EVERGREEN

ALL HANDS IN THE DIRT

A Guide to Designing and Greening School Grounds in a Changing Climate

August 2025

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Introduction

All Hands in the Dirt reflects almost 30 years of school ground greening experience by Evergreen in partnership with schools, parents and funders who have made this work possible. The emphasis in this resource guide is truly on **"all hands"** – meaning everyone has something of value to contribute and should be included in the project. This means school staff, teachers, administrators and community members. Most importantly, children and youth use the school grounds more than any other group of people and must be listened to and observed in the setting for any new project design to have meaningful impact.

If you believe it takes a village to raise a child, you could say it takes a whole community to green a school yard!

Our vision of inclusive and climate-resilient school grounds across Canada is grounded in the lessons and relationships Evergreen has built through transforming over 6,000 Canadian schools, impacting over one million students thus far. Combined with lessons learned from around the country, this guide promotes a participatory design process to school ground greening that actively engages the whole school community in the process.

This guide is **intended for teachers, administrators, parents, school boards and their local communities interested in making school grounds climate-ready, child and youth-centred and accessible.** Project leaders should adapt this guide to suit their needs, appropriate grade levels, school population and cultural makeup of the school community. This guide answers questions such as:

- What are the most important things to consider in this kind of project?
- How have other schools done this work?
- How do we meaningfully involve students?

School grounds can connect students with their local habitats and ecosystems. By using nature and ecology as a foundation, schools can foster creativity, learn about and practice sustainability, and help the whole school community understand what is involved in climate resilient design.

About this resource

The original version of *All Hands in the Dirt* was created in 2006 with support from the Ontario Ministry of Natural Resources. We acknowledge the spirit, creativity, and determination of everyone who made the original guide possible, particularly Cam Collyer and Randee Holmes.

We're re-releasing this resource because its core message—greening school grounds through community collaboration and child- and ecology-centered design—remains as vital today as it was 20 years ago. With growing awareness of climate change and the need for resilience, the importance of outdoor spaces for learning, play, and environmental connection has only increased. While tools and context have evolved, the need to bring school communities together around this work hasn't. This updated edition reflects today's challenges while staying true to the original vision.

Bringing this resource up to date has been made possible with support from the Peter Gilgan Foundation, with contributions from Heidi Campbell, Cheryl Gudz, and Emma Vredenburg of Evergreen.

Phase 1

Getting Your Project Started

Restoring your school grounds is about restoring a spirit of place. School grounds are special places for play and for learning, and nature has an important role in both. For children, school grounds are the setting where they develop lifelong social skills and receive subtle messages about what matters in their social and physical environment.

Greening school grounds requires learning how to read the landscape. Observing the stories in the landscape guides the restoration of your site. The inspiration for improving school grounds comes from people of varying ages, personalities, skills and experience. It is their collective vision of what the site can become that will transform your school grounds from the ordinary to the extraordinary.

Keep in Mind!

ecological design: develop a design that is responsive to the landscape as well as to all its inhabitants, human and non-human.

group process: move the project along in a way that involves and respects the input of everyone who shows an interest in the project.

The 5 Design Principles

These five design principles will help you to translate the values of ecological design and group process into action. Use them as the foundation of your participatory design process. Check out our new infographic to explain the design principles for successful school ground greening!

Children at the centre

Healthy natural systems

Integrated landscape and program design

Co-creation

A place for everyone

The Importance of Partnerships

Reaching out beyond the school community for everything from fundraising to sourcing materials to seeking advice can lead to beneficial partnerships. Some examples of partnerships that could support a school ground greening project include:

- Summer day camps and daycare programs can maintain and enhance school ground projects over the summer months.
- University and community colleges can provide student expertise to support the design and implementation of projects.
- High school art departments can develop sculptures, mosaics and murals to enhance school projects.
- Municipal government departments can provide mulch, logs and even compost demonstration sites.
- Local horticultural, gardening and naturalist groups can provide schools with ongoing expertise.

Consensus Decision Making

Between starting up and breaking ground, there will be many decisions to make, so it's important to agree on some ground rules. Just as with a participatory approach, there is a way to make decisions that respects different points of view -- through consensus. Unlike taking a majority vote, making decisions by consensus requires participants to try to reach agreement before a decision is finalized. Deciding by consensus can be done by any group -- from senior managers to school-aged children.

The Basics

Before implementing consensus decision making, everyone must agree to the process. Consider working in small groups to ensure everyone is heard. As with the participatory approach, deciding by consensus takes time and commitment to the process.

- Choose a facilitator. Their task is to remain impartial, keep the discussion focused and ensure that all members have an opportunity to express their views.
- Explain that when a participant puts forward an issue for discussion, each member of the group is allowed a chance to voice approval or concern.
- Following the discussion, the facilitator asks if there are any unresolved issues or concerns.
- If there are not and everyone agrees, the decision is made. If consensus is not achieved, however, the discussion continues. Each member of the group has a chance to voice his or her opinion without interruption.
- Following the round, the facilitator may summarize the views that have been expressed. Someone suggests a decision, again seeking the agreement of other members.
- The proposed decision is discussed and adapted until everyone agrees with it or at least can live with it.

Remember, some decisions will be made quickly and easily while others will be more difficult to reach. In some cases, a previously agreed upon "backup process," such as taking a break to think things through or breaking into small discussion groups, may be necessary.

Given that any project requires a multitude of decisions, it makes sense to delegate decision-making powers to smaller groups. Reserve large group decision making for key decisions. This will help focus all meetings on pursuing action items and will keep participants more actively involved.

Why Use Consensus Decision Making?

- It creates equality among members of the group. Soft-spoken members can have the opportunity to express their views just as much as more outspoken members.
- It increases opportunities for participants to appreciate different perspectives.
- It challenges participants to produce creative solutions and identify alternative strategies rather than decide by majority vote.
- It results in decisions that are more likely to be effective over the long term since they will reflect each participant's perspective.

Establish Your Vision

Before approaching others, have a clear understanding of what you want to achieve and why. List out key benefits to the school community such as increased connection to nature and improved wellbeing. The benefits derived from transforming school grounds cross many realms: educational, environmental, social, behavioural and economic so being able to communicate a multitude of benefits will go a long way.

Begin to articulate goals for your school grounds, recognizing that they will evolve and grow as more people become involved.

Goals may include:

- to create a play space for students to connect with nature in different ways
- to increase tactile, hands-on learning
- to restore and nurture biodiversity by creating habitats and planting native species
- to provide better shade and seating for students
- to establish native plant gardens
- to help students understand and appreciate the process of growing plants.

Communicate your vision to school staff and parents

It can take one person to spark a project, but many hands to make it come to life. Gather support from some key players in the school community. The approach is different if you are a parent leading the project or a staff member at the school.

*Are you a parent initiating the school ground greening project?

As you begin to spread the word, talk to some of the key players, namely the principal, maintenance staff and some teachers. Let them in on the idea and seek their input. Without their support and involvement, the project is unlikely to succeed.

Talk to the Principal, Administrators and Custodial Staff

A principal who is excited by, and supportive of, the project can do a lot to make things happen by approving teachers' time spent on the effort, seeking financial support and spreading the word in the community. The superintendent and other school board members can help to determine board policies and limitations to the project. The grounds and custodial staff are the caretakers of the school grounds, so ensure that they are aware of the proposed changes and get their input as well.

Invite these key players to a staff meeting presentation early in the process. The importance of involving these people **early in the process** cannot be stressed enough. Be well prepared and demonstrate that you have done some initial research. Bring lots of pictures and examples of other school ground naturalization projects. Have lunchroom and office staff provide input through surveys for those unable to attend meetings. Finally, keep everyone informed of your progress.

Talk to Teachers

Together with a few parents and the principal, teachers can be the leading force in getting the project off the ground. Find teachers who are supportive and invite them to help communicate the idea to other teachers. Teachers will more likely support the effort if it is inspiring, easy for them to participate in, and connected to the curriculum. Give teachers tools to integrate the project idea into their classrooms (e.g. handouts, lists of activities, templates) to help reduce additional work. Be mindful of teachers' limited time; consider a lunch meeting or a short presentation during a staff meeting.

Involve Students

Once you have the support of the principal and a few teachers, it's time to get the students involved. Decide on a process to obtain input from all grade levels. You'll need the help of a handful of supportive teachers to guide the students' participation and make the connections to the curriculum.

*Are you a teacher or staff member initiating the school ground greening project?

Ideas for Teachers: Harnessing Students' Energy

- Use a school-wide assembly to build momentum.
- Show videos for discussion in class.
- After sharing the concept with the students, give them an opportunity to express their reactions. Invite them to write, draw, sculpt or verbalize their ideas.
- Approach the student environmental club.
- Organize teams of students to go to classrooms and give presentations, leaving questionnaires for feedback.
- Create leadership opportunities for students such as classroom representative or a portfolio in the student government as minister of the environment.

Many successful school ground transformation projects are largely driven by a committed group of parents motivated to create a healthier learning environment for their children. Informing parents of the project and inviting them to participate will not only help to address any concerns they may have but will also go a long way toward engaging their support and skillsets. Note: It's best to extend the invitation to participate to all parents only after the principal and a core group of teachers have committed.

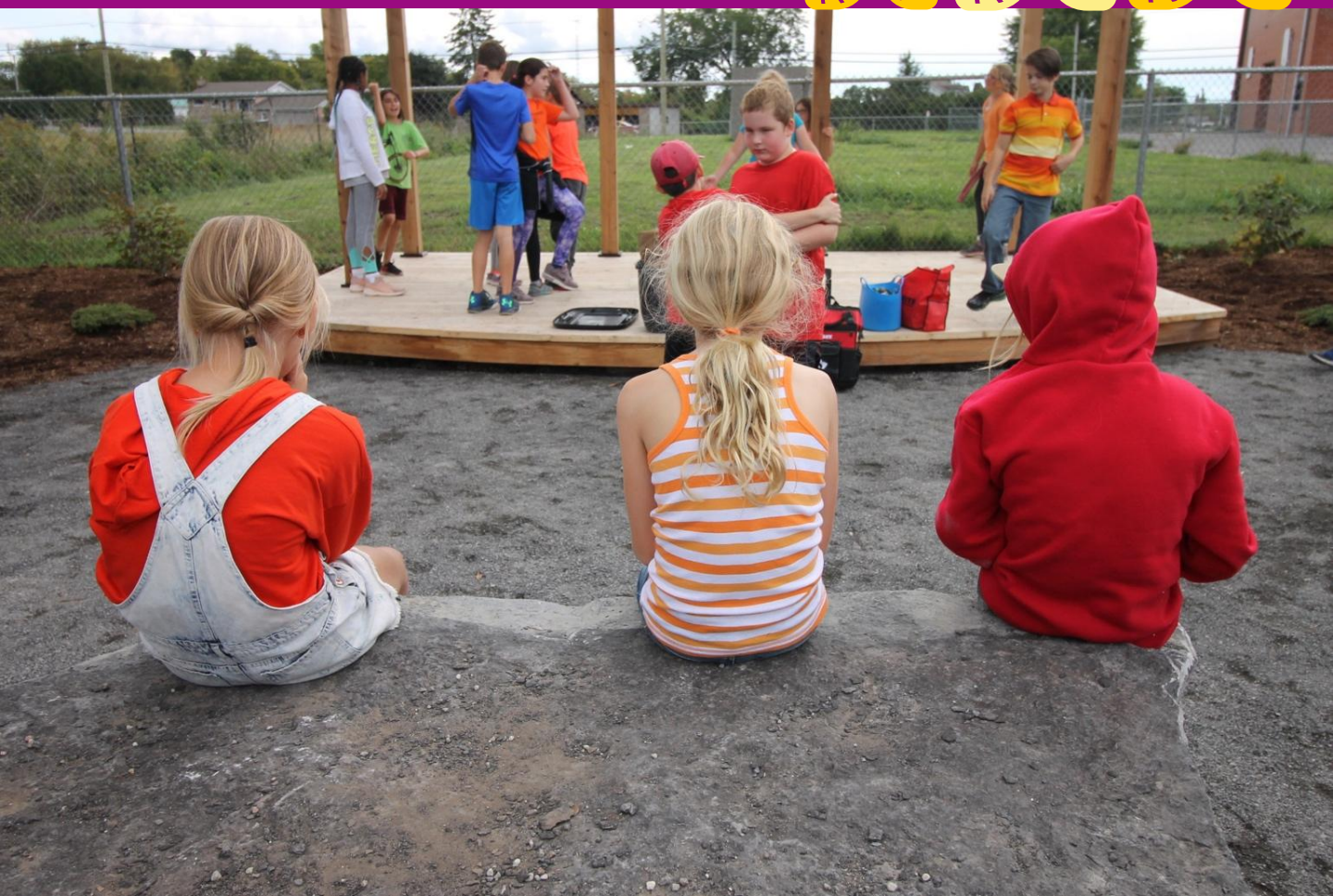
Finally, one of the golden rules of beginning a new school ground greening project is start small and do it well. Most schools start with a very small budget, but volunteer support and proper planning can help keep costs low. It often takes a year of organizing to ensure a high degree of involvement and to create a sound design plan.

