

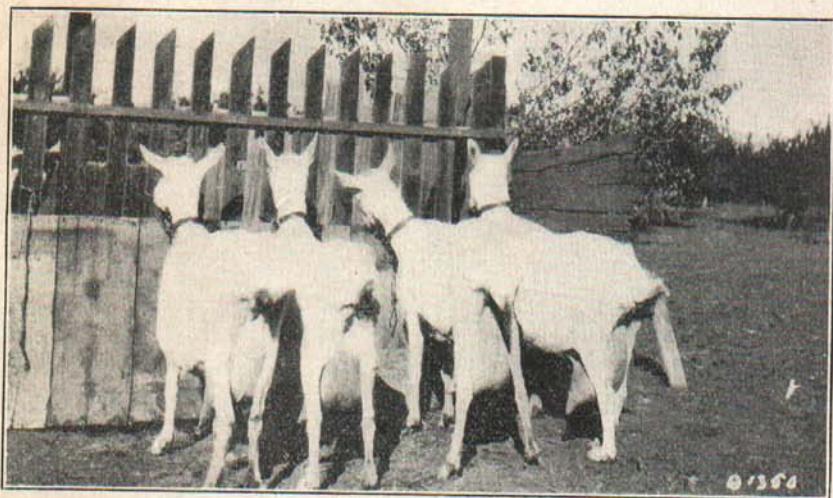
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Extension Bulletin No. 85

April, 1929

DAIRY GOATS



MICHIGAN STATE COLLEGE
Of Agriculture and Applied Science

EXTENSION DIVISION

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Printed and distributed in furtherance of the purposes of the co-operative agricultural extension work provided for in the Act of Congress, May 8, 1914, Michigan State College of Agriculture and Applied Science and U. S. Department of Agriculture co-operating.

DAIRY

DAIRY GOATS

By G. A. BOWLING

Although the number of dairy goats in Michigan is small, there is a growing interest in them. To those people who would like to own their own milk supply, but are, because of lack of available room, unable to keep a cow, the goat may offer a solution for the problem. Many individuals also are becoming interested in goats because they believe goats milk to have superior food value for infants and invalids in special cases.

Prospective owners of dairy goats will do well to inform themselves regarding the characteristics of the different breeds, the quality of the milk and its products, prices of breeding stock, methods of feeding and management of both young and mature stock, and the common diseases and parasites that affect the animals.

BREEDS OF DAIRY GOATS

There are a great many breeds of dairy goats. Only a few, however, have been imported to this country, and of these the important breeds are the Toggenburg, Saanen, Nubian, and Alpine. A good doe should produce an average of two to two and one-half quarts of milk a day for 10 months. Does will produce eight to 15 times their body weight in milk. Goat owners usually base production records on the number of quarts per day. This means the production for the best day, and it should not be confused with the average production, which will be considerably lower.

Toggenburg

The Toggenburg, imported from the Toggenburg Valley of Switzerland, is the most numerous of the breeds of dairy goats in this country. The Toggenburg is a medium-large breed, the does weighing from 100 to 125 pounds when mature. The color of the body is brown, with a light stripe down each side of the face. They are white on the inside of the legs, and entirely white below the knees and hocks. Like other Swiss breeds, the Toggenburg has erect ears. It is a heavy milking breed and the milk will test 3.5 to 5.0 per cent butterfat. This is considered a hornless breed, although occasionally a horned individual appears.

Saanen

The Saanen, developed in the Saanen Valley of Switzerland, is the largest of the Swiss goats. Mature does average about 135 pounds in weight. The desired color of Saanens is pure white, but some individuals have a creamy white coat. Although a few individuals have horns, this is considered a hornless breed. While the milk of this breed is hardly as high in fat content as the other breeds, Saanens are unsurpassed as milk producers and are rapidly gaining favor in America. The Saanen doe, Lydia Reed, produced over 21 pounds of milk in one day, and Selma of Three Oaks, another Saanen, produced 4,570.3 pounds of milk in twelve months.



Fig. 1.—A herd of mature Saanen does.

Nubian

The Nubian is a native of Nubia, Upper Egypt, and Abyssinia. This breed ranks third in numbers in the United States. The Nubian may be distinguished by its large size, Roman nose, and large, broad, drooping ears. Any combination of colors may be found in this breed. A few bucks develop horns. The hair is short and fine. While the Nubians do not have the high average of milk production common to the other breeds, the butterfat content of the milk is unusually high. The bucks are said to be more free from odor than those of other breeds.

Alpine

The Alpine is the oldest breed of dairy goats in Europe. This goat was developed by the French, who paid no attention to color but em-

phasized conformation, production, vitality, and high percentage of reproduction. The color ranges from black to white, the hair is short, and the body shows striking dairy conformation. The Alpine is noted for a long and highly productive lactation period and a milk which is fine in flavor and rich in fat. There are only about 200 Alpines in this country at the time this is written.

