

**A COMPARISON OF RAMBOUILLET AND CORRIEDALE
SHEEP UNDER SOUTHWEST TEXAS
RANGE CONDITIONS***

J. M. JONES, W. H. DAMERON, B. L. WARWICK
and S. P. DAVIS

Texas Agricultural Experiment Station

From the early days of the Texas range sheep industry until the present time, Merinos and Rambouillets have been used in preference to other breeds largely because of their adaptability to the peculiar conditions existent in the Southwest. These conditions unquestionably are somewhat representative and similar to those under which the finewool breeds were developed. A high percentage of sheep of the United States and Australia carry varying amounts of Merino or Rambouillet blood in their foundations, due to their adaptability to these conditions.

During the past twenty-five years, the Texas range sheep industry has undergone some rather drastic changes. Sixty years ago, West Texas ranchmen were engaged in sheep raising primarily from the wool production standpoint, while today the industry is conducted from both the wool and lamb standpoints.

Texas finewool lambs have been rather severely criticized in some quarters as being undesirable from the standpoint of the feeder. It has been charged that they carry too many skinfolds or wrinkles, that they are undesirable in conformation, and that they mature more slowly than the so-called mutton breeds, within which category most of the popular British breeds fall. Undoubtedly, twenty-five or thirty years ago, some of this criticism was justified as is true in occasional instances today. However, in recent years Texas sheep of finewool breeding have undergone a phenomenal improvement from the mutton standpoint.

Although the Delaine-Merino usually produces a staple wool which is slightly more valuable per pound, scoured basis, than wool produced by the average Rambouillet, the latter breed matures faster and is in greater demand by feeders of finewool lambs.

The Texas Agricultural Experiment Station has conducted a large number of tests in the feeding and finishing of Rambouillet lambs during the last twenty-five years. The results of a major portion of these tests have exceeded expectations. In fact, the average gains made by Rambouillet lambs have equaled and in some instances surpassed feedlot per-

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formance records of the mutton breeds or mutton x finewool crosses, obtained at stations in the corn belt.

The Rambouillet lambs used in our feeding tests have in the main been selected for relative freedom from heavy skinfolds. Many of them have, however, carried light to medium heavy neck folds. These lambs in the wool and finished at ages of 9 to 12 months have shown dressed yields of 48 to 51 percent and the bulk of the carcasses have graded good to choice.

The senior author recently visited a number of wholesale and retail meat markets in Boston, New York, Baltimore, and Washington, as the representative of the Texas Sheep and Goat Raisers Association. Inquiry was made at each of these marketing centers regarding the desirability of the fat Rambouillet lambs from the consumer standpoint. It developed that New York affords one of the largest and most consistent outlets for the Texas finewool lamb. Texas lambs, which in the main are of straight Rambouillet breeding, are preferred by New York and Jersey City consumers because (a) they do not carry too much finish, and (b) carcasses are usually of medium weight, i.e., 35 to 40 pounds. We in the range country have been led to believe that the Rambouillet lamb is deficient in the leg of mutton, which no doubt is more or less true as judged by a Southdown standard. It developed, however, that the majority of lamb consumers in the east demand a 4½ to 6 pound leg of lamb. The leg of the Rambouillet lamb of medium weight falls within such specifications.

During the past few years, considerable interest has been centered in the Corriedale among some West Texas ranchers, with the thought in mind that this breed might perhaps be used to advantage in crossing on the Rambouillet to produce lambs that conform more nearly with the requirements of those accustomed to the English types.

The Corriedale sheep has been developed in New Zealand since 1880. It was first imported into the United States in 1914. This breed was developed by crossing the Lincoln, English Leicester and Border Leicester breeds on the Merino. As a result of careful selection and inbreeding, the characteristics of these large, heavy shearing, long wool sheep were combined with the desirable qualities of the Merino. This combination resulted in a breed capable of producing a desirable market lamb which at the same time yields a fleece of desirable wool. The fleece produced by the Corriedale is a long, medium type of wool and is used in the manufacture of a different class of goods than the fine wools.

