Breed Standards

FRENCH ALPINE

The French Alpine originated in France. It is a large animal, and generally excels in stature. Even when quite large, they should remain refined and never be coarse. Alpines are alertly graceful, hardy, adaptable animals that thrive in any climate while maintaining good health and excellent production. They are known for being exceptionally curious, and friendly, although sometimes independent and strong willed. They are also known for their long lactation, producing large quantities of high quality milk. French Alpines are acceptable in any color pattern, although pure white animals and bucks with standard Toggenburg color and markings are discriminated against. The head is long. The bridge of the nose is straight or slightly dished. Ears are upright, alert, fine, and somewhat narrow. The hair is medium to short.

Color patterns in the Alpine are often referred to by French names: cou Clair (light-colored neck), cou blanc (white neck, black rear quarters), cou noir (black front quarters and white hindquarters), sundgau (black with white facial stripes, white below knees and hocks, white on either side of the tail), chamoisée (any shade or mixture of brown, often with a black stripe along the back and white markings on the face) or two-tone chamoisée (usually a lighter color on the forequarters), and pied (broken with white, spotted, or mottled). A "broken" pattern has large white areas obscuring the basic colors. Mature Alpine does should be at least 30" tall at the withers and should weigh at least 135 pounds. Mature Alpine bucks should be at least 32" tall at the withers and should weigh at least 160 pounds.
LAMANCHA

The LaMancha was developed in the USA. It has roots in Spain, but its full genetic history is somewhat obscure. LaManchas vary greatly in size, and often tend to be somewhat shorter and blockier than most other breeds of dairy goats. Taller, more refined animals are seen and are acceptable as well. They are widely respected for their docile, even temperament and steady production of milk of fairly high fat content.

The hair is short, fine and glossy. The LaMancha face is straight or slightly dished, with the ears being the distinctive breed characteristic. There are two types of LaMancha ears. "Gopher" type ears contain no cartilage but only a ring of skin around the auditory canal. "Elf" type ears contain a small amount of cartilage and a small amount of skin that may turn either up or down from the cartilage but should be no longer than two inches. One type of ear has no advantage over the other when evaluating does, however only gopher ears are acceptable on bucks. Any pattern, color, or combination of colors is acceptable.

Mature LaMancha does should be at least 28" tall at the withers and should weigh at least 130 pounds. Mature LaMancha bucks should be at least 30" tall at the withers and should weigh at least 155 pounds.
The Nigerian Dwarf is a miniature dairy goat originating from West Africa and developed in the United States. The balanced proportions of the Nigerian Dwarf give it an appearance similar to the larger, Swiss breeds of dairy goats. Shorter height is the primary breed characteristic of the Nigerian Dwarf, with does measuring no more than 22 1/2” at the withers and bucks measuring no more than 23 1/2” at the withers.

They are known for their high quality milk, often with exceptionally high butterfat content. Nigerian Dwarves are gregarious, friendly, hardy animals that thrive in almost any climate. The medium length ears are erect and alert. The face is either straight or slightly dished. The coat is of medium length, and straight. The Nigerian Dwarf is the only dairy breed known to occasionally have blue eyes. Both brown & blue-eyed animals are encountered with no preference being given to either eye color. Any pattern, color, or combination of colors is acceptable. Mature Nigerian Dwarf does should be no more than 22 1/2” tall at the withers. Mature Nigerian Dwarf bucks should be no more than 23 1/2” tall at the withers.
The Nubian is a relatively large, proud dairy goat of mixed origin. The ancestors of today's Nubian have African and Indian heritage, developed further in England, where they are known as Anglo-Nubians. They are known for high quality, high butterfat milk production. They are also noted for being a quite vocal breed. Nubians often carry more muscling/fleshing than the Swiss breeds.

The head is the distinctive breed characteristic, with the facial profile between the eyes and the muzzle being strongly convex. The ears are long, wide and pendulous, extending beyond the muzzle when held flat along the face. They lie close to the head at the temple and flare slightly out and well forward at the rounded tip, forming a "bell" shape. The ears are thin, with the cartilage well defined. The hair is short, fine and glossy. Any pattern, color, or combination of colors is acceptable.

