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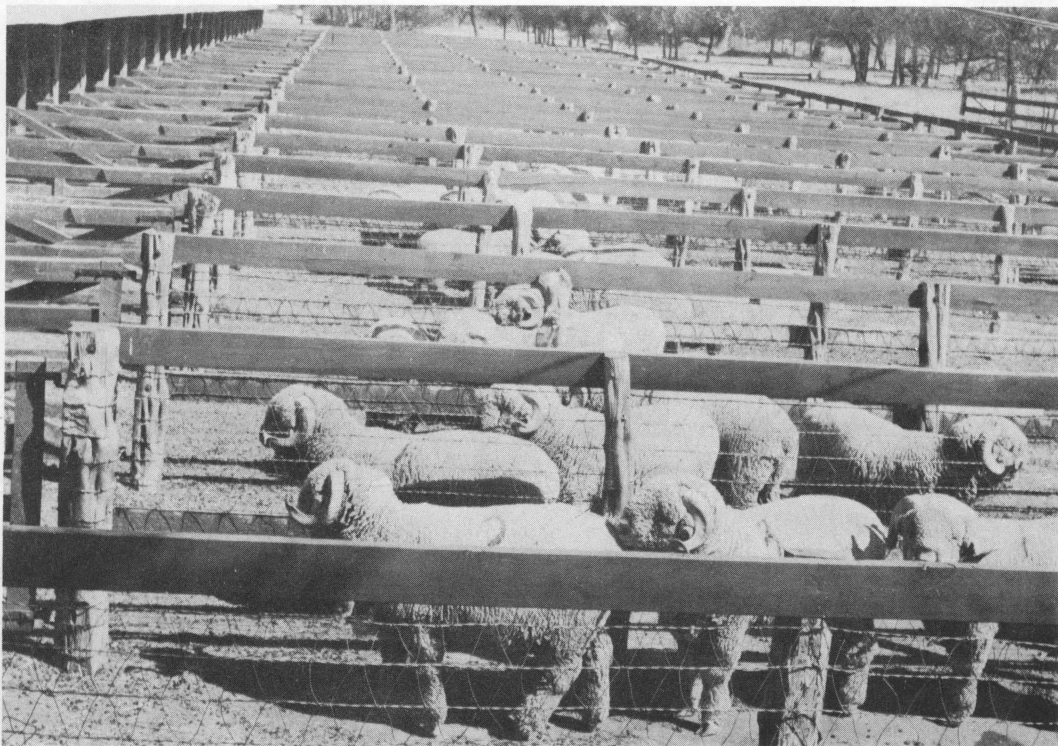
# *Improvement of Sheep*

## *Through the Selection of Performance-tested and Progeny-tested Breeding Animals, 1958-59*

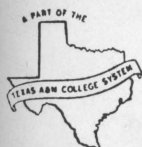
**FIELD DAY - APRIL 22, 1959**

**Ranch Experiment Station, Sonora, Texas**

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IN COOPERATION WITH  
**TEXAS SHEEP BREEDERS**  
AND THE  
**UNITED STATES DEPARTMENT OF AGRICULTURE**



**TEXAS AGRICULTURAL EXPERIMENT STATION**

R. D. LEWIS, DIRECTOR, COLLEGE STATION, TEXAS

IMPROVEMENT OF SHEEP THROUGH THE SELECTION OF  
PERFORMANCE TESTED AND PROGENY TESTED  
BREEDING ANIMALS, 1958-59

The results of the eleventh annual ram test are given herein. Ram performance and progeny tests have been held at this Station each year since 1948 in cooperation with sheep breeders and the U. S. Department of Agriculture.

During this period of time approximately 1400 rams representing 6 breeds and numerous crossbred strains have been tested. Two lines representing at least 5 generations have been tested.

The eleventh test began officially on October 1, 1958 with 125 rams at the Station and 9 on cooperative pasture test at Junction. The rams were "warmed up" on alfalfa hay and oats for 10-14 days prior to the starting date. All were initially sheared on September 24, including those on pasture test. Ninety-four rams were fed in 24 sire groups and 31 were fed together in a large lot. Of the total of 134 rams on test 95 were registered Rambouillets. The others were commercial rams.

Only one ram was lost during the course of the test. That was Test No. 133, which was on pasture at Junction. Test No. 88 died the night following the final shearing on March 19, presumably of an injury.

The gain test lasted 168 days - 6 28-day periods. Fleece growth was measured for a 175-day period between shearings on September 24, 1958 and March 19, 1959.

The Texas Agricultural Experiment Station Wool Research Laboratory furnished scouring results and fiber diameter measurements. Each entire fleece was scoured separately and results were reported with moisture content standardized to 12 percent. Fiber diameter determinations were made with a micronaire according to standard procedures.

This year's ration consisted of equal parts of alfalfa hay and oats, hand fed according to appetite. Feed trials were conducted separately to determine the feasibility of returning to a self-fed type ration in future tests.

Staple length, grease fleece weights and clean fleece weights were reported on a 365-day basis. No stubble was removed from the measured staple lengths; therefore about .25 inch of the staple length reported herein can be attributed to shearing stubble and is not in actuality wool produced during the 365-day period.

As in past tests, a committee scoring system was used to determine face covering, belly covering and body conformation. The following scores were used:

Face Covering: Open (1); Medium Covered (2); Covered (3); Wool Blind (4).

Belly Covering: Dense (1); Medium (2); Poor (3); Bare (4).

