

Kinder® Goat Youth Project Manual



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Purpose of the Kinder Goat Project Manual

The purpose of the Kinder Goat Project Manual is to teach youth how to select and care for a Kinder Goat and the responsibility of caring for an animal, record keeping, and fitting an animal for showing, showmanship, and sportsmanship. This guide was put together by the Kinder Goat Breeders Association for informational purposes.

Congratulations on your choice of a Kinder goat! Now that you've decided that Kinders are the right goat for you, you are probably a bit impatient to get started. Before you do, let's learn a little bit about your Kinder project.



As the only true dual purpose goats bred to excel in both milk and meat production, the Kinder goat is ideal for the hobbyist, homesteader and goat enthusiast. The Kinder goats' medium size (averaging 100-125 pounds) makes them easy to handle, a safe choice for families and kids, and their friendly personalities make them a joy to be around.

Kinders make a large amount of milk for their size, and their milk tends to be sweeter and higher in

butterfat than most other breeds. This makes it ideal for cheese-making and soaping as well as drinking. Reaching 70% of their full weight before they reach a year, with a dress out percentage of around 60%, they are also a wonderful option for those interested in raising goats for meat. They are very efficient in their feed conversion rate, and their milk and meat have both been rated as best tasting in competitions. Hardy and thrifty, these goats truly are the perfect breed!

Getting acquainted with goats

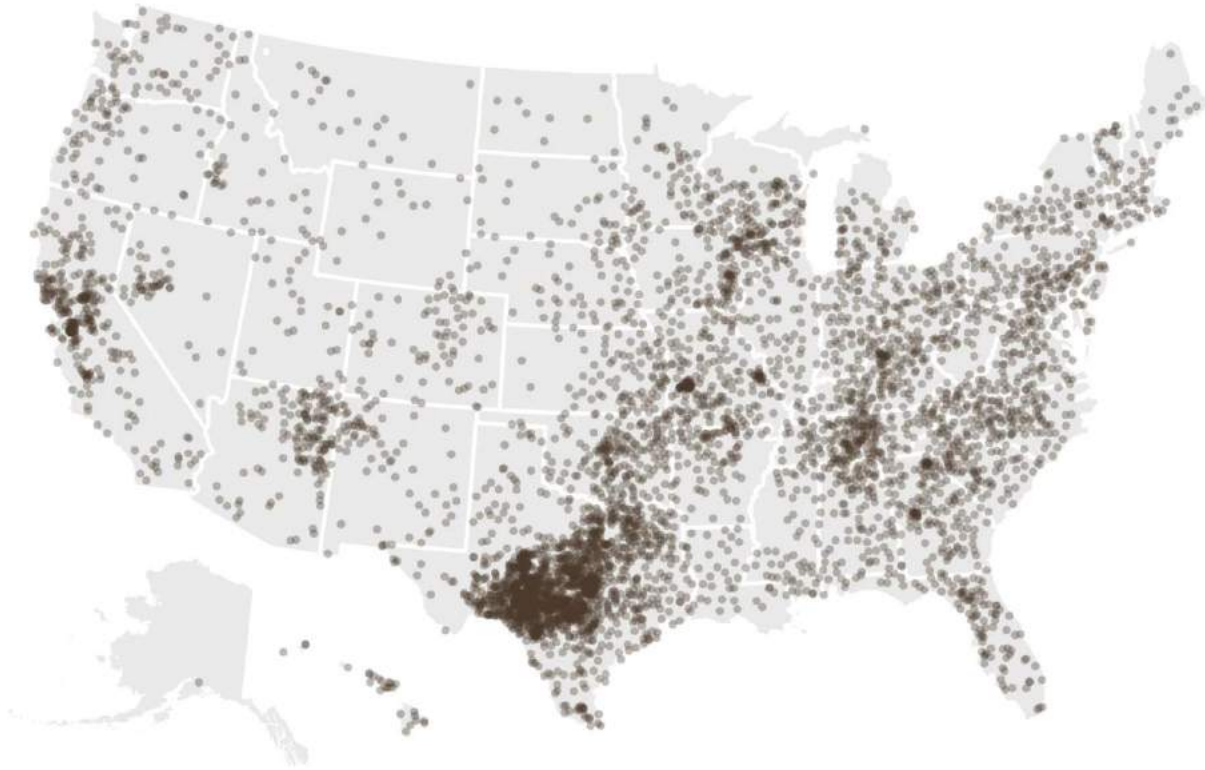
Goats are an important part of the story of mankind. They were probably the first domesticated animals in Western Asia and are mentioned in the Bible, Torah and Quran. Goats were common characters in western mythology. Like many mortals, the Greek gods were nourished on goat milk. Pan, the Greek deity of nature, was possessed of goat horns and feet, as were the satyrs of classic Greek drama and art. Goats are mentioned in eastern and western mythology and early literature from Europe to Asia to Africa.

Goats came to New England with Captain John Smith and to the Virginia colony with Lord Baltimore. The hardy animals proved they could survive on browse and scarce rations and still supply settler families with dairy products.

Today goats are important milk producers throughout the world. There were 2,621,514 goats in the United States as of 2012, the year of [the most recent USDA Agricultural Census](#). If America's goats were their own state, its population would be larger than that of Wyoming, Vermont, D.C. and North Dakota -- combined. This is what all those goats look like on a map.

This is literally every goat in the United States.

One dot = 500 goats.



As populations expand throughout the world and competition for land increases, goat numbers may rise. The animals survive on limited feed and in wide-ranging climates. While goat meat and milk does not surpass the amount of cow meat and milk consumed globally, goat products are more widely used throughout the world. In addition to milk, dairy goats provide meat (chevon), skins (Morocco leather) and hair. Goats are being used in urban areas to trim grass and control brush.

Aside from meat, goats are making their mark on the culture in other ways too. There are currently 3.2 million YouTube videos relating to goats. Last year saw the release of the video game Goat Simulator. 28 million people have watched this video of goats yelling like humans.¹

Goats make ideal 4-H projects, especially for younger members, since the animals are relatively easy to handle. They are interesting, like attention, inexpensive to keep, easily transported and fun to show at fairs. They enable young people to gain experience in feeding and managing live animals for fun and profit. Goats give young people a chance to learn about many of nature's processes by daily care of their animals.

Breed History

The first three Kinder does were born in Washington in 1986. After the death of their Nubian buck, Zederkamm farm bred their does to the Pygmy buck they had on hand simply to get them back in milk. They were pleasantly surprised by the growth rate, great temperament and darling appearance of the resulting kids. One of their most endearing characteristics was their “airplane ears”, neither hanging nor pointing but sticking out to the sides. As they matured, the new does proved even more desirable due to their high quality milk, ease of kidding and multiple kids in each freshening.

Briar Rose, Liberty and Tia were born in the summer of 1986. These first does quickly became favorites of a number of breeders and hobbyists in Snohomish, WA. Liberty led the way as the first Kinder doe entered into official milk test (DHIA). She earned her star by fulfilling the same requirements as those set by ADGA for standard dairy goats. Other local goat enthusiasts soon became involved in the Kinder project. In 1988, Teresa Hill, Daralyn Hollenbeck and Kathy Gilmore came together to form the Kinder Goat Breeders Association for the advancement of the breed. The first Kinders were registered in 1989 and a new breed was born!

The association, run by volunteers, established the standards to which breeders today should strive and it continues to advance the breed. This could not have been done without the help and encouragement of many individuals, including other goat breeders and judges. Special note should be given to the Considines of Herd Evaluation Service (HES- Portage, WI). The KGBA has refined the Kinder Goat Breed Standard with their expert help. In addition, HES designed a scorecard specifically for the dual purpose (milk and meat) Kinder. The Association later registered a trademark for the Kinder name to protect the breed standard, ensure a single breed registry and pursue the continuous improvement of the breed.

Kinders are now distributed throughout the United States, with herds spread from one coast to the other. They can even be found in Alaska, Canada and Brazil! There are now well over 5,000 Kinder goats in the herd book. Not only has the breed become very popular among homesteaders and family farms but these little goats have gone on to become star milkers, Grand Champions at breed shows, and won the hearts of many goat enthusiasts.



Goals & Expectations

While Kinders are amazing little goats that often thrive on less than their full sized cousins, they still need good shelter, feed and care. Please see our housing page to review how to prepare for the arrival of your new goats.



In your search for Kinder Goats, set realistic goals: starting with just one or two does or a doe and a wether. Finding a buck nearby for breeding will make the transition to goat owning go more smoothly than trying to start with a herd of twenty goats. Setting realistic goals for breeding, selling and improving you herd will ensure your success. This is also true when setting your expectations - expecting to get a gallon of milk for each of your does while feeding no grain is not realistic, and will make your search and future breeding results very disappointing. Instead, focus first on the conformation and health of the goats you are

buying. If your goats are healthy, sound and have proper conformation, good care and feed will yield excellent results in kid growth and milk production.

Since the Kinder is a dual purpose goat, emphasis should not be focused too heavily on either the milk or meat aspect, but rather on a goat that encompasses both. Whether you decide to purchase Kinders from an established breeder or start your own lines, be sure that the goats you purchase are healthy and free of disease. Some diseases are not outwardly obvious, but can be detrimental to your herd and remain on your property for decades. Remember - education is the best protection!

The Association recommends that your very first animals be tested for Caprine Arthritis Encephalitis (CAE), Caseous Lymphadenitis (CL) and Johne's Disease. It is also recommended that a regular annual testing program be established to ensure that your herd remains free from these diseases. If you wish further information on common goat diseases, please see the Articles section of the KGBA website.

Perhaps the best starting place is to ask yourself: What do I want to do with my goat. If you want a companion goat, then you should strongly consider a wether (a castrated buck). They can be very loving, playful and loyal. If you want to do goat packing, Kinder wethers make ideal animals due to the size and power of these animals.

If you are interested in milking your goat and producing milk related products like yogurt, ice cream and cheese, then you will want to look for a doe from strong milk producing lines. Kinders routinely provide up to six pounds of milk per day. The high percentage of butterfat from your Kinder Goat will ensure many years of wonderful, tasty dairy products.

If you are interested in showing your goats, you will want to obtain the best breeding stock available, free of flaws and defects, and closely adhering to the breed standard.

Your first Kinders, realistically, will not be perfect. You will find good characteristics in most every animal, but not any one of them will have it all. Begin with the very best animals you can afford, and work up from there.



Selecting your goats

The Kinder breed originated by crossing a Nubian goat with a Pygmy goat. We recommend that for ease of kidding and safety of the animal, that you cross a Nubian dam with a Pygmy buck. To this day, breeders continue to re-create the cross to bring new genetics to the wider Kinder gene pool, or to start a Kinder herd when established lines are not readily available.

The only criteria, and most important consideration, in this venture is that the Nubian is registered as purebred or 100% American through American Dairy Goat Association (ADGA), American Goat Society (AGS), or the Canadian Goat Society (CGS), that the Pygmy is registered with the National Pygmy Association (NPGA), American Goat Society (AGS) or the Canadian Goat Society (CGS) and can show proper documentation of ownership, lease, or breeding rights on both parents. The crossing of these two registered breeds result in first generation Kinders. After this initial breeding the Kinder is bred within their own breed. The harder question is, what criteria should be used when selecting the individuals? While the KGBA makes no ruling on the specific type you can use, we do have the following recommendations;

Nubians:

This breed provides the Dairy aspect of the Kinder 's dual purpose nature. They should have the basics of conformation down pat. They should be long bodied, deep and wide. You want a doe who has great capacity for holding multiple kids easily during pregnancy, with lots of room for a full rumen, to fuel high milk production and stay well fleshed. They should have strong, level backs and wide, flat rumps. Rumps should be long and level from hip to pin, and wide and level thurl to thurl. Chests should be wide and deep, with good extension of brisket, and increasing depth of body. Legs should be straight, with tight short pasterns, and tight toes pointing straight forward. Udders should be very high, wide and tightly attached in the rear, with a strong medial, and long smooth fore udder. It should be capacious, and she should produce large amounts of milk with ease. ADGA provides performance programs that many breeders partake in. If you can, look for high LA (Linear Appraisal) scores and



DHIR milk records. As far as type goes, you want a heavier, more robust doe that has adequate muscling. Stay away from delicate, refined, or "twig like" does. You want a hardworking girl that can contribute to the dual purpose nature of their Kinder kids, and not give you excessive dairy-ness you'll need to breed out later. Stay away from selecting an animal based on color.

