

BOER GOAT PROFIT GUIDE

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A Quick Background on Boer Goats

1. Where do Boer goats come from?



Boer goats were developed in South Africa in the early 1900s for meat production, and their name is derived from the Dutch "Boer," meaning "farmer."

Boer goats were probably bred from the indigenous goats of the Namaqua Bushmen and the Fooku tribes, possibly with some crossing of Indian and European bloodlines.

2. When were Boer goats first exported to other countries?

Boer goats first moved from South Africa to New Zealand when embryos were smuggled out. With embryo transfers, New Zealand's producers increased herds. Then, Boers were quarantined in New Zealand and Australia because of scrapie.

After they came out of quarantine, ranchers started to export embryos to other parts of the world. South Africa didn't want their germ plasma to get out, but it did.

Now the biggest countries for Boer goat production are the U.S., New Zealand, Australia and southeast China. Germany used to have a larger goat production (used mostly for research), and nations like Mexico and Argentina are beginning to farm Boer goats, but on a smaller scale.

3. What is the average lifespan of a Boer goat?

If you breed them once a year (and keeping in mind that well-bred does have twins), after 7 or 8 years they are about spent. At that point they tend to have disease problems, they don't reproduce anymore and it's time to get rid of them.

4. How much does a full-grown buck/doe weigh?



The weight of a full-grown buck or doe depends on how they're fed. If you grow them on forage (or if you're going to grow them with a lot of grain), they tend to weigh more. But on average, the smallest does can range from 90-100 pounds up to 130-140 pounds. Full-grown bucks weigh more, ranging from

150-180 pounds to 190 pounds.

If your goats are really pushed to feed on grain, they can become very fat (not a good thing) and weigh even more.

Benefits of Raising Boer Goats

5. How easy is it to raise Boer goats?

Boer goats are survivors, because they evolved in the dry tropics. They've devised all kinds of ways to live in a difficult environment where there are not many foragers but plenty of browse and shrubs. They spend a lot of time browsing rather than grazing. And many of their browse plants contain noxious compounds so Boer goats have evolved by devising ways to dilute these noxious compounds.

If you compare a goat to a cow and put them in a grazing situation or give them a choice, cows are going to eat the same thing most of the day. Goats like a "buffet." They like to move from one species of plant to another. This is a way for them to dilute some of the noxious compounds they pick up in plants.

It's a common misconception that goats are a lot like sheep – but they are actually quite different. Their nutritional requirements are different. As smaller animals, goats need better foragers and higher quality feed than sheep.

6. Are Boer goats easier to raise than other breeds of goat?

Boers have mild temperaments, are affectionate, and require no milking, no special care and no shearing. Goats in general can survive under adverse foraging conditions, setting them apart from other livestock.

Boers, developed for meat and hardiness, are large-framed and resemble Nubian goats. They consistently produce more muscling in less time than other goat breeds.

Boers were developed to clear land that was too tough to be cleared by humans, and they spend a lot more time grazing than other goat types. They're out in the heat of the day when dairy goats stay in the shade, and they graze in blowing snow. Boers thrive on ground that won't support dairy goats without supplementation.

Boer goats in their first 12 months can grow 200 g/day under good pastoral conditions. Faster-growing rates mean Boers reach marketing weights more quickly. (Carcass quality, however, is key to capturing maximum market returns.)

Boers reach breeding weights fast. They have an extended breeding season, and does can have 3 kiddings every two years. About 50% of does produce twins and another 10% to 15% produce triplets.

Boers are good milkers, allowing them to raise multiple offspring with excellent weight gains, with little pre-weaning mortality.

Boer female kids can reach puberty at 6 months of age and are considered early breeders. Male kids can be used for breeding at 5 to 6 months of age but reach puberty or a body weight of 32 kg as early as 3 to 4 months of age.

Boer breeders say that their kids are ready for market sooner, and their customers will pay a premium for meat goats if they add Boer blood to their herd.

Compared with other goat breeds, Boers put on more weight and generally look fuller and healthier. At the butcher, if a customer sees a Boer goat along side another breed, the Boer is often purchased before being butchered.

Continuous improvement in genetic selection, feeding methods and management systems suggest that growth rates in Boers, as well as their crosses, will only increase. Because of their desirable traits for meat production, Boer goats have raised the performance of indigenous breeds through cross breeding so that indigenous goats have seen improvements in birth weights, growth weights, weaning weights, breeding weights, mature weights, kidding rates and carcass quality.

Here are some other reasons why Boers are a great breed to raise:

- ➤ Efficiency of feed and space. With 10 acres, a producer can raise 60 goats or ten head of cattle.
- ➤ Boers (or Boer crosses) can prosper on poor pasture and brush that would not support cattle. They eat berry bushes, Russian olive, elm or cottonwood trees, ragwort, gorse, dock and other weeds. Some ranchers run goats on the pasture after their cows--to clean up the weeds.
- Returns for raising Boer goats are generally higher than for cattle. You don't need expensive squeeze chutes for goats, and it's easier to own a buck than a bull and to artificially inseminate a doe than a cow.
- Many people raise milk goats because they like goats. But it takes less time to feed 100 goats than to milk ten. Raising Boer meat goats is an option to consider if you don't want the trouble of milking,
- The stress-coping mechanisms of Boer goats are strong and equivalent to those of hardy Merino sheep. Boers are tame, gentle animals and the more you handle them, the gentler they become. Of course, a wide variation in personalities exists between animals in a herd, and while a few Boers may be flighty, others want to stand and be scratched.

7. Are Boer goats easier to breed than other goat breeds?

Breeding Boer goats is generally no easier or harder than other breeds, especially since the current herds have much stronger genetics than when the breed was first brought from South Africa.

Choosing an exceptional buck and pairing him with average females, and providing the pregnant does with high quality feed, is generally all that's needed to produce strong offspring that will continue to improve the flock.

(See the breeding tips in the last chapter of this guide.)

8. Are there animals that Boer goats should not mingle with?



Given their calm natures, Boers can mingle with just about any animal. Goats get along fine with chicken and sheep, and are commonly put in the same fenced areas as cows.

Because they like different plants (goats prefer browsing weeds, while cattle graze grasses), you can put in 1 or 2 goats per

head of beef cattle without reducing the production of your cattle. This is a good way to get a bit more money per acre.

You can even put them in with horses. Sometimes the horses will run the goats a little, but it's okay with the goats!

Goats and sheep share many of the same intestinal parasites and some of the same diseases, too. But goats and cows have different parasites, and digesting the other's parasites will kill the parasite and reduce parasites on the field.

How Many Acres Do I Need?

9. What is the best number of Boer goats to raise per acre of grass field?



Six to eight goats per acre (plus a few extra) is a good size, plus the land you use for other things.

In developing your feed budget, budget for 6-8 goats per acre (or in the spring, 4 does plus their kids). This assumes that during certain periods of

the year, you will have to make hay. In the spring, you will have too much forage. And then, you will have to refeed it in the winter.

It's a good idea to use control grazing, which is shifting fences ten feet every so often to gradually move the goats across the land once they've finished a field.

You could also plant different fields with forage and browsing plants that work well in different seasons, then do any planting you need once the goats have moved on to the other field. For example, warm season forages could be high quality summer annuals (ex. millet or crab grass) and then in the fall, do small cereal grains. If you can use plants that help fight parasites, that's even better.

You may also want to keep extra land, so that you can store your hay, and so that if you hit a drought the goats have access to more land, since there is less food per acre in a drought. Extra fields should also be used if you want to do plant renovation to encourage growth of certain forages, so you can set that field off use for a season.

Alternately, if you have some woods, summer when the summer forage is over (but you don't want to start on winter feed yet). This is a good time to browse your woods.

In the winter, give animals some shelter and keep it clean of manure, which can breed disease. The drier, the better.

10. Is it possible to keep Boer goats in a small area (e.g. feedlot) while still being productive?



Goats are not going to grow on feed in the same way as beef cattle, sheep, or lamb. Therefore, a feedlot is not an ideal environment for goats. They are happier and more suited to open browsing, and they don't put on enough weight to be worth the money spent on the feed itself.