Body Conformation: Excellent (1); Good (2); Fair (3); Poor (4).

Skin folds are counted and scored as to size. The higher the score the greater the skin fold development.

Initial and final body weights were determined by weighing the rams on two consecutive days and averaging the two weights. This system reduced weight errors due to excessive or subnormal fills.

AVERAGE VALUES FOR RAMBOUILLET

Year	Daily Gain Lb.	Grease Wool, Lb.	Clean Wool Lb.	Staple Length, Inches	Face Covering Score	Skin Fold Count
1948-49	.37	13.8	6.6	3.36	2.7	33.8
1949-50	.45	16.7	7.8	3.57	2.8	38.9
1950-51	.49	18.0	8.1	3.34	2.7	44.8
1951-52	.46	17.7	8.2	3.47	3.3	25.1
1952-53	.48	18.4	8.6	3.56	3.0	40.7
1953-54	.51	19.5	9.3	3.80	2.9	31.3
1954-55	.49	17.8	8.7	4.07	2.8	32.2
1955-56	.48	19.9	9.2	3.87	2.7	26.6
1956-57	.50	18.8	9.1	4.02	2.8	25.7
1957-58	.60	19.2	9.3	4.20	2.6	36.4
1958-59	.49	15.4	8.0	4.16	3.0	26.3

Values for feed conversion and clean fleece weights have been adjusted for initial body weight. Due to the great variation in initial body size (60 to 141 pounds), these figures were adjusted by use of a regression coefficient in order that sire groups of older lambs could be compared to sire groups of younger animals.

Selection index values have been calculated for each registered Rambouillet ram. Since the index formula was developed from data involving this breed, it is not known whether or not it is applicable to commercial breeding. Therefore, index values for commercial rams are not shown in the report. The formula used was developed by Dr. J. M. Shelton from Sonora data and is calculated as follows:

$$\text{Selection Index} = 60 X (\text{daily gain in pounds}) - 5.2 X (\text{face cover score}) - 0.2 X (\text{skin fold count}) + 6.0 X (\text{staple length in inches}) + 4.0 (\text{adjusted clean wool in pounds}).$$

Index scores for the highest ranking 25 rams are shown at the conclusion of this report.

Clean fleece weights on this test were lower than for many years. This is due primarily to the small size of the rams at the test completion. The rams averaged only 170 pounds at the end of the test, compared to an average of 202 pounds during the past 6 years. This light weight may be attributed to the low initial weight of the rams (88 pounds compared to 94 for the past 6 years) and to the shorter feeding period (168 days compared to 224). The rams at the completion of the test lacked a mature size and did not have sufficient body surface to produce the quantity of wool which can be produced by rams 30 pounds heavier.

A separate report is included in this bulletin which gives the results of a comparison of feedlot and range testing.

Acknowledgement is made of the fine cooperation of the following persons who assisted in scoring the rams for body conformation, face covering, belly covering and taking staple measurements and fleece samples: J. E. "Spud" Tatum, Vocational Agriculture Instructor, Rocksprings; Hayden Haby, County Agent, Rocksprings; Clinton Langford, County Agent, Sonora; John Williams, Eldorado; Richard Jones, Eldorado; Leo Richardson, Iraan; Rod Richardson, Iraan; Vernon Jones, County Agent, Junction; and Aubrey Kothmann, Junction.

TOP 25 RAMBOUILLET RAMS RANKED BY INDEX SCORES  
 SELECTED FROM 95 RAMS ON TEST

Test No.	Owner	Score	Sire	
1	48	W. L. Davis	94.5	Davis 1094
2	52	F.M. Bierschwale	89.7	TS 4425
3	3	Leo and Rod Richardson	82.7	L.R. 5926
4	108	Substation No. 14	81.9	TS 5157
5	58	Prentice Harris	81.8	PHH 932
6	73	Substation No. 14	81.3	TS 4722
7	57	Prentice Harris	80.9	PHH 932
8	114	Substation No. 14	80.8	L. R. 5926
9	60	Prentice Harris	79.4	PHH 932
10	71	Boyd Brothers	78.0	CH 626
11	46	W. L. Davis	77.9	Davis 1094
12	87	Substation No. 14	77.7	TS 4776
13	111	Substation No. 14	76.9	TS 4722
14	35	Leo and Rod Richardson <sup>1</sup> / <sub>2</sub>	76.8	IR 2712
15	109	Substation No. 14	75.6	TS 5157
16	68	Ed Guy Branch	74.0	B 889
17	93	Substation No. 14	74.0	TS 5278
18	74	Substation No. 14	73.9	TS 4722
19	2	Leo and Rod Richardson	73.7	IR 5926
20	67	Ed Guy Branch	73.4	B889
21	4	Leo and Rod Richardson	73.3	L. R. 5926
22	90	Substation No. 14	72.8	TS 5388
23	61	H. C. Noelke, Jr. Estate	72.7	R 805
24	19	R. Q. Landers	71.9	R 2104
25	59	Prentice Harris	71.6	PHH 932

Note: Commercial rams, Test Nos. 100, 104 and 98, would have been on this list had their scores been included in the report.

## PASTURE-FEEDLOT COMPARISON

On September 16, 1958 eighteen rams belonging to Aubrey Kothmann, Junction, were paired as closely as possible for body weight, staple length and density. One of each pair was placed in one of two groups. One group of 9 rams was left on pasture on the Kothmann ranch, while the other group was taken to the Sonora Station for feedlot testing.

