



Society Promoting Environmental Conservation

SPEC'S School Garden Start-up Guide

Whether you are a parent, teacher or administrator interested in getting a food garden project started at your school, this guide should provide you with the basic information you need to get the ball rolling.

Background

School Garden Elements

A Garden Committee – students, teachers, administrators, parents and staff

A set of goals – why you are undertaking this project

A garden site plan – including easy access to water, orientation, safety

Physical materials – raised beds/containers, soil, seeds, tools



Gathering the team together

The idea of a school garden might originate with one person, but it's far from a one person job. Many gardens have been built in the past by a lone gardener and have had a positive impact on the school and community. These gardens are, however, unlikely to be long-term successes.

The good news is that this can be avoided. Many people involved with your school would likely be keen to see a school garden become a long-term success.

Approach your school's principal with your ideas, attend PAC meetings and staff meetings to establish a team of people from all of your school's interest groups. Start holding informal meetings to establish your goals, create a vision and pool and find new resources to see your project take flight. You'll likely find many community groups and organizations with valuable resources to help you along your way. We provide a list of those resources for Vancouver schools below.



Determine Responsibilities

Schools we have worked with have taken such steps as establishing a Garden Committee Chair position on their PAC, starting a Garden Representative position on the School Council and putting a parent in charge of coordinating summer maintenance. Who will care for and water your garden project in the summer months is an essential question that needs to be addressed early on.

Important jobs may include site planning and construction, fundraising, watering, garden maintenance and outreach. Most importantly, a plan for yearly watering and planting will need to be established. At minimum a binder should be established to keep track of what is being done to maintain the garden year to year.

SPEC specifically works to ensure long-term success of the school gardens we help establish by engaging teachers and students in garden creation and care in its first year with continued support in the second. We have found that when at least two teachers at each school are a part of a gardening unit they discover the benefits and become empowered to continue garden activities with their classes in the future. Teachers and students become natural experts and stewards for the project they have come to know intimately. The following year they might help another teacher include some gardening activities in their classroom. Slowly, the entire school should learn how to be a part of the project and make it a central part of the school community.

Establishing your goals

At least one meeting should be dedicated to formalizing what your current and future goals for the garden entail. You might want to incorporate planting and gardening activities in the school's classrooms, provide hands-on learning related to plant growth and care, involve the community and parents in a shared project, help protect biodiversity, learn more about where our food comes from, or set the stage for a full-scale urban farm.

It is important to tackle a garden in stages. Start small with a few raised beds or boxes, establish a maintenance system that works, and then expand from there. A year down the road you might want to add fruit trees or berry bushes, a mason bee box or the like.



Planning your physical garden

Finding the right spot

Finding a spot that is underused is important as you don't want to encroach on student play areas or have your garden crops constantly bombarded by flying soccer balls. Monitor your planned site over several days during lunch and recess to observe play patterns. The garden should be visible from the school to decrease your chances of vandalism and not too close to roads or parking lots to reduce noise.

Choosing orientation

Gardens that are south-facing receive the most sunlight in the Northern Hemisphere so are best especially if you want to grow tomatoes, squash, and other sun-loving plants. Six hours of direct sunlight



are needed from April to September to grow many crops successfully. To increase sunlight especially over the winter months situate the garden away from buildings or other large structures that will create excess shade.

H2O SOS

Watering is often one of the biggest jobs in the garden. For this reason you'll want to choose an area that has easy access to an outdoor tap. The further away your tap is, the longer, heavier and more cumbersome your hose will need to be. Ideally taps should be within 100 feet (33 meters) of the garden. Especially if you are able to construct your garden on soil or turf consider installing a simple drip irrigation system.

Digging beds or building beds

Although digging up the soil might seem like a simple solution, some school districts may require expensive soil tests before allowing a school to grow food in-ground. This is one reason why we have opted to build raised beds or planters in the past. Boxes also reduce the chance of a child, dog, or other explorer entering your garden, compacting the soil, or using it for an unintended purpose.



Avoid concrete where possible

It is easiest to build gardens on ground or turf rather than concrete, as concrete necessitates building planter boxes versus raised beds (raised beds do not include bottoms), which increases costs.

Consider drainage

As foot traffic around your beds increases, what is now green grass might become mud. Add this to the fact that school grounds staff likely won't like the added work of trimming grass close to your beds and you might opt to surround the beds with fine gravel or bark mulch.

Talk to Grounds Crew

You need to run your plan by the school's maintenance team and also have a visit from your School Board's Chief Groundskeeper. Make sure your project isn't a last minute surprise! In our experience, grounds personnel and funders will want to see a site plan – a drawing of your garden plan as it sits on school property, so start this early on.

Gathering materials

Here is a list of minimum materials you will most likely need in your first year.

Wood (we recommend untreated cedar timbers at least 4"x4") for your garden beds

Wood-working tools (we partner with high school wood-working teachers)

High quality organic soil (some conventional soil contains coal dust to make it look dark and rich)

High quality non-kinking hoses (length depending on the distance from tap to garden)



A spray nozzle (high quality, as these will be heavily used)
Seeds and/or seedlings (we recommend organic and heirloom varieties where possible)
A shovel or two
A few kid-friendly trowels
Kid-friendly (small) watering cans
A garden fork
Composter (ready-made composters can be purchased from the City of Vancouver or consider building your own [wooden 3-bin composter](#))

Here is a list of additional materials that you may be able find creative solutions for.

