Pathways



THE ONTARIO JOURNAL OF OUTDOOR EDUCATION

VOLUME 2, NUMBER 4

APRIL, 1990



ISSN: 0840-8114





THE ONTARIO JOURNAL OF OUTDOOR EDUCATION

PATHWAYS welcomes all submissions of articles, pictures, cartoons, puzzles, upcoming events and materials related to Outdoor Education. Active participation from readership with an organized news/journal format is the best guarantee for a quality journal meeting the broad needs of Outdoor Educators. It is hoped that the journal serves as the voice of Outdoor Education in Ontario and will be a major communication vehicle to COEO members and others, furthering knowledge, enthusiasm and vision for Outdoor Education.

Participation: herein lies the strength and life of a volunteer organization. You have to know who you are writing for: in the case of a COEO member writing for PATHWAYS, it's easy. Imagine you are writing for someone just like you, a person who is interested or involved or both in some form of outdoor education.

Article submissions should be topical, appreciating the scope of Outdoor Education, which encompasses both an adventure and an environmental focus. To this end, guard against specialized detail and jargon considering that your audience may not be at your technical level. Both theoretical and practical material is important. Subjective non-scholarly sources as well as quantitative and qualitative research works are important as are specific teaching tips, approaches and general Outdoor Education concerns.

Readable natural writing is preferred. Conversational writing styles are easy to read and usually to the point. References as footnotes following the text are important to include in complete fashion where appropriate. Quoting from other sources can strengthen a work but excessive use is best avoided. Better to tell your own tale. There is no formula or mould to fit. The best guide is PATHWAYS itself. Your style is more important. Think: be creative, have fun, share your ideas.

Articles should be typed and double-spaced. Please include a short biography and return address. Feature-length articles are 1000 to 2000 words, at approximately 250 words per 8 1/2" x 11" page

Submit to:

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We ask that the product or service be:

- 1. valuable and useful to COEO members
- 2. quality people, equipment, resources or programs

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April, 1990

VOLUME 2, NO. 4

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State of the Art

The cover art and other photographs in this issue were submitted by Jim Smithers. For more information, see his article. Sketches, submitted by "Heath," depict scenes from Far North Region's Kingfisher Lake Outdoor Education Centre.

Editor's Log Book

Public Commitments

As educators, whenever we stop in front of students, we make public commitment of our vales. In these changing times, it is mportant that we are aware of the beliefs we espouse as outdoor educators. COEO, and Pathways in particular, plays an important role in helping us clarify our outdoor education values. Consider, for example, the various articles and columns in Pathways in which COEO members express their opinions. Or consider the COEO / NIU course currently being offered with Cliff Knapp on teaching environmental values.

As authors, we make a public commitment whenever we have somthing printed. With each opinion shared, comes an opportu-

nity to have a personal role in shaping the directions of outdoor education. There are various means of personal involvement: articles, reviews, illustrations, and Letters to the Editor. We constantly need more COEO members with the courage to share ideas and make a public commitment. The strength of this organization is the number of people (in the hundreds!) involved in committing their time and energies to the goals of COEO. Please use your pen to add to the chorus and make your commitment public!

Carina Van Heyst, our Pathways Editor, and Andy McLahlan, a frequent art contributor, have just made a public commitment of their love for each other by re-

cently getting married. On behalf of the Editorial Board of Pathways, we wish them well!

Mark Whitcombe



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Outlook

Advisory Board Report

The Council of Outdoor Educators of Ontario is becoming increasingly recognized throughout the Province as a leading professional organization in outdoor and environmental education. As such, there continues to be a great interest in our opinions of provincial and local initiatives and concerns related to educational and environmental issues.

The general public are in the forefront of environmental action. Educating the public to ensure an understanding and appreciation of father The Council may need to define its

environmental issues is of top priority. The Advisory Board has been receiving more and more letters from local groups seeking the council's opinion on a variety of environmental matters. As an organization dedicated to "learning and growth" in the outdoors, the Council responds to the requests appropriately.

The Advisory Board members predict that COEO will find itself in a situation where policy development becomes an increasingly significant function in the coming years. position on any number of educational and environmental issues. The environment, green space, and sustainable development will draw more attention from local groups, who in turn may seek the Council's opinion.

The Advisory Board is interested in the comments COEO members may have on this matter. If you would like to share your comments, please contact your Regional Representative.

> - Kathy Reid President

LETTERS TO THE EDITOR

P.O.E.O. - an alternative to POSH

The EDITOR.

It was with great sadness and frustration that I read Ron Hudson's letter to the editor Re: Reflections, COEO's last conference held at the Talisman Resort. If we outdoor educators, the people whose message is to walk lightly on this increasingly fragile earth, feel the need to be pampered at a conference, how on earth can we expect the unconverted to listen?

It was during a conversation with a girlfriend last August about the prohibitive cost of the COEO conference to students that the idea of a POEO (Poor Outdoor Educators of Ontario) Conference was born. Seeing as we were a part of the current Outdoor and Experiential Education (OEE) program at Queen's, a program full of folks with all kinds of

outdoor experience and skills, it seemed only natural that we put on our own conference.

The first annual POEO Conference was held last September 21 -23 at Skycroft Camp, just outside Kingston, Ontario. The conference was open to any and all who were interested. As it was the first time that we had organized anything of this nature, we kept the numbers and advertising limited. The \$25 registration fee covered the cost of camping, all the sessions, the guest speaker, a guitarfest on the Friday night and a dance on Saturday night. Participants brought their own food and eating utensils. All our cans and bottles were recycled and by the end of the weekend, only one large bag of garbage had been produced. The guest speaker, Alan Watson from the University of Guelph donated

his fee back to POEO to buy two acres of rainforest.

Sessions offered included kayaking, improving your canoeing teaching skills, wilderness camping skills, art in the out-ofdoors, an introduction to birding, a bat and geology walk, a choice of two natural history meanders, paper-making, star-gazing and an introduction to the herptiles of Ontario (with live specimens). All of the sessions were led by current members of the OEE class. After a community dinner on Saturday evening, we all gathered in the lower portion of the big barn on the site to listen to Alan Watson's talk about nature interpretation in outdoor education. After the talk, we had a real "kick-up-yer-heels" dance with music provided by yet another talented member of the

(con't. on page 4)

Editor's Log Book

Letters to the Editor

The EDITOR,

I am writing in regard to an article which appeared in *Pathways* in the column On The Land by W.A. Andrews titled "Leukemia and Nuclear Facilities" (Volume 2, Number 3 January 1990).

I too have read of studies from the United States and Great Britain of higher than average rates of childhood leukemia near nuclear power facilities. Recently, I have read an article in *Discover Maga*zine (December, 1989) titled "Power Play".

This article by David Noland cites studies in the United Sates which indicate increased levels in childhood leukemia in a direct relationship to proximity to high

(con't. from page 3)

OEE class, Jeff Bond.

A terrific time was had by all 35 participants and an incredible amount of sharing of skills and knowledge took place. Not all of the participants were hard "outdoorsy" types. One mother of two came up to me and exclaimed "I can't wait to do all of this with my own kids and the kids I teach in the classroom. I see now that I don't have to know everything to take them outdoors!" That comment alone made the weekend worth it for me.