Pygmies

These little guys will add the meat qualities and medium size our Kinders should be known for. Look for a buck that is long bodied, and as level as possible.

Many Pygmies will have great width and depth, but it's important to include plenty of length in the equation, for appropriate body capacity.



You want as long and level a rump as you can find. Pygmies are often short and steep hip to pin, and sloping thurl to thurl. Be picky, and keep in mind that correct top lines and rump structure are crucial in their Kinder offspring. You want the same straight legs and feet as with the Nubians, with short and strong pasterns that won't deteriorate with age. Chests should be wide and deep with a brisket that extends well past the point of the shoulder, wide and muscular loins, and wide and arched rear assembly.

Udders are not a focus in the Pygmy breed and should be evaluated carefully. Inspect any buck, and as many relatives as

you can access, for teat defects (spurs, double teats, extra orifices, etc) and avoid family lines displaying those faults. Udders on female family members should be held up tightly above their hocks, wide and tight rear attachments, noticeable medial, and smooth fore udder blending into her belly. Additionally, Pygmies often have difficulty kidding, so try to find a line that kid easily without medical intervention.

While there is no perfect animal, these tips should assist in your venture to creating the most correct Kinder kids, with appropriate breed type. As always, selective breeding and culling practices should be maintained for 1st generation kids, and beyond.

As with any breed, take care to select animals from clean, tested herds that are in good health and condition. If a seller advertises that they test for diseases, they will never be offended if you ask for copies of their results.

Of course the easiest way to obtain your new Kinder Goat is to buy one from a local breeder. There are many advantages to buying a Kinder Goat from your local breeder including after-sale support, being able to examine existing breeding lines, lack of the breeding uncertainty between the Nubian doe and Pygmy buck, inclusion of some medical procedures including shots, dehorning and castration, and the joy of picking out your kid and being able to take it home that day or within a few weeks.

Most breeders like to work with youths and want you to have a positive experience. Establishing a relationship with your local breeder gives you an established source of information for feed, medical and breeding decisions. Most will be more than willing to show you how to trim hooves and give shots. They should also tattoo your goat kid for identification, assist with registration, disbud (dehorn), and provide you with enough feed until you buy your own or switch over to your feed. Other than emergency situations, your breeder should be your first call when looking for information you are unable to find.

Finally, most breeders will keep more than one buck, or rotate bucks, so when it comes time for breeding, they may be able to assist you with buck service.

If you are planning on showing your goats in your local 4H or FFA, you will want to check the project/fair guidelines for your county Junior Fair. Many guidelines require that you begin with a kid project. This will allow you to experience raising and caring for your goats from the very beginning.

Kids make excellent first year projects. Most breeders will allow their kids to leave their mother between 6 to 8 weeks of age which is considered weaning age. However, some breeders feel that 8 to 12 weeks old is an ideal age as the kid has the benefit of additional time on their mother's milk.

You must decide whether your go project will be for a pet or whether you may be interested in eventually breeding your goat. If you're interested in breeding the recommendation is to purchase a kinder goat as opposed to creating your own line. This will allow you to enjoy the Kinder goat without the task of purchasing Nubians and Pygmies to begin your own line. You may want to create your own line of Kinders as you grow in your project but it's best to keep things simple to start.

Kinders must be the result of breeding registered animals. A registered animals has an official pedigree paper issue by the registry organization that keeps track of production records, show records and pedigrees. The pedigree is a family history and list the names of parents, grandparents etc. The pedigree will also contain identifying information for your goat such as birthdate and tattoo numbers.

Kinder Goats are unique in that their herdbook is not closed. In other words, as new lines of goats are created, those lines can be registered by the Kinder Goat Breeders Association. Animals in the first to fourth generation are issued a Certificate of Merit while animals in the fifth generation and beyond are issued a Certificate of Registration. The first generation of Kinder is always created by crossing a Pygmy (preferably a buck) to a Nubian (preferably a doe). After this generation, Kinders must be bred back to other kinder goats. When figuring the generation of your kinder kids, they will always be one generation higher than the lowest generation of their Sire (buck) or Dam (doe). The following chart provides some examples:

Generation of Sire or Dam	Resulting Generation	Pedigree
Nubian x Pygmy	First	Cert of Merit
First gen bred with First – Fifth+	Second	Cert of Merit
Second gen bred with Second – Fifth+	Third	Cert of Merit
Third gen bred with Third – Fifth+	Fourth	Cert of Merit
Fourth gen bred with Fourth – Fifth+	Fifth	Cert of Registration

If you were to breed a sixth generation dam to a first generation buck, the resulting offspring would be a second generation; one generation higher than the lowest generation of either parent.

It is important to remember that higher generations do not necessarily equal a higher value goat. Breed type and conformation are much more important considerations. Another factor that does not affect the value of a goat is the color of their coat. Some people will pick their Kinder based on the coloration or spots. Cosmetics are a matter of personal preference but remember, you don't eat the fur. Muscle mass and udder characteristics are much better indicators of the value of your goat.

Housing

Kinder goats enjoy playing outdoors. However they do require some type of shelter. Goat shelters must be dry, free from drafts, clean and protect the goat from the weather. Inadequate shelter, or dampness in the pen can cause pneumonia or respiratory problems. Kids are the most likely to be affected by the drafts and cold, so make this a number one priority before you bring a new kid home. Also consider this when you wean babies and move them into a pen of their own. The most important thing is: **Dry, clean, no drafts.**



An 8 x 10 building will house two goats comfortably. You should have a small, secure area for feed and supplies that is not accessible to your goats. For a smaller goat like a Kinder, it is recommended to allow approximately 10 Square feet per animal per pen. Make sure the surface bedding is kept dry. Straw makes an ideal bedding material. Also, goats typically will not eat hay that has fallen onto the ground and this loose hay can be used for bedding.

Provide feeding equipment which will prevent goat droppings from contaminating feed. You can buy feeders at your local farm supply store. When beginning your new kid on a feed mix, it is best to stay with them for a set amount of time and then remove their feeder. This will prevent them playing in the feeder. They will learn very quickly that when the feeder is put in the pen, it's time to eat.

Goats like clean, fresh water. In the winter time, a bucket of warm water provides a treat for your goats.

Also like all babies like, Kinder babies enjoy toys. Kinder kids are known for being playful and energetic. They love to climb and play. Toys can include wooden spools used for wire, small picnic tables, Little Tikes toys, stacked tires, or a homebuilt play gym, as long as whatever you provide seem safe to climb on and play with.

Fencing should be at least 4 foot high. Some Kinders can jump and may be able to clear a 4 foot fence. For goat kids the stock fencing with the 6 inch squares or smaller or the no climb horse fence is preferred. Some goats may try to escape through, over, under or wherever they can find an opening. Your job is to keep your goats in and safe. Woven wire is the best recommendation for mature animals. **Do not** use barbwire fencing. This can cut your goat if they get tangled in the fence. Make sure to purchase quality gate latches for both your inside and outside pens. Choose a latch that you can easily open with one hand but that is goat proof. Your Kinders will be very curious and learn quickly how to open the simple latches

Caring for your goat – feed, water, supplements

Goats are herbivorous mammals which means they eat plants, give birth to live kids and nurse their young with milk. They are also ruminants meaning they are hooved animals with a four-part stomach. Understanding that a goat is a ruminant is a very important part to understanding your goat's digestion.

Like other ruminants, goats have a complex digestive system. The stomach includes four chambers - the rumen, the reticulum, the omasum, and the abomasum. The largest area of the stomach is the rumen where the food travels through first. The rumen of a Kinder goat can hold 2-3 gallons of liquid and food matter in the rumen, which is the part of the stomach that can be seen bulging out on the sides of your goat. Food is broken down into digestible form in the rumen by micro-organisms. Partially digested food returns to the goats mouth where the goat chews it some more. This soft food is called cud. Chewing cud is called ruminating. Goats spend much of their day ruminating and do not sleep long hours like you do. The next chamber, the reticulum, pumps the food back to the mouth or passes it to the omasum. The omasum removes moisture from digesting food. Finally the abomasum functions similar to our stomach where the proteins are broken down into substances which can be used by the body.

The feeds that are fed to dairy goats can be broken up into two different groups. Basically, these two groups are roughages and concentrates. Roughages are high in fiber (18% crude fiber or more). Fiber adds bulk to the goat's diet and keeps their digestive tract working well. Fiber has a laxative effect. It can also influence the butterfat content of a mother goat's milk. Diets that are high in fiber tend to increase butterfat content resulting in creamy milk, while low fiber diets decrease butterfat content. Most roughages are forages, that is, they come from the green vegetative parts of the plant, for example, blades of grass. Forages tend to be low in energy. In contrast, concentrates are low in fiber and high in either energy or protein. They often come from the seeds of a plant. Examples of concentrates include corn, oats, brewers' grains and soybeans.



Feed groups:

- 1) Dry forages - these feeds are cut and cured, usually in the sun. This way they can be stored for later use. Hay is forage that is cut before or at maturity.
- 2) Green forage and browse - examples of these are pastures or shrubs that your goat grazes fresh. As well as grazing, goats can browse like deer and giraffes. They can take a woody plant like a raspberry bush and use their mobile upper lip to select the tender, highly digestible new leaves from it and leave behind the less digestible branches and thorns. Because of this ability to select and reject different

parts of the plant, goats are called selective eaters. Goats can get sick if they get too much green forage too suddenly. Always introduce your goat to fresh pasture and cuttings gradually. Do not feed your goat yew clippings, rhododendron clippings or prunings from cherry, apricot or peach trees (these are toxic when they wilt). All of these are very deadly to her but she will eagerly eat them. Before you cut and carry any fresh feed to her make sure it is not poisonous. You can order an excellent pamphlet (Information Bulletin #104) on Common Poisonous Plants from Cornell University Media Services by calling (607)255-2080.

3) Silages - these forages have been cut and then “pickled” rather than dried to store them. They are cut and then stored without air. In the absence of oxygen, certain bacteria are able to ferment the forage and preserve it this way. Silage can be made from grasses and legumes and also from corn plants. If improperly fermented or stored, the silage can develop molds that are deadly to goats. Chaffhaye is a commercial brand of silage.

4) Energy concentrates - as the name suggests, these feeds are high in energy. They include feeds that have less than 20% protein and less than 18% crude fiber. Energy concentrates include grains, flour mill by-products and certain root crops.

5) Protein concentrates - these concentrates contain at least 20% crude protein. They are often also high in energy. They can be of plant or animal origin. Examples include soybean meal, buckwheat middlings, dried whey, cottonseed meal and soybean meal.

6) Trace mineral supplements - come in various chemical forms depending on what mineral is being added to the diet. An example of a trace mineral supplement that humans use is table salt. Minerals should be added carefully to the feed as excesses can be toxic (poisonous) to your goat. Some minerals, for example, Selenium, Copper, Magnesium, and Cobalt are best fed as salt blocks or mixed into the grain ration or complete diet as the goat may eat too much of them if fed free choice in the form of loose salt.²

Any changes to your goat’s diet should be made gradually. Any sudden change can disrupt the function of the rumen and the digestive system and make your goat sick.

Water

Water is the cheapest feed ingredient. However, production, growth and the general performance of the animal will be affected if insufficient water is available. Water needs vary with the stage of production, being highest for early lactating does, and during times when the weather is warm and forages are dry. In some instances, when consuming lush and leafy forages, or when grazing forages soaked with rain water or a heavy dew, goats can get all the water they need out of the feed.³

However, water is almost always needed by some members of the herd such as lactating does. Because it is difficult to predict water needs, goats should always have access to sufficient high quality water. Clean water buckets are a must and buckets should be cleaned at least weekly. A good rule of thumb is if you would not drink the water from your goat’s bucket, then your goat should not have to drink the water from that bucket.