Average body weight, staple length, fiber diameter and grease fleece weight at the start of the test are shown in the following table:

	No. of Rams	Body Weight 9/15/59	Staple Length 9/15/59	Grease Fl. Wt. 9/24/59	Fiber Diam. (Micr.)
Pasture Group	9	106.8	2.78	6.58	20.48
Feedlot Group	9	107.9	2.79	6.24	19.32

The Station group was handled in a similar manner to others on the test. Their pairs on pasture test were not fed other than a small amount of mineral supplement containing some protein. This supplement has been used for several years on this ranch and is considered a normal ranch operation.

At the conclusion of the test, performance of the two groups was compared. Average values for the two groups are given in the following table:

	Pasture Group	Feedlot Group
Body weight	136	157
Average daily gain	.24	.39
Grease fleece weight	13.85	15.43
Clean fleece weight	6.55	6.93
Staple length	4.23	4.22
Fiber diameter	20.6 (64s)	19.8 (70s)
Conformation	2.3	2.2
Belly covering	3.0	2.3
Skin folds	16.1	13.4
Face covering	1.5	2.4
Fleece shrinkage (percent)	53	55

As noted, by testing under feedlot conditions gains were increased by 0.15 pound per day. Consequently, the final weight of the rams in the feedlot was 21 pounds heavier than those on pasture. Grease wool and clean wool weights were heavier from the feedlot rams, probably due to their greater size.

It is interesting to note that staple length, fiber diameter and skin folds were not significantly affected by this level of feeding. The lack of differences may be due in part to the good condition of pastures on the Kothmann ranch.

There appeared to be considerably less wool on the faces and bellies of the pasture rams compared to those in the feedlot. While it is not certain, there is a possibility that grazing in and around brush may be responsible for the differences in covering.

### Acknowledgement

This study was made possible with the help of Extension Service personnel with whom Aubrey Kothmann has been working for several years. Particularly Vernon Jones, Kimble County Agent, was of great help in the planning and carrying out of this work.

## Fleece Record - 365 Days

Grease Fleece Weight	Clean Fleece Weight	Adj. Cl. Fleece Wt. (1)	Staple Length Inches	Fiber Diam. Micr.	Spinning Count	Con-formation	Belly Wool	Skin Folds	Face Cover	Selection Index
18.2	11.1	10.1	4.87	20.8	64s	2.8	1.0	23	3.5	67.2
15.9	9.8	8.9	5.18	22.2	62s	2.5	1.8	10	3.8	73.7
17.8	11.1	10.5	5.02	22.2	62s	1.9	1.0	30	2.0	82.7
20.1	11.3	10.0	5.02	22.0	64s	1.4	1.3	21	4.0	73.3
18.0	10.83	9.88	5.02	21.8	64s	2.2	1.3	21.0	3.3	74.2
18.0	10.0	8.9	4.33	22.0	64s	2.3	2.2	36	3.3	68.4
14.4	7.3	5.6	3.14	21.2	64s	1.3	4.0	10	2.7	49.2
16.7	8.2	7.1	3.66	22.0	64s	1.7	2.2	22	3.3	52.2
16.3	8.8	8.0	3.66	22.4	62s	1.8	1.7	63	3.8	43.8
16.4	8.58	7.40	3.70	21.9	64s	1.8	2.5	32.8	3.3	53.4
17.3	9.0	8.3	3.93	21.9	64s	2.3	1.5	51	3.2	66.6
16.1	8.6	8.6	4.01	23.0	62s	2.2	1.7	22	4.0	60.9
15.9	8.2	8.5	4.03	21.5	64s	2.5	1.3	23	3.8	65.6
13.6	7.9	8.2	4.08	22.0	64s	2.7	2.3	29	1.8	68.5
15.7	8.43	8.40	4.01	22.1	62s	2.4	1.7	31.2	3.2	65.4
16.3	9.4	8.2	4.22	22.6	62s	1.8	1.5	19	3.5	61.9
20.5	9.4	7.7	4.18	20.8	64s	2.3	1.2	29	3.5	54.1
21.5	10.7	9.1	4.60	23.8	60s	2.5	1.8	34	3.5	64.8
21.3	10.9	8.9	4.24	22.1	62s	1.8	2.2	20	3.0	71.4
19.90	10.10	8.48	4.31	22.3	62s	2.1	1.7	25.5	3.4	63.1
11.5	6.3	5.6	3.30	22.0	64s	1.8	3.0	15	1.5	56.0
14.8	6.9	6.1	3.49	23.7	60s	1.8	1.5	17	2.2	58.7
15.5	10.0	9.6	3.72	23.7	60s	1.4	2.0	7	3.0	71.9
14.0	7.3	6.7	3.51	22.5	62s	1.6	2.5	13	1.7	65.9
14.0	7.63	7.00	3.51	23.0	62s	1.6	2.2	13.0	2.1	63.1
16.8	9.1	8.2	4.11	22.2	62s	2.0	1.9	24.7	3.1	

Ram Test No.	Flock No.	Age in Months	Initial Weight	Final Weight	Total Gain	Average Daily Gain	Feed per 100 lbs. Gain (1)
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FALL-DROPPED LAMBS FED IN PROGENY GROUPS

Sire: 5926 Owner - Leo and Rod Richardson

1	3148	16	113	171	57	.34	783
2	3179	16	111	192	81	.48	
3	7255	16	103	180	76	.45	
4	7318	16	121	202	80	.47	
Average			112	186	74	.44	