Climate and Soil - What You Need to Know

11. What are the best climatic conditions for Boer goats?



Boer goats evolved in South Africa and therefore prefer drier climates--as opposed to humid and wet conditions.

Boers usually don't mind the cold, and during winter in both southern and northern climates, like Canada, they can be seen outside their shelters, lying down--sometimes with frost on their back.

But Boers don't like rain with a wind-and-cold combination because they don't have that much of a fat layer and get pneumonia fairly easily. It's important for them to have access to a shelter when conditions are windy and cold. But snow and cold without wind doesn't seem to affect them that much, and they can withstand heat much better than cattle or sheep, because of their origins--a dry, hot environment.

12. What are the best vegetation and soil-type conditions for Boer goats?

Soil conditions don't matter very much. If you let Boers do what they are naturally inclined to do, they'll spend 60% of their time browsing on shrubbery and the rest of the day they'll graze.

The best thing to do for grazing is to use the principles of "control grazing." This means you give the goats enough for two or three days, then you move the fence - one fence in front of them, one fence in the back of them. That way, they do a good job at grazing your pastures. Otherwise, if you give them too much, they'll run all over and soil the pasture, and cry for more.

This concept is similar to crop rotation, only it's for forage.

Profit Potential of Boer Goat Farming

13. How much profit potential is there in Boer goats?

The value of Boer goats is based mainly on their ability to produce meat with superior carcass quality. While a genetically-superior buck can command a market premium, expected income from meat and carcass sales is usually what makes Boer operations profitable.

Demand for goat meat in North America is strong because of changing ethnic demographics. Producers can't keep up, and much of the goat meat sold is imported from New Zealand or Australia!

North American demand for goat meat comes from consumers of Middle Eastern, Asian, African, Latin American and Caribbean heritage. These

customers purchase goat meat when they can find it and are often willing to pay more for higher-quality meat.

Goat digests more easily than most other meats and is considered a low-fat, good-tasting alternative to chicken or fish. The Boer influence changes the taste of goat meat to a mild, more veal-like flavor, so Boers often sell at a premium to other goat meat.

Here are some of the niches you can look at when planning your Boer goat operation:

- The "direct market", in which a buyer comes to your ranch
- > Supplying goat meat to local restaurants serving ethnic clients.
- Raising Boers for breeding stock. Commercial breeders will often pay double for breeding stock, versus what a producer expected to receive for the same animal per pound.
- ➤ Many ranchers are grouped in cooperatives or associations to supply meat markets on the East and West Coasts of the U.S. Those markets require large numbers of animals of consistent quality on a regular basis.
- ➤ Supplying Boers for 4-H and Future Farmers of America clubs that raise goats.

The Importance of Developing a Plan for Your Boer Business

Market Research Competitive Analysis

Management Team

Innovation Assessment Business Model

Financial Projections

Like all businesses, goat raising involves many variable and hidden costs. So turning a profit depends on realistically assessing all costs - by using a plan (see Annex A of this report for a sample business plan).

Before getting into the Boer business, it's important to estimate your costs and potential profits. To help you estimate your profits, there are several calculators on the Internet that you can use.

One calculator that we recommend is provided by Boer Meat Goats, LLC in Oklahoma. Their calculator considers the number of does purchased and the number of acres used to raise goats. You can find the calculator here:

http://www.boermeatgoats.com/Profit_Calculator.cfm

Typical Costs of Running a Boer Goat Operation

In developing a plan for your business, you need to figure out what kinds of costs you're going to incur. Here's a list of the typical costs of a Boer goat operation:

• **Animal costs**: how much it's going to cost you to buy your first does and bucks, and how much it's going to cost you to breed them (especially if you choose artificial insemination)

• Feed costs:

- o Hay
- o Grain
- o Minerals
- Vitamins

• Land and shelters:

- Leases and other shelter costs
- o Fertilizing and treatments to pasture
- o Fencing
- o Guard dogs and their feed

• Health costs:

- Veterinarian visits
- Vaccines
- o Medicines, such as worming, antibiotics, iodine
- Health certificates
- Medical supplies (first aid kits)
- Labor costs for the producer and hired workers

• Transportation:

- o Travel to sales, shows, feed stores, and other farms. Include motels, meals and costs per mile.
- o Cost of trailers and goat haulers spread over years
- **Miscellaneous costs** spread out over time for feed buckets, hay racks, tattoo equipment and show supplies.

• Administrative expenses:

- o Business software
- o Phone and internet bills
- Association and registration fees
- Publication subscriptions (magazines)
- o Stamps, paper and office supplies

• Selling costs:

- Auction fees
- o Advertisements, signs and business cards

Here are some other questions to ask yourself in planning your Boer operation:

- ⇒ Who will buy your goats and what costs will you incur to sell each kid?
- ⇒ Will you have to haul them a long distance or will buyers come to you?
- ⇒ How much advertising will you need?
- ⇒ Do you have a truck and trailer?
- ⇒ How far will you drive and what's the cost in terms of mileage and your time?
- ⇒ Is a meat operation the best choice for your land and situation, or could you do better selling replacement breeding stock and meat goats?
- ⇒ Can you sell live kids to ethnic markets?
- ⇒ What do those markets want young or older kids and when?

- \Rightarrow What is the carrying capacity of your land?
- \Rightarrow How rich is your soil?
- \Rightarrow How much rain do you get?
- ⇒ Do you have access to cheap labor or will you pay a premium to get help?
- \Rightarrow Do you and your spouse enjoy working with animals?

14. What are the best marketplaces for Boer goat meat?

Market demand is higher in some areas than others and generally spikes around certain religious holidays (including Ramadan, Easter and Christmas).

Because of their ability to put on weight, Boer goats or Boers cross-bred with other decent-quality breeds are more desirable than other breeds at market. Goats sell at lower prices if sold at auction, and will get higher prices when sold directly to other farmers or as meat.

15. What weight of goat will get the best price at market?

Generally speaking, the market wants an animal that is 80 pounds live weight, rarely more than 100.

At 80 pounds, the meat is still tender and the animal is young, so there is very little internal fat yet. Over-feeding adds weight, but not meat quality, as it will generally increase fat around the internal organs, rather than adding muscle. So 80 pounds is usually the best quality.

16. At what age are Boer goats best for market?

Weight is a better market indicator than age as goats grow at different rates depending on their genetics and food supply. They gain the most weight when they are suckling.

A kid will be born at 5-6 kilograms and gain, on average, 200-230 grams of weight per day for the first several months. Between 3-6 months, they add 130-200 grams per day. The best price is achieved at 80 pounds live weight, which is usually around 6-7 months.

17. What are the marketable by-products of Boer goats?

There are many by-products of Boers that you can incorporate you're your operation. Here are some to consider:

- o Milk, powdered milk, cheese, yogurt, ice cream
- o Leather for footwear, gloves, clothing, luggage and book binding
- o Milk for soap, lotions, lip balms, foot creams
- Hair for brushes



Unlike cow's milk, goat milk doesn't need to be homogenized. And for individuals who can't drink cow's milk, goat milk can sometimes be used as an alternative. Goat milk is also an excellent moisturizer.



Leather from Boer goats is thicker and stronger than that from other goats and takes well to tanning. Higher-value goat skins are those with a fine grain appearance and usually come from smaller goats, as well as young kids.

A characteristic of goat leather is its ability to drape - though only with thinner skins, which along with their consistency and good color, are prized by the garment industry.

As a general rule, developing countries import raw goat hides and skins from developed nations to be processed and re-exported as value-added products.

In China, Pakistan and India, domestic demand for raw goat skins outstrips production and thus these countries import skins. Australia imports about \$9 million worth of goat leather yearly and exports goat skins valued at around \$2 million.

Goat leather is in high demand because of its toughness and flexibility, its soft feel and good appearance. Up to 70% of goat skins are used for the

upper leather of shoes, with the rest used for book binding, fancy goods, clothing and gloves. World trade in leather shoes has expanded swiftly in recent decades.

Offal - including livers, skin, brains and bone marrow- is another by-product of the goat meat industry. Offal is included in the diets and rituals of certain Muslim countries.



