

FACTORS AFFECTING PROFITABLE ANGORA GOAT PRODUCTION IN TEXAS

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Angora goats are an important enterprise for ranch operators in certain areas of Texas (see Figure 1). Angoras produce income from the sale of mohair and meat. They also are used for biological control of brush and weeds in range improvement programs. Production costs have increased in recent years. This places a heavier burden on the ranch manager for decision-making for greater efficiency in production and higher economic returns.

Goats require the same major production resources as other species of livestock. These include land, labor, capital and management.

Goats often are grazed on forage land less suited for other livestock. They prefer browse, thus are not totally competitive with cattle and sheep for limited land resources. However, goats must convert forage into salable products to justify their presence in most multi-species operations. Since land is a costly resource in ranching operations, goats should recover their share of the costs.

The total annual cost of maintaining an Angora goat varies by area and from ranch to ranch. This is influenced by the productivity of the land resource and by the level of management. Annual income per goat also varies for the same reasons.

PRODUCTION MANAGEMENT FACTORS

Low reproductive performance is a major problem for the Angora goat industry throughout Texas. This may be a result of breeding programs that have placed high selection pressure on mohair production traits. It is possible to select goats that excel in producing both mohair and offspring.

Improved management practices help overcome low kidding percentages. Most declining reproduction rates in an Angora flock are associated with: (1) failure of estrus and ovulation due to under-

development of the does, (2) lack of vigor and strength in breeding-males due to nutritional deficiencies, (3) abortion caused by poor nutrition or infection and (4) death loss of kids.

Properly managed selective breeding programs, along with adequate nutrition and health care for improved physical development, increases the reproductive rate of any flock, excepting losses from extreme weather conditions or predators.

During pregnancy, most Angora does suffer from protein deficiency. Supplemental feeding of $\frac{1}{4}$ to $\frac{1}{2}$ pound of cottonseed cake or $\frac{1}{2}$ to $\frac{3}{4}$ pound of yellow shelled corn per head daily during winter stress periods or drouthy conditions increases productivity. Self feeding with three parts ground milo, one part cottonseed meal and one part salt produces satisfactory results. When range forage is deficient, a more balanced supplemental ration should be provided.

Replacement doe kids should receive special care after weaning during winter months. Kids will not develop properly when competing with adult goats. Supplemental feeding or improved grazing conditions are necessary if doe kids are to develop adequately. Body weights of 65 pounds for yearling does and 80 pounds for yearling bucks are suggested minimum weights for satisfactory breeding performance.

Both internal and external parasites must be controlled if animals are to reach maximum genetic potential. Medications are available, and new and improved chemicals are being introduced for even better health improvement measures. Applicators should always follow container directions on all internal and external medications.

While the reproduction rate of the flock has the greatest impact on the potential net return for the Angora goat enterprise, the pounds of mohair produced annually per head is very important. Some flocks produce an average 12 pounds of good quality fiber per head every 12 months, although

