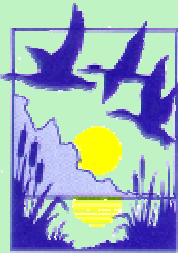




School Grounds, Naturally!



Hamilton-Halton
Watershed Stewardship
Program

*A Guide to
Schoolyard
Naturalization*



Hamilton
Conservation Authority

Healthy Streams... Healthy Communities!





**Hamilton-Halton
Watershed Stewardship
Program**

© 2011 Hamilton-Halton Watershed Stewardship Program

Reproduction of this publication, in whole or in part, without written permission of the Hamilton-Halton Watershed Stewardship Program is forbidden. Limited photocopying for not-for-profit education use is allowed in accordance with normal library standards.

School Grounds, Naturally!: A guide to schoolyard naturalization.
Produced by the Hamilton-Halton Watershed Stewardship Program—a partnership program between Conservation Halton and the Hamilton Conservation Authority.

For digital copies of this publication and associated guide resources, please contact:

Hamilton-Halton Watershed Stewardship Program
c/o Hamilton Conservation Authority
Box 81067, 838 Mineral Springs Road
Ancaster, Ontario
L9G 4X1
(905) 525-2181



Acknowledgements

Special thank you to Susan Kennedy (pictured at left receiving a Hamilton-Halton Watershed Stewardship Program Watershed Steward Award from Ken Phillips, CAO of Conservation Halton, on behalf of Brookville Public school), the staff and students of Brookville Public School, and the parents and the community of Brookville for their vision and commitment to the creation of the Brookville Public School Living Classroom.

Thanks are also extended to; Joan Kott, Retired School Principal with the Hamilton-Wentworth District School Board, Beth Stormont, Education Program Manager at the Hamilton Conservation Authority (HCA), and Alison Bekendam, Project Coordinator for the Classroom Grow Green Project (HCA), for all of their expertise and assistance.



Hamilton-Halton Watershed Stewardship Program

School Grounds, Naturally!



Hamilton-Halton
Watershed Stewardship
Program

In 2007, the Hamilton-Halton Watershed Stewardship Program (HHWSP) partnered with the staff and students of Brookville Public School to create a 'Living Classroom' of unique ecosystems to enhance the learning experience of its students.

This guide will introduce the idea of schoolyard naturalization, guide teachers through the planning and implementation processes, and provide resources and contacts available both locally and provincially to schools interested in undertaking a schoolyard naturalization project. This guide will provide enough information for teachers and administrative staff to embark on a schoolyard greening project of their own.



Inside this Guide

First Things First!	2
Fundraising	3
Design, Installation and Maintenance	4- 5
Linking to Curriculum	6- 9
Health & Safety	10
Allergies & Toxins	11- 12
The Project Lives On!	13



This icon, located throughout the workbook, will direct you to the location in the workbook or companion resource guide where you can locate related resources.

Schoolyard naturalizations are fun projects that can engage the entire school and surrounding community - students, teachers, parents, local business owners and community groups can all work together to create, grow and foster these unique interactive classrooms.

These natural areas serve to reinforce in-class material by providing a creative and dynamic learning environment while creating food and shelter for local wildlife and beautifying the schoolyard.



Every natural area has the potential to positively reinforce life lessons learned in the classroom. A living classroom is a tool that can enhance teaching methods by incorporating sensory activities which are proven to engage students and reinforce curriculum.

A living classroom provides students with a stimulating learning environment that will help them develop the foundation for an appreciation of natural processes, the importance of outdoor activity, and an environmental ethic. Engaging students actively in the planning and maintenance of a schoolyard naturalization project will also encourage social and environmental responsibility and foster positive self-esteem.





First things First!

Where will your garden grow?

Assess your schoolyard. Your school may already have a natural area that simply needs a little care and attention. Schools that are fortunate enough to have a creek, wetland or forest in their backyard should take ownership of these lands and pledge to be good stewards of those special places.



For a list of stewardship activities that your classroom can undertake, visit 'The Project Lives On!' on page 13 of this guide!

When choosing a site for your living classroom, look beyond your schoolyard. Perhaps there is a natural area close to your schoolyard that you can “adopt” with the landowner’s permission. Look for planting sites that will help to increase the size of adjacent natural areas, link existing natural areas, protect watercourses, or create new natural areas.