GOATS MILK

Goats milk is white in color and averages about 4.5 per cent fat. The globules are small and do not rise as do the fat globules in cows milk, although the fat can be separated very efficiently by a separator. There is very little difference in the protein, ash, and sugar content of goats and cows milk.

Much has been said about the "goaty" odor of the milk. Clean goats milk has a characteristic odor that is unlike that of cows milk, but it is not objectionable. The objectionable odor comes from the buck. This odor should never be present in milk if the buck is kept at a sufficient distance from the milking does. It is possible to produce goats milk that is as free from objectionable odor as the average raw cows milk. Such a quality product can be produced only by keeping the does clean, using clean utensils, exerting care in milking, and cooling the milk properly. It is advisable to remove the doe to clean, well kept quarters for milking.

Tuberculosis is rarely known to exist among goats, and tuberculosis infection from goats milk is hardly a probability. Goats have Malta fever, however, a disease that is, in some regions of the world, transmitted to man.

Because of its reported beneficial nutritive effects, goats milk is in demand as a food for infants and invalids. The price of goats milk usually ranges from 30 to 75 cents per quart.

Products of Goats Milk

Very good butter can be made from goats milk, but it is white in color and requires coloring to make it attractive to most individuals. As a matter of fact, the high price of goats milk in this country makes the production of this butter uneconomical.

Cheese made from goats milk is very popular in many parts of Europe, and it is reported to be of very high quality. As in the case of butter, very little of the cheese is made in this country.

Goats milk may be used to make ice cream of very good quality, but its manufacture is largely for home consumption. Goats milk is also condensed, but this product is sold almost entirely for infant feeding.

PRICES OF BREEDING STOCK

The price of does varies a great deal. Grades may be purchased at \$35.00 to \$75.00, and pure breds at from \$50.00 up to \$200.00. Kids may be had at \$10.00 to \$50.00, depending on age and breeding. The price of bucks will be about the same as the price of does. It pays to buy good stock.

Prospective owners should pay particular attention to the actual production of the does or to the breeding of the kids when making purchases, as it is easy to pay too much for inferior stock.

FEEDING AND MANAGEMENT OF DOES

Contrary to popular opinion, the dairy goat is a very fastidious animal, eating only the cleanest high quality feed. Good, bright alfalfa is the most popular roughage; while oats, corn, barley, bran, and oil meal are very popular grains for concentrate mixtures. Whole grains are preferred. Ready mixed dairy feeds also make good goat rations.

Only inexpensive quarters are required for goats, but they should be light, dry, and free from drafts. The goats may be kept in stalls or stanchions. Stanchions similar to calf stanchions are satisfactory. It is probably cheaper and more satisfactory, however, to keep the does together in pens with a common feed rack, with solid bottom trough for grain. By this method, feeding is made easy and tying is eliminated. The goats are removed to clean quarters to be milked and then returned to the pen. Goats are usually milked on a stand, which makes the job a very comfortable one for the milker. The does should be given some grain while being milked, as they will be more quiet.

Does should be bred to drop their first kids at 18 to 20 months of age, if they are well grown, although some breeders recommend two years as a more satisfactory age. The gestation period is five months. The breeding season is from September to the last of February, although a few does will breed during the summer months. Does have a high percentage of twins, and triplets are not uncommon.

FEEDING AND MANAGEMENT OF KIDS

If the doe has been well fed and cared for, the kids should be up and ready to feed shortly after birth. If the doe is to be milked, it is better not to permit the kid to suck. It should be fed colostrum milk by hand. Kids may be fed by either nipple or pan. They are easily taught to feed either way, but the latter is probably more sanitary. Feeding should be done from three to six times per day at first, gradually decreasing the number of feeds to two per day. The kids will begin to eat grain at an early age and should have access to good, wholesome food, such as is fed the doe. For young kids, the grain should be ground. Ordinarily, the kids are not fed milk after they are three to four months of age.

DISEASES AND PARASITES

The most common diseases of goats are pneumonia and Malta fever, the latter being transmitted to man. This disease, however, seems to be transmitted to humans only in certain regions. The more common parasites are worms and lice.

GOATS AS PETS

Because of their high intelligence, affectionate disposition, and clean feeding habits, goats make ideal pets for children. Such a pet amuses the child, serves to keep him occupied, encourages him to be out in the open air, and it can easily be a source of considerable profit.

