

Pathways

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December, 1990

THE ONTARIO JOURNAL OF OUTDOOR EDUCATION



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Pathways

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State of the Art

This month's cover is a pencil drawing of a Barn Owl by Toronto artist Gail Beglin. Inside art comes from a variety of contributors, including Andy McLacklan and Gail Beglin.

Pathways is printed on recycled paper.



If not you, who? . . . If not now, when?

After more than a year of working with the new Pathways format, the Editorial Board agreed that it was time to do some fine-tuning. And so, we present to you the new and improved Pathways: The Ontario Journal of Outdoor Education. The most obvious change has been in the style of the magazine. Mark Whitcombe sought the services of a graphic artist who has given us an up-dated format for the journal to make it more readable and more manageable to layout. We hope these changes are pleasing to the eye.

Second, and possibly more importantly, Pathways is now printed on recycled paper. Such a change will hopefully help COEO to set an example as an environmentally-aware organization (no matter which side of the on-going debate in the Letters to the Editor you are on). The Chairman of the Editorial Board, Dennis Hitchmough, must be thanked for his hard work in researching environmentally-friendly printers in the Toronto area that COEO could actually afford.

Dennis also found a new production house for the journal which is close to the now city-bound editor and which can help us lower the typographical errors which have been rampant in the journal. I hope that an error-free journal will contribute to both increased readability and enhanced image for COEO.

Finally, I would like to thank Dennis for taking over this issue as guest editor.

Our format of regular columns and features remains the same. We are looking for any feedback and material the members can give us. Changes can only come about if readers are willing to make their voices heard. Please write to us with your concerns, information and events. The dates for submission are the same as those for advertising. For us to represent COEO's membership, we need to hear from you. Don't wait for someone else to write to us, pick up your pen or turn on your keyboard and write to us now! We're looking forward to hearing from you soon.

Carina van Heyst

Letters to the Editor

Dear Editor;

I have a special relationship with the outdoors. It is something I value personally and professionally. In an effort to share the ideas of others like myself, I joined COEO and enjoy reading the regular issues of Pathways.

I believe that concern for our environment is not as radical or as pervasive as it needs to be to affect real change. I work on projects that aim to heighten our concern.

The use of the out-of-doors as a place to teach environmental ethics is a "natural".

Because of this, Pathways needs to be concerned about, aware of and involved in environmental education. I agree with Mark Whitcombe, however, when he suggests that this should not be the only focus for COEO and Pathways.

Outdoor Education includes Environmental Education as well as many other topics. Our organization and its publications must address the many areas that outdoor education covers.

Kevin Stauton

Dear Editor;

Pathways has recently carried two most interesting letters from Mark Whitcombe and Bill Andrews concerning the issue of whether or not COEO should change its mandate and become an Environmental Educators Association.

The overall goal of Environmental Education is to assist the learner, adult or student, to acquire the knowledge, values and problem-solving skills to work individually and cooperatively toward solutions of environmental problems.

Many people and agencies contribute to the achievement of this goal — parents; teachers in all subjects but especially Environmental Studies, Science, Biology, Geography; TV personalities such as David Suzuki; park interpreters; 4H, Brownie, Scout Leaders; etc.

Outdoor educators have a unique role as I see it. They contribute toward assisting the learner to acquire the knowledge, skills and values mentioned above by providing unique learning experiences in the out-of-doors related to Environmental Education. Harvard University's Edward O. Wilson has stated, "We have to know our kin — the other animals and plants that share the planet with us . . . To get to know our relatives is to come to love and cherish them." The outdoor educators that I know are particularly talented at helping their students to know and love the natural world. Outdoor educators also provide unique outdoor learning opportunities that help to extend and enrich many other areas of the learner's education — aesthetic appreciation; creative, visual and language arts; personal physical fitness; social development; leadership skills; decision making; problem-solving; outdoor-living skills; etc. It is my position that outdoor education and COEO, through its workshops, conferences and publications, should

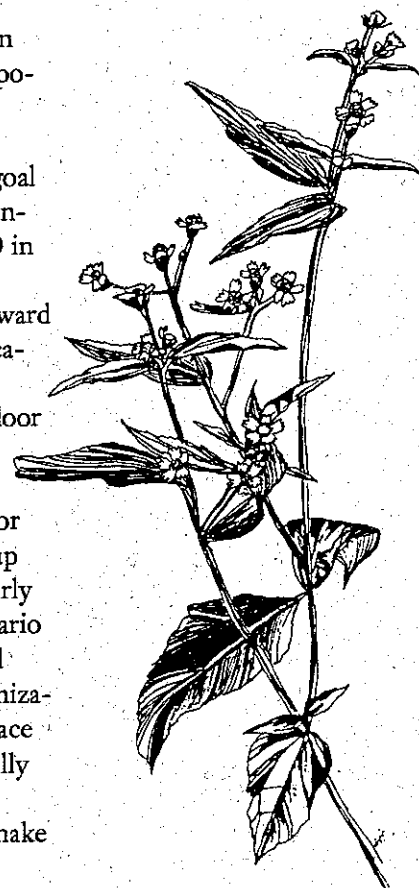
continue to concentrate on the "Outdoor" components of Environmental Education and other subject areas of the curriculum. COEO should not try to become an all encompassing "Environmental Educators" organization. There may be a place for a large umbrella organization that unites all of the various components of EE but I think COEO's most valuable role is to define its boundaries and concentrate on providing support for the outdoor component of Environmental Education in its broadest sense.

The continuation of the present goal and objectives (which, by the way, are entrenched in the constitution) by COEO in no way restricts the organization or its members from participating actively toward the achievement of environmental education objectives and issues that go well beyond the outdoors. I think most outdoor educators are doing that now in their personal and professional lives.

I fear that by changing the name or mandate COEO might get swallowed up and disappear. Outdoor education is fairly widespread and well established in Ontario now because of the dedication and hard work of many individuals and this organization. Important changes usually take place because there are people who individually and in groups make things happen.

Outdoor learning opportunities make an enormous contribution to environmental education. We have come a long way but there are still many islands of neglect in Ontario where students get very little outdoor education and teachers and other youth leaders get very little support and assistance for what they would like to do. There is still a very important mission for COEO and COEO members.

Clarke Birchard



Dear Editor,

"So the issue of where we should take leadership is clear. We must take leadership in promoting the use of the outdoors and of experiential education in the curriculum. Environmental organizations and environmental education organizations exist for those who wish to have a narrower outlook. COEO should retain its breadth of outlook." MW, Summer 1990 *Pathways*, Letter to the Editor.

By deliberately using the words "narrow" and "broad", I sought to provoke discussion. I am guilty of setting out a red herring. And I would like to thank Bill Andrews for rising to the bait. (*Pathways*, October 1990, Letter to the Editor) If I had used the words in the exact opposite manner — referring to outdoor education as narrow and environmental education as broad, would I have got any response?

I want to be very clear that I am not against environmental education. Bill ended his letter by saying that "what COEO now does is just a small part of what needs to be done to ensure that the children we teach will have a decent environment in the future." I'll say "Amen" to that. That small part is a very important part of what COEO does — of what all people should do.

Bill's main concern is that "if COEO divorces itself from environmental issues which do not affect its outdoor mandate, then COEO will be about as narrow as an organization can get."

The real question is not about "narrowness" or "broadness" of outlook.

The issue at heart is the extent to which we control the content of what we present in our outdoor education programmes. There are many possible answers to this question, strung out along the continuum from exercising total control to having no input at all and merely providing a captive service to our clientele. Briefly, as I see it, the danger of defining our content as environmental education is that we become seen by our clientele *as the content*: "Ah, now that I've been to Sheldon, I've 'done' environmental education."

Outdoor education is more a matter of methodologies and approach than it is a question of content. Environmental education has a very definite content. There are organizations whose reason for being is to promote this or that environmental issue. If that is your concern, join and support such organizations. I do, and will continue to do so.

But what concerns me more is spreading the word about the value of learning by direct experience in the out-of-doors. If COEO does not stand up to present our case for learning and experiencing in the outdoors, who will? Not environmental organizations — they quite rightly have different goals. And neither will environmental education organizations have a clarion voice for learning in the outdoors, because, and quite rightly so, learning about the environment doesn't always best take place outdoors. So COEO has a role to play, and that is to champion "the use of the outdoors and of experiential education in the curriculum." Let's get out and do it — whatever the content!

Mark Whitcombe

Outlook

The Board of Directors met for its annual retreat and meeting on October 19-20, 1990 at Mono Cliffs Outdoor Education Centre near Orangeville.

The Board welcomed new members to the slate of officers for 1990-91. Judy Simpson has a new role as Vice-President; Glen Hester takes on the responsibilities of secretary and the role of Eastern Region Representative will be shared between David Royal, Larry Aiken and Ian Hendry. We trust they will find their new positions rewarding.

At this year's retreat we decided to concentrate our energies on a number of specific tasks, having heard the advice of professional consultants over the past two years. Better communication, membership growth and new financial initiatives top the agenda. There are also some "housekeeping" tasks that will be completed this year.

We have received many offers of volunteer assistance over the past months. Board members will be getting in touch with perspective volunteers in the coming weeks.

We are pleased to announce that Joan Thompson has accepted the invitation to represent COEO on the joint COEO/

NAAEE Conference Management Committee. Joan will be working with Chuck Hopkins and two NAAEE members. We wish them the best of success — they have a challenging task ahead of them. Once again, if you are interested in participating on the conference organizing committee please contact Chuck, Joan or myself.

The next meeting of the Board of Directors will be held November 29 and 30, 1990. If any member has an item for the Board's consideration, please contact me as soon as possible.

I am looking forward to a successful and productive year. It will be a pleasure working with such a dedicated and enthusiastic group of individuals.

Kathy Reid
President

Award Winners at the Annual General Meeting

Robin Dennis Award — **Kathy Beach**

Dorothy Walter Award for Leadership — **Jerry Jordison**

President's Award — **Mark Whitcombe**

Life Membership — **Ralph Ingleton**

COEO Calendar

- | | |
|---------------|---|
| Jan. 5/91 | — Dog Sledding at South River |
| Jan. 11-13/91 | — Traditional Winter Travel & Camping At the Frost Centre |
| Feb. 1-3/91 | — Make Peace With Winter Conference |
| April 20/91 | — Rock Climbing at South River |
| May 3-5/91 | — Spring Celebration at the Frost Centre |
| May '91 | — Eastern Region Spring Celebration |
| Aug. '91 | — Wetlands at Tiny Marsh |
| Sept. '91 | — 21st Annual Conference |
| Oct. '92 | — NAAEE/COEO Joint Conference on Environmental Education |

Practical Solutions to Problems in Outdoor Education

by John Bowyer

"Many of today's students are deprived of outdoor learning experiences."

Children should understand the delicate balance that controls all living things and their own place in the environment. This is an important environmental concept that children need to learn in order to make future decisions concerning the wise use of our natural world. Such environmental concepts are difficult to teach if students are not given opportunities to observe life in the outdoors (Babcock et al, 1970). Outdoor Education stimulates student interest in the environment and enhances the development of positive attitudes and values. Many of today's students are deprived of outdoor learning experiences. Classes about the environment are often taught in indoor settings where teachers resort to vicarious learning. But the best pictures, textbooks or class discussions can never give the full appreciation of the beauty of a spring flower or the stateliness of a forest tree (DeBlanc, 1973). Teachers should not ignore the fact that the real thing is worth a thousand pictures. Students are interested in, understand better and are more likely to appreciate, what they can directly touch, see and explore for themselves. (McCormack, 1979).

Research has shown that many administrators, teachers and students agree that outdoor education is beneficial and worthwhile. Hambleton (1970) conducted a survey on the use of outdoor science activities in Metropolitan Toronto. They used an open ten-point rating scale, ranging from most worthwhile to useless and discovered that a significant majority of the principals and students surveyed, place the value of outdoor activities as most worthwhile to students. There was also a high

percentage who felt that outdoor activities are most worthwhile to teachers.

With all of the positive feedback regarding the perceived value of outdoor education, it seems perplexing that the survey by Hambleton also discovered that only 30% of teachers in Toronto at the intermediate level and 10% at the senior level are involved in outdoor science education.

The disparity between the conviction, held by most principals and teachers, that outdoor activities are of significant value and their actual involvement, is explained by Bain. (1980). He surveyed a large group of teachers and concluded that they do not engage in out-of-class science activities because they foresee the following problems:

- 1) Allocated class time is not sufficient to accomplish anything worthwhile.
- 2) Teachers lack the expertise for outdoor work.
- 3) Teachers do not want to be held responsible for any accidents that may occur.
- 4) There is a lack of suitable areas for field work.

The number one problem cited by principals and teachers in Metropolitan Toronto was arranging and paying for transportation (Hambleton et al, 1970). The problems listed were, and still are, legitimate concerns. The outdoor education movement must adapt to meet these challenges. Probably the most practical solution is making use of the school grounds and the immediate environs of the school for outdoor science activities. This solution eliminates transportation time and allows the maximum use of the classroom

period. McCormack (1979) states that, "to get interesting, "real" things, you do not need a lot of extra time or a "fat" school budget. All you have to do is step outside with your class and use whatever is there as a learning laboratory — pavement, city streets, the muddy school yard. Any outdoor site can be used as a place for exploration and learning." To follow McCormack's advice effectively, teachers must plan their courses around the limitations imposed by the local environment. A pond study should not be included in the curriculum if there is not a pond nearby.

Because of increasingly tight budgets, many schools have had to reduce the number of field trips their students may take in a year (Wood, 1986). The costs associated with long distance travel are eliminated when the local school environment is used. The cost of expensive equipment may also be reduced. If time is available in class, students could construct equipment like nets and collecting jars, using inexpensive materials.

The lack of teacher confidence and competence when teaching in the outdoors will be alleviated if outdoor education is developed in both preservice and inservice teacher education programmes. Bain (1980) states that there should be outdoor education courses in every teacher education institution or, at the very least, the science courses they provide should include an outdoor education component. Teachers also need to accept the responsibility for their own in-service education by making use of appropriate reference materials such as curriculum guidelines and textbooks that outline outdoor science activities, journal articles on outdoor education, activity sheets and field guides.

Students should be thoroughly

prepared for work in the outdoors. Howie (1972) found that the use of the indoor setting to prepare students for the outdoor experience was the most effective approach for teaching students environmental concepts. Students receiving classroom preparation prior to an outdoor experience were better able to conceptualize ideas than students who received only the outdoor set of experiences. Thorough planning with careful attention to safety and vigilance in supervision will also minimize the possibility of student accidents. Outdoor laboratory science classes can be aggressive, challenging and interesting. Unless the programme is carefully planned and supervised, however, accidents could occur through contributing negligence (DeBlanc, 1973). It is also important to include a follow-up learning experience as the final step in the sequential process of the outdoor learning pattern. The full value of the trip will not be realized without proper follow-up.

If outdoor education programmes are to continue to exist in Ontario and in other parts of the world, more research must be conducted to verify the benefits of these programmes. Although educators may expound on the virtues of outdoor education, examination of the literature reveals a lack of empirical evidence. Skeptics have asked for data to support the claims made by outdoor educators. Gillenwater (cited in Peck, 1975) argues that justification of outdoor education has largely been based upon the emotional appeal of outdoor studies. Exaggerated claims, such as subject matter being enriched, have been advanced with little evidence! Empirical studies comparing the methods are scarce and often limited by inadequate research procedures. If outdoor education is to meet the variety of difficulties that it faces, such as decreasing financial support, the need for

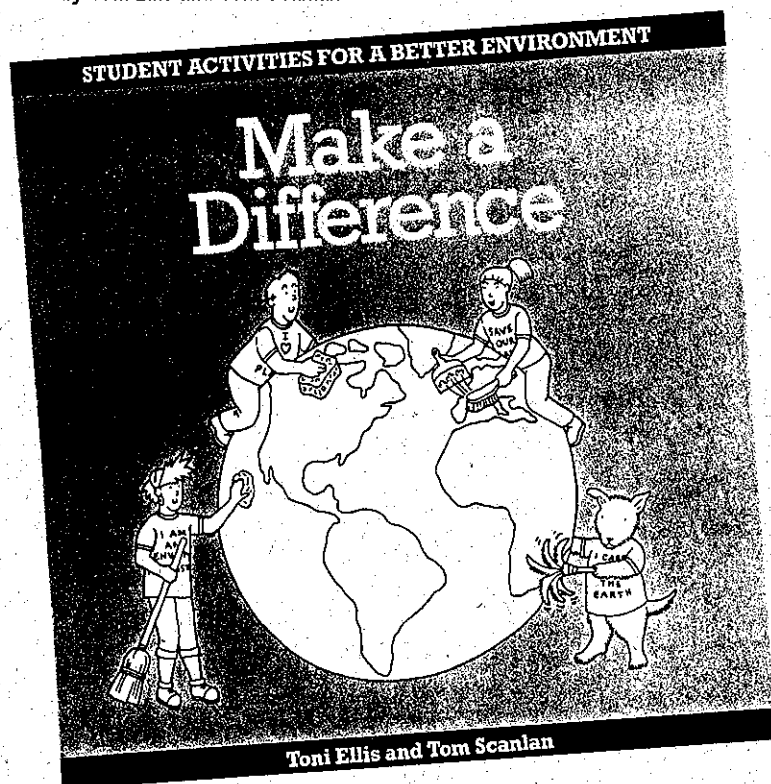
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"The outdoor education movement must adapt to meet these challenges."



Make a Difference: Student Activities for a Better Environment

by Toni Ellis and Tom Scanlan



This new publication from Is Five Press is based on the premise that 6th, 7th and 8th grade students can evaluate their present lifestyle at school, home and in the community and learn practical ways to use our resources wisely.

With four major chapters, Recycling, Energy Management, Transportation and Waste Management, students grapple with major environmental issues in the context of their personal lifestyle. The more than 20 exercises provide informational background on a variety of environmental concerns and leave the readers with positive evidence that they really can "make a difference."

The 56 page book contains charts and tables, maps, illustrations, photos, and a glossary with definitions of environmental terms.

Sample Exercise: Packaging Detective

In this exercise, you'll be playing the part of a packaging detective. Copy the accompanying table onto a large piece of paper. Be sure to leave enough space to record the information.

Now, take a trip to a large grocery store. Bring your chart, a clipboard and two pencils. You may need to explain to a staff person that you are working on a class assignment.

Under each of the four categories (bathroom supplies, hardware, beverages and snacks/candy) choose the item which has the most wasteful packaging. When you find an example, describe the packaging in as much detail as possible. Then, under the third column, explain how this item could be sold using less packaging. An example has been included at the top of the chart.

Follow-up Work

The Ontario government and the

Packaging Detective

Product Category	Product Name	Describe Packaging	How could this be sold with less packaging?
Bathroom Supplies	Bar soap	3 bars each wrapped in foil - then all 3 packed together with cellophane.	Each bar doesn't need to be wrapped. Paper wrappers would be better than cellophane.
Hardware	?	?	?
Beverages	?	?	?
Snacks/Candy	?	?	?

Packaging Association of Canada jointly sponsor a bi-annual "good packaging" contest. Students are asked to design a product package that is good for the environment but also helps sell the product. Imagine that you are one of the judges. Name three things that you would look for in each entry.

Keeping in mind the results of examining the products on your chart, design a product package that is good for the environment but also helps to sell the product.

Sample Exercise: Alternatives to Disposables

Think of five disposable items and jot them down in your notebook. Beside each, list a longer-lasting product that could be used in its place. Here are two examples:

Disposable Item	Longer-lasting Alternative
J-cloths	Fabric dish cloths
Paper plates	China plates

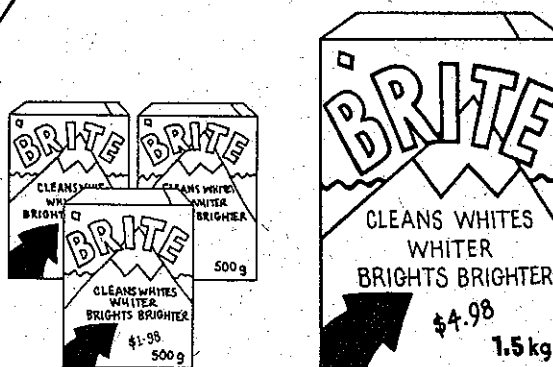
How many from your list are found in your home? Choose at least three longer-lasting alternatives that you would be willing to use. Explain each choice in a sentence or two.

Questions:

1. What does disposable mean?
2. Why are disposable items so popular?
3. Why do you think manufacturers prefer to sell disposable items rather than long-lasting products?

Reuse It!

While it is possible to eliminate much of our garbage by avoiding overpackaging and buying durable, long-lasting products, some waste cannot be avoided. Many things have to wind up as garbage. However, with a bit



There is the same amount of detergent in the large box as there is in the three smaller boxes combined. Which is the most economical way to buy detergent? Which way will produce the least amount of garbage?

of imagination, some articles can be reused. This reduces waste and saves money. A plastic yogurt container, for instance, is useful for storing leftovers in the fridge. A broken game or appliance can be donated to a charity, repaired and passed on to someone who could use it.

Most of us have had an item of clothing, a toy or a game handed down from an older relative, friend or neighbour. You may also have given an item to someone else. Write three or four paragraphs about receiving a "hand-me-down" or giving one to a friend, brother or sister. Describe the item, how you felt about giving or receiving it, and whether you think this is a good habit to adopt.

Copies of *Make a Difference: Student Activities for a Better Environment* can be obtained from Is Five Press, 400 Mount Pleasant Road, Suite 4, Toronto, Ont. M4S 2L6, tel. (416) 480-2408. Enclose \$9.50 per book, plus \$2.50 per book for postage and handling.

Is Five Press is a not-for-profit publisher that produces innovative material addressing educational and social concerns.

The Importance of the Expedition in Adventure Education

by Bill March and Brian Wotchow

"It is possible to identify five distinct types of expedition which reflect distinct cultural values."

The Expedition is defined as; "the setting forth for some definite purpose" — it involves leaving the status quo of one's personal cultural island and launching forth into uncertainty and change. By its very nature it involves risk — the risk of the unknown and the challenge of the new experiences. Education, in its broadest form, may be described as the ongoing experience of growth and strengthening of a person's capabilities to cope with, value, appreciate, and contribute to, life. Adventure education may be thought of as the required capabilities necessary for functioning in the natural environment, which involves living and travelling in an ever increasing, independent manner on the part of the individual and/or the small group community. It follows, therefore, that the expedition may be the most appropriate and effective vehicle to fulfill the aims of adventure education. The expedition experience provides a vehicle in which an individual emerges as a person capable of acquiring and validating information, identifying and establishing alternatives, making decisions about alternatives, acting upon the decision and being satisfied with, and accountable for, the consequences of these actions.

Since the dawn of civilization, men and women have left the security of their communities to undertake expeditions. It is possible to identify five distinct types of expedition which reflect distinct cultural values. The classical expedition of the Greek and Roman mythology eg., Jason and the Argonauts, in their search for the Golden Fleece, are typified by a quest for honour and the righting of wrong. This quest for honour and fame is a recurring theme found in Homer's Ulysses, Virgil's

Aeneid, the Norse Sagas and the Celtic Bardic tales. In the latter Middle Ages, the next great impetus for expedition was the search for economic wealth by the merchant adventurers who discovered the New World and circumnavigated the globe in pursuit of gold and spices. Columbus, Magellan, Vasco de Gama and Drake were the leaders of expeditions which extended the frontiers of the known world. The mercantilists were followed by the scientific adventurers, the explorers and map makers who set forth to plot and measure the new lands albeit for settlement and development. Captain Cook, Lewis and Clarke, David Thompson, Alexander McKenzie, Stanley and Livingstone and Mungo Park, undertook long and dangerous expeditions in the South Seas, North America and Africa.

Today, with much of the planet mapped and explored, there is still the phenomenon of the modern day expeditioners, the existentialists, who in search of personal meaning, step out from the protective, somewhat restrictive cocoon of society, to seek fulfillment in the wilderness environment. The wheel has turned full circle and the pursuit of self and life's meaning brings the existential would be expeditioner, close to the classical model of Ulysses. The military model of expeditioning has hopefully been demythed and debunked by the debacles of Vietnam and Afghanistan and has become too lethal and costly by inappropriate use of modern technology. There is a real need for the existential expedition model to cater to man's curiosity and natural sense of play supplanting war and aggression. Thus, the use of the expedition as a learning vehicle in

adventure education, is really only the adaptation of a powerful focus of human endeavor which can be traced through recorded history.

If we accept the expedition as a valid methodology in adventure education, then it is important to examine it in detail. Yet it must be acknowledged that to dissect any expedition in some way detracts from its integrity, for it is an holistic experience which is freely sought by the participants. There are four distinct phases which are critical to the total expedition experience. They are as follows:

1. Conceptualization/Dream Phase

This phase is typified by the imagination and exploring of an idea — the need of which may have been placed by hearing about a previous expedition. Dreaming and reconceptualization, as products of time, continue to mold the idea until it is felt as a concrete desire. This is the creative phase in which the original idea is developed by debate and discussion and eventually becomes a personal objective with well defined parameters. Once this becomes manifest, the process naturally moves on to a second phase.

2. The Preparation Phase

Human consciousness continuously confronts us with possibilities. It is when we begin to actually take steps towards achieving them that we enter the preparation phase of an expedition. Succinctly put in the words of the outdoor educator and mountaineer John Jackson, "Preparation is the right people, in the right place, at the right time, with the right equipment." In many ways, this is the most important part of the expedition and it must be thorough and complete in order to build a firm foundation for success. It is also a time of anticipation, expectation and even anxiety as to the outcome of the approaching challenge.

3. The Action/Reality Phase

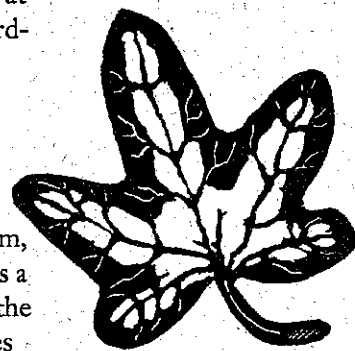
This is the temporal expedition experience, the commitment of a group to the undertaking and all that it involves. The human response will be felt as either success, a degree of incompleteness or failure. Success may not necessarily be achievement of the original selected goal, but rather it may be the fulfillment of individual and group potential. The original goal may become elusive, even beyond reach, due to conditions beyond the expedition members control. So it is with the forces of Nature. The perception of success in the wilderness environment becomes malleable as the group reacts to the ever-changing nature of the challenge.

4. The Reporting/Reflective/Processing Phase

Although all expeditions involve ongoing reflection and processing of experiences, at the end there should be a complete recording of the event. Humans are, by nature, story tellers, whether it be reporting to others, new information to assist further ventures, or simply seeking enjoyment through entertaining peers. The act of telling the expedition story, in media form, is vital to the total experience. It provides a sense of closure to the expedition, eases the stress of reentering into society, enhances personal growth, and is often the birth place for future ventures. In a society which has become dependant on passive listening and vicarious entertainment, it provides the opportunity for people to renew their natural story telling abilities.

However, it is the Action/Reality phase which is the heart of the expedition and it is here that the venture earns integrity. Hopefully, it is apparent by now that the expedition is not something vague and amorphous, but rather an active, seeking, human endeavor. Also, that it occurs in a particular environment, and within a conceptualized set of parameters. An

"Success may not necessarily be achievement of the original selected goal."



"When the outcome of the endeavor is uncertain, there is a greater opportunity for meaningful growth."

expedition should therefore fulfill the following criteria; 1) it should be self-contained 2) it should have an element of challenge 3) there should be a common goal.

1. A self contained expedition should be remote from, and independent of, the normal life support systems of food, shelter, security and medical aid provided by modern society. The greater the degree of independence, the greater the need for group cooperation, and the more serious the undertaking. The expedition is really a microcosm of society, a self-contained society with a distinct value system providing a "hot house" environment for group and personal development.

2. The expedition should have an element of challenge by including the following ingredients:

- a) A new and unusual environment with the goal of the endeavor uncertain.
- b) Stress must be present with significant physical, intellectual and emotional demands made on the participants. A degree of deprivation of comfort and security should be involved which is appropriate to the levels of experience of the expedition members.
- c) An element of faith is required to succeed. The element of the unknown, whether it is the traverse of a previously unvisited wilderness area, the ascent on an unclimbed peak, or the descent of an uncharted river, greatly adds to the level of the challenge.

When the outcome of the endeavor is uncertain, there is a higher level of challenge for the participants, a greater opportunity for meaningful growth. It is this factor which poses the greatest dilemma to the adventure educator - reconciling safety and challenge. In the words of Eric Langmuir; "To say that we can achieve a balance between challenge and adventure is wishful thinking. The best we can hope for is an

uneasy truce." Yet we live in a "quick fix" society where everything has to be "cut and dried" with appropriate rules and procedures. Everyone desires the thrill but not the potential consequences that may accompany the venture. There is no "free lunch," and the outdoor leader must accept the level of constant vigilance required by Langmuir's postulated uneasy truce.

Whenever possible, the expedition should include a grade of difficulty not previously experienced by expedition members, but one which they may be capable of achieving because of considerable experience with the level of technical difficulty immediately below. This, in turn, requires that the participants have an element of faith in the leadership, their ability, and in their equipment in order to succeed. It is when these personal advances are made that potential is realized, participants become empowered and personal growth is achieved.

3. The unifying strength of an expedition is that all members share a common goal to which everyone has voluntarily committed themselves. Each individual has an expressed desire to succeed in the attainment of this group goal. This sharing of a common goal enhances the opportunities for the charismatic moments of action where individuals engage in personal sacrifice for the common goal. These actions bring purpose and meaning to the undertaking beyond mere physical achievement. Indeed, the essence of the expedition is the process of attaining the goal rather than the attainment of the goal itself. All too often the student is more interested in what mark they achieved than in what they did right and, perhaps more importantly, what they did wrong. Making mistakes is acceptable, failing to learn from them is not.

The expedition is, therefore, a unique and powerful experience if it includes all of the above ingredients. It may be impossible

to achieve the perfect expedition by applying these guidelines, however, we should strive to maintain the integrity of the experience by being as rigorous as possible in their application. The reality of any situation is that there will be trade-offs and we should always be aware of these. Everyone should be capable of participating in an expedition, but, it should be remembered that the degree of commitment required places them at the culmination of a learning curve. Even the most simple expedition requires a solid foundation of prerequisite skills, knowledge, and understanding, otherwise it will involve members in unacceptable levels of risk.

Expeditions may also have different degrees of autonomy — initially they may be led by an instructor as a role model of leadership, then leadership by authority may be gradually withdrawn allowing more decision-making and responsibility to be shouldered by the students. Eventually, the instructor will be just an observer intervening only in situations of real danger to the group. The pen-ultimate or "weaning phase" will involve the instructor vetting the expedition plan carefully prior to the expedition operating independently in the field without the instructor.

There is a bond, a common element, joining Ulysses and Edmund Hilary with the countless others imbued with the expeditioning spirit. It is perhaps best expressed in the words of the British

mountaineer Wilfred Noyce, "But if adventure has a final and all embracing motive, it is surely this; we go out because it is in our nature to go out, to climb the mountains and to sail the seas, to fly to planets and to plunge into the depths of the ocean. By doing these things we may touch with something outside or behind, which strangely seems to approve our doing them. We extend our horizons, we expand our being, we revel in the mastery of ourselves which gives an impression, mainly illusory, that we are masters of our world. In a word, we are men, and when man ceases to do things, he is no longer man."

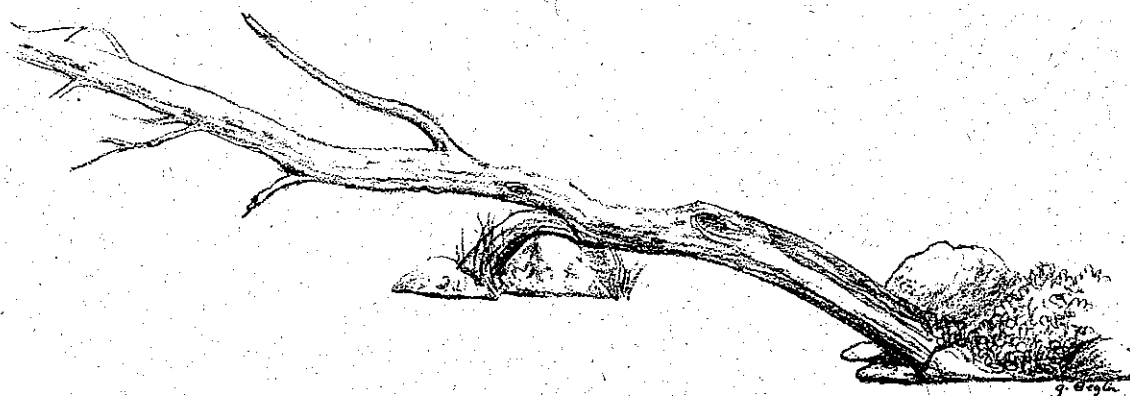
Bill March is an Associate Professor in the Outdoor Pursuits Program of the Faculty of Physical Education at the University of Calgary. Bill led the 1982 Canadian Mount Everest Expedition which placed two Canadians and four Sherpas on the summit.

Brian Wattchow is currently working as an undergraduate at the University of Calgary with the Faculty of Education, specializing in Outdoor Pursuits. He has skied, canoed, backpacked and climbed most of the wilderness of Australia and New Zealand.

Further Reading

The Nature of Adventure Education by Claude Cousineau, 1978, Department of Recreation, University of Ottawa, Ontario.

"Making mistakes is acceptable, failing to learn from them is not."



Experiential, Environmental, and Adventure Education: Terminology and Context

by Robert Chisnall

"...transcendence lies in the power of reflection."

"What's in a name?"
Romeo and Juliet, Act II, Scene II,
William Shakespeare

How often has an overly presumptive editor altered the word "experiential" to read "experimental" or even "environmental"? It is clear that the non-rigorous use and occasional misuse of such terms is widespread and perhaps counter productive at times. The following discussion attempts to highlight the diversity of terminology in the current literature, and clarify the terms "experiential", "environmental" and "adventure" in education.

Terminology and Context

Throughout the education, psychology, therapy, counseling, sports, recreation and leisure studies literature, writers and researchers use the term experiential education, environmental education, adventure education, adventure-based counseling, outdoor education, leisure pursuits, recreation activities, and similar combinations. These labels appear as synonyms or they may refer to distinctly different fields. Hence, some definitions are required to clarify and distinguish this terminology.

Experiential Education

Proponents concede that experiential education focuses on concrete, physical acts or challenges, provides support and feedback, and culminates in reflection, a debriefing, or spiritual enlightenment (Bacon, 1983; Chickering, 1977; Joplin, 1985; Quintal, 1988). Psychologists and sociologists might be inclined to define experiential education according to similar psycho-

motor, cognitive and affective components (Kraft, 1985; Bacon, 1983). This, of course, does not narrow the field much. Hence, its boundaries and precise definition have been areas of controversy and discussion.

Although there is no universally-accepted definition for experiential education, many writers have identified the common elements mentioned in the last paragraph. One particular characteristic propels the everyday experience into the more formalized and pedagogical realm of experiential education. This transcendence lies in the power of reflection (Chickering, 1977; Joplin, 1985; Kraft, 1985).

Adventure Education

Adventure Education is part of this larger whole which has been labelled experiential education (Priest, 1986). Nevertheless, specific adventure programs vary in their encouragement of student reflection.

Ewert (1986, p. 56) defines adventure education as "an activity, usually performed in a natural setting, which contains elements of real or apparent danger, in which the outcome while often uncertain can be influenced by the actions of the individual and circumstances." He goes further to say that adventure education has the following characteristics: (a) it should offer active participation regardless of student skill levels; (b) it should guarantee success or offer modifiable successes in challenging activities; (c) it should present a unique experience in a different, non-competitive environment. Hence, the following also fall within the same category or share similarities: environmental education, outdoor education, leisure pursuits, recreation activities, and to some extent, sport.

Classifying Terminology

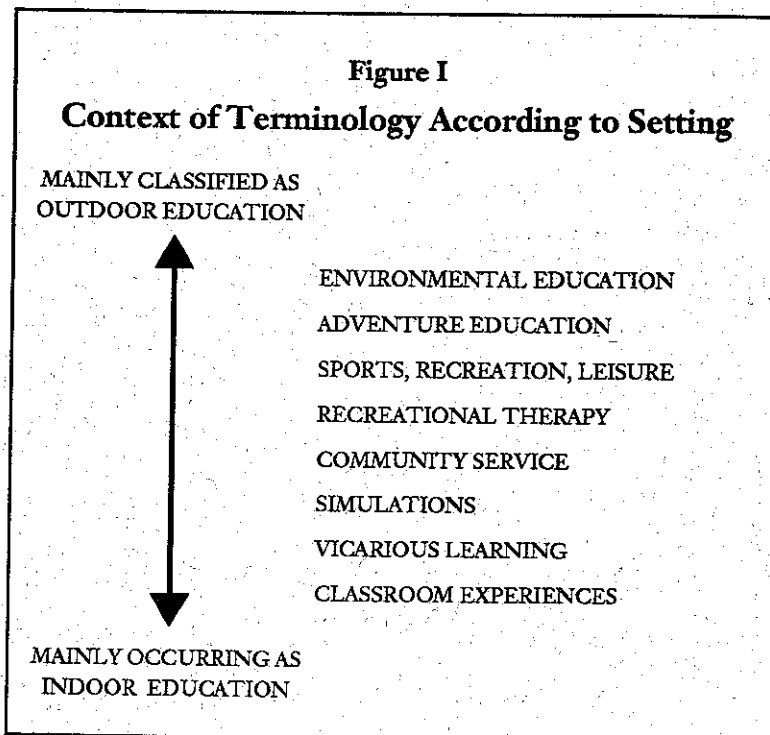
Figure I depicts a suggested model for conceptualizing how these terms are related in terms of setting. Outdoor education is somewhat of a misnomer because adventure and experiential education can occur in almost any setting. However, outdoor education appears in the literature as an umbrella term for outdoor sports, recreation, and adventure education, as well as environmental education.

Although there is some overlap between environmental education, adventure education and leisure, the main differences concern the focus. Figure II models these differences. People-centered activities occur at the left-hand side of the rectangle. Sports and leisure activities are concentrated at this end. The right-hand edge of the rectangle represents environmentally-centered pursuits. Everything else falls between these two extremes on the continuum. Adventure education lies near the middle of this model, favouring the people-centered pole.

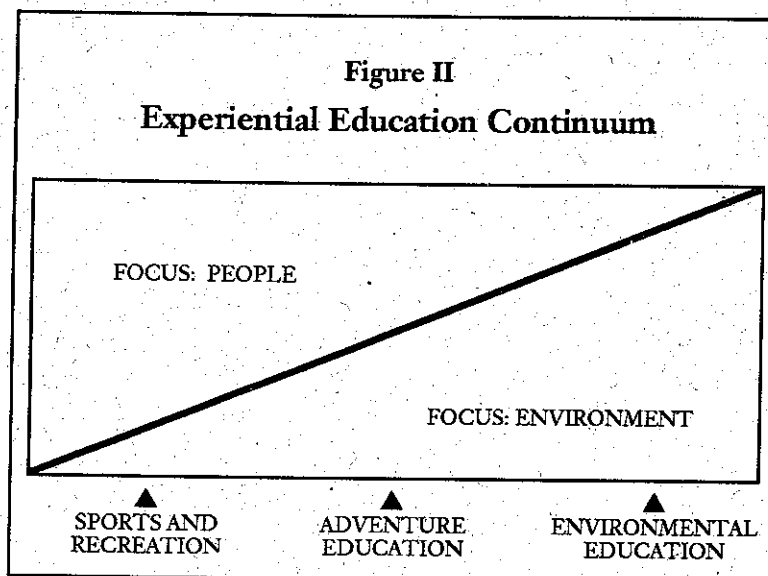
Some practitioners conceptualize Experiential Education as illustrated in figure III (Horwood, 1988). The circles of the Venn diagram represent three major fields: (a) psychology, therapy, counseling; (b) recreation, leisure, and sports; (c) education, curriculum, and pedagogy/heuristics. Experiential education resides mainly within the intersection of all three of these fields. Adventure education is a subset of this intersection. It should be noted that the sizes of the fields and subsets are not necessarily equal, and the limits represented by solid circles are mutable according to specific programming goals and time.

Conclusion

These three models and the associated terminologies are merely constructs developed by researchers and practitioners in aid of conceptual understanding. The

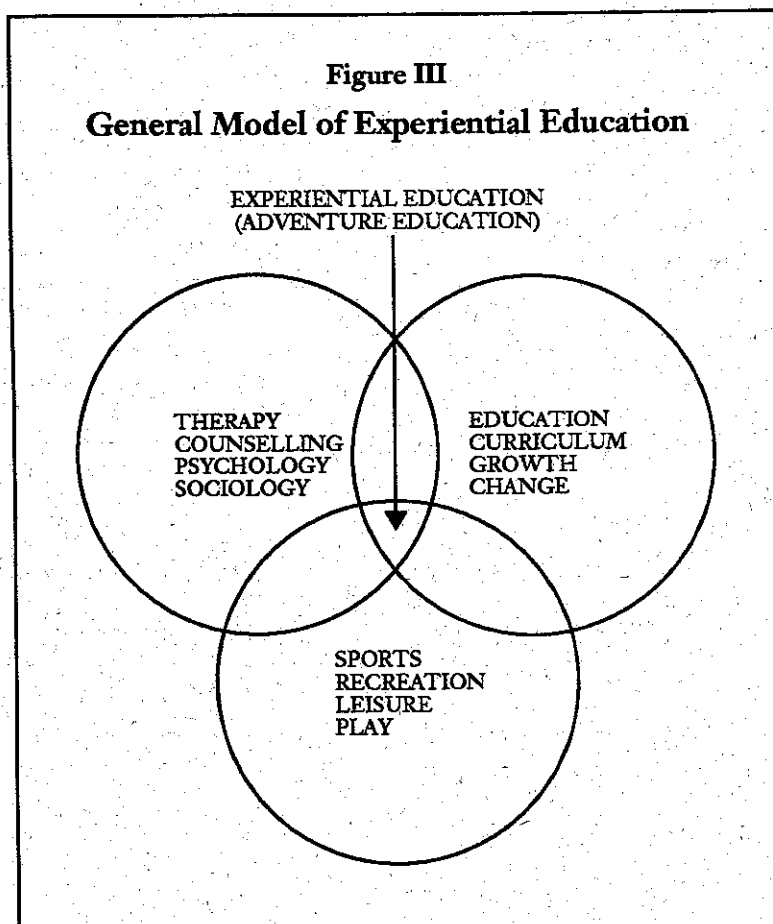


Note: Adventure education is characterized primarily by outdoor activity and is situated accordingly at that end of the spectrum presented above. Adventure education can also overlap with the other major educational approaches listed.

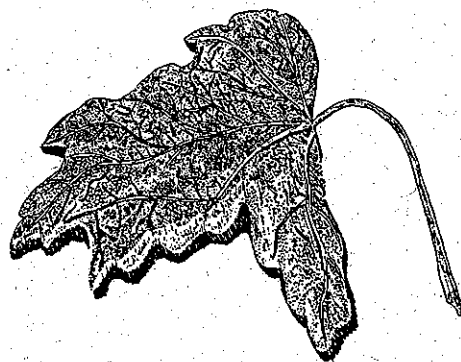


Note: The vertical axis on the continuum represents intensity of focus. The horizontal axis depicts the spectrum of experiential education activities which are classified mainly as outdoor pursuits.

Figure III
General Model of Experiential Education



Note: Adventure education is depicted as a subset of the intersection of the three domains shown. The boundaries between these fields, in reality, are less pronounced than implied.



boundaries and relationships between disciplines and fields are not, strictly speaking, that clear cut. It should be recognized that interdisciplinary boundaries are fuzzy, and that there is a natural tendency for all areas to overlap. However, educators should be consistent in their use or common term when possible. Clarity and precise formulation leads to better understandings.

Robert Chisnall is currently at the Faculty of Education, Duncan McArthur Hall, Queen's University, Kingston, working in the outdoor and experiential education programme.

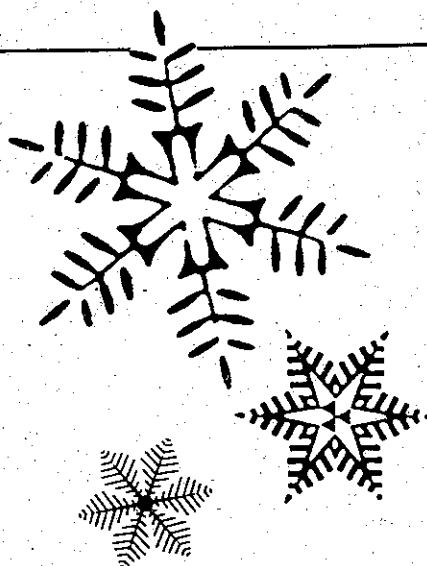
References

- Bacon, S. (1983) *The Conscious Use of Metaphor in Outward Bound*. Denver, CO: Colorado Outward Bound School.
- Ewert, A. (1986). *Fear and Anxiety in Environmental Education Programs*. *Journal of Environmental Education*, 18(1), 33-39.
- Chickering, A.W. (1977) *Experience and Learning*. Change Magazine Press.
- Horwood, R. (1988) *Personal communication*.
- Joplin, L. (1985). *On Defining Experiential Education* (pp. 117-120). Boulder, CO: Association for Experiential Education.
- Kraft, R.J. (1985) *Towards a Theory of Experiential Learning*. In R.J. Kraft (Ed.) *The Theory of Experiential Education* (pp. 4-35). Boulder, CO: Association for Experiential Education.
- Priest, S. (1986). *Redefining Outdoor Education: A Matter of Many Relationships*. *Journal of Environmental Education*, 17(3), 13-15.
- Quintal, J.P. (1988) *Ontological Emancipation*. *Holistic Education Review*, 1(3), 52-54.

Make Peace with Winter

A Winter conference primarily for Teachers

Sponsored by the
Council of Outdoor Educators of Ontario



Date: Friday, February 1st to Sunday, February 3rd, 1991

Location: Leslie Frost Natural Resources Centre,
Dorset, Ontario

Possible Sessions:

- Winter and Science • Cross Country Skiing •
- Winter Games • Natural Resources • Environment •
- Snowshoeing • Animals and Winter • The Arts •
- Education • Birding • Change •

This year at Make Peace we will be exploring changing attitudes, actions, philosophies, opinions, ideas, etc.

Fees: \$150.00 Members \$140.00 Full Time Students

This fee covers registration for sessions, accommodation, all meals and snacks, skiing fees, prize draws and all social activities.

Registration Form

Please fill out a separate registration form for each participant.

Please enclose your fee and mail it to:

Allyson Kelly
Make Peace with Winter
Leslie Frost Centre
Dorset, Ontario POA 1E0

No postdated cheques, please.

Cancellation: We have a cancellation policy that is stated on your acceptance letter. Please write or call Allyson Kelly at The Frost Centre (705) 766-2451 between 8 a.m. and 5 p.m. as soon as you are aware that you cannot attend the conference.

COEO Conference • Make Peace with Winter 1991

Name _____ Male ☐ Female ☐

Employer _____ Membership # _____

Home Address _____

Telephone (H) () (B) ()

Accommodation is two per room. If you have made arrangements to room with another attending the conference, please indicate their name: _____

Can we give out your telephone number if someone needs a ride? Yes ☐ No ☐

How many years have you attended Make Peace? _____ Is this your first year? Yes ☐ No ☐

University of Alberta Explorations as an Ecological Education

by Harvey A. Scott
Professor, University of Alberta

"All group members prepared contact period clothing and equipment."

Canada's remarkable and varied outdoors environments offer teachers from many Canadian Studies interests and disciplines wonderful opportunities to excite and enrich their students learning experiences through active travel ecological education programs. Traditional lecture, laboratory or library-based programs can be complemented and brought alive by experiential learning journeys which actively re-enact historical passages, rediscover ancient human habitations, study ecosystems in the field, critically examine environmental impacts in the field, or discover Canadian literature or other artforms first hand in nature, with all of the human senses tingling in direct contact with landscape.

Explorations is a senior year one term practicum opportunity for outdoor environmental education leadership students to work as a team to research, plan, expedite, lead and document a series of three or four extended outdoor environmental education adventure expeditions. These fourth year physical education students bring three and a half years of cognate and professional courses to the Explorations group. Usually about one third of these courses will be options taken in various arts or sciences which will provide them with somewhat of a minor concentration and/or a reasonably broad environmental studies background. With this disciplinary background each exploration team member is expected to serve as researcher, guide and interpreter of that particular environmental field enroute.

Over the ten years we have been operating the programs, our students have studied a great variety of Western Canadian trails and environments. Our 1981 group included in their agenda an August canoe

trip from Ft. Vermilion, Alberta to Ft. Smith, N.W.T. and in January, a snowshoe trek from Ft. Chipewyan to Ft. Smith. These outings in the same school year allowed them to retrace the steps of Franklin and MacKenzie, amongst others, and to get involved in the environmental impact assessment of proposed hydro dams to be located at prime Pelican nesting sites on the Slave River near historic Ft. Fitzgerald, Alberta. A key ecological experience was to visit and interview the native trappers along the routes, to understand their lives and the potential impact of the dam. All group members prepared contact period clothing and equipment for the snowshoe hike and were given a community reception in Ft. Smith on their arrival.

The 1985-6 crew participated in centennial celebrations with Banff-Jasper towns and parks, complete with support from the Canadian Geographic Society with which they researched and retraced the prehighway routes from Jasper to Banff on touring skis. A highlight of this trip was an oral history done with elderly Norwegian Canadians who had guided on this route in the 1920's and 30's.

The 1986 crew got heavily involved in the Meares Island logging environmental conflict and highlighted the end of their student days with a May sea kayaking exploration of the area. While in the Meares Island area they carried out a small interview survey of logger, environmental advocates and native views on the proposed timber harvesting. Another highlight was an experience with native ritual and spirituality.

From a social organizational point of view, explorations team development has

been perhaps both the biggest challenge and the greatest accomplishment of the programs. From the beginning, the organization and structuring of group and leadership has been left primarily to the students.

An indirect, non-authoritarian leadership style has become the preferred mode for most explorations. The teams choose to organize themselves year after year into a non hierarchical, egalitarian, social anarchistic team. Like the nomadic Dene hunting group or the ideal "social ecological" community conceived by Murray Bookchin, the groups gradually evolve a "libertarian and communitarian group culture" embodying the ecological ideal of unity in diversity. Generally cooperation and mutual aid predominate over competition, and decisions are almost always made by consensus — everyone has to be able to literally live with each decision. Such consensus is often hard won after long hours of give and take.

We use the word "Explorations" to describe our programme for a variety of reasons. We see the search for knowledge of the human as explorer as the most useful model of a proactive learner exploring relationships with her/his environment for understanding. It is the root image of the active learner in an ecological educational experience. We put emphasis on self understanding, group process and adventure/study on the trail. However, the central focus is always the lived experience of life on the trail.

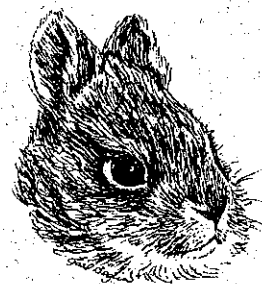
In Explorations, we hope the Explorer realizes a clearer, truer vision of who she/he is within the human community, as a

Canadian, in terms of Alberta as home and bioregion and ideally as an ecological self. These aspirations for the Explorer seem to be met regularly to varying degrees. Most develop a truer and more empowered sense of self out of the years experience. This is not the macho sense of self esteem the victor might acquire in a traditional competitive learning environment but rather one rooted in the knowledge that the travellers had contributed mutually to important tasks necessary to the community's well being.

Perhaps the most widespread self realization is the sense of awe and understanding the participants get in realizing the magnificence of Canada, its ecological diversity and beauty, and the Canadian cultural experience of the aboriginal and pioneer Canadians. It is very hard to take your country for granted after you've travelled, as our 1989 crew has, by canoe from the Rockies to Old Fort William and encountered endless portages, pulpmills and power dams. Certainly all travellers develop a deep and abiding wonder and respect for themselves as biological beings. Some may even approach realizing our goal of a deep ecological self, so critical if we are to save ourselves and our planet. However, to hope to more fully achieve this deep ecological self we have a lot more work to do.

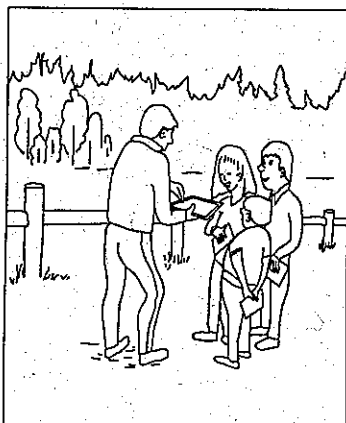
Harvey Scott coordinates the University of Alberta's Exploration Programme, now in its 10th year. He is lovingly known as Dr. Vague to those students who begin their explorations with themselves.

"The teams organize themselves into a non hierarchical, egalitarian, social anarchistic team."



Environmental Youth Alliance

The Environmental Youth Alliance held their 3rd annual conference Nov. 2-4 in Ottawa. Forty high school volunteers organized the event for over 600 students from across the country. Participants were mainly high school students but elementary and university students were also present. A large contingency came from B.C. where the Alliance had its beginnings. For more information about Environmental Youth Alliance, watch for conference reports from a COEO members Grade 6 class in Lincoln County.



Wilderness Canoeing Symposium: Central Arctic

Jan. 25-26, 1991

This years annual slide-fest gathering for Canadian northland enthusiasts will rendezvous at Monarch Park Collegiate, Toronto. The northern region to be considered will be the Central Arctic, from the Thelon River to the Arctic Coast, from the MacKenzie River to Hudson's Bay. Rivers to be highlighted will most certainly include the Horton, Back Coppermine and Burnside. The simple and well-tested format allows each presenter thirty minutes to address the full house of up to 600. Between Friday evening and all day Saturday, up to 20 presentations will be shared. The audience tends to be as eclectic and eccentric as the presenters who will cover topics ranging from wildlife, flora, history, literature, art environmental/political issues and, not to forget, the forever loved canoe travel account. It is the canoe trip that serves as the glue that binds speakers and audience alike. Previous regions featured included Labrador, the Far Northwest and Northern Ontario. Among this years speakers will be Jim Raffan, who will address his recent book *Summer North of Sixty* reviewed in the last issue of *Pathways*. For more information or to register, write Symposium, P.O. Box 211, Station P., Toronto, Ontario, M5S 2S7.

Orienteering Instructors Course

On Saturday, April 20, 1991 and Sunday, April 21, 1991 at the Jack Smythe Field Study Centre just north of Terra Cotta, an Instructors Course in orienteering will be run by Mark Smith and Christine Kennedy. The seminar will cover all the basics and participants will be eligible for an Orienteering Instructors Certificate. A maximum of 20 people will be accepted. Contact Mark Smith (416) 665-5817 fax (416) 665-9892 for more information.

Internship Positions Available In Resident Outdoor Education

Northern Illinois University Outdoor Teacher Education Faculty has openings for qualified individuals interested in pursuing a M.S. Ed. degree program with a major in outdoor and environmental education. Interested person will hold a Bachelor's degree and have teaching experience. The university will supply housing, meals, \$355 per month stipend, and a tuition waiver for three consecutive semesters. Positions begin in the fall of 1991. For further information write or call, Dr. Morris (Bud) Weiner, Taft Campus, NTU, P.O. Box 299, Oregon, IL 61061 (815) 732-2111.

The Sixth International Earth Education Conference

May 1-5, 1991

The Institute for Earth Education is holding its Sixth International Conference at Star Lake in the Adirondack Mountains of northern New York. This conference will bring people from around the world to experience Earth Education programs, learn how to create their own earth education programs and be part of a network of educators dedicated to a better understanding of the natural world. For more information write The Institute for Earth Education, Box 288, Warrenville, IL 60555, USA (708) 393-3096.

International Conference on Science and the Management of Protected Areas

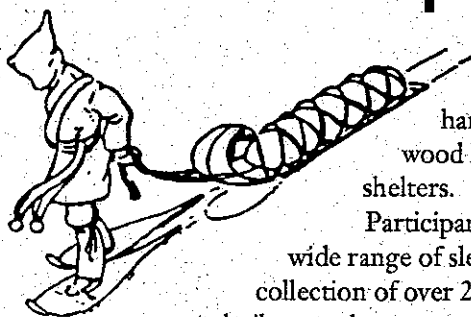
May 14-19, 1991, Wolfville, Nova Scotia.
For information contact: Neil Munro,
Director, Policy Planning and Research,
Canadian Parks Service, Atlantic Region,
Environment Canada, Historical Proper-
ties, Halifax, Nova Scotia, Canada, B3J 1S9.

Interested in Starting an Oak Ridges Hiking Trail?

Hike Ontario and the Metropolitan Toronto Conservation Authority are in the initial stages of negotiations to organize an Oak Ridges hiking trail. If you are interested in assisting Hike Ontario with this project call: Jill Leslie (519) 821-2133.

Traditional Winter Travel and Camping Workshop

A workshop on traditional winter travel by toboggan and snowshoe will be held **Friday evening January 11 to Sunday afternoon January 13, 1991** at the Leslie M. Frost Natural Resource Centre, Dorset, Ontario. The workshop leader will be Craig MacDonald, Recreation Specialist, Frost Centre. This workshop is sponsored by the Council of Outdoor Educators of Ontario, Northern Region and costs \$225 per person which includes meals, accommodation, the use of specialized camping equipment, displays, handouts, and expert instruction. An optional field test and written exam for certification will be available at the end of the course for an additional fee of \$25 payable to Mr. MacDonald. 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 15 paid registrants will be accepted. To register, fill in the form below and mail, along with a cheque or money order to: *Ms. Jan Heinonen, Council of Outdoor Educators of Ontario, P.O. Box 517, South River, Ontario, P0A 1X0*. For further information contact Jan at (705) 386-0580 (H).

We believe that this course is the best ever offered concerning this rapidly expanding outdoor field. Out-of-Province participants are welcomed!

Traditional Winter Travel and Camping Workshop — January 11-13, 1991

Name: _____ Male ☐ Female ☐

Mailing Address: _____

Telephone: (H) _____ (B) _____

What is a Garbage Monster?

by Joan Hodges
Shanty Bay, Barrie, Ontario

*"We stuck
with used
chewing gum
when
available."*



Last summer I made a commitment to begin teaching something about the environment in my family studies program. I had no idea what I would do, but promised I would have something to share next summer. Little did I know what I was getting into!

The second week in September I decided to try a "Garbage Monster". I turned the garbage pail upside-down, stacked several empty cardboard boxes beside the blue box and instructed students to stick any garbage (anything not recyclable) on the box. We "stuck" with glue and with used chewing gum when available (actually, masking tape and scotch tape work better.)

As an awareness exercise, the project was excellent. The most surprised person (of course, you guessed it) was... me! I was horrified to see my carefully prepared handouts stuck on by the dozens — some with a few words written and crossed off, some simply discarded. Student instruction pages, paper patterns, recipe pages and notes, along with a wide variety of packaging materials were exposed for all to see, while Kleenex tissues and paper towels were stuffed inside for hygienic reasons. The students were interested and involved in the whole process.

Some of the packages began to fall off... the monster was shedding! Some of the students began to feel uncomfortable with the monster in the room. The Grade 8's introduced their Primary Partners to the monster and asked them to help name it. Some of them made a face for it, other wrote stories about it. They all wanted to know where it went when it finally disappeared. (to where all good garbage monsters go).

The lessons I learned included: everyone has habits which need to be changed for the good of the planet. Handout pages which use both sides of the page and incorporate the student's assignment and journal are valued and kept more often than discarded.

Students must learn to cross out mistakes neatly, not take a fresh page. Students will follow the routines outlined if you set a good example.

Every classroom needs a scrap paper box AND a paper recycling Green Box. Students are eager to teach other students, especially younger ones, things they have learned about making a difference to the environment.

We repeated the Garbage Monster for Earth Day at Steele Street Public School in Barrie, Ontario. Unfortunately, we almost had a disaster on our hands when the media arrived to shoot the monster: the Environmental Council had worked so hard on awareness events leading up to Earth Day that we had very little garbage on the monster! We realized that we should have had a "before and after" monster display to show the effects of our consciousness-raising activities. Our garbage had decreased by 80%! The TV news report explained that Reading, 'Riting, and 'Rithmetic had changed to Reusing, Reducing and Recycling. They filmed the poster contest and the lunch bunch recycling and composting the leftovers. At the end of the day, Tiffany, the Grade 8 Environmental Council Chairperson, said it all: "It was great... it was so exciting to show everyone that kids really can do something to make a difference in the world."

(Printed with permission, *Green Teacher* (416) 960-1244, August 1990)

Learning to Write; Writing to Learn

by Bert Horwood

There is a formula for writing which urges the writer to gather all the material related to the topic, organize it, identify major and minor themes and finally, write. This method of doing it has the writer learn the material first and write about it last. It is a very effective method, and none the worse for being widely used by professional writers and students alike. Teachers who want to help students improve their writing frequently teach this method. I call such instruction "learning to write".

In school, the learning to write model means that student writing is a summary of the learning that happened earlier. The writing is the terminal product. It reveals the quality of the preparation as well as the quality of the expression. The orientation is on writing as reporting. There is much literature on ways and means of helping students to do it well.

There is a smaller but growing literature which describes the reverse relationship between writing and learning. I call this "writing to learn". It is the research and instructional reverse of learning to write. Here there is no need to gather, sort and organize information before writing. On the contrary, writers are encouraged to respond as immediately as possible to their experiences. The responses may be jottings or lists, poems or letters, dialogues or anecdotes, sketches or maps. The rough and dirty written response to experience is central to the process of learning from the experience rather than being the terminal report of the experience.

This method of learning is relevant to outdoor education and has been systematically explored by a number of researchers who are also practitioners. Ian Sykes

teaches elementary grades in a Calgary Community school. He describes a progressive method of taking children outside, first near the school, then further and further afield, with a variety of journal writing going on during and after each experience. The early writings are shared among students and teachers (teachers are expected to write, too, in Sykes' school). Emphasis is on appreciation and meaning. In this way students build a journal which documents their experiences and shapes the learning they made from them.

In the U.S. college context, Peter Beidler reports striking improvements in student writing when it was based on challenging out-of-school experiences. In one case, his students spent a week-end at a honey farm. In another case, they participated in ropes course adventure activities; in a third, students renovated an old house as part of an English course in the literature of self-sufficiency. In all cases, journals provided a vehicle for learning by writing. It is clear that journal entries are a method of learning. Writing, in some form, is the commonest mode of journal entry, although art work, music, and scrap book style inserts are also used. When writing to learn, as in a journal, is extended over time, there is evidence that surprising and unexpected discoveries are made. This is learning that could not happen in the gather and sort mode. For example, Jim Raffan and M.J. Barrett report that people on an expedition who kept journals, showed strong shifts over time to expressing a new relationship of identity with the land in which they were only visitors.

There are two messages in this work for outdoor educators. The first is that there is research support for using writing

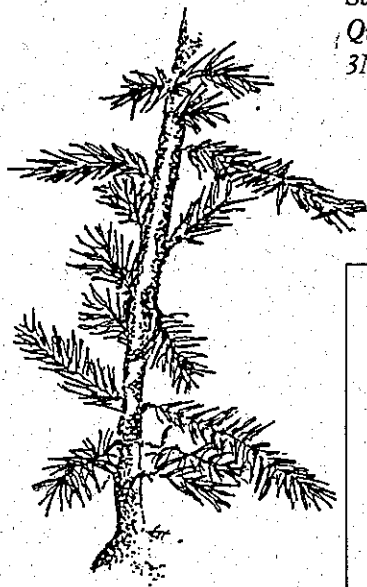
"A journal documents experiences and shapes the learning."

in Journal formats to help promote learning from outdoor experiences. This does not devalue the use of writing as the terminal product of prior learning. In fact it enriches the body of learning available for the more common mode of writing. The second message is that teachers themselves may find keeping a journal to be a very powerful reflective tool for inquiring into their own work. If students can learn from writing, so can teachers. To be blunt and bold, journals are a form of research tool easily accessible to practitioners.

Bert Horwood welcomes contributions of research reports and ideas for this column. Send them to him at the Faculty of Education, Queen's University, Kingston, Ontario, K7L 3N6.

Sources

- Beidler, P., Kraft, R & Kielsmeier, J. (Eds.) *Experiential Education and the Schools*. Association for Experiential Education, CU Box 249, Boulder CO 80309.
- Raffan, J. & Barrett, M. (1989). *Sharing the Path: Reflections on Journals From an Expedition*. *Journal of Experiential Education*, (12)2, 29-36.
- Sykes, I. (1987) *Time, Place and Community: Ingredients for Good Writing*. *Journal of Experiential Education*, (12)2 10-13.



Protecting Environment is a \$2-Billion Industry in Ontario

Environmental protection, according to a recent survey, is a \$2-billion industry responsible for 28,000 jobs in Ontario. This places it on par with the clothing and wood products industries. The survey covered 1,800 firms involved in the supply of environmental goods and services. Areas covered were air pollution, wastewater treatment, solid waste disposal, recycling and the monitoring of environmental data. Since 1983 the growth rate of these industries was

between 17 and 32 percent per year. When asked what areas were most favoured by government policy, the environmental protection regulations were cited. Unfortunately, it was also noted that, by following the American model for regulations, Ontario was limiting the possibility for stimulating environmental protection products that could be exported to the United States.

D. Hitchmough

Ethical Environmental Economics

By Mark Whitcombe

Economics and the Environment: A Reconciliation

Block, W. (Ed.) (1990). Vancouver: Fraser Institute.

The Green Capitalists: How Industry can make money — and protect the environment

Elkington, John, (& Burke, Tom.) (1989). London: Victor Gollancz

"The 'environment' is where we all live; and 'development' is what we all do in attempting to improve our lot within that abode. The two are inseparable."
(*Our Common Future*, p. XI.)

Environmental conservation and economic development are inseparably linked. Elkington's book, *The Green Capitalists: How Industry can make money — and protect the Environment*, is one statement of that view. Another is a recent Canadian book edited by Walter Block, *Economics and the Environment: A Reconciliation*. However, these books present differing views of the relationship between economics and the environment. Block's book comes from the Canadian conservative business and economics establishment. Elkington presents a view, somewhat new to environmentalists, that it really is OK to 'get into bed with capitalists', that there is a valid greening of the corporate world, and that by working with capitalists in an integrative manner, suitable solutions to our environmental problems can be found. I would have liked to have found a thoroughly "green" view of these topics. However this is the widest spread I could find.

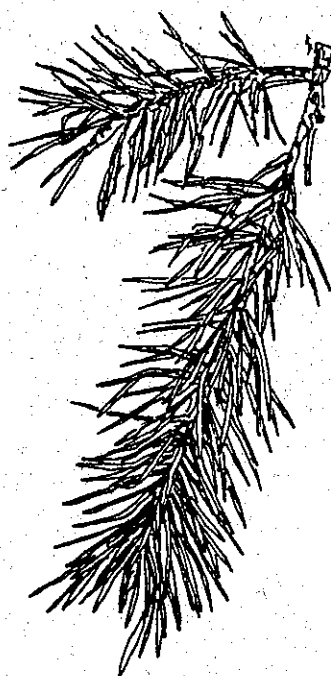
Can Industry make money — and protect the Environment?

In *The Green Capitalists: How Industry can make money — and protect the Environment*,

Elkington points out the need for new bridging institutions to narrow the polar partisan gaps that often develop between environmentalists and government / industry — highly politicized gaps that often prevent reasonable discussion. He states "There is a growing willingness on the part of many people in the environmental lobby to work with industry to resolve pressing issues in such a way that development can proceed, while the environment can be protected or even enhanced." (Elkington, p151) He distinguishes between environmentalists who are *polarizers* and those who are *integrators*. The integrators "attribute environmental damage not to unalterable selfish attitudes and interests, but to defects in scientific analysis, in appraisal of costs and benefits, and above all in education and training which can be and should be remedied, especially in the ranks of many large economic agencies, both public and private." (quoted from Max Nicholson, WWF founder, *ibid.* p158) Conflict between environmentalists and capitalists is seen as a temporary aberration, with consensus as a much more normal manner of settling conflicts in a society whose natural condition is a sort of equilibrium. "Environmentalists are moving from reaction to action, from analysis to synthesis" (*ibid.*, p23) "Private ownership and private enterprise, far from being endangered forms of

"need for
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environmentalists
and government/
industry"

*"Environmentally
unsound activities
are ultimately
economically
unsound."*



economic activity, are playing an increasingly important role in the transition to more sustainable forms of development." (*ibid.*, p85)

Partly for writing this book, partly for writing *The Green Consumer*, (cannot a green admit that we all are, in fact, consumers, no matter how green our actions?), and partly for becoming a consultant to industry, Elkington is seen by some greens as a sellout to the capitalists, and not really a true green. He is seen as condoning consumerism, rather than being stronger in promoting a new and fundamentally different lifestyle. Elkington, himself, uses the phrases "watchdog becomes lapdog" and "green quisling" to describe the reactions of more fundamentalist greens to others of his ilk, and I think pretty clearly he feels the term is being applied to him. But I think he is also aware of the potential pitfalls of his approach. "When future generations look back at this period of economic history, they may well conclude that we ... were seduced away from sustainable development by the bright lights of consumerism." (*ibid.*, p84)

Elkington shows considerable sympathy towards the views and methods of private industry. "Environmentalists no longer have the monopoly on environmental thinking" (*ibid.*, p23) "Private industry is among the largest institutions in most countries, commands the most resources, moves the most quickly and flexibly, is the least bound by traditional structure or ideology. It is the engine of wealth creation. It has learned the rule of the marketplace — change or die. The times call for massive change, and business knows how to manage change." (Bruce Smart, former chairman of the Continental Group) (*ibid.*, p72) In many cases, *The Green Capitalist* seems to be a presentation of the industry side, replete with facts that seem on the surface to be marvellous examples of industry's environmental ethic,

but which on closer inspection, are, to say the least, somewhat suspect. For example, the justification of plastic bottles for airline liquor, instead of asking surely the greener question: Why is anything necessary, other than one big bottle, out of which drinks are poured, just as in any other bar? In fairness, industry has in many cases made significant responsible environmental changes to pressures that in part do come from environmental concerns and that are driven by standard free-market economies, e.g., Rolls-Royce and jet engines.

Yet, Elkington is not all blind. "There is no denying that market pressures have encouraged many companies to 'externalize' a significant proportion of their production costs by imposing them on their workforces (with, for example, unsafe working conditions), on local communities (for example, high noise levels), on consumers (for example, defective products based on inadequate research or quality control) and on the environment (for example, pollution)." (*ibid.*, pp14-15) And, "Environmentally unsound activities are ultimately economically unsound." (*ibid.*, p15)

Many of his points have a good deal of merit. He argues that environmental protection and sustainable development have to be presented to industry in such a way that it is seen to be a real, commercially viable option for business. "Out of enlightened self-interest, business is likely to become involved in social problems concerned with the environment." Robert Anderson, Arco President. (*ibid.*, p165) However, is that "likely" enough, or is legislation with teeth required to add motivation? Can industry be expected to regulate itself, or does it require means of regulation in order for it to behave sensibly? One of the problems with the free-market approach to the environment is that environmental problems are indivisible, being transboundary in space and

intergenerational in time, while market forces operate much more in response to artificial boundaries. Broader (green) costs of particular environmental decisions must be borne by developers and it is crucial that the economic time scale is much lengthened to reflect "biospheric" time, as exemplified by the quote: "We do not inherit the planet from our parents and grandparents, we borrow it from our children and grandchildren." Thus various forms of government regulation need to be used to replicate incentives and outcomes of a perfectly

functioning market economy. This regulation should allow maximum freedom for industry to respond, rather than imposing 'ready-made' solutions.

Two worthy points from the book need to be acknowledged here. One of the main themes running throughout the book is the role of environmental action groups in forcing both government and industry to move faster, (indeed, move at all, in some cases.) Elkington details many examples of the role of environmental groups in pushing governments, corporations and indeed

*"Environmentalism
is repeatedly put
down as a rich
man's cause."*

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"...a very clear statement of the need for values education."

whole sectors of industry to make significant and fast changes in policy and practice, e.g., CFC's and Friends of the Earth, and Greenpeace and the European chemical industry.

The second is the quote from Ian Blackwood (of the Oil Companies International Marine Forum) that "the ultimate challenge is to have all personnel identify with environmental protection objectives. Human conduct is the least amenable for legislation." (*ibid.*, p92) This is surely a very clear statement of the need for values education!

Economics and the Environment: A Reconciliation?

The other book on the topic of environmental economics is *Economics and the Environment: A Reconciliation*, (1990), edited by Walter Block, and published by the Fraser Institute of Vancouver. This body is an independent Canadian economic and social research and educational organization, with the objective of redirecting public attention to the role of competitive markets in providing for the well-being of Canadians. Completely free markets — strict laissez-faire economics — in a libertarian society are the goal of this conservative think-tank, with a much reduced role being given to government. This book, downright scathing of environmentalist thoughts and actions, is therefore an interesting contrast with *The Green Capitalists*.

The discipline of economics rests, in part, on evaluative assumptions, which many economists seem oblivious to. These Fraser Institute economists are conspicuously blind to the existence of their own values. I find this lack of acknowledgement of the very existence of their values one of the most frustrating things with this book. It is one of the most blatantly value-laden books I have ever read. The values

of the authors are never considered, but always right, and the values of their opponents are always wrong and often run-down in the most scurrilous of manners. Environmentalism is repeatedly put down as a rich man's cause — as if their brand of thought is any less so!

Their blatant anthropocentric view is never explicitly admitted, let alone questioned. Their ultimate goal is to "maximize consumer wellbeing" (*The Economics of the Consumer Society*, Chant, McFetridge, and Smith, p18) Furthermore, their "fundamental objection to the entire conserver scenario is that it is based solely on value judgements. More importantly, it is based on value judgements not shared by the majority of Canadians." (*ibid.*, p17) This last quote could equally apply to their own position! And both points therefore are not sufficient to preclude either position.

The view of environmental problems is very narrow. Pollution is really the only problem dealt with in much of the book. "Pollution is no more than a standard resource allocation problem that can be analyzed with the traditional tools of economics." (*The Economics of the Conserver Society*, Chant, McFetridge and Smith, p61) Intergenerational rights and equity are treated only as possible profits for a landowner to realize by conserving his land for the higher price some future generation might pay. Intergenerational rights (called "self-interested redistribution" and "feigned altruism" by Borchering, (*Natural Resources and Transgenerational Equity*, p95)) are thus merely values linking a potential profit situation and a profit. The maintenance of biological diversity and the reversal of the plight of endangered species are seen as only market potentialities for someone to capitalize on, in the manner of the Texas rancher with his fenced-in rhinos.

The repeated solution in *Economics and the Environment* is to move to a com-

plete free-market economy first, together with the establishment of very broad private property rights. Then the best solution, both economically and ecologically, will come about. "The two [Environment and Ecology] are intellectually indistinguishable as far as our dealings with nature are concerned — but only if all costs are taken into account." (Walter Block, *Environmental Problems, Private Rights Solutions*, p289)

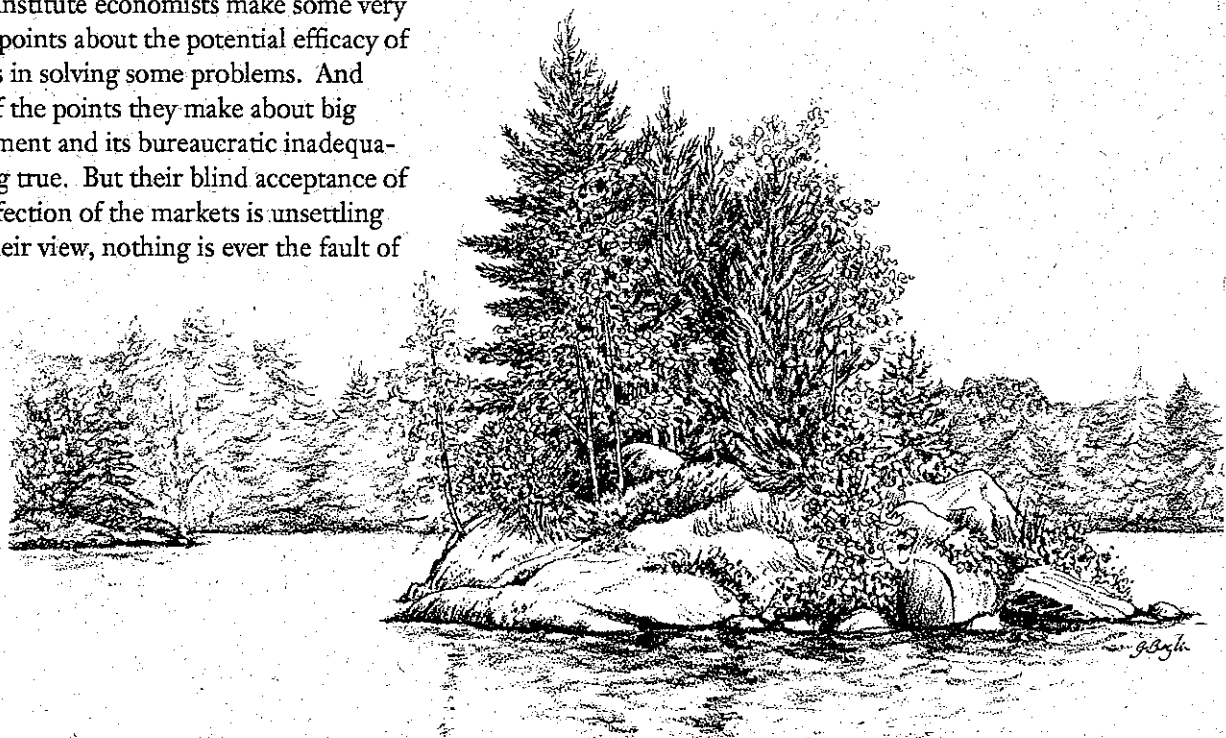
Block advocates a strict system of costs-benefits analysis. In the case of the Valdez oil spill, he wishes that the complete costs of the damages be borne by Exxon, as the responsible party for the perpetration of the disaster. Under his proposed scheme of full responsibility, the economic system should reflect the true and total costs of alternative activities.

Pulling Together the Commonalities
In many ways the free markets advocated by the authors of this book have some strong points. As Elkington says, and these economists would agree, a free market can respond very quickly to changes. And the Fraser Institute economists make some very cogent points about the potential efficacy of markets in solving some problems. And some of the points they make about big government and its bureaucratic inadequacies ring true. But their blind acceptance of the perfection of the markets is unsettling — in their view, nothing is ever the fault of

a market or one of its agents, and governments are always the cause of market failures because of their interventions which invariably interfere with the way the market will ideally operate.

Yet the point that any commodity must reflect its true and total costs is similar to the strict green view. The difference relates partly back to the fundamental difference between anthropocentrism and biocentrism: what things are of value?, and partly to the manner in which conflicts are to be decided. The Fraser Institute economists don't consider anything other than the preferences of humans to be of value, and a strict utilitarian costs-benefits analysis based on that narrow assignation of values as the means to satisfying that end. In a view in which the integrity of the biosphere is the highest value, assigning relative values is enormously more difficult, because there are so many more complex entities to value. And there is no one view of settling conflicts in a biocentric view.

"...blind acceptance of the perfection of the markets is unsettling."



My Desk is Under My Bus Seat

By Zobe (Liz) MacEachren
Graduate Assistant AEI Bus #2

*"Trying to bug
a Sequoia!"*

The school I attend is about as experiential and outdoors as a school can be. It is definitely very unique. For instance, my school is under my seat in the form of a box filled with paper, clipboards and pencils. My bed (sleeping bag and foam pad) is above my head on a shelf. I make extensive use of a library at the back of the bus which rests above the kitchen coolers and stoves. My classrooms are wherever a road goes, the hiking trail wanders or a paddle can take you to.

Teachers are all the people we purposely seek out or coincidentally meet along the way as well as the busmates you sit beside. The school I am attending is called the National Audubon Expedition Institute, AEI for short. I am especially excited about attending school this fall as the bus I am on will probably be coming to Ontario. It will be the first AEI visit to this area, as past visits to Canada have been limited to the east coast provinces.

Last fall I started my first of two years in AEI as I worked towards my Masters of Education with an environmental emphasis. I flew to San Francisco to meet twenty-one other people who I would join forming a consensus society for one school year. Everything is discussed and agreed upon unanimously; like what time breakfast will be served, to where we will go that day and who we will meet. There are two guides who drive the bus and make sure we follow the school rules. Their past experience with AEI means they may be turned to for guidance but they are not "teachers" in the traditional sense; just fellow bus members. AEI also has buses for high school, undergraduate and semester students. To be accepted at the school, you must first read a

book about the school, fill out an application and attend a personal interview. This ensures that you understand exactly how the school operates.

For each course I am enrolled in, I set up my own curriculum using some predetermined guidelines. Assignments are based on my own preferences. I may choose to write a log, set up an internship, or do a presentation for my busmates. For grades, we mark ourselves and get approval by our peers. It sounds easy but believe me it is not. It requires that you stand up and justify your thesis for every course and project. Fortunately, we get to sit in a circle and talk. You can expect some very honest comments for and against your work. This process also means that after all our experiences, we share our opinions. Twenty-one opinions can vary a lot when our backgrounds so diverse. As diverse, in fact, as social workers, computer specialists, graphic designers and biologists. With consensus I gain a well rounded view instead of the viewpoint of only one professor.

Over the year the bus I was on travelled from San Francisco to Louisiana and back to the Southwestern states. Here are a few of the highlights.

- Meeting a witch, raising magic, doing earth rituals and understanding stereotypes.
- A backpack trip in Yosemite and two excellent theatrical shows about John Muir.
- An Oregon Dunes backpack expedition and then meeting Carol Van Strum — a bio-toxic specialist, author and victim of forestry spraying.
- A walk in the Redwoods and then a

sawmill tour.

- Trying to hug a Sequoia!
- Learning to avoid cactus spines while hiking in the Anza Borego Desert.
- Participating in "A Council of all Beings" environmental education seminar.
- Dancing Mardi-Gras style in a small town accordion shop while twenty-one musicians jam Gumbo Soup!
- A canoe trip in the swamps, spotting my first alligator and hugging a Cypress tree from the canoe.
- Meeting a Voo-Doo princess and unravelling stereotyped visions again.
- Feeling hypnotized by Hopi Katchina dancers late one night as they danced for the earth in a kiva.
- Contra dances, contra dances and more contra dances.
- A sweat lodge and a Navajo medicine man.
- A geology discussion and my first look at Rainbow Bridge.

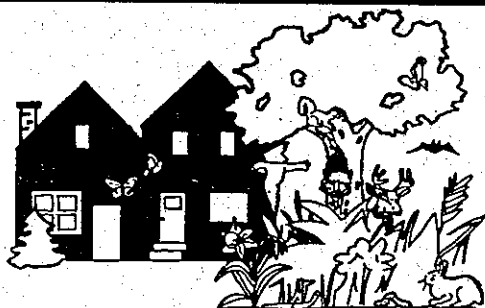
My list of highlights could go on. It is easy for me to get excited when I talk about my school. Mid-September this fall I will be meeting my new bus-mates for this year in

Milwaukee. The guides picked this staring location in response to a letter I wrote last year asking that they consider having a bus come to Ontario to explore some Great Lakes issues. Presently, I have a list of canoe trips and Ontario highlights ready to sell to the group. Hopefully, our group will then agree to visit some of Ontario's wonders.

So if you see a school bus with lots of backpacks on the roof, parked outside an organic food store, feel free to come by and talk. If we drive by you on the north shores of Lake Superior, then honk. Help me show AEI that Ontario is a wonderful province, full of enthusiastic outdoor educators and friendly people.



Zabe MacEachren is a graduate of Lakeheads Recreation Department. She taught in Northern Ontario communities and with McMaster's O.E. programme. Having completed her Masters with AEI, she now is a staff and rides the experiential learning bus. For more information regarding this interesting programme for High School and University students, contact: Northeast Audubon Centre, Sharon, Connecticut, 06069.



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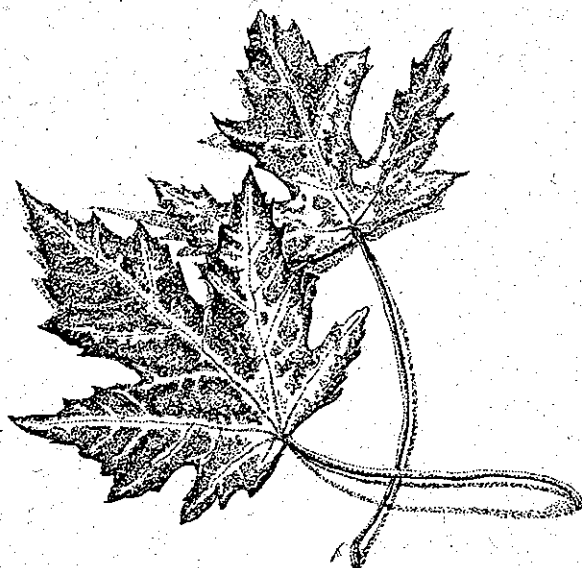
The Programme Committee invites contributions of ideas for speakers and format.

Continued from page 7

more teacher training on the techniques of teaching in the outdoors and teacher apathy towards conducting outdoor science classes, a more substantial body of research that verifies the benefits of outdoor education programmes must be compiled.

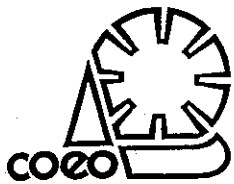
There is a need for outdoor activities in the curriculum. First-hand experiences in the out-of-doors stimulate positive student interest in the environment and may instill a deeper understanding of those areas of life science which are ordinarily read and discussed. In order to ensure that our students receive the benefits associated with outdoor science activities, educators must be willing to overcome the challenges associated with this teaching strategy.

John Bowyer is an environmental science teacher at Brock High School in the Durham region. His interests centre on the development of environmental attitudes and values.



References

- Babcock, W.J. *Outdoor Education Manual* (1970) The Ontario Teachers' Federation.
- Bain, R., *Teacher Education: Learning to Use the Outdoors*. In P. McFadden (Ed) *World Trends in Science Education* (pp 250-254) Atlantic Institute of Education, 1980.
- DeBlanc, J.J. *A Comparative Study of Science Academic Achievement of Senior High School Participants in an Outdoor Education Centre - St. Martin Parish*. Unpublished doctoral dissertation, McNeese State University, Louisiana.
- Hambleton, D.C., E. Wright, G. Doolittle & S. Burbidge, *Survey of Outdoor Education in Metropolitan Toronto*, Metropolitan Toronto School Board, 1970.
- Howie, T.R., *The Effectiveness of Outdoor Experience Versus Classroom Experience in Learning the Cognitive Dimensions of Environmental Education*. Unpublished doctoral dissertation, George Washington University, District of Columbia, 1972.
- McCormack, A.J. *Outdoor Areas as Learning Laboratories - CESE Sourcebook*, ERIC Clearing House for Science, Mathematics and Environmental Education. (1979)
- Peck, R.A. *A Study Comparing Outdoor, Indoor and Outdoor-Indoor Settings for Teaching Specific Environmental Objectives*. Unpublished doctoral dissertation, University of North Carolina, Chapel Hill (1975)
- Wood, J.K., *Take a Field Trip Close to Home*, *Science and Children*, 24, 26-27



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