

Garden Plans for Schools

at Oliver's Battery Primary School



Hampshire Gardens Trust

www.hgt.org



Reflections from our first year

Jill Walmsley & Ruth Farley, January 2022

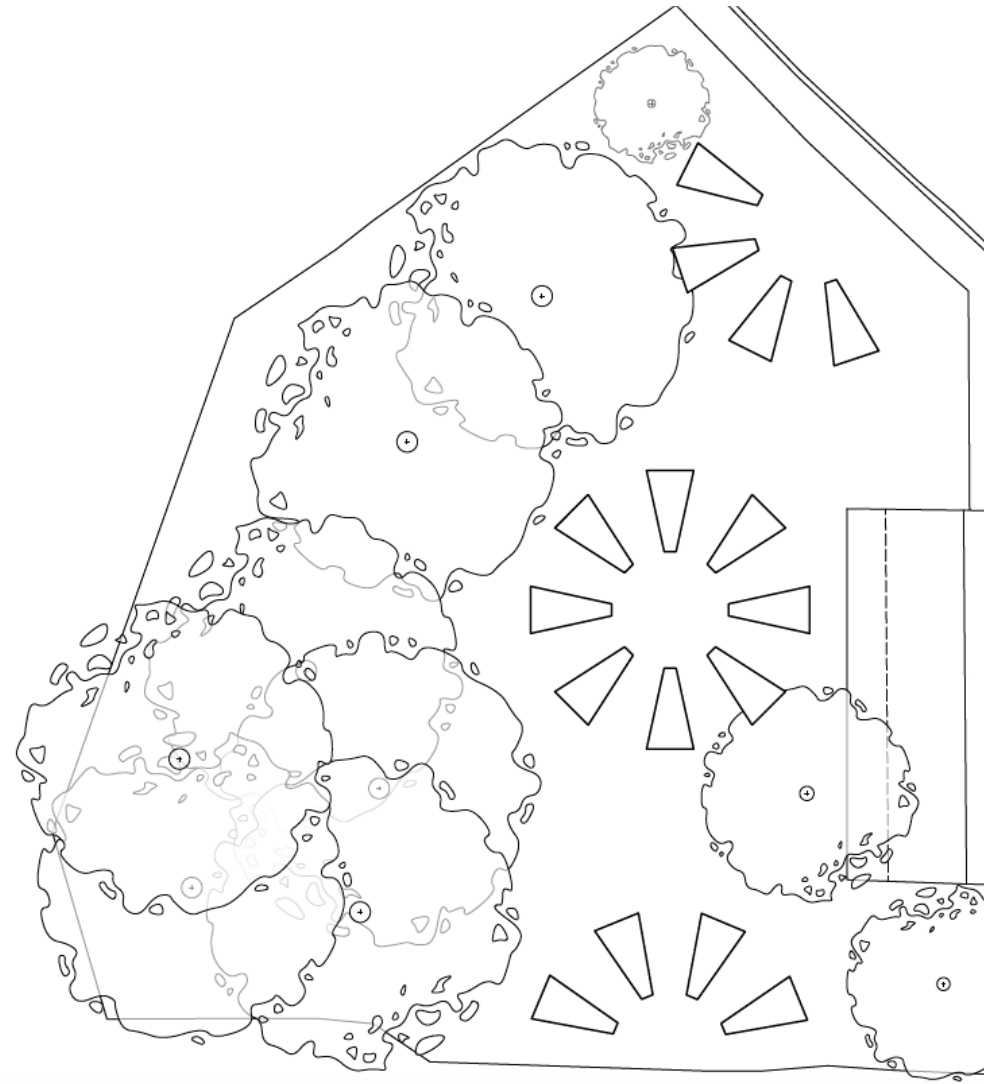
January:

Designing the garden.

After consultation with Oliver's Battery Primary School Head Teacher, Carly Redfern and PTA Lead, Shona Chalmers Hampshire Gardens Trust (HGT) appointed Garden Designer and Horticulturalist Ruth Farley to design the 'Edible Play-ground' with support from HGT Trustee, Jill Walmsley.

The Oliver's Battery Primary School logo is a sunflower so the design took inspiration from this.

We also started documenting the project on social media. Particularily Instagram @sowyummyfood.



February:

Building the garden.

We commenced work building the raised beds from tanilised wood and gathered soil from the old allotment area on site. This soil had perennial weeds, couch grass and brambles, which we removed as best we could. This saved money at the beginning of the project.

