

Pathways

THE ONTARIO JOURNAL OF
Volume 11, No. 2, May 1999

OUTDOOR EDUCATION



Pathways

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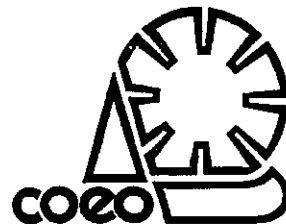
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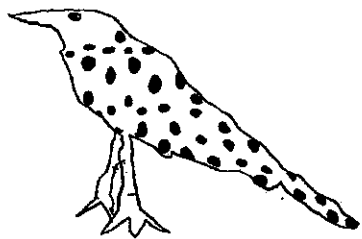
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"Only 36 pages?!?" we said to Bob. "Afraid so," he replied, "That's the limit for cheap mailing." So out came the machetes and the editing process began.

This special guest-edited issue of Pathways is devoted to voices from York University's Faculty of Environmental Studies (FES). In the 34 pages that follow (yikes! there go two already) we bring you a thumbnail sketch of the programmes and approach that distinguish FES, and some of the activities, people, and passions that gather under the FES umbrella. We are delighted to be able to feature undergraduate, masters, and PhD students, faculty, former faculty, alumni, and staff. (Many of you may also be delighted to know that four of the contributors—Sanj, Julie, Jason, and Emanuela—attended last year's *Make Peace With Winter* conference, working as student helpers. Remember them?) Collectively, this issue's contributors bring us a wealth of experiences as both learners and educators, and from a diversity of backgrounds and educational environments, including an elderhostel, an urban elementary school, a BC First Nations community, a suburban high school, the Toronto zoo, the exurban York campus, and the Badlands of Alberta.

Yet this is not a comprehensive review of outdoor/environmental education at York (it does not even touch on the activities of folks over in the Faculty of Education), nor is it even representative of everything FES has to offer. It is limited to those goings-on within FES that we felt had direct relevance to the COEO community. And truth be known, it is only a smattering of what could have been said. Owing partly to multiple commitments on the part of would-be contributors, and partly to that pesky 36-page limit, there are a myriad of exciting undertakings that we wanted to share with you but couldn't. So we thought right here we would mention some of those might-have-beens, if only to illustrate one of FES' truest aims—breadth and versatility and the freedom of each student to design her/his own unique course of study.

Given more time and pages you might have read about Maryam Nassar's involvement with the Children's Groundwater Institute, or Leah Houston's tireless advocacy work in defence of West Side Marsh in Clarington. You might have heard from Emily Chan and Anuja Mendiratta about their experiences running an environmental justice simulation game at Desh Pardesh (an annual conference on South Asian arts, culture, and politics, celebrating South Asian diaspora). Or we might have featured Neps Ng'ong'ola's work incorporating local understandings of geography into sustainability education in Malawi. We might have carried a profile of the Toronto Renewable Energy Cooperative, an initiative of recent MES grad Bryan Young. Or you might have learned of PhD student Dan Longboat's continuing work at Trent University to establish a degree and diploma programme combining First Nations and Western approaches to ecological knowledge, action, and community leadership.

Of course, it would be silly to lament all that *could have been*. You can trust that future issues of Pathways will feature some of the inevitable spillover (we're keeping that much a surprise) and with luck, some of those might-have-beens. For now, let us welcome you to the contributions we *have* collected and packed into this issue. While they speak of diverse experiences, the articles that follow touch repeatedly on three themes that are integral to outdoor education: story, design, and discovery. We hope that they will resonate with your stories, inform your own designs, and inspire you, the readers, to ongoing discovery.

Jennie Barron and Connie Russell,
Guest Co-Editors

Connie Russell, currently finishing up her PhD at OISE on the educational aspects of whalewatching, has taught and advised students at FES in the areas of environmental education, conservation, ecotourism, and environmental thought.

Jennie Barron recently completed an MES degree in environmental politics, ecopolitical education, and cultural studies. She is now stitching together a patchwork life of freelance writing/editing, youth work and canoe tripping.

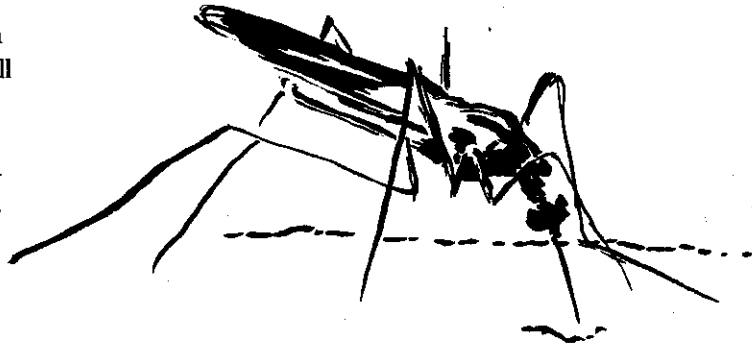
Outlook

What happened to winter? While I was enjoying the snow, spring sprung! It seems we've all been busy adapting to educational changes and more demands on our time. Make sure you still allot yourself some time for personal growth.

Do you need a weekend of rejuvenation? Western Region is hosting a spring get-together from May 14 to 16 at Pinery Provincial Park on the shores of Lake Huron. Activities offered will include mountain biking, canoeing, interpretive activities with Tom Purdy, and some great camaraderie. Call Carl Feeland at 519-539-2704 for more details on this low-key, high-fun, low-cost weekend.

Our next board meeting is on June 26. Let us know if you have an issue to raise or would like to attend. If you would like to plan an outing and would enjoy some COEO company, give me a call and we'll help make it happen!

Linda McKenzie, COEO President



Sketch Pad

We are fortunate to have many talented artists represented in this issue, among them former FES faculty, current students, and students of students. The cover art and drawings on pages 3,4,5,7-10,20,22,23,27,28,31 and 35, all done in india ink, are by MES student Christina Ellis. She describes her cover piece in this way: "Ageless' conceptualizes the timelessness of the human desire to understand our place in the natural world, thereby understanding ourselves. Despite the length of time humans have walked on the globe, with each new generation, each new phase of the moon, and each rotation of the Earth, the process of discovery continues." Elsewhere in this issue (pages 2,6,11-14,24,32-34) you will see line art

drawings by former FES faculty member dian marino, who passed away in 1992. We feel very fortunate to have been able to reproduce these from a book of dian's writings, sketches, and spoken words. *Wild Garden: Art Education and the Culture of Resistance*, by dian marino, is published by Between the Lines, Toronto. Copyright 1997 Robert Clarke and Ferne Cristall. It is also reviewed in *Reading the Trail* (see page 32). Finally, our feature article "Grounding Environmental Education in the Lives of Urban Students" by Wanda Martil-de Castro comes with illustrations by Wanda's grade 4-5 students, Bhageshwar Jodha and Becky Arsula from Joyce Public School in Toronto. We thank all of the artists for sharing their talents! (All artwork used by permission)

Environmental Studies at York

By Joanne Monnekes



The Faculty of Environmental Studies (FES) at York University offers three programs, one each at the bachelor's, master's and doctoral levels. Each of these programs incorporates the FES' unique approach to thinking, learning and acting environmentally. Central to this approach is the individual Program Plan (BES and PhD) or Plan of Study (MES), a tool designed to make each student's program learner-centred. Most discipline-based graduate programs prescribe the field to be studied. FES, however, from its inception as a transdisciplinary place of learning, has adhered to a belief in students' "freedom to choose how to learn and what to learn." Students identify which fields in ES will be their focus; over the years they have investigated subject areas as wide-ranging and diverse as the environments - natural, social, built, organizational - that FES was initially established to address.

BACHELOR in ENVIRONMENTAL STUDIES - BES

The Bachelor in Environmental Studies (BES) program leads to an Honours degree (20 university courses, normally four years of full-time study). Students choose from one or two of the following theme areas: Nature, Technology and Society; Global Development, Peace and Justice; Human Settlement and Population; and Environmental Policy and Action. Through the individual Program Plan, students identify their educational objectives and requirements and then choose courses and other learning activities accordingly. This Program Plan is updated by the student on a regular basis in consultation with a faculty advisor. Besides working towards a standard BES, some students choose to do a combined honours programs with an intensive concentration in a second subject as either a double major or a major/minor program. A concurrent BES/ BEd degree with the Faculty of Education is

also an option. Additionally, some students participate in one of several Certificate programs offered through York including the Geographical Information Certificate, or the Certificate in Refugee and Migration Studies.

MASTER in ENVIRONMENTAL STUDIES - MES

In the MES program students can investigate a broad range of theoretical and practical concerns. Through the Plan of Study, each student identifies an Area of Concentration, identifies learning objectives, and chooses or designs courses and other learning activities accordingly. A sampling of the many diverse areas currently pursued by students in the program include: environmental education; biological conservation and biodiversity; Canadian and global development; environmental planning and design; environmental thought; urban politics and planning; environmental and social policy; organizations and change; gender and environment; resource management; Native/Canadian relations; impact assessment; housing; cultural studies; and tourism and recreation planning and management.

DOCTORATE in ENVIRONMENTAL STUDIES - PhD

The PhD program offers students the opportunity to develop research competence with regards to a diversity of conceptual, methodological and substantive concerns. There are two broadly-defined and overlapping fields of specialization: Nature, Culture, and Society, which is concerned with the philosophical and ethical characteristics of the relationships between human society and the totality of nature, of which humans are a part; and Environments, Institutions, and Interventions, which focuses on the relationships between human

institutional frameworks and the social and cultural constructions of human environments.

Joanne Nonnekes, Co-ordinator of External Relations at FES, is a keen naturalist and music enthusiast. If you would like more information and/or an application package, contact her by post (Faculty of Environmental Studies, York University, 4700 Keele Street, Toronto, Ontario, M3J 1P3), telephone (416-736-5252), email (jesinfo@yorku.ca), or visit the website (<http://www.yorku.ca/faculty/fes>).



Interdisciplinarity in Environmental Studies

By Raymond Rogers

As an approach to environmental studies, interdisciplinarity provides an especially appropriate methodology for analyzing environmental concerns. Environmental problems are "messy" in ecological terms as well as in terms of the individuals and groups who are affected by these problems. Interdisciplinarity can respond to this "messiness" by beginning with the recognition that there is no single approach that will address the complexity of environmental issues. Indeed, interdisciplinarity assumes that there are a range of perspectives and information that will have to be integrated if this complexity is to be recognized. In pedagogical terms, it means that there is no canon of "received knowledge" that can be set out for every student to study, as there is in other disciplines. Rather, what counts as important knowledge must be related to particular contexts and continually renegotiated. The interdisciplinary learner therefore plays a much more active role in defining the terms of learning and must seriously reflect upon their own social contexts, learning styles, and preferred approaches to issues which will inform their pursuit of knowledge in environmental studies.

More broadly speaking, it can be argued that interdisciplinarity operates on a vertical and a horizontal axis. In horizontal terms, there is the project of integrating a range of perspectives

and disciplines. In vertical terms, there is the attempt to integrate various levels of authority as they influence decisions on environmental issues. For example, a holistic approach to community-based conservation would not only integrate information from different disciplines, it would also attempt to integrate points of view from various stakeholders from national governments to local community groups. In this process, an interdisciplinary approach would not necessarily privilege the perspective of one group over another.

With regard to environmental issues, interdisciplinary approaches assist us in not "assuming the very things that need to be explained" when analyzing environmental issues. In these terms, interdisciplinarity moves towards transdisciplinarity in that it is not only a matter of integrating various points of view, but also of transforming conceptions of knowledge of who we are as humans and our relations to that great green being called nature.

Raymond Rogers is the Undergraduate Program Director at FES and is currently continuing his work on interdisciplinary teaching at FES by developing an interactive computer program to aid students in the development of their own perspectives on environmental issues.

...there is no canon of "received knowledge" that can be set out for every student to study.

Environmental Education Journeys at FES

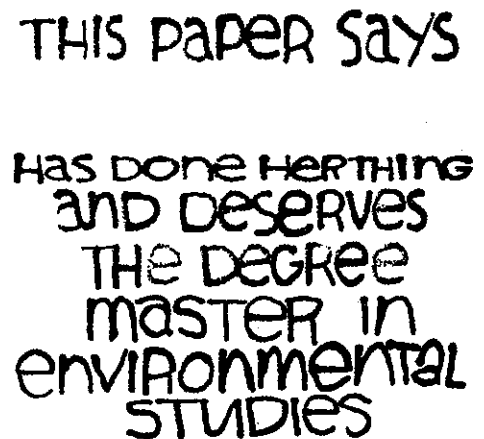
By Leesa Fawcett

It took me a long time to realize that being a graduate student meant I would have to stay indoors a lot. I had been doing field work in biology, teaching environmental education, and working as a naturalist for years. When I first became a graduate student at FES, it was the staying indoors that almost killed me. John (Jake) Livingston, a professor in FES and renowned Canadian naturalist and conservationist, jokingly told me that I was not domesticated enough. Fortunately, FES had a surplus of wild, feral, and untamed professors and students. Professors like Jake, Neil Evernden, dian marino, Gerry Carrothers, and Steve Kline made learning environmentally at FES alive and vibrant, as their individual and collective work in natural history, environmental thought, critical pedagogy, popular education, art, and communication intersected with the field of environmental education.

