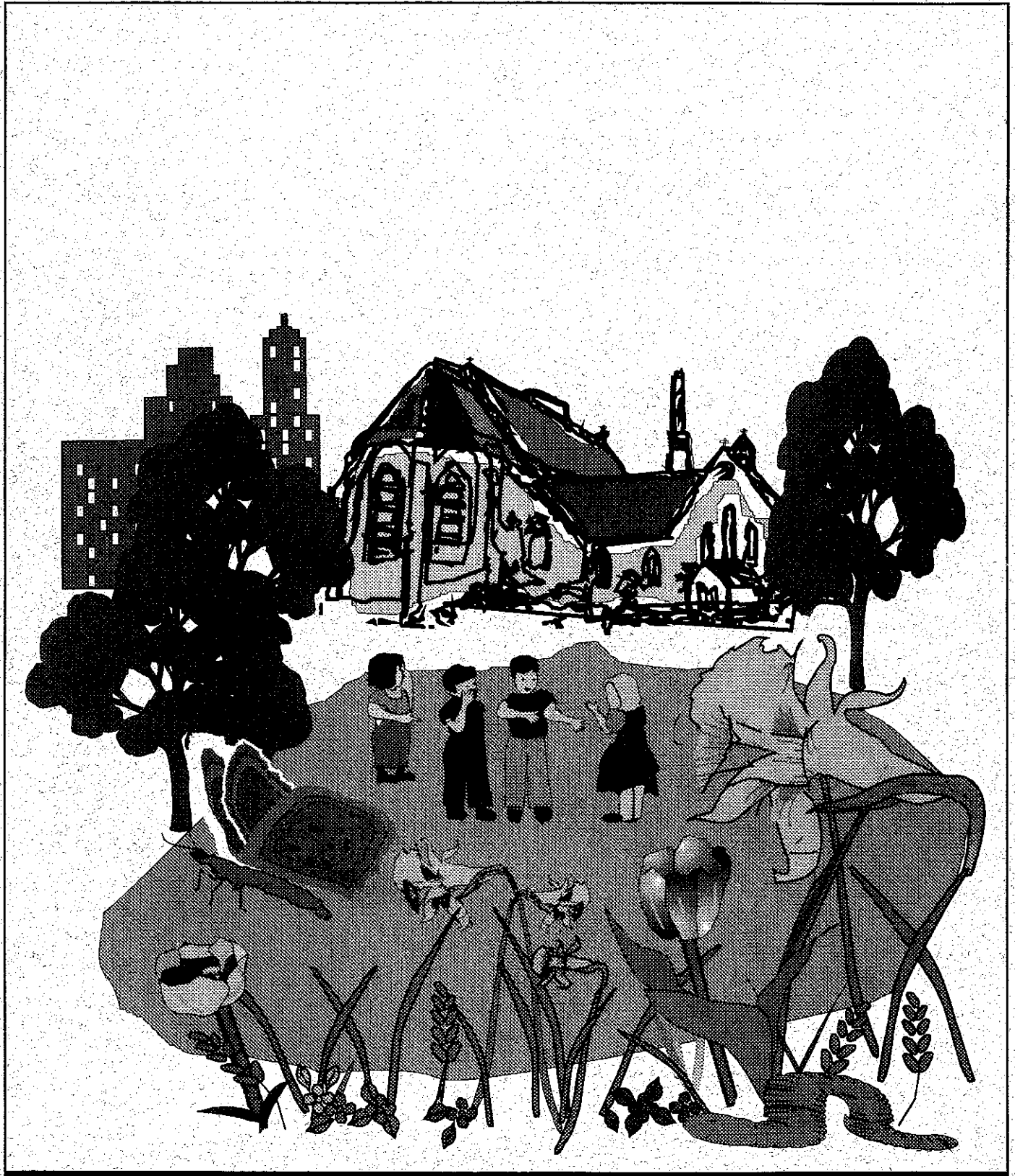


Pathways

Volume 5, No. 4
June, 1993

THE ONTARIO JOURNAL OF OUTDOOR EDUCATION



Pathways

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Administrative Assistant:	Sue Ferris 77 Ellen Street, Flesherton N0C 1E0 (B/H) 519-924-2790

COEO Office:

Council of Outdoor Educators of Ontario
1220 Sheppard Ave. East, Willowdale M2K 2X1
416-495-4264 (Fax) 416-495-4310

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Pathways Editorial Board

Co-Chair: Bob Henderson

Dept. of Phys. Ed., McMaster University
Hamilton, Ont. L8S 4K1
(B) 416-525-9140 ext. 3573
(H) 416-627-9772 (Fax) 416-523-6011

Co-Chair: Mark Whitcombe

34 Blind Line, Orangeville L9W 3A5
(B) 705-435-4266 (H) 519-941-9966
(Fax) 519-941-9966 (6 p.m. - 11 p.m.)
e-mail: mwhitcombe@web.apc.org

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Clare Magee

270 Rogers Rd., Newmarket L3Y 1G6
(B) 416-833-3333 (H) 416-898-0467
(Fax) 416-833-2085

Barrie Martin

c/o L.M. Frost Natural Resources Centre
Dorset P0A 1E0
(B) 705-766-2451

Merrily Walker

52 Highland Ave., St. Catharines L2R 4J1
(B) 416-682-7239 (H) 416-682-6539

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Cathy Graham, a grade four teacher with the Wentworth Board, and Bob Henderson thought an issue of *Pathways* should focus on Greening the Classroom.

As editors, we wanted to know what has been done in this field? What is in the planning stage? Where can you go to see a working model?

We found that so much is going on we could not fit it all in one issue. Maybe we need to do this every year. Let us know what you think. Let us know what you're doing! Here is a green selection we hope you'll enjoy.

*Cathy Graham
Merrily Walker*

Cathy will be spending two years studying poetry at Rousseau Poet's House Island Magee N. Ireland.

Her work has been featured in earlier and upcoming issues of Pathways.

Thanks to Cathy for great editorial work.

Guest Commentary on Greening Issue The Ecological Restoration Movement

By Douglas Woodard

For five hundred years or so, nature has been in retreat, her empire of life first nibbled and gnawed away, then crunched and gobbled by her mutant offspring industrial "civilization." In the last century, we have seen the rise and spread of an ever more determined human defense of nature. What few have realized is that for 60 years a counterattack has been under way, aimed at restoring wild ecosystems to the devastated lands. While some have been fighting to halt the monster's progress, or working to tame and shrink it into a responsible law-abiding and cleanly citizen of the biosphere, the number of resistors who devote part of their time to healing and restoration has been swelling, and both their effort and its results are finally capturing public attention.

From British Columbia to Newfoundland, all over North America and around the world, humans are protecting streambanks and planting trees, shrubs, grasses and herbs; tuliptrees, nannyberries, spicebush, sassafras, skunk cabbage, big bluestem and thousands more. People are fostering black-footed ferrets and transporting wild turkeys back into the lands from which they have been extirpated. Guided both by ecological science and by intimate acquaintance with their lands, humans are bringing back to watersheds, woodlots and fields the key elements of natural ecosystems which will allow nature to begin to heal herself in those places, back to that native richness whose intricacy and power we are just beginning to understand.

While the counterattack is still far from victory and the rate of healing is as yet much less than the rate of destruction, the work of ecological restoration is essential to slowing and stopping that destruction. The work helps to heal the rifts in our own souls which permit the destruction to occur and continue. Our hearts become committed to what our hands knit together. The hope that springs from effort and accomplishment leads to more action on a wider front, and the example of a few brings emulation by many. Finally, the close observation and intimate acquaintance that the work involves, and the interest that flows from commitment and physical effort, leads to the deeper knowledge essential to guide further action. The development of knowledge and skill increases our capacity for knowledge and skill, and the understanding of nature helps us to understand ourselves and our own lives.

DOUGLAS WOODARD is chief agent of the Green party of Canada. He has sent us a wealth of materials that will be used in future issues. Thanks Doug.

Outlook

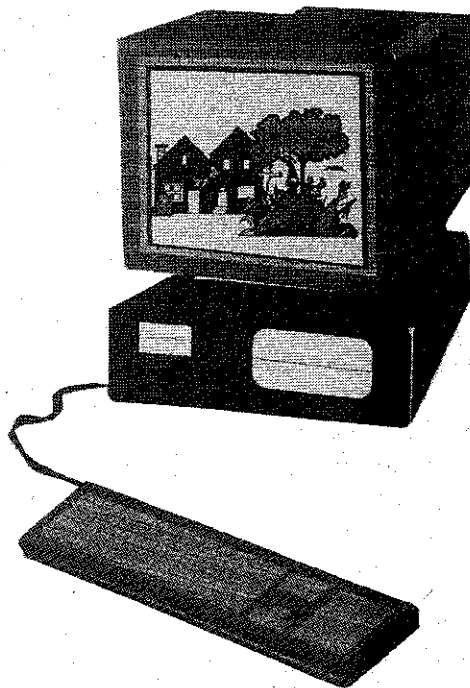
I would like to take this opportunity to thank the six COEO members who have volunteered their services to help run the children's summer camp this July 18-24. This is a minimum staff complement. We could really use a couple more people to help us out. Even if you can't come for the full week, your part time help would be greatly appreciated. COEO has always been known as a group of friendly people who readily give their time for others and the promotion of the organization. If you have been waiting for a chance to give something back to the organization for all of the good things it has given you, here is a perfect chance for you to get actively involved in a COEO project.

Elsewhere in this issues of *Pathways* you will find an announcement for the camp and an application form. Please take the time to copy this form and distribute it to students aged 9-12 within your school board. If this camp is to be successful we will need to have it promoted as widely as possible. If you can not help with the operation of the camp then perhaps you could help us recruit participants. Any assistance you could give us in this regard would be greatly appreciated.

I would like to take this opportunity to extend a warm COEO thank you to Ian Hendry for volunteering to complete Jennifer Kottick's term as a member of the Board of Directors. Ian has served in this capacity before, and we all look forward to his continuing involvement in the operation of the organization.

Over the years COEO has offered a number of ways in which members could be involved in Professional Development opportunities. The mainstay of this part of the organization has been the offering of graduate level courses offered through Northern Illinois University. If you have any suggestions as to other avenues which you would like us to follow to meet the needs of this aspect of our organization, please contact Brent Dysart, the COEO Professional Development chair.

Glen Hester
President, COEO



William Edwards looks out his back window to a jungle of massive oak trees, dead and alive, and a tangled understorey of vines, hawthorns and tall grass; all overlooking Hamilton Bay. His cottage home is the kind of place we all like to visit and stay awhile. We might see the nesting osprey and will certainly feast our ears on the other wealth of birdlife. It is a pleasant place to the senses. Inside, is a small room that sets me spinning. I'm sure I'm not alone on this. It is not pleasant to my senses, but William delights in it equal to the mess of bush out back. In this small room one will find a mass of computer paraphernalia (note the lack of technical terms); CD's that are really computer program images, tapes and players hooked up to other consoles, patch cords everywhere, printers—more than one, and as often as not, something is opened up for repairs, re-programming or, as best I can tell, just for the joys of tinkering.

Now, I'm not computer illiterate, but I'm a far cry from William. In short, computers—I don't get it. This "user friendly" term is really lost to me. Again, I know I'm not alone here. What I don't get is that, in William's words; "The computer is a tool, like a pencil. People don't play with them. They don't see its tool function. It's really painting with light. You can undo and redo with no damage to the media." William tends to go on and on enthusiastically about both the technical and the conceptual joy of manipulation that the computer allows. On different occasions, he has shown me image scanning, explained how certain computers have a colour register of 1.6 million colours (at 32 thousand the computer monitor is like a television screen), and corrected his audio time clock that speaks from a speaker somewhere (?). I never did figure this out.

