



EVERGREEN

Building Healthy Soil II

Techniques for Building Healthy Soil II

Soil is a vital part of our natural environment and the source of most of our food. It is a non-renewable resource that influences plant distribution and provides habitat for a wide range of organisms. When soils are nutrient-poor, the plants that grow within will be nutrient-poor as well. Modern building techniques scrape away the topsoil before digging for foundations, leaving many urban centres with poor soils. By understanding its composition and feeding the soil, we create better conditions for plants.

Sheet Mulching

Sheet mulching is a no-digging technique for building soil above poor soils. It works to add organic matter and carbon to the soil while improving water retention and

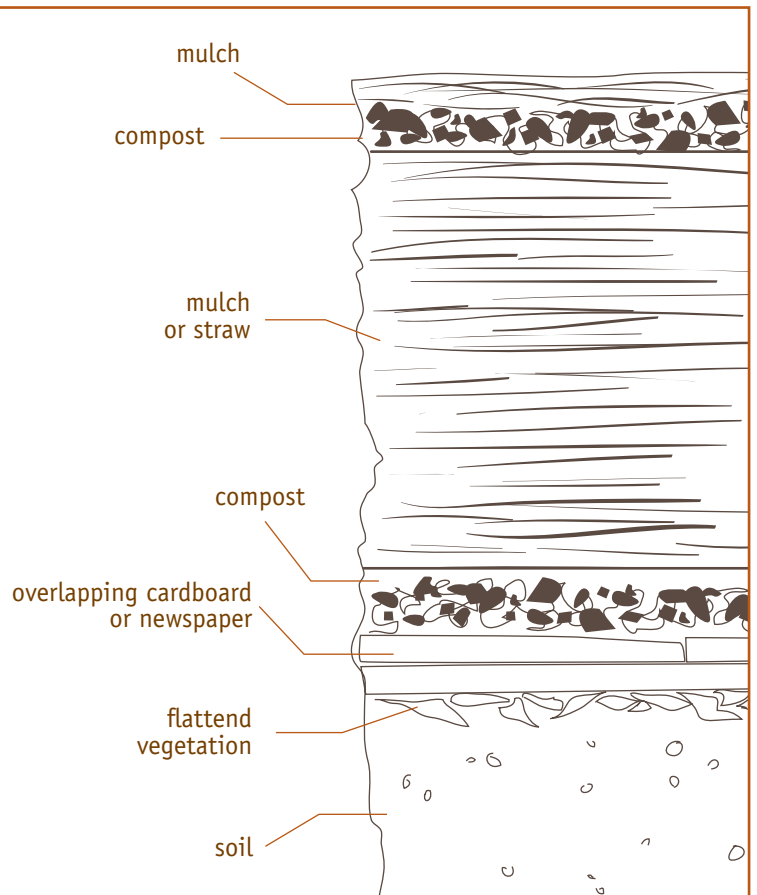
reducing labour. Over time the cardboard or newspaper and mulch will break down and add carbon to your soil while the compost will add organic matter and nutrients. There are many variations of sheet mulching. Try this one, or experiment with your own variation.

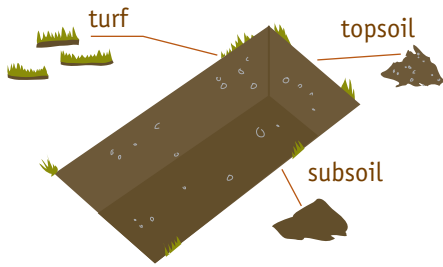
What You'll Need

- Newspaper or cardboard
- Compost or manure
- Shovel
- Mulch or straw
- Water source

Building Soil through Sheet Mulching

1. Flatten or trim down the area of soil you wish to sheet mulch and water it thoroughly.
2. Lay down layers of newspaper (10 at least) or cardboard (two is good) taking care to overlap the edges and water the layer thoroughly.
3. Add a layer of compost or manure about 2.5 centimetres thick and water the area again.
4. Cover the area in a layer mulch or straw on top between 15 and 20 centimetres thick and water the areas again.
5. (Optional) Add another layer of completely finished compost about 1.5 cm thick and a final thin layer of mulch, and water the area.
6. Plant your desired species into the sheet mulch and water the area.





