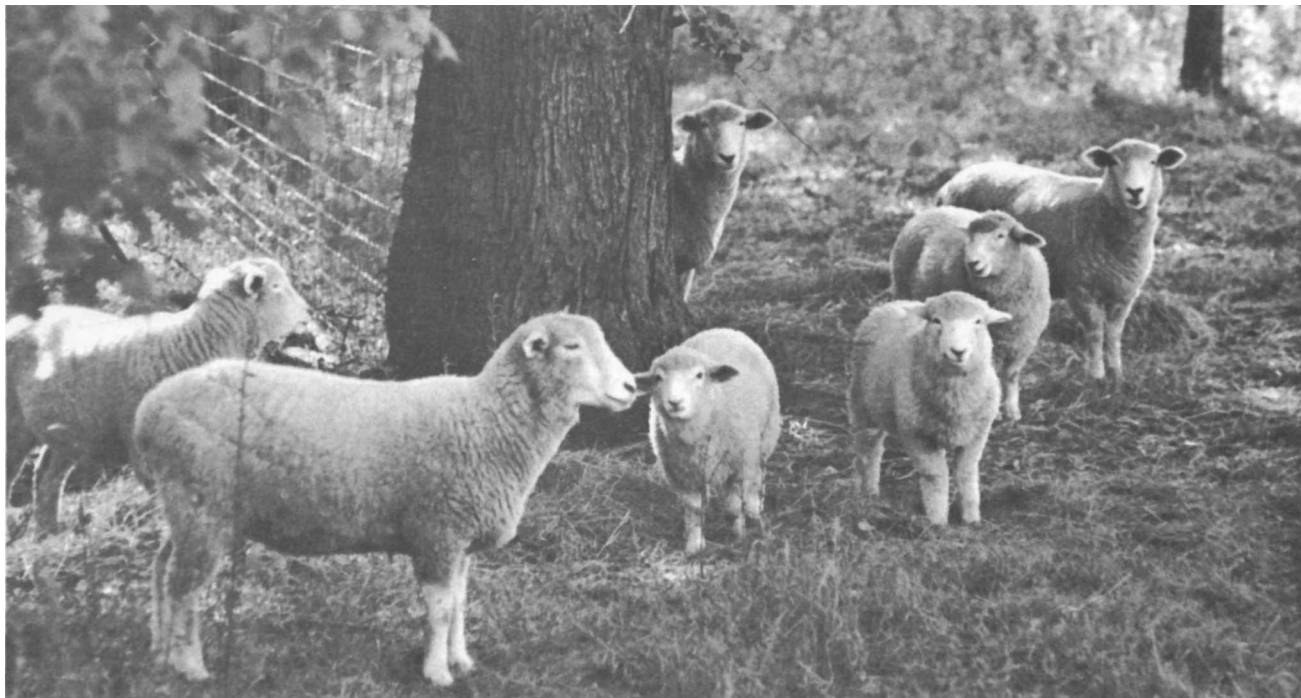

Wool Production from Small Flocks of Sheep

by Kristin Nicholas



When I learned to spin five years ago while attending Oregon State University on an exchange program, I was introduced to raw wool from many breeds of sheep. As a new spinner, I was anxious to experiment with different wools and to learn the qualities of the yarn produced from each breed. I began spinning Romney wool from native Oregon sheep. In the course of my development as a spinner, I have learned that there are many other wools from all over the globe with which we should experiment.

I have heard spinners speaking of their fleeces from New Zealand, Great Britain, the Falkland Islands, Australia, and the various corners of the world. I have tried wool from numerous countries and find it satisfying to fantasize about the sheep and their far-away lives. The fleece could be from an animal who has lived through many lightning storms. It could be from a ewe who has reared many sets of twin lambs out on the desolate range, or it could be from a relatively young mother just beginning her years of producing lambs and wool.

Foreign wools have taken on an air of a "status symbol" to some handspinners. But we must not overlook something as close as our own backdoor, the wool of the American sheep.

Recently, I finished my master's degree at Colorado State University in textiles and clothing. As a spinner, weaver, and part-time sheep producer, I was naturally interested in choosing a project for my thesis which would be of particular interest to me. This research was entitled "Wool Production From Small Flocks of Sheep". In this article I hope to introduce you to the American sheep producer, with special emphasis on the small flock producer, highlighting some of the interesting and relevant findings from my study which will be of interest to you as a handspinner.

Sheep production

I am one of a growing number of part-time farmers who raise sheep. My partner, Mark Duprey, and I keep a flock of 20 Romney and cross-bred ewes which provide us with wool, meat, and pelts while they are being used to reclaim overgrown pastures on a picturesque hill farm in Bernardston, Massachusetts. Our flock is one of the 52% of the sheep operations in the United States which produce less than 25 sheep.¹ Sheep are an excellent part-time farm enterprise for people who want to utilize existing farm buildings and unused pastures on their property. Children can care for sheep more easily

Romney ewes and lambs in late summer on the Eden Trail Sheep farm in Massachusetts.

than large beef or dairy cattle. With little capital expense on feed and buildings, one can successfully raise sheep in small numbers, and a flock may also be kept in a small area if pasture is not available.

