ANGORA GOATS

FOR FOOTHILL AND BRUSH AREA

RANGE-Brush Control
biological
CP-271-200-1/82

Cooperative Extension
University of California
Bldg. 4, 5555 Overland Avenue
San Diego, California 92123
Adapted from Amador County publication

"Angora Goats"

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Revised - October 1976
ANGORA GOATS

Angora Goats are a valuable domestic ranch animal in the brush areas of the Sierra Nevada foothills and similar areas throughout California. The Angora converts otherwise useless brush into saleable mohair, chevon (goat meat) and Easter kids.

The center of Angora Goat production in California is in Amador and Calaveras Counties. Good Angora herds may be found throughout the state. Historically, Angoras have been used to clear the land of brush, so it could be opened up for grazing by other species of livestock. Instead of overgrazing to kill the brush, many operators now use rotation grazing of Angoras on their brush fields. In this way, they are using the brush as a crop. Better nutrition means more production, fewer parasites and higher quality mohair.

How to get into the Angora Goat Business

There are three principal ways of raising Angora Goats. The first is the doe-kid operation. Angora breeding herd operations are much like those of the flock of sheep, but require more technique and skill. Contrary to popular belief, Angora Goats do not eat tin cans and will not survive on brush alone. They are sensitive to feed conditions and prefer range consisting of 40% brush and 60% grass and forbs. The Angora doe weighs between 50 and 85 pounds at maturity. She produces one kid per year and from 5 to 10 pounds of mohair. She is sheared in the fall and spring. Angora kids must be housed and protected against predators because they are unable to keep up with the flock. Kids are able to keep up with the flock when they can jump an 18-inch barrier. Breeding stock may be purchased in the Amador-Calaveras area.

The registered flock is much like that of the doe-kid operation but requires additional investment, promotion and attention to many details. A half-dozen registered flocks are now in operation. The novice should become experienced before attempting to raise registered Angoras.

The third type of operation is the wether band. The Angora wether goat may be used successfully on brush ranges. They are used principally for controlling live oak sprouts; however, more and more ranchers are using brush as a crop. This is called sustained-yield brush grazing. Brush fields are cross-fenced and grazing is rotated for maximum yield. Beginners are strongly urged to start out with a wether band rather than a breeding herd.

The Angora wether is a large animal, weighing between 85 and 150 pounds and is much larger than the does which weigh 50-85 pounds. His larger body allows him to produce more mohair. His extra size also helps him fight off coyotes and other predators. The wether stands taller and can graze higher on the brush plant. It is not uncommon to see a third of a wether herd standing erect on their
hind legs stripping the leaves from live oak branches. Wether bands may be purchased in California or in Texas. Wethers will profitably shear a crop of mohair twice a year. This can be done until the animals are from 5 to 7 years old. Fleeces tend to become coarse with age and production falls off after 7 years. Aged wethers are sold for slaughter. The meat generally is used in table-ready meats, such as salami.

Several Methods of Grazing Brush

A drive through the Clinton area of Amador County gives an excellent demonstration of the different methods of grazing brush. Heavy brush fields are goat fenced, (39-inch woven wire with 6 x 12-inch mesh with a strand of barbed wire on top and one on the bottom.) The animals are timid about entering brush that is over their heads and will tend to stick to the open areas near fences. Eventually, they will graze out the understory and greatly reduce the fire hazard.

Some ranchers bulldoze or rail down the brush and let the Angoras take care of the sprouts. Many controlled burn areas are grazed by Angoras to control or use the brush sprouts. If not controlled, regrowth will cause the brush field to become a worse fire hazard than before burning. Brush-cleared fields grazed by a few Angoras stay clear, while sheep-grazed areas without Angoras revert to brush.

