

SHEARING SHEEP ONCE VS. TWICE A YEAR

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Texas ranks first among the range states in the production of wool. According to a preliminary estimate made by the United States Department of Agriculture, the production for Texas for the year 1936 was 63,167,000 pounds, and the year 1937 will show an increase of approximately 10 million pounds.

The finewool breeds are well adapted to range and climatic conditions existent in the Southwest; consequently very little cross-

breeding has been practiced. Texas enjoys the distinction of being the only state engaged in large scale production of range sheep of straight finewool breeding. Owing to the mild climatic conditions, it is in a position to meet market demands for fine clothing wools.

Texas short finewools enjoy a reputation in the wool trade for their characteristic good felting properties which places them in a unique position. The number of flocks that are fall-sheared varies somewhat from year to year, depending upon several influences, among which are (1) range conditions, (2) the demand for short wools, and (3) the financial position of the growers concerned. Generally the wool sheared twice a year ranges between 15 and 25 per cent of the State's production. A number of Texas wool growers believe that sheep produced under Southwest Texas conditions will, as a result of being shorn both spring and fall, remain more thrifty, produce a significantly heavier total clip of wool, raise a larger percentage lamb crop, and at the same time show a smaller death loss than flocks under similar conditions sheared once a year.

Since no definite information was available to answer this question, a test was conducted at the Ranch Experiment Station, located in Sutton and Edwards Counties, during the nine-year period, 1920-1929. The results showed that the increased production of wool from ewes sheared twice a year was hardly adequate to offset the lower prices usually paid for the shorter wool. In shearing twice a year, the expense incurred is approximately doubled. Furthermore, there remains the possibility of death losses which may result from screw worm infestation. It is recognized, however, that prices paid for limited amounts of superior fine clothing wools occasionally equal or even surpass average prices paid for 12 months fine wools, this being dependent to a large extent upon seasonal demand for the shorter wools. However, in general, fine clothing wools average several cents per pound grease basis below 12 months fine wool values.

A flock of improved grade Rambouillet ewes (both aged and yearling ewes, the latter group coming two's), owned by the Ranch Experiment Station were used for this study. They were comparatively uniform with respect to type and development. The divisions of the groups to be sheared once and twice a year were made by driving the animals through a cutting chute, alternate animals going to the respective groups.

The reversal method was practiced during the period 1920-1926, after which time the groups were not alternated. All sheep were machine shorn by Mexican shearers, using the standard equipment employed generally among range sheepmen. The groups

being compared were grazed together under the same pasture conditions during each of the respective years that the test was under way. All sheep in the test were weighed twice a year, i.e., preceding the fall and spring shearings. Immediately after the sheep arrived at the shearing pens, they were assorted into their respective groups and weighed. All group animal weights were recorded on an unshorn basis. At the subsequent spring weighing of groups sheared twice, the average fleece weights (previous fall) were added in order to place the groups sheared either once or twice a year on a similar basis.

The average annual wool production (unscoured basis) per head for the aged ewes sheared once a year as shown in Table I was 8.74 pounds, while that for the aged ewes sheared twice a year was 9.58 pounds. The coming two-year-old ewes sheared once a year produced an average fleece weight of 9.04 pounds while those sheared twice a year produced 9.77 pounds. Shearing twice a year as contrasted to once a year increased the average fleece weights for the aged and coming two-year-old ewes during each of the nine years, except for the aged ewes during the 1923-24 season, when those sheared twice a year produced 0.1 pound less wool, unscoured basis, than those sheared once. The average increase in weight of fleece for the aged ewes sheared twice a year above those sheared once a year during the nine year period was 0.84 pound per head. The advantage in this respect for the two-year-old group sheared twice a year over ewes of similar age sheared once was 0.73 pound. Shearing twice a year increased fleece weights (unscoured basis) from 3 to 18 per cent for the aged ewes and 2 to 16 per cent for the two-year-olds. There was no significant difference in fleece weight increases between aged and two-year-old ewes sheared twice a year.

The average fall and spring animal weights for aged and coming two-year-old ewes sheared once and twice a year are shown in Table II. The fall weight for the aged ewes in the group sheared once a year averaged 111.6 pounds as compared with 111.1 pounds for the aged group sheared twice. The ensuing spring weights for the group sheared once a year had increased to 118.3 pounds for the ewes carrying 12 months fleeces, and to 119.2 pounds for the aged ewes sheared twice a year.

