NO-DIG GARDENS

Permaculture Tasmania

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Productive food gardens

Becoming producers rather than consumers... that is what happens when we turn time-consuming lawn into tasty fruit and vegetables. Growing some of our own food saves us money and keeps us fed when food supply chains falter.

What materials do I need?

The no-dig gardening technique is an easy way to get started. You need only a few materials to get started no-dig gardening:

- cardboard or waste paper such as newspaper; this breaks down in the garden into organic material used by our plants
- lucerne hay (lucerne hay contains nitrogen, one of the main plant nutrients), straw (obtained from the produce store or nursery) cane mulch or stable sweepings (a combination of hay and horse manure — let the stable sweepings sit for a few months to compost before use in the garden)
- compost, which can be made at home or purchased
- if your soil is sandy and porous, add a fertiliser such as dynamic lifter or blood and bone to improve fertility
- reuse old bricks, timber sleepers, bark chips or pavers for paths and garden edges.

A gardener lays straw over a layer of compost which was spread over a thick layer of newspaper to suppress weeds

The benefits

We copy nature when we make a no-dig, mulched garden in which to grow our vegetables. The mulch layer is like the leaf-litter in the bush. It provides the same benefits.

Mulch in our no-dig garden:

- reduces soil moisture loss and weed growth
- breaks down into nutrients that feed our plants
- reduces soil temperature extremes
- reduces the erosion of our garden soil during heavy rain.

The amount of mulch we use might seem excessive when we spread it. In time it weathers and compacts down.

The no-dig method lays compost then straw mulch over a thick layer of cardboard. Just add compost then straw when rejuvenating your mulched garden, rather than more newspaper or cardboard.

If there are perennial plants in our garden — those that live longer than a year — place the mulch close to them but avoid contact with the stem. Allow air to circulate around the stem to avoid collar rot.

Plant seeds and seedlings into compost-filled pockets scooped into the straw layer

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Make a no-dig garden...

1. BED PREPARATION

If you want to grow vegetables, choose a location for your garden bed that is protected from strong wind and that receives a minimum of four to six hours of sunlight a day.

Cut long grass and clear stones and other materials like dried seeds and weeds so they do not grow in the mulch. Cut grass can be left on the ground.

Prepare the garden bed by marking it out. To deter grass from invading your garden, construct sturdy edges with material such as timber or bricks.

2. SOIL PREPARATION: the nitrogen layer — and water

To allow these nutrients as well as water and air to penetrate to the root zone open the soil using a garden fork. Push the fork into the soil as far as it will go, then move it back and forth to open but not turn the soil. Water sufficiently to moisten the soil to the root zone.

If you are building a garden on sandy or low-fertility soil, add a fertiliser layer about 2cm thick; compost, worm castings, manure and/or a sprinkling of dynamic lifter or blood and bone will improve soil fertility.

3. LAY THE WEED BARRIER: the carbon layer

Cover the garden with cardboard or newspaper about 10 pages thick that has been well-moistened so that it will not blow away. If you have invasive grasses like twitch that spread underground, cover with a thicker layer of cardboard to block light and discourage growth. Overlap by one-third their size to discourage weeds.

4. ADD A FERTILISER LAYER: a nitrogen layer

Spread a fertiliser layer of compost/wormcastings/grass clippings/manure to cover the cardboard or paper weed barrier. This will act as a slow release fertiliser and will become available to the plants over time.

5. LAY THE WEED-FREE MULCH: the carbon layer

Lay mulch such as lucerne hay/straw/cane mulch on top the nitrogen layer to at least 10cm thick. A thicker layer will soon flatten. Repeat nitrogen and carbon layers if needed.

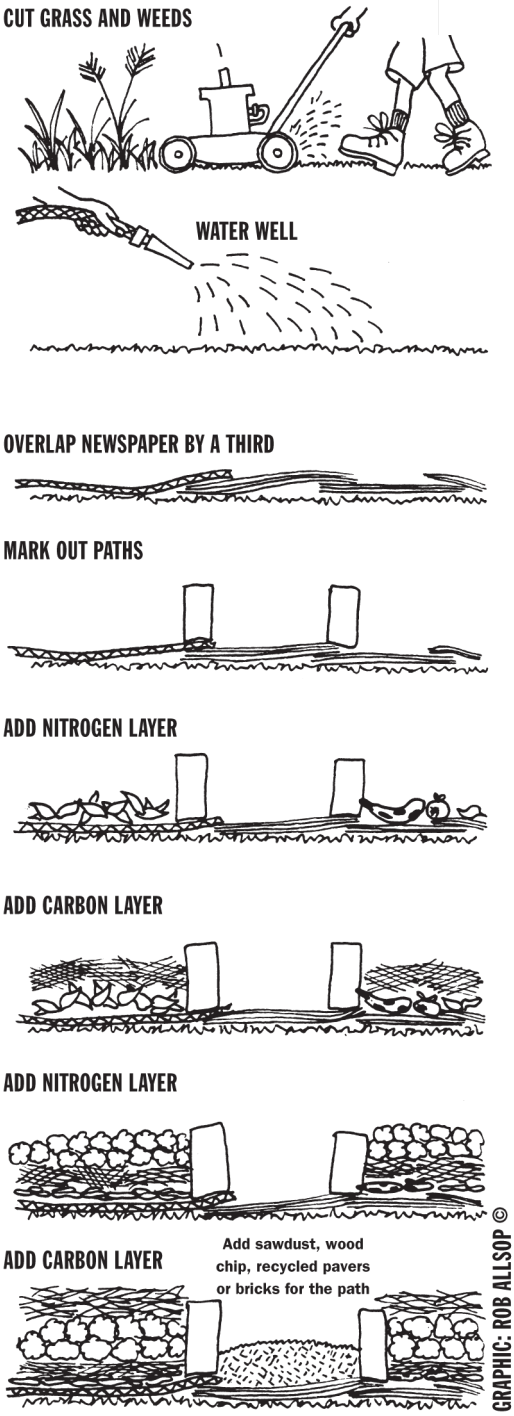
6. PLANT SEEDLINGS AND SEEDS

Germinate small seeds in pots for transplanting into the garden. Large seeds such as peas and beans can be sown directly into the bed.

To plant the seedling or large seed, make small holes in the mulch to the depth of the cardboard or newspaper layer, fill with compost and plant the seedling or seed into this. Don't plant the seed too deep — just to twice the size of the seed. Some gardeners slit the cardboard or newspaper with a knife so that the seedlings roots can penetrate the soil below.

7. WATER WELL

Give the garden a thorough watering to soak the mulch.



STAY WELL, STAY HEALTHY...

Compost, straw and stable sweepings may contain living organisms that, on rare occasions, could cause illness.

Precautions include:

- moistening compost/mulch to avoid microorganisms becoming airborne
- wearing gloves to protect broken skin
- wash hands after handling materials
- wearing a dust mask if you suffer from asthma or respiratory disorders
- if you handle animal manure, such as found in stable sweepings, consider vaccination against tetanus
- protect yourself from sunburn with suncream and hat
- drink plenty of water while gardening.

REFERENCES

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