Fortunately, over the years, FES has continued to attract a wide diversity of students and instructors, and this is precisely why I enjoy teaching here. Recently, we have been gifted to have professors in EE like Deborah Barndt, Anne Bell, Zabe MacEachren, Connie Russell, and Joe Sheridan. Students come from many walks of life, and from many different cultures, religions, homes, and ecosystems. "Nature" and EE mean so many diverse things to them. In this diversity there is such richness and continual learning, individually and collaboratively. To give you a taste of this diversity, I've worked with students (undergraduates and

graduates) who have designed EE curricula for indigenous communities, museums, science centres, inner city schools, the Seychelle Islands, Canadian national parks, backyards, schoolyards, cottage areas, and summer camps. Other students have written fiction, drawn maps, made quilts, hiked mountains, studied humans watching orangutans, performed plays, and created puppets—all in the name of environmental education!

Leesa Fawcett teaches in FES. Her current research interests include: childhood experiences with, and ideas about animals; animal consciousness; ecofeminism; biological conservation; natural history; and organic gardening.



THIS PAPER SAYS
HAS DONE HERTHING
AND DESERVES
THE DEGREE
MASTER IN
ENVIRONMENTAL
STUDIES

Heraclitus you're ok (1973)

The Natural History of an Inanimate Artifact

or *Alas, Poor Edgar, I Knew Her Well*

by Angus Leach

This piece is an excerpt from a longer natural history journal which I originally compiled for a course in EE taught by (the wonderful) Connie Russell and Anne Bell at FES. I used the assignment as an excuse to do some creative writing, but the process helped me to develop a firmer sense of the potential role of literary storytelling in critical environmental education. As far as natural history is concerned, I am no expert, but I can say that I feel it important to challenge many of the boundaries which have typically been drawn around how natural history is understood and taught, and I believe that the key to this subject for me - the element which is just barely beginning to assert itself in this work - is to see that natural history is in so many ways cultural history, and is as much a product of the stories we tell about nature as it is of processes which lie outside the imagination.

Let us not be too concerned with beginnings. The story of this natural history could be said to begin on a warm late-summer evening as I walked with my younger brother down the curve of an eroded gully in the Badlands of Southern Alberta. As beginnings go, this one doesn't do too bad a job, I think, of slipping us into the stream. The bank is gradual, the bottom is sandy, and the current is mild enough to swim.

The Badlands in late summer are spun with threads of dried out sunshine. The pale white slopes of the sandstone hills, mushroomcapped with rusted ironstone, blend gradually into valleys of sagebrush and grasses, desiccated and brittle from months of blue sky but still holding the grains of earth together. On a breezy day when thunderclouds sweep close and hang giantlike on the badlands edge, you can smell the dry soil exhale, sending countless molecules of scent into the moistened sky. On days like this walking feels like swimming.

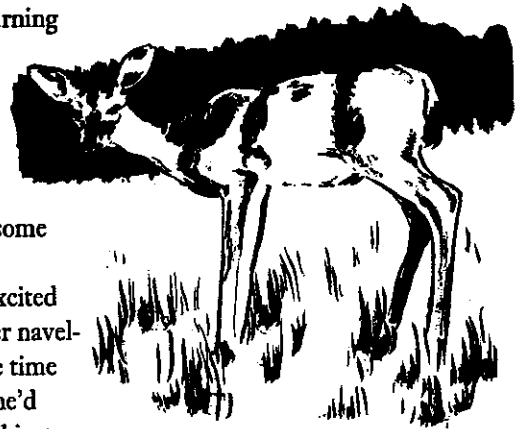
It was this kind of day when Dylan and I walked over a hill and into a little canyon,

slipping down a steep slope, gliding over shortstemmed grasses, and hopping the bank of a dry arroyo streambed in order to move more easily along its sandy bottom. Walking in the Badlands means always having to divide your attention between up and down, paying attention to sky and hills (so as not to get lost) but always watchful for the prairie rattlesnake, *croatalus viridis*, or an ankle-turning irregularity, either of which may be camouflaged and silent underfoot. And so it happens that, thanks to so much time spent staring at the ground, you tend to find some interesting things.

When I heard Dylan's excited call, I snapped out of whatever navel-gazing I was engaged in at the time and walked over to see what he'd found. I could see the white object halfburied among the grasses, and both of us knew immediately what it was. It was the lost head of some creature who no longer would need it.

Now bones, let me tell you, are what the Badlands are all about. When you stand on their edge and look down into that expanse of hoodoos and semidesert, the landscape seems to speak of bones. Not scary B movie skeletons hanging rotten in closets, but clean dusted relics; friendly apparitions; silenced travellers frozen in their paths; cryptic writers eager to be read; caricatures on a path to dust. When you walk through the Badlands, the bones crunch beneath your feet. They are everywhere and invisible unless you know what to look for, or unless their journey to dust is new and they still resemble their former selves, as this one did, whitened and polished in the sun.

To Dylan, who is new to the Badlands,



With a skull
you can see into
a bone's open eyes.

such bones are amazing, and to me they remain no small miracle. A skull is always worth the walk, seeming as it does to encapsulate the entire thread of another creature's life, somehow more symbolic to me than a leg or a toe, or even a hip. With a skull you can see into a bone's open eyes.

Of course, bones also lie to those who are unused to their language. After a baking day in the sun and not a lot of experience, I looked at this one, incomplete and pointy toothed, and thought it was a coyote, an idea which got old Dylan and me very excited, seeing as canine relics are so rarely found. We decided to take it home, and it was not until late that evening that we realized our mistake. For coyotes have much pointier teeth, and are generally much less deerlike.

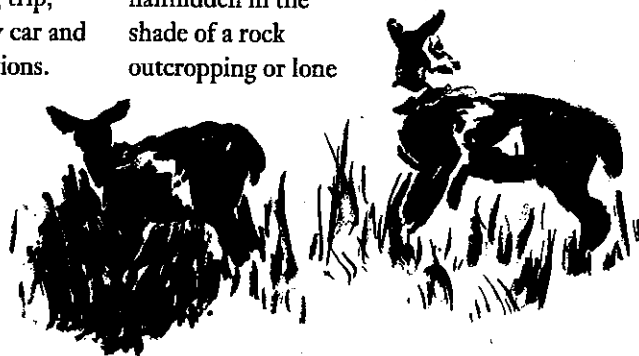
It took about five seconds to spot the mistake. Hold up found object, compare to deer skull and coyote skull in Park collection, have a latenight snack. What we had found was no meateater, but the ancient and unused home of a departed Mule Deer, *Odocoileus bemonius bemonius*, with teeth like a buffalo.

Now, I'm not much of a collector. Most of the time, I don't even bring home fossils or pretty stones, and I rarely take away anything that promises to play an important role in the life cycle of an ecosystem. On subsequent hikes, I thought about taking this found object back into the hills, even though Dylan still thought it was cool. But I never got around to it, and after awhile I grew attached to this curious paperweight on my shelf. When the time came to pack up my car and drive east, across millions of miles of prairie and shield, to contemplate nature amid the urban sprawl, the deer came with me, my only company on the long trip, staring at me from the dashboard of my car and not saying much in answer to my questions. Edgar R. Deer, foolishly personified. It has become for me a strange sort of touchstone, a connector to times and landscapes as far from the city as Saturn. I take curious comfort in the thought that I still, one day, have to take it back to its place in the sun.

For now, it sits quietly and all well behaved upon my apartment shelf. Sometimes I hardly notice it, busy as I am with much sillier things, but sometimes we strike up a conversation which lasts some time. And so, as it has begun again to tell me its story over the last few days, I have decided to write it down in words the words of an admittedly inanimate (or perhaps very slowly animate) object; a story which has become for me, for now, the most natural of histories.

Odocoileus bemonius bemonius. What does it mean? I don't know, because I do not speak Latin. I'm certain that there must be a wonderful story associated with the name, but for now I cannot find it. As far as I can say, *O. bemonius bemonius* stands for mule deer, one of North America's most common and widespread native faunal species. In the Badlands, mule deer are known by many names. "Muleys" to farmers and hunters, "managed species" to fish and wildlife officers, photo opportunities to recreational interlopers, lunch to fortunate coyotes and hood ornaments to the occasional unfortunate speedster. How they know themselves and each other is unknowable. Except for very young fawns, which bleat and call to their mothers, they have little verbal ability. Their language is mostly invisible to the human ear.

In the Badlands of the Red Deer River valley, mule deer are as common as sand. There are always a few near the river at any given time, grazing in the rich undergrowth of the Plains Cottonwood forests which edge the channel and stabilize its banks. Away from the river, back among the hills and arroyos, sightings are less frequent, but often a lone buck or a doe with fawns can be spotted halfhidden in the shade of a rock outcropping or lone



stunted cottonwood, lying sheltered from the midday sun. The occasional whitetailed deer can also be spotted in this range of territory, but these are more rare and extremely shy. Except for the occasional lost cow, these are the only large planteaters to penetrate the heart of the Badlands. There used to be bison, but even they may have wandered there by accident.

To tell the truth, I am not entirely sure that Ed is a mule deer. There is not all that much left of him, and so it would be very difficult to say for certain. He might in fact be a whitetail, but it is very difficult to tell from only the skull, and a partial one at that. I am no expert on skeletal structure, but the skulls of mule deer and whitetails are virtually identical. There is one thing that seems quite clear, though. Ed, for all of his manly name, was most likely a she.

You see, Ed has no antlers, or, indeed, any place to put them. There are no thick rounded knobs on the skull to which antlers may have been attached. In North American members of the family Cervidae (the deer family, including various deer, moose, caribou and elk), only the males of a given species grow headgear. As Ed's skull is more or less adultsized, definitely of antlered age, I reckon Ed must have been a doe. Imagine my embarrassment. Sorry, Edwina. I didn't mean to be sexist, I guess I just needed a little imaginary male bonding.

Maybe this would be a good spot to elaborate a bit upon this bony relic's actual appearance. What is left of it is the colour of bone (heh heh): mottled white and waxy yellow on the outside, and very yellow on the inside surfaces. The lower jawbone is missing, and the back of the skull has broken away, leaving an open bowl of a braincase clearly visible. There are two equal rows of teeth set below and in front of the broken eye sockets, and the delicate front portion of the skull has been broken off just forward of the teeth. From the front, one can peer through this broken place and see the delicate structures of Ed's sinus cavities; amazingly thin perforated sheets of bone coiled like spiderweb jellyrolls. I have no idea, but maybe these structures are in part responsible for a deer's heightened sense of smell. All that

surface area must be for something. From the back of the skull, one can look into the brain case and find the holes where major bundles of nerves and blood vessels were once strung, wiring the mule deer for life.

On the thickened outer surface of the cranium, many cracks are visible where different bones of the skull are fused together. These



cracks are not straight in most places, but ripple and wind like a river meandering madly. The more elaborate the zigzagging, the tighter the bond between bones. Where the bone is broken, you can see inside it tiny bubbles of space which once held blood vessels, bone marrow, and other fluid life. Now these empty spaces look like Aero bars or sponge toffee.

Why is Ed in such lousy shape? Well, she went on a pretty serious after-life journey, it seems. The skull was nowhere near any other bones, probably carried off by a scavenging



coyote to eat in secluded peace, or perhaps washed downstream by a spring flood in the dry Badlands creek where we found her. The skull has a few scrapes and grooves which are probably toothmarks. Once the big scavengers were done chewing on it, perhaps having broken through the thick braincase to feast upon the meat inside, it was the small critters' turn. Field mice probably gnawed upon the bones for calcium and other minerals. The edges of the eye sockets and other cavities appear to be unevenly chewed. Crows and magpies, and maybe even hawks or falcons pecked at the small holes for the bits inside. Beetles and bugs would have come to eat and lay their eggs inside the hard to reach places. There were a few of these still around when we found the skull, and what appear to be unhatched larvae still cling to its inner walls. The skull may have formed one very active node within a rich community of grassland organisms dedicated to slowly deconstructing the skull, socializing it toward dust. The bluebox program of the Badlands.

Now, back to the problem of Ed's identity crisis. If Ed did have antlers, the job of speciating the skull would be a piece of cake. The antlers of mule deer and whitetails, while seemingly similar from afar, are quite different when viewed from close up. The antlers of whitetailed deer have many thinner points curving upward from one main thick "beam" or branch. On the other hand, mule deer antlers are what is called dichotomous, branching from the main branch into two equal branches, each of which may, in older animals, branch into two more equal branches, and so on. Alas, poor Edwina, you have no crown.

When deer are alive, with skin and everything, you can generally tell them apart quite easily. As they are usually moving away from you at a fair velocity, the most common way to differentiate is to look at their rumps. A mule deer has a thin white tail with a black tip (as if dipped in black paint), and a large white patch on its behind. When alarmed, a mule deer will bounce away with its tail held straight up in the air as a warning signal to others of its kind. Whitetails, on the other hand, have a much

bushier tail, brown on top and snowwhite underneath, a brilliant beacon when raised in flight.