Sire: Rodney Davis 6 Owner - Frank W. Anderson, Round Rock

5P	60	17	116	203	87	.52	801
6P	61	17	134	202	68	.40	
7P	62	17	116	181	65	.39	
8P	63	17	110	172	62	.37	
Average			119	190	71	.42	

Sire: P116 Owner - H. C. Noelke, Jr. Estate, Sheffield

9	1606	15	106	208	102	.61	742
10	1626	15	88	166	78	.46	
11	1638	15	81	170	89	.53	
12	1705	13	79	153	74	.44	
Average			88	174	86	.51	

Sire: MP A592 Owner - Miles Pierce, Alpine

13	A4352	16	119	192	73	.43	733
14	A4384	17	134	195	61	.37	
15	A4389	17	131	203	72	.43	
16	A4393	17	141	225	84	.50	
Average			131	204	73	.43	

Sire: R. R. Richardson 2104 Owner - R. Q. Landers, Menard

17	J106	15	107	176	69	.41	856
18	F117	15	109	189	80	.47	
19	R654	15	99	178	79	.47	
20	R648	15	103	185	82	.49	
Average			104	182	78	.46	
Ave. Fall Dropped Lambs			111	187	76	.45	783

(1) Adjusted for Initial Body Weight



## Fleece Record - 365 days

Feed Per 100 lbs. Gain (1)	Grease Fleece Weight	Clean Fleece Weight	Adj. Cl. Fleece Wt. (1)	Staple length inches	Fiber Diam. Micr.	Spin- ning Count	Con- forma- tion	Belly Wool	Skin Folds	Face Cover	Selec- tion Index
774	15.9	7.1	7.6	3.76	20.5	70s	2.8	2.7	40	2.8	62.8
	13.0	6.5	6.8	3.59	21.5	64s	2.3	3.3	8	4.0	52.7
	12.1	5.4	6.2	3.55	20.2	70s	2.3	3.5	8	3.7	54.7
	17.1	7.3	7.7	3.80	21.8	64s	2.4	2.5	23	3.2	69.6
	14.5	6.58	7.08	3.68	21.0	64s	2.4	3.0	19.8	3.4	60.0
782	14.2	7.1	7.0	3.93	20.0	70s	2.5	3.3	17	3.8	59.6
	11.1	6.5	7.0	4.45	20.4	70s	2.9	1.5	10	3.8	57.5
	16.1	8.4	7.7	4.64	20.4	70s	1.4	3.3	11	2.2	76.8
	14.6	7.7	8.0	4.39	21.0	64s	3.1	1.0	20	3.2	61.6
	14.0	7.43	7.42	4.35	20.4	70s	2.5	2.3	14.5	3.2	63.9
803	15.0	7.3	6.7	4.01	21.0	64s	1.4	3.0	24	2.7	59.7
	15.0	7.7	7.9	4.18	22.9	62s	2.2	2.8	15	3.7	60.3
	11.5	6.5	6.8	3.66	19.9	70s	2.6	2.7	17	2.7	58.8
	13.2	6.7	7.1	4.08	19.8	70s	2.6	2.2	21	2.2	64.3
	13.7	7.05	7.12	3.98	20.9	64s	2.2	2.7	19.2	2.8	60.8
793	11.9	5.9	6.7	3.97	21.0	64s	2.3	2.3	21	4.0	53.8
	15.0	8.2	8.8	4.33	21.9	64s	1.6	1.5	22	4.0	63.0
	13.8	7.7	7.6	4.28	21.0	64s	2.4	2.5	32	3.0	59.9
	12.7	6.7	7.0	3.51	21.3	64s	2.2	2.3	19	3.8	56.1
	13.4	7.13	7.52	4.02	21.3	64s	2.1	2.2	23.5	3.7	58.2
734	16.1	6.7	6.4	3.39	20.9	64s	1.9	2.3	26	2.0	61.5
	16.9	10.2	10.1	4.12	20.9	64s	1.7	2.3	17	2.3	77.9
	14.6	7.5	7.2	3.76	22.1	62s	2.0	2.5	22	2.2	67.4
	17.3	9.8	10.0	4.49	21.1	64s	1.7	2.2	22	1.0	94.5
	16.2	8.55	8.42	3.94	21.2	64s	1.8	2.3	21.8	1.9	75.3

Ram Test No.	Flock No.	Age in Months	Initial Weight	Final Weight	Total Gain	Average Daily Gain	Feed Per 100 lbs. Gain (1)
		4/1/59	10/1/58	3/18/59			
Sire: Beal 2089 Owner - Clyde Thate, Burkett							
29P	1279	12	75	165	90	.54	
30P	1280	12	79	153	74	.44	
31P	1289	12	66	149	83	.49	774
32P	1290	12	77	182	105	.62	
Average			74	162	88	.52	
Sire 2712 Owner - Leo and Rod Richardson, Iraan							
33	3832	12	91	178	87	.52	
34	3921	12	76	146	70	.41	
35	8250	12	106	195	89	.53	782
36	8283	12	80	145	65	.39	
Average			88	166	78	.46	
Sire: AWK 259 Owner - A. W. Keys, Eldorado							
37	471	13	103	180	77	.46	
38	474	13	84	156	72	.43	
39	478	13	81	156	75	.45	803
40	488	12	77	153	76	.45	
Average			86	161	75	.45	
Sire: 1066 Owner - W. L. (Tom) Davis, Sonora							
41P	19	12	68	147	79	.47	
42P	1922	12	72	148	76	.45	
43P	1948	12	91	163	72	.43	793
44P	1951	12	80	165	85	.51	
Average			78	156	78	.46	
Sire: 1094 Owner - W. L. (Tom) Davis, Sonora							
45P	1886	12	95	182	87	.52	
46P	1888	12	91	170	79	.47	
47P	1889	12	95	184	89	.53	734
48P	1918	12	83	188	105	.62	
Average			91	181	90	.53	

