ErinEarth
School Vegie Patch Guide

ErinEarth is proud to acknowledge that it is situated on Wiradjuri country and is committed to reconciliation with all our First Nations sisters and brothers

Principles

The ErinEarth vegetable patch is based on permaculture principles of no dig, with only a fork being used to loosen soil and incorporate fertiliser, without turning the soil. This allows microorganisms to flourish and soil structure to be built up. Rotations and companion planting are also used, along with chemical free treatments for pest, disease, weeds and fertiliser.

Tomatoes are grown each warm season and the rotation of the tomato crop between the three large beds, largely determines the rotation of all crops each season. This rotation of all types of vegetables helps to disrupt the disease cycle and improve crop health.

With each new warm and cool season planting cycle dynamic lifter, blood and bone and lime (if required by a pH test) are added. At this time the irrigation can also be undone and flushed out.

The main pest issues in the garden are cabbage moth (can be treated with Dipel natural spray but we don't use any chemical sprays at ErinEarth) in early autumn and spring, fruit fly, excluded by fruit fly net, and caterpillars in tomatoes, which are bagged and binned. Netting is used extensively throughout the year in the ErinEarth vegetable garden.

The following calendar of vegetables has been successful for this site, and for growing what volunteers want (i.e., to ensure the produce gets used). New crops, if applicable or novel to Wagga have also been trialled in the past, such as Okra, introduced by the Yazidi refuge community, and Amaranthus from African gardeners at Mount Austin school. Heirloom vegetables are also interesting for the community and school groups, such as purple carrots. There has been some experimentation with quicker crops in autumn and pulling crops out before summer due to unfavourable and drier weather. This pattern also works for a school system when everything is closed down for the Summer and saves water.

Crops are also timed to allow school kids to pick vegies and so this calendar can be adapted to the school term and curriculum. The vegetable patch is a demonstration site and helps us to advise schools on their own production systems, a common request, as well as guide the home gardener.

- Term 1 – Late Summer/Early Autumn
- Term 2 – Late Autumn/Early Winter
- Term 3 – Late Winter/Early Spring
- Term 4 – Late Spring/Early Summer

Term 1 – Late Summer/Early Autumn

In late summer and early autumn, we are planting for a quick and good-looking harvest for the first open day, after letting everything go at the end of Summer and this also works when resuming school following a break in growth. The following crops allow for a quick result for kids to see and can weather the hot end of summer whilst still being a productive autumn crop.

While it is still quite warm, plant the following:

1. Lettuce
2. Radish
3. Rocket
4. Onions
5. Sprouts
6. Pak choy
7. Beetroot
8. Bok choy
9. Carrots
10. Peas
11. Rainbow spinach

Term 2 - Late Autumn/Early Winter

Consider frost protection measures through Autumn and Winter. Harvest citrus fruit and compost your vegetable beds through Winter.

1. Broccoli
2. Silverbeet
3. Rhubarb
4. Cabbage
5. Onions
6. Broad beans
7. Cauliflower
8. Kale
9. Snow peas, peas

Term 3 – Late Winter/Early Spring

The beds can be prepared for tomatoes. At ErinEarth, tomatoes are raised inside greenhouses from seed and planted out early under frost cover to ensure this heavy crop twice to make enough for relish for the year. In a home/school situation you can buy advanced tomatoes early and protect them, or plant as the frosts subside (October). Other varieties of tomato for salads etc will produce a steadier ongoing crop.

Green manure crops can be grown in the lead up to Spring planting in any of the beds, allowing 6-8 weeks to grow and then chop and incorporate into the soil for extra fertility.

1. Lettuce
2. Golden Zucchini
3. Beans
4. Brussel sprouts
5. Chillies
6. Spring onions
7. Pak choy

While carrots can be grown from seed in Spring they can tend to bolt to seed quickly as the weather warms, so autumn may be the better option or get them in early. This is applicable to most of the vegetables mentioned in the first section – Late Summer- Early Autumn. For this reason, it may be better to concentrate on summer crops at this time and even protect them with frost covers to ensure an early harvest before summer watering is an issue in Wagga's climate.

Tomatoes will need fruit fly netting as soon as the fruit appears and can be picked when just flushing red to ripen inside.

Term 4 – Late Spring/Early Summer

Remove frost protection from beds.

1. Warrigal greens
2. Okra
3. Zucchinis
4. Beetroot

Frames

Frames and trellis' can be used for peas, beans and frost protection (to get an early tomato crop), along with Okra, fruit fly net (which can also control cabbage moth but can inhibit pollination on some crops).

Frames made of flexible and sturdy irrigation pipe or bamboo stalks are curved over the bed and netting attached to slide up tubing to allow easy harvest. Moveable galvanised mesh trellis" have been made to fit the two bottom garden beds and there are also fitted cages to protect seedlings and seeds from blackbirds digging. Occasionally rabbits or possums will also eat the vegetables.

Weeding

Most weed management at the gardens should involve hand removal and weed suppression through heavy mulching and dense planting. It is imperative that weeds are removed before their seeds set. Boiling water is also an effective path and paving weeder that is regularly used as required. Care needs to be taken to avoid burns or scalds on the user.

Companion plants

Companion planting refers to the interaction between plants growing together and the effects (good or bad) they have on each other. Companion planting is used to help plan the vegetable, herb, and fruit gardens. For example, some herbs such as Wormwood are used to control insect pests in the chook pen. Roses and garlic seem to have a beneficial effect on one another; garlic keeps aphids away; yet garlic is a bad companion for peas or beans. Marigolds secrete a substance that kills nematodes in the soil and help to repel insects if planted around the border of vegetable gardens. Nasturtiums are compatible with broccoli and

radishes and are used in the vegetable garden as sacrificial plants attracting the white cabbage moth.

Decoy moths

White decoy moths can help to deter cabbage moths. Decoy moths can be made by students and added to the garden. Draw small butterfly shapes on white paper, laminate and cut out. Attach to bamboo skewers with tape and push into the soil around cabbages, broccoli and cauliflower plants.

Key performance indicator

Vegetables are planted before the season arrives to show well established seasonal crop in time for open days and school visits. This can be achieved with forward planning and advanced stock. Vegetable patch is full and productive for key events such as Open days and School visits.

Seasonal Planting and Harvesting

Summer

Harvest: Tomatoes, capsicums, cucumbers, eggplants, zucchinis, squash.

Plant: Spinach, silverbeet, beetroot, lettuce

Autumn

Harvest: Spinach, silverbeet, beetroot, lettuce, olives.

Plant: Cauliflower, broccoli, kale, cabbage, bok choi, pak choi, carrots, leeks, onions, brussel sprouts, broad beans

Winter

Harvest: Cauliflower, broccoli, kale, cabbage, bok choi, pak choi, carrots, leeks, onions, brussel sprouts, broad beans and all citrus (including finger limes)

Plant: Asparagus, spring onions, snow peas, beans, lettuce, spinach.

Spring

Harvest: Asparagus, spring onions, snow peas, beans, lettuce, spinach.

Plant: Tomatoes, capsicums, cucumbers, eggplants, zucchinis, squash.