Goat hair is used in brushes - produced mainly in China - for shaving, cosmetics, hair care, art, writing and dish washing. Goat hair has a naturally blunt tip but retains a large volume of fluid. It can be used in hair blends and fillers for brushes.

Lastly, pet farms are another way to make money from your Boers.

Starting a Boer Goat Operation – Your First Steps

18. What are the first steps I should take to start a Boer goat production business?

There are many ways that you can get started in the Boer goat business. Here are some of the first steps that successful Boer farmers mentioned in our interviews with them:

- a. Make contacts in your local area with knowledgeable people before buying your goats. In particular, seek out:
 - A local (or regional) goat association. Even if there's no association in your immediate area, you might be able to correspond with association members by telephone or email.

Check out Annex B of this guide, where we provide contact information for goat associations across the United States.

- Members of local groups can give you advice that's applicable to your geographic area and climate.
- A local veterinarian who has experience with Boer goats.
 One of the biggest obstacles new Boer farmers face is keeping their goats healthy. Having a local veterinarian you can call up will be crucial to building a successful operation.

Here are websites that provide links to veterinarians across the United States and Canada:

- Vetlocator has a database of over 26,000 veterinary clinics in the United States and 2,400 veterinary clinics in Canada. Go to http://vetlocator.petplace.com/
- TalkToTheVet has a "veterinarian finder" that lets you search for a vet by state. Go to http://www.talktothevet.com/VETERINARIANS/veterinarians.HTM
- b. Have your shelter (i.e. shed/barn) in place. Boer goats don't need much in the way of shelter, but you'll need one spot that's away from the elements and has a roof. It could be in an old barn, so you could have a chute where you could work them and vaccinate them and so forth.

If you plan to build feeders, make sure they're short enough so the goats can reach them, but tall enough so the goats can't defecate in them.

- c. Make sure that you know about the soils in your area. Many soils are either deficient or marginally deficient in some nutrient. Mineral supplements are available.
- d. Start with a handful of pregnant does. As there are a lot of things that can only be learned by experience, starting small will allow

you to learn without making costly mistakes. You don't want to buy 200 goats without knowing what you are doing—that's the worst way to go about it!

e. After everything else is in place, buy a buck. Buy the buck a few months before the breeding season so that he's used to your farm when the breeding season starts.

The rule of thumb for bucks to does is 1 buck for 20-30 does (an older buck can handle 40 does). During breeding season, do not introduce new animals to your farm, as the bucks can be quite disagreeable.

- f. Goats need clean water. If using water tanks in the summer, brush them several times a week so that algae doesn't grow. As with feeding troughs, make sure the water is low enough for young kids to have access.
- g. Make sure you have a place, like a refrigerator, where you can store all your medications. Be aware of expiration dates.
- h. Put loose minerals out a few times a week, and see how fast they eat it. With mineral feeders, goats are going to eat around half an ounce to an ounce per day. Make sure it's not on the ground, for the same reason that water and food trough should not be too low.
- i. If you are close to neighbors, alert them to the fact that you are going to raise goats. Sometimes goats make noises that sound pained but are normal. Make sure your neighbors know and will not be alarmed.

19. When I go to buy my first Boer goats, what should I look for?

This is a good time to talk about what kind of physical examination you're going to do on your Boers before you buy them.

Keep in mind that you can avoid a lot of problems by buying healthy animals from the get-go - although animals that appear healthy when you buy them may still become sick after the stress of purchase, transportation, exposure to new environments, feed routines, etc. This is why it's so

important to keep them completely separate from any existing animals on the farm for at least 2 weeks (no nose-to-nose contact, so no shared fencing).

The physical examination

Here are the most important things you can do when physically examining the goats you're interested in buying:

- ➤ Take their body temperature and make sure they don't have a fever. Normal body temperature for a goat is 100.5 F (up to 103 if it is a hot day or they have been running around or stressed).
- ➤ Look for these signs of poor health:
 - o Discharge from the eyes and nose
 - o Coughing and sneezing
 - o Poor body condition (overly thin or too fat)
 - o Lack of energy
 - High respiratory rate (panting)
 - o Respiratory noise (noisy breathing)
 - o Limping. Animals that look like they are "kneeling in prayer" are too footsore to stand for long periods of time. They will have soiled bare knees and possibly skin sores over their knees; avoid buying these animals.
- As you approach healthy goats, they should either show interest in you (if they have been handled a lot and are very tame), or should run friskily away (if they are not handled often).

A healthy goat will not remain lying down as you approach, and should not appear to be reluctant to rise or have difficulty getting up. It should get up easily and appear sound (not limping).

The two most common causes for limping goats are foot rot and "interdigital dermatitis" (also called foot scald, which is different from foot rot but still causes sore feet).

Both of these problems can mean twice-daily foot care for weeks, frequent foot trims, infection of other herd animals, and general poor doing of the sick animal(s). (See the section later in this guide called

- "Keeping Your Boer Goats Healthy" for tips on how to deal with these problems.)
- Look at the rear end of the animal, around the tail and hind legs. It should be clean and dry, not soiled or crusty with feces. Diarrhea may an indicator of parasites and poor health and care/feeding.

Don't believe a seller that says the goat just has a "touch of diarrhea" from eating something "too rich" or some other story. A goat with diarrhea is a sick goat, or was sick recently, and could have something infectious.

At the same time, a goat that doesn't have diarrhea doesn't mean that it doesn't have a high worm burden! But at least it's something you can look for and recognize as a potential problem.

➤ If you can catch the goats, look in and around their mouths and eyes. Mucous membranes (the gums and inner parts of the eyelids) should be healthy dark pink and moist.

Goats can get a disease called "Orf" or "soremouth" or contagious ecthyma, which is caused by a poxvirus and causes painful crusts and scabs to form around the mouth and nose, or on the teats of the does. People that handle affected goats can get the disease as well.

➤ Teeth should be in good shape, not broken or missing. Goats do not have upper incisors in the front, but the bottom teeth should meet the dental pad (the upper hard gum tissue) evenly, not stick out in front of it or behind it.

Missing or stubby little teeth may indicate an old animal. Pale mucous membranes mean the animal is anemic, and probably has a lot of *Haemonchus* worms (again, see the section later in this guide called "Keeping Your Boer Goats Healthy" for tips on how to deal with this problem).

Another thing to look for very carefully are any round hard lumps under the skin of the animal, especially under/behind the jaw and on the neck, and behind the elbows and hocks. These lumps may be a sign of Caseous Lymphadenitis (CL), a bacterial infection that infects the lymph nodes and causes them to expand and fill with hard dry pus.

If the lymph node ruptures through the skin, the pus leaks out and the bacteria will spread all over the place and can infect other goats. Affected animals are discounted at slaughter (so if you're selling an infected animal, you'll get less money for it), or the carcass may be condemned outright if the infection is extensive enough.

Sometimes a goat will have a very small lump with a scarred hairless skin surface; this means the lymph node has already ruptured and healed at some point in the past.

Avoid buying any animal that may be a suspect infected animal. People can become infected by CL, too, which is another reason to avoid infected animals.

19. Is there a website that puts buyers in touch with sellers?

There is no comprehensive website that puts buyers in touch with sellers internationally (that we know of!), but there are websites for particular regions of the U.S.:



http://www.GoatFinder.com allows you to quickly find or promote goats for sale



http://www.GoatBreeders.com allows you to search for goat breeders by clicking on a map. The website will then tell you the names of goat breeders near the location you clicked on the map.



http://www.RuralAds.com has a section on goats for sale (go to the website and scroll down toward the bottom of the page)



On http://www.GoatWorld.com you can find the most recent auction prices at auctions around the United States

Here are a few important pointers when it comes to buying Boers:

- Keep in mind that it's best to stay within your geographic region when buying your goats - because you are going to buy animals that are going to be adapted to the geographic and climatic conditions you are in.
- o Another benefit of buying within your geographic region: if you buy from somebody who is close by and you have a problem with your goats, usually you can go to the seller and they will help you out.
 - For instance, say you buy a young buck from somebody and this buck doesn't do *anything*. Maybe you have him tested and his sperm is terrible quality. If you can document that, you can probably get another buck from the seller, if he has any business sense, because otherwise people are not going to buy from him anymore.
- When looking to buy goats make sure to stay away from people who go to goat sales and advertise that they have "prize" goats (in other words, goats that have won prizes at goat shows). These animals have often been fed heavily on grain, so that's what the goats are going to be used to. You want animals that thrive on forages and cheap feed sources, not expensive grain.

