

Audit, plan and design school garden & grounds

Time of Year

This can be carried out at any time of the year (preferably Sept to Feb).

Cross Curriculum Relevance

SESE:	living things, environmental awareness & care, local studies.
Maths:	Measuring, estimating, recording, active learning.
Literacy:	New words.
Art:	Sketching, planning, mapping, creativity, imagination.
SPHE:	Myself & the wider world, active learning.
Informal Curriculum:	Green Schools, Discover Primary Science.



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Structure of this section

In this Teacher Support Sheet you will have 3 Sections to help you with the process:

Section 1:

Potential Elements of a School Organic Garden.
(4 pages)

Section 2:

School Site and Garden Audit.
(1 page)

Section 3:

School Site and Garden
Audit Worksheets for Students.
(Audit One is 1 page; Audit 2 is 2 pages)

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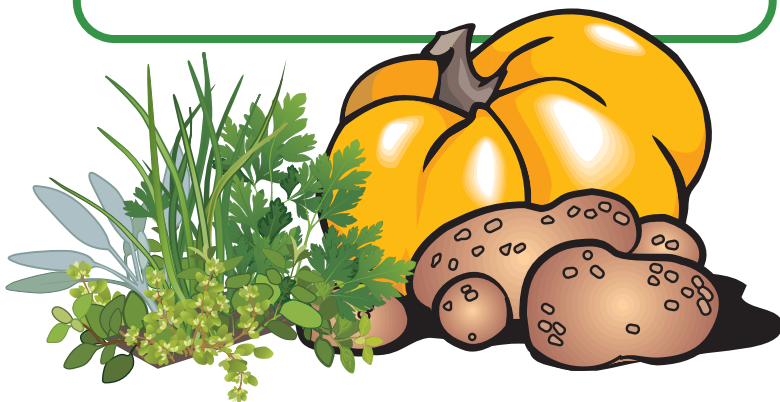
Resources needed

- Map of the school grounds if possible - if you do not have this it just means that you have to sketch a basic outline of buildings and boundaries.
- Trundle wheel if you have them or measuring tapes.
- Audit Worksheets.
- Clipboards and pencils.
- Camera to take photos of school ground at the beginning.
- Chalk, markers, ruler, pencils etc.

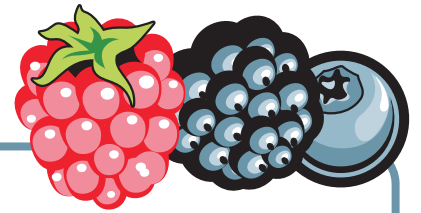
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Health & Safety

Ensure all students stay within the group. Use tools safely. Ensure students wash hands after garden session. Please refer to the worksheet on Health & Safety for detailed information.



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Section 1:

Introducing the Potential Elements of a School Organic Garden

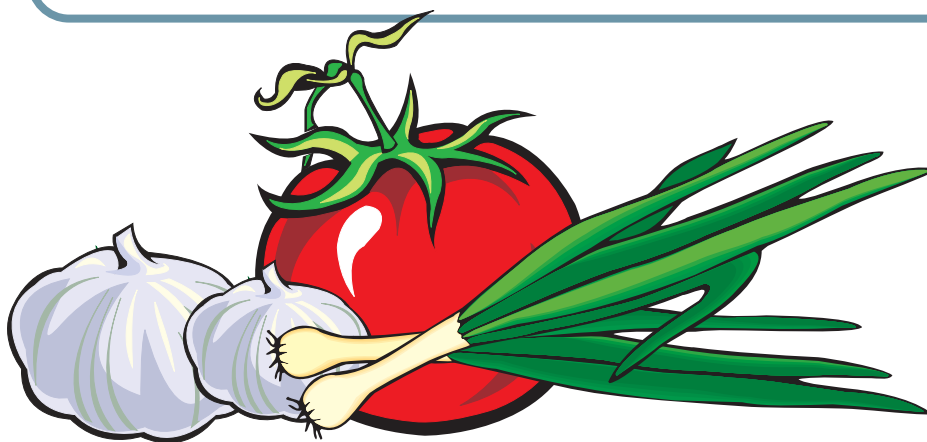
When you make a plan to create a school organic garden, you will be aiming to create a variety of food growing areas, habitats and ecosystems, which can be studied and used as an outdoor living classroom. This can be created in any space, no matter how small. This planning session will bring diversity to the school grounds & garden.

An organic garden is a place where we can grow vegetables, fruit and herbs, plant flowers, hedges and trees. It is also important to have places in the garden where wildlife can feed, bathe, sleep and hide.

When we garden organically, we do not use any chemicals, sprays or artificial fertilizers. We try to recycle as much as possible and nature is the best recycler. A variety of ecosystems & habitats will create a balance in the garden. The secret to a good organic school garden is to observe how nature works and to learn from it. This system follows basic permaculture design guidelines.

