Week-old kids

2-year old buck

GOATS AS A VEGETATION MANAGEMENT TOOL

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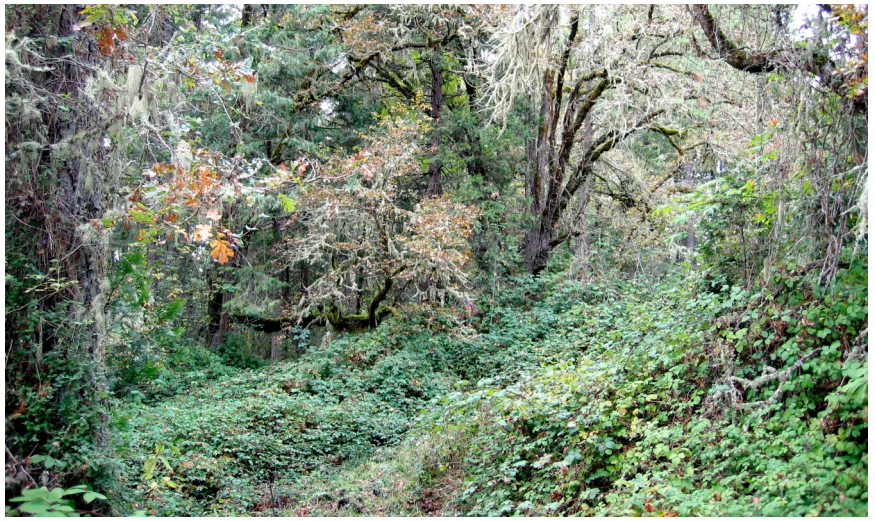
FINANCIAL PHILOSOPHY

- Goats are like a brush hog mower…they cost money to buy, operate and maintain, but they do an important job.
- This tractor costs $25,000. Goats cost less, and can get to steep, rocky places a tractor can't reach.
- It can make financial sense to keep goats even if you do not turn a profit. Income from kid sales can often cover out of pocket costs.

THE PROBLEM AND THE SOLUTION

Blackberries, Scot's broom, poison oak and unwanted trees can take over unmanaged land.



Goats will eradicate brush and control small trees, even on very steep hills.

GOATS CAN GO ANYWHERE

This logged-over hillside is so full of slash, stumps, rocks and logs, and is so steep, that it cannot be mowed. This hill has been subjected to rotational goat grazing for two years. In another 2 or 3 years, it will be a grass pasture.

COLLATERAL DAMAGE

Goats are also very good at eradicating plants that you'd rather keep.

Trees and shrubs can be girdled and killed by goats. Bored and nutritionally stressed goats are the worst offenders.

A large mob of goats can do a lot of damage in just one day. Protect important trees with fencing or spray them with deer repellant.

HELPFUL TREE REMOVAL

Goats' tendency to eat trees and shrubs can be also be an advantage. These invasive mazzard cherries surrounding a native oak have been barked and will die next spring.

Goats will strip needles and small branches from trees felled in their pasture, making it easier to buck up the trees later on.

LAND CONVERSION PHASES

The process of converting land from a brushy, overgrown state to a grassy pasture goes through several stages.

It seems to take about 4 or 5 years to convert a blackberry monoculture into a pasture.

It is important to plan for each stage. The number of goats that can be supported can vary widely during the conversion process.

FIRST YEAR

- At first, there will be more food than the goats can eat. Stocking rates can be high.
- Blackberry bushes still have significant root reserves, and will be able to regrow quickly.
- Better results will be obtained if the goats are concentrated and rotated through small paddocks, rather than allowing them access to the whole pasture.

SECOND YEAR

During the second year, dense blackberry canopies are broken, leaving bare dirt exposed.

Seeding with desirable grasses is difficult, since large areas of dead canes still impede access.

Since the browse has been removed, but grasses have not yet established, stocking rates may need to be scaled back dramatically. Feed can be quite scarce.

