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# MARKETING ASPECTS OF RANGE SHEEP PRODUCTION

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## Summary

This study of sheep and lamb marketing practices was conducted to determine the production practices followed, and practices, costs and transportation of stock involved in the marketing of sheep and lambs in Texas. Ranchmen in nine West Texas counties were interviewed to obtain this information.

Most ranchmen on the Edwards Plateau graze a combination of sheep, cattle or goats, or all three together, on their ranches. Of these three types of livestock, sheep were listed by most respondents as the major source of income. Farther west, in the Trans-Pecos area, sheep and cattle predominate.

The counties listed in this study can be divided into two groups. The first group includes Gillespie, San Saba, Menard and Uvalde counties. The second group includes Sterling, Crockett, Val Verde, Pecos and Presidio counties. The first distinguishing characteristics of these two groups are the sizes of breeding ewe flocks and the sizes of ranch operation. In the first group of counties, flock and ranch sizes were relatively small, while the ranches and breeding flocks were large in the second group. Most of the ranchmen in the first group of counties had less than 1,000 ewes and grazed less than 2,500 acres, while many county ranchmen in the second group grazed more than 2,500 acres and had more than 1,000 ewes.

Another distinguishing characteristic of the two groups of counties is the higher percentage of fat lambs produced in the first than in the second. Ranchmen in the first group sold 29 to 84 percent of their lambs fat, while those in the second sold less than 20 percent of their lambs fat. This difference in production of fat lambs is caused mainly by grazing conditions in the two groups of counties.

There was a difference in the use of hired labor between the small operations in group one and the larger operations in group two. Relatively few producers in group one used hired labor, while the opposite was true of the larger operations in group two.

Of the total number of lambs sold, order and local buyers purchased 88 percent. Auction and central markets accounted for 8 and 4 percent, respectively, of the lambs sold.

Approximately 70 percent of the total number of lambs were sold during July-October. Gillespie, San Saba and Uvalde were the only counties where

significant numbers of lambs were sold during spring.

The lack of important data on net returns, as quality and finish, made it impossible to determine accurately the net returns per head on alternative methods of marketing. However, there was an indication that net returns per head were highest from sales to packers. Sales at central markets appeared to yield slightly lower net returns while sales to dealers and commission men yielded still lower net returns. This probably is in line with the actual situation because of differences in quality, finish and weights of lambs sold through alternative native outlets.

The average size of lamb shipment for all counties studies was 723 head, with an average weight of 71 pounds per head.

All direct sales included sales agreements of one type or another. Thirty-nine percent had weighing conditions in the sales agreement. Fifty-two percent included sorting privileges in the sale agreement and 38 percent included some pencil shrink, usually 3 percent, in the sale agreement. Ten percent of the direct sales included all the types of sales agreements: pencil shrink, weighing conditions and sorting privileges.

Only 13 percent of the ranchmen interviewed contracted the sale of their sheep and lambs in 1956. Of these contract sales, 86 percent were handled by local and order buyers. Val Verde county had the highest percentage of sales contracted with 44 percent.

The average cash marketing cost reported per head for all sales was 19 cents in 1956. Cash costs of marketing were highest at terminal markets mainly because of transportation charges. These costs were lowest on direct sales, although there were some charges on many of these.

Forty-two percent of the ranchmen interviewed felt that fat lambs brought higher prices at a central market, while 57 percent felt that stocker and feeder lambs brought higher prices from local buyers.

Of the ranchmen interviewed, 61 percent considered market price quotations from central markets more closely than other sources. Twenty-four percent considered local auction markets and local trading more closely. Fifteen percent relied on a combination of sources.

# Marketing Aspects of Range Sheep Production in Texas

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WHILE SHEEP ARE RAISED in most areas of Texas, the major concentration is in the western part of the State in the Edwards Plateau and Trans-Pecos areas, Figure 1. Almost 90 percent of the sheep were located in those areas and surrounding counties in 1954. In these areas, sheep raising is primarily a range operation. Therefore, most of the Texas sheep production is produced under range conditions. Sheep numbers have changed drastically in recent years in both Texas and in the United States. They rose, until the early 1940's and then declined sharply until 1957. Since 1957 there has been some increase. The major factor causing the severe decline in numbers was the severe drouth experienced in Texas during that period. Within the major sheep-producing areas of the State, sheep and lamb numbers have declined relative to cattle numbers, Figure 2.

Since little was known about marketing practices of range sheep producers in the State, this study was undertaken in 1957.

The nine counties in West Texas selected for study were Crockett, Gillespie, Menard, Pecos, Presidio, San Saba, Sterling, Uvalde and Val Verde, Figure 3. More than 300 ranchmen were interviewed in these counties to obtain information on ranch operations, marketing practices followed, costs of marketing, sources and use of market information and prices received for sheep and lambs sold.

Based on an analysis of this information, problem areas are pointed up and recommendations for improving marketing practices are made.

## Characteristics of Range Sheep Production in Texas

Sheep are produced in Texas under many different conditions. Even within the major range sheep-producing areas there is much variation in ranch organization, breeding and marketing practices, seasonality of production, size of operation and labor use:

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### TYPES OF LIVESTOCK

Ranching operations in the Edwards Plateau and Trans-Pecos areas of Texas are diversified. Most stock includes more than one species—sheep and cattle, sheep and goats, or sheep, cattle and goats. Of the three, sheep were the leading source of income for most of the ranchmen interviewed.

Among the ranchmen interviewed, 80 percent had some combination of livestock on their ranches, while 20 percent had only sheep. Thirty-five percent had a combination of sheep and cattle. Another 35 percent had a combination of sheep, cattle and goats, while 10 percent stocked sheep and goats.

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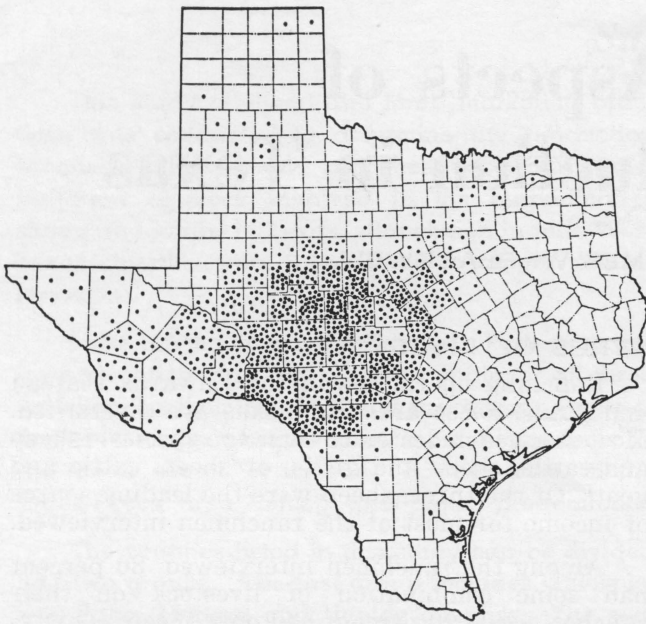


Figure 1. Distribution of sheep and lambs in Texas, 1954. Each dot equals 5,000 head.

Types and combinations of livestock stocked depend upon range conditions, ranch organization, preferences of the owner and many other factors. Therefore, there was considerable variation between counties in types of livestock carried. Ranches having all three types of livestock were most predominant in Gillespie and Uvalde counties, Table 1. More than 40 percent of the ranchmen interviewed in these two counties were raising sheep, cattle and goats. Eighty-four percent interviewed in Sterling county had a combination of sheep and cattle. Pecos, Presidio and San Saba counties had the highest percentages of

specialized livestock operations. More than 80 percent of the ranchmen interviewed in Pecos, Presidio counties had only sheep on their ranches. Approximately 32 percent of the producers interviewed in San Saba county had sheep only. In other counties there were approximately equal proportions of the different combinations of livestock operations.

With the exception of Uvalde county, more than 80 percent of the producers in each county indicated that sheep provided their major source of income. However, only 65 percent of those in Uvalde county indicated sheep as their major source of income; 23 percent listed goats as the major source of income.

### BREEDS OF SHEEP

Texas sheep are known primarily for their fine wool production. The Rambouillet is the most important breed in Texas. Rambouillet ewes and rams were stocked by 58 percent of the ranchmen interviewed. Thirteen percent had Delaine Merino ewes and rams. Six percent had some other breeds. Almost one-fourth of the ranch operations studied were using crossbreeds.

With the increase of lamb prices relative to wool prices in recent years, more emphasis has been placed on lamb production. It was a change in relative prices that led to crossbreeding of Suffolk and Hampshire rams with Rambouillet and other wool-type ewes.