The number of students, classrooms that may be involved in the project, and proposed uses of the living classroom will help dictate the size of the planting site. Consider that the planting site can be expanded annually, which will result in a dynamic project involving both new and returning students for a number of years. You may wish to keep your first planting site smaller and more manageable so you can accommodate lessons learned during the first year to subsequent years.



EASY AS 1, 2, 3

You don't have to plant a garden at all! Just create a 'no mow' zone and let nature take care of the rest!

- 1. Rope off an area of your lawn.**
- 2. Tell the maintenance crew not to mow that area.**
- 3. Watch as natural succession occurs.**

The Pitch!

- Obtain permission from the school administration office. Tour the site with associated staff members—the more supportive your Principal, Superintendent and Facilities Manager are the more successful the project will be.
- Once you have permission, present the project idea to fellow staff. A schoolyard naturalization can be a simple one class project, but it can also be a complex project school-wide that will require on-going supervision and maintenance. Form a garden committee with teachers, parents and student representatives and outline the responsibilities of committee members clearly. Many hands will make lighter work.
- Present the project to the Parent Teacher Council. Parents will have questions about the project. Councils are often useful resources for the project and council members/parents may be able to provide or have access to funding through their employer, or other support for the project.
- In Hamilton or Halton, contact the Hamilton-Halton Watershed Stewardship Program for assistance. A staff representative can help you present the details of a schoolyard naturalization project and assist you in species selection.



Visit our Companion Resource Guide for local and provincial contacts that are available to assist you in the creation of your vision.





School Grounds, Naturally!

Hamilton-Halton Watershed
Stewardship Program

You can create a living classroom at absolutely no cost to the school. In fact, you'll save the school money by decreasing the area of land that needs to be mowed, not to mention the health and environmental benefits of reducing the emissions from lawn mowers in your community. However, if you do want to design and build a living classroom there are ways to raise funds for the project.

Fundraising!

Grants and Donations

Grant Programs - Funding for schoolyard greening projects is available from a number of sources, including your local Conservation Authority, Ministry of Natural Resources Stewardship Council and TD Friends of the Environment Fund, just to name a few. Consider partnering with other schools or local conservation organizations to receive funding. The Hamilton-Halton Watershed Stewardship Program can help you determine an appropriate funder for your project and can help you fill out the application.



Visit our **Companion Resource Guide** for a list of funders and local organizations whom you may wish to partner with.

Donations - Donated materials and volunteer time from businesses and residents in the community can keep the cost of the project low. Encourage the reuse of recycled materials and reduce waste. Contact local nurseries, landscaping companies, tree services, and horticultural associations or garden clubs for plant material, skilled labour and machine rentals. Many student's parents, or school neighbours, own and work for local businesses, or may have materials they don't need. Send a notice home with the students asking for a "wish list" of donated plants, materials or monies to contribute toward the project.

Don't forget to thank your funders and donors publicly. This acknowledgement of their generous contribution will be appreciated and will help to maintain a relationship with them so that you may be able to approach them in the future if their materials or services are needed again for maintenance or repairs.

Help raise awareness about ecological processes in your community by promoting your living classroom.

- Write articles about the living classroom for your school's monthly newsletter.
- Send a flyer home to parents describing the project and its purpose.
- Put posters up in local businesses and community centres explaining what the living classroom is and offer tours to members of the community who want to learn more.

Extra! Extra!

Working with the Media



Invite local print and television media to all planting days, the grand opening and any award ceremonies that your school is invited to.

Your students may make the front page like the Brookville Public School students did!

Make sure to incorporate a large sign identifying your living classroom. A sign will generate interest in the project from within the community and will help to spread the message of the importance of caring for our natural environment.





