



Great Grazing with Sheep and Goats

Small ruminants can fit into farms in a variety of ways. Their grazing preferences make them ideal animals to feed on weeds, brush, and other plants that cattle often won't eat (multiflora rose and pigweed are two notorious examples). The small size of sheep and goats makes them less likely to damage wet soils. They are easier to work with than cattle, cheaper to buy and maintain, and require less equipment. They are prolific and do well on forages.

The varied products of small ruminants — milk, cheese, wool, meat, leather or skins, manure, and specialty items like soaps and lotions — are easy to market, once a market is found. Current prices for meat goats and lambs are very good. Because goats and sheep mature quickly and have a short gestation, farmers can bring products to market very quickly, improving their cash flow. This also means that herd and flock sizes can be rapidly increased. Return on investment is usually better for small ruminant enterprises than for cattle. —*Excerpted from ATTRA's recently published Small Ruminant Sustainability Checksheet, an excellent tool to help farmers evaluate their sheep and goat operations.*



Photo by Tamara Bauer, www.sxc.hu

What are Ruminants?
Ruminants are grazing animals whose complex stomachs are capable of digesting large quantities of grasses and shrubs. Sheep and goats are known as small ruminants. For more information see ATTRA's Goats: Sustainable Production Overview.

Small Ruminants to the Rescue

Teresa Maurer, ATTRA Program Manager

A grant awarded to Dr. Karen Launchbaugh (University of Idaho) and Dr. John Walker (Texas A&M University) will result in a much-needed new handbook, *Prescribed Grazing for Vegetation Management: A Handbook for Sheep and Goat Producers and Land Managers*. NCAT staff have been invited to contribute to this new guide, which is funded by USDA's National Sheep Industry Improvement Center. The ATTRA Web site will be a gateway to the new manual, which will be published in early 2006. Other partners on the project include the American Sheep Industry Association, the Joe Skeen Institute for Rangeland Restoration, and the Montana Sheep Institute.

The new handbook will address the details of managing grazing sheep and goats to remove weeds, reduce fire frequency, and improve plant composition on rangelands and wildlife habitat. Many states are facing serious land management problems due to the spread of flammable brush, leafy spurge, spotted knapweed, yellow starthistle, cheatgrass, salt cedar, and kudzu. Property owners generally hire crews to apply expensive herbicides or to hoe, chop, and burn unwanted vegetation. Sheep and goats are proving to be an even more effective tool.

Katahdin sheep at Round Mountain Farm, Arkansas. Katahdins have been used in parts of the Southeast to control kudzu.



In the Northern Great Plains, for example, leafy spurge aggressively competes with native plants on more than 3 million acres of rangeland. Cattle avoid grazing leafy spurge, but

(see "Ruminants" on page 3)

Only Ewes Can Prevent Wildfire

In the fire-prone West, a growing number of small ruminant producers use their animals to create fire breaks between suburbs and the flammable wildlands. In the "Only Ewes Can Prevent Wildfire" program near Carson City, Nevada, sheep grazed a fenced corridor around the city, removing 71 to 83% of easily ignitable vegetation. A survey of nearby homeowners revealed that more than 90% supported the project and preferred the sheep to traditional chemical or mechanical methods of creating fire breaks. To learn more about managing animals to reduce fire danger, see the CD on page 2, *Goats! For Firesafe Homes in Wildland Areas*.

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Reducing Parasite Problems in Small Ruminants

Internal parasites are a major health concern for sheep and goats. The problem is compounded by the fact that the parasites are rapidly becoming resistant to de-worming medications. Therefore, management *must* be the primary method for sustainable control of internal parasites. You can reduce parasite problems by having a low stock density and rotating your animals to different pastures.

