ontario Legislature now in session has made provision for raising the revenue by an increased assessment on all real property in the province, covering also incomes. The Hon. W. T. McGarry in his budget speech outlined the plans of the Government, the main feature being the placing of a direct tax of one mill on the dollar on all real property in the province, the tax to be collected through municipal authorities and turned over to the Government soon after collected. The lands and buildings of Ontario are assessed at $\$1,800,000,000$, so that one mill on the dollar will raise a large sum to meet the present deficit in the province of $\$697,000$, and further calls which will be made on the treasury as a result of war conditions. This tax is only a temporary tax, and is not to be continued after the war is over. It will be raised as part of the county rate in the counties, and in cities and towns which are separated from counties will be raised with the general tax and collected from the city and town authorities. Mr. McGarry took occasion in his budget speech to berate the life insurance companies upon refusing to pay provincial taxes.

The Suhring Dispersion Sale.

The Suhring dispersion sale of Holstein cattle, held at Sebringville, Feb 17, was well attended and good prices realized. The following is a list of the pure-bred Holsteins selling for \$100 or over:

Lorna Schuiling, J. R. Archibald, Seaforth.....	\$140
Monica, J. R. Scott, Seaforth.....	192
Cherry Grove Bertha Black, R. Low, Stratford.....	162
Cherry Grove Spotty, S. J. Monteith, Stratford.....	177
Princess of Fullarton, Louis Seebach, Stratford.....	130
Cherry Grove Erma, J. R. Archibald.....	193
Ulrike De Kol, J. Summer, Dublin.....	122
Cherry Grove's Lula, Jesse Looker, Mitchell.....	131
Cherry Gove Meta Faforit, Wm. Stock, Tavistock.....	144
Meta Pauline, J. Steinacker, Stratford.....	190

Wheat Growing in Austria.

A despatch to a leading British news agency from Vienna says: "The appeal issued to farmers by the Austrian Minister of Agriculture, in which he urged them not to leave a single plot of ground anywhere uncultivated, was followed by a peremptory decree by the Austrian Government ordering land owners to sow immediately every available part of their ground with spring wheat. Where necessary local authorities are empowered by the decree to provide labor for this work and to recover from the sale of crops the expenditure incurred. Failure to comply with the edict is punishable by heavy fines or imprisonment."

Canadian Seed Growers' Association Convention.

The eleventh annual convention of the Canadian Seed Growers' Association will be held at Ottawa on March 11th and 12th, 1915. The day sessions will be held in the Carnegie Library Hall, Metcalfe Street, and the evening sessions in the Railway Committee Room of the House of Commons. The sessions this year are expected to be of special interest and importance, in view of the unusual conditions which prevail in Canada at the present time.

Winnipeg Exhibition Called Off.

As we go to press G. H. Greig, acting manager of the Canadian Industrial Exhibition Association, Winnipeg, Man., advises us the Board of that Association have finally cancelled the 1915 exhibition. It is hoped and expected that the exhibition will be held as usual in 1916.

AIR SLAKED LIME.

When burnt lime is allowed to remain exposed to the air it first takes up water and then carbon-dioxide until it finally becomes calcium carbonate, much the same in composition as it was previous to the burning.

A pile of burnt lime slakes first on the outside and the lumps fall apart, covering the pile with fine material which excludes the air and with fine material which excludes the air and prevents a rapid change to the carbonate. The outside of the pile very quickly reverts to the carbonate; but the inside changes slowly. Consequently, air-slaked lime may contain some quick lime.

CARBONATE OF LIME.

Carbonate of lime or agricultural lime is simply ground lime-stone rock; marl is another form of carbonate of lime. This is now considered the best form of lime to apply. It may not be so quick in its action as the quick lime, but it does not cause so rapid decomposition of the organic matter of the soil. Experiments in Europe and the United States indicate that the carbonate is the best form to apply.

It is well to remember that 1,200 pounds of freshly burned lime, 1,500 pounds hydrated lime and 2,000 pounds of ground limestone rock, all contain approximately the same amount of actual lime, and are capable of neutralizing the same amount of acid in the soil, provided all forms are of the same grade.

GYPSUM.

Gypsum or land plaster exerts a similar effect to that of lime in improving the mechanical condition of soils; it serves as a source of calcium as a plant food; it serves to stimulate the beneficial soil organisms on the roots of leguminous plants, like the clovers, alfalfa, peas, beans, etc., it is a liberator of potash and phosphoric acid. In these ways it acts in the same manner as lime, but gypsum will not, like lime, correct or neutralize the acid of soils. It, however, contains sulphur, which may be of a distinct advantage for certain crops.

WASTE LIME.

Lime is used in the purification of the sugar solutions in the manufacture of sugar from the sugar beet. This waste material is practically all in the carbonate condition, and at Berlin and at Wallaceburg, where the factories are located, may be got for the hauling away. "Gas lime" should be exposed to the soil, thus allowing the sulphides and sulphites it contains to be changed to sulphates, which is harmless to plants. Lime is also a waste product in the manufacture of acetylene gas. It should be exposed before application, to allow the traces of acetylene to escape.

A great many questions are being asked regarding how fine the limestone should be ground. Lime need not be applied every year, in fact, possibly once in four years is sufficient, consequently it is not necessary that it all be in a finely divided condition when applied. In places where it has been used for some time the general idea appears to be that if it is reduced to the size of clover seed or the crystals of granulated sugar with all the fine materials that would naturally be formed in this reduction, it will be fine enough. In some cases it is being made fine enough to practically all go through a 100 mesh sieve (10,000 openings to square inch). This seems to be finer than is necessary, and only adds to the cost of production.

Where the dust from the stone crusher plants can be procured conveniently it may be used. The greater part of this is coarser than is desired, but it contains a part, usually about 20 to 30 per cent., fine enough to pass a 100 mesh sieve. It will naturally have to be applied more heavily. It is, however, a cheap substance. On the other hand if it has to be carried by rail, the freight charges together with the extra labor in handling may render it more expensive than the specially prepared material.

Regarding the rate of application, it is commonly recommended to apply the fresh-burned lime at the rate of one ton per acre. Corresponding quantities of the carbonate of lime would be approximately two tons per acre, and the limestone dust from the stone crushers would have to be applied at from three to four tons per acre.

The best way to apply the lime is with a lime spreader, but as we have few if any of them in the country, it will have to be spread with a shovel, scattering it over the land as evenly as possible. Some farmers have successfully applied it with the manure spreader by covering the spreader with straw and then placing the lime on the straw. In this way they claim to have got an even distribution of the lime. It should not be ploughed down, but applied after ploughing and thoroughly worked into the soil.

Possibly no other element has such a great variety of uses in crop production, and possibly no other constituent is so badly needed on some of our soils, yet it must not be considered a universal panacea for all soil troubles. It is a plant food, but it is also a stimulant, and like all stimulants must be used in moderation.

O. A. C.

R. HARCOURT.