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FARM AND DAIRY



& RURAL HOME



We Welcome Practical Progressive Ideas

Trade increases the wealth and glory of a country; but its real strength and stamina are to be looked for among the cultivators of the land.—Lord Chatham.

Vol. XXXIII.

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The Recognized Exponent of Dairying in Canada.

No. 26

The Importance of Good Breeding

EVERY day fresh evidence comes to hand that good breeding pays. A valuable contribution to the science of good breeding has been prepared by Dr. Raymond Pearl, an American authority on this subject. Dr. Pearl made a thorough study of Holstein-Friesian A.R.O. records and from these he has compiled some valuable data. One point is very evident that sires and dams that are in the A.R.O. are more likely to produce A.R.O. progeny than those that are not. The value of the sire in the herd is also well illustrated. The relatively small influence which the dam exerts upon the milking qualities of her heifers is almost surprising.

At the time Dr. Pearl made his investigations there were 3,070 cows in the advanced registry. These he classified as follows:

Sire and dam in A. R. O.	1,196
Neither sire nor dam in A.R.O.	710
Sire only in A.R.O.	770
Dam only in A.R.O.	394

There were 1,121 cows which produced 50 per cent. more than the A.R.O. requirements. These had:

Sire and dam in A.R.O.	584
Neither sire nor dam in A.R.O.	157
Sire only in A.R.O.	235
Dam only in A.R.O.	145

If the present standard were 100 per cent. higher, 168 cows would qualify, as follows:

Sire and dam in A.R.O.	123
Neither sire nor dam in A.R.O.	5
Sire only in A.R.O.	25
Dam only in A.R.O.	15

These two tables clearly show that the higher the qualifications the greater is the advantage of having well bred animals. Dr. Pearl also made extensive investigations of A.R.O. sires. There were 261 which had nine or more A.R.O. daughters. These he classified as follows:

Sire and dam in A.R.O.	145
Neither sire nor dam in A.R.O.	31
Sire only in A.R.O.	25
Dam only in A.R.O.	46
Of 112 sires which had 15 or more A.R.O. daughters there were:	29

Sire and dam in A.R.O. 75

Neither sire nor dam in A.R.O.	6
Sire only in A.R.O.	19
Dam only in A.R.O.	12
Of 25 sires having 25 or more A.R.O. daughters, there were:	12

Sire and dam in A.R.O. 31

Neither sire nor dam in A.R.O.	0
Sire only in A.R.O.	7
Dam only in A.R.O.	5
Of 14 sires having 50 or more A.R.O. daughters, there were:	5

Evidence Deduced from an Examination of 3,070 Holstein-Friesian Official Records

B. H. C. BLANCHARD, B. S. A.

Sire and dam in A.R.O.	12
Neither sire nor dam in A.R.O.	0
Sire only in A.R.O.	1
Dam only in A.R.O.	1

Five sires which had 75 or more A.R.O. daughters all had both sire and dam in the A.R.O. The tables relative to sires indicate even more strongly that the higher the qualifications the more necessary it is to have both sire and dam well bred.

One conclusion can safely be drawn—that the

dams only were A.R.O. Then too many of the dams of those 73 sires may have been capable of making good records but were not given the opportunity.

Some valuable bulletins on the subject of breeding have been issued by Dr. Pearl, of the Agricultural Experiment Station, Maine.

Barrenness in Mares

THE annual loss sustained by United States farmers due to barrenness in mares amounts to the enormous sum of \$350,000,000. In that country only one in two mares bred ever become with foal. Canadian figures are not available, but men of wide experience tell us that if the figures could be secured they would be staggering. We do not believe, however, that failure to conceive is so common in Canada as across the line. The feeds we use are more conducive to conception. Commenting on United States conditions, the Iowa Homestead recently said:

"Investigation discloses the fact that there are fewer foals in the corn belt and most in the grass belt. One at once decides that too much corn and too much hard work is the cause of the failure on the one hand, and little corn, plenty of pasture and little hard work is the explanation of success on the other. This seems to clearly point out the fact that too much corn is fed the brood mare in the corn belt. Everybody knows that the best brood mares in the corn belt are the ones that work but little, if any, and spend much of their time in the pastures with little grain.

"The mares on the range average 91 per cent. in producing foals yearly. Those on summer grass and alfalfa in the winter time produce 81 per cent. Those on oats, bran and hay continuously, 68 per cent. Those on corn, alfalfa, or clover, 58 per cent. Those on corn, bran and hay, 52 per cent. Those on corn and hay alone 49 per cent."

We are not to decide from these statistics that exercise is not to be desired. It is. The mare on pasture is getting plenty of exercise. A moderate amount of work is good for both female and male, particularly the latter. Hard, continuous labor is detrimental to both for breeding results. And we must watch the feed. Corn grain has been rapidly advancing in favor as a feed for horses. It would seem that we must use it with care in the case of brood mares and stallions. The old reliable, a mixture of hay and oats, is still unexcelled for breeding stock.

The Value of the Sire

Breeders are asking now, as never before, for accurate information on breeding methods. Dr. Raymond Pearl, of Maine, has endeavored to add to the information we already have on the subject by investigations of the official records of Holstein cattle. The results of his investigations are summarized in the article adjoining.

The belief that the sire has more influence on the milk-producing ability of the female offspring than has the dam, would seem to be borne out by Dr. Pearl's investigations. If this be true, many breeders need to revise both their beliefs and their practice and lay more stress on the breeding and individuality of the sires they use.

common maxim, "the sire is half the herd," is confirmed by conclusive practical evidence. In the first place the A.R.O. cows whose sires only were A.R.O., outnumber two to one the cows whose dams only were A.R.O.

But the table of sires having nine or more A.R.O. daughters seems to disprove the commonly accepted idea that the sire transmits to his heifers the milking qualities of his dam. Of the 120 sires stated as having sire only or dam only in the A.R.O., 73 were A.R.O. sires and 47 from A.R.O. dams. This would indicate that milk production is inherited through the male line only. It would hardly be safe, however, to draw any such sweeping conclusion, even from data as accurate as the foregoing. The 73 sires whose sires only were A.R.O., may have been better bred than the 47 sires whose dams only were A.R.O. Then too many of the