Goat Health

A common rule of thumb when caring for your goat is that if it is leaking out of either end, then something is wrong. This may seem a bit simplistic but is actually good advice. Goats should have clear eyes, their nostrils should be free of discharge, and there should not be any matter stuck around the rear of the goat. If you observe any of these conditions, then your goat may not be feeling well. As mentioned previously, your first source for health information should be your breeder. A second, but equally important source of information of health information for your goat is your veterinarian. When you bring your first Kinder goat home, you should have it checked by your veterinarian for any health defects that will need to be addressed with your breeder. Most breeders will encourage you to have your goat vet checked within seven days of purchase. This will begin you and your goat's relationship with your vet; one that will last the life of your goat.

It is important that you establish a relationship with your veterinarian for several reasons. First, when you have that first emergency in the middle of the night, a veterinarian that already knows you is more likely to come to your farm. It is also important that you establish a Veterinary Client Patient



Relationship. A Veterinarian-Client-Patient Relationship, or VCPR for short, exists when your veterinarian knows your pet well enough to be able to diagnose and treat any medical conditions your animal develops. Your part of the VCPR is allowing your veterinarian to take responsibility for making clinical judgments about your pet's health, asking questions to make sure you understand, and following your veterinarian's instructions. Your veterinarian's part of the VCPR involves making those judgments; accepting the responsibility for providing your pet with medical care; keeping a written record of your pet's medical

care; advising you about the benefits and risks of different treatment options; providing oversight of treatment, compliance (your follow-through on their recommendations) and outcome; and helping you know how to get emergency care for your pet if the need should arise.

Figuring out what's wrong with an animal is like solving a very complex puzzle – your veterinarian has to figure out how to fit all of the clues (pieces of the puzzle) together to solve it. Veterinarians have, on average, 8 or more years of college and in-depth veterinary school training to prepare them for this task. Their training makes it possible for them to thoroughly evaluate, diagnose and treat your animal's problem. Doing these things effectively involves thorough knowledge of your animal's body systems and how they function, as well as a familiarity with how medications and other treatments work and if any treatments interfere with others. Hands-on physical examination is incredibly valuable to your pet and can't be replaced by a phone conversation, web-based conversation, or email description.⁴

The following chart provides some basic information for healthy goats:

- Rectal temperature: 101.5 – 103.5 (can vary due to weather)
- Pulse rate: 70 – 80 beats per minute
- Respiration: 15 to 30 per minute
- Rumen movements: 1 – 1.5 per minute

- Estrus Cycle: 17 to 23 days
- Gestation: 145 to 155 days (about 5 months)
- Average Lifespan: 8-12 years

Goats can be affected by parasites, both internal and external. Internal parasites include lung worms, stomach worms and tapeworms. The most effective way of destroying internal parasites is to use a Dewormer. Due to concerns of increased drug resistance by worms, dewormers should only be used when you have a known condition. This means you may need to isolate individual goats to collect fecal samples to have examined by your veterinarian. Parasites can be shared through feces so be sure to place feed dishes and hay off the ground. Use rotational grazing and limit pastures to use by goats only. External parasites include lice, ticks, flies and maggots. Sprays and insecticidal dust can be used to prevent and or kill these parasites in your goat housing. Carefully cleaning pens on a regular basis will also help.

There are number of other diseases that can affect your goat. Two of the most common diseases that you will see in your new kids are coccidiosis and pneumonia. Coccidiosis is a parasitic disease of the intestinal tract of animals caused by coccidian protozoa. The disease spreads from one animal to another by contact with infected feces or ingestion of infected tissue. Diarrhea, which may become bloody in severe cases, is the primary symptom. Most animals infected with coccidia are asymptomatic, but young or immunocompromised animals may suffer severe symptoms and death. One of the best guards against this disease is proper management. Keep the kid's living area clean and dry. Keep food and water dishes clean. Make sure that food and water is supplied in such a way that the kids cannot step in and soil it. To prevent your kids from ever getting coccidiosis, they need to be on a prevention program. There are many drugs that can be used, but it is best to discuss coccidiosis protocol with your breeder or your vet. Once coccidiosis is present, best treatment is to contact your veterinarian to diagnose the severity of coccidiosis. Immediate treatment is important because of dehydration.

The 3 main causative agents of pneumonia are: Bacterial, Viral and Parasitic. High humidity, close conditions, drastic change in weather conditions, change in environment, feed, or kidding (Sometimes referred to as shipping stress), inadequate ventilation and dusty damp bedding are some of the most common antagonists for the beginning of pneumonia. Symptoms include cough, fever, loss of appetite, discharge from the nose and raspy breathing. Do not delay in treatment; early detection and treatment ease the seriousness of pneumonia greatly. Different medications will work on different types of pneumonia. If you have not had a diagnosis by a Veterinarian, and are treating yourself, expect some improvement by the second full day of treatment. If you do not see this improvement, you should contact your veterinarian for advice. Some steps you can take to prevent pneumonia include protecting your goats from the weather, controlling parasites, providing good ventilation, and good nutrition management.

There are many other diseases and parasites that you should become familiar with as your knowledge of goats increases.

Breeding and Kidding

Planning is very important when choosing to breed goats. It requires more than just putting a doe and a buck together. When planning to breed there are several things to consider. Before breeding, your goats should be of good health, and weight, and free of big worm loads. Goats too thin may put the health of the mother and kids at risk. Goats too fat can cause trouble with kidding. Once your goats are in good health, now it's time to plan your breeding. There are a few more things to consider.

The first thing to consider is when to have your kids. Kidding may require a lot of time in the barn, sometimes in very cold conditions. Gestation for goats is approximately 150 days so plan ahead for kids about 5 months from breeding. Avoiding very hot or very cold weather is something to consider, depending on where you live. Kids can get frostbite or die when born in very cold weather and require you to be present for kidding to get them dry fast. Very hot weather can be hard on the dam in late pregnancy.

When you know when you want kids, now it is time to pick a sire. If you have more than one option, choose a buck that will improve any faults or areas that may need improvement in your dam. For example if your dam is higher in the hips than the shoulders, choose a sire that is higher in the front or very level. Avoid breeding any goat that has teat defects, is frequently ill, or has other problems that can pass on to kids.

Once you have chosen your buck and doe, you can wait until your doe is in heat or you can put them together and leave them for about a month. Some people prefer to wait until their doe is in heat and put them together for a short time. This way they know the exact date their kids are due and can plan to be home near the delivery dates. Most does have heat cycles that are very noticeable, especially during the fall and winter. They may be loud, wagging tails, or standing at the fence where the boys are. Keep track of when your doe is in heat and mark it on a calendar. Plan for your doe to come into heat about every 3 weeks to decide when you want kids born.

When your doe is pregnant, it is important for them to get good nutrition. Being pregnant and kidding takes extra nutrition from a doe's systems. Making sure your doe is in top condition can help to ensure a happy and successful kidding and healthy kids.

Kidding Time

Your Kinder doe is bred and kidding time is approaching. There are some things you need to do for your doe. A CDT vaccine shot at 4-6 weeks before her due date is a good idea to give immunity to the kids. You should also check with your veterinarian to see if they recommend any supplements like Bo-Se. Her hoofs should be trimmed a month before kidding. Make sure she has plenty of good hay that is high in calcium such as alfalfa or alfalfa pellets during the last part of her pregnancy, fresh water everyday and a good loose mineral free choice. Does near kidding should have a shelter that is dry, free of drafts, and have clean bedding. Now it's time to get ready for kidding. The best advice is to be prepared ahead of time. There are several ways to prepare.

Go online and watch kidding videos and presentations on how to reposition kids if needed. Most kids are born without assistance, but you should be prepared to help if your doe gets into trouble. Kids can get tangled or try to come out in the wrong position. Have a vet phone number that treats goats just in case you need one. Have a friend or neighbor who is a goat person to be your mentor and ask them to be available if possible for any questions of problems. They will be your 'goat-to' person.

It is important to educate yourself before your kids arrive. Get a goat care book and read about kidding. Put together a kidding kit. A simple kidding kit can help with an easy delivery and is the minimum of items to have on hand before kids arrive.

Items in your kit should include;

Clean dry towels (for drying kids)

Puppy pads (to lay under kids delivering) (Optional)

Scissors (to cut umbilical cord)

Iodine (for dipping cord)

Molasses or other high-energy source to give to dam

Warm water to mix molasses into

Clean bedding to place after kidding

So now it is delivery time. Your doe is due and she may be acting like she wants you to stay with her. Her udder may appear fuller than a few days ago. She may be lying by herself in a corner or just not eating like she normally does. These are usually signs of impending delivery. She may paw the ground and lie down or change positions frequently.

Stay close and grab your cell phone (for pictures) and your kidding kit. Wash your hands well with soap and water in case you need to help. Goats usually have kids very quickly if there are no problems. They will often only push a few times before one is born. They should come out 2 front hoofs first with a nose just after them in a 'diving' position. Goats can deliver in other positions but this is the easiest and most common position.

When the kid comes out, the dam will start licking the kid to clean it off. This is where you can help a lot. Immediately run your finger into the kid's mouth to sweep out the goo to assist with clearing their airway so they can breathe. They will probably be coughing or sneezing to help. Lay them on a towel or puppy pad and vigorously rub them down to get them dry and stimulate them. Let the dam continue to help. She will try to lick your hands too as she has really strong bonding instincts at this time. Make sure when she has other kids she pays attention to them. You may have to put the 2nd kid right in front of her and move the 1st one away so she bonds with them all. If the temperature is below 30, the kids need to get completely dry quickly. Frostbite can happen to ears quickly after delivery at temperatures below 25 degrees. Very cold temperatures may require taking kids in the house to dry them. Return them to mom as soon as possible.

After the kids are born, she should deliver a placenta that will be a large shiny blob of pink tissue within an hour of the last kid. She may eat this and it is fine to let her, as it is very high in nutritional value. If she does not eat it you can get it out of her area and discard it. The kids will need their umbilical cords cut with scissors about 1 in. from their belly. They should not bleed after a few minutes following delivery. Dip the remaining cord in iodine to protect from germs.

Your kids will already be trying to stand to nurse. Squeeze both teats to make sure there is no clog in the opening and milk flows freely, then assist kids with getting their first drink. They are pretty good at doing this alone, but sometimes require a little assistance. They should eat the first time within an hour of birth. This is a great time to offer mom some warm molasses water (1 tablespoon in 1 gallon) and she should drink. After she drinks what she wants, you can switch to plain water a few hours later. Offer her some good hay at this time also. Clean out the wet and soiled bedding and put fresh down.

Spend lots of time with new kids to socialize them to people. They are much easier to sell when friendly and social.