Building Parent Awareness and Interest

- ✓ Introduce the project by sending a letter home with students inviting parents to attend a meeting.
- ✓ Schedule meetings in the evenings to allow more parents to attend and offer childcare.
- ✓ Whenever possible, translate materials into appropriate languages.
- ✓ Talk about the importance of green space for the students. Share concerns about the desire to improve the wellbeing, comfort and happiness of their children.

Phase 2

Building Your Team



Once you've done some initial outreach to some of the key players in your school community, it's time to plan your first meeting and build the steering committee.

Conducting a Productive Initial Meeting

Before the meeting:

☐ Agree on roles (e.g. facilitator, timekeeper, note taker).

☐ Prepare ground rules and an agenda to distribute prior to the meeting.

☐ Prepare your presentation and try to anticipate questions or concerns.

During the meeting:

☐ Share the ground rules and get group agreement.

☐ Set time limits for each agenda item to help maintain focus but stay flexible—don't prioritize the schedule over meaningful participation. Adapt to the group's needs as they arise.

☐ Record action steps, including the time frame of the task and the person responsible for completing it.

☐ If you take minutes, send them out as soon as possible afterward, outlining any decisions made and tasks and duties agreed upon and deadlines that apply.

☐ Record the initial impressions with notetaking, which will help kick-start the work of the steering committee.

6 Ways to Help Captivate Your Audience

1. Present a short video or slide presentation that shows naturalized school grounds and includes testimonials from the participants (Watch Evergreen's *Why Canada Needs Climate-Ready Schools* and the National Film Board's *A Crack in the Pavement* series).

2. Show before and after pictures of other school ground greening projects. See our companion resource *Designing Climate-Ready School Grounds: A Lookbook* for design examples.

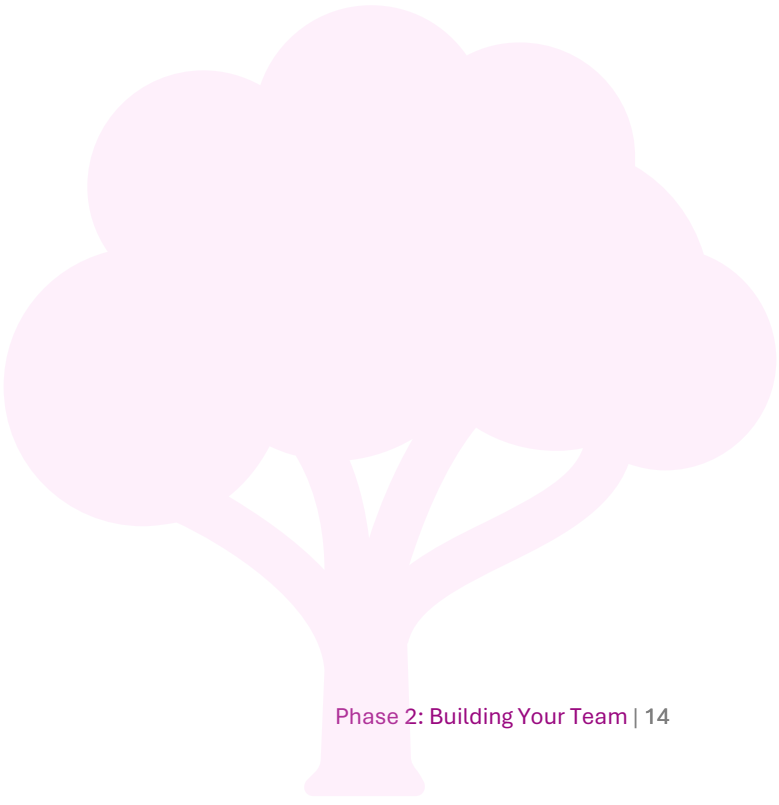
3. Hand out a summary of the benefits of the undertaking with a list of design elements that the project might include.

4. Circulate other related resource materials such as guidebooks and curriculum activity books.

5. Invite guest speakers to provide training and advice.

6. Arrange an outing to visit other school ground initiatives.

This meeting is a good time to **inventory the skills and interests of your group**. Use the form on the next page (Template 1).



Template 1: Inventory of the Skills and Interests of Your Group

1. Name: _____

2. I am…

a student a parent a school board member a teacher
a neighbour a community member the principal
an administrator maintenance staff

3. Do you think our school would benefit from this type of project? If yes, how?

_____
_____

4. What are some of your ideas for what we could include?

_____
_____

5. Please list any questions or concerns you may have about this project.

_____
_____

6. Would you be willing to help with any parts of the project? What might you be interested in doing? Circle your selections from the lists below.

PLANNING

- Mapping and modeling
- Designing site plans
- Conducting surveys
- Gathering and analyzing results
- Engaging younger students
- Engaging the community
- Supporting a committee
- Assisting with site inventory
- Organizing a launch event

DOCUMENTATION & RESEARCH

- Documenting the project (photos, videos, journals)
- Researching native plants, wildlife habitats, and site history
- Connecting with other schools for insights
- Tracking planting dates and locations
- Investigating safety considerations
- Creating a site field guide

FUNDRAISING

- Fundraising and proposal writing
- Organizing events and donation drives
- Engaging local groups, businesses, and neighbours
- Creating stewardship programs (e.g., adopt-a-tree)
- Managing finances and bookkeeping

PUBLICITY

- Creating newsletters, articles, and press releases
- Designing and installing signs, posters, and murals
- Sharing information with neighbours and the wider community

PLANTING & IMPLEMENTATION

- Laying bricks & creating pathways
- Creating a pond
- Gardening/planting trees
- Building bird and toad houses
- Making shade structures
- Building seating areas
- Painting games on asphalt

MAINTENANCE

- Watering during the summer months
- Gardening (i.e. weeding, edging, mulching, etc.)
- Creating a year-round maintenance schedule
- Overseeing safety inspections for build structures
- Harvesting & collecting seeds
- Organizing tools

7. Please list other ways that you might be able to help. Thank you!

_____

_____

_____

Communicate Widely

Continue to get the word out through all stages of your project. The more informed people are about what you're doing, the better your chances of attracting more volunteers, gathering donated items and cash support, and gathering more input into the design of the site. It will also help to address potential concerns the community may have about the project and to incorporate these as early as possible into the design process.

The golden rule of effective communication is understanding your audience and their needs. A presentation to a group of schoolchildren should be quite different from a presentation to members of the maintenance department — even if the content is the same. Describe the project in a way your audience can relate to.

Communication Ideas to Try

- Produce a newsletter to be delivered by hand or electronically by email.
- Create colourful posters and flyers to post in high-traffic areas (community centres, libraries, recreation and health centres, grocery and retail stores).
- Develop a website for your project, or partner with an environmental or community group and post the information on their site or in their newsletter.
- Write articles or even a regular column for school and community newspapers.
- Submit public service announcements about project events to the community calendar of daily newspapers and radio stations (this is usually free of charge).
- Develop a free-standing display for school and public functions, such as parent-teacher interview night, Earth Day or other community events.
- Keep your board of education and the superintendent in the loop — send copies of meeting announcements, press coverage and so on to your board's public relations department.
- Provide student-guided tours of your project to other schools.

Developing your Project Team

Once you've been given the green light to proceed, it's time to get down to some specifics. Who is going to be involved in the project, what do you want to accomplish and how is it going to get done?

Refer to the information you gathered from Template 1. For the areas of planning, fundraising, planting, maintenance and publicity, make a list of all the people who expressed an interest in helping. Using the chart below, note the type of group that person comes from.

For the moment, set aside the responses of the students, as they will be involved in all areas of the project.

Group interest in Specific Project Areas					
Group Name	Planning	Fundraising	Planting	Maintenance	Publicity
Teachers					
Administrators					
Principal					
Board Members					
Maintenance Staff					
Parents					
Community Members					
Total					

Form a core team committed to supporting the project from start to finish, providing continuity throughout. Use the task area lists to identify individuals—such as teachers, parents, or community members—who've expressed interest across multiple areas. These people make strong candidates for a steering committee, taking on long-term roles and representing their respective groups.

Once you have a core team committed to the project, organize the first official meeting of this group. Brainstorm about the potential stages of the project, some of the tasks that will need to be accomplished and potential subcommittees or work groups. The stages of a typical project usually correspond to those outlined in this guide: forming committees, choosing and surveying the site, designing the project, making a project plan, gathering funds, planting, publicizing your efforts and maintaining and updating the project.

Keep in mind that these stages are will sometimes overlap, occur simultaneously or even happen out of order. Each group's process is unique; the information provided here is meant to serve only as a guide for how to proceed.

Forming Committees and Defining Roles

Engage the broader community to participate and aim for inclusivity. To keep things manageable, form subcommittees or working groups. Even if a small core group handles most of the work—as is often the case—divide tasks clearly to focus efforts and assign responsibility. Group tasks in the following manner to organize your volunteers effectively.

Site Planning

Purpose: to propose creative solutions to address design and environmental issues related to the site.

Tasks:
- Conduct a site inventory
- Note site challenges and opportunities
- Determine design intent
- Suggest a layout of design elements.

Documentation

Purpose: to document the entire process through the various stages of implementation.

Tasks:
- Document the findings of each of the task areas
- Take before and after photos and record videos
- Encourage students to use creative expressions and artwork
- Establish a project journal to record the project's evolution
- Collect written materials related to the project (for example, news clippings, meeting agendas, letters of support).

Planting Design

Purpose: to select appropriate plants and design a layout that is ecologically and socially responsive to the area.

Tasks:
- Research appropriate native plant species and their physical needs
- Research proper maintenance procedures for chosen species and create a maintenance program
- Research habitat needs of wildlife species native to the area
- Determine which wildlife species will be encouraged
- Decide if any structures need to be built (bird and toad houses, bat boxes)
- Establish a formal planting plan and layout.

Technical Requirements

Purpose: to determine technical requirements of implementing the plan.

Tasks:
- Research and incorporate safety considerations into design and planting
- Research, source and cost construction materials
- Arrange utility checks
- Propose and create a construction schedule
- Organize work parties and planting days
- Supervise deliveries of supplies and construction activities.

Publicity and Fundraising

Purpose: to raise cash and donated materials and promote the project to gain support and recognition for the work being done.

Tasks:

- Research potential financial support
- Prepare fundraising proposals
- Manage the project's budget and account
- Solicit donations of supplies, materials and tools
- Organize fundraising events
- Prepare reports for funders
- Prepare and submit press releases and articles to local media
- Organize information evenings
- Create displays to share information with the community and other schools.