(1) Adjusted for Initial Body Weight

## Fleece Record - 365 Days

Feed per 100 lbs. Gain (1)	Grease Fleece Weight	Clean Fleece Weight	Adj. Cl. Fleece Wt. (1)	Staple Length Inches	Fiber Diam. Micr.	Spin- ning Count	Con- forma- tion	Belly Wool	Skin Folds	Face Cover	Selec- tion Index
766	12.5	6.7	7.5	4.66	20.1	70s	3.3	4.0	13	2.8	66.6
	15.3	7.7	7.8	4.35	20.6	64s	2.5	3.3	27	3.3	64.7
	15.3	8.4	8.8	4.28	21.0	64s	2.5	3.2	25	2.8	71.3
	17.1	10.0	10.1	4.45	20.1	70s	1.5	3.3	14	2.5	89.7
	15.1	8.20	8.55	4.44	20.4	70s	2.4	3.4	19.8	2.8	73.1
770	12.7	7.5	7.0	4.03	19.3	70s	2.0	2.8	13	3.0	55.6
	12.5	6.9	6.8	4.18	19.9	70s	2.2	2.7	14	2.7	61.9
	11.9	5.2	5.7	4.03	19.3	70s	2.8	2.2	6	2.3	58.4
	14.2	8.4	8.6	4.08	20.7	64s	1.8	2.2	19	3.3	70.9
	12.8	7.00	7.02	4.08	19.8	70s	2.2	2.5	13.0	2.8	61.7
782	15.3	8.6	8.7	4.79	21.0	64s	1.8	1.0	7	1.7	80.9
	14.4	8.4	9.0	4.97	20.7	64s	1.1	1.7	10	2.3	81.8
	15.3	7.7	8.1	4.64	21.8	64s	1.4	1.5	8	2.7	71.6
	14.2	8.4	8.9	4.54	20.1	70s	1.4	2.0	12	2.0	79.4
	14.8	8.28	8.68	4.74	20.9	64s	1.4	1.6	9.2	2.2	78.4
Sheffield											
764	18.2	9.2	8.4	4.12	22.1	62s	2.3	2.5	74	2.0	72.7
	11.9	6.7	6.6	3.93	20.8	64s	2.4	3.7	15	3.5	52.2
	15.5	8.6	7.8	3.72	21.4	64s	2.6	3.8	42	3.3	61.5
	13.6	7.3	8.1	3.91	23.5	60s	2.7	1.5	6.5	1.8	62.3
	14.8	7.95	7.72	3.92	22.0	64s	2.5	2.9	49.0	2.6	62.2
753	15.3	8.6	8.9	4.01	20.2	70s	2.6	2.0	44	4.0	54.7
	15.5	8.4	8.2	4.28	21.8	64s	2.7	1.0	32	3.7	55.7
	19.9	10.0	10.2	4.33	22.1	62s	2.7	1.7	62	2.0	73.4
	15.9	8.6	9.2	4.56	20.6	64s	2.7	1.5	31	2.8	74.0
	16.7	8.90	9.12	4.30	21.2	64s	2.7	1.6	42.2	3.1	64.5

Ram Test No.	Flock No.	Age in Months	Initial Weight	Final Weight	Total Gain	Average Daily Gain	Feed per 100 lbs. Gain (1)
		4/1/59	10/1/58	3/18/59			

Sire: TS 4425 Owner - F. M. Bierschwale, Segovia

49	8828	12	68	140	72	.43	
50	8829	12	85	169	84	.50	
51	8830	12	77	161	84	.50	766
52	8832	12	86	194	108	.64	
Average			79	166	87	.52	

Sire: JBP 128 Owner - Prentice Harris, Bronco

53	1637	11	100	161	61	.36	
54	1664	11	90	164	74	.44	
55	1667	11	74	143	69	.41	770
56	1698	11	83	176	93	.55	
Average			87	161	74	.44	

Sire: PHH 932 Owner - Prentice Harris, Bronco

57	54	11	86	164	78	.46	
58	1612	11	72	157	85	.50	
59	1625	11	78	154	76	.45	782
60	1685	11	76	159	83	.49	
Average			78	159	81	.48	

Sire: R605 Owner - Frieda Kay and Herbie Noelke, Sheffield

61	H-16	15	108	219	111	.66	
62	H-18	15	90	156	66	.39	
63	K-14	14	109	204	95	.56	764
64	K-18	11	66	147	81	.48	
Average			93	181	88	.52	

Sire: B889 Owner - Ed Guy Branch, Rankin

65	1030	12	81	151	70	.41	
66	1034	12	93	157	64	.38	
67	1036	12	83	166	83	.49	753
68	1050	12	72	158	86	.51	
Average			82	158	76	.45	

