

No-Dig Gardening

for the home and community gardener



Productive food gardens

When we grow our own food we make productive use of urban land. Food gardening turns consumers into producers who enjoy fresh, nutritious, home-cooked food in the company of family and friends. And... growing some of your own food saves you money.

Re-using materials

No-dig gardening reuses waste newspaper. Food and garden wastes are made into compost. Recycled materials such as crushed concrete, bricks, pavers, wood chip and sawdust can be reused to make paths and garden edges.

The benefits of mulch

When we make a no-dig, mulched garden in which to grow our vegetables and fruit trees, we copy nature. 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 of heat and cold
- reduces the erosion of our garden soil during heavy rain; lessens the impact of raindrops and the force of rain water runoff.

When first made, the amount of mulch you use might appear excessive. But, as it weathers, it will compact down.

The no-dig method lays straw mulch over a thick layer of waste newspaper. Once the weeds are mostly eliminated from your garden you can simply apply compost, stable sweepings or straw when rejuvenating your mulched garden, rather than more newspaper.

If there are perennial plants in your 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.



USING WASTE PAPER AND MULCH TO MAKE PRODUCTIVE FOOD GARDENS...

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

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

Seedlings planted into a sheet mulched community garden made from stable sweepings and compost

Materials you need to start

You need only a few materials to start no-dig gardening:

- newspaper
- hay, lucerne hay (lucerne hay contains nitrogen, one of the main plant nutrients), straw (obtained from the hardware store or nursery) 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 to the soil, such as dynamic lifter or blood and bone, to improve fertility
- garden edge and path materials; practice recycling by reusing concrete, roof tiles or bricks and pavers for paths and garden edges.



How to 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 unwanted materials such as 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

- 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.
- To allow these nutrients, water and air to penetrate to the rootzone, 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.

3. LAY THE WEED BARRIER: THE CARBON LAYER

- Cover the garden with newspaper that has been well-moistened so that it will not blow away – about 10 pages thick. If you have invasive grasses such as kikuyu or couch that spread by stems that grow horizontally, lay a thicker layer of newspaper to block light and discourage growth.
- Overlap pages 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 paper. 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 composted stable sweepings/hay/straw/lucerne hay on top the nitrogen layer to at least 10cm thick. A thicker layer is alright. 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 newspaper, fill with compost and plant the seedling or seed into this. Don't plant the seed too deep – just to double the size of the seed. Some gardeners slit the newspaper with a trowel or knife so that the seedlings roots can penetrate the soil below.

7. WATER WELL

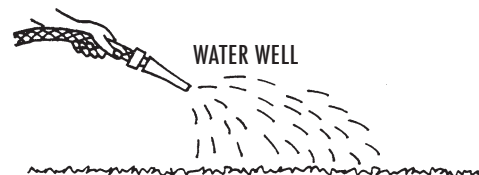
Give the garden a thorough watering to soak the mulch.

STAY WELL, STAY HEALTHY...

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

- moistening compost/ mulch to avoid micro-organisms becoming airborne
- wearing gloves to protect broken skin
- washing hands after handling materials
- wearing a dusk 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.

CUT GRASS AND WEEDS



OVERLAP NEWSPAPER BY A THIRD



MARK OUT PATHS



ADD NITROGEN LAYER



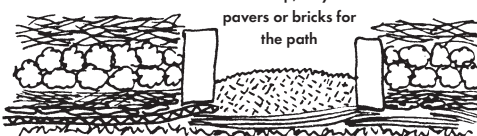
ADD CARBON LAYER



ADD NITROGEN LAYER



ADD CARBON LAYER



GRAPHIC: ROB ALSOP ©

REFERENCES

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