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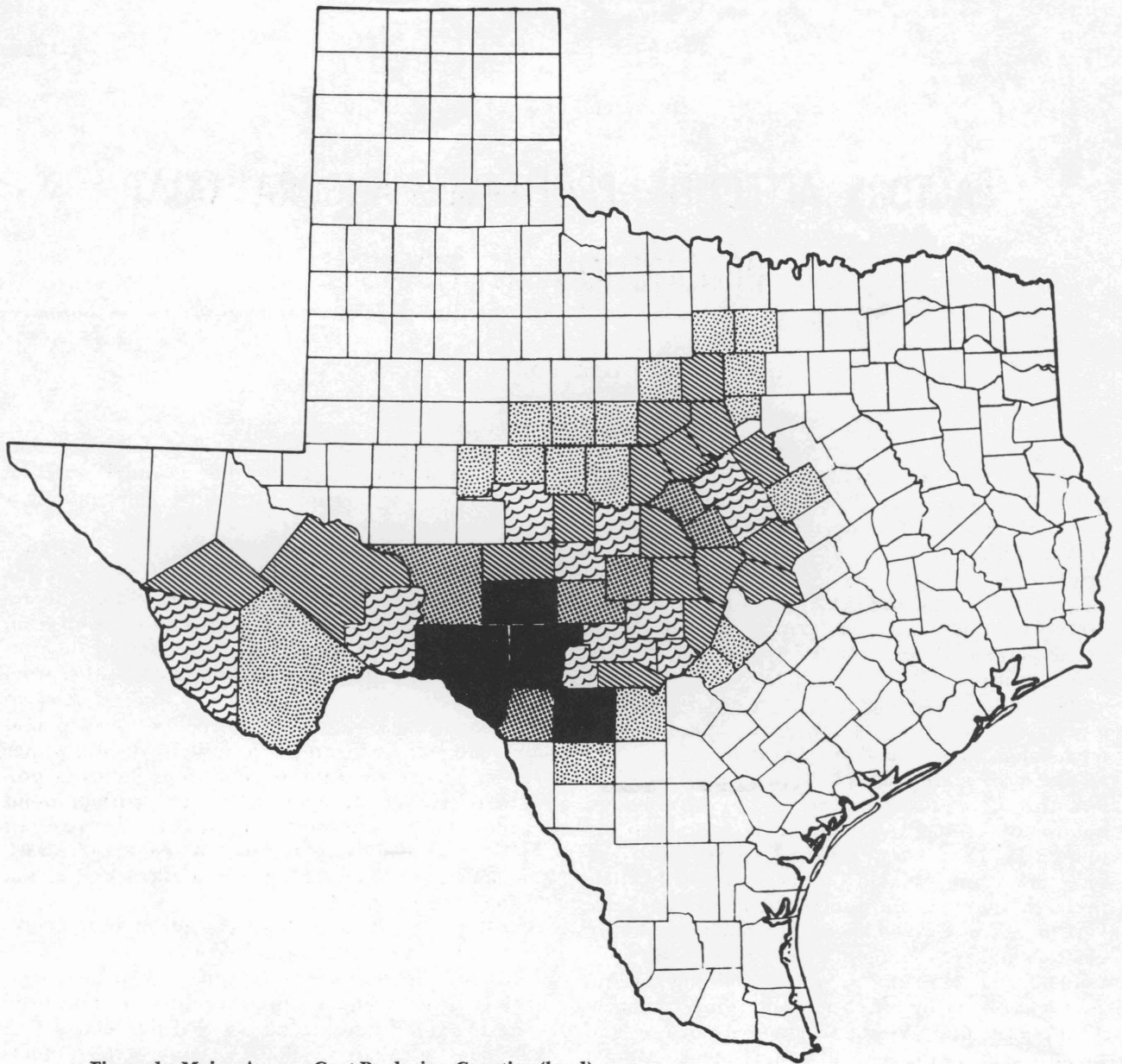


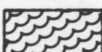




Figure 1. Major Angora Goat-Producing Counties (head)

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 1,000-4,999—Brewster, Medina, Zavala, Hays, McLennan, Comal, Hood, Parker, Jack, Wise, Sterling, Coke, Coleman, Taylor, Nolan, Stephen, Runnels, Callahan.
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 5,000-14,999—Jeff Davis, Pecos, Bandera, Blanco, Llano, Burnet, Bell, San Saba, Bosque, Brown, Comanche, Palo Pinto, Williamson, Schleicher, Concho, Eastland, Erath.
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 15,000-29,999—Presidio, Terrell, Gillespie, Kerr, Real, Kendall, Tom Green, Menard, McCulloch, Hamilton, Coryell.
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 30,000-74,999—Crockett, Kinney, Kimble, Mason, Mills, Lampasas.
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 Over 75,000—Val Verde, Edwards, Uvalde, Sutton.

the average for Texas is about eight pounds for adult goats. Twelve pounds may be near the physical maximum when quality, length and clean yield all are considered. Improvement in mohair production can be achieved and maintained through selective breeding programs and good flock management.

The mohair clip needs special attention before and during shearing. Recommendations from warehousemen should be followed when preparing the clip for market. These recommendations often include chute-cutting and bagging various age groups and grades of mohair separately.

Spring clips will include kid hair, or second shearing; young goat hair, or fourth shearing; fine adult hair, usually the main clip; and average adult hair. Fall clips include kid hair, or first shearing; yearling hair, or third shearing; fine adult; and average adult hair, which is coarser. Fleeces showing colored fibers, stained hair, or excessive vegetable matter also should be bagged separately. All grades of mohair should be kept free of dirt and other foreign materials.

ECONOMIC MANAGEMENT FACTORS

Production costs for an Angora goat enterprise can be estimated closely when purchase prices of inputs are known. Price data will be influenced by locations, season and volume of purchase. Estimated budgets include variable costs and fixed costs. However, both costs must be recovered over the long run, or the goat enterprise will be un-

profitable. Table 1 shows the estimated variable, fixed, and total costs per animal unit of Angora does. (Six does and their offspring, until weaning, equals one animal unit.)

