University of Idaho
College of Agriculture
Cooperative Extension Service

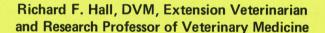
Cooperative Extension Service Agricultural Experiment Station

LIBRARY

APR 28 1977

UNIVERSITY OF IDAHO

Do You Have A Goat?



Goats have been used for milk and meat around the world for thousands of years. In fact, more people drink goats' milk than cows' milk. Goats have not been popular in the United States until recently, however. The American Dairy Goat Association had only 900 members 8 years ago but now has well over 4,000 and is increasing at the rate of about 120 members a month.

The sudden increase in dairy goat popularity can be credited to two groups of people — those who wish to "get back to nature" and professional people moving back to the country on small acreages. They want a small animal that can provide milk and meat, can be easily cared for and that does not require a lot of room. Goats seem to be ideally suited for these purposes. In addition, they are quite friendly and make good family animals.

The value of goats has also dramatically increased as goats have become popular. In 1964, purebred bucks sold for about \$200, in 1973, they were worth \$1,100.

The cost of average purebred kids is about \$100 each at weaning time. Good grade milkers sell for

about \$100 each. Purebred milkers may go for \$1,000 or more depending upon genetic capability. Purebred doelings have sold for as much as \$2,600.

### **Nutrition and Management**

Like sheep and cattle, goats are ruminant animals. They are good roughage utilizers. They would rather eat brush and weeds than grass. If there are trees or bushes in a pasture, they will eat the bushes and the bark off the trees. However, contrary to common notion, goats do require a good diet.

In general, 6 to 8 goats will eat as much as one cow. To keep a goat a year requires 10 to 14 bales of hay (500 to 700 pounds) plus good pasture. Some goats can eat up to 10% of their body weight per day. Goats like whole or course ground grain best. Grain should be fed at the rate of ½ pound of grain per pound of milk produced in the winter and ¼ pound of grain per pound of milk in the summer when the goat is on pasture. Goats do not like dusty or finely ground feed. They are messy feeders and if hay or grain is dropped on the floor they will not eat it.

Goats should have a good source of fresh clean water at all times and should have loose trace-mineral salt available.

Goats can become sexually mature as young as three months of age but standard sized doelings should not be bred until they weigh 65 to 80 lbs. They usually breed in the fall of the year and their gestation period averages 150 days. Twins are most common but singles or triplets are not rare. A milking goat should rest or be dried up for 6 to 8 weeks before parturition and should be milked for 305 days. Some goats have been selected to milk for two years and are bred biannually.

When the kids are born, feed them the first milk (colostrum milk) as soon as possible after birth and for the following 3 days. This gives the kids protection against diseases. Without colostrum milk they have very little protection. As soon as possible after birth, dip their navels in 7% tincture of iodine to prevent navel infections.

Many people take the kids away from the doe at birth and feed them colostrum milk from a bottle, never allowing them to nurse the doe. The reason for this is that the doe becomes attached to the one who milks her and the owners want her attached to the person rather than to the kids.

Young kids traditionally are raised on goat's milk but they can be fed milk replacer or cow's milk. They should receive colostrum milk for 3 days and goat's milk for a week, however. They will drink 1½ to 2 pints a day. They can be weaned when they are eating sufficient grain.

Goats are susceptible to a number of diseases but the most common health problems are malnutrition and internal parasites.

## **Internal Parasites**

Goats are susceptible to all forms of internal parasites. Stomach worms and intestinal worms cause the most damage. Wormy goats get anemic, displaying pale mucous membranes, bottle jaw (swelling around the lower jaw) and weight loss. They often have diarrhea.

Your veterinarian can perform a fecal examination to determine the extent of worm infection. Thiabendazole and Haloxon are effective wormers for goats. Haloxon is not approved for lactating goats whose milk is for human consumption, however.

Goats can also get tapeworms but they are not very significant.

Clinical signs of coccidiosis are not common in goats unless they are housed in concentrated, filthy conditions where the feed will become highly contaminated. In this case kids may get a fatal bloody diarrhea. Sulfa drugs are usually used to treat coccidiosis.

Lungworms are common in goats and can be fatal. They can be effectively treated with Tramisol.

#### **External Parasites**

Goats host a variety of lice. These result in skin irritation and loss of blood. They are most severe in the winter. Insecticides are effective in a spray or powder form. Be careful, however, to make certain the products you use are approved for lactating animals and young kids.

#### **Diseases**

Navel III — Navel ill is quite common in kids. This results in arthritis which is very difficult to treat, so prevention is the best course. Make certain you dip the navel in iodine as soon as possible after birth. Be sure to have a clean maternity stall. If you allow the kid to nurse, wash the udder before he nurses.

Arthritis — Older goats also suffer from arthritis. One type is due to excess calcium in the diet. Some types are not well understood and all are difficult to treat or prevent in older goats.

Brucellosis and tuberculosis — Little brucellosis or tuberculosis has been found in goats in the United States. However, since most goat milk is consumed raw, without pasturization, be sure your goats test negative for both of these diseases before consuming the milk. Both diseases are serious in humans and can be transmitted through the milk.

Your veterinarian can do this testing for you.

Lymphadenitis — Lymphadenitis, a disease caused by a variety of bacterial agents, is rapidly becoming important in the purebred goat industry of the United States. It causes abscesses of the lymph glands, most of which are inside the goat. Animals become weak and emaciated and probably die.

Treatment is not effective but the disease can be prevented to a great extent by management. Cull the old chronic animals as soon as possible. Separate the kid from the doe as soon as it is born and raise it in a sanitary stall away from the mature animals. When young animals are eating grain, the addition of 100 gm of oxytetracycline per ton of feed is helpful.