With the exception of Gillespie and Menard counties, all of the counties had a majority of Rambouillet-type lambs, Table 2. Gillespie county ranchmen had 62 percent Delaine lambs and 38 percent crossbred lambs. In Menard county, 62 percent were Rambouillet lambs; 32 percent

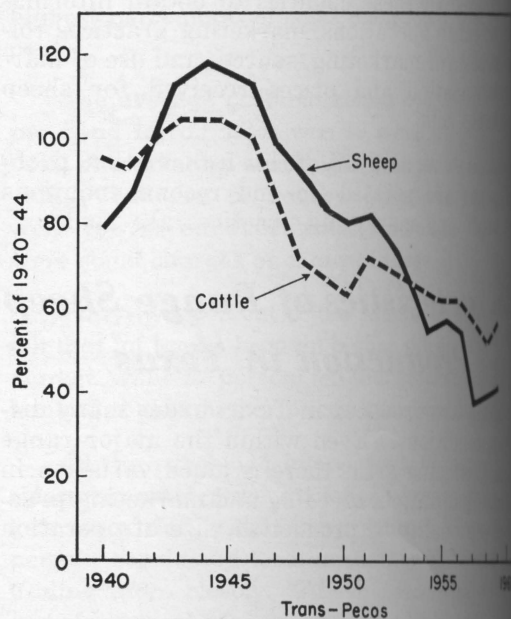
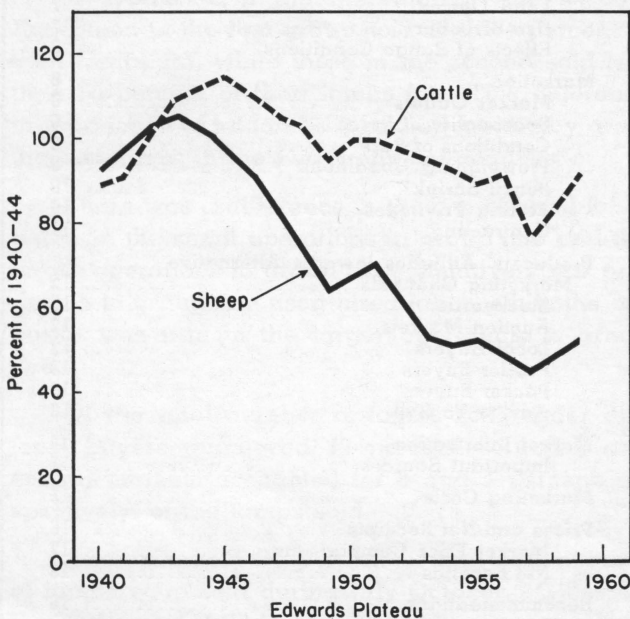


Figure 2. Relative changes in cattle and sheep numbers, Edwards Plateau and Trans-Pecos areas of Texas, January 1, 1960 (1940-44=100).



crossbred lambs; of the remainder, Delaine and Debouillet lambs predominated. Rambouillet type lambs were predominant in Crockett, Val Verde and Pecos counties, accounting for more than 90 percent of the ranches.

### FLOCK SIZES

The average size of breeding ewe flocks was 1,070. Flocks ranged in size from less than 500 to more than 4,000 breeding ewes. Forty percent of the ranchmen surveyed had flocks with less than 500 breeding ewes. Twenty-one percent of those interviewed had flocks with 501 to 1,000 ewes and 20 percent had 1,001 to 2,000 breeding ewes. Seven percent of the ranchmen interviewed had 3,000 or more breeding ewes.

The smallest flocks were in Gillespie and San Saba counties where over 90 percent of the flocks had less than 500 breeding ewes, Table 3. The average size flock in these counties was 184 for Gillespie and 160 for San Saba. Over 50 percent of the flocks in Menard and Uvalde counties had fewer than 500 ewes. The ranches surveyed in Sterling, Crockett, Val Verde, Pecos and Presidio counties had flocks ranging from 501 to more than 3,000 breeding ewes; 18 percent of the respondents in Val Verde county were in the latter category.

### LAMBING PERIODS

Lambing seasons are correlated closely with the grazing season. Lambs usually are dropped shortly before the grazing season so that best lamb gains can be made on the spring and summer grasses. The breed of sheep also may affect the time lambs are born. Different breeds of sheep have certain natural periods during which they come into heat. The Rambouillet and Merino come into heat early compared with certain mutton breeds that will not breed until late in the summer or fall. Most of the lambs covered by this study were dropped in the late winter and early spring. Approximately 71 percent were born during February and March. Fall and winter, October through January, accounted for 23 percent. A small percentage of the lambs dropped in both the fall and spring.

In San Saba and Uvalde counties, lambs were dropped earlier than in the other counties, Table 4. In San Saba county, 76 percent of the lambs were dropped between November and January, while in Uvalde county, approximately 60 percent of the lambs were dropped between October and February, with 40 percent between February and April. Two factors are responsible for the fall and winter lambing in these counties. First, most of the ranchmen interviewed had smaller flocks. With the relatively smaller number of sheep, better care and attention could be given during the winter in order to sell lambs on the spring market. Second, more temporary winter pasture per animal unit was available on the smaller sheep operations.

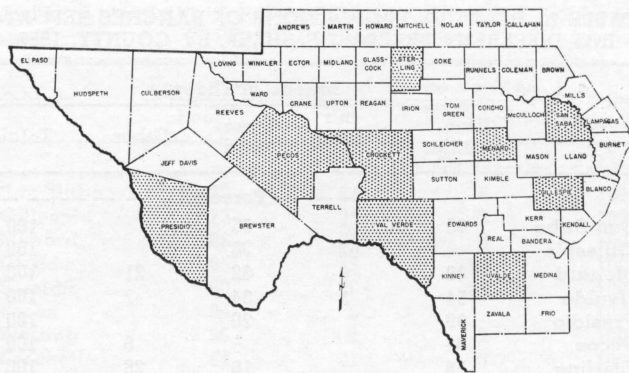


Figure 3. Location of nine counties in West Texas selected for a study of marketing practices of sheep producers, 1957.

In the remaining counties, more than two-thirds of the lambs were dropped in the spring.

### TYPE OF LAMB SOLD

A majority of the range lambs produced in Texas are of the feeder and stocker type. Most sheep in the major Texas producing areas are bred mainly for wool production. Range forage conditions in most years are not adequate for the production of high percentages of fat lambs. Relatively few lambs are drylot fed in Texas. Most lambs that are held for further fattening go to grazing areas to be finished on grass and are sold the following spring as "old crop" lambs. These lambs usually are born in the spring and carried until late summer or fall on the mother ewe. They usually are purchased and shipped to winter grazing areas until late spring when they are marketed. These grazing areas are located in Central Texas. Most of the lambs purchased for winter grazing come from the Trans-Pecos area because winter grazers like to start with the light, good-quality lambs that are produced in the western portion of Texas.

A majority of the lambs in Texas are sold directly from the ewe. If they are fat, these lambs are sold to packers for slaughter. If they are not in slaughter condition, they are sold as

TABLE 1. RELATIVE PROPORTIONS OF RANCHES REPORTING DIFFERENT TYPES AND COMBINATIONS OF LIVESTOCK, BY COUNTY, 1957

County	Types of livestock				Total
	Sheep	Sheep and cattle	Sheep and goats	Sheep and cattle and goats	
	Percent				
San Saba	32	45	3	20	100
Gillespie	7	39	6	47	100
Menard	24	37	13	26	100
Uvalde	18	21	20	41	100
Presidio	60	20		20	100
Pecos	41	35	6	18	100
Sterling	10	84		6	100
Crockett	17	38	17	28	100
Val Verde	25	14	22	39	100

TABLE 2. RELATIVE PROPORTIONS OF RANCHES REPORTING DIFFERENT BREEDS OF SHEEP, BY COUNTY, 1957

County	Breeds of sheep				Total
	Rambouillet	Delaine	Cross-bred	Other	
	Percent				
San Saba	65		35		100
Gillespie		62	38		100
Menard	39	8	32	21	100
Uvalde	54	5	34	7	100
Presidio	80		20		100
Pecos	94			6	100
Sterling	58		16	26	100
Crockett	94		6		100
Val Verde	92		8		100

feeder or stocker lambs. Many producers will have some of each type. In marketing their lambs, they may sort them by condition or they may sell them unsorted.

Only about 25 percent of the ranchmen interviewed sorted and sold fat lambs in 1956. Sixty-eight percent sold stocker and feeder lambs, while 7 percent indicated that they did not sort their lambs. Fat lambs in this connection may mean milk fat lambs sold off the ewe or grass fat "old crop" lambs sold off pasture.

In San Saba county, 84 percent of the lambs marketed were fat, Table 5. Approximately one-third of these were "old crop" lambs that were grazed through the fall and winter and sold in late spring and early summer. Gillespie county producers interviewed sold an average of approximately 25 percent fat lambs. Most of these lambs were milk fat and sold off the ewe. Twenty-nine percent of the producers in Menard county sold fat lambs. Five percent of these were "old crop" lambs, and the remaining 95 percent were milk fat lambs. Uvalde county producers sold 18 percent of their lambs fat.

Sterling, Crockett, Pecos, Presidio and Val Verde counties producers sold most of their lambs as stockers and feeders or in unsorted lots including both fat and stockers.

TABLE 3. DISTRIBUTION OF RANCHES BY SIZES OF BREEDING EWE FLOCKS, AND AVERAGE SIZE OF BREEDING FLOCKS, BY COUNTY, 1957

County	Flock size					Total	Average
	Under 500	501-1000	1001-1500	1501-2000	Over 2000		
	Percent						Head
San Saba	91	5		4		100	160
Gillespie	93	7				100	184
Menard	50	33	8	4	5	100	545
Uvalde	52	32	10	3	3	100	709
Presidio	25	25	25	25		100	1,000
Pecos	6	37	13	25	19	100	1,005
Sterling	16	33	6	12	33	100	1,434
Crockett		21	26	19	34	100	1,725
Val Verde		20	14	19	47	100	2,327

The types of lamb produced are mainly influenced by lambing dates, range conditions and size of the flock.

