

**Spirit of the North—Conference 80**

# **ANEE**

**Newsletter of the Council of  
Outdoor Educators of Ontario**

**Volume 9 Number 7 Sept. 1980**

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# IN THIS ISSUE

2-Editorial  
3-Letters to the Editor  
4-Pot Pourri  
8-Datebook  
10-Books-Magazines-Films  
11-Pre-Conference Seminar  
13-Conference Pullout  
17-Datebook  
19-Regional News  
22-Pot Pourri

Cover Photo: Ramsey Lake, Sudbury. Courtesy of Northern Life Magazine.

ANEE, the newsletter of the Council of Outdoor Educators of Ontario is published seven times each school year. The publication is mailed to C.O.E.O. members only. Membership can be arranged through the membership secretary whose address appears opposite.

ANEE (AH-NEE) IS AN OJIBWAY WORD USED AS A GREETING OF FRIENDSHIP, IT IS USED AS A CORDIAL SALUTATION AMONG FRIENDS MEETING INFORMALLY. OUTDOOR EDUCATION IS A DISCIPLINE WHICH HAS AS ITS FOUNDATION A DESIRE TO LIVE IN HARMONY WITH THE ENVIRONMENT; THE TRADITIONAL WAY OF LIFE OF OUR NATIVE PEOPLE CHERISHED THIS ATTITUDE. ANEE IS A MEANS OF COMMUNICATING AMONG OUR MEMBERS WHO ARE SCATTERED ACROSS A LARGE PROVINCE. IT IS HOPED THE GREETING -ANEE- IS FELT THROUGH THESE PAGES.

Printed on de-inked recycled paper.

**Next Deadline! Oct.15**



**All memberships are now due!**

# FROM THE EDITOR'S DESK

## CLEAN-WATER ADS ALL WET, MINISTER TOLD

The scene opens with a beautiful young woman chin deep in a sparkling clean northern lake.

She stands up, revealing an orange bathing suit top and a lot of cleavage and shakes her shoulders slightly.

"Why do I come back to Ontario for my vacation every year?" she asks.

"Because Ontario is clean. Ontario and its people are doing as well in the fight against pollution as any place I know. Stay beautiful, Ontario," she says, and swims off.

This advertisement is one of three current television and radio spots sponsored by Ontario's Ministry of the Environment at a cost of \$500,000.

Ontario Liberal Leader Stuart Smith and NDP Leader Michael Cassidy have called the ads an example of the Government's using public money to answer political criticism.

The ad showing the woman swimmer is sexist advertising, Dr. Smith said. However, he said, in any case, all three ads show another attempt by the Government to use public funds to praise the Government's performance.

"It is totally dishonest and despicable. I hope the people of Ontario wake up to the continued arrogance and lack of fair play of this 37-year-old regime," he said in a telephone interview.

Environment Minister Harry Parrott smiled when asked about the ad. The ads have a summer theme because "the time the people enjoy the environment most is now. The use of water is very big in this country and I think those scenes are pretty representative."

The other two ads show an actor paddling in a canoe who says he is an engineer (he isn't) and an old man playing baseball. All three ads show spectacular scenes of lakes, hills and birds.

"I'm sure we would have been criticized if we had not used a woman," Dr. Parrott said. But a woman in a bathing suit?, he was asked. "I enjoy the opposite sex with a bathing suit or more clothes on. No question, it is an attractive person not heavily clothed, but you have to look at the total number of scenes."

Mr. Cassidy called the ads, "a transparent misuse of public funds to benefit the Tories. They are responding in advance and softening the public in advance on what will be a major issue (in the next provincial election.)"

He called on the Government to give an equal amount of money to environmental protection groups to give the other side of the story.

Dr. Parrott defended the ads, saying his ministry wanted to present the good news about the environment. "We're a bad news ministry. We go around pointing out problems. The bad news is reported day after day and the good news is reported once. I understand this, but we wanted to put it in perspective. We have to give a balance that things are pretty good."

Dr. Parrott said he asked that his name not be used in the ads. "You don't see Harry Parrott's name on it. I won't comment on the others (other Cabinet ministers) using their names (on ministry ads.)"

The ads are not political because they show what the ministry can do along with the people of Ontario, not what the Conservative Government is doing, Dr. Parrott said.

The theme song is Stay Beautiful Ontario, and the ads end with "The Ontario Ministry of the Environment. Working with you to keep Ontario beautiful."

Globe and Mail, Toronto.  
Saturday, August 2nd, 1980.

## LETTERS TO THE EDITOR

The danger with using 'catchy' titles and phrases is that readers may accept that they represent a writer's views, without following his logical twists and turns to another conclusion. I enjoyed Robert J. Rogers article in ANEE, Volume 9, Number 5, (May, 1980,) but his conclusion that skills certification is part of the Leadership process is a little at odds with a title that reads, "Adventure Activity Leadership Certification - It's Obsolete!"