I grew up in a semi-urban town in northwestern New Jersey where sheep were always the "cute" little animals we saw in pens at our county fair. In reality, the majority (80%) of sheep grown in the United States are found in our western states. The range state of Texas produces 19%, or almost one-fifth, of America's sheep. While most sheep producers (83%) raise less than 100 ewes, over 50% of our sheep are raised by only 2% of America's sheep producers.² There are three basic kinds of sheep producing operations: large range flocks, confinement sheep feeders, and small farm flocks.

A small flock of 40 sheep needs only one ram for breeding purposes, though occasionally a producer will have more than one ram in order to pass along different traits to the offspring. On one farm there are sometimes two entirely separate flocks of very different breeds which allows the farmer to cross the two breeds to produce sheep with the most desirable qualities of both. Producers are wary of inbreeding; therefore rams will be changed annually to biannually.

Sheep are seasonal breeders. Ewes have a gestation period of five months and come into heat from August to January (with the exception of some breeds such as Dorset which will breed throughout the year). Many small flock producers will breed their sheep early so the ewes lamb from December to February. These lambs will reach market weight by the Easter holiday season when top dollar is paid for lamb. Small producers can more easily produce early spring lambs than range producers can by providing a shed to shelter the newborn lambs from drafts, and adding supplemental heat with a heat lamp.

When first born, a lamb is very vulnerable. If a ewe is not a good mother and the lamb does not receive the much-needed first milk, called colostrum, which provides it with necessary antibodies and nutrients in its first hour or so of life, the lamb may die, being very susceptible to pneumonia and many other diseases. Upon birth a lamb leaves the warm, secure body of its mother and hits the cold, hard ground, which could have a temperature of less than 0° F.—a severe shock for even the healthiest, strongest lamb.

Frequently, a ewe will produce twin lambs. Twins, although very desirable to the sheep producer, are sometimes smaller and weaker than a single lamb and may need additional care. Finnsheep are known for multiple births of lambs, sometimes having litters of up to seven. Since a ewe has only two teats, these extra sheep become bottle lambs. Producers may use a ram for breeding which is part Finnsheep to increase the lambing percentage of the flock.

Wool production

Wool fiber is produced throughout the world with the United States contributing only a small amount of the total. In 1978, we produced 46.4 million pounds of raw wool as compared to New Zealand, which produced 316.5 million pounds and Australia which produced 695.4 million pounds.³ In 1980, we imported 80.5 million pounds of scoured wool.⁴

As most spinners know, the fleece of a sheep varies from animal to animal and among breeds. Many factors such as climate, stress, breed, heritage, nutrition, insects, disease, and environmental living conditions affect the coat of a sheep. Wool quality is a highly heritable trait within sheep; if both a ram and a ewe have excellent fleeces, their offspring will usually produce nice wool. When choosing a ram, producers should choose one with a high wool pro-



Kristin's Romney ewe, Putney, with two newborn twins, Lester and Sophie, immediately after birth.

duction record, as it costs no more to produce a large wool clip (the wool shorn from all a producer's animals in one year). Wool can be responsible for anywhere from 10% to 50% of the income of a flock depending on the marketing and management techniques employed by the producer.⁵

Many producers form cooperative associations called wool pools. Each year the wool from these farmers' flocks is gathered at a central place to be graded and stored. The pool will then sell this wool to a wool buyer who will in turn sell it to a textile company. The costs of selling the wool are split up among the producers and they are paid a per pound price for their wool.

Large ranch sheep producers deal exclusively with buyers of wool. These ranchers have huge amounts of wool to sell and therefore can try to get the price they desire for their wool. Sometimes it will pay a producer to store the wool in order to receive a better price. Reputations are made and kept within the wool industry, with certain areas of the country known for the various kinds and qualities of wool they produce.

Thesis research

I chose to do a national survey of sheep producers, with concentration on small flocks. I wanted to learn the answers to questions like: What do they do for a living? How many sheep do they keep? How do they market their wool? Why do they raise sheep? Here I will briefly introduce you to the information my study revealed. I hope it will help handspinners to become more knowledgeable about the American sheep producer.

I distributed a 26-question survey and a cover letter explaining my research project to 120 sheep producers throughout the United States. My sample was chosen by consulting periodicals, breeding directories, and advertisers in many sheep-oriented magazines and forming a list of producers from all over the United States. As with any scientific study, my results may be biased because of the respondents to my survey. I kept in mind that my goal was to learn more about the small flock sheep producer while selecting my sample.

