



Using Goats for Brush Control as a Business Strategy

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State and local goat producers' organizations occasionally receive calls from businesses and government agencies asking about goat producers in the area who offer their services as a brush control business. Frequently, when goat producers hear of the opportunity they think of it as free feed for their goats – easy money. However, the business of using goats to control brush is not the same as a meat goat or dairy goat business. Using goats for brush control is a business strategy and comes with its own set of opportunities and problems.

Equipment

Starting a brush control business with livestock, like any other business, has start-up costs. Unlike your meat or dairy goat business, you will need a large livestock trailer and a very dependable truck that can haul it for long distances. You will need a good flatbed trailer for hauling your equipment and fencing



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materials. Also, you will need to buy a commercial-grade grass trimmer/brush cutter and brush hog. Without these, you will not be able to install your fences where you need to. In addition, you will need a stock tank capable of holding several days' worth of water for your goats and a livestock feeder. You may also need to provide shelter from rain or sun, although your stock trailer may suffice if you are willing or able to leave it on-site. This is of special concern when working inside city limits, as they may have special ordinances regarding animal care and welfare. As you can see, brush control must be thought of as a business that must earn enough money to cover its costs. Brush control with livestock is not cheap.

Labor

You must be prepared to do some hard physical labor. Keep in mind that most of the locations where goats will be used are often steep, rocky, covered in brush and vines, and generally difficult to traverse. You, however, will have to walk over at least a portion of the property to install your fences. You will have to be able to cut through the brush and other cover that lies in the path of your fence line. This is why it is so important to start with high-quality equipment to cut brush. You will need a commercial-grade grass trimmer/brush cutter and a good brush hog and tractor.

You must be prepared to travel both long and short distances, often on short notice. Hooking up trailers, loading and unloading equipment after a hard day of brush-cutting, followed by a long drive can be exhausting. You may have to hire labor and provide room and meals while on an extended stay.

Fencing

Fences in the brush control business serve the same purposes they do in the meat goat business – to keep the goats in and the predators out. The problem lies in the fact that as the amount of brush declines, in other words the better the goats do their job, the more the goats will try to get out for feed. Most brush control businesses use five-strand electric fence with both hot and ground wires. This ensures a good circuit even in the drier, rockier terrain you may be browsing. It also makes it harder for agile predators to cross the fence. Some brush control operations have opted for electronet fencing to make it even harder for predators to get through.

Insurance

You should strongly consider carrying liability insurance. Some jobs will require you to work in areas where the public will congregate. Electric fencing and aggressive goats can be a hazard to small children or the unwary. Guardian dogs may bite intruders or those who attempt to pet them over the fence. Liability insurance is inexpensive and can save you a great deal of money in the event of an incident.

The insurance company's attorneys can often help you recognize potential problems and advise you about the best course of action to avoid legal problems. Liability insurance also comes with its own problems, however. In some cases, your insurer may not allow you to use guardian dogs, and your losses to predators may become unacceptably high. There are insurers that allow guardian dogs, and you should make the effort to find them.

Local Laws

One of the difficulties you may run into is local animal welfare ordinances. Some municipalities have strict rules governing how much room each animal must have, access to shade, water and shelter from the elements, veterinary care and more. Typically these rules are designed for pet care and do not reflect the realities of using goats to control brush. In other cases, well-meaning people with little understanding of animal behavior may create rules that are difficult to comply with. No matter how unusual the requirement, you must be prepared to comply. Some localities have exemptions for the use of livestock for brief periods. Be sure to double check with local authorities to avoid receiving a citation.

Animals

Many of the producers who use goats to control brush wether all of their bucklings and keep them. Remember, every animal that you have eating brush creates income. Brush control operators generally only sell cull animals. Wethers can also be easier to manage because you do not have to be concerned about breeding or kidding. Does nursing kids during the summer months may need extra attention the first few days on the new site. Kids are usually the first losses to predators or may become separated from their dams and lost. Kidding does may be too far away for you to check and assist on some sites, and does may be lost to complications from kidding. Does often hide their kids in the brush for the first few days or weeks, and you may lose kids when you pick up your goats. You can be a successful brush control goat producer and have successful kidding seasons as long as you keep these potential problems in mind and prepare for them.

Brush control goat operators often prefer meat/dairy goat crosses because they tend to be bigger. They can reach higher and knock over or penetrate brush better than smaller goats. Kiko breeding is also frequently preferred, as they tend to have fewer parasite and hoof problems. Your animals should be selected to be good travelers, docile and easy to catch, and parasite and disease resistant.

