Can You Dig It?

By Schann Nelson
OSU Master Gardener

Oh, my goodness! What adventures we have had! At least we were on the southern edge of the target of Mother Kali's warm, rain-laden winds storming across the Pacific. More than enough snow for me! I do not remember that much snow, EVERYWHERE, for that long! There certainly were heavy snows and cold. The first year we lived here, the temperature dropped to 16 degrees the week after Halloween and stayed below freezing for six-weeks! In a poorly insulated "cabin" (an enormously kind description), I had ample opportunity to develop my skill at heating with wood. Then there was the year that the snow shoveled off the roof of the chicken coop became an extension of a sled run. Higher, longer, WAY faster and too scary to watch them careening down the hill and across the, hopefully frozen enough, pond.

The big piles of snow and/or the extreme cold usually lasted for only a few days, or a week or even (gasp!) ten days. Practically nobody remembers a truly White Christmas that extended across much of the Willamette Valley. The few who remember Vernonia's last snow-covered Christmas were accustomed to candle, lantern and woodstove, since much of the area did not get electricity until 1945. *Such astounding snow!* Light and fluffy blankets transforming the landscape, a stark and glittering palette. *Great* snow for snowballs and sled runs and on the ground long enough to build really COOL forts and snowpeople, even igloos! WOW! Then, the darn stuff hung around for another week making it COLD, hard to drive, getting icier and icier and harder and harder to walk.

The amount of snow at your address can vary a lot depending mostly on elevation, but also affected by wind, sun exposure and latitude. The weather I described above is on the floor of the Nehalem River Valley, just up-river from Vernonia. We had 18 inches on the ground for almost two weeks. Anywhere higher than our 700-foot elevation had a lot more snow. Reports of two to three feet within five miles of town were not uncommon. I assume the higher mountains surrounding us had correspondingly more snow. The fear of flooding was not unfounded. Had we received the rain that pounded Washington, flooding would have been severe. I am glad that we, as a community, have been able to use our experience and provide an efficient and integrated response to the threat. Unfortunately, I believe that regional weather is going to continue to get more extreme.

So far, winter has done quite a bit of damage, even without strong winds and heavy ice. Snow broke a lot of limbs in trees, and a surprising number of them are still hanging in the canopy. Watch for falling branches! Obviously, debris that is creating a hazard should be removed as soon as possible. Fences have to be inspected and cleared of debris or they won't be fences for very long. BUT don't be in a big hurry to dig out perennials and shrubs that appear severely damaged. I'm quite hopeful about the perennial survival rate because that lovely soft snow blanket provided good insulation. The biggest danger to perennials in the ground is adequate drainage. Most of the perennials we treasure do not like having their roots sitting in cold water for any length of time.

While organic matter is the "secret ingredient" in any productive soil, good friable soil is about 25% AIR and 25% water. If all of the space between soil particles is filled with water, roots and soil, organisms die and rot. The native soil is a thin (2 – 6 inches) layer of "active" soil on top of a deeper layer of mineral-rich clay. Clay has a very small particle size, giving it that slippery feel when wet. Clay soils really hold on to water, once saturated. Freezing causes existing soil structure to deteriorate and snow can compact the ground underneath, especially if walked or driven on. Thus, after the snow melts, the ground can become a soggy, slippery mess where little will grow. The trick is to get the excess water to drain away and allow air (25%) back into the soil.

Raised beds create at least a small elevation difference that will increase over time if you stay off. Don't walk where you want stuff to grow! Even a brand new garden plot freshly rototilled will have healthier soil if you shovel through some 'paths'. By throwing the dirt up into beds three to five feet wide (so you can reach the middle from the path) you can establish pathways before you begin to amend and improve your soil. Not only does this make more efficient use of soil amendments, but the compacted soil in the pathways is less likely to sprout weeds. Using boards or something similar can quickly create a space to fill with great dirt from somewhere else, but you work with whatever you have. Over time, summer irrigation is also improved as water runs off the path and into the bed.

It's counterintuitive but DON'T add sand! Truly sandy soil drains well because the particle size is relatively (as compared to clay) large and uniform. Adding sand to mineralic clay makes something closely resembling concrete – not a good growing environment! Adding all the organic matter you can get your hands and shovel on, especially for that brand new garden, is a better short-term solution. Checking and adjusting soil pH closer to a neutral seven will increase the survival of beneficial soil organisms, breaking down organic matter into useable nutrients. Gypsum breaks up clay only in alkaline soil, which we don't have here (unless you make it that way by accident or on purpose).