(1) Adjusted for Initial Body Weight

Fleece Record - 365 Days

Feed Per 100 lbs. Gain (1)	Grease Fleece Weight	Clean Fleece Weight	Adj. Cl. Fleece Wt. (1)	Staple Length Inches	Fiber Diam. Micr.	Spin- ning Count	Con- forma- tion	Belly Wool	Skin Folds	Face Cover	Selec- tion Index
775	14.0	7.7	8.4	4.49	22.2	62s	2.5	1.3	22	3.8	63.9
	15.5	7.1	7.6	3.82	21.4	64s	2.5	2.7	43	3.2	60.5
	18.0	9.0	9.2	4.74	20.1	70s	1.6	1.0	44	2.3	78.0
	16.9	8.4	9.2	4.43	23.5	60s	2.6	1.3	33	3.3	71.4
	16.4	8.05	8.60	4.37	21.8	64s	2.3	1.6	35.5	3.2	68.5
758	17.1	9.2	9.0	4.39	22.8	62s	1.7	2.3	25	2.3	81.3
	14.8	7.7	7.7	4.01	19.6	70s	1.8	2.5	28	1.5	73.9
	12.5	6.1	6.3	4.01	19.2	70s	2.3	2.5	17	3.7	50.7
	12.7	7.1	7.6	3.93	21.0	64s	2.4	2.3	33	3.7	54.0
	14.3	7.53	7.65	4.08	20.6	64s	2.0	2.4	25.8	2.8	65.0
764	14.8	7.1	6.9	4.70	19.3	70s	1.8	2.7	10	3.3	64.8
	13.6	7.1	6.9	4.39	20.4	70s	1.5	2.2	13	3.7	62.7
	16.9	8.4	8.5	4.03	23.9	60s	2.1	1.3	61	3.0	60.4
	15.1	7.5	7.8	4.56	20.0	70s	2.3	3.2	51	2.8	65.6
	15.4	7.53	7.52	4.42	20.9	64s	1.9	2.4	33.8	3.2	63.4
788	15.0	7.1	7.4	4.08	21.2	64s	1.9	2.2	38	3.2	64.1
	11.9	6.1	6.4	3.82	20.1	70s	2.4	4.0	24	2.5	60.7
	13.8	7.1	7.9	4.49	21.1	64s	2.6	1.2	37	2.0	66.5
	15.0	8.2	8.8	4.22	21.3	64s	2.8	1.3	40	3.2	67.7
	13.9	7.13	7.62	4.15	20.9	64s	2.4	2.2	34.8	2.7	64.8
776	15.9	7.1	7.6	4.03	21.3	64s	2.8	1.8	35	3.3	61.0
	14.8	7.5	7.8	3.93	21.2	64s	1.9	1.8	32	3.8	57.4
	16.3	8.4	8.1	4.49	20.2	70s	1.8	1.8	28	2.3	77.7
	15.4	7.95	7.83	4.15	20.9	64s	2.2	1.8	31.7	3.1	65.4

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Ram Test No.	Flock No.	Age in Months 4/1/59	Initial Weight 10/1/58	Final Weight 3/18/59	Total Gain	Average Daily Gain	Feed Per 100 lbs. Gain (1)
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Sire: CH626 Owner - Boyd Brothers, Rankin							
69	74	14	70	148	78	.46	775
70	76	14	74	164	90	.54	
71	79	14	83	177	94	.56	
72	81	14	66	155	89	.53	
Average			73	161	88	.52	

Sire: TS 4722 Owner - Substation 14, Sonora							
73	5699	13	94	195	101	.60	758
74	5719	13	87	178	91	.54	
75	5741	13	83	151	68	.40	
76	5810	13	76	148	72	.43	
Average			85	168	83	.49	

Sire: TS 5157 Owner - Substation 14, Sonora							
77	5668	14	93	172	79	.47	764
78	5731	13	93	179	86	.51	
79	5773	13	86	171	85	.50	
80	5818	13	81	170	89	.53	
Average			88	173	85	.51	

Sire: TS 4776 Owner - Substation No. 14, Sonora							
81	5677	13	80	175	95	.57	788
82	5734	13	80	164	84	.50	
83	5749	13	68	140	72	.43	
84	5799	13	72	161	89	.53	
Average			75	160	85	.51	

Sire: TS 4776 Owner - Substation No. 14, Sonora							
85	5686	13	74	160	86	.51	776
86	5698	13	81	162	81	.48	
87	5720	13	97	198	101	.60	
Average			84	173	89	.53	

(1) Adjusted for initial Body Weight

## Fleece Record - 305 Days

Feed per 100 lbs. Gain (1)	Grease Fleece Weight	Clean Fleece Weight	Adj. Cl. Fleece Wt. (1)	Staple Length Inches	Fiber Diam. Micr.	Spin- ning Count	Con- forma- tion	Belly Wool	Skin Folds	Face Cover	Selec- tion Index
743	18.4	9.0	8.9	4.39	21.1	64s	1.8	2.0	42	3.7	70.3
	15.9	8.4	9.0	4.70	21.1	64s	2.0	3.0	24	4.0	72.8
	15.3	7.9	8.5	3.82	21.5	64s	2.9	1.2	50	4.0	52.5
	16.5	8.43	8.80	4.30	21.2	64s	2.2	2.1	38.7	3.9	65.2
852	13.6	7.5	7.7	3.66	20.7	64s	2.1	4.0	21	2.5	63.8
	16.9	7.9	7.3	4.03	21.3	64s	1.5	3.8	17	2.3	74.0
	14.6	7.1	7.3	3.93	22.1	62s	2.3	1.5	8	4.0	56.2
	15.0	7.50	7.43	3.87	21.4	64s	2.0	3.1	15.3	2.9	64.7
775	14.8	7.7	7.9	4.17	21.0	64s	2.2	2.3	26.2	3.0	
	15.4	8.0	8.0	4.16	21.2	64s	2.2	2.2	26.3	3.0	65.5
774	15.3	8.4	8.6	4.39	20.0	70s	2.7	3.0	12	3.0	
	16.7	6.7	6.8	3.93	23.5	60s	2.5	3.8	18	1.0	
	14.4	6.7	6.8	3.91	21.3	64s	2.8	2.3	12	2.3	
	16.7	8.6	8.5	4.08	22.9	62s	2.8	2.0	21	4.0	
	15.8	7.60	7.68	4.08	21.9	64s	2.7	2.8	15.8	2.6	
791	20.5	7.7	7.8	4.12	22.1	62s	2.4	2.0	44	1.5	
	19.0	8.6	8.7	4.77	22.2	62s	1.6	2.0	13	2.8	
	24.0	8.4	8.6	4.49	22.1	62s	1.8	1.8	23	3.2	
	21.1	9.2	9.1	4.77	21.2	64s	2.7	1.0	23	3.8	
	21.1	8.48	8.55	4.54	21.9	64s	2.1	1.7	25.8	2.8	