Showing your Goat

Whether you're a junior competitor showing your dairy goat for the first time, an amateur goat enthusiast or a professional breeder, taking your goat to show is an exciting way to evaluate the quality of your animal and test your showmanship skills. Preparing yourself and your dairy goat for the show ring takes time; but with a positive attitude, regular training and good planning anyone can show their goat. If you are interested in competing or want to see how your goats compare to others of the same breed, you can show them at fairs and other events put on by different goat associations. Showing has the added benefit of helping you market your goats. Here are ten guidelines to remember:

- Practice walking with your goat before the show: Even a well-trained goat may be a little nervous during the show because of unfamiliarity with the show ring, but if you lead-train first, at least the goat has an idea of what you expect
- Don't talk with your neighbor: Talking with the person next to you while the judge is thinking about placements, comparing goats, or examining each goat is considered rude and distracting.
- Remain calm even if your goat is misbehaving: Despite being trained, your goat may get bored, scared, or just ornery and misbehave in the show ring. Don't ever hit the goat or treat it roughly.
- Do what the judge asks: You will start by walking the goat clockwise around the ring. Keep your goat under control with her head up, and keep her between you and the judge. If your goat doesn't want to move, gently coax the goat. Some old timers will suggest you lift the goat's tail to get it moving, but we don't advocate any behavior that could appear abusive to your goat. When the judge asks you to stop walking, set your goat up in a straight line, facing the same direction as the other goats. Stand on the goat's other side or near her head. Stay alert for another request and keep the goat set up.
- Keep your goat properly set up: Make sure that your goat's weight is evenly distributed. Don't splay the legs. Set up your doe so that you can see a third of the udder in front and a third behind the back leg. Set up the rear legs first and then the front legs. Hold the goat's head up. Make sure the front legs are straight down from shoulders.
- Be a good loser (or winner): After judges determine rankings, they explain their reasons for awarding placements as they did. Listen closely to those reasons. Regardless of your placing, congratulate the class winners and other goat owners who placed ahead of you.⁵

Things You'll Need:

Chain collar

Clippers

Baby wipes

Show catalog

Class list

Hoof trimming supplies

Prepare all paper work several weeks before the show. Some shows require you to pre-register weeks before the show. To pre-register send the show secretary a completed entry form, a copy of your goat's registration papers and a check before the entry deadline. Read over all the show's rules and regulations carefully before entering.

Start training your goat to lead at least six weeks before the show if not earlier. Place a chain or nylon collar around your goat's neck, leaving two inches of room so the collar rest loosely about the neck. Lift the collar up and under your goat's jaw and ask your goat to walk forward, just a few steps at first, by applying pressure under her chin. Repeat this exercise every day and soon your goat will be walking quietly with you and not fussing.

Practice squaring up your goat. You want your goat to stand with her head high, back straight, front legs squarely under her shoulder and hind legs aligned evenly with her hips. You should be able to walk your goat, halt her and quickly square her up without a lot of commotion before you enter a show ring. Every time you handle your goat practice leading, pick up her legs, touch around her udders, and ask her to square up. Though Kinder goats aren't judged on your showmanship abilities, being able to show off your goat to her best advantage plays a large role in your goat's performance and placing in the ring.

Clip your goat before the show. You want to do a complete body clip three weeks before the show. This will give any trace lines ample time to grow out and you will have plenty of time to double-check for any spots you might have missed. Touch up around your goat's head and lower legs two or three days before the show.

Trim your goat's hooves a week before the show. Assemble an outfit for yourself for the show ring. It should be neat, clean and tidy. A white shirt with dark pants, polished leather boots and a matching belt are always a safe way to go. Wash your goat the morning of the show or the evening before. Clean under her tail with baby wipes and around her hooves before entering the ring. Replace her regular collar with a chain-link collar, the type used on dogs.

Check in with the show secretary the day of the show and pick up a revised show schedule and class list. You may also have to present your dairy goat to a veterinarian for a quick health inspection. You should always have your original registration papers with you as well as any health papers. Please remember that if you are crossing state lines, you will need to have a veterinary inspection and health paperwork completed no more than 30 days prior to the show.

Many shows will have a showmanship class in addition to breed classes. While breed classes focus on the animal, showmanship focuses on your ability to present your animal. 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.

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! Many of the handling skills used in breed class are also used in showmanship class. Here are a few tips.

- 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.⁶

More information on showmanship movement can be found in Appendix H.

Opportunities

Your Kinder goat project is not only what you invest in it financially, but through the commitment and time you spend working on your project. The following are basic opportunities which this project offers you:

- Learning basic record keeping on the care of your goat. . .
- Learning proper feed and nutrition needed to keep your goat in good health.
- Learning about animal health, such as basic vaccination and worming practices to keep your goat free from disease and parasites.
- Learning the basic body parts of your goat.
- Learning to train your goat how to lead and be shown.
- Learning the responsibility to provide a happy home for your Kinder goat. This includes fresh water, shelter/shade, salt/minerals, feed, clean/dry housing, and a place to exercise.
- Learning to search further if you cannot find the answers you need in this project book by referring to other sources which have been listed in the Appendices

Information Sources and Useful Links

The Kinder Goat Breeders Association Breed Standard, Kinder Scorecard, and registration information are all available on this KGBA website, and are very useful tools that can be used while choosing new goats and during future breeding and culling decisions. Perhaps the best source of information for the goat novice is their breeder. Look for a breeder that likes working with youth and has a good reputation.

Harvey Considine's book "Dairy Goats for Pleasure and Profit" contains a section on Kinders, and it is an excellent reference for all kinds of goat questions. "The Illustrated Standard of the Dairy Goat" by Nancy Lee Owen, and "Dairy Goat Judging Techniques" by Harvey Considine and George W. Trimberger are also excellent resources that will help you learn how to evaluate your goats.

Sue Weaver's book, *The Backyard Goat: An Introductory Guide to Keeping and Enjoying Pet Goats, from Feeding and Housing to Making Your Own Cheese*. This book discusses all the basics and provides ideas on all the projects you can explore with your goat.

Pat Showalter provides a 5 DVD set through Etsy on Kinder Goat herd evaluation, along with sample scoresheets to make it easier to follow the scoring done by Harvey and Peggy Considine. The videos are rough and unedited - just as they were filmed on a big old camcorder in the '90's and early 2000's. They contain a wealth of information found nowhere else, and by the time you get through the 18 plus hours of the actual professional evaluations, you will understand what makes a good Kinder goat. The first three disks are lessons in Kinder history as well - the process of establishing breed parameters, refining the breed standard, and creating the official scorecard. Included on disk 5 is a copy of the video from the very first sanctioned Kinder Goat Show in Ferndale, WA. The video DVD set can be found on Etsy at the following link:

https://www.etsy.com/listing/164691597/kinder-goat-herd-evaluation-dvds-set-of?ref=shop_home_active_17

These information in the following links will provide essentials to help you make wise breeding decisions as you build your Kinder herd.

http://Kinder_communique.blogspot.com/2010/

<http://4h.ansci.cornell.edu/animal-programs/goats/dairy-goats/>

Glossary

A

ABOMASUM: The fourth or true stomach of a ruminant where enzymatic digestion occurs.

ABSCESS: Boil; a localized collection of pus.

ACIDOSIS (Grain Overload): A condition in which the pH of the rumen is abnormally low (<5.5).

ACUTE: Any process occurring over a short period of time.

AFTERBIRTH: The placenta and associated membranes expelled from the uterus after parturition.

ANEMIA: An inadequate number of red blood cells in the body.

ANESTROUS PERIOD: The time when the female does not exhibit estrus (heat); the non-breeding season.

ANTHELMINTIC: A drug that expels or kills internal parasites.

ANTIBODY: A protein produced by the body's immune system that recognizes and helps fight infections and other foreign substances in the body.

ANTIBIOTIC: A pharmaceutical product injected or fed to the animal that helps it fight off a bacterial infection.

ARTIFICIAL INSEMINATION: The injection of semen into the female reproductive tract through the use of an instrument (example: French gun) in order for the animal to become pregnant.

AVERAGE DAILY GAIN (ADG): The amount of weight gained each day during a period of time.

B

BACK CROSS: Breeding a first cross offspring back to one of the parental breeds. This is often the first step in establishing a grading up program or composite breed.

BALANCED RATION: A ration containing nutrients in the correct proportion to meet the nutritional needs of the animal.

BALANCE/SYMMETRY: Describes how the parts of the body blend together and result in good eye appeal and proper confirmation.

BLIND TEAT: A non functional teat on the udder of the goat. It can be an additional teat that is not connected to a milk duct or one that is nonfunctional due to mastitis.

BLOAT: An excessive accumulation of gas in the rumen and reticulum, resulting in distension of the abdomen.

BODY CONDITION SCORE: A numeric value assigned to an animal that estimates the degree of fatness or condition that covers the animal's body. This score is assessed by palpating the spine, (spinal and transverse processes) and ribs. See body condition scores for goats under goat nutrition Community of Practice.

BOLUS: A rounded mass of medicine used in cattle, goats and sheep.

BREED: A group of animals with similar characteristics (color, markings, size, etc.) that distinguishes it from other animals. The characteristics are passed from the parents to the offspring.

BREEDING SEASON: The period when goats will breed naturally. This season usually begins in the fall.

BUCK (Billy): A sexually mature intact male goat used for breeding.

BUCKLING: A sexually immature young male.

BUCK RAG: A cloth rubbed on a buck and imbued with his odor. The rag is kept in a closed container and can be used to assist in stimulating estrus (heat) in does.

BROWSE: Bushy or woody plants that goats consume.

BURDIZZO: A tool used to castrate goats, sheep or cattle that crush the spermatoc cords to render the male sterile. This leaves the scrotum intact; however, the testicles will shrink away.

BUTTING: A method of fighting by which one animal strikes the head and horns of its opponent.

C

CAPRINE ARTHRITIS ENCEPHALITIS (CAE): An infectious disease that causes arthritis and progressive inflammation in one or more organs or tissue systems such as the joints, bursae, brain, spinal cord, lungs and udder. This disease affects goats and is currently incurable.

CHEVON: Chevon is the French word for goat. These are animals that are slaughtered near or shortly after weaning.

CARCASS: The dressed body of a slaughtered animal.

CASTRATION: Removal of the testicles.

CISTERN: The final temporary storage area of milk in the udder.

CLEATS (Clays, Claws, Clees): The two halves of the goat's hoof.

CLOSED HERD or FLOCK: No new animals are introduced into the herd or flock.

CLOSTRIDIAL INFECTION: A bacterial infection that can occur in sheep and goats. Some goat diseases that are caused by this infection are: Blackleg, Enterotoxaemia (Overeating disease) and Tetanus.

COCCIDIOSIS: A disease that is commonly exhibited in younger animals caused by a protozoa parasite infection. It is characterized by diarrhea, dehydration, weight loss, lack of thriftiness, and weakness.

COLOSTRUM: The first milk the doe or ewe produces after given birth to their offspring. The milk is thick and golden yellow in color and contains rich antibodies. If the newborn does not consume the milk within the first 24 hours of life, there is very little chance the animal will survive.

CONCENTRATE: The non-forage part of an animal's diet, principally grain and including oil seed meal and other feed supplements that are high in energy and/or protein, but low in crude fiber.

CONFORMATION: The combination of structural correctness and muscling of the animal including the frame and shape of the animal.

CREEP FEEDER: An enclosed feeder meant to keep larger (older) animals out for supplementing the ration of young animals.

CRUDE FIBER - The more fibrous, less digestible portion of a plant primarily consisting of cellulose, hemicellulose and lignin. A method of estimating the fiber content is the analysis of a feedstuff by sequential extraction with acid and alkaline solutions.

CRYPTORCHID: A condition where one or both testicles fail to descend into the scrotum sac.

CULL: To remove a substandard animal from the herd or flock.

D

DOE (Nanny): A sexually-mature female goat.

DOELING: A young female that is not yet sexually mature.

DRENCHING: To administer an oral dose of liquid.

DRESSING PERCENTAGE: The dressing percentage is calculated by dividing the carcass weight by the live weight.

DRY PERIOD: The time when the female is not producing milk.

E

EAR TAG: A method of identifying animals by using a plastic or metal tag placed in the ear of the animal. The ID information is printed or written on the tag and then it is applied to the ear. This is not considered a permanent method of ID.

EMBRYO: Unborn offspring that does not yet have developed organ systems and is in the very early stages of development in the uterus.

ENTEROTOXEMIA - A disease caused by an overgrowth of bacteria (*Clostridia perfringens*) in the intestine, usually due to fermentation of a large quantity of starch, with production of endotoxin. Usually causes rapid death of animals.

ENVIRONMENT: The sum of all the conditions the animal is exposed to including: climate, housing, feed sources, disease, etc.

ESTROGEN: The hormone that primarily causes behavioral estrus.

ESTROUS (adjective): An adjective describing anything having to do with the female reproductive cycle, including estrus.