Brush Species Used for Browse

Angora Goats will graze almost all species of brush to some extent; however, they eat some species much more readily than others. Evergreen oak sprouts and brush are very palatable to Angoras and are excellent feed. The deciduous oaks are eaten during the summer months. Mixed brush areas produce very good browse because the different species leaf and bloom at different times throughout the year. Some of the better browse species are California scrub oak, chamise, dwarf interior live oak, wedgeleaf ceanothus, western mountain-mahogany, most species of manzanita, and toyon in season. Angoras will actually debark and kill some brush species. The coffee berry (Rhamus Californica) should be eliminated from goat pastures since there is strong evidence that this plant will cause blindness in goats. Blackberries and wild roses are eaten but constitute a hazard since mohair can become tangled in the thorns.

Shearing Practices

Shearing is done in the fall and spring. The hair should be sorted into the grades. (Shown elsewhere in this publication.) A 20-tooth comb is used on the shears. Second cuts should be avoided. The clip should be packed in standard 5-foot mohair bags. (Wool is packed in 6-foot bags.) Bags are available through the Mohair Association.
Parasites (Internal)

Angora Goats are subject to the same internal parasites as sheep. The most common offender is the eastern stomach worm, *Haemonchus*. This is probably introduced with imports of goats from Texas. Wet, swampy, muddy areas or shallow water are the principal source of reinfections. Goats may be drenched with Tramisol (R), thibenzole or phenothiazine, but management must change or the problem will persist.

Other internal parasites common in California are the thread-necked strongyle, medium stomach worm and the small black scour worm. Other parasites that can cause difficulty are lung worms and liver fluke.

Coccidia, a microscopic one-celled protozoan, can cause serious disease outbreaks in herds suffering from shipping stress or close confinement. Sulfonamides and sanitation are used in treating this disease. Growers are urged to work closely with their veterinarian in solving parasite or disease problems.

Parasites (External)

Goats are subject to attacks from lice, mites, flies, and warbles. Major external parasites of goats are the biting and sucking lice. These pests can cause a drop of one or two grades in mohair quality.

Goats should be put through a dip after each shearing. The mohair should be allowed to grow for a week or two before dipping. It is very important to dip a second time, 14 days after the first dip. This kills lice hatched after the first dip. (In theory, a ranch can be made free of lice with two dippings, 14 days apart. This is seldom adequate however, and dipping usually becomes a routine operation after each shearing.)

Breeding Practice

Yearling does should weigh about 70 pounds at the beginning of the breeding season. Bucks should be at least one year old and well grown out. Both does and bucks are seasonal breeders. Mating usually takes place in July or August. Does are stimulated to start estrous cycling by the presence of the buck goat. Does come into heat about eight days after the buck is introduced. Ovulation rate is higher during the second heat period than the first. There is a marked drop in the rate in the third heat period. Gestation in Angora Goats takes from 139 to 156 days (average is 149.2).

Kidding Practices

Where possible, kidding pens with heat lamps are desirable. Weak kids should be helped to nurse. Hand milking may be necessary to reduce the size of the teat so that the kid can nurse. Kidding pens are useful to be sure the doe has accepted the kid. Dry, warm
shelters should be available from kidding to weaning time as this period occurs during cold rainy weather. Goats have very little subcutaneous fat and, therefore, are very subject to chilling.

Castration

Young male kids should be castrated. Some ranchers wait until they are yearlings so they will be larger before becoming wethers. A new method of castration called the "Bairdutcjan" method has proven very effective in California trials. This is done by making a small incision in the lower half of the testicle and squeezing out the soft inner tissue. The method causes less shock than the normal method. Since the growth hormone tissue is retained, the goats grow larger and faster than normal castrates or intact bucks. They grow horn like a buck goat, produce more mohair, but are sterile and do not exhibit libido.

Income from Angoras

Angora kids are in strong demand for the Easter season, especially among the Slavonians of the Mother Lode and their relatives throughout the state. Prices for kids have been rising for several years; 1972 prices were $18 to $25 per head. Some older Angoras are slaughtered and smoked for a product called "Kastradina." Buyers from the valley often purchase hundreds of Angoras for use in farm labor camps. Aged goats are used in the sausage trade.

