

Representatives of the Wealthiest Breoders' Club in Canada, the Holstein-Friesian, who Gathered in Annual Convention in Toronto, Last Week Photo may be had from Galabraith Photo Co., Toronto

farm or the supervisor of the cow-testing association to charge the cows with feed according to the quality of each kind, where this is likely to vary, and to use his judgment as to the feeding value which the animals derive from them.

A SYSTEM OF PRACTICAL VALUE

There can no doubt as to the practical value of the need unit system to the dairy farmer. As suggested, there are other ways of reaching the same results, but it would appear that for general applicability and simplicity, this system must be placed first. It has the advantage over any system based upon the market values of feeds in the fact that it does not fluctuate; it may be applied everywhere, and holds good for all ordinary conditions of feeding dairy cows. It may be a question whether correct units have been taken for all separate feeds, but this is a matter of minor importance, which does not affect the value of the system itself, and can be readily remedied on further study and experimentation

The system was elaborated in response to requests from dairy farmers for information as to how they might best meet changes in the supply of home-grown forage crops from year to year; for instance, a scarcity of the hay crop; or what substitution might be made for a feed, the supply of which happened to be exhausted, or how feeds of abnormally high market prices might be replaced by other feeds in the rations fed without suffering a loss in production.

HOW PROTEIN IS FIGURED

The feed units given for the different feed stuffs are only meant as equivalent values under ordinary conditions of feeding farm animals. when fed in mixed rations that would contain over a certain minimum of digestible protein. This, in the case of milch cows, may be placed at half a pound for a 1,000-pound cow, and .05 pound of digestible protein per pound of four per cent, milk produced. Given this amount in the rations, it is now apparent that an additional supply of digestible protein is not of much greater value even for milk production than a similar amount of digestible non-nitrogenous components. This explains why feeds of different nutritive ratios are given equivalent values in the table of feed units, e.g., corn, peas, and wheat middlings, green corn and green clover.

It is a question how far the equivalent figures can be carried in replacing feeds of different character with each other, like replacing a con-. centrate with roughage, or a starchy feed with one high in protein. But the feed units were elaborated under ordinary European farm conditions, with rations that never varied greatly from those regularly fed to the animals, and were

always made up of a mixture of common feeds with a fair supply of protein. The system should, therefore, be applied only under similar conditions. In the case of rations composed largely of starchy feeds, like corn stalks, timothy hay, corn, or other small grains, preference should always be given to the protein feeds among those of equivalent feed value.

SUCCESSFUL IN EUROPE

The feed unit system has stood the test of practical feeding experience in European countries for nearly two decades, and has proved its usefulness to farmers in this country who have become familiar with it, in connection with cowtesting association work, and in the study of various phases of this system not only as to the economy of the production of dairy cows and other farm animals, but in regard to the value of different forage crops.

It showed Danish farmers that they could largely increase the production of feed from their land by growing more root crops and less grain than was the practice until recent years,

and it may in the same way tend to impress on the minds of our farmers the great value of the corn plant and alfalfa for feed production, and the fact that larger quantities of food materials may, under the conditions presented in the central states at least, be secured from a certain area of land, by growing and feeding especially the former crop than from any other crop. addition, the system will aid in determining the relative efficiency of different feeding stuffs and enabling the farmer to provide against a shortage of certain feed.

Professor Henry, one of our leading author ties on matters pertaining to the feeding of farm animals, says after a close study of the feed unr system, "The Scandinavian system of using fee units for studying and comparing individua cows, herds and associations, and the cooperative efforts of these associations toward bette ment, merit the highest proce. This system simple, easily understood, and capable of widest usefulness. It should be adopted



A Group of Farmers who Handle Business on a Large Scale

A toroup of Farmers who financie Dusiness on a Large Joans he day before the annual meeting of the Canadian Holtschn Friedman Cathle Breeden's Lassociation, he sele the Toronic, the retiring board of directors was photographed. Here they away from the selected the Association is the strongest cathle breeder's association in Canada. There is the selected the selected. This Association is the strongest cathe breeder's association in Canada. There is the selected the selected the selected of approximately \$20,00, with no liabilities. From left to right bown are: President Jas. Rettle, Norwood, Ont. Will Sangster, Ornexiown, Que, N. Michener, 4t existing President Jas. Rettle, Norwood, Ont. Marker Y. Acoderski, Caledonia, G. A. Brethen, Norwood, tanley A. Logan, Amberst Foint, N.S.; Secretary Taragners, A. Clouss, St. George, Ont.; M. L. Hal Vice-President, Byringford, Ont. tetiring President Jas. tanley A. Logan, Amb

February 1

Mr. N

OES the and const make mo han the highe ittended to an such was the c in article appe week. Before print Mr. H. o., Ont., weil high produci ed in at the Far nd Mr. Macde ere discussed l n editor of Far "There is mo ng the best of raising inferior Hamill's first co

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