

LIVE STOCK.

BEEF PRODUCTION VS. DAIRYING.

Editor "The Farmer's Advocate":

To predict the relative standing of the two great industries of beef production and dairying at the close of the first quarter of the present century would call for greater powers of penetration than I possess. I shall not attempt to prophesy, therefore, but merely call attention to a few facts which may, or may not, have a bearing upon the subject.

In the first place, it must be remembered that the cow is a much more economical producer of human food than is the ox. Lawes and Gilbert show that in the case of a cow giving ten quarts of milk per day, and an ox gaining fifteen pounds in weight per week, the cow produces nearly six times as much nitrogenous matter, about six times as much mineral matter, and the equivalent of an equal amount of fat. The cow does not produce so much fat as the ox in the comparison cited above, but if the milk sugar produced by the cow is reduced to its fat equivalent and added to the fat, the sum will be equivalent to the fat produced by the ox. Of course it is an exceptional cow, or, at least, one a long way above the average, that will average ten quarts of milk per day for a whole year; but even if we make deductions for the time the cow would likely be idle, it would be a very poor cow indeed which would not excel the ox in economy of production.

Thorne, of the Ohio Experiment Station, concludes that steers will gain three pounds in live weight upon a consumption of food which would produce one pound of butter-fat if fed to a dairy cow. When we consider the relative value per pound of butter-fat and the increase in live weight of the steer, and make allowance for the casein and milk-sugar produced by the cow in addition to the butter-fat, it is not difficult to decide which of these animals makes the better use of the food it consumes.

In connection with the matter under discussion, Prof. W. A. Henry says: "When population grows dense, the ox will be the first to disappear from our agriculture, because it is not an economical producer of human food, while the dairy cow will remain an economical instrument for that purpose." No man can say what the future has in store, but it is reasonably safe to prophesy that the time which witnesses the passing of the ox is still a long way off. We have watched with interest the marked extension of the domain of the dairy cow in our own country, and we see her encroaching upon ground which has long been sacred to beef production in the United States, but there are factors which tend to limit the aggression of the dairy cow, and to prevent the extinction of the ox.

Those who look for the disappearance of the ox are apt to assume that the present market values for dairy products and for beef will continue, but of this we have no assurance. It is generally conceded that there is less labor connected with beef production than with dairying, and the dairy cow must show herself considerably more profitable than the ox in order to hold supremacy; therefore, should there be depreciation in the market value of dairy products, or appreciation in the market value of beef, the dairy cow is bound to lose a considerable number of her supporters, and will be forced to retrace some of the steps in her all-conquering march.

There is another factor in this problem which cannot be ignored, and that is the taste, or demand of the consumer. It is one thing to demonstrate to the consumer that beef is an expensive article of diet, that the amount of money required to buy a pound of beef would purchase for him a great deal more nutriment, in the form of dairy products, but it is quite another thing to so educate his taste that he will be willing to substitute dairy products for meat in his daily bill of fare. English-speaking people are noted as meat eaters, and the place they occupy in the world to-day indicates that the diet agrees with them pretty well, so that it seems fairly safe to predict that until the juicy sirloin loses its charm for the hungry consumer, the prime butcher's bullock will continue to play an important part in the markets of this and other beef-producing countries.

A glance at the agriculture of Great Britain may be worth while. Here we have a country more densely populated than Canada can hope to be for a good many centuries to come, yet no place in the world do we find finer beef than that produced in Great Britain. Unfortunately, we have no figures relating to the relative profits from beef production and dairying in Britain, and figures showing the relative importance of the two industries are not easy to obtain. The Journals of the Royal Agricultural Society show that during 1901 and 1902 there was a decrease in the milking stock of Great Britain, attributed to an increase in the price of beef. Since that time, milking cows have been on the increase, and the probability is that history will repeat itself in the near future, and that the pendulum will again swing the other way. As in other lines of business, the factors of supply and demand play an important part. When there is a comparative shortage in dairy products, prices begin to soar, and many farmers are induced to take up the more remunerative business. By and by the desertion from the ranks of beef-makers makes itself felt in the shortage of beef, and prices for this commodity begin to rise, while, owing to the large accession to the ranks of dairymen, dairy products ease off in price. When this happens, we find many deserters re-enlisting under the beef-makers' banner, and they will remain loyal until dairying once more regains the

ascendancy with regard to profits, when we may expect to find them shifting their allegiance once more. In Great Britain, therefore, we probably see these two great industries about as nearly in a state of equilibrium as they are likely to attain, and the fluctuations are within comparatively narrow limits. It is fairly safe to assume that farmers will stick to beef production in preference to dairying until driven out of it by force of circumstances, because less labor is required in the first mentioned business; and, in consequence, the probability is that dairying will always continue to show a larger profit than beef production. In other words, on account of the larger amount of labor involved in dairying, it must be able to show considerably larger profits than those obtainable from feeding beef animals, before farmers will give up their beef cattle to engage in it.