My word processing sensibilities are usually run ragged after a visit. But there are simple lessons to be learned from time with William at his charming natural setting cottage with its 'high tech' paraphernalia; 1) computers really can be fun and a release for creativity and function, 2) all you have to do is play with them—really play, 3) hey these toys can do incredible things—newsletters, displays, title screens for video, logo design, produce slides,

banners, not to forget an ever evolving array of multi-media connections. In William's hands, the computer is a creative, entertaining, educational device.

Williams started his career as a graphic artist. From this background, he easily saw the promise of the emerging computer technology. He is one fellow who has kept pace with the technological advancement always from the artist's perspective. Hamilton's Royal Botanical Gardens regularly use his services. (He has been a full time employee as budgets allow.) William likes 'projects'; remember the play element in art and computers. His freelance career keeps him busy. He has done logos for outdoor education centres and conferences (C.O.E.O. 91). He has produced many large scale displays for centres.

But William doesn't like to work alone. I mean, he does not wish to be one of a few outdoor education types who is doing professional computer-designed work. He hopes Outdoor Education staff and centres see the rich value in adding the computer tool to their list of other familiar tools, such as the climbing rope, the bird feeder, the cider press, etc. It is, after all, just another tool to enhance our work. That is William's overriding message as evident in the pages of this issue of Pathways. William has also worked in downtown Toronto hermetically sealed box environments where people work and travel in boxes and stare at boxes all day. His interest in Outdoor Education and his Hamilton Bay home environment speak to a balance he brings to his life. In simple terms, he fears that the downtown boxed environment is taking away the open fresh air environment from people's lives. His hope is that we, all, become comfortable and competent in both...in balance for the good of all.

William can be contacted at:

666 Bayshore Blvd.
Burlington, Ontario
L7T 1T2
(416) 526-0349

The Greening of St Patrick's

by Jennie Barron

Pat Cameron's grade 6-7 class is sitting in a circle on the floor of the school library, laughingly recollecting their early impressions of their teacher. I want to know what they thought of Mrs. Cameron before they got to be in her class. John-Paul boldly confesses, "We thought she was the meanest teacher in the whole school and she would make us work until we dropped".

"And now?" I ask. "She's the best we ever had" he says, without a hint of sarcasm.

A boy in a Montreal Canadiens shirt puts up his hand. He was new in September and more than a little leery of his teacher's reputation. But, he says, "I thought, 'Let's give this a try'. People were telling me this [class] was really weird. She likes to do this outdoor stuff. I never liked it before but now I do".

Pat Cameron listens with an affectionate smile. "Ryan tried to get his parents to move, didn't you Ryan?" she teases. Pat knows she has made a name for herself and doesn't mind one bit. As the driving force behind the "greening" of St Patrick's School, she has turned the common curriculum into a most uncommon experience. She has transformed standard stale paper objectives into engaging and unpredictable hands-on experiences; learning in her class is memorable and fun. And as it continues to attract attention, the Cameron-style "green" curriculum is awakening students, parents, school staff, Board and city officials to the untapped educational potential of the local living environment.

In the past two years, students in Pat's class have been involved in worm composting, outdoor composting, tree-planting, and Project Wild; they have undertaken a major clean-up in the Red Hill Creek area to restore tern nesting areas; and they have used their Materials, Process and Design (M.P.D.) course to construct and install blue bird and wren nesting boxes for the Hamilton Region Conservation Authority. They have helped the Conservation Authority with their annual gypsy

moth destruction programme, and have participated in the Hamilton Naturalists' annual Walkathon for the Environment to raise funds for the clean-up of Hamilton Harbour. Last year St Patrick's served as a pilot school in the tri-board project, "Greening Our Schools", a government-sponsored initiative to help schools reduce waste, save water, save energy, and eliminate toxic substances.

Every school has one teacher who has been dubbed "The Environment Lady" or "Mr Recycling". So it is at St Patrick's where staff and parents have grown accustomed to Pat Cameron taking her class on "yet another escapade" while they shake their heads in disbelief and chalk it up to a predisposition for self-punishment. To the students, being in Mrs Cameron's class is a rite of passage they love to fear. At the mention of her name they roll their eyes back in their heads in mock exasperation that barely conceals their admiration.

When pressed for details they recount the time she brought in frogs' legs and stewed rabbit for the kids to try when they were reading *My Side of the Mountain*. They tell of the fried bread she made to eat on a walk in the woods, and the seaweed she brought in for the language arts unit "Desert Island". They recount their visit to a farm in Binbrook last year where they met a Vietnamese pot-bellied pig and built duck blinds so the ducks would have a place to roost in winter and picked up grapes in the vineyard and made them into grape juice.

Smiling and grimacing at the same time, the students describe the long walks their teacher takes the class on no fewer than 10 times a year. Starting just east of downtown they walk out toward Cootes' Paradise at the west end of the lake. Each time they go they walk a little farther before hopping on the bus. Each time they stop at the Portugese bakery and pick up a few loaves of freshly baked bread to sustain them on their hike. By the end of the year they are doing the whole 20

km trek on foot. Then they add up the total number of kilometres they have travelled and figure out how far around the world their collective steps could have taken them. One year they "went" as far as New Zealand.

In Cootes' they write 'ravine poetry' and do watercolour art. They pick a spot and observe how it changes through the seasons. One time they collected grape vines at Princess Point to use for making baskets for their parents at Christmas. They had to cut it, roll it, stuff it into garbage bags and haul those heavy bags back through the city. Halfway back they stopped unexpectedly at TCBY: 24 frozen yogurt cones were waiting for them.

Certainly all this has helped to give Pat Cameron her reputation for doing quirky weird "outdoor stuff". But the central focus of her environmental efforts, the project that has made her the "Green Lady" of St Pat's, is the garden. Of course it's not just any garden...

St Patrick's is located in the heart of Hamilton's downtown core. Sandwiched between Main St. and King St., the school is surrounded by the stop-and-go busy-ness of the city's two main traffic arteries. With the incessant noise and palpable air pollution of the inner city, the schoolyard was an unlikely habitat for wildlife of any kind. Last year Pat and her grade 6-7 class decided to change all that. They knew they couldn't get rid of 10 lanes of traffic, but they could work with what they had. It wasn't much; just an island of asphalt trimmed with beat-up grassy patches and lifeless shrubs growing in thin, hard-packed soil.

Over the winter they talked about putting in plants which attract birds and butterflies. They envisioned roses and wildflowers, vegetables and herbs, and vines for the Frost fence to block out the sights of the busy street. In early spring, with funding from Shell and Canada Trust, and a plan drawn up by volunteers from the Hamilton Naturalists, they rolled up their sleeves and got down to work.

"Our biggest focus was on native plants" Pat says, "we wanted to put back the things that would've been growing here before civilization". They opted for perennials wher-

ever they could to ensure that their garden would be as self-sustaining as possible. And they honoured Ontario's official tree, the white pine, by planting three seedlings and naming them Larry, Curly, and Moe.

In May and June the students worked in the garden every chance they got, picking out garbage, pulling weeds, shovelling, mulching, spreading manure, tilling, cultivating, and finally planting hundreds of dollars' worth of bulbs, shrubs, seedlings, and seeds. Most nights the kids stayed until 6:30 or 7:00; on Fridays they might be there until 9:00. More than once somebody's parents brought pop and pizza for the crew.

Towards summer the kids were able to pick things from their own garden and make edible flower salads. "We had chives, scented geraniums, yarrow, sage, wild mustard" remembers Pat, "we also made herbal tea". For the students, getting to eat what they'd planted was the most exciting part of working on the garden.

It wasn't long before people in the neighbourhood started to take notice that something big was happening. Storeowners brought over cuttings for the garden, and the director of the funeral parlour across the street brought the kids candy. The caretaker at St. Patrick's Church lent the students his tools, and the city donated eight old hydro poles and an off-duty crew to cut them. When a local brickyard offered free bricks but couldn't deliver, the class walked two and a half miles to get them, each student carrying four in a knapsack all the way back to the school. The students remember that day with a good-natured groan.

By the end of the school year, the class had collectively put in over 1000 hours' work on the gardens, according to Pat's estimates. In addition to the herb garden, there were roses and trumpet vine, squash and Indian corn, Virginia creeper, lantana, honeysuckle, geraniums, bugleweed, butterfly weed, and dozens of other species that the students could name. Red-breasted robins were often sighted in the schoolyard, as were monarchs, smalltails, and cabbage butterflies. The schoolyard had become a verdant urban oasis.

But the garden was providing much more than a hands-on botany lesson. Kids in all grades of the school were taking tours through the garden, touching and smelling the different kinds of sage, and picking herbs to make herb jellies and vinegars. In the fall they would use the dried out husks of the Indian corn to weave baskets, and would dye them with natural dyes. In exchange for bulbs and seeds from a Hamilton nursery, the students were compiling information about each species into a computer database for use by customers and staff. The garden was working its way into the whole curriculum, providing a meaningful context for work in subjects as diverse as computers and religion.

I ask the kids what they liked least and most about working on garden. The worst part, according to Bartek Chlebowski, was not the hours of work, or the junk they had to clean up, or even walking bent over all the way back from the brickyard with those heavy bricks in their knapsacks. It was "when people came in and said, 'You're never going to make it'". And what about the best part? John Paul has a ready answer. "The best part I liked about the garden was when the senior citizens came by and said, 'That's beautiful, that's beautiful'". Renee understands, and adds her own thought, "The best part was just watching it grow".

The students' work on the garden has brought them all sorts of unsolicited support and attention and led them in all sorts of unexpected directions. The Hamilton Naturalists and the Conservation Authority nominated Pat Cameron's class for the city's "Environmentalist of the Year" award. The mayor visited the school, and several newspapers carried stories about St Patrick's garden. Other schools in the board started to take notice and initiate plans for their own gardens. "People started calling us" says Pat, incredulously.

Patricia Chow-Fraser, a professor and limnologist at McMaster, invited the kids to work with her three days a week over the summer on a marsh restoration project planting cattails and building carp exclosures in Cootes' Paradise. There the students learned

about the devastating effects of PCBs, untreated sewage, and siltation on the natural ecosystem of the marsh. They watched swans and blue herons in the marsh, and they were filmed with David Suzuki for an episode of "The Nature of Things".

What started as a class project has snowballed, and the story hardly ends here. More plans for the garden are underway - a patch of garden at the northeast corner of the property will be officially dedicated to one of last year's enthusiastic supporters, the school crossing guard who recently passed away. A triangular section in one corner of the yard may soon become a wildflower garden with raised beds that are wheelchair-accessible. In a few weeks the perennials planted last year will all be back, the roses will be in bloom, the vines will be climbing the fence even higher. It will be the season for flower salads. Neighbours will appear out of the woodwork where there were only strangers before. The new kids in Pat Cameron's class can hardly wait to get involved and make this story their own.

For Pat Cameron the school garden has been its own reward. "Five years ago," she says, "I was bored to death". The garden has inspired her both as a teacher and as an environmentalist, and has renewed her respect for her students. "It is a joy to know that our school community consists of children who give instead of demand. They serve as excellent role models".

The "greening" of St Patrick's serves as an inspiring lesson for outdoor educators, for it exemplifies the words of Goethe:

Whatever you can do, or dream you can do, begin it. Boldness has genius, power, and magic to it.

JENNIE BARRON is a graduate from the ARTS and SCIENCE programme at McMASTER UNIVERSITY. She is an environmental education consultant with the Hamilton-Wentworth Separate school board and an Outdoor Educator with Wilma's Place, an alternative school connected with the Cathedral girls school in Hamilton. This summer Jennie is a canoe tripping guide with Project Canoe.

The Greening of Lincoln County

Environmental initiatives abound in St. Catharines. Perhaps it's our reputation as the Garden City, or maybe we're just good citizens and want to play our part in the "Greening of the Globe."