We engaged help from the PTA. We were particularly lucky to have Shona 'The Tools' who pushed through the funding of materials. Shona started with the compost bins, a crucial element to the sustainability of the project, before moving onto the raised beds. We had to make 16 'triangle' beds as part of the design. Shona made a template in order to use this as a guide. It was quick and efficient.

We were welcomed by Ted Wake to coppice hazel poles and pea-sticks from The Holt to use for structures in the Edible Playground.

The existing polytunnel was structurally sound and mostly waterproof, but needed a re-skin. Whilst we waited for new polythene, it was a useful storage area for materials.

Horti notes

Charlotte seed potatoes purchased and put in a light cool place to chit, ready for the 'Potato in a Bucket' competition (launched in April).



March:

Finishing the build.

Ruth and Jill came weekly but there was also a couple of parent work parties to get everything finished.

We didn't dig. We lined the beds with cardboard removing any staples or plastic tape and put 15 cms of soil and the Apsley compost on top.

In addition to growing vegetables, we incorporated a pollinator border into the design, to encourage beneficial invertebrates. This ran along the length of the boundary with the playground.

First plantings:

Summer Raspberries and Bergamot.

Also half hardy annuals Cornflowers, Marigolds, Nigella, Ammi majus, Bronze Fennel, Chives and Sorrell.

(sown previous Autumn by Ruth).

5 x Minarette Apple and Pear trees, bare-root, donated by John Pringle.



April:

Meet the children.

We built plant supports from coppiced hazel - these were used to make bean frames, Sweet Pea arches and a Raspberry cage. We cut turf to make a meadow area in the field near the garden. The children sowed wildflower seed here directly, but success was poor, see May.

22nd April

The whole school - 200 children came to meet us. We launched the project with the 'Potato in a Bucket Challenge', sponsored by Jill and Tim Walmsley.

10 x £1 buckets from Wickes with drainage holes drilled
10 x chitted seed potatoes (we used Charlotte)
50:50 mix of top soil and peat-free compost.

Each class was given a bucket and planted the potato on top of 10cm growing media, before covering it with soil and watering. All children were instructed to make a label for the class, be responsible for watering and topping up the compost as the potato grew.

The big reveal would happen on the last day of summer term, and there would be prizes!!

In Flower: Calendula



Olivers Battery Primary School Potato in a Bucket Challenge 2021

The aim is to grow as many potatoes from 1 seed potato in a bucket.

Each class has :-
1 bucket with drainage holes
1 Charlotte seed potato
Peat free growing medium



Please make a sign to represent your class and put in your bucket.

Mrs Redfern is also going to compete and will have her own bucket!

At the end of the Summer term we will have "The Grand Reveal" at the Olly B Potato weigh in.

Prizes will be awarded for:-
Most potatoes by number
Most potatoes by weight
Biggest individual potato
Booby prize for fewest potatoes



May:

Working with the children, structure of the session.

We drew up a two week time table, where by we see half the school each week (roughly 100 children) through 4 x 40 minute sessions. Each class comes outside to the Edible Playground where we deliver a session with our volunteers. Teachers/ teaching assistants have stepped up if we are short on volunteers, but usually float to provide discipline support.

We found a 1: 7 adult: child ratio or less was ideal.

Each session starts the same way, with the entire group in a circle. We introduce ourselves and volunteers and give an overview of how the next 40 minutes will unfold and an introduction to the topic being covered. The class is then split into smaller groups, typically 3 or 4 groups of 7 or less children for 2 x 15 minute or 3 x 10 minute activities; groups rotate so that every child completes multiple tasks with different adult volunteers. Each group led by Ruth or a volunteer.

Main activities in May:

Inside polytunnel seed sowing - Sunflowers, Peas, Beans, Lettuce, Courgettes, Pumpkins, Sweet-corn, in trays or 9cm pots, using New Horizon potting compost. These seeds are larger to handle and a great introduction for children to seed sowing.

Outdoor planting/ weeding/watering/pricking out/ digging more allotment soil.

Plant Strawberry and perennial Kale 'Taunton Dean' plants in beds. Plant plug plants in meadow (Cosmos, Calendula, Poppies.... (seeds didn't germinate from direct sowing).