ESTROUS CYCLE: The beginning of one estrus (heat) to the beginning of the next estrus (heat).

ESTRUS ((noun, a.k.a “Heat”)): The period in which the female is receptive to breeding.

EXTERNAL PARASITE. These parasites feed on body tissue such as blood, skin, and hair. The wounds and skin irritation produced by these parasites result in discomfort and irritation to the animal. Some examples of external parasites are: fleas, keds, lice, mites, nose-blot flies, and ticks.

F

FAMACHA ©: It is an acronym for Faffa Malan Chart; he is the person who developed a method of using the color of the inner eye lid to determine the level of parasite infection in sheep and goats in South Africa. The method is used to implement selective treatment programs for parasites in goats. To use the system properly producers need to attend training course and obtain an official chart. This system is only good for control of *H. Contortus* (also known as the barber pole worm).

FECES: The manure or excrement produced by an animal.

FEED ADDITIVE: Anything added to a feed, including preservatives, growth promoters and medications.

FETUS: Unborn offspring that has developed organ systems. This term applies to the baby after embryonic development and until birth.

FIBER (in diet): The portion of a feed that is indigestible or slowly digested by ruminants. It may be expressed as crude fiber, neutral detergent fiber, acid fiber or effective fiber.

FINISH/CONDITION: Refers to the amount of external fat that covers the body.

FLUSHING: The process of increasing the quality of the diet of the doe before breeding season starts. The practice is used to increase the number of ovulations to try to increase the number of offspring. It is generally achieved by increasing the energy in the diet by either using high quality forage or increasing or starting feeding a concentrate.

FORAGE: The hay and/or grassy portion of the diet of goats, sheep and cattle.

FORB - any non-woody broad-leaf plant that is not a grass.

FOREQUARTERS: The area on the animal's body that includes the withers, front legs, feet, shoulder, chest and brisket area.

FOUNDER - Refers to a consequence of acidosis, resulting in rapid growth of the hoof.

FREE CHOICE (Ad Libitum): Feed made available to an animal at all times so that the animal can eat whenever and as much as it chooses.

FRESHEN: When a doe gives birth (kid) and starts to produce milk.

G

GESTATION: The period in which the doe is pregnant (average 150 days).

H

HAND MATING: A breeding scheme in which a female and male are isolated by the producer in a confined area for individual breeding.

HEAT (Estrus): The period in which the doe is receptive to mating.

HERMAPHRODITE: A sterile animal with reproductive organs of both sexes.

HORMONE: A chemical secreted into the bloodstream by an endocrine gland, bringing about a physiological response in another part of the body.

HYPOTHERMIA: When body temperature drops below that required for normal metabolism and body functions. Inability to keep warm often caused by cold or wet weather.

I

IMMUNITY: Protection from disease that comes as a result of the body's normal immune system response.

INBREEDING: The mating of closely related individuals.

INTERNAL PARASITES: Parasites located in the gastrointestinal system in animals.

INTRADERMAL: Within the dermis, this is the layer of skin below the epidermis (outermost layer).

INTRAMUSCULAR (IM): The route of administering medications by inserting the needle straight into the skin and deep into the muscle. The recommended site for this injection is usually given in the neck of the animal.

INTRANASAL (IN): The spraying or administering of a solution into the nostrils.

INTRAVENOUS (IV): Medication injected into the vein, usually the jugular vein.

J

JOHNE'S DISEASE (*Mycobacterium paratuberculosis*): A bacterial disease causing severe weight loss and some diarrhea. Not currently curable.

K

KEDS: They are large, flattened, usually wingless parasitic flies.

KETONE: Compounds found in the blood of pregnant does suffering from pregnancy toxemia.

KETOSIS: The accumulation of ketones in the body, responsible for pregnancy diseases, acetonemia, twin lambing disease and others that occur at the end of pregnancy or within a month of kidding.

KID: A goat less than one year old.

L

LACTATION: The period in which a doe produces milk; the secretion or formation of milk.

LARVAE: The immature stage of an adult parasite. The term applies to insects, ticks and worms.

LEGUMES: A family of plants that has nodules on the roots to enable them to fix nitrogen from the atmosphere. Legumes are high in protein and bear their seeds in a pod (i.e., clover, alfalfa, cowpea).

LETHARGY: An animal that is slow to react lacks energy and is often sick.

LINE BREEDING: A form of inbreeding that attempts to concentrate the genetic makeup of some ancestor.

LIVER FLUKES: A small leaf-shaped organism that rolls up like a scroll in the bile ducts or liver tissue.

LOIN: A muscle that lies between the last rib and the hip bones of the back. Is commonly used to describe the part of the body between the last rib and the hip.

LUNGWORMS: Roundworms found in the respiratory tract and lung tissue.

LUTALYSE (PGF₂ or Prostaglandin): A hormone used for synchronizing estrus.

M

MARBELING: The fat within the muscle.

MASCULINITY: Term used to describe the secondary male characteristics which are exhibited in the head, neck shoulders and chest.

MASTITIS: Inflammation of the udder usually caused by a bacterial infection.

MATERNAL: Pertaining to the mother or dam.

MEAT GOAT (type): A breed of goat that is primarily used for meat production.

METABOLIC DISEASE: Those diseases that involve the lack of or unusual breakdown of physical and chemical processes in the body. Often associated with nutrition and feeding.

MICROORGANISM: Any living creature of microscopic size, especially bacteria and protozoa.

MINERAL - The inorganic group of nutrients, including elements such as calcium, phosphorus and copper.

N

NECROPSY: To examine an animal after death to determine the cause of death.

NON-PROTEIN NITROGEN (NPN): Feed ingredient that is not a protein, but contains nitrogen (urea) that can be converted by the animal into protein (with enough energy).

NUTRIENT - One of six classes of chemical compounds having specific functions in the nutritive support of animal life.

NUTRIENT REQUIREMENTS - The level of specific nutrients required to keep an animal healthy and productive.

NUTRITION - The study of nutrients, determining what nutrients are required, what levels of nutrients are necessary for various levels of productivity, and how to provide those nutrients.

O

OMASUM: The omasum is the third compartment of a ruminant's stomach located between the reticulum and the abomasum. Known as manyplies.

OPEN: A female that is not pregnant.

OPEN SHOULDERS (Loose shoulders): The shoulder blades are structurally too far apart at the top which makes it difficult for the animal to stand for long periods or to move around freely.

OVER-CONDITIONED: An animal that is excessively fat often due to over feeding.

P

PALATABLE or PALATABILITY: The taste and texture of forage and feed. A forage that is highly palatable has a pleasant taste and texture to livestock.

PARASITE: An organism which lives on or in another living organism (host) at the expense of the latter.

PARTURITION: The process of giving birth.

PASSIVE IMMUNITY: Acquiring the protection against infectious disease from another animal. This commonly occurs when a newborn consumes antibody-rich colostrum from its mother. Failure to consume sufficient colostrum increases the animal's risk of contracting a disease.

PATERNAL: Pertaining to the father or sire.

PEDIGREE: A listing of the ancestors of an animal that generally goes back 4 to 8 generations. It is often used to prove parentage for registration in a breed association. A shorter list can be used by producers to trace parentage of animals on their farm.

PELT: The skin of a goat.

PERFORMANCE DATA: Information related to the growth rate of the goat. This often will include birth to weaning data and adjusted weaning weights. It correctly refers to any weight and animal gain data available on an animal.

PERITONITIS: Inflammation of the internal surface of the abdomen. This condition is often the result of infections and certain diseases.

pH: How much acid or how much base is in a sample. The lower the pH of a substance, the more acidic the sample. Conversely, the higher the pH, the more basic the sample. A pH of 7 is considered neutral. Normal rumen pH should be around 6-7, depending on the ration being fed.

PHOTOPERIOD: Length of day (or length of period that that artificial light is provided). This also can be expressed as a ratio of daylight to darkness.

PLACENTA: the membranes that surround the fetus while it is in the uterus. This is also referred to as the afterbirth at parturition.

PLACENTITIS: Abnormal inflammation of the placenta, usually due to infectious disease.

POLLED: Naturally hornless.

POLIOENCEPHALOMALACIA, PEM, or 'polio' - A neurological disease of goats caused by thiamine deficiency. The rumen normally produces adequate levels of thiamine; but under some conditions, such as a high grain diet, high sulfur in the diet, stress, or being "off feed," the thiamine is degraded, thus causing the disease.

POSTPARTUM: Occurring after birth.

ppm: Parts per million.

PREPARTUM: Occurring before birth.

PROGENY: Offspring.

PROLAPSE: An interior organ pushing outside of the body cavity.

PROGNOSIS: The chances of an animal having a normal quality of life following a disease or problem. This is reported using the words poor, fair, good, or excellent.

PROLIFIC: Tendency to produce many offspring.

PROTEIN: A nutrient required for growth and the repair of body tissue.

PROTEIN SUPPLEMENT: A feed that contains a high density of protein and is used to supply additional protein in the ration.

PROXIMAL: A structure that is nearer the main body. For example, the three bones in the foot are designated by the terms proximal, middle, and distal depending on their location relative to the main body.

PUBERTY: When an animal becomes sexually mature. This occurs around 4 months of age in most goat breeds.

PURULENT: A term describing pus-like discharge or infection.

Q

QUARANTINE: To confine and keep an animal away from the rest of the herd or flock to prevent the spread of disease.

R

RACK (meat term): refers to the rib section of the carcass along the back. This is one of the highest value cuts on a goat and is often used as a roast.

Range - an area of land that is populated with native plants species, often never cultivated.

RATION: The total feed given to an animal during a 24-hour period.

RECESSIVE GENE: A gene which must be present on both chromosomes in a pair to show outward signs of a certain characteristic.

RECTAL PROLAPSE: When a portion of the rectum protrudes from the anus.

REGISTERED: A goat whose birth and ancestry has been recorded by a registry association.

RETICULUM: The second compartment of the ruminant's stomach. The reticulum has a honey-combed appearance and is the receptacle for metal foreign objects that is swallowed.

ROTATIONAL GRAZING: A system by which livestock are allotted to a certain grazing or browsing area for a certain period of time before they are moved to another area.

ROUGHAGE: A high fiber, low total digestible nutrient feed consisting of coarse bulky plants or plant parts; dry or green feed with over 18% crude fiber.

RUMP: The area between the hip bones and the tail head.

RUMEN: The large first compartment of a ruminant's stomach containing a microbial population that is capable of breaking down forages and roughages.

RUMINANT: Animals that have a four-compartment stomach (rumen or paunch, reticulum or honeycomb, omasum or manyplies, and abomasum or true stomach).

RUMINATION: The process of regurgitating food to be re-chewed.

S

SCALE: A device used to weigh animals, feed etc.

SCOURS: Diarrhea.

SCRAPIE: Scrapie is a fatal, degenerative disease affecting the central nervous system, one of the class of diseases known as transmissible spongiform encephalopathies (TSEs).

SCROTUM: The skin sac or bag containing the testicles of a male animal.

SCURS: A rudimentary horn. A small rounded portion of horn tissue attached to the skin of the horn pit of a polled animal.

SEPTICAEMIA: A serious infection in which the bloodstream is invaded by large numbers of causal bacteria which multiply there.

SERVICE: Mating.

SETTLED: A female that is pregnant.

SICKLE-HOCKED: Condition when an animal has too much angle or set to the hock. This condition, when viewed from the side is identified as the animal having their feet too far under the animal while the hock is in the correct position behind the animal.

SIRE: Male parent.

SKIN TENT: When the skin of an animal is gently pinched and pulled outward. A dehydrated animal's skin will not rapidly return to its normal position or shape.

SOUNDNESS: When an animal is free from disease and lacks structural defects that affect its usefulness.

SOREMOUTH: A highly contagious, (also to humans), viral infection that causes scabs around the mouth, nostrils, and eyes and may affect the udders of lactating does.

STANCHION: A device for restraining a goat by the neck for the purpose of feeding, milking, hoof trimming or artificial insemination.