Following city council's leadership, described in their current Green Guide, the Board of Education has been promoting and facilitating Green Space projects on school properties for the past two years.

In difficult economic times, money is a rare commodity! However, where there's a will, there's a way...and with the help of our community partners, the projects have flourished.

Our local C.E.C. (Canada Employment Commission), through the section 25 grant program has provided funding that has allowed us to hire a Green Space Coordinator, Jennifer McKenzie, who operates out of the Board's Environmental Centre at Woodend.

As Coordinator, Jennifer is available to:

- assist with site planning and green space-oriented activities
- assist with obtaining donations and/or discounts on plants and equipment
- assist with the preparation of funding requests
- assist with the execution of site-based plans
- solicit volunteers
- speak with school staff and parent organizations
- handle Green Spaces community information
- create a photo journal of school activities
- create a slide or video presentation
- maintain regular written progress reports for open perusal

To say that the Green Spaces Projects have been successful would be an understatement. To-date, 50% of our schools have been involved in projects that have engaged the support of local nurseries, trucking firms, farmers, the hydro, the regional and municipal

works departments and seed companies. Many parents have also assisted in our projects.

Whenever hard currency has been required, local business, private individuals, and in particular, Canada Trust "Friends of the Environment" have been most generous.

The gratifying part of such a project is the win-win aspect. The children, the school, the community and the globe as a whole all benefit!

Green Spaces Project-Lincoln County

Lincoln County schools are experiencing the 'wild life' first hand! No, they're not having parties in the classroom or behaving like animals. They'd rather have the animals do that. For these schools, the wild life means participation in the Lincoln County Board of Education Green Spaces Project, designed to attract wildlife back to the city.

Created in 1991 by the Ontario Public Interest Research Group (OPIRG) at Brock University, 'Green Spaces' as it has come to be known, has become a popular project among Lincoln County students. So popular, in fact, that the number participating has tripled in the two years since its creation and it is still growing.

The creation of a three part teaching guide in the summer of 1992 by OPIRG's Green Spaces staff included a Teacher's Manual, Primary-level activity book and Green Spaces-theme colouring book. Backing from the Superintendent of Education and Staff Development, Mae Denby, and Co-ordinator of Social and Environmental Studies, George Thompson, gave an added boost to the project, giving it additional credibility with principals, teachers and the public.

Since then, 'Green Spaces' has flourished throughout the Board. Utilizing school property, the 'natural' green spaces can be found in many areas of the school yard. Where green spaces have been created near neighbouring homes, owners have been consulted, and where appropriate encouraged to assist

students in the development of the site. For the most part, colourful low-lying ground cover, wild fruit vines and bushes have been planted in these areas. To-date, neighbours have wild strawberries, raspberries or grapes growing near their yards. Weeds are few and the entertainment provided by the squirrels and birds foraging for food in the area have made the idea of improving the environment an inviting one to many of the neighbours.

At the front of the school, flowering trees and shrubs are the norm. In a simulated bird sanctuary or thicket of shrubbery, wildflower gardens are in place to attract butterflies to the area. Despite having an abundance of flowers in place, bees do not seem to create a major problem, nor do any of the other insects. Mosquitoes and other tiny insects provide food for the birds and keep them coming to the area to feed. When the insects die off at the end of the summer, shrubs bearing fall and winter fruit provide food for the non-migratory birds of Niagara, including blue jays, cardinals and sparrows. Bird feeders take care of the birds for the rest of the winter.

From the planning to planting, 'Green Spaces' is the project of students. The majority of the schools have had a second, third and fourth graders doing much of the work, as they are the ones who will see the changes year-to-year. Graduating students do much of the manual work, such as cutting back bushes and using the rototiller to break up the soil (under supervision, of course). Younger students are on 'garbage patrol,' making sure that plants are not being suffocated by candy bar wrappers, chip bags and pop cans polluting the garden.

The first steps for the young planners include making a map of the existing area and completing a soil survey. These tasks help them to choose the plant species best suited to their area. Following this, the students can decide what type of habitat to create: a butterfly meadow, bird sanctuary or a miniature woodlot to attract a variety of species depending on available space and funds. Smaller is better when planning a wildlife habitat because there is always room for expansion later. Planning at the participating

schools began in September or October, with teachers, principals and parent-teacher organizations discussing the possibilities for developing a green space and the ensuing benefits for the children and the environment.

Many parents and teachers have come to believe 'Green Spaces' has been one of the most valuable learning experiences within the school. At the schools where vandalism has been most feared, little or none has been discovered. Having students so actively involved in all aspects of the project has given them a sense of ownership in the school garden and in the environment as a whole. The risk of student vandalism is reduced and will hopefully deter vandalism as students get older. Coupled with the STAR Recycling program in the Lincoln County Board of Education, 'Green Spaces' gives students a well-rounded first-hand look at environmental problems. It also shows them the things even children can do for the global environment by managing conservation and preservation projects on a local level.

The Lincoln County Board of Education has reinforced its commitment to the 'Green Spaces' programme by hiring a co-ordinator for the winter term of the 1992-93 school year. The OPIRG working group continues to support the project as well by creating a resource fund. Money for purchases such as potting soil, seeds and planting equipment has been provided to schools to get them off to an early start in the spring by planting seeds indoors.

While the future of the project is still uncertain, there is a positive feeling among the participating schools that the project can be continued for many years to come.

*JENNIFER MCKENZIE
Green Spaces Co-ordinator
Lincoln County Board of Education*

Anyone interested in obtaining additional information about this project can reach Jennifer at the Woodend Environmental Centre (416) 688-5440.

The Re-Think Tree

by Jim Gear

Our beautiful green earth is in trouble. Years of neglect and abuse have taken their toll. The waters of our great oceans are polluted. At the rate that we are contributing to the environmental destruction of our planet, the lush green world we inhabit will cease to be. (Earth Works Group, 1990).

As you read the environmental literature today, you will frequently see a reference to the three R's of environmental protection - Reduce, Re-use and Recycle. Periodically you hear about reject, refuse and repair as well. From the seed planted by these few powerful words, the Re-Think Tree grew.

The Re-Think Tree is a simple framework to empower individuals to get up and do something about global environmental problems. It helps you to assess where you stand on a given environmental issue and encourages you to think about what actions you will need to take to move to a branch that provides greater benefits to the planet.

Education, clean-up and alternatives are expensive, but what will it cost to buy a new planet? It is now time to re-think our lifestyle so that it will cease to be the root of the problem and will become the genesis of the solution. Please use the Re-Think Tree to guide you in this process.

Recycling has become the major method of combating the problem. As we increase the percentage of waste that we recycle (presently Canadians recycle 6%), this will have a positive effect on the planet. I do not intend to downplay the importance of recycling—it is very important and we should constantly strive for increasing the percentage of garbage that is recycled. However, recycling is becoming part of the problem. People think that because they use their blue box, they have now done their part to contribute to saving the planet. Individuals who have nothing to put in their blue box because they have bought wisely (this is called precycling) are at a much higher level of contributing to the solution than the recyclers. As you examine the Re-Think Tree you will see that recycle is a very low branch.

Let's examine the branches of the Re-Think tree in order of priority: Refuse, Reduce, Re-use, and Recycle. On each environmental issue individuals can assess which branch they presently sit on and determine which branch they would like to move to. They can then ascertain when and how they will get there. Some branches may not apply to some environmental problems.

The following illustrates how you can use the Re-Think Tree. On the issue of buying pop in individual cans, on which branch do you sit? People who buy their pop in cans and then throw the cans on the ground or in the trash are completely disregarding the Re-Think Tree and are a major part of the problem. Those who ensure that their pop cans are recycled have hopped up on the first branch and have become a small part of the solution. It must be remembered that recycling pop cans, although much better than throwing them away, has an energy cost and a negative effect on the environment. There is an energy cost and a pollution factor at the collecting phase and during the recycling phase.

If you can come up with another use for the pop can that will be safe and environmentally friendly, you have prolonged its life and its usefulness and have therefore climbed up to the Re-Use branch on the Re-Think Tree. If you decide to buy pop in cans only when it is very difficult and inconvenient to do otherwise, you have climbed to the reduce branch. Refusing to buy or accept pop from tins in favour of a more environmentally friendly method of quenching your thirst, moves you to the top branch of the Re-Think Tree.

In this example we will examine someone who prefers a bath to a shower, even though he/she realizes that a short shower is more

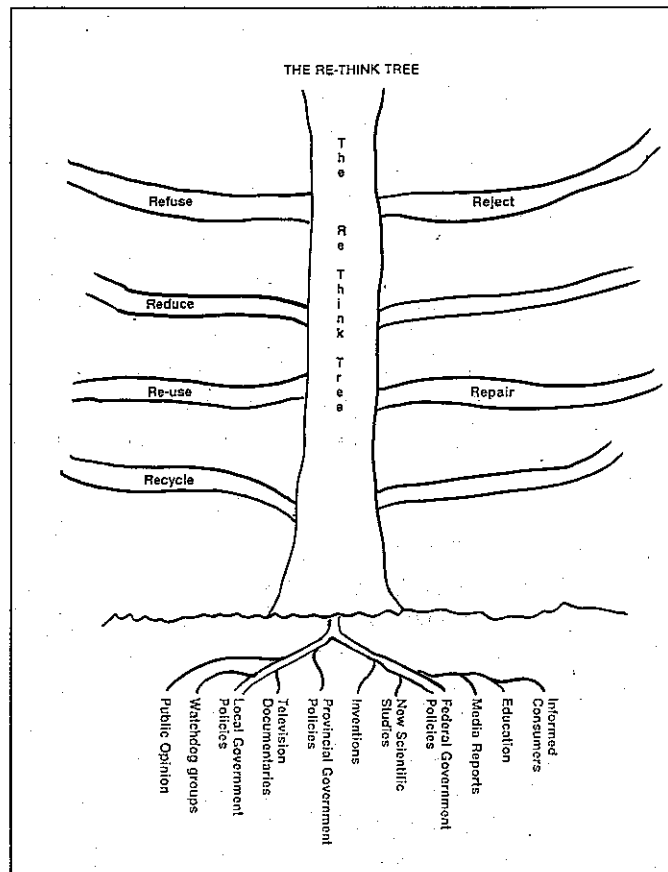
environmentally friendly. Since we cannot recycle water and the water cycle guarantees that it will be re-used, the issue becomes a matter of reducing the energy consumption necessary to bath and ensuring the availability of water in the immediate environment. In areas where fresh water is not plentiful, re-using water before it is returned to the water cycle is an alternative that must be considered. One technique is to capture household water, separate the solids from the water and then re-use the water for such applications as watering the grass or washing the car. This is called grey water and is only recommended in areas where fresh water is scarce.

Wasting Water

When we say we are wasting water what we really mean is that we are wasting the amount of clean water presently available to us and the amount of energy used to purify and transport clean water. Water is not created or destroyed, it is naturally re-used as it moves to a new location in the water cycle. We cannot recycle water; we can purify it and re-use it.

For our person who likes a bath, he/she is now left with two options or branches to choose from. The highest order skill on this issue is to refuse to bath. Since this is not advisable, he/she could reject baths in favour of short showers. The use of low flow shower heads would further reduce the amount of energy consumed in bathing. If this alternative is not acceptable, he/she can reduce the number of baths or the amount of water in each bath.

Find out where you stand or sit on a number of environmental issues! Where are you now; where do you wish to be, and what will it take to get you there? Where do you stand on private transportation (cars)? Are you at the don't care level or are you willing to reduce? Could you use a bicycle, or car pool or use public transportation more than you presently do? If you could be convinced the planet will not survive the decade unless the private use of cars ceased immediately, would



you be willingly stop using your car? Pick a number of other environmental issues and assess where you are, where you want to be and what actions will get you there.