Direct sow Carrots, Beetroot (with low success)

By the end of May, we planted up the polytunnel border. Shona had grown all the Tomato, Chili, Aubergine and pepper plants at home, starting them off in February with bottom heat.

NB: It may be easier and cost effective to buy in veg for polytunnel as plug plants.

Next year, will not grow chili plants - as hot fruits weaponised by some students.

In Flower: Calendula, Perennial Cornflower, Campion, Cornflowers



June:

Planting, maintaining, exploring.

As well as planting out all the veg we had sown during May, we played games such as 'Heroes and Villains' to get children thinking about friends and foes in the garden, and how the boundaries are sometimes blurred.

We also re-sowed crops that had failed or not done well e.g. Carrots and Beetroot.

Jill planted a meadow of tulips with the children from surplus bulbs from clients' gardens.

In Flower:

Foxgloves, Calendula, Cornflower, Campion, Ammi, Sweet Peas

Harvest:

First Mangetout and Lettuce



July:

Garden in full growth.

Activities were aimed towards weeding, watering, deadheading, netting and maintaining the garden. These were complimented by exploratory games in the Edible Playground.

The children really enjoyed completing surveys such as pollinating insect, flower and weed spotters. We played the blackbird lunch game, and animal seed dispersal game. During each session we took the time to harvest veg and flowers that were ready to taste together.

This was the month we had our opening. The Mayor came and we got lots of coverage in the Hampshire Chronicle.

In Flower: Cornflowers, Calendula, Snapdragon, Cosmos, Potatoes, Ammi, Sweet Peas, French Marigolds

Harvest: Mangetout, Lettuce, French and Runner Beans, Peas.

22nd July - Last session of summer term - Potato in a Bucket Big reveal!

Saw whole school 8 x 20 min sessions. We used luggage scales to weigh the harvest.

Three prizes:

Greatest number of Potatoes

Biggest total weight of Potatoes

Largest circumference of individual Potato.



August:

School Holidays.

A parent watering rota was set up to keep the polytunnel and outside beds alive through the holiday.

We came in fortnightly to weed, deadhead and harvest.

In Flower:

Sunflowers, Cosmos, Calendula, Borage

Harvest:

Tomatoes, Cucumbers, Runner beans, Lettuce, Aubergine fruit starting to set, Chillis, Chard

Sow autumn veg:

Spinach Medania/ Perpetual, Chervil, Pak Choi Green Boy, Cavalo Nero, Landcress, Mustard Wasabina, Bulb Fennel, Lambs Lettuce.

Harvest: Seed from Sweet Peas, Calendula, Cornflower, Nigella in brown envelopes.



September:

Garden sessions linked to the curriculum.

We welcomed ex-battery hens to the Edible Playground as well as the children returning from holiday.

Act out the life cycle of a plant so the children can understand how the growing cycle is a closed loop.

Seed - root - shoot - growing plant - flower - (pollination) - fruit - seed ---

Split into three groups and rotate:

Process seed from dried harvested pods by removing the husk and separating out the seeds, ready for sowing for next year e.g. Sweet peas, Calendula, Nigella, Cornflower, Coriander.

Opened fruits to identify and explore the seeds inside e.g. Runner Beans, Peas, Tomatoes,

Identify seed pods growing on plants at different stages of ripeness, and harvest at the correct time.

We also started to use the Edible Playground to link into curriculum topics.

We played the 'Animal Cafe' for Yr 1 and 2, looking at animal hibernation.

We played the Stone Age Hunter Game with Yr 3 and 4. Year R and Nursery used tweezers to pick out Sunflower seeds to improve dexterity muscles.

In Flower: Cosmos, Sunflowers

Harvest: Tomatoes, Cucumber, and Peppers.



October:

Focus of teaching shifts to decomposition and the growing year drawing to an end.

Played the decomposition game, linking to the carbon cycle and how gardeners can help with the climate crisis by not digging, leaving roots in the soil and composting their garden waste.

Spread compost and manure onto beds, after clearing spent crops (keeping roots in the soil). Chose a new source from 'Beaver Soil and Mulch' as Aspley had been too rich.

Planted out Spinach, Fennel, Landcress, Chervil, Pak choi, Lambs Lettuce.
Pot up Strawberry runners.

Sow Broad Bean 'Aquadulce Claudia'

Divide herbs

Planning to plant a Daffodil spiral, get the Yr 5/6 classes to calculate how many bulbs would be required by using ropes, tape measure and some simple maths.... the answer was 500 bulbs for a 4m diameter spiral 30cm bed width.