In the spring of 1973, Mohair prices rose to over $2.50 per pound. The average June price for spring kid hair was $2.30 per pound. National average prices for Mohair from 1963 to 1972 varied from 73¢ to 94¢ per pound.

California mohair prices have averaged 15¢ below the national average or the Texas average. This difference is principally due to transportation costs, brokerage costs and loss from marketing an ungraded clip. National Mohair production has declined since 1962 from 27,215,000 pounds to only 8,400,000 pounds in 1974.

Income can be increased by using improved breeding stock, the use of registered bucks in all herds, and the elimination of Spanish type goats from Angora flocks. Rotation grazing on brush and better nutrition in general will improve the weight and quality of the clip.

The marketing of a graded California clip through a single marketing outlet will greatly improve the price situation and bring California closer to the national average price.

The Calaveras County Wool Pool has set up a separate Mohair Pool with this objective in mind. Eventually, they plan to ship carload lots to the Texas market. California growers have also lost the advantage of selling high-priced kid Mohair because they fail to bag kid fleeces separately at shearing time. Kid Mohair sells for as
much as 130% per pound more than adult Mohair. The California Wool Marketing Association in Stockton occasionally buys Mohair. When these markets are not active, the Mohair Association sometimes pools hair for shipment.

TABLE I

Goats and Mohair in California:

Average number goats clipped: 1967: 9,000  
1968: 7,000  
1969: 6,000

Average clip per goat 1967: 6.0 pounds  
1968: 6.0  
1969: 5.5

Average Mohair production 1967: 54,000 pounds  
1968: 42,000  
1969: 33,000

TABLE II

Cost and returns from 500 Angora Goats. (One acre per goat of brush-grass pasture; eight pounds Mohair per doe; 20 pounds Mohair per buck; 100% kid crop, 15% replacement per year.)

Costs

<table>
<thead>
<tr>
<th>Feed:</th>
<th>1972 Prices</th>
<th>Your Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range, interest on investment @ 7%</td>
<td>$ 7,000</td>
<td>$</td>
</tr>
<tr>
<td>Taxes on range @ $2.50/acre</td>
<td>1,250</td>
<td></td>
</tr>
<tr>
<td>Hay, 30-tons @ $30/ton</td>
<td>900</td>
<td></td>
</tr>
<tr>
<td>Pellets, 4-tons @ $50/ton</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Salt and minerals, 2-tons @ $80/ton</td>
<td>160</td>
<td></td>
</tr>
<tr>
<td>Total Feed Costs</td>
<td>$ 9,510</td>
<td>$</td>
</tr>
</tbody>
</table>

Other:

| Replacement bucks, 5 @ $100/each          | $ 500       | $           |
| Shearing (Fall & Spring), 80¢/head        | 1,600       |            |
| Mohair bags, 15 @ $1.75/each              | 26          |            |
| Pickup, 1,000 miles @ 13¢/mile             | 130         |            |
| Dog                                        | 30          |            |
| Depreciation on buildings, fences and      | 500         |            |
| equipment                                  |             |            |
| Interest on investment, goats, buildings   | 854         |            |
| & equipment                                |             |            |
| Taxes on goats and buildings               | 150         |            |
| Miscellaneous (insurance, etc.)            | 250         |            |
| Veterinary (dipping & drenching)           | 165         |            |
| Association dues ($5 plus 1/2¢/lb, Mohair) | 30          |            |
| Total Other Costs                          | $ 4,235     | $           |

