

Hugelkultur

The Discovery Garden is experimenting with Hugelkultur (*pronounced hoo-gul-culture*) beds. This permaculture technique is popular with European and organic gardeners. In the Discovery Garden bed, a hole about four feet deep was dug. We invited various tree trimming services and neighbors of the garden to bring their tree trimmings to put in the hole. Large tree trunks, small branches, twigs, and wood chips were added to the pile until it reached approximately 4 feet above ground level. The soil that was initially removed was added back to the top of the pile and then topped with four inches of wood chips. In the fall, the entire bed is covered with leaves which act as mulch and add more nutrients as they decompose. In essence, we have built another form of a raised bed.

Hugelkultur beds are meant to be self-sustaining after three years requiring little water or fertilizer. These beds develop a unique microclimate that keep plants warm and hydrated because decaying material inside the mound retain moisture. The woody carbon is a source of food that attracts soil microbes which break the material down over a long period of time. A large bed like the one in the Discovery Garden may give out a constant supply of nutrients to the plants in it for 10 years or longer. This long-term nutrient release is a way to make beneficial use of our grass clippings and tree trimmings rather than putting them into the landfill or burning them.

Many growers find that the warmth generated in the bed by decomposition can extend the growing season, allowing the gardener to plant both earlier and later in the growing season. A hugelkultur can be built with practically anything you would add to a compost pile: logs, branches and sticks, grass clippings, leaves, end of year garden clean up, weeds that have not gone to seed, vegetable food scraps, egg shells, coffee grounds, spent brewing grain, or large animal manure (*not* dog or cat). Typically, the larger, longer-to-decompose items are placed lowest in the pile with smaller materials layering upward. Once topped off with soil and mulch, it is ready to plant.

Some types of wood are known to not break down very well, so their use is discouraged in hugelkultur beds. These include all treated woods and treated dimensional lumber, cedar, black walnut and black cherry wood. Dead wood is best because it will decompose faster than green wood; but if green is what you have, use it!

The Discovery Garden has chosen to plant this hügelkultur bed as a Pollinator Garden, using both perennial (plants that come back after winter) and annual (must plant new every year) flowering plants. Pollinator Gardens are gardens which are planted primarily with native flowers that provide nectar and pollen for a wide range of pollinating insects and animals including bees, butterflies, wasps, flies, hummingbirds and even bats. Plants that flower from early spring until late into the fall are incorporated into the garden and a wide variety of flower shapes and colors are used to attract different pollinators.

We look forward to monitoring this ancient technique of growing plants, enhancing soil, and extending growing areas and seasons. Keep checking back to see how this hugelkultur bed is growing!

General Hugelkultur Website Resources

The Many Benefits of Hugelkultur

<https://www.permaculture.co.uk/articles/many-benefits-hugelkultur>

Hugelkultur Gardening, Master Gardener Society of Oakland Count., Inc.

<https://mgsoc.info/2019/01/hugelkultur-what/>

The Art and Science of Making a Hugelkultur Bed, Transforming Woody Debris into a Garden Resource

<https://www.permaculturenews.org/2010/08/03/the-art-and-science-of-making-a-hugelkultur-bed-transforming-woody-debris-into-a-garden-resource/>

General Hugelkultur Video Resources

What is a Hugelkultur Bed

<https://www.youtube.com/watch?v=1IMA3WzSVNk>

Understanding Hugelkultur – How and Why to do it

<https://www.youtube.com/watch?v=JrPcc7p-XVc>

Book suggestions from the MCPLD collection:

Mother Nature's Raised Beds: Using Hugelkultur & Permaculture Principles for High-yield, Low Impact Gardens

Edible landscaping with a permaculture twist: how to have your yard and eat it too