In Flower: Cosmos still going

Harvest: Green Tomatoes and Peppers from polytunnel to make chutney.



November:

Winter craft activities.

Leaf Art, inspired by Andy Goldsworthy to create an image from colourful collected Autumn materials: leaves, Pine cones, berries, sticks. Split the class into 4 groups. Laid a black bin liner on 4 separate picnic benches. Each group worked together for the whole 40 minute session. 2 children at a time could come to the center to collect a handful of materials to bring back to their group, before the next 2 children could go and choose. The images were created on the bin liner. At the end, each group nominated a spokesperson and the entire class viewed the work. Images were photographed, before materials were returned to the central store to be used again.

Twig stars, using colourful dog wood stems. Younger children could make triangles, and decorate with Ivy.

In Flower: Cosmos

Harvest: Radiccio



December:

Winter craft activities continued.

Planting of Daffodil spiral, parent volunteers dug the trench!

We had used one of the sessions to work out the amount of bulbs for this project. We involved the children and teachers in choosing a space. This took lots of time and the pros and cons were all discussed with great enthusiasm.

It was decided to plant this at the front of the school so it can be enjoyed by parents dropping children off.

It was the last main job before the end of term. Luckily our parents were fantastic in making the soil soft enough for the children to plant and all the pupils had a chance to help.

Bring on Spring!

In Flower: Cosmos

Harvest: Radiccio



January '22:

Planning for the growing year ahead.

The perfect time of year to reflect on what worked well, and plan the garden for the year ahead.

Years 1-4 were involved in planning which vegetables and flowers to grow. They had to think about which vegetables they liked to eat, and what flowers were going to be most beneficial for pollinating insects. They used seed catalogues, and other planners to work out when to sow and harvest the crops. They also calculated how much it would cost to order new seed.

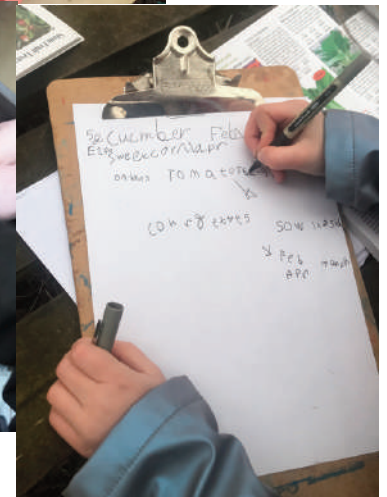
The teachers of Year 5-6 asked if we could launch an enterprise activity linked to the edible playground. There are three classes, each has been given their own bed to grow cut flowers to sell to parents and staff at the school. The money raised will go towards the Year 6 leavers activities. Each class has chosen four different plants to grow in each bed. They had seed catalogues and planners to work out timings and costs. The work will continue in the classroom with persuasive writing letters asking local garden centres to donate materials.

Amongst other transferrable skills, they will learn budgetting, marketing and event planning.

Reception – we make bird feeders from pine cones, fat and wild bird seed to suspend from the trees in the edible playground.

Year 1 – we made lavender bags from saved seed heads, cloth circles and ribbon.

Harvest: Red Mizuna, Pak Choi, Kale Taunton Dean, Parsley, Chard.



Activities List

Downloaded Resources

- Animal Café – Grow to School
- Blackbird Lunch Game - Trailblazer
- Compost decomposition Game – Learning Through Landscapes
- Heroes and Villains – Edible Playground by Trees for Cities
- Insect spotter survey - RHS
- Seed dispersal Raisin Game –Learning Through Landscapes
- Stone Age Hunter Game – Grow to School
- Summer flower spotter survey - RHS
- Weed spotter survey – RHS

Self-Created Resources

- Harvesting seed and processing to save for next year
- Plant life cycle
- Pricking out
- Rope spiral – calculate bulb quantity for daffodil spiral
- Seed sowing indoor and outdoor

Crafts

- Leaf art
- Twig stars
- Twig triangle wreaths



Crop List:

Outside beds

Veg/Herbs

Beetroot 'Detroit'
Beetroot 'Pablo'
Beetroot Chioggia
Broad Bean 'Witkiem Vroma'
Bronze Fennel
Carrot 'Nantes 5'
Chervil
Climbing French Bean 'Cobra'
Coriander
Courgette 'Orelia'
Courgette 'Romanesco'
Kale Taunton Dean (perennial)
Landcress
Lamb's Lettuce
Lettuce 'Black seeded simpson'
Lettuce 'Red Deer Tongue'
Lettuce 'Romana'
Mangetout 'Oregon Sugar Pod'
Mint
Mizuna Red
Mustard Wasabina

Pak Choi Green Boy
Parsley 'Gigante di Napoli'
Pea 'Hurst Greenshaft'
Pea 'Kelvedon Wonder'
Radicchio 'Rossa'
Runner Bean 'Scarlet Emperor'
Spinach 'Medania'
Spinach 'Perpetual/Beet'
Sweetcorn 'Golden Bantam'
Swiss Chard 'Bright Lights'
Winter Squash 'Crown Prince'

Flowers

Ammi 'Majus'
Borage
Calendula 'Touch of Red'
Cornflower 'Polka Dot Mix'
Cosmos 'Psyche White'
Gladioli '....'
Nasturtium...
Snapdragon 'Twilight Mix'
Sunflower 'Russian Giant'
Sweet pea '....'

Fruit

Apple 'Chivers Delight'
Apple 'Kid's Orange Red'
Apple 'Sunset'

Pear 'Beurre Hardy'
Pear 'Concorde'
Strawberries
Summer Raspberries

Polytunnel

Veg/herbs

Aubergine 'Moneymaker'
Basil 'Red Boza'
Basil 'Sweet Genovese'
Chilli peppers '....'
Cucumber 'Carmen'
Sweet peppers '....'
Tomato 'Apero'
Tomato 'Black Russian'
Tomato 'Feo de Rio'
Tomato 'Gardener's Delight'
Tomato 'Golden Sweet'
Tomato 'Green Zebra'
Tomato 'Honeycomb'
Tomato 'Moneymaker'

Flowers

French Marigold 'Dainty Marietta'
Tagetes 'Linnaeus'

Successes and Areas to Improve - Growing year 2022

Successes:

- ◆ Regular volunteers who knew the ropes, and brought enthusiasm and energy.
- ◆ Buy in from PTA – weekend and holiday watering during the summer.
- ◆ No dig method, using cardboard over weedy soil, adding soil and compost on top and growing straight in.
- ◆ Potato in a bucket competition. The children loved the anticipation, and big reveal!
- ◆ Sessions that involved a mixture of practical horticulture, craft, and other outdoor game/ survey/ activity.

Crops:

- ◆ Polytunnel veg, quantity and flavour: tomatoes, cucumbers, aubergines and sweet peppers.
- ◆ Herbs, especially lemon sorrel!
- ◆ Salad crops, lettuce (early in the summer)
- ◆ Runner and French beans, peas
- ◆ Flowers in pollinator border: calendula, cornflower, cosmos, snap dragon, sweet peas, sunflowers

To Improve:

- ◆ Hot chilli peppers weaponised by children – don't grow again.
- ◆ Apsley compost – too rich for vegetable growing (great for ornamentals in pollinator border)
- ◆ New Horizon peat free compost grew stunted seedlings – try Home-base peat free in 2022.
- ◆ Need closer adult supervision of children planting out seedlings into beds to prevent damage to fragile roots and stems and to provide sufficient firming in and watering. Many plants didn't thrive because this step was not successful.

Crops:

- ◆ Pumpkins, courgettes, sweet corn, broad beans – largely explained by Apsley compost
- ◆ Lettuce (bitter from mid-summer sowing – too hot)
- ◆ Beetroot, carrots (impatient children wanting a look, the seedlings never had a chance to get going before being pulled up!)
- ◆ Swiss chard (pulled up prematurely – lessons learnt)
- ◆ Luffa – didn't get going early enough in the polytunnel

Aspirations for 2022

- ◆ Incorporate invertebrate and bird surveys throughout each term to start building a data set.
- ◆ Involve children in the planning of the garden more – use winter to do this.
- ◆ Grow flowers for cutting and selling to raise funds and teach business skills.
- ◆ Sessions more closely linked to curriculum topics.
- ◆ Build a more permanent and solid frame for climbers in the polytunnel.

**Hampshire Gardens Trust
Jermyns House
Jermyns Lane
Ampfield
Romsey
SO51 0QA**

**Tel: 01794 367752
email: admin@hgt.org.uk
Website: www.hgt.org.uk**