Once the core group has outlined the task areas needed, the next step is to assign people to them. Contact those who expressed interest and invite them to a general meeting. Remember that the volunteers will decide on the specifics of what to do and how to do it. Try to end up with at least one core group member and a representative from each stakeholder group, including students, assigned to each task area.

Establishing a Statement of Purpose

Focus the group on the common purpose for undertaking the project. Encourage the group to come up with a statement of purpose for its efforts. What is the main goal of this project? What are we trying to accomplish? For whom are we doing this? Ask yourselves these questions, then formulate a sentence or two that can be used to keep the group focused on the purpose of the project and to communicate that message to others when enlisting their support. If you ever get stalled when deciding on options for your school ground greening project, refer to the statement for guidance.

Once you have established a focus for your efforts, you can set some broad goals. These might include increasing the comfort and safety of students through sun or wind shelter, diversifying play activities and fostering the school identity. Get a feel for what you'd like to accomplish and don't limit your options. Leave the details for later. These goals are only meant to provide a direction for your efforts, to get you started on your way and to help your group begin to focus.

Working Well with Volunteers

Most school ground greening projects are volunteer driven. Here are some tips on working successfully with volunteers. Note: they should be used to supplement or aid in the efforts of students and teachers, not replace them.

Where to Find Volunteers

- ☐ Contact local groups in your community. Try gardening clubs, naturalist organizations, outdoors clubs and senior citizens' organizations.
- ☐ Contact high schools, colleges and universities in your area. Students may be looking for opportunities to do community work or gain work experience.

How to Engage Volunteers

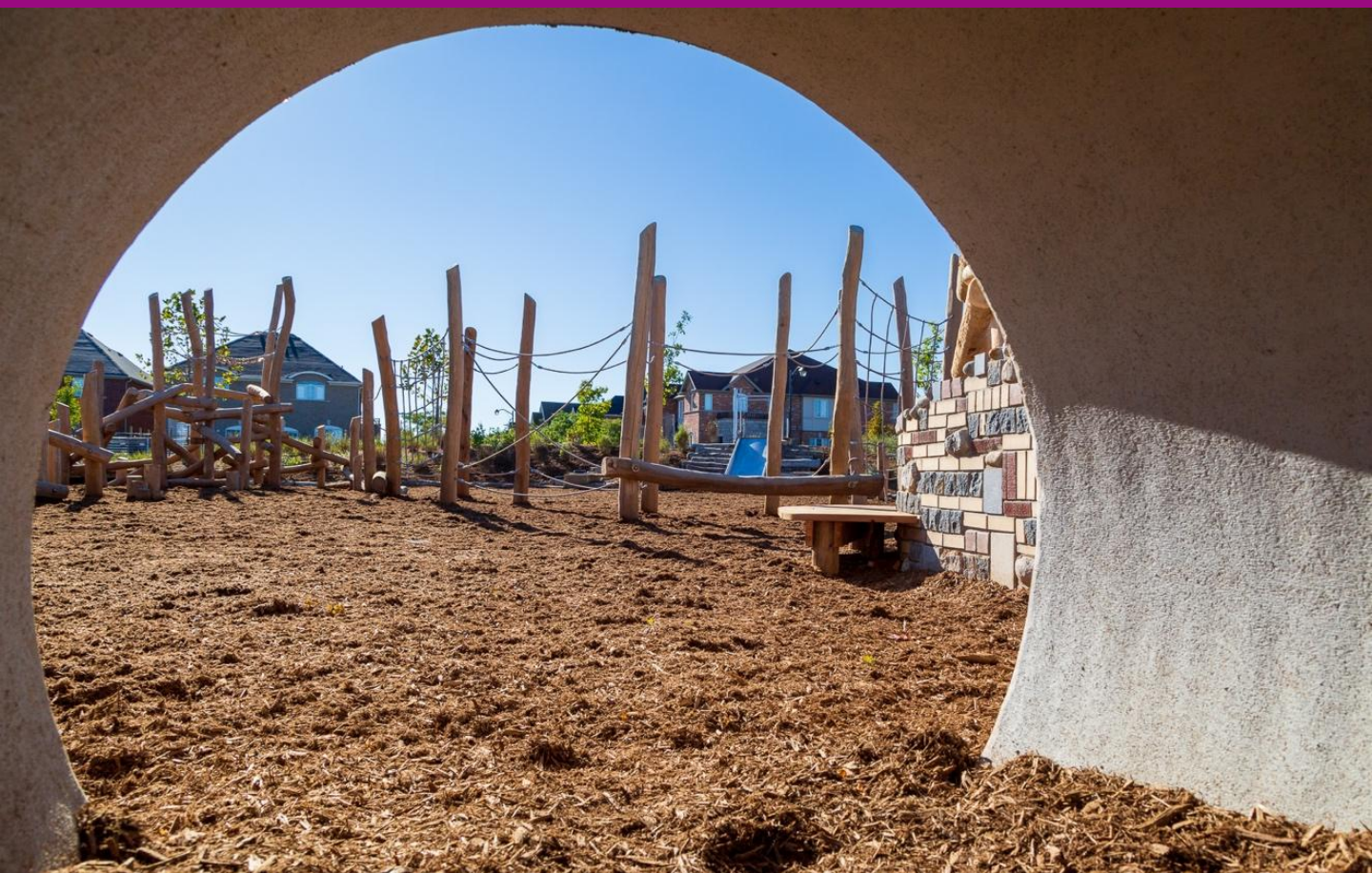
- ☐ Provide volunteers with a list of available tasks and then allow them to choose. Always seek their consent before assigning a duty or offering their assistance to someone.
- ☐ People are more likely to become involved in a task that is well defined. Be clear and specific.
- ☐ Offer an orientation to volunteers so that they can see how they fit into the bigger picture and can meet other volunteers and feel part of a team. This is also an opportunity to educate volunteers about both the goals of your project and the basic skills needed to do the work.

How to Recognize Efforts

- ☐ Integrate volunteer appreciation into major events of your project. Have students write letters of appreciation for volunteers' time and energy. Ask a teacher to have their class write official thank-you letters.
- ☐ Organize recognition events.
- ☐ Publish all the volunteers' names in the school newsletter.

Phase 3

Gathering Information & Input



Before you can begin planning the details of your school ground greening project, you'll need to learn a few things about the space you have available. Gather information about the physical features of the school grounds such as size, directional orientation, location of built and natural features. Find out how various people currently use the space and what they'd like to be able to do there. Research what people like and don't like about the space. Use our sample letters, questionnaires and surveys provided in this section to reach out to people.

The Creative Potential of Mapping

Mapping the physical features, uses and perspectives of the school grounds is a valuable way to capture and communicate information. Visual representations make it easy to share ideas with students of all ages and offer a chance to be creative – using collages, bubble diagrams, colourful markers, popsicle sticks and more! Each level of information can have its own sheet of tracing paper overlapped over the map.

Make a Base Map

To start, you'll need a base map of the school drawn to scale. To find a ready-made map of the site, ask the school board office, local municipal office in charge of planning or land registry, grounds maintenance contractor or library. If you can't find an existing map, make mapping a student activity. Help students make a map of the school grounds, including taking measurements and recording information. Use graph paper and record the scale used on the map. A scale of 1:500 is recommended so that the map can easily be copied onto letter or legal-size paper.

Indicate the measurement of the site perimeter and the location of all buildings, all paved or gravelled areas and all grassy areas. Record the area of each element in square metres. Also indicate the location of:

- main entrances and exits to the site
- exterior water outlets
- main entrances and exits to the buildings
- fences
- sports fixtures (soccer posts, baseball diamonds)
- areas designated for parking
- property lines shared with neighbours
- adjacent parklands.

Have the students mark all these areas on the base map. Next, using a compass, determine the orientation of the site and mark it on the map. Once you have an accurate base map, make photocopies so that you can record other kinds of information you will be collecting about the site. Store the original so that you always have a clean copy for later reproductions. If there is a significant change made to your school grounds, you'll need to update the original base map.

Mapping the Physical Features of the Site

Now you can start adding details to your base map. Use one copy to record the physical features of the site — both natural and built. Check your site for the following natural features at different times of the day and, if possible, different times of the year. Ask the students to make up symbols for these features on the map:

Sunlight

Mark on your map those areas that are very sunny and those that are very shady. You'll use this information to choose appropriate plants and to identify places for shade cover for people.

Vegetation

Identify different types of existing vegetation on your site. have students create symbols to represent each type of vegetation you find.

Landforms & Drainage

Mark the land's shape on your map, including slopes, low spots, and natural water sources. Note areas that are hard to maintain, prone to erosion, or where water collects or stays dry.

Wind

Mark areas that are open and very windy. These may not be the best places to put a sand pile or delicate seedlings. Areas sheltered from wind may get very warm and, therefore, are good candidates for shade structures and tree covers.

Soil

Knowing the condition of the soil on your site is very important as it will determine what plants are best suited to each location. Collect information on the soil and conduct these simple tests in various areas of the site to see if there are differences.

Soil Texture and Moisture

Sandy soil drains water quickly while clay-type soil drains more slowly. Since plants have different requirements for water, the type of soil will determine what plants will grow best in each area. To find out the soil type, dig holes in different areas of the site, each approximately twelve centimetres deep. Moisten a handful of soil and squeeze it into the shape of a tennis ball. Hold the ball in one hand and press through it with the index finger of your other hand. If the soil is sandy, the ball will break apart. If it contains clay, it will compress and hold together.

pH level

The pH level is a measure of the acidity of the soil. The pH scale ranges from 1 to 14. The lower the pH level of the soil, the more acidic it is. Most plants prefer conditions of 6 or 7 pH. Find kits for testing pH at garden centres or borrow them from your science department.

Built & Temporary Features

In addition to the natural features, ask your students to look at the built features on the site and the temporary elements that vary by the season and that may fluctuate over time. Mark these on the map, including:

- play areas
- garbage bins
- visible utility lines
- walkways or paths
- driveways
- water sources such as taps and fountains
- classroom portables
- snowbanks
- sand piles
- wood chips

Additional Considerations When Mapping

Service utilities: Map all the service utilities on the site — both above and below ground. Contact local utility and service companies to determine the location of any power, gas, water, sewer, telephone and cable lines.

Health and safety: Contact the school board to obtain a copy of its standards on health and safety. Make sure you comply with these as you plan your project.

Grounds maintenance: Find out from the school board if there are any policies concerning the maintenance of the school grounds that might be relevant to your project.

Visibility: Contact police to discuss any visibility and safety considerations.
Emergency vehicles: Find out the guidelines for emergency vehicle access and turning spaces.

Fire drills: Ensure unobstructed access to the school grounds.

Surveying People About How They Use the Space

When planning changes to the school grounds, it's important to understand how the space is used year-round. Aim to build a complete picture of all activities that take place, including how students, teachers, and community members interact with the space. Taking everyone's needs and uses into account will prevent you from inadvertently changing an aspect of the school grounds that is very important to someone else. Refer to the templates at the end of this chapter for sample questionnaires.

STUDENTS

Ask students how they use the space before, during and after school (see Template 2, Part A). Encourage them to think about where they play in the yard and what they do at different times of the year. Schedule at least part of the survey outside on the grounds; students will give more complete answers when they are physically in the place they are thinking about.

Ask them to use big arrows to mark on a map the routes they take to go in and out of buildings from various areas of the grounds. When planning, consider that people naturally take the most direct route, regardless of planned walkways.

TEACHERS AND STAFF

Ask teachers which parts of the school grounds they use for teaching and during which seasons. Find out if there are areas they consider "problem spots" and how students typically use the space during recess and lunch. Inquire about any supervision challenges.

Talk to custodians about maintenance needs—where snow is piled in winter, where salt is used, and the location of outdoor water access (e.g. hose bibs) to help plan for watering trees or gardens.

At a staff or curriculum planning meeting, give teachers a copy of the base map together with a survey (see Template 3 Part A). Ask them to respond to the survey questions, marking any relevant information on the map.