A big vote of thanks goes to all who helped to organize the POEO Conference — an alternative to posh.

Gail Reddick

voltage power lines. It notes first a study done by Dr. Nancy Wertheimer at the University of Colorado in 1979. She found in a sample of 963 homes that the incidence of childhood cancers was twice normal for those near power lines or transformers.

A second study by Dr. David Savitz of 550 homes in 1986 confirmed the Wertheimer findings. The article goes on to suggest that if the studies were projected for the entire population some 10 to 15 per cent of all childhood cancers in the United States might be due to power line fields.

In Mr. Andrews' article, he notes that an Ontario study found increased rates of leukemia near the Bruce and Pickering Nuclear Generating Stations but not near the Chalk River nuclear research laboratories.

The small number of studies as yet on record prompts me to ask this question. Is it nuclear reactors or the high electromagnetic fields being generated by the transmission lines leading from the generating stations which are the cause of the apparent higher incidence of cancer?

A few years ago, I obtained a copy of a questionnaire from a now forgotten source designed to compute a person's yearly radiation intake. The North American average is 182 millirems. The questionnaire states that the increase at the site boundary of a CANDU nuclear facility is 2 millirems for an entire year's exposure.

Something doesn't sit right here. Either Ontario Hydro and AECL are lying to us or the greater danger near any generating station (hydro, thermal or nuclear) is the electromagnetic field surrounding the transmission lines. It is worthy of note that the photograph which introduces the article "Power Play" is a night shot of a gentleman named John Filipowski standing under a 345 kilovolt transmission line 60 miles from New York City. He is holding two forty watt fluorescent bulbs in his hands. They are being excited by the electromagnetic field and are emitting enough light to read a newspaper.

I admit a bias at this point in that I believe nuclear energy is far less damaging overall to the environment that coal-fired thermal plants. I would however caution all of us to withhold an opinion on the cause of apparent increased leukemias until more indepth studies are completed.

There are so many prices to be paid for our current lifestyle. Most of the cost will have to be borne by the next generation, whether that is dealing with the storage of nuclear waste or repairing the desolation caused by acid rain and the poisoning of waters by the wastes of strip mining for coal.

It is sad to think that even the movement of electricity may be one more payment that must be accounted for.

Bert Murphy

Canada Sea-to-Sea: A "Living History" Experience

By Jim Smithers

The 1989 Mackenzie Expedition was the first of five historical reenactments designed to promote greater public awareness of Canada's rich and varied fur trade heritage by means of a series of travelling audience-interactive events. During the 1989 Expedition, twenty-five students and two leaders from the Lakehead School of Outdoor Recreation travelled from Fort McMurray, Alberta, to the Beaufort Sea (a distance of 3500 kilometers) in four "voyageur" canoes. While en route, they took part in the ceremonial aspects of the "Mackenzie River Canoe Race" and presented a two-hour interpretive activity in each of the communities visited. This "living history" experience was a challenging activity for the participants and an exciting educational event for the schools and communities along the route.

Canada Sea-to-Sea

The Canada Sea-to-Sea Project is a cooperative undertaking of Lakehead University of Thunder Bay, Ontario, The One Step Beyond Adventure Group of Canmore, Alberta, and The Alexander Mackenzie Trail Association, Kelowna, British Columbia. As well, Old Fort William, Thunder Bay, Ontario, was an "historical" partner together with Heritage Canada, The National Capital Commission, The Canadian Recreational Canoeing Association and many corporate, foundation and government groups.

The mission of the Canada Sea-to-Sea Project is to recreate, and commemorate on the 200th Anniversary, the first recorded crossing of Canada from the Atlantic to the Pacific Oceans — a journey which originally occurred between the years of 1789 to 1793. Through a series of historical dramatizations and re-enactments, the first route to link Canada from "Sea-to-Sea" will once again be established and interpreted by a group of young Canadians as an important part of our Canadian heritage. Through these events, the life and character of Alexander Mackenzie will be profiled, a man whose vision, courage, commitment, endurance and resourcefulness can inspire modern Canadians. Through the image of this founding explorer of our nation, the Mackenzie Project will make a powerful statement about Canada's adventurous heritage and the important role that adventure and entrepreneurism must play in today's increasingly urbanized world.

"Alexander Mackenzie...a man whose vision, courage, commitment, endurance and resourcefulness can inspire modern Canadians."

Canada Sea-to-Sea



The goals of the Canada Sea-to-Sea project are as follows:

To COMMEMORATE, on its bicentennial anniversary, the first recorded crossing of North America from the Atlantic Ocean to the Pacific Ocean. To EDUCATE Canadians about Canada's adventurous heritage and the need for re-adopting this spirit of adventure and entrepreneurism in today's increasingly urbanized world through the image of Alexander Mackenzie and the other great explorers in whose footsteps he followed.

To RE-ESTABLISH the first route to link Canada from "Sea-to-Sea" by using a series of historical dramatizations and re-enactments as a catalyst for the establishment of a National Heritage Trail (The Alexander Mackenzie Voyageur Trail), thereby preserving and interpreting the route for subsequent generations of Canadians.

To RE-AFFIRM for modern Canadians the spirit of teamwork, unity and multiculturalism that built Canada as a nation, by demonstrating once again the participation and support of Canada's native peoples and voyageurs without whom Mackenzie's journeys would not have been possible.

While the above goals are a tall order in themselves, the 1989 Mackenzie Expedition was further complicated by the many legitimate demands placed on it by the founding partners, the associated partners and the various sponsors. In addition, travelling historical re-enactments are stressed by schedules, weather, the "scrutiny" of the media. "Authenticity" is another universal problem as there are the perceptions/expectations of both the participants and the public which must be considered. In order to reduce the pressures emanating from the above, the management of the 1989 Mackenzie Expedition was premised on the following "ordered" criteria:

- 1. The safety of the participants,
- 2. The goals of the partners,
- 3. The obligations to the sponsors,
- 4. The community commitments,
- 5. Historical authenticity,
- 6. The convenience of the participants.

A most important aspect of the "problem-free" nature of the 1989 expedition was that all the participants clearly understood and agreed to the above criteria. This made the decision-making process during the expedition quite straight forward as, for example, one did not have to debate the fine points of wearing lifejackets while crossing Great Slave Lake in the freezing rain, or paddling all night in order to arrive on time for a community performance. A further consideration was that all the participants wanted to be part of the project, were able to do the required tasks, were properly trained

and supervised and were rewarded handsomely by the enthusiastic reception which they received in all the communities along the route.

While the original idea was developed in 1985, the "nitty gritties" of actually doing it were attended to during the summer of 1988 when twelve students spent four months preparing for the 1989 expedition. This involved making costumes, writing the historical drama, interpretive training at Old Fort William and "hands on" canoeing and audience-interactive experiences at Kingston, Ottawa, Sault Ste. Marie and Quetico Park. A great deal of valuable preparatory work was completed and a core of twelve dedicated and experienced participants was assembled.