There are some other reasonable steps you can take to help the planet. You can Re-educate others about the importance of caring (e.g., adopt a politician and keep him/her educated and informed on environmental issues). You can Re-report good things that are happening to heal the planet and you can alert others to problems in need of a solution. Most of all you can Re-joice in the fact that you are ceasing to be the root of the problem and are now becoming the genesis of the solution.

Speaking of roots, it must be remembered that roots are essential to the survival of every tree. They provide stability and a foundation upon which it can grow. They are lifelines to bring it nutrients and water. What provides the stability and foundation for the Re-Think Tree and what is necessary to help it to grow?

The following list gives examples of roots that support the Re-Think Tree:

Public Opinion

People often suggest that the environment is in serious trouble and that *they* should do something about it. It is imperative that we realize that very little will happen until the *they* becomes *I*. Public opinion will be the most powerful tool available to reverse the process.

Television Documentaries

Appropriate documentaries can significantly help to shape public opinion.

Education

Education is a very powerful process to get the environmental message to the children and through them to the adults.

Media Reports

Appropriate media coverage can assist people to realize the magnitude of the problem and can be a deterrent to inappropriate use of the environment. (e.g., publishing the names of companies that have been convicted of environmental infractions).

Informed Consumers

The greatest power the individual has over environmental decisions comes from being an informed consumer and utilizing the power that this knowledge provides to exercise the required pressure. This action can cost you in the short run but pays great dividends in the long run.

Inventions

Inventions can have a powerful positive and negative influence on the environment. Procrastinating action in the hope that an invention will solve the problem in the future is one of the major reasons for environmental inactivity. It is essential that we stop counting on an invention that will solve the problem and increase our effort to find one. Inventions have another negative effect. They create a demand to continue to be a highly consumptive society.

New Scientific Studies

Appropriate scientific studies can help us to become better informed consumers and can assist us to know more about the impact of our efforts and the urgency of particular environmental problems.

Watchdog Groups

Watchdog groups have a vital role to play in environmental protection. They can also become part of the problem. If the group attacks a problem entirely on emotion and chooses to ignore the facts, they can sometimes do more harm than good. Such groups can give all environmentalists a bad name. When you are examining an environmental group to support, do your homework carefully. Find out what percent of the money taken in directly supports the cause and how much is consumed in administration. Examine the facts on both sides of the issue and make an informed decision.

Government Policies

Local, provincial, federal, and international governments have an obligation to draft legislation that will help protect the planet from environmental destruction. Citizens in democratic countries have an obligation to ensure that they do.

It is now time to Re-Think our lifestyle to help guarantee the survival of our planet. I hope the Re-Think Tree will be a useful tool to help you with this process. Ask yourself this question and be prepared to act on the answer: "If not me—who? If not now—when?" As Denis Hays put it, "Individually, each of us can only do a little. Together we can change the world."

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Important Components of Outdoor Leadership

by Simon Priest, Ph.D.

In many instances, increased accidents, greater environmental damage and additional negative learning experiences are being observed as part of a trend toward expanded use of the outdoors for recreational and educational purposes. By preparing more effective outdoor leaders, the outdoor education movement can contribute to decreasing the frequency of accidents, the amount of environmental damage, and the number of negative outdoor experiences that presently face poorly trained outdoor users. However, before competent outdoor leaders can be prepared, a preparation formula is needed: what does it take to be an effective outdoor leader?

In an effort to share international opinions on this question, a study of experts from the five nations of Australia, Canada, Great Britain, New Zealand, and the United States of America was recently undertaken (Priest, 1987). These experts were asked to discern the most important components to practicing outdoor leaders from a comprehensive list of seven skills and seven attributes. These fourteen components were both rated and ranked for importance. The resulting list is presented below, with most important components given first. All ratings and rankings of the experts were found to be parallel and in close agreement. Definitions for each component follow later also in order of importance.

1. SAFETY Skills (skill)
2. JUDGEMENT based on experience (attribute)
3. AWARENESS and EMPATHY for others (attribute)
4. GROUP MANAGEMENT Skills (skill)
5. PROBLEM SOLVING Skills (skill)
6. INSTRUCTIONAL Skills (skill)
7. TECHNICAL ACTIVITY Skills (skill)
8. Flexible LEADERSHIP STYLE (attribute)
9. Motivational PHILOSOPHY and INTEREST (attribute)
10. ENVIRONMENTAL Skills (skill)
11. ORGANIZATIONAL Skills (skill)
12. Personable TRAITS and BEHAVIOURS (attribute)
13. Healthy SELF-CONCEPT and EGO (attribute)
14. Physical FITNESS (attribute)

SAFETY skills are the competencies necessary to enjoy adventure activities in a safe and sensible manner. Examples of some safety skills are navigation, survival, weather interpretation, body temperature regulation, wilderness first aid, accident response, search and rescue, and water safety.

JUDGEMENT based on experience is needed when critical problem solving information is unknown, missing, or vague. By calling on past experiences and using sound judgement, outdoor leaders substitute for unknown, missing, or vague information, and permit the problem solving process to continue. Sound judgement comes from surviving past judgement calls (good or bad); from analyzing those successes and failures, and from retaining that analysis for future situations. In turn, this suggests that outdoor leaders should gain plenty of intensive and extensive practical field experience over the years. However, possession of a great base of experiences in no way assures sound judgement on the part of outdoor leaders.

AWARENESS and EMPATHY for others relates to more than mere sympathy for people. Outdoor leaders must be aware of how group members might feel under certain circumstances. This awareness comes from the outdoor leader having previously been in such a similar situation. A leader who has never been through an activity similar to that of a group member, may lack the experience

necessary to truly appreciate the predicament the member is in. If a leader is unaware of the emotional status of a group member, then the leader cannot possibly help the member reach toward goals!

GROUP MANAGEMENT skills are those competencies which keep the group dynamic intact and which keep the members working toward their task. For example, outdoor leaders need to resolve conflicts, maintain group co-operation, communicate effectively, foster interpersonal trust, and develop intrapersonal confidence. The abilities to use such "people" skills allow outdoor leaders to maximize the benefits of learning from outdoor adventure experiences.

PROBLEM SOLVING skills are those competencies which enable leaders to accomplish tasks and overcome emergencies. The problem solving process is composed of two important phases: the analytical and the creative. The analytical phase follows definite procedures such as distinguishing a probable decision from the list of possible solutions. The creative phase, on the other hand, uses techniques such as brainstorming new ideas when the analytical procedures reach a bottleneck or standstill, and when answers to questions are not immediately obvious to outdoor leaders.

INSTRUCTIONAL skills are those competencies required to teach the group skills related to living in the outdoors. For example, teaching rock climbing in a series of progressions, learning environmental concepts by the questioning approach to inquiry, and effectively using visual media aids for imparting canoe safety are all important instructional skills.

TECHNICAL ACTIVITY skills are those competencies concerned with the outdoor pursuits being led. Some examples include being able to rock climb at a certain standard or level of difficulty, and being able to paddle a certain section or grade of a whitewater river. So as to maintain group control during the adventure, leaders need to be able to

perform at a proficiency equal to or greater than that of the group members.

Flexible LEADERSHIP STYLE means knowing how, why and when to apply differing approaches for sharing the role of decision maker. Three key styles exist: autocratic (authoritarian), democratic (equality), and abdicratic (Laissez-faire). Under most conditions, the decision making of a group will be democratic or shared. In an emergency, leaders must be autocratic: giving orders and expecting them to be carried out. When the experience is progressing well, the leader may choose to be abdicratic: entirely delegating responsibility for decision making to the group. In the latter case, the leader remains on hand ready to assume more decision making power if called for.

Motivational PHILOSOPHY and INTEREST are the underlying reasons which cause (or motivate) outdoor leaders to have interests for leading other people in the outdoor setting. These might include a desire to introduce others to nature, to work in the outdoors or to share skills with others. Rarely, if ever, are leaders in it for the money, but occasionally they might desire to lead in order to be at the centre of attention!

ENVIRONMENTAL skills are those competencies necessary to prevent negative damage to the natural surroundings. For example, outdoor leaders must practice and encourage minimum impact travel and no trace camping. By model behaviours such as carrying out the garbage and not cross-cutting switchback trails, leaders can expect and receive similar behaviour from their group members.

ORGANIZATIONAL skills are those competencies needed to plan, prepare, execute and evaluate an expedition or field trip with attention given to the special needs of participants. For example, leaders need to arrange transportation and lodging for a group, schedule activities, plan the menu, map escape routes, and secure the necessary permits, equipment and clothing to make the trip a success.

Personable TRAITS and BEHAVIOURS

refers to the set of model actions and one's personality which combine to create a rapport between outdoor leader and the group. For example, a leader needs to embody such traits as unselfishness, confidence, honesty, punctuality, humour, and eagerness. Leaders are also held up as role models by those they lead; and as such, they must exhibit model behaviour when in the presence of their charges. They must demonstrate a C.A.R.E.S. ethic (concern, admiration, respect, empathy, and safety) toward both environment and people. For example, they should wear lifejackets and protective helmets when such equipment is called for, they should avoid leaving trace of their presence in the wilderness, and they should behave in a manner that is socially acceptable to others.

Healthy SELF-CONCEPT and EGO

refers to outdoor leaders who are *not* entirely devoted to themselves and who know their true abilities. Potentially disastrous consequences are possible from a leader who is leading in order to be the centre of attention, rather than to honestly help others. Outdoor leaders who know their own strengths and weaknesses, who reserve pushing their own limits to times when they are engaged in personal trips and who are aware of their own egos, can devote time and effort to developing healthy self-concepts in others. Outdoor leaders who take groups outdoors so that they, themselves, may benefit from climbing a new peak or running a new river with the students along for the ride, are obviously not responding to the needs of the group and therefore cannot be expected to provide enjoyable growth experiences for others.

PHYSICAL FITNESS includes the agility, co-ordination, endurance and strength necessary to perform the tasks associated with being an outdoor leader. Outdoor leaders need to be physically and mentally fit enough to work long hours, sometimes under considerable stress.

This list has profound implications for the outdoor educator charged with the duty of selecting or training staff. In the past, safety (at the top of the list) has been of paramount importance to organized programmes. Obviously this should continue to be the case, with staff training still including as many safety skills as possible. On the other hand, judgement based on experience was seen as being almost equally important as safety skills. Sound judgement is the glue which binds all the other components together to create the truly competent outdoor leader. It is also a very difficult and nebulous attribute to develop in outdoor leaders. One way to provide an opportunity for judgement to develop is to include plenty of field experience in the staff training, but there are few guarantees that sound judgement will result from a collection of experiences alone.

Further down the list, awareness and empathy and group management were found unexpectedly high in terms of relative importance. Many experts observed that this was probably due to a new global trend toward emphasizing the "soft" or subjective components (as opposed to the "hard" or objective ones) in outdoor leadership preparation. Since outdoor education is a critical process for developing socialization in students, programme directors could do well to consider including more people-oriented training for their staff.

In the middle of the list, three skills concerning problem solving, instruction and technical activity provided a grounding for outdoor leaders. Also, having a flexible leadership style and a genuine reason for wanting to be an outdoor leader were considered of moderate importance by the experts. They felt that these five components formed a firm foundation upon which to build by preparing outdoor leaders in the other components mentioned above. Programme directors ought to give careful thought to questioning a staff members reasons for wanting to lead before training begins. Once training has begun, a familiarity for using various leader-

ship styles, followed by learning how to do different activities, how to teach each activity, and how to solve unexpected problems, ought to form the bulk of the initial training. Later training can then concentrate on the safety, judgement and people orientation deemed critical to outdoor leaders.

Environmental and organizational skills were fairly low on the list of important outdoor leadership components. Experts commented that this was due to a lesser concern on their part for protecting the environment when compared with a greater concern for participant care. They also felt that organizational responsibilities resided with a logistics manager and not the leader. It would appear from these results that outdoor leadership experts place more emphasis on the adventure part of outdoor education than on the environmental part. This discrepancy was apparent to many experts who commented that the worldwide pressure of dwindling natural resources was slowly shifting their opinions. Additionally, programme directors are at a distinct advantage by being able to reduce the logistic responsibility placed on the leader and free time for training staff in other components.