COMMUNITY MEMBERS

Talk to community members to learn which parts of your school grounds they use either formally or informally. Ask the school office for contact information for all groups that use the school grounds in some way. Ask which areas of the school they use, what they do there and when. Use this opportunity to invite them to become involved.

Surveying People About How They Feel About the Space

Gathering input from students, staff, parents, and neighbours is a key step in creating a school ground that reflects the needs and values of the whole community. By asking people how they feel about the space and what they wish they could do there, we demonstrate that their perspectives matter and are being thoughtfully considered.

This process helps identify which areas of the school grounds are valued, disliked, or even avoided—and reveals similarities and differences in how the space is used and experienced.

STUDENTS

Students often have strong emotional and experiential connections to the school grounds. Ask them how they feel in different areas, what they enjoy doing, and what they wish was possible. This can highlight both cherished and problematic spaces. You can adapt a sample questionnaire to suit your group or invite students to help design one. (See Template 2, Part B)

TEACHERS AND STAFF

All staff members—teachers, educational assistants, lunchroom supervisors, custodians, and specialty educators—interact with the school grounds in different ways. Providing a chance for them to share open-ended feedback can uncover practical insights and creative ideas from a wide range of perspectives. (See Template 3, Part B)

PARENTS

Parents bring a unique lens, balancing care for their child's well-being with an interest in the school environment. Their input can shed light on safety concerns, opportunities for family engagement, and general impressions of the schoolyard. Including parents also helps build broader support for the project. (See Template 4)

NEIGHBOURS

Neighbours who live near the school often observe the grounds outside of school hours and can offer a perspective that no one else can. Involving them early helps build goodwill and avoid misunderstandings. Reach out with a letter outlining your goals and inviting their feedback.

Sample Letter

Dear Neighbours,

We are pleased to let you know that **(Name of School)** is beginning an exciting **greening project** to transform our school grounds into a more vibrant, inclusive, and climate-friendly environment.

This initiative goes beyond planting on unused portions of the property. While we will continue to enhance underutilized areas with native trees, shrubs, and wildflowers to support local biodiversity, we are also looking to renovate and improve highly used parts of the school ground. Our aim is to create a more welcoming and sustainable outdoor space that benefits all members of our school community.

In addition to supporting birds, butterflies, and other pollinators, a greener school ground will provide **increased learning opportunities, improved health and well-being for students**, and a space where **children, staff, families, and neighbours can connect with nature**. A nature-rich environment encourages outdoor learning, active play, and a deeper appreciation for the natural world—right outside the classroom.

We would greatly appreciate your ideas and input as we move forward with planning. Please join us for our upcoming design meeting on **(date, time, location)**, or send your comments to **(name, contact info)**.

Thank you for supporting this important step toward a healthier, more inspiring school environment.

Name, Title/Role
Contact Info

Once you've gathered information about how people use and feel about the site, organize it and display it on your school ground map. Here are some ideas for doing so.

- Create a weekly calendar and record what areas of the school grounds are used on what days, by what groups and for what activities. Do the same with a yearly calendar. Display the calendars together with a marked-up copy of the base map.
- Enlarge a copy of your base plan. Represent all the activities that take place on the school grounds by marking the map with symbols or colour-coded pins or flags. Also indicate the frequency of each activity and the time of year it happens.
- On another map, identify the areas that are used for teaching, used at recess and lunch breaks, used after school hours, and used infrequently or not at all.

Template 2: Student Questionnaire

Part A — How Students Use the School Grounds

1. What times of the day do you play in the school grounds?
2. What do you do when you play in the school grounds?
3. What do you like to do best?
4. What do you play with?
5. Where do you play? Why?
6. Where don't you play? Why?
7. Are there places to get out of the wind, rain and sun?
8. Are there places where you can sit quietly to talk with a friend or read a book?

Part B — How Students Feel About the School Grounds

1. What are the things you like the most about the school grounds?
2. What are the things you don't like at all about the school grounds?
3. Do you have a favourite place in the yard? What makes it special?
4. Are there any places where you don't feel safe in the school grounds?
5. What would you like to be able to do in the school grounds that you can't do now?
6. What would make our school grounds more interesting?
7. Are there places that you think could be made more colourful?
8. Make a wishlist of things you'd like on the school ground 😊

Template 3: Teacher Questionnaire

Part A — How Teachers Use the School Grounds

1. Which areas on the grounds do you presently use to meet the demands of the formal curriculum?
2. What do you teach in these areas, and at what time of year and how often?
3. Are there any parts of the grounds that aren't used? Why?
4. Which curriculum subjects do you see being reinforced by the development of the grounds?
5. If the grounds were developed following criteria set by you and the other teachers, would you be more likely to use the grounds as an outdoor classroom for a variety of subjects? If yes, for what subjects?
6. What are your recommendations (e.g. changes, additions, deletions) to improve the grounds so that they may be used more fully to meet the demands of the formal curriculum?

Part B — How Teachers Feel About the School Grounds

1. What comes to mind when you think about the school grounds?
2. Which aspects of the grounds do you think are an asset?
3. Can you identify problem areas on the grounds and explain why they are a problem?
4. Do you have any current concerns about supervising the school grounds?
5. What do you find aesthetically pleasing about the present site?
6. What improvements would you like to see in the future?
7. Would you be willing to devote class time to the maintenance of the grounds if outdoor classroom development and use were integrated into the curriculum?

Adapted from materials developed by Anne Coffey and the Canadian Biodiversity Institute

Template 4: Parent Questionnaire

We're exploring ways to improve our school grounds and would love to hear your thoughts. Please take a few moments to complete this questionnaire and return it to the school with your child by _____ (date). Please return to _____. Your input is greatly appreciated!

1. What do you think of the school grounds?
2. What parts do you like and why?
3. What parts do you dislike and why?
4. Do you think the school grounds are being used effectively? Why or why not?
5. Which parts of our school grounds do you think your children particularly like? Why?
6. Which parts of our school grounds do you think your children dislike? Why?
7. Is there anything about our school grounds that causes you particular concern?
8. Any other comments?

Template 5: Custodian Questionnaire

Your input is important and will help us design a school ground that works for everyone. Please take a few minutes to share your perspective. Thank you!

1. What areas of the school grounds require the most maintenance (e.g. lawn care, litter, repairs)? Please list and briefly explain why.
2. Are there any areas of the grounds that you find difficult to maintain or access with equipment? If yes, please explain.
3. Where do you typically pile snow during the winter? Please describe locations and whether any issues arise from this.
4. Where is salt most often used during icy conditions? Please identify key walkways or problem areas.
5. Where are the outdoor water sources located (hose bibs or tabs)? Is it accessible or challenging?
6. Are there areas of the school grounds that you think could be improved to make your work easier or more efficient?
7. Do you have any concerns or suggestions for the design team as we plan changes to the school grounds?

Setting Your Goals and Objectives

Once you've completed your school ground inventories, you'll have a strong foundation of information—including the physical features of the site, how people use the space, the interests and skills of those eager to get involved, and the range of available resources to support the project.

This is a good time to refer to your statement of purpose and the broad goals you initially set. Based on what you've learned so far, these may need to refine or adapt them.

As you begin setting more specific goals, consider how the site itself fits into the broader physical and social landscape. Defining clear, measurable goals at this stage will help guide your naturalization project and inform key decisions around planning, design, and implementation. It's also important that this goal-setting process involves your entire group, ensuring a shared vision moving forward.

Strategies for Setting Goals

Set goals according to needs and wants. Based on the survey responses, draw out the themes that point to people's needs, wants and concerns and adapt your goals to address these. This simple yet essential step will serve as the foundation for most of your planning decisions.

Set short-term and long-term goals. Come up with a five-year plan for your project and set goals to be achieved by the end of each year. Then establish objectives to achieve those yearly goals. Be sure to build in strategies for sustaining the momentum of the project over time.

Set goals according to areas of interest. Look at what people are interested in doing. Capture their interest and ambition by setting goals related to the areas where they have the most energy.

Set goals according to priority. When prioritizing goals consider the following:

- What are the issues that are of greatest appeal or concern?
- What are the issues that are most pressing?
- What are the other activities taking place in the surrounding area during the span of your project?
- What is the likelihood that a particular initiative will be successful
- What is the impact that a particular effort will have?

Take Time to Set Precise Objectives

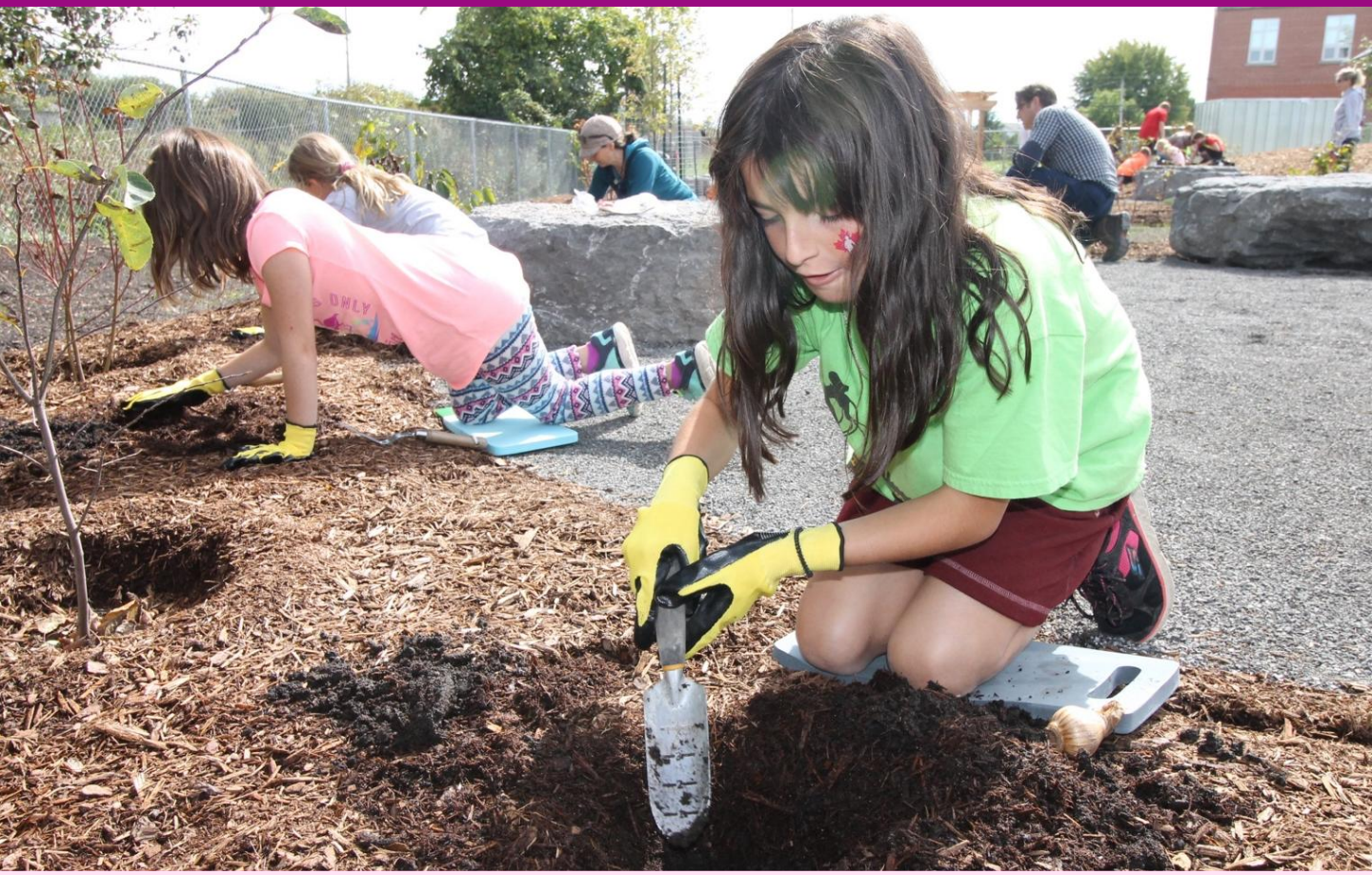
Objectives describe the short-term and long-term activities that are necessary to reach the overall goals and can provide a benchmark for evaluating progress and success.

