

STUD-STOCK BREEDING.

ADVICE REGARDING SHEEP.

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It is with a feeling of diffidence that I consent to give an opinion on breeding of stud animals. The experience I have had has been wholly with long-woolled sheep, and I am of opinion that methods that will work out quite well when breeding Merino sheep, on account of their purity and evenness of type, will not be satisfactory with long-woolled sheep.

Having been in charge of a Lincoln flock for forty years, a Romney flock for sixteen years, and an English Leicester flock for ten or twelve years, it has given me a very good opportunity of following different methods of breeding and watching results, and has practically brought me to the conclusion that none of the systems, such as in-and-in breeding, line-breeding within the same line of blood, line-breeding with unrelated families, or consistent outcrossing, can be followed exclusively when breeding long-woolled sheep. Undoubtedly close breeding or keeping within the same blood is the only way to produce great and valuable sires, but there are limitations beyond which the breeder must not go. Great judgment is required in this matter to know when the danger-line has been reached. The loss of vitality comes on gradually and is not easily detected; the wool-covering is affected as well.

There is a lot of literature on breeding, and most of the writers quote the pedigrees of champion animals as being closely inbred; but nothing is known of the percentages of failures the breeders of those animals had in their matings. There is no straight road to success. With all the advantages possible, it is not so difficult to reach a high standard with a flock as to maintain it.

There are several recognized methods of breeding—namely, (1) In-and-in breeding; (2) line-breeding with distant strains of the same blood; (3) line-breeding with distinct families; (4) outcrossing, which means continuous change of blood.

The method of outcrossing is very misleading to the young breeder. If he is careful to select sires similar in appearance to his flock he will apparently produce some useful-looking animals at first, but the more fresh blood he introduces the more uneven will be the result. I had this experience when I first started with Lincoln sheep, and did not do any good until the method of line-breeding was adopted. Rams bred on the outcross principle are no good to the stud breeder, and very little better for the ordinary flockmaster. Sheep bred in this way are much like the crossbred: they mature quicker than the line-bred sheep, and at two-tooth they look very promising, but do not last; and the result of mating them with crossbred ewes will be anything but satisfactory. Any one who has read and studied Mendel's