During the 1988-89 academic year, the group was enlarged to twenty-seven (including two leaders), community contacts made, itineraries finalized, transportation arrangements confirmed and equipment and supplies purchased. After two weeks of somewhat frantic last-minute activity, the 1989 expedition departed for Fort McMurray, Alberta on Thursday, May 18, 1989. Although Mackenzie departed from Fort Chipewyan, Alberta on June 3, 1789, the Canada Sea-to-Sea project launched from Fort McMurray (Syncrude Canada Ltd., was the regional corporate sponsor and there is no road into Fort Chipewyan). Three days of school and community performances and events preceded the "official" expedition departure on Thursday, May 25, 1989, and it was with considerable trepidation that the expedition departed on a long and arduous voyage into the vast expanse of Canada's North.

For the next two-and-a-half months, these modern-day voyageurs experienced an exhilarating but exhausting routine of paddling, performing, ceremonial activities and outdoor living. From Fort McMurray to Fort Providence, the four canoes were on their own as they travelled down the Athabasca, Peace and Slave Rivers and crossed the wide expanses of Lake Athabasca and Great Slave Lake. Since the communities along the Mackenzie River had organized the "Mackenzie River Canoe Race", the decision had been made to forego the original intent of following Mackenzie's diary and to join the schedule and the activities of the racers. While the group did not "race", it did provide much of the ceremonial and historical pageantry of the community events which were scheduled around the arrivals and departures of the racers.

Although many things were "different" in relation to Mackenzie's 1789 voyage — lifejackets, radios, maps, canned fruit, "high tech" rain gear, performing after a hard day's paddle and arriving at a specific time in each community, to name a few — numerous aspects were identical as most of the major components of the natural environment have remained the same during the past two hundred years (in most locations). The following are but a few

"...these modern-day voyageurs experienced an exhilarating but exhausting routine of paddling, performing cermonial activities and outdoor living."

Canada Sea-to-Sea

of the identical events which were experienced — camping in the mud on the Athabasca River, crossing Lake Athabasca in huge swells, being lost/confused on the Slave River, being ice-bound on Great Slave Lake, regularly "knocking off" sixty- to-ninety-mile days due to the swift current of the upper Mackenzie, camping at Camsell Bend (where the Mackenzie turns irrevocably to the North), seeking and receiving copious and conflicting advice regarding the next section of the river from the locals, paddling all day and all night and all day in order to beat the wind and arriving out of the mist on the edge of the Beaufort Sea. Then, with Inuvik as the final destination, the struggle back up the East Arm of the Mackenzie against the never-slacking current and a strong south wind began.

While all of this may be quite interesting, many sceptics ask the following questions. What does this have to do with education? Why spend hard-earned tax/corporate dollars to enable a select and small group of people to take a ten-week vacation by canoe?

In relation to the expenditure of tax dollars, Canada's history is both interesting and important (if we wish to avoid the cultural vacuum common to many countries). As recreational and educational professionals, we have an obligation to do all that can be done to counteract the "cultural infiltration" which comes from the Daniel Boone and Davey Crockett "hype" emanating from south of the broder. Historical re-enactments are a significant means of making history "live", and the role model supplied by a group of hardworking and enthusiastic young adults, who are re-living an exciting part of Canada's heritage, just might make an impact on many insecure or unsure Canadians, both young and old.

From the corporate dollar point of view, there are many reasons for supporting a project of this nature. Some are altruistic, such as providing a quality-of-life experience for the local community. Some are historical: the Syncrude Canada Ltd. Visitor's Reception Centre has a portrait, map and quotation from Mackenzie's diary. Some are promotionally-oriented: Zodiacs powered with Outboard Marine Corporation motors would have been the choice of Mackenzie (if only he had known). We are also more than willing to testify that the "beef jerky" (our favourite food item) supplied by Northern Stores Inc., is infinitely tastier than boiled fish (the staple of the 1789 expedition).

Answering the first question is the easiest because a primary responsibility of both teachers/recreators and educational/camping institutions is to provide the young people concerned with quality learning experiences. It is hard to imagine a more rich and varied multi-sensory personal and professional experience than one involving the development and delivery of a tenweek "living history" expedition which follows in the footsteps of one of

Historical reenactments are a significant means of making history "live." Canada's founding explorers and entrepreneurs. There is also considerable evidence that the school children who took part in the scheduled activities benefitted in many ways. While the 1989 Mackenzie Expedition may be considered an "extreme" example of an historical experience (for both the participants and the school children), there are countless numbers of historically-oriented programs which could be added to existing activities at summer camps, outdoor centres and schools. All it takes is a bit of imagination, some dedicated research and a lot of hard work!

In this regard, the plan is to use the experiences and resources which were acquired during the 1989 Mackenzie Expedition to develop a set of curriculum materials on this component of the Canada Sea-to-Sea project, and the Walter and Duncan Gordon Charitable Foundation is providing financial support. Perhaps, a "living history" workshop at Old Fort William would be an exciting way for the Mackenzie voyageurs to present the joys and perils of voyageur life to interested teachers, interpreters and camp counsellors.

Jim Smithers is a professor of Outdoor Recreation at Lakehead University in Thunder Bay.





How To Landscape Your Schoolyard

By Ron Harris

Loss of habitat is the single-most important factor responsible for the reduction of wildlife numbers. As custodian of a piece of Ontario, even if your school is in a city, you can choose to improve your parcel of nature. By involving your students, you will have benefitted more than wildlife and the environment. You will also have created a deeper awareness and understanding in your students. They will have a more direct connection to "the land", a bond that has been lost in much of our society.

So exactly what is landscaping for wildlife? The goal is to create a chunk of habitat that supports animal and plant life. Ecological principles are incorporated into the design — principles that can be learned and applied by your class, and not just read in a textbook — and the use of native species is stressed. Traditional landscaping on the other hand, is concerned with visual and esthetic goals, such as choosing shrubs and flowers for their form, colour and texture. Benefits to wildlife are unintentional. Wildlife considerations can purposely be included in the original landscape without sacrificing visual beauty.

The Principles

Letting a schoolyard "grow wild" would eventually create a habitat chunk. However, the transition to a wild schoolyard is made more effective, and more palatable to school administrators, by actively designing and planting and by applying certain ecological principles. In the process, students learn "hands-on" ecology. What are the ecological guidelines for planning and maintaining a wildlife garden?

1. The Three Basic Requirements

A successful wildlife garden provides three things: food, water and shelter. It is very important that these ingredients be available throughout the year. Food and shelter can be supplied by the proper selection of plants. A bird bath or small pool can be a water supply.

2. A Variety of Plants

All wildlife species have somewhat different lifestyles, and their needs

"The goal is to create a chunk of habitat that supports animal and plant life."

change with the seasons. Just as people offer wintering birds a variety of foods, in a variety of feeders, to attract different species, so you should provide a diversity of food and cover in your schoolyard garden to provide habitat for a greater variety of wildlife.

3. Patches and Clumps

Groupings of plants provide much better cover for wildlife than individual shrubs and trees widely spaced over the property. Plant shrubs and trees in natural-looking clumps, hedgerows and thickets.

4. Layering

Plant your schoolyard in 3-D. Have grass, flowers, shrubs, small trees and large trees in your landscape, to create different levels. There could be open areas of grass and flowers, and shady freed areas, if you have the space. This will be attractive to more wildlife species than a garden consisting only of lawn and flower beds.

5. Native Plants

Trees, shrubs and flowers that are native to Ontario are, generally speaking, better adapted to local climate and soil conditions and more resistant to local disease and pests, than are non-native or exotic plant species. Native stock requires less of your time and money to maintain, and stands a greater chance or healthy growth, than most exotic species. More importantly, our native wildlife evolved in these habitats so they are better adapted to native plant communities. It is nice also to help re-establish some of Ontario's natural heritage.