Each goal should be accompanied by concrete, precise, measurable objectives that provide an action plan for reaching that goal. For example, if one of your goals is to establish a wildflower garden, an objective might be to establish a mixed wildflower community by planting 50 coneflowers, 65 black-eyed Susans and 35 asters in the southeast corner of the site.

Goals and objectives should strike a balance between ambitious and attainable. They should reflect a desire to maximize the potential of the site together with a recognition of limitations — limitations of the site itself, the people involved, and the resources available such as money, expertise, planting materials and tools.

Phase 4

Digging into Design



One of the most important factors to remember during the design process is to keep tasks small and manageable. Be mindful of the resources you have available. This might mean developing your project in stages, adding new sections to the garden as the funds become available or as new individuals bring special skills to the project.

Ecological Design: Working with Nature

In the natural world, everything is interconnected. The elements in natural systems must work together rather than in competition. Let the natural features of your site guide your decisions. If an area is naturally moist, don't fight this. Plant moisture-loving species or create a small pond. Plant species that complement each other or support their intended purpose. Companion planting can also be a natural method of discouraging pests. Let the soil structure dictate what species go where. And don't forget to consider how people use the site. Restoring nature's place means we create a place for ourselves in it, not to harm nature but to learn, grow and be inspired. Here are some essential design strategies to help you plan your greening project with an ecological lens:

1. ECOLOGICAL FUNCTIONALITY

- **Habitat Creation**: Incorporate native plants, pollinator gardens, and features like birdhouses or log piles to support local biodiversity.
- **Soil Health**: Avoid compaction, use organic matter, and minimize hard surfaces to maintain living, breathable soil.
- **Water Management**: Use rain gardens, swales, permeable surfaces, and bioswales to manage stormwater and reduce runoff.

2. PLACE-BASED LEARNING & ENGAGEMENT

- **Outdoor Classrooms**: Create a variety of flexible spaces for play and learning in nature.
- **Hands-on Features**: Include gardens, composting areas, or insect observation zones that students or community members can help maintain.
- **Interpretive Signage**: Have students help create interactive educational signage to explain ecological systems or cultural significance.

3. CLIMATE RESILIENCE

- **Shade and Cooling**: Plant deciduous trees to create shaded gathering areas to mitigate urban heat.
- **Drought-Resistant Landscaping**: Choose native and climate-adapted plants that require less maintenance and water.
- **Flood Resilience**: Design with topography in mind to accommodate storm surges and heavy rainfall events.

4. STEWARDSHIP & LONG-TERM MAINTENANCE

- **Low-Maintenance Materials**: Use durable, natural, and locally sourced materials.
- **Community Involvement**: Involve students, educators, and residents in planting, caretaking, and programming to build ownership.
- **Seasonal Flexibility**: Design for year-round use, with features that evolve with the seasons (e.g., winter play, fall harvests).

5. MULTI-FUNCTIONAL SPACE

- **Blended Zones**: Combine play, learning, and habitat in overlapping ways—e.g., a willow archway that's also a bird garden or a log edging around a garden used for both seating and bug hotel.
- **Diverse Micro-Environments**: Include a variety of sensory and spatial experiences—open green spaces, quiet nooks, dense plantings, and vertical gardens.

6. SYSTEMS THINKING

- **Whole-Site Integration**: Think beyond isolated features—connect plantings, structures, and flows (water, energy, people) to function as a living system.
- **Lifecycle Thinking**: Consider the embodied carbon of materials, the end-of-life plan for components, and how the space can evolve over time.

7. INCLUSIVITY AND ACCESSIBILITY

- **Universal Design**: Ensure paths, seating, and play areas are accessible for all ages and abilities.
- **Culturally Responsive Design**: Reflect the stories, values, and contributions of the surrounding communities and Indigenous Peoples.

Anticipating Safety Concerns and Vandalism

In developing school grounds, often the two greatest concerns expressed by parents and teachers are vandalism and safety. There are measures that can be put in place to ensure that the project isn't vandalized and that children (and others) are kept safe while using the space. These fall into two categories: site design and community involvement.

Here are the key factors to consider when designing a safe school ground:

Physical layout: Both children and adults feel more secure when they understand the physical layout of an area. Include visible paths in the design. Post signs displaying maps of the area and showing the user's current location. Offer orientation sessions.

Clear sight lines: Make sure people can see what is ahead of them as well as around them. Be sure you can see into the site area from all perimeter lines. A clear view will also make it easy for police passing by to monitor the area.

Lighting: Adequate lighting will encourage positive uses of the area after dark and discourage undesirable activity.

Access: Plan for more than one entry and exit point to the naturalized area.

Maintenance: Ensure adequate maintenance of the project. An area that looks cared for feels safer and is less prone to vandalism.

Practical Design Tips for Safety

- Avoid placing dense shrubs or small trees directly beside a path or seating area.
- Maintain an open area along both sides of trails or paths and choose plants not taller than 60 centimetres.
- To reduce access to hiding spots, choose thorny plants such as raspberries and rose bushes to line paths adjacent to wooded areas.
- Maintain open sight lines at trail intersections and at approaches to bridges, buildings and other possible hiding areas.
- Use stepped levels near wetlands and ponds.

Creative Thinking

Before your group decides on specific actions, take time to explore creative ways to approach the tasks ahead. Try brainstorming together – encourage bold, imaginative, even unconventional ideas. The goal at this stage is to generate as many project ideas as possible without judgement. You can assess feasibility and refine the list later.

Try visioning, using guided imagery, creating images by drawing, painting or making collages, telling stories and playing games. This can be done as part of the site mapping exercise. Represent the creative expressions on a map of what you'd like the site to be.

Community involvement

The more you encourage the direct involvement of the community, the more you reduce vandalism. Students will attest to this. At one school a group of Grade 6 students came across some broken trees in their project. Apparently, they knew that some of the older students had done it. When asked how this might be prevented in the future, they suggested that they would get older students to help next time so that they too would have a vested interest in the project. When people feel a sense of ownership for an initiative, they are likely to be protective of it rather than destructive. For this reason, it is imperative to involve a diverse cross-section of the community.

Putting the Design on Paper

People get excited by what they can see. During a long planning phase, a visual representation of the project, either a 3D model or a design, can be helpful in maintaining people's spirit and enthusiasm. On a practical level, you'll also find a visual representation helpful in finalizing decisions regarding the elements and layout of the project.

It may be worthwhile to consider the design task in two parts. First is the big picture, focused on the large-scale design aspects. In this phase of design, you're thinking about planning of the overall space, considering where the various elements will be located and how they will work together and be affected by each other. This large-scale design roughly corresponds to the goals of the naturalization initiative.

The second part of the design task is focused on the smaller-scale aspects of the planning. You're thinking about the type of plants to include in the butterfly garden, the dimension of the benches to be used for seating, the number and types of trees to attract songbirds and the location of toad houses. This small-scale design roughly corresponds to the objectives of the project.

Play with Plasticine

Plasticine is a great tool for creating a 3D model and is a pliable medium that students will enjoy working with as they design the site.

School Tested: Using Theme Collages

On one project, the visioning process was slow and the dreams trickled in. They came in the form of drawings, paintings, prose and anecdotal comments. One full school year later, a committee of parents and teachers pored over the work that had been spread out on the tables in the school library. They made note of every idea, created tallies for those mentioned more than once and drew out 13 of the most commonly occurring themes. Using magazine cut-outs of actual images, the committee created collages representing various interpretations of each theme. The collages were viewed by each class, and each student and teacher were given three stickers to attach to his or her three favourite collages.

From this exercise, the four top design elements were selected. Marius deBruyn, landscape architect and key community member, drew up a concept plan to incorporate each of the 13 elements, giving priority to the chosen four. The theme collages were scanned, mounted on foam board and displayed with the master plan. "Dreamacres" was now on paper, and the planting could begin.

Maggie Linton, teacher, Sunningdale Public School, Oakville, ON

Working with Experts Can Save Time and Help Avoid Problems

For many reasons, it is of great benefit to involve a professional in your project. That person can help you sidestep mistakes and setbacks, save a lot of time and money, increase your access to resources and suppliers, and come up with solutions that may have otherwise been missed. Seek expert involvement whenever possible. Remember that you may not have to look too far. You'll find there is a lot of expertise in the contacts you've already made.

If you have the benefit of expert advice, there are some things you'll want to keep in mind.

- Brief the professional on the principles of your participatory process and your desire to keep everyone involved.
- Familiarize the expert with the space and aspects that must be taken into consideration in the design.
- Arrange for the expert to interact with the students.
- Give this person access to all the information you have gathered about the site and any materials that have been produced.

Experts are trained to identify missed opportunities and overlooked constraints. At the very least, have your design reviewed by a professional at the concept stage and the final stage. While many professionals are willing to donate their services, it is recommended that you budget for them and pay them. Payment is always appreciated, and some professionals will do this work at a reduced rate as they view it as a worthy benefit to the community.

Developing Your Action Plan

With goals and objectives in hand, you're probably eager to move to the action phase. Start by creating a large planning chart and make sure to include:

- Theme or issue (for example, planting, fundraising, publicity)
- Goals
- Objectives (broken up into short, medium and long-term actions)
- Tasks to be completed in the order in which they need to be accomplished
- Timeline to complete the tasks
- Individuals/groups responsible for completing the tasks.

Making Group Decisions

Developing an action plan involves a lot of detailed thinking. You'll need to decide on a logical sequence of events, determine what tasks must happen before others, and consider how completing one task will affect another. Think about the time it will take to complete each task, who will be available to do the work and when, and what the backup plan will be if certain things don't happen. Determine when outside expertise will be needed.

Because you'll be making numerous decisions, it's wise to expect a little conflict between competing interests. Refer to the tips on consensus decision making and the participatory process on page#. Be patient and allow plenty of time for this stage of the process.
Could there be reference to a page or section here?

Here are three ways to assist decision-making:

For each potential action, ask a series of questions: What resources do we have/need to do this? How difficult will it be to accomplish? What is the likelihood that it will be successful? Will most stakeholders support this effort? Are there any that may be opposed? Does it lead to another action to ensure momentum of the project? Is it consistent with the overall vision and goals for the initiative?

Do a SWOT analysis. List the strengths and weaknesses of the idea. Then consider the opportunities that may make the project successful and the threats that may contribute to its failure.

Consider doing nothing. How does each option compare to not taking any action.

Presenting the Site Design and Your Action Plan

As the project heats up, it's time to reinvigorate those who showed an interest early on. Organize a meeting to present the site design. Advertise the meeting and invite local media to the "unveiling." Also invite all those who completed surveys and attended previous meetings. This is an exciting time as the project comes closer to become real. It's also a good time to recognize individuals for the time and effort they have given.

At the meeting, you will also want to introduce the action plan. Hand out copies of the plan and post a large summary version on the wall. Make it clear where openings remain for people to become involved.

You will also want to do the following:

- ☐ Organize your social calendar so that you can announce upcoming community work fests, project celebrations and committee meeting dates
- ☐ Indicate timelines for completing tasks
- ☐ Share your wish list of materials that are needed.

The more organized you are in presenting the action plan, the easier you'll find it to get people involved and committed.

Establishing Evaluation Measures

After all the hard work, you'll want to know if it's paid off. As part of the action plan, build in ways to evaluate how successful the project was in meeting its goals and objectives. The process needn't be highly technical or complicated; you simply need enough information to determine what is working well, what isn't, and what improvements can be made. Assign someone to the task, establish procedures for collecting the information, arrange for the results to be reported to the group, and adapt the project considering the evaluation results.