20. Where could a person find average prices for goats of a particular age or pedigree?

Prices vary from region to region. Currently in the U.S., you can buy decent pregnant does for \$200-\$300 each, depending on their genetics. However, prices for bucks range widely - all the way up to \$100,000. Yes, \$100k for a prize buck!

If you don't want to spend too much money, it's easier to get some average does and then to spend money on a good buck, to breed up. And even if you have some animals that don't look good, if you put a purebred Boer buck on them, it's amazing what offspring results.

21. Are there any "best practices" in running a profitable Boer goat farm?

Good question! When we finished our interviews with successful Boer goat farmers, we came up with ten "lessons learned". These are the lessons that farmers interviewed for this guide wished they had known when they started raising Boers.

Here are the top 10 lessons learned:

a. Focus on quality over quantity.

Save up some money and buy the best buck you can at the beginning, rather than a bunch of mediocre bucks. The seller of the buck should stand behind the doe (and should exchange a poor-performing buck).

Even with mediocre does, you'll get healthy and strong kids when you have an excellent buck. Many new goat farmers make a BIG mistake by buying cheap bucks when they first get into the business. When buying your goats, it's extremely important to pay attention to genetics.

b. Make sure your goats have <u>high-quality food</u> through grazing and browsing.

Grazing of forage generally provides the least expensive way of supplying nutrients to animals so it's good to develop a year-round forage program that allows for as much grazing as possible each month.

But good management involves more than turning the animals out to pasture. Controlled grazing of goats is similar to that used for cattle, with owners dictating the extent of plant defoliation. Goats typically consume the most nutritious parts of grasses, legumes and browse plants.

c. Use diversification to maximize the benefit from your Boer goats.

For example: mix your goats with cows to clean up your pastures—to get rid of weeds—or with horses. If you have a small vegetable operation, and you have a rotation of pastures with vegetables, you can integrate goats to eat the forage, either perennial or annual forages, to increase nutrient cycling, and make a little money.

You can raise Boers on crop aftermath. Boer goats can also be used to manage encroaching vegetation, given their preference for plants that we often consider to be weeds or invasive species.

d. Make sure you have a good fence to prevent goats from escaping and for predator control.

Goats love to jump fences – and they're good at it! Your fencing should include electric wire. Also, you should consider installing mesh on existing fences. It's more costly than electric-fencing but in areas with foxes and wild dogs meshing adds protection for goats. Also, use cross fences for pasture rotation and for separation of does, bucks and weanlings.

e. <u>Buy a doe that's kidded before</u> to make sure she was a good mother and that her kids developed well. Boer goats breed year-round. Because of high fertility, in two years a doe can have three kiddings, and with good nutrition and management practices, a producer can hope for 6 to 9 kids per doe-- offering a good return on investment.

- f. <u>Talk to other farmers</u> in your neighbourhood before getting into the business; ask them what mistakes they've made and what they think they've done right.
- g. Install <u>automatic waterers</u> as soon as you get your first Boers. Doing so will allow you to avoid time-consuming handling and cleaning of buckets and the need to thaw frozen water.
- h. Buy grain in bulk, not by the bag, for significant savings on feed.
- i. <u>Set up feeders</u> so that there's a hole in the fence and the feeder hangs on the outside of the fence. This will prevent the goats from standing in the feeder and defecating in it. You don't want your goats defecating in the feeder and then eating from it.
- j. Construct <u>small shelters on each of your paddocks</u>, instead of investing a lot of money in a big barn. Paddocks are useful for rotational feeding and can accommodate goat recreation.

Keeping Your Boer Goats Healthy

22. What are the most common Boer goat health problems?



It's a question we get asked all the time – as a new Boer producer, what diseases or health problems am I going to have to deal with? Great question – because a healthy goat is a productive goat!

Although Boer goats are usually tough and hearty, there *are* a few health problems that

can mean disaster for your flock and your business - if you don't recognize them and deal with them properly.

The **two most common health problems** encountered by goat owners are **parasites** and **foot rot**.

These diseases and a few others are described below.

Parasites

Boer goats are more sensitive to parasite infections than other breeds of meat goats. Because their stock originally comes from a hot dry climate where these parasites don't survive as well, Boers don't have as good of immunity against them as breeds of goats that developed where they were always exposed to the parasites.

There are two major parasites that can cause death of goats:

- o *Haemonchus contortus*, the blood-sucking abomasal worm that causes anemia
- Coccidia, which live in the intestinal wall, hatch out, and cause destruction of the lining of the intestines, diarrhea, and possibly death if not treated appropriately.

There are many other types of worms that may inhabit Boer's digestive tract, lungs, liver, etc., but these are the two major ones that are the most common cause of death.

Parasites and the resistance of worms to dewormer treatment is a MAJOR concern in any goat herd. Misinformation and a lack of veterinarians willing to work on goats has led to a large amount of misuse of dewormer products.

"Dewormer resistance" means that you give the animal a dose of dewormer, but the worms don't die because they are immune to the medicine. This is a very bad situation to be in, because in the meantime those worms are multiplying and making more worms that are resistant, too.

There are many strategies you can use to decrease the rate or incidence of dewormer resistance in your flock:

• Use the <u>right dose of dewormer</u>. Do not use the dose for sheep. Goats are not sheep, and they need more dewormer than sheep on a per pound basis, usually 1.5 times the sheep dose.

By always under-dosing, it means you are not giving enough medicine to kill all the worms, so the strong ones survive and resistance develops. Make sure you are using goat-approved medicines, and the goat dose.

- Pasture rotation: many parasites take 21 days to go from egg to adult. This means if your goats move to a new pasture every month, they won't be able to pick up as many eggs or larvae because the worms will not have had time to develop into adults and produce eggs that are shed into the pasture in the manure.
- <u>Keep good records</u>. Make a note of which animals required deworming at each check. If you find yourself deworming the same animals at every check, these are the animals that always have a consistently high worm burden and are shedding the most eggs, infecting your pastures. Cull these animals.
- Use <u>fecal examinations</u> to assess how effective your deworming is. The number of eggs per gram of feces should decrease a lot following deworming. If not, that means the dewormer is not working and you should use a different kind and reassess its effectiveness.
- Keep <u>feed and watering areas clean and dry</u>. Feeding hay also helps, because the eggs and larvae don't survive the drying process as well as on wet grass. But make sure the hay stays clean and dry; pooped-on hay is just as bad as pooped-on grass.

Elevated feed and water areas are good, although goats love to climb, so make sure you design a system that keeps the goats out of the feeders/waterers, and are not built in such a way that they can get feet, head, horns, etc. stuck.

- Co-graze with other species. Horses and goats do not share parasites, and cattle and goats do not graze the same forages. The other species acts as a "vacuum", eating the parasite eggs and larvae that are on the grass, and so preventing their ingestion by goats.
- Make sure your <u>herd has enough pasture</u>. If goats are crowded, they are more likely to over-graze pasture and pick up more parasites. This is bad for the goats and bad for the pasture, which will quickly turn into a dirt lot, or a mud pit, depending on the weather.



The FAMACHA system: Animals' mucous membranes are checked every 3 weeks and they are only dewormed if they are pale, according to the color chart. This avoids the over-use of medication and slows the rate at which resistance

develops. Your veterinarian or local extension office can assist you with learning this system and provide you with a FAMACHA card.

