

## **A COMPARISON OF FLEECES FROM B AND C TYPE RAMBOUILLET EWES**

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A paper entitled "A Preliminary Comparison of Fleeces from B and C type Rambouillet Ewes" produced and handled under Southwest Texas range conditions at the Ranch Experiment Station, was presented before this group at its twenty-fourth annual meeting (Proceedings 1931, pp. 242-243). The present analysis includes records of fleeces from some 1100 additional Rambouillet ewes in the same flock, or a total of 2280, for the period 1923 to 1935 inclusive.

A considerable amount of interest has been centered in this study on account of the popularity of the Rambouillet sheep in the Southwestern range area. The finewool breeds have pre-

dominated on the sheep ranges since the beginning of this range industry in Texas. During the earlier days of the Texas range industry, the principal source of income was derived from wool, and during this period Merinos, which are generally regarded as premier finewool producers, were at the height of their popularity. However, as time went on, the range sheep industry was transformed from a strictly wool to a wool and mutton basis, and as a result the Rambouillet has become increasingly popular until today it far outnumbers the Merino on Texas ranges. The Rambouillet is larger than the Merino, produces a lamb that is in more popular favor with the feeder buyer, and at the same time produces wool which is in a general way similar to that produced by the Merino. The smooth-bodied Rambouillet is the most popular type among Texas range men, owing to its greater desirability as foundation stock for the production of feeder lambs.

The comparatively heavy-folded Rambouillet has in this study been designated as the B type. It carries three or more prominent neck folds, one or more of which may extend prominently over the top of the neck. This type carries one or more prominent folds back of shoulders and possibly one or more on sides, thighs, and at the tailhead. Rambouillets comparatively free from skin folds or those carrying fewer than defined above for the B type were classified within the C type for the purpose of this study.

Since annual fleece yield is regarded as an important consideration, an earnest attempt was made to eliminate all ewes carrying open or light weight fleeces as well as individuals with weak constitutions. Undesirable females of either B or C type were culled from the flock at weaning time and from year to year as the work progressed, just as would be done by any well-managed commercial outfit. The ewes used in this study were sired by both B and C type rams.

#### DISCUSSION OF DATA

These data are the records of certain 12 months fleeces for Rambouillet ewes for each year from birth of animal to eleven years of age. As is generally believed, the unscoured or grease weight fleeces produced by the B type ewes averaged nearly one pound heavier at each age than those produced by the corresponding C type animals. The average unscoured weight of fleece produced by the B type ewes for all ages was 9.8 pounds as compared with 8.9 pounds for fleeces produced by the C type animals. However, the shrinkage of the fleeces of the B type animals was 63 percent while that of the C type animals averaged only 60 percent. Accordingly, the average yields of clean wool

were essentially the same for both types. Calculated on a grease weight basis, the C type ewes produced fleeces weighing 9 percent less than those produced by the B type animals, however, figured on a clean content basis, this difference was reduced to less than one percent. The maximum production of wool on a basis of clean content was reached at three years of age for both the B and C types, although the differences in yields at two, three, and four years respectively are quite insignificant.

Length of fiber, with the exception of the first year's production, when the growth period averaged approximately six weeks longer, was greatest on the two and three year old animals. The C type ewes produced the longer staple length at all ages, the average being 2.4 as compared with 2.1 inches for the B type animals.

The quality of the wool produced by the C type ewes as indicated by fiber diameter measurements, averaged slightly but significantly finer than that produced by the B type animals. As indicated in the accompanying table, animal weight differences by ages between the two groups were not significant. These

Comparison of Fleeces from B and C type Rambouillet Ewes

	Fleece weight				Shrinkage per cent		Staple length, inches		Average fiber diameter*		Animal weight, pounds	
	Unscoured pounds		Clean, pounds									
	Type C	Type B	Type C	Type B	Type C	Type B	Type C	Type B	Type C	Type B	Type C	Type B
1 year	8.0	9.2	3.2	3.5	59	62	2.5	2.3	4.9	5.2	82	86
No. records	445	67	435	63	435	63	449	66	320	59	454	66
2 years	9.3	10.2	3.8	3.8	59	63	2.4	2.2	5.4	6.0	100	98
No. records	376	51	376	51	376	51	359	51	261	47	370	49
3 years	9.6	10.3	3.8	3.9	60	61	2.4	2.1	5.2	5.9	108	110
No. records	310	51	309	51	309	51	307	52	238	45	311	53
4 years	9.6	10.5	3.8	3.9	60	62	2.3	2.1	5.5	5.9	114	111
No. records	236	50	234	50	234	50	234	48	177	42	234	49
5 years	9.3	10.3	3.7	3.6	60	65	2.3	2.0	5.5	6.1	116	111
No. records	191	45	191	45	191	45	189	44	117	38	192	45
6 years	8.8	9.7	3.5	3.6	60	63	2.2	2.1	5.5	5.8	115	113
No. records	145	40	145	40	145	40	141	39	80	34	144	39
7 years	8.6	9.4	3.4	3.4	60	64	2.2	1.9	5.3	6.0	113	113
No. records	101	32	100	32	100	32	99	33	64	28	100	33
8 years	8.3	8.4	3.3	3.0	60	64	2.1	1.9	5.6	5.3	112	111
No. records	62	20	62	20	62	20	62	20	47	16	61	20
9 years	7.1	9.0	2.8	3.1	61	66	1.9	1.8	5.1	5.9	108	109
No. records	26	11	26	11	26	11	25	11	17	8	26	11
10 years	7.8	8.5	2.8	3.2	63	63	2.1	1.8	5.4	5.0	119	112
No. records	8	6	8	6	8	6	8	6	4	6	8	6
11 years	7.3	8.7	2.8	3.6	61	59	1.9	1.6	5.1	5.6	108	88
No. records	5	2	5	2	5	2	5	2	5	2	5	1
Average	8.9	9.8	3.6	3.6	60	63	2.4	2.1	5.3	5.8	103	105
No. records	1905	375	1891	371	1891	371	1878	372	1330	325	1905	372

\* Records 1923 to 1932 inclusive only. Measured in ten thousandths of an inch.

ewes, which were handled under range conditions, increased slightly in weight until the fifth year after birth.

This further investigation bears out our previous tentative conclusion that range flocks comprised of comparatively smooth-bodied ewes carrying dense fleeces of combing length will produce approximately the same amount of wool, clean basis, as is produced by the B type ewes.

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