Seed trays with domes
Seed starting mix
Soil testing kit
Organic fertilizer
Plant labels
String (for delineating rows of crops)
Gardening gloves
Wheel barrow
Wingdigger for aerating compost (in Vancouver these come with your compost bin if purchased from the City)

*note that you'll need somewhere to store these items, i.e. a lockable area with a shareable key

Funding

Of course these things will require some upfront funds. A garden *can* be started for next to nothing, but in order to build lasting beds, you'll need roughly \$100 per 3 by 10 foot garden bed for the wood alone.

This is a great opportunity to get school classes involved in some creative fundraising projects. Plant sales, bake sales, bottle drives and other special fundraisers should be started early.

Other sources of potential funding include: your school's Parental Advisory Committee, private donors, [Evergreen's School Grounds Greening Grants](#) and [TD Friends of the Environment Fund](#).

Starting Your Garden

Once you have your garden rolling, you need to start thinking like a gardener. You will need to do some research but here is a rough timeline of tasks. (All the below information is for Vancouver, BC. Other areas will differ.) More information on specific crops to plant and when is contained in our **Planting Schedule**.

September

- Gather your team and plant the figurative seed

photo: Kevin Tan



October, November

- Fundraise, plan, enlist additional support and determine roles and responsibilities
- *In the classroom:* elicit fundraising ideas and support in the classroom
- Draft a garden plan and check with all parties affected
- Install your compost and start collecting food scraps, green and brown material to make lovely fertilizer for your garden, come spring. (*note – compost boxes should be lockable to keep dog waste out, they should also be screwed or otherwise fixed into the ground and pest proof). In Vancouver, a compost plan should be submitted to the School Board for approval).

December

- Finalize your garden plan and get approval from groundspeople
- Apply for additional funding
- *In the classroom:* engage students in deciding what and where to plant

January

- Look through seed catalogues, and decide on seed varieties to order/ purchase
- Order your seeds (or seek seed donations from avid gardeners)
- Gather materials including tools, wood, soil and seedling trays

February

- Build your beds, order soil, set-up and fill (*note – in Vancouver, the building of beds needs to either be an educational activity involving students or it needs to be done by School Board personnel)
- *In the classroom:* begin exploring the basics of plant needs, soil, food production and organic gardening

March

- Once the threat of frost has passed, seed your cold hardy outdoor crops
- *In the classroom:* start indoor seedlings of warm weather crops such as cucumbers and tomatoes
- Separate out some compost to fertilize your new crops (not too much)
- *In the classroom:* older grades could plan and start a garden research project

April

- *In the classroom:* engage students in growing, pollinating, discussing nutrition, art and other garden activities and studies
- Direct seed more crops outdoors

May

- *In the classroom:* think more deeply about watering, and water-wise gardening techniques
- Explore garden life, pests and organic management techniques, harvest and taste some cold crops
- *In the classroom:* Start planning summer and winter plantings and your year end Harvest Party
- Plant out seedlings started indoors (warm weather crops)



June

- Plant new crops as you continue to harvest what is ready
- Confirm a summer watering and maintenance schedule
- Collect more compost to fertilize your garden
- Harvest your crops and share with as many as possible

July & August

- Consider holding a summer maintenance workshop day
- Have your Summer Coordinator visit the garden from time to time to check on it and assist with any problems
- Plant fall crops

September

- *In the classroom:* welcome new students to the garden
- Hold a garden meeting to share feedback, successes and areas for improvement
- Establish responsibilities for the new school year
- *In the classroom:* harvest late crops and transplant out cold hardy plants for the winter; consider growing plants in the classroom.
- Mulch

October

- Continue the process or repeat should you want to expand

Supply Sources

Soil:

[West Creek Farms](#)

Seeds:

[West Coast Seeds](#)

[Saltspring Seeds](#)

[The Environmental Youth Alliance](#)



Teaching Resources

SPEC is currently compiling our more detailed lesson plans and activity ideas to share with you.

In the meantime, there are many **lesson collections** and other resources available to you, including:

Evergreen Foundation's "Patterns Through the Seasons" and "Patterns, Plants & Playgrounds", both downloadable at www.evergreen.ca

Teacher resources by the [Environmental Youth Alliance](#)



"Turning the Earth: A month by month guide to your school garden" [available from the authors](#) for \$15

BC Agriculture in the Classroom's resources available at www.aitc.ca/bc/

"School Year Gardens: A Toolkit for High Schools to Grow Food from Sept-June" from the **Fruit Tree Sharing Project**, Richmond, BC at www.fruittreeproject.ca

Life Cycle Project's "Where in the World...Does Your Food Come From?" A series of lessons on the Global Food System & Local Alternatives for the Elementary School Level at www.lifecyclesproject.ca

"Get Growing: Activities for Food and Garden Learning". A Teacher Resource for Elementary and Middle Grades. [Intergenerational Landed Learning on the Farm for the Environment project at UBC.](#)