All parasite infestations occur when the animal ingests the infective larval stage in contaminated pasture, hay, or living quarters. The larvae develop from eggs that were passed from an animal through its feces. Because the larvae do not climb up very high on grass blades, removing animals from pastures before the plants are grazed shorter than four inches will help prevent infestations. Letting animals browse on vines, shrubs, and woody plants will also help. Including cattle and poultry in your rotation is a good idea, since they ingest the parasites of sheep and goats without harm, removing larvae from the pasture.

Symptoms of a parasite problem include weight loss, rough coat, depression, and anemia (evidenced by pale mucous membranes, especially in the lower eyelid or gums). It is important to realize that heavily infected animals are “seeding” the pastures with parasite larvae. Culling severely affected animals will decrease the herd’s problems by reducing pasture contamination and by selecting for parasite-resistant animals.

A clinical on-farm system called FAMACHA® was developed in South Africa to classify animals based upon level of anemia. This is done by comparing the color of the lower eyelid to a special colored card. The system recommends de-worming or culling the most susceptible animals. FAMACHA® is only useful in detecting animals infected with barber-pole worms (*Haemonchus contortus*), the primary problem in goats and sheep. To learn about FAMACHA®, visit the Web site of the Southern Consortium on Small Ruminant Parasite Control, www.scsrpc.org, and then enlist the help of your veterinarian.

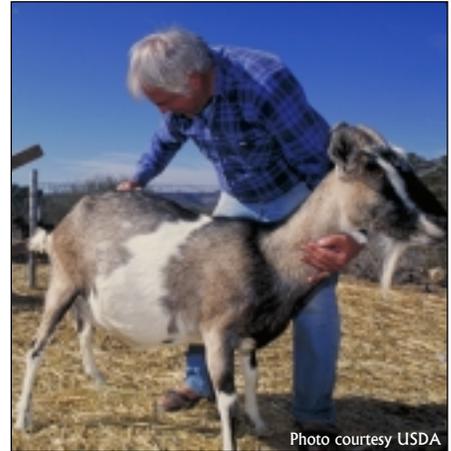


Photo courtesy USDA

Visual appraisal is one way to evaluate an animal’s health.

ATTRA Publications about Small Ruminants

The following publications are available free from ATTRA at 800-346-9140 or www.attra.ncat.org

General

- Dairy Sheep
- Sustainable Goat Production: Meat Goats
- Goats: Sustainable Production Overview
- Dairy Goats: Sustainable Production
- Sustainable Sheep Production
- Small Ruminant Sustainability Checksheet
- Small Ruminant Resources

Health

- Integrated Parasite Management for Livestock
- Predator Control for Sustainable and Organic Livestock Production

Forages

- Assessing the Pasture Soil Resource
- Matching Livestock and Forage Resources in Controlled Grazing
- Meeting the Nutritional Needs of Ruminants on Pasture
- Multispecies Grazing
- Paddock Design, Fencing, and Water Systems for Controlled Grazing
- Rotational Grazing
- Sustainable Pasture Management

Marketing

- Alternative Meat Marketing
- Direct Marketing
- Evaluating a Rural Enterprise
- Holistic Management
- Keys to Success in Value-Added Agriculture
- Marketing Strategies for Farmers and Ranchers (SAN publication)
- Overview: Adding Value to Farm Products
- Value-Added Dairy Options

Sheep and Goat Resources

WEB SITES

- ATTRA—The National Sustainable Agriculture Information Service: <http://attra.ncat.org/livestock.html#Hogs>
- Maryland Small Ruminant Page: www.sheepandgoat.com
- Langston University — E (Kika) de la Garza American Institute for Goat Research: www.luresext.edu/goats/index.htm
- American Sheep Industry Association: www.sheepusa.org
- Farm Flock Sheep Production Handbook, Montana State Univ.: http://animalrangeextension.montana.edu/Sheep/sheep_pub.htm
- Association of Small Ruminant Practitioners: <http://aasrp.org>
- Cornell University: www.sheepgoatmarketing.org/sgm/index.html and www.ansci.cornell.edu
- Livestock for Landscapes: www.livestockforlandscapes.com
- The Dairy Practices Council Small Ruminant Guidelines: www.dairypractices.org/guidelinelisting.htm
- National Scrapie Education Initiative: www.animalagriculture.org/scrapie
- FAMACHA® system for control of barber-pole worm: www.scsrpc.org
- Sustainable Control of Ruminant Internal Parasites: www.abdn.ac.uk/organic/organic_14a.php