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Ram	Age in	Initial	Final	Average	Feed per
Test Flock	Months	Weight	Weight	Daily	100 lbs.
No. No.	4/1/59	10/1/58	3/18/59	Gain	Gain (1)

Sire: TS 5388 Owner - Substation 14, Sonora

89	5640	14	91	192	101	.60	
90	5654	14	72	168	96	.57	
91	5679	13	71	145	74	.44	743
Average			78	168	90	.54	

Sire TS 5278 Owner - Substation No. 14, Sonora

92	5645	14	83	163	80	.47	
93	5651	14	103	204	101	.60	
94	5673	14	83	155	72	.43	852
Average			90	174	84	.50	
Average Spring-Dropped							
Lambs			83	166	83	.49	
Average All							
Rambouillets			88	171	83	.49	775

#### DEBOUILLETS AND DEBOUILLET CROSSES

Sire: JD 11 Owner - Phillip Robbins, Ft. Stockton

21	183	12	82	162	80	.48	
22	184	12	85	163	78	.46	
23	191	12	86	147	61	.36	774
24	208	12	90	177	87	.52	
Average			86	152	76	.45	

Sire: JD 23 Owner - Phillip Robbins, Ft. Stockton

25	222	12	85	166	81	.48	
26	228	12	86	171	85	.51	
27	234	12	84	174	90	.54	791
28	235	12	91	157	66	.39	
Average			87	167	80	.48	

(1) Adjusted for initial Body Weight



Fleec Record - 365 Days

Feed per 100 lbs. Gain (1)	Grease Fleece Weight	Clean Fleece Weight	Adj. Cl. Fleece Wt. (1)	Staple Length Inches	Fiber Diam. Micr.	Spinning Count	Con-formation	Belly Wool	Skin Folds	Face Cover	Selec-tion-Index
urg & Son, Rocksprings Sire - P.R. 1997											
17.3	9.6	9.6	4.77	23.4	62s	3.1	1.5	10	4.0		
18.8	8.2	8.5	4.39	21.7	64s	3.0	2.7	16	2.8		
16.1	7.9	8.1	4.56	23.6	60s	2.4	1.8	16	3.2		
15.0	7.9	8.3	4.77	20.7	64s	2.5	3.3	8	2.5		
14.0	7.9	8.2	4.28	21.8	64s	2.1	2.7	18	3.7		
22.8	11.3	10.6	4.33	24.2	60s	1.8	1.2	17	3.8		
16.3	8.4	9.0	4.24	21.6	64s	3.3	1.2	22	2.8		
16.7	7.7	7.2	3.59	21.9	64s	1.3	3.5	27	3.8		
15.5	7.9	7.5	3.76	21.2	64s	1.6	2.8	16	3.2		
16.9	8.6	8.1	4.28	22.2	62s	1.8	3.7	18	1.7		
17.3	7.7	7.4	3.97	21.2	64s	2.3	3.2	18	3.8		
15.0	6.1	6.4	3.41	21.6	64s	2.5	3.2	17	3.2		
16.8	8.27	8.24	4.20	22.1	62s	2.3	2.6	16.9	3.2		
21.9	8.8	9.3	3.91	22.0	64s	2.8	1.5	71	2.7	66.7	
19.0	8.8	9.1	4.49	21.0	64s	2.0	2.3	18	2.2	81.9	
14.0	7.9	9.0	4.24	19.5	70s	2.8	3.0	14	3.3	75.6	
18.3	8.50	9.13	4.21	20.8	64s	2.5	2.3	34.3	2.7	74.7	
15.7	6.1	6.3	3.91	20.6	64s	1.7	3.5	17	3.0	60.9	
17.8	8.8	9.4	4.01	20.8	64s	2.7	1.0	41	3.0	76.9	
16.3	6.9	7.2	3.41	21.7	64s	1.7	2.0	27	2.7	64.1	
16.6	7.27	7.63	3.78	21.0	64s	2.0	2.2	28.3	2.9	67.3	
14, Sonora											
15.5	7.1	8.1	3.97	20.9	64s	2.9	1.0	36	4.0	55.2	
19.2	10.2	10.1	4.87	20.1	70s	2.0	1.7	38	3.3	80.8	
14.4	6.7	7.0	4.54	19.7	70s	2.7	2.0	24	3.3	60.2	
12.7	6.3	6.8	4.49	19.0	80s	2.3	2.5	10	3.5	60.3	
16.4	7.7	7.8	4.20	20.9	64s	2.3	2.5	20.0			