Beginning in 1920, the Texas Station initiated a test, the object of which was to compare straight bred Rambouillet and Corriedale sheep

at the Ranch Experiment Station, located in Sutton and Edwards counties in Southwestern Texas, with a view of ascertaining the advantage, if any, of one or the other produced under strictly range conditions in that area. Through arrangements made by Mr. F. R. Marshall, who at that time was in charge of sheep breeding investigations for the Bureau of Animal Industry, U. S. Department of Agriculture, eight head of registered Corriedale ewes and a registered Corriedale ram were selected by representatives of that Bureau from the U. S. Sheep Experiment Station flock at Dubois, Idaho, which served as the foundation flock. Several replacement rams were later furnished by the Bureau of Animal Industry.

The Corriedales retained in the flock after some culling were compared with a much larger flock of registered Rambouillets used in connection with inheritance studies. The foundation flock of Rambouillet ewes was purchased from several sources and was considered as representative of the breed.

These flocks of experimental Rambouillets and Corriedales were grazed together under the same range conditions. The average fleece weight produced by the eight yearling Corriedale ewes first acquired by the Ranch Station in the spring of 1920 was 8.7 pounds, grease weight. The breeding ewes included in this study averaged 161 Rambouillets and 22 Corriedales annually during the period, 1923 to 1939 inclusive. During a period preceding and at lambing time, supplemental concentrates were usually fed. Individual weights of the fleeces, grease basis, were taken at shearing time, after which they were shipped to the Research Wool Scouring Plant at the A. and M. College for shrinkage tests.

The average weights of 3227 Rambouillet and 380 Corriedale ewes from 1 to 11 years of age were 102 pounds and 85.5 pounds respectively. This comparison shows that the Rambouillets had a weight advantage of 16.5 pounds per head, all ages averaged. In a comparison of lambs dropped and lambs weaned per 100 ewes bred, the Rambouillet ewes dropped 80 and weaned 68. The Corriedales dropped 77 and weaned 66. A rather wide range of variation existed in percentage of lambs dropped by seasons for both breeds. This probably is due to seasonal variation in rainfall.

The average weaning weights of lambs and average pounds of lamb weaned per ewe bred for 2743 Rambouillets was 62.8 and 42.9 pounds, and for 375 Corriedales, 54.8 and 36.2 pounds. The average grease and scoured weights of fleeces as well as percent shrinkages for ewes two years old and over were as follows: Rambouillets, 2472 averaged,

9.03 pounds grease, 3.6 pounds clean, shrinkage 60.3 percent. Corriedales, 329 averaged, 7.35 pounds grease, 3.7 pounds clean, shrinkage 49.25 percent. While there was considerable variation in fleece weight within each breed from year to year, the Rambouillet fleeces, grease basis, averaged 1.7 pounds heavier than the Corriedale fleeces. Compared, however, on a scoured or clean basis, the lighter shrinkage Corriedale fleeces averaged 0.1 pound heavier than those produced by the Rambouillet ewes. A comparison of fleece weights and shrinkage between yearling ewes revealed that 498 fleeces from Rambouillets averaged 8.14 pounds, grease basis, and 3.27 pounds, scoured, with a shrinkage of 59.9 percent. The weight of 69 Corriedale fleeces was 7.07 pounds, grease basis, and 3.6 pounds, scoured, with a shrinkage of 49 percent. The unscoured fleeces produced by the yearling Rambouillets averaged 1.07 pounds heavier than those produced by the Corriedales, however, considered on a scoured basis, the Corriedale fleeces averaged 0.3 pound heavier than the Rambouillet. The staple length produced by 2447 Rambouillet ewes averaged 2.24 inches as compared with an average staple length of 3.94 inches for 331 Corriedale fleeces.

While in this study proper, the Rambouillet and Corriedale breeds were not crossed, it may be of interest to some to hear a brief statement regarding 57 first cross Rambouillet x Corriedale ewes used in connection with a skinfold inheritance study. During the period 1936 to 1939, fifty-seven cross-bred ewes ranging from 1 to 4 years produced an average of 8.4 pounds wool, unscoured basis, which, on a scoured basis, averaged 3.7 pounds. The average shrinkage in scouring was 53 percent and the average staple length was 3.1 inches. The average body weight of these ewes was 92 pounds.

This study, in a comparison of Rambouillet and Corriedale breeds under strictly range conditions in Southwestern Texas, has rather definitely indicated the following advantages in favor of the Rambouillet: (a) body weight advantages at all ages, and (b) larger percentage of lambs weaned. Advantages in favor of Corriedales: (a) very slight weight advantage in yield of clean wool, and (b) longer staple.