On the Edwards Plateau, there was a direct relation between the type of lambs sold and size of the producer's flock. Producers who had less than 500 breeding ewes sold an average of 34 percent of their lambs fat, 62 percent as stockers and 4 percent unsorted. Those who had more than 1,000 ewes sold 17 percent of the lambs fat, 80 percent as stockers and 3 percent unsorted. Producers with flock sizes ranging from 1,000 to over 4,000 sold 8 percent and less of their lambs fat, with the remainder being stocker and feeder type.

Few ranchmen sheared their lambs before sale. Approximately 80 percent sold their lambs in the wool; of these, 45 percent stated that lambs brought a better price in the wool. Twenty percent said that they sold their lambs before they were old enough to shear. Of those who sold shorn lambs, 77 percent gave the price for wool as the major reason for shearing prior to sale. Better lamb gains and better lamb prices were reasons given by 16 percent for selling lambs of the wool.

San Saba and Uvalde counties had the highest percentages (approximately 40) of producers who sheared their lambs before sale. "Old crop" lamb operations accounted for the higher percentage of shorn lamb sales in those counties.

By breeds, Delaine flocks had the highest percentage of lambs that were sheared before sale. Thirty-four percent of the Delaine lambs were sheared, compared with 20 percent and less for Rambouillet, Debouillet and crossbred lambs. Delaine sheep is bred mainly for wool production. Delaine lambs are held 1 to 3 months longer than Rambouillet and crossbred lambs since it takes longer to fatten Delaine lambs for market. During this period, extra wool growth is obtained. Many ranchmen felt that it was to their advantage to shear this wool before marketing their lambs.

### SIZE OF OPERATION

The average size of the ranches covered in this study was 9,624 acres. Gillespie county ranches were the smallest, averaging 1,400 acres, while Val Verde county ranches averaged 19,100 acres, Table 6. San Saba, Menard and Uvalde counties ranches averaged 2,845, 4,600 and 5,600 acres, respectively. Sterling, Crockett, Pecos and Presidio county ranches averaged more than 15,000 acres.

The ranches ranged in size from less than 250 to more than 50,000 acres. Twenty-seven percent had less than 1,500 acres. Twenty-six percent had 1,501 to 6,500 acres. Forty percent had 6,501 to 25,000 acres. Ranches of more than 25,000 acres accounted for 7 percent of the total.



The operations studied can be divided roughly into two groups. The first group included operations in San Saba, Uvalde, Menard and Gillespie counties. These counties had smaller operations, some farming and the availability of supplemental grazing in the form of small grain fields and river bottomlands. More than half of the ranches studied in these counties had holdings of less than 2,500 acres.

In the second group of counties — Sterling, Crockett, Val Verde, Pecos and Presidio—holdings were considerably larger and were strictly range operations. In these counties, holdings ranged from 4,501 to more than 50,000 acres in size. This difference in grazing areas has considerable effect on the degree of finish of the lambs produced in each area.

The ranches in Gillespie county ranged from less than 250 to 4,500 acres, with 68 percent between 251 and 1,500 acres. In San Saba county, approximately 83 percent of the ranches had less than 2,500 acres, while 17 percent were in the 4,501 to 25,000 category. Menard and Uvalde counties ranches were distributed between 251 and 25,000 acres. Most of the Sterling, Crockett, Val Verde, Pecos and Presidio county ranches were larger than 4,501 acres.

#### LAND LEASED

One-third of the ranchmen interviewed leased part or all of their grazing land. Of those who leased land, more than half (56 percent) leased more than three-fourths of their grazing land, Table 7. Sixteen percent leased 51 to 75 percent of their land, and another 16 percent leased 26 to 50 percent of their land. Twelve percent of the producers who leased land had less than 25 percent of their operation leased.

Leasing was more prevalent in Pecos, Uvalde and Crockett counties than in Sterling, Gillespie and Menard counties. In Pecos county, 87 percent of the ranchmen were leasing land. Of these, 85 percent leased more than three-fourths of their total holdings.

TABLE 5. RELATIVE PROPORTIONS OF LAMBS SOLD, BY TYPE, BY COUNTY, 1956

County	Proportion of type of lambs sold as			Total
	Feeder	Fat	Unsorted	
	----- Percent -----			
San Saba	10	84	6	100
Gillespie	73	25	2	100
Menard	66	29	5	100
Uvalde	65	18	17	100
Presidio	60	20	20	100
Pecos	94	6		100
Sterling	96	2	2	100
Crockett	54	41	5	100
Val Verde	84		16	100

Lease values in the counties studied varied considerably, depending on the type of grazing land and the carrying capacity of the land. Figure 4 shows there is a direct relationship between lease values and the estimated carrying capacity of the land. Eighty percent of the producers who leased land in San Saba county paid \$1.75 to more than \$2 per acre, which is an indication of a relatively high carrying capacity.

Lease values in Menard county also were relatively high, ranging from 76 cents to \$2 per acre. Lease values in the other counties studied ranged mostly from 25 cents to \$1 per acre. These counties with low lease values were farther west, and fewer animal units were grazed per section of land. In counties where lease values were more than \$2 per acre, almost all of the land leased carried more than 80 animal units per section. In counties where lease values were 26 cents to 50 cents per acre, fewer than 30 animal units were grazed per section.

#### USE OF LABOR

The use of hired labor other than during peak seasons such as shearing, varied with the size of ranch operation. In Gillespie county, where the average size of operation was relatively small, only 5 percent of the ranchmen used extra labor throughout the year. In Sterling, Crockett, Val Verde, Pecos and Presidio counties, where the

TABLE 4. RELATIVE DISTRIBUTION OF RANCHES BY LAMBING MONTHS, BY COUNTY, 1957

County	Month								Total
	October	November	December	January	February	March	April	Other <sup>1</sup>	
	----- Percent -----								
San Saba		52	14	10	10	9		5	100
Gillespie	5	8	5	5	33	33	9	2	100
Menard				3	33	50	11	3	100
Uvalde	10	10	16	23	32	6	3		100
Presidio					25	50	25		100
Pecos				6	12	69	13		100
Sterling				5	21	53	21		100
Crockett				2	30	57	9	2	100
Val Verde				4	88	8			100

<sup>1</sup>Ranchmen who had lambs dropped in both the spring and fall months.

TABLE 6. DISTRIBUTION OF RANCHES BY SIZE GROUP AND AVERAGE SIZE OF RANCH, BY COUNTY, 1957

County	Size group (acres)									Total	Average acres
	Under 250	251- 750	751- 1500	1501- 2500	2501- 4500	4501- 6500	6501- 10,000	10,001 25,000	Over 25,000		
	Percent										
San Saba	17	40	13	13		3	3	11		100	2.84
Gillespie	1	34	34	19	12					100	1.40
Menard		16	22	13	11	19	13	6		100	4.60
Uvalde	4	16	11	18	14	9	14	14		100	5.60
Presidio						25		50	25	100	15.70
Pecos					6	19	6	50	19	100	18.10
Sterling				5	10	5	10	54	16	100	16.50
Crockett					2	13	34	40	11	100	15.20
Val Verde					4	6	26	43	21	100	19.10

average size of ranch operation was large, 65 to 92 percent of the ranchmen used hired labor during most of the year.

**EFFECTS OF RANGE CONDITIONS**

The prolonged drouth in Texas, which lasted nearly 8 years in some areas, reduced sheep and cattle numbers considerably. The drouth also had some effect on the marketing of Texas sheep and lambs. Some producers held their lambs longer before selling to get the usual amount of weight on the lambs, while other producers sold their lambs earlier than usual because adequate forage was not available. Table 8 shows the effects of pasture conditions on sheep and lamb marketing.

Three-fourths of the ranchmen interviewed stated that range conditions had affected their operations. Twenty-eight percent said the principal effect was the production of lighter lambs. Eighteen percent of the producers reported they sold their lambs earlier because of a lack of forage. Seven percent of the producers cut their flock sizes further in 1956. Most of the producers had cut their flock sizes before 1956. Another 7 percent said that their lambs were lighter than usual and were sold earlier. Eight percent re-

ported various other effects caused by pasture conditions.

One-fourth of the producers reported that pasture conditions had not had any effect on their marketing operations. The highest percentage of producers reporting no effect were located in San Saba, Gillespie, Menard and Uvalde counties while the counties farther west had a smaller percentage of ranchmen reporting no effect.

**Marketing**

Marketing represents the end of the production process as far as the individual ranchman is concerned. Much of his financial success depends on his ability to market his products to the best advantage. Some important decisions to be made in marketing are the choice of a market outlet, season of sale and conditions of sale. Some important economic considerations in marketing are comparative prices, costs, shrink, sorts and risk and uncertainty.

**MARKET OUTLETS**

Texas sheep producers have several market outlets through which they may sell their sheep and lambs. The major outlets available are public markets and direct (country or ranch) sales. Public markets may be either auction markets or terminal markets (stockyards). Major types of buyers involved in direct sales are packer buyers, local order buyers, feeder buyers and other sheep producers.

Among the ranchmen interviewed in 1956, direct sales were the most prevalent, accounting for 87.6 percent of all the lambs sold. Auction market sales accounted for 9.4 percent and terminal market sales, 3 percent. Direct sales accounted for less than two-thirds of the lambs sold in only two counties, Gillespie and Menard, Table 9. In those counties, terminal market and auction market sales were relatively more important.