And of course, there are many other ways to tell these species apart. For instance, whitetails are graceful trotters, lithely built and possessed of fluid movements and delicate features. Bambi was a whitetailed deer. In comparison, mule deer truly live up to their name. They are more blunt in outline, with more rounded snouts and enormous ears, vaguely donkeylike, more solid. They do not stride and run so often as they spronk, a word ideal for describing the erratic bouncing hop which they use to flee danger. Pepe LePew, that cartoon Romeo, is a spronker.

However, none of these distinguishing features is readily apparent in Ed's fragmented skull. Even an expert might be unable to say for sure. But why worry? For now, Ed speaks to me as a mule deer, which she in all probability was. For all her ambiguous mystery, she is still a good storyteller.

Angus Leech is presently completing his MES, which has focused on the role of various forms of storytelling (most notably, literature and maps) in processes of environmental/social change. When his time in Toronto is finally done, he plans to celebrate with a lot of different kinds of really fancy cheese.

Reflections From the Neck Down: Embodied Learning in the Classroom

By Deborah Barndt, Zabe MacEachren, Heather Rigby

It's the end of a very full fall term at York, and the three of us gather at a cafe to share tales of our most recent ventures in the classroom—Zabe teaching Environmental Education, Deborah and Heather teaching Environmental Attitudes and Communications. We have a common passion for multi-sensory learning and for what we call embodied knowing. As we try to theorize out of our individual practices, we confront both the limits and possibilities of bringing the body into the classroom. We imagine that others face similar constraints, and so we hope snippets of our dialogue can catalyze broader conversations.

Bodies Transform the Classroom

By Deborah Barndt

Of course, the body is in the classroom! Or is it...? Forty undergrads are slouched in comfortable chairs, at least physically here. We have managed after much searching and negotiation, to find a room for our class that is carpeted, a wall of windows revealing trees and inviting in natural light, with chairs that can be moved around in multiple configurations - a rarity on a campus that assumes most students learn best sitting still in rowed and bolted chairs, in windowless rooms under a fluorescent glare.

The space is critical. It makes it possible to open the class with breathing and movement exercises, to set up debates in the centre of the room, to do skits and make murals that summarize key points from the readings. Perhaps more importantly, it has allowed these students to design the room in myriad ways with their collective media productions on the theme of Birth and Death in Nature and Culture. Over

the term, we have visited interactive stations on alternative funeral practices, engaged with a performance piece on the death of the Nike swoosh, listened in the dark to a radio program on more humane childbirth practices, viewed a photo exhibit hung from a clothesline between pillars, been videotaped as an audience of a student TV production, and celebrated the birth of our own class newspaper. Each week, the space has been re-created, bodies have discovered new positions, passions have been tapped, energy has filled this room.

The space, however, is not enough. The engaged pedagogy underlying these activities posits that learning most effectively starts with the experiences and perceptions of students, that they will grapple more deeply with concepts if they help create the physical space and the conceptual frames, and that learning will be more intense if it taps their multiple senses, their whole selves - body, mind, and spirit.

But even to talk about whole selves implies that only partial selves are most commonly present in academic contexts. Indeed, hegemonic voices seem to whisper from the walls that it is not appropriate to bring moving bodies, strong (and contradictory) feelings, and other forms of corporeal expression into this sacred space that has been reserved for certain kinds of more legitimate knowledge - for the most part, abstract, rational, verbal, written. The knowledges spoken in different forms through our senses, our spirits, our bodies are of lesser value, even shunned in the classic western Judeo-Christian tradition, reinforced by the Cartesian body-mind split. We have internalized this legacy, as Susan Griffin suggests:

"The real enemy, however, in dualistic thinking is hidden: the real enemy is ourselves. The same dualism which imagines matter and energy to be separate also divides human nature,





separating what we call our material existence from consciousness. This dualism is difficult to describe without using dualistic language. Actually, the mind cannot be separated from the body. [Yet]through a subtle process of socialization since birth, we learn to regard the body and our natural existence as something inferior and without intelligence.”

Griffin’s words resonate as I recall (not as a disembodied thought, but as a visceral memory) the palpable energy we shared in that space, as students were passionately engaged in learning - minds stimulated kinetically through thinking bodies, spirits soaring with senses grounding them, people connecting with themselves and each other.

Consciousness cannot exclude bodily knowledge. We are inseparable from nature, dependent on the biosphere, vulnerable to the processes of natural law. We cannot destroy the air we breathe without destroying ourselves.

Towards Embodied Teaching Techniques

By Heather Rigny

Embodied learning begins with creating a sense of trust and a feeling of groundedness within each student. I approach teaching by opening up to my students and sharing my vulnerability, which allows the students to see me as a human being, not just a professor. Through playfulness, I engage in learning with the students by sharing the dynamism of being alive. It is a commitment to self-discovery. My energy spills over into the classroom to excite the entire group.

To begin my course, I like to develop an awareness of the space we will share for the term. I ask the group how we could make it more comfortable and help the students feel comfortable with themselves. I focus our attention on the air in the room which circulates through our bodies and each other. I note that it is the sharing of this air that will either encour-

age drowsiness or help to wake us up. This opening exercise establishes a basis for our relationships and for active participatory learning throughout the course.

Using a playful, performative approach to engage the students in embodied learning, I introduce breathing exercises and, gradually, movement and voice work. This doesn’t take long but it does direct the students’ attention to their bodies, to an awareness of space within and without, and towards a responsibility and sense of connectiveness with the group.

Depending on course material for the day, I also lead students into active imagination exercises. Prior to each class I reflect on the rudimentary components of the curriculum and compose these as colourful symbolic objects or events and create a story format. During the class at the appropriate time, I ask the group to close their eyes and relax and I proceed to tell the story. These exercises move the curriculum more into an embodied learning experience, not simply one absorbed into the cerebral cortex. These active imagination exercises enrich students’ understanding of the course material on a deeper, sensorial, intuitive level. The students have the option of engaging in the exercise or standing aside as observers. Through group discussion and the students’ written responses I learn of the students’ perceptions and can modify these techniques accordingly.

Through breathing and imagination exercises, movement, and voice work, the students develop an understanding of their own learning process, and an appreciation of each other. For me as an instructor, these techniques provide a wonderful way to get to know the whole student. These methods encourage students to let down their masks around learning and to truly engage in an interactive and supportive environment for learning experientially and developing critical skills.

Flowing Through Our Bodies— Storytelling, Crafting and Water

By Zobe MacEachren

Embodied knowing for me is understanding something non-verbally; learning something through the sensuousness our bodies are capable of. It involves experiencing viscerally the present moment and/or our memories. It also includes a sense of ourselves as extended beings reaching beyond our physical bodies. This extended self allows us to live in what might be called an animate world, where other things—plants, minerals and animals—are perceived and interacted with as if they were all vitally alive.

The full use of our senses allows us to resonate with, and thereby know, the more-than-human world. I believe that this kind of sensuous embodied knowing is nourished by natural space, a familiarity with cyclical time and a comfort with silence and/or being alone.

Three experiences usually kindle in me a sense of embodied knowing. As a teacher I try to bring these experiences with me into a classroom to aid students. They are storytelling, crafting and water.

I use storytelling a lot because it is a very light yet portable load; I pack it with me anywhere. It is like a huge invisible pack sack that I carry into any sterile, desolate classroom on campus. I open up this pack sack of stories and pull out all the natural environments I wish I could be teaching in instead. I love the way hearing a story can take me to a place

where all my senses are clinging to a cliff's edge or basking in a hot spring. Hearing a good story makes clock time collapse; it shuts up the clatter of my mind telling me that my priorities are supposed to be elsewhere. Stories let me live in the moment, full of all the emotions my body is capable of experiencing. Stories relax my need to always be thinking, so that my body can travel to a time and place of great sensuousness.

Crafting also encourages me to listen with my whole being. My body must hear the more-than-human express itself if my hands are going to be able to carve with the grain. This kind of knowing cannot be expressed on a page or in a diagram. How can one verbalize the extent to which a branch can be bent? This is like the felt understanding of a sustainability limit. This knowing is embodied; it is felt through the sensuous capabilities of the body.

I lug clay, leather, fibre and wood into the lecture halls where I teach, and encourage students to seek out natural materials to use in their homework. The natural materials we craft with are like tuning forks: they help us feel our bodies' resonance with nature. They reveal the false claims made by virtual representations and advertising

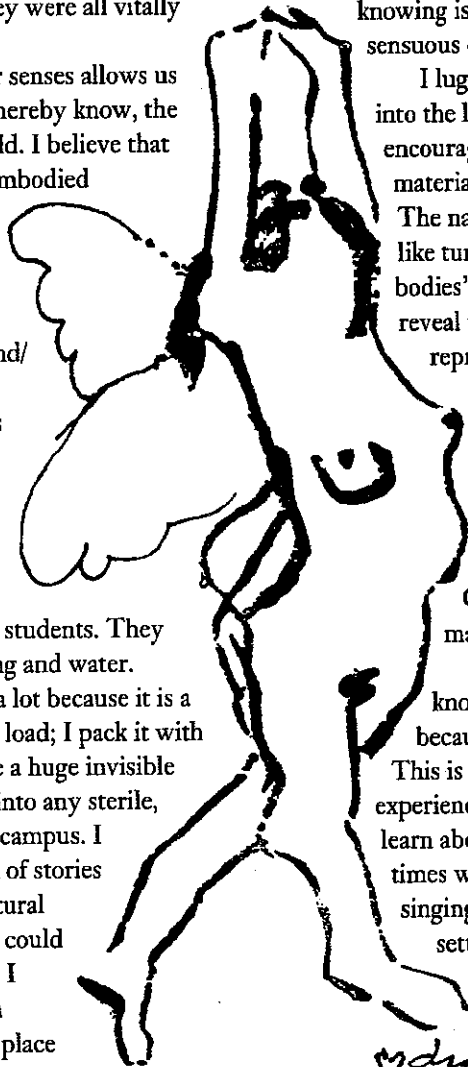
images, which encourage you to feel that you should purchase the world instead of experiencing it, or suggest that you can experience it only after you have purchased this and that.

Crafting with natural materials makes fewer false claims.

It makes sense that we try to know and absorb things like water because our bodies are mostly water.

This is why I relate to water as an experience by which to understand and learn about embodied knowing. Sometimes when I am moving, drumming, singing, or when I am in a particular setting where everything feels right,

I can know something in a sensory way that is difficult to



Indian marin

*How can one
verbalize the extent
to which a branch
can be bent?*

describe in words. This kind of knowing is more like the primitive movement of water common to all life forms. Knowing occurs like waves that are absorbed and pass through us. These waves are felt yet not stated; they are impossible to measure. The cells of my being are able to resonate and float in a greater pool of being and knowing, perhaps best expressed through the metaphor of water.

By attending to this flow we can connect with a knowing that lies beneath cultural influence or species identification. Our ability to sense and join the waves of movement in water everywhere allows us to flow into a within and beyond. What is good for the ocean becomes good for us, and what is good for us becomes good for the ocean; the two are connected through the sea of sensory knowing that our body, the world, offers.

Trying always to recall and connect with the water in my body encourages me to immerse myself in a world beyond my intellect. The world by which I try to sense my being comes from the sea in every cell and pore of my body.

Deborah Barndt is a mother, popular educator, photographer, and professor in the Faculty of Environmental Studies, where she struggles daily to embody her thoughts and think about her body.....!

Zabe MacEachren survives PhD studies at York by constantly searching for stories she can relate to and by taking pilgrimages along the green belts and river systems that remain in the city.

Heather Rigby is an environmentalist and practicing sculptor-performance artist and is presently a PhD candidate in FES. During the past 20 years Heather has taught at the Toronto Waldorf School, Arctic College in Nunavut, York University and the University of Western Ontario. In the year 2000 Heather will have a major exhibition at the Art Gallery of Mississauga.

Grounding Environmental Education in the Lives of Urban Students

By Wanda Martí-de Castro

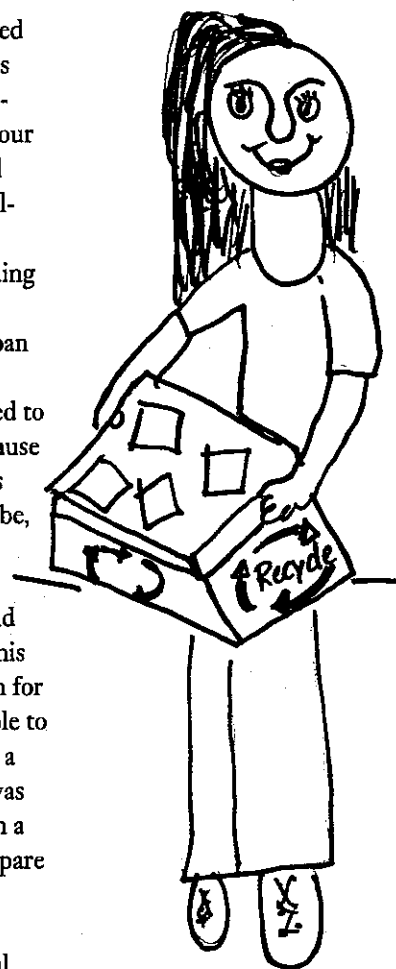
As a student in both Environmental Studies and Education and as a teacher-in-training working in an urban Toronto school, I constantly aim to integrate environmental education into the public school curriculum. However, after reading various texts about environmental education, I had become somewhat discouraged in my endeavours. Many environmental educators had emphasized that outdoor experiences in specific settings such as long walks in a forest, playing in a meadow, or day-long canoe trips were vital to environmental education. Unfortunately for many of my urban students, such experiences are mere fantasies that they view on television or in magazine advertisements since they cannot access such sites in their urban environment nor can they afford to travel to destinations offering them. This situation posed a problem for me as I questioned my ability to successfully teach about/in/for/with the environment in an urban setting.