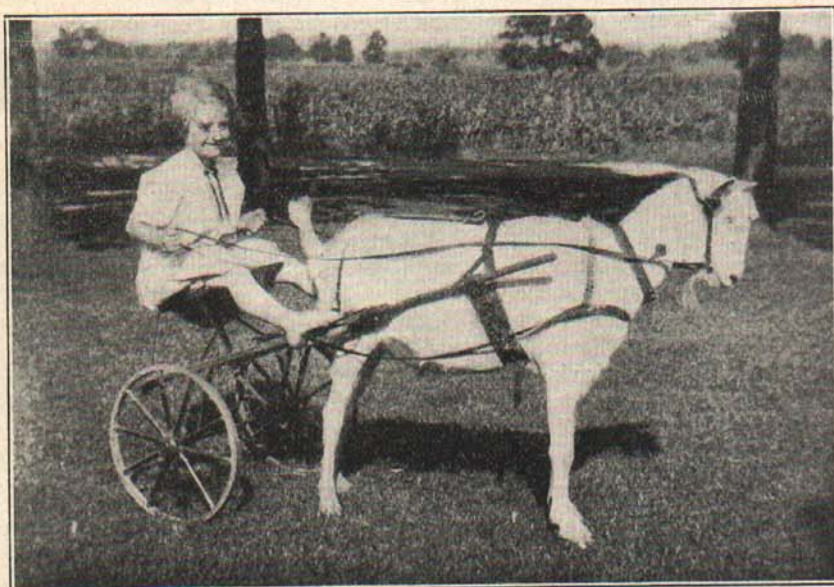


Fig. 2.—Goats make excellent pets.

SOURCES OF INFORMATION

The following are journals devoted to the interest of dairy goats: "The International Dairy Goat Journal," published at Fairbury, Nebraska; "The Milk Goat News," published at Dodge City, Kansas; and "The Goat World," published at Vincennes, Indiana. The subscription rates of these magazines are very reasonable.

A number of bulletins and circulars that give impartial information on dairy goats, have been published by State and Federal authorities. A partial list follows:

- Milk Goats, by E. L. Shaw; Farmers' Bulletin No. 920 (1918). U. S. D. A., Washington, D. C.
- Milk Goats, by C. A. Matthews and Earl Weaver; Circular No. 111 (1928). Iowa State College, Ames, Iowa.
- Takosis, a Contagious Disease of Goats, by J. R. Mohler and H. J. Washburn; Bulletin No. 45 (1916). Bureau of Animal Industry, U. S. D. A., Washington, D. C.
- Milk Goat Improvement, by O. G. Cunningham; Bulletin No. 154 (1926).

- New Mexico Agricultural Expt. Station, State College, New Mexico.
The Milk Goat in California, by E. C. Voorhies; Bulletin No. 285 (1921).
California Agricultural Expt. Station, Berkeley, California.
- Care and Management of the Milk Goat, by E. C. Voorhies; Extension
Service Circular No. 6 (1926). California Agr'l Expt. Station, Berkeley,
Calif.
- Manufacture of Roquefort Type Cheese from Goats' Milk, by S. A.
Hall and C. A. Phillips; Bulletin No. 397 (1925). California Agr'l
Expt. Station, Berkeley, California.
- Varieties of Cheese: Description and Analyses, by C. F. Doane and H.
W. Lawson; Bulletin No. 146 (1911). Bureau of Animal Industry,
U. S. D. A., Washington, D. C.
- Malta Fever with Special Reference to its Diagnosis and Control in
Goats, by J. R. Mohler and A. Eichhorn; Circular No. 215 (1925).
Bureau of Animal Industry, U. S. D. A., Washington, D. C.
- Information Concerning Common Goats, by G. F. Thompson; Bulletin
No. 42 (1903). Bureau of Animal Industry, U. S. D. A., Washing-
ton, D. C.
- Information Concerning Milch Goats, by G. F. Thompson; Bulletin No.
68 (1905). Bureau of Animal Industry, U. S. D. A., Washington, D. C.
- The Casein and Salts in Goats' Milk, by A. W. Bosworth and L. L. Van-
Slyke; Technical Bulletin No. 46 (1915). New York Agr'l Expt. Sta-
tion, Geneva, New York.
- Goats' Milk for Infant Feeding, by W. H. Jordan and G. A. Smith;
Bulletin No. 429 (1917). New York Agr'l Expt. Station, Geneva,
New York.

Other Sources of Information

- Modern Milk Goats, by Irmagarde Richards (1921), published by J. B.
Lippincott Company, Philadelphia, Pa.
- The Book of the Goat, by H. S. H. Pegler (1886), published by L. Upcott
Gill, 170 Strand, W. C. London, England.
- Milch Goats and Their Management, by Bryan Hook (1896), published
by Vinton and Company, Limited, 9, New Bridge St., London, E. C.
- Angora Goat Raising and Milch Goats, by G. F. Thompson (1903).
Published by American Sheep Breeder Company Press, Chicago, Ill.
- Dairy Goats, by The International Dairy Goat Journal (1928). Pub-
lished by Leach Publishing Company, Fairbury, Nebraska.

Dairy Goat Associations

In addition to the many state and local associations there are three
associations of national scope.

- The American Milk Goat Record Association, Vincennes, Indiana; Will
L. Te Walt, Secretary-Treasurer.
- International Dairy Goat Record Association, 1519 "O" St., Lincoln,
Nebraska; P. E. Clement, Secretary.
- International Nubian Breeders' Association, La Jolla, California; Archie
C. Talboy, Secretary-Treasurer.

These Associations will furnish information on request.