In terms of the number of sales, distribution was somewhat different because the average size of consignment varied. Direct sales accounted for

TABLE 7. RELATIVE PROPORTIONS OF RANCHMEN LEASING GRAZING LAND AND DISTRIBUTION OF THE PERCENT OF HOLDING LEASED, BY THOSE WHO LEASED LAND BY COUNTY, 1957

County	Percent of ranchmen leasing land	Distribution of ranches by per- cent of holding leased				Total
		1-25	26-50	51-75	76-100	
		Percent				
San Saba	33	10		30	60	100
Gillespie	19	37	25		38	100
Menard	22	12	25	13	50	100
Uvalde	41	5	11	17	67	100
Presidio						100
Pecos	87		7	8	85	100
Sterling	16	33		33	34	100
Crockett	43	10	35	10	45	100
Val Verde	31	13	7	27	53	100



68.0 percent of the sales reported, compared with 22.8 percent for auction markets and 9.2 percent for terminal markets. Average size of consignment was 807 head for direct sales, 258 head for auction markets and 206 head for terminal markets.

Size of flock has an important bearing on marketing. In 1956, small flock owners (less than 1,000 ewes) sold a lower percentage of their lambs direct than did medium-size flock owners (1,000-1,999 head) or large flock owners (2,000 or more head), Table 10. The average size of the consignment tended to increase with the size of the flock.

#### SEASONALITY OF SALES

The month or season in which Texas sheep and lambs are sold is correlated closely with the grazing season and with the time of birth. Lambs dropped in the spring usually are sold in the summer or fall. Lambs born in the fall, usually are sold in the spring. In the western portions of Texas, the major grazing season is during the late spring and summer. Most Texas lambs are sold after this peak in range conditions. The months of concentrated marketing usually are July through October, depending on range conditions and location, Figure 5. Lamb marketings were highly concentrated in these months in all sizes of flocks. Small flocks had a higher percentage of lambs marketed during the spring, but even there, two-thirds of the lambs were marketed during the July-October period. In large flocks, 90 percent of the lambs were marketed then, compared with 82 percent for the medium-size flocks.

Gillespie, San Saba and Uvalde counties had significant numbers of lambs marketed in the spring, from March through June. This can be attributed to the different types of range conditions and the different lambing seasons in these counties compared with the other counties. Also contributing to spring marketings are the "old crop" lambs grazed in these counties. Peak range conditions in Gillespie, San Saba and Uvalde counties are during the early spring, while peak conditions in counties farther west occur during the summer. In those counties, more than 80 percent of the lambs sold were marketed during the July-October period.

#### CONDITIONS OF SALE

Since direct sales are negotiated between buyer and seller, many considerations other than price may enter into the sale. Among these are preweighing conditions, the weighing point, "pen-shrink" and sorting privileges. Just as the price to be paid for lambs is determined by the producer and buyer, so must these marketing arrangements be determined. Each arrangement is important to both the buyer and seller in that it affects the actual weight and pay weight of the

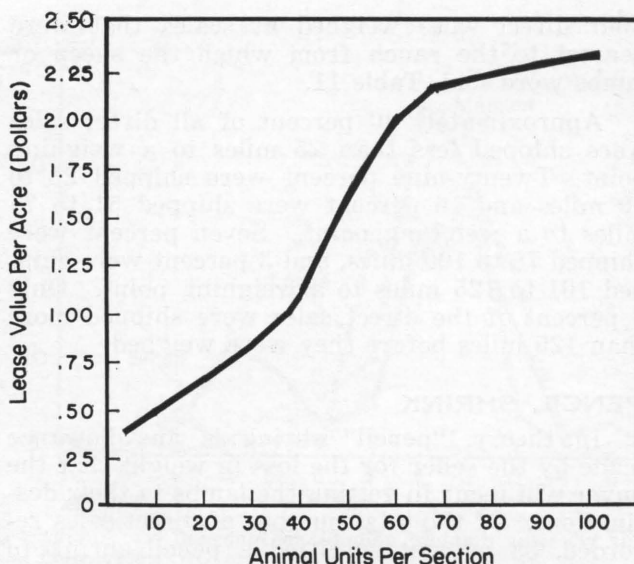


Figure 4. Relationship between lease values per acre and animal units grazed per section of land, 1956.

lambs, and it affects the number of lambs to be sold at a certain price.

#### PREWEIGHING CONDITIONS

Of the direct sales made by the ranchmen interviewed, 62 percent included no preweighing conditions, while 38 percent included them. The preweighing conditions in nearly all cases was overnight pen shrink without fee. Feeder buyers had the highest percentage of sales including preweighing condition agreements, while relatively fewer sales to commission firms and packers involved such conditions.

Lambs may be weighed almost anywhere agreeable to both buyer and seller. Approximately four-fifths of all direct sales were weighed at a nearby town scales. The remainder were weighed at terminal markets, auction markets or at the ranch. With the exception of San Saba county, all counties had at least 60 percent of

TABLE 8. DISTRIBUTION OF RANCHMEN BY REPORTED TYPE OF CHANGES IN PRODUCTION OR MARKETING PRACTICES AS A RESULT OF CHANGED RANGE CONDITIONS, BY COUNTY, 1956

County	Type of change						
	Lambs lighter	Sold earlier	Sold later	Re-reduced flock size	Other	None	Total
San Saba	26	16	6	10	42	100	
Gillespie	23	25	5	6	41	100	
Menard	24	6	6	8	56	100	
Uvalde	22	30	5	6	10	27	100
Presidio	25	20	20	15	20	100	
Pecos	25	6	33	18	18	100	
Sterling	37	31	6	7	19	100	
Crockett	60	21	2	6	11	100	
Val Verde	55	9	7	8	6	15	100

their direct sales weighed at scales that were nearest to the ranch from which the sheep or lambs were sold, Table 11.

Approximately 40 percent of all direct sales were shipped less than 25 miles to a weighing point. Twenty-nine percent were shipped 26 to 50 miles and 16 percent were shipped 51 to 75 miles to a weighing point. Seven percent were shipped 76 to 100 miles, and 3 percent were shipped 101 to 125 miles to a weighing point. Only 5 percent of the direct sales were shipped more than 125 miles before they were weighed.

### PENCIL SHRINK

In theory, "pencil" shrink is an allowance made by the seller for the loss in weight that the buyer will incur in getting the lambs to their destinations. Of the total number of direct sales recorded, 38 percent specified a pencil shrink in the sales agreement. Of those sales that included pencil shrink, approximately 80 percent specified 3 percent. Thirteen percent specified 1.5 percent, 5 percent specified 2 percent and 2 percent specified 1 percent.

Since only 3 percent of the sales were weighed at the ranch, most lambs were transported var-

ious distances before being weighed. Of these, 10 percent were shipped less than 26 miles to a weighing point. Forty percent were shipped 26 to 50 miles. Ten percent were shipped more than 51 miles before being weighed. Generally, buyers will not ask as much shrink on sales that may be shipped long distances to be weighed. Almost all of the sales involving 2 or 3 percent shrink were shipped less than 50 miles, while 43 percent of the sales involving 1.5 percent shrink were shipped more than 50 miles. However, in an extreme case, one sale involved transporting lambs more than 100 miles and a 3 percent shrink.

### SORTING PRIVILEGES

Sorting privileges were included in approximately 72 percent of all direct sales. The most common sorting agreement was a 5 to 10 percent cut on each shipment. This served to separate lambs of different quality and lambs with varying degrees of finish. The buyer, after taking a cut, usually purchased the lambs that were sorted at a different price or turned them back to the seller. Also included in most sorting privilege agreements and in most sales with no sorting

TABLE 9. DISTRIBUTION OF LAMBS SOLD, LAMB SALES, AND AVERAGE SIZES OF CONSIGNMENT BY TYPE OF SALE IN BROWN COUNTY, 1956

County	Type of sale					
	Direct sales		Auction markets		Terminal markets	
San Saba						
Percent of lambs sold	90.0		2.9		7.1	
Percent of sales		47.7		22.7		29.6
Average size of consignment		1071		73		136
Gillespie						
Percent of lambs sold	35.2		41.8		23.0	
Percent of sales		32.1		48.1		19.8
Average size of consignment		106		84		113
Menard						
Percent of lambs sold	53.9		42.2		3.9	
Percent of sales		56.8		34.1		9.1
Average size of consignment		304		398		139
Uvalde						
Percent of lambs sold	89.2		7.1		3.7	
Percent of sales		71.9		17.6		10.5
Average size of consignment		624		204		176
Presidio						
Percent of lambs sold	100.0					
Percent of sales		100.0				
Average size of consignment		1159				
Pecos						
Percent of lambs sold	100.0					
Percent of sales		100.0				
Average size of consignment		857				
Sterling						
Percent of lambs sold	67.5		11.4		21.1	
Percent of sales		68.2		18.2		13.6
Average size of consignment		672		425		1050
Crockett						
Percent of lambs sold	96.4		3.6			
Percent of sales		91.4		8.6		
Average size of consignment		929		375		
Val Verde						
Percent of lambs sold	92.4		7.6			
Percent of sales		96.4		3.6		
Average size of consignment		1402				

<sup>1</sup>Too few sales to derive a meaningful average.



agreement was the option for the buyer to cut out undesirable sheep and lambs. These were sick or crippled lambs or those with undesirable qualities.

Order-buyer sales had the highest percentage of sorting privilege agreements with packer-buyer and feeder-buyer sales next highest. Commission companies had the lowest percentage of sales with sorting agreements.

Approximately 40 percent of the sales that included agreements concerning preweighing conditions also had some amount of "pencil" shrink in the agreement. Ten percent of the direct sales included "pencil" shrink, preweighing conditions and sorting privileges.