Design

Working Together to Grow your Garden

As a group, discuss the goals of the project. Some common goals include: attracting butterflies, birds and pollinators, creating privacy hedgerows or shaded areas for outdoor classrooms, showcasing native species, or emulating different habitats (meadow, prairie, wetland). Environmental function and aesthetics should be considered when developing goals for the project. Work together with students to draft a concept design or layout for the project area. Have older grades complete site assessments, noting features such as sun exposure, soil characteristics, and moisture content of soils. Hamilton-Halton Watershed Stewardship Program staff can provide expertise in highlighting appropriate native species based on the soil, sun and moisture characteristics of the chosen site. Students can then choose preferred species based on any number of attributes, including plant height, bloom time (fall or early spring is preferable so students can witness blooms), bloom color, wildlife usage or habitat type.



For a list of native plants and suppliers visit our Companion Resource Guide or contact your local Conservation Authority. But first, check out page 11 to learn what plants should be avoided!

Once you have your concept design, have students map out the spacing between plants to determine how many plants you will need to purchase. Hamilton-Halton Watershed Stewardship Program staff can assist you in determining the number of each type of plant that you will need for your project and sourcing your plants. You will need to order your plants in the fall if you are planning for a spring planting so it's best to start planning your project as soon as school starts in September. Once a site is located, draw a rough sketch of the project site and take a number of photos from different vantage points to capture the site. Take a careful look around the site and consider external factors that may affect the type of species, and where, you plant. Things like overhead or underground wires (or pipes), the application of rock salt in the winter, high traffic areas, sun exposure, septic bed locations, water sources, and proximity to buildings/structures should be noted on your drawing.

Based on the types of plants being planted, the area may need to be prepared for planting. Hamilton-Halton Watershed Stewardship Program staff can assist you with determining what, if any site preparation is needed. Put a call out to parents and members of the community to assist with site preparation. Often parents of students or businesses in the community have the skills and equipment needed for preparing a planting site.

Work with your team to develop a work plan for the project. Assign the following **duties and responsibilities** during the planning phase so that everyone knows what will be required of them throughout the year.

Site Preparation: making flyers to advertise the planting day, taking “before” photographs, coordinating volunteers, preparing equipment, flagging the planting site, tilling the soil, spreading manure.

Planting Day: broadcasting seed, watering, coordinating volunteers, marking species planted using painted signs/rocks, running a “hydration station”, digging, planting, site clean-up, taking photographs.

Post-planting/Maintenance and Monitoring: taking “after” photographs, making thank-you notes, watering, mulching, weeding, insect control, collecting seed, recording bloom times.





Installation and Maintenance

Announce your planting day well in advance. When announcing it to parents and to the community ask for volunteers to help on the planting day (if background checks are required for volunteers, you may have to announce the day at least two months in advance). Some parents and members of the community may have an avid interest in gardening and would appreciate the opportunity to share their knowledge and expertise.



When planting the garden, different responsibilities can be given to students of different ages and with different abilities. Kindergarten students can spread seeds, primary students can plant small flowers and grasses and older students can plant trees and shrubs. Watering cans can be given to younger students to water the new plants. Older students can help to spread mulch or lay flagstone pathways.

You can create a schedule that would have each of the classes come out one at a time to do a specific activity for a short period of time so as to not disrupt the in-class programs.



Student and volunteer health and safety should be a priority on planting day! Visit pages 10-12 to find out how you can ensure all participants have a happy and safe planting experience.

Depending on the project design, on-going maintenance may or may not be required. This maintenance could just be during the summer, or it might carry over into another school year. It could also become a long term project. Maintenance should be considered at the beginning of the project and a commitment to the maintenance should be made by the school and project team prior to planting. You may wish to approach your local Horticultural society, or retirement homes for volunteer assistance during the summer months. In the event some of your volunteers are seniors, you may wish to consider raised beds into your project design!

You can have a naturalization project that doesn't require any maintenance at all - all it requires is leaving a portion of land to revert back to its natural state. It will go through many different stages including: meadow, as the grasses begin to grow tall; shrub thicket as small woody shrubs start to establish and then to the early stages of a forest when pioneer tree species begin to grow up in the garden. Observing these naturally occurring processes can be used to provide students with a real life example of how habitat is created and evolves.

If you are planting flowers and grasses they will need to be watered in their first summer. In later years you may need to weed or mow the area to simulate processes that would naturally occur in the wild in order to suppress weed growth and invasive species.

Trees and shrubs will also have to be watered in the first year of planting. Mulching or mowing around the base of small trees and shrubs can reduce competition from other plants and increase your plants chances of surviving.





