

ANIMAL LIFE IN THE GARDEN CONT.

England sheep farmers once formed a successful crow-exterminating cooperative because they thought crows were killing new-born lambs. The following year when their pastures dried up they discovered that crows were the natural control for grubs that ate the grass roots. Without the crows they were soon without pasture.

One last friend I will mention is the skunk. Naturalist Ernest Thompson Seton once touted the skunk as a replacement for the eagle as our national emblem. Tongue-in-cheek to be sure, but Seton reasoned that the skunk is more of a friend to man, eating harmful grubs and field mice. Further, he has stripes like our flag, is fearless, never fires unless fired upon, and always emerges the victor by a nose.



Backyard Livestock:

How to Grow Meat for Your Family

By Steven Thomas
Drawings by Mark Howell

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GROWING SOIL CONT.

Does your village pile its leaves in a dump? If so, the under layers will likely be black and crumbly - nature's own compost. Do you have a compost pile? If so, your favorite barber may be glad to save you hair which would otherwise be swept up and thrown away. It is a good addition to a compost pile, or a good mulch - high in nitrogen.

Do you have access to a woods? A few bushels from the forest floor would make a good mulch under young evergreens or other acid-loving trees or bushes. For plants that like a high PH add lime when you mulch with forest topsoil.

WATER, WEEDS, WORMS, AND MULCH by doug jones

The practice of mulching, or covering the soil, is being increasingly recognized as a valuable tool by vegetable farmers and gardeners alike. Some people use it primarily as a weed control method, others value its ability to retain moisture, but it does both of these things and much more. Sometimes, however, mulch can have a negative impact, so let's examine its functions and learn how to use it right.

It is important to realize that Nature keeps most of her soil covered with decaying organic matter from previous years' growth. When soil is bared to the elements, it can easily gain or lose too much moisture and organic matter, especially if it is a light (sandy) soil. Sun and oxygen will "burn" up the organic matter, instead of its being digested by the thousands of species of soil organisms that form a stable humus or nutrient bank, for new plant growth. Bare soil can also dry out faster, or wash away in heavy rains, or, especially in the case of heavy soils, form a hard crust on the surface.

The different mulching materials available to you will have differing effects on your garden. The most available mulch in dairy country, is old or spoiled hay - many farmers, especially after last year's bad hay season, have old hay that they would love to have cleared from their barns to make way for the new stuff. If they've already taken it out and piled it somewhere, even better - the rains will have started it rotting, which is what you want. Despite the sliminess of some of the bales, partly rotted hay will "dissolve" into your soil by next spring and not interfere with tillage. The same is true of other mulches - leaves, saw dust, woodchips, pine needles, newspaper - in their fresh state, all are high in carbon, low in nitrogen. This means they can tie up nitrogen in your soil as they decay, starving your vegetables. The microorganisms will take nitrogen from the top soil layer to digest these carbonaceous materials. The solution to this problem is either to let your mulch rot first, or else use more manure or compost in your soil to provide more nitrogen.

Or, use black plastic for mulch, which won't decompose, but this for me, makes plastic a less desirable tool. Not only is it a pollutant when it is thrown away, but it fails to add organic matter to the soil, which is everything. I won't go into the long list of virtues that make organic matter essential to a healthy, permanent agriculture, save that for another time. But, plastic has one definite advantage which northern gardeners appreciate - its soil warming effect. We use it for the crops that grow slowly and don't like to fruit if their feet are cold - melons, eggplants, and peppers. The latter two can be mulched with hay or leaves, but wait until at least late June, and then leave a little bare soil around the plants. Try to re-use your plastic - the world has too much of it already.

A disadvantage of hay is weed seeds, another reason to use it in a more rotted form. The ideal mulch, if you have enough, would be finished compost, which has heated to digest carbon and destroy weeds.

All right now, which vegetables to mulch, and when? With cool-soil varieties, mulch as soon as they are big enough to not get buried or damaged by the mulching - this would include the cabbage family, greens, root crops, onions, strawberries and peas. We plant our greens, roots, and some of our peas intensively in raised beds (see last issue's "working the land"); mulch fits nicely in the "valleys" between them. When the soil warms more, mulch your cukes and squashes, tomatoes, sunflowers, beans, and if you want to, corn. We don't bother with corn - the soil space on half an acre would require too much. Corn seems well adapted to hoeing or other cultivation - it quickly gets large enough to shade the soil. Some people have successfully broadcast-planted clover cover-crop (or "green manure") after their last corn cultivation, right among the corn rows. This would require a rainy period to establish it.

We also do not mulch our trailing winter squash and pumpkins - not only do they form a shady covering with their leaves, but they also put down roots from their vines as they wander, easier without mulch.

Baled hay has the advantage of coming apart in neat square sections, which fit easily between your rows. On the other hand, leaves, chopped hay, or sawdust are easier to use around strawberries or other plants growing in irregular patterns.

Potatoes can be mulched at the time of planting - they will push through - or after they emerge. Mulching leaves the soil very loose underneath, for easy digging of any root crop - especially those planted in raised beds. Probably the earthworms, who love the mulch, and other soil organisms, are responsible for this loosening effect, one of the major advantages of mulching on heavy soils. After being tilled under, the added organic matter keeps on loosening. On a sandy soil, it has the opposite effect - the humus produced actually binds particles together for better soil texture and retention of nutrients and water.

With leaves or sawdust, watch out for their tendency to acidify - some ground limestone, wood ash, rock phosphate, or extra compost, will help to neutralize.

Warning: mulch can't take care of all your weeds - grass will come through if you don't mulch heavy enough (3-4" after it has settled), some animals in the rows or beds will come through the same spaces as the vegetables. You must deal with these, if you have future gardens in mind - one or two casts thousands of eggs - some do it in July, most in August. Weed thoroughly before mulching, especially in the rows of vegetables, and then keep pulling the escapees. Finally, when those you missed shoot up suddenly and start flowering, take a sickle around the garden and cut them off as low as possible (pulling big weeds often disturbs vegetable roots) - it's worth the effort.

A word on hoes and sickles - these can be valuable tools if kept razor sharp and used at the right time. When annual weeds are less than three inches tall, a light scraping with a sharp hoe just below the surface will easily do them in. You'll notice that you can kill 95% of the weeds between your rows with a hoe, leaving a few in the rows to pull by hand. Use a file on the beveled edge of the hoe, pushing toward the edge. We even file the sides of the hoe blade, for hoeing in our narrow 7" spinach rows.

One thing I forgot - mulch prevents the fruits of your vegies from rotting, worms, or insects through soil contact - this is important for cukes, beans, summer squash, unstaked tomatoes, and melons.

Good luck - you'll be glad you mulched.