### CONTRACTING

Many sheep and lambs sold directly by producers in Texas and other Western States are contracted for a future delivery date. The length of time between the contract date and the delivery date may be fairly long. However, in Texas in 1956, the contract specified delivery within a relatively short time after the contracts were signed.

Most contract sales had specified delivery dates during the same month that the agreement was made. The term between the contract date and delivery date of the majority of sales ranged from 1 to 5 weeks. Only four contracts were executed more than 2 months prior to contract delivery date. Two of these were made 7 months prior to the specified delivery date. Two other contract sales were made approximately 2 months before the specified delivery date. The number of sheep and lambs sold by contract varies from year to year, depending on market expectations, range conditions and in many cases, on the buyer's need for a guaranteed number of sheep or lambs of a specified quality on a certain date.

Only 13 percent of the ranchmen interviewed contracted the sales of their sheep and lambs in 1956. Of these, 91 percent were lamb sales (usually stockers and feeders with some "old crop"

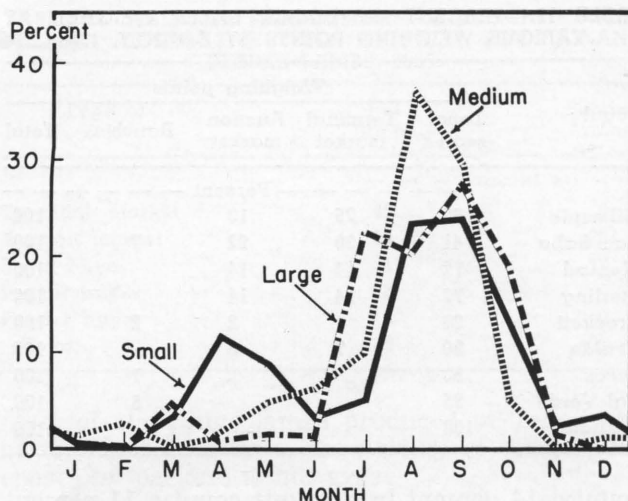


Figure 5. Seasonal distribution of lamb sales by size of flock, 1956.

lambs); 6 percent were ewe sales; and 3 percent were pair sales—a ewe and a lamb sold as a unit.

Local and order buyers purchased most sheep and lambs sold by contract. Local buyers, order buyers and commission companies bought 88 percent of the sheep and lambs sold by contract. Feeders and packers purchased 8 and 4 percent, respectively, of the sales contracted.

Approximately 80 percent of all contract sales were in June, July, August and September. July and September had the highest percentage of contract sales. Each month had 23 percent of the total contract sales.

With the exception of Uvalde and San Saba counties, the majority of contracting was in the summer and fall. San Saba county producers made 50 percent of their contract sales in the spring. Of the contract sales in Uvalde county, 83 percent were made from February to June.

Approximately 44 percent of the sales made in Val Verde county in 1956 were contract sales. Contracting accounted for 17 percent of the total sales in Presidio county, 15 percent in Pecos

TABLE 10. DISTRIBUTION OF LAMBS SOLD, LAMB SALES, AND AVERAGE SIZE OF CONSIGNMENT BY TYPE OF SALE, BY SIZE OF FLOCK, 1956

Size of Flock	Type of sale		
	Direct sales	Auction markets	Terminal markets
<b>Small</b>			
Percent of lambs sold	69.3	20.8	9.9
Percent of sales	50.5	34.2	15.3
Average size of consignment	301	133	142
<b>Medium</b>			
Percent of lambs sold	95.8	4.2	
Percent of sales	93.6	6.4	
Average size of consignment	715	460	
<b>Large</b>			
Percent of lambs sold	90.8	7.4	1.8
Percent of sales	92.2	6.5	1.3
Average size of consignment	1645	1910	1

Too few sales to derive a meaningful average.

TABLE 11. PERCENT OF DIRECT SALES WEIGHED AT VARIOUS WEIGHING POINTS BY COUNTY, 1956

County	Weighing points				Total
	Local scales	Terminal market	Auction market	Ranch	
	Percent				
Gillespie	62	25	13		100
San Saba	41	30	22	7	100
Menard	72	14	14		100
Sterling	72	14	14		100
Crockett	96		2	2	100
Uvalde	90	7	3		100
Pecos	93			7	100
Val Verde	95			5	100
Presidio	100				100

county, 14 percent in Crockett county, 11 percent in Uvalde county, 8 percent in San Saba county and 7 percent in Sterling county. No contract sales were recorded in Gillespie and Menard counties.

Sixty-five percent of the contract sales included a forfeit payment agreement in which both buyer and seller deposited in escrow a specified amount subject to forfeit, (usually \$1 per head for lambs). In case the contract was broken, the responsible party forfeited his deposit to the other. Thirty-six percent of the contracts included a maximum weight agreement. Here, a maximum weight was specified in the contract, and all lambs exceeding this weight at the delivery date were cut out of the sale or sold at a lower price. Twenty-seven percent of the contract sales included a minimum weight agreement. The minimum weight was specified in the contract, and all lambs under this weight at the delivery date were cut out of the sale or sold at a lower price.

## *Producers' Attitudes toward Alternative Marketing Channels*

No marketing outlet is completely satisfactory to all producers. Each has certain advantages and disadvantages for individual producers. Ranchmen interviewed were asked to give advantages and disadvantages of certain marketing outlets.

### STOCKYARDS

Advantages of marketing through central markets featured strong demand and higher prices and the ability to handle large shipments.

Thirty percent of the ranchmen interviewed gave "strong demand" as a major advantage of central markets. Ten percent said that stockyards were "good fat-lamb markets." "Good seasonal prices" was given by 10 percent; another 10 percent said the ability to handle "large ship-

ments" was an advantage of stockyards. Fifteen percent named various other factors as advantages of marketing through central markets. Twenty-six percent gave no advantage.

Distance, cost and price uncertainty were the major disadvantages given. Fifty-three percent of the ranchmen interviewed gave "distance" as the major disadvantage of marketing through central markets. Commission, shrink and other expenses of marketing were given by 16 percent as being other disadvantages of central markets. Eight percent of the ranchmen named "price uncertainty" as a major disadvantage of stockyards. Twelve percent gave still other disadvantages of marketing through central markets. Eleven percent gave no disadvantage.

### AUCTION MARKETS

According to the ranchmen interviewed, the major advantages of marketing through auction markets is convenience. Approximately 27 percent indicated that handling "small lots" was a major advantage of auction sales. Eight percent said that "culls and cut-backs" could be sold through auctions more advantageously than through other marketing outlets. Eleven percent gave "short distance from the ranch" as a major advantage of auction sales. All who gave short distance as an advantage of auction sales came from Gillespie, San Saba, Menard, Sterling and Uvalde counties, where markets are convenient. "Strong demand" was given by 10 percent of the producers interviewed as being an advantage of marketing through auction sales. Thirty percent of the producers named various other factors as advantages of selling through auction markets. Fourteen percent gave no advantage.

The disadvantage of selling through auction markets named most consistently was "price uncertainty". Approximately 21 percent of the producers interviewed considered unreliable prices a disadvantage of auction markets. Eight percent named the possibility of spreading disease a disadvantage of auction sales. "Commission expense" was given by 4 percent, and another 4 percent indicated that only small lots of sheep and lambs were handled at auction markets. Various other disadvantages accounted for 25 percent. Thirty-eight percent gave no disadvantages.

### LOCAL BUYERS

The local buyer, as a marketing outlet, provides one convenience that is not furnished by most auction sales and central markets. Ranchmen, by selling to local buyers, can in many cases deliver their sheep and lambs at their ranch. This is convenient since they can avoid transportation and other expenses involved in selling through public markets.

Being able to "sell on the place" was named by 36 percent of the ranchmen as a major advantage.



tage of selling to local buyers. Eleven percent gave "no commission charge" as an advantage, while 4 percent named "less shrink" as a major advantage of selling to local buyers. "Good prices" given by local buyers was named by 6 percent of the ranchmen and 25 percent named other advantages of selling to local buyers. Eighteen percent gave no advantages.

The main disadvantage named by 29 percent of the ranchmen was that the offering prices of local buyers usually were low. Most of these complaints came from San Saba and Gillespie counties where almost half of the ranchmen said that local buyers or country traders tried to "buy too cheap." Three percent said that competition was not strong enough between local buyers. In other words, these producers did not feel that they had received enough price bids from local buyers. Five percent of the producers interviewed criticized the buying patterns of local buyers as being too erratic and undependable. Eight percent named various other disadvantages of marketing through local buyers. Slightly more than one-half gave no disadvantage.

#### FEEDER BUYERS

Feeders, as buyers, are important in Texas since considerable numbers of the lambs available for sale are of feeder type. Feeder buyers purchase sheep and lambs to be finished in drylot feeding operations or to be finished on grain or alfalfa fields. Even though feeder buyers are important to Texas sheep producers, they are responsible for a relatively small percentage of the direct lamb purchases. Many feeders let order and local buyers handle their purchases since these buyers are familiar with the type of sheep and lambs available. First sales of most sheep and lambs in Texas are handled by local or order buyers, auction sales or stockyards. Ranchmen listed "good prices for quality lambs," "good prices for feeder lambs," "can sell lambs on the place," and "less expense involved" as the main advantages of selling directly to feeder buyers. Thirty-seven percent of the ranchmen named "good prices for quality lambs" as an advantage of marketing lambs through feeder buyers. Eight percent indicated "good prices for feeder lambs," 10 percent indicated "less expense" and 5 percent indicated "can sell on the place" as advantages of selling sheep and lambs to feeder buyers. Forty percent gave no disadvantages.