Milestone Moments

It can be useful to establish milestones at key points in the action plan. These milestones provide interim objectives to work toward, give focus and momentum to a group's efforts, and can be used to raise enthusiasm, solicit further participation, mark progress and provide a sense of accomplishment.

Plan celebrations around major milestones. Possibilities include public tours, festivals, media events, volunteer potlucks and awards ceremonies. Other creative things to try are soliciting stories, poems, music, drawings and murals to mark the occasion.

A Year in the Outdoor Classroom

School ground greening projects do not begin and end during planting season. You will be more successful and have more fun if you plan activities throughout the school year. Refer to these ideas for each month and add your own.

SEPTEMBER

1. Visit other school ground projects or local natural areas.
2. Collect wildflower seeds.
3. Begin planning meetings.
4. Inspect existing plants and weed or water as necessary.
5. Harvest vegetable gardens.
6. Clean and repair existing wildlife structures.
7. Take photos.

OCTOBER

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1. Halloween activities — carve pumpkins, decorate classrooms with gourds and Indian corn.
2. Collect leaves for winter mulch or composting.
3. Finish harvesting vegetable gardens, sunflowers and compost debris.
4. Sow winter cover crop (such as winter rye) on all bare soil.
5. Plant large caliper shade trees in active play areas of the school grounds (65-70mm caliper)
6. Collect seeds from natural areas for habitat projects.
7. Write grant proposals.
8. Plant bulbs.
9. After Thanksgiving, plant bare-root trees and shrubs in protected areas of the school grounds.

NOVEMBER

1. Prepare ideas for next year's projects.
2. Begin fundraising and seeking community support.
3. Empty composters for winter, digging compost into garden or habitat areas.
4. Mulch trees and perennial plants for winter.
5. Plant nuts from trees in outdoor nursery.

DECEMBER

1. Collect winter cuttings for tree nurseries if you plan to grow your own.
2. Fill bird feeders.
3. Make birdseed cookies and pinecone feeders and hang in wildlife areas.

JANUARY

1. Put used Christmas trees in habitat area for brush.
2. Decorate trees with popcorn and apple strings to provide a winter feast for wildlife.
3. Develop plans for the spring.
4. Invite speakers to share ideas about garden design, participatory design, and curriculum connections.
5. Use the site for winter activities such as tracking in the snow.
6. Continue fundraising and complete funding applications.
7. Order wildflowers for contract growing by your local nursery.
8. Take winter photographs of your site.

FEBRUARY

1. Finalize plans for next spring.
2. Plant seeds indoors.
3. Order trees.
4. Fill bird feeders.
5. Visit plant nurseries to get ideas on varieties, cost and availability.

MARCH

1. Build birdhouses.
2. Plant vegetable seeds indoors.
3. Monitor growth, weather, animal activity.
4. Tap a maple tree.

 APRIL	1. Till new garden areas. 2. Order supplies (stakes, peat moss, manure, mulch). 3. Contact neighbours and finalize site plans. 4. Mark pathways and cover with mulch. 5. Stake out planting sites. 6. Plant bare-root shrubs and trees in protected areas of the school grounds.
 MAY	1. Organize volunteers. 2. Prepare planting sites. 3. Plant trees that prefer to be planted in spring (Sugar Maple) and stake if necessary. 4. Plant vegetables and flowers after the last frost. 5. Take pictures.
 JUNE	1. Weed and water. 2. Mulch. 3. Install benches, bird baths, brush piles. 4. Post information signs. 5. Celebrate! 6. Advertise. 7. Organize summer volunteers 8. Plant squash and pumpkins. 9. Plant sunflowers the last week of school. 10. Take an “after” picture at the end of the month.
 JULY	1. Weed, water and check for damage or disease. 2. Harvest vegetables as they are ready. 3. Hold a community work bee. 4. Take photographs of summer flowers.

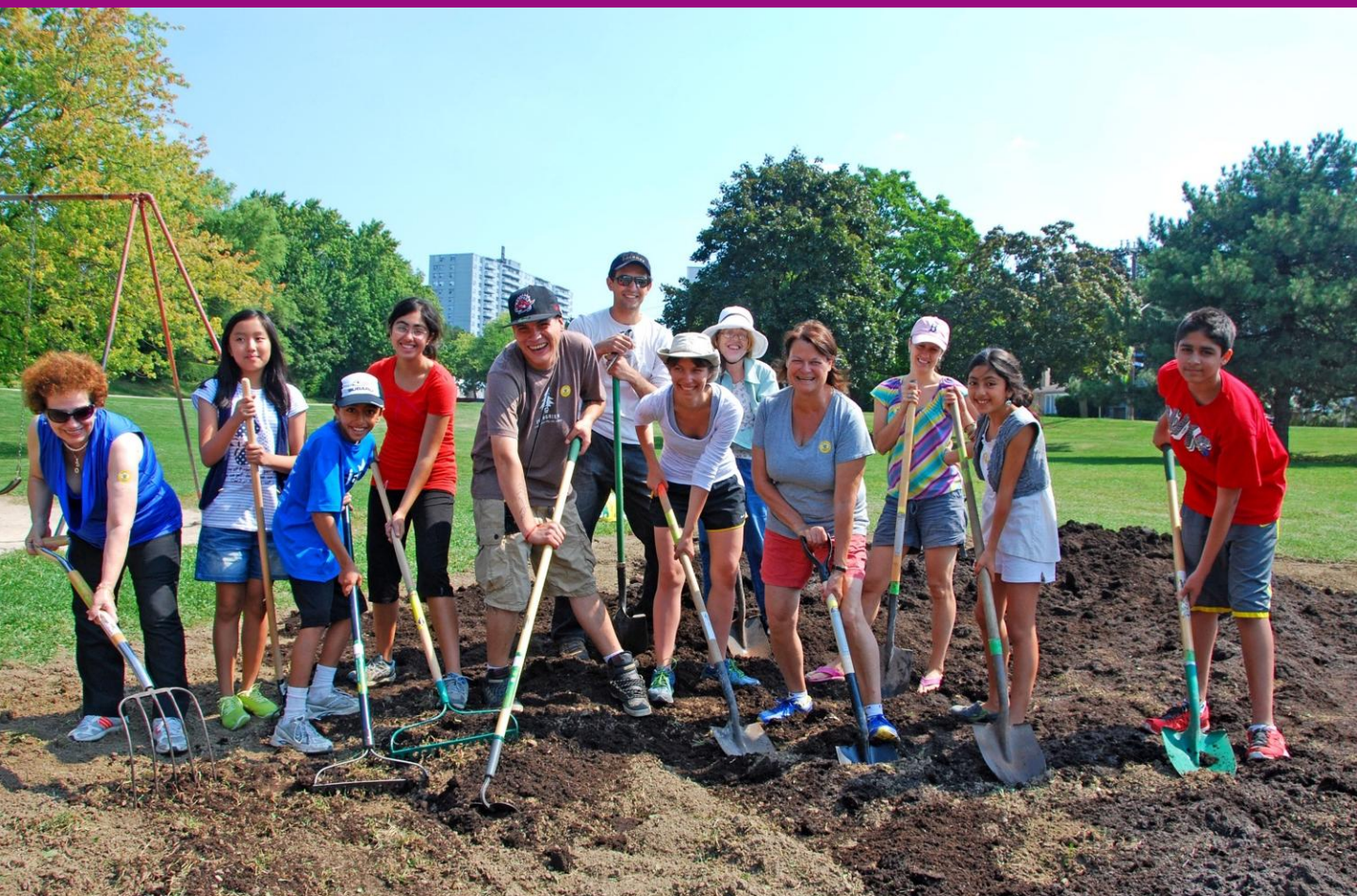
AUGUST

1. Weed, water and check for damage or disease.
2. Harvest vegetables as they are ready.
3. Collect local wildflower seeds for next year.
4. Organize another community work fest.
5. Take more photographs to compare with before pictures.

Adapted from Peterborough Green-Up 1993, Schoolyard Magic, pp. D6–7

Phase 5

Budgeting and Fundraising



If your group has made efforts to involve as many sectors of the community as possible, you will find yourself with a large resource base to approach for funding. And when people are familiar with and involved in a project, they are much more likely to donate their time and resources.

Before you approach potential sources of funding, have a clear idea of what you need and the associated costs. Depending on the nature of your greening project your costs may include:

- Reference books, design plans and maps
- Equipment (e.g. shovels, hoes, wheelbarrows, buckets, hammers, saws, rakes, nets, watering cans, trowels, weed diggers, gardening gloves, hoses, bushel baskets, heavy machinery for grading)
- Planting materials (e.g. wildflower plugs, potted plants, shrubs, trees, seedlings, seeds, mulch, lumber, nails, burlap, stakes, tree guards)
- Publicity and promotion (e.g. posters, flyers, presentation materials, digital or newspaper ads, newsletters and website fees)
- Transportation or delivery of materials to the project work site
- Professional consultation and technical support
- Maintenance and monitoring services
- Concept renderings
- Office supplies (e.g. paper, envelopes, postage photocopying)
- Other costs (permit fees, food and refreshments for meetings, art supplies for making banners, permanent signs and murals).

Setting a Budget

Creating a realistic budget requires careful and detailed planning. Start by reviewing your action plan to identify the costs associated with each phase of the project. Think about what you need right away and what can be added later, then organize these items along a timeline. Prioritize your expenses by identifying which are essential and which are optional "nice-to-haves."

Consider the following steps as you develop your budget:

- Refer to your action plan to estimate costs for each phase of work.
- List required resources in the order they will be needed.
- Assign priority levels to each item—from essential to optional.
- Consult catalogues and potential suppliers to research product and material costs.
- Comparison shop to find the best prices, quality, and product options.
- Obtain quotes from at least three suppliers to ensure fair pricing.
- Plan for large plantings, such as wildflowers:
- Contact local nurseries in the winter to arrange for custom growing of specific species.
- Contract growing often reduces costs and ensures plant availability at the right time.

Sources of Support

There are many potential sources of funding, but identifying and approaching them may take some creativity. Be innovative and explore beyond the obvious, such as in-kind donations. Gifts in kind include donations of materials, equipment and time. These are typically much easier to get than cash. Parents are a vast source of resources. For example, the parents who run the local nursery may be much more willing to donate 100 seedlings to the project than to give a donation of $200.

Brainstorm to draw up a list of potential supporters for each of your needs. Would a construction company donate labour and machinery for large-scale landscaping needs? Would a garden centre be willing to provide hand tools such as shovels and rakes? Would an office supply or stationery store donate paper and envelopes? When you make up your list of needs, be as specific as possible. Instead of asking for seedlings, for example, specify that you want 20 red maples, 150 purple asters, 300 mixed prairie grasses. Companies will find it easier to donate if they know exactly what you are asking for.

Ask Before You Buy

The golden rule of fundraising is to ask before you buy. Many schools have had a long list of items they couldn't afford to buy, but when they sent out a notice about their greening project accompanied by a wish list of items, they soon started receiving phone calls from parents and members of the community offering to help. The donations included everything from wooden fencing around a pond, to boulders and plant materials, to design expertise and machinery for heavy digging and moving.

Potential Sources of Funding or In-Kind Support

- Corporate donations — Businesses that have an interest in supporting community-based or environmental projects may be willing to help. They are often a good source of cash and in-kind donations. Consider both large corporations and local businesses (nurseries, gardening supply stores).
- Government grants — Federal and provincial governments often have grants available to sponsor community-based and environmental projects. Municipal governments also sometimes have a small budget for community improvement projects.
- Private donations or lending — Individual members of the community may have time or materials to donate. A group of neighbours may be willing to jointly lend equipment on a short-term basis.
- Credit unions — These financial institutions may have funds available to either donate or loan in support of community-based initiatives.
- Neighbourhood and community health centres — Social service organizations can be a source of in-kind donations.
- Universities and colleges — Students enrolled in environmental studies, science, education or geography programs may be willing to donate time and expertise to a school ground greening effort.
- Service clubs — Social service clubs such as the Lions Club, the Rotary Club and the Kiwanis Club may be able to offer volunteer support for getting the work done, or they may be able to assist with organizing fundraising or other publicity events. Other community groups may be similarly available to help.