In my final year as a student teacher, I am now working in a grade five classroom at Joyce Public School. When I first observed my new “host school”, I was somewhat encouraged, as the schoolyard was honoured with a variety of scattered trees and even a new garden—the result of a naturalization project implemented by my “host teacher”, David de Belle. I was relieved by their existence and hoped they would facilitate my endeavours to integrate environmental education into an urban school. While the tree and garden certainly *were* useful, throughout the course of the first term, I was surprised to discover that the urban environment actually provided me with many other valuable resources. In fact, some of the very factors which I thought would inhibit environmental education actually proved to be the most beneficial and useful.

At first, I thought the lack of visible biological diversity in our school’s urban environment, especially during the winter months, would greatly limit my efforts to integrate environmental education into the curriculum. Despite my concern, I encouraged my students to observe local living organisms during our study of ‘Habitats and Communities’. Ironically, the lack of visible species in our community actually helped my students and myself create a tremendous amount of knowledge.

By exploring the environment surrounding the school during our habitat study, my students became aware of the fact that their urban environment lacked biological diversity in comparison to other areas and were prompted to question why this might be so. Further, because my classroom is composed of many students who originate from different parts of the globe, we were able to make direct comparisons between the species diversity in our urban community and in other communities around the world with which they were familiar. This activity was tremendously enlightening both for my students and myself because we were able to explore and reflect upon species diversity in a variety of settings. Our urban community was extremely useful because it provided us with a living example in which to observe and compare the results of environmental degradation on species diversity firsthand.

Similarly, although some environmental educators might assume that the infrastructure of urban communities—such as roadways and industries—limits environmental education because it leads to degradation of the natural environment, I found it to be precisely the opposite. Students not only learned about pollution but were able to explore where major sources of such pollution are located in their



own city and neighbourhood. After exploring the water cycle with my students, my host teacher encouraged me to extend our investigations to include acid rain. In trying to directly relate this issue to the students' lives, we considered some of the causes of acid rain in our local community. This discussion proved to be invaluable because the students were able to consider the high number of pollutant sources evident in their neighbourhood. For example, students discussed the existence of many major roadways which are congested with traffic during specific times of the day. They also highlighted that a large factory is situated close to the apartment complex where many of them live.

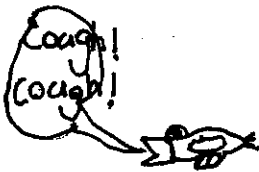
Acid rain suddenly became a relevant fact in the students' lives. Not only were they able to identify sources firsthand but we also brainstormed ideas to address this problem. Further, our discussion also provided me with an opportunity to introduce issues of equity and environmental justice as I revealed that there are many communities in our city which are not located near major roadways and/or factories. Some of my students were quite surprised at this and they questioned the reasons why their community was situated near such dangerous sources of pollution. This opened up a discussion in which we explored class and race issues in relation to environmental degradation and health concerns. In this way, the urban environment again acted as an invaluable tool for furthering our understanding of major environmental issues.

Another urban environmental education opportunity emerged through working with the school's environmental group, the "Green Club". While walking through the school grounds and the adjacent community, I noticed a large amount of waste spilling out of dumpsters, collecting on curbsides and even lodged in tree branches. In trying to develop student awareness of the tremendous amount of waste created in the urban environment, my host teacher developed various recycling programs in the school with the help of the "Green Club". I took a particular interest in

organizing our paper recycling program. During each recess period of my teaching day, the "Paper Patrol" students and myself rummaged through several classroom paper recycling boxes for unwanted contaminants such as old markers and 'tetra-pak' drink boxes. We then deposited the school's waste paper into our large paper recycling bins.

Once we encouraged the teachers to become involved in our efforts and to use their paper recycling boxes in their classrooms, our program became quite successful. As time progressed however, we began to find increasingly more waste contaminants in the recycling boxes such as discarded lunches and even old binders. The students of the "Paper Patrol" were quite discouraged and would often rely on me to empty the boxes for fear of coming in contact with something undesirable. To make things worse, our school was not regularly visited by a recycling collection service and many of our large paper recycling bins commonly became overloaded to the point where our school custodians were forced to deposit their contents into the trash. In observing the students' reactions, I became greatly concerned because I thought that the students would eventually cease their participation in paper recycling altogether due to these disheartening circumstances.

I posed our problems to the Green Club and encouraged the students to come up with solutions. At first, they were extremely surprised that I did not provide them with 'the answer' to our challenges. Many thought that, as students, they were incapable of inducing change. Fortunately, as I expressed my confidence in them, they enthusiastically began to work as a group. Through their deliberations, the students decided that it was important to educate the school about appropriate ways to use recycling boxes so they posted notices around the school and delivered morning announcements concerning this issue. As I write this, the problem persists, but the students have now begun to create a presentation for the school to educate teachers and students about our purpose as a Green Club and about how to



effectively participate in our programs.

This situation has also provided an excellent opportunity for me to encourage the students to consider the possible reasons behind the irresponsibility we have encountered regarding waste disposal. Through drawing on the students' own experiences and challenges in collecting waste in the school, as a group we have begun to question why we have become so detached from our waste crisis and explore how we can foster feelings of responsibility not only about waste disposal but also waste production. In considering the endeavours of our Green Club, once again, the urban environment was an invaluable tool in facilitating tremendous growth among students. In particular, many of my students have become empowered to reconsider their own actions concerning waste. Many have expressed their concerns regarding the adequacy of recycling in successfully reducing waste and have begun to consider issues of unnecessary consumption. Some have also already begun to assume an active stance in waste reduction not only by participating in recycling programs but by inventing ways to reduce their own consumption—e.g., by supporting 'litterless' lunches and parties. Hopefully, as the school year progresses, we can continue to critically examine this issue and further develop our understanding of how we can actively address consumption and waste production in our lives and motivate others to do so also.

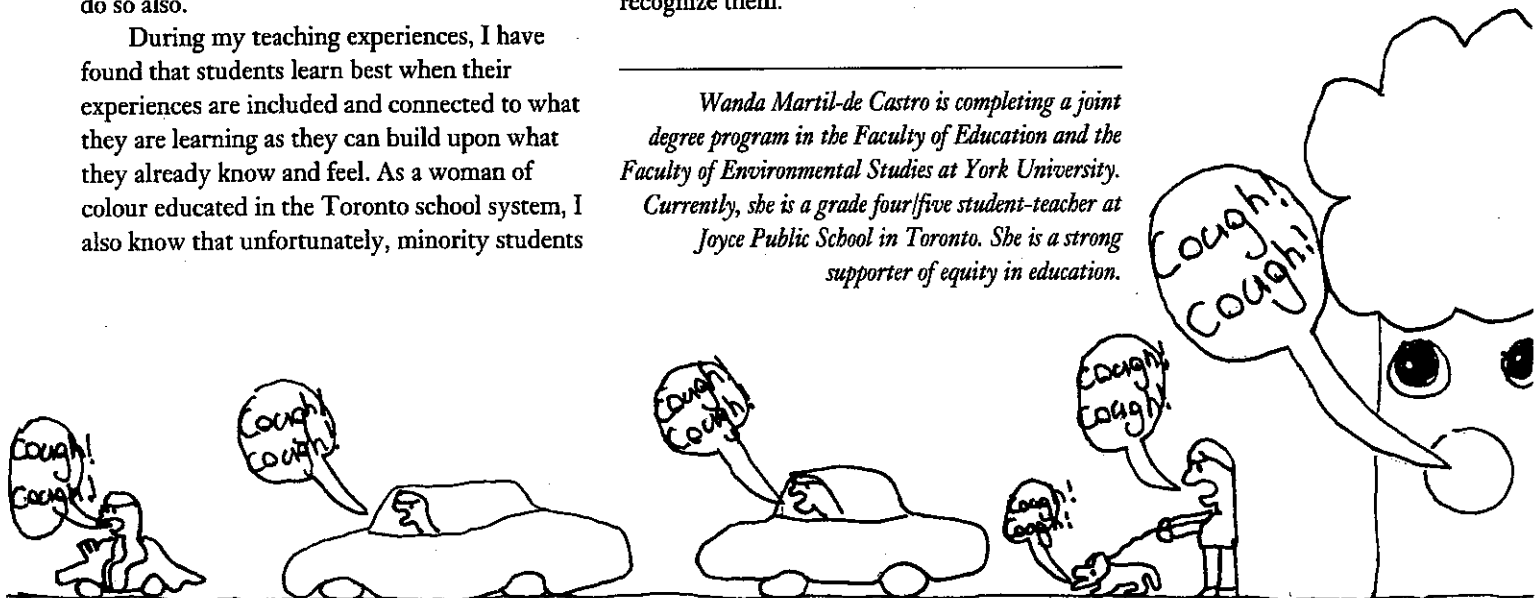
During my teaching experiences, I have found that students learn best when their experiences are included and connected to what they are learning as they can build upon what they already know and feel. As a woman of colour educated in the Toronto school system, I also know that unfortunately, minority students

often feel extremely insecure about sharing their experiences in the classroom because many teachers tend to place a higher value on the experiences of the dominant class/culture. As a teacher, I now try to address such inequitable value systems by helping my students to feel comfortable and confident in sharing their experiences during learning. For example, I often share my own experiences as a woman of colour so that they are motivated to reveal their own unique and diverse histories. Also, when students share their experiences, I continuously refer to and build on them during my teaching practices. This not only encourages my students to view their personal histories as valuable learning resources, but also fosters relevant learning in the classroom. By grounding explorations of environmental issues in the daily lives of students, and in familiar, local, natural environments, students are more able to consider how their lives and attitudes support or degrade the planet. They will also be more able to develop creative solutions, on personal and community levels.

We cannot afford to overlook the value of urban environmental education and focus only on experiences available to privileged students. Environmental education must become accessible to all students. My own experience teaching in an urban environment has made me realize that our cities offer a multitude of opportunities for environmental education. We should recognize them.

I often share my own experiences as a woman of colour so that students are motivated to reveal their own unique and diverse histories.

Wanda Martil-de Castro is completing a joint degree program in the Faculty of Education and the Faculty of Environmental Studies at York University. Currently, she is a grade four/five student-teacher at Joyce Public School in Toronto. She is a strong supporter of equity in education.

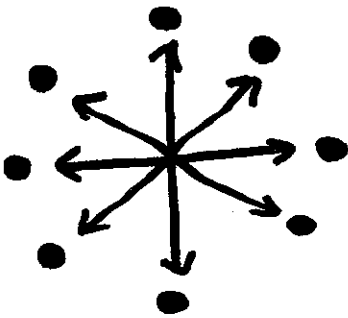


Word Play

By Sanjeevan Sathiyamoorthy

A Game for 10-20 players

Equipment required:
scrap paper, pencils,
a bowl. (Watch with a
second hand also
recommended)



The game that I share here is a variation on one that I have used in my work with student groups at the Toronto Zoo. It provides an opportunity for the participants to explore their surroundings, and to then share their interpretations with each other. This game quickly becomes a favourite because players have a chance to be creative, they do not get eliminated, and they remain constantly involved.

1. Begin by having the participants move around and explore an environment, writing down words or short phrases that come to mind as they do this. For example, at the Toronto Zoo the words might include: polar bear, Lost and Found, sea otter, veterinarian, kelp. Once everyone is ready to play, have the players transfer what they have written onto small pieces of scrap paper, using one piece for each word or phrase. Fold these and place them in the bowl.

2. Ask the players to find a partner, and join in if there is an odd number. Have everyone sit in a circle, with partners sitting across from each other (see diagram).

3. Place the bowl in front of one of the players. To start the game, this player randomly selects one piece of paper and begins describing to her partner what is written on it, with the intention of getting her partner to say the word or phrase. If a player had to describe the phrase "polar bear", she could say things like "large white mammal" or "it has slightly-webbed feet for swimming". A player must attempt to describe the word or phrase she selects, even if it is something she is unfamiliar with; that is, she does not simply keep picking a piece of paper until she comes up with something she likes. Also, this game is meant to focus on verbal descriptions, so players should avoid using actions. (Indeed, you can think of this as a verbal version of charades.)

4. If a player gets her partner to say the correct word or phrase, she then selects another piece to describe. This continues until time expires. (I suggest each round last one minute.) At the end of a round, if a player is still describ-

ing something, she stops and returns that piece of paper to the bowl. The bowl is passed to the next person in the circle, and that player and his partner begin to play.