To help you choose a dewormer for your Boers, below are the most common dewormers used in goats

Brand of Dewormer & Dosage	Comments
Valbazen 7.5 mg/kg 3cc/100lbs 5cc/100lbs	Do not use in early pregnancy (if at all); effective vs. tapeworms
Safe-Guard 5 mg/kg 2.3cc/100lbs 5cc/100lbs	Use in goats mostly limited to treating tapeworms; only product in this class safe during pregnancy
Synanthic 4.5mg/kg 2.5cc/100lbs 5cc/100lbs	Do not use in early pregnancy (if at all); effective vs. tapeworms
Ivomec (drench) 0.2 mg/kg 3cc/26lbs 15cc/100lbs	Large volume needed; not shown to be safe during pregnancy
Cydectin (drench) 0.2 mg/kg 1cc/11lbs 12cc/100lbs	Large volume needed; not shown to be safe during pregnancy
Prohibit (drench) 8 mg/kg 4cc/100lbs* 4cc/100lbs*	Can be mixed as a concentrate for adults or diluted for kids; safe for pregnant does
Rumatel (feed) 10 mg/kg 0.1lbs/100lbs 0.1lbs/100lbs	Simple to top-dress on feed; Coccidiastat.
Ivomec/Ivomec Plus(injection) 0.2mg/kg 1cc/110lbs 2cc/100lbs	Inexpensive; safe for pregnant does; resistance is a problem
Dectomax 0.2mg/kg 1cc/110lbs 1cc/110lbs	Safe for pregnant does; less resistance issues than ivomec
Cydectin (cattle pour-on, as drench) 0.2mg/kg 1cc/22lbs 5cc/100lbs	More practical than approved drench, but no safety/efficacy studies to support

The two populations of goats that are most susceptible to *Haemonchus* infection are young kids (a few weeks to a few months old) and recently kidded does.

Special attention should be given to the attitude and appearance of these two classes of animals. Mucous membranes should be checked every two to three weeks for signs of paleness, and deworming should be done as needed based on the FAMACHA guidelines and labeled dosage charts.

Goats with *Haemonchus* infection may not develop diarrhea, so if a goat doesn't have diarrhea it doesn't mean it does not have a dangerous parasite load!

Signs to look for other than paleness of mucous membranes are:

- Lack of energy
- Depression
- Poor/rough hair coats
- Not wanting to nurse

Young goats (a few weeks to a few months of age) are the most susceptible group to Coccidia infection.

Signs of Coccidia infection include:

- Diarrhea
- Weakness
- Tiredness
- Not wanting to nurse
- Lying down a lot

A fecal examination can confirm Coccidia infection. Deworming should be repeated in 3 weeks.

Foot Rot and Foot Scald

Foot Rot



Foot rot is a disease caused by infection by two organisms that eat away at the hoof wall and soft tissues underneath.

Older animals are more susceptible to foot rot and foot scald, and the main source of

infection is other infected animals. Although the organism can only survive in the environment for a few weeks, it can survive in the feet of infected animals for good.

Infections most commonly occur when goats have not received proper foot care/trimming, leading to overgrown hooves, and when ground or living conditions are always wet, muddy, dirty, or contaminated with feces.

Foot rot is extremely painful, and animals limp or lie down a lot (they may stand on their knees, looking like they are kneeling in prayer). When the foot is examined, you may notice a foul smell coming from the foot. Infected parts of the hoof will be soft, rotten, and black, bloody, or oozy.

If you discover one of your Boers has foot rot and you want to keep the goat instead of culling it, you'll have to be aggressive in your treatment – including trimming away all of the affected tissue until healthy tissue is reached.

Trimming away all rotten foot tissue can mean a lot of bleeding and the removal of large portions of foot. Then the animals need to stand in a zinc sulfide bath for at least 20 minutes, once or twice a day, which will kill the bacteria and help the feet dry and harden.

Antibiotic treatment has little effect on foot root; the most important thing is to eliminate any "pockets" that hold dirt and debris.

Healthy animals should be separated from affected animals, because the bacteria will contaminate the whole pasture or barn, and other animals may

get infected, leading to further spread. Ideally, you should be putting the healthy Boers into a "clean" pasture.

The bacteria can hang around for weeks, especially in wet weather. Animals should be checked frequently and animals that develop lameness should immediately be removed and put with the affected animals.

Once a herd has foot rot, it is very hard to eliminate, even with intensive care. The most common way a herd gets foot rot is introducing a new animal that has it to the herd, which is why <u>isolation</u> of new arrivals and careful examination before putting them with the rest of the herd is so important.

Foot Scald

Foot scald is not as big a problem as foot rot, but can still cause significant lameness. The difference between foot rot and foot scald is that foot scald is an infection of the skin between the toes, not an infection of the hoof wall itself.

Foot scald can also smell terrible. The skin between the toes will be swollen, soft, cracked, and may have a cream-colored pus-like substance. Foot scald also occurs most often when feet are overgrown and conditions are wet.

Foot scald can be cured by doing the following:

- ➤ Cleaning the skin between the toes with gauze soaked in betadine, chlorhexidine, or zinc sulfate (Hoof and HealTM is a great foot product that contains zinc sulfate)
- > Giving the goat a foot soak or footbath
- > Improving footing conditions and providing routine foot care

Some animals seem to be predisposed to foot scald (those goats usually have bad foot conformation).

Providing foot care right when you see a problem, and always maintaining clean living conditions, are the best ways to avoid both foot rot and foot scald.

If feet are trimmed regularly and kept dry, this avoids cracking, peeling, and folding of the hoof wall, and over-separation and stretching of the skin that

leads to problems. Some goats just have "bad feet" and are more prone to developing feet problems. These animals should be culled.

Other Boer Goat Health Problems

While parasites and foot rot/foot scald are the two main health problems that Boers get, you need to be aware of other conditions that your herd might encounter. As they say, an ounce of prevention is worth a pound of cure!

Lice

Goats can get lice, especially in the late winter/spring, when they have been huddled together through the cold months, and may be a little run down and under-nourished.

There are two types of lice: biting and sucking. Biting lice have broad heads, and sucking have narrow heads, compared to their bodies.

Lice like warm dark places, so if the goats seem overly itchy (and normally they do like to scratch themselves some on the fence, with their horns, on the feeders, etc. but it should not be constant) and you see hairless patches on the animal, you should suspect lice

If you suspect lice, look in the creases of their elbows, in the inner thigh area, and next to the scrotum, in the males. Lice are tiny and can be hard to see, but part the hair and you may see them crawling around. You may also see the eggs (nits) attached to the fur.

There are many products to treat lice, like permethrin dusts or injectible Ivomec (which only works for sucking lice). You will have to re-treat in 3 weeks to kill the lice that hatched from the nits, because the lice products only kill the larvae and adults, not the eggs.

Lice are species specific: goats get goat lice, sheep get sheep lice, cattle get cattle lice, and one species cannot give its lice to another (and you can't get lice from your goat).

Respiratory disease

Boer goats can get pneumonia like any other animal. Young goats are most susceptible, especially if their living conditions are crowded, dirty, or dusty, their nutrition is poor, or they don't suckle enough colostrum at birth.

Bacterial pneumonia is the most common, and will cause fever, coughing, sneezing, nasal and ocular discharge, difficulty breathing, and lack of appetite.

There are a variety of antibiotics that can be used to treat pneumonia, although a lot of bacteria are resistant to tetracyclines and penicillins, which are available over-the-counter.

Sometimes goats can get lung parasites, too, although infection is rarely severe enough to cause death. Usually the animal with lung worms has a cough, especially after exercise, but no nasal discharge or fever, and seems otherwise healthy.

Drug Withdrawal Times

One thing to keep in mind with any meat goats is the drug "withdrawal time". This is the amount of time that you must wait after giving a goat a particular drug before its meat is suitable for consumption, or the time it takes for that drug not to be detectable in the meat at slaughter.

The withdrawal time varies for each drug, so it is VERY important to read the manufacturer's labels regarding the withdrawal time, because if drug residues are detected in your goat's meat at slaughter, you can be fined a hefty sum by the USDA.

Drugs that are not labeled for use in goats have an "unestablished withdrawal time", meaning it's not known how long residues stay in their tissues.

These drugs can legally ONLY be used by a licensed veterinarian, and then it is considered "off-label usage". "Drugs" include antibiotics, dewormers, nutritional supplements, and anything that you inject into the animal or stick in its mouth. Some drugs are ILLEGAL to use in ANY food animal species,

like phenylbutazone and chloramphenicol. Read labels carefully and dose according to instructions.