I am well aware that what I have said does not answer the question which has been submitted, but I intimated at the outset that I would not attempt to answer it. The question reads: "How are the industries of beef-raising and dairying likely to compare in profit during or at the end of the present quarter century?" I have attempted to show that dairying owes its existence to the fact that it affords larger profits than beef-raising, and that it will continue to develop so long as the difference in profits is sufficiently great to tempt men to engage in it in preference to beef-raising. Unless there is a marked change in the tastes of the consumer, there will eventually come a time when the two industries will reach a stage of comparative equilibrium, the fluctuations in their relative development being governed by the law of supply and demand, and the advantages of one over the other becoming temporary in character. Increase in population appears to favor the development of dairying, so that we may expect to see dairying gaining ground so long as our population continues to increase. This does not necessarily mean that less beef will be produced, but that the increase in production of dairy products will be more rapid than the increase in production of beef. Extensive methods of farming will gradually yield to more intensive methods, and the quality of our beef will gradually improve in response to the demands of the market. The prospect is not a gloomy one, but, rather, it seems to me, is full of encouragement to those who are interested in the improvement of either meat or milk producing animals.

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CONVULSIVE FITS IN PIGS.

Information concerning the cause and treatment of convulsive seizures, to which pigs are subject, has repeatedly been asked for by farmers in the last few months. This trouble appears more frequently in winter, or when pigs are confined in pens, and is rarely if ever seen when they are allowed to run out on the ground and on grass. The supposed cause, the symptoms, and the preventive and remedial treatment, given by a writer in the Farmer's Gazette (Ireland), may serve to throw some light on the question:

These attacks usually come at feeding time, when the animal leaves its warm lair and comes to the feed trough. The pig runs to the trough as if to feed, but instead of doing so it suddenly falls over on one side. It then sets up a continuous squealing for several minutes, its eyes start out and look bloodshot, it froths at the mouth, and kicks violently and convulsively. This is followed by unconsciousness, and after a short time the animal rises to its feet and slinks off to its lair without eating any food. It happens sometimes that the affected animal dies in one of these fits, but more often it recovers, and the trouble is that the seizures become more frequent and more violent as time goes on, and the animal grows gradually thinner and weaker, and seldom recovers its health so completely as to develop into a thrifty feeder.

Convulsions in young pigs are almost always due to indigestion, and consequently the steps to be taken to prevent them are to follow a judicious system of feeding, so that indigestion may not set in. If the affection has actually made its appearance, the affected animal must be treated promptly, before the ailment becomes chronic. Change of diet is the first step necessary, if the foods which have been used are of a heavy, luscious and indigestible nature, and it is advisable to feed for some time on the lightest foods, such as ground oats and shorts, mixed with sufficient sweet skim milk to form a paste. A small quantity daily of fresh green stuff may be allowed with advantage, and if the weather is not severe, the pigs may get some outdoor exercise every day. Food may be supplied four or five times a day, but only in small quantities, as it is imperative that the animals should have no opportunity of gorging themselves. The medical treatment consists in dosing with castor oil or Epsom salts and sulphur; and if there is acute constipation, it may be necessary to resort to injections of glycerine or warm soap and water.

While an animal is struggling in the throes of a fit, nothing can be done except to place it on a layer of straw, and not to suffer it to struggle on a hard ground, but the custom of throwing cold water over the pig, or immersing it in hot water, is to be deprecated as useless and unnecessary.

THE OXFORD COUNTY (ENGLAND) SHOW.

This year's show was held at Banbury, May 14th and 15th.

CATTLE.

There was a large entry of Shorthorn cattle, and a grand lot they were. Sir R. P. Cooper's white four-year-old bull, Meteor, was champion again for males, and Mr. G. Harrison's well-known Ursula Raglan took similar honors for females.

