

# NO-DIG GARDENING

## The benefits of no-dig gardening

Growing fresh chemical-free food at home or community is a significant way to improve health and well-being and contribute to the reduction of our ecological footprint. Below is a tried and tested technique for kitchen gardens or community gardens. These fully-mulched gardens require low-maintenance, conserve water and turn local waste materials into valuable resources. No-dig gardens are easy, quick and fun to make.

Healthy fertile soil is alive – a thriving ecology with millions of micro-organisms in every cubic centimetre. Avoid turning the soil as this disturbs the ecology of the soil and the soil structure. By creating an environment that is suitable for soil life, these organisms will open up the soil for water and air to penetrate, transform organic matter into accessible plant food, and take nutrients to the roots of plants. If the soil is fed and cared it will provide a healthy environment for plants and is the foundation for growing nutritionally-dense food.

## Suggested materials and tools

WORM ATTRACTORS: Liquid manure, chicken manure or kitchen scraps

NEW TOPSOIL LAYER: Compost, mushroom compost or worm castings

WEED BARRIER: Newspaper

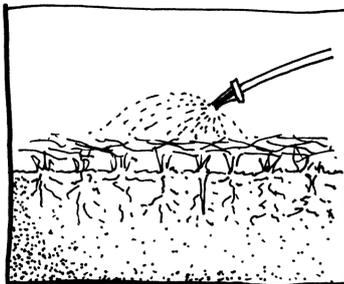
MULCH: Seed-free mulch.

SEEDLINGS (choose non-hybrid, locally adapted seed varieties).

PATHWAY: Sawdust

TOOLS: Garden fork, transplanter, hose, watering can, wheelbarrow.

## Step 1 – Locate site for garden

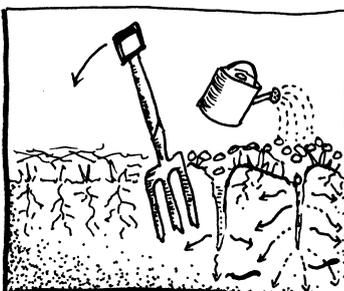


Select the site for your garden – preferably close to the kitchen. Keep in mind that most vegetables need 6–8 hours sun a day. The initial size of garden will depend on the amount the resources you have available.

Firstly, mark your edges and pathways. Slash any grasses or weeds and leave them on top. Both the leaves and roots of the weeds add organic matter and when the roots die they open up channels for air and water.

Water well.

## Step 2 – Open and feed the soil

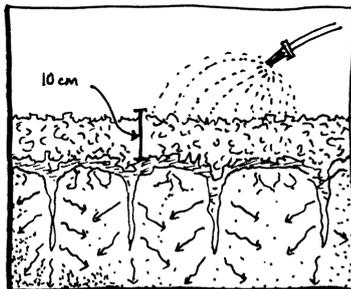


Use a garden fork to open the soil, but do not turn it. Push the fork into the ground as far as it will go and pull back gently to open and loosen the soil. Next season you will find that the depth will have improved due to the increased activity of the soil life.

Sprinkle high nitrogen materials (such as chicken manure and fresh non-meat kitchen scraps) to attract worms. Water in with diluted liquid manure.

### Step 3 – Make new topsoil

Add a layer of compost about 10–15 cms thick on the garden bed areas and water in. This will become the new layer of topsoil.



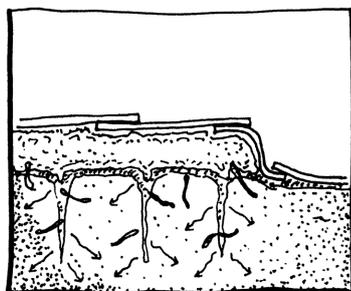
There are many different materials that can be used to make up this layer. We recommend homemade compost mixed with worm castings. Both are excellent forms of accessible and well-balanced plant food.

Other ingredients could be aged manure, mushroom compost, fresh leaf clippings (but not pine, eucalypt or other oily leaves). Use what you can find locally and preferably recycled from your own on-site waste materials.

NB: The greener the materials or fresher the manure, the longer you will need to leave the garden to settle before planting into it.

### Step 4 – Add a weed barrier

To prevent weeds from coming up in your garden, we recommend you add a biodegradable weed barrier – newspaper is the best we’ve found if used about 10–15 sheets thick. This thickness allows it to last long enough to stop the weeds, but thin enough to decompose in a season.

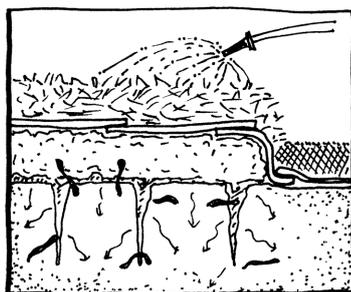


Before you lay the paper, wet it thoroughly first (in a wheelbarrow full of water) otherwise it will soak up the water from the soil. The key to an effective barrier is overlapping the layers well (by at least 10 cms). If you can see any hole, so will the weeds – they’ll be searching for the light. Before you mulch over the top, check for holes and cover them up.

Remember to paper your paths and edges.

### Step 5 – Mulch Mulch Mulch!

Add a thick layer of SEED-FREE mulch on top of the weed barrier. Anything that contains seeds (that you do not want to propagate in your garden) can be placed under the weed barrier.

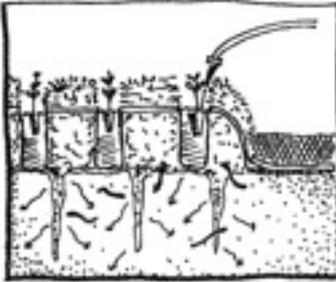


Generally a 15 cm layer of mulch is sufficient. The visual test is “if you can see newspaper – ADD more mulch”. The mulch will eventually become part of your new topsoil, but in the process will be providing soil protection and insulation and help to conserve water.

Sawdust can be used on the path, but not the garden (draws too much nitrogen from soil). Over a few seasons the sawdust path will transform into compost which can be dug up, added to the garden and replaced with fresh sawdust.

## Step 6 – Planting and watering

In planning where to place the seedlings, consider the size and growth form of each plant. Aim for a diversity of vegetables, herbs and flowers to create a polycultural kitchen garden.



For each plant, pull back a small portion of the mulch, poke a little hole through the newspaper and make sure that soil is loose below. If necessary, add a handful of compost in the hole to the level of the weed barrier.

Plant the seedling in the compost – make a hole first with a stick or your finger. Press gently to make sure the seedling is firmly planted. Bring the mulch back around the seedling, but not touching it. This will provide protection for the young seedling until it emerges.

Water into the individual holes and check once again that the seedlings are firmly in the compost.

## Step 7 - Tips for maintaining your no-dig garden

- Water only when necessary. Feel under the mulch first. Overwatering causes shallow root growth and the seeds you collect from overwatered plants will expect lots of water – weakening the strain.
- Mix herbs and flowers in amongst the vegetables to assist with pest management.
- Feed with liquid manure once a week.
- Pull out any emergent weeds before they seed or spread.
- While the garden is growing prepare more compost.
- You can add more plants once others have been harvested, but add more compost too.
- Next season, top up with a new layer of compost and add more mulch. You may need to loosen the soil a little more with the fork and add another layer of newspaper. Observe and use your judgment.