Rogers is quick to acknowledge that most of the confusion and debate about certification is concerned with semantics. However, I was disappointed to see him seize one convenient definition of leadership (from Janis of the National Woodmanship School,) and use this as a premise for all his subsequent arguments. Research seems to indicate that in a group of peers, two types of leaders tend to emerge. One is that skills leader, and one is the psychological or group leader. In most outdoor activities, the "leader" is primarily a psychological or group leader, whether he has been hired as a guide, or is leading a class or recreational group. The leader's authority is appointed or given. The type of activity that may be led by that leader depends on his skill level and experience in an activity.

I must agree with Rogers that the appointed leader must be prepared by a process that is complex, on-going and dynamic. This will give the experience and leadership qualities required by the teacher who takes a class into the outdoors, or the camp counsellor who leads a camping trip, or the guide who takes out clients. We presume that even without certification these leaders have the required experience to evaluate the dangers of the area where they are working. Hence, an outdoor education teacher with little experience and skills may start on the school site.

However, to move from a low-risk to a high-risk activity, a level of skill and experience in that activity is necessary. To evaluate this level of skill

is not easy, especially if a school board or camp or municipality does not have detailed knowledge of the activity. Also the need for this evaluation is important, because the schoolboard or municipality or whatever is legally responsible for the "leader" they are appointing. This is true even if the leader is providing his services gratuitously. (Quebec Civil Code 1050.) In short, skills certification and logged experience in the skill can show employers and clients that a leader is qualified in a particular activity.

Unfortunately, it is too easy to mention "skills certification" and leave it at that. There are problems in certifying and assessing skills, not the least being that the process is "self-centred," encourages 'cloning' in the image of the assessor, encourages elitism, etc., etc. However, many of these problems can be solved by using logged experience as a pre-requisite, by making certifying bodies stand behind their certifications, by requiring a period of "encadrement" before a certificate becomes effective and by having regular seminars for certified leaders to exchange knowledge, safety methods and upgrade skills. Adventure Activity Leadership Certification is not obsolete. It is very much current and new methods are being found to weld skills qualifications to experience and outdoor leadership. The bodies who hire adventure leaders require it. I submit that your article did move the fence around people, but there are fences inside that fence, and the pasture in those fenced areas is greener because the occupants are finding work. Perhaps fences won't be necessary in the future, because all the grass will be equally green.

Keith Wilkinson

## POT POURRI

### BLUE PERIS MOUNTAIN CENTRE - NORTH WALES

The county of Bedford is relatively flat with a major industrial area around Luton and Dunstable in the south. The rural areas are interspersed with brickworks overspill and immigrant communities. The county has a policy of residential experience coupled with outdoor education. In county on the chalk downs is Dell Farm, a small centre for day or short stay primary groups (maximum 40.) Out of county there is Nether Swell Manor in the Cotswolds, catering for up to 80 pupils drawn mainly from secondary age groups (11+), and Blue Peris Mountain Centre in the mountains of North Wales, which can take 30 students normally (13+.) All centres run inservice adult courses. It has been the Authority's policy to differentiate between the environmental and activity aspects of Outdoor Education, thus Dell Farm and Nether Swell are Field Study centres and Blue Peris is an Activity centre.

Blue Paris was opened in 1975 in an old Quarry Manager's house, 1000 feet above sea level facing Snowdon, and 215 miles from the county or about 5 hours drive. Currently it is staffed by a Warden (the author) and two instructors, plus ancillary staff of seven (some part-time.) It is equipped with gear for camping, rock climbing, mountain walking and 9 kayaks and 2 'Canadian' canoes. This equipment includes basics such as waterproofs and boots, since few of our pupils possess such things.

The centre is open for 43 weeks of the year and is normally fully booked a year in advance. Of the open period 77.5% are school groups, 9.5% inservice and Mountain Leader courses, 9.5% long Apprentice/Police Cadet courses, 3.5% open adult courses. The programmes offered centre mainly around sampling the activities above and are normally of 6 days duration. Whilst the centre is 'activity' orientated, the staff are also qualified in environmental subjects and there is an informal input in this area. The centre's courses aim to provide a valuable residential experience through the challenges of our rugged environment, the shared experience and the aquisition of new skills. It is hoped that students acquire an increased awareness of themselves, their relationships with others and their relationship to the environment. The relationship between each cannot be divided proportionally. The accent of each course is as different as the course members. Since the courses are short it is hoped that a stimulus is provided for further developments through the schools.

The funding of the centre is through the Bedford Education Service, but the students pay approximately 55% of cost per annum. In special cases of need, the Education Service will assist pupils further and teachers on inservices courses receive a 75% grant. The centre has a house committee made up of 5 members of the Education Committee (including 1 teacher) and the Deputy Chief Education Officer. This body is primarily concerned with the annual budget.

We have grown from nothing 5 years ago, to our present state and seem to be answering a need. Yet, I believe, we only touch the suface of the potential. This makes the challenges greater perhaps since we need to 'educate' the powers that be, as much as our own users. In times of recession it makes the going hard if not seventh grade! But challenge is the whetstone of human endeavour.

P. J. HOOD



#### STAO - 80 Conference

The Science Teachers Association of Ontario is holding its next annual conference on Nov. 6, 7 and 8th, 1980 at the Skyline Hotel in Toronto. For further information, contact Keith Clark, Conference Chairman. Aldershot High School, 50 Fairwood Place West, Burlington, Ontario. L7T 1E5.

