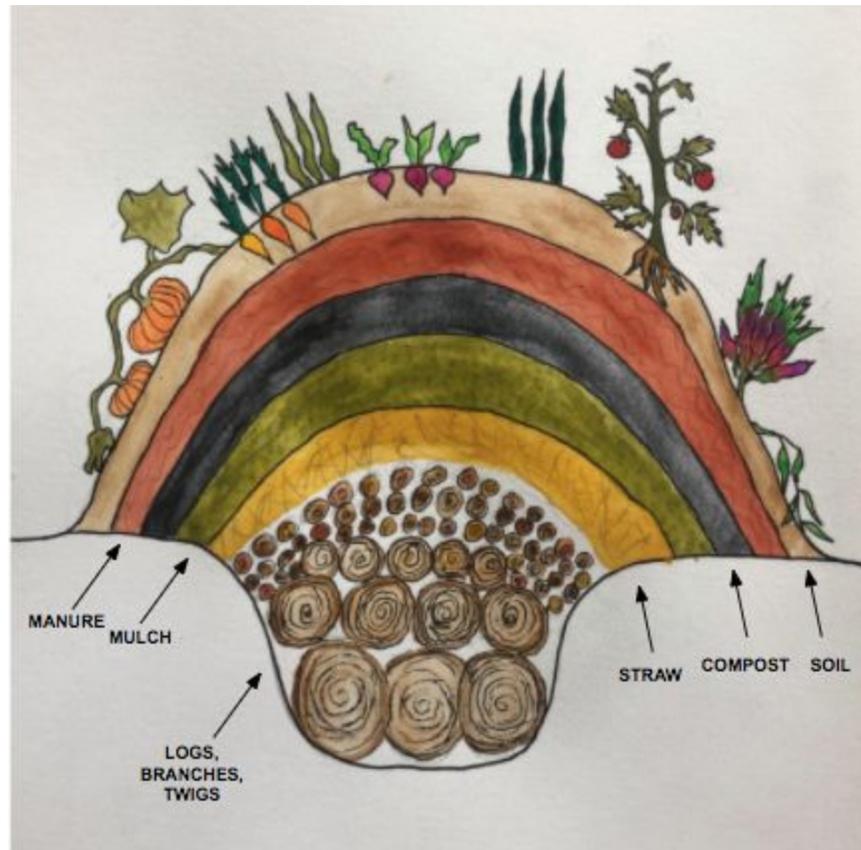


How To: Make a Hugelkultur Raised Garden Bed



What is hugelkultur?

Hugelkultur (hoo-gul-culture), is a German horticulture method to make raised beds that uses rotting wood to provide nutrients for fruits, vegetables, and herbs. This permaculture technique allows gardeners to replicate nutrient cycles that occur in natural forest areas. It acts very similar to nurse logs, which are fallen trees that serve as nutrient sources to surrounding plants, like western hemlock, Sitka spruce, and salal, as they decay. By layering different materials (compost, mulch, fertilizer, etc.) on top of the wood to provide additional nutrients, gardeners are able to create a self-sustaining raised bed.

What are the benefits?

1. **Little-to-no watering:** It will be necessary to water your garden bed in the first year. However, in future growing seasons, you will not have to water your garden because the logs at the base of the bed will act as a sponge, soaking up excess moisture, and storing it for your crops to use. After the first year, you will only have to water your garden once a year!

2. **Nutrient supply:** The gradual decomposition of wood, along with other materials that make up the bed, will provide long-term nutrients for your plants. The nutrients produced from a hugelkultur bed can sustain a garden with rich soil for up to 20 years--no need to till or supply additional fertilizers!
3. **Extended growing season:** A hugelkultur bed essentially acts as a compost bin: Just as compost heats up as it decomposes, so does your garden. This allows crops to start earlier in the spring and grow longer into the fall.
4. **Maximizes garden space:** The dome-shape of the hugelkultur bed increases the surface area of your garden space. This means you can grow more food for your family, even if you only have a small area to do so.

Let's get started!

The best part about a hugelkultur bed is that you can utilize and recycle organic materials from your property. You can use fallen trees, branches, or twigs that are lying around your yard; garden waste from the last growing season; rotting hay or straw; and manure from your farm animals. If you don't have these materials at hand, don't fret, they can easily be obtained through other sources.

The steps below are what the Farm at Water's Edge used to create our hugelkultur bed. All of the material we used was recycled from our property.

Layer 1: Logs, branches, and twigs

You can build a below-ground or above-ground hugelkultur bed. To build a below-ground bed, dig out a half meter to a meter deep ditch the length of your bed. This ditch is where you will begin placing your wood. The ditch will allow the logs to absorb and hold water more efficiently. When you begin laying down the wood, start with larger logs and move to smaller branches and twigs as you pile up. You will want to use wood that is not resistant to rot (alder, apple, cottonwood, poplar, willow, birch). If you choose to forgo the ditch to make an above-ground bed, begin by stacking the wood on level ground.

Layer 2: Straw, hay, and grasses

Layer straw, hay, and grass cuttings on top of the wood layer. This layer will assure that the larger air pockets between the wood are filled. Use this layer to begin shaping your hugelkultur bed into a dome.

Layer 3: Mulch

Put a layer of mulch on your hugelkultur bed. We used coffee chaff, but other options to use are leaves, shredded bark, sawdust, shells, shredded newspaper, or cardboard. This layer helps prevent water from evaporating.

Layer 4: Compost

Layer nitrogen-rich compost on top of the mulch. High nitrogen materials include fresh grass clippings, leafy plants, coffee grounds, and some kitchen scraps (avoid meat). Providing nitrogen-rich materials will be very important because in the first year, as the wood begins to break down but is not yet rotting, your bed may struggle with nitrogen deficiency.

Layer 5: Manure

Layer animal manure on top of the compost. This will also be a good source of nitrogen. We used alpaca and llama manure, but horse, chicken, or goat manure will also work.

Layer 6: Top Soil

Place a thick layer of soil to prepare your bed for planting.

Layer 7: Seeds!

In the first year, you will want to plant crops with a shallow root system to avoid nitrogen depletion. Good crops to plant in the first year are: peas, peppers, beans, borage, potatoes, strawberries, onions, squash, and cucumbers. After the first year, you won't have to worry much about nitrogen depletion.