Linking the Living Classroom to Curriculum

A living classroom can be used to observe many natural processes which will reinforce the curriculum at every grade level.

Kindergarten:

Concepts of quantity: Which plants have more/fewer flowers? How many scoops of water does it take to fill up the bucket? Each plant gets one pail of water. If we have 3 plants, how many pails will we need?

Concepts of measurement: Which plants are shorter/taller, smaller/larger? How many steps from the water fountain is the garden?

Spatial Concepts: Explore the different types of flowers – what shapes do they see in the flowers? Recreate the flowers using different shapes.

Data management and probability: Sort the flowers/plants by color and shape. Use graphs to show how many plants are in bloom.

Scientific concepts: Describe how plants react to the seasons through observations and representation. What type of animals and bugs live in the garden, or types of birds visit the plants? Use funnels to fill pails and buckets.

Activity and the Arts: Press leaves and flowers from the living classroom to make pictures. Sit outdoors and make paintings of the living classroom. Carry out stretching activities in the garden.



Grade 1:

Concepts of quantity: How many buckets of water can we carry, do we need, are left? Each student waters three plants... how many plants have you watered so far, how many plants are left to water? Which plant is the first, second... last to bloom?

Concepts of measurement: Measure the height of the plants. Record bloom times for each species annually – send observations into PlantWatch if applicable.

Spatial Concepts: Are there any patterns on the plants, leaves or flowers?

Data management and probability: Sort the flowers/plants by size and bloom time. Record observations in charts and use them to predict growth.

Scientific concepts: Observe and record the life cycle of plants. Build a bird feeder with recycled materials. Introduce the different garden tools and how they are to be used safely.

Activity and the Arts: Use dance to show the growth and movement of plants, insects. If you were a seed in the ground, how would you grow into a tree? Would you grow with fast movements or slow?





Grade 2:

Concepts of quantity: Calculate how much water is needed for the living classroom. Collect and examine different types of seed produced.

Concepts of measurement: Measure the growth of the plants during the spring using a variety of units of measurement.

Spatial Concepts: Design and build a pathway using recycled/natural materials (wooden stumps, old bricks, painted stones).

Data management and probability: Put a rainfall gauge in the garden and record rainfall—use this information to predict plant performance and growth. Design a work chart for the living classroom, taking into account ages and abilities.

Scientific concepts: Record weather patterns in the spring and make predictions about how this may affect bloom times. Chart the life cycle of different types of plants and insects found in the living classroom.

Activity and the Arts: Sing songs about nature and the earth, using branches/fallen logs/seed pods as percussion instruments. Press flowers and leaves, or pick natural materials to use in art projects. Host a pow-wow. Write a story about the garden.



Grade 3:

Concepts of quantity: Examine seed heads from different types of plants and record the amount of seed available. Conduct an on-going tally of wildlife species and numbers seen in the garden.

Concepts of measurement: Record spring temperatures to determine if they impact bloom times.

Spatial Concepts: Examine a plot of the garden and record the various habitat components available for wildlife (food, shelter, cover) and determine what species are most likely to utilize the habitat.

Data management and probability: Put a rainfall gauge in the garden and record rainfall—use this information to predict plant performance and growth.

Scientific concepts: Examine different types of soils and compare them to the soils found in your garden. Collect and/propagate the seed to sell at fundraising events.

Activity and the Arts: Act out plays suitable for outdoor settings. Imitate movements and natural processes found in the living classroom in a variety of ways and incorporate them into a dance (e.g. use movement to mimic a spider making a web, or snow falling from branches).





Linking the Living Classroom to Curriculum continued...

Grade 4:

Concepts of quantity: Install a rain barrel, and using the roof dimensions calculate the amount of rainfall that can be collected. Use the seed quantity information from the Grade 3 class to calculate how much seed the garden will produce.

Concepts of measurement: Measure future planting areas—help delineate the distance between plants and calculate how many plants are needed.

Spatial Concepts: Design and/build nest boxes for the living classroom.

Data management and probability: Collect seed from the plants and propagate them to determine viability.

Scientific concepts: Propagate a variety of seeds indoors in a variety of mediums to show students that different plants require different growing conditions.

