

Weeding and Mulching With Goats

By Linda Fox

In addition to the wonderful fiber that our goats produce, they, as other types of goats, have other less glamorous abilities. They eat weeds and they produce fertilizer.

Weeding

The weed eating is not news to us. In addition to the tin cans and laundry that we are told is their preferred diet, they also make short work of undesirable weeds in our forests and fields. When we moved back to our farm, our acreage was so overgrown that we would often spend days just clearing a line of ground enough to be able to insert a fence to contain our weed eaters. Most of our property now looks well-maintained, except for the areas where goats don't roam on a regular basis.

We have always had a few acres around our house that we refer to as the "no goat zone". This is an animal-free area for our lawn, rose garden, greenhouse, herb garden and a few raised beds for vegetables. Part of this area on the south side is a small forest of young fir and oak trees with grass, some low brush, a few blackberry vines and wild rose bushes and a variety of seasonal wildflowers. At least this is the way it used to be.

A couple weeks ago we noticed that our nice little forest had become a jungle. When did that happen?! I couldn't remember the last time I had wandered in it to pick wildflowers.

We have a small herd of 16 wethers and kid bucks grazing in an adjacent pasture who were wistfully looking over at our private jungle. They had their area pretty well cleaned out except for the ever-present poison oak. They eat poison oak, but it isn't high on their list of food choices.

Paul and I quickly built a temporary fence using T-posts, fencing wire pieces we had laying around and plastic zip-ties. We didn't take our usual fencing care by bothering to tighten much or reinforce with electric as we knew it would be temporary, it wasn't a common fence with other animals and we wanted to easily remove it when the job was done. We only had one fence line to build as the area was already bordered on three sides by a good fences.

We cut a hole in the boys' fence to allow them access to the new area and tied in a temporary gate to the new fence to give us access.

Continued on next page



Part of the "no goat zone" jungle.



GK Kern—he used to be able to hide behind these weeds, but now he can only peek through the sticks. Good Kern!

Weeding and Mulching - continued

It's been less than two weeks and they have already made progress. They have cleared a path behind the fence and are gradually clearing the underbrush starting from their access point. In addition to eating out the underbrush, they are trimming up the trees that had branches touching the ground.

An added advantage to having them in this location is that we can watch them work from a close vantage point. The goats and their guardian dog seem to enjoy having an audience.

Improving Soil

The soil on our farm in most areas is heavy clay. It is not the greatest soil for growing plants. When we first moved back to the farm, we concentrated on the animals and didn't worry much about gardening. We kept our little patch of lawn green and tried, mostly without success, to establish flowers and plants around the house. Proclaiming that, "Heck! We live on a farm.", we didn't worry about it much. We had great forests and wild spaces to look at anyway. Who needs a garden?

Over time, we've become more concerned about how our food supply is produced and how much it costs. We decided we needed to produce all of our food that we could here on the farm. The first thing we needed to address was our soil. Our management system in the barn has always involved adding layers of bedding straw inside the barn to clean things up when the ground floor becomes dirty and/or wet. Once a year, we scoop it all out—removing the straw/manure mixture down to the dirt/gravel base in the barn. In the early years, we just hauled it out of the barn and dumped it in piles around the pasture. These piles eventually flattened out from composting and from goats dancing on them. We noticed that the area around our barn where we dumped the piles was becoming increasingly lush with greenery.

To enhance our garden soil, we decided these annual barn cleanings were not just junk to be disposed of, but a valuable soil enhancement. We began to haul it out of the barn and up the hill to dump on our newly-appointed garden space. Sometimes we dug the enhancements into the soil in the spring before planting and sometimes (especially if we ran out of time and/or energy), we just planted directly into the straw-manure mix.

Continued on next page



Scotch broom.



Scotch broom "on goats". Nothing left but the sticks.

Weeding and Mulching - continued

Our soil improved immediately and has continued to get even better over the years. Our garden began to produce food! My struggling plants around the house began to thrive. As our efforts began to produce results, we've expanded our garden and our "yard".

About the only area of our "yard" that isn't thriving now is our lawn. Our initial small patch of lawn needs enhancement as well, but we're thinking about replacing it with either raised beds or more garden. Of course there's always the issue of "How much can two people eat?"

Mulching

We discovered mulching our garden plants with straw/manure last year. We wanted to do our barn cleaning in the summer rather than in the fall, when the garden was done. It's hard to dump piles of straw/manure in your garden when there's still plants growing there. So, we used the cleanings to place around the bases of the growing corn. Not only did this give us a place to store the cleanings, it kept the weeds from growing and held moisture in the soil so that we didn't need to water the plants as often. When the garden is done, the enhancement can still be worked into the soil as usual or just left to compost for the next year. This worked so well, this year we used everything to spread as mulch either around the growing plants and in unused garden areas. Thank you goats (again).



Along the north side of our lawn, we added a narrow garden strip that has a few rows of corn, peppers and cotton. All have been mulched, compliments of the goats. Well, they didn't actually carry and spread the mulch, but they did provide it.



This is an example of not having the time/energy to dig in the enhancements before planting. This spring we planted our tomato starts directly into the partially-composted piles dumped here the previous fall. Later, we mulched around the plants with the current year's crop of enhancements. As you can see, tomato vines look great.



Squash, bush beans and other plants thrive in the goat-assisted garden. This area wasn't treated with enhancements last year as the soil was good, thanks to prior years' enrichment, but we did add a layer of straw/manure mulch around the plants to conserve water and discourage weeds. We will dig the mulch into the soil this fall and spring before next year's planting.

Goat Manure for Fertilizer

Did you know that goat manure is high in nitrogen, phosphorus and potassium? It sure works well on our garden. Ross Penhallegon, Extension Horticulture Agent at Oregon State University Extension Service has completed a study on relative values of various animal manure, fish and other materials.

For goats, the breakdown is:
Nitrogen 4%, Phosphorus 0.6% Potassium 1 to 2.8%.

Another even higher source is wool waste, but it has a slow release speed, and may mat in layers.

Nutrient values vary greatly among organic fertilizers. Sheep manure has 2.2 to 3.6% of nitrogen. Obviously values can also vary due to time of year applied, time in open air, percentage of added straw, soil type, amount of rain, sun and so on.

You can access the entire article:
<http://extension.oregonstate.edu/gardening/how-find-nutrient-values-organic-fertilizers>

Click the link on that page for a pdf of the chart, comparing various sources of these nutrients.



This cotton bloom (in Oregon!) is enjoying the high nitrogen content in goat manure. Can you tell? Whether Oregon's growing season will allow those cotton bolls to get rotten is another issue.

Is *This* the Right Tool for The Job?

As part of our search for making our energy go further (as we get older) we are always looking for tools to make our gardening chores easier. We've recently become fans of Eliot Coleman's organic gardening books. We find his approach to be practical and useful. One of his suggestions was the use of a walking tractor on a small farm.

To me, the drawings of the walking tractor in the book just looked like a rototiller with a new, market-savvy name. I searched for more information on the internet for walking tractors and found this link:

<http://www.youtube.com/watch?v=U2syQBTZFA4>



It's John Deere so it must be a good deal. Paul says they remind him of Star Wars' Imperial Walkers and he wants one.