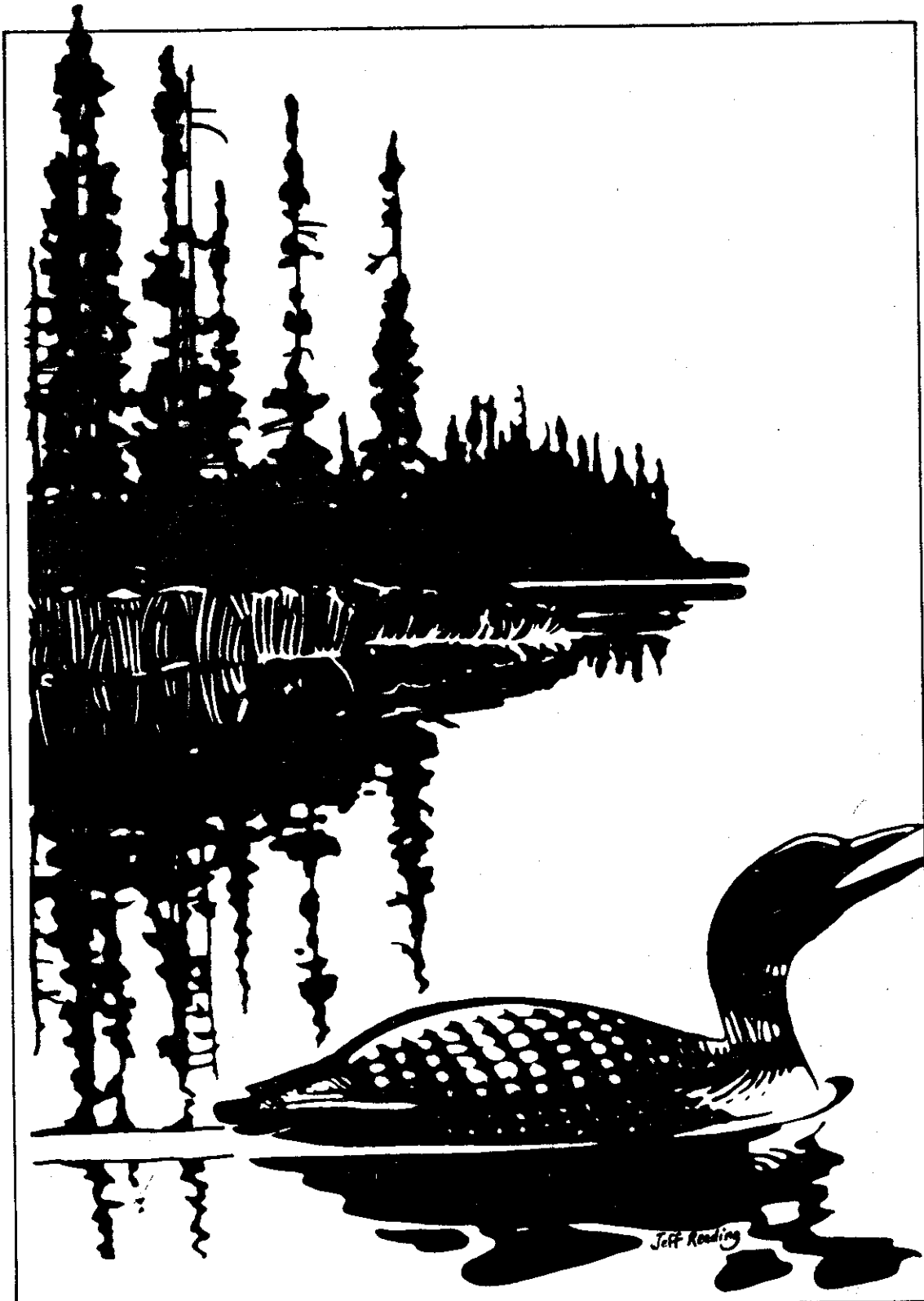


# ANEE NEWS-JOURNAL



VOLUME 15, NUMBER 6, JULY 1986

ISSN 0771-351X

The Council Of Outdoor Educators Of Ontario

# The Council Of Outdoor Educators Of Ontario

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## From The Editorial Desk

Our July issue presents an interesting balance of viewpoints from a wide range of contributors on the subject of toxic wastes. From FON to Hamilton's steel industry to Pollution Probe to Bob Henderson's philosophical opinions on how we got into this problem in the first place, you should find a good deal of stimulating reading material.

This will be my last issue of ANEE; it has been a dynamic learning experience, and I hope I provided the membership with an informative, high-quality News Journal. Yours outdoors,

*Akid*

## Upcoming Feature Topics

All correspondence for ANEE should now be addressed to the new editor: Dennis Hitchmough  
23 Cudham Dr.,  
Scarborough, Ont.

home phone: 1-416-297-6024

THE ANNUAL CONFERENCE ads are contained in full in this issue. Your early response would be greatly appreciated by the conference committee.

SEPTEMBER - Bringing the Outdoors In!  
displays, dioramas,  
and bulletin boards  
for the classroom  
and Field Centre.

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Cover Illustration: Jeff Reading

# The President's Report

As spring is now finally here, I feel that it is time to do some spring cleaning and tidy up a few items of interest to the C.O.E.O. membership. Over the winter months your Advisory Board has met regularly to handle the on-going business of the organization.

One of the major tasks has been to streamline the "organizational" facets of the Advisory Board. There have been six standing committees appointed to look after the major concerns of our 620+ members. These committees are Professional Development, Communication, Regional Development, Editorial, Finance, and Planning.

A new membership brochure and a C.O.E.O. poster have been prepared and produced by the Communication Committee and are available from the recording secretary. The Catalogue of Programs and Personnel in Outdoor Education in Ontario has finally gone to print and should be available about mid-June from our recording secretary.

Over the past two years the Advisory Board has

been working very diligently in preparing and adopting a Long Term Planning Guideline. With the assistance of the Ministry of Tourism and Recreation, this plan is now completed, adopted and published.

I have just completed a two day meeting of the O.T.F. Curriculum Forum, which is a gathering of all the presidents of the subject associations in Ontario dealing with areas of curriculum development and implementation. It became apparent that the Ministry of Education has all but forgotten about outdoor education in that they have no person identified to liaise with outdoor education or C.O.E.O. and that no C.O.E.O. person is involved with the development of the new provincial standards for school trips presently underway. I have made several contacts with the Ministry to hopefully remedy these oversights.

Two areas in which the Advisory Board is concentrating its efforts are in Financial Development and Volunteer Management. A Task Force under the leadership of Mike

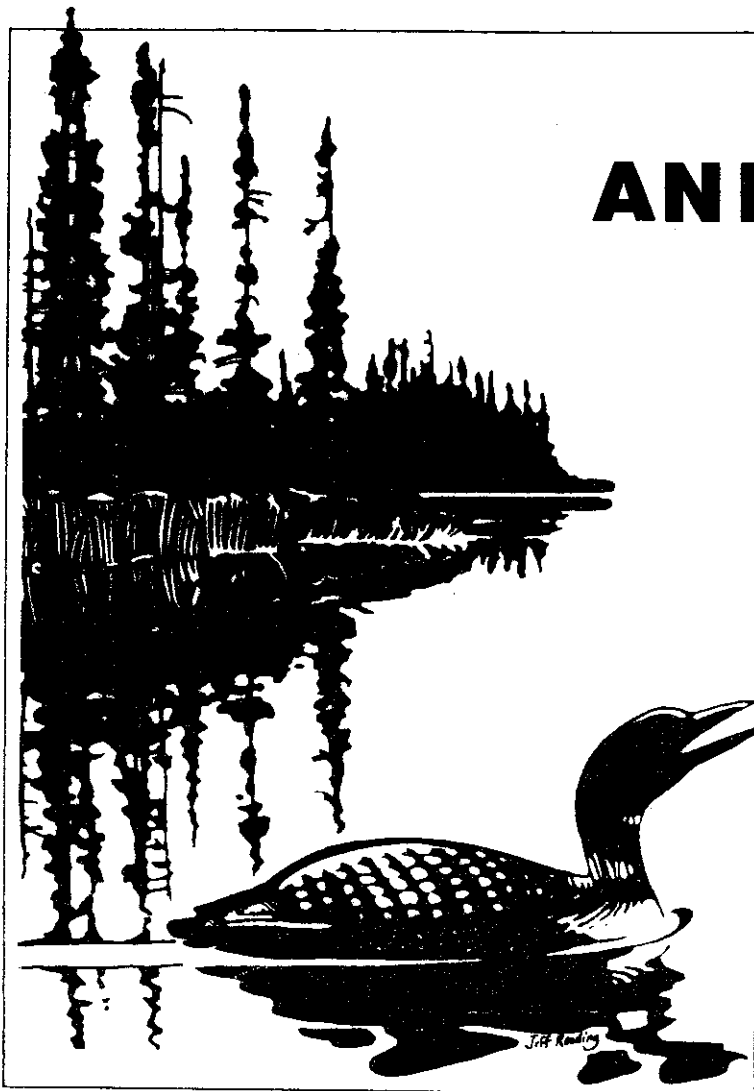
Townsend is looking at various ways of generating new funds for the organization. They should be bringing their report and recommendations to the Advisory Board in June.

At its April meeting, the Advisory Board participated in a workshop on Volunteer Management. With an organization which is 100% volunteers, it became very apparent of the need for an organized approach to getting volunteers and to have a co-ordinator to undertake this role.

The challenge is therefore upon us to get more people involved in the organization and running of C.O.E.O. I am sure that there are many of you who have talents which could be shared amongst us. I direct you to the VOLUNTEERS WANTED section of this issue as to our immediate needs. It is up to you to let us know of your talents and to help share in improving the quality of outdoor education and C.O.E.O. in this province.

John H. Aikman,  
President





# ANNOUNCING...

## CPPSS

Thanks to the efforts of numerous COEO members, and the financial assistance and support of the Ontario Ministry of Tourism and Recreation, COEO's new CATALOGUE OF PROGRAMS & PERSONAL, SITES & SERVICES (CPPSS) FOR OUTDOOR EDUCATION.

Thanks to the efforts of numerous COEO members, and the financial assistance and support of the Ontario Ministry of Tourism and Recreation, COEO's new CATALOGUE OF PROGRAMS & PERSONNEL, SITES & SERVICES (CPPSS) for Outdoor Education in Ontario has gone to print at last!

Now available to members and non-members at cost, over 200 entries of information has been collected, computerized and catalogued, and it proved a mammoth undertaking. Special Thanks to Rod Ferguson, the Ottawa Board of Education, Sheila & Maureen Hunt, Judi Simpson, Cathy Beach, Jan Stewart, Grace Tamaki, Lloyd Fraser, North York Board of Education, and all of the Regional Reps of the past 3 years.

\* Artwork for the cover, shown here, is to the credit of Mr. Jeff Reading.

Catalogues are never perfect.... PLEASE USE THE FORMS PROVIDED IN THE CATALOGUE TO CORRECT, ADD, DELETE, AND UPDATE ANY NEW INFORMATION FOR THE NEXT CATALOGUE EDITION!

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detach

Please send \_\_\_ copies of COEO's CATALOGUE OF PROGRAMS & PERSONNEL, SITES & SERVICES  
at \_\_\_ \$8.00 Members    Membership # 86\_\_\_\_\_  
\_\_\_ \$10.00 Non-members

NAME: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Make Cheque payable to: Council of Outdoor  
Educators of Ontario  
Send to: Mr. Jerry Best, Corresp. Secretary  
186 Crockett Street  
HAMILTON, Ontario  
L8V 1H2

# Volunteer Management Workshop

by  
**Mark Whitcombe**

I got involved as a C.O.E.O. volunteer several years ago for a number of reasons. I wanted to broaden my Outdoor Education experience by working with people that I respected. I hoped that my involvement would help me develop in my job as a teacher and administrator. I hoped that I would get some professional exposure. I felt that if I was expecting to gain from C.O.E.O. that it was my obligation to volunteer for C.O.E.O.

## VOLUNTEER MANAGEMENT WORKSHOP

To better understand the principles of Volunteer Management, the Advisory Board held a workshop in Midland on Tuesday, April 29, 1986. Kate Wiele of Lifetime

Consulting Services was our excellent consultant. Kate has considerable experience not only as a consultant on the topic of volunteer management, but also being a volunteer, most recently as the Past President of the Ontario Recreation Society.

Volunteers are the most important resource that C.O.E.O. has. Virtually all of the work done in C.O.E.O. is done by people who give freely of their time and energy. One of the findings of the Planning Committee last year is that many C.O.E.O. members feel that they have strengths that they could contribute to C.O.E.O. Yet as an organization we have not been very effective in involving broad numbers of C.O.E.O.'s members in the operation of the

organization. Every function of C.O.E.O. could be more effective if the work load was shared by others.

## VOLUNTEERS

My reasons for volunteering in C.O.E.O. turn out to be typical of today's volunteers. Other reasons for people volunteering include feeling a need to address a trend or an idea, being challenged to change C.O.E.O., having something to offer, and wanting a sense of belonging. Today's volunteers make short-term commitments to clearly described jobs. They want to apply skills they already have, learn additional useful skills, and not be put in situations where they are out-of-pocket.

## VOLUNTEER MANAGEMENT

Kate Wiele helped us to become clearer about ways that we could more effectively tap the volunteer potential of our membership. C.O.E.O. is a desirable organization in which to volunteer one's services. But we need to show more people that not only do they have talents to offer, but that in so offering, they will achieve personal satisfaction. We need to publicize our volunteer needs. We must make use of the strong network within C.O.E.O. to personally tell our members what we need and ways in which as individuals, our members can not only help C.O.E.O. but also get personal payoffs. When we give a volunteer some responsibility we must be supportive of them by being clear about what we need, by providing training if they need it, and by making sure they achieve their expected benefits.

The session has helped the Advisory Board to decide to appoint a Volunteer Co-ordinator, to assume responsibility for volunteer management. (S)he would determine capabilities of potential volunteers, and recruit and "maintain" volunteers to

undertake or assist with C.O.E.O. projects as required.

## PERSONAL REFLECTIONS

Over the past two years I have volunteered my services for C.O.E.O. in a number of ways. I have been the Central Region representative on the Advisory Board. I was involved on the Planning Committee. I have helped out with the organization of some of the Central Region workshops. Through C.O.E.O. I have worked closely with at least fifty marvellous people involved in outdoor education from across the whole province, folks with whom I would never have been involved, just through my job situation. From each of these interactions I am richer both as an outdoor educator and as a person. I have gained considerable satisfaction from accomplishing a variety of tasks. I have learned many things. I have added tips and trick too numerous to count to my professional repertoire. I have learned about giving better workshops both by helping to organize them and by giving several myself. I am a more effective committee

worker. I have learned about the complexities of attitudinal research and the planning process. Though I don't consider myself as an ambitious person, I have raised my professional profile. With the chelsea buns from "Make Peace" I have also expanded my personal profile. That certainly adds up to a great deal of growth and benefit from just two years of volunteering. Anyone else care to benefit?



## MEMBERSHIP RENEWALS

All members are reminded that the membership year closes August 31. In order to maintain a continuous flow of information to all members, you are invited to renew your membership now. There will be no change in membership fees for the coming year. Please submit your membership renewal form (on the back page of the ANEE) along with the appropriate amount in cheque form to the Membership Co-ordinator.

Last year we had over 75% of our membership renew. You can help to maintain that high percentage by renewing **NOW!**

# NOMINATIONS NEEDED FOR ADVISORY AND EDITORIAL BOARDS



I was nominated for the C.O.E.O. advisory board because someone thought I had something to offer.



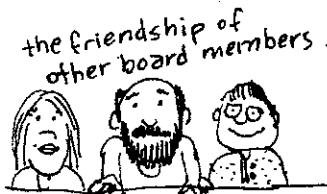
I really didn't know what I was getting into or what was in it for me. I accepted because I wanted to help and I was flattered to be asked.



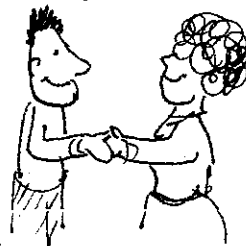
Now I've been on the advisory board for almost 2 years and I have loved every minute of it.



I've grown so much from the experience



the friendship of other board members.



New Contacts



New Skills



and resources.



It's really been a help in my job.



I feel good about having contributed. It has involved work but I've gotten way more than I've given.



C.O.E.O. needs you

The advisory board is looking for nominations for advisory board and editorial board members.

Hood

PLEASE CONTACT: BRUCE HOOD (416) 832-2289 or LORI JARVIS (705) 345-0122



# Volunteers Wanted!

<u>POSITION</u>	<u>TASK</u>	<u>LENGTH OF TERM</u>
Editorial Board Member(s)	To assist the editor in the design, content, layout, and production of ANEE, and to assist in formulating policies and guidelines for future issues.	Immediately to August 31, 1987.  <u>Contact</u> Dennis Hitchmough 1-416-297-6024 (H)
Contributors to ANEE	To write articles, take pictures, draw pictures or cartoons, and/or provide advertisements.	short term  <u>Contact</u> Dennis Hitchmough
Representative(s) [two] to the Conservation Council of Ontario	To represent COEO at the monthly meetings of the CCO, of which COEO is a voting member.  Meetings are held in Toronto, usually in the last week of the month in the A.M.	Immediately to August 31, 1987.  <u>Contact</u> Cathy Beach 1-705-742-3908 (H) 1-705-743-7431 (W) 1-705-447-2452 (Bark Lake)
Volunteer Coordinator	To implement a plan to contact volunteers to assist with a variety of tasks as determined by the Advisory Board.	September 1986 to September 1987  <u>Contact</u> Cathy Beach

# AWARDS

Each year the Council of Outdoor Educators of Ontario chooses to honour its membership by presenting two awards:

## THE ROBIN DENNIS AWARD

Presented to the individual or outdoor education program or facility which has assisted in the advancement of outdoor education in Ontario.

The Award is presented in recognition of one of the founders of outdoor education in Ontario, a man who was a prime mover in its development in the 1950's and 1960's.

## THE PRESIDENT'S AWARD

Presented to the individual who has made an outstanding contribution to the development of the Council of Outdoor Educators of Ontario, and to outdoor education in Ontario.

## THE NOMINATIONS ARE NOW BEING RECEIVED

Please submit your nominations for either or both awards to: John H. Aikman, President COEO,  
47 Rama Court, Hamilton, Ontario, L8W 2B3

Deadline for entries is August 31, 1986.

In your nomination, please include a brief rationale for your selection.

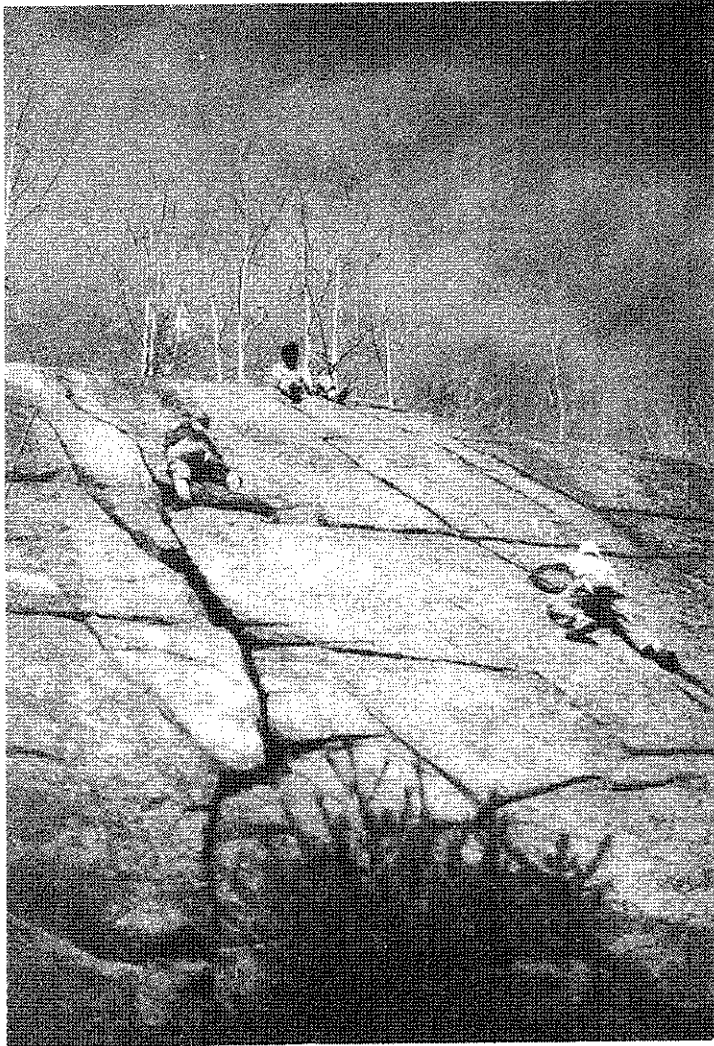


# Northern Region

Our April Rock Climbing Workshop was a rewarding adventure.

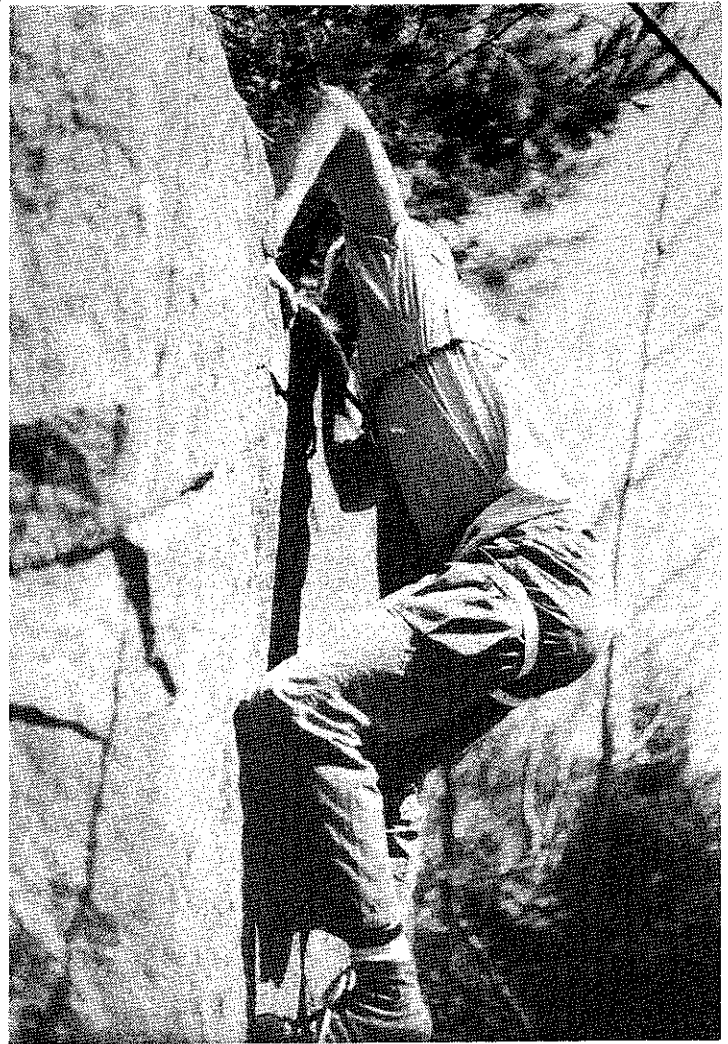
Thanks to Linda McKenzie for the following write-up, and Tom Tekavcic for the photographs.

*Linda*



NORTHERN REGION C.O.E.O. REACHES NEW HEIGHTS!  
BY LINDA MCKENZIE

Great instructors, a good climb site, eager climbers and 30°C weather (without bugs!) all combined to make Northern Region's first Rock Climbing Workshop a big success. Seven aspiring "rock jocks" met Friday night with four equally enthusiastic instructors for an introductory/review session on gear, knots and safety. We discussed our personal goals for the weekend and then further whetted our appetite for the sport with a slide presentation.



Following a wonderful breakfast bright and early Saturday morning, we headed off to our rock face, just east of South River. Ropes were set up for three different climbs and a rappel. We were all amply challenged as attested to by our stiff muscles the next day. We had the opportunity to belay each other and also to try ascending a rope using a Prussik (type of knot) and a Jumar (a mechanical device). Lead climbing was also demonstrated.

With a pupil-teacher ratio of 2:1, learning was maximized. There were more opportunities to climb than what we had the energy to take advantage of. Lunch time provided a welcome break! Mother Nature did her share too - 30°C under clear blue sunny skies. By the end of the day, we were radiating almost as much heat!

All the participants felt that they had expanded their knowledge of climbing and improved their skills. We all thoroughly enjoyed ourselves. Many thanks to our instructors Tom Tekavcic, Pat Ford, Penny Stoker and Michelle Clusieu for a super workshop!

# **EASTERN** *Region*

## HARMONIOUS SPRING SYMPHONY AT CAMP CAMERON

The frogs, the birds and assorted COEO members plus friends made beautiful music together at Camp Cameron on the weekend of April 25.

A Project Wild Workshop ran with customary energy. There was hand-made ice cream to fill in any spaces left after eating Gerry Green-slade's gourmet 'burgers'. Great pots of natural dyes simmered on the open fire as folks learned some of arcane mysteries of mordants and dyes.

The flora and fauna got a thorough work-out and so did the players of new, new games. The night walk was a magic encounter with another world, and with the spirits of earlier inhabitants of the area. The Flower Power Party was hard to believe in terms of sheer beauty and chutzpah. It was a total participation occasion, with emphasis on sharing expertise and a focus on wildlife.

Thanks to organizers Jan Atkinson, Carmel Hunt and Mike Yu.

The 1987 version of Spring Symphony is scheduled for the first week end in April next. Don't miss it.

Bert Horwood, a quick frozen crittur, is editor of the Eastern Region Page. You can reach him at Queen's Faculty of Education.



more...

# **EASTERN** *Region*

## CONSERVATION EDUCATION IN THE MISSISSIPPI VALLEY

The Mississippi Valley Conservation Authority's goal for its Conservation Education Program is to increase awareness and appreciation for our environment and natural resources; ultimately to encourage a conservation ethic. In addition, watershed residents have an opportunity to learn about the Authority's goals and programs.

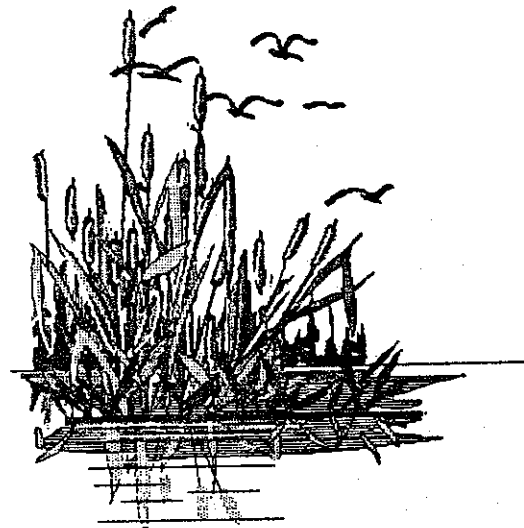
Since its inception in 1978, the Authority's program continues to evolve and change. To provide the necessary structure to implement priority program areas yet allow flexibility in a changing climate, the Authority has completed a 5-year Conservation Education Strategy to guide and direct its activities.

The programs are operated from the Mill of Kintail Conservation Area, located north of Almonte. The Conservation Area is 67 hectares and includes fields, mature woodlots and a river. There is an historic grist mill that is maintained as a commemorative museum to Robert Tait McKenzie, a prominent physical educator, physician and sculptor.

The programs are offered to school children and children's groups from pre-Kindergarten to grade eight. The programs range from half to full day in length and are offered during the spring, summer and fall.

Activities have varied from year to year, but the approach remains the same; a hands-on, activity-oriented program with the activity doing the teaching. Sensory nature walks, stream studies and ecological simulation games such as "survival" and "foxes and rabbits" have been offered.

For more information about our programs or a list of up-coming events, please contact Pamela McGrath or Michael Yee at 613 256 3610 or 259 2421.



How about your program? Why not write up a brief account of the highlights for the Eastern Region Page? Send the deathless prose to Bert Horwood, Faculty of Education at Queen's University, Kingston, Ontario K7L 3N6.

## Notes from the FAR NORTH...

Two FAR NORTH members took advantage of the "TRAVEL SUBSIDY" program to travel to DORSET for "SPRING CELEBRATION". They were Cathy Paskin of Thunder Bay and Tammy Gerrard of South Porcupine. Cathy had this to say: "The COED Spring workshop was more than worthwhile to attend. I learned an immense amount from very knowledgeable people. Project WILD is one such programme that I hope to apply in my position. I was also most impressed with the Star Gazing and early morning Bird Hike. I would certainly recommend going to COED workshops. It was great."

Watch for info coming on TRAVEL SUBSIDY monies currently being applied for and make use of them to get to COED functions!

## SUMMER EVENTS IN THE FAR NORTH'S NORTHWESTERN CORNER

### ISLE ROYALE FIELD SEMINARS...

co-sponsored by the Isle Royale Natural History Ass'n - one week long seminars - for info contact ISLE ROYALE FIELD SEMINARS, 87 N. Ripley ST. HOUGHTON, MICH. 49931

ORCA anyone?

WILDWATERS are once again offering trips this summer North of Thunder Bay.

### THUNDER BAY FIELD NATURALISTS FIELD TRIP HIGHLIGHTS

SAT JULY 12 Orchids at Keshabowie  
SUN JULY 27 ISLE ROYALE BOAT TRIP

SEPT 13-14 HAWK RIDGE, DULUTH

SUN OCT 19 SIBLEY PENINSULA

This is a partial listing - TBFN trips are a great way to learn about the outdoors - their members are very keen and personable; for further info contact Susan Robinson (807) 767-8880

more local events ...

### OLD FORT WILLIAM GREAT RENDEZVOUS '86

Here's your chance to rendezvous with history during the Fort's Great Rendezvous Pageant June 28 to July 1. Like fur traders of old, hundreds of modern day voyageurs converge on this 120 acre historic site for such festivities as ceremonial brigade arrivals, canoe races, games and competitions, traditional songs and dances, musket contests, Canada Day celebrations, historic mini-dramas and voyageur ball.

For over a decade Old Fort William has been recreating one of the most colourful and adventurous periods of North American history and each year some 5000 visitors and 300 participants gather to take part.

If Thunder Bay is in your travel plans this summer make sure OLD FORT WILLIAM is on your itinerary!

### LAKEHEAD REGION CONSERVATION AUTHORITY

JUNE 19 ARBOR DAY

Three schools will be involved in tree planting in their Schoolyards

JULY 20 HAZELWOOD

LAKE CONSERVATION AREA -

OPEN HOUSE

AUGUST 23 FLOODWAY FROLIC

FUN RUN



As the far North regional rep.  
this is what I'm working on  
for the fall...

- NIU courses for Thunder Bay -  
a survey to determine interest  
will be coming your way
  - PROJECT WILD WORKSHOP - tentatively  
in October
  - SUNSHIP EARTH - EARTH CARETAKERS  
SESSION
  - a division of the huge region we  
have for more localized mailings.
- Have a great Summer!  
Leri Jarvis



# How Does One Poison A Small Planet?

an opinion by

**Bob Henderson**



So how does one poison a small planet? I've heard it said in outdoor education circles that, "if you were riding through space on a chocolate cake, you wouldn't eat it". Certainly not, not even on one of those double layered ones, but it would be very tempting. A good way to inquire into the perplexing motives, or non-motives of a species that can strangle its own life support system, while holding the dubious distinction of being fully aware of its extinction route, is to consider what has been "just too tempting" for this self aware species. How has this

grand experience (?) of man the different animal - the self aware animal, come to project such a sorry possibility.

Along the way, certain assumptions have led us astray. To get back on an ecological track we must cultivate an ecological consciousness where there presently is none. Such thinking has now received the label "deep ecology". The central focus of this deep inquiry into mankind is put into clear terms by the POGO cartoon, "we've met the enemy, and he is us.

Deep Ecology is a big job - a life's mission. A useful starting point

is gained from reviewing the false premises en route to 1986; the year of out of control meltdowns, space age explosions, and the year illegal dumping of toxic waste is taking the leading role as a money maker for various mafia groups, and mysterious toxic blobs get reported just before last night's hockey scores (six toxic spills in nine months for Dow Chemical).

There are three general assumptions to consider: 1) Man the King, 2) Science the Tool, and 3) Tragedy the Code. Over the time span of mankind, these ideas have proven to be too good for our own



good. As we pursued this direction with singular vision we've taken piranha type bites from that chocolate cake. In the 20th century we've "PROGRESSED" to contest winning mouthfuls. But while the mouthful gets bigger, so too does a realization of what John Livingston calls the "ancient will to be part of a greater enterprize" - a richer reality, a wider experience. An awakening of the rich reality of Nature and our nature means exciting new ways of mind/nature relationships. This is where Outdoor Education comes in.

#### MAN THE KING

To speak of "man the king" is a far cry from the adage, "the meek shall inherit the earth". Herein lies the problem; the latter seems to be loaded with survival value, but the former, with a critical glance today, has little correspondence to reality - that is, if reality has anything to do with survival value. Yet it is clearly the dominant position. Man the King is in us as part of our ethical heritage. That, "man is made in God's image", and "Ye shall exercise

dominion over all the earth ... Ye shall multiply and subdue the earth" is encoded in our psyche freedom. It is flattering and offers total freedom. Very tempting, one might say.

Yet increasingly we find ourselves wondering today, "okay, we've done that, now what"? Do we continue to subdue? What about this notion of progress anyway - more control, more artificial, more man made? Our slow questioning of the "Man the King" idea is encouraged at this time in our history because of a simple truth, put best by Margaret Atwood. "Nature used to surround us, now we surround nature and the change hasn't been for better."

My goodness, if we are as Gods, look at the mess we're making. So now we surround nature. Nature certainly isn't better for it, are we? Or is this King notion for the birds, oops ... I don't mean that!

A new humility seems to be gaining momentum. But it is not new to mankind. It is the surfacing of an "exiled religious impulse"<sup>2</sup> that is likewise encoded in us as a species, though more biologically derived, than cultural in origin. This impulse

directs us to be meek, and of the earth, another animal. Perhaps a special animal, because we have the distinction, or confusion, of being aware of ourselves as an inter-related species. We see that this rekindled notion has great survival value and corresponds to a richer reality. This reality we DO feel as aesthetic experiences, free flow, or the shivers. It is part of our genetic inheritance and tells us we are part of our experiences. It is part of a spirituality oozing from somewhere deep within us, our brain stem, or perhaps some hidden undiscovered tissue, or yes, perhaps, even our whole being. There is more to us than that all-dominating cerebral cortex which Ian McHarg has suggested might prove to be a spinal tumour if we don't change our tuning, or tune in-ing. This leads neatly to another dominant notion too tempting to not have become an all pervasive worldview of its own.

#### SCIENCE THE TOOL

Science is a great idea. It is an excellent means of answering, "How" type questions. In its

creation, it was a means to knowledge of the earth, which gave man power on the earth. This in turn was a valuable fulfillment of the Man the King creed, which certainly seemed like a great idea at the time. The spin off of power became control, and with this we see how sophisticated we have evolved this science in the name of progress. Genetic manipulation, James Bay Power projects, and bombs in waiting all bespeak our proud capacity to control. Why ... why not, the domestication of all species.

To control, the universe had to become a machine. It had to be reduced to component parts to be thought about. But we've neglected to realize, "Like Outside, Like Inside". We have been reduced too. Schumacher has written that there are two approaches to difficult questioning, 1) the reductionist view, "if in doubt, leave it out", or 2) an ecological view, "if in doubt, show it predominantly".<sup>3</sup>

We have exaggerated the importance of "how", to win control (PROGRESS) at the expense of "why", which addresses a spiritual search and wisdom that is the

essence of humanness. So, like outside - the machine, like inside - the machine, we lose touch of human qualities that then become subversive feelings we repress. This is what "we have left out" - yourselves in relationship, in context with the world, rather than seeing the world as a backdrop for our detached actions. What "we've left out" allows us to ask why, and makes it possible for us to see the wonder in the present around us. Plato was wrong. He said, "what appears a wonder is not a wonder." In other words, let science at it and remove your person from it. Can we study in balance with subjectivity/objectivity? Can we be a part of the wonder, as an element in the whole system?

Again this is a humbling state. It is only a matter of perception though whether being "detached from" - objective, is more flattering and offers more freedom than being "a part of".

#### TRAGEDY THE CODE

The ego is central to the tragic code of conduct. Man values dignity, honour, and the

supreme suffering. Conflict is taken seriously. Accommodation is a weak man's way next to the greatness of a man's ideals and struggles. "Tragedy does not imitate the conditions of life, but creates artificial conditions which people mimic in their attempts to attain the flattering illusions of dignity and honour".<sup>4</sup> This is tragedy, the noble tradition we so respect and are influenced by. Now that's tragic!

There is another tradition however, that stresses accommodation, interrelatedness and diversity, and encourages a change in ideals when they do not produce harmonious results. That is the comic spirit which is an ecological alternative, strong on survival value. This is to say, "anything worth dying for, is worth living for".

With Man the King and Science the Tool as building blocks for behavior, the Tragic Spirit is a logical spin off. Tragedy will always attempt to show individual greatness, to exhibit humanity's supremeness, while comedy will tend to deny them. Tragedy is just too tempting and

flattering.

ALTERNATIVES: HERE'S  
WHERE OUTDOOR EDUCATION  
COMES IN

The alternative can be judged as man the animal, ecology (but let's get it right) the tool, and comedy the code. Deep Ecology or Natural Philosophy is an all-encompassing means for perceiving alternatives. It serves as a framework, like putting on a new set of lenses. The exciting and encouraging thing is that these alternatives are starting to look TEMPTING. Perhaps they are flattering and offer control in new ways; ways that do correspond to a richer reality that has promising survival potential. People are tuning into an awareness that the needs of the planet are close to their true personal needs. We are looking to the past and other cultures as a way to change, to get back to nature and the whole picture. But really we are only appreciating that we have never left nature. It is just that problem of perception again.

Wisdom and quality of life (not standard of living) are becoming linked to science and

technology more frequently, and "why" is a new question in people's minds. We are learning that we are not on a spaceship that some mysterious captain controls, but rather, that this is a sunship full of wonder that we CAN experience. We have the potential - we're human!

The assumptions of greatness are still overwhelmingly more tempting than the humble alternatives, but a new momentum exists. The Outdoor Educator is a part of the new momentum. Whether consciously or not, we work on, and for, the alternatives. We are eroding one philosophical religious base, or another. Our motives are egocentric - survival is the key, but that is the comic sense of accommodation.

If the work seems easy and people responsive, this is because, intuitively we all know the old assumptions are breaking down like a crumbling mosaic before us. But, intuition is more an attribute of the new/former-former assumptions. Slowly the alternatives will just be too tempting, too flattering and too wonderful to be ignored complacently.

There is still some icing on that cake in space, but it is that perception problem again. Can we not be so hungry? It would be fun to roll around in that stuff.

END NOTES

1. John Livingston, C.B.C. A Planet For the Taking, David Suzuki, Domestication, Program 6, 1985.
2. Theodore Roszak, Where The Wasteland Ends, Anchor Books, Doubleday, 1972.
3. E. F. Schumacher, A Guide For The Perplexed, Harper Colophon Books, London, 1977.
4. Joseph Meeker, The Comedy Of Survival: In Search Of An Environmental Ethic, Guild of Tutors, Los Angeles, 1980.

This opinion has been shaped by a few key sources that make useful reading for Outdoor Educators for inspiration, controversy, and thinking "big".

The resource list for information and inspiration is:

### MAN THE KING

Lynn White, Jr. The Historical Roots Of Our Ecologic Crisis, Science, 155:1203-1207, 1967.

Ian McHarg. Design With Nature, Doubleday, New York, 1969.

John A. Livingston. One Cosmic Instant: Man's Fleeting Supremacy. A Delta Book, New York, 1973.

### SCIENCE THE TOOL

Neil Evernden. The Natural Alien, University of Toronto Press, 1986.

Morris Berman. The Re-enchantment Of The World, Bantam Books, Toronto, 1981.

Theodore Roszak. Where The Wasteland Ends, Anchor Books, Doubleday, 1972.

### TRAGEDY THE CODE

Joseph Meeker, The Comedy of Survival, Guild of Tutors, Los Angeles, 1980.



## Annual Meeting

### NOTICE OF MEETING

All members of the Council of Outdoor Educators of Ontario, in good standing, are requested at attend the ANNUAL GENERAL MEETING to be held during the Annual Conference, September 26 - 28, 1986 at the Highland Inn, Midland, Ontario.

The purpose of the

meeting will be to receive the reports of the Advisory Board, the various standing committees, the treasurer, and the nomination committee. Action will be required on certain items including approval of the 1986 - 87 budget submission and the election of members to the Advisory Board.

Plan now on attending!

## Be There!



VOYAGEURS



WETLANDS

# NORTHERN SPECTRUM

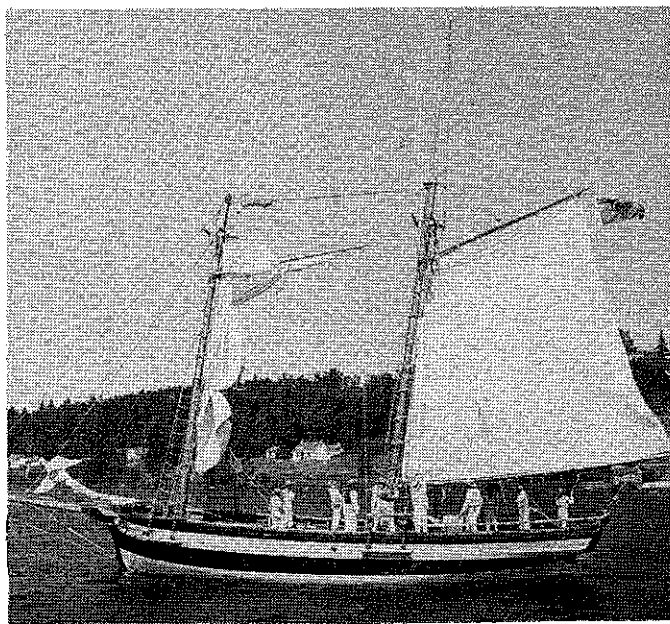
The Council of Outdoor Educators of Ontario

**SEPTEMBER 25 -28, 1986**

**HIGHLAND INN, MIDLAND**

ARCHEOLOGY

HISTORY



## CONFERENCE PROGRAM

THURSDAY, SEPTEMBER 25, 1986

REGISTRATION 5:00 - 9:30

### EVENING PROGRAM

8:30 Ballroom

Cabaret-style wine and cheese

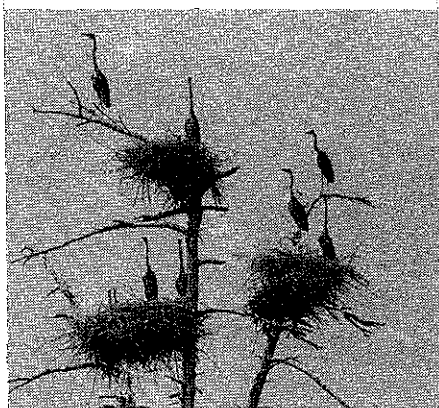
1. WELCOME TO NEW FRANCE - Tanglefoot
2. GEORGIAN BAY PERSPECTIVE
3. WE OTTER SAVE OUR WETLANDS - Waterwood Productions

## FRIDAY, SEPTEMBER 26, 1986

All conference program is organized into one-day or two-day themes. Indicate your choices on the registration page: first - #1, second - #2, etc.

### TWO-DAY FULL CONFERENCE THEMES

(full conference package registration required)



WETLANDS: (May be taken as single day workshop or both sessions). Friday workshops: Introduction, management, conservation, classification and wetlands by canoe. Saturday: This is opening day of the waterfowl hunt. With a 5:00 start, delegates watch the hunt and M.N.R. management. Issues and discussion follow. Afternoon: closeup of wetlands biology - collecting and identification.

VALUES EDUCATION (May be taken as single day workshop or both sessions). Friday. Cliff Knapp leads morning session entitled "Introduction to environmental issues" and, in the afternoon, "Why the Wye?". Marsh exploration, multiple users, resource awareness, evening cookout and canoe trip. Saturday morning: Issues: the Pauze landfill site, or clash of Indian/European cultures. Afternoon: Frank Glew - "How and why to implement values education into your own program".

VOYAGEUR CANOEING: Setting out into Georgian Bay in 5-man voyageur canoes, 16 delegates and 4 leaders canoe and receive instruction in voyageur skills and crafts circa 1650. The group will camp overnight. Delegates must be swimmers but canoeing experience is not necessary.

LIVING HISTORY: An overnight program at Sainte Marie Among The Hurons. Explorer & Indian life of 1650, topics include; shelters, trapping and hide preparation, clothing, squaring timber, forge, carpentry, preparing meals, Indian lore and games. The evening will be spent in the longhouse.





FRIDAY, SEPTEMBER 26, 1986

People wishing to register Friday night  
may do so between 6 - 8:00 p.m.

FRIDAY SCHEDULE

7:30 Breakfast  
9:00 Programs begin  
12:00 Packed lunch  
4:00 Programs end  
5:30 Supper  
8:30 Focus speaker  
9:00 Square Dance

WETLANDS

Friday workshops: Wetlands introduction, management, conservation and classification. p.m. Wetlands by canoe.

VALUES EDUCATION

Friday program: Cliff Knapp leads morning session entitled; "Introduction to environmental issues", and in the afternoon, "Why the Wye?" - Marsh exploration multiple users, resource awareness, evening cookout and canoe trip.

✓ EXCELLENCE IN OUTDOOR CENTRE MANAGEMENT

Leadership in Outdoor Education is a career pursuit. Managers, directors, senior staff and those planning to specialize in this field will increase their understanding of management strategies, as we explore alternatives, trends, solutions, resources for staffing, facility development and program decision making. One of the highlights of the day will be a visit to the Mill Outdoor Education Centre which will be our "lab" for some of the sessions. Plan to join the team of Clarke Birchard, Hugh McPherson, Terry Carr, Austin Matthews and Dorothy Walter in an investigative and active discovery of sound management options and methods of influencing administrative decisions.

✓ LEARNING STYLES AND ENVIRONMENTAL EDUCATION

Participants will apply the "4 MAT" system of learning styles to outdoor learning and environmental education. An introduction to 4 MAT and self assessment will be followed by practical applications in outdoor settings. This session features Bill Hammond, co-author of 4 MAT and Science, and director of environmental education in Lee County, Florida.



FOCUS ON FORESTRY

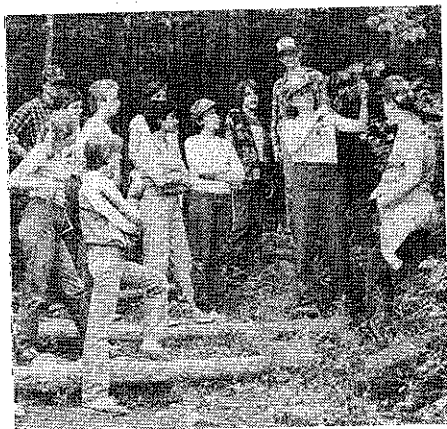
Explore the forestry resources of Huronia including; the Copeland Forest, a tree nursery, a seed farm, and a private woodlot. Participants will acquire knowledge and skills related to forestry concepts and issues that can be applied in or out of the classroom. New educational initiatives by the M.N.R. will be highlighted.

DO IT YOURSELF GUIDE TO INTERPRETATION IN GEORGIAN BAY NATIONAL PARK

Don't be lead down the garden path any longer. Try a full day of sessions and activities in Georgian Bay National Park. Gain techniques and learn valuable information that will enable you to plan, prepare and present an interpretive program. Sessions include: "How to prepare your group for a visit to a National Park", "What is interpretation?", "How to give an interpretive hike in an unfamiliar setting", "Behind the scenes at Georgian Bay National park", and "Natural and cultural features at G.B.N.P.". Session leaders are Greg Gemmell and Barb Hoover.

PROJECT WILD

Project Wild is an interdisciplinary, supplementary environmental and conservational program emphasizing wildlife. Participants of this full day workshop will receive the elementary level guidebook. Join us for a day of WILD activities. Session leaders: Mike Buss and Anne Nicholson.



# SATURDAY, SEPTEMBER 27, 1986

## SATURDAY SCHEDULE

7:30 Breakfast  
9:00 Programs begin  
12:00 Packed lunch  
4:00 Programs end  
5:00 Regional Meetings  
(snack provided)  
6:15 Buses to boat  
6:45 Last bus to boat  
7:00 Cruise & Banquet  
9:00 Dance on boat  
10:00 First of return buses  
12:00 Last return bus

## WETLANDS

Saturday workshops: This is opening day of the waterfowl hunt. With a 5 a.m. start, participants will watch the hunt and M.N.R. management of it. Issues and discussion follow. Afternoon: close-up of wetlands biology - collecting and identification.

## VALUES EDUCATION

Saturday program: Issues: The Pauze landfill site, or clash of Indian/European cultures. Afternoon: Frank Glew - "How and why to implement values education into your own program".

## INSIDE AWENDA

Come and explore Awenda - a gem of a Provincial Park. Participants will hike the interior of the park in search of the unique natural and cultural features. Park classification, park management, outdoor education, the potential of the park system, and backpacking basics, will be some of the topics covered.

## ✓ LAKE HURON BASIN STORY

An investigation of the post glacial history of the Lake Huron basin. Participants will visit unique geological features including the Waubashine beaches, Awenda Provincial Park and LaFontaine.

## CANOEING THE MINESING SWAMP

The Nottawasaga River, near Angus, forms one of the largest swamp areas in southern Ontario. Canoe this beautiful area, alive with birds and fall colour. Approximately 18 km. Need own canoe or share. (12 max).

## ✓ PENETANGUISHENE NAVAL AND MILITARY ESTABLISHMENT

The Establishments were built by the British after the War of 1812 to help safeguard Upper Canada's northern frontier. Now it is a living example of military life and of the hardships our forefathers faced while settling in the backwoods of Upper Canada. Participants will actively examine this facility and the programs offered. A trip aboard the schooner "Bee", will highlight the visit.

## ARCHEOLOGY

This full day of activity includes on-site excavation at Sainte Marie Among the Hurons. The afternoon is spent sorting, identifying and cataloguing what we find.

## ORIENTEERING

Mark Smith and Chris Kennedy present their excellent orienteering program at the Mill Outdoor Centre. Working entirely from maps and starting with basics, participants will quickly be involved in the active progression. Teaching materials and lessons will be handed out.





SUNDAY, SEPTEMBER 28, 1986

SUNDAY SCHEDULE

7:00 Mass at Sainte Marie  
8:00 Breakfast and annual  
meeting  
10:00 First short sessions  
11:00 Second short sessions  
12:00 Lunch, conference  
wrap-up and prizes

7:00 Mass at Sainte Marie Among The  
Hurons. A special opportunity to see  
the site.

8:00 BREAKFAST & ANNUAL MEETING  
Be involved in your organization.  
(Some door prizes will be presented  
at this meeting).

SUNDAY SESSIONS

OUTDOOR EDUCATION - MAKING IT WORK

One or two hour sessions can be selected from the following topics on  
the presentation day.

DRAMA IN THE OUT-OF-DOORS

THE RESOURCE KIT

THE FUR TRADE GAME

URBAN ECOLOGY

THE ACID DEPOSITION EDUCATION KIT

PROJECT WILD OVERVIEW

NATURE PHOTOGRAPHY

CROSS-COUNTRY SKIING CLINIC

WATERCOLOUR PAINTING



CONFERENCE WRAP-UP

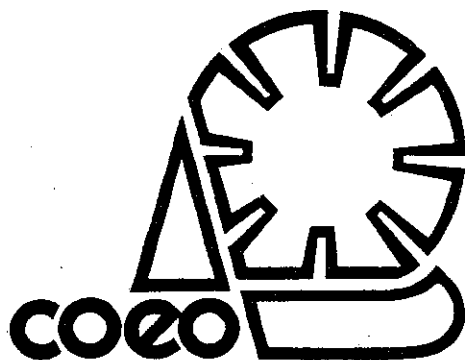
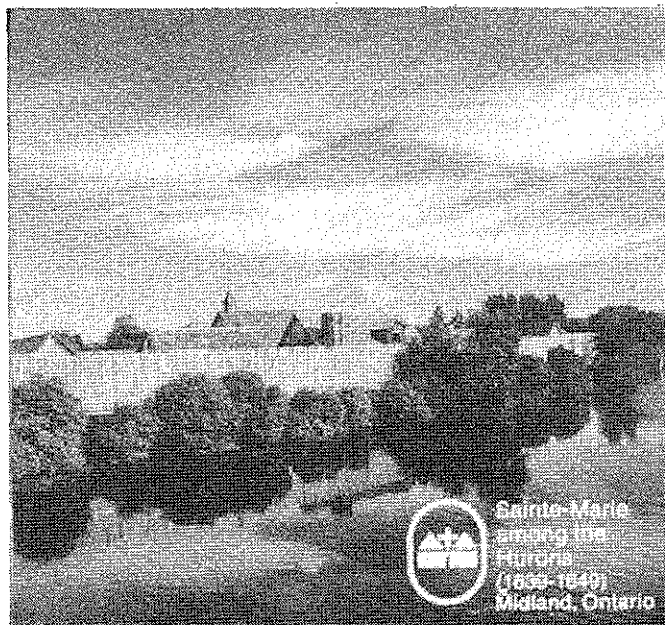
A slide presentation of the highlights of the conference made during  
the sessions. Lunch and awarding of final door prizes.

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For further program or registration information contact:

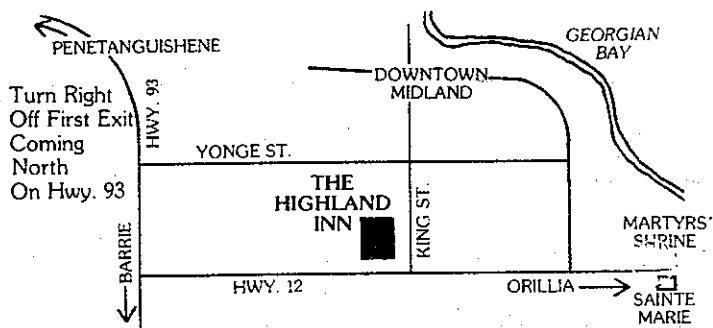
Eva Kaiser  
Wye Marsh  
(B)705-526-7809

Barrie Martin  
R.R.#1 Haliburton  
KOM 1S0  
(H)705-754-3436

Eric Rothwell  
632 Yonge St.  
Midland  
(H)705-526-8233



**C.O.E.O. ANNUAL CONFERENCE MIDLAND, ONTARIO 1986**  
**SEPTEMBER 25 -28, 1986 HIGHLAND INN, MIDLAND**



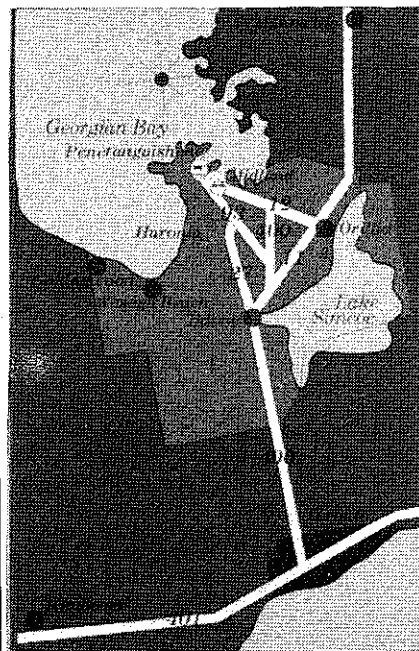
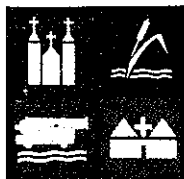
**In The HEART Of HISTORIC HURONIA**  
**The Highland Inn Has It All!**

**KING ST. AND HWY. 12 · MIDLAND, ONTARIO**  
**1-705-526-9307 1-800-461-4265** (Reservations Only)

**Travel Time**

*Toronto to Midland/Penetanguishene...approx 1.5 hours*  
*Huntsville to Midland/Penetanguishene...approx 1.5 hours*

*Watch for*  
**"Huronian Heritage"**  
*highway signage*



C.O.E.O. ANNUAL CONFERENCE 1986. HIGHLAND INN, MIDLAND, ONTARIO  
THURSDAY, SEPTEMBER 25, EVENING - SUNDAY, SEPTEMBER 28 NOON  
REGISTRATION

Please complete this page and the program registration.

Name:.....Phone (B).....(H).....

Address:.....

.....Postal code:.....

Occupation:.....COEO membership #:.....

COEO membership: regular (\$25).....student (\$18).....  
family (\$35).....

FULL CONFERENCE PACKAGE

(Full conference package is required for two-day workshops)

Registration, deluxe accom (dble), all meals:	\$225
Registration, stnd accom (dble), all meals:	\$205
Registration, tenting, all meals:	\$155
Early bird registration by June 25th - subtract \$20.00	

A'la Carte REGISTRATION

Conference fee

Accommodation - per person  
2 to a room (3 nights)

full \$60  
/night

Night(s) accom. needed: T..F..S..

deluxe	\$85	\$35
standard	\$65	\$30
tenting	\$15	\$8

Meals a' la carte: full \$80.... Fri \$30.... Sat \$40.... Sun \$20....

Sat. banquet and evening boat trip \$15.....

ALL TOTALS.....

Preferred

roommate(s).....

Wish to receive: single suppliment price....

3 or 4 to room discount....

family rate.....

MUST REGISTER FOR PROGRAM - SEE NEXT PAGE.

REFUNDS (MINUS \$25 ADMINISTRATION COSTS) WILL BE MADE UNTIL SEPTEMBER 15 ONLY

Send registration and cheques (payable to C.O.E.O Conference 86) to  
Eva Kaiser, c/o Wye Marsh Wildlife Centre  
P.O. Box 100, Midland. L4R 4K6  
705-526-7809

C.O.E.O. ANNUAL CONFERENCE 1986. HIGHLAND INN, MIDLAND, ONTARIO  
THURSDAY, SEPTEMBER 25, EVENING - SUNDAY, SEPTEMBER 28 NOON  
PROGRAM REGISTRATION

Name:.....Phone (B).....(H).....

Address:.....

.....Postal code:.....

All conference is organized into one-day or two-day themes. Indicate your choices: first - #1, second - #2, third - #3.

TWO-DAY FULL CONFERENCE THEMES

(Full conference package registration required)

You may be contacted and instructed to bring necessary equipment or clothing)

WETLANDS .....  
VALUES EDUCATION .....  
VOYAGEUR CANOEING .....  
LIVING HISTORY .....

FRIDAY, SEPTEMBER 26

WETLANDS.....

VALUES EDUCATION.....

EXCELLENCE IN OUTDOOR MANAGEMENT.....

LEARNING STYLES.....

FOCUS ON FORESTRY.....

INTERPRETATION-GEORGIAN BAY NAT. PARK

.....  
PROJECT WILD.....

SATURDAY, SEPTEMBER 27

WETLANDS.....

VALUES EDUCATION.....

INSIDE AWENDA.....

LAKE HURON BASIN STORY.....

CANOEING THE MINESING.....

PENETANG ESTABLISHMENT.....

ARCHEOLOGY.....

ORIENTEERING.....

.....

OFFICE USE

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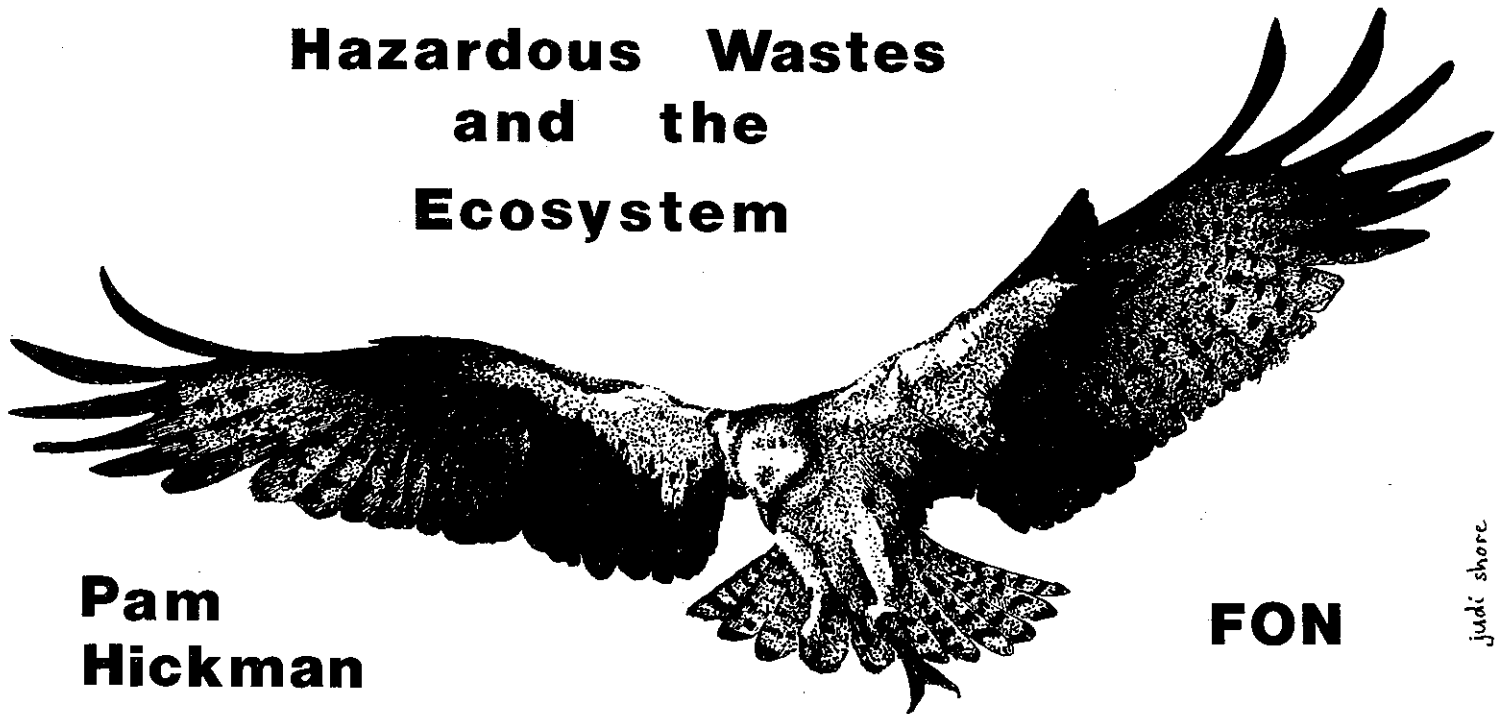
Date acknowledged.....

Payment.....

Code:.....



# Hazardous Wastes and the Ecosystem



**Pam  
Hickman**

**FON**

judi shore

{{ Of all the planets circling our sun, only the earth has developed an intricate pattern of life. Thousands of forms of life occupy a fairly narrow band (the biosphere) of the earth's crust, seas, and lower atmosphere. The total width of the biosphere is only about 14.5 km; about 11 km of usable atmosphere plus a few thousand meters of water and crust. In this thin, but remarkably intricate film are all the water, minerals, oxygen, nitrogen, carbon dioxide and other chemicals that are necessary to life.

These elements must be constantly recycled for life to continue. They are all interconnected and interdependent: the air helps purify the water, the water is used by plants and animals, the plants help renew the air, and decomposed

plant and animal matter enriches the soil.

Except for minute discrepancies, the total amount of matter on the earth is fixed - that is, no matter enters or leaves the system. This means that the chemicals necessary for life must continually be recycled throughout the biosphere. It also means that there is actually nothing "new" on the earth. Everything is composed of just the same old "matter" in some arrangement or another. A world full of computers, superhighways and plastic cups appears to be very different from the way we imagine the world looked during caveman days, but actually it is just the same "matter" in new arrangements.

The term "wastes" refers to the fact that they

are not needed, not wanted. And yet, the web of life must integrate these wastes into the ongoing cycling of the various elements. What is put back into the environment by people as waste may be degraded and reprocessed by nature into harmless or reusable forms, or it may not be. A hazardous product could be so stable that it is not degraded. From a hazardous waste perspective, one of the most important parts of the ecosystem functioning is nutrient cycling through a food chain or within a food web. Hazardous substances in the soil or water can be taken up by plants, and those in water can be ingested by animals. Once a hazardous substance enters a plant or animal, it can move through the food web.

Human activity has added many new chemical combinations to the naturally occurring pool of substances found in the environment - an estimated 1000 "new" chemicals each year. These new combinations can intrude on natural processes in a variety of ways, often resulting in stress on the natural systems.

Although stresses can become so great that an entire system can be destroyed, sometimes unbalanced systems can re-establish their former balance with time and with a discontinuance of the stress element. In other circumstances, an unbalanced system might disappear in its former condition and take on the characteristics of one or several "new" systems.

When hazardous substances enter an ecosystem, they can affect its functioning in a variety of ways.

1. They can become attached to nutrient elements and move through the system damaging component after component.
2. They can terminate normal biological processes or initiate completely different ones.

3. They can alter the system's efficiency so that its growth is increased or decreased.

4. They can shift the physical or the chemical factors within the ecosystem so that species sensitive to these factors may either increase or decrease in number. This change in species could affect relationships in such a way that the functioning of the entire system is altered. }}

The text between the symbols {{ }} has been extracted from the Hazardous Waste Education Kit, Federation of Ontario Naturalists, 1985.

The result of society's currently inadequate methods of dealing with the hazardous waste generated is that all of us - men, women, children, birds, fish, etc. - are part of a huge statistical experiment into the combined effects of myriad chemicals upon the residents of a "chemical soup". Despite our state of affairs, experts agree that the technology exists now, to solve the problems of hazardous wastes. The "Hazardous

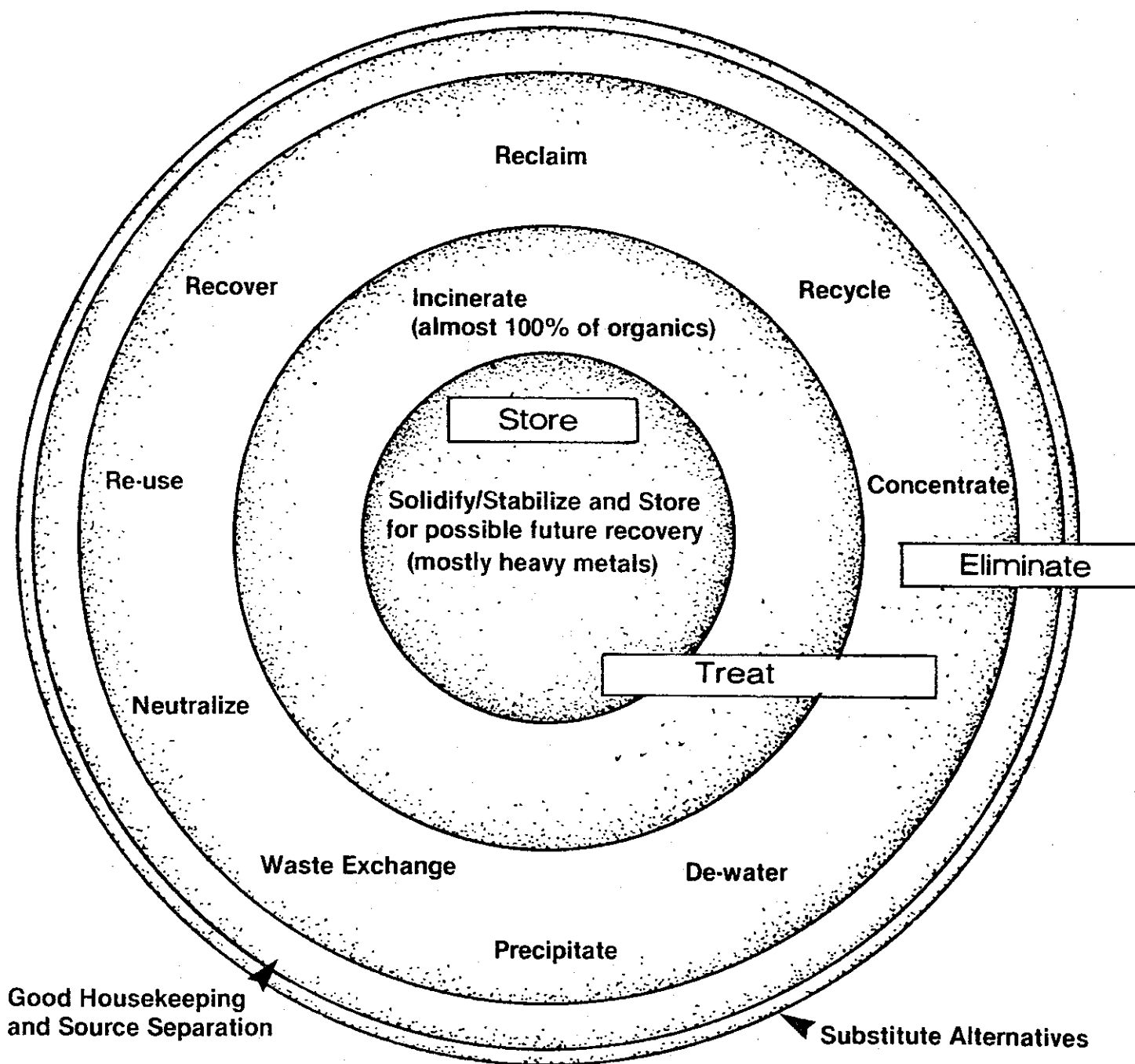
Waste Onion" illustrated here, represents the three main strategies, in order, for taking action against hazardous wastes: eliminate, treat and store. Unfortunately, knowing the technology exists is only part of the answer - public education and political education have not developed sufficiently to implement all of the solutions yet.

Due to past, present and future environmental and health problems associated with inadequate management of hazardous waste, FON produced a \* Hazardous Waste Education Kit to help unravel the misconceptions, fears and complexities associated with the issue, and discuss the problems and solutions of living in a CHEMICAL SOUP.

Not much material is available on this subject which is Canadian and designed for teaching. What is available, tends to be strictly human health oriented and overlooks environmental disruptions. Human health is obviously important and captures people's attention, but the possible irreversible damage to ecosystems is also very important and can lead

# The Hazardous Waste "Onion"

OR  
HOW TO SHRINK HAZARDOUS WASTE TO A MANAGEABLE SIZE



to longterm problems. In many ways the environment acts as an early warning system. We depend on clean air, clean water and uncontaminated soils for our lives. The environment can only absorb so much and it starts "giving it back" in the form of polluted water, unclear air, contaminated foods etc.

The Hazardous Waste Education Kit deals with the following questions:

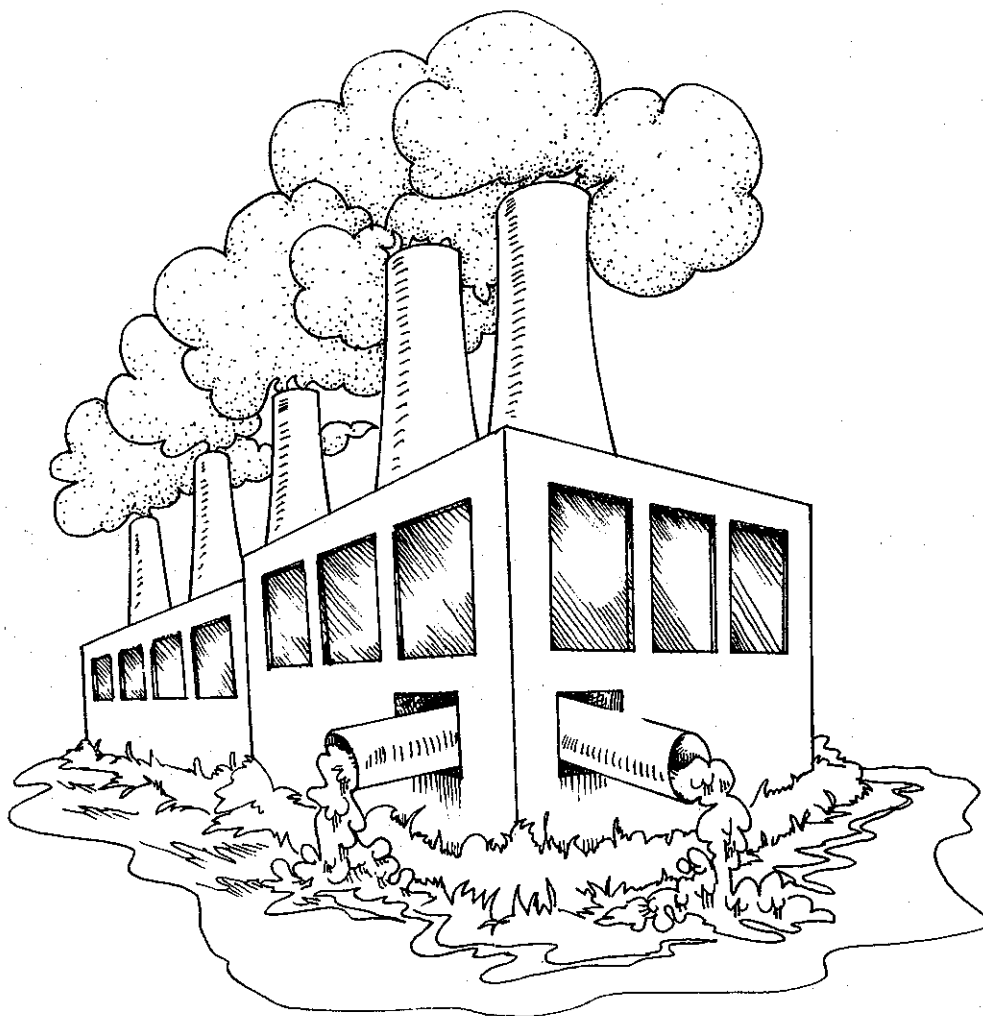
1) What are hazardous

wastes?

- 2) Where do they come from?
- 3) What are they doing to the environment?
- 4) How are they affecting human health?
- 5) Where do they go?
- 6) What can we do about them?

For more information, contact Pamela Hickman, Education Projects Co-ordinator, Federation of Ontario Naturalists, 355 Lesmill Road, DON MILLS, Ontario. M3B 2W8. (416) 444-8419.

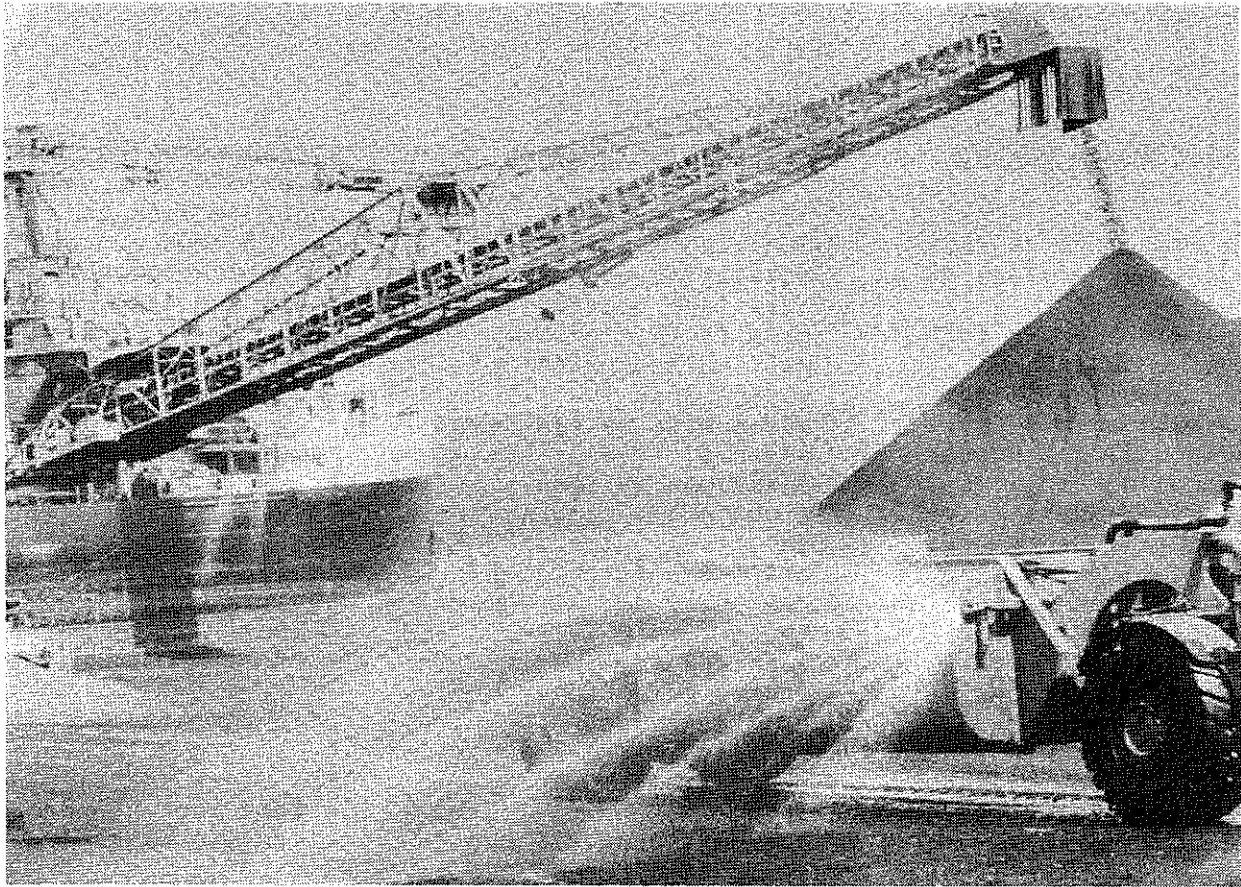
\* FON's definition of Hazardous Waste in the kit is: Material which no longer serves a purpose and which requires special precautions in it's handling to prevent damage to people, property or the environment. It includes hazardous spills, residues and materials discharged into the environment or contained for disposal. But it does not include radioactive or pathological wastes.



judi shore







# Environmental Control in the Steel Industry

The steel industry is considered the backbone of any industrialized economy; it has also become a criterion of progress and national prestige. Steel is essential not only for production, processing and the transportation of many products, but it also plays a key role in the provision of food, housing, recreation and the defence of a nation.

Large Canadian plants collectively produce up to 16 million tons of steel annually. In doing so, they handle as much as 25 million tons of iron ore, coal and limestone -- the basic raw materials of steel production.

## WATER QUALITY CONTROL

Most processes in the production of steel occur at high temperatures. In turn, large quantities of water combined with chemicals or oil (emulsions) are needed for cooling the equipment and hot steel, lubricating machinery, and cleaning the steel's surface prior to coating processes.

Regeneration processes plus biological and chemical treatment plants costing millions of dollars have been built by the steel industry to separate oil and waste materials from water. There are different types of "waste"; therefore more than one process is necessary to remove wastes from water. With the oil and water emulsion, an oil separation process treats the water so it can be cleaned and re-circulated.

Settling chambers and filters for removal of solid substances and ion exchange plants for removing chrome from tin plating wastewater, are other examples of environmental technology at work in industry.

## AIR QUALITY CONTROL

Handling large quantities of raw materials requires great care so that particulates will not escape into the atmosphere in raw material form or as emissions during steelmaking processes. To prevent unnecessary emissions into the air, the steel industry uses three types of particulate cleaners. If the material is hot and magnetic, electrostatic precipitators can magnetize and collect the particulate. Cooler material is collected in vacuum-like bag houses that gather particulate in bags. Finally, very hot and wet materials are contained in air and forced through water at very high speeds in a process called wet scrubbing. The particulate is later separated from the water by settling or filtering.

The steel industry also protects the environment from raw materials in storage. Coal piles, for example, are sprayed with water or an oil and water emulsion, to protect against the wind carrying coal dust into the atmosphere.

sulphur dioxide emissions, the primary ingredient in acid rain, are of less concern in the steel industry today because a low sulphur iron ore is available. With an industry-wide trend toward low sulphur iron ore, emissions remain within the levels set by the provincial government.

## INDUSTRY'S RESULTING EFFECTIVENESS

With the implementation of this new technology, the steel industry has become over 95 percent effective in controlling its particulate emissions to the atmosphere.

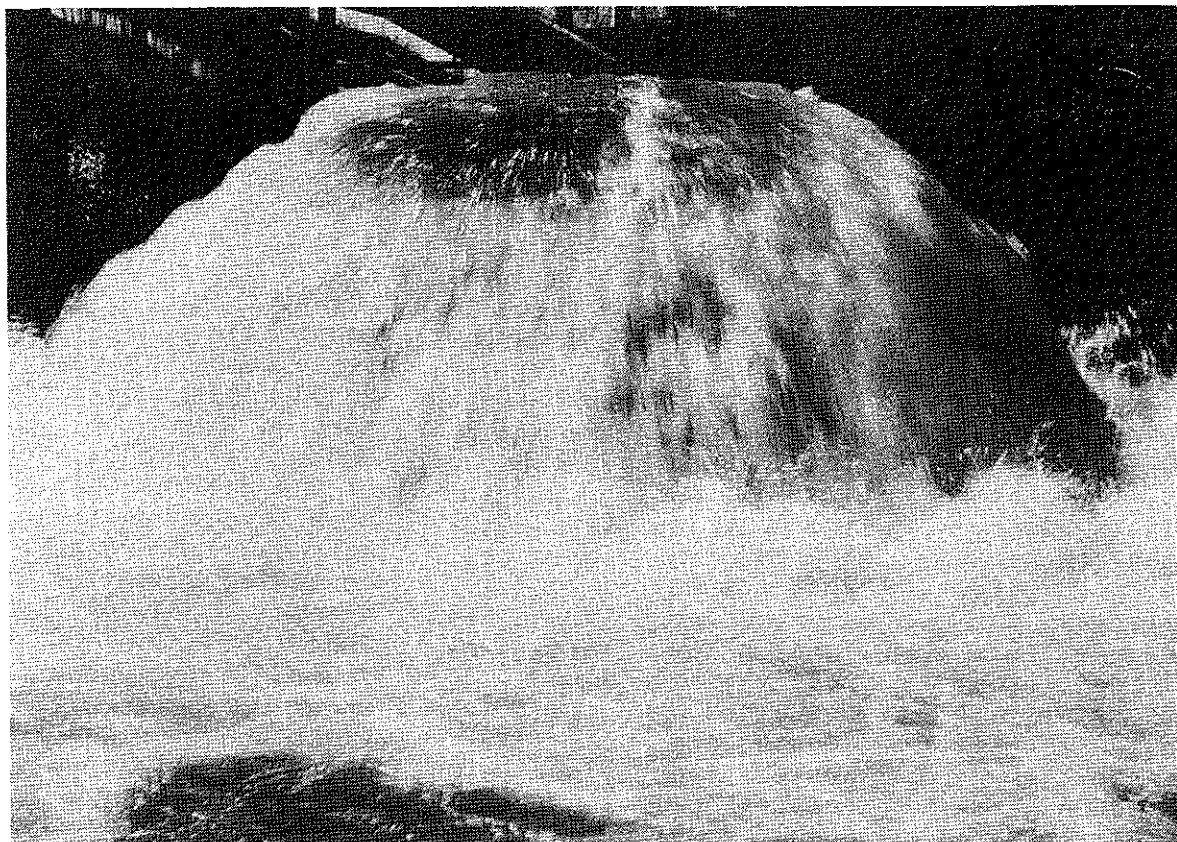
The controls have been very effective in reducing the negative impact of steel plants on their surrounding communities. In Hamilton, recent Ontario Research Foundation government sponsored air quality studies indicate that with controls, the effect of industrial stack emissions on urban air quality is quite small. In fact, day-to-day automotive traffic contributes more to high emission levels than does Hamilton's steel industry.

## THE FUTURE

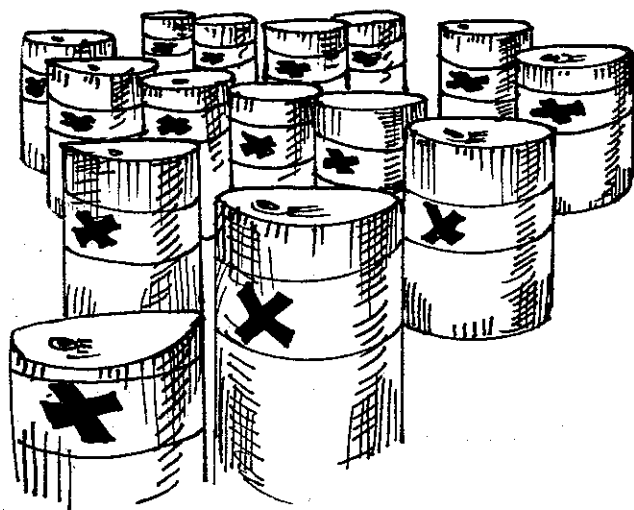
The steel industry is now working on the reduction of fugitive emissions that come from the process itself, rather than the stacks. An example of this, are the emissions that arise when iron is poured from the blast furnaces. Although particulate from the blast furnace stacks has been controlled for years, emissions that occur during the casting of iron are smaller in quantity but harder to collect.

## SOCIAL RESPONSIBILITY

The steel industry is committed to the preservation and improvement of environmental quality. Stelco Inc. of Hamilton, for example, has spent close to \$300 million on environmental projects since 1960. And as the ever-changing field of environmental technology continues to progress, the steel industry will readily implement the changes needed to provide a healthy, clean environment.



# Reducing Toxic Wastes



judi shore

## Mark Simpson, Pollution Probe

Despite years of concern over health effects, industry continues to dump hundreds of toxic chemicals into the environment. New research indicates that the present approach to pollution problems is at least partly to blame.

Glenn Munroe, a researcher at Pollution Probe in Toronto, argues that because companies try to deal with wastes after they have been created, they can do little else but dilute them or shift the problem from one realm to another. Something as simple as paint in water, illustrates the point. An industry faced with such a waste, can either dilute the waste to meet the

concentration requirements, or it can try to separate the paint from the water. Separation is never completely effective, so some paint stays in the water. The company is also left with a paint sludge, which must be put in a landfill site. From the landfill, the paint sludge can migrate through the groundwater into rivers and lakes.

The solution, says Munroe, "is to ensure that the wastes are never created in the first place. Wastes are really misplaced resources. By reducing, reusing and recycling wastes, industry not only reduces pollution problems but often costs, as well.

The consequences of present practices are becoming ever more apparent. Leaking toxic waste on the Niagara River threaten the drinking water of 18 million people. Over 25,000 pounds of dioxin, the most toxic chemical known, lie buried in these dumps. Already up to 90 percent of adult carp in the industrialized stretch of the Welland Canal have tumours on their reproductive organs, rendering them sterile. A recent study by the Toronto Board of Health found dioxin levels in Ontario food to be 66 times above the suggested safe level. The Canadian

Environmental Law Association recently released a study which showed that the fallout of toxic air pollutants was at least as serious a problem as acid rain.

Yet only recently has the magnitude of the problem and the need to take action been fully realized. When the industrial revolution reached North America few, if any, gave industrial waste a second thought. It was felt that the sky and lakes were large enough to absorb anything we might care to dump into them. As industry developed, local pollution problems became evident, but it was still felt that the problem could be solved if we only sent the waste far enough away, or diluted it. However, it has become obvious that this too does not work. Consequently, wastes are now being biologically or chemically treated before disposal, to reduce their toxicity.

Although our attitude to industrial waste management has progressed considerably, none addresses the fundamental issue embodied in the second law of thermodynamics -- the more we consume, the more waste we create. And, although this may

seem to state the obvious, it remains that we have made little progress in increasing resource efficiency and minimizing waste. Munroe feels that "ultimately we must all re-evaluate our individual lifestyles," yet he also thinks that "in the interim, there is much that industry can do to make substantial gains in waste reduction."

Unfortunately, common belief maintains that the technology for such an approach is either unavailable or prohibitively expensive. Yet Munroe points out that "there are already many case histories that disprove these popular misconceptions."

The organic chemical industry is of primary importance to anyone concerned about toxic pollution problems. A 1985 study of the organic chemical industry in the United States reported that the industry is responsible for over 60 percent of the toxic wastes entering the environment.

Initiatives, including changes in processes and products and substitutions of chemicals as well as operational and equipment changes, have

been taken by a few in the industry. In some cases these were achieved by simple alterations, in other cases by complex and expensive efforts. The report clearly points out that "there is remarkable potential for plants to identify ways in which they might reduce or eliminate toxic wastes."

One example cited is Exxon Chemical Americas, who manufacture synthetic lubricants, solvents and specialty chemicals in Linden, New Jersey. Emissions of some hazardous chemicals at the plant have been reduced by over 90 percent, for an overall savings since 1974 of more than five million pounds of organic chemicals. These toxics were previously being released into the atmosphere and falling as rain into fields, rivers and lakes. Such dramatic results were achieved by the installation of floating roofs on eleven chemical storage tanks. The floating roofs are a cover that rest on the surface of the chemical stored in the tank and rise and fall as the level of the liquid changes, thereby minimizing toxic vapour loss to the environment. The roofs saved enough chemical to pay

for themselves within a year.

Exxon has undoubtedly profited from the installation of the floating roofs and reports that it plans to install five more. More importantly, such emission reductions serve not only to minimize toxicants in the environment, but also to minimize the amount of raw materials needed for production.

A 1982 publication by Pollution Probe, Profit from Pollution Prevention, cites numerous examples where waste reduction technologies are not only limited to large corporations with considerable financial and technical resources at their disposal. It reports several smaller and medium-sized manufacturers that have proven the contrary.

One firm, Kelcoatings Ltd., a medium-sized paint manufacturer in London, Ontario, has been using computers in the plant for some time. The benefit of a computer in the coatings industry is that it can optimize scheduling of production sources so as to minimize equipment clean-out needs. A computer can also assist in reworking a spoiled batch of paint into something marketable by recording its

composition and indicating what ingredients need to be added to make it saleable. Munroe points out that this can drastically reduce the size of the plant's toxic wastestream.

Another innovation in the coating industry which has helped reduce toxic waste is the use of powder coatings. Because powder coatings are 100 percent solids, they present no solvent emission problems during the curing process. Another significant low-pollution aspect of powder coatings is that they are easily recycled. The excess powder that does not adhere to the object falls to the bottom of the paint booth onto a moving belt. The belt carries the excess powder to a vacuum system which collects and transports the overspray to the filter units. Once the overspray has been filtered to remove dirt, metal bits and clumps of paint, the powder is returned to the feed hopper for re-use. Because the recovery rate of the overspray is about 99 percent, barrels of toxic paint sludge do not accumulate.

These examples illustrate only a few of

the technologies available to industry in the challenge to reduce toxic wastes. Similar technologies exist for the electroplating, plastics, textiles and other industries.

Yet waste recycling and reduction technologies have not been widely adopted because of a number of specific barriers which restrict their use. A joint study by the Canadian Environmental Law Association and Pollution Probe on the legislative and economic barriers to industrial waste reduction and recycling, states that "income tax legislation could provide incentives for recycling and waste reduction in the industrial sector. At this time, income tax laws do not have incentives for industry to recycle and reduce wastes, but encourage conventional technologies and industrial practices". One example of this is the Accelerated Capital Cost Allowance (ACCA) provision under the federal Income Tax Act. It provides taxpayers with a means by which the capital cost or depreciation cost of assets can be deducted in determining taxable income. Where the capital cost allowance is accelerated, it

affords a greater rate of deduction in early years of investment, thereby easing the burden of investment on certain capital equipment for specific activities.

However, the provision specifically mentions pollution control equipment, but fails to note waste reduction technologies. Although a technical subtlety, Munroe feels that "the omission encourages industry to install so called 'end of pipe' pollution control equipment, rather than technologies that do not produce the waste in the first place."

Other barriers to waste

reduction include current pollution control legislation. Thomas Rahn, a Pollution Probe researcher presently investigating legislative barriers to waste reduction, adds that "present pollution control standards do little to foster waste reduction. Because pollution control standards are often negotiated on an ad-hoc or case by case basis with individual manufacturers, they are not enforceable until an agreement is struck with the polluter in question." Rahn feels that "in too many instances the manufacturer pleads economic hardship and gets off scot free."

This happens, he adds, "because both government and industry see pollution control in terms of adding costly equipment to the end of the process. If waste reduction is seen as an opportunity that may actually increase profits then pleading economic hardship is no longer possible."

If the toxic contamination of the country's air, rivers and lakes is to be reduced at all, government and industry must begin to approach the problem from a new perspective. Waste reduction, rather than treatment, can be both profitable and environmentally sound.



## TEACHING AIDS FOR CONSERVATION EDUCATION

October 16, 1986  
Kortright Centre for Conservation  
Kleinburg, Ontario  
8:30am to 5:00pm

A major one day conference is being organized for October 16th, 1986 at the Kortright Centre for Conservation. Sponsored by the Ontario Chapter of the Soil Conservation Society of America, the conference will consist of speakers, presentations and displays focusing on materials (audio, video and written) which have been produced by interest groups, government agencies and private industry, for use by teachers and students in natural resource conservation education.

Approximate cost: \$20.00 (includes coffee and lunch)

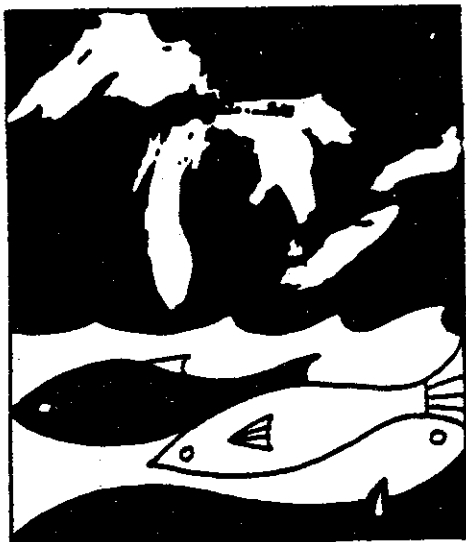
Plan to attend!

*Registration required before October 2*

For further details contact:  
Mike Puddister  
Credit Valley Conservation Authority  
Meadowvale, Ontario  
L0J 1K0

or (519) 837-1016 (home)

# THOSE MAGNIFICENT SWEETWATER SEAS



**1986 Annual Conference**

**of the**

**NATIONAL MARINE  
EDUCATION  
ASSOCIATION**

**August 4 - 9, 1986**

**John Carroll University, Cleveland, Ohio**

The Jesuits called them *l'eau douce*, sweet water. The diaries of the explorers extolled them, and Herman Melville compared them with the majesties of the oceans. The Great Lakes. Once mourned for the treatment they received from the cities and industries they supported, the Great Lakes are now praised for their beauty, honored for their place in our history, and sought for their precious water.

The Governor of Ohio has proclaimed 1986 as **The Year of the Lake** in recognition of the water resources that are our future.

The Consortium of Aquatic and Marine Educators of Ohio (CAMEO) and the Ohio Sea Grant Education Program invite you to discover **THOSE MAGNIFICENT SWEETWATER SEAS** in Cleveland, their renaissance city.

## PROGRAM HIGHLIGHTS

Great Lakes Symposium  
The Great Lake Erie children's art exhibit  
Sea Grant curriculum fair  
Microcomputer software review  
Nonformal education workshops  
Classroom activities demonstrations

Dinner Cruise on Lake Erie  
Sea and Swap  
Perch and Pike Picnic  
Songs of the Seas and Lakes  
Luau at Sea World  
Field trips to Lake Erie sites

For more information contact: Ohio Sea Grant Education Program  
The Ohio State University  
059 Ramseyer Hall  
Columbus, Ohio 43210





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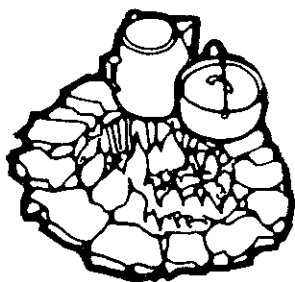


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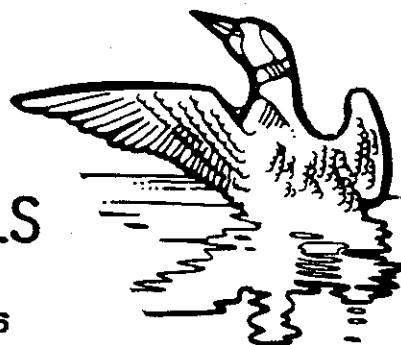
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FOR A 12 DAY COURSE IN



## OUTDOOR SKILLS

AUGUST 18 - 29, 1986



THIS EXCITING OUTDOOR PROGRAM IS DESIGNED BY OUTDOOR EDUCATORS FOR EDUCATORS, RECREATION STAFFS AND OTHER PROFESSIONAL ADULTS WISHING TO IMPROVE THEIR OUTDOOR SKILLS.

THE PROGRAM OFFERS INSTRUCTION IN CANOEING, ORIENTEERING, OUTDOOR LEADERSHIP, CAMPCRAFT, SAILING WATERFRONT, ROCK CLIMBING, ROPES COURSE AND ENVIRONMENTAL STUDIES.

ADDITIONAL HIGHLIGHTS INCLUDE RECREATIONAL EVENTS, NORTH CANOE, TRADITIONAL CAMPFIRE PROGRAMS, INITIATIVE GAMES AND SPECIAL INTEREST PRESENTATIONS.

THE CENTRE PROVIDES AN EXCELLENT RESIDENTIAL ENVIRONMENT WHERE LEARNING BECOMES BOTH PROFITABLE AND ENJOYABLE.

FEE \$110.00 INCLUDES ALL INSTRUCTION, RESOURCE MATERIALS, MEALS AND ACCOMMODATION.

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MINISTRY OF TOURISM & RECREATION  
8TH FLOOR, 77 BLOOR STREET WEST  
TORONTO, ONTARIO, M7A 2R9  
PHONE: (416) 965-2356

Applications may also be requested from your schools, C.O.E.O. representatives, Ministry of Tourism and Recreation Field Services Offices.

# PROFESSIONAL DEVELOPMENT

## GRADUATE COURSE in OUTDOOR EDUCATION

In conjunction with Northern Illinois University, the Council of Outdoor Educators of Ontario offers Master's Degree level courses in Ontario. Courses are offered in the spring and fall terms. Participants take these courses for interest, for credit to transfer to an Ontario University, or to apply to a M.S.Ed Degree in Outdoor Teacher Education from Northern Illinois University.

A course will be offered this fall in the Toronto area. The topic is Advanced Field Experiences in Outdoor Education. This course is for experienced teachers who wish to supplement and enrich the classroom program by including outdoor learning experiences. Ways and means of relating various outdoor learning activities to the subject matter of various areas of the school curriculum will be examined.

Dates- four weekends between Sept. 20 and Nov. 30, 1986  
Presentation of this course is dependent on approval of the Minister of Colleges and Universities.

For details see below.

## SAFETY MANAGEMENT WORKSHOP FOR LEADERS OF OUTDOOR PROGRAMS SEPT. 6 & 7 1986

AT MONO CLIFFS OUTDOOR EDUCATION CENTRE

MONO CENTRE, ONTARIO  
(NORTH OF ORANGEVILLE)

The Safety Management Workshop is based on a simple, yet powerful equation that illustrates how accidents occur. From this departure point all necessary safety plans and precautions are developed in detail during the workshop. The safety management methods presented are effective, applicable to any outdoor or camping program, suitable for any organizational setting, relevant to all activities, all sites, all equipment, all personnel. There are no loose ends, no blind spots, no exceptions. The workshop equips participants with tools that are effective, thorough, simple to use, positive in approach and immediately useful.

The Workshop will be conducted by Alan Hale of the National Safety Network. Fees: Registration (including two lunches) \$ 110  
Room, supper and breakfast 20

FOR DETAILS ON EITHER OF THE ABOVE EVENTS, CONTACT KATHLEEN HUNTINGFORD,  
OUTDOOR EDUCATION DEPT., 5050 YONGE ST. WILLOWDALE, ONT. M2N 5N8 225-4661 X377

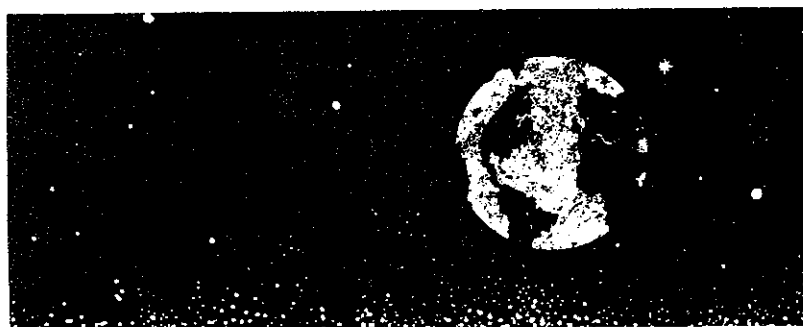
# Conference of The Institute for Earth Education

The Institute for Earth Education announces its second international conference for September 24-28, 1986 at the McKeever Environmental Learning Center in Sandy Lake, Pennsylvania.

Earth Education is the process of helping people live more harmoniously and joyously with the natural world. Based upon the Acclimatization materials and approach, this new effort offers more tools and greater support for the practitioners of focused, purposeful environmental learning. From Steve Van Matre's opening speech, "Sunship Earth," to a special "Song for the Earth" concert with Jim Scott, (formerly with the Paul Winters Consort), this will be a landmark gathering of prospective Earth Educators.

Here are some of the sessions you can select at this important event: see our newest program for upper elementary students, "Earthkeepers", experience an entire day of a "Sunship Earth" program, learn about the whys, whats and ways of Earth Education, join a day-long "Muir Trek", and participate in the new one-day Earth Education workshop where you'll receive a firsthand introduction to a new classroom-based program, "Earth Caretakers". During the conference you can also discover how to become an "accredited" Earth Educator and join a worldwide network of others, develop an "Earthwalk" to use at home, share special natural experiences, and observe a practical demonstration on how to set up your own two-hour ecological concept-building adventure, "Earth Secrets".

To receive more information on the conference and the Institute, write:  
The Institute for Earth Education, Box 288,  
Warrenville, IL 60555, U.S.A.



## CEC CONFERENCE '86

Kitchener-Waterloo

OCTOBER  
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Don Meichenbaum  
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Judy Harding  
Frank Clifford

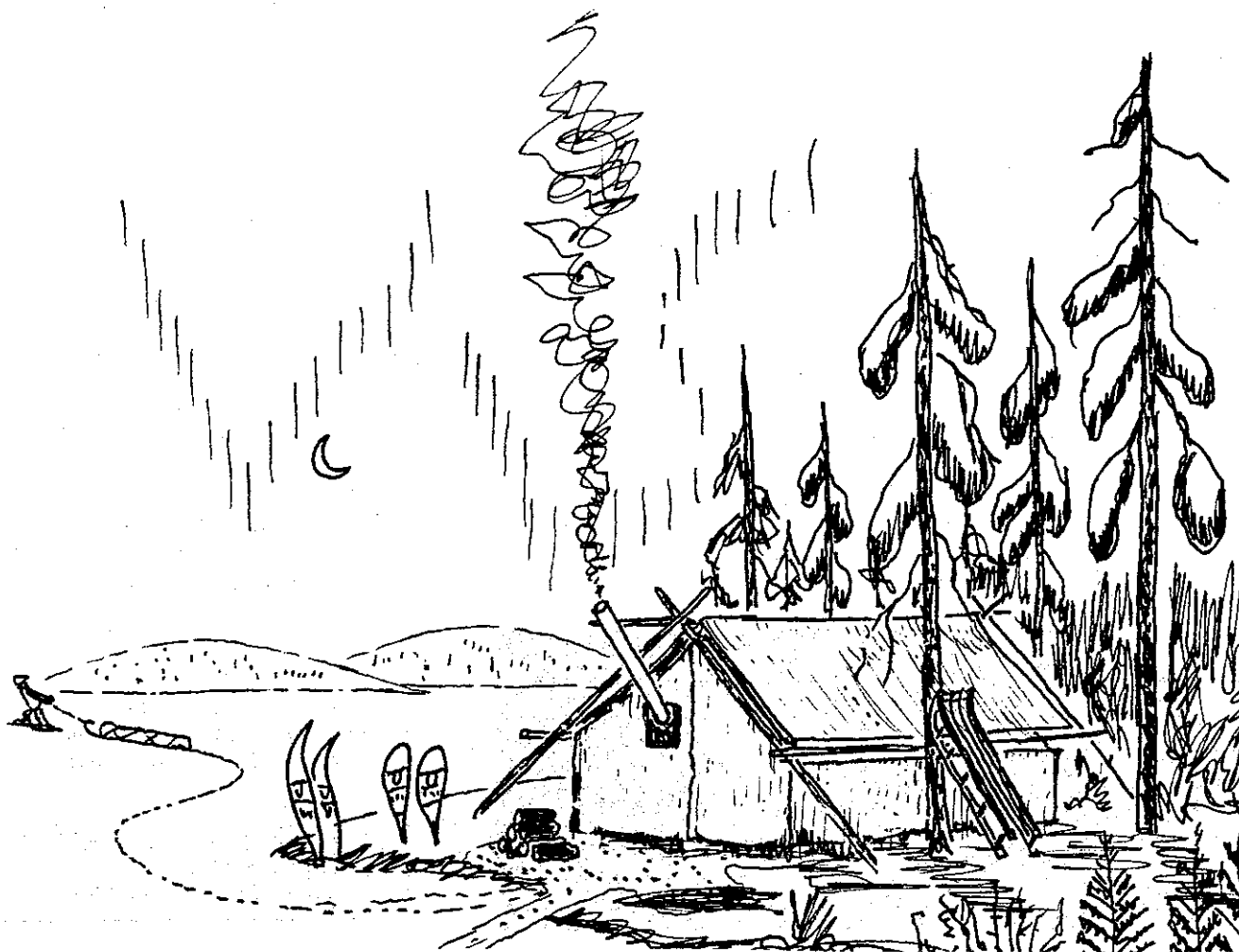
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## TRADITIONAL WINTER TRAVEL & CAMPING WORKSHOP

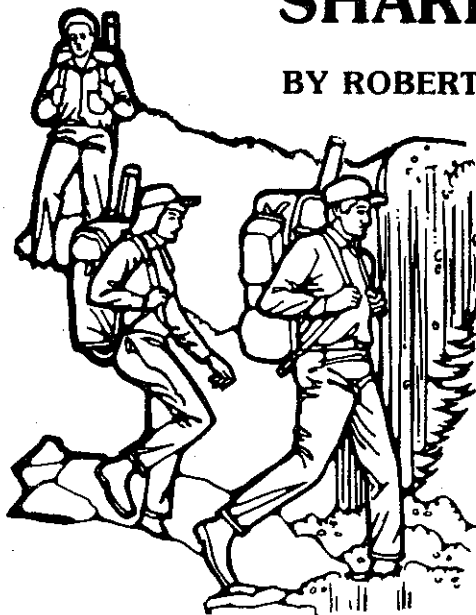
A workshop on Traditional Winter Travel by Toboggan and Snowshoe will be held Friday evening January 9 to Sunday afternoon January 11, 1987 at the Leslie M. Frost Natural Resources Centre. This workshop is sponsored by the Council of Outdoor Educators of Ontario and costs \$200 per person (includes all meals, accommodation, the use of specialized camping equipment, displays, handouts and expert instruction). An optional field test and written exam for certification will be given for \$25 at the conclusion of the course. An overnight trip is planned to provide training in equipment handling and safe operation of wood heated tents and emergency shelters.

Participants will be able to examine a wide range of sleds and toboggans as well as a collection of over 25 different styles of native built snowshoes. The first 20 paid registrations received will be accepted. To register, mail a cheque or money order payable to Craig Macdonald, Frost Centre, Dorset, Ontario POA 1E0. Telephone number 705/766-2885. This course will be the best ever offered concerning this rapidly expanding outdoor field. Out-of-province and country participation is welcomed.



# LEADING TO SHARE SHARING TO LEAD

BY ROBERT J. ROGERS



In this monograph an outline for training leaders of outdoor adventure activities is presented. The outline contains both the method by which leaders should be trained and the material which should be presented during the training. Because the outline concerns itself with the skill of leadership and not any one specific activity or sport, it is applicable to a wide variety of organizations which take groups of people into the out-of-doors for adventure. It can be used by those involved in backpacking, canoeing, recreation programs and many other adventure activities or programs.

## Adventure – Activity – Leadership

The Council of Outdoor Educators of Ontario, COEO, was founded in 1971. This organization, open to all persons involved in Outdoor Education, is dedicated to fostering professional leadership in the out-of-doors.

The Task Force on Adventure Activities was formed in 1976 in response to membership concern over certification. Its recommendation that four essential components be considered in all adventure activities was accepted by the membership in 1977. Active discussion, with representatives from many different organizations, then led to the development of this publication.

It is our hope that this book will make you, the leader or administrator of adventure activities, aware of the dimensions of leadership, one of the four essential components, and will help you develop a leadership programme relevant to your specific needs.

### Order Form Retail Price ..... \$4.00 per copy

Please send \_\_\_\_\_ copies of LEADING TO SHARE/SHARING TO LEAD  
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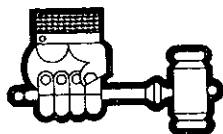
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# A REVIEW



by J. Aikman

In the field of outdoor education, one is always on the lookout for new aids in teaching outdoor wilderness skills. When our local media consultant suggested I look at a new series which had come on to the market in video format, I took up the challenge with great anticipation.

The series "MASTERING THE WILDERNESS" is a six program video production dealing with the various aspects of basic and advanced canoeing, backpacking, shelters, emergency first aid, canoe rescues, food planning and packing and travelling by map and compass. The programs are set up in a three tape (Beta) format with two programs per tape.

I wondered at the time, how so much information could be condensed into six 30 minute programs. However, I need not fear, because at the beginning of each program, the narrator stated that the program contained "everything necessary to live in the wilderness". Such an all inclusive statement challenges one to find out what is missing and it didn't take very long.

Nowhere in any of the credits listed are any technical advisors credited. In order to achieve any credibility, the series could have made use of the technical expertise such

as Canoe Ontario, the Ontario Recreational Canoe Association, the Red Cross, the Seneca King College Wilderness Technicians Course, all well known to C.O.E.O. members.

Some basic concerns I have, among others, deal with canoe skills and safety. The basic canoeing strokes were poorly demonstrated. When one is demonstrating a technique one should have the best possible person demonstrating the paddling strokes, not someone who has been in a canoe only a few times. In the matter of canoe safety, the tape stated that when you dump a canoe, you should put on your lifejacket or P. F. D. at once. However, following the dumping sequence, no one could be seen to do just that. There was no mention about what were approved lifejackets or P. F. D.'s and there were many sequences where no lifejackets or P. F. D.'s could be seen in the canoe or on the participants.

I am concerned about advocating the use of hatchets rather than axes or folding saws. A hatchet is one of the most dangerous tools to take outdoors. They also advocated not using metal frame packs on canoe trips, yet each time a canoe was shown being loaded, there was a metal frame pack.

The program on SURVIVAL TECHNIQUES was very poorly done, barely touching the topic. They could have made 3 tapes on this topic alone. A little knowledge is often more dangerous than none at all.

The MAP and COMPASS tape was very difficult to follow as was the section on WEATHER SIGNS. Incidentally, moss on trees is not even a remotely reliable method of finding North.

The series needs a study guide to explain the content and format of the tapes. Each tape, although different in content, begins the same way, which promises what the series will attempt to do, but never really does.

In short, I applaud the efforts of Checkmate Productions to produce a series which is needed in the field of outdoor education. However, they need to involve more input from recognized authorities and experts before producing something that has little practical usage. Perhaps there might be a role for C.O.E.O. in assisting with the production of similar types of "how to" series.





# Membership Application Form

PLEASE PRINT COMPLETE AND SEND WITH REMITTANCE TO ADDRESS BELOW  
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If you are applying for Family Membership, please list persons who will be using the membership. \_\_\_\_\_

POSITION \_\_\_\_\_ EMPLOYER \_\_\_\_\_

UNIVERSITY/COLLEGE attending full time if a student \_\_\_\_\_

I am in the \_\_\_\_\_ Region of COEO (see listing below)

FAR NORTH Patricia, Kenora, Thunder Bay, Algoma, Cochrane, Sudbury, Rainy River, Timiskaming.

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CENTRAL Niagara South, Lincoln, Hamilton-Wentworth, Halton, Peel, York, Ontario, Metro Toronto.

EASTERN Victoria, Durham, Peterborough, Northumberland, Hastings, Prince Edward, Lennox and Addington, Renfrew, Frontenac, Leeds, Grenville, Ottawa-Carlton, Dundas, Russell, Stormont, Prescott, Glengarry, Lanark.

OUT OF PROVINCE Any area in Canada except Ontario

OUTSIDE CANADA

Please note: THE COEO MEMBERSHIP YEAR IS FROM SEPTEMBER 1 TO AUGUST 31. ANY MEMBERSHIP APPLICATIONS RECEIVED AFTER MAY 1 WILL BE APPLIED TO THE FOLLOWING YEAR.

Please check: NEW \_\_\_\_\_ RENEWAL \_\_\_\_\_ CURRENT MEMBERSHIP NO. \_\_\_\_\_

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Make your cheque or money order payable to the COUNCIL OF OUTDOOR EDUCATORS OF ONTARIO and mail with this form to

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