6. Chemicals

Synthetic fertilizers, herbicides, pesticides and fungicides may give you a lusher, greener garden but they also kill organisms that are vital to the natural processes of pollination and decay. These organisms are food for wildlife too. Refrain from the use of such chemicals as much as possible. Instead, use compatible and less costly alternatives. Replace synthetic fertilizers with compost, replace herbicides by mulching, plant generally more hardy native species, and weed by hand. Get the class in there and get dirty!

7. Clean-up

Wait until spring to clean up the leaves and dead plant material from your wildlife garden. Better still, leave some low or non-maintenance areas in your garden to provide cover and food for wintering wildlife. Insect pupae, spider eggs, seeds, and old berries left over from the fall can be important food

"Get the class in there and get dirty!"

School Landscape

sources for spring migrants at a time when there is little other food.

Planning

Once you have selected the area of the schoolyard that you will use to create your habitat chunk, planning the garden becomes a three-step process.

First, undertake an inventory of the existing conditions and draw these, preferably to scale, on graph paper. This is the *survey*. If your school has surveyor's drawings available, they would be an excellent starting point. Here is a list of the sorts of things you and your class should map: existing structures like buildings, baseball diamonds, fences, slides and swings, running tracks, overhead power lines and underground services; existing plantings like trees, shrubs, flower beds and lawn areas; areas used for recreation or other purposes. Add a north arrow and measure the dimensions of your garden area. Make several photocopies of this drawing and use them in the following steps as your base map.

Creating a preliminary or conceptual plan is your next step. Your task will be to decide in general what you want to incorporate in your garden, and to roughly outline where you will put everything. Select sites for large and small trees, and layout areas for shrubs, hedges, flower beds and lawn. Don't try to be too specific about where things will go for now. Perhaps the class could work in groups and devise several different versions, once they know the principles of landscaping for wildlife (variety, layers, patches and clumps, etc.).

Finally, the planting plan. Here is where you will decide which specific plant species and how many of each to plant in the areas outlined in the preliminary plan. The growing conditions in your garden will determine which plants will grow best. What is the soil texture? Have the students squeeze the garden soil into a ball. If it stays in a ball, it is a clay soil. Loams clump together loosely, and sandy soils are loose and gritty. What are the moisture conditions (dry, moist, well-drained, poorly drained)? If water absorbs quickly into the soil even after a heavy rainfall, then the soil there is well-drained. Standing water after a storm indicates imperfectly or poorly-drained soil conditions. What lighting conditions are present (full sun, partial shade, full shade)? Are there significant slopes and contours to deal with?

Unlesss you are a trained horticulturalist. landscape architect, or experienced gardener, this is about as far as you can go on your own. Now you must take your preliminary plan and the description of the growing conditions to an expert. Consult with your local nursery, garden centre or garden club about which plants (preferably native species) are best-suited to your growing conditions. Show them your preliminary plan also, to get advice about the

School Landscape

spacing requirements of various plants. Begin a list of which species of plants are best, how many of each will fit in your habitat chunk, and their cost.

Pick species that provide a variety of food and shelter throughout the year. What other plants are in the neighborhood? If there are plenty of nut trees, like oaks, then plant a berry tree, like a cherry or mountain ash. Add an evergreen tree, if the area around your school has mostly deciduous trees. Maybe the students have some favourites that would fit into the principles described earlier which could be included in the plan.

The prospect of providing a home for wildlife is exciting to adults and children. It is especially so when your planting is completed and you and your class are eagerly awaiting the visits of the fascinating creatures that are attracted to what you have created. Given time, and depending on where you live, expect to see birds and insects, butterflies, maybe hummingbirds, and even rabbits or squirrels.

Creating a wildlife garden may seem like a daunting task right now but remember, this should be fun and educational. Keep your project simple. Don't try to accomplish too much at once, and don't expect results overnight. Don't expect to recreate Algonquin Park either. Make the project more manageable by breaking it up into smaller tasks. It's not as though labour is in short supply -- you have a whole class (maybe even the entire school!). Take a picture every year from exactly the same location, to record how your wildlife garden develops. Keep records of the wildlife attracted to your habitat chunk, and how this list grows and changes over the years. Once the garden is planted, continue to use it to teach your classes how to find and identify different plants and animals and insect, how they interrelate, and how they use what you have created. Show them how the bees pollinate the flowers, which mature into fruit, which the robins come to eat and sometimes drop onto the ground to become new plants. The more you can involve the students, the more they will benefit. Get them in on the decision-making and design, as well as the get down and dirty stuff.

Now is the time to get started!

Ron Harris is a Special Projects Biologist with the Wildlife Branch of the Ministry of Natural Resources.

"Creating a wildlife garden may seem like a daunting task right now but remember, this should be fun and educational."

This article has been adapted from a forthcoming booklet entitled "Landscaping For Wildlife" that will be available this spring from the Ministry of Natural Resources Public Information Centre, 99 Wellesley Street West, Toronto, Ontario, M7A 1W3, (416) 965-4251.

More information on wildlife gardening is also available in the CWIP Manual (See Volume 2, Number 3 of Pathways, January, 1990).

SPRING MIGRATION II

A Birding Weekend sponsored by the Council of Outdoor Educators of Ontario with the cooperation of the Essex County Board of Education

LOCATION: Point Pelee and other birding hot spots

> Date: Fri. Eve

May 11-Sunday 13

1990

Fee:

\$35.00

per person

Fee Covers

- Campsite Friday & Saturday
- Fri. Night Mixer BYOB & musical instruments
- · All Saturday meals
- Entry Fees
- Expert Guides

WESTERN REGION

Resource people include Essex County Field Naturalists members, Essex Region Conservation Authority staff, Peter Middleton (Bruce County Board of Education) and Sandy Middleton (University of Guelph).

WHETHER YOU ARE AN EXPERT BIRDER OR DON'T KNOW A COMMON TERN FROM A LEFT TURN THIS IS THE WEEKEND FOR YOU!

Explore Pelee and other Birding Hot Spots on this peak migration weekend.

Accommodation is group camping at Holiday Beach Conservation Area or "indoor camping" if desired or dictated by weather. Motel accommodation is possible for the non-camper. Call Registrar for information.

NAME(S)				Tel	ephone	Home
						Bus.
ADDRESS:	(home)	Apt. # or st	treet	city		postal code
ACCOMMODAT	,	Ve will be -	oudoor camping indoor camping other	•		,

Please enclose \$35.00 per person and mail to: Kevin Ferguson, R.R. # 5, Aylmer, Ontario N5H 2R4. Call Kevin at: BIRDING HOTLINE (519) 773-5196 for information.

> Make cheques payable to COEO Western Region (no postdating please). Registration is limited to 40 individuals.