At the bottom of the list, the three attributes of personable traits and behaviours, healthy self-concept and ego, and physical fitness were considered of less importance to outdoor leaders. However, the experts did mention that these were the attributes they considered most when looking to select outdoor leaders for entry into a preparation programme.

In conclusion, the experts would like to select their outdoor leadership candidates on the basis of the attribute components, train the candidates in the skill components, and build in plenty of opportunity to develop sound judgement during intensive and extensive field

experiences. The outdoor educator or programme director, facing the prospect of staff training this season, may benefit greatly by addressing each of the components mentioned here for staff selection as well as for staff training.

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Simon Priest, Ph.D. teaches in the Department of Recreation and Leisure Studies at BROCK UNIVERSITY.



Seeds of Survival Teaching Kit



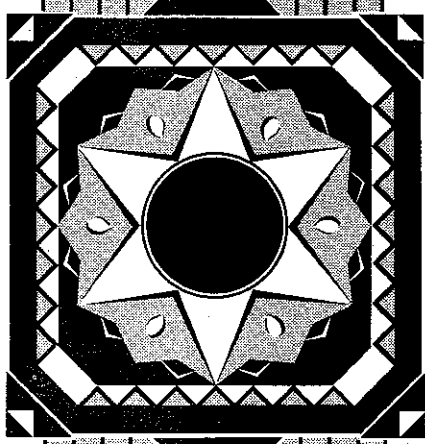
One important lesson that many are not teaching is that more than 90 per cent of the food we consume comes from only 20 food plants. Even more enlightening, is that the world's food supplies are unreliable, our ability to feed ourselves and future generations depends increasingly on the work of farmers and scientists in countries like Ethiopia. In fact, Ethiopia is home to some of the world's most diverse food producing seeds.

The world's dependence on so few food plants make the preservation and conservation of seeds in areas of crop diversity vital to our survival. Areas in the world where crops were first widely cultivated are called 'centres of diversity' or the 'gene pool' of breeding material for the crop. Ethiopia, with several

thousand years of agricultural history, is one such place.

The Seeds of Survival Teaching kit dispels some of the myths about where our food comes from, by exploring the important role seeds play in our human food chain and that the developed and developing countries play in preserving food producing seeds.

The Seeds of Survival Teaching Kit clearly reveals the interdependence of farming nations like Canada and Ethiopia in their common effort to produce food in a rapidly changing environment. Ethiopia is the centre of origin for crops like coffee and teff and is the centre of diversity for many others like wheat and barley.



Make A Down To Earth Investment

SUPPORT THE SEEDS OF SURVIVAL PROGRAM

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During the drought of the seventies and early eighties, severe hunger forced many farmers to eat their seeds, even the ones they had set aside for next year's planting. This meant that thousand of grain varieties developed over thousands of years of farming were quickly disappearing. This also meant that many of the genes within these seeds were becoming extinct. Ethiopian scientists noticed with alarm this rapid erosion in the genetic diversity of essential food crops.

Crop genetic erosion has implications that reach far beyond Ethiopia. Western industrial agriculture is based on very few varieties of high-yielding seeds. In any field, each of the thousands of plants in a crop is genetically uniform with the next. When a disease breaches the genetic armour of one plant, the entire crop is immediately vulnerable. To build defenses against this genetic weakness, western plant breeders must rely on the centres of diversity, such as Ethiopia, to find the genetic raw material to do 'repairs.' These local seeds, called landraces, have adapted over thousands of years to a diverse range of climates. They do not require chemical pesticides or expensive fertilizers to grow and as a result provide Ethiopians with the opportunity to develop their farming sector while at the same time producing seeds that provide Canada with invaluable genetic material for its agriculture. Genetic erosion, in centres such as Ethiopia, severely threatens the entire system of modern agriculture.

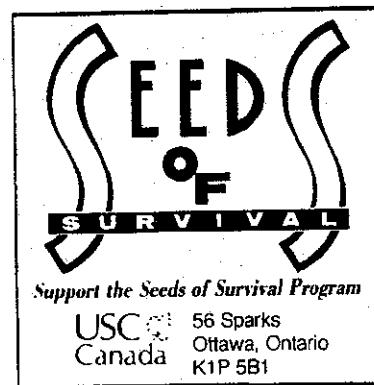
It is clear that Ethiopia and Canada are linked together by a common food chain. The first link in that chain is seeds. If Ethiopia is to develop food self-sufficiency and if industrialized countries, like Canada, are to continue with large-scale food production, the seed link must be recognized as fundamental to our human food chain.

The Seeds of Survival Teaching Kit was developed by the development organization, the Unitarian Service Committee of Canada (USC). USC is working with Ethiopians to restore their food producing potential by planting indigenous seeds that produce food under Ethiopia's diverse growing conditions.

The Seeds of Survival Teaching is an exciting package for high school, biology, social studies and family studies classes. The package contains a 15 minute video, a giant colour map that explores the world's 12 centres of crop genetic diversity, a teaching guide and a student booklet. This innovative resource has been produced in both video and slide show format and is available in both in English and French.

How to Get Your Kit

The cost of the kit is \$95.00 plus a \$3.00 postage charge. To obtain your copy of the kit contact: USC Canada, 56 Sparks Street, Ottawa, Ontario K1P 5B1 or call 1-613-236-5857.



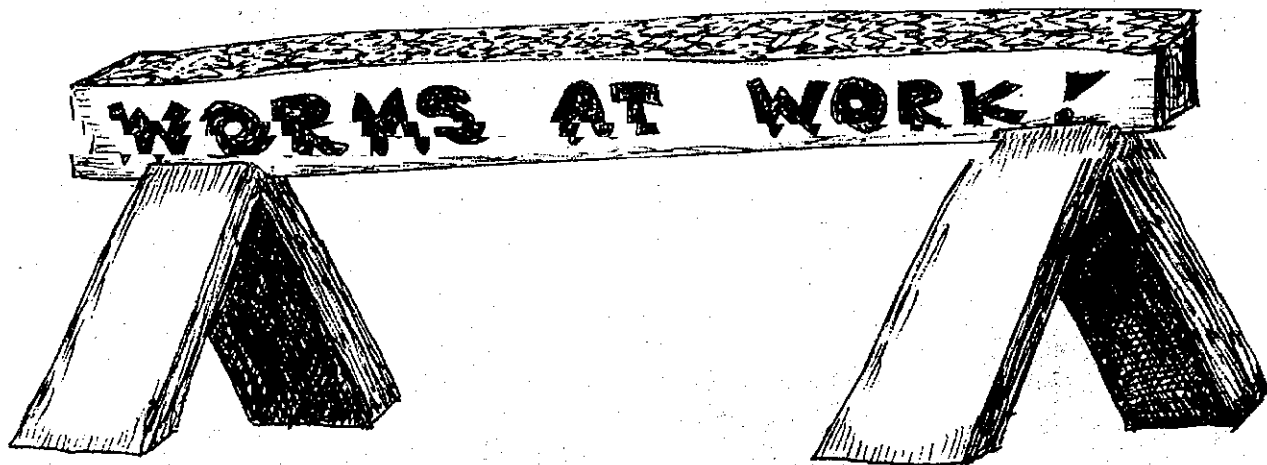
by Merrily Walker

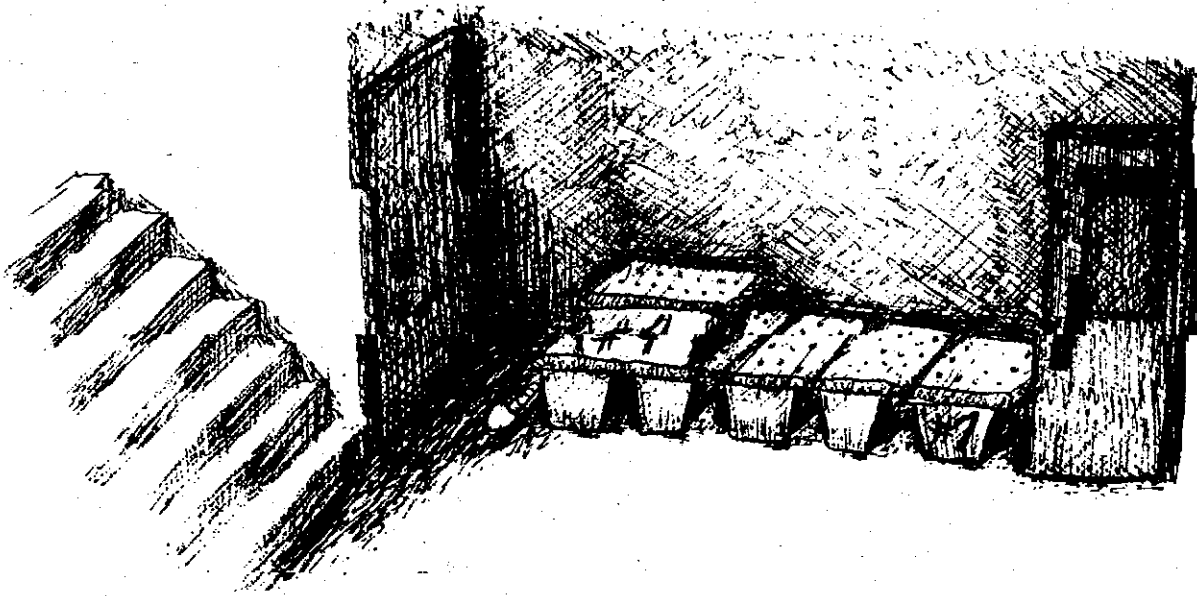


Down in the basement hallway at Merritton High School there are six blue plastic boxes, each about the size of a paper recycling bin. Each box has a perforated lid. One has a large #4 painted on the end, another is #7. One, whose number is not visible, has a trowel hanging from it attached by a rope. These boxes are part of our school's recycling programme which was started in 1990, thanks to the efforts and enthusiasm of Bruce Hemphill, a teacher in the science department. There is also a big blue box in the chemistry room and another in the family studies' room. Inside each box there is a quiet and content colony of worms steadily munching in about 20 centimetres of earth.

To keep the worms busy, Bruce put a small bucket (gallon ice cream size) with a perforated lid in the staffroom beside the recycling bins for bottles, cans and paper and a large lidded pail in the students' cafeteria.

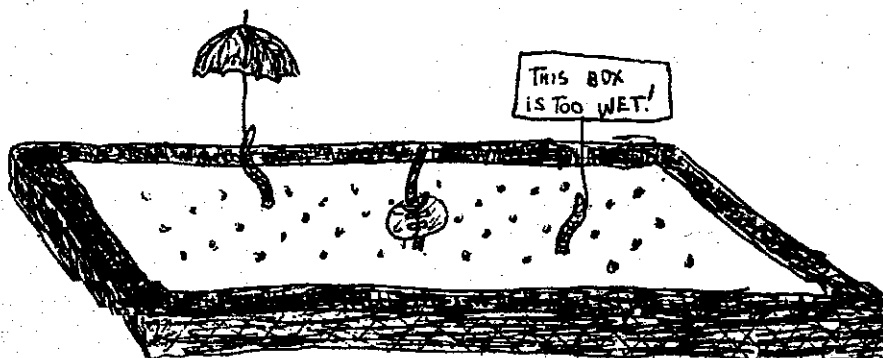
Students and teachers are encouraged to fill these containers with their apple cores and orange and banana peels at lunch time. Last year a team of two girls emptied the bucket and the pail each day into a different worm box. They dug down into a new section of the worm-box-of-the-day each time to bury the peelings. It's important to have someone monitor the amount of moisture in the soil to make sure it is not too dry or too wet. A metal wand with a simple dial and arrow on top can be obtained for this purpose from a gardening shop. If the worms are unhappy they tend to move onto the lid of their box in search of a nicer moist dark spot.