The only disadvantage of selling to feeder buyers named by ranchmen was that they were not always buying. Thirteen percent of the producers named this as a disadvantage.

#### PACKER BUYERS

Packer buyers purchase sheep and lambs directly from producers when supplies of sheep and lambs are light at central markets and when they can buy more profitably in the country. Since

TABLE 12. RELATIVE PROPORTIONS OF RANCHMEN PREFERRING ALTERNATIVE TYPES OF SALES FOR FAT AND FEEDER LAMBS, 1956

Type of sale	Fat lambs	Feeder lambs
	— — — Percent — — —	
Terminal market	42	8
Auction market	15	25
Local buyer	31	57
Packer buyer	12	
Feeder buyer		10
Total	100	100

most of the range lambs produced in Texas are of stocker-feeder type, the volume of direct purchases by packers is not great.

Of the ranchmen interviewed, 34 percent mentioned convenience, 20 percent mentioned less expense, 7 percent mentioned best prices for fat lambs and 10 percent mentioned other factors as advantages of selling directly to packer buyers. Twenty-nine percent gave no advantage.

Disadvantages pointed out were low offering prices, too much shrink, lack of competition between packers and too much cut.

#### ADVICE TO SELL

In an attempt to obtain a true measure of their market preferences, ranchmen were asked which marketing outlet they would recommend to a person starting ranching in their areas. The answers received varied considerably, depending on the location of the ranchmen. In counties where auction and terminal markets were relatively convenient, ranchmen advised selling through these channels. In counties where no auction markets or central markets were convenient, ranchmen usually advised selling through local or feeder buyers.

Forty-two percent of the ranchmen advised the interviewers to sell fat lambs through terminal markets, Table 12. Thirty-one percent advised the selling through local buyers; 15 percent advised selling through auction markets; and 12 percent recommended packers as the best market outlet for fat lambs.

Fifty-seven percent of the ranchmen interviewed felt that local buyers offered the best outlet for feeder lambs. Twenty-five percent advised selling through auction markets; 10 percent advised selling to feeder-buyers; and 8 percent advised selling through terminal markets.

Many ranchmen seem to feel that certain marketing outlets, other than the one they currently were using, might increase their returns. However, in their own marketing operation, custom and convenience apparently were more important than the possibility of increasing returns by selling through a different market outlet.

More than half of the producers having flock sizes of less than 500 ewes advised selling fat lambs at central markets. Approximately one-fourth of the producers having 1,000 to more than 4,000 ewes advised selling fat lambs through terminal markets.

More than half of the ranchmen having fewer than 500 ewes advised selling feeder lambs through auction markets. More than 80 percent of those having over 1,000 breeding ewes advised selling feeder lambs to local buyers. Small producers probably prefer auction markets because these markets are located in areas where there are many small producers and they handle small shipments.

## **Market Information**

In most areas, sheep and lamb producers have a choice of marketing outlets. Market price information from the various marketing outlets enables producers to compare markets and select the outlet offering the greatest returns.

Four principal agencies collect and disseminate market news to Texas livestock producers. These are the Federal Market News Service, the State Market News Service, commission companies and auction markets.<sup>1</sup> These collecting agencies disseminate daily and weekly market prices through radio, television, mail reports and newspapers. Livestock producers also obtain market prices by talking with neighbors and other producers and by attending local auction market sales.

The most important sources of market news, the markets watched most closely by the ranchmen interviewed and the use made of this market news are important.

### **IMPORTANT SOURCES**

Approximately 58 percent of the ranchmen interviewed gave radio as their principal source of market news. Radio was a more important medium for small than for large producers. Seventy-three percent of the ranchmen having less than 500 ewes, named radio as their major source of market news. Radio was less significant as a source of market news among producers with more than 2,000 ewes. These producers relied more on newspapers, local buyers and prices received by neighboring ranchmen. Seventeen percent of the ranchmen named newspapers as their major source of market prices. Eight percent named local buyers and 5 percent listed prices received by neighbors as their main source of market prices. Auction markets and mail reports accounted for 8 and 4 percent of the ranchmen interviewed, respectively.

<sup>1</sup>W. H. Walter and John G. McNeely, *Livestock Market News Service in Texas*, Texas Agricultural Experiment Station, Bulletin 811, July 1955.

Sixty-one percent of the ranchmen interviewed watched price reports from one of three principal markets — Fort Worth, San Antonio or Chicago. More than two-thirds named Fort Worth while the remainder named San Antonio or Chicago as the central market they watched most closely. Twenty-four percent of the ranchmen interviewed obtained their principal market prices from local auctions, local buyers or prices made by other ranchmen. Of these, 71 percent watched local traders, local auctions and prices made by neighbors more closely; 29 percent watched auction markets in San Antonio or Chicago more closely. Fifteen percent followed market prices from a combination of terminal markets, auctions and local trading.

Ranch location is a strong factor affecting the choice of a market to follow. Ranchmen in Gillespie and Uvalde counties watched the San Antonio market, while those in San Saba and Menard counties watched the Fort Worth market more closely. Sterling and Pecos county ranchmen watched the auction market prices in San Angelo more closely than ranchmen in the other counties. Ranchmen in Pecos, Uvalde, Menard and Crockett counties depended more heavily on price information obtained from local trading than did ranchmen in other counties.

Of those ranchmen selling their lambs through the Fort Worth or San Antonio Stockyards in 1956, 83 percent paid closer attention to market prices coming from central markets. Forty percent of the ranchmen who sold their lambs through the various other market outlets watched market prices coming from central markets more closely. Ranchmen who sold their lambs through auction sales, to commission companies and to local buyers paid closest attention to prices quoted from the auction market sales in San Angelo. Those who sold their lambs through auction markets, to local buyers and to other ranchmen paid closest attention to market prices from local sales.

In an attempt to determine the usefulness of present market information available to sheep and lamb producers, ranchmen who used the various sources of market information also were asked to state how much this information helped them in making marketing decisions. They were asked to state generally whether this market information helped them "a lot," "some," or "not much" in deciding when to sell. While these were not precise statements subject to objective measurement, they provided some indication of the relative usefulness of present market information.

Forty-three percent of the ranchmen interviewed said the market information obtained from the several sources helped "a lot" in making marketing decisions. Fifty percent said the information helped some and 7 percent said that it helped very little. Many of the ranchmen who



said that the information helped only some or very little had poor range conditions or were selling fat lambs. In the case of poor range conditions, the lambs had to be sold regardless of the prices received because of lack of forage. Ranchmen who sold fat lambs, felt that they had to sell when the lambs became fat or reached their peak condition to realize maximum income.

## Marketing Costs

Because Texas sheep and lamb producers have a choice of a variety of marketing outlets, there is a great deal of confusion regarding marketing costs. Many are of the opinion that no marketing costs are incurred on direct sales at the ranch. Actually, prices received probably are adjusted to reflect the marketing costs of each shipment even when no actual cash costs are paid by the seller. A packer-buyer, speaking to a meeting of Texas sheep producers in 1958, made the following statement:

"One of the major factors involved in the difference between buying at central markets and in the country is the cost of buying. In the long run these costs have to come out of the difference between what packers can get for the dressed lambs and what they can pay producers. For that reason livestock producers have a definite interest in this question. In most cases it is obvious that buying livestock in the country carries an expense. . . . But for the meat packer, it requires more men to cover the territory and bid on a given number of livestock. Automobile costs and other travel expenses have been increasing rapidly over the past several years. In addition, a considerable part of the buyer's time is spent in the unproductive job of getting from one spot to the other."<sup>2</sup>

Costs of marketing sheep and lambs in Texas represent charges for services and must be paid by someone on every shipment of sheep and lambs. Services such as locating, bargaining, sorting and transportation are necessary to move sheep and lambs through the marketing process from the producer to the ultimate consumer.

Marketing costs that are important considerations for sheep producers may be divided into two categories — total costs and cash or "out-of-pocket" costs. "Out-of-pocket" costs are direct cash outlays paid for transportation and other marketing services, while total costs are costs of the complete sales transaction and in addition to cash costs may include items such as shrinkage and transportation paid by the buyers and may be borne partly by the seller and partly by the buyer. Generally speaking, the more of the marketing costs paid by the producer, the higher the price unit (pound or head) he will receive for his lambs. The price received will be lower if he does not pay a significant portion of the marketing cost. In other words, prices received

tend to reflect marketing costs. If the seller pays only a small portion of the marketing cost, the buyer usually will bid lower to compensate for the marketing costs he must pay. Under competitive conditions, net returns to producers probably are much the same whether cash marketing costs are paid by the producer or the buyer.

Three principal factors affect the level of marketing costs. These are the distances that lambs are to be transported, the marketing channel through which the shipment is sold and the terms or agreements included in the sale transaction. When sheep are sold through auction or central markets, both transportation and commission fees (plus yardage and feeding at central markets) are "out-of-pocket" costs that must be paid. Cash payment by the producer in direct sales in many cases involves only transportation costs, and often only a portion of those. The customary agreement in direct sales is for the seller to pay transportation costs to the agreed delivery point, which usually is the nearest public scales. Some of the ranchmen interviewed also paid a weighing fee at the delivery point. Commission charges also were paid by some ranchmen who sold direct. However, this was not a general practice.