The coming two-year-old ewes in the group sheared once a year averaged 96.1 pounds as compared with 96.4 pounds in the similar group sheared twice a year. At the following spring weighing, the group sheared once a year averaged 106.8 pounds as compared with 107.7 pounds for those sheared twice.

Shearing either once or twice a year, as shown in Table III, did not, under the conditions of this experiment, appreciably in-

TABLE 1. Average Weight of Wool From Aged and Two-Year-Old* Ewes Sheared Once and Twice a Year, 1920-21 to 1928-29.

Season	Sheared once a year				Sheared twice a year				Advantage or disadvantage of shearing twice a year vs. once a year.			
	Aged ewes				2-yr-old ewes				Aged ewes		2-yr-old ewes	
	No. Ani-mals	Fleece weight lbs.	No. Ani-mals	Fleece weight lbs.	No. Ani-mals	Fleece weight lbs.**	No. Ani-mals	Fleece weight lbs.**	Lbs.	Per-cent-age	Lbs.	Per-cent-age
1920-21	62	8.73	25	11.35	65	9.95	26	12.24	+1.22	+14.0	+ .89	+ 7.8
1921-22	84	8.91	33	9.17	79	9.38	33	10.35	+ .47	+ 5.3	+1.18	+12.9
1922-23	70	8.18	36	7.11	75	8.70	43	8.19	+ .52	+ 6.4	+1.08	+15.2
1923-24	106	9.48	33	9.54	106	9.38	33	9.70	- .10	- 1.0	+ .16	+ 1.7
1924-25	95	9.21	59	9.36	100	9.51	58	9.59	+ .30	+ 3.3	+ .23	+ 2.5
1925-26	143	8.23	56	8.52	145	9.35	55	9.27	+1.12	+13.6	+ .75	+ 8.8
1926-27	147	7.99	24	8.36	158	9.43	25	9.74	+1.44	+18.0	+1.38	+16.5
1927-28	154	9.28	25	9.70	157	10.51	25	10.84	+1.23	+13.2	+1.14	+11.7
1928-29	25	9.18	23	8.94	25	9.42	25	9.78	+ .24	+ 2.6	+ .84	+ 9.4
Average (unweighted)		8.74		9.04		9.58		9.77	.84	9.6	.73	8.1

All weights are fleece per head on grease basis.

*Yearlings at time of entering test.

**Combined Fall and Spring weights.

TABLE 2.—Average body weights of the aged and two-year-old ewes.

Season	Fall						Spring					
	Aged ewes Fall, lbs.	2-yr. olds Fall, lbs.	Aged-ewes Spr., lbs.	2-yr. olds Spr., lbs.	Aged ewes Fall, lbs.	2-yr. olds Fall, lbs.	Aged ewes Spr., lbs.	2-yr. olds Fall, lbs.	Aged ewes Spr., lbs.	2-yr. olds Spr., lbs.	2-yr. olds Spr., lbs.	
1920-21	130	120	128	129	134	122	133	132	133	122	132	
1921-22	110	96	114	101	111	99	115	105	115	99	105	
1922-23	113	86	113	91	111	86	114	92	114	86	92	
1923-24	108	98	127	112	109	97	129	116	109	97	116	
1924-25	111	100	109	98	109	99	106	96	106	99	96	
1925-26	109	80	116	100	107	80	118	102	107	80	102	
1926-27	99	92	122	118	100	92	126	116	100	92	116	
1927-28	112	97	122	108	111	97	119	106	111	97	106	
1928-29	112	96	114	104	108	96	113	104	108	96	104	
Average	111.6	96.1	118.3	106.8	111.1	96.4	119.2	107.7	111.1	96.4	107.7	

TABLE 3.—Number of aged and two-year-old ewes in test; ewes dead or missing; ewes that dropped lambs; number and percentage of lambs dropped. Period 1920-21 to 1928-29, inclusive.