Activity and the Arts: Make sculptures for the garden from recycled materials. Press leaves to look at the different patterns and designs and find examples of the designs being used outside of a natural setting.



Grade 5

Concepts of quantity: Calculate your personal carbon footprint—the school's carbon footprint, and how much carbon the plants offset.

Concepts of measurement: Design and build a sundial. Build a composter and calculate how much waste is being diverted from the landfill.

Spatial Concepts: Design and/build nest boxes for the living classroom, taking into account the species present in your locality.

Data management and probability: Compile the data obtained from other grades and classrooms and produce an annual report on the living classroom.

Scientific concepts: Discuss plant respiration and transpiration and compare them to the human body's respiration system. Using a pool testing kit, test the pH of the water from the rain barrel.

Activity and the Arts: Role play interactions between species. Design and create an outdoor theatre and use materials from the garden to create props. Create a time capsule to celebrate the building of the living classroom.





Grade 6:

Concepts of quantity: Calculate the volume and biomass of vegetation present in the living classroom. Calculate how much carbon could be off-set by planting the whole schoolyard or other areas. If the vegetation is removed, how does that impact carbon levels?

Concepts of measurement: Build devices to measure wind velocity and direction. Determine how much seed is being consumed by monitoring the feeders.

Spatial Concepts: Design an interpretive play area for the garden using natural materials—create a model of your design to scale.

Data management and probability: Review the data collected from all grades and look at long-term trends. Create a work chart for the living classroom. Measure future planting areas and assist in delineating the spacing between plants based on anticipated spread and growth.

Scientific concepts:

Consider planting species with various soil requirements and determine what type of soil will need to be added and how this will affect the moisture content of the soil. Design a garden for a specific purpose/habitat, e.g. prairie, butterfly, edible plant.

Activity and the Arts: Create a “Zen” garden that acts as a dynamic art piece in the living classroom. Write a play about an environmental issue and create musical compositions based on natural processes in the living classroom. Explore dyes and art materials made from natural resources.



A living classroom can be a source of inspiration for artists using all different media.

Creating interpretive signs explaining the function of the ecosystem or the characteristics of the plants in it is an educational and challenging project for any art student.





Health & Safety

Creating a Fun but Safe Place

Hydration - It is important that all students, staff and volunteers drink plenty of water when working or playing out in the garden. Set up a hydration station where students can fill reusable water bottles as needed. Set and monitor regular break times to ensure that the students and volunteers are drinking plenty of water.

UV Protection - It is important to ensure that students, staff and volunteers protect themselves from sunburns. Hats and long sleeved clothing will assist in preventing sunburns. You may wish to have a couple of bottles of sunscreen on hand during any work or play days in the garden. Remember to take preventative measures even on overcast days as UV rays can still cause sunburns through light cloud cover.

Shade - It is also important to provide a shaded area where students, staff and volunteers can rest out of the sun. If the school is closed erect a small event tent where people can take turns under the shelter.

Traffic - Take extra care when working close to roadways. You may wish to appoint some older students or staff/volunteers as traffic monitors, outfitted with safety vests, to watch over volunteers in high traffic areas. Set out roadway cones when working close to roads.

Volunteers - Most schools require that volunteers undertake a mandatory police records check.

Dressing Appropriately - When working in the living classroom, the following dress should be considered depending on the activities to be undertaken: close-toed shoes, long sleeves and pants, hats to block the sun, work gloves, safety goggles, hard hat, etc.

First Aid - Create a First Aid kit specifically for the living classroom that is accessible at all times, especially during events where the school may be closed. In addition to regular supplies, extras that should be included are: ice packs, thermometer, Epi-pen, oral anti-histamines, hydrocortisone cream, Band-Aids, sterile gauze, bottled water (for hydration or eye rinse), tweezers, and calamine lotion. Make sure your First Aid kit includes emergency phone numbers, the location and directions to the nearest medical care facility, and a copy of any medical forms that are required to be filled out as per school policy.

The best way to avoid health and safety risks is through prevention. Make sure all volunteers are aware of which children have allergies and the recommended course of treatment. Be sure that a First-Aider (and your kit!) is always on-site. Prepare for emergencies.





