

Is Mulching Good for the Garden?

by Al Chomica

While conducting a garden tour in December a few years ago the question was asked why I had not raked up all the fallen leaves from our flower beds. I thought that was a strange question and asked why I should do that. The reply was that leaves harbour slugs and diseases that can harm one's plants!

That may be true but it is known that healthy soil consists of organic material with an extensive population of creatures and a network of microbes. In my gardener's way of thinking, if our trees had not covered those beds with leaves I would have gone out and found some to put on top of the gardens. Bare soil invites erosion from our torrential *winter* rains and numerous weeds of every variety quickly move in to take advantage of any exposed soil.

Those leaves are the eventual source of food for all those living things in the soil that move nutrients around and feed our plants. To that end we seek out other sources for different leaves and other materials to spread over our gardens and to add into our compost bins. We bring in three different kinds of seaweed that we harvest from the beach, wood shavings for our walkways as well as a supply of wood chips that can be used as a resilient surface layer where needed.



You are wondering if the seaweed should be washed, now aren't you? I don't wash it, although I have heard it can kill some plants if not used sparingly. The school of thought here is that the sea minerals are the same as the salts we buy in plant fertilizers so we never wash it. They might even have a more complete spectrum of minerals than the chemical fertilizers. I have also heard the seawater around Nanoose is not that salty and we have had good luck with it for a couple years now. Look at the image of the eel grass (left). This has dried in the sun for two days and the salts can be seen collecting on the leaves.

So, what is the definition of mulch? Wikipedia gives us this definition: *A **mulch** is a layer of material applied to the surface of soil. Reasons for applying mulch include conservation of soil moisture, improving fertility and health of the soil, reducing weed growth and enhancing the visual appeal of the area.*

A mulch is usually, but not exclusively, organic in nature. It may be permanent (e.g. plastic sheeting) or temporary (e.g. bark chips). It may be applied to bare soil or around existing plants. Mulches of manure or compost will be incorporated naturally into the soil by the activity of worms and other organisms. The process is used both in commercial crop production and in gardening, and when applied correctly, can dramatically improve soil productivity.

The last two summers in Nanoose were dry and presented challenges for watering, especially with water restrictions. We converted a large portion of lawn under our fruit trees into a thickly mulched area and, when moisture-meter tests were conducted in different locations in our yard, the areas under any mulch were moist whereas any bare soil and the lawn were bone dry. To convert our bone-dry mini-orchard into a moist biomass, we covered the grass with paper then covered that with a few inches of soil that was enriched with our compost. That soil was then covered by about three inches of wood chips obtained from an arborist and the pathways are all cedar wood shavings. After two seasons now, I would have to say this may well be the best solution to growing in our climate and all our beds should be done this way.

But what exactly is a winter mulch? Well, in the Prairies I have seen farmers mulch water lines and septic fields with bales of straw to keep them from freezing. Here in the Pacific Northwest we don't usually get a deep frost but last year we did. Many of the marginal plants in our experimental gardens froze along with some hardy plants, like grapes, that were not mulched. Most of the hardy plants we grow and sell that were in pots, froze solid as well and we lost over 100 valuable specimens, including a batch of fig trees that were to be donated to the Garden Club's plant sale.

Mulching early in the fall will protect the ground from losing heat too quickly and hopefully protect the roots from being upheaved from frost. I believe that is what killed many of my established plants last year.

So, after learning a lesson about what a cold winter is capable of, we now have a strategy in place and an extensive supply of material on hand for winter mulching. This is mostly leaves that we have found in our travels and most are maple and oak. We like to chop them up with a lawn mower and collect them from the ground using the mower when the leaves are dry. They get placed into big garbage bags so they can be transported throughout the garden easily. I like to use leaves because they can break down into a rich humus soil within a year or two. One bag of chopped maple leaves that sat in a bag for two years turned into a rich soil but I have also seen a one-year old pile of maple leaves in the compost that had only turned into a big slab of wet leaves. Chopping up the leaves seems to be the way to go for use as a mulch.

My strategy for winter mulching started off by collecting copious quantities of eel grass seaweed back in June. It is nice to use and if kept on the surface it keeps its shape for years without breaking down.

I spread it out over the lawn to let it dry then run it over with the lawn mower to chop it into finer pieces. It remains springy and somewhat fluffed-up so it traps the air well which is needed

for insulation. Chopped up this way makes it easy to apply to the garden rather than trying to disperse long strands evenly. Some of the last batches we chopped were mixed with dried maple leaves. This turned out to be an even better mulch with a lot of good organic material in it.

We store over 100 potted plants that overwinter before we can sell them in the spring. This year our strategy for the figs, kiwis, grapes, gojis and berry bushes is to give them a place in the sun then fill in between and up to the top of all the pots with wood chips. Then our chopped leaves and seaweed will be mulched to a depth of a few inches over the top of the pots. This was done to one batch of kiwis last year and they survived where others did not so it should protect them.

Hopefully we won't experience another cold winter but this year we are prepared.