

Dairy and Livestock Management Fact Sheet



Are You Thinking of Raising Sheep?

Bulletin #2186

With changes in New England agriculture, many New England farmers and rural residents with land or other available resources are thinking of raising sheep. A lot of things need to be considered before you invest in a sheep enterprise. This fact sheet will help answer some of your questions and help you make a decision.

New England as a Sheep Region

New England is a good sheep region. In the mid-1800s, before the development of the western United States, it was a sheep producing region with several million sheep. New England also has the potential to produce excellent quality forage for sheep, both pasture and hay or silage. It is far enough north that the forages are highly digestible and nutritious. Our location also dictates that forage production is seasonal, with rapid growth of high-quality forage occurring during the late spring, early summer, and again in the fall. The long winters necessitate an extensive feeding period of hay or silage.

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New England is located in the center of the major lamb consuming regions of the United

States. However, the marketing systems for live lambs are not well developed, largely due to the small supply of lambs produced in this region. Lamb production also tends to be seasonal, but efforts are being made to produce a constant supply of high-quality lamb.

Wool represents a small percentage of income from sheep. The wool markets have been stagnant in recent years with the pooling of wool clips in marketing pools. Niche markets for hand spinning yield higher prices for wool.

New England apparently has people interested in raising sheep; however, many of them are not familiar with modern sheep production techniques. Older people who were good shepherds are disappearing from the scene. New producers need to acquire the information, skills and judgement necessary for successful sheep production.

Evaluating Your Resources

To run a successful sheep enterprise, you'll want to efficiently produce high-quality lamb and wool that can be profitably marketed. The first step is to evaluate the resources you have available. Then you'll need to design a sheep production system that will use those resources most efficiently. The resources that you need to evaluate are:

1. **Land:** How much land is available and what is its productivity? If all the forage produced on an acre of land could be harvested as hay and measured in tons (or hay equivalent per acre), you would have an estimate of your land's productive capacity. Some rough hill

lands in New England only produce up to one ton of hay equivalent (H.E.) per acre per year. This would probably be harvested and consumed by the sheep as pasture. "Average" pasture and hay land may produce two or more tons of H.E. per acre. Good land might produce four or five tons if properly managed.

Suppose you have 100 acres, of which 30 acres are rough poor pasture and will produce about one ton H.E., 30 are average and will produce two or more tons of H.E. and 30 are good to excellent and should produce four tons of H.E. per acre. Your total production would be $30 \times 1 = 30$, plus $30 \times 2 = 60$, plus $30 \times 4 = 120$. This equals a total estimated H.E. of 210 tons. An average ewe requires $\frac{3}{4}$ ton of hay/year (half of this comes from pasture). So in this example, you should have enough forage for about 280 ewes (210 divided by .75).¹

This method is, of course, only an estimate. But it is a quick, easy and reasonably accurate method to evaluate your land resources for sheep. On most farms, improvements in pasture management and forage culture can result in big increases in production. Just remember that about half of the forage production would be consumed as pasture and the rest as harvested forage in the winter. You must be prepared to provide hay or silage for winter feed.

- 2. Buildings:** Do you have buildings to house the number of ewes you want in the winter, along with their lambs? You will need about 15 square feet for each ewe. So in the example of a 280-ewe flock, you would need about 15×280 , or 4,200 square feet for the sheep. (The exact amount will depend on your production system.)

Dry (non-lactating) ewes need only modest protection, even in winter, if they are well fed, while ewes with January baby lambs need more. Most older dairy barns, machine sheds and outbuildings can be converted to excellent quarters for sheep. But remember,

¹ We use 100-acres for ease of calculation. This is not the only acceptable size for a sheep operation. Many New England sheep flocks are smaller than the examples.

sheep should have an *open, cold, dry* barn rather than a *tight, warm, humid* barn. They wear sheepskin coats and do well in the cold, except for when baby lambs are born.

- 3. Machinery and Equipment:** Do you have the equipment and machinery to harvest hay, clip pastures, clean barns, etc.? Or can you arrange with a neighbor to do this? Or should you plan on purchasing hay? If you only need about 100 tons of hay, it may be cheaper and easier to buy the hay than to make it. This might also allow you to increase your ewe numbers.

What about sheep equipment? You will need proper fences (high-tensile electric), corrals, sorting pens, lambing pens, etc. You will also need small pieces of equipment for foot trimming, tail docking, ear tagging, and possibly for shearing.

- 4. Markets:** How will you market your products? Are you planning to sell hot-house lambs, feeder lambs, freezer lambs, market lambs, breeding stock, wool or all of the above? Are you planning to sell on a seasonal basis or have an even cash flow with the lambs for sale throughout the year? Your market is a valuable resource that must be studied and cultivated.

Sheep probably respond more to proper care and attention than any other farm animal. For the most part, the labor is not hard, but they require quality time and quality labor.

- 5. Labor:** Do you have the time to properly care for the sheep? Sheep probably respond more to proper care and attention than any other farm animal. For the most part, the labor is not hard, but they require quality time and quality labor. Timeliness of sheep management tasks is very important. You must have time to do the jobs when required and not put them off until next week or next month. You must have time to observe the animals and recognize their needs.

