



Building a Maara Kai Vegetable Garden

Have you ever thought about growing some of your own kai? It can be a fun, active, and affordable way to feed your whānau, with all the added benefits of healthy produce free of sprays and additives like sugar, fat and salt.

This step by step guide shows you how to build your own thriving no-dig vegetable garden, or 'maara kai'. A maara kai is a great way to live off the land and use traditional self-sufficiency.

This particular garden was built at Toroa

Marae (Pupuaruhe) in Whakatāne. Use it as a guide when building your own maara kai at your marae, home, school, workplace, or when contributing to a local community garden.

For more information about building a maara kai, email:
hapu.hauora@bopdhb.govt.nz

For information regarding community gardens in your local area, contact your local district council.

Stage 1: Gather Resources

- Pallets (try and get them all the same size)
- Saw (circular or hand)
- Hammer and nails (tacks, gun staples and long nails)
- Shovel/spade
- Top soil (plenty of worms if possible)
- Carbon browns, dries
- Nitro greens
- Plastic lining
- Lime
- Manure (cow, sheep, horse etc)

EXAMPLES

Carbon Browns

- Wood chips, wood, sawdust.
- Dust, twigs, leaves, card, paper (no coloured glossy print), dolomite, rock dust and ashes.

Nitro Greens

- Kitchen waste (no meat or bones), tea leaves, coffee grounds, grass clippings, fresh garden waste etc.



Stage 2: Build the Boxes

Pallets



1
Remove back palings but keep intact to use again for capping.



2
Cut pallets evenly in two halves.



3

Nail together pallet halves with large nails – ensure vertical posts are on the outside.



4

Tack lining on inner walls with small tack nails.

TIPS

- If using more than one piece of lining, ensure to overlap so there are no gaps.
- Do not pull lining too tightly as layering will tighten the lining.
- Do not cover bottom of maara kai with plastic but ensure it covers all timber to preserve structure for longer.
- Ensure capping is nailed across the joined pallets to strengthen the box, secure the lining to act as a seat.



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Nail capping around top of the boxes.

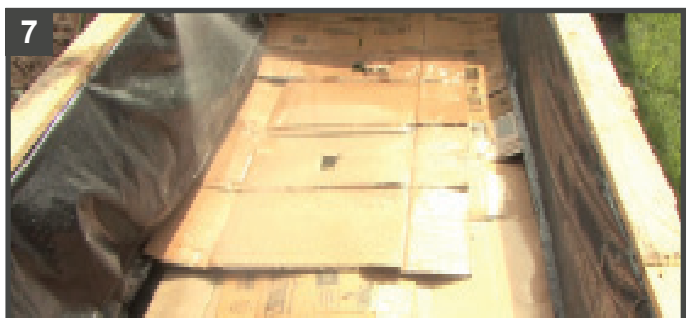
Stage 3: Layering

Start with woody branch material/twigs for air flow; compost needs air to stop it from going anaerobic (no air) and smelly or use any carbon browns if no branches available.



6

Use woody branch material/twigs as the first layer if possible.



7

Cardboard boxes can be used on the bottom layer if no woody branch material/twigs are available. Use a combination of the two if you don't have much.

8



Alternate nitro greens, carbon browns and soil (each layer about 10cm thick).

9



Ensure every layer is watered – it will help it decompose quicker.

10



Add in one layer of manure when layering at approximately half way.

TIPS

- Use mostly organic items – things that have once been alive.
- Keep aeration and wetness in balance; if compost gets too wet and slimy (anaerobic – no air) add carbon (sawdust or dry leaves etc) and a bit of lime.
- If it is too dry – add water and/or nitrogen materials. Compost wants to be like a moist sponge.



Stage 4: Planting

11



Water plants while in pots so roots remain compact when transferring to maara kai.

12



Plant vegetables approximately 1 – 2 centimetres apart from base of plant.

Stage 5: Maintenance

- Weed and leave on top of the garden
- Water the ground around the plant, not the plant itself
- If possible, try to keep marae lawn clippings in a specific pile as this will decompose over time and can be used for compost feed on the garden
- Avoid: meat, oil, fish, bones, fat and dairy, large amounts of acidic scraps, pine needles, gum leaves and woody material larger than your finger should also be avoided
- If after a few months the maara kai smells a little, add in another layer or two of nitro greens and/or carbon browns.

TIP Plant insect attracting plants (ie marigold or calendula) around the edges of the garden.



Fresh kai grown in your own maara kai is full of goodness and tastes fresh.

Growing, gathering and preparing kai has always been an important part of Māori culture and hauora. Pre-European Māori kai was gathered from the bush, sea, rivers and lakes. Birds, fish, shellfish, eels, vegetation, eggs and wild honey was sourced and prepared for eating. Some root crops were also grown. Obtaining food was a prized accomplishment and food was a symbol of hospitality and generosity.

“He kai kei aku ringa”

There is food at the end of my fingertips.



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