Hügelkultur

Hügelkultur is a soil-building practice similar to sheet mulching that mimics nurse logs in forests. By digging in large amounts of decomposing organic matter to your raised bed, it adds nutrients to the soil over time, while increasing water retention, microbial habitat, and gently warming the soil. Though more involved than sheet mulching, hügelkultur can increase the surface area of planting area and decrease the amount of maintenance over time.

Building Soil through Hügelkultur

1. Select an area approximately 1 by 2 metres and dig approximately 1 metre down to create separate piles for the turf, the topsoil and the subsoil (there should be a colour change in between these layers).
2. Add the logs into the bottom of the pit and place the turf on top of the logs- roots facing up, then water both layers thoroughly.
3. Add a layer of branches and a layer grass clippings and water thoroughly.
4. Add the subsoil on top of the grass clippings and water thoroughly.
5. Layer the twigs on top of the subsoil and add a layer of compost and water thoroughly.
6. Cover the raised bed with topsoil and add a layers of cardboard and mulch to suppress weeds. Water thoroughly.
7. Plant in your desired plants.

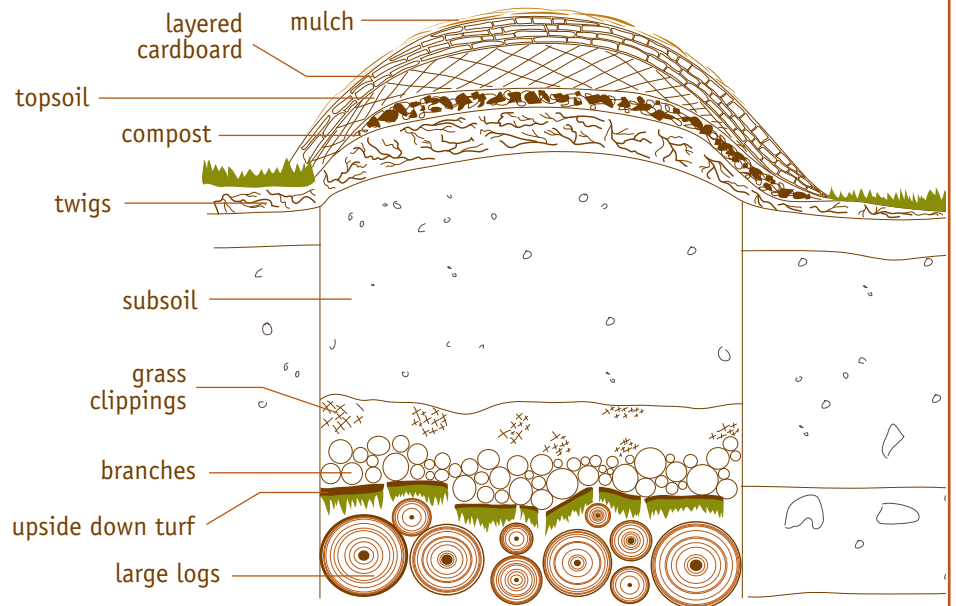
For More Information

The Art and Science of Making a Hügelkultur Bed: permaculture.org.au/2010/08/03/the-art-and-science-of-making-a-hugelkultur-bed-transforming-woody-debris-into-a-garden-resource/

The Ultimate, Bomb-Proof Sheet Mulch: patternliteracy.com/books/gaias-garden/how-to-the-ultimate-bomb-proof-sheet-mulch

What You'll Need

- Shovel
- Fallen logs, branches and twigs
- Compost
- Grass clippings
- Cardboard
- Mulch



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Evergreen is a national charity that inspires and enables action to green cities. Get involved or donate today.

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