6. **Capital:** Do you have the capital or money available to get started, hold you until the sheep are in full production and maybe see you through some dips? Finances are individual, so we cannot give much information here. You need to carefully evaluate your financial resources before starting a sheep enterprise. Compare sheep with other alternatives.
7. **Attitude:** What is your attitude toward sheep? Do you like them? Would you be willing to brave cold rains or snowstorms to feed and care for them? Would you be willing to miss a ball game or a social event to be sure the sheep were protected from marauding dogs or coyotes? Do you enjoy late night checks in the lambing barn? If you do not have a positive attitude, do not read any further.

Establishing Production Goals and Management Systems

Once you evaluate your resources, you can set-up an overall management system that will use them efficiently and be profitable. Sheep are amazingly adaptable. Using different breeds and systems, you can set and meet your production goals. In New England, most farms have the potential to produce excellent forage and, since concentrates can be purchased, can produce at high levels. The goals you set will depend on your resources, abilities, the ability of the sheep and the products you hope to produce. (See

Breed Characteristics

- **For medium wool and reasonable levels of lamb production**, the Corriedale and Columbia breeds are possible choices.
- **For rapid growth**, the large blackface breeds such as Suffolk, Hampshire, Shropshire and Oxford are hard to beat.
- **For out-of-season lamb production**, the Dorset is popular.
- **For fecundity or large litters**, the Finnsheep excels.

Product Choices below.)

The level of production, especially of lamb, can vary from less than one lamb per ewe per year to more than three lambs per ewe per year. Choosing the product to be produced and a production goal depends on the breed of sheep and your management system. Each breed represents a given genotype that is best in some situations and not in others. For example, if you want to produce only fine wool, Merino or Rambouillet might be the breed of choice. (See Breed Characteristics above.)

Many production systems use combinations of breeds to meet specific goals. (See Management Systems on page 4.) Of course, your success will ultimately depend on good management, nutrition, technology, disease control and marketing.

Product Choices

Lamb for meat:

- **Market lamb**
(100 to 110 pounds)
- **Feeder lamb**
(40 to 70 pounds)
 - sell to lamb feeder
 - keep and feed to 100 to 110 pounds
 - custom-feed in feedlot
- **Hot-house lamb**
(30 to 40 pounds)
sold at Easter or other celebration time.

Breeding stock

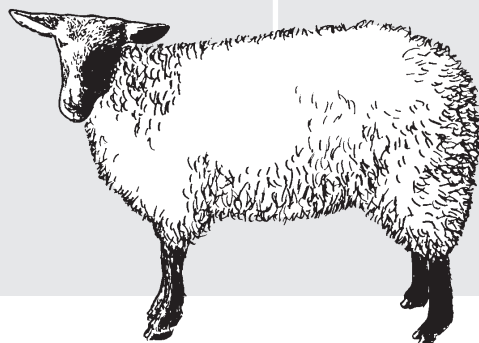
Both registered and commercial.

Wool

Probably sold at wool pool or developed as a specialty market for spinning or felting.

Milk

Sheep's milk for cheese is popular in some areas of the world, but milk breeds aren't very common in the United States. However, interest is increasing.



Sheep Management Tasks

Any successful sheep producer keeps up with day-to-day management tasks, and does them properly.

- **Lambing:** Can you handle a ewe properly before and after lambing? Can you assist her as needed or recognize more serious problems? What do you do with a newborn lamb?
- **Docking:** How do you remove a tail from a young lamb?
- **Vaccination:** Can you recognize the important diseases? Do you have a vaccination schedule?
- **Ram care:** Can you care for rams even during the non-breeding season?
- **Weaning:** Do you know about the weaning process?
- **Baby lamb care:** Do you know the basics of baby lamb care?
- **Shearing:** Can you learn to do it yourself, hire a custom shearer or do both?
- **Internal and external parasite control:** Every sheep has parasites. Can you set up an effective control program?
- **Foot trimming:** Do you know how to do this? (It can be hard on your back.)

Markets for Lamb and Wool

Most wool is marketed through one of the wool marketing cooperatives, although some is sold to other buyers or, hand-spinners, and small quantities are custom made into yarn, cloth or blankets.

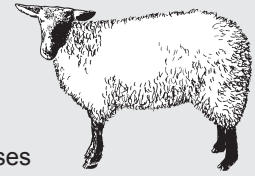
Lamb markets need further development and require a larger and more consistent supply. Lamb can be marketed through local auctions, the spring hot-house lamb market, the freezer trade, producer cooperatives or directly to large slaughterhouses.

Where Do You Get Sheep?

If you decide to start a sheep enterprise, where you get your starter flock is critical. It can be difficult to get exactly the breed you want and number you want at reasonable cost. (See the list of resources at the end of this fact sheet.)