April, 1990

Canoe Games

Room mate: _____

Spring Celebration Keynole: Mr. Flacoh Thomas 11

 S_{lars}

Six Nations Reserve - Woodland Cultural Centre Initiatives Inside the Frost Wellness: Your Health & You The Periwinkle Project Spring Birds and Night Sounds with Phil Natural Resources for You Crisis Management Rock Climbing Natural Dyes / Spinning High School Credit Courses in Environmental Education Canoe Building Fur Trade Simulations Buckskin Workshop (Moccusins) Ripples & Reflections (Photography by Cance) Focus on Forests Beyond Project Wild Roller Canoes Professional Massage Development Spring Flowers Workshops Journals Provided by May II - I3, Leslie Frost Centre COEO\$120 fee payable to Spring Celebration. Please send to: Norah Lederman Central Region Mono Cliffs Outdoor Education Centre, R.R. I, Orangeville, Ontario L9W 238 Phone (home): Name: (work):____ Address: ___

International Conference on the Environment 1992

C.O.E.O. (The Council of Outdoor Educators of Ontario) and **N.A.A.E.E.** (The North American Association of Environmental Educators) plan to co-sponsor a 1992 international conference on the environment in Ontario. C.O.E.O. is striking a Conference Committee which will negotiate a contract with **N.A.A.E.E.** early in 1990.

If you are interested in serving on this committee please contact:

Kathy Reid
c/o Otonabee Region Conservation Authority
38 Armour Road
Time Square, Suite 200,
Peterborough, Ontario
K9H 7L7
(705) 745-5791

16

OR Bob

Bob Takeda 1214-10 Bridletowne Circle Agincourt, Ontario M1W 2M4 (416) 497-4816

COEO MAIL ORDER

Items and Price (Tax included)

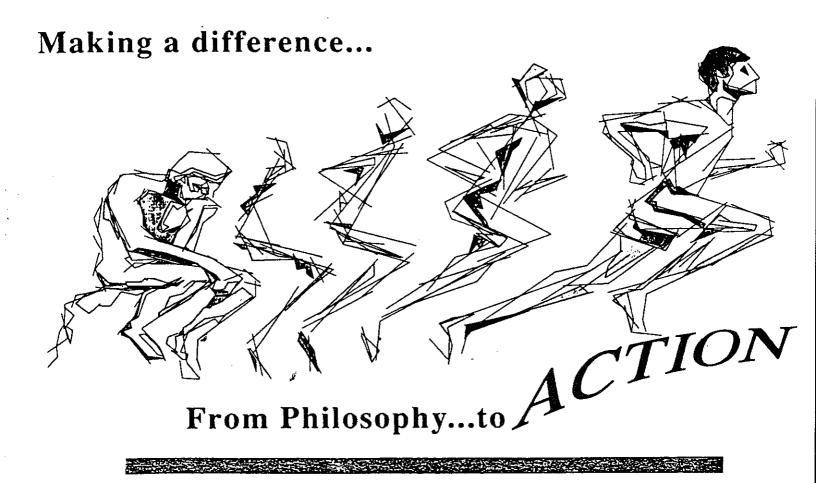
Total

How to Order:

• turtle neck (yellow, navy)	\$15.00	Send form below with a cheque or money order			
 outdoorable t-shirt (red, green, grey, blue, white not all colours /sizes available) rugger shirt (grey and blue) catalogue of programs & services (no tax) COEO pens 	\$6.00 \$25.00 \$12.00 \$3.00	payable to: COEO Merchandise Kathy Kay c/o Forest Valley OEC 60 Blue Forest Drive North York, ON M3H 4W5 Canada Post Charges			
COEO Hasti-notes Lapel pins, tie clips, crests, posters, mugs	\$4.50 \$1.00 \$.50 \$4.00				
Decals Conference T-shirts "Yesterday, Today, Tomorrow" Red/White "In Quest of New Horizons" (Navy/Yellow)		under \$10. \$10 \$20. \$20 \$40. \$40\$100.	Parcel Post \$2.00 \$2.50 \$3.75 \$4.25	1st Class \$3.75 \$5.00 \$7.50 \$8.00	

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Item	Size	Colour	Price	Tax	Total	
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athways		Subtotal				April, 1990



Council of Outdoor Educators of Ontario

20th Annual Conference September 27-30, 1990



at the

Leslie M.Frost Natural Resources Centre

Dorset, Ontario

Hosted by Northern Region
Contact: Linda McKenzie 705-388-7408

Tracking

Workshops, Conferences and Other Events

CREDIT VALLEY WALK

COEO Central Region presents a Walk Along the Credit Valley Footpath and a chance to see the Upper Canada Norval Outdoor School. This 8 - 10 km walk starts at Terra Cotta and finishes at the Outdoor School, Sunday, April 29th, 1 - 4 p.m.

PADDLING PARDISE

Come birding and botanizing by canoe in Cootes Paradise Marsh, Hamilton, May 5th, 10 - 12 noon followed by bring your own lunch (BBQs and a limited number of canoes are available to borrow) It's free!

Donatations to the Royal Botanical Gardens appreciated.
Call Barb McKean at (416) 527-7962 (RBG) to register.

NO FRILLS CAMPING WEEKEND

This is a low key weekend designed for you and your family or companion to get outside together and it's free!

Arrive around noon on June2nd, enjoy a buffet lunch on us. Stay until Sunday, June 3rd at Mono Cliffs Provincial Park at Mono Centre (near Orangeville). Activities include hiking, trail bike riding (bring your own or rent one for a small fee), nature crafts for children, singing around a campfire and much more.

For registration or other information contact:

Margit McNaughton (519) 833-9858 or Gay Ahmed (416) 884-1888

YEAR END BBQ

Come one, come all, to the COEO Central Region Year End BBQ at Lake St. George Conservation Field Centre, Richmond Hill, on Thursday, June 14th from 5 p.m. All keen COEO comrades are invited to take part in cruising or paddling a scenic kettle lake, fantastic food, super socializing and a stimulating slide show "Outward Bound on Three Continents."

RSVP: Leslie Hoyle (416) 773-5525 (work) or (416) 895-7276 (home).

DIRECTORS COLLOQUIUM

The Professional Development Committee of the Council of Outdoor Educators of Ontario is holding a Colloquium for Directors of Field Centres, April 25 -27, 1990 at Mono Cliffs Outdoor Education Centre (near Orangeville, Ontario).

The purpose of this Collo-

CANOE MISEMA RIVER -

Howard Lake Canoe Route, Esker Lake Provincial Park near Kirland Lake - Excellent fishing - bass, pike, pickerel, 8 hours from Metro - New timber log four season two bedroom cottage with facilities 150 feet waterfront - rent \$400 per week or \$3,000 season with option to buy \$69,000 or offer. Mark Boekelman (416) 237-1334

E.S.T.A.O.

Environmental Science Teachers' Associationof Ontario

Theme - Sustainable Development

Date - May 10, 11, 1990

Place - University of Waterloo

Cost - \$75

For more information, call
Jane Forbes, 25 Ashford Drive, Islington, Ontario, M9B 5X1
(416) 232-9461

quium is to bring together Directors and Managers of Outdoor Education and other Field Centres which deal on a regular basis with school children. This will include both Day Centres and Residential Centres.



ADVENTURES

Kayak the ruggedly beautiful coastline of the Bruce Peninsula National Park and the islands of Fathom Five with experienced guides. Novice through experienced paddlers welcome. Write or call for a brochure. Instruction and Rentals available.