23. What vaccinations do I need to give my Boer goats?



Vaccinations are *extremely* important in keeping your Boers healthy. There is only one major vaccination that must be given to your goats, and a few you might also want to consider:

a. The one vaccine that no goat should do without is usually called **C/D/T**, which stands for Clostridium types **C** and **D**, and **T**etanus. This vaccine prevents Clostridial enteritis (inflammation of the small intestine, also called "over-eating disease" because it is associated with animals on a high plane of nutrition), kidney infections ("pulpy kidney"), and "lockjaw" (tetanus).

C/D/T should be given to goats at 2-3 months of age, boostered 3-4 weeks later, and at yearly intervals after that.

Pregnant does should be vaccinated a month before kidding, so that protective antibodies go into her colostrum for the kids.

The C/D/T vaccine costs pennies per dose (compare that to the cost of losing an animal from these diseases) and is extremely effective.

Preventing tetanus is especially important if you are going to castrate the males. Goats should be given the C/D/T vaccine just under the skin on the side of the neck, not in the butt/hip or into the neck muscle. The neck has the least value in terms of hide and meat, so if there is a vaccine reaction or "knot", it won't damage a valuable area of the animal.

b. Other vaccines you should consider include those against foot rot, sore mouth (Orf), and Caseous Lymphadenitis (CL). But these vaccines should only be used in herds with a known history of these problems,

because their effectiveness varies, they are a bit expensive, and the CL and sore mouth vaccines can actually cause disease, especially if used incorrectly.

A Few Final Words on Boer Goat Health

The above guidelines touch on a few of the most important and common diseases encountered by Boer goat owners. They are also the easiest to recognize before you buy your goats, because you can observe the animals' behavior and appearance.

In short, when you are buying new animals, avoid any animals that:

- > Are lame
- ➤ Have swellings on their bodies (especially around the head and throat)
- ➤ Have diarrhea, pale mucous membranes, runny eyes or noses, or cough

Prevention is the best way to avoid bringing problems to your farm, and a thorough physical exam and knowing what to look for, and which animals to avoid, is big first step to establishing a healthy herd and keeping it that way.

24. What should I feed my Boer goats to get the best weight gain?



Many people have the wrong impression about goat feed – they think that goats are going to survive on tin cans. Well, Boers are very curious, but they actually choose the best food available to them on the field.

Boers often go for plants that we consider to be weeds, which are in fact very nutritious. Goats prefer them when they are lush and young, which is when they are most nutritious.

If you are a good grazier and can do a good job raising good quality forage for your animals in a warm or moderate climate, you can feed your animals for most of the year without purchase feed. However, during the winter, you probably should provide them with good quality hay, and supplement that with some purchased feed.

Some farmers want their goats to be in optimum body condition all year round, which is unrealistic. For example, it's normal for a doe to lose weight during lactation, or they may be lean toward the end of winter. They will quickly rebound in the spring.

Feed is the largest expense of a goat operation, so if you want to make profits, you must move away from heavy feeding.

To grow a goat's weight in winter just before the slaughter house, purchased feed is acceptable. The recommended amount is no more than a pound of whatever you feed them. Start with a quarter pound, and increase it to half a pound. But base your feed changes on the body conditions of your animals.

One example of the type of feed used by a lot of Boer goat farmers is Rumensin, which is a medicated feed.

When thinking about what to feed your Boers, try to "think outside the box". Industrial byproducts are a cheap way of getting high energy feed. What is available depends on the region. For example, hulled cotton seed or soybean hulls can be mixed with good quality hay to get a very good feed for the winter for a very reasonable cost. This may be even better nutrition than purchased feed (ex: hulled cotton has 18% protein).

Here's an example of REALLY thinking outside the box. If you have a bread or donut factory within a reasonable distance from your farm, the sweet, fortified, unsold product makes excellent feed. Some Boer goat operations have been known to pick up old product from donut factories and feed it to their goats!

The Essentials of Breeding

Breeding *right* can make the difference between a Boer goat operation that is solidly profitable, and one that loses money. After all, your goal is to steadily increase your herd with healthy, productive Boers.

This section of the guide describes what you need to know about breeding, from the basics of pregnancy to tips on how to choose good breeding stock.

25. What is the length of pregnancy for female Boer goats?

The female Boer gestation period is 5 months.

26. What is the best age and weight to breed a doe?

When deciding when to breed your does, it's better to consider weight and physical development than age. Breed them when they are about 65% of the average weight of the other does in your herd. This is usually when they are a year and a half old, sometimes a year if they are a very good forager.

If you breed does when they are lighter, you may stunt them because they are still growing actively. Also, lighter does may not be physically large enough to have her kids, leading to dystocia (when the kids get "stuck" on the way out).

27. Will Boer goats breed more than once a year? If so, are there any "tricks" to getting them to breed more frequently?

On paper, it looks good to breed a doe 3 times in 2 years. But the increased feed and management costs may make this not worth it for your farm.

In terms of the doe's health, breeding once a year is ideal. It gives the doe more time to recover and gain strength and nutrition after weaning. That chance at better nutrition makes her healthier and more fertile for the next cycle.

The season in which kidding will take place should also be considered. Most farmers kid in the spring, so you may put half the herd on a spring kidding rotation and half on a fall kidding, to target certain markets. Breeding more

than yearly means you will sometimes have kids in the winter, when there is less food, or summer when there are more parasites.

28. What does it mean to "synchronize" the breeding season, and how can I do it?

"Synchronizing" the breeding season means getting your does to give birth during the same stretch of time. The biggest benefit of synchronization is that the births happen together, so it's easier for you to plan.

The simplest way to synchronize the breeding season is to keep bucks and does in separate pens until they're ready to mate, then let them out together into the pasture. Bucks should be left with the does for about 35 days (1½ breeding cycles), to ensure that the kidding season is "clustered" within a month, which makes it easier to manage the does and kids at kidding time. Gestation length is about 5 months (145-150 days), so does bred in the fall will kid in the spring, and vice versa.

29. When choosing breeding stock, what should I look for?

Choosing a Good Breeding Buck



A good physical examination is a good way to make sure that your buck is going to be able to perform well during the breeding season.

Sound feet and legs are critical, because he's going to be very busy visiting all the does, checking to see if they are in heat, and breeding the receptive does. If he is sore from

arthritis, foot rot, foot scald, or anything else, he is not going to want to walk around and breed does.

Body condition is also important. A fat buck may have too much fat in the scrotum, which can insulate the testicles and causes sperm damage from heat. He may also be out of shape and not physically fit enough to get the job done.

On the other hand, an overly thin animal will also not have the energy needed to maintain breeding through the entire season. Pick an animal with good muscling, sturdy feet and legs, and good conformation (how he's put together, skeletally and muscularly).

For their size, goats are one of the most well-endowed animals, in terms of testicle/scrotal size. Scrotal size/circumference is important. The bigger the "package", the more fertile the buck is likely to be.

Scrotal size increases with age; more mature bucks will have larger testicles and be more fertile. Testicles should be the same size, firm but not hard, contain no lumps or swellings, and he should not mind if you gently squeeze them (it should not elicit a pain response), once he is used to someone being back there handling him.

The scrotal skin should be dry and clean, not crusty, and there should not be a "split" or division between the two testicles (called "split scrotum" and is not a desirable characteristic in a good breeding buck).

If you spend a lot of money on a buck, you may consider a "breeding soundness exam" performed by your veterinarian, which, in addition to a thorough physical exam, will get a semen sample from the buck and look at the number of sperm and the motility of the sperm, to give you an idea of his fertility.

Breeding records are a good way to know the productivity of a buck. Information on his birth weight, weaning weight, and information on his progeny (number of offspring he has sired, their birth and weaning weights, etc) are a good measure of his productiveness.

Information on the buck's mother is also a good measure on his potential; if she is a good producer of quality kids, he probably will sire good kids, too.

