

Pathways

Volume 4, No. 2
February, 1992

THE ONTARIO JOURNAL OF OUTDOOR EDUCATION



Pathways

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Correction

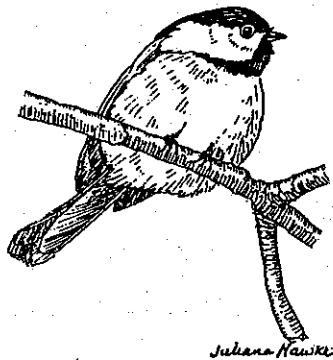
In the last issue we incorrectly credited a piece in the Opening The Door column. The hand piece was actually written by Heather Morein when she was taking part in the Earthlens programme.

State of the Art

Cover art and selections within from Juliana Hawke (see Sketch Pad, page 4).

Pathways is printed on recycled paper.





Pathways is the voice of COEO's membership—and that voice is continuing to grow stronger! In this issue we include a diversity of styles, approaches, and topics. Dave Dawe writes eloquently about his positive concern for COEO and how we can better “walk our talk.” Susan Sproul and Simon Priest clearly alert us with up-to-date information about ropes courses and standards. Mike Mulligan shares some thoughts on the thorny issue of research in the value of outdoor education experiences. Then acting as a foil to those sobering thoughts, Chuck Fraser gives a testimony to the value of a particular outdoor education experience. Larry Innes explores the philosophical aspects of this topic of values.

Other submissions by COEO members follow. Many of these writers have not been heard from in these pages before. For those submissions we are thankful. Others, such as Joan Thompson and Skid Crease, demonstrate for us the valuable

contributions our members are making, and can make in the future.

The next issue will be put together by Merrily Walker, with help from MJ Barrett. They are gathering submissions from students of all ages and abilities. I'm sure they would welcome any offerings you were able to provide! Just a reminder that the deadline for submissions for that student issue is early in February, shortly after you receive this issue.

The issue to come out in early April will include a variety of practical how-to-do-it pieces. For that issue, I need submissions from across the spectrum of COEO membership. If you have a practical lesson involving the outdoors, please consider sending it to me in whatever form you use it in. A good worksheet is at least as effective as a highly polished piece of prose when it comes to actually helping students experience learning outdoors.

If We Do It, It Will Happen!

Mark Whitcombe

Letter to the Editors

I would like to take this opportunity to compliment you on your recent issue of *Pathways*, Vol. 4, No. 1. The variety of articles that are presented, as well as the manner in which it is done, is of very high quality. There is something of interest for everyone regardless of one's involvement in outdoor education. *Pathways* has come a long way due mainly to the tireless efforts of Dennis Hitchmough and Carina Van

Heyst, as well as a superb editorial board. Thanks to all who have helped in its growth over the years. I am sure that if this issue is any indication, it will continue to be THE Journal of Outdoor Education for Ontario. Thanks for a task well done and keep up the good work. I am proud to put this issue on the coffee table for all to see.

John H. Aikman

Introduce Someone To COEO in 1992!

As a COEO member yourself you are familiar with the benefits of membership and the impact your association has had on your professional development. Take the challenge in the new year to add a new member to COEO!

To keep you up-to-date on what has happened in the past couple of months, let me draw your attention to communications and office space. Final preparations are being made to the new promotional/ membership brochure. The new brochures should be in circulation by spring.

As well, we hope to have the revised catalogue of outdoor education facilities and personnel in circulation by the spring. This database will replace the catalogue published in 1986. No price has been established as of yet.

Over the past several years COEO has had a travelling exhibit which promotes the mandate and services of the Council. It was agreed that revisions were needed to more accurately portray COEO and reflect the benefits of membership. Gina Bernabei (Eastern Region co-representative) has designed the new display. The Board will define a means of making the display available to members. We hope to have the display travelling again in the next couple of months.

Glen Hester, Barrett Greenhow, John Thorsen and Lloyd Fraser (Office Committee) have been studying the establishment of a permanent office for the Council. At the December meeting of the Board of Directors it was agreed by motion that COEO acquire an office in the Ontario Sports Centre, provided subsidized rents or grants are available for COEO's use. If our

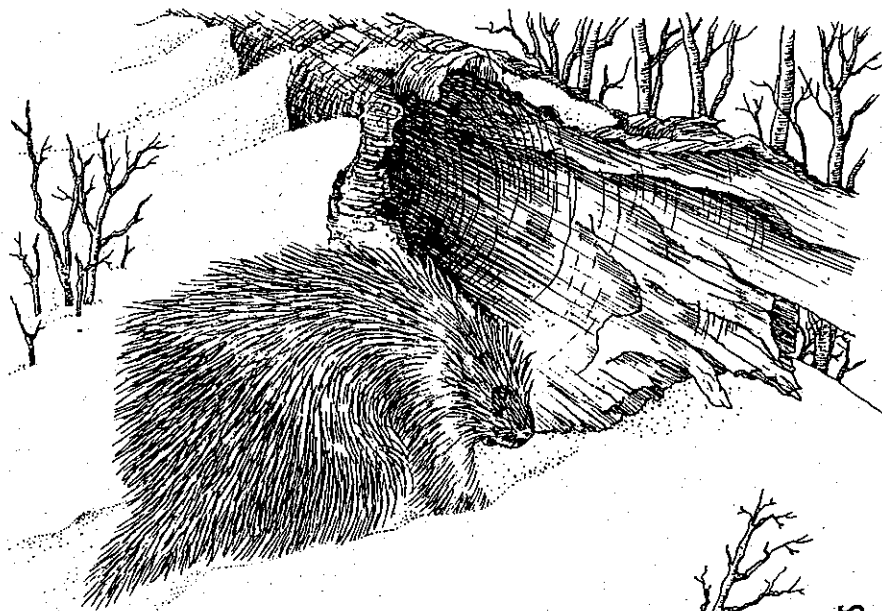
application for accommodation is accepted, COEO will be put on a priority list for space.

In the meantime the Office Committee is continuing the search for alternative office space in determination of the ideal arrangement for COEO.

The next meeting of the Board is scheduled for February. If you have an item of business you would like brought to the attention of the Board, please contact your regional representative or myself.

All the best in the new year!

Kathy Reid
President



Juliana Hawke '84

Juliana Hawke

Juliana Hawke is a freelance artist specializing in wildlife illustration, with a background in Biology and Fine Arts at Guelph. She has done displays for both Parks Canada and the Canadian Wildlife Service. She has illustrated the book *The Beaver: Nature's Master Builder* and provided the waterfowl drawings for the *Ontario Breeding Bird Atlas*. Her work includes pencil, pen and ink, and watercolour commissions. The drawings we have used in this issue were originally done for a local newspaper to advertise a local naturalist club's outings.

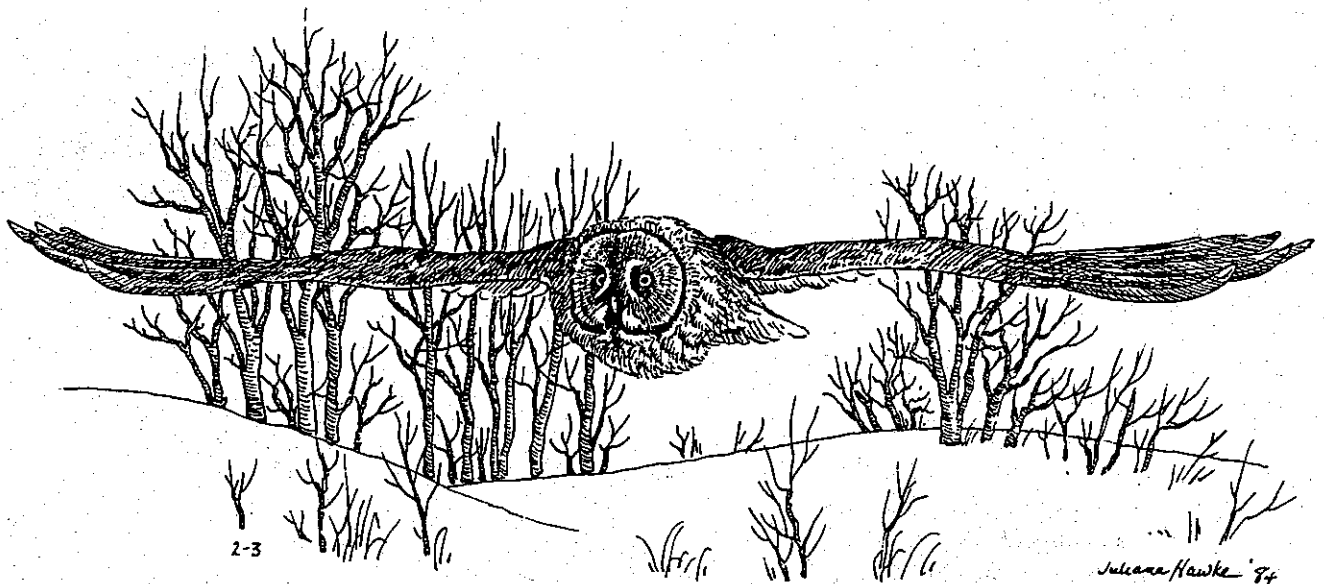
Julie runs the Barn Gallery in her home outside Coldwater. Her artwork and the

wildlife photography of her husband, Dave, can be viewed there by appointment. Much of Julie's time at present is given to raising their two young children, but she is looking forward to getting back to wildlife illustration in the near future.

Juliana Hawke, Barn Gallery, RR#4,
Coldwater, Ontario Tel. (705) 835-6213

As with other artwork that appears on the pages of Pathways, we ask that you recognize that the rights to use these drawings are given to Pathways, and that the artwork should not be used beyond the pages of Pathways.

The Editors



Effective Organizations and Environmental Literacy

by David Dawe

As outdoor educators much of what we do focuses on helping others become environmentally literate. The recent surge of environmental awareness has made this position a very popular one and people from other vocations come to us for advice and look to us for modelling. As individuals and organizations, we must look beyond the high profile aspects of environmental literacy — the 3 R's, etc. — and develop ourselves in the other, equally critical facets. At the COEO annual conference this past September, keynote speaker David Stokes asked us to think of something we do that holds us back from achieving what we want. If we look critically at ourselves, we will most likely find some fundamental behaviours that go against the things we are trying to achieve at individual and organizational levels. These behaviours have the capacity to greatly inhibit our effectiveness in pursuing the development of an environmentally literate society.

Over the past few years many outdoor education centres, schools and individuals have done much in the way of changing behaviours to become "green" role models. Some changes needed were easy, others difficult. Getting the whole organization to commit to double-sided photocopies, for example, is often harder than it first appears. Change always encounters some resistance. These changes to "greener" behaviour have, for the most part, been highly mechanical, with some shift in attitude coming about.

While all this is going on for the better, there is more to the development of an environmentally literate population than environmental activities. As an integral

component of an environmentally literate society, being able to cooperate and work collaboratively within our organizations and between organizations is essential. The complexities are too much for a single person or group to deal with. We know this and work hard at creating programmes to help our students learn the required skills. Cooperative games, initiative tasks and adventure based learning programs, prevalent throughout the province, all try to teach these skills to our students. We know this is important and we pursue it enthusiastically.

It has been my experience, however, that there is a discrepancy between what we say (and teach) and what we do. Chris Argyris, an expert in organizational learning, calls this discrepancy a gap between our espoused-theory (what we say) and our theory-in-use (what we do). Without necessarily realizing it, we do not always "walk our talk." The 1991 COEO annual general meeting provided a subtle, but clear, example of this. The annual general meeting started in its normal fashion, with the members of the board sitting at the head table and the general membership in the audience. The result was some lively exchanges, some of which I would describe as confrontational. They were up there, we were down here. The sense of collaboration was, in my mind, nonexistent. The scent of win-lose exchanges was in the air. I do not think this happened because the people who were involved are inherently confrontational.

The physical structure of the "power at the front" format, backed up by the hierarchical structure of president, vice-president, treasurer, etc., lends itself to that

Without necessarily realizing it, we do not always "walk our talk."

Our actions are limited and, in a sense, directed by the structure in which we find ourselves.

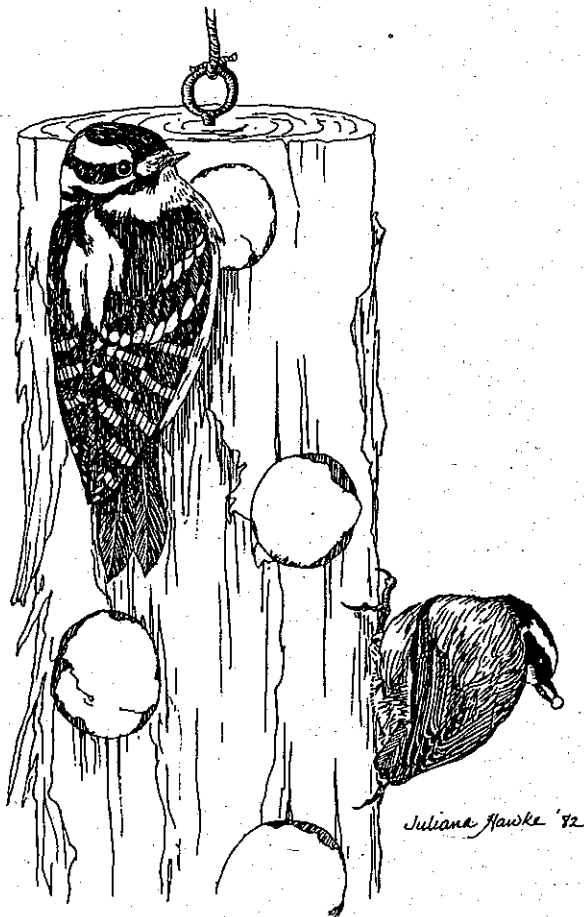
kind of "us" and "them" situation. In the afternoon, however, this realization led to a continuation of the meeting in a circle on the grass, with board members scattered throughout the circle. A better sense of community and collaboration ensued. Though some heated issues were discussed, I no longer felt that the board was under fire. Key points were addressed more to the whole group, not just to the board or person at the centre of the issue. The espoused-theory of collaboration was starting to show up in the theory-in-use at the meeting.

Peter Senge has written extensively on the topic of how an organization as a whole can learn. In his writing he mentions how

structure drives action and affects our learning. Our actions are limited and, in a sense, directed by the structure in which we find ourselves. I have seen this a number of times. Groups of people who dedicated to collaboration and participation (as COEO members are), placed in a non-collaborative structure, act out what their roles dictate. I am not only referring to formal board members but to the general membership of the organization. We showed this by confronting the board at the meeting this year and in years past. A result of this is a resistance to the flow of ideas and creativity, essentially inhibiting the learning of the organization. And an organization must learn to become better at what it does.

In addition to the physical structure, the organizational structure is important as well. A hierarchy is made to focus control at the top. It was invented to do that and served the industrial revolution well. It still works for some organizations. On the other hand, many organizations, such as COEO, do not have a real need for that top-down orientation to the world. Our personal preferences and espoused-theories of cooperative learning tell us it is not the best way to go. But, once it is created, it is hard not to operate by the rules of the structure, even if our intentions are otherwise.

Ideally, our structure should emerge from us. A vision of cooperation and collaboration must be backed up by structures to support it. The purpose that brings us together should dictate the development of the basic interrelationships that control our behaviour. An incompatible structure imposed on an organization inhibits the rich learning that could occur. John Naisbitt and Patricia Aburdene (authors of *Megatrends*) in writing about reinventing organizations, suggest that the best structure for an organization is whatever conditions promote the best



communication, innovation, and productivity in the situation. There is no "ideal" structure. Each organization, essentially, should create its own.

My concern is not really with COEO and its structure. This was an easy experience to relate because many members shared it. The importance of this, as I see it, is in what we are trying to achieve. If an environmentally literate society is part of what we want, we need to realize the critical role developing cooperatively plays in this. To do this we have to look closely at ourselves and our organizations. Structures are important but we also must see the many other aspects of what makes for cooperative and collaborative organizations.

Staff meetings are good places to start. Think for a moment if you have attended staff meetings where you left feeling frustrated, not listened to, or conflicting with someone who may not even have known it. If that has been the case, you probably did not feel like really supporting what was going on (but maybe did so because it was your job) or did not feel like sharing all the value that you could bring to the group. In short, you probably did not feel too cooperative. If a similar situation has occurred for you, look a little deeper and you probably will start to identify a gap between a personal espoused-theory and theory-in-use.

It is very difficult. Many of our behaviours are habitual. Most of us did not grow up or go to schools with cooperative models. Many of us are engulfed in highly bureaucratic structures in school boards or other government organizations. We act on a day-to-day basis without often putting too much thought into the process of our interactions. Learning to change some of these ingrained behaviours is much harder than changing our photocopying habits. But, if we cannot do this well, how can we

expect whole organizations — schools, governments and businesses — to do it when there is so much at stake?

As with changing any behaviour, a good first step is in becoming aware. In the October issue of *Pathways*, Bert Horwood discussed the use of reframing situations as a method of reflecting on and learning from experiences. This process helps us to see old situations in a new light, providing potentially rich learning opportunities. Having another person around to help us do this would be invaluable in assisting us in becoming aware of the discrepancies between the things we say and the things we do. If we are not aware of what we are doing, we cannot change.

We have to learn as individuals, as groups, as organizations, as full sectors and as total societies. We need to narrow the gap between our espoused-theories and our theories-in-use. This could only be done when we have an awareness of this gap. And usually we don't. We need intentionally to seek them out, just as we seek out environmentally unfriendly actions in our lives.

It seems insignificant in the whole scheme of things, to be concerned about interpersonal relations at a staff meeting. These acts, however, that go on between each of us, are the foundation of the greater acts. Just as we believe that walking a kilometre instead of driving is really a help to the world, we must also believe that if we can learn to be models at working collaboratively, it will also help the world. For us to be effective at spreading our influence in realizing our vision for a healthy planet, we have to be able to do all of what needs to be done. A central focus of the 1992 ECO-ED World Congress is on how the different sectors can work together in bringing about the best information and resources to learn how to achieve sustainable development. Much of

Learning to change some of these ingrained behaviours is much harder than changing our photocopying habits.

its success hinges on how the multiple stakeholders are able to cooperate.

We don't want to be just a great bunch of sensitive recyclers and composters. The problems to overcome and the joys to be gained will require a cooperative will, achieving it together. The world needs models to help it do this. I used COEO as an example in this article because, if it is difficult for a group of people who are generally inclined this way to act in an effective, collaborative manner, what must it be like for a line manager in the heated environment of the oil or auto industry? If we can't show them what we really want the world to be like, who will do it for us?

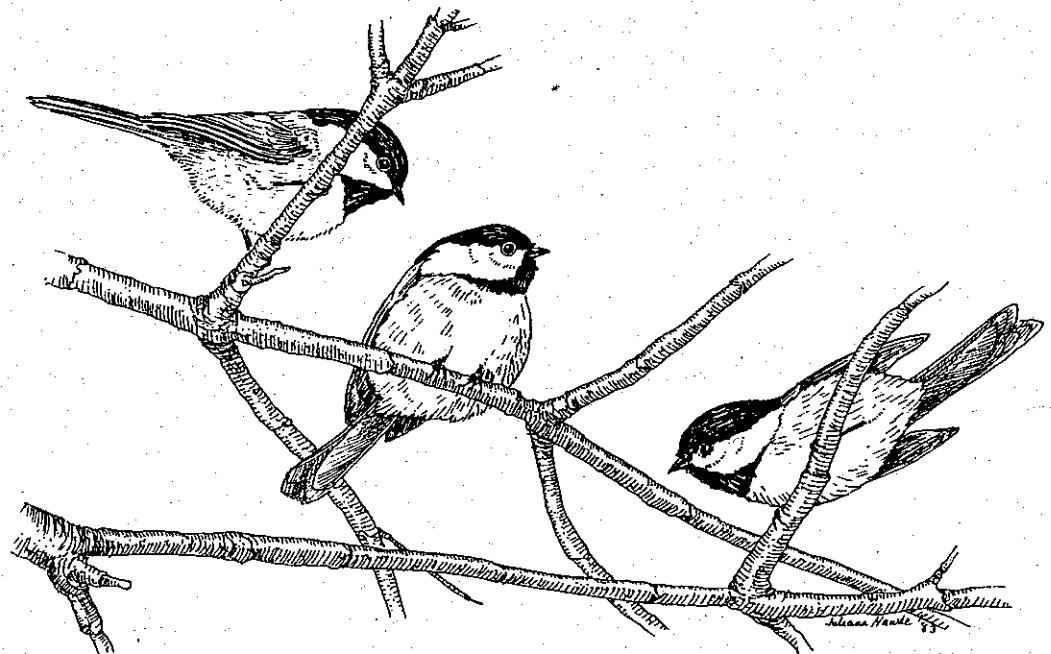
Thinking globally and acting locally is needed here as well. It is easy to be overwhelmed by the total system but each of us chooses what we think, believe, and do in a given situation. We need to reflect on and alter some of our thoughts, beliefs and actions and make choices that model what we really want to see happening. If our

vision is to have a healthy planet, we have to seek out the changes needed in ourselves. As David Stokes asked, "What are we doing that keeps us from getting what we want?"

David Dawe is just completing his M.Ed. degree at OISE in the Developing Human Resources focus of the Department of Adult Education. He has been an Outdoor Programme Specialist at Mono Cliffs Outdoor Education Centre for the past five years.

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The Ropes Course as an Educational Tool

by Susan Sproul and Simon Priest, Ph.D.

In Ontario today, many schools and camps have begun utilizing ropes courses as teaching laboratories to augment their regular outdoor education programmes. A ropes course is "a series of obstacles designed to present a challenge with a degree of controlled risk. The obstacles are made from a variety of ropes, cables, trees, ladders, cargo nets, swings, tires, and rings, on which participants climb, balance, swing, jump, crawl and fall. The course can be designed so that each task is linked to another or so that each task is attempted separately" (Darst and Armstrong, 1980, p. 81). The risk is merely perceived due to the events taking place high above ground level, while real dangers are minimized through the use of helmets, harnesses and safety ropes. The appearance of risk, coupled with the individual student's use of competence along with the support of their peers, makes the ropes course a challenging experience.

Benefits

This proliferation of ropes courses has provided many opportunities for students to benefit from participation in these kind of challenges. Karl Rohnke (1991), an international authority on ropes courses, has listed the benefits as follows: 1) an instrument for increasing self-esteem, physical growth and teamwork; 2) promotes physical fitness by utilizing natural exercise; walking, jumping, crawling, lifting and throwing, and so on; 3) courses are frequently used for developing problem solving strategies and personalities; 4) many different groups and individuals can use the courses for personal rewards; 5) in group participation, teamwork, trust and

cooperation are vital and help to reduce clichés and subgroups.

Other authors have also written that ropes courses provide positive outcomes. Steve Webster (1980) explains four educational objectives associated with this popular trend: adventure, cooperation, direct experience and integration. Creating a sense of adventure for the participants helps them to fully enter into an experience. It creates an emotional setting which the participants feels they are doing something that personally mattered. Cooperation is an objective which leads to a strong benefit because of a common set goal which the group as a whole are working towards. This only occurs if the group accepts and gives support to the individuals within it. Direct experience allows individuals to make mistakes and achieve triumphs in the actual setting. Too often the themes of society are words and not experiences. Yet when put together, words and experience can become a single reality. The final objective is integration where individuals can bring together the physical, social, emotional, and intellectual aspects of their personalities. If neglected, the person may suffer not only emotionally or socially, but also intellectually.

Several studies have clearly demonstrated that these benefits do occur from participating in a ropes course experience. Braverman, Brenner, Fretz and Desmond (1990) described three different types of research which have been successfully utilized with ropes courses. The first type of research, programme monitoring, involved the collection of information about the experience as a means to evaluate the programme's safety and educational

*...adventure,
cooperation,
direct
experience
and integration*

“gained in their abilities relating to selective perception, critical judgement, and creativity.”

effectiveness. The second type was experimental in nature, with before and after testing of subjects looking for changes in variables measured quantitatively by pencil and paper tests. The third was a qualitative form of evaluation involving interviews and observations of the subjects during their participation which provided a more flavourful description of what people felt and precisely gained from a ropes course experience. On the basis of participant feedback, the evaluations in this case helped improve the researchers' ropes course and showed that children not only enjoyed the experience, but also felt they learned something important and useful which they could apply in the future. More specifically, the researchers (Braverman, et al, 1990, p. 27) found that children “gained in their abilities relating to selective perception, critical judgement, and creativity.”

History

George Hébert, a French navy officer of the 1800's, developed and adapted natural exercise into the physical training programme of all French navy recruits. This approach of utilizing natural exercise (i.e., walking, crawling, jumping, etc.) has been carried on through the decades and is still the crucial component associated with today's modern ropes courses (Rohnke, 1991). The first classic Ropes Course was founded in the early 1970's in a Colorado Outward Bound School and the second was constructed in the jungles of Puerto Rico to train Peace Corps volunteers for their assignments (Attarian, 1990).

Many of these early courses were punitive and dangerous by today's standards. The ropes easily rotted due to the wet, humid climate and belay systems were minimal or non-existent. The impact of a fall was cushioned by the mud below the course (Attarian, 1990). Herein lies the major concern of utilizing ropes courses as

an educational tool. Some of the older ropes courses, still in use around Ontario, are of the older design and may be unsafe. Furthermore, some people building new ropes courses for schools and camps may not be aware of modern construction standards.

Safety & Construction

The Association for Experiential Education is an international organization based in Boulder, Colorado (Box 249 at the University of Colorado) composed of several hundred adventure-based educational programmes or centres and over a thousand individual adventure-based practitioners. Their recent book (written by two outdoor adventure educators from Ontario with over three dozen contributing reviewers—eight from Ontario) outlines the new North American guidelines for *Safety Practices in Adventure Programming* (Priest & Dixon, 1990). The tenth chapter details the standards for construction and use of ropes courses as established by a panel of two dozen expert builders. Ten construction standards exist for ropes courses (pp. 90-92); summarized, they are as follows:

- 1) Safe working load (SWL) is one fifth of minimum breaking strength (MBS) and needs to be adhered to in all construction of safety, belay or backup systems. The standard for strength is 3/8" 7x19 twist galvanized aircraft cable (SWL = 2,880 lbs. MBS = 14,400 lbs.) and all other materials need to meet or exceed these specifications.

- 2) Anchor integrity refers to the strength of the trees or poles on which the course is built. Trees need regular inspection by qualified arborists, dendrologists or foresters for crown and root damage, rot, or insect infestation. Utility poles (class I, II or III) need to be

placed in the ground to a depth of 10% of their length plus two extra feet. Poles need to be treated with a rot retardant such as Copper Chromic Arsenate (not Creosote) and they need to be fixed in place with soil, rather than cement (which speeds rotting).

3) Cables need to be anchored to trees or utility poles by (minimum 5/8") eye bolts (with thimbles) through drilled in direct line with the expected pull of the cable. Belay cables (with strand vises) need to have an extra backup wrap around the tree or pole and be triple clamped to themselves with 3 drop forged U clamps or wire rope clips. Where the backup wrap is around a tree, care needs to be taken to prevent damage to its bark.

4) Belay anchor lines, from which individuals are (safety) belayed as they participate in the ropes course, need to incorporate a 1:10 sag/span ratio (for every ten units of length, one unit of drape is necessary in the line). Tightening belay anchor lines to a straight line with "piano wire" tension may lead to abrupt failure at lower loads as the lines are less able to accommodate stretching under weight and when loaded by a fall.

5) Either static (self) or dynamic (assisted) belaying methods are acceptable for use with overhead belay anchor lines. Static belays need a pair of adjustable lengths of nylon webbing or cordage tied into the harness and clipped in by carabiners to the belay anchor line, thus permitting participants to transfer between ropes course elements by removing one length, while remaining on self-belay with the other. Dynamic belays are like those commonly used in rock climbing: a rope, tied into the harness, runs up through two carabiners or a spin/static pulley, attached to a second pulley riding along atop the

belay anchor line, and then back down to the belayer or belaying device.

6) Carabiners in contact with the cables need to be composed of steel, as aluminum (a more common material) wears quickly and is more likely to fail under load. Locking carabiners need to be employed when part of safety systems such as anchors or belays. Properly fitting and UIAA approved helmets and harnesses (full body preferred) need to be worn by participants. Nylon materials (ropes and webbing) need to be logged for use and retired according to their manufacturer's standards.

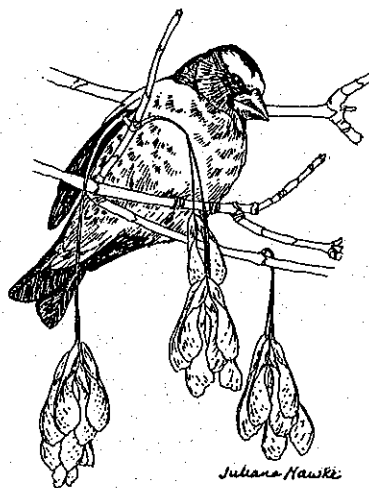
7) To strengthen the resilience of trees and poles alike, guy lines need to be attached to form a 45° angle with ground anchors so as to transfer the loading forces during a fall.

8) Like swimming pools, ropes courses can be considered as "attractive nuisances" and as such, need to be fenced, signed and made inaccessible when not in use. The easiest way to prevent access is to remove any staples, pegs or steps from the lower 15' of the tree or pole (thereby making climbing difficult for even one person boosting another) and then to substitute ladders or raised nets (which are locked when not in use).

9) If constructed in a natural area, utilizing tall trees as the attachment points, the ropes course needs to address environmental safety. Walking around at the base of trees can compact the soil, crush their fine root hair system, and eventually kill the trees. A minimum 6" of hardwood bark mulch in all ground areas where people walk will help to extend the life of the trees.

Schools or camps interested in constructing their own ropes courses ought to seek out expert builders.

10) In addition to visual checks of each element before and after each use, the entire ropes course needs to be inspected by a qualified ropes course expert on a yearly basis.



The guidelines in the book continue explaining how to use a ropes course in a safe and ethical manner. The next five guidelines address the need for a ropes course rescue kit (in the event someone is stuck or unable to complete the course), the need for careful and thorough supervision (to avoid unsafe actions), the need for proper equipment and procedures (such as wearing helmets and harnesses, and spotting or belaying to protect one another), and need to consider ethics, especially the notion of "challenge by choice" (not coercing involvement) and downplaying competitiveness and destructive peer pressure.

Conclusion

The times of putting together one's own course are gone. A litigious society, coupled with modern standards, indicates outdoor educators must all be aware of and follow established practices in a prudent and responsible manner. Failure to do so may not only lead to a negligence suit, but more importantly it may injure some of those young people that are valued so highly. Schools or camps interested in constructing their own ropes courses ought to seek out expert builders—several live in Ontario and the authors are prepared to freely offer their recommendations on who to contact. Don't be frightened off by these closing comments—properly constructed ropes courses are very safe and participation in a ropes course is still safer than riding in a car or enjoying physical education classes in school (Webster, 1989). The benefits far outweigh the risks!

Susan Sproul and Simon Priest, Ph.D. are student and faculty member respectively in the Outdoor Adventure Recreation Programme at Brock University in St. Catharines, Ontario, L2S 3A1

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Studying Attitude: We Need to Figure Out How to Do It!!

by M.E. Mulligan

I did my M.Ed. at Brock University, in the area of curriculum. For my exit project, I examined the topic of *Environmental Attitudinal Change: Does the Sunship Earth Program make it happen?* over the winter of '88-'89. The sentiment that was expressed to me was to pick something that really interested me, because by the time it was done, I would be fed up with it. On the other hand, I was advised that if I picked something not so personally interesting, I would end up hating the topic. I chose to study attitude change because I feel that as a teacher with an interest in outdoor education, there is very little concrete research to support the idea that our programs will improve attitude towards the environment. I felt that if I could show that attitude change was measurable, then we could start to measure all outdoor programs, in an effort to determine those that cause favourable change, and those that do not. With the limited funding that exists, surely we would want to see the money put towards the courses or programs that provide the most success towards the goals.

With my advisor, Dr. Wally Poole, providing encouragement and constructive leadership, I refined my topic, and struggled through my preplanning, and then plodded through the various steps of a research project. When I was done, Wally suggested that COEO members may be interested in my findings. In talking to Bob Henderson, at the '91 conference, he persuaded me to pursue an article from the point of view of helping others of the pitfalls of studying attitude. This article combines both of these ideas, with a short synopsis of the study and its findings, and some of the problems involved in doing

such a study.

The Study

Sunship Earth, the object of my study, is one of the environmental programs designed by Steve van Matre and the Institute for Earth Education. It is a residential program, and attempts to teach grade 5 and 6 students about the earth from an attitudinal perspective, rather than with a content or knowledge based curriculum. Sunship Earth stresses that a good feeling about the Earth is more important than learning how to identify species in the natural environment. It encourages the learner to be drawn in to the excitement of learning about nature, rather than encouraging more people to walk through natural surroundings with a nature guide in hand. The program has "Model Program" status at YMCA Camp Wanakita, in Haliburton, Ontario, and the study was conducted with their cooperation. In my opinion, it is an excellent program, and it would seem obvious that anyone who attended it would leave feeling good about the Earth.

My study, in simple terms, attempted to measure the change in attitude towards the environment by children who they have attended a Sunship Earth program. To do this, I tested their attitude before the trip, and again after the trip, and compared this to similar tests for students who had not attended the camp.

The Test

Designing a test for attitudinal testing is not a simple matter, as anyone who attempts to do so will soon find out. After looking over the research, I decided to use an objective type test, with a Likert scale.

...start to measure all outdoor programs, in an effort to determine those that cause favourable change, and those that do not.

Students were asked 25 questions, of which the following are a sample:

<i>Sample questions:</i>	Agree	Strongly Agree	No Opinion	Disagree	Strongly Disagree
1. As far as I am concerned, I think that studying about the environment is a waste of time.	_____	_____	_____	_____	_____
2. It wouldn't bother me to find out that our drinking water had dangerous chemicals in it.	_____	_____	_____	_____	_____
3. I would not kill an insect that came into the house, if I could let in outside instead.	_____	_____	_____	_____	_____
4. It doesn't really matter to me that some animals are extinct.	_____	_____	_____	_____	_____

Students were also asked two open ended questions, at the end of the test, in which they could name what they saw as an environmental problem, and how they could correct it, and what they thought that they already did to try to help the environment.

Students were given a pretest before the trip. This included the students who were not going on the trip. Then after the trip, the test was readministered, with the posttest having the same basic questions in a different order.

The Results

After studying the results, there were inconclusive conclusions. So much for my grand illusions about measuring attitude change. The students who had not gone on the trip showed lower results on the posttest, while the students who went on the test showed higher scores. This difference was shown to be statistically different. However, when the pretest and posttest results were compared, the posttest results were not statistically significant in either

group, although it would have been predicted that the students who went to Sunship would have showed a difference after their trip. This gave the study a sort of double ending, one meeting the expectations of the study, that Sunship does improve student attitudes to the environment, and one giving the opposite result, that student scores did not change greatly before and after the trip.

Pitfalls: Why did it come out this way?

Looking back at the study, now that the diploma is framed, and the box of data is covered in dust in the workshop (no...I won't throw it out...not yet...), I can look back more objectively, in trying to examine my research techniques.

1. Time

Time is a killer in a research project.

a) After doing all of the prep work, i.e., ERIC searches, periodical readings, and then deciding very specifically what you are going to test, you must deal with all of the realities and legalities involved with con-

ducting a study with kids and teachers who work for various Boards of Education. As a researcher, you must get Board permission, and teachers who will agree to do the tests.

b) Then you must find or design a test. The ideal is to find a valid test. I wish you good luck. Then when you realize that you won't find one, you must design it yourself, validate it, duplicate it, and get your volunteer teachers to administer it. Of course, then you must compile the results, but these will come in over a span of time, as different sample groups make their trip to the Sunship Program.

c) Then you must interpret the results, and link them to your initial hypothesis. This is where you may face the heartbreak of finding that you didn't get the nice straight line graphs that you expected.

d) After all of this comes the fun of writing it all up, and massaging your work so that it will pass the variety of academic rules that are placed in front of you, before you can "go to print". This means that you may have to shorten some of the steps that would make your project more valid.

All of the above take time, and meanwhile you see the finishing dates approaching — closer and closer.

2. Test Design

In many of the readings that I read, tests for attitude were used. As I've already stated, none of them seemed to fit what I was doing, so I had to face the reality of designing my own test. Really what we need is for some brave soul to attempt to design an attitude test that would be applicable to all outdoor programs. In this way we could more easily compare the value of one outdoor program to another, whether day or residential.

Once my test was designed, after lots of discussions with Wally Poole, and lots of other interested people, it was difficult to validate. One of the aims of the test was to include no environmental jargon, so that the pretest results would not depend on the students having a great deal of background. I got help from my school Learning Resource Teacher, regarding vocabulary and reading level. These are critical if the test is to be useful.

I did not include the results from the second part of my data, i.e., the students' open ended questions regarding how they feel about the environment, and of course, I should have. I just did not have the time, and could not see how these results would fit into statistical data. These results are sitting in the dusty box, waiting for another student to use them. Their inclusion would have probably improved the validity of my study, but would also have complicated it.

Another problem with time is that all of the readings talked about the need to measure attitudes by interviews, but I did not have the time to conduct these. If you are a full time researcher, and have a staff to aid you, then perhaps interviews would give a more accurate record of the attitude changes for the study. Once you have conducted the interviews, however, you still have to figure out how to put the findings in statistical terms.

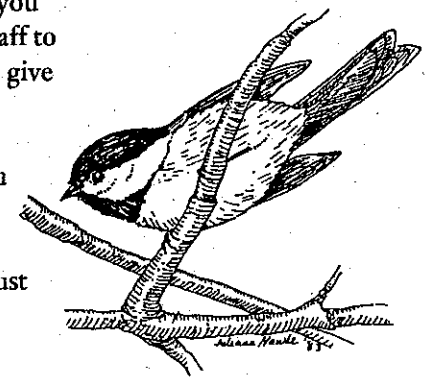
All the while you are thinking...I must get done...I have a deadline...

3. Uncontrollable Variables

As any social scientist knows, when we are dealing with human studies, we are restricted in many ways. Probably the same restrictions should apply to all studies of living things, but humans, as we are constantly shown, get special treatment.

To do the study properly, the choice of who goes on the trip to the Sunship Earth should be a random selection. Of course, it

...attempt to design an attitude test that would be applicable to all outdoor programs.



We must be willing to show, by rigid academic testing, that these programs can and do cause these changes in attitude to happen.

was not, because the students in most of the schools who participated could choose not to go. Only one of my sample schools, because it is a private school, demanded that everyone in the class go on the trip. This lack of randomness certainly may have affected the data. The students who chose to go may have parents who already support environmental studies, and show different attitudes towards the environment than parents who chose not to let their students go. This variable may also be controlled by availability of funds, but either way, it takes away from the randomness, and therefore the validity, of the study. The weather on the trip is a factor that can effect the results of a student's attitude to the environment. Heading home after glorious fall weather instils different feelings and memories than dragging a wet pack off of the bus, and feeling wet right through to the skin.

4. Money

Money is also a factor which effects the outcome. If the trip is expensive, then many students will not go, and the value of the experience is lessened. The ideal situation with the Sunship program is that the teacher follows up the trip with in-class work to reinforce the concepts, but if only a smattering of students from various classes go, the followup becomes limp, and the students attitude will not be as effected. The students on the Sunship program can only complete the final journey when they come back home, and help spread the message of their experience to others.

Of course, this brings up the question of funding, and right now it seems that many boards are lessening their support of programs, rather than increasing it. One of my repeated arguments is that if outdoor programs are not legitimized by academic testing, such as my study attempted to do, then Boards will not bow to pressure to support outdoor programs, but if we can

statistically show that outdoor programs can change attitudes, then the support will be more likely to take place.

Summary

The frustrating part of all of this is that, as a teacher, I still feel that the Sunship Earth program is excellent for students in grade 6, and I feel that it does change their attitude towards the environment. But even with that bias, my test did not clearly point out those results. I see a need for further study in the area of attitudinal change testing, and in the area of measurement of the effectiveness of outdoor programs to change environmental attitudes. My study attempted to make a small notch in these areas, and yet I was not as successful as I thought I would be. This article may motivate someone else to carry the torch another step down the line. If we believe that our outdoor programs help our children to be more prepared for the future, then we must be willing to show, by rigid academic testing, that these programs can and do cause these changes in attitude to happen.

By the way, I was glad to see my project finished and in print, but I must also say that I did manage to hold on to my initial view that there was a purpose in doing it. Good luck with your research project!

Mike Mulligan is a teacher in Hamilton, Ontario, who has spent the last 17 years teaching mostly Math, Science, and Computers to elementary students. He has been involved in various outdoor education experiences, including being a participant in the committee to revamp the Hamilton Board's Outdoor Education Policy, and was recently a committee member for the '91 COEO conference in the Dundas Valley.

Close Encounters at Murphy's Point

by Chuck Fraser

"As we go through life, I doubt there is anyone who has the strength or ignorance to resist change. Sometimes it's gradual change, other times it happens very quickly, and you can see how different things are from even the day before. Spending five days with a group of people you never come in contact with is a situation that can change you in many ways. I was faced with challenge after challenge and with everyone I saw it — I saw myself changing."

A.S., *Five Days of Change*— a reflection

Recently, one hundred outdoor education and environmental science students from South Carleton High School and Brockville Collegiate Institute descended on Murphy's Point Provincial Park for their annual Fall Camp. There have been O.E. credit courses at South Carleton since 1975, while environmental science has been offered for the last two years. The main thrust of the camp program in the past has been skills — canoeing, camping, group dynamics. This year, however, there was a larger ecological component to complement the environmental course.

This was our first visit to Murphy's Point, a natural environment park with many features that facilitated our programs. The boat launch area featured finger docks and a sheltered bay for our canoeing instruction. The history of human activity in the area was well documented and incorporated into the interpretive program (including pioneer homesteads, a mica mine, and a sawmill ruin). The park staff was very helpful and provided many of its regular summer programs. Jim Ives, the Superintendent, invited an old singing prospector, "Mica Mike Murphy" to appear during our mine tours. Merebeth Switzer, (Visitor Services), gave an interesting guided tour of beaver ponds and various

succession sites. She showed many artifacts including a six foot black rat snake skinned, various skulls and a beaver pelt. Many of her recommendations for the environmental science class were incorporated into the overall program.

One highlight for me was leading my class on an excursion on the third evening. It was a silent hike to Loon Lake. I was told that loons had nested there this year and the Barred Owls were responsive. Getting twenty-six grade twelve students to walk stealthily wasn't easy at first, but as darkness fell around us, we melted into the night. We arrived at Loon Lake at dusk to find the loons swimming casually. A beaver passed close by the trailhead. Several flights of Canada Geese passed over us as the sky cleared to reveal a profusion of stars. We sat or lay in the tall grass and listened to the honking geese, barking dogs, and howling coyotes. I then played a tape of Algonquin Park Barred Owls with a preamble on their ecology. After about twenty minutes of playing calls and waiting, I tried a few of my calls. Suddenly, when darkness was well upon us, there were a few distant answering calls. Over the next while, I conversed among three owls, seemingly within 100m in nearby red pines. We even saw one large dark shadow drift into a nearby tree, but it remained silent.

Students and teachers kept journals and wrote post-trip reflection papers to help tune-in to their experiences. Here are a few excerpts from reflections offered to illustrate, by permission:

"...There's something about camping with people that makes everyone so friendly and I don't feel as shy."

J.G.

"...one trip and a class becomes one. You get to know your teacher better, acquaintances become friends, and finding yourself isn't so hard any more."

J.C.

"There was nothing like the closeness you (feel) around a fire. It seems like the fire would destroy any walls built up against people."

P.K.

"I'm really glad I went on this camping trip, so I could see the other sides of people and they could see the other sides of me."

T.H.

"the biggest thing I learned on this trip [was that], compared to the beauty of nature and man's exploitation of it, my problems are pretty small. Everybody needs to learn to put things into perspective once in awhile. It helps prevent ulcers."

S.G.

Murphy's Point
Provincial Park, RR # 5,
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(613) 267-5060

The students thought the owls were a "hoot", and the laughter was contagious. The leaders then pointed out the Milky Way, and a few constellations, as we did a star walk (on our backs with hands and feet in the air). The return to camp was relaxed as we searched the woods with our flashlights for reflective tape "eyes" at various heights.

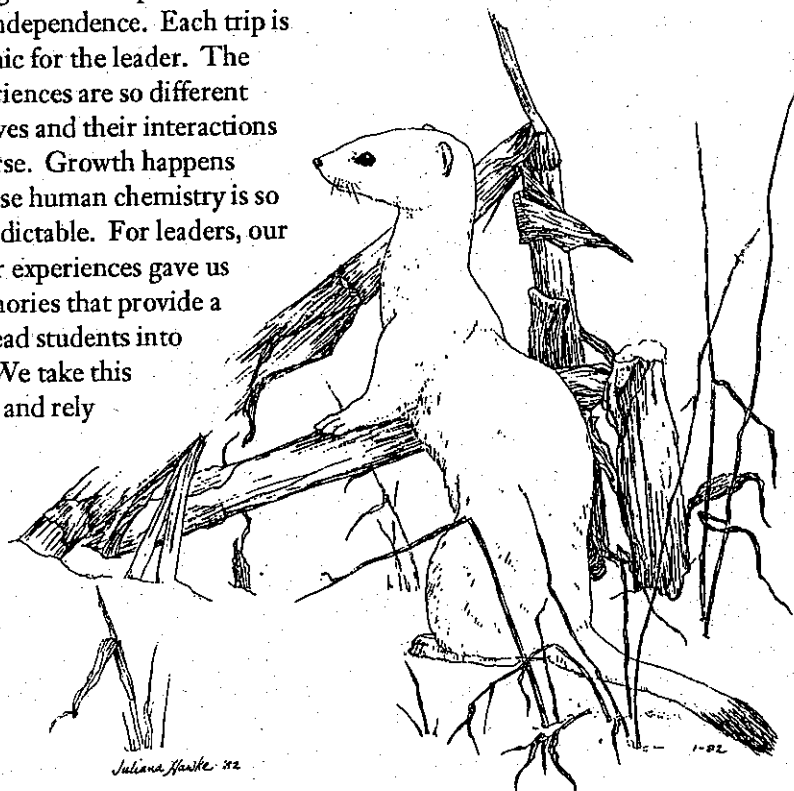
It was an intimate time for us as a group. The students began to open up to the "program." It was a close encounter with the owls, stars, darkness, and with each other — a truly bonding experience. For me, the risks paid off a hundred-fold, and a new mutual trust emerged amongst us.

The magic worked on individuals and groups, while participating in outdoor experiences, always impresses me. Journals often mention how the participants are surprised by their new understanding of each other (and how humane teachers become outside the classroom). Best friends may fall out, but more often, new close friendships form as the physical/emotional challenges create experiences of dependence and independence. Each trip is unique and dynamic for the leader. The participants' experiences are so different from their daily lives and their interactions are infinitely diverse. Growth happens incidentally because human chemistry is so delightfully unpredictable. For leaders, our own early outdoor experiences gave us lasting social memories that provide a motive for us to lead students into these moments. We take this risk with students and rely

on experience and planning to ensure a positive outcome.

Our camp program loaded structure at the "front end" of the trip. Here, there was much discovery and acclimatization happening in their groups during instruction. Then we eased into more "free" time-blocks for interaction and settling of new relationships in the middle days of the trip. As time passed, people relaxed and created opportunities to be more natural together. For leaders, great opportunities arose out of perceived adversity (physical-emotional-social) to model "being real". This gave the students a sense of belonging with us, allowed them to view their potential, and enabled them to reach new heights of believing in themselves.

Chuck Fraser teaches a Grade 12 Environment Science double credit course at South Carleton High School in Richmond Ontario. He also has several cotton canvas tents for sale and may be reached at (613) 836-7128.





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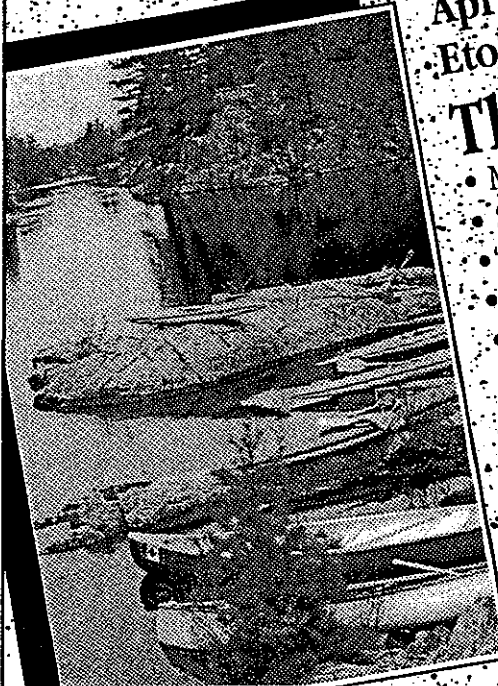
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Tom Hartung



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OTTAWA, SPRING 1992

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Infusing Recycling in the Curriculum

March 28-29,
Sat. 9:00 - 3:30; Sun. 9:00 - 3:30 Bora Simmons

Concepts and Activities in Astronomy

April 10-11
Fri. 7:00 - 9:30 p.m.; Sat. 9:00 - 8:00 Mike Harrison
Location: MacSkimming w/overnight;
reserve April 12 as alternate date)

The Leopold Education Project

May 23-24
Sat. 9:00 - 3:30; Sun. 9:00 - 3:30 Cliff Knapp

School Site Environmental Initiatives

June 6-7
Sat. 9:00 - 3:30; Sun. 9:00 - 3:30 Bora Simmons

TORONTO, SPRING 1992

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The Leopold Education Project

March 28-29
Sat. 9:00 - 3:30; Sun. 9:00 - 3:30 Cliff Knapp

Infusing Recycling in the Curriculum

April 4-5
Sat. 9:00 - 3:30; Sun. 9:00 - 3:30 Bora Simmons

Agriculture in Environmental Education

April 25-26
Sat. 9:00 - 3:30; Sun. 9:00 - 3:30 Brent Dysert
Location: Waterloo area

School Site Environmental Initiatives

May 9-10
Fri. 7:00 - 9:30 pm; Sat. 9:00 - 3:30 Cliff Knapp

Brief Overview of Sessions

(Note that some sessions are specific to only one site or the other.)

1. Infusing Recycling into the Curriculum

Barry Commoner's Law of Ecology stating "there is no away" epitomizes our garbage crisis. On average, each one of us generates over 2kg of solid waste per day, while landfills continue to close in record numbers. Incinerators, high-tech landfills, recycling and basic changes in our lifestyles have been suggested as possible solutions. But without education no truly effective solution can be found. Through demonstrations, simulations, issue investigation exercises, and field trips, the workshop will focus on resources available for teaching about solid waste issues.

2. Concepts and Activities in Astronomy

We are the stuff of the stars. The green of the leaves, the fallen twig underfoot, the pebbles tumbling along underfoot, the red blood in our veins, all came from the ashes of exploded, now dead stars.

Astronomy provides a wonderful connectivity among chemistry, mythology, physics, biology, and the development of many cultures. Through skills of observing and the use of simple and complex equipment, star charts, the human fist, compasses, story-telling, and cameras, you will get to know the universe.

During the day you will undertake detailed observations of our star...the Sun...and the times of the rising and setting of the moon. You will practice the setting-up, alignment, and storage of Celestron 8" telescopes. How the human eye interfaces with binoculars and telescopes will be explained. You will make your own starfinder and process your own black and white negatives of astrophotographic objects.

By becoming an observer of the sky yourself, you will be better prepared to conduct astronomy lessons and prepare units for students. Problems and logistics associated with leading an observation session with a class will be discussed.

We will research and prepare mythological stories about the constellations to share around the late night campfire. A wide selection of reference materials will be available for you to explore and use over the weekend at MacSkimming.

3. Leopold Education Project

Aldo Leopold's *A Sand County Almanac and Sketches Here and There* has become a classic since it was first published in 1949. The book deals with a variety of topics centered upon Leopold's exploration of places and ideas. He made strong pleas for developing ecological understandings, aesthetic appreciations of nature, and a land ethic which would treat the planet more gently. A teacher's guide and student activities for indoor and outdoor use, based on the first 22 essays, has been developed by a coalition of Soil and Water Conservation districts in Northeastern Illinois.

This session will focus upon the use of this curriculum supplement designed for grades 6-12. However, younger students can benefit from some of the modified activities. We will use the indoor and outdoor classroom to teach and learn selected lessons. An accompanying video tape will be available to provide a biographical sketch of Leopold and scenes to illustrate the essays. Purchase of the Oxford University Press, 1949 edition (1968 paperback) is recommended although the Ballantine edition may be substituted. The book should be read before the first class meeting.

4. School Site Initiatives

During a typical school day, students consume water, food, energy, and a variety of other natural resources; create garbage; and interact with the natural environment through play. Yet, the environment of the school has remained an untapped learning resource. This session is designed to increase awareness, skills, and knowledge of using schools and school sites for teaching about the environment. The course will focus on ways of making the school itself an integral part of the environmental curriculum. The topics include: inventorying resources, managing and modifying the school site, identifying and designing activities and developing action projects. Demonstration lessons, lectures, small group discussions and investigations and peer teaching will be the primary instructional approaches.

5. Agriculture in Environmental Education

A new initiative in North America during the last decade has been the focus on the rural community. Agriculture as it is seen in animal and plant growth, development and harvest, as well as the rural lifestyle, will be explored. The Agricultural Education Centre at St. Jacobs, the first of its kind as an environmental education centre, will be visited as well as a field trip through the Old Order Mennonite community of Waterloo County. Emphasis will be placed on teaching resources and student activities.

In order to receive graduate credit, students must have been accepted by the Graduate School as either graduate students or students-at-large.

Please enrol me in COURSE CIOE 590, Workshop in Outdoor Education: Current Initiatives in Outdoor Programming. I enclose a deposit of \$50. (made out to 'COEO') to reserve a place.

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Please return to: Mark Whitcombe
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Tel: (H) (519) 941-9966 ; Messages (416) 396-2000 (for Toronto course)

or to: Rod Ferguson
MacSkimming Science School, RR#2, 3625 Highway 17, Cumberland, Ontario, K0A 1S0
Tel: (613) 833-2080 (for Ottawa course)

Plan to attend all sessions. Please be sure the weekend dates are open and that you have no conflicts before you register.

"The Ministry of Colleges and Universities does not endorse this programme of studies or certify that it meets Ontario University standards. The programme of study being offered in Ontario is equivalent to the programme being offered by the institution in its home jurisdiction. In addition, the Ministry of Colleges and Universities cannot guarantee that the degree will be recognized by Ontario Universities and employers." You are advised that the NIU programme is deemed "an approved Master's Degree in Education" for QECO Evaluation Programmes 3 and 4, and it is evaluated by QECO as "no less favourable but no more favourable than degrees taken from recognized Ontario Universities." Further you are advised that students from this programme have found Ontario Universities willing to accept equivalency when credits are being transferred to the Ontario University. Some Ontario Universities will only accept credits which they consider appropriate for the programme of studies undertaken at the Ontario University."

Do Trees Seem Different When One is in the Forest?

Wilderness Experience & Respect for Nature

by Larry Innes

Attitudes, like values, are learned; learning is primarily a process of experience with ones environment.

As a society, we lack substantial contact with anything resembling a wilderness environment. This lack of experience may have translated into a lack of understanding, and more importantly, a lack of responsibility for the effects we have on the natural world. Confronting the environmental problem begins with an examination — and an alteration — of our attitudes, our ethics, and most importantly, our actions.

This study is an investigation of the relationship between experience and attitudes: do individuals who have substantial wilderness experience also possess an attitude of respect for nature? Is this attitude incorporated into their ethics and expressed in their actions?

Attitudes, like values, are learned; learning is primarily a process of experience with ones environment. A child brought up in Suburbia is exposed to a mass-produced, pre-fabricated environment of white bread, concrete and McDonald's. Wilderness experience, in stark contrast, is intricate, complex and unpredictable. We intuitively understand that the learning which occurs within these radically different contexts will inform different insights and provide the basis for a different understanding of the natural environment and human responsibilities within it.

Outdoor educators understand that learning is not a process that occurs only in formal, institutional settings. The natural world is too complex and diverse to be fully understood or appreciated through the pages of a textbook. Some consider institutional environmental education to be a failed attempt, one that has:

...rendered the individual and his experiences irrelevant. As a consequence, we tend to think of the environment in massive, global terms. We think of runaway population growth, of increasing pollution of land and waterways... Thinking about the environment in these terms produces overwhelming feelings of helplessness and insignificance in most people... If it is to be effective, environmental education must enable individuals to understand why and how to act on their awareness and concerns. (Elkin 1982, pg.25-26)

Arne Naess advocates a form of environmental education which seeks to understand nature in her own terms. *Friluftsliv*, which translates literally as "free air life" is the Norwegian equivalent of "roughing it" in North America — that is, participation in self-directed wilderness recreational activities such as hiking, climbing, cross-country skiing, mountain cycling, canoeing and kayaking. All of these activities incorporate minimal strain on nature and promote personal growth, allowing individuals to experience deep and varied interaction in and with nature. The aim of *friluftsliv* is to touch the earth lightly, to stimulate a sense of oneness, wholeness and deep identification with the earth (1989, pg. 176). Naess outlines five essential guidelines for environmentally and ethically responsible *friluftsliv*:

- 1) Respect for all life. Respect for landscape.
- 2) Outdoor education must encourage identification.
- 3) Minimal impact on nature combined with maximum self-reliance.

- 4) Natural lifestyle, with the elimination of excess equipment and technology.
- 5) Time for adjustment: Those who come from urban life usually have an appreciation for the peace and stillness of nature, but after a few days begin to miss television, etc. It takes time for the new milieu to work in depth, to develop the sensitivity for nature. (1989, pg. 179)

If Naess's prescription is correct, we should see a strong correlation between an individual's wilderness experience and the depth of his or her ethical commitment to the environment.

If traditional Western ethics have been concerned with the relationship between humans, environmental ethics attempts to extend ethical consideration to the natural environment. One of the primary theorists, philosopher Paul Taylor, describes environmental ethics as the:

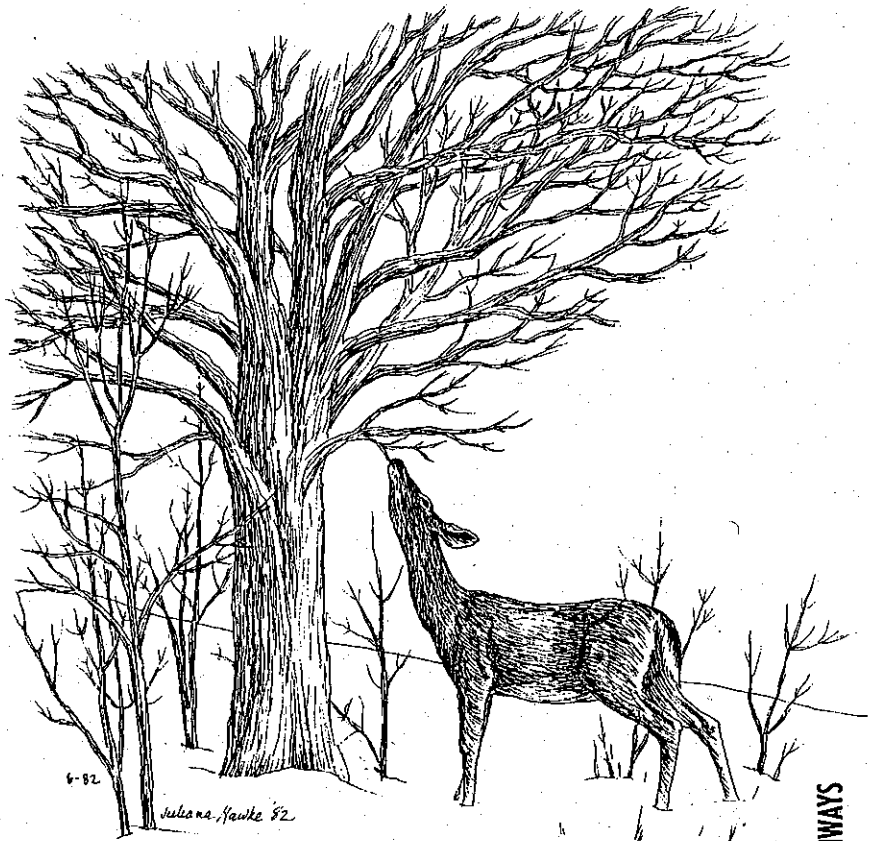
...attempt to establish rational grounds for a system of moral principles by which human treatment of natural ecosystems and their wild communities of life ought to be guided...our subject of concern encompasses nothing less than the place of human civilization in the natural world. (1986, pg. 9)

In general, a normative system of ethics has two sets of conditions which must be met in order for the system to be considered valid. The first set, called formal conditions, apply to the system of rules which govern the application of the ethical system. The second set, the material conditions, determine the content and application of the formal conditions. An analogy is useful to illustrate these terms. Consider a chessboard. The rules of play that govern the movement of the knights, pawns and other pieces are analogous to the formal conditions of an ethical system. The

material conditions of an ethical system are equivalent to the actual chesspieces and the chessboard.

In Western cultures, the application of "rules of play" has been restricted to a small, but slowly expanding "chessboard". Historically, women and slaves have been considered to be outside the scope of the ethics that governed relationships between men. Often, they were afforded little more than the consideration given to other types of property, while males enjoyed the status of being morally considerable in the sense that they possessed rights. Gradually, the material conditions of our ethical system

Environmental ethics attempts to extend ethical consideration to the natural environment.



have changed, permitting women and people of other races to enjoy these rights. Today, it is generally uncontroversial to speak of human rights in a global context, affording all humans regardless of sex, race, colour or creed equal status as morally considerable persons.

Environmental ethics attempts to rationally extend the material conditions of our ethical system to include the natural environment. One of the currents within environmental ethics seeks a move from our current "anthropocentric" position to an "ecocentric" or "biocentric" position which affords moral considerability to the environment and to other living things. One of the major elements of the biocentric position is that all living things have inherent worth. According to Taylor, when one speaks of a thing possessing inherent worth, it refers to the ability of that being to possess attributes which are good independent of any external (human) value that is placed on them (1986, pg. 62).

At the core of this idea is the tenet that living things, as self-directed entities, possess qualities which are valuable to themselves. Accordingly, living things should not be viewed as merely means to human ends, for doing this entails denying their inherent worth, but rather as ends in themselves.

This brings us to the question of how we should act in order to live by an environmental ethic. Taylor answers this question by stating that "actions are right and character traits are morally right in virtue of their expressing or embodying a certain moral attitude which I will define as respect for nature" (1986, pg. 80). Accordingly, demonstrating respect for nature is at once an indication and a result of possessing the attitude of respect for nature. According to Taylor, the attitude of respect for nature has four major dimensions:

a) *Valuational*: This dimension is the

disposition to regard nature as possessing inherent worth.

b) *Connotive*: An individual who has the attitude of respect for nature will aim to achieve ends that will preserve natural ecosystems and ensure a healthy environment.

c) *Practical*: The practical aspects of respect for nature require reasoned decisions to reflect this attitude, and that these decisions will translate into action.

d) *Affective*: The affective dimension of respect for nature is the presence of strong feelings for natural ecosystems and a deep interest in events which affect the natural world.

This study uses Taylor's categories as a theoretical basis on which to construct indexes which measure the valuational, conative, affective and practical aspects of an individual's respect for nature. If the hypothesis is correct, a strong correlation should exist between individuals who are extensively involved in wilderness activities and high scores on each of the indexes.

Methodology

To investigate the relationship between wilderness experience and ethical commitment to the environment, a survey was designed to provide data about the attitudes, values, activities and inclinations of individuals who participate in the sorts of wilderness activities which Naess described. Specifically, the survey was designed to collect demographic information, data on the amount and nature of the respondent's wilderness experience. The four dimensions of respect for nature identified by Taylor were measured through responses to set-response questions. The results were tabulated, indexed and subjected to statistical analysis. For specific details on the statistical methodology and the survey design, contact the editor for a copy of the original paper.

For ease of data collection, the sample was deliberately chosen from a population that would have a high probability of being strongly involved in wilderness activities. The survey was conducted at two popular outdoor supply stores in Toronto which concentrate in outfitting self-directed wilderness enthusiasts, and at a weekend ice-climbing class. In both settings, the surveys were conducted in person, allowing clarifications to be made as required.

The method of data collection employed non-probability techniques, specifically, convenience sampling. Accordingly, the results cannot be extrapolated to the general population. As we are investigating the relationship between a specific type of experience and the attitudes of the individuals who participate in it, such a restriction is of no consequence to the study.

The composition of the sample was diverse. The 67 respondents ranged from teenagers to senior citizens, with 38% falling into the 23-30 category and 26% falling into the 31-40 category. Sex was approximately equal, with males slightly edging females at 56%. 81% of respondents were from Ontario, and of this group, 87% were from urban centres larger than 100,000 people. Professionals and students represented the largest vocational groups.

Evaluation and Discussion of Results:

A linear relationship exists between wilderness experience and each of the variables under investigation. This relationship is enough in itself to support the thesis that high levels of wilderness activity strongly correlates with a deep ethical commitment to the environment. It may be useful, however, to examine each of the variables in turn.

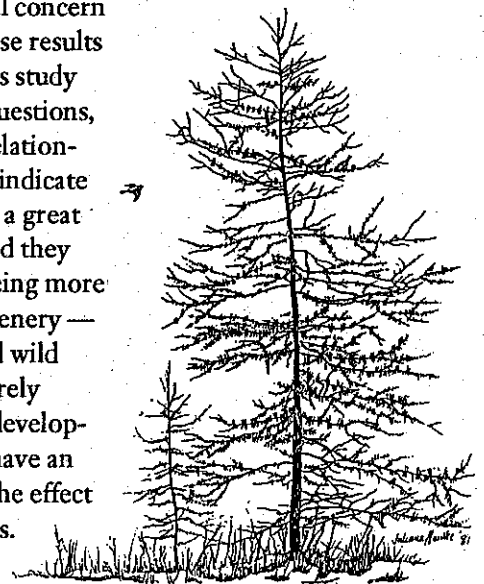
According to the study, the affective and practical dimensions of respect for nature had the strongest correlation with wilderness experience. This indicates that the

individuals in our sample who spend more time in a wilderness environment also have a deeper "love for nature" and actively demonstrate their ethical commitment to the environment. This result harmonizes with the theories of Taylor and Naess, and perhaps more importantly, with our own intuition.

The correlation between wilderness experience and the other dimensions is weaker, but exists nonetheless. The reasons for weaker correlation may be found in the design of the questionnaire, or may reflect a growing, more widely shared feeling among the sampled population that nature is inherently valuable and should be preserved. Certainly we have seen a recent trend towards heightened environmental concern among the general public, and these results may be charting this concern. This study cannot definitively answer these questions, so any attempts to explain these relationships are speculative. The results indicate that the sampled population share a great deal of environmental concern, and they regard nature and wilderness as being more than just rocks, trees and pretty scenery — they recognize that wilderness and wild beings have worth that cannot merely be measured in terms of dollars and development potential, and that humans have an ethical responsibility to consider the effect that we have on natural ecosystems.

Discussion:

In Ecology, Community and Lifestyle, Naess describes experience as a gestalt. The concept of a gestalt is best understood as "experiencing wholes". Historically, the study of gestalt perceptions belongs to psychology. A well-known visual gestalt is the picture which seems to be at once a vase and two faces. Applied to the understanding of experience, gestalt perception is a hierarchy of relationships between all the elements of an experience, "a coming



This study simply demonstrates that a strong environmental ethic can be found among those individuals who take the time to develop a relationship with nature.

together of parts into something more” than the individual elements of an experience considered separately (58). Naess observes:

To only look at nature is extremely peculiar behaviour. Experiencing of an environment happens by doing something in it, by living in it, meditating and acting. The very concepts of “nature” and “environment” cannot be delimited without reference to interactions between the elements of which we partake. Spinoza conceives of knowledge as cognitive actions of understanding/love.

Gestalt formation crosses boundaries between what is conventionally classed as thinking separated from emotion. The overcoming of this prejudice has profound consequences for environmentalism. (63)

Affective feelings for nature are critical in the development of an environmental ethic. The role of gestalt in Naess's system is to break down the barriers between subjective and objective experience. In philosophy as in science, the “subjective” has often been dismissed as invalid. Naess incorporates subjective and objective experience into a gestalt, and uses this holistic approach to experience as the basis for a theory of ethical development.

Naess argues that a tree (or anything else) experienced spontaneously is always part of a gestalt. One can break down the experience into smaller elements, but limiting discussion to the objective or quantifiable is an artificial restriction. J. Baird Callicott states that “ecology changes our values by changing our concepts of the world and of ourselves in relation to the world. It reveals new relations among objects which, once revealed, stir our ancient centres of moral feeling.” (1982, pg. 174).

Philosophy aside, this study simply demonstrates that a strong environmental

ethic can be found among those individuals who take the time to develop a relationship with nature. The attitude of respect for nature appears to grow as individuals increase their level of experience within a natural environment, but the study was not designed to test for a causal relationship between these factors.

The sample studied in this paper represent only a small percentage of the general population, and they are distinct in that they participate to some extent in *friluftsliv*. If the attitude of respect for nature is to become a dominant aspect of our society's ethics — if we are to see an extension of moral consideration to the environment — we should work toward making wilderness experience a part of the way in which we educate our children and ourselves.

Larry Innes is an Arts and Science student at McMaster University. This program offers small group environmental inquiry courses for senior students.

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Spring Celebration

A Weekend
Workshop
For Educators

Sponsored by The Council of Outdoor Educators of Ontario

When: Friday, May 1st to Sunday, May 3rd, 1992

Where: Leslie M. Frost Natural Resources Centre, Dorset, Ontario

- What:** Tentative program includes:
- *In Search of Old Growth Forests*
 - *Photography*
 - *Bats*
 - *Wetland Exploration*
 - *Adventure Education*
 - *FishWays*
 - *Wolf Howl*
 - *Trail Cooking*
 - *Traditional Bush Skills*

*Special pre-conference
Focus on Forests workshop
no extra charge*

Fees:

COEO Members: \$175.00

Full-time Students: \$150.00
(covers registration, accommodation,
all meals and equipment)

Day Fee: \$35.00
(includes lunch and programs only)

Questions:

For more information call Linda
McKenzie (705) 386-0503 (H);
(705) 386-2376 (W)

Registration Form — COEO Spring Celebration 1992

Name _____ Employer _____

Home Address _____

Telephone (H) (_____) _____ (W) (_____) _____ Membership # _____

Accommodation is 2 per room. If you wish
to room with another person attending the
conference please indicate his/her name:

**PLEASE SELECT
PROGRAM CHOICES
ON BACK OF FORM**

Write cheques to "Spring Celebration"
and mail to:

Linda McKenzie
Spring Celebration
Box 324
South River, Ontario POA 1X0

No post-dated cheques please.

Spring Celebration — Program Description

FRIDAY - 11:00 to 5:00. Special preconference activity — Focus on Forests workshop at no extra charge (lunch available in cafeteria for \$10.35 or bring your own).

SATURDAY — Full day sessions, 8:30 to 4:30.

AB1 In Search of the Old Growth Forest — A forester will be your guide as you canoe in to discover a local area of old growth forest, a complex and controversial ecosystem.

AB2 Shrike Hike — For naturalists. Travel to the contact zone between the Canadian Shield and limestone plain, where a field naturalist will share his insights into this biologically rich area and home to Ontario's next endangered species.

SATURDAY MORNING — Half-day sessions, 8:30 to 11:30.

A3 Things That Slither and Crawl — You'll learn where to search out spring reptiles and amphibians and how to identify them by sight and sound. You will also be shown some activities to try in your classroom. An active, outdoor session.

A4 Teaching Through Adventure — Discover what adventure education is all about and how you can use it to motivate and challenge your students. Come prepared for an active, fun-filled session of initiative games and other activities.

SATURDAY AFTERNOON — Half-day sessions, 1:30 to 4:30.

B3 Traditional Bush Skills — Tracking wildlife and survival in the bush are part of this workshop that borrows from Native traditions and skills. Wear comfortable outdoor clothing.

B4 Wetlands Explorations — Wetlands are rich, diverse and valuable habitats. Explore some local wetland types where you will learn to compare and classify them according to their values for wildlife and people. Rubber boots or webbed feet required.

SUNDAY MORNING — Half-day sessions, 9:00 to 12:00 noon.

C1 Developing your Photographic Skills — A hands-on session in black and white photography for the novice/intermediate photographer. Topics covered include composition, developing and printing. Take your finished photos home with you. A \$5.00 fee provides you with film, photographic paper and chemicals. Bring your own camera.

C2 Finding Forest Facts — Groups will rotate through activity centres that cover topics such as tree identification, growth and measurement.

C3 FishWays — This is an active workshop to familiarize educators with this new package of curriculum materials for grades K-12. A manual of Fisheries activities is free of charge. Mandatory prerequisite of a Focus on Forests or Project Wild workshop.

C4 Cooking on the Trail — Sign up for a hands-on culinary adventure and learn about the fun of preparing a full course meal on the campfire. Pick up some useful info for your trip-planning this summer.

PROGRAM CHOICES

PRECONFERENCE FOCUS ON FORESTS WORKSHOP

Yes, I will attend the Focus on Forests workshop

Please order the following manual for me: P/J I/S English French

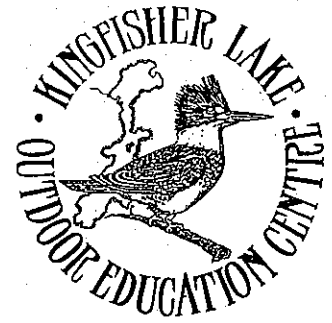
I require lunch on Friday (additional charge of \$10.35) Yes No

REGULAR SESSIONS: Please indicate first (1) and second (2) choices for each time slot.

SATURDAY		SUNDAY
8:30-4:30	8:30-11:30	9:00-12:00
<input type="checkbox"/> AB1 (Old Growth)	<input type="checkbox"/> A3 (Slither and Crawl)	<input type="checkbox"/> C1 (Photographic Skills)
<input type="checkbox"/> AB2 (Shrike Hike)	<input type="checkbox"/> A4 (Adventure)	<input type="checkbox"/> C2 (Forest Facts) <input type="checkbox"/> C4 (Cooking)
1:30-4:30		<input type="checkbox"/> C3 (FishWays) Check
<input type="checkbox"/> B3 (Bush Skills)		choice of manual:
<input type="checkbox"/> B4 (Wetlands)		<input type="checkbox"/> P/J <input type="checkbox"/> I/S <input type="checkbox"/> English <input type="checkbox"/> French

Kingfisher Lake Outdoor Education Centre

by Paul Higgins



This year-round centre, located 40km north east of Thunder Bay, is owned and operated by the Lakehead Board of Education. Its formally expressed 'raison d'être' is to provide a variety of curriculum related outdoor education activities. An underlying purpose is to instil an awareness and appreciation for our natural environment in all who experience Kingfisher Lake.

The lake lies in a north-south orientation and is 2km by .6km. Near the south end is the "main camp." This consists of a year-round residential facility and a separate year-round day-use facility. The all-log construction creates a rustic "close-to-the-land" atmosphere. There are eight log cabins, a classroom, a fire shelter for meal preparations, washroom facility, office, and wood-chopping shelter at the residential site. (Here the axe is not a "pioneer implement" but an everyday tool.) Junior kindergarten through OAC use both of these main camp facilities. The "north camp" has a similar log cabin layout. It is used for more senior students in the spring and fall. Students either paddle or hike to this facility which lacks electricity and heat, other than wood.

Imagine accessing a boreal setting for outdoor education 4km by 3km in area, which has been posted NO HUNTING for twenty years! Moose, otter, beaver, grosbeaks, whiskey jacks, loons, eagles, the ever-present kingfishers and many more species of wildlife are seen every day. The 25km trail system touches all possible boreal habitats so that typical trees, shrubs, upland and wetland species can be experienced. When our consistent metre of snow blankets the bush, skis and snowshoes are used as a means of travel for outdoor study, as well as for their own inherent joys and pleasures.

Programme plans for either day or residential encounters are done in consultation with the classroom teacher so as to tie-in topics being studied in the classroom. For the three day residential experiences one of the centre staff visits the class to help shape positive preparation. These "community living and learning experiences" have a lot of power. If going to the north camp, students either hike in carrying all they'll need, or, after a canoeing safety and skills lesson, paddle to their "home base." Upon arrival, community living rules and procedures are reviewed,

*Imagine
accessing a
boreal setting
for outdoor
education 4km
by 3km in area,
which has been
posted NO
HUNTING
for twenty
years!*

Kingfisher Lake Staff

Full-Time

1 Teacher/Manager

1 Naturalist

2 Instructors/Maintenance

Seasonal

3-7 generalists:
instructors/maintenance/
support

Visiting

Classroom Teacher

2 volunteer parents
with each class

We feel this offers an all-round experience.

and chopping and fire-building lessons are taught. The first meal is an interesting one as students struggle to start their fire, cook their meal and do their dishes outside. Each cabin group focuses their budding cooperative skills at a very immediate and important goal — the MEAL. Gradually, community living skills develop and are blended with such outdoor studies as: aquatic ecology, birds, mammals, plants, orienteering, general habitat and ecology interpretation, to provide a balance of academic and social learning. These residential trips have strong impact as attested by the follow-up letters, art and poetry which the students create.

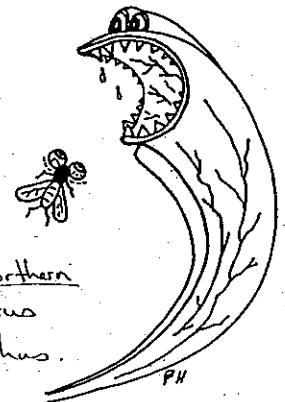
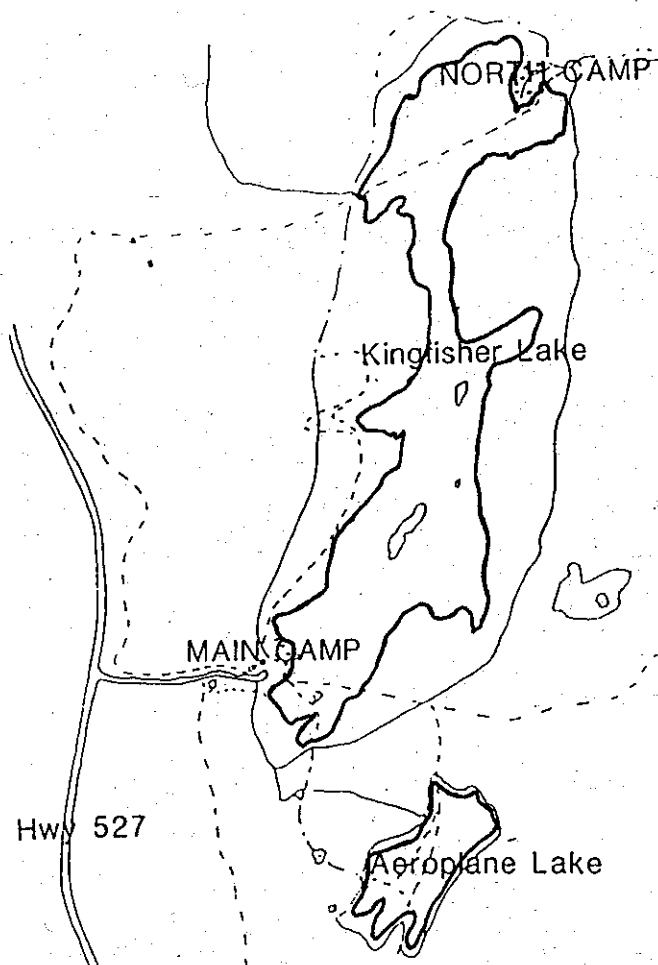
The spring season sees both residential facilities and the day facility operating at

capacity. In a typical spring week, there will be 280 student days at Kingfisher Lake. In practising outdoor education, we spend as much time outdoors in the programmes as possible. Despite the seasonal weather extremes (-40°C to +40°C), students rarely spend more than 30 minutes inside in any half day programme period. We try in all our programmes to balance academic enrichment with environmental, community-living, and recreational themes and practical outdoor skills. We feel this offers an all-round experience that excites, exercises, extends, enlightens, and empowers the students.

Primary students spend a day at the centre. In season, they typically hike to the bog where they discover bog cranberry, sundew, and the ferocious pitcher plant! For lunch it's back to the field centre where they cook their own hot dogs over an open fire. The afternoon is fast-paced with a variety of activities such as: pond studies, row boat rides, and environmental games. By the end of the day, our staff are exhausted, the kids are exhausted, the food supply is exhausted... It's just plain exhausting!

Kingfisher Lake... student extension through staff exhaustion!

Paul Higgins is one of those precious full-time "generalist" instructors at Kingfisher Lake. His outdoor teaching stamina is remarkable.



*The rare Far-northern pitcher plant *Sarracenia borealis* fasciata.*

Building the Momentum

by Joan Thompson

On a bright Saturday morning in November, approximately twenty-five COEO members gathered in comfortable Davies Hall at Lake St. George to learn more about ECO-ED and to become actively involved in the project.

Chuck Hopkins, Chair of ECO-ED; Nola Seymoar, Executive Director; and Joan Thompson, COEO Representative on the Steering Committee, gave a thorough overview of the history and scope of the Congress. Those with questions had an opportunity to ask and to discuss answers in detail.

Over a working lunch, three committees met to "get down to business." The Hospitality Committee, chaired by Dorothy Walter, has a mammoth task of arranging a billeting system for NAAEE members and foreign visitors to ECO-ED. This will keep costs down for these delegates and provide a chance for COEO members and their families to host an international visitor. If you live within easy commuting distance of Metro, please consider hosting a delegate. You will be asked to provide a bed with a reasonable amount of privacy, and a breakfast each day. You are not required to provide transportation but should be close to public transit. Of course, if you are attending ECO-ED, your visitor would probably travel with you. To receive an application to host a delegate, contact Dorothy at 488-4854.

The second committee formed under the leadership of Ron Hudson, was the Field Trip Committee. Ideas flowed fast for trips that would appeal to our own members as well as to delegates from beyond Canada. Within a week of the Lake St. George meeting, the Field Trip

Committee had met again, had drawn up a list of twenty field trips and was well into the detailed planning for them. Visitors will be able to choose from among visits to recycling facilities, outdoor education sites, a wildlife rehabilitation area, and the Metro Zoo. They will be able to rock climb, canoe, cycle in various locales and to orienteer through the towers and tunnels of the "urban jungle!"

Ron's and Dorothy's committees are to be congratulated for accomplishing so much in such a short time. The enthusiasm and varied talents and skills of COEO members are a powerful tool when harnessed in a project such as this.

Also at the Lake St. George meeting, a group of members interested in having some input into the programme of the conference met with Jiiva Somerville, one of our COEO representatives on the central Programme Committee. Jiiva, Nola, and Chuck had a chance to discuss suggestions from other COEO members.

Members of the Programme Committee include representatives from NAAEE, COEO (Jiiva Somerville and Skid Crease), OAGEE (Ontario Association of Geographers and Environmental Educators), Man and the Biosphere Canada (Brent Dysart.) They have met twice by conference call and for a two day face to face meeting in Toronto in December. The programme format has been set and will consist of plenary sessions and workshops each day. The conference is designed so that you may attend for one day, or all five and still have a quality learning experience. Many strategies will be built in to ensure that participants are encouraged to interact with people from

Visitors will be able to choose from among visits to recycling facilities, outdoor education sites, a wildlife rehabilitation area, and the Metro Zoo.

beyond Ontario and from outside the education field. Some of the objectives identified by the Programme Committee for the conference component of ECO-ED are:

- to encourage dialogue among teachers from around the world,
- to present innovative case studies and success models in environmental education from all sectors,
- to expand networks and partnerships across all sectors (education, business, government, non-governmental organizations),
- to "agitate and shake up" participants, but to send them away with practical strategies,
- to increase the profile of COEO and

NAAEE and to foster other related organization around the world.

Watch future columns in *Pathways* for programme details as they develop!

For the many COEO members out there who still want to become involved in ECO-ED, whether on a regular basis or for a few hours at the event, please fill out the Volunteer Form in this issue of *Pathways*. A database is being created so that we may find you when the need arises. Can you speak Hungarian? drive a van? use a computer? Have you got weekends? evenings? summer holidays to donate? **WE WILL NEED YOU!** Send your completed form to Joan Thompson, 840 Coxwell Avenue, Toronto, Ontario, M4C 2V3.

ECO-ED VOLUNTEER DATABASE

Name: _____

Address: _____

Employer/Workplace: _____

Position: _____

Telephone: (H) _____ (W) _____ (Fax) _____

Skills: Committee Work Art/Graphics
 Secretarial Speaking/Writing
 Telephoning Computer
 Fundraising Driving

Other: _____

Languages Spoken: _____

Availability: Evening/Weekends Occasional Work Days
 Summer '92 During Conference

Please send your completed form to: Joan Thompson, 840 Coxwell Avenue, Toronto, Ontario, M4C 2V3.

What is NAAEE?

by Joan Thompson

By now most COEO members know about ECO-ED—a joint COEO/NAAEE conference in Toronto in October 1992. What some members have been asking is “What is NAAEE?”

NAAEE stands for North American Association for Environmental Education. In 1989, COEO entered into an agreement with NAAEE to co-host an international conference in Toronto to be chaired by Chuck Hopkins, and ECO-ED was born!

NAAEE is a professional organization of environmental educators from the United States, Canada and Mexico. Like COEO, the organization is twenty years old, having formed in 1972 when a small group of environmental educators got together in Hot Springs, Arkansas. Since then they have met annually, including twice in Canada—in Quebec City and in Banff.

The membership of NAAEE embraces a wide spectrum of educators, from primary to college level, and from formal and non-formal sectors. Where COEO has five regions, NAAEE has four sections based on interest of the members. These are: Elementary and Secondary, Nonformal, Conservation Education, and Environmental Education. A member of NAAEE may belong to more than one section.

As immediate past president, Gus Medina says, “NAAEE is now a dramatically different organization from the fledgling group that organized our first meeting. We are a vibrant organization that is deeply committed to creating a healthy, sustainable environment through education by supporting the professional efforts and growth of our members.”

Benefits of membership include a bi-monthly newsletter, *Environmental*

Communicator, an annual conference, and a professional publications programme. For example, two recent publications, *Computer Aided Environmental Education* and *Essential Learnings in Environmental Education* are still available for \$12 US for members and \$16 for non-members from NAAEE headquarters. These publications are highly relevant and of benefit to anyone interested in environmental curriculum.

Several COEO members are also members of NAAEE. Personally, I have found that attending NAAEE meetings and developing a network among other members has broadened my perspective on what it is we are all trying to do. Most annual meetings have thirty to forty Canadian members present. Through NAAEE I have made connections with many dedicated Canadian professionals from Newfoundland through to British Columbia.

It is refreshing to look at different ways of educating students — and the general public — about environmental issues. Educators from Mexico or California, New York, the Yukon, or Ontario may use different strategies but the message is still the same. There is a feeling of strength and solidarity that develops when you realize that you are not alone in what you are trying to accomplish.

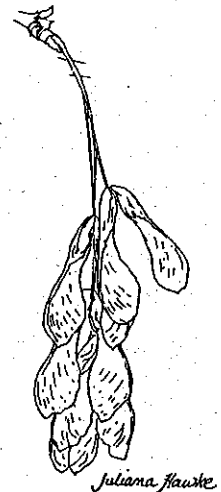
I encourage all COEO members to get to know our partners in ECO-ED. Invite them in to your homes. Develop some new friendships. Make some connections. It will enrich your teaching, and your life!

For information on membership in NAAEE, contact:

NAAEE, Box 400, Troy, OH 45373

Tel: (513) 339-6835;

Fax: (513) 335-5623



Congratulations to COEO from NAAEE

A Report to COEO members from the ECO-ED '92 Programme Committee

by Skid Craose

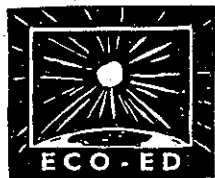
The meeting highlight was the positive NAAEE reaction to Joan Thompson's report on the field trip portion of the conference.

I can honestly say that I have never before worked on a conference which has produced so many questions without answers. I have begun to realize it goes hand in hand with conference planning on an international scale! When Jiiva Somerville and I volunteered for the Programme Committee, our intention was to get those answers and ensure that the programme met the needs and objectives of our members. After the meetings, phone calls and two lengthy conference calls, we still had the same questions and the programme structure remained basically unchanged from the one presented by the Steering Committee in September. Separating the "Congress" from the "Conference" came first.

Finally, the face-to-face meeting in December with the full Programme Committee from COEO, NAAEE, OAGEE, MAB and UN connections produced the programme specifics we needed. Congress Canada will be handling all ECO-ED registration. The partner events, including the COEO field trips, will still run from October 14-16; each partner group is responsible for planning and communica-

tion to ECO-ED—details (cost, dates, description) should go in NOW! The redesigned main conference will go from Oct.17-21. Each day will have a keynote strand (from "The State of the World" to "Paradigms in Progress") presented by international speakers, followed by workshops for greater depth and educational action models. Calls for papers/local speakers/presenters will go out in April *Pathways* along with current programme details.

The meeting highlight was the positive NAAEE reaction to Joan Thompson's report on the field trip portion of the conference. Chaired by Ron Hudson, the COEO field trip group produced a diverse and meaningful selection of trips on a very short notice. NAAEE thanked COEO for its quick planning and felt that their members would now have something of substance at the conference even if some of the international connections fall through. COEO and NAAEE representatives left the December meeting feeling much more confident about the success of the ECO-ED '92 Conference.



"If you can't be at the Earth Summit in Brazil, get to ECO-ED in Toronto!"

The World Congress on Environmental and Development Education

hosted by The Council of Outdoor Educators of Ontario and the North American Association for Environmental Education at their joint

Annual Conference

October 14-21, 1992, Toronto, Ontario

ECO-ED '92, 110 Eglinton Ave. W., 3rd Floor, Toronto, Ontario. M4R 1A3. (416) 482-9212

Sisters of the Earth: Women's Prose and Poetry About Nature

Edited and with Preface by Lorraine Anderson
Vintage Books, Random House, New York, 1991

Reviewed by Margit McNaughton

As I was preparing to lead my "country rambles" for C.O.E.O. in September I came across an interesting book called *Sisters of the Earth*. Something about this book stirred me emotionally and I knew almost immediately that it was a keeper!

As an outdoor educator I have always used the affective domain a great deal in my programs. In the last few years I have noticed an increased emphasis in this area. We are now being asked to feel the heartbeat of mother earth and to spend time "listening to nature." This type of activity comes more naturally to me than teaching a hard core science style programme. I am a confirmed tree hugger (as I'm sure many of you are). Maybe that is why I liked this book so much. It is written by women offering their responses to the natural world.

In my university years I was introduced to the writings of Leopold, Thoreau, Muir and many more. I enjoyed them but until reading this book I had no idea how much nature writing women had done. But in reading this book I responded differently... somehow more emotionally...with more feelings associated with the authors.

Interestingly the editor concludes in her preface that there is no such thing as a woman's view of nature but that there is a feminine way of being in relationship to nature. "This way is caring rather than controlling. It seeks harmony rather than mastery. It is characterized by humility rather than arrogance, by appreciation rather than acquisitiveness." These very things strike me as being at the root of what

we are trying to teach.

This book is a collection of over ninety author's works of different types—poems, short stories, essays, novel excerpts, journal entries, autobiographies and natural history. Unfortunately the editor Lorraine Anderson included only writings by women of the United States to keep the volume of approachable length. Maybe someone is working on a Canadian version.

In conclusion I would recommend this book because it is different—it feeds the soul and touches the heart.

"We live in a time of rebalancing. At this point in our journey as a species we are opening to two ecological truths: that all of life is a circle within which everything has value and serves an indispensable purpose and that strength and health derive from diversity. The important social and political movements of this century all have been concerned with extending our culturally defined circle of value to include those previously excluded: women, people of colour, foreign "enemies", animals—even trees, water, mountains, soil. The time is ripe for bringing women's voices into the circle of nature literature valued by our culture. This anthology is a step toward realizing that vision." (Preface, xvi)

Margit McNaughton is the Central Region Rep for COEO, and works both at home and for the Peel Board of Education in their Outdoor Education programme.

This book is a collection of over ninety author's works of different types—poems, short stories, essays, novel excerpts, journal entries, autobiographies and natural history.

ADD ONE MORE...



Since 1970, COEO has developed into a very prestigious organization representing the interests and concerns of and for outdoor education in Ontario. We have seen our influence in the professional development field with our co-sponsorship of major outdoor and environmental education conferences such as the Man-Environment Impact Conferences in Toronto and in Hamilton, as well as taking a lead in the creation of the Eco-Ed Conference in Toronto in the fall of 1992 which will be a world class congress on the issues for a global environment. Our various provincial conferences and regional workshops provide a wide variety of "hands-on" experiences for all. Over the years COEO has been a leader in providing post-graduate courses in Outdoor Teacher Education as offered by Northern Illinois University.

Our publications such as *Pathways*, *The Ontario Journal of Outdoor Education* and the *Catalogue of Programs and Personnel in Outdoor Education* continue to provide a source of information and facts relative to our membership.

Membership in COEO has continued to grow. As of the end of our membership year in 1991, our membership was almost 800. However, there are a great many

people in Ontario who are still unaware of our existence. **WE NEED YOU** to help us increase our membership. We are asking each member to recruit **ONE MORE MEMBER EACH** over the next few months. If each person did this, our membership would be well over 1,500!

What You Can Do

- Share a copy of *Pathways* with your colleagues and talk about COEO.
- Leave a copy of *Pathways* in your staffroom. If you want extras contact the Membership Coordinator.
- Contact your local regional representative to see about setting up a local outdoor education workshop in your area and invite others to come to these events.
- Have your school or agency take out a library subscription for your resource centre. It costs \$38.00 a year — NO G.S.T.
- Leave a photocopy of a membership form (backpage of each *Pathways*) with your friends and colleagues.

Let's see if we can each add one more member this year.

Council of Outdoor Educators of Ontario

Regions Served by COEO

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

Membership Application Form

(Please print)

Name: (Mr., Mrs. Ms) _____

Address: (Street or R.R.) _____

City _____ Postal Code _____

Telephone: (H) _____ (B) _____

Position: _____ Employer: _____

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

University/College if full time student: _____

I am in the _____ Region of COEO.

COEO membership is from September 1 to August 31. Any
membership applications received after May 1 will be applied to the
following year.

Please check: New Renewal Membership # _____

Fees: (circle)

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

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

John Aikman
Membership Secretary
47 Rama Court
Hamilton, Ontario
L8W 2B3

Please allow four weeks for processing or change of address.