The average total cash costs reported paid by the ranchmen interviewed was 19 cents per head. There were considerable differences between types of sales. Sales at terminal markets cost an average of 94 cents per head, while sales to other ranchmen involved reported costs of only 10 cents per head. A major factor in the higher cost at terminal markets was transportation, which averaged 50 cents per head. "Out-of-pocket" costs also were high for sales through auction markets. Ranchmen who sold through auction markets reported an average cash cost of 61 cents for transportation. The essential factor that made transportation costs high for auction markets was small shipments. In most areas there is a minimum charge for hauling a load of livestock. For example, if a ranchman were sending only 25 sheep to an auction market, a minimum charge for transportation might be \$15. If he had shipped 200 head, his cost per head would be much lower. Average total costs of selling sheep and lambs through auction markets were 55 cents per head.

Average costs reported for selling sheep and lambs directly to buyers ranged from 18 cents per head for commission companies to 10 cents per head for ranchmen. Transportation costs for selling direct to buyers were low, relative to costs of sales through central markets and auction markets. The lower transportation costs involved in direct sales can be attributed to larger shipments and to shorter hauling distances to delivery points. Some of the ranchmen who sold direct had commission charges, weighing fees and other

<sup>2</sup>A Packer-buyer's Views on Marketing Sheep and Lambs," Jim Adle, Highland Sheep and Goat Raisers' Association Workshop, Alpine, Texas, July 10, 1958.

TABLE 13. ESTIMATED CASH COST OF MARKETING SHEEP AND LAMBS AT THE FORT WORTH STOCKYARDS, BY SIZE OF CONSIGNMENT 1958<sup>1</sup>

Size of consignment	Commission	Yardage	Feed and miscellaneous	Total	Total per head
Dollars					
10	3.50	2.00	.30	5.80	.58
25	7.25	5.00	.75	13.00	.52
50	13.50	10.00	1.50	25.00	.50
75	19.00	15.00	2.25	36.25	.48
100	24.00	20.00	3.00	47.00	.47
150	31.60	30.00	4.50	66.10	.45
200	37.60	40.00	6.00	83.60	.42
250	43.60	50.00	7.50	101.20	.40

<sup>1</sup>Commission, yardage and feed costs were based on tariffs in effect at the Fort Worth Stockyards, 1958.

miscellaneous marketing costs. These costs were small on a per-head basis compared with auction markets and central markets which had relatively high commission and other marketing costs.

Gillespie and Sterling counties had the highest average marketing costs per head, with Uvalde and San Saba counties having the lowest. San Saba, Crockett, Val Verde, Uvalde and Pecos counties had low commission and other costs per head. Most sales in these counties were direct to buyers and involved less commission expense. Gillespie, Menard and Sterling counties had relatively high commission and other costs mainly because significant numbers of sheep and lambs from these counties were sold through central and auction markets.

Highest average costs per head for transportation were found in Gillespie and Sterling counties. In Gillespie county, small shipments and long distances to central and auction markets were the major causes of high transportation

TABLE 14. ESTIMATED CASH COSTS PER HEAD FOR MARKETING SHEEP AND LAMBS AT THE FORT WORTH STOCKYARDS, BY COUNTY, 1958

County	Transportation cost <sup>1</sup>	Cost at market <sup>2</sup>	Total cost <sup>3</sup>
Dollars			
Gillespie	.42	.42	.84
San Saba	.30	.42	.72
Menard	.39	.42	.81
Uvalde	.59	.42	1.01
Sterling	.46	.42	.88
Crockett	.54	.42	.96
Val Verde	.62	.42	1.04
Pecos	.69	.42	1.11
Presidio	.84	.42	1.26

<sup>1</sup>Based upon distance from county seat to Fort Worth and current Texas Railroad Commission tariffs for a load of 16,000 pounds.

<sup>2</sup>Includes commission, yardage and feed charges based upon current tariffs for the Fort Worth market and based upon a shipment of 200 head.

<sup>3</sup>Allowances for shrinkage, death loss, crippling and such are not included.

costs. In Sterling county, long hauling distance to delivery points was the major cause of relatively high transportation costs per head. Transportation costs averaged 45 cents per head in Gillespie county and 23 cents per head in Sterling county. Uvalde, Pecos and San Saba counties had the lowest transportation costs per head. Most shipments in these counties, with the exception of Pecos county, were for relatively short distances. In Pecos county, large shipments of relatively light-weight lambs were partly responsible for low transportation costs per head.

For purposes of comparison and for the convenience of producers attempting to evaluate prices at alternative market outlets, cash costs of marketing sheep and lambs at the Fort Worth Stockyards, are shown in Table 13. Cash costs per head decline significantly as the size of consignment increases.

In addition to costs at the market, transportation costs must be taken into consideration. Transportation charges vary with distance and with load size. In Texas, transportation rates are regulated by the Texas Railroad Commission. Copies of the latest tariffs may be obtained from the commission.

The distances from county seats to Fort Worth were used to compute transportation costs. A load of 16,000 pounds also was used. Estimated cash costs of marketing sheep and lambs at Fort Worth (including transportation) are contained in Table 14. Since the cost at market was assumed to remain constant, variations in total cost reflect differences in transportation charges.

## Prices and Net Receipts

Prices received for their products constitute an important concern of sheep and lamb producers. Three aspects of prices are important: the general level of sheep and lamb prices, seasonal variations in prices within the year and actual prices received by producers.

The general level of economic activity within the nation, feed supplies and livestock numbers also affect the general level of sheep and lamb prices. Seasonal changes in prices are caused by natural factors such as lambing time, grazing seasons and marketing periods. Prices usually are highest in the spring when marketings are light, and lowest in the summer and fall when marketings are heaviest. The season in which the producer sells his sheep and lambs is probably the most important single factor affecting the price he receives.

Lamb prices tend to be highest seasonally during the spring and lowest during the summer and fall, Figure 6. During the 8 years, 1952-59, prices of slaughter lambs on the Fort Worth market rose an average of 23 percent from December to May. From May to December, they fell rather



steadily. Prices of feeder lambs were highest on the average during the late winter and early spring, reaching a peak in February and March. Lowest prices of feeder lambs occurred in July, after which, they began a slight rise.

Some important factors affecting prices at the local market level are location, the particular marketing channels used, shrinkage and the quality and finish of lambs sold.

Accurate differential shrinkages by market outlet are not available. Shrinkage varies by type of market and by handling methods. Shrinkage, especially "pencil" shrinkage, can be an important factor affecting prices. Producers often are faced with offers of different prices coupled with different shrinkage allowances. To assist in making decisions of this type, Table 15 was developed. Offering prices with specified percentages pencil shrink deducted are shown. For example, if the offering price for a group of lambs were \$18 with a 6 percent shrink, the price actually received would be \$16.92. Conversely, a bid of \$17.50 by another buyer with a 3 percent shrink would result in an actual price of \$16.98.

Prices received, marketing costs, date of sale and sale conditions were obtained from the ranchmen interviewed. Important items lacking for an adequate analysis of prices were quality and finish and shrinkages. However, bearing in mind this limitation of the data, some tentative conclusions appear to be in order.

Gillespie, San Saba, Uvalde and Sterling county ranchmen averaged more than \$17 per hundredweight for their lambs in 1956. These counties had significant numbers of lambs sold in fat lambs during the spring. In addition, a higher percentage of their lambs were sold at central markets. These factors, along with heavier lamb weights, probably accounted for the higher average prices received in these counties. Crockett and Pecos were the only counties averaging less than \$16 per hundredweight for lambs. Prices received on a per-head basis corresponded generally with the hundredweight prices. Not many lambs sold by the head and those so selling usually were very lightweight feeder lambs. On a per-head basis, prices received in San Saba county were highest, with Gillespie and Menard counties next, in that order.

#### MARKET PRICE COMPARISONS

It is difficult to compare prices at alternative markets; however, they provide a general indication of the situation which prevailed. To evaluate prices which ranchmen reported they received, they were compared with actual average prices for the same months on the Fort Worth backyards. The results are shown in Table 16. In all counties selling fat lambs, weighted average prices received for lambs sold in April and May were below the average prices received for

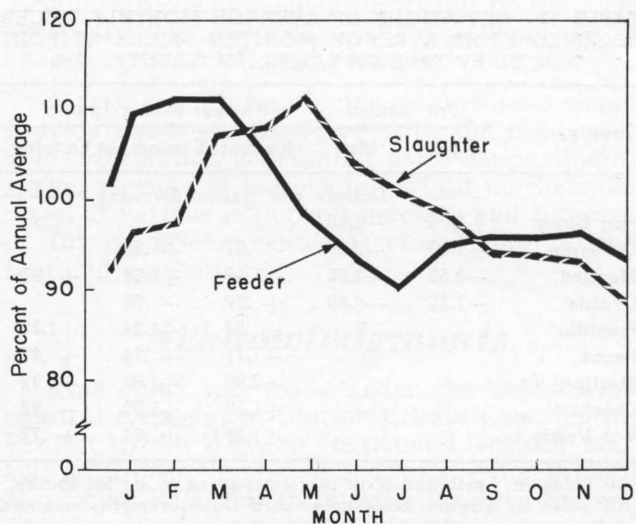


Figure 6. Seasonal variation in prices of feeders and slaughter lambs at Fort Worth (1952-59 average = 100).

slaughter lambs on the Fort Worth market during these months. The deviations were lowest in April, averaging -\$1.12 per hundredweight, compared with -\$4 per hundredweight during May.

On the other hand, average prices per hundredweight received for stocker-feeder lambs sold during August, September and October were higher than the average monthly prices reported at Fort Worth during these same months. Average deviations for these months were \$1.32 per hundredweight for August, 89 cents per hundredweight for September and 85 cents per hundredweight for October. Sterling county had the highest deviations at \$2.60, \$1.67 and \$1.32 per hundredweight for August, September and October, respectively.