5. When the bowl eventually returns to the starting player, all of the players will have had a chance to describe for one round and to guess for one round. The game can end either at this point, or when all of the words or phrases have been identified. If the latter happens before all of the players have had a turn, new words or phrases can be added.

6. Other players must ensure that the playing pair does not use descriptions that are unfair, even if inadvertently. For example, words written on the paper cannot be used in the descriptions. So, in describing a polar bear, a player could not use clues like "related to a grizzly bear" or "found in polar regions". The participants can decide before starting what else they consider unfair, and as they observe each other, they can point out when someone breaks a rule. If this happens, the players can also decide whether that round should end right away, or whether that piece of paper should be discarded and play continued.

Although only one player is guessing out loud each round, all of the other players can mentally be guessing the answers. Doing so gives them all an opportunity to learn new words, phrases or meanings. While much of the learning takes place during the game, it is helpful to share some thoughts afterwards to enhance that learning. Participants can be asked to recall words or phrases that puzzled them, ones that they interpreted quite differently from other people, or ones that they found difficult to describe. Keeping this in mind, the facilitator can purposely include tricky words or phrases in the bowl at the start of the game to generate or promote such discussion.

Sanj Sathiyamoorthy is a graduate student at FES, focusing on environmental education. He also works at the Toronto Zoo, where he learns from children and does his best to reciprocate.

Animal Stories and the Struggle Against Forgetting

By Laesa Fawcett

I have a question that has been nagging me for years. If it is not in my face, then it is at the back of my mind. The question keeps getting bigger and more incessant in its demand to be answered. This is my first, conscious attempt to write my way into some possible answers.

Everywhere I go, whether it is a kindergarten class, a children's camp, a graduate class in Environmental Education or an academic conference, people tell me animal stories. I hear hundreds and hundreds of animal stories a year. The question of why so many different people tell me animal stories haunts me, follows me around. Just when I think I'm having a respite from yet another animal story—BAM—out of the blue comes another one. They come from the most unsuspecting places and people - the night janitor, the neighbour at the bus stop, the executive funding officer.

I have only once in my life *asked* for animal stories and that class did not end for three hours. Feeling overwhelmed, I have not done it since. It is not that I want to trivialize the human telling of stories about animals. Far from it. I want to understand it, as a phenomenon, for what it says about humans, and perhaps for what is worth remembering in our lives. Besides, I can no longer ignore it; the sheer magnitude of the number of stories I alone have heard is too much to squander.

As a person intrigued by the great human/animal divide, I have been researching and presenting ideas about the shapes, textures and theories of human relationships to other animals for decades. I know theories are really good stories. The best theory-stories are ones born out of experience, curiosity, passion and sometimes pain.

I wonder about things like participatory consciousness, anthropomorphism, and the disappearance of species. I ask questions about

wonder, awe, cells and sensory lives, about "radical otherness" and the more-than-human world. I ask my students to do environmental autobiographies, animal or plant intimacy journals, environmental ethics and environmental education theory papers and, of course, to design environmental learning experiences.

Back to my problem. When I present my ideas publicly to academic audiences, largely to people I do not know, they seem to listen. I explore complex ideas about radical otherness, about the moments of knowing the Other across species barriers. They are often a very learned lot of people, well-read and versatile in their interests. My talk ends and I look out at the audience. Then it begins.

Initially, people speak excitedly but tentatively. We don't talk directly about the ideas at all. Instead they tell me animal stories. Lots and lots of different animal stories. Personal, humorous, poignant, silly, sentimental animal stories. Stories that vary from a recent encounter with a wild animal to what their dog did last night, from a classroom experience with a snake to the roadkill they saw on their way to the conference or an animal dream they had. It is a veritable verbal ink blot, Rorschach test, collective stream of consciousness of animal stories. I never know what to expect, except a barrage of animal stories.

At first, I am always taken aback. As a junior, female academic I want to have my ideas discussed, conceptual frameworks and assumptions challenged, radical theories questioned. NOT, as my son would say. I get told animal stories instead. A big space opens up and is filled with spoken and unspoken sincere, open-faced, innocent and not-so-innocent animal stories. Serious adults start to remember animal stories and tell one another.

*Just when I think
I'm having a
respite from yet
another animal
story — BAM —
out of the blue
comes another one.*

In the middle of the last such presentation, I had the most vivid image. I felt like a crack in a socially constructed reality had opened up before us. It was as if animals were allowed to enter the room and, hungry for some contact, they rushed into people's bodies, reminding them of kinships lost. Stories made up of vague sensual memories of scales, fins, fur and carapaces spilled forth.

I have come to see the abundance of animal stories waiting for the right moment to be told as a form of resistance: people recognizing (perhaps unconsciously) the fracturing of relationships between humans and other species, and feeling compelled from some deep place to tell a story about a relationship. To try to close the widening gap. To not forget. This struggle against forgetting is an act of resistance—resistance to the increasing disappearance of animals from Western lives. As animals disappear from our lived encounters we struggle to keep the few remaining memories alive. Charles Bergman has argued that animals become endangered in our minds before they become endangered in the 'real' world.

Stories carry within them the seeds of innumerable possibilities. Most of the stories I have heard are not about endangered animals; they are often about common and familiar species. There is a hopefulness in the recounting, in the possibility of such events happening again. I have adapted some reasons for animal stories from Scott Sander's article entitled, "The Most Human Art". Telling animal stories creates a community (even momentarily), linking listeners and tellers where no experts are required. The stories can remind us of the existence and experience of the "Other", which in turn reminds us of our own humanity, and the consequences of our actions. They locate us in time and place and remind us of where we have belonged. Animal stories help us deal with our grief, our fear of the passing away of animals from our lives, and what our world would feel like without them. As Sanders says, stories "educate our desires", as they help us remember what we value and why.

Upon writing and reflecting more, I have come to think my question is not as complicated as I first imagined it to be. These stories are about remembering animals in people's lives; they are struggles against forgetting. They are perpetual questions, struggling to be remembered. Why did I feel that way then? What am I missing now? What do I want in the future?

To tell an animal story in such a human-centred world is to invoke radical otherness; it is one way across the human/animal divide. It's like an embodied form of resistance. People can talk about the ideas, but they need to remember the sensory experiences, the feelings, the context of the encounter. As long as animal stories are alive and well, they can continue to function as disruptive forms of emotional and experiential biological conservation. We need to tell the stories to remember, and to hope for more.

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"Looking Into Our Hearts": Rediscovery in Northern BC

By Donald Gordon

The hill-top that I had chosen offered spectacular views up the Finlay River valley and up Bower Creek to the jagged peaks of the Russell Range of the northern Rocky Mountains. The hill-top and all below me was covered in an undulating carpet of small lodgepole pines, all regenerated after a forest fire here in the 1950's. The view of the Kaska Dena and Sekani homeland spread out before me was nothing short of magnificent.

Right now, however, I was not admiring the view; I was too busy worrying about the fact that this awe-inspiring vista contained a massive bank of black cloud and sheets of rain, which were rolling down the Finlay Valley toward me. This would not have been anything more than an inconvenience if I had had my tenting gear with me. Instead all I had was a potato, 2 matches, my sleeping bag, and a pocket knife.

This night, I had left behind camp logistics, funding issues, and staff meetings at the Sudze K'anusta Rediscovery base camp. Like three 14 to 18-year-old Kaska Dena and Sekani youth who had also decided to be alone in the bush this night, I was on a 24-hour solo. Before we had left camp, one of the things that the Elders had told us was that if we really needed something while out in the bush, the Land would give it to us. I did not think that what I really needed was to spend a night in the lashing rain. I started to build a shelter, but the tough branches of the small pines were amazingly difficult to cut with my pocket knife, and the sparse needles resulted in a pathetically transparent roof. I braced myself for a grim night.

Eighteen months previously, Paul Byrne, an inspired teacher in the remote Kaska Dena and Sekani community of Fort Ware, had been expressing his frustration with the often irrelevant curriculum that he had to teach. The people of Fort Ware have been through a vast

amount of upheaval and tragedy. This ranges from their experiences at residential schools and the flooding of a large portion of their lands and two communities by the vast Williston Reservoir, to ongoing pressures from resource industries. The trapping economy which had sustained this community for generations has collapsed, and many community members are wary of the true cost of the forest industry's promises of jobs. Unemployment and alcohol addictions are taking their toll. The provincial school curriculum, however, has difficulty addressing the legacy of this damage.

According to Paul, "What these kids really need is a bush camp where they can spend time with their Elders! Show their bush skills! Do science by stomping through bogs! Learn old stories! Do real-life group problem solving!" Such an outpost camp, his tentative description continued, would be guided by Kaska Dena and Sekani traditions and teachings. It would blend healing, respect for the land, respect for themselves and each other and having fun while learning and being challenged. It would need to be guided by the Elders of this community so that it addresses issues of concern for this community.

I suggested that one model of what he was looking for had already been developed, and as soon as I got back to Vancouver I sent him Thom Henley's *Rediscovery: Ancient Pathways, New Directions*. The Rediscovery concept was initiated by Thom Henley and Guujaaw on Haida Gwaii (Queen Charlotte Islands) in the late 1970s. It has since spread across western Canada, the US, and to Thailand.

Paul's enthusiasm for the concept was infectious, and I soon found myself helping him and Elder Tom Poole set up Fort Ware's first Rediscovery Camp. Members of the community told us that Sudze K'anusta would be a good

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potato, 2 matches,
my sleeping bag and
a pocket knife.*

*It was the Elders
who provided the
soloists with advice
on responding
to physical and
spiritual occurrences
they might
encounter while
alone in the bush.*

name for the camp, as it is an age-old Sekani expression meaning "looking into our hearts".

This was now the second year of Sudze K'anusta Rediscovery. After successfully initiating the project, Paul and his family had to return to Newfoundland. Charlotte Rohrbach stepped into the gap and provided her considerable leadership abilities. Andreas Rohrbach and Cathy Warren provided their crucial talents and tireless efforts. Having seen the success of the first camp in the faces of the participants, Chief Emil McCook and the Band Council redoubled their support. Tom Poole remained as the stalwart Elder. This year he was joined at the bush camp by four other Elders, including 85-year-old Minnie McCook.

One of the fundamental concepts of any Rediscovery camp is re-connection with the Land, and the cultural heritage which it embodies. The Land has magic to work on youth, even those who live in a small community on the edge of the largest unroaded wilderness south of the 60th parallel. In order to reach the camp, all the youth participants had to walk for three hours along an ancient Sekani trail which follows the Finlay River. Although this trail had fallen out of use with the decline of trapping and the increased use of out-board motors, it had recently been restored by a crew from Fort Ware. None of the youth had ever walked on it before, and some did not know of its existence. Its path was easily traceable, as the trail was worn deep in the soil by the feet of countless generations of Kaska Dena and Sekani people. The young people literally found themselves walking in the footsteps of their ancestors.

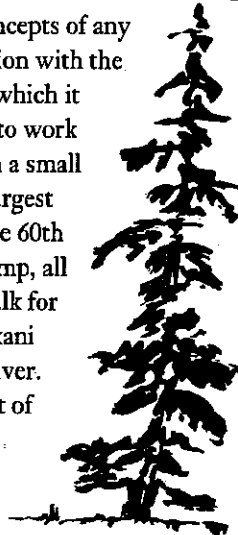
Not all the participants were comfortable with the pace of this hike, so the group safely split into faster and slower parties. The slower group quickly did away with the notion that this hike was any sort of race, and stopped for long periods to rest in the sun and pick cranberries. Two individuals who had endured a particularly turbulent year found great solace in the berry-

picking. It was only later that I heard that a researcher at the University of Washington is studying "Huckleberry Healing". This is the term she has coined for her observations of the therapeutic value to youth in crisis of becoming absorbed in repetitive, peaceful activities such as berry-picking.

There are many keys to the success of the Rediscovery model, but one of the most crucial is that it provides an opportunity for Elders to share their knowledge with youth, in a setting free of electronic distractions and external pressures. Given the opportunity, there can be a unique bond between Elders and youth in all societies. In our digitally-enhanced society, however, which glorifies beauty, physical power, and rapid change, the elderly are too commonly viewed as helpless, as of little value, and perhaps even as an "out-of-touch" embarrassment. In the city where I live, the elderly tend to live in high-rise apartments and are often too scared of unknown youths to go downtown. Meanwhile, these youth may live a continent away from their own grandparents.

Freed from Nintendo and satellite-borne professional sports, the youth at Sudze K'anusta Rediscovery were drawn to their Elders, and the Elders to the youth. It was the Elders who knew how to cut and bend spruce frames for the youths' drums, and how to make babiche (fine moosehide cord). It was the Elders who knew the old stories of the land to be told around the campfire, and the locations of the animal licks where a moose or mountain goat might be found that would feed the camp. It was the Elders who provided the soloists with advice on responding to physical danger and spiritual occurrences they might encounter while alone in the bush. Many of the youth realized that they had more to learn from the Elders than they had ever thought possible.