One of the big advantages of using a worm box (practising vermiculture) is that it cuts down on the amount of fruit and vegetable scraps that have to be green garbage bagged and dumped in the city's landfill. Another is that the nutrients from the food scraps can be returned to the soil. Yet another advantage for people who have compost piles in their backyards is that composting can be carried on even in the winter months. Outdoor piles don't work very well at below zero temperatures but an indoor worm box will keep converting food scraps to rich soil all year around as long as it's kept at at least 10°C.

There is no unpleasant smell to a worm box. Sometimes when the lid is lifted, if the soil is too damp, you get a blast of moisture-laden air. The worst thing that could happen is that the odd fruit fly might be lurking in the box. The best worms to use are red wigglers. They can be obtained from Early Bird Ecology in Smithville, Ontario. They multiply lustily if well fed and housed. At the end of the year you will probably have enough worms to populate new worm boxes for each of your students.



Greening of the Classroom

by Alice Casselman

GREENING in our classrooms is a story with many threads—the development of technology, the increasing awareness of the fragility of our environment, the urbanization of society, changes in family structure, and the downturn of our economy. GREENING of our classrooms may also be seen as our salvation both as humans and as residents on this planet.

The greening of our classrooms resembles our Canadian spring—a long time coming and suddenly everything is in bloom.

In 1984 I chose to do research on the greening of North America. I had just spent a year travelling around the world with a pack on my back, much of my time spent in India and Nepal, before returning to finish my Masters in Outdoor Education at Taft. I chose this topic on my return because I sensed a change in the awareness and commitment of people towards the environment, a change which I had not previously seen. Travelling had made me look at our attitude towards our environment more critically.

Why was there more greenery in businesses, restaurants and homes?

Why was Outdoor Education suddenly getting recognition and even funding?

Why were conferences such as Man and Environment being co-hosted by outdoor educators, geographers and science teachers?

Why had BSCS Green Version, pond studies, the ecology of the dandelion and Steve van Matre become de rigeur?

Could it be that outdoor educators had finally convinced people that the environment was a part of ourselves worth understanding and conserving?

To begin my search for answers, I developed a questionnaire for post-graduate students taking summer courses. Those in outdoor education courses at Taft campus were compared with those in other courses at other campuses. The results of this survey surprised me. The profile of the outdoor education students showed a higher percentage from an urban background. Why were urban students seeking GREEN? Did the

students from the rural background see the environment as a business?

My search led me to readings—*The Greening of America, Aquarian Conspiracy, The Turing Point, and Megatrends*, to name a few. The answers began to emerge. Coping with the speed of technological change and the feeling of isolation while working at machines had driven us to ask if that was all there would be in the year 2000. If so, it wasn't going to be enough—there had to be some balance in our lives. After all we had just emerged from the sixties. Where had the sense of freedom and power of the individual gone as we struggled to keep up with technology?

It seemed that society was now facing both a human problem and an environmental problem. Classroom teachers had sensed a change in students—changes in behaviour showed a decrease in a sense of responsibility, a decrease in self worth and a shortened attention span! Family chores, once serious responsibilities with obvious consequences, had become almost unnecessary and trivial through technology and urban living. Our environment had also begun to deteriorate more rapidly than we thought. Our scrap yards, landfill sites, urban sprawl, high rise, algal bloom, beach closings, mercury and phosphate wastes had begun to echo the findings of Silent Spring and Club of Rome. As Pogo said, 'We found the enemy and them is us.'

We began to take comfort in bringing nature into our workplace and our homes. It was proven to be no coincidence that GREEN, the colour to be used for creating calm, soothing environments, was found in institutions,

operating rooms and factories. Born Again! Nature revisited! Back to the future! Outdoor Educators took advantage of this rebirth and requested and received funds to build programmes and centres to spread the environmental gospel.

Administrators and entrepreneurs shared this vision—getting in touch with the environment was the way to go! The time was ripe for baking, gardening, composting, eco-tripping, and GREEN. Ecology had become the new religion to save us all. This trend was seen in the proliferation of nature themes on sweat shirts, etc.—Chest Art. Retailers such as Roots, Northern Reflections and Mountain Co-op all met our needs as we sought to bring comfort and balance into our lives by getting in touch with nature, a greening, almost a keening, for the times we knew had gone.

As individuals we knew we had to have this contact with things GREEN. As educators we became aware that we were the last link to the roots of this land—our country and our cultural heritage. We tried harder to bring this feeling to our students—we took them to camps, farms, pioneer cemeteries and residential centres. We changed the curricula to include time to touch and be touched by nature.

Parents, trustees and administrators understood how vital greening was to our future. Awareness of the importance of green was increasing. It was acceptable to invest time and money in this endeavor—bringing the student to GREEN. Teachers felt comfortable when an expert showed the students how to do all these activities. The economics of the time supported the programme. Buses and staff were available to those energetic teachers who would take their students to these sites and learn GREEN.

There was, however, a BLACK hole in this story. The school yard and creek were often ignored as outdoor classrooms because the teacher did not feel confident enough or have time enough to develop a site specific program in their own backyard. There was little on-site support, release time or expertise to help bring

the curriculum home. Today the economic environment has changed. The buses, supply teachers, professional development time are all under pressure. Drastic cutbacks are touching the outdoor programmes. The cost of maintaining buildings and buses has driven us to re-examine our GREENING.

Fortunately classroom teachers have begun to turn BLACK economics GREEN by seizing this chance for environmentally positive change. Concentration on recycling, reusing, refusing, rethinking has given us a new focus. A chance to make the curriculum and activities relevant and lead the way back to GREEN. Paper recycling, blue-box programmes, eco-diaries, tree planting and landscaping allow our students to assume responsibility and personal pride for their environment and in their personal lives. We are empowering our students to take up the challenge of saving our world in their generation.

This is already happening in some classrooms. English teachers are using environmental concerns to learn composition and literature, geographers are using Gaia atlases, Boards are hiring recycling coordinators, chemists are encouraging students to choose an environmentally-based independent study experiments, music theatre classes are writing environmental shows and student councils have GREEN representatives. ECO-ED, Earth Week, Pitch-In week and Litterless lunches are part of our classroom life. Use of technology is being critically evaluated and controlled to support environmentally friendly and user friendly programme. Pogo might now say, 'We found the enemy and we're doin' something' about us.'

GREENING this time is for a life-time. We outdoor educators must now encourage teachers and students to make a measurable difference, to be responsible for the GREENING IN THE CLASSROOM.

The last task of the aging teacher is to pass on the knowledge and respect we used to have for each other and should have for our environment, to help the beginning teachers

understand that this may be the planet's last stand and to give them the tools to use in the 20th century to KEEP OUR CLASSROOMS GREEN.

ACER-My Personal Action Plan

My personal action plan began with the founding of ACER, Association for Canadian Education Resources. I was inspired by watching Dr. Walter Tovell work with teachers in the field at a COEO annual meeting. I knew how few of us ever got a chance to experience this type of teaching live—and there were no films or videos which captured these moments. ACER thus began as an organization to preserve and share teaching tools for our classrooms. This philosophy has taken us and GREENERS—Ralph Ingleton, Jean Wansbrough and I, ACER's founding directors, into the development and production of new tools as well as conservation and preservation of proven ones.

ACER is a non-profit organization whose future lies in facilitating, evaluating and making connections. Connections are needed between classroom teachers in all grades and subjects with each other and with the world outside the class room—of organizations, publishers, ministries and producers. The world which has put the classroom teacher under siege is asking us to take leadership for the year 2000 and beyond. A perfect chance for GREENERS!

If you are interested in making connections, please complete and return the enclosed survey. You can add a programme you already have and would like to share or any idea you would like to develop.

PLEASE COMPLETE THIS SURVEY FOR ACER - ASSOCIATION FOR CANADIAN EDUCATIONAL RESOURCES

'Classroom Classics' Canadian film titles which should continue to be available are:

1. _____
2. _____

I would order these as film, VCR cassette, CD Rom, Interactive Disc

I would be interested writing a Teacher's Guide for the above film # _____

'BIOSPHERE RESERVE' is an audiovisual, cross-curriculum proposal on the Niagara Escarpment Biosphere. Please put me on your mailing list for more information.

I am interested in accessing Canadian materials dealing with _____

I want to share materials which I/my Board developed on the topic of _____

Name _____ Tel/Fax _____

Address _____

PLEASE RETURN TO: ACER, U #44; 3665 FLAMEWOOD DR., MISSISSAUGA, ON L4Y 3P5

How Green is Your School Yard?

Why does a school have a yard? What purpose does it serve? How could the yard be modified to expand its use? How could the school and its yard become a community showplace?

These and other questions can be asked of any facility that exists. The school is a socializing agency created and funded by our society. The school's mandate as described by the broad goals of education is indeed broad and a challenge for its agents to fulfill. Social and environmental values and functional skills with an emphasis on minimum consumption are critical for living in the 21st century. Thomas Berry (1990) describes this when he discusses the move from the industrial, petrol-based culture to an ecozoic period where the environment is sustained only through a full understanding of an ecosystem, of which we are a part. In his writings, Berry also describes how the educational and religious institutions have failed to deal with society's ills of which environmental degradation is the most significant.

So how does the school's programme today fit the demands of the future? What changes are required by the new eozoic era in which our children will live?

This paper proposes a collection of ideas and resources. Depending on your answers to the questions posed above, you may already have imagined a new set of uses for the space around your school building. Does your preferred vision of the school yard go beyond an open area for play, exercise and sport?

The Centre for Educational Research and Innovation (C.E.R.I.) (1991) reports that innovation that increases student's environmental awareness is one of the most important priorities for the future development of education. Further, C.E.R.I. stresses the importance of grassroots involvement and development of environmental educational projects. When students had an active role in defining objectives and carrying out the plans they

made concrete changes to the environment. The projects developed dynamic qualities in students through active pedagogical strategies including research, while promoting environmental awareness in students, teachers and the community. Young people need to sense that they can contribute to their society through meaningful activities that are respected and that actually influence their society. Schools can provide a framework in which to gain experience in investigating and acting on the environment. (In this context, environment could include the social and economic as well as the physical.)

What is possible for the curriculum planner who is thinking of using the schoolyard as a teaching-learning context? Obviously the children do use it to learn. They make decisions, solve problems, interact, among other things. And these learning experiences go on without much direction from the professional educators other than supervision.

We hear about the new ways of thinking, the need for different paradigms, the need for greater co-operation and interagency collaboration as requirements for effective environmental action. The challenge remains: how can the school use its yard to create teaching-learning experiences to foster collaborative environmental action?

The author recommends the use of acronyms to generate new images and concepts. In this context use GREEN as the source for words. Set up a grid and list words for each letter in the acronym. Under the 'G' you might list the words gardening, growing or generate. The 'R' could stand for rewarding, real or renewal. The 'E' words could be environment, experience, effort. The 'N' might be naturally. The author's choice is 'Generate Rewarding Environmental Experience Naturally.'

If you become excited by the idea of a 'green yard' you will want to share it with your

colleagues, students and community. A planning procedure that offers promise in this regard using the acronym A.K.A.P. (Awareness, Knowledge, Action Plans). It describes the components of a changed sequence. A.K.A.P. requires you to consider the 'why,' 'what' and 'how' of the GREEN plan.

The 'why' of GREEN would include a rationale that says it is opportune for the school to act as a role model for collaborative environmental action. The new Ontario curriculum (grades 9-12) mandates environmental values, skills and knowledge. The 'what' of GREEN is basically the process of planning the curriculum for generating rewarding environmental experiences naturally (the concepts, skills and values to be developed). The 'how' would include the processes of planning the development of the GREEN area on the school yard, such as habitat area, ecology garden, the funding and the maintenance.