STANDING HEAT: The period in which the doe or ewe will stand still and accept the male for breeding.

STILLBIRTH: A fetus born dead. There can be many possible causes some related to disease others due to nutrition or conditions in the uterus at or before the birth process starts.

STOCKING RATE (per acre): The number of animals that can be pastured on one acre, or the number of acres required to pasture one animal.

STRUCTURAL CORRECTNESS: Free from any conformational abnormalities which includes the skeleton, feet, and legs of the animal.

STYLISH (Tracking): An animal possessing an attractive, pleasing conformation or way of movement.

SUBCUTANEOUS (SQ) INJECTIONS: Insertion of the needle just under the skin and not into the muscle. This is important because SQ injectables are designed for a slower rate of absorption.

SUPPLEMENT - A feed designed to provide nutrients deficient in the animal's main diet.

T

TAPEWORMS: Long, ribbon-like segmented flatworms that can inhabit the gastrointestinal tract of animals.

TATTOO: Permanent identification of animals produced by placing ink under the skin, generally in the ear, or in the tail web (of the LaMancha goat) using a tattoo gun with digital (sharp needle-like) numbers.

TEASER: A male that has been vasectomized and is used to indicate which females are in estrus.

TETANUS: Also called Lock Jaw is a condition caused by poisons produced by *Clostridium tetani* which is a bacterium found in the soil. Symptoms usually appear within 7 to 14 days of exposure and include stiffness and soreness that progresses through the body until the whole body is paralyzed within 48 hrs of first appearance.

TOTAL DIGESTIBLE NUTRIENTS (TDN): A measure used to indicate the energy in a feed or of how much energy an animal requires. A pound of TDN equals 2,000 calories (kilocalories).

TOXEMIA: Generalized poisoning, due to soluble (usually bacterial) toxins entering the bloodstream.

TOXIN: Any poisonous substance of biological origin.

TOXOID: An immunizing agent against toxins produced by bacteria. Most often form of immunity to tetanus.

TRACE MINERALS(TM): Minerals that are required in very small amounts.

U

UDDER: The mammary gland of sheep and goats that secretes-milk.

UMBILICUS: The area where the umbilical cord was attached during gestation. This is commonly known as the "belly button."

URINARY CALCULI: A metabolic disease of males characterized by the formation of stones within the urinary tract. It is caused primarily by an imbalance of dietary calcium and phosphorus.

URETHROSCOPY: An examination of the urethra using an endoscope.

UROLITHS or UROLITHIASIS: Describing a variety of stones that are found in the urinary system. These include kidney and bladder stones.

V

VACCINE: A biological product that is injected into an animal to stimulate an immunity to a particular disease.

VAGINAL PROLAPSE: The protrusion of the vagina in ewes or does during late pregnancy.

VEIN: Blood vessels in the body that carry blood towards the heart.

VITAMINS - Specific organic substances required for various metabolic functions.

VIRULENCE: The ability a microorganism has to cause an infection or disease. Microorganisms which have the ability to cause more severe disease are said to be highly virulent.

W

WASTY: a:) Too much fat on the carcass; b:) An animal that has a paunchy-middle.

WATTLE: A small fleshy appendage attached on or near the throat area of the goat and which serves no known function.

WEAN: To separate nursing offspring from their mothers so that they no longer receive milk.

WEANER or WEANLING: An animal that has been weaned from its mother or has stopped suckling its mother. **WETHER:** A male sheep or goat that has been castrated.

WHITE MUSCLE DISEASE: Problem in young goats caused by a deficiency of selenium and/or vitamin E. It causes kids to be weak at birth and shortly after birth. The condition impairs the animals ability to transport oxygen properly and if not treated can result in death within 48 hrs of birth.

Y

YEARLING: A male or female sheep or goat that is between 1 and 2 years of age.

Z

ZOONOSIS or ZOONOTIC: Any animal disease that can be spread to humans.⁷

Bibliography

Most of the information in this manual was obtained from the website for the Kinder Goat Breeders Association, the Kinder Communique and the Kinder Goat Project Manual compiled and edited by Kim Moff in 1999. Other sources are notated in the text and are shown below.

1. Washington Post, Map: Literally every goat in the United States, Ingram, Christopher. 1 Jan. 2015.
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Appendix A

Kinder Goat Breed Standard

General Appearance

HEIGHT: 20"- 26" at the withers for does, maximum 28" for bucks. (Does should average around 115 pounds and bucks around 135).

Moderate faults:

Overly long in body

Serious faults:

Overly long or short in the leg

COAT: Short, fine textured.

MARKINGS: Any colors, any markings are acceptable.

HEAD: Strong, clean-cut, balanced, with deep jaw and wide muzzle and nostrils. Straight or dished face. Ears are long and wide, resting below horizontal. Genetically horned; disbudding and dehorning recommended. (NOTE: in order to show at sanctioned shows, animals must be disbudded or dehorned). Large eyes, widely set, bright and animated.

Moderate faults:

Long muzzle

Jowls lacking muscle tone

Pig eyed

Serious faults:

Narrow, snipey muzzle

Underdeveloped jowls

Narrow forehead

Closely set eyes

Ears above horizontal

Very serious faults:

Crooked face

Slightly misaligned jaw/bite

Swollen jowls

Bulbous forehead

Protruding eyes

Disqualifying faults:

Under/overshot jaw/bite

Disfiguring malocclusion

Blindness or deafness

Naturally polled

SHOULDER: Muscular, well attached at withers and set smoothly on the chest wall. Point of shoulder behind brisket extension.

Moderate faults:

Lacking muscle tone

Serious faults:

Sharp or steep withers

Very serious faults:

Open or poorly attached shoulders

Recessed shoulders

CROPS: Full, well muscled, not fatty.

Moderate faults:

Lacking in fullness

BACK: Strong, laterally straight, smooth transposition from withers, blending smoothly at hips into rump.

Moderate faults:

Poor transition to withers

Very serious faults:

Swayed or roached

CHINE: Level and straight.

Moderate faults:

Poor transition to withers

LOIN: Wide, level and having moderate fleshing over short ribs.

Serious faults:

Lacking width

RUMP: Gradual slope from hips to pins and otherwise wide and level from thurl to thurl. Pin bones should be moderately wide, set level with the tail head and have moderate fleshing.

Moderate faults:

Steep or overly short or long rump

Lack of muscling over hips

Serious faults:

Lacking width

Narrow or pinched hips

Narrow or pinched pin bones

LEGS: Moderately heavy boned but not coarse. Forelegs heavily boned, strong, sturdy, straight, and set wide apart. Rear legs straight when viewed from behind and set wide apart, providing ample height for udder clearance. Pasterns medium length. Strong and springy with proper slope. Well angulated from thurl to hock. Hock cleanly molded, straight from hock to pastern.

Moderate faults:

- Flanks lacking muscle tone and/or depth
- Thighs shallow or weak
- Poorly angulated rear legs

Serious faults:

- Fine boned or lacking width
- Postiness, cow, fiddle or sickle hocks
- Thighs lacking width

Very serious faults:

- Elbows not flush with torso
- Bowed or knock kneed
- Labored and/or stiff locomotion

FEET: Short, straight, with deep heel and level sole. Toes symmetrical and tight, not curled or splayed.

Moderate faults:

- Misshapen

Serious faults:

- Not symmetrical
- Splayed and/or curved
- Pasterns too long or too short

Very serious faults:

- Stiff or weak pasterns
- Pasterns lacking proper slope

Dairy/Meat Character

NECK: Moderate length, strong and muscular but not fat, smoothly blended to shoulder and brisket.

Serious faults:

- Overly long or short
- Lacking muscle tone

WITHERS: Wedge shaped, slightly above and blending smoothly into the shoulder blade. Muscular but not fat, should be slightly higher than hips.

Serious faults:

- Sharp or steep

Very serious faults:

- Recessed

RIBS: Long, flat, and wide apart, well sprung and deep.

Serious faults:

Short or close

Very serious faults:

Lacking spring of rib

FLANK: Moderately deep and arched, with some increase in depth of flank over depth at heart girth.

Serious faults:

Lack of muscle tone and/or depth

THIGHS: Muscular, but with some incurving when viewed from the side and rear; set apart and long with somewhat wide incurving escutcheon providing ample room for the udder.

Moderate faults:

Shallow or weak

Serious faults:

Poorly angulated

Very serious faults:

Lacking width or height

SKIN: Soft, fine textured, and pliable.

Body Capacity

Relatively large in proportion to the size of the animal, providing ample lung, digestive, and reproductive capacity, as well as strength, vigor, and stamina. Greater attention to depth and spring of rib than to body length.

CHEST: Deep and wide with chest floor wide between forelegs and full at the point of the elbow.

Serious faults:

Lacking chest floor width

BARREL: Deep and strongly supported by ribs that are wide apart and well sprung; depth and width increasing toward the rear of the barrel.

Moderate faults:

Lacking symmetrical increase

Very serious faults:

Narrow and/or shallow

HEART GIRTH: Deep, resulting from long, well sprung fore ribs, wide chest floor, full at the point of elbow.

Very serious faults:

Shallow

BRISKET: Prominent, extending beyond the point of shoulder when viewed from the side.

Very serious faults:

Flat, non-protruding

Disqualifying faults:

Concaved

Mammary System

UDDER: Capacious, held high and properly hung.

Disqualifying faults:

Blind, non-functioning udder

FORE UDDER: Extended well forward, widely and tightly attached.

Moderate faults:

Lacking proper blending

Serious faults:

Lacking forward extension

Narrow attachment

Pocket and/or lack of muscle tone

REAR UDDER: Highly, widely, and tightly attached.

Serious faults:

Narrow

Lacking muscle tone

Very serious faults:

Overly long

Unbalanced halves

MEDIAL SUSPENSORY LIGAMENT: Strong and dividing neatly into a wide, quite level udder floor with about 1/2" deep cleft.

Very serious faults:

Lacking definite small cleft between halves

CAPACITY AND SHAPE: Proportionately large capacity with uniform halves and soft texture adding to capacity.

Moderate faults:

Lacking comparable capacity

Very serious faults:

Pendulous

Unevenly hung

Overly large for size of doe

TEATS: Medium size, easy to milk, cylindrical, uniform, plumb from rear view, pointing slightly forward from the side view. Any teat abnormality denotes a "cull" and is unacceptable.

Moderate faults:

Narrow

Lacking symmetrical placement

Serious faults:

- Too short for ease of handling
- Lack of uniformity
- Strutting

Very serious faults:

- Too long, large or small
- Cistern

Reproductive System for Bucks

TESTICLES: Two, evenly and fully descended, of equal size, healthy and firm. The scrotal sac is to be soft and pliable, with moderate to tight attachment.

Moderate faults:

- Not evenly descended

Serious faults:

- Unequal in size

Very serious faults:

- Poor condition

- Soft

- Tough and/or lacking elasticity

Disqualifying faults:

- Not fully descended

- More or less than two

TEATS: Two non-functional, well shaped and adequately spaced. Any teat abnormality denotes a cull and is unacceptable.

Very serious faults:

- Lacking uniformity and/or symmetrical placement

Disqualifying faults:

- More or less than two

- Multiple orifice, bifurcated, double, or extra teats

- Spurs, supernumery, blind, abnormal and/or deformed

Appendix B

KGBA Scorecard

Recognizing the need for a scorecard to meet their specialized requirements in a dual purpose animal, the Kinder Goat Breeders Association asked me to help them with devising one, which I was glad to do. A copy of it is hereby reproduced.

Several comments are in order. First it is an adaptation of the dairy goat scorecard utilizing the four general categories of general appearance, dairy character, body capacity and mammary system. This is appropriate since a large part of the Kinder goat usefulness lies in their ability to produce satisfactory quantities of milk for long periods of time out of udders that are easy to milk and strategically placed to avoid injury and infection. However, the “ultra-dairy appearance” and low flesh covering of some dairy goats make their usefulness as a meat animal quite minimal. To promote this aspect of the Kinder required that more attention be paid to general appearance, hence the allowance of a full 40 points to the category. Since they are a “mid-sized goat” the maximum wither heights of 26 inches for mature does (and 28 inches for mature bucks) will tend to keep them a little shorter legged and this is good. Shorter legged animals tend to be easier to maintain in good flesh than longer legged animals. The term “moderate fleshing” in the front end will help us to select those animals who carry some flesh over shoulders and neck. Similarly, the topline description calls for moderate fleshing in the areas of loin, short ribs and pin bone.