## PARKS AWARENESS EDU-KIT

by

Joan Bell Farley

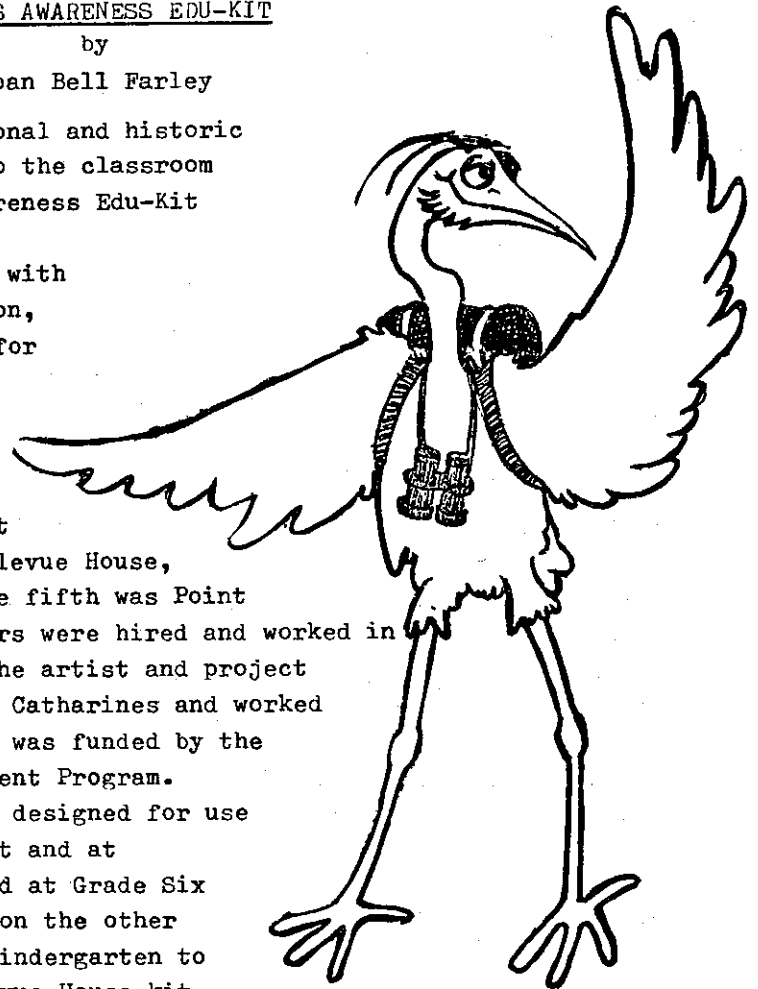
In an effort to bring national and historic parks' philosophy and facts into the classroom Canada introduced the Parks Awareness Edu-Kit project.

The project, sponsored by COEO, with Alan Hunter as the contact person, involved seven persons working for six months, between September, 1979 and February, 1980, to produce educational kits for five Parks Canada sites. Three were historic sites-- Fort Wellington, Fort George and Bellevue House, one was the Rideau Canal and the fifth was Point Pelee National Park. Five writers were hired and worked in close proximity to the parks. The artist and project co-ordinators were based in St. Catharines and worked with all the sites. The project was funded by the federal Youth Job Corps Employment Program.

The kits were produced and designed for use by the Elementary School student and at three sites were primarily aimed at Grade Six to Eight. The Point Pelee kit, on the other hand, includes activities for Kindergarten to grade Six classes and the Bellevue House kit for grades Four to Six.

The themes for the kits are as follows:

1. "Garrison Life at Fort Wellington"
  - explores the life of the officers, soldiers, women and children at the fort and touches on the Battles of Ogdenburg and Windmill Heights concept of change emphasized throughout.
2. "John A. Macdonald: The Man" and "Bellevue House and grounds"
  - two themes forming Part I and Part II of the Bellevue House kit.
  - explores the questions, "Who was John A?", "What was he like?", and "Why was he famous?" and "Where is Bellevue House?", "What does it look like?" and "Why is it significant?"
3. "Jones Falls Lockstation" and "Smith Falls Lockwalk"
  - two separate kits produced at the Rideau Canal for each of these two locks.





- the Jones Falls kit emphasizes the construction of the Jones Falls lock and lockmasters house north of Kingston, engineering along the canal and blacksmithing.
  - the Smith Falls kit is a general introduction to the canal, its history, many uses and present appearance; how a lock operates and stone masonry.
  - explores the fort life of the officers, soldiers, women and children in comparison with society today.
  - introduces national parks philosophy and rules, and Point Pelee.
  - discusses bird and insect migration, especially the Monarch Migration.
  - introduces the kit and how to use it.
  - helps the teacher plan his or her outing to the park.
- 4 "Life and Times at Fort George and Queenston Heights"
- 5a "Point Pelee: A National Park"
- b "Migration"
- c "Take a Breath of Fresh Air: An Introduction"
- d "Take a Breath of Fresh Air: How to Plan a Day at Point Pelee"

The kit material for Fort Wellington, Fort George and Rideau Canal are contained in a physical box, such as a barracks box, cheese box or trunk. The contents of the box include a combination of teacher's instructions, resource material and student handouts, reproductions of artifacts, display cards, games, enlarged photographs or study prints, maps, charts, puzzles, slide shows, and more. The Bellevue House kit is housed in a three-ringed binder containing all of the above material except artifacts.