The leading two-year-old bull came from the latter's herd, Elvetham Sweetmeat, a choicely-bred bull, bred by Lord Calthorpe, whilst the winning yearling, Walton Victor, was owned by Mr. W. Hazel. Snow Queen, after a keen contest with Royal Lily, owned by Mr. H. Dudding, won first honors for Mr. J. Coleman, in the three-year-old class. Sweet Smilax was first in the two-year-old class for Sir A. Henderson, and Lord Calthorpe's well-bred Elvetham Sweetheart took leading honors in the yearling heifer class.

The competition in the Hereford classes was not large. The leading exhibitors were the Earl of Coventry and Dudley, Messrs. G. D. Faber, S. Smith and T. Thomson.

A small but choice selection of Aberdeen-Angus was present. Mr. J. J. Cridlan won for bulls, and Mr. W. B. Greenfield for cows, the latter taking champion honors.

Lord Rothschild's herd came well to the front in the Jersey contest. Choice and typical animals owned by his lordship won both male and female championships, the former a yearling bull, Protector, and the latter a three-year-old cow, Oxford Snowdrop. The Earl of Rosebery, Sir E. D. Stern and Mrs. McIntosh were also amongst the leading winners.

A small entry was made in the classes for Guernseys, Kerrys and Dexter Kerrys. In the first, Mr. E. A. Hambro won the principal honors. In the second, Lady Greenall and Mr. T. Waite; and in the last, the Duchess of Devonshire and Mr. B. de Bertodano.

The dairy classes for Shorthorn cows had an excellent entry. In the cows over four years of age, Mr. C. Adeane was first with Ingram's Rose, Mr. Taylor being second, and Lord Rothschild third.

In the younger class, the Marquis of Winchester was first and Lord Rothschild second.

In the family class, three Shorthorn breeders took leading honors, in the order named: G. Harrison, Dyke Bros., and T. Thomson.

HORSES.

The horse classes were fully up to the average, and although exhibited under most unfavorable weather conditions, the result of the competitions were, as a rule, generally satisfactory. The older Shire stallion class had for its winner Dunsmore Iron Duke, owned by Sir P. A. Muntz. The leading two-year-old was Ratcliffe Conquering King, owned by Mr. F. Farnsworth, Mr. F. E. Muntz taking second with King Forest. Dorothy of Waresley, owned by Mr. J. G. Williams, won first in the mare-and-foal class. Sir P. A. Muntz's Dunsmore Nougat took a similar position in the four-year-old class, and in the classes for three-year-olds, two-year-olds and one-year-old fillies first honors went in each case to Mr. W. T. Everard—a notable series of success, and particularly so as each of these three were sired by Lockinge Forest King. The names of these three winners were Bardon Raisin, Ashley Royal Duchess, and Bardon Flower of the Forest.

SHEEP.

A fine collection of Oxford Downs were forward. Mr. J. T. Hobbs won first and champion for yearling rams, first for yearling ewes, and also champion for same, and first for yearling ewes in full fleece. Mr. J. Horlick was second for yearling rams and second for yearling ewes, as well as fourth in this class; typical and excellent sheep in each case. Mr. Brassey was third and fourth for yearling rams, and second for two tegs in wool. Mr. G. Adams was winner all through the lamb classes. Messrs H. W. Stilgoe, W. J. P. Reading and J. P. Hobbs also won in these classes.

The Hampshire Down section was a good one. Mr. James Flower won first and champion for his pen of ram lambs; he was also first for yearling rams and first for ewe lambs. Sir W. G. Pearce, Bart., the Hon. D. P. Bouverie, H. C. Stephens and Sir A. Henderson were the other winners.

A choice collection of Southdowns made up fully an average entry. First and champion honors, as well as r.n., for rams went to Mr. C. Adeane. Sir T. V. S. Gooch won first for ram lambs, the Duke of Devonshire for yearling ewes, and Mr. J. Coleman for flock ewes. The Duke of Devonshire won champion honors for yearling ewes.

SWINE.

The Berkshire pigs were represented by a thoroughly typical entry. Mr. Hudson's Oakford Emperor took champion honors, and the Duchess of Devonshire's Polegate Dorcas 2nd, r.n., for champion honors. These breeders, together with Lord Calthorpe, Messrs. J. Lawrence, J. Jefferson and G. T. Inman, were the principal winners.

In the other breeds, Mr. C. Spencer took the leading awards.

W. W. C.