SECOND & THIRD YEARS

In western Oregon, bare ground does not stay bare for long. Under dead and dying blackberry canes, grasses and weeds will start to grow.

The kinds of plants that appear will depend on the seed bank. Hopefully, dominant pasture species such as clover, tall fescue and orchardgrass will be among the colonists.

THIRD & FOURTH YEARS

- As brushy plants are removed, more grasses and forbs move in to reclaim the space.
- Walking through previously brushed-in areas becomes possible, so overseeding with desirable species is an option where bare dirt still exists.
- Young grasses and forbs should not be overgrazed.

FIFTH YEAR & BEYOND

Once the goats have converted the land to a pasture, it is important to care for the pasture using standard rotation techniques.

Goats can thrive on grass, especially during fall and spring, when the grass is actively growing.

PASTURE ROTATION

Ideally, goats should be rotated into a new grazing area at least once a week. Rotation allows vegetation to re-grow, breaks parasite life cycles, and prevents bare spots caused by overuse.

Land productivity, vegetative cover, and herd size are factors in determining the number and size of required paddocks.

Except for well-managed annual grass pastures, most paddocks can be grazed only once in the five months from mid-October through mid-March. Weekly rotation would require 20 paddocks of sufficient size to provide a week's ration to the mob.

Supplemental winter feeding is an alternative to wintertime rotations. A sacrificial area can be used to spare the majority of the pasture from compaction and overuse.

MANAGEMENT STRATEGY

Goats can be housed in a barn, and fed hay and grain in addition to their pasture.

Lactating does and growing kids need high quality feed. Some goats need help with kidding.

Other goats are able to thrive without manmade shelter, supplemental feed, foot trimming, kidding assistance, and other management inputs.

You will need to decide how you want to raise your goats, and then select the proper goats.

TYPES OF OPERATION

EASIEST → HARDEST

BUCKS & WETHERS

200+ pounds, with the lowest nutritional & management needs. Can bring down tall, thick blackberries.

DRY & PREGNANT DOES

Can be maintained with lower quality nutrition than lactating does or growing kids.

DOES & BARN RAISED KIDS

Higher management allows more types of goats to be used without sacrificing kid survival. Nutritional needs are high.

DOES & PASTURE RAISED KIDS

Lowest cost option, but major losses may occur unless hardy, high maternal does are used.

KIDDING WITHOUT A BARN

- Successful pasture kidding in the cold and rainy months can be done with tough, high maternal does.
- Pastures may have large grassy areas, but must also have wooded areas with large conifers.
- Low hanging branches create dry areas for kidding and nurseries for older kids.

VALUABLE TRAITS FOR LOW INPUT MANAGEMENT

- Strong maternal instincts
- Compact, high udder with small teats
- Feet that grow slowly and resist footrot with no hoof trimming needed
- Resistance to parasites and respiratory problems
- Aggressive browsing behavior and large rumen
- Unassisted delivery of vigorous kids
- Fast early growth rate on native vegetation

ELECTRIC FENCES

Powerful energizers are the key to successful goat fencing. Don't scrimp. Fence voltage should be checked EVERY day. Maintain at least 5000 volts.

Premier's Intellishock 506, a "wide impedance" energizer, works even in August, when grounding conditions are poor. This is a good energizer for smaller farms. We keep this as a backup energizer. It costs about $600.

Stafix's M36 is the most powerful energizer available. It can deliver 8000 volts even with dead shorts to the ground or tee posts. Stafix's fence tester is also a remote control - the fence can be turned on or off from any location. Cost is about $1,600, with lighting arrestor and grounding rod assemblies.

TEMPORARY FENCES

Temporary fences are a good way to get started. Don't build your permanent fences until you are sure you know where you want them.

We like Premier's green plastic Powerposts and low-resistance Intellitwine polywire.

Materials cost is about 20¢ a foot. This fence can last 5 years, but needs regular maintenance.

If goats are well-trained to respect electric fences, 3 wires are enough.