Allergies and Toxins

While many allergy sufferers are diagnosed and often take medication or have prescribed treatments such as Epi-pens or anti-histamine tablets, the following information will be of assistance in preventing allergic reactions.

POLLEN ALLERGIES

Ragweed pollen is the most common allergen among plants. This hearty and prolific native plant may establish in your living classroom at some point.

Because goldenrod, also a native plant (pictured at right), blooms out in prominent yellow flowers at the same time that ragweed (left) goes to seed, the allergic reactions caused by ragweed are often incorrectly attributed to goldenrod.



It is important to remember that trees and grasses will also produce pollen. When choosing species for your garden, you may wish to contact your local health unit for a list of common plant, tree and grass allergens and avoid planting male trees as it is the male component that



produces pollen. For those students who are allergic to pollen, the period from August to first frost (Hay fever season) may be a time of year when they can focus on indoor activities that relate to the garden like painting flagstones for a footpath or building birdhouses.

The following list details tree and shrub species native to Ontario that are known severe allergens and or toxins to humans via contact and or ingestion. These lists do not include non-native or introduced ornamental species and are not exhaustive—please note there are several nut trees found in Ontario that have yet to be examined for tree nut allergies. **Species highlighted in red indicate that the male, pollen producing plant should be avoided, however, females of these species can be considered for planting.** Research all items to be planted carefully. Visit the Canadian Poisonous Plants Information System at <http://www.cbif.gc.ca/pls/pp/poison> for more information.

Severe Pollen Allergens

Bitternut hickory, *Carya cordiformis*

Black ash, *Fraxinus nigra*

Black walnut, *Juglans nigra*

Black oak, *Quercus velutina*

Blue ash, *Fraxinus quadrangulata*

Butternut, *Juglans cinerea*

Bur oak, *Quercus macrocarpa*

Chinquapin oak, *Quercus meuhlenbergii*

Dwarf chinquapin, *Quercus prinoides*

Manitoba Maple/Box-elder, *Acer negundo*

Northern pin oak, *Quercus ellipsoidalis*

Pignut hickory, *Carya glabra*

Pin oak, *Quercus palustris*

Poison-sumac, *Toxicodendron vernix*

Pumpkin ash, *Fraxinus profunda*

Red/Green ash, *Fraxinus pennsylvanica*

Red mulberry, *Morus rubra*

Red oak, *Quercus rubra*

Shagbark hickory, *Carya ovata*

Shellbark hickory, *Carya laciniata*

Shumard oak, *Quercus shumardii*

Swamp white oak, *Quercus bicolor*

White ash, *Fraxinus americana*

White oak, *Quercus alba*

Willow (all species), *Salix sp.*

...continued on next page





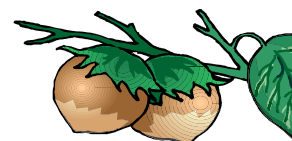
...continued from previous page...

TREE NUT ALLERGIES

In addition to being allergic to the pollen produced by male flowers on trees, many people also suffer from a hypersensitivity to the nut of certain types of trees. This hypersensitivity varies widely by both means of contact and species and is not necessarily related to peanut allergies. This list does not include non-native or introduced ornamental species and is not exhaustive.

American beech, *Fagus grandifolia*
American chestnut, *Castanea dentate*
American hazel, *Corylus Americana*
Beaked hazel, *Corylus cornuta*
Black walnut, *Juglans nigra*

Butternut, *Juglans cinerea*
Hickories, *Carya sp.*
Oaks, *Quercus sp.*
Pine, *Pinus sp.*



TOXINS

A number of ornamental and native plants found in gardens across Ontario are known toxins. The toxicity of plants varies widely and can occur on contact or via ingestion of the plant. In addition to being toxic to humans, pets and livestock may also be at risk. This list does not include non-native or introduced ornamental or herbaceous plant species and is not exhaustive.