The estimated cost of \$20.97 per year for keeping an Angora doe indicates mohair production and kid crop must be high to show a positive net return. Figures in Table 2 may be used to analyze the Angora goat enterprise in several ways. The annual kid crop percentage estimates range from 25 percent to 75 percent and can be used to (1) show the effect of kid crop sales on the goat income and (2) indicate the mohair sale price needed to recover total costs at varying levels of production.

The break-even prices for mohair shown in Table 2 emphasize the importance of increased kid crop percentages. A 25 percent increase in kid crop can decrease the price for mohair needed to break even by 25 to 32 cents per pound, depending on the amount of mohair produced per doe annually.

The current average production levels in Texas for Angora goats is about 50 percent kid crop with about 8 pounds of mohair per doe. Using the analysis procedure in Table 2, this production level indicates the estimated breakeven mohair price in Texas is approximately \$2.12 per pound.

Based on these cost and return estimates, there is both a need and an opportunity for initiating breeding and management programs for increasing production and income from Angora goats in Texas.

Table 1. Estimated annual costs per animal unit, Angora goats

Item	Unit	Price or cost/unit	Quantity	Cost	Your ranch
Variable costs					
Protein supplement	lbs.	.07	135	\$9.45	.....
Salt & minerals	lbs.	.02	60	1.20	.....
Veterinarian & medicine				2.40	.....
Shearing				5.40	.....
Miscellaneous expense				5.50	.....
Equipment (fuel, lube, replacement)				1.76	.....
Labor, equipment				1.00	.....
Labor, livestock				11.18	.....
Interest on operating capital				1.15	.....
Death loss (7% of value)				5.04	.....
Total variable costs				\$44.09	.....
Fixed costs					
Land rent	acre	3.50	13.90	48.65	.....
Interest on livestock capital		.10	72.00	7.20	.....
Interest on other equipment		.10	99.14	9.91	.....
Depreciation on livestock				1.88	.....
Depreciation on other equipment				7.19	.....
Other fixed costs				6.88	.....
Total fixed costs				\$81.71	.....
Total costs 1>				\$125.80	.....
Cost per doe				20.97	.....

1> Cost estimates are based on prices prevailing on March 1, 1975.

Table 2. Break-even mohair prices to recover annual production cost per doe. Varying production levels.

Annual production cost per doe	Percent kid crop	Income from kids \$10 per head	Cost less kid value	Break-even mohair prices		
				8 lb. av.	9 lb. av. (dollars per pound)	10 lb. av.
\$20.97	25%	\$2.50	\$18.47	\$2.31	\$2.05	\$1.85
20.97	40	4.00	16.97	2.12	1.89	1.70
20.97	50	5.00	15.97	2.00	1.77	1.60
20.97	60	6.00	14.97	1.87	1.66	1.50
20.97	75	7.50	13.47	1.68	1.50	1.35

Estimates for your ranch

MANAGEMENT TIPS FOR GREATER PROFITS FROM ANGORA GOATS

1. Balance livestock numbers with land, facilities, feed and labor.
2. Follow carefully planned grazing and range improvement programs.
3. Practice selective breeding for permanent genetic improvement.
4. Establish and keep both production and cost records.
5. Follow sound flock management practices.
6. Make best use of supplemental feeds.
7. Control internal parasites through proper stocking rates, rotation programs and systematic treatment.
8. Control external parasites through systematic treatment.
9. Consult warehousemen and practice proper preparation of mohair.

10. Strive to develop a reputation clip, and market mohair on a quality basis.

SUGGESTED READING

- B-1105 Nutritional Requirements of the Angora Goat
- B-1136 Reproductive Efficiency in Angora Goats
- L-909 Keys to Profitable Angora Goat Production
- B-926 Texas Angora Goat Production
- L-869 Preparing Mohair for Market
- B-960 Wool and Mohair Judging
- L-934 Keys to Meat-Type Goat Production
- MP-396 Common Internal Parasites of Sheep & Goats
- MP-691 Texas Guide for Controlling External Parasites of Livestock and Poultry
- MP-259 Proper Grazing = More Profit
- MP-878 How Good is Your Range?
- MP-896 Grazing Systems for Profitable Ranching

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