- Community and private foundations — There are several foundations across Canada that provide funding in specified areas. For information on foundations, the mandates they fund and their grant deadlines, search in the Canadian Directory to Foundations, published annually by Imagine Canada (formerly the Canadian Centre for Philanthropy) and available in most libraries.
- Other sources — Horticultural societies, public utilities, municipal parks departments, "Adopt-a-" programs.

Be sure to carefully document all sources of funding — whether cash donations or in-kind support — in terms of time, expertise, materials and equipment. Use this information as a tool when writing funding proposals and building donor recognition programs.

Taking Stock of Assets

Don't underestimate the assets that are available in your immediate core group. Take an inventory of the skills, expertise and resources that participants can contribute or obtain. Find out if anyone in your group has connections to businesses or organizations that would be willing to help. Refer to the information you collected from participants at previous meetings to see what resources they had offered.

Writing a Funding Proposal

Research potential funders and only pursue those who indicate that they support the type of work you are doing. Become familiar with their funding criteria, organizational vision and principles and describe how your project is compatible with these. Refer to the vision, goals and objectives of the restoration initiative. Emphasize the benefits of the project to the natural environment and to the community. Provide any documentation that is available, such as media releases, newspaper articles featuring the project, photographs and promotional brochures.

Some granting programs may require a comprehensive description of your project, while others may only ask that you complete a short application form. For more extensive applications, do a rough draft of your proposal first to help organize the presentation of your material. Ask someone not involved with the project to read over the application and provide feedback.

If possible, arrange to make an in-person presentation of your project to the funding organization or agency. At the very least, follow up your application with a phone call to make sure that it arrived and to communicate that you are available should the committee have any questions.

Be specific in your request about which portion of the project you are requesting funds for. Proposals with vague, lump-sum totals and unclear breakdowns tend to be less successful. Here is an example of sample budget with specific information:

Sample Budget				
No. of Plants	**Species name**	**Size of plant**	**Cost per plant**	**Total**
2	highbush cranberry (Viburnum triloba)	1 metre	$25	$50
			Subtotal	X
			Shipping	X
			Taxes	X
			Total	X
			Funding Request	X

Outline of a Sample Funding Proposal

Title Page: Include contact information.

Summary: Keep it concise and aim for less than 500 words

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Background Information: Describe your organization or committee, including your purpose, accomplishments and contributions.

Rationale: State the goals and objectives of the project and why you need funds.

Project description: Describe how the project objectives will be accomplished. Outline specific tasks and indicate who will carry them out.

Schedule: Include a project timeline with key milestones.

Budget: Break down the funding required for each part of your project. Be sure to include: the amount requested from the donor, the estimated value of volunteer contributions, and any additional funding requested from other sources.

Attachments: Include a profile of the qualifications of project participants, the group's brochures or newsletters, and any letters of support.

Adapted from Community Stewardship: A Guide to Establishing Your Own Group, Fraser Basin Management Program et al., p. 16

Thank Supporters

The success of your project will depend greatly on the generosity and support of others. As any fundraising expert will tell you, recognizing your supporters is an integral part of a successful fundraising process. Some ideas for ways to thank supporters include:

- acknowledging them in your brochures and newsletters
- publicly recognizing them in the local media or at events
- including their names on signs posted at the project site
- hosting a celebration specifically to thank them
- offering gifts related to the project, such as dried flowers or vegetables harvested, art inspired by the project or photos.

Get Creative About Funding Sources

- Solicit donations of plant cuttings from individual members of the community.
- Invite local Scout or Guide troupes to make birdhouses or start vegetable seedlings for transplant.
- Organize an equipment lending library for such things as tools, gloves and buckets.
- Create and sell T-shirts that promote the restoration effort.
- Solicit sponsorship for individual items, such as flagstones for a path, fence posts for a border, logs for a seating area.
- Solicit memorial donations of trees from graduating classes or for retiring teachers.
- Suggest that pizza lunch profits be allocated to the project.
- Arrange a library book donations program to support the purchase of project-related books.

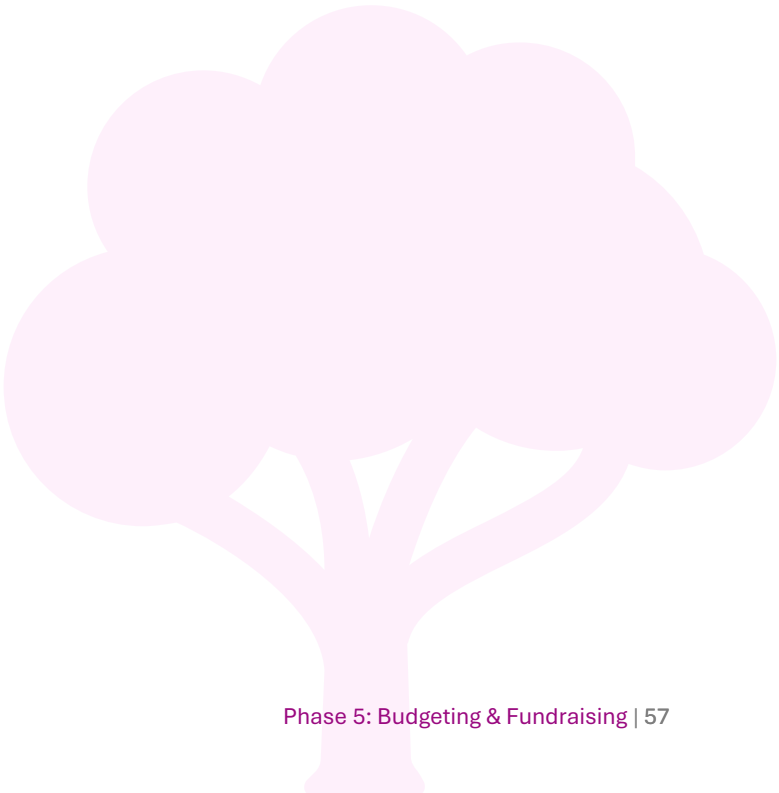
Good Idea: Tree of Recognition

To spark interest and demonstrate the school's environmental commitment, the school ground greening committee at Brookhouse School designed and commissioned the construction of a two-metre high "Tree of Recognition." Whenever students, staff or parents support our greening project, their names are engraved on a leaf on the tree.

Brookhouse School, Dartmouth, Nova Scotia

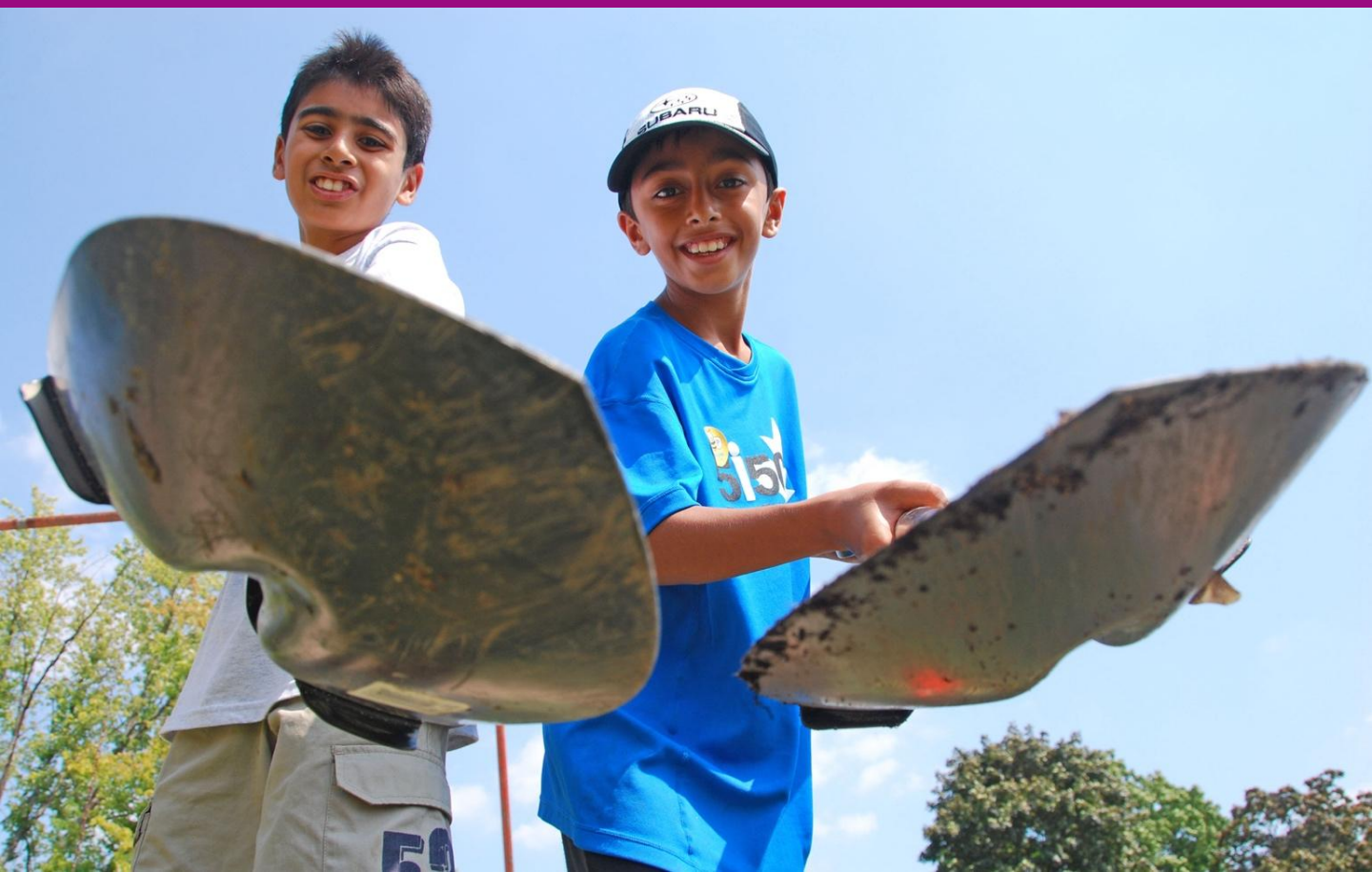
A Word of Encouragement

Don't get discouraged if you don't receive the support you were expecting right away. It takes time to build momentum. As the community becomes increasingly familiar with the benefits of the project and the dedication of its participants, support for the effort will increase. If you are turned down for funding from one source, go on to the next. Seek feedback on ways your proposal could be improved. Once you have secured some funding and support, try again with those who initially refused. And recognize when you have raised enough money to get started with the hands-on work!



Phase 6

Getting Ready for Planting Day & Sharing the Results



It may have seemed as if the day would never arrive, but at last it's time to plant! Breaking ground, getting dirty and engaging in hands-on tasks to transform the space will be some of the most enjoyable and memorable moments of the project. You'll have kids (and maybe even a few adults) bouncing with energy and excitement. You've been working toward this for a long time — expectations will be high, and things may get a little hectic, so it's important to be prepared and well-organized.

Get Organized

As for any event, a bit of organizational prep will ensure the day runs smoothly. Depending on the age group of the students and the size of the event, you'll want to have lots of teachers and parent volunteers on hand who can work with the students to keep things manageable.

Also, make sure your site is fully prepared before the planting day. This means completing all major landscaping activities. You don't want a backhoe moving around the site amid a bunch of excited students.

Permits

Ensure that you have obtained any permits necessary to hold the event. Check with the public works department and the power and phone companies to ensure there are no cables or pipes below ground.