At Point Pelee, the kit development took a somewhat different route. As the emphasis is on nature themes and not history, the teacher is referred to the park for live props, films, books, etc and only the written material was distributed to school resource centres in the local area.. Two activity booklets have been printed to accompany the first two themes.

For any who may be interested, more information regarding the Edu-Kits can be obtained by contacting the Interpretive Officer at each of the parks. Their addresses and telephone numbers are listed below for easy reference. Please note that except for Point Pelee, there is only one copy of each kit, and this one can only be booked at the park, historic site or canal. They are completed now; some are being tested in the classroom and others are being presented to teachers at Professional Development Days.

Some interesting research and creative activities have been prepared for these kits and are worth investigating. As time and funds were short and as needs change there is always room for improvement. Your use, experimentation and comments will be appreciated.



The participating parks, historic sites and canal are as follows:

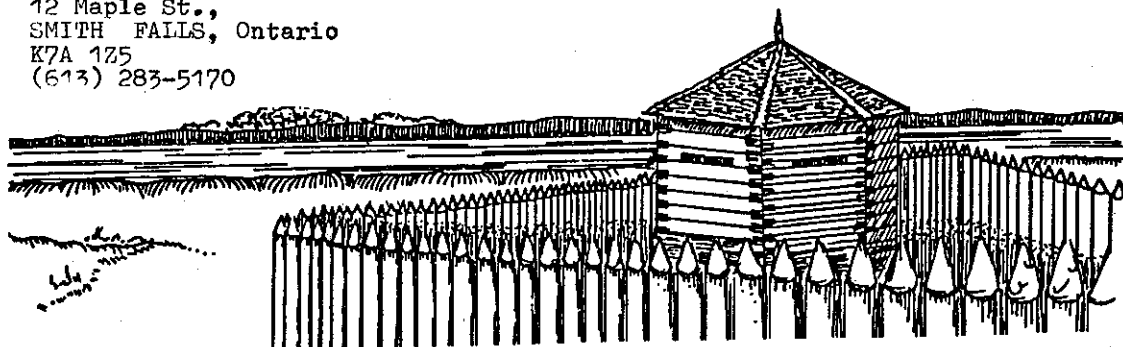
Point Pelee National Park  
LEAMINGTON, Ontario  
N8H 3V4  
(519) 326-3204

Fort Wellington National Historic  
Park  
PRESCOTT, Ontario  
KOE 1T0  
(613) 925-2896

Bellevue House National Historic  
Park  
35 Centre St.,  
KINGSTON, Ontario  
(613) 542-3858

Fort George National Historic Park  
NIAGARA-ON-THE-LAKE, Ontario  
LOS 1J0  
(416) 468-2741

Rideau Canal Historic Waterway  
12 Maple St.,  
SMITH FALLS, Ontario  
K7A 1Z5  
(613) 283-5170



# DATEBOOK

LAND CONFERENCE

NOVEMBER 14 - 15, 1980

AT THE

UNIVERSITY OF GUELPH

LAND      Lessons from the Past  
            Ideas for the Future

## POLICY FORMULATION

The conference will explore the issues and political reality in searching for action to improve land conservation.

Workshops will provide a forum for consensus and the development of a policy paper.

SPONSORED BY:    Conservation Council of Ontario and  
                         Centre for Resources Development  
                         University of Guelph.

Further information may be obtained from:

University School of Part-Time Studies and  
Continuing Education  
Guelph, Ontario. N1G 2W1--Phone (519)824-4120.

### Upcoming Events at the Guelph Arboretum

#### SOLAR CLOCKS - SUNDIAL WORKSHOP SAT., SEPT. 6

An obvious extension to today's interest in solar energy for home heating is the solar powered clock, or sundial. We'll discuss the history of sundials, movements of the sun and various sundial designs. The workshop will also be a "hands-on" experience with an opportunity for you to build your own model sundials to try out at home. Materials will be supplied. Please register by phoning 824-4120, ext. 3932. Saturday, September 6, 9:30 a.m. Alan Watson - 2.5 hours.

#### NATURE'S DYES WORKSHOP TUES., SEPT. 16

The rainbow of colours which can be obtained from plants is quite fascinating. In this introductory workshop, we'll stress the plants utilized by the North American Indians, discussing conservation, identification and preparation. Materials will be supplied for workshop participants to complete a sample card of the various dyes. Please register by phoning 824-4120, ext. 3932. Tuesday, September 16, 7:30 p.m.

#### FALL PHOTO WORKSHOP - TUES. SEPT. 30,

An evening workshop is planned to discuss various aspect of nature photography, specifically close-up and telephoto techniques, composition and equipment. This is to be followed by a group field trip and showing session. Bring 10 of your nature slides for showing. Please register by phoning 824-4120, ext. 3932. Tuesday, September 30, 7:30 p.m.