Ram Test No.	Flock No.	Age in Months	Initial Weight	Final Weight	Total Gain	Average Daily Gain	Feed per 100 lbs. Gain (1)
		4/1/59	10/1/58	3/18/59			

PURE-RED RAMS FED IN OPEN LOT Owner - J. F. Whittenburg & Son, R

95	1	13	88	155	67	.40
96	2	13	79	159	80	.48
97	3	13	82	167	85	.51
98	4	13	78	163	85	.51
99P	5	13	79	156	77	.46
100	6	13	107	213	106	.63
101	7	13	72	134	62	.36
102	8	13	102	197	95	.57
103	9	13	99	198	99	.59
104	10	13	101	200	99	.59
105	11	13	96	171	75	.45
106P	12	13	80	150	70	.42
Average			89	172	83	.49

RAMBOUILLETS FED IN OPEN LOT

Sire TS	Owner - Substation No.	14, Sonora				
107	5736	13	74	170	96	.57
108	5751	13	79	174	95	.56
109	5770	13	60	156	96	.57
Average			71	167	96	.57

Sire: TSl	Owner - Substation	14, Sonora				
110	5682	13	83	171	88	.52
111	5760	13	73	183	110	.65
112	5805	13	79	175	96	.57
Average			78	176	98	.58

Sires:	TSl4776, LR5926, BL100	Owner - Substation No.	14, Sonora			
113	5768	13	63	139	76	.45
114	5721	13	90	192	102	.60
115	5752	13	81	157	76	.45
116	5687	13	76	150	74	.44
Average Open Lot Group, Including Kothmann's	85		166	81		.48

(1) Adjusted for Initial Body Weight

## Fleece Record - 365 Days

Feed Per 100 lbs. Gain (1)	Grease Fleece Weight	Clean Fleece Weight	Adj. Cl. Fleece Wt. (1)	Staple length inches	Fiber Diam. Micr.	Spin- ning Count	Con- forma- tion	Belly Wool	Skin Folds	Face Cover	Selec- tion Index
	21.7	8.8		4.14	21.1	64s	1.9	1.5	27	2.2	
	15.7	6.3		3.49	19.2	70s	2.5	3.0	16	2.0	
	16.1	7.5		4.24	20.3	70s	2.0	3.3	20	2.5	
	14.0	6.1		4.33	17.5	80s+	1.8	3.3	11	2.8	
	13.2	6.1		4.28	19.3	70s	2.2	3.5	11	3.2	
	11.7	6.1		4.08	22.5	62s	2.2	3.8	3	1.3	
	17.8	8.4		4.35	19.9	70s	2.0	2.0	21	3.0	
	15.3	7.9		4.77	20.1	70s	2.6	3.0	6	2.0	
	13.4	5.2		4.33	18.2	80s	2.9	3.8	6	2.5	
	15.43	6.93		4.22	19.8	70s	2.2	2.3	13.4	2.4	
	14.0	7.3		4.60	23.5	60s	2.2	3.2	5	1.7	
	11.1	5.6		3.82	20.6	64s	3.2	3.0	6	1.7	
	15.3	6.3		3.97	19.3	70s	2.3	3.3	40	2.7	
	13.2	7.1		4.43	20.3	70s	1.8	1.8	9	1.0	
	15.3	7.1		4.43	19.2	70s	2.3	1.2	32	1.0	
	15.3	7.3		4.22	20.5	70s	2.2	4.0	12	1.0	
	13.2	5.6		4.28	20.5	70s	2.7	3.8	11	1.0	
	13.4	6.1		4.08	20.7	64s	1.5	3.3	14	2.0	
	13.85	6.55		4.23	20.6	64s	2.3	3.0	16.1	1.5	

Ram Test No.	Flock No.	Age in Months	Initial Weight	Final Weight	Total Gain	Average Daily Gain	Feed Per 100 lbs. Gain (1)	Grease Fleece Weight	Fleece Record Clean Fleece Weight	Adj. Cl. Fleece Wt. (1)
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FEEDLOT-PASTURE COMPARATIVE PERFORMANCE TEST

Aubrey Kothman, Junction - Feedlot Group

117P	130	13	114	190	76	.46		21.7	8.8
118P	192	13	87	159	72	.43		15.7	6.3
119P	94	13	102	164	62	.37		16.1	7.5
120P	234	13	97	163	66	.40		14.0	6.1
121P	148	13	92	146	54	.32		13.2	6.1
122P	84	13	92	156	64	.38		11.7	6.1
123P	242	13	85	157	72	.43		17.8	8.4
124P	149	13	82	157	75	.45		15.3	7.9
125P	216	13	76	124	48	.29		13.4	5.2
Average			92	157	65	.39		15.43	6.93

Aubrey Kothmann, Menard - Pasture Group

126P	233	13	98	143	45	.27		14.0	7.3
127P	75	13	110	142	32	.19		11.1	5.6
128P	163	13	96	139	43	.26		15.3	6.3
129P	189	13	99	133	34	.20		13.2	7.1
130P	126	13	90	129	39	.23		15.3	7.1
131P	127	13	94	146	52	.31		15.3	7.3
132P	404	13	90	130	40	.24		13.2	5.6
134P	193	13	85	124	39	.23		13.4	6.1
Average			95	136	41	.24		13.85	6.55

(1) Adjusted for Initial Body Weight