A division of Suntrail Outfitters
P.O. Box 29, Hepworth, Ontario N0H 1P0 (519) 935-2478

Opportunities will be provided for exchange of ideas on a formal and informal basis. Topics will include Environmental Programs & Practices, Staff Training & Renewal, Safety, Administration, Curriculum Considerations, etc.

Registration: Barbara Goodall, Outdoor Education, North York Board of Education, 5050 Yonge Street, Willowdale, Ontario M2N 5N8. Fee \$110 includes registration, accommodation, meals, snacks, etc.

EMPLOYMENT OPPORTUNITY

OUTDOOR EDUCATION ASSISTANTS NEEDED

The Waterloo County Board of Education will require two outdoor education teaching assistants this spring. The position involves teaching primary age students from our mobile centre for approximately six weeks. (May 1st to June 8th).

Selection Criteria:

- · Background and/or education in a related field
- Experience, general knowledge and interest in the outdoors
- Leadership ability
- Displayed teaching ability with young children
- Enthusiasm, motivation and interest in working with young children

Apply in writing to:

Dennis Wendland Consultant - Outdoor Education Blair Outdoor Education Centre RR #33 Cambridge, Ontario N3H 4R8



On The Land

Environmental Update

By W.A. Andrews

The Plight of the African Elephant

Since 1970, the African Elephant population has been reduced by 4 500 000 individuals. Since 1980, the total number of elephants has declined from 1 200 000 to 625 000, largely due to poaching at the rate of about 300 animals per day. Projections indicate that, at this rate of decline, the African elephant will be extinct in 20 years.

The African Elephant is currently listed in Appendix 2 in the CITES listing (Convention on International Trade in Endandgered Species of Wild Fauna and Flora). This allows people to become involved in the selling of elephant ivory provided CITES has issued a permit. It also allows the selling of ivory from dead elephants, from culls in national parks and other sanctuaries, and from caches of ivory that wardens take from poachers. As a result, it also makes it easy for illegally obtained tusks to be sold, since they can be moved through the system as though they were in one of the legal categories.

Canada and many of the other 101 member countries of CITES want to see the African Elephant listed in Appendix 1. This listing would recognize that this animal is a threatened species and, as a result, make the sale of its ivory, regardless of source, illegal.

South Africa, Botswana, and Zimbabwe do not support the change in listing because elephant numbers have increased so rapidly in their parks that culling is necessary to prevent habitat destruction. The tusks of culled elephants are sold to support elephant conservation efforts and the development of local economies. Yet the continuing market created by these countries is also a market for poached elephants from areas where the elephants are in decline. What, then, needs to be done?

You can use this issue to show your students that most conservation issues are tied to human needs and wants. Over-population and poverty afflicts most Africans. Therefore elephants will likely continue to die until we help Africans solve those problems. The market for most ivory is Japan, largely due to the current affluence of that population. Therefore a market will continue to exist for ivory, legal or illegal, until international pressure is put on Japan by countries like Canada.

The Return of the Whooping Crane

Though still on the endangered species list, the whooping crane has staged a remarkable comeback, thanks to the efforts of the

Canadian Wildlife Service, the United States Fish and Wildlife Service, the International Crane Foundation and numerous other organizations. From a low of 19 birds in 1945, the wild flock has been gradually built up through captive breeding programs and habitat protection to 144 birds in 1989. Unfortunately all of these birds are in the same flock which migrates yearly from Wood Buffalo National Park in northern Canada to the Aransas National Wildlife Refuge in Texas. As a result, an encounter with a violent storm or another destructive natural or human-made force could destroy the entire population. Attempts to establish a second flock in Idaho, using sandhill cranes as foster parents, has been abandoned because the flock never produced enough eggs to become self-sustaining. Efforts are now being concentrated on building up the existing flock with captive breeding programs.

The only captive breeding program has been based at Patuxent Wildlife Research Station in Laurel, Maryland. However, in 1989, 22 birds from that flock were transferred to the International Crane Foundation headquarters in Baraboo, Wisconsin. This foundation is renowned world-wide for its work with rare, threatened, and endangered crane species. Since 1973, ICF has successfully bred 13 of the

world's 15 crane species, resulting in almost 200 new birds. This second flock ensures that all the captive breeding stock will not be wiped out, should humans introduce a disease. The ICF headquarters is also close to a stopover on the migratory route of the wild flock, facilitating the return of birds to that flock.

Including both captive and wild birds, the global population of whooping cranes now exceeds 210, a new record for the population number since monitoring began in the early 1930s.

Species Extinction

The World Resources Institute (WRI) reports that 25% of the world's species of plants and animals face extinction in the next 25 years if the present rate of decimation continues. As we all know, the main threat to species is from the systematic destruction of major ecosystems on earth, systems such as the tropical rain forests of south America and southeast Asia, the forests of the islands in the Pacific Northwest (Oregon, Washington, British Columbia, Alaska), and the African savanna.

James Peth, president of WRI, says that the world is being deprived of its most fundamental capital stock — its species, habitats, and ecosystems — and that

such losses have potentially devastating effects on human well-being. He maintains that it is no longer acceptable to merely slow the rate of destruction. Rather, this biotic impoverishment must come to a halt.

Salt Damage

Road salt is cheap — only \$30 or so a tonne. At least it appears cheap at first glance. It has been long known that salt corrodes metallic parts of automobiles, damages plants, disintegrates concrete, rusts bridges, harms wildlife, and contaminates drinking water. When these environmental and economic costs are included, the true cost of road salt is closer to \$2000 a tonne.

Less harmful substitutes such as calcium magnesium acetate are available. They are just as effective but much less corrosive and polluting. However, this particular compound costs close to \$500 a tonne, which discourages its use even though the true cost of road salt is four times higher.

Many states in the United States are planning legislation to reduce the use of road salt. Some American cities have significantly reduced its use by using sand on residential streets and less salt on main streets. What are we doing to reduce the use of this pollutant?

Bill Andrews is a professor in the Faculty of Education at the University of Toronto.



Explorations

Reflections on Current Research

The Kangaroo's Kick: Aussie Views on Environmental Education

By Bert Horwood

Environmental education must be put in the political arena, according to recent work by Australian researchers. Deakin University in Victoria is the centre for radical new insights into the failure of past environmental education practices and possibilities for the future. Outdoor educators in Ontario will likely receive the Australian work with an uncomfortable mixture of sympathy and dismay.

The research itself does not fall into the experimental stereotype which the word "research" often implies. This work is based on detailed critical analysis and study of the curriculum and literature of environmental education and other relevant literature. From the analysis come arguments which identify fundamental properties of environmental education. These difficult characteristics are largely being ignored in current practice and the work suggests new directions for curriculum and a radically different professional development for environmental educators.

The Deakin University team of five is led by Ian Robottom and includes people from other Australian colleges. The focus is the development of a course in environmental education for teachers. The product of the research is a book cited below.

The five contributors have backgrounds in teaching environmental science, life sciences and outdoor education and are currently engaged in teacher education and research. Historical, feminist, curriculum and teacher education perspectives are represented. Despite the fact that each person made a specialized and unique contribution, I will treat the work as a whole.

Three important general points emerge from this work. One is that to study human relationships with environment is to make social criticism. The objective, technocratic image of the environment as something remote and "out there" is a demonstrably failed point of view. Education must shift the image to make environment include what is "in here". Social criticism is an inescapable necessity for environmental education.