These comparisons cannot be accepted at face value because of the previously mentioned limi-

TABLE 15. COMPARATIVE LAMB PRICES, DOLLARS PER HUNDREDWEIGHT, WITH SELECTED SHRINKAGE ALLOWANCES

Offering price	Shrinkage allowance, percent			
	2.0	3.0	4.0	6.0
	Dollars			
21.50	21.07	20.85	20.64	20.21
21.00	20.58	20.37	20.16	19.74
20.50	20.09	19.88	19.68	19.27
20.00	19.60	19.40	19.20	18.80
19.50	19.11	18.92	18.72	18.33
19.00	18.62	18.43	18.24	17.86
18.50	18.13	17.94	17.76	17.39
18.00	17.64	17.46	17.28	16.92
17.50	17.15	16.98	16.80	16.45
17.00	16.66	16.49	16.32	15.98
16.50	16.17	16.00	15.84	15.51
16.00	15.68	15.52	15.36	15.04
15.50	15.19	15.04	14.88	14.57
15.00	14.70	14.55	14.40	14.10

Source: "Livestock Marketing Handbook," Western Livestock Marketing Research Committee.

TABLE 16. DEVIATIONS OF AVERAGE MONTHLY PRICES RECEIVED FROM AVERAGE MONTHLY PRICES AT FORT WORTH, BY TYPE OF LAMBS, BY COUNTY, 1956

County	Fat lambs <sup>1</sup>		Stocker-feeder lambs <sup>2</sup>		
	April	May	August	September	October
	— — —	Dollars	per	hundredweight	— — —
San Saba	-1.00	-3.60			
Gillespie	-1.50	-2.30	+ .37	+ .99	
Menard	-3.50	-3.25	+1.48	+1.68	+ .92
Uvalde	-1.25	-4.80	+ .77	- .26	
Presidio			+ .97	+1.24	+1.22
Pecos			+1.11	+ .24	+ .47
Sterling			+2.60	+1.67	+1.32
Crockett			+1.12	+1.03	- .90
Val Verde			+1.25	+ .64	+ .72

<sup>1</sup>All sales in April and May were assumed to be fat lambs.

<sup>2</sup>All sales in August, September and October were assumed to be stocker and feeder lambs.

tations in the data. However, since Fort Worth is most widely known as a slaughter lamb market, these general relationships very likely could prevail. Price reports from the Fort Worth market may be a more accurate barometer of the fat lamb market than of the stocker and feeder lamb market.

## NET RECEIPTS

Average net receipts per lamb varied considerably among the counties and among the marketing channels. Those ranchmen who sold directly to packer buyers reported receiving the highest net receipts per lamb. Ranchmen selling through central markets received next highest net receipts per lamb; while those selling to feeder buyers received the lowest net receipts per lamb. Usually, those lambs sold directly to packer buyers and through central markets were relatively fat, while those sold to feeder buyers were usually a light feeder type. Much of the difference in net receipts between packer and central market sales and feeder sales can be attributed to the lamb weights and the higher prices per pound received for fat lambs.

TABLE 17. AVERAGE SIZE OF SHIPMENT, WEIGHT PER HEAD, NET RECEIPTS PER HEAD AND PER POUND OF LAMBS SOLD, BY COUNTY, 1956

County	Size of shipment	Weight of Net receipts		Per pound
		lamb sold	per head <sup>1</sup>	
	Number	Pounds	Dollars	Dollars
San Saba	633	83	\$16.47	\$ .20
Gillespie	109	76	10.60	.15
Menard	331	75	11.76	.16
Uvalde	638	75	13.86	.18
Presidio	1080	66	10.28	.15
Pecos	766	64	8.45	.13
Sterling	796	74	11.81	.16
Crockett	1058	70	10.11	.14
Val Verde	1545	66	10.27	.16

<sup>1</sup>Deducting only transportation and other cash marketing costs.

San Saba county ranchmen received the highest average net receipts per lamb for all types of sales at \$16.47. Uvalde county ranchmen received relatively high average net receipts per head, while Pecos county ranchmen received the lowest average net receipts per lamb at \$11.81. Gillespie, Menard, Presidio, Sterling, Crockett and Val Verde county ranchmen averaged \$11.81 net receipts per lamb.

Table 17 shows that average net receipts per head were highest in San Saba and Uvalde counties. It also shows the relationships between average lamb weights and average net receipts per lamb in each county. In the three counties where net receipts were highest, the average weight of the lambs sold also was relatively high. In Crockett, Val Verde and Pecos counties, where average lamb weights were low, average net receipts per head also were low.

In Gillespie, San Saba, Menard and Uvalde counties, where the size of shipment averaged less than 700 head, average lamb weights were relatively high. The location of the county may be the principal factor affecting lamb weights; however, the size of operation might also be a factor to be considered in the finish and condition of lambs sold. On the smaller operations found in San Saba, Gillespie and Uvalde counties, more care and attention can be given to ewes and lambs, while the larger flocks located farther west may not have received the care that a smaller flock would. Also, in San Saba and Uvalde counties, the relatively high percentage of "old crop" lambs sold in the spring increases the average weights of the lambs sold.

## Recommendations

Sheep and lamb producers should be aware of the various marketing outlets available. The producer's choice of a market outlet is based primarily on consideration of net returns, he should consider the price per hundredweight that he is likely to receive on the various markets. He also should consider expected shrinkage, transportation costs, death loss and handling charges at the various market outlets. In some cases, marketing costs can offset the higher prices received at a particular market. Other factors such as convenience and price risk may be considered in selecting the appropriate outlet.

Producers should seek bids from anyone interested in their lambs. In addition, they should seek the advice of commission-firm salesmen and auction-market operators before deciding when and where to sell. All available market information also should be evaluated carefully.

Natural factors such as breeding and grazing seasons and range conditions tend to affect to a large extent the time sheep and lambs are marketed in Texas. Other than these natural factors



...rs, some of which cannot be altered easily, sheepmen should base their marketing time on the number of head to be sold, the available feed supply, local demand and prices and the degree of finish of the animals.

Marketing agreements involved in direct sales also may affect net returns to the sheep and lamb producer. Pencil shrink, preweighing conditions and the distance to the weighing point affect the liveweight and the net returns to the producer. All of these agreements are not necessary in a sales transaction. Neither pencil shrink nor preweighing conditions are necessary in direct sales if the distance to the weighing point is far enough to allow for adequate shrinkage. Sheepmen should know the approximate price needed per hundredweight to offset the various amounts of pencil shrink and estimated actual shrink.

Sheep and lamb producers often can realize increased returns if they sell their sheep and lambs in lots sorted according to quality and finish instead of in unsorted lots.

Forfeit payments should be a significant portion of the expected value of sheep and lambs on contract sales. Also, minimum and maximum

weight agreements should be within reason. The sheep producer selling by contract should use an agreement that is legally sound.

Marketing information or market news should provide the sheep producer with the best available information concerning price range, quality range, receipts at various important markets, demand at various important markets and forecasts of future developments affecting lamb production and marketing.

## *Acknowledgments*

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# State-wide Research



Location of field research units of the Texas Agricultural Experiment Station and cooperating agencies

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The Texas Agricultural Experiment Station is the public agricultural research agency of the State of Texas, and is one of ten parts of the Texas A&M College System

## ORGANIZATION

IN THE MAIN STATION, with headquarters at College Station, are 16 experimental departments, 2 service departments, 3 regulatory services and administrative staff. Located out in the major agricultural areas of Texas are 21 substations and 9 field laboratories. In addition, there are 14 cooperating stations owned by other agencies. Cooperating agencies include the Texas Forest Service, Game and Fish Commission of Texas, Texas Prison System, U. S. Department of Agriculture, University of Texas, Texas Technological College, Texas College of Arts and Industries and the King Ranch. Some experiments are conducted on farms and ranches and in rural homes.

## OPERATION

THE TEXAS STATION is conducting about 400 active research projects, grouped in 25 programs, which include all phases of agriculture in Texas. Among these are:

- |                                      |                                 |
|--------------------------------------|---------------------------------|
| Conservation and improvement of soil | Beef cattle                     |
| Conservation and use of water        | Dairy cattle                    |
| Grasses and legumes                  | Sheep and goats                 |
| Grain crops                          | Swine                           |
| Cotton and other fiber crops         | Chickens and turkeys            |
| Vegetable crops                      | Animal diseases and parasites   |
| Citrus and other subtropical fruits  | Fish and game                   |
| Fruits and nuts                      | Farm and ranch engineering      |
| Oil seed crops                       | Farm and ranch business         |
| Ornamental plants                    | Marketing agricultural products |
| Brush and weeds                      | Rural home economics            |
| Insects                              | Rural agricultural economics    |
|                                      | Plant diseases                  |

Two additional programs are maintenance and upkeep, and central services

*Research results are carried to Texas farmers, ranchmen and homemakers by county agents and specialists of the Texas Agricultural Extension Service*

**AGRICULTURAL RESEARCH** seeks the **WHATS**, the **WHYS**, the **WHENS**, the **WHEREs** and the **HOWs** of hundreds of problems which confront operators of farms and ranches, and the many industries depending on or serving agriculture. Workers of the Main Station and the field units of the Texas Agricultural Experiment Station seek diligently to find solutions to these problems.

*Today's Research Is Tomorrow's Progress*