Stocking Rate

The number of goats you choose to use on a site will vary according to conditions and the goals of the landowner. Most landowners want the brush on their property eliminated. A general rule of thumb is that ten goats will clear an acre in about one month. However stocking rates as high as 34 goats per acre have been reported. Complete brush eradication will take several years to accomplish, and you should make this clear to the owner. The more goats per acre and the longer they remain on site, the greater the damage they will do to trees. In most cases, landowners do not want their trees damaged, so you will need to monitor your goats and remove them before they damage trees. Finally, the longer the goats remain, the more likely they will be to try to escape as available feed decreases.

Obviously, high stocking density can clear brush more rapidly, but you can have problems maintaining the condition of your goats. You will have to keep a close eye on their body condition to stop nutritional deficiencies before they get out of hand. Your replacement does may grow more slowly, so you may need to wait to breed them in the next breeding season rather than as yearlings. However, done correctly, brush control goats can achieve good gains.

Effectiveness in Reducing Brush

While the popular misconception that goats will eat anything is clearly not true, goats will clear an amazing variety of brushy and weedy species in relatively short time. In experiments conducted in Oklahoma, North Carolina and West Virginia, goats reduced brush cover by 50 to 90 percent in a single year. Over the course of five years, brush cover in one study was reduced to just 2 percent. In North

Carolina, brush cover was reduced while desirable grasses and legumes increased from a low of 16 percent to over 50 percent of the plant ground cover. In a separate study, multiflora rose was almost completely eliminated by the fourth year of browsing. Keep in mind that there are some species that goats will not eat. For example, in one study, nimblewill, wild strawberry and yellow-crownbeard cover actually increased because the goats would not eat them and they faced less competition from other brush and weed species. It may be useful to add either cattle or sheep to the brush control program to increase the number of plant species controlled.

Timing of browsing to control brush is critical. Browsing during the early spring and summer growing season does the most damage to undesirable species. Browsing in late summer or early fall has almost no effect on brush regrowth the following year. Damage to pine trees in an Arkansas study did not occur until other forage was gone and during late fall and winter when other green forage was not available.

Costs of Brush Control

Brush control using goats is the least expensive method of controlling brush available. How much should you charge? Because conditions, distances and circumstances vary widely, it is unlikely you will develop a set price per acre for your brush control service. Brush control operations typically charge \$1 per goat per day or more as a base fee. You will need to add fees for the number of hours and distance you must travel, cost of hauling (which should include depreciation and maintenance), labor cost for fence lanes you must clear mechanically, fencing cost, utility costs, veterinary costs, hotel and meals, equipment costs (fuel, maintenance, depreciation), livestock losses, insurance, bonds, licensing and more.

Summary

Brush control using goats is a business that differs from raising goats for meat or milk. Start-up costs include vehicles for hauling livestock and equipment, portable fencing, feeders and waterers, insurance and marketing. The work is hard, and you will

need to be fit enough to accomplish it or hire labor to meet your needs. Local laws and the general public can be problematic because of the lack of understanding of the requirements of goat care and management. However, the news media can also provide valuable advertising for you with news stories about your operation. Once you understand the needs of your clients, the restrictions imposed by the location and the costs of browsing goats on your client's property, you can set a price for your services that will reward you for your hard work.

References

- Browning, Jr., R., M. L. Leite-Browning and M. Byars, Jr. 2010. Reproductive and health traits among Boer, Kiko and Spanish meat goat does under humid, subtropical pasture conditions of the southeastern United States. *J Anim Sci* 89:648-660.
- Luginbuhl, J-M., J. T. Green, J. P. Mueller and M. H. Poore. Meat goats in land and forage management. In: Proceedings of the Southeast Regional Meat Goat Production Symposium "Meat Goat Production in the Southeast – Today and Tomorrow." February 21-24, 1996. Florida A&M University, Tallahassee, Florida.
- Magadlela, A. M., M. E. Dabaan, W. B. Bryan, E. C. Prigge, J. G. Skousen, G. E. D'Souza, B. L. Arbogast and G. Flores. 1995. Brush clearing on hill land pasture with sheep and goats. *J Agron Crop Sci* 174:1-8.
- Mitchell, E. R. 1996. Brush control with goats. The Kerr Center for Sustainable Agriculture, http://www.kerrcenter.com/publications/brushcontrol_goats.html.

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