Gardening Basics

Hügelkultur

That German word above, (pronounced hyoo-gull-culture), means 'mound culture' and although having been around as a gardening method for hundreds of years, it has only caught on in Texas in the past few. It's basically a layering technique using branches, twigs, garden waste, and soil piled in a mound that creates a raised bed with rich soil.

"Hugelkultur bed" by Sustainability at Portland State University is licensed under CC BY-NC-SA 2.0.

Advantages to hügelkultur

- Low maintenance
- Performs as a raingarden by capturing runoff
- Excellent for any crop: vegetables, herbs, fruit, or flowers
- Ideal where soil is poor quality or compacted
- Uses debris that might be sent to the landfill; sequesters carbon
- Inexpensive to build
- Adaptable to many situations

Design basics

Mounds can be created in a variety of shapes and on any scale: a simple round mound, a longer-than-wide straight berm, crescent-shaped, multi-curved like a snake, or even in multiples in a pattern to create a mini-labyrinth. You can even use the system within an existing raised bed that collects runoff.

Locate the mound in an area that is relatively lower than the surrounding ground and perpendicular to the flow of water to capture runoff. To have the broadest choice of plantings, the area should receive 6-8 hours of sunlight. Hügelkulture can be either constructed by digging a trench (save the soil) and then begin piling the organic materials in the trench or forego digging and place the mound on the surface. Advantages to excavating are that the mound will capture more water (thus increasing self-watering and decomposition of organic materials), and the initial larger logs will have a more stable foundation. Having a border around the mound is also optional but assists with stabilization.

Collect logs and branches (dried hardwoods are best) and twigs/prunings. Start with the logs on the bottom, and pile materials in parallel rows in order of size. These woody materials act like a sponge, capturing water and facilitating microbial activity. Then begin layering grass clippings, leaves, hay, manure, and food waste. Poke these materials down between the wood to carefully pack it into the spaces and stabilize the mound, watering the pile between steps. Finish with a layer of soil that completely covers the organic materials and has sloping sides. If starting a hügelkultur in fall or winter, to keep soil in place, plant a cover crop like clover or legumes (e.g. hairy vetch or Austrian peas). When you harvest or a plant ends its lifecycle, don't pull it up but just cut it off at soil level, thus leaving the roots to decompose, enrich the soil, and discourage erosion. The soil must always have plant cover, or your mound will melt away in the rain. Because the system is based on decomposition, the mound will slowly reduce in height, with its lifespan approximately 5-6 years before needing renovation.

For detailed information with illustrations, consult the excellent articles listed below. Have fun exploring this ancient gardening technique that adds interest, dimension, and productivity to your property.

Resources

[i]Luo, Qing Lana, Casey Hentges, and Carmen Wright, "Sustainable Landscapes: Creating a Hügelkultur for Gardening with Stormwater Management Benefits", February 2020, OSU Extension, Oklahoma State University, (accessed 16 December 2024), https://extension.okstate.edu/fact-sheets/sustainable-landscapes-creating-a-hugelkultur-for-gardening-with-stormwater-management-benefits.html

Russell, Adam, "Hügelkultur: the mound method for home gardeners", AgriLife Today, Texas A&M AgriLife, 13 January 2018, (accessed 16 December 2024), https://agrilifetoday.tamu.edu/2018/01/13/hugelkultur-the-mound-method-for-home-gardeners/