#### AUTUMN'S NIGHT SKY

This evening program will introduce you to stargazing and the movements of the heavenly bodies. Foremost in the session will be tips on how to find your way around Autumn's night sky, demonstrating just how easy and entertaining stargazing can be. Bring your binoculars and warm clothing. Wednesday, October 15, 8:00 p.m. Alan Watson - 2 hours. N.B. Sessions cancelled if it is cloudy at 5:00 p.m.

#### AUTUMN DAY AT THE ARBORETUM - SAT. OCT. 18

Enjoy the colour and sounds of autumn at the Arboretum. In the morning and early afternoon, walk the trails and view the collections. At 2:00 p.m. in the Arboretum Centre, the fall colours can dance in your mind as you hear the exotic, fiery rhythms of Flamenco Guitars performed by Harry and David Owen. Like the fall landscape, these two artists are "exciting and spirited and their individual sounds blend into one rich textured fabric." This event is a joint venture by the Music Department and the Arboretum. Saturday, October 18, 10:00 a.m. to 3:30 p.m. Nature and Arboretum Centres.

#### BIRD FEED AND FEEDERS SAT. NOV. 1

Wondering just what kind of bird feeder to put up and then what kind of feed to put in it this winter? This Saturday afternoon activity is just for you then. We'll discuss the pros and cons of bird feeding, when to start and finish, types of feeding stations, photography at the feeder, kinds of food and the bird species which you are likely to attract. Saturday, November 1, 1:00 p.m. Alan Watson - 2 hours.

#### TREES WITHOUT LEAVES - SAT. NOV. 22

While you are probably fairly confident that you could identify an oak or maple leaf, without seeing the tree from which it came, how would you fare if asked to identify the tree without the leaves? It's really very easy and fun, if you know your three B's: buds, branching and bark. We will have an introduction to tree identification keys and then get some first hand experience during a walk along the nature trails. Saturday, November 22, 1:00 p.m. Alan Watson - 2 hours. Dress warmly, hot chocolate and tea will be available after the walk.

#### WINTER'S WEEDS - SAT. DEC. 6

The dried, scraggly remains of many summer plants contain seeds which are an important winter food source for birds and mammals. In addition, their shapes and various shades of brown add beauty to the early winter landscape. This outing will include identification of winter's weeds, and possible uses in Christmas decorations -- everyone will leave their own natural Christmas tree ornament. Saturday, December 6, 1:00 p.m. Alan Watson. Dress warmly, hot chocolate and tea will be available after the walk.



## BOOKS - MAGAZINES - FILMS

The Complete Guide to Backpacking in Canada is the ideal manual for both beginning and expert backpackers. All aspects of this popular sport are explored, from choosing equipment to routefinding and winter backpacking.

The book is divided into two sections. The first, "Getting Ready," covers the basics in backpacking equipment and techniques necessary before heading out on the trail. In these chapters Elliott Katz discusses all the practical angles of backpacking, including how to protect yourself from insects, backpacking with children, and safety. He even tells how to grow sprouts in your pack.

The second section provides detailed description of where to backpack in Canada, with a separate chapter for each province and territory. Maps and statistics give the interested backpacker a clear picture of the available trails in each part of the country. Temperature charts, useful addresses, and a description of some of the remarkable wildlife you might expect to encounter are all included.

The Complete Guide to Backpacking in Canada is the indispensable guide for anyone interested in the fun and challenge of backpacking.



# RECORD IT!

ANNUAL MEETING  
PRE-CONFERENCE SEMINAR, 1980.  
SEPT. 25-26/80

- \* ADVANCED RECORDING TECHNIQUES
- \* FOR PERSONAL and PROFESSIONAL GROWTH
- \* FEATURING: "CREATIVE COMMUNICATIONS"
  - \* Photography
  - \* Sketching/Picture-Making
  - \* Sound Recording
  - \* Graphics/Visual Displays
  - \* Non-Verbal Communication and Recording

\*PLACE: Sudbury, Sheraton-Caswell Inn  
(same as Annual Meeting)

\*COST: \$70., COEO Members: \$60. (Fee includes double-occupancy accommodation, meals, and programme.)

\*REGISTRATION: By mail. Closes Sept. 12/80.

\*MAIL TO: Mail completed Registration Form and Fee (payable to Phyllis Hill):

Phyllis Hill  
153 Meadowbank Road  
Newmarket, Ont. L3Y 2Z2 (Tel: 416-898-2517)

Cancellation Policy: Refunds available prior to Sept. 19/80, subject to a \$10. service charge.