TEMPORARY CORNERS & ENDS

Temporary polywire fences need tee post corners and ends, unless they will be standing for only a few weeks.

Premier's PI 21: notched for corners, plain for ends

Claw insulators: cheap, easy, fast.

Pinlocks: the most secure corner.

OTHER IMPORTANT DETAILS

Even temporary fences should have a knife switch disconnect at the beginning of every run. Every run should be a dead end; loops are very hard to troubleshoot.

Premier's "Maxishock" galvanized cable is the ideal wire to connect insulators and bond wires.

Maxishock is also available as an insulated cable.

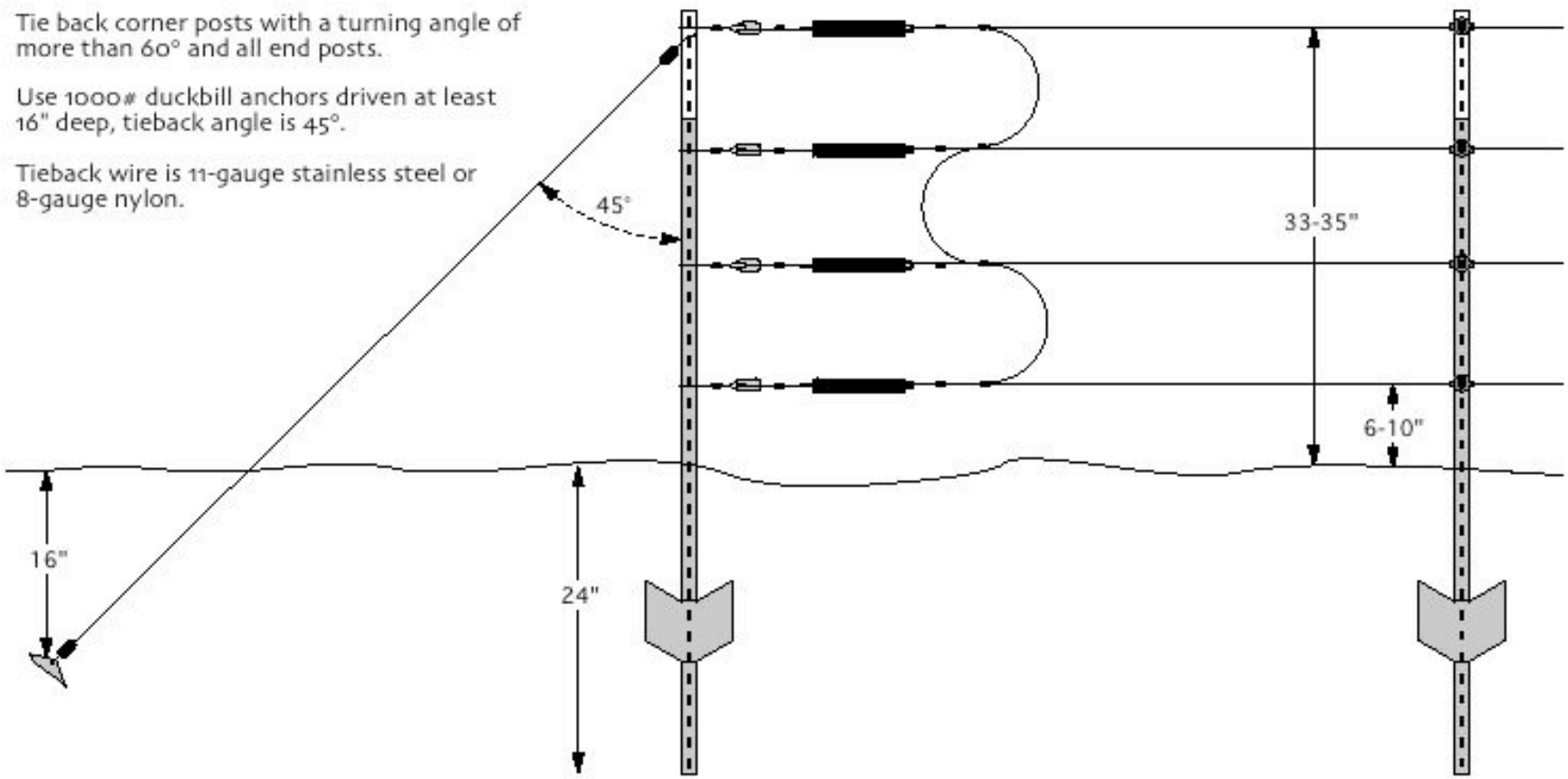
PERMANENT FENCES

For our permanent fences, we use deeply-driven heavy tee posts with pinlock insulators and four low-tension 16-gauge HT wires. Boundary fences have five wires. Many of our fences are built along curves and inaccessible, rocky terrain. Materials cost is about 20¢ per foot.

Many people use 12-gauge HT wire on braced wooden posts. This is a good choice where runs have long straight stretches with good access for post-driving equipment.

LOW-TENSION PERMANENT FENCE

This is a low-tension (35 pounds) permanent HT fence intended for rugged areas where traditional HT wooden line posts and braced corner posts are impractical.



1. Use 5-foot heavy-duty tee posts driven 24" deep. Post separation is 10-30', depending on terrain.
2. Use the highest quality pinlock & end insulators available; they should have a 10-year guarantee.
3. Use 16-gauge HT wire with class 3 galvanizing, minimum tensile strength 600 pounds.
4. All connections to posts, insulators and springs made with 16-gauge HT wire & crimp sleeves.
5. Connect wires together with a single piece of 16-gauge HT wire fastened with crimp sleeves at each end post.
6. Maximum pull length 1500', with 70# light-duty tension springs at each end & daisy tensioner at center.
7. Tighten wires to about 35# tension (springs should be half compressed). Excessive tension will cause post movement.

NET FENCES

We don't use portable electric netting because it's expensive, gets tangled in blackberries, collapses in snow, and will get grown in if not moved every month or so.