Environmental problems are essentially social and political in their nature. Because society and politics (including the politics within education) are still patriar-

chal, what counts as an environmental problem needs to be informed by feminist points of view. The same is true of what counts as an environmental solution. This emphasis on social criticism, with strong feminist perspectives, is one of the most challenging features of the team's work.

A second point is that the structure of schools and schooling is fundamentally contradictory to the social criticism and political actions required for environmental education to make a difference. The school, as servant to maintain the social order and its values, works powerfully against the need to develop persons who have environmentally-centred perspectives and outlooks.

There are deep inconsistencies in school practices which make effective environmental education impossible. An ecological image of education looks very different from one based on the transmission of technical expertise. One way to sum up the difference simply is to express the ecological image as learning with environments and the technical image as learning about environments. In practical (but oversimplified) terms, the Institute for Earth Education materials come closest to exemplifying the ecological model and Project WILD resources are a reasonable example of the technological one.

Finally, the central role of

teachers is recognized. Somehow, teachers need to know differently. to think of the environment and their role differently. Toward this end, the team develops a professional development program which emphasizes the critical and active way in which environmental education must be done within the political and social arenas. Teacher education, as promoted by Robottom and his colleagues, asks us to establish teachers and students as active, thoughtful agents in the community. The idea is to use a process of action research in which teachers struggle to articulate their own ideas about their work and test those ideas supported by others engaged in their own searches. Self-awareness, self-criticism and social criticism become a series of repeated steps which teachers take and which subsequently they can teach their pupils to take. A necessary condition for such a scheme to work is to abandon the "theory into practice" method of developing environmental and education technical expertise.

The book is too polite and too academic to say so directly, but the message is that environmental educators should take the gloves off, so to speak, in respect of

social criticism and its political consequences. The kangaroo would kick us into entirely new and much more effective fields of education through well-grounded environmental action.

Sources

Robottom, I. (1987) Environmental Education: Practice and Possibility. Deakin University Press, Victoria 3217 Australia.

Bert Horwood is a member of the Faculty of Education at Queen's University at Kingston.



Reading the Trail

Books, Films & Reviews

Tom Brown's Field Guide to Wilderness Survival (with Brandt Morgan) Tom Brown's Field Guide to Nature Observation and Tracking (with Brandt Morgan) Tom Brown's Field Guide to City and Suburban Survival (with Brandt Morgan) Tom Brown's Field Guide to Living With the Earth (with Brandt Morgan) Tom Brown's Field Guide to Wild Edible and Medicinal Plants Tom Brown's Field Guide to the Forgotten Wilderness Tom Brown's Field Guide to Nature and Survival for Children (with Judy Brown)

Autobiographical works:

The Tracker (as told to William Jon Watkins)

The Search (with William Owen)
The Vision

by Tom Brown Jr.
Published by Berkley Books, New
York. Price (latest book) \$11.95
Canada

Reviewed by Jerry Jordison

"At the age of eight Tom Brown Jr. began to learn tracking and hunting from a friend's grandfather, the Apache elder, Stalking Wolf.

After being featured in PEOPLE magazine, he disappeared at the height of his fame to

spend a year in the wilderness with only a knife, honing the skills that he presents in this handbooks at his famous survival school." (from the back cover of his books)

I read Tom Brown's first book, The Tracker, 10 years ago. Even though I was excited by his adventures and survival skills it wasn't until November, 1984, when I read an interview with Tom Brown in the EAST WEST TOURNAL that changed my focus in life. I bought his first four field guides shortly after and experienced an excitement and energy I never felt before or since.

The books are written in a clear, unpretentious style that drives you to read them from cover to cover, unlike other field guides in which you skim to identify a tree or animal. They are about basic survival skills and how to live successfully with the earth. Through out all of his books, he teaches you to respect nature and search for the "spirit-that-moves-in-all-things."

The books are basically about the teachings of Stalking Wolf or Grandfather, as he respectfully refers to him, and Tom's experiences while living in the Pine Barrens. They teach you all the skills needed to survive in the wilderness. The books deal very little with commercial survival aids such as sleeping bags and tents. Instead, Tom shows you

how to live comfortably using only what nature provides.

His Wilderness Survival book is arranged in the order of importance to the survivalist. When faced with a survival situation your first concern is attitude, then shelter, water, fire and finally food. The book has a chapter on each.

I find most of his books an excellent resource guide in teaching outdoor education. They are full of practical activities. Three of his books, Wilderness Survival, Nature Observation and Tracking, and Nature and Survival For Children, offer specific activities to reinforce the lesson of the chapter. The mastery of any art comes only through practice; reading is never enough. Each skill mastered will add to your reservoir of confidence, making your emotional and mental adjustments much easier in a real survival situation.

I particularly enjoy his Field Guide to Nature Observation and Tracking. The first part of the book deals with "fine tuning the senses." He offers a variety of exercises for the student to enable a person to use his five sense to their maximum. He sprinkles in a little Apache philosophy here and there to make it meaningful. Tom Brown has attuned himself so well he is able to "hear" when a rabbit is caught in a snare a kilometre or more away.

In "Towards a Deeper Awareness" he explains how you can go beneath the surface of the five senses into the intuition or subconscious, gaining deeper awareness. I found his section on the sweat lodge very useful for attunement and purification.

The second half of the book introduced Tom's main area of expertise: tracking. His method goes well beyond identifying animal tracks. He has identified 84 different pressure releases that can be found in a foot print, each one telling important information about the animal. He is able to track a mouse across a highway, tell its sex and even what it thought about doing as it walked.

I attended one of his wilderness survival courses last summer and witnessed, first hand, his abilities at tracking. He has helped the police in hundreds of cases, tracking lost children and criminals.

His latest book is an ideal guide for Outdoor Teachers especially with children. It is essentially a synthesis of his six other books, geared for children. The books packed full of activities for children to learn survival techniques, some of them in game form. It could be the definitive guide, concerning survival for all teachers of the Outdoors.

Tom's <u>Living With the Earth</u> book is a logical extension of his survival book. It deals with ad-

vanced survival and nature awareness skills. Most of these skills are aimed at long-term, comfortable wilderness living rather than mere subsistence living. Included in this book are construction of semi-permanent shelters and simple furniture; how to "carry" fire, how to make pots, baskets, mats and fine bows and arrows.

Survival will take on an entirely different meaning after reading and practising the contents of these books. They are clearly written, beautifully illustrated,

logically thought out and a valuable resource to all people.

The books are all in soft covers and are reasonably priced. The one fault with them is that the binding is inadequate for a book that will be used over and over again in the wilderness.

Jerry Jordison is the Coordinator of the new Earth Awareness Education Centre in Temagami, a pilot project by the Temiskaming Public School Board.



Prospect Point

Opinions, Ideas, Reflections

By Bob Henderson

Recently I had an opportunity to sit in on a meeting of teachers within a Faculty of Education. The group meets informally to discuss the pressing and more difficult questions in education. It became obvious to me that a recurring theme, perhaps even the overriding theme, for members is the issue of education...for what? Mainly concerned with teacher training, this group repeatedly comes back to concerns for education as the leading societal agent for social change — change in the way we relate to each other and change in the way we relate/ perceive environment to our inner life. In a nutshell, things are either okay or they are not.