Mature Nubian does should be at least 30" tall at the withers, and should weigh at least 135 pounds. Mature Nubian bucks should be at least 32" tall at the withers, and should weigh at least 160 pounds.
The Oberhasli is a dairy goat found in the Brienzer region of Switzerland near Bern, where it is known as the Oberhasli-Brienzer. It was formerly called the Swiss Alpine in the USA. This breed is of medium size, vigorous and alert in appearance. It is noted for its rich red bay color and quiet, gentle temperament. The natural coat is a uniform red bay, ranging from light red bay to dark red bay; or a solid black in does. Bucks must have the red bay color to be registered.

Minimum markings in the bay Oberhasli are: two black stripes down the face from above each eye to a black muzzle; forehead nearly all black; ears black inside and bay outside; black stripe from the base of each ear coming to a point just back of the poll and continuing along the neck and back as a dorsal stripe; a black belly; black legs below the knees and hocks. The skin, including udder, is light gray to black. A few white hairs through the coat and about the ears and/or nose are permitted. Bucks often have more black on the head than does, black whiskers, and black hair along the shoulders and lower chest with a mantle of black along the back. Bucks frequently have more white hair than does.

Oberhasli heads vary with the most distinctive type being shorter in length than the other Swiss breeds. This head type has a deep jaw and broad muzzle with wide forehead and prominent eyes. The short erect ears are set low and pointed forward. The face is dished or straight.

Mature Oberhasli does should be at least 28” tall at the withers, and should weigh at least 120 pounds. Mature Oberhasli bucks should be at least 30” tall at the withers, and should weigh at least 150 pounds.
SAANEN

The Saanen is from Switzerland. It is the largest of all the dairy breeds. Saanen hair may be short and fine, although a fringe over the spine and thighs is often present. The hair is white to creamy white, with white being preferred. Ears are medium to large, and should be erect and alertly carried, preferably pointing forward. The face may be straight or dished.

The Saanen doe has a majestic air about her, combined with her large size, consistency in producing large quantities of milk, sturdiness, vitality, ease of management, herd compatibility, a mellow "eager to please" temperament, and capacity to tolerate environmental change; has earned her the name, by some, "Queen of the Dairy Goats."

Mature Saanen does should be at least 30" tall at the withers, and should weigh at least 135 pounds. Mature Saanen bucks should be at least 32" tall at the withers, and should weigh at least 160 pounds.
SABLE

The Sable is a color variation of the Saanen breed. Sables can be the offspring of Sables or Saanens. Other than color, this breed is identical to the Saanen. Sables may be any color except solid pale cream or white.

Mature Sable does should be at least 30" tall at the withers, and should weigh at least 135 pounds. Mature Sable bucks should be at least 32" tall at the withers, and should weigh at least 160 pounds.
The Toggenburg is from the Toggenburg Valley in Switzerland. This breed is small to medium in size, sturdy, vigorous, and alert in appearance. It is known for its productivity and calm nature. The hair varies from short to long, but is always soft, and fine. The ears should be small, erect and point forward. Facial lines must be dished or straight (dished preferred). Its color is solid, varying from light fawn to dark chocolate with no preference for any shade.

Distinct white markings are as follows: white trimmed ears with dark area in the center; two white stripes down the face from above each eye to the muzzle; hind legs white from hocks to hooves; forelegs white from knees downward with dark vertical stripe below knee acceptable; a white triangle on each side of the tail; white spot may be present at root of wattles or in that area if no wattles are present. Varying degrees of cream markings instead of pure white are acceptable, but not desirable.

Mature Toggenburg does should be at least 26” tall at the withers, and should weigh at least 120 pounds. Mature Toggenburg bucks should be at least 28” tall at the withers, and should weigh at least 145 pounds.
Tattooing

AGS accepts tattoos and/or microchips as forms of identification; however, you MUST assign and list your tattoo sequence (both right and left ears) on the registration papers. Recording the tattoo sequence allows future owners the ability to tattoo the animal should they choose to do so. Keep in mind that not all members have a chip reader.