The following is a brief synopsis of the results of my sur-



Putney still dotting over Lester!

PHOTOS BY KRISTIN NICHOLAS

vey which will be of special interest to handspinners. Producers responded to many questions regarding both themselves and their sheep operations. The majority of the producers (59%) were male, although female producers constituted a surprisingly high percentage (36%) of the respondents; 5% of the respondents were couples who were equally involved with their sheep. Occupations of the participants varied from farmers to professionals. Sheep raising was considered the main source of income by 14% of the participants.

The term "small flock" was determined by asking the producer to define it in numerical terms. Most producers felt that fewer than 50 sheep (44%) or fewer than 100 sheep (37%) defined a small flock. Some western producers stated that 500 sheep could be called a small flock.

The potential for growth in the small flock segment of the sheep industry is great. Most producers (47%) planned to increase their flock size; only 10% planned to decrease the numbers of sheep. The United States sheep population increased by 2% in 1981.

Medium-wooled sheep were the most popular breed category among sheep producers (53%). Common medium-wooled breeds were Hampshire, Suffolk, Finnsheep, Dorset, Cheviot, and Southdown. Many producers (31%) raised more than one breed of sheep. The primary reason for raising sheep was for sales of breeding stock (67%) as would be expected from the selection pressure of the original sample. Income was earned by selling more than one product such as breeding stock, meat, wool, and by-products.

Family, non-paid help was the most prevalent form of labor; only 9% of all producers surveyed hired help to assist them with their flocks. Feedstuffs for the sheep were more commonly purchased (42%) by the producers or were both purchased and produced (42%).

Wool production from small flocks was of special interest to me. A majority of producers (51%) sold more than \$500 of wool with a national 1980 average price per pound of \$.88. The producers surveyed sold their wool for average to above average prices (42% received \$.75 to \$1 per pound, 25% sold their wool for \$1 to \$2 per pound, and 13% sold for \$2 or more). The national average weight of

the 1980 fleece was 8 pounds; producers sheared fleeces of average and better weight.

The most common method of marketing the wool was through the wool pool (65%); many (22%) marketed the wool in more than one way. Wool was considered to be a bonus by the majority of the producers, although many couldn't foresee their wool being processed into a money-making product.

Buying wool from an American sheep producer

Buying wool from an American sheep producer can be an adventure. What handspinners should realize is that sheep are animals which live either outside or in a sheltered area. Sheep which live in small enclosures will be much dirtier than sheep which are allowed to graze on open pastures all year. The way in which sheep producers care for their animals is of utmost importance for us handspinners. Because we are processing raw wool by hand and want to produce an heirloom-quality product, we must be very picky about the amount of vegetable matter, bugs, dirt, and manure which we find in a fleece. A handspinner may steer clear of spinning a fleece from an American sheep because of one bad experience with a fleece unsuitable for handspinning. Your selection of a spinning fleece is very important. Find out as much as you can about the producer's methods of raising the sheep. How do they choose a shearer? Do they dip their sheep to control bugs? Where do the sheep live? How does the producer store fleeces? If we are careful when selecting a fleece to spin, our long, lustrous, clean wool may be raised by our fellow Americans.

Be adventurous when choosing your next spinning fleece. Call up your county extension service and ask for names of sheep producers in your area. You will be surprised to learn that as there are spinning guilds, so are there sheep producing associations. We handspinners and sheep producers should become friends; perhaps both groups in your community could share an evening program where ideas and techniques of sheep producing and handspinning could be explained. Your local spinning group could plan an excursion during lambing season to see the ewes and their lambs. You might be able to choose a sheep for which you could return to purchase the fleece after it is shorn. Sheep producing is as interesting and rewarding as handspinning—and the people who grow sheep are a great group to get to know. □

NOTES

¹Gee, C. Kerry. *A New Look at Sheep for Colorado Ranchers and Farmers*. Ft. Collins, CO: U.S. Dept. of Agriculture, Economics, Statistics, and Cooperative Services, 1979, p. 4.

²Ibid., p. 4.

³United States Department of Agriculture. *Agricultural Statistics—1979*. Washington D.C.: U.S. Government Printing Office, 1979, p. 338.

⁴Textile Economics Bureau, Inc. "The Wool Situation", *Textile Organon*, 1980, vol. 51, p. 199.

⁵Burkhart, H. Ray. "The Value of Wool", *Sheep!*, 1981, Vol. 2, No. 11, p. 10.

FOR FURTHER READING

The Shepherd, Sheffield, Mass. 01257. Monthly publication, \$9.50/year. *Sheep!* magazine, Highway 19E, Waterloo, Wisc. 53594. Monthly publication, \$12/year.

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Kristin Nicholas operates Eden Trail South, a mail-order business which sells raw wool from her Romney sheep, woollen yarns, sheep gift items, books, and her own knitting patterns, out of her home in Dover, New Jersey.