These two sides to this theme were happily dealt with as philosophical dialogue rather than debate. Dialogue encourages open consciousness-raising, while debate is steeped in conflict and control such that one is discouraged to connect with another. This is in itself is important, for it is becoming increasingly clear that the way we learn something is as important as what we learn. As one spokesperson would put it: it is difficult enough for the teacher, particularly the new teacher, to cope with the existing status quo. Fundamental innovation or counter-structure learning is beyond the mandate of the dedicated teacher. Rather, the dedicated to improving "what is" — to strengthen the basic power structures — discipline and control, to improving standardized tests and evaluation, to flesh out ever new curriculum content materials. Personal volition is to be channelled within the system as designed.

Another point of view is fogused on a fundamentally different belief. That is, I think, best described as a belief in the possible, for what educator John Gardner called an "ever-renewing society". This implies a critical mood where one challenges what is rationalized as common sense. Personal volition is to be channelled within the system towards a possibility of something different, something better. Better than what and better for what, of course, become the questions. Both considerations mean a continual evaluation of what is good, what is worth doing. One must both critique and create with these questions in mind. The question of ends is central to education.

Erich Fromm has stated that, "every act of disobedience, unless it is empty rebellion, is obedience to another principle...I am disobedient to the idol because I am obedient to God." In terms of the dialogue in question, one can be obedient to the idol, what Laurens Van der Post called the "comfort-

able disease of progress", the common-sensical ideology as reality. Or one can seek a creative and critical mood which is to be obedient to another, perhaps even to God (but this is not the central issue here). To be obedient to a "possibility" brings a new dimension to questioning - self-searching and institutional searching to the forefront of a teacher's presence. The teacher is now also the learner. Is this an appropriate undertaking for the current teacher challenged in so many ways already?

This dialogue shrouded the room with a yearning for resolution. But the questions remained, to be good to (easy on) the teacher or good to society/good to the learner (my bias is obvious), to improve what is or create what could be.

So what's the punchline? In the main, outdoor educators are obedient to another and should serve as a model for the "possible". This is to say, that we are primarily concerned with connecting people to themselves, others and the land. This isn't a subsidiary objective after maintenance and evaluation, content instruction and teacher accountability via testing and controls. The pressures to be obedient to change, to create truly counter-structure learning design for an ever-renewing society is not just possible, but probable. A new ecological consciousness that

evolves with a liberating selfunderstanding is an ultimate "possible" end.

The yearning I sensed within the gathering of Education Faculty teachers is not something I sense at COEO gatherings. In fact, when I suggested to the faculty, "if not you, who?", exposing my own obvious bias towards what Northrop Frye called "the task of teaching is the task of corrupting its youth", a member of the staff added gratuitously, "yeah, you're an outdoor educator. Kids love what you guys do." He was suggesting that I must be doing this counter-structure stuff and that (I assume) if kids love it, it is because it demands of them something fundamentally different. Of course, I could be off-base with all these thoughts. That's a chance I'll take.

The following two quotes (perhaps the two longest sentences I know) concern what is fundamental to counter-structure learning and what such a teaching approach ultimately can accomplish. I certainly cannot offer so many ideas in so tight a space, so I present these ideas verbatim.

Instead of organization/lack of organization, evaluation/nonevaluation, accountability/nonaccountability, integration/nonintegration, legitimate knowledge/illegitimate knowledge, serious reflection/casual reflection, and

subject-centred learning/studentcentred learning, arguments can be made that value lack of organization (where learning is not defined exclusively by objectives). nonevaluation (where worthwhile) nonaccountability (where attempts are not made to make teachers individually accountable for measurable student achievement), nonintegration (where attempts are not made to impose spurious structures on academic knowl-🕯 edge), illegitimate knowledge (where minority, labor and feminist history, among other subjugated knowledge, is promoted), casual reflection (where learning and play are brought closer together and replace sober reflection), and student-centred learning (where the voices of students as readers, interpreters, and critics are valued, and reading as experiencing is promoted over reading as discovering). (Cleo Cherryholms, Power and Criticism, 1988, p. 160)

Coming to a radical new selfconception is hardly ever a process that occurs simply by reading some theoretical work; rather, it requires an environment of trust, openness, and support in which one's own perspectives and feelings can be made properly conscious to oneself, in which one can think through one's experiences in terms of a radically new vocabulary which expresses a fundamentally different conceptualization of the world, in which one can see the particular and concrete ways that one unwittingly collaborates in producing one's own misery and in which one can gain the emotional strength to accept and act on one's new insights. (Brian Fay, How people change themselves: The relationship between critical theory and its avoidance. In T. Ball (Ed.), Political Theory and Praxis, pp. 200-233. Minneapolis: University of Minnesota Press, 1977, p. 232).

Finally, thinking about ENDS — WHAT ARE WE TEACHING FOR? is a critical question of this so-called turn-around decade.



Nipissing University College

Additional Qualification Courses for Teachers Summer Session July 2 - 27, 1990

ENVIRONMENTAL SCIENCE

The following courses are offered by the Faculty of Education of Nipissing University College at the Leslie M. Frost Natural Resource Centre in Dorset, Ontario. The Centre is located in the heart of the Muskokas, in the midst of picturesque lakes and forests and the rock outcrops of the Canadian Shield.

EDUC 1145E:/ Environmental Science, Part I

Course Organization

Frost Centre July 2 - 7

Home Study July 9 - 13

July 15 - 20 Frost Centre

July 23 - 27 Home Study

EDUC 2145E: Environmental Science, Part II

Course Organization

Home Study July 3 - 5

Field Studies (Killarney Provincial Park) July 6 - 10

July 11 - 13 Home Study

July 15 - 20 Frost Centre

July 23 - 27 Home Study

EDUC 3145E: Environmenjai Science, Part III

Course Organization

July 3 - 6 Frost Centre

July 9 - 13

Home Study and Field Placement

July 16 - 23

July 24 - 27 Frost Centre

Course Director:

Brian Richardson 416-797-2362

Residence Fees:

Dorset/Killarney \$42.00/day including meals.

SCIENCE (P/J) I

In cooperation with SCIENCE NORTH, Sudbury, Nipissing is offering EDUC 1345E Science (P/J) I. Registration includes weekly workshops at Science North and unlimited access to the facility.

EDUC 1345E: Science (P/J) I

Course Organization

- 8:30 a.m. - 12:30 p.m. - Classes July 3 - 27

- Lockerby Composite

- Workshops

- Science North

-12:30 - access to Science North to complete practicum assignment

Course Instructor:

John Celestini 705-671-9650

Residence Inquiries:

Director of Services, Laurentian University, 705-673-6597

These courses lead to degree credit and to Ministry of Education additional qualification. Registration will be accepted by mail or at the Registrar's Office. An Ontario Teacher's Certificate is required to take these courses. A photocopy of your Ontario Teacher's Qualification Record Card, unless previously submitted, and a \$100.00 deposit are required at the time of registration. The total course fee is \$313.00

For application forms contact the Registrar's Office. Academic information is available from the Office of the Assistant Dean of Education.

Note: Each course is limited to 20 candidates. Courses must meet minimum enrolment by June 1, 1990. This announcement is for the information of prospective students. The College reserves the right to make changes, including the cancellation of a course.



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