When tattooing your goats’ ears your registered herd tattoos should go in the right ear. This same registered herd tattoo will be used for all goats born on your property. The animal specific tattoo for each animal should go in the left ear. This tattoo will be different for every animal you tattoo. This tattoo consists of a letter for the year the animal was born followed by a sequential number for that particular animal. In 2009 the year letter is Z so the first kid born in 2009 would be Z1, second kid Z2; eighth kid would be Z8 and so on through the year. While standing behind your animal your left will be the animal’s left and your right will be the animal’s right. If you are facing the animal it would be opposite.

The specific letter is assigned for each year an animal is born. The year letter basically follows the alphabet. The letters I, O, Q, and U are not used.


TATTOO REGISTRATION

All animals must be permanently identified before they are registered in AGS. Tattoo Registration is free of charge with the registration of a herd name.

EASY STEPS TO TATTOO MARKING

Every kid should be tattooed shortly after birth to assure lifelong identification. Proper tattoo identification is required by many fairs, and it is essential in production testing, and is always valuable to be sure that identifications do not become confused. More than once stolen animals have been recovered because of this positive identification afforded by the tattoo. In cases of death and settling of estates, the presence or absence of tattoo marks in the animals has meant the difference between a good herd being discarded because no one could properly identify the animals, or the profitable sale of the herd because the purchaser was able to know positively the identity of the goats purchased.

Tattooing is a simple operation - so simple it can hardly be termed an operation, in fact. Its success depends entirely upon the operator and following a few simple rules.

1. Hold the animal securely. With a small kid this is no problem, as its head can be held between the operator’s knees; with a larger goat it may be simple to put a halter on it and tie rather close.
2. Cleanse the area of the ear to be tattooed, using a cloth dampened with carbon tetrachloride or alcohol to remove dirt, grease and wax. (In the case of the earless LaMancha breed the tattoo is placed in the thin webbing at the base of the tail, using the same technique otherwise.)
3. Using a pliers-type tattoo, the correct symbols are inserted in the pliers. Check the correctness of the tattoo by impressing it in a sheet of paper.
4. While not absolutely necessary, it simplifies the operation if a thin sheet of sponge rubber is then pressed down over the tattoo needles. This pad helps to release the needles after the impression is made in the ear.
5. Smear ink on the skin, covering the area of the tattoo. Choose an area free from freckles or warts that might disfigure the tattoo. Place the symbols of the tattoo so they will be parallel to and between the veins or cartilaginous ridges of the ear. The accidental piercing of a good-size vein may spoil the tattoo.
6. Make the imprint with a quick firm movement of closing the tattoo pliers. Immediately after releasing the pliers apply a further amount of ink in the ear and rub vigorously and continuously for at least 15 seconds to insure penetration of the ink - this is highly important. The most effective way is to rub with thumb and forefinger, although a stiff brush may be used.

7. Do not disturb the tattooed area until the healing process is complete, which may be from 5 to 21 days depending on the age of the animal.

On light-skinned animals the color of the tattoo is rather unimportant. With dark-skinned animals a dark green ink seems to be preferable. On such animals holding a flashlight in back of the ear will help in reading the tattoo.

TATTOO POLICY INFORMATION

1. Be sure you tattoo the animal’s right ear for tattoos in the right ear and the animal’s left ear for tattoos in the left ear. On LaManchas, this would read, left tail, center tail, or right tail, or a combination of these. AGS currently recognizes tattoos and/or microchips. ANY animal registered must be assigned a tattoo sequence from the herd of origin at the time of registration, regardless of whether the animal is microchipped or not. It is not required that BOTH forms of ID be done at the time of registration, but the tattoo sequence MUST be listed on the application to provide an accurate, alternative form of permanent ID in the event the animal is sold to a non-microchipping herd. In the case of verifying show wins, either form of ID may be read, as long as it is noted on the awards/show report. The win will then be verified by the office. The ID read must match exactly the same ID on the animals registration certificate. (BOD 2001) If microchipped only, the owner must provide the reader to identify the animal at a show. (BOD 1993)

2. Be sure the animal’s tattoos match exactly the animal’s registration papers. This is very important for animals that enter the show ring.