Libido is the measure of a goat's sex drive. He should be on the constant look-out for does to breed. A good breeding rate is four to six breedings or more in 30 minutes. Acceptable is two to three breedings in 30 minutes. Less than that is not acceptable libido.

A mature male buck can service about 30 does. The older and more mature a buck is, the more does he can service effectively. A younger buck may only

be able to breed 20 does. Putting 3-4 bucks per 100 does assures that all the does will get bred by one buck or another. Bucks may have "preferences" for some does and just not breed others, for no obvious reasons. Having multiple bucks eliminates this problem.

Choosing a Good Breeding Doe



Goats are polyestrus, which means they have multiple heat cycles throughout the breeding season. And they're "seasonal breeders", which means they tend to cycle during the "short day" times of the year, fall and spring.

Like the buck, a good physical exam will ensure you start with healthy animals. Make sure the doe has two well-developed teats. If

she has kidded before, the udder will be more developed than a doeling's. It should hang evenly and not be lumpy or hard, which can mean she has an udder that was damaged previously, by injury or mastitis (infection of the milk glands).

As mentioned previously in this guide, try to get a history of the herd. Look at health records, which a breeder should have. Ask how many times they have been dewormed and what kinds of problems they have had.

Buying goats from people you know directly is far more reliable than buying goats at an auction sale, where prices are lower, but goats may also come with unseen health and behaviour problems, which can damage the herd.

30. What are the most important factors in increasing successful multiple births?

Flushing is one of the most important factors in getting multiple births.

Flushing is a system where, starting about 4 weeks before the breeding season, you put the does on a good quality pasture (or provide quality purchase feed) so you give them extra energy, which makes the ovulation rate go up.

Continue that during the breeding season and for about 40 days after the end of the breeding season, after removing the bucks, so that the embryos are going to implant well in the uterus.

Group does into groups of 20-30, which is how many does one buck can handle. With quality fencing, put the buck on the other side of the fence for 7-10 days before letting the buck into the does' area.

It's not uncommon that the first heat is "silent" (i.e. without ovulation), and a doe may have another heat shortly thereafter that is fertile.

To discourage kidding at night, feed the does hay in the evening.

Once the kids are born, put mother and kids in a small fenced in area to bond for 1-2 days.

Calculate ahead of time when you want to kid, and feed accordingly. This nutrition is going to increase ovulation rate, and flushed goats most commonly give birth to twins; occasionally singles or triplets, and very rarely, quadruplets.

Does are best suited to raising 1 or 2 kids. Any more than that can deplete her nutrition, making it hard for the doe to feed the kids, and also deteriorating her own body.

31. How can I prevent my Boer does from having a miscarriage?

Miscarriages are sometimes just natural embryo death early in the pregnancy, and there's nothing you can do about that. Sometimes they may occur because the older does were mean to each other, butting each other in the stomach. And there are some diseases that can provoke abortion.

Animal handling in late pregnancy can also cause problems. Goats are very sensitive animals. So if you need to deworm them or round them up, be careful not to stress them out. If you bring them into a chute, handle them very quietly in a non-threatening manner.

Make sure the does have access to high quality food, and plenty of it. If a doe gets fat and you suddenly run out of quality food, the body will start breaking down fat. If too much fat breaks down, ketone bodies (a byproduct

of breaking down fat) build up and can cause pregnancy toxemia. (If this happens, give the doe Caro syrup and water several times a day.)

32. What treatments must the mother and kids receive after birth?

It's extremely important to keep a close eye on mother and kids, especially during the first few days. The mother requires plenty of good quality forage and water. For the kid, clean the nasal passages, put iodine on the umbilical cord (if you find it before it dries), and make sure that they nurse: the sooner the better. This is the best thing you can do for your kids.

For the weak ones that don't seem to find the teats, try to help them. During the first 12-24 hours of life, they should eat about 10% of their live weight in colostrum. Their bellies will feel tight like a balloon (not flat). The colostrom gives antibodies to help them develop their immune systems. For goats that produce a lot of colostrum, freeze extra in ice trays for use in the future.

If they still struggle to eat, even with help, milk the doe into baby milk bottles and give it to the kid. At the extreme, you would have to tube the animal, which means to put a tube all the way down to its stomach and pour milk in it. This is a last resort, and should be done only if the animal is very weak, lethargic, and is not drinking. Watch to see the tube go down its throat. If you cannot see it, it may go into the lungs, which can kill the kid.

It's not known why, but on occasion a doe will not accept her kid. Kids can be fed thawed colostrom frozen from other does. Sometimes, other does take them in. To encourage this, find a doe that birthed a single (vs. twins) and cover the rejected kid with this doe's afterbirth. The doe will accept it.

After kids are born, separate your herd by nutritional needs and match it to your farm to decrease feed costs. Put yearlings, weanlings, and nursing mothers on high quality feed, and put other adult does on mature forage. It won't hurt them, and will make sure they cannot steal the good food needed by the weakest.

A Few Final Words

I hope you learned a lot from this guide and the accompanying audio interviews.

A lot of care was taken to include only the best information in the guide, and the interviews are pure GOLD. What better way to learn how to start a profitable Boer goat operation than from others who have done it themselves!

Starting any kind of business isn't easy. But with the information from this guide and audio interviews, you'll have a head-start in launching your own profitable Boer goat operation!

To profitable farming,

Marc Mac Donald

Marc MacDonald, M.Sc. Boer Goat Researcher

Annex A: Boer Goat Business Plan Template

"Failing to plan is planning to fail" *Alan Lakein, Author*

It's a well-known fact that many businesses fail within the first five years of their existence. But many of those businesses fail because they didn't *think through* their business before they got started.

Take a look at the following list of 10 leading causes of business failures:

- 1) Insufficient business/enterprise planning
- 2) Lack of adequate capital in the start-up and growth stages
- 3) Going into business for the wrong reason
- 4) Manager gets worn out and/or underestimates the time requirements
- 5) Family pressure on time and money
- 6) Being at the wrong place at the wrong time
- 7) Lack of market awareness
- 8) The manager falls in love with the enterprise and cannot make objective decisions
- 9) Lack of financial responsibility and awareness
- 10) Lack of a clear focus

You can see in the list above that many of the reasons why businesses fail is a *lack of planning*.

Having a plan helps you develop a vision of what you want your business to be, define how you will build it, and determine if it's working.

To start, proper identification and written descriptions of a mission and goals for a Boer goat operation will provide a strong foundation for the development of a complete business plan.

Take a moment to write down your mission and goals for your Boer goat operation:

1. Mission Statement:

(Here's an example to get you started: "The mission of John Smith Farm is to be the largest provider of high-quality Boer goat breeding stock in Lubbock County, Texas")
2. Specific Goals of My Boer Goat Operation:
(Examples: "Achieve \$500,000 in annual profits within 5 years"; "Increase my herd siz to 100 goats within 2 years")
Goal #1:
Goal #2:
Goal #3:
Goal #4:
Goal #5:
In the next section of your business plan, you should be thinking about the <u>niche</u> you want your Boer goat business to operate in. In other words, will you specialize in selling breeding stock to other producers? Selling meat directly to consumers off your farm? Selling meat to wholesalers?
3. The niche my Boer goat business will specialize in will be:

Next you want to define the <u>target market</u> for your business. Your market will include where, and to whom, you will sell your goat. Take a moment to answer the questions below:

4. The geographic area that my Boer goat business will focus on will be:

5. The ideal customer for my Boer goat business will be:
Competitor analysis is an extremely important aspect of any business. After all, you won't be the only farm in your state selling Boers (but if that was the case, it would be great for you!).
Give some thought as to who will be your competitors, along with their strengths and weaknesses. (Hint: think about how you can turn your competitors' weaknesses into your strengths.)
6. My major competitors will be:
Competitor #1:
Strengths of this competitor:
Weaknesses of this competitor:

Competitor #2:
Strengths of this competitor:
Weaknesses of this competitor:
Competitor #3:
Strengths of this competitor:
Weaknesses of this competitor:
Related to competition, you need to decide what <u>promotional methods</u> you'l use to market your Boers. Will you only rely on word-of-mouth to spread the word about your business? How about advertising in newspapers? How about the Internet?
7. The main ways I will market my Boer goat business will be through:
a
b
c

Now we get to the boring stuff – the financial planning ⊗ Planning the costs of your Boer goat business might cause you to yawn, but it's necessary - so let's get to it!