The temptation to add sand comes when years of added organic matter (Straw mulch!) eventually breaks down into constituent atoms, i.e. clay. You need to add material with significantly larger, non-uniform particle size. Small crushed rock (1/4 minus is the technical term) is the proven standby around here and will work wonders to improve drainage. Unfortunately, you pretty much have to buy the stuff (problem 1) by the truckload (problem 2). The good news is that even a small yard can easily accommodate a whole truckload of rock. It would be a great thing to share with the neighbors! Adding rock can transform a garden bed, elevating the surface 6 – 12 inches above the paths. Beds this height drain winter rainfall readily and warm up sooner in spring. A bucket of small rock incorporated into the soil when planting trees and shrubs will vastly increase your chances of success.

One more winter thought: Sometimes storm-damaged trees can be helped. Trees that have blown over can be braced and tied into a more normal position if you act while the ground is soft. It may be worth the trouble to save a prized specimen. Shrubs and bushes that look completely dead now may show signs of growth in spring.

I swear the inside plants start to grow immediately after the equinox, increasing the need for water. Windows with a good southern exposure can get HOT even when it's still cold outside. Remember soil needs air and water.

My method is to water infrequently but thoroughly! Every few weeks I water every plant in the house. Ideally, every plant gets a shower and grooming a couple of times over the winter. I like to make sure the soil is good and dry and plants are showing signs of thirst. I start my mission of water relief and just keep at it until every plant in the house has absorbed all of the water it wants from its saucer, tray or bowl. I make sure that water is not running just around the edges of a pot but is absorbed by roots and transported to leaves. This takes several minutes per plant with the watering can, but I try to persist until all the plants have had a good drink. Hanging baskets and the orchids get a thorough soaking in a bowl. I watch for water disappearing from catch basins and the smell of earth filling the house.

Hope you got some good photos of the underlying structure of your yard when it was all covered up. Dream about the perfect vertical accent plant, or maybe a hedge to create a garden room, or a comfy retreat in a beautiful pergola!

Church Directory

Nehalem Valley Bible Church
Gary Taylor, Pastor
Grant & North Streets, Vernonia
503 429-5378
Sunday School 10:00 a.m.
Morning Worship 11:00 a.m.
Nursery available
Wednesday Service 7:00 p.m.

Vernonia Foursquare Church
Carl Pense, Pastor
850 Madison Avenue, Vernonia
503 429-1103
Sunday Worship Service: 10:30 a.m.
Children's Sunday School

Church of Jesus Christ of Latter Day Saints
Marc Farmer, Branch President
1350 E. Knott Street, Vernonia
503 429-7151
Sacrament Meeting, Sunday 10 a.m.
Sunday School & Primary 11:20 a.m.
Relief Society, Priesthood and
Young Women, Sunday 12:10 p.m.

Seventh Day Adventist
Gary S. Walter, Pastor
2nd Ave. and Nehalem St., Vernonia
503 429-8301
Morning Worship, 11:00 a.m.
Sabbath School 9:30 a.m.

Assembly of God
Wayne and Maureene Marr
662 Jefferson Ave., Vernonia,
503 429-0373
Sunday School 9:45 a.m.
Morning Worship 11:00 a.m

Vernonia Christian Church
Sam Hough, Evangelist
410 North Street, Vernonia
503 429-6522
Sunday School 9:45 a.m.
Morning Worship 11:00 a.m.
Every Wednesday:
Ladies' Bible Study 9:30 a.m.
Ladies' Worship 10:00 a.m.
Children's Choir 3:00 p.m.
Family Bible Study 7:00 p.m.

First Baptist Church
359 "A" Street, Vernonia
503 429-4027
Sunday School 9:45 a.m.
Sunday Worship Service 11:00 a.m.
Wednesday Prayer Meeting 7:00 p.m.

St. Mary's Catholic Church
Rev. Luan Tran, Administrator
960 Missouri Avenue, Vernonia
503 429-8841
Mass Sunday 12:00 Noon
Religious Educ. Sunday 10:30 a.m.

Vernonia Community Church
Grant Williams, Pastor
957 State Avenue, Vernonia
503 429-6790
Sunday Breakfast 9:00 a.m.
Morning Worship 9:45 a.m.
Children and Nursery 10:00 a.m.
Youth Group 6:00 p.m.
Preschool Mon. & Wed. 9:00 a.m.
Wednesday Prayer 6:00 p.m.
Tues. & Fri. Adult Volleyball 7:00 p.m.