3. All revisions (this includes added microchip information) for registration certificates must be sent to the office with the appropriate revision fees.

4. AGS, along with USDA, is recommending that microchips be placed in the tail or tail web. This is a recommended site only and is not required at this time. Animals that have been micro-chipped in other locations prior to this time are still acceptable

5. A tattoo will be deemed correct:

6. If the correct tattoo can be identified.

7. If other identical markings exist, they are to be disregarded IF the papers are marked "re-tattooed". (In other words, if an animal is re-tattooed or microchipped, papers MUST be sent in to the office for revision.)

8. If a tattoo revision is made to the registration papers, and revision is NOT identical to original tattoos, the revised tattoos are what will be read.
What is Showmanship?

A good showman is a person that can effectively present an animal in such a way as to enhance its best characteristics. In showmanship, you are judged on your abilities to both control and present your animal, and how you and your animal can work together as a team. Advance planning and practice are the keys to becoming a good showman. Dairy goat showmanship not only generates enthusiasm in the show ring, but also teaches many valuable lessons that can be used in daily life.

These lessons include:

- Responsibility
- Learning about work and determination to reach a goal
- Winning graciously, and losing with dignity.

In Showmanship, your job is to accentuate the positive and downplay the negative.

Have a positive attitude! Be confident that you are showing the animal well, and to the best of your ability. Don’t get discouraged by an uncooperative animal, or more experienced showman in your class. Listen to the judge’s reasons for the placings and learn from those reasons. Leave the ring with pride and confidence, and always shake the judge’s hand and thank them for the experience. If you tried, and did your very best, you are a winner!

Change sides by crossing over to the front of your goats, NEVER cross behind the goat. Watch the Judge for hand signals and/or verbal commands. Stand; never kneel behind your goat. When not walking, the animal should be immediately set up in a correct show stance. A correct show stance is one where the animal’s legs are placed squarely underneath it. Set up the end of the goat nearest the judge first, meaning, if the judge is standing at the head of the line, looking at the front of your goat, then set up the front legs first. If the judge is near the end of the line, then the rear legs would be set up first. Place the front legs in a natural stance, perpendicular to the ground. Place the feet so that the legs are parallel to each other, no wider than the chest floor. Place the rear legs so that the hocks are directly below the pin bones, with the rear cannon perpendicular to the ground. Don’t over spread the rear legs. You can level the topline of your goat by “teasing” the goat in the loin. You simply put slight pressure on either side of the loin with your fingers, pressing down just in front of the hip bones. Excessive handling of your goat will draw attention to its weaknesses, so set your goat up quickly and leave it alone.

50 points Showmanship Ability

This consists of following such basic rules as keeping the goat between the exhibitor and the judge, walking at a normal pace, changing sides by crossing in front of the animal, etc. Basically, these 50 points are based on your knowledge of the animal and correct ring procedure, and how well you and the animal work together as a team.

40 points Grooming of the Animal

Includes the overall appearance of the animal in regards to health and condition, as well as cleanliness and proper clipping and grooming.

10 points Appearance of Exhibitor

Based on the neatness and appropriateness of grooming and attire of the show person.
PARTS OF THE DAIRY GOAT

graphics by Karen Carr
Goats

The domestic goat (Capra aegagrus hircus) is a subspecies of goat domesticated from the wild goat of southwest Asia and Eastern Europe.

The goat is a member of the family Bovidae and is closely related to the sheep as both are in the goat-antelope subfamily Caprinae. There are over 300 distinct breeds of goat. Goats are one of the oldest domesticated species, and have been used for their milk, meat, hair, and skins over much of the world. In 2011, there were more than 924 million live goats around the globe, according to the UN Food and Agriculture Organization.

Female goats are referred to as "does" or "nannies", intact males as "bucks", "billies", or "rams" and their offspring are "kids". Castrated males are "wethers". Goat meat from younger animals is called "kid" or cabrito (Spanish), and from older animals is simply known as "goat" or sometimes called chevon (French), or in some areas "mutton" (which more often refers to adult sheep meat).

