

# Hugelkulture Workshop 2010

In 2010 I did a lot of research to see if by adding essential missing pieces, I could use excess material on the farm to create productive land. **The GOAL:** Use excess manure and scrap wood from the farm to create high quality vegetable and flower gardens requiring as little maintenance as possible. **I was aiming for high productivity with reduced maintenance by creating nutrient dense soil and healthy plants.** A tall order!

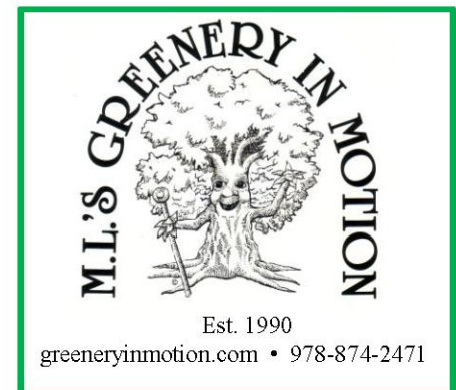
I discovered **Hugelkulture (HK)** beds – an adaptation of the mid-European concept of mound culture—piling up woody plant debris, covering it with compost, manure or other organic material and planting in the middle of it. As the years pass, the soil deepens and becomes incredibly rich and loaded with soil life. As the wood shrinks, it makes tiny air pockets - so the hugelkultur stays aerated - for free!

I also looked at **Nutrient Dense Farming** as a way of looking at food production that maximizes the health of the food produced and thereby increases the health of whoever eats that food. It uses the tenets of organic, ecological, biological, and re-mineralization agriculture to produce the best quality food and it documents that vitality through independent tests like Brix readings.

Last year we built two beds – the results have been amazing. Take a look at and see how we did it.

It's a great way to:

- Use up scrap wood and debris from field edges and downed limbs
- Create usable beds over soil that has little or no value.
- Develop a way to deal with drought and flood conditions brought on by climate change.



# Nutrient Dense Hugelkulture (Hk) Beds

What is an HK bed? A raised garden built on a base of woody debris (ice storm damage, yard clippings, old fence posts etc) and covered with organic material (compost, manure) and loam (from on site or purchased).

What makes it nutrient dense? Alfalfa meal (nitrogen and microbe support), calcite (Ca) and dolomite (Ca/Mg) lime, rock phosphate (P/Ca), greensand (K/Fe/Si) and azomite (paramagnetic mineral clay) and stone dust (raw rock from a local quarry) are added to the bed as it is built in order to ensure maximum nutrition for the developing plants. Maximum nutrition means less insects and diseases, minimum maintenance, top production and excellent flavor and storage capacity.

Why should you try one? Everyone who has a yard has woody debris that builds up during the year. Usually it's dragged to the back and left to rot or hauled to the landfill – and left to rot. This uses that material as a vital part of a raised bed system that helps to regulate water (rotten wood holds water like a sponge but also has air pockets – like a sponge) and compaction problems found in many yards and you can really enjoy the flowers and fruits of your own choosing!

**JOIN US THIS YEAR (2011) OCTOBER 1st (2nd is raindate) AND LEARN TO BUILD ONE  
FROM THE GROUND UP!**

Open field before the Hugelkulture (HK) bed is installed. It's going to be placed below and to the front of the greenhouse where it's easy to keep an eye on it!



Location for the bed was chosen based on a uneven mowing area and wet spot. Scrap wood left over from the 2008 ice storm is the base.





Enough space is left between the logs so that manure and soil reach the ground.  
Dolomite (Ca/Mg) lime is spread over all.





The first layer of manure is dumped on top of logs. More lime could be added at this point if it wasn't added to the compost.



The team works the manure between the logs and adds smaller branches on top of the manure. This adds structure, air and more wood to connect the fungi and bacteria that will link through the bed.





Here's a close up of the smaller brush being worked into the top.



The next layer is another round of compost worked down into the smaller branches.





Compost almost done. Next step is to add a layer of top soil 4"-6" thick and a layer of stone dust from a local quarry (for raw mineral to break up the "new loam crust"). Both purchased from off site.



Completed bed before adding  
stone dust and mineral layer.  
You could stop here but....







You can see the loam - it's the dark grey layer and now we're adding the stone dust - the light grey layer (1/8"-1/4" thick).

The amendments: a blend of alfalfa meal, rock phosphate, greensand and azomite mixed together on a tarp (use a dust mask if necessary!)







Completed HK bed. The team did a great job!

Now we need to wait for the next layer to be delivered.



A local landscaper has dropped off the chopped up leaves and grass from fall cleanup. Great mulch and helps to tie all of the microbes together.



Leaves are spread over the bed  
and the bed almost disappears.  
Now it's time to plant.





Laying out the blackberries, raspberries, cherries. Next year, potatoes, squashes and tomatoes will be inter planted - plus a few trial plants just to see if they'll grow!





Finally, it's planted and ready for winter.

Time to let everything settle -

and let the microbes come to life

Now we wait to see what happens come spring!