	Year	Ewes bred in test at beginning	Ewes in test at finish	Ewes dead or missing		Ewes that dropped lambs	Lambs dropped	Percentage of lambs dropped
				No.	Pct.			
Aged ewes 12 mos. fleeces	1920-21	67	63	4	6.0	56	68	101.5
	1921-22	86	84	2	2.3	73	76	88.4
	1922-23	72	70	2	2.8	60	65	90.3
	1923-24	106	106	0	0.0	92	98	92.4
	1924-25	99	96	3	3.0	84	103	104.0
	1925-26	147	143	4	2.7	124	138	93.9
	1926-27	153	147	6	3.9	124	131	85.6
	1927-28	160	156	4	2.5	126	146	91.2
	1928-29	25	25	0	0.0	22	23	92.0
	Totals	915	890	25	.....	761	848	.....
Average	.....	.....	.....	2.7	.....	.....	92.7	
2-yr.-old ewes 12 mos. fleeces	1920-21	27	25	2	7.4	16	17	63.0
	1921-22	33	33	0	0.0	18	18	54.6
	1922-23	36	36	0	0.0	28	28	77.8
	1923-24	33	33	0	0.0	26	26	78.8
	1924-25	60	59	1	1.7	24	25	41.7
	1925-26	58	56	2	3.4	39	40	69.0
	1926-27	26	24	2	7.7	17	17	65.4
	1927-28	25	25	0	0.0	19	19	76.0
	1928-29	25	23	2	8.0	17	17	68.0
	Totals	323	314	9	.....	204	207	.....
Average	.....	.....	.....	2.8	.....	.....	64.1	
Aged ewes 6 mos. fleeces	1920-21	64	64	0	0.0	57	77	120.3
	1921-22	86	83	3	3.5	55	61	70.9
	1922-23	75	75	0	0.0	65	71	94.7
	1923-24	106	106	0	0.0	90	97	91.5
	1924-25	104	100	4	3.8	79	84	80.8
	1925-26	148	145	3	2.0	128	140	94.6
	1926-27	160	159	1	0.6	138	145	90.6
	1927-28	160	158	2	1.2	137	150	93.8
	1928-29	25	25	0	0.0	21	22	88.0
	Totals	928	915	13	.....	770	847	.....
Average	.....	.....	.....	1.4	.....	.....	91.3	
2-yr.-old ewes 6 mos. fleeces	1920-21	28	27	1	3.6	17	19	67.9
	1921-22	33	33	0	0.0	15	15	45.4
	1922-23	43	43	0	0.0	27	27	62.8
	1923-24	33	33	0	0.0	24	24	72.7
	1924-25	61	58	3	4.9	29	31	50.8
	1925-26	55	55	0	0.0	38	40	72.7
	1926-27	25	25	0	0.0	21	21	84.0
	1927-28	25	25	0	0.0	22	22	88.0
	1928-29	25	25	0	0.0	17	18	72.0
	Totals	328	324	4	.....	210	217	.....
Average	.....	.....	.....	1.2	.....	.....	66.2	

fluence the percentage of lambs dropped. The average lambing percentage based on ewes bred in the aged groups sheared at 12 month intervals was 92.7 as compared with 91.3 for the aged ewes sheared twice a year. The two-year-old ewes sheared once a year showed a lambing percentage of 64.1 as compared with 66.2 for those of similar age sheared twice. The death loss among all groups was relatively low. In the aged group sheared at 12 month intervals, the death loss averaged 2.7 per cent while the coming two-year-old group sheared once a year showed a death loss of 2.8 per cent. In the aged group sheared twice a year, the annual death loss averaged 1.4 per cent while this loss among the coming two-year-olds sheared twice a year was 1.2 per cent.

SUMMARY

1. Shearing sheep twice a year under the conditions of this experiment resulted in a slightly increased yield of wool per sheep over those sheared once a year; however, a wide and rapid fluctuation in market prices may offset any net gain in fleece weight resulting from shearing twice a year. Thus a financial loss instead of a profit may be incurred. It is recognized, however, even in the light of these data, that there are certain range areas in Texas where twice-a-year shearing must be practiced. Ranges heavily infested with "catclaw", or rough hilly country are typical examples of areas where it is hazardous to run ewes in 12 months fleeces.

2. Body weight differences between the respective ages compared were not significant.

3. Shearing either once or twice a year did not materially influence the percentage of lambs dropped.

4. The death loss among the ewes, although unusually low for each of the groups, slightly favored those sheared twice a year.