American elderberry, *Sambucus canadensis*
Black cherry, *Prunus serotina*
Canada Yew, *Taxus canadensis*

Kentucky coffeetree, *Gymnocladus dioicus*
Poison-sumac, *Toxicodendron vernix*
Pawpaw, *Asimina triloba*

While the soil type and moisture and sun exposure at your site will dictate what plants will do best in your living classroom, by planting species of plants that are native to your area, you will help the natural environment in maintaining plant diversity by reducing the risk of introducing non-native invasive species. Research all items to be planted carefully. Visit the Canadian Poisonous Plants Information System at <http://www.cbif.gc.ca/pls/pp/poison> for more information.

INSECT BITES AND STINGS



Honeybees, bumblebees, wasps, hornets, fire ants, spiders, ticks, flies, mosquitoes, and fleas are common in the outdoors and getting stung/bitten may produce an allergic reaction. Proper dress (gloves, long sleeves and pants) will discourage contact with insects. You may wish to consider having bug spray on hand. Consult with your local Health department to determine the prevalence of West Nile virus and Lyme disease in your area and take recommended precautions.

DIRT CAN HURT! Human parasites can be found in both soil and water. Students should be taught to wear gloves when working in the garden and to avoid touching their face (e.g. brushing away hair) with dirty hands. After each visit to the garden, a thorough hand washing session should be mandatory!





The Project Lives On!

In addition to being a dynamic and vital tool to compliment curriculum, the addition of a living classroom to your schoolyard can also compliment other well known environmentally-based school and youth based programs.

GO FOR THE GOLD!

Did you know that if your school participates in the Ontario EcoSchools Program that you can increase your score by 20 points by naturalizing your school grounds. That could be the difference between a silver and a gold medal! www.ontarioecoschools.org

Living classrooms are dynamic environments that require on-going attention and management. Environmental stewardship, the act of caring for the land to the best of one's ability in order to maintain it in a healthy state for current and future generations, is key to the initial success and long-term development of the living classroom.

To be good stewards of your living classroom, all you have to do is make sure the area is protected from harmful human activities. Some tips for being good stewards are:

- Clean up litter - hosting a litter clean up day in the very early spring will ensure that you're not trampling any sensitive plants as they're starting to grow.
- Prevent dumping - dumping of grass clippings and other yard waste smothers new plant growth and puts seeds of non-native grass species in the natural area.
- Remove invasive species - monitor the area to see if one plant seems to dominate. The Hamilton-Halton Watershed Stewardship Program can help you identify and control these plants so that they don't 'out compete' native plants.
- Help local wildlife by planting native plants for a food source and erecting nest box structures.
- Resist the urge to tidy natural areas - fallen tree branches and autumn leaves decompose and enrich the soil, providing nutrients for plants. They also provide homes and hiding places for amphibians, reptiles and small mammals.
- Let trees and shrubs grow along creeks and streams - branches overhanging the water shade the water from the sun, keeping the water temperature cool for sensitive native fish and aquatic insects. They also provide hiding places from predators.
- Avoid using fertilizers - fertilizers are chemicals that can harm wildlife and small organisms living in the soil when not applied properly.
- Undertake activities such as composting and mulching, setting up rain barrels to encourage wise water use and creating natural fertilizer.
- Plant native species of trees, shrubs and herbaceous plants to encourage biodiversity and support local wildlife populations. Planting native species that are accustomed to our climate and soils will result in less maintenance!

Engage the community! By sharing your successes, you can encourage nearby residents to become good stewards of their properties.



**A mind that is stretched by
a new experience can
never go back to
its old dimensions.**

- Oliver Wendell Holmes

Do you have photos of your schoolyard project/living classroom to share?

**Perhaps you have ideas you would like to share for
future versions of this guide.**

**The Hamilton-Halton Watershed Stewardship Program
would love to hear from you!**

In Hamilton:

c/o Hamilton Conservation Authority
P.O. Box 81067
838 Mineral Springs Road
Ancaster, ON L9G 4X1
Fax: 905-648-4622

Watershed Stewardship Technician
Phone: 905-525-2181 Ext. 181

In Halton:

c/o Conservation Halton
2596 Britannia Road West
RR2
Milton, ON L9T 2X6
Fax: 905-336-7014

Watershed Stewardship Technician
Phone: 905-336-1158 Ext. 263

Or, feel free to email us at stewardship@hrca.on.ca!

We're on the Web!
www.conservationhamilton.ca
www.conservationhalton.on.ca