TOTAL COSTS $13,745 $
Income

<table>
<thead>
<tr>
<th>Item</th>
<th>Number</th>
<th>Weight</th>
<th>Price</th>
<th>Incentive</th>
<th>Price &amp; Incentive</th>
<th>1972 Total Value</th>
<th>Your Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manure</td>
<td></td>
<td>104 tons</td>
<td>$16.25</td>
<td></td>
<td></td>
<td>$1,690</td>
<td>$ --</td>
</tr>
<tr>
<td>Kids</td>
<td>425</td>
<td>--</td>
<td>20.00</td>
<td></td>
<td></td>
<td>8,500</td>
<td>--</td>
</tr>
<tr>
<td>Mohair:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>--</td>
</tr>
<tr>
<td>Fall adult</td>
<td></td>
<td>2200 lbs.</td>
<td>.60</td>
<td>.20</td>
<td>.80</td>
<td>1,760</td>
<td>--</td>
</tr>
<tr>
<td>Spring adult</td>
<td></td>
<td>2200 lbs.</td>
<td>.60</td>
<td>.20</td>
<td>.80</td>
<td>1,760</td>
<td>--</td>
</tr>
<tr>
<td>Spring kid</td>
<td></td>
<td>220 lbs.</td>
<td>2.10</td>
<td>.73</td>
<td>2.83</td>
<td>623</td>
<td>--</td>
</tr>
<tr>
<td>Fall kid</td>
<td></td>
<td>220 lbs.</td>
<td>2.10</td>
<td>.73</td>
<td>2.83</td>
<td>623</td>
<td>--</td>
</tr>
<tr>
<td>Cull does</td>
<td>75</td>
<td>--</td>
<td>15.00</td>
<td></td>
<td></td>
<td>1,125</td>
<td>--</td>
</tr>
<tr>
<td>Cull bucks</td>
<td>5</td>
<td>--</td>
<td>15.00</td>
<td></td>
<td></td>
<td></td>
<td>$ 75</td>
</tr>
</tbody>
</table>

Total Income $16,156

Value of Goat Manure

Goat manure compares very favorably with other animal manures. The sale of manure collected from barns and pens can be a source of income.

TABLE III

<table>
<thead>
<tr>
<th>Manure</th>
<th>Nitrogen % N</th>
<th>Phosphoric Acid % P₂O₅</th>
<th>Potassium Oxide % K₂O</th>
<th>Organic Matter % O.M.</th>
<th>Cubic Feet Per/Ton</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goat</td>
<td>2.77</td>
<td>1.78</td>
<td>2.88</td>
<td>60</td>
<td>70</td>
</tr>
<tr>
<td>Dairy Cow</td>
<td>.70</td>
<td>.30</td>
<td>.65</td>
<td>30</td>
<td>55</td>
</tr>
<tr>
<td>Steer</td>
<td>2.00</td>
<td>.54</td>
<td>1.92</td>
<td>60</td>
<td>70</td>
</tr>
<tr>
<td>Sheep</td>
<td>2.00</td>
<td>1.00</td>
<td>2.50</td>
<td>60</td>
<td>70</td>
</tr>
</tbody>
</table>

MOHAIR ASSOCIATION OF CALIFORNIA

In 1960, several Angora producers in Amador and Calaveras Counties surveyed the state to contact as many Angora raisers as possible. This survey resulted in a meeting at which a statewide association was formed. The first president was Norman Dal Porto of Jackson, California. Headquarters of the Association are located at 108 Court Street, Jackson, CA 95642. The name of this organization was originally the California Angora Goat Raisers Association. The Board of Directors meets quarterly in the Cooperative Extension Service office in Jackson. Past presidents are Charles Stembridge of Coulterville and James Cuneo of Jackson. Mr. Dal Porto was reelected president in October 1972.
INFORMATION SOURCES:

"The Angora Goat" USDA Farmers Bulletin No. 1203
Texas Angora Goat Production Texas Agricultural Extension Service,
Selecting Angora Goats for Increased Mohair and Kid Production College Station, Texas 77840

The Ranch Magazine
Hotel Cactus Bldg.
P. O. Box 1840
San Angelo, Texas 76901

American Angora Goat Breeders Association
Rocksprings, Texas 78880

Cooperative Extension
108 Court Street
Jackson, CA 95642

Mohair & Goat Association of California
Norman Dal Porto, President
Star Route 3, Box 235CR,
Jackson, CA 95642

National Wool Market Review (a weekly report on Mohair prices)
USDA Market News Service, Denver,
Federal Service Center Bldg. #81
Denver, CO 80225