Desirable Sheep Characteristics

- out-of-season breeding
- multiple births
- early sexual maturity
- high average daily gains
- desirable meat-type carcasses



Breeds or types should either lamb out-of-season, have large lamb crops or both. Some beginning producers simply started with whatever sheep are available and set up a breeding program to create the preferred genotypes by proper ram selection and careful culling. Obtaining the proper sheep is difficult, but exceedingly important. (See Desirable Sheep Characteristics above.)

Feeding Sheep

Sheep are efficient users of forage. In fact, they can get a larger portion of their nutrients from pasture and hay than most other animals. They eat and control most weeds and, with proper

Management Systems

In New England, three basic management systems (with variations) are used. They are used as follows:

1. **Early-lambing:** Lamb in January or February and sell hot-house lambs on the Easter market, or sell 100- to 110-pound lambs by early summer.
2. **Late-lambing:** Lamb in April or May to maximize summer and fall pasture use and sell feeder or market lambs in the fall. Production costs may be lower, but lambs are sold on a lower market. Summer parasites and predators are also more of a problem.
3. **Accelerated lambing:** Lamb several times a year, with each ewe lambing three to five times in two to three years. You will increase production with frequent lambing, but require the right sheep and careful management.

pasture management, can significantly boost production of many native pastures.

The forage must, at certain times, be supplemented with grains or other concentrated feeds to meet nutritional requirements, especially for ewes during late pregnancy or lactation and for rapidly growing lambs. Most dairy feeds are suitable for lactating ewes. Mineral or salt combinations are also available. The trace elements iodine, cobalt and selenium are deficient in feeds grown in New England, so supplements are needed. Copper is toxic to sheep at lower concentrations than it is for other livestock. So read labels to be sure copper levels will not harm sheep.

One big question is what harvested forage or method of harvesting you should use. Many dairy farms have silos and silage-making equipment available, and can use hay crop silage as winter feed. Smaller farms usually use small square bales, although big round bales are common. The small square bales are easier to handle and can be transported, purchased or sold. They can be produced with readily available equipment and offer more flexibility than other types.

Whatever feed system you decide on, remember that any investment in harvesting equipment must be paid for by the sheep. A small flock cannot cover the costs of large tractors, forage harvesters, silos, and other major equipment.

The big round bales are popular and require little labor if you have the right handling equipment. Some producers successfully self-feed these in specially designed feeders to reduce labor and feed wastage.

A beginning sheep producer must also decide whether harvested forage should be purchased or produced. Farmers who are adding on a sheep enterprise probably already have the production capability needed, but others may be wise to

purchase hay. If you start with 50 or fewer ewes and only 15 or 20 tons of hay are required, purchasing hay seems reasonable. Whatever feed system you decide on, remember that any investment in harvesting equipment must be paid for by the sheep. A small flock cannot cover the costs of large tractors, forage harvesters, silos, and other major equipment.

For More Information

The best information often comes from other sheep producers in your area who are willing to spend some of their valuable time with you and help you make decisions. Consider volunteering to work with another sheep producer for a few days. You will learn, and he or she may catch up on some jobs that need doing!

Another valuable source of information is your county Cooperative Extension office.

Sheep Publications

Body Condition Scoring of Sheep, Fact Sheet No. DA594-09, IVD 3g, Engle, Clair, Department of Dairy and Animal Science, Pennsylvania State College of Agriculture Sciences, University Park, PA 16802.

The National Wool Grower, 6911 S. Yosemite St., Englewood, CO 80112-1414.

Sheep Breeder Magazine, P.O. Box 796, Columbia, MO 65205.

Sheep Housing and Equipment Handbook, MWPS-3, Midwest Plan Service, 122 Davidson Hall, Iowa State University, Ames, IA 50011-3080, Toll-Free Orders: 1-800-562-3618, Customer Service: 515-294-4337, Fax: 515-294-9589.

Sheep Industry Development Program, c/o American Sheep Industry Assoc., 6911 S. Yosemite St., Englewood, CO 80112-1414.

Sheep! Magazine, Box 329, Jefferson, WI 53549, web site <http://www.sheepmagazine.com/>.

The Shepherd Magazine, 5696 Johnston Rd., New Washington, OH 44854.

Sheep Textbooks

A Practical Guide to Sheep Disease Management, Norman Gates, DVM, 1985, MPH, News-Review Publishing, Moscow, ID 52760-9999.

The Lamb Marketing Primer, William K. Kruesi, 1991, University of Vermont Extension System Publications, Burlington, VT 05401-9999.

Nutrient Requirements of Sheep, 6th edition, 1995, National Academy Press, 2101 Constitution Ave., N.W., Washington, DC 20418.

The Sheep Book: A Handbook for the Modern Shepherd, Ron Parker, 1983, Charles Scribners & Sons, New York, NY.

The Sheep Raisers Manual, William K. Kruesi, 1985, Williamson Publishing, Charlotte, VT 05445.

University of Maine Cooperative Extension
Livestock Web Page:
<http://www.umaine.edu/livestock/>.

Sheep Associations

Maine State Breeders Association, Richard Brzozowski, Treasurer, 525 Cobb's Bridge Road, New Gloucester, ME 04260

Visit the UMCE web site at: <http://www.umext.maine.edu>

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