CD-ROMS

Multi-Species Grazing and Leafy Spurge
USDA-ARS Northern Plains Ag Research Lab
1500 North Central Ave., Sidney, MT 59270
406-433-2020, www.team.ars.usda.gov

Goats! For Firesafe Homes in Wildland Areas
Kathy Voth, 6850 W. County Road 24
Loveland, CO 80538, www.livestockforlandscapes.com

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Wool, Mohair, Cashmere: Marketing the Softer Side of Small Ruminants

Linda Coffey, NCAT Agriculture Specialist

As a sheep farmer and a knitter, I personally enjoy working with wooled sheep and using natural fibers such as wool and mohair to make beautiful and useful items. And I'm not alone. Jamie Gunthal, publicist for Interweave Press, visited with me recently about the tremendous current interest in spinning and knitting. During the past three years, the newsstand sales of one of their magazines, *Spin-Off*, increased by 46%. Their readership (of a magazine geared to hand spinners) is now more than 27,000. According to the Craft Fair Council of America, one out of every five women under the age of 45 knows how to knit. It is estimated that 34 million knitters and crocheters are in the United States right now.

I have to admit that the price of commodity wool does not provide much incentive to keep raising wooled sheep. That is, unless you can find a way to make more money from the wool you grow. As sheep farmer Ken Hargis of Morning Glory Farm, Bentonville, Arkansas, says, "When you have a market that pays \$4 per pound for raw wool or \$40 per pound for wool yarn, versus 30 to 40 cents per pound from a wool broker, it changes the way you look at your sheep. Instead of focusing on size and fertility, your emphasis shifts to wool quality and yield. Color, fineness, crimp, and softness are all qualities you breed for. The lambs are a bonus—not only for the meat markets but for the fiber markets as well, since clean "hogget" (first) fleeces command a premium price from hand spinners.

"We have expanded our farm operation to include a retail shop and a teaching studio," Hargis says. "It is our goal to be able to sell all of the wool we grow on our farm in one form or another to crafters and fiber artists."



Photo by Ken Coffey

Dempsey Perkins and part of his Gulf Coast Native flock on shearing day, April 2003.

Dempsey and Brenda Perkins of Louisiana also market their wool effectively. They raise Gulf Coast Native sheep, a rare breed. Their focus is on conserving the breed and making a living at the same time. I had the pleasure of attending one of their "Wool Days" in April 2003, when the family invited hand spinners to come out and watch the sheep shearing and select some fleeces fresh off the sheep. The farm was very attractive, the atmosphere enjoyable, with musicians playing fiddles and banjos, handspinners working in the

open air, and the farm shop open for business. The Perkinses send some of their fleeces to MacAusland's Woollen Mill on Prince Edward Island, where the fleece is converted into beautiful blankets sold in the farm shop. Contact Dempsey and Brenda Perkins at P.O. Box 1, Reeves, LA 70658.

Liz Gipson, editor of *Spin-Off* magazine, emphasizes that there is a great need for the farming community to communicate with the crafting community. We farmers must do a better job of understanding what we can sell, and not wasting the assets we have. As Ken Hargis says, "If a farmer has wooled sheep and doesn't market the wool, it's like letting a crop rot on the ground." For more information, contact me at lindac@ncat.org.