The language of dairy character is also primed to allow more muscle and fleshing. Beginning with the phrase “moderate angularity” and continuing on to a neck of moderate length, strong and muscular and “thighs that are muscular” the intent is to preserve an animal with good muscling yet a will to milk.

~Harvey Considine

Kinder Goat Scorecard

I. General Appearance – 40

An attractive, well-balanced, proportional animal revealing femininity combined with strength, grace and easy motion.

Stature – slightly taller at the withers than the hips, with a maximum allowable with height of 26 inches for does, 28 inches for bucks. (5)

Head – strong, clean-cut, balanced with deep jaw and wide muzzle and nostrils. Straight or dished face with ears below the horizontal. (5)

Front End – smooth blending shoulders, withers slightly above shoulder blades, full crops, point of shoulder behind brisket extension, proper fullness at point of elbow, moderate fleshing (10)

Topline – back strong and straight, blending smoothly at hips into a rump that has moderate slope from hip to pins and is otherwise wide and level from thurl to thurl; the loin should be wide, level and have moderate fleshing over the short ribs; pin bones should be moderately wide, set level with the tail head and have moderate fleshing. (10)

Feet and Legs – front legs should be straight from side or front view with sound knees, relatively long cannon bone and with front feet pointing straight forward; rear legs should be wide and square from the rear and correctly angled from the side; feet should have even, tight toes with good heel depth; pasterns of medium length, strong and springy with slight angle when at rest (10)

II. Dairy Character - 20

Moderate angularity allowing for a strong chest; wide, flat ribbing with some increase in depth of flank from depth of heart, the neck should be of moderate length, strong and muscular but not fat; withers above shoulder blades, again muscular but not fat; flank should be moderately deep and arched; thighs should be muscular but have some incurving from both side and rear and have a wide, somewhat incurving escutcheon; skin is to be fine textured with soft, fine hair.

III. Body Capacity – 10

Moderately large in proportion to over-all size of animal with greater attention given to depth and spring of rib than body length. An ideal mature weight of 115 for does and 135 for bucks in combination with a maximum height of 26 inches (28 for bucks) will provide an animal of good depth if they are not too long.

IV. Mammary System - 30

Fore udder extended well forward, widely and tightly attached (5)

Rear udder high, tightly and widely attached (5)

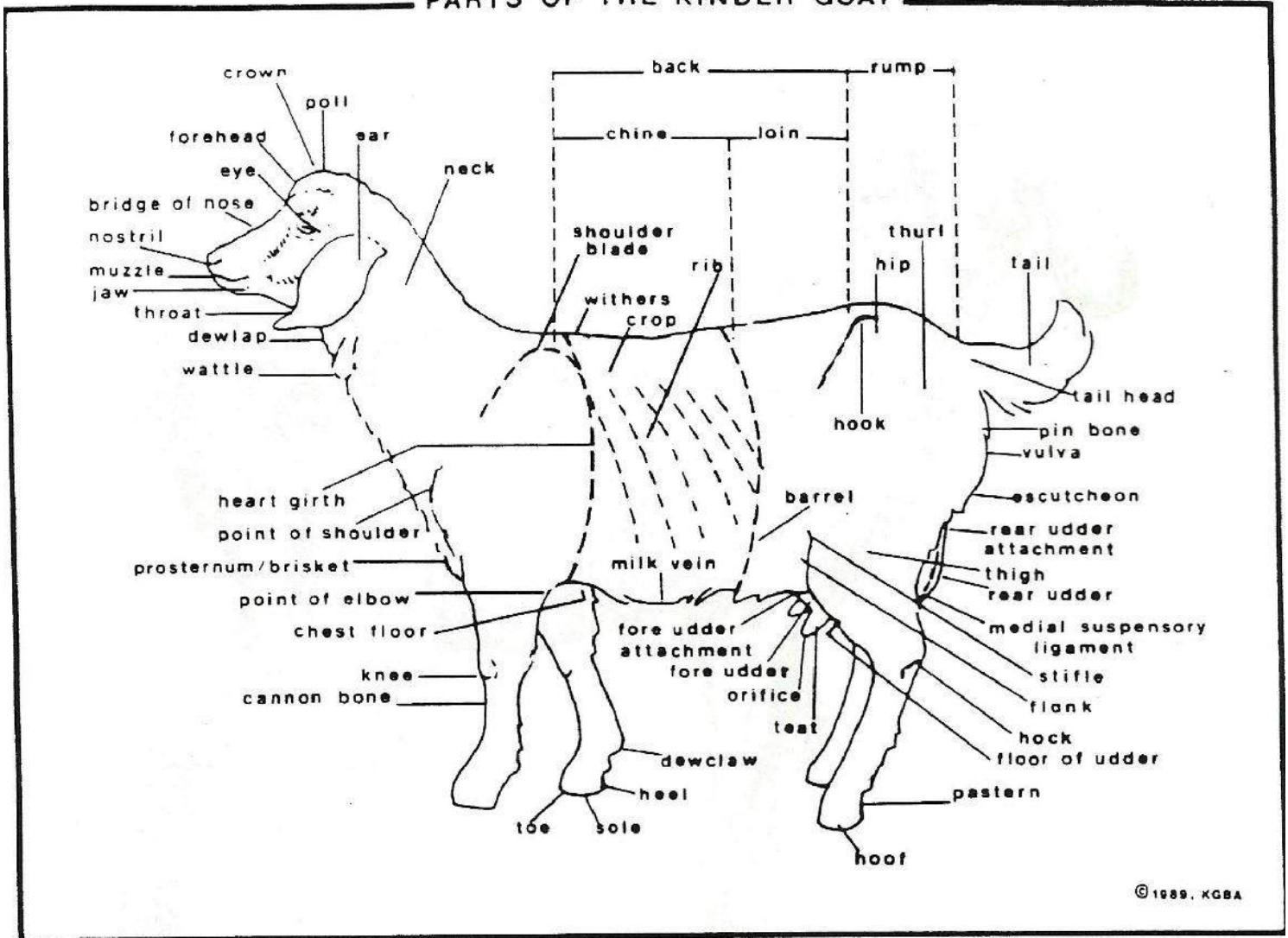
Medial suspensory ligament strong and dividing neatly into a wide, quite level udder floor with about ½ inch deep cleft (5)

Capacity and Shape: large capacity with uniform halves and soft texture adding to capacity (10)

Teats: medium size, easy to milk, cylindrical, uniform, plumb from rear view, pointing slightly forward from side (5)

Appendix C

PARTS OF THE KINDER GOAT



Appendix D

GOAT FIRST- AID KIT

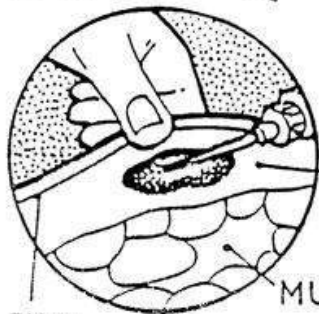
Find a container such a sealed plastic container, tool box, fishing box, which can close securely. Assemble the following items to have on hand to help in an emergency. Also place an index card with **your veterinarian's phone number** in the box, so you have it in convenient place if you should need it. You may wish to list a secondary vet's name and phone in case you cannot reach your veterinarian.

- 1 Rectal Thermometer
- Isopropyl Alcohol - Small Bottle & Pads
- 6 syringes to give shots if needed
- 6 needles (18 gauge or smaller) for syringes
- Clean towels - cloth or paper
- Tetanus antitoxin - for wounds if goats not vaccinated (may need to be in refrigerator)
- Hydrogen Peroxide - cleaning of wounds
- Powder or liquid antibiotic
- Iodine - small bottle or pads
- Probios or paste containing probios
- Electrolytes
- Propylene glycol, honey - help with ketosis
- Pepto - bismol - helps with bloat and upset stomach
- Baking Soda, Mineral Oil
- Udder Cream - Dry udder
- Dry Treat - To treat doe when kids are weaned
- Today Tube - For treatment of mastitis, can be used for Pink-eye
- Dewormer
- Livestock Powder for parasites
- Eye Puffer - Eye Infections
- Blood Stop Powder or Com Starch
- Small Scissors, Gauze, Tape, or Secure Wrap

borrowed from 1/85 Gobner Goat Gossip (MNI DGA)

INJECTION METHODS....

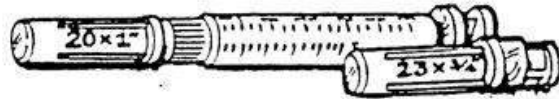
SUB-Q SUBCUTANEOUS INJECTION



SUB-Q TISSUE
MUSCLE

SKIN

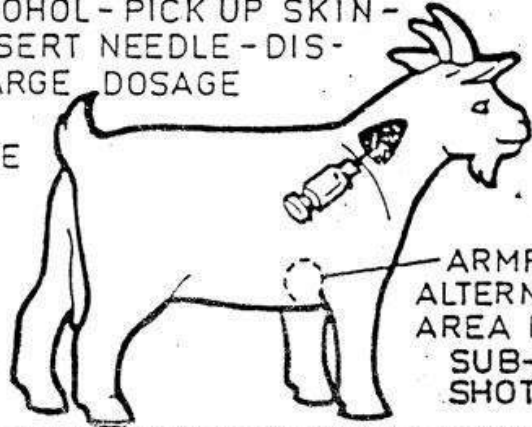
MADE IN LOOSE SKIN OVER SHOULDERS OR NECK



GOOD FOR TETANUS

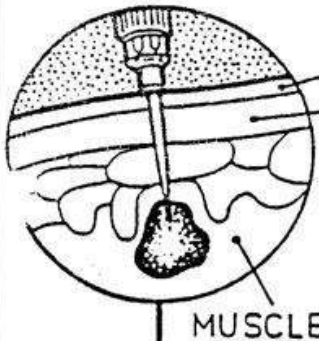
CLEAN SMALL AREA WITH ALCOHOL - PICK UP SKIN - INSERT NEEDLE - DISCHARGE DOSAGE

MASSAGE AREA AFTER SHOT



ARMPIT ALTERNATE AREA FOR SUB-Q SHOTS

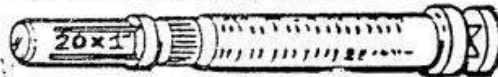
IM INTERMUSCULAR INJECTION



SKIN
SUB-Q TISSUE

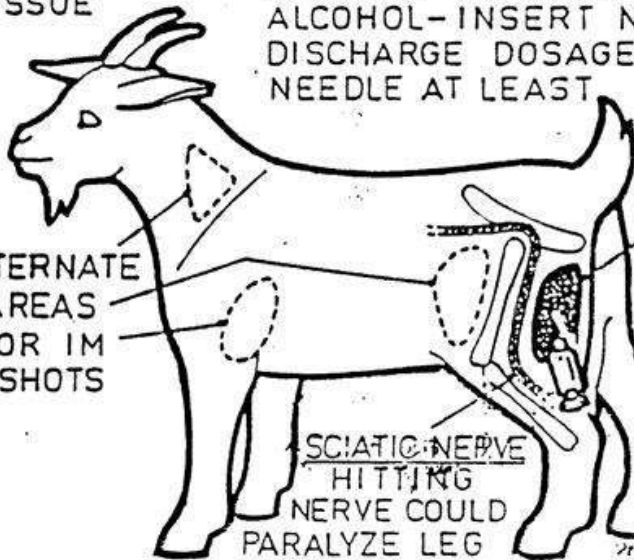
MUSCLE

MADE DEEPLY INTO LARGE THIGH MUSCLE



CLEANSE AN AREA WITH ALCOHOL - INSERT NEEDLE - DISCHARGE DOSAGE - USE NEEDLE AT LEAST 3/4"

