

Can You Dig It?

By Schann Nelson
Columbia County Master Gardener



Let's talk about dirt, or as it is technically known, soil. Everybody knows that dirt is made up of many parts, but few realize that one-quarter of good quality soil is made of air and another one-quarter is made of water. About 40 percent is minerals of varying pore size, and only about 10

percent is left for the "magic", the living and dead organic material that makes soil thrive.

The mineral content of your soil will determine how fast water moves through it. Mineral particles have three "pure" forms: sand, silt, and clay. The percentage of each in your soil will determine the soil type. Loam, the most desired of garden soils, is a combination of all three types of particles. Think of the particles this way: sand at least as big as a beach ball, silt about the size of an orange, and clay about the size of a penny or smaller. Together, these particles allow for large and small air spaces between them, with the help of a fleet of soil organisms that are constantly churning them up – though not so much now, when the ground is frozen.

That's part of why this is a good time to get your soil professionally tested. The internet or the OSU Extension office can give you a long list of companies that perform soil testing, and which will provide specific recommendations. However, it's a little early to be thinking about fertilizer. The exception (there is always at least one exception) is dolomitic lime, which supplies calcium as well as magnesium, but takes a winter to become available to plants. Typically, our soils range from a pH of 5.5 to 5.8 in their natural state. Plant nutrients are available in the range of 6.5 to 7.5. You can see that some work is required to raise the pH

to a level where garden plants can access nutrients. As a rule, vegetable gardens should be limed every three years at a rate of 50 pounds per 1000 square feet with agricultural or dolomitic lime. However, if you are using wood ashes, the rate of application drops to a mere 15 to 25 pounds per 1000 square feet. There is probably still time to apply lime, as you should wait at least three weeks before planting. There is certainly not any unprotected planting going on now.

This is not to say that there can't be planting. There are any number of ornamentals and vegetables that can be planted indoors now for setting out next month, though still under cover. This is the time you can get a head start on fickle flowers and tomatoes that refuse to bloom without eight weeks or more of sunshine. And they don't mean overcast – they mean unending weeks of at least six hours of full sunlight. When was the last time you saw that around these parts?

If professional soil testing is out of reach, you can conduct your own primitive analysis. Using a standard glass jar, add soil to about one-third full, then fill with water. Give it a good shake and put it where it will not be disturbed for about a week. At the end of the week, before you move your sample, mark the layers and determine what percentage of the whole is occupied by each type of soil particle. Sand will be on the bottom, silt will be the next layer and clay will be the top layer due to its small particle size. Organic material will float on the top of the water. Good loamy garden soil is about 45% sand, 35% silt and 20% clay.

It's likely that, unless you have been working your soil for some time, you will have a very high clay content. This is a good thing because this is the "mineral bank". Too much, however, creates the thick, slippery mud we all know and love...and can't grow much in. You may be tempted to add sand to improve your soil drainage. If so, be sure you add large quantities of organic matter at the same time, or you will create something more akin to cement than garden soil.

As I said before, the magic of soil is in the 10-15%

of organic material floating on top of your soil. A whole host of soil organisms live, eat, and die in your topsoil, providing nutrients and improving drainage. In order to maintain and improve this layer you need to add 1 – 4 inches of organic matter every year for every plant you want to maintain in your landscape. This turns into a huge amount of leaves, compost, bark dust, straw, or stuff you cleaned out of the gutters, that needs to be moved from one place to another. Rhodies, azaleas, blueberries, and other acid-loving plants which do well in our acid soil, tend to have micro roots very close to the surface and need this mulch cover to maintain moisture in the summer.

So, here is your insurmountable list of chores. Test the soil, add amendments and/or mulch as available and necessary, clean and sharpen garden tools, fertilize fall planted garlic before it begins to come up, prune fruit trees and ornamentals and spray for pests or disease as necessary, plant and/or move dormant perennials, shrubs and trees, prune cane berries, treat unwanted moss on roofs or patios when the moss is damp but rain is not an immediate threat. And don't forget to enjoy the winter sun on its rare appearances!

I almost forgot – that winter sun can convince trees to try to break out of dormancy early. This can lead to a lot of damage. The warm sun and cold nights can be particularly hard on young trees, which are susceptible to sunscald in weather like we had a couple of weeks ago. The cheapest and easiest way to protect them is simple to wrap young trunks with newspaper.

P.S. In last month's column, the caption for the illustration about pruning trees left out a bit. Usually, you buy a young dormant tree with several small branches. The old recommendation was to prune those branches off to get that stick-like form. You can certainly plant a tree that does not have branches, just don't cut any branches off for the first season. I've killed any number of purchased plants with too aggressive pruning at planting (and so have a lot of others it seems), so this practice is no longer recommended.

Church Directory

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| <p>VERNONIA FOURSQUARE CHURCH Carl Pense, Pastor 850 Madison Avenue, Vernonia 503 429-1103 Sunday Worship Service: 10:30 a.m. Children's Sunday School</p> | <p>FIRST BAPTIST CHURCH Pastor John D. Murray 359 "A" Street, Vernonia 503 860-3860 Sunday School 9:45 a.m. Sunday Worship Service 11:00 a.m. Wednesday Prayer Meeting 7:00 p.m.</p> | <p>PIONEER BAPTIST FELLOWSHIP John Cahill, Pastor 939 Bridge Street, Vernonia 503-429-1161 www.pbfalive.com Sunday School 9:30 a.m. Sunday Morning Worship 11:00 a.m. Thursday Prayer 7:00 p.m.</p> |
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Oregon 1st lady ready to begin battle against poverty in the state

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raise awareness about Oregon's strong network of food banks and affordable housing facilities, and convene the Interagency Council on Hunger and Homelessness to address how to improve both the supply and distribution of food and housing to people in need.

In the long term, Hayes will lead the Oregon Prosperity Initiative's efforts to establish a more coordinated and integrat-

ed approach to poverty reduction in Oregon. This includes integrating poverty reduction strategies into long-term budgeting plans, engaging the business community in developing entrepreneurial approaches to improving opportunities for people to achieve prosperity, and embedding poverty reduction into the Governor's education and health care transformation efforts.

Spaghetti feed set in N. Plains

There will be an All You Can Eat Spaghetti Dinner at the North Plains Senior Center on Saturday, February 25, starting at 5:00 p.m.

In addition to spaghetti,

there will be salad, garlic bread, dessert and beverages, all for only \$5.00 per person.

For more information, call 503-647-5666.