Probably the most critical question concerns an innovation such as the GREENing of your yard is the 'What if?' or 'So what?' Is the project feasible in terms of the school's mandate and its established traditions? Should teachers be expected to be involved in such outdoor education given heavy load of the indoor curricula? Can the community and the school collaborate effectively on such endeavours? Can the associated costs be justified? These and other related questions must be answered from both the head and heart perspectives. The logic of a GREEN programme must be defined and defended to satisfy the administrative requirements and the accountability of the education system to its communities. Is there administrative support to properly implement the plan? Who are the major players in the plan? Does the plan demonstrate collaboration among the major players? Is the learner empowered to act in a stewardship role? Is the GREEN plan sufficiently meaningful to excite the hearts of all those involved in turning the awareness and knowledge of GREEN into action?

The author in this instance argues for a renewed look at the use of the school yard. It is not a new idea at all for some of the yard space to become an extension of the indoor curriculum. The school's garden and Arbour Day activities of the 1920s and the Victory gardens of the 1930s and 1940s certainly illustrated the functional skills and values of the human-soil relationship.

The philosophy of Outdoor Education in the 1950s and beyond advocates the outdoors as a means to curriculum enrichment, while the environmental education movement of the present endorses the ecological component of education.

The following are some resources that may encourage you to act. There are no blueprints for you to duplicate on your space because that would deprive you of the rich experience of being architect and engineer in your own GREEN project. Rather, you are encouraged to pursue these contacts and experience the excitement of personal success. People willingly share their personal first experiences with others who show an interest.

In the Peterborough area, contact Ms. Kathy Dueck, the coordinator of the 'Green Up' programme while involves the schools, municipal council and community. Pat Cameron, of St. Patrick School of the Hamilton Separate School Board, is busy at this inner-city school in a community school interactive beautification project of the school grounds which include herb and butterfly gardens. The OOOPS project in Toronto (Old Ossington Orchard Public School) has earned notice with its orchard project, an effective method of GREENing it school yard.

The *Green Teacher* Magazine (Ontario) frequently includes information on school yard projects.

Club Cosmicos is operated by Simon Fell and Barbara Stocking who incorporate 'Permaculture' (permanent agriculture) in the 'Future Builders' approach to integrated learning experiences for school and community projects.

The Ontario Ministry of Natural Resources provides funds and help through the Community Wildlife Involvement Program (CWIP). Many success stories emerge when school and community projects are completed for the benefit of wildlife.

The Canadian Wildlife Federation and the Habitat 2000 program can assist schools in their environmental projects.

Canada Trust and its Friends of the Environment Fund can process funding proposals through individual branch managers.

Shell Canada has funded projects similar to GREEN.

The Faculty of Education library, Brock University houses master's projects and theses describing school-based environmental projects.

The OPIRG (Ontario Public Information Research Group) located at Ontario universities can provide information on 'Green Up' projects in your area.

But the first contact is with your own network—your colleagues, students, friends and your community agencies.

Let's celebrate the success, because in the end:

*'We will conserve only what we love;
We will love only what we understand;
And we will understand only what we are
taught.'*

Baba Dioum (Senegal)

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Future Builders. (Barbara Stocking, Simon Fell). Toronto, ON: (416) 692-7743.

Habitat 2000, Canadian Wildlife Federation, 2740 Queensview Drive, Ottawa, Ontario, K2B 1A2 (613) 721-2286.

O.O.O.P.S., 380 Ossington Avenue, Toronto, Ontario, M6J 3A5. Contact Sara Katz (416) 393-0710.

Ministry of Natural Resources, contact your district office.

Shell Environment Fund, P.O. Box 100, Station M, Calgary, Alberta, T2P 2H5.

The Green Teacher, 95 Robert Street, Toronto, Ontario, M5S 2K5 (416) 960-1244.

WALLY POOLE is semi-retired from the
Faculty of Education, Brock University, St.
Catharines, Ontario, L2S 3A1

Niagara Escarpment Commission

When I left a job in the city to work for the Niagara Escarpment Commission, my friends figured I was about to enter some non-stop TV Ontario nature special. I would have an open air office, a chipmunk chattering at the corner of my desk, mandatory tree-hugging breaks...

But for the longest time the closest I got to the Escarpment was the lovely posters tacked on the office walls. I have a window, but it overlooks a gas station, some fast food outlets and a doughnut shop. Sixteen fluorescent tubes light my work space; you can read a newspaper wearing a welder's mask.

Spend a few hours in a beige room in the front of a word processor under glaring lights. You feel uneasy, itchy and tense. There's no single reason why you feel this way. It's an unspecific reaction to the environment as a whole.

After a couple of months, I got to drive to a meeting in Grey County. North of Eugenia on Regional Road 13, I discovered the Niagara Escarpment.

As I crested the hill that goes down to Kimberley, the Beaver Valley rolled away beneath me—wide, gentle, green and endless. It was a rare day in November, mackerel clouds rippled high in a cobalt blue sky. The shimmering vision lasted a few seconds at best. Yet I will never forget the sight of that valley and the involuntary tingle it set off.

In a quiet instant, I felt whole. All that I needed was here in this moment, in one delicious gulp of experience.

Tony Hiss is an American writer and lecturer in the emerging science of 'place.' He describes our relationship with the places we know and meet up with as 'a close bond, intricate in nature, and not abstract, not remote at all: It's enveloping, almost a continuum with all we are and think.'

In short, the places where we spend our time affect the people we are and can become,' says Hiss.

We must be careful when we make changes to our surroundings. Even with the best intentions, we risk inadvertently removing sights, sounds, shapes, textures or other information. In the end, these are the elements that mould and nurture us at the deepest level of our being.

That notion is at the heart of the Niagara Escarpment Plan. It's one of the things that sets this land-use plan apart from others. The Plan protects identifiable environmental features such as water quality, natural vegetation, soil, wildlife and rural working spaces. But in addition, it protects 'visual attractiveness.'

This reference to beauty raised howls when the plan was put together. How could you regulate taste? Who would decide what was attractive? A rumour started that the Commission would dictate the style of shingles on your house or the colour of your garage door.

In reality, the issue never caused much of a problem. People who own or buy land on the Escarpment generally want to preserve the pristine appearance they bought it for.

Landowner, NEC planner and NEC landscape architect share a common goal in trying to make a proposed development as 'natural' as possible. The planner's interest is professional, the landowner's deeply personal, yet both are concerned about overall visual impact. They discuss, negotiate and usually arrive at a conclusion that suits the landowner and is friendly to the Escarpment.

The final result confirms that. At the formal stage, when the 17-member commission considers landowner proposals and planners' reports, the outcome is typically favourable all around. More than 90 percent of development proposals are approved by the commission. There are conditions, of course, to assure compatibility with the natural environment.

There's no argument that it's an environment worth protecting. The Escarpment is host

to more species of ferns and orchids than anywhere in Canada: 1,000-year-old eastern white cedars; 300 species of birds; icy streams and scores of waterfalls.

Some of the best agricultural land in Ontario is on the Escarpment, providing us with crisp Beaver Valley apples and slurpy Niagara peaches. The climate and soil in Niagara have also proved perfect for vinting: French varietal grapes and wines from the region have won international acclaim.

The Escarpment has cultural treasures, too. Historic villages, ghost towns, pioneer industrial Sites, archaeological digs—sacred grounds that give us a sense of our past in this land.

So important is the Niagara Escarpment that two years ago it caught the attention of the United Nations. The UN Educational, Scientific and Cultural Organization (UNESCO) designated the Escarpment a World Biosphere Reserve, putting it on a par with the Galapagos Islands and the Florida Everglades.

The UNESCO designation recognizes the Escarpment as a natural ecosystem of international significance. It credits the Niagara Escarpment Plan for striking a balance between conservation and human need.

The Niagara Escarpment is part of a network of 300 biosphere reserves around the world. They provide a standard against which the impact of human activity can be measured globally. There are only six reserves in all of Canada.

The Escarpment is small. You can see for yourself what that means. Grab a regular sized sheet of white paper. On it, draw a three cm square. That's the size of the Escarpment compared to Southern Ontario. Now draw a one cm square. That's how big the Escarpment is compared to all of Ontario.

Size is not as critical as location. The Escarpment travels through the most densely populated area in Canada. Only 17,000 people live on the Escarpment but six million people live within a 90-minute drive of it. There is intense pressure to develop this area.

When UNESCO Director General Frederico Mayor inaugurated the Escarpment as a biosphere reserve, he said, "The protection of this complex landscape within a rapidly urbanizing region is a tremendous feat of will and co-ordination requiring leadership, hard work, imagination, tenacity, and a good dose of human psychology to apply it."

Land development in South Central Ontario will continue to press against areas protected by the Niagara Escarpment Plan. There will be repeated calls from big developers that the Niagara Escarpment Plan and the commission should be broken up.

During the current review of the Niagara Escarpment Plan, developers have posed as plain, grassroots folk battling for their rights. This mimics recent events in the United States where lumbering and mining industries agitate local people to fight environmental legislation.

You need to go back only about 20 years to remember why people wanted a special commission and plan in the first place. It was because development was starting to negatively affect the escarpment. People feared it would be lost.

In the years to come, the Niagara Escarpment will increasingly stand out as the last large nature corridor in this area of the province.

If we can manage to protect it, the Escarpment will continue to inform our lives. As our understanding of its natural processes grows, we will also grow in knowledge and spirit. We will understand and will be comforted by our place.

RICHARD MURZIN is communications director for the Niagara Escarpment Commission.

Thanks to CLARKE BIRCHARD for recommending this article. Permission granted to reprint from the BRUCE TRAIL NEWS, WINTER 1992 issue.

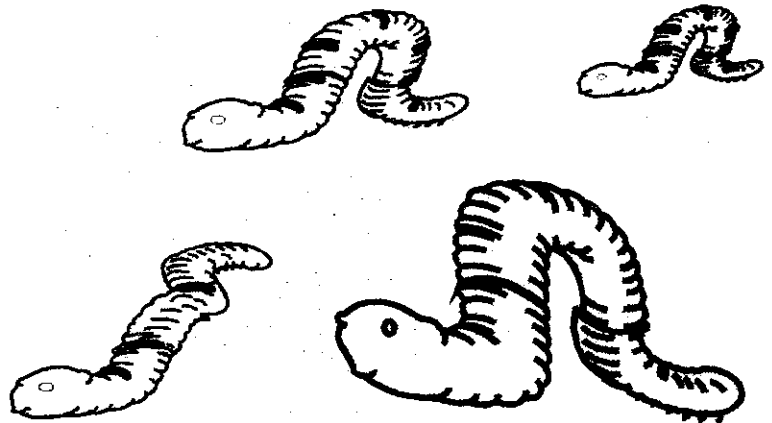
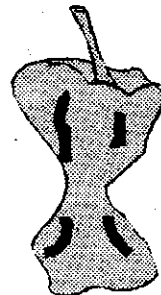
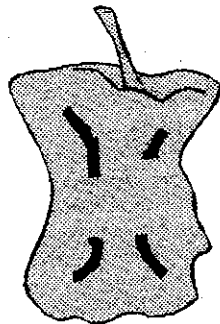
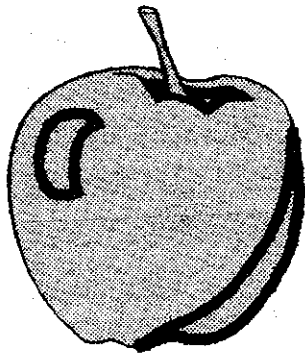


Opening The Door

There once was an apple and the apples name was Katie. Katie lived on a tree near a forest. Onenight there was a bad storm and during the storm Katie got knocked off the tree and she fell on the ground with a thump. The next morning a girl came along and she saw the apple and she picked it up and went and put it in the fridge. And then five hours later the girl came and took the apple out of the fridge and she put the apple in the fruit basket there was a banana and a orange. They talked for a while until the girl came back and ate Katie and after the girl was done she threw Katie in the compost. Katie fell into it and landed with a thump. Katie was very very sore

so she went over to the orange peel and sat down on it and fell asleep.... Then the girl came back and took the compost bucket outside and she threw Katie, and all the other fruits in to the outdoor compost and Katie fell in with a thump and it really stank in it so she just went to sleep. And early in the morning the girl came out side and took all the fruits and put it on the garden. The End.

SABRINA OFIELD is a grade four student from Rosseau Public School in Ancaster, Ontario. Thanks to Sara McClure, Sabrina's teacher, for sharing this work.



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*With thanks to several people at
Make Peace with Winter who
enthusiastically made suggestions.*

Algonquin Centennial

Algonquin Park, in Ontario's "near north" headwaters country, is celebrating its one hundred year history this year. May 27th, 1993 will see the official opening of the park's new elaborate interpretive centre. The large structure is nestled on a hill overlooking the Sunday Creek at the Park's east end. The interpretive centre will accommodate a much larger number of visitors than the busy and cramped former highway visitors centre. The former site near Cache Lake might be used as a skills centre. This option is still being explored as are available funds and staffing. It is fitting that in such a heavily travelled canoe trippers country, a museum centre visit can now be added to one's canoe travel plans; also fitting that it be a marshland creek that makes up the panorama given the dominance of such terrain.

These seepage area headwater marshes through spawn a rich collection of rivers all well noted as white-water destination. The Friends of Algonquin each year over the next four will be releasing high quality river guides of these much travelled waterways. The White Water resources in and near Algonquin Park project will involve separate publications of the Petawawa river guide - Summer, 1993, Madawaska upper/middle/lower sections - 1994, the Magnetawan to Georgian Bay - 1995, and in 1996 the exciting spring river running potential for the lesser volume Opeongo, Amable du Fond, and Oxtongue rivers. The guides have been meticulously worked on by veteran river canoeist George Drought. The full collection will provide a valuable reference resource for the many clubs, school groups and countless distance visitors that both base camp on site and travel through. Indeed, this is wise use of centennial funds for canoeists' interests.

Also of interest is the expected summer release of the "Best of the Raven." The Raven is the Park's much respected interpretative publication. Since 1960, the Park staff have produced 10 issues per year of the acclaimed pamphlet with a naturalist's eye on Algonquin's life. The modestly priced "greatest hits" book will add another dimension to the canoeist's knowledge and view of the Park. It will be a valuable resource for Ontario-based outdoor interpretation given the high quality of the writing. Many will already have yearly sets of

THE RAVEN as it has been the practice to mail the yearly set of 10 issues by mail on request.

For yet another view, watch for the release of the stunningly beautiful photography and lively text of artist and writer Don Stanfield and Liz Lundell, respectively. *ALGONQUIN: THE PARK AND ITS PEOPLE*, a richly illustrated "coffee table" style book, published by one of Canada's leading publishing houses, McClelland and Steward, offers a wise look at Algonquin old timers and the people who call the Park home. Don Stanfield has a knack at coming to know the young and old alike and the spirit they bring to Algonquin. The text is an interpretive background needed to fill this Park land with life; a life dominated by canoe and snowshoe. A final note, no one catches the canoeist's experience of shrouded misty morning like Don Stanfield. Watch for a longer review on this book in an upcoming issue of *Pathways*.

Finally, while there have been other traveller's guides of Algonquin over the years, the 1993 release by Michael Runtz promises to be the most useful guide to date. *THE EXPLORERS'S GUIDE TO ALGONQUIN PARK* is an attractive pocket book at 5" x 8" for \$10.00. Inside you will find 14 detail maps, sketches, photos and a text designed to allow you to explore the natural and human history of the Park by foot, vehicle and particularly via the day canoe outing. For example, did you know where on St. Andrews lake (a day's paddle from the ARCHRAY vehicle entry point) there is a sunken pointer boat; a relic from the busy logging days, and did you know of the choice moose and other habitat site on the Tim river via a western boundary access. This book (a spring release) by General Stoddart Press is a gem for the day use, overnight base camp paddler and highway #60 corridor day use users. Runtz has also worked hard to spreading out the attention throughout the Park's many road access points which should inspire many to explore new regions. A choice guide for family canoeing.

1993 marks this busy Park's centennial. It provides an opportunity to gain knowledge and understanding of this canoeing haven.

by Bob Henderson

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Apply immediately

**3. Canadian Rails to Greenways
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Contact: Marc Bedard

Canadian Parks & Recreation Association

306-1600 James Naismith Dr.

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Phone (613) 748-5651

Fax (613) 748-5706

**Ancient Forest Exploration
and Research**

For a fourth year with EarthCorps teams, ecologist Dr. Peter Quinby is leading a momentous effort to locate remaining stands of ancient white-pine forests on Ontario's Lake Temagami Region. Concentrating this year on upland forests, Quinby is testing methods of watershed analysis that might well help preserve the integrity and diversity of other ancient forests.

Based in tents, fit teams will paddle and portage canoes for several kilometres, then hike into the forest to measure the age and size of big trees, estimate tree cover along transects and identify and collect samples of smaller plants. Past volunteers have praised the wilderness experience.

TEAM I: June 28-July 10, 1993

TEAM II: July 17-29, 1993

TEAM III: August 5-17, 1993

TEAM IV: August 24-Sept. 5, 1993

STAGING AREA: North Bay, Ontario

PROJECT COST: \$47,800

YOUR SHARE: \$1,195

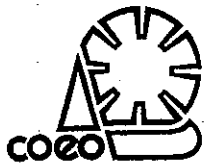
For further information contact:

Dr. Peter Quinby

R.R.#4

Powassan, Ontario POH 1H0

(705) 724-5858



COUNCIL OF OUTDOOR EDUCATORS OF ONTARIO

Children's Summer Camp

July 18 - 24, 1993

Sponsored by The Council of Outdoor Educators of Ontario

at the

Etobicoke Outdoor Education Centre

located in the

Albion Hills Conservation Area

Bolton, Ontario

The Council of Outdoor Educators of Ontario is a volunteer non-profit organization which promotes the concept of outdoor education in the province of Ontario

This camp is open to all children aged 9-12 in the Province of Ontario.

The tentative programme includes a combination of environmental and recreational education activities such as:

- hiking • canoeing • adventure education
- stream investigations • woodlot wanderings • co-operative games
- swimming • crafts • individual pursuits • camping skills

FEES:

\$200.00 per participant

Transportation to and from the camp will be the responsibility of each family

Deposit: A deposit of \$50.00 must accompany the application for participation in the camp.

Balance of Fee: \$150.00 is payable no later than June 21, 1993

Cheques: Make cheques payable to Council of Outdoor Educators of Ontario

Registration Form – COEO Children's Summer Camp

CHILD'S NAME _____ BIRTH DATE _____
Last First Mo/Day/Yr

PARENT'S NAME _____
Last First

ADDRESS _____
Number and Street City/Town Postal Code

TELEPHONE HOME () _____ BUSINESS () _____

Send Registration To: Glen Hester, 20 Linn Cres., R.R. #3, Caledon East, Ontario L0N 1E0

For more information about the camp or COEO contact: Glen Hester at (416) 880-0862

Nature Appreciation from an Ethical Standpoint

Those of us who like to experience flora and fauna in their natural surrounding periodically need to be reminded of our responsibility to avoid disturbing the wildlife and vegetation that we so enjoy. The following Code of Ethics, from the Summer 1992 issue of *Season's* is reprinted with permission of the Federation of Ontario Naturalists.

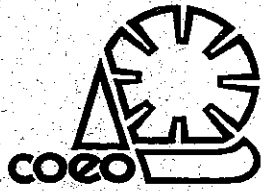
A Nature Viewer's Code of Ethics

There are a few published codes of practice for nature photographers (see below), but since the ethical issue is really viewing nature, we've expanded this code to embrace all watchers. Like all codes, it can offer only general principles and guidelines, to be adapted to your personal ethics. You must judge the circumstances and follow what you know in your heart to be right.

1. Always put the welfare of animals and plants ahead of your desire to view them.
2. Study the species' behaviour, needs and ecosystem. Learn how things interrelate and how easily you can break their links.
3. The rarer the species, the greater the care you must take.
4. The more that seasonal circumstances make a species vulnerable, the wider the berth you must give your subject. Breeding season, winter and migration are especially stressful times for wildlife.
5. Leave nesting birds and nursing mammals alone unless you have proper training and guidance. Stay away from hibernators.
6. Don't stalk, chase or badger wildlife, repeatedly causing a bird to flush or a mammal to run.
7. Don't handle birds, wildlife or their young, or muck about with nests and dens. Never separate babies from their mothers. Avoid removing reptiles, amphibians or insects from their natural habitat.
8. Always move slowly, letting birds and other wildlife get accustomed to you.
9. If you see any signs of stress, you're too close. Back off immediately.
10. Avoid trampling plants and vegetation in any habitat.
11. Never permanently alter any habitat to improve your view. Gardening—cutting and clearing away branches, reeds, grasses and other protective cover—is unacceptable. Removing a stray leaf or tying back a branch is acceptable, but return everything to its original position.
12. Make your visit as brief and quiet as possible. Take as little equipment as possible to minimize disturbance in the field. Avoid repeated trips. Avoid creating a trail to your subject's refuge.
13. Don't trespass or litter. Respect landowners' and public terms for land use.
14. If you witness any unethical practice in the field, speak up.
15. Consider the collective impact of nature viewers. If the area or subject is overvisited, could you look for another, less stressful opportunity?

Codes of practice are available from the following organization (send a self-addressed stamped envelope):

Toronto Camera Club
587 Mt. Pleasant Rd.
Toronto, Ontario
M4S 2M5, as well as
other clubs belonging to
the Greater Toronto Council
for Camera Clubs.



Council of Outdoor Educators of Ontario

Regions Served by COEO

- Far North:** Patricia, Kenora, Thunder Bay, Algoma, Cochrane, Sudbury, Rainy River, Timiskaming
- Northern:** Parry Sound, Nipissing, Muskoka, Haliburton, North Bay, Simcoe County
- Western:** Essex, Kent, Elgin, Lambton, Middlesex, Huron, Bruce, Grey, Dufferin, Wellington, Waterloo, Perth, Oxford, Brant, Haldimand-Norfolk
- Central:** Niagara South, Lincoln, Hamilton-Wentworth, Halton, Peel, York, Ontario, Metro Toronto
- Eastern:** Victoria, Durham, Peterborough, Northumberland, Hastings, Prince Edward, Lennox and Addington, Renfrew, Frontenac, Leeds, Grenville, Ottawa-Carleton, Lanark, Prescott, Russell, Stormont, Dundas, Glengarry
- Out-of-Province:** Any area in Canada except Ontario
- Outside Canada**

Membership Application Form

(Please print)

Name: (Mr., Mrs., Ms.) _____

Address: (Street or R.R.) _____

City _____ Postal Code _____

Telephone: (H) _____ (B) _____

Position: _____ Employer: _____

If applying for family membership, list persons who will be using the membership.

University/College if full time student: _____

I am in the _____ Region of COEO.

Introduced to COEO by: _____

COEO membership is one year from date of renewal.

Please check: New Renewal Membership # _____

Fees: (circle)

Regular: \$40.00 Student: \$25.00 Family: \$52.00

Subscription Rate: \$38.00

Make your cheque or money order payable to *The Council of Outdoor Educators of Ontario* and mail, with this form, to:

COEO
1220 Sheppard Avenue East
Willowdale, Ontario
M2K 2X1

Please allow four weeks for processing or change of address.