We also don't use woven wire, since it is much more expensive, is difficult to erect in rugged terrain, and must have offset electric wires to prevent goats from ruining the fence and/or getting stuck in it.

HANDLING FACILITIES

Goats need to be corralled several times a year for sorting, vaccinations, worming, hoof trimming, castration and tattooing.

At a minimum, you need a small area where the goats can be crowded together and caught one at a time. Wrestling individual goats can be exhausting for the handlers and stressful for the goats, so owners of more than a few dozen goats will probably want to invest in better facilities, such as crowd pens, treatment chutes and tilt tables. Costs can run $5,000 or more.

DOGS: IMPORTANT HELPERS

Unless your pasture is small, close to the house, and well fenced, you will probably need a livestock guardian dog to protect your goats from cougar, bear, coyote, and domestic dogs. Puppies cost $300-400, adults about $800. Annual costs are about $300 per dog.

Border collies are used to move and catch goats. Good puppies are $300 and up, fully trained adults can be $5,000 or more. You will also need training to learn how to use the dog. For small herds, another option is to train your goats to come for a treat.

FENCING SUPPLIERS

PREMIER 800-282-6631 www.premier1supplies.com
Intellishock energizers, Powerposts, Intellitwine, Maxishock, Maxitube, PI21 (end) and PI21n (tight corner) insulators, Suprareels, conductor hooks

KENCOVE 800-536-2683 www.kencove.com
16-gauge class 3 HT wire, underground wire, spinning jenny, springs, duckbill anchors, crimp sleeves, wire cutters, crimp tool, pinlock insulators (IPTL), Stafix energizers, lightning protection, cutout switches, spring gates, polywire tensioners, claw insulators

OREGON WIRE 800-458-8344 www.oregonwireproducts.com
Hot-dipped wire-filled gates

JERRY'S, HOME DEPOT, COASTAL FARM, etc.
Tee posts (buy the pinlock insulators first and make sure they are a tight fit - it should require a pliers to cinch the insulator on the post)