Small Ruminant Resources

ORGANIZATIONS

Dairy Sheep Association of North America
carol.delaney@uvm.edu, www.dsana.org

American Dairy Goat Association
828-286-3801, www.adga.org

American Meat Goat Association
915-387-6100, www.meatgoats.com

International Goat Association
501-907-2649, www.iga-goatworld.org

American Sheep Industry Association
303-771-3500, www.sheepusa.org

Fiber Resources

- www.sheepusa.org: A wealth of information about niche marketing (see Industry Affiliates/Wool Contacts/Niche Marketing). Farmers with wool or wool products for sale can be listed here for no charge.
- www.woolfestival.org: Details about some of the many Wool Festivals that celebrate sheep, wool, and the fiber arts, such as the Maryland Sheep and Wool Festival which draws 100,000 people.
- *Turning Wool into a Cottage Industry*, by Paula Simmons, Storey Publishing, 1991.
- *Spin-Off* magazine, Interweave Press, 201 E. 4th St., Loveland, CO 80537. www.interweave.com
- *Wild Fibers* magazine, P.O. Box 1752, Rockland, ME 04841. www.wildfibersmagazine.com
- *The Goat Farmer*, P.O. Box 641, Whangarei, New Zealand. www.caprine.co.nz
- *Goat Rancher—Magazine of America's Commercial Goat Meat Industry*, 731 Sandy Branch Road, Sarah, MS 38665, 888-562-9529. www.goatrancher.com
- *Sheep! Magazine—The Voice of the Independent Flockmaster*, W11564 Hwy. 64, Withee, WI 54498
- *Shepherd* magazine, Sheep and Farm Life, Inc. 5696 Johnston Rd., New Washington, Ohio 44854



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small ruminants find it a nutritious and desirable forage. In many areas of Montana and North Dakota, sheep and goats are reducing the dominance of leafy spurge for as little as \$.60 per acre, compared to a cost of \$35 per acre to spray herbicides from a helicopter.

According to Dr. John Walker, the traditional products of the sheep and goat industry — meat, wool, and dairy products — are vulnerable to foreign competition, but vegetation management is not. Furthermore, controlled grazing can convert unwanted vegetation on power line easements, irrigation canals, roadsides, forest plantations, and orchards into saleable products. For more information on the project and related topics, contact NCAT Agriculture Specialist Linda Coffey at lindac@ncat.org.



Congress Takes Final Action on 2005 Sustainable Ag Budgets; 2006 Work Starts Soon

The Sustainable Agriculture Coalition and the National Campaign for Sustainable Agriculture have provided this update on funding approved for key sustainable agriculture programs within USDA in the omnibus bill passed in November 2004. Congress began its 109th session on January 4, and in a few weeks they will begin considering new funding bills for FY06, which begins on October 1.

To learn about current and future funding for these and more than 20 other key programs, including conservation programs provided for in the 2002 Farm Bill, please contact Margaret Krome at 608-238-1440 or mkrome@inxpress.net.

Note: The following programs are also reduced by a .83% across-the-board cut, which is not reflected in the chart numbers.

Sustainable Agriculture Program	Congressional FY04 Budget	FY05 Omnibus Bill Approved by Congress
Sustainable Agriculture Research & Education (SARE) Program	\$12.3 million	\$12.5 million
SARE Professional Development Program	\$4.4 million	\$4.1 million
Organic Transition Research, Education & Extension Program	\$1.9 million	\$1.9 million
ATTRA	\$2.5 million	\$2.5 million
Rural Cooperative Development Grants	\$6.5 million	\$6.0 million
Value-Added Producer Grants Program	\$15.0 million	\$15.5 million

ATTRA New and Updated Publications

Biodiesel: A Primer
 Certificación para Granjas Orgánicas y el Programa Orgánico Nacional
 Edible Flowers
 Entertainment Farming and Agri-Tourism
 Food Dehydration Options
 Ginseng, Goldenseal, and Other Native Roots
 Hog Production Alternatives
 Producción Orgánica de Lechugas de Especialidad y Verduras Para Ensaladas
 Rotational Grazing
 Squash Bug: Organic Control Options

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Teresa Maurer, Project Manager
 Karen Van Epen, Editor
 Robyn Metzger, Production
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