ALTERNATE AREAS FOR IM SHOTS



GIVE IM SHOT IN THIS AREA. AIM SYRINGE FROM SIDE NOT REAR

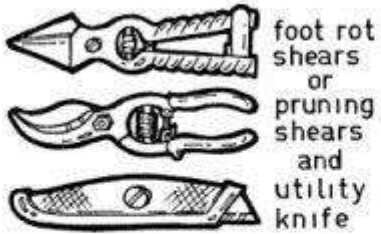
SCIATIC NERVE HITTING NERVE COULD PARALYZE LEG

Handwritten signature and date: *Handwritten signature*
PDBA 5/60

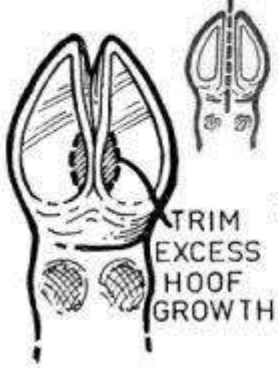
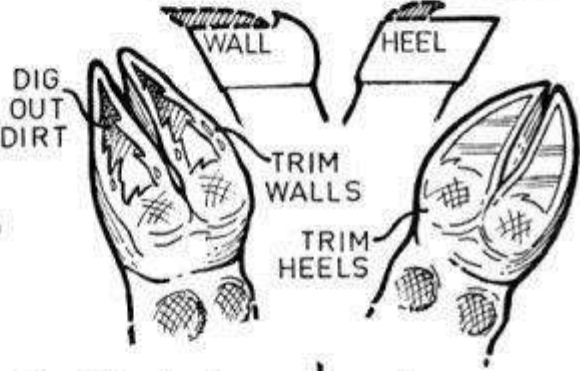
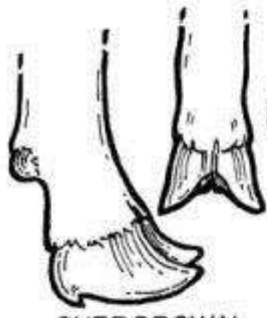
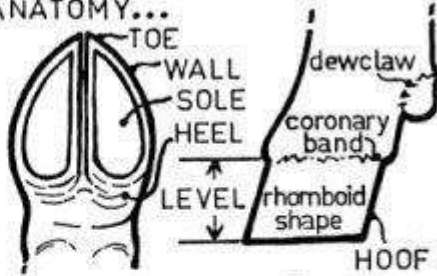
Appendix F

HOOF TRIMMING.....

TOOLS...

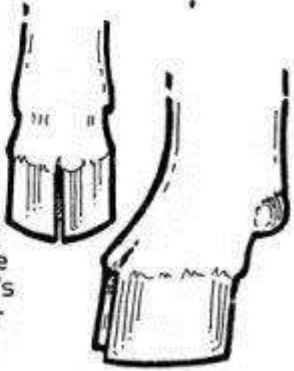


ANATOMY...



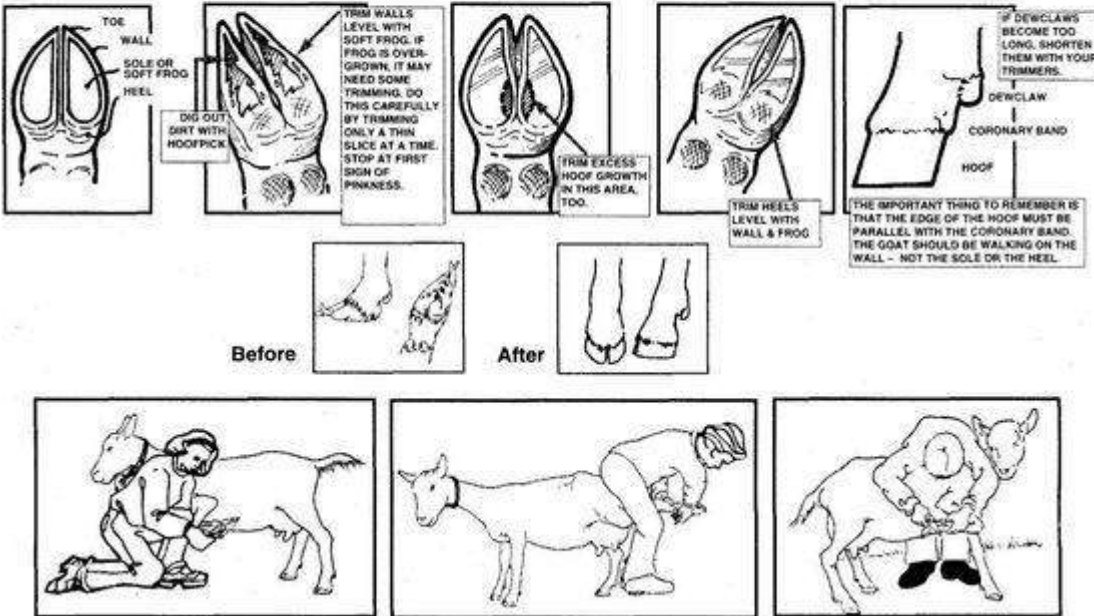
* if the hoofs are trimmed regularly the job is much easier

* if the goat bleeds use some iodine and make sure the animal's tetanus booster is up to date

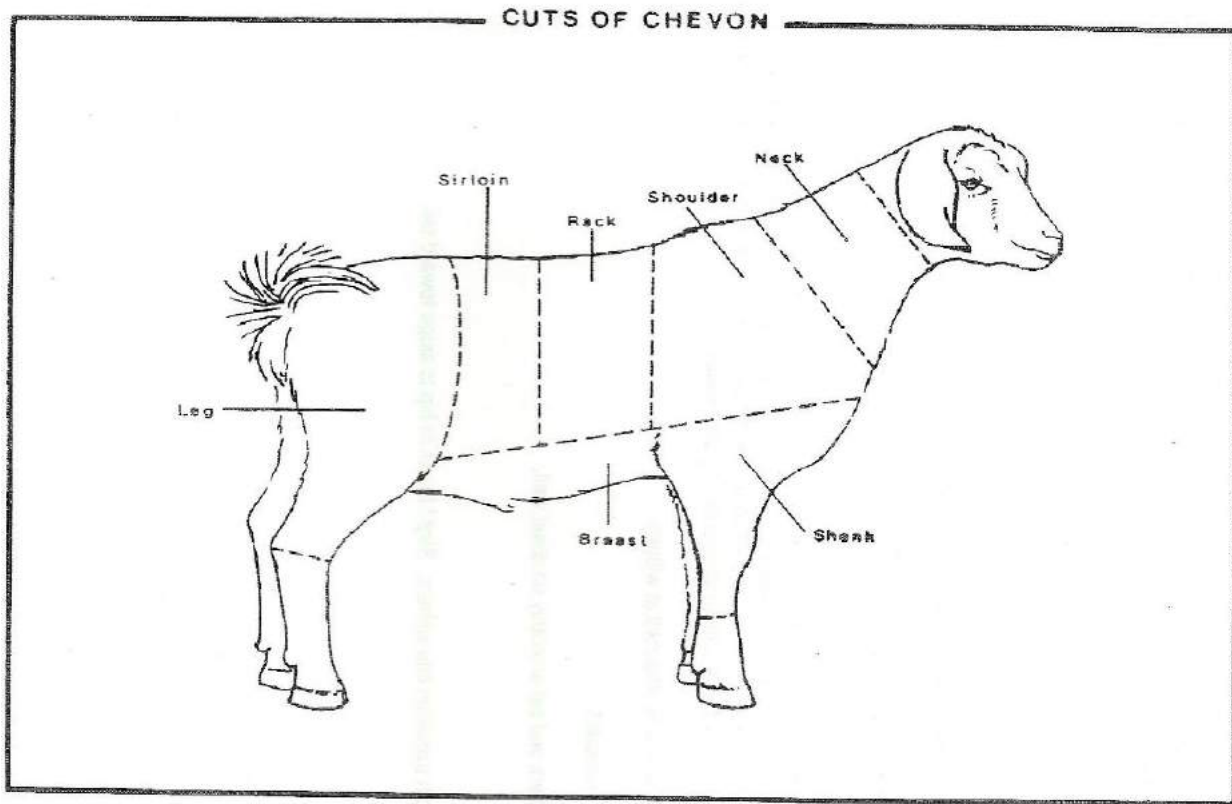


HOOF TRIMMING PROCEDURE

Hoof trimming is an essential part of caring for all goats. Proper hoof trimming is extremely important on show wethers. Improper or incorrect trimming can lead to a multitude of problems. Much of how your goat walks or stands will be determined by his feet. An awkward, unsuitable stance can ruin your chances in the show ring. Many wethers become weak in the pastures when the pad or heel is not cut enough. Hoof trimming should be addressed once a month when you worm, etc.



Appendix G



SIMPLE SHOWMANSHIP MANEUVERS

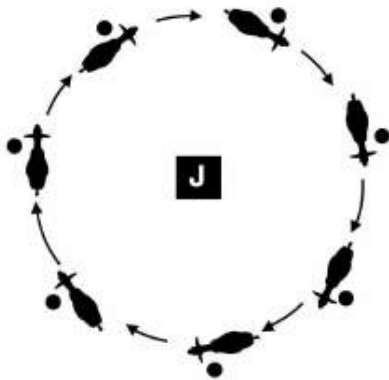
JUDGE



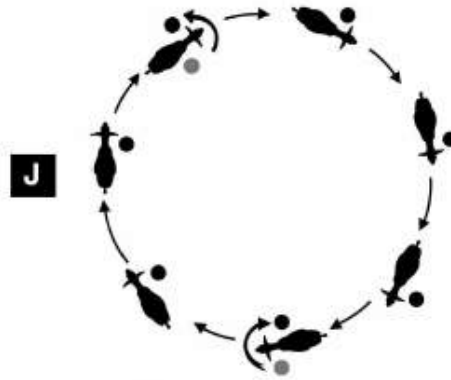
GOAT



EXHIBITOR

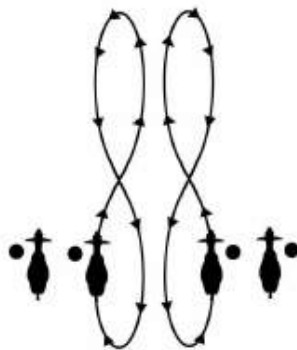


With the judge in the center of the circle, the exhibitor should remain on the outside of the circle.

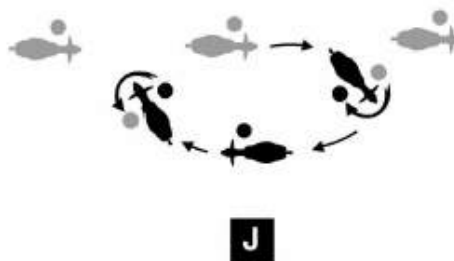


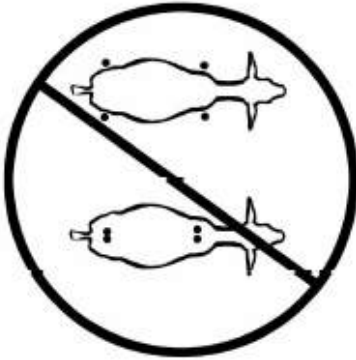
With the judge on the outside of the circle, the exhibitor should keep the animal between themselves and the judge, which requires rolling turns as they approach and advance away from the judge.

Walking in pairs

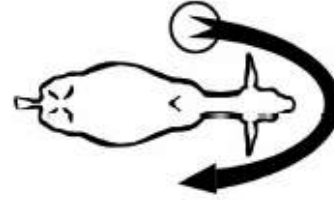


Changing position





The legs should be set correctly, placed neither too far apart nor too close together.



Roll turns are always made at the head of the animal.