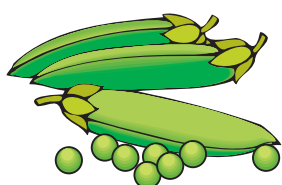
This is a wish list of some of the features you can have in your organic school garden. Use your imagination and you can create a special place where you can enjoy gardening, eating and watching nature close to you. Read through the next list to make yourself familiar with the elements before introducing them to the children.

As you will be carrying out this work with the children, include them in the process. Below is a short explanation of the elements that can be incorporated into the plan – it does not all have to happen in one year – it is better if it is a gradual process but at least you will have a plan to start with.



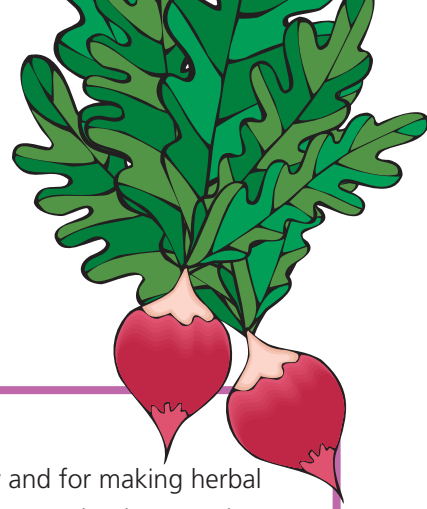
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Elements of a School Organic Garden

Perimeter/Imlíne

This aims to develop nature corridors in your school grounds, such as native hedgerows, naturalized hedgerows, living stone walls, living willow fences and wooden fencing. A sample of native hedge plants are – whitethorn, blackthorn, elder, hazel, holly, guelder rose, dog rose, rambling roses and honey-suckle.

Native Woodlands/Coill Dúchasach

Native woodlands are valuable wildlife habitats and carbon sinks. It can be as small or as big as you like (minimum three to five trees). Native trees include: oak, birch, willow, alder and ash. Celebrate National Tree Day by planting a tree, collect seeds in autumn and grow your own trees from seed. What is the importance of native trees?

Vegetable Plot/Plota glasraí

Make raised beds for your vegetables. Plant organic or heritage seed varieties, create healthy soil, use crop rotations, use natural fertilisers (source local manure), use natural pest and weed control. What vegetables can you grow in Ireland? Make a list.

Fruit/Orchard/Torthaí/Úllord

Try to plant native and old heritage varieties of apples, plums and pears. Under-plant these larger trees with raspberries, gooseberries and a variety of currants. Companion plants that support this ecosystem are herbs like comfrey and mints. This can be as big or as small as you want (minimum three trees). Research what fruits can grow in Ireland, you'll be surprised at the amount.

Herbs/Luibheanna

Herbs are medicinal, culinary and for making herbal teas. Herbs are beneficial for attracting insects. List the herb plants you know.

Flowers and Shrubs/Bláthanna agus Tománna

Flowers attract beneficial insects to the garden, such as butterflies and hoverflies, these are important pollinators in the garden. They have bright and different colours and smells, some are edible, seeds can be popped, dried, and the seed heads used to feed birds in autumn.

Lawn/Léana

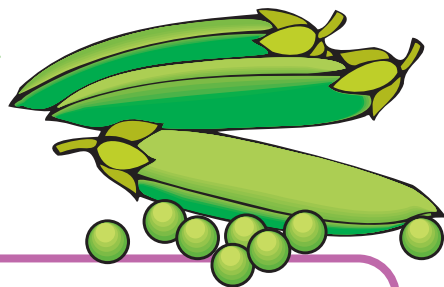
Your school may have a football pitch in the school grounds, or some area where the grass will be kept short. If possible, leave some long grass areas. There are lots of ways to use grass clippings instead of just dumping them in a corner. Rake them into a pile and cover them over with carpet or black plastic for a year to get compost; add small amounts to the compost heap; add some to the rough piles; mulch around hedges/trees/fruit bushes/mulch beds with cardboard and grass clipping; mulch mow them and let them feed the grass directly.

Wild Areas/Áiteanna fiáin

There are a variety of possible wild areas. Leave some long grass areas; make log/twig piles; make some bird- and bat-boxes; set up bird-feeders; leave the grass long in your woodland and hedgerow; sow native wildflowers and create a wildflower meadow. All these are very important for conservation and protection of our wildlife.



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Pond/Lochán

This is a special place for frogs, birds, insects, bugs, beetles, fish, ducks, etc. Water is essential for wildlife and biodiversity and an excellent resource to teach about water conservation and related issues.

Tunnel/Greenhouse/Teach gloine

An outdoor classroom when wet and raining. It can grow exotic fruit, vegetables and herbs that cannot grow outdoors in the Irish climate.