Anatomy and health

Goats are considered small livestock animals, compared to bigger animals such as cattle, camels and horses, but larger than microlivestock such as poultry, rabbits, cavies, and bees. Each recognized breed of goats has specific weight ranges, which vary from over 140 kg (300 lb) for bucks of larger breeds such as the Boer, to 20 to 27 kg (45 to 60 lb) for smaller goat does. Within each breed, different strains or bloodlines may have different recognized sizes. At the bottom of the size range are miniature breeds such as the African Pygmy, which stand 41 to 58 cm (16 to 23 in) at the shoulder as adults.

Most goats naturally have two horns, of various shapes and sizes depending on the breed. Goats have horns unless they are "polled" (meaning, genetically hornless) or the horns have been removed, typically soon after birth. There have been incidents of polycerer goats (having as many as eight horns), although this is a genetic rarity thought to be inherited. The horns are most typically removed in commercial dairy goat herds, to reduce the injuries to humans and other goats. Unlike cattle, goats have not been successfully bred to be reliably polled, as the genes determining sex and those determining horns are closely linked. Breeding together two genetically polled goats results in a high number of intersex individuals among the offspring, which are typically sterile. Their horns are made of living bone surrounded by keratin and other proteins, and are used for defense, dominance, and territoriality.

Goats are ruminants. They have a four-chambered stomach consisting of the rumen, the reticulum, the omasum, and the abomasum. As with other mammal ruminants, they are even-toed ungulates. The females have an udder consisting of two teats, in contrast to cattle, which have four teats. An exception to this is the Boer goat, which sometimes may have up to eight teats.

Goats have horizontal, slit-shaped pupils. Because goats' irises are usually pale, their contrasting pupils are much more noticeable than in animals such as cattle, deer, most horses and many sheep, whose similarly horizontal pupils blend into a dark iris and sclera. This adaptation allows goats to see at least 320 degrees around their heads with no blind spot in front of them.
Both male and female goats have beards, and many types of goat (most commonly dairy goats, dairy-cross Boers, and pygmy goats) may have wattles, one dangling from each side of the neck.

Some breeds of sheep and goats look similar, but they can usually be told apart because goat tails are short and usually point up, whereas sheep tails hang down and are usually longer and bigger – though some (like those of Northern European short-tailed sheep) are short, and longer ones are often docked.

Reproduction

Goats reach puberty between three and 15 months of age, depending on breed and nutritional status. Many breeders prefer to postpone breeding until the doe has reached 70% of the adult weight. However, this separation is rarely possible in extensively managed, open-range herds.

In temperate climates and among the Swiss breeds, the breeding season commences as the day length shortens, and ends in early spring or before. In equatorial regions, goats are able to breed at any time of the year. Successful breeding in these regions depends more on available forage than on day length. Does of any breed or region come into estrus (heat) every 21 days for two to 48 hours. A doe in heat typically flags (vigorously wags) her tail often, stays near the buck if one is present, becomes more vocal, and may also show a decrease in appetite and milk production for the duration of the heat.

Bucks (intact males) of Swiss and northern breeds come into rut in the fall as with the does' heat cycles. Bucks of equatorial breeds may show seasonal reduced fertility, but as with the does, are capable of breeding at all times. Rut is characterized by a decrease in appetite and obsessive interest in the does. A buck in rut will display flehmen lip curling and will urinate on his forelegs and face. Sebaceous scent glands at the base of the horns add to the male goat's odor, which is important to make him attractive to the female. Some does will not mate with a buck which has been descented.

In addition to natural, traditional mating, artificial insemination has gained popularity among goat breeders, as it allows easy access to a wide variety of bloodlines.

Gestation length is approximately 150 days. Twins are the usual result, with single and triplet births also common. Less frequent are litters of quadruplet, quintuplet, and even sextuplet kids. Birthing, known as kidding, generally occurs uneventfully. Just before kidding, the doe will have a sunken area around the tail and hip, as well as heavy breathing. She may have a worried look, become restless and display great affection for her keeper. The mother often eats the placenta, which gives her much-needed nutrients, helps stanch her bleeding, and parallels the behavior of wild herbivores, such as deer, to reduce the lure of the birth scent for predators.