Starting a Boer operation is going to require both upfront and ongoing investment from you. In return, you expect to get some money back in the form of profits – hopefully much more than you put in!

The upfront investment will consist of "capital investment" - in other words, money that you'll use to buy assets to start your business (assets like land, fences, and the Boer goats themselves).

Take a moment to look at the categories in the sample Capital Investment table below. Then come back to the table once you've figured out the investments that will be necessary for your own business.

Capital Investments Required to Set Up Boer Goat Business

	Investment
Land	
Crop land (10 acres)	
Improvements & Facilities	
Utilities (enterprise share)	
Pole shed (15' x 30')	
Perimeter fencing	
Cross fencing	
Fence line feeders	
Pens	
Total Improvements & Facilities	
Stock	
Breeding does	
Breeding bucks	
Predator control dog	
Total Stock	
Equipment	

Electric fencer	
Hoof trimmers	
Small tools	
Truck (enterprise share)	
Waterers	
Total Equipment	
Total Investment	

Next step in estimating your costs is to look at how much money you'll be spending to keep your business going – in other words, the **estimated operating costs**. You can combine an estimate of these costs with **estimated revenues**.

Below is a sample budget sheet that includes estimated costs and revenues, and arrives at an estimated profit at Year 3 of a Boer goat operation:

Sample Budget Sheet

Projected Revenues	No.	Weight	Price	Year 3	Your Snapshot
Meat (weanling) bucks					
Meat (weanling) does					
Breeding doelings					
Cull does					
Value of increased inventory					
Government grants					
Total Projected Revenues					
Projected Direct Costs					
Feed costs — Does					
Hay					
Grain					
Salt & mineral					
Feed costs — Weaned					
offspring					
Hay					
Grain					

Total Feed Costs			
Pasture management expense			
Veterinary costs			
Bedding			
Marketing			
Fuel & repairs			
Machinery costs			
Facility repairs			
Utilities			
Office expenses			
Manure removal			
Interest on operating			
Total Projected Direct Costs			
Return Over Direct Costs			
Projected Indirect Costs			
Operator labour (X hours @ \$X/hour)			
Land taxes, licences & insurance			
Depreciation on improvements			
Depreciation on equipment			
Total Projected Indirect Costs			
Total Projected Direct & Indirect Costs			
Gross Operating Profit			

Once you've gone through all of the steps outlined in this Boer Goat Business Plan Template, there will still be some nitty-gritty questions that you will need to ask yourself.

Asking these questions of yourself will allow you to develop a mental "action plan" to get your business up-and-running. (Here's another tip: write down the answers to these questions, then prioritize them by date. This will give you a timeline that you can follow to set up your business.)

The following questions are from Jack Mauldin's excellent website, www.JackMauldin.com:

Questions to Ask Yourself About Your Environment:

- ➤ Do you have sufficient fencing to keep your goats in and predators out?
- ➤ Will you need any cross-fencing to separate some animals?
- ➤ Will you need some type of guard animal?
- ➤ Do you have sufficient shelter for your animals during bad weather?
- ➤ Do you have the ability to pen up sick animals?
- ➤ How will you transport animals?
- ➤ How will you pen animals to doctor?
- ➤ Will you have to supplement grazing with grain/hay?

Questions to Ask Yourself About Your Animals:

- ➤ Where will you purchase your animals?
- ➤ Where will you sell your animals?
- ➤ How will you track breeding sire if you will be registering animals?
- ➤ How close will you monitor and participate in birthing?

Medical Questions to Ask Yourself:

- ➤ How will you gain knowledge about medical requirements?
- ➤ Is the vet in your area that is knowledgeable about goats?
- ➤ What type of maintenance program will you have for goats?
- ➤ What type of medical supplies will you need and where will you get them?
- ➤ How will you learn how to administer medicine?

General Questions to Ask Yourself:

➤ What type of goat manuals and magazines will you get?

- ➤ What type of record keeping will be required?
- Will you join any goat associations?
 How will you determine price to pay or set for animals?

Annex B State-Level Boer Goat Associations

Association	Representative	Contact Info	States Served
Arkansas Meat Goat Association	Lisa Wagner	11307 Booth Road Mulberry, AR 72947 Skippa1@earthlink.net	AR, MO, TX, LA, MS, TN
North Central Texas Meat Goat Association	John Muery	1451 Marley Road Jacksboro, TX 76458 ewfboers@hughes.net	TX
Piney Woods Boer Breeders Club	Calvin Taylor	969 Leon Tillman Road Lufkin, TX 75901 calvintaylor@yahoo.com	TX, AR, OK, LA
Iowa Meat Goat Association	Eric Finch	73860 280th St. State Center, IA 50247 edfinch@fbx.com	MO, OK, IL, MN
Cascade Boer Goat Association	Randall Smith	13218 NE 80th Ave. Vancouver, WA 98662 boerdman@aol.com	OR, WA
Illinois Meat Goat Producers	Jodie Boen	101 Boen Road Alvin, IL 61811 jodieb@cooketech.net	IL, WI, MO, IN
Southeast Arkansas Goat Producers Association	Jan Wesson	1789 Highway 133 North Crossett, AR 71635 jan@dunroaminboergoats.com	AR
Midwest Boer Goat Breeders Club	Cindy Wade	29856 E. 2150 N Colfax, IL 61728 cwwade@hotmail.com	IL, Open to all Midwest states
Snake River Meat Goat Association	Clara Askew	5180 SE 1st Ave. New Plymouth, ID 83655 foxtailfarms@hotmail.com	ID, WA, OR, NV, UT, WY, MT

Alabama Meat Goat and Sheep Producers	Mitt Walker	P.O. Box 1100 Montgomery , AL 36191 mwalker@alfafarmers.org	AL
Midwest Goat Producers	Ron Williamson	13173 N. 1300th St. Robinson, IL 62454	IL, IN, MO, KY, WI,
Empire State Meat Goat Producers Association (ESMGPA)	Brett Lindsay	P.O. Box 306 Watkins Glen, NY 14891 BSBBLINDSAY@TWCNY.RR.COM	NY, PA, MD, DE, MA, CT, NJ, VT, ME
Four States Boer Goat Association	Scott Hawthorn	164 Hawthorn Lane Arkadelphia, AR 71923 jennifer@cedargrovefarms.com	AR, OK, TX, LA, TN, MO
Louisiana Meat Goat Association	Chris Shaffett	29100 Craig Dr. Hammond, LA 70403 Shaffman01@hotmail.com	LA
North Carolina Meat Goat Association	Randall White	105 Five Bridge Road Clinton, NC 28328 crookedcreekgoat@aol.com	NC, VA, SC
Northwest Boer Goat Association	Dan DiCicco	17847 Bald Hills Road Yelm, WA 98597 danspak6@ywave.com http://www.nwbga.org	WA, OR, ID
Ohio Meat Goat Association	Mary Morrow	13140 Stoney Point Road New Concord, OH 43762 morrowfarm@aol.com	OH, PA, NC, IN, MI, TX, KY, CT, WV
Oklahoma Boer Goat Association	c/o Dottie Wallace	P.O. Box 14 Tryon, OK Rockingmranch1@earthlink.net	OK

Sam Houston Goat Association	Alma Staples	9020 FM 1484 Rd. Conroe, TX 77303 rstaples@houston.quik.com	TX
Southern Goat Producers Assoc, Inc	Gaylene Carson	P.O. Box 237 Pendleton, SC 29670 info@billysboermeatgoatfarm.com	SC, GA, NC, FL, TN
Tall Corn Meat Goat Wether Assoc., Inc.	Vern Thorp	1959 Highway 63 New Sharon, IA 50207 neverthorp@aol.com	Iowa
North East Texas Goat Raisers Association	Lyndie Mansfield	3349 CR 4777 Sulpur Springs, TX 75482 mansfieldboers@yahoo.com	TX