Organizing work teams

Before the big day, hold an orientation session for participants to ensure that they have all the information they need to carry out the tasks successfully, including proper planting methods. To ensure that the plants, paths and ponds end up where they were supposed to and in the way they were intended, it is worthwhile to organize participants into teams and to assign specific and rotating duties to each team.

Team tasks could include digging holes, carrying water, laying mulch and, of course, planting. Another way to organize teams is to assign them to a particular planting area and have them complete all the tasks in that one part of the site. If the whole school is to be involved, rotate the involvement of different classes over the course of the day. Some schools have found it best to train older students during the morning, then have them act as leaders along with parent volunteers during the afternoon to guide younger students.

Prepare a handout

A brief handout can be very useful for orienting participants to the site and providing them with basic information. A map of the site that indicates the location of washrooms, refreshment tables and planting areas should be included. It may also include a short description and simple diagram of proper planting techniques.

Food and refreshments

Reward hard-working volunteers with snacks and drinks during the day. This is a great opportunity to have a local restaurant demonstrate its support for your project with a donation of sandwiches and snacks.

It's Planting Day: Ready, set, go!

Mark the planting areas

Mark off planting areas with stakes and strings well in advance to make expectations clear. If the planting is to be done over successive days, colour-code the areas to indicate which ones are to be planted on what days. Leave the string boundaries in place until the plants have had a chance to grow to protect them from being trampled.

Consider the weather

Be ready for all types of weather. For early spring or late fall plantings, remind children to dress in warm layers and wear raincoats. Sturdy, closed-toe shoes—ideally boots—are essential for safely digging and using shovels. On hot summer days, ensure there's plenty of water, sunscreen, and shade available. Hats are a must to stay protected from the sun.

Choose a group spokesperson

The event itself will generate curiosity in the neighbourhood. Designate someone to be a spokesperson for the group to explain the project, answer any questions and encourage participation. This same person could also be available for media interviews. These events are great opportunities to promote the project and solicit further community support.

Create a display area

At the entrance to the site, set out the materials that have been produced during previous phases of the project. Use a display board to post site plans, designs, photographs, artwork, stories, brochures — anything that has been produced related to the project.

Designate a support team

Once the work gets under way, volunteers will most certainly have questions. It can be very useful to have a team of knowledgeable support people available to provide direction and assistance when required. These support people should be easily identifiable and could wear a uniform or name tag.

> When it came to filling the planters, we could have simply ordered the soil and had it deposited directly into the planters, but we didn't. To reinforce the curriculum integration, a class was asked to measure the planters, calculate the volume and estimate the soil required. When the soil arrived, it was dumped on the adjacent asphalt. To instill in the students a sense of ownership of the project, a 'dirt day' was held. All Kindergarten to Grade 3 children brought an ice-cream pail and formed a brigade to fill the planters. Consequently, not a speck of soil has been removed from the planters since."
>
> *Ted McLachlan, teacher (Windsor School) Winnipeg, Manitoba*

Tips for Publicizing the Event

Publicize your planting days well in advance. Get the word out through community papers, organization newsletters and the community events section of the major daily newspapers. Distribute flyers and brochures, display posters on bulletin boards in stores and libraries, and post announcements on your website (if you have one) and the websites of local groups.

Arrange for your own documentation of the planting process. Record events in writing and with photographs and videos. Interview participants as they are working and record their responses.

Assemble a list of media contacts that will be interested in your story. Include local newspapers radio and television stations. Try to get your story into the hands of the right people according to their deadlines.

Maintaining Your Site

Once your site has been planted you will need a maintenance strategy to help your site flourish. Involve the community by establishing maintenance teams for specific tasks on an ongoing basis. Or each team could be responsible for all maintenance tasks of the area for a limited length of time; in some schools, families or individuals volunteer to care for the site for two-week periods. It's a good idea to have at least one person overseeing the maintenance plan to ensure that the work is getting done.

Involving students in ongoing maintenance offers rich opportunities for them to learn about cycles of life and growth and to foster respect and caring for the earth. Assign classes different tasks over the course of the school year according to a maintenance schedule. Some schools have initiated "Adopt-a-Tree" programs that require classes to provide ongoing care and monitoring of specific plants. Sometimes, this includes researching the trees' particular needs and life cycle and preparing signage, songs and stories that can be shared with the class and the rest of the school.

While maintenance will be an ongoing requirement of all projects, the first few years are particularly intensive. As time goes on, the need for ongoing maintenance will diminish and will shift instead to monitoring of the site. For example, if your goal is to maintain a certain type of plant community, beware of invaders taking over such as twitch grass, thistle and glossy buckthorn.

If a food garden is part of the school ground project, select species that require minimal maintenance during the summer, when the students are away. Plant fast-growing vegetables such as lettuce, radishes, peas and carrots in the early spring so students can harvest them before school finishes for the summer. Plant other vegetables that require a long growing season, such as pumpkins, corn, cabbage and winter squash as these won't be ready to pick until students return in the fall.

During the Summer Months

The greatest maintenance challenge for school ground greening projects come during the summer when there are few people to do the work, but the demands are greatest in terms of watering and weeding. Here are some creative solutions.

- Make sure maintenance teams have access to an outdoor tap, which may require a special key. Many schools work out a sharing arrangement so that the key is passed from person to person.
- Organize students and their families to volunteer to water and maintain the area for one-week periods during the summer. Their time and commitment can be rewarded with a share of fruits, vegetables or flowers at harvest time.
- Ask neighbours if they are interested in helping with maintenance.
- Invite a local gardening or conservation organization to donate some time and energy.
- Coordinate with summer school programs to incorporate use and maintenance of the area into their curriculum. Approach city recreation programs about using the area for environmental education purposes.
- Raise funds to hire a summer student to maintain the area.

Ensuring Continuity

Schools are ever-changing communities—students, parents, teachers, staff, and principals all move through them at different paces. As a result, each school year brings a new school community. This constant turnover presents key challenges for school ground projects: how to maintain continuity, preserve shared knowledge and history, and meaningfully engage new members of the community.

While it can be challenging to maintain interest and commitment in greening school grounds, once the foundation is in place, there are countless opportunities to engage students, staff, and the community in meaningful, ongoing ways. Maintaining engagement as a priority in the school community can often be both as simple and as challenging as building in routine observation and documentation of the site and celebrating the passing of events occurring in the landscape.

Realizing the Outdoor Classroom

There is no question that supporting teachers in their efforts to make the best use of school grounds as outdoor classrooms is a sound investment toward the continuity of any school ground greening project. There are a variety of resources available to help teachers with hands-on activities and more are being written to connect with the learning outcomes of the various provincial curricula. Helping teachers become more comfortable and creative in an outdoor setting may be simply a matter of providing some training with outdoor educators or local specialists from conservation authorities, or other similar groups.

Activities for Students

Linking classroom activities to the ongoing monitoring and maintenance of the school grounds is a practical and effective approach. Activities that model this linkage could include charting the growth rates of the various plant species; drawing activities that show the intricate network of veins on a leaf; life cycle studies of the various insects that find habitat in the natural setting; and the storytelling and creative writing that contemplate a butterfly's extraordinary annual migration journey.

Teachers have assigned individual garden journals to students as a place to document or reflect on the school grounds. Not only are the journals used during lessons, but students are encouraged to draw and write in their journals on their own time.

In addition to keeping individual student journals, **a master journal of the improvements made should be kept**. It is invaluable in several ways, including providing continuity with the project from one year to the next. Typically, these journals include photographic and sometimes video documentation of the site before changes are made and at each stage of development. Journals can also include funding proposals, design plans, survey results, press clippings, award certificates and any number of other items that relate to the ongoing development of the project. While a journal can document a proud history, finding ways to share and educate others about a project's history is just as important.

Planting Strategies

Planting native plants as the backbone of your school grounds is itself a strong contribution to continuity in the grounds. A greening plan provides the opportunity to place plants into the context of their natural ecological communities. This strategy easily facilitates additional plantings done in stages over a few years. Each year, students and teachers will need to work together to assess and understand the evolving ecology of their site so that future plantings remain true to goals set for the project.

Vegetable gardens have an obvious role to play in creating opportunities for the annual renewal of activity. Many schools have created garden allotments for each of their classes, including terraced gardens, gardens shaped like spirals and container gardens. Not only does this provide students with the opportunity for regular participation in developing parts of their school grounds, but it also creates a bridge between one school year and the next. Spring planting builds excitement for the fall harvest.

School Tested: Lesson Planning – Students Help in Snow Study

Grade 5 & 6 French immersion students at Mary Johnston Public School in Waterloo, Ontario, have been looking at snowflakes as part of a University of Waterloo engineering research project that will help verify weather radar observations and snowpack modelling results.

The Mary Johnston students were part of a team of student observers from across southwestern Ontario. Their winter outdoor classroom work involved measuring snow depths shortly after snowfalls, examining snowflakes on the top layer of the snowpack, estimating the largest flake dimension, identifying the prominent flake type and measuring the air temperature.

Participation in the project has provided the students with an opportunity to closely examine major factors in their environment, assist in the collection of data and fine-tune their observational skills. It has also provided a sense of collaboration with the larger community at the university and students participating at other schools.

Steven Fassnacht, teacher, University of Waterloo, Ontario & Carol Moogk-Soulis and Cathy MacPhie, teachers, Mary Johnston Public School, Waterloo, Ontario

Sharing Your Story

Several schools have created both portable displays and permanent bulletin boards devoted to communicating the history of their efforts. Portable displays can travel from class to class each year to reintroduce staff and students to the stages of the project. They can also be used at local workshops or as semipermanent displays in the school's library. Adopting one of the school's bulletin boards to communicate what's happening in the outdoor classroom can be a great way to keep students, teachers and visiting parents up to date on the garden. "Did You Know?" sections can be used to stimulate teaching ideas, while a "Helping Hands" section can list items or services that are needed to achieve planned activities. A few schools have even put up weatherproof outdoor bulletin boards to keep the neighbouring community abreast of the latest developments on the school grounds.

Connecting to the Community

Finding outside help to support your efforts can be important for maintaining the vitality of the project. Some examples of successful collaborations include artists who have helped bring children's own paintings to life in the form of both indoor and outdoor murals or gallery displays; a series of workshops on native plant gardening targeted to both the school and the surrounding community and hosted on the school grounds by local naturalists, parks officials or gardeners; and a local basket weaver working with students to weave protective baskets around the bases of young trees using locally gathered natural materials. In addition to enriching student experiences, these partnerships can also help teachers become more confident, creative, and inspired in using outdoor classrooms

Building Traditions

Undoubtedly one of the most powerful elements of greening school grounds is the change that occurs in cycles — from the daily and seasonal to the annual and beyond. The power of a changing landscape is that it captures the imagination and stimulates the mind while simultaneously stirring the emotions. Celebrating annual events is a marvellous opportunity to connect the school community to the local landscape.

Many schools are now hosting seasonal festivities, such as spring and fall festivals. Spring celebrations have featured such events as planting, tastings of wild edible salads, tea and maple syrup, and storytelling. Fall festivals have included dyeing cloth with colour extracted from wildflowers, nut cracking, flower pressing, sweet grass braiding and preparing harvest feasts of vegetables, fruits and herbs. Other annual events have been more practical: spring cleanups and pathway refurbishing. There have also been fall tours for new students and parents, and pageants for presenting music and theatre.

While a school's history and stories are commonly passed down through siblings, through multiple generations and through long-standing teachers, the stories in the landscape of a green school ground can provide continuity and meaning to a school community. In many cases, the feelings associated with the school's outdoor setting become central to its identity and student pride.

For all of you who undertake to improve your school grounds, we hope you find enjoyment through the process. As so many schools have demonstrated, your efforts will be greatly appreciated by the students and by many others who will get caught up in the spirit of making a positive contribution.

Good luck with all your efforts. May your roots grow deep.