This disease can also be spread to humans by ingestion of the organism.

Enterotoxemia — Goats are more susceptible to enterotoxemia than any other domestic animal. They are susceptible to all three types of Clostridium per-

fringens, the bacteria which causes the disease. This disease causes sudden death in kids. Usually the "best doing" kid will be dead within an hour. Older goats experience acute death or chronic toxemia. In older animals, the disease is usually brought on by a sudden change of feed. If you change feed, take a week or so to make the changeover.

Vaccines are available to protect against all three types of enterotoxemia. All animals over a month of age should be given two injections at least two weeks apart as an initial vaccination. They should then receive an annual booster injection. Antitoxin will protect kids under a month of age. Antitoxin will probably not be necessary if the doe is vaccinated because the kids will get protection through the colostrum milk.

Foot Rot and foot abscess — Goats are susceptible to foot rot and foot abscess the same as sheep. In the case of foot rot, the feet should be well trimmed and treated topically with copper sulfate solution or formalin.

Foot abscess is treated by antibiotic injections. Treatment is not very successful once the condition becomes established in the foot, however, so treat at the first sign. This disease is brought on most often by wet, muddy conditions which soften the hoof and tissues and make the foot more susceptible to entrance of the infectious organisms.

Mastitis — Because goat milk is often consumed by babies or chronically ill people, mastitis prevention becomes of paramount importance. Goat milk is also most often consumed in a raw state.

Preventive measures used in dairy cows are also recommended for dairy goats. Wash the udder before milking. Wash your hands between milkings and dip the teats following milking. Keep your goats in a clean area where they cannot injure the udder and teats and where the udder and teats will not become contaminated.

Observe the milk for lumps, off color or change of odor. Observe the udder for swelling. These are signs of mastitis. If you do find mastitis, have your veterinarian examine the animal and culture the milk so the proper treatment can be started.

Pneumonia — If goats are kept in closed quarters where there is water condensation prevnting pneumonia is virtually impossible. If your goats must be kept in closed quarters, make certain there is enough air exchange to prevent moisture condensation and maintain the inside temperature the same as outside. Goats are healthier if they are provided outside open housing.

# **Common Surgical Procedures**

Dehorning and Castration — Goats are commonly dehorned. The best time to do this operation is before the kids are 3 days old, although older animals can also be dehorned. Removing the scent glands from the head at this time is often desirable. Both the horns and scent glands can be removed with a hot iron or surgically.

Young bucks should be castrated at about 2 weeks of age if they are not intended for breeding use. This will keep them from becoming odoriferous before they are marketed.

If you are not familiar with castration and dehorning, you should visit with your veterinarian.

#### **Goats and Odor**

One of the chief objections to goats is the odor. Bucks are especially bad, according to human taste. Bucks can have the scent glands removed from the head but they still urinate on themselves. The only cure is castration.

Because of odor, bucks should be housed away from the does. If housed next to the does during breeding season, they also often will pine away and become skin and bones.

Goat milk can also have an off smell or flavor. The reasons may be —

Storng-flavored food in the diet.

Indigestion of the doe.

The use of plastic milk pails.

Cooling too slowly.

Covering the milk while it is cooling.

Overdeveloped musk glands on the head of the female (these can be removed).

Housing the female too close to the male.

Goats are good animals but they must be cared for properly to keep them productive and healthy. They are susceptible to about the same diseases as sheep. If you have not had experience with goats but wish to raise them, contact your county Extension agent and veterinarian. Their advice can save you a lot of money and anguish. Some may not be extremely knowledgeable about goats but they have a good understanding of animal husbandry, ruminant nutrition and management.

Goats can live for 18 to 20 years if properly cared for so enjoy your goat. Other good sources of information about goat management and disease include the American Dairy Goat Association, (P. O. Box 186, Spindale, NC 28160) and the American Goat Society (1606 Colorado Street, Manhattan, KS 66502).

The State is truly our campus. We desire to work for all citizens of the State striving to provide the best possible educational and research information and its application through Cooperative Extension in order to provide a high quality food supply, a strong economy for the State and a quality of life desired by all.

Auttis M. Mullins
Dean, College of Agriculture
University of Idaho



# SERVING THE STATE

This is the three-fold charge of the College of Agriculture at your state Land-Grant institution, the University of Idaho. To fulfill this charge, the College extends its faculty and resources to all parts of the state.

Service ... The Cooperative Extension Service has active programs in 42 of Idaho's 44 counties. Current organization places major emphasis on county office contact and multi-county specialists to better serve all the people. These College of Agriculture faculty members are supported cooperatively by federal, state and county funding to work with agriculture, home economics, youth and community development.

Research ... Agricultural Research scientists are located at the campus in Moscow, at Research and Extension Centers near Aberdeen, Caldwell, Parma, Sandpoint, Tetonia, Twin Falls and at the U.S. Sheep Experiment Station, Dubois and the USDA/ARS Soil and Water Laboratory at Kimberly. Their work includes research on every major agricultural program in Idaho and on economic and community development activities that apply to the state as a whole.

**Teaching** ... Centers of College of Agriculture teaching are the University class-rooms and laboratories where agriculture students can earn bachelor of science degrees in any of 20 major fields, or work for master's and Ph.D. degrees in their specialties. And beyond these are the variety of workshops and training sessions developed throughout the state for adults and youth by College of Agriculture faculty.

Issued in furtherance of cooperative extension work in agriculture and home economics, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, James L. Graves, Director of Cooperative Extension Service, University of Idaho, Moscow, Idaho 83843. We offer our programs and facilities to all people without regard to race, creed, color, sex, or national origin.