Equally powerful as the youths' contact with their Elders was the youths' contact with each other, and indeed with their own voices. Every night around the campfire, a talking





feather was passed around the circle of all camp participants. Only the person holding the feather could speak, while everyone else listened. One could simply pass the feather on to the next person, or one could hold it and talk about what was on one's mind. Some participants took several days before they were comfortable speaking a word in front of so many listeners; others took the opportunity only to thank

someone who had made a difference to their day. By the end of a week, however, many were speaking from their hearts, often with striking eloquence.

Despite being such a simple concept, the opportunity to speak from one's heart and mind and be listened to without interruption is rare. The youth and the camp leaders embraced it as a means to put issues to rest, to air those issues which remained troubling, and to share experiences of the day. Indeed, any group or organization would benefit from such an opportunity for all its individuals to speak and be listened to.

As I cringed in my sleeping bag on the hilltop, waiting for the downpour to strike, I must have fallen asleep. I awoke to a clear morning and no sign of the rain that I had expected during the night. Later in the day, as I followed the trail back to base camp, I encountered Grandma Minnie McCook. She had been concerned about my safety in the bush, and had come looking for me, accompanied by her granddaughter. I was deeply touched.

With time available for individuals to absorb its magic, the Land provides a catalyst for people of any age to re-learn that the world can be a caring place. Being on the Land can provide an opportunity for individuals to look into their hearts and find something they may have misplaced. Once people are a little more gentle and caring with themselves, their peers, and their Elders, they can then be a little more gentle and caring with the Land that has cradled them. The Elders were right: if you truly need something, the Land will give it to you. It seems that this can apply whether what one needs is an opportunity for huckleberry healing, time to sit quietly with an Elder, or even just to stay dry in the path of a downpour.

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Donald Gordon (MES 1993) lives in Vancouver and works on community economic development initiatives in Fort Ware. He has a passion for ancient trails and log-house building.

*It was only later
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ROC 1998 and Horwood's Model of Integrated Programmes

By Emanuela Bazzoli

For my MES Major Project, I conducted research from February to June 1998 on the integrated program at Mayfield Secondary School in Brampton, Ontario. The pioneering students dubbed this programme "Roots of Courage/Routes of Change," shortening it simply to the ROC. In its fifth year of operation, the course brings students together all day, every day, for an entire semester, earning credits in English, Geography, Physical Education, and Leadership Skills.

My role was that of a researcher and student volunteer. I guided activities, led group discussions, taught short lessons, or took up homework, offered advice and help, assisted in developing new activities, supervised activities independently, and attended retreats or field trips whenever possible. The most important aspect of my volunteer work was to challenge and expand the students' environmental thinking, learning and acting. My goal as a researcher was to examine student experiences in an established integrated programme.

Soon after my first days with the ROC, I realized I needed to know what motivated these students to participate. I therefore asked them in a questionnaire: "Why did you enrol in this programme?" and "What attracts or interests you most about this course?" The four top reasons for enrolling were the outdoor and physical components, the environmental content, the good reviews from previous ROC students, and the expectation that the ROC would be different from regular school. The most attractive or interesting aspects of the course were being outside, participating in trips and physical activity, being with the same people all day, learning experientially, and, again, having a change from regular school.

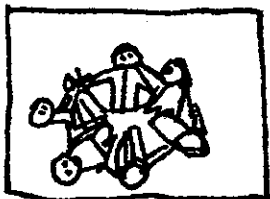
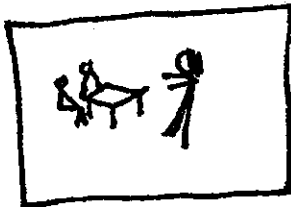
Towards the end of the term, I asked the students and teachers for their personal evaluations of the programme. The results of these interviews, combined with my observations, led me to reflect on Bert Horwood's (1995) model of a successful integrated programme. In my last interviews with the students, I asked them to

reflect specifically on the six features of Horwood's model: experiential learning, whole process, authenticity, challenge, responsibility and community.

Experiential Learning

There is no doubt that the ROC programme places more emphasis on doing rather than telling. The ROC programme acknowledges the importance of teaching about/in/for with the environment, and sees students as active rather than passive learners. Students spent a great amount of time outside of the classroom. They participated in a variety of activities like winter camping, canoeing, and hiking and held the majority of their lessons in the adjacent natural areas and community. Many students said they learned more in this programme than in regular school. For example, they mentioned that their understanding of ecology was greater because the teachers took advantage of spontaneous teaching opportunities while in the outdoors. I recall often hearing the words "Now I get it!" while on an expedition.

Another example often cited by the students was their My Own Backyard Projects (MOBY), a semester-long group project where students researched an environmental issue within their community. They presented their results by guiding the class on a 2-3 hour walking tour highlighting cultural, historical and ecological aspects of their communities, giving an in-class presentation, and submitting both group and individual essays. For most students, the constant group work was often frustrating since most of their earlier high school experience focused on independent work. Upon reflection, students believed that their teamwork skills were greatly tested and improved through the MOBY assignments and that they gained valuable research skills.



Whole Process

Experiential learning activities often encompassed “whole process” participation for the students because they were involved in planning, implementation, and evaluation of these activities. Students mentioned the MOBY projects in this regard as well as the Waterwalker Film Festival, established in honour of the late conservationist and filmmaker Bill Mason. ROC used this film series of the Canadian Recreational Canoeing Association as a fundraising event. Although the students received guidance from their teachers, Waterwalker became the students’ responsibility. All students had the opportunity to voice ideas and opinions concerning preparation and presentation. In the end, it was a great success and the students were satisfied with the result. The only regret the students had with this film festival was: “All this hard work and it’s over in one night”.

Another “whole process” activity mentioned frequently by students was journal writing. Throughout the term each student was required to keep a journal. For many, beginning to keep a journal was difficult and it was seen as just another assignment. The teachers asked for specific journal entries, mostly reflections on activities and events, or short essays. Otherwise, the content and structure of the journals were up to the students. Once they became comfortable with journaling, they began to use their journal more as personal diaries and as a notebook for organizational purposes. A large number of students even made daily entries. By half-way through the semester, journaling became one of the class’ favourite activities. A fair number of students mentioned that they continued to journal even in the summer.

Authenticity

The three top activities that made the students feel they were involved in “real” issues and good causes were Waterwalker, learning about and writing letters for “Lands for Life” and “Living More Lightly” challenges. Regarding “Lands for Life”, students learned about this Ontario government initiative by conducting research and hosting a visit from a Federation of Ontario Naturalists representative. Students felt

that learning about “Lands for Life” was important because it was a current issue that would affect their access to public lands in the future. Many students felt strongly about this process and chose to write letters to the Minister of Natural Resources and other major participants. Although the students wondered if their letters would affect change, they felt it necessary to have their voices heard. When the students began to receive responses they felt that their opinions had been considered and counted on some level. They believed they made a small difference.

The “Living More Lightly” weekly challenges required the students to choose their own environmental challenge that would alleviate personal environmental impact or improve on their participation in environmental action. One month after the students had chosen and committed themselves to their personal challenges, the class was introduced to weekly challenges. At the end of each week, the class decided on an environmental challenge to pursue together that would benefit the environment. The “Living More Lightly” sessions proved to be an excellent activity for the ROC students. Although not all students accomplished their goals, attempting and sometimes succeeding at these challenges made them feel involved in significant action. They also had a clearer understanding of the many actions they could take to enact their values.

Challenge

Challenge is about having students face an unavoidable situation where they “cannot get off the hook” (Horwood 1995:16). When the students were asked about the challenges they faced in the ROC, nearly every student responded with a different answer. A common theme, however was teamwork and the desire not to let others down. As mentioned earlier, working in groups was challenging for many of the students. Others discussed physical challenges, some discussed academic challenges. For many students, meeting such challenges was the central theme of the year-end Portfolio assignment, a personal presentation of their experiences during ROC. At first the students were not enthusiastic about this assignment because it was about themselves. In the end, however,

*I recall often
bearing the words
“Now I get it!”
while on
an expedition.*

many said that it was the most significant learning experience in the ROC and that it was like "learning everything all over again". Some students performed one-person skits, others gave speeches, others used computer presentations, others showed artwork expressing their feelings and accomplishments, and two others wrote a story book for elementary children which they read aloud to the class. The presentations were incredibly creative. Students talked about how they changed significantly throughout the semester, not only intellectually but also emotionally and socially. I found that each presentation had a common ending, with each student sharing their surprise at how ambitious, determined, curious and intelligent they really were.

Responsibility and Community

The students accepted a great deal of responsibility throughout the term. Nearly all students reported that they felt they had more responsibility in the ROC programme than they had in any other courses. First, the students had to fulfill the requirements of assignments without excessive prodding and reminders from the teachers. Second, as teamwork intensified, students felt increasingly obligated to each other. When asked "What was the greatest responsibility you felt during the ROC programme?" the answer most students gave was "Trying not to let anyone down." This sense of responsibility was both to other students and to the teachers. Since the students were in contact with only two teachers throughout the term, they came to know one another very well. Many students therefore felt that they wanted to meet the teachers' expectations, not to impress them, but rather to do their best and get the most out of what the programme and the teachers had to offer.

The responsibility and respect in the student-student and teacher-student relationships inevitably fed into the development of community in the classroom. The students became comfortable and respectful with each other, even describing the class as a "second family". They felt free to discuss their feelings openly with each other because of the closeness and trust within the classroom. No matter the situation, opinions and feelings were always

respected. An excellent example of the class being able to freely air out frustrations took place in May in what could be called a "Circle of Grievances and Positives." The teachers realized that the students had become annoyed with each other and with the teachers, so they offered this activity as a venue for open discussion. Acknowledging that the students, and they themselves, were running out of patience, the teachers took approximately two hours out of the day to have the students sit in a circle and express their feelings on any matter in the course.

Although this activity may suggest a deteriorating class relationship, it was the exact opposite. The comments the students made and the true feelings they expressed revealed how comfortable, respectful and trusting the students were with each other. This session actually made the class closer and stronger. Many realized that they still had much to learn about each other and themselves. Furthermore, by the end of the session the students better understood the hard work their teachers put in to make the ROC programme successful and worthwhile.

Conclusion

My experience with the ROC programme was most enlightening. The teachers and students were inspirational and the structure and content of this programme cleverly linked theory and practice; I consider ROC 1998 to be a resounding success. Horwood's model of a successful integrated programme very ably describes the key features of this programme.

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Emanuela Bozzelli completed her MES in December and is now looking for employment in the outdoor environmental education field.

Nature Snob No More: Urban Interpretation Along Sixteen Mile Creek

By Amy M. Rolf von den Baumen

What struck me one day in the midst of my environmental studies program was the fact that I was a nature snob. Like many others, I believe, I had understood nature to be an other-than-urban experience. And while I had walked through many a ravine and visited the urban lakeshore I did not for a moment think of these experiences as 'getting in touch' with nature. I subscribed to the out-of-the-city-for-any-real-nature-experience way of life and felt proud that I'd tree-planted and camped and really roughed it where there was nature of some substance.

It was my old friend the chickadee who had me question my snobbish assumptions. Please allow a small digression. The chickadee was the first bird to come to my hand for a seed when I was a young child. For me this bird has always been the ultimate symbol of nature. Where the chickadees followed me down a path or where I could hear their inspiring 'chick-a-dee-dee' I knew I could feel happy. I thought that when I moved to Oakville, it would mean giving up regular visits with some of my favourite nature friends. In fact, the opposite happened. In a moment of whimsy, I hung up a bird feeder and was delighted to see that my first visitor was not a squirrel (though I like them too) but a chickadee. It seemed to be a sign—if you believe in those—that nature could, and more importantly, *did* exist in my backyard. But it seems that the chickadees told all of the other forest animals and backyard creatures who might be interested in birdseed where this food could be found. Soon, with deer mouse in the barbecue and three raccoons dumping over the bird feeder every night, I had no choice but to reconsider visiting the trail behind our house for those real nature experiences.

While trying to put together a proposal for a major project I discovered people such as David Orr (1994) who challenged the merits of

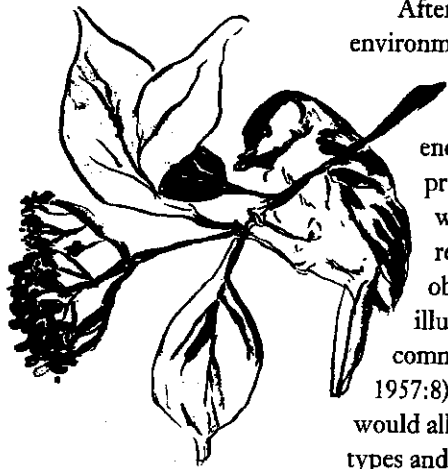
global environmental education and advocated the merits of local experiences and local environmental education. Equally inspiring was Rachel Carson's *A Sense of Wonder* (1956) in which she wrote:

"...wherever you are...you can still look up at the sky—its dawn and twilight beauties, its moving clouds, its stars by night. You can listen to the wind, whether it blows with majestic voice through a forest or sings a many-voiced chorus around the eaves of your house or the corners or your apartment building...Even if you are a city dweller, you can find some place, perhaps a park or a golf course, where you can observe the mysterious migration of the birds and the changing seasons...you can ponder the mystery of a growing seed, even if it be only one planted in a pot of earth in the kitchen window" (p. 49).