Freshening (coming into milk production) occurs at kidding. Milk production varies with the breed, age, quality, and diet of the doe; dairy goats generally produce between 680 and 1,810 kg (1,500 and 4,000 lb) of milk per 305-day lactation. On average, a good quality dairy doe will give at least 3 kg (6 lb) of milk per day while she is in milk. A first-time milker may produce less, or as much as 7 kg (16 lb), or more of milk in exceptional cases. After the lactation, the doe will "dry off", typically after she has been bred. Occasionally, goats that have not been bred and are continuously milked will continue lactation beyond the typical 305 days. Meat, fiber, and pet breeds are not usually milked and simply produce enough for the kids until weaning.
Diet

Goats are reputed to be willing to eat almost anything, including tin cans and cardboard boxes. While goats will not actually eat inedible material, they are browsing animals, not grazers like cattle and sheep, and (coupled with their highly curious nature) will chew on and taste just about anything remotely resembling plant matter to decide whether it is good to eat, including cardboard, clothing and paper (such as labels from tin cans). The unusual smells of leftover food in discarded cans or boxes may further stimulate their curiosity.

Aside from sampling many things, goats are quite particular in what they actually consume, preferring to browse on the tips of woody shrubs and trees, as well as the occasional broad-leaved plant. However, it can fairly be said that their plant diet is extremely varied, and includes some species which are otherwise toxic. They will seldom consume soiled food or contaminated water unless facing starvation. This is one reason goat-rearing is most often free ranging, since stall-fed goat-rearing involves extensive upkeep and is seldom commercially viable.

Goats prefer to browse on vines, such as kudzu, on shrubbery and on weeds, more like deer than sheep, preferring them to grasses. Nightshade is poisonous; wilted fruit tree leaves can also kill goats. Silage (fermented corn stalks) and haylage (fermented grass hay) can be used if consumed immediately after opening – goats are particularly sensitive to Listeria bacteria that can grow in fermented feeds. Alfalfa, a high-protein plant, is widely fed as hay; fescue is the least palatable and least nutritious hay. Mold in a goat's feed can make it sick and possibly kill it.

The digestive physiology of a very young kid (like the young of other ruminants) is essentially the same as that of a monogastric animal. Milk digestion begins in the abomasum, the milk having bypassed the rumen via closure of the reticuloesophageal groove during suckling. At birth, the rumen is undeveloped, but as the kid begins to consume solid feed, the rumen soon increases in size and in its capacity to absorb nutrients.

Behavior

Goats establish a dominance hierarchy in flocks, sometimes through head butting.

Goats are extremely curious and intelligent. They are also very coordinated and widely known for their ability to climb and hold their balance in the most precarious places. This makes them the only ruminant able to climb trees, although the tree generally has to be on somewhat of an angle. Due to their agility and inquisitiveness, they are notorious for escaping their pens by testing fences and enclosures, either intentionally or simply because they are handy to climb on. If any of the fencing can be spread, pushed over or down, or otherwise be overcome, the goats will almost inevitably escape. Due to their high intelligence, once a goat has discovered a weakness in the fence, it will exploit it repeatedly, and other goats will observe and quickly learn the same method.

Goats have an intensely inquisitive and intelligent nature; they will explore anything new or unfamiliar in their surroundings. They do so primarily with their prehensile upper lip and tongue. This is why they
investigate items such as buttons, camera cases or clothing (and many other things besides) by nibbling at them, occasionally even eating them.

When handled as a group, goats tend to display less clumping behavior than sheep, and when grazing undisturbed, tend to spread across the field or range, rather than feed side-by-side as do sheep. When nursing young, goats will leave their kids separated ("lying out") rather than clumped as do sheep. They will generally turn and face an intruder and bucks are more likely to charge or butt at humans than are rams.

Diseases

While goats are generally considered hardy animals and in many situations receive little medical care, they are subject to a number of diseases. Among the conditions affecting goats are respiratory diseases including pneumonia, foot rot, internal parasites, pregnancy toxosis and feed toxicity. Feed toxicity can vary based on breed and location. Certain foreign fruits and vegetables can be toxic to different breeds of goats.