## \*\*\*\*\* PROGRAMME

Thurs., Sept. 25, evening: Features noted wildlife photographer, Barry Ranford, presenting:

"Mysteries of the Desert: Baja, California"

Fri., Sept. 26, all day. CHOOSE ONE OF THE FOLLOWING-ALL-DAY WORKSHOPS:

1. Sketching/ Picture-Making- by John Joy. This Toronto artist, educated at OCA, is well-known for his watercolour and oil paintings of older Toronto backyards and buildings. Equally popular are his paintings of rural Ont. He has had numerous one-man shows; and his work is represented in many collections. Participants are to bring: painting materials, any medium: watercolour, oil, pencil..., sketch book or canvas, sun hat, easel, camp stool (if possible), some examples of own work (if available)

2. Sound Recording- by a CBC natural sound consultant for shows such as: This Land and Nature of Things. Session will focus on recording in the outdoors. Participants are to bring: portable tape recorder(preferably  $\frac{1}{4}$  inch), microphone(parabolic, if possible), 2 tapes/cassettes, headphones
3. Graphics/ Visual Displays- by Bruce Hood. Currently wildlife biologist at Kortright Centre for Conservation, Bruce has worked as design exhibitor for Ministry of Natural Resources. His session will focus on the design and creation of interesting and informative displays suitable for outdoor education themes.
4. Photography-by Barry Ranford. An honours grad of OCA, Barry is self-employed, as a photographer and graphic designer. His work appears in educational material, as well as magazines such as OWL, and the FOW newsletter, Seasons. Participants are to bring: 35 mm camera, 2 rolls Kodachrome 64 or 25 ASA film, wide angle lens(28 mm) or a macro lens, tripod, Mini-tripod ( $\pm$  10") light meter, telephoto lens.
5. Creative Approaches to Communication: Recording Verbally and Non-Verbally in the Out-of-Doors. by Shelt Chastain and Bud Wiener, professors at Northern Illinois University. This session is concerned with the building, reviving, and exercising forms of communication through multi-sensory awareness outdoors.

\*\*\*\*\*

REGISTRATION FORM  
1980 PRE-CONFERENCE SEMINAR  
Sudbury, Sheraton-Caswell Inn, Sept. 25-26.

NAME \_\_\_\_\_ Male \_\_\_\_\_/Female \_\_\_\_\_  
ADDRESS \_\_\_\_\_ PHONE: Home \_\_\_\_\_  
\_\_\_\_\_ Work \_\_\_\_\_  
COEO # \_\_\_\_\_

I wish to share a room with: \_\_\_\_\_

Friday Programme Choice: 1st \_\_\_\_\_ (Early registrants  
2nd \_\_\_\_\_ will be notified  
3rd \_\_\_\_\_ as to choice given.)

Amount Enclosed: \_\_\_\_\_ \$70. Signed: \_\_\_\_\_  
\$60. COEO

\*Registration closes Sept. 12/80. No refunds after Sept. 19.

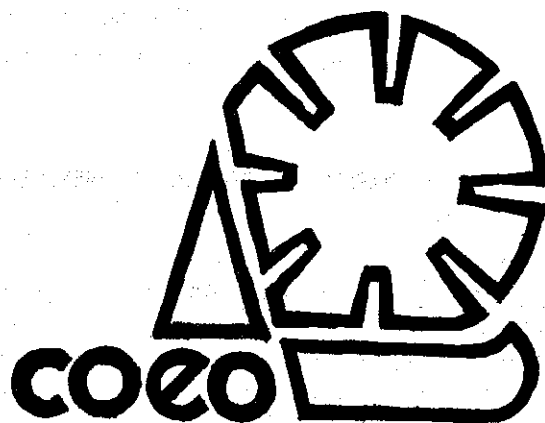
\*Mail to: Phyllis Hill  
153 Meadowbank Road  
Newmarket, Ont. L3Y 2Z2 (Tel: 416-898-2517)

\* Note: This form does not register you for the Annual Meeting.

**CONFERENCE '80'**  
**10th Annual**

**Sudbury, Ontario**

**Sept. 26, 27, 28.**



**'SPIRIT  
OF THE NORTH'**

## CONFERENCE INFORMATION

The Far Northern Members are excited at the prospect of being your hosts for the 10th Annual Conference. We are sure that you will be pleased with the program we have planned for you. As Northerners, we are looking forward to sharing our part of the province with you. Bring your camera to capture the fall splendor.

The Conference Headquarters is located at the Sheraton Caswell Motor Inn, located on 1696 Regent Street South, (705) 522-3000. The hotel facilities include a pool and a sauna, so bring your bathing suits.

Sudbury is about a 4½ hour drive from Toronto and about 5½ hours from Ottawa. We strongly suggest forming car pools for your trip north in order to conserve fuel, increase enjoyment and to save money. Contact your Regional Representatives for help in forming car pools.

Our entertainment committee ask those of you who play musical instruments and/or lead singsongs to participate in a Saturday evening campfire session.

If you wish to have room accomodations confirmed at the Conference Hotel, we require the first nights fee to be sent with your registration. NOTE--You then must check out through the hotel's front desk.

A complete, up-to-date Conference Program will be handed out when you arrive at the Conference.

Participation in the full or half day programs requires pre-registration (prior to Sept. 15). These sessions have a limited number of spaces, which will be filled on a first come - first served basis. All full and half day sessions are scheduled on Saturday, Sept. 27. The morning half day and the full day sessions will leave the hotel at 08:30 and the afternoon half day sessions will leave at 13:00. All of these sessions are activity orientated and so appropriate dress is required.