Satisfied that there were pockets of nature in the urban environment that could potentially contribute to a diet rich in wonderful local nature experiences and that could be enjoyed all year round, I began to see opportunities for environmental education in urban parks and along the trails that already existed. I figured I was probably not alone with my snobbish assumptions of urban nature and that there were probably a few unassuming others who would be interested in discovering, exploring and experiencing this world if the opportunity presented itself.

Close to my home is Sixteen Mile Creek and the beautiful forested ravine valley that flanks it. On either side there is a beautiful trail that follows the top bank of this river valley. Once on the trail it is easy to forget that you are in an urban area. Due to its proximity and character, the trail suited my plans for an environmental education project that would focus on facilitating urban nature experiences within the community.





After a detailed site analysis of the trail environment, I decided that interpretation would be an ideal way to encourage discoveries, explorations and experiences. My favourite definition of interpretation is this: "An educational activity which aims to reveal meanings and relationships through the use of original objects, by firsthand experience, and by illustrative media, rather than simply to communicate factual information" (Tilden 1957:8). Because interpretation is informal, it would allow for a wide variety of audience types and would be available to local residents

any time of the day and all year long.

Interpretation also seemed like an ideal way to incorporate several themes that were recurring in my environmental education readings. I had made a list of some really important and oft-missed everyday experiences such as local hands-on nature experiences. (See sidebar.) Soon my list evolved into a web of essential themes and components from which I felt I could build urban interpretive exhibits that would focus on local nature experiences and, if possible, avoid Western anthropocentrism. (See figure 1). Interpretive exhibits could potentially reflect the local and natural history of the site. Photographs taken on site throughout the year could be used for identification and illustrative purposes. In keeping with the interpretive model I'd proposed, it seemed important to attempt to exclude phrases such as "Your forest" and "Our trail" which are traditionally used to make interpretation personal. Instead, I used phrases such as "You are part of a wonderful forest" or "The trail beneath your feet", which give the interpretive exhibits a personal feel but don't reflect any anthropocentric ownership of the land. I used the word "exhibit" in my project to refer to an outdoor sign posting that includes both text and graphics (and/or photographs) to convey the interpretive message.

While the urban environment offers many diverse, and in my opinion often overlooked, opportunities for environmental education—in particular interpretation—it also poses some unique challenges for environmental educators. In my view, nature interpretation needs to be adapted to meet the individual features of the site. Urban interpretation is no different. Within the urban context (for eg., parks and recreation master plans), interpretation needs to be designed for the urban site and the urban audience, with detailed analysis informing both interpretive and exhibit design. Perhaps the most striking difference in urban and rural design is the frequency of site visits. Unlike an audience that may only visit a rural site once a year, the urban audience may visit the site at daily, weekly, or monthly intervals. For this reason, urban interpretive exhibits and

A Wish List of Elements for Urban Interpretation

- connectedness - beyond the human sphere
- responsibility - beyond the human sphere
- mutual need
- changing seasons
- night / day skies
- life cycles
- elemental things:
- flowing water, wind, trees, clouds, rain, mist,
- mountains, landscape, forests
- food - knowing the source
- livelihood
- energy
- healing
- not a recreational resource
- celebration
- places of mystery
- places of adventure
- roaming
- exploring
- imagining
- materials waste flow
- senses - seeing, touching, smelling, hearing, tasting,
- experiencing
- silence
- humility
- holiness
- courtesy
- beauty
- giving
- restoration
- obligation
- wildness
- respect
- sense of place
- local connections
- non-anthropocentric

programs need to be changed often, possibly monthly, at sites visited frequently, in order to keep the exhibits relevant, exciting and entertaining. This in turn leads to further design and implementation considerations.

With regards to my project, I envisioned trailside exhibits attached to posts with plexiglass covers that could be unscrewed for monthly changes of interpretive information. For each exhibit post, I developed a thematic interpretive mock-up for each month based on what the visitor might experience at that particular location. For example, at one post location in April, the spring forest floor is covered with Trout Lilies. The exhibits' theme, then, might be "Trout Lilies: Important Nutrient Sponges". In keeping with the monthly theme, "The Spring Bouquet Means Spring is Here to Stay", another post might draw attention to the Trilliums and another to the Dandelions.

At this point, the project is still in model form. However, interest remains in some sort of interpretive program along the Sixteen Mile Creek Trail. Discussions continue with various parties as to the scope of interpretation that will eventually be adopted. Concerns that have been expressed with the proposal are maintenance, cost, and vandalism.

Of course the facilitation of interpretive experiences is problematic in the sense that one can never guarantee a desired outcome. I acknowledge that urban interpretation does not necessarily result in an urban population intimately connected with the nature that surrounds them. However, I can share with you my own experience while working on this urban interpretive project. It was as though my own sense of wonder for what was around me stirred. Each day, while walking the trail I saw a different layer of forest relationships. Whole new worlds opened up for me – like the spring day when I realized that all the trees, like flowers, were blooming. I find it hopeful, that in my own experience, the interpretive journals

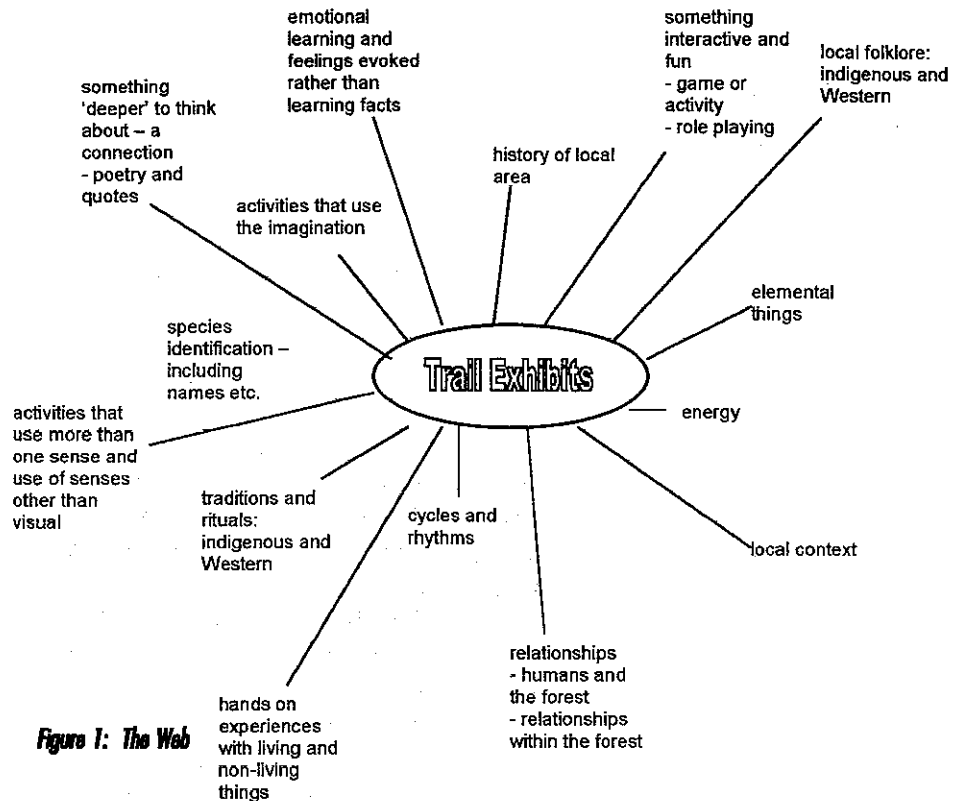


Figure 1: The Web

and natural history I was reading facilitated an eagerness to explore and discover the nature in the urban community. The trail feels different now – the chickadees are there and a part of me too.

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Amy Rolf von den Baumen recently completed her MEd. She lives in Oakville with her husband and two daughters. She can be reached by email (rvdb@andybaumentd.com).

Old Bats

By Jason Taylor

This summer I had the wonderful opportunity to spend a week in the Ottawa Valley, at the Chippawa Cottage Resort, co-facilitating a programme entitled “Ballads to Biodiversity” for an Elderhostel group. For those who are unfamiliar with Elderhostel, it is a non-profit organization providing educational adventures all over the world to adults aged 55 and over. It is for people who believe that learning is a life-long process.

“Ballads to Biodiversity” was a five-day programme. The first part was conducted by Barney “the Mountain Man” McCaffrey and was dedicated to learning the history of the Ottawa Valley, largely through song. My part of the programme consisted of exploring the biological diversity of Ontario. This is by no means a small topic, so I focused on several specific subjects. Each morning we went on nature walks to enjoy the start of a new day and identify some of the flora and fauna of the area. We talked about the reptile and amphibian diversity of Ontario and spent a morning dip-netting for aquatic invertebrates. Previous experiences had shown me what a popular activity mucking around with nets is with children. However, I was slightly nervous as to how this group would respond to the activity.

After a few moments of grumbling, the elders were up to their elbows in mud looking for the next crawly critter. It was so popular that I had to drag people away so that we wouldn't be late for lunch!

Another component of the programme was a focus on my favourite area of study: bats. I gave a slide show on the diversity of bats to introduce some of the bats found in Ontario and the world. We then went for an afternoon trip to an abandoned mine and an evening bat walk. We used bat-detectors to allow us to eavesdrop on the echolocation calls of bats. In the past, I have found that people find bats a popular topic and this group was no exception. Myriad stories and myths about bats were shared among us and for many of the participants it was their first encounter with a live bat.

“Old bats” is how a friend referred jokingly to this programme. At first this term seemed unfavourable—to both the elders and the bats—but upon further reflection I have grown to like this rather politically incorrect saying. In Canadian culture, both bats and seniors are often misunderstood. If we take “old bats” to mean “elderly and misunderstood”, I think that the bats and seniors have much in common.



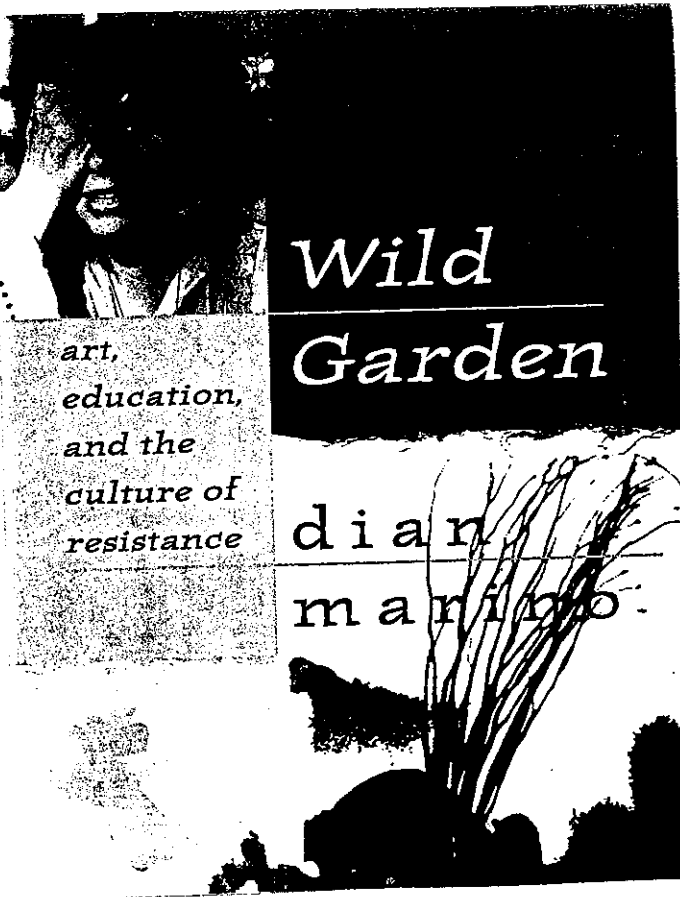
First off, bats live for a very long time, especially given their small size. Coincidentally, the oldest bat ever recorded, a 32-year-old little brown bat, was found at the same abandoned mine we visited. So there's no real problem with calling bats "old", but what about calling seniors "old bats"?

As a species, bats are very misunderstood animals and most of my work involves dispelling some of the negative myths related to them (e.g., that bats are evil, suck blood, get caught in your hair etc.). Similarly, this group of seniors dispelled for me many of the myths often placed on elders. They were an energetic, exciting bunch of people with a genuine thirst for knowledge. We came to the programme from diverse backgrounds and all enjoyed sharing each other's experiences.

Perhaps this comparison between elders and bats is quite simple and, some may say, ridiculous. But what I'm trying to address is the issue that outdoor education is one of the most accessible venues to promote life-long learning. I think that as educators we often neglect the elder section of the population when we are creating and implementing our programmes. This is to our detriment because there is much that we can learn from this group. I gained incredible new perspectives from this experience and can only hope that when I'm 55, I will be continuing my adventures in life-long learning.

Jason Taylor is a graduate student in FES and is active in the bat education front. He can be reached at (416) 736-2100 x 22664 (phone) or by e-mail at jtaylor@yorku.ca.





**Wild Garden: Art, Education
and the Culture of Resistance
by dian marino (Toronto:
Between the Lines, 1997)**

Review by John Sandlos

There is no simple way to tie together the strands that made up dian marino's critical thought, educational activism and artistic energy into one neat package. Indeed, to say that she was an eclectic personality is to understate the case. Not only was her creative and intellectual life marked by an uncontrollable wildness, but as a critical educator, community organizer, painter and professor, she was continually defining and re-defining her relationship to the students, communities and the institutions that govern the practice of education.

The editors of *Wild Garden* - a collection of marino's writings, spoken words and visual art from the period between 1980-1990 - were wise to reflect this diversity. The volume includes everything from theoretical musings on Gramsci to a hands-on section describing (complete with diagrams) the art of silk screening. Practical teaching activities such as "Drawing and Discussion as a Popular Research Tool," "Community Self-portraits," and "Structured Criticism" provide an important guide (for formal educators) to the innovative approaches offered by the popular and critical education movement. For community organizers, the theoretical thread running through the book — marino's insistence that education is not neutral (neutral is, after all, a stance), but an act of political resistance — provides a solid conceptual basis for on-the-ground community activism.

Nonetheless, to focus simply on the content of *Wild Garden* is to miss the most attractive aspect of the volume: the pervasive and infectious energy of dian marino. One senses it in her story of people's 'street' reactions to her outrageous clothes and heart-shaped sunglasses, or in her hilarious effort to draw as many 'T's' as possible during a creative exercise at an academic conference. One is more fully aware of it in her art ("Bird on the edge about to...." serves as an apt metaphor for marino's own kinetic edginess and willingness to embrace uncertainty) and in her absolute commitment to education as a medium for social change.

There are also profound moments of self-doubt in the book, moments of deep insight when the critical educator begins to critique herself. Recalling her experiences teaching English as a Second Language to textile workers in Toronto, marino remarks, "too often I felt like I was lying in wait for students to come up with my political framework — a sense of arrogance was being disguised and diffused with 'pedagogy of the oppressed' phrasology" (p32). Such intellectual honesty is rare in the combative world of contemporary academia. But it is precisely marino's ability to doubt herself, to constantly formulate and re-formulate ideas and

(using her terminology) to see things within a new 'frame' that makes *Wild Garden* such an engaging volume.

My only critique of the book takes the form of a question: where exactly does the 'culture of resistance' proposed by marino (and other critical educators) lead communities of teachers and learners? Surely, as marino suggests, education must address issues of hidden hierarchy, power and oppressive politics. But if education becomes the exclusive articulation of personal and community acts of resistance, then upon what foundations do we build 'post-oppressive' human communities? After all, dynamic opposition to power assumes, even *needs*, its oppressive counterpart; it offers no firm pedagogical basis upon which communities and individuals might consent to certain 'given' forms of knowledge (the traditional knowledge and experience of elders, for example). On this issue, *Wild Garden*, along with the wider field of critical education, remains strangely silent.

That said, *Wild Garden* remains an invaluable contribution to the broad field of education. To say that it should be read by every teacher and community activist is not enough. Government ministries and school board officials who are serious about education should buy the book *en masse* and distribute it on all the street corners and in all the coffee shops of the nation, preferably while wearing outrageous clothes and a pair of heart-shaped sunglasses.

John Sandlos has worked as an environmental educator, a national park naturalist, and an adult educator. He is presently beginning his PhD at FES.



Bird on the edge about to... (1975)

Ecological Identity: Becoming A Reflective Environmentalist by Mitchell Thomashow (Cambridge, MA: MIT Press, 1995)

Review by Julie Dale

In *Ecological Identity*, Mitchell Thomashow brings his classroom work in environmental education to a wider audience. His view that ecological identity work involves exploring one's relationship to the earth and other life forms, as well as fostering a sense of community and citizenship, is demonstrated by the approach he uses in encouraging students to explore their own ecological identities. This approach extends the context of ecological identity beyond one of personal interest to include a sense of responsibility for our actions. It embodies an awareness of our personal impacts on the environment and the need to undertake relevant political action in order to maintain the integrity of our ecological identities.

According to Thomashow, the essence of ecological identity is grounded in four questions: Where do things come from? What do I know about the place where I live? How am I connected to the Earth? What is my purpose and responsibility as a human being?

Thomashow's descriptions of branches of environmentalism such as deep ecology and ecofeminism, as well as the conservation versus preservation debate, emphasize the diversity of perceptions of environmentalism which exist, and thus the need for individuals to assess the values and actions which comprise their own ecological identities. Further to this, in reviewing the ecological identities of some prominent environmentalists, Thomashow highlights the tension commonly encountered by environmentalists concerning their enjoyment of nature and solitude and their need to engage in political debates in order to fulfill their responsibility to the environment.



Tell me, doesn't your painting interfere with your writing?

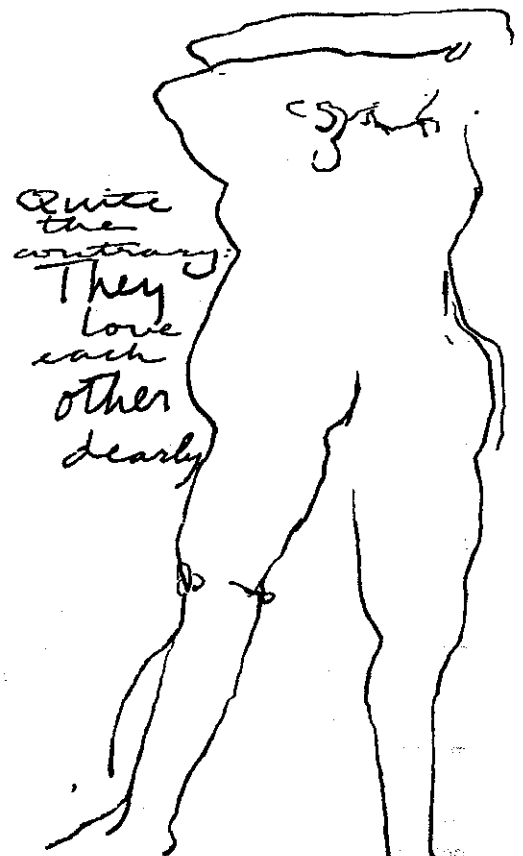
While reading this book, I frequently found myself thinking from the perspective of one of Thomashow's students, using his suggestions to reflect on my own values and experiences. Although I have a great love of the outdoors and a genuine concern about the future of nature, I found myself experiencing twinges of guilt as

I was forced to admit how frequently I fail to integrate my values into everyday practices. Thomashow's style, however, allows such feelings to surface in an atmosphere of acceptance as he reveals the imperfections in his own track record through an eco-confession. While such guilt is generally perceived as a negative emotional response, Thomashow suggests that it should be framed in such a way as to provide a stimulus for change. "Guilt is retrospective, enabling us to see the consequences of our past actions. Responsibility is prospective, inspiring positive action to construct the world as we would like it to be...Guilt and responsibility become the dynamics of spiritual transformation, allowing us to merge the suffering of the past with the liberation of the future." (p.159)

I found a great deal of personal use in reading this book and can well imagine that it would encourage others who have an interest in the environment to explore their ecological identities in more detail. It offers an approach for reflecting on the compatibility of one's values and actions. As such, it prompts us to define our values more clearly for ourselves, to use these values to evaluate our actions, and then to work toward ensuring that the two are more closely aligned. In addition, this book provides a useful orientation for leading others in their own ecological identity work.

Suggesting this, however, reveals a limitation of the ideas expressed in this book: it relies on the premise that people have some latent positive connection to the environment which, if encouraged, will surface and be embraced. While this is likely true of the environmental studies students whom Thomashow generally encounters, it is not likely to be true of many groups of people. *Ecological Identity*, therefore, should be seen as a useful tool for guiding environmentalists in strengthening their own commitments and as a source of useful ideas which may be added to the array of techniques environmental educators use in encouraging an appreciation of the environment.

Julie Dale recently completed the MES program. She and her 20-month-old son Tyler are now living in Botswana where Julie is working with local women on sustainable resource use in craft cooperatives.



Quite the contrary. They love each other dearly.

el cummings & dian morrow 86

Milestones

By Thomas Lee

There's a familiar swish underfoot this time of year as my footsteps play with the brightly coloured carpet of leaves. I've retraced the footsteps that have brought me here many times in my mind, pondering the significant milestones in my life that have brought me to where I am today; that have made me who I am today. This is the first time, however, that I have recounted this story to an audience that has no idea of who I am. So, let me begin there.

Like many people reading this journal, I am an environmental educator of sorts. I make my living working in the field of conservation biology, conducting ecological research and guiding field expeditions. A large component of my work involves sharing my knowledge and experience of the natural environment with people of all ages and backgrounds, and I am always thrilled when I feel I have helped make that special connection between someone and the natural world around them.

I have been in this line of work for six years now, have enjoyed many more years investigating the natural world, and am now working on my second academic degree in the environmental field. Over the years, I have developed a strong attachment to the environment, but it's not something I remember always having. My parents came to Canada from very different countries: Australia, in my Mum's case, and China, in my Dad's. I think of this as being significant because they did not spend the first third of their lives growing attached to the natural environment in which I was to grow up. Although my parents did a wonderful job of raising me, they did not instill within me any great attachment to this environment, with which they themselves were unfamiliar. Similarly, my friends and family, at an early age, did not lead me in this direction. What was that first

milestone then, that got me started down this path? I remember the occasion well.

It happened during a week-long field trip to Boyne River when I was in grade six. There were many fun activities going on that week at the outdoor education centre, but the one thing that sticks out more vividly than any other was an activity which had as its only prop a flimsy

paper wheel and a forest full of trees. That flimsy piece of paper was a tree wheel and by turning one paper disk over another and following clues, it was possible to identify all sorts of different trees just from their leaves, or so I was told. Well, it worked, and I

loved it! I treasured that wheel and that moment so much that I hung on to it my whole life. I still have that tree wheel today, and the memory, and although neither of us were aware of it at the time, I still carry the special connection someone at Boyne helped me make all those years ago.

Since then, there have been other people and experiences that have helped reinforce that special connection for me. I suppose this article is to say thanks to all of them for sharing their knowledge and experience with me, and for being important milestones along the path in my walk of life.

Thomas Lee is an Associate Ecologist with Ancient Forest Exploration Research and is currently finishing up his MES at York.



At this time, mid April, your conference committee is in the final stages of designing the conference programme and schedule. A full programme will be printed in the June and summer issues of Pathways. For now, let us list a collection of highlights to encourage you to register early. Hey, why not register now and get lots of draw tickets towards our conference prizes? See below for incentive details. Have you noticed we are pushing this register early thing? Now back to Programme highlights.

Our keynote presenters, well suited to the our theme - The Park, The Land as Teacher, are singer-songwriter soundscape artist, Ian Tamblin and Education Professor, Author and Outdoor Educator extraordinaire, James Raffan.

Ian will perform songs from his rich repertoire of Canadian landscape inspired folk music, as well as share stories from his travels. James will share the gems of insight from his latest book concerning the role of the canoe in Canadian consciousness. Both of these keynote presenters stand tall among us as people who have captured the "genius of places" and know the land as teacher.

A Heritage Lunch: ever been to one? Neither have we. Algonquin Park is blessed with a wealth of people who have dedicated much of their lives to learning its ways and spirit. Be it human heritage, natural history, tales from the 1930's to the '90's, there is a pack-full of knowledge and good cheer to be gained from time to informally - over lunch - chat with Algonquin elders and policy makers. Join in with a luncheon table guest to chat with: Craig MacDonald, Algonquin historian and traditional travel techniques specialist; or Ester Keyser, the first female guide in Algonquin to learn how it was in the '30's; or Ron Tozier, park naturalist for decades, to learn about the evolving relationship of people, animal and landscape in the park.

The aerial course at Camp Tamakwa and the leadership from staff at the Canadian Outward Bound Wilderness School, allows us to explore, in a variety of sessions, the latest of theory and practice concerning adventure-based learning skills such as the use of metaphor, debriefing strategies and "front loading" experiences. You also may wish to pursue some professional development of your own making on this aerial course supervised by some of the best instruction we offer in Ontario.

How about a "one act" play entitled, "The Algonquin Spirit Visit Campfire," performed by your very own conference committee, a meeting of Integrated Curriculum Programme specialists and enthusiasts, the "latest" on curriculum issues/policies concerning Outdoor/Environmental Education, a bannock bake off at Tent City, a static dance - interactive dance, learning the night stars from a voyageur canoe, dealing with issues of diversity at our centers, the latest books on Experiential Education theory and practice on display, gifts from the land, time to catch the end of the fall colours by canoe or hiking trail. Come to the shores of Tea Lake, Camp Tamakwa for all of this and much, much more. And, check out your next Pathways for a full programme description. But why not NOW, commit to the conference. See the ever-so-friendly registration form on this next page. Send it in now, gain incentive tickets for great prizes (15 tickets towards the Kayak Package with a registration mailed by the end of May) and make your conference committee stress free for the summer and September.

In the next issue, we will provide more information on Ian Tamblin's career as a musician, songwriter, playwright and producer.