**Pregnancy Toxemia/Ketosis** is caused by a build up of excess ketones in the blood (urine & milk), due to the incomplete metabolic breakdown of body fat. It occurs in a doe (before or after kidding) because of an inability to consume enough feed to meet her needs. Ketosis can be caused by either too much, or too little grain, or the wrong type of grain and also poor quality hay/forage.

Goats can become infected with various viral and bacterial diseases, such as foot-and-mouth disease, caprine arthritis encephalitis, caseous lymphadenitis, pinkeye, mastitis, and pseudorabies. They can transmit a number of zoonotic diseases to people, such as tuberculosis, brucellosis, Q-fever, and rabies.

**Caprine Arthritis Encephalitis (CAE)** is a lentiviral infection of goats which may lead to chronic disease of the joints and on rare occasions encephalitis. The symptoms of this disease are varied. Mature goats can develop arthritis and find walking painful. The knee joints may be inflamed and swollen, and the goats will slowly lose condition. In some cases they will not be able to stand. As of 2012 there is no known cure. Goats which test positive for the disease are typically separated from the rest of the herd.

**Caseous lymphadenitis (CLA)** is an infectious disease caused by the bacterium Corynebacterium pseudotuberculosis found mostly in goats and sheep that at present has no cure. It manifests itself predominantly in the form of large, pus-filled cysts on the neck, sides and udders of goats and sheep. The disease is spread mostly from an animal coming in contact with pus from a burst cyst on an infected animal, but the disease is highly contagious and is thought to also be spread by coughing [1] or even by flies. Studies have found CL incidence in commercial goat herds as high as 30%.

**Husbandry**

Dairy goats are generally pastured in summer and may be stabled during the winter. As dairy does are milked daily, they are generally kept close to the milking shed. Their grazing is typically supplemented with hay and concentrates. Stabled goats may be kept in stalls similar to horses, or in larger group pens. In the US system, does are generally rebred annually.
Milk, butter and cheese

Goats produce about 2% of the world's total annual milk supply. Some goats are bred specifically for milk. If the strong-smelling buck is not separated from the does, his scent will affect the milk.

Goat milk naturally has small, well-emulsified fat globules, which means the cream remains suspended in the milk, instead of rising to the top, as in raw cow milk; therefore, it does not need to be homogenized. Indeed, if the milk is to be used to make cheese, homogenization is not recommended, as this changes the structure of the milk, affecting the culture's ability to coagulate the milk and the final quality and yield of cheese.

Goat milk is commonly processed into cheese, butter, ice cream, yogurt, cajeta and other products. Goat butter is white because goats produce milk with the yellow beta-carotene converted to a colorless form of vitamin A. (Cajeta (pronounced cah-heh-tah) is a delicious, sweet Mexican caramel sauce made from goat milk.)

According to the USDA, doe milk is not recommended for human infants because it contains "inadequate quantities of iron, folate, vitamins C and D, thiamine, niacin, vitamin B6, and pantothenic acid to meet an infant’s nutritional needs" and may cause harm to an infant's kidneys and could cause metabolic damage.

<table>
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<tr>
<th>Breed</th>
<th># does</th>
<th>Milk (lb)</th>
<th>% Fat</th>
<th>Fat (lb)</th>
<th>% Protein</th>
<th>Protein (lb)</th>
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<td>2,024</td>
<td>3.3%</td>
<td>66</td>
<td>2.9%</td>
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<td>454</td>
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<td>3.1%</td>
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<td>3.7%</td>
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<td>1,944</td>
<td>3.7%</td>
<td>71</td>
<td>3.0%</td>
<td>58</td>
</tr>
<tr>
<td>Toggenburg</td>
<td>112</td>
<td>1,784</td>
<td>3.1%</td>
<td>56</td>
<td>2.6%</td>
<td>47</td>
</tr>
<tr>
<td>All Breeds</td>
<td>13,409</td>
<td>1,850</td>
<td>3.6%</td>
<td>66</td>
<td>3.1%</td>
<td>57</td>
</tr>
</tbody>
</table>

Compiled by Tony Seykora; Seyko001@umn.edu

References:


http://www.americangoatsociety.com/

https://www.cdcb.us/publish/dhi/current/hax.html