

Lasagna Gardening in Oklahoma

Lasagna gardening - also known as sheet composting - is a sustainable, no-till gardening method that builds rich, organic soil by layering biodegradable materials directly on the ground. This approach is especially beneficial for Oklahoma's challenging climate, which features temperature extremes, variable rainfall, and clay-heavy soils. Lasagna gardening is a viable method for improving soil fertility, increasing water retention, and reducing weeds.

Oklahoma soils, particularly in the central and western parts of the state, tend to be compacted and low in organic matter. These conditions limit plant growth and make traditional tillage both labor-intensive and often counterproductive, as it can disrupt soil structure and microbial life. Lasagna gardening, however, builds soil health from the top down without tilling.

The lasagna method consists of alternating "green" layers (nitrogen-rich materials like vegetable scraps, coffee grounds, and grass clippings) with "brown" layers (carbon-rich materials like cardboard, newspaper, dried leaves, and straw). It is important to maintain a proper carbon-to-nitrogen (C:N) ratio - ideally around 30:1 - for effective decomposition. Layering these materials in the fall allows

for decomposition through the winter, thus preparing a nutrient-rich bed for spring planting.

Water management is another key benefit of lasagna gardening, particularly when rainfall can be inconsistent. Sheet composting improves soil water-holding capacity, making it more resilient during drought periods. The mulch-like layers reduce evaporation and erosion while providing insulation against temperature swings which is a critical feature in a state where summer temperatures frequently exceed 90°F.

Weed suppression is also enhanced by the dense layering of materials, which blocks sunlight and prevents weed seeds from germinating. The use of cardboard and newspaper as base layers is particularly effective at smothering existing vegetation without chemicals.

Lasagna gardening is also cost-effective and environmentally friendly, reducing landfill waste by reusing kitchen scraps, yard debris, and recyclable paper products, building humus-rich soil and supporting beneficial microorganisms.

When building a lasagna garden, site selection and timing are important. It is best to begin in early fall to allow sufficient decomposition time. Choose a location with good drainage and at least six hours of sun. Moisture should be

maintained throughout the layering process to encourage microbial activity.

In summary, lasagna gardening offers a practical solution for gardeners seeking to improve soil health, manage water wisely, and reduce weeds - all without tilling.

SOURCE:

<https://extension.okstate.edu/fact-sheets/sustainable-landscapes-creating-a-hugelkultur-for-gardening-with-stormwater-management-benefits.html>