Shed/Bothán

A place to store tools, seeds for drying, potting compost, and to store the vegetable and fruit harvest.

Poultry/domestic animals/beeives

Éanlaith chlóis/ainmhithe clóis/coirteog
Sometimes it is possible for school farms to have chickens and ducks for manure, and bees for pollination, etc. These elements could potentially be incorporated at some stage, if appropriate expertise is available to the school.

Compost system/Cónas múirín

All school food and garden waste, grass cuttings, shredded paper and cardboard can be composted. This will supply the garden with free fertiliser for growing food and plants. Composting is a good way to recycle material and reduce the school's waste bill.

Recycling facilities/Áis athchúrsaileach

Most schools have a well organised recycling system, through the Green School's programme. It involves the separation of cans, batteries, glass and plastic into recycling bins, etc. Prevention of waste is the best action possible. Some waste products can be reused as recycled art projects, such as wormery in a bottle, windmills, etc.

Willow or Hazel Coppice/Coppice saileach/coll

Willow and hazel can be grown as a coppice to produce rods for use in the garden. Willow and hazel rods can be cut every year to make pea fences, plant supports and Bean tepees. Willow can also be used to make seasonal crafts, Christmas stars, trees, wreaths and living willow sculptures such as fences, willow domes, mazes and tunnels. These projects can be done between November and March.

Tree/Plant Nursery/Naiolann crann/planda

A nursery is a place to grow native trees from seed, to support them when they are young and when they need special care. This is a great project as growing trees is very important for future generations. The school could also propagate herbs, vegetable seedlings and shrub plants. These could be brought on as potted plants to sell at a school open day to raise money for the garden.

Living Willow fence, dome or structure/Struchtúr saileach beo

Willow can be used to make a variety of living sculptures from practical fences and archways to frame a garden space, to more recreational play spaces for children such as domes and tunnels.

Bird and Bat-Boxes/ Boscaí éin agus laltóg

Can be made as part of school project, use recycled waste wood if possible, put up on school building in a sheltered spot, observe and record any activity.

Bog Habitat/Gnathóg portach

Bog habitats are important as worldwide water and carbon sink/stores, and also as rare wildlife and plant habitats. The bog habitat can be incorporated into a pond overflow area.

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Outdoor Seating/Recreational Area/Áis spraoi/suigh

It is good to include a recreational area of the garden where students can go to sit and appreciate nature and the garden. Possibilities are hammocks, wooden seating, play areas and sand pits. Another option is wide wooden edgings on top of the vegetable bed frames.

Water Collectors/Bailitheóir uisce

Water is an important resource that we need to conserve. Water collectors, with lids, can be free-standing or attached to guttering on the school building. They harvest rain water from the drains and can be used to water the garden in summer time.

Adequate Sewage System/Reed Bed system/Córas cearr camras

Brings attention to where our waste goes. Reed Beds are an alternative sewerage system; they use reeds and special plants/bacteria to clean toilet water.

Trellis/Climbing plants/Plandaí drepadóireacht

An alternative use of space for growing plants, using the wall/fence spaces for climbers and fruit. Good for brightening up grey concrete walls.

Alternative Energy Sources/Foinsí athrach fuinneamh

Brings attention to where our energy comes from. Some of these renewable energy options are windmills, solar panels, water power, etc. You can set up a weather station in the school to measure rainfall, garden temperatures, etc. Carry out an energy audit on your school – (this can be done under the Green Schools Programme), how much energy is being wasted?

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Section 2: Environmental School Site and Garden Audit

This section is to help you assess your school garden in simple practical steps.

Step 1:

Introduce the Elements of an Organic School Garden (above). Discuss why each element is of value in the school garden.

Step 2:

The Site Audit can be carried out with the class, preferably outside, in the school grounds. Go through class rules before going outside. The Site Audit Sheet can be given out to the class (they could work in pairs) on the morning of the design session, so that the children participate in the design of the garden.

Step 3:

Walk around the school grounds with the class. Use the site audit sheet to orientate, to assess and to sketch what the school grounds have already, e.g. school buildings, existing hedgerows etc. Measure the size of the school site, using trundle wheels/measuring tape or footsteps!

Basic Measurements:

1 metre = approx. 3ft3" = 39" = 100cm

1 big pace = 1 metre

1 footstep = 0.3 metre

Step 4:

Return to class. On the blackboard, sketch the school grounds or use a map that has been enlarged. Begin the design process with the class, working methodically through all the elements of the proposed School Garden.



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Step 5:

After the session, take a photo of the map and sketch up a more accurate map so that the school is left with a completed design by the end of the day. This map is then displayed in the school on a notice board to allow for discussions, and to ask the question; where do we go from here?

Step 6:

Make a plan of action for the year in the school garden, what you can realistically achieve in your first year, second year, etc.



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