## SCHEDULE

FRIDAY	SEPT 26	16:00 Registration	SATURDAY (cont)	17:30 Cocktail Hour	
		20:00 Guest Speaker		18:30 Dinner	
		21:00 Regional Meetings		20:00 Annual Meeting	
		22:30 Entertainment		21:30 Entertainment	
SATURDAY	SEPT 27	08:00 Breakfast	SUNDAY	SEPT 28	08:00 Breakfast
		09:00 Session 1			09:00 Session 5
		10:00 Break			09:45 Break
		10:45 Session 2			10:00 Session 6
		12:30 Lunch			10:45 Break
		14:00 Session 3			11:00 Session 7
		15:30 Break			12:00 Conclusion
	15:45 Session 4				

## GUEST SPEAKER

We are happy to announce that our Guest Speaker for the Conference will be Peter J. Hood from Great Britian. Peter is the Warden (Director) of the Blue Peris Mountain Centre in North Wales. The Centre's main function is to provide activity courses for school groups but it is also involved with conducting Leaders courses for adults. Peter's address will speak of this Centre's program and he will also explain a recently introduced certification system, entitled the 'Field Party Leadership Scheme'. Peter comes to us with a wealth of background experience, both practical and academic. We are pleased that Peter is able to join us on his month-long tour of Canada.



# PROGRAM

## FULL DAY SESSIONS

08:30

- KAYAKING - conducted by Herman Kerckhoff - an introduction to kayaking - the session will include theory, a pool session and in the afternoon some work in rapids.
- WILDERNESS SKETCHING - conducted by Fred Hagen - this session is designed for the intermediate artist - the group will travel to Killarney Provincial Park.
- CANOE TO SEE - Killarney Provincial Park - the tour will include George, Freeland, Killarney and O.S.A. Lakes.
- ROCK CLIMBING - this session is designed for those who have had some prior experience and wish to increase their skill level.
- TRAIL RIDE - we are sorry to announce that the trail ride has been cancelled.

## HALF DAY SESSIONS

MORNING SESSIONS 08:30

- FITNESS IN THE OUT-OF-DOORS - this session will deal with fitness required for the out-of-doors and with using the out-of-doors to remain fit.
- INCO SURFACE TOUR - this tour of the INCO Copper Cliff facilities will include the Smelter, Mill and Refinery.
- LAKE LAURENTIAN CONSERVATION AREA - will include a program overview and a nature walk through this beautiful wilderness area located within the city limits.

AFTERNOON SESSIONS 13:00

- SAILING - This program is designed for the beginning sailor and will be held at the Sudbury Yacht Club on Lake Ramsey.
- EDIBLE WILD - this session will provide you with an opportunity to discover some of Northern Ontario's fall edibles.
- NATURE PHOTOGRAPHY - this session with Karl Sommerer, an award winning photographer, will provide tips for the beginner and expert alike.
- SUDBURY BASIN TOUR - the Sudbury Basin is a unique geological area - explore the Basin with Dave Pearson, a man who knows it well.

## THE FOLLOWING SESSIONS WILL BE HELD IN THE CONFERENCE HOTEL

### SESSION 1 SATURDAY 09:00

ELEMENTARY SCHOOL MINING WORKSHOP  
LAKEHEAD UNIV. OUTDOOR RECREATION PROGRAM  
WILDERNESS SURVIVAL - SUMMER  
FUR TRAPPING - PART 1  
SNOWSHOE MAKING AND REPAIR  
ADVENTURE LEADERSHIP PANEL  
RAPE OF THE NORTH

### SESSION 3 SATURDAY 14:00

OUTDOOR REC. & TRIPPING AT LAKEHEAD UNIV.  
HEADWATERS  
LEGAL LIABILITY AND THE OUT-OF-DOORS  
RAPE OF THE NORTH  
PADDLE CONSTRUCTION  
ENVIRONMENTAL INTEGRITY  
REGIONAL STRATEGIC RESOURCES PLAN

### SESSION 5 SUNDAY 09:00

WILDWATERS  
ROPES COURSE INTRODUCTION  
ROCK CLIMBING PREPARATION  
SECONDARY SCHOOL OUTDOOR CREDIT COURSES

### SESSION 2 SATURDAY 10:45

AN ADVENTURE IN LEARNING - LIVING HISTORY  
SKIING FOR THE DEVELOPMENTALLY HANDICAPPED  
WILDERNESS SURVIVAL - WINTER  
FUR TRAPPING - PART 2  
ACID RAIN - INCO  
REGIONAL STRATEGIC RESOURCES PLAN

### SESSION 4 SATURDAY 15:45

PURSUIT ACTIVITIES FOR ELEMENTARY STUDENTS  
OUTDOOR EQUIPMENT  
OUTDOOR LEADERSHIP - RISK MANAGEMENT  
ROCK CLIMBING PREPARATION  
BIOLOGICAL EFFECTS OF ACID RAIN  
OUTDOOR LEADERSHIP IN THE UNITED KINGDOM

### SESSION 6 SUNDAY 10:00

BIKE TRIPPING  
WOMEN IN THE OUT-OF-DOORS  
NATIVE VALUES AND OUTDOOR EDUCATION  
ENERGY CONSERVATION & ALTERNATE LIFESTYLES  
BAFFIN ISLAND BACKPACKING

### SESSION 7 SUNDAY 11:00

OUTDOOR RECREATION AT LAURENTIAN UNIV.  
FOOD DEHYDRATING - DO IT YOURSELF  
WILDERNESS GUIDES ASSOCIATION  
HEADWATERS

A CONTINUOUS FILM REVIEW ON SUNDAY MORNING

# REGISTRATION

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REGISTRATION (SEPT. 15) IS  
FOR ALL FULL AND HALF DAY  
PROGRAMS. PLEASE INDICATE  
PREFERENCE.

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Climbing \_\_\_\_\_  
Business Sketching \_\_\_\_\_  
Ride (cancelled) -- \_\_\_\_\_

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Cheque Payable to:

COEO CONFERENCE '80

Cheque and registration to:

Miss Barb Fogle,  
1669 Southview Drive,  
Sudbury, Ontario. P3E  
(705) 522-2536

219

## FEES

Please complete the following

Conference Fee and Meals  
\$60.00 or \$10.00 deposit \_\_\_\_\_

### Accommodation

Single/Night \$25.00  
Double/Person/Night \$16.00  
Triple/Person/Night \$12.00 \_\_\_\_\_

### Membership ( if applicipal)

Regular \$15.00  
Student \$ 8.00  
Family \$25.00 \_\_\_\_\_

Please attach Membership Form

### NON MEMBER FEE

Regular \$7.50  
Student \$4.00 \_\_\_\_\_

LATE FEE (After Sept. 15)  
\$5.00 \_\_\_\_\_

Total Amount Included \_\_\_\_\_

Please indicate if you wish a second  
night's accommodation \_\_\_\_\_

If you have made arrangements to share  
hotel accommodations with others, please  
give their names:

First Night Accommodation Fee must  
be included with your registration if  
you wish your room confirmed.

Early Registration (Sept. 15) will  
mean your name will be put in for  
a Grand Draw

For Office Use

## REGISTRATION

(Please Print)

Mr.  
NAME Miss \_\_\_\_\_  
Mrs. \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
\_\_\_\_\_  
POSTAL CODE \_\_\_\_\_  
TELEPHONE \_\_\_\_\_  
REGION \_\_\_\_\_  
MEMBERSHIP NUMBER \_\_\_\_\_

EARLY REGISTRATION (SEPT. 15) IS  
REQUIRED FOR ALL FULL AND HALF  
DAY PROGRAMS. PLEASE INDICATE  
YOUR PREFERENCE.

### FULL DAY

Kayaking \_\_\_\_\_  
Canoe to see \_\_\_\_\_  
Rock Climbing \_\_\_\_\_  
Wilderness Sketching \_\_\_\_\_  
Trail Ride (cancelled) -- \_\_\_\_\_

### HALF DAY

A.M.  
Fitness \_\_\_\_\_  
Inco Tour \_\_\_\_\_  
Conservation Area \_\_\_\_\_  
P.M.  
Sailing \_\_\_\_\_  
Edible Wild \_\_\_\_\_  
Photography \_\_\_\_\_  
Geology Tour \_\_\_\_\_

Make Cheque Payable to:

COEO CONFERENCE '80'

Send cheque and registration to:

Miss Barb Fogle,  
1669 Southview Drive,  
Sudbury, Ontario. P3E 2L9  
(705) 522-2536

## FEES

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### Accommodation

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Double/Person/Night \$16.00  
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night's accommodation \_\_\_\_\_

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hotel accommodations with others, please  
give their names:  
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\_\_\_\_\_

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be included with your registration if  
you wish your room confirmed.

Early Registration (Sept. 15) will  
mean your name will be put in for  
a Grand Draw  
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For Office Use

# Simcoe County Outdoor Education Fall Workshop

OCT. 24,25,26,1980

The Simcoe County Board of Education is sponsoring an outdoor education workshop on the weekend of October 24-25-26, 1980, at Prof. E. A. Smith Natural Resources Education Centre (Scanlon Creek - 2½ miles north of Bradford.)

The activities offered during the weekend will be directed to all teachers (K-13) and to all levels of experience in outdoor education.

The cost for the workshop will be \$30.00 and will include comfortable accommodation (dormitory style) and all meals. The workshop will begin on Friday night and end with lunch on Sunday.

Participants will select the workshops on arrival Friday evening. Some of the activities available will be:

- socialization and initiative games
- bird banding
- art in the out-of-doors
- wildlife management - Ducks Unlimited
- alternative energy
- canoeing
- outdoor ed programs for autumn
- fur-bearer management
- preparation and ideas for winter activities
- first aid and survival techniques
- survey of outdoor ed programs in York Region



There will be ample opportunity to meet and exchange ideas with your colleagues in a relaxed, informal atmosphere. Enrolment is limited to 40 people. Upon receipt of your registration form and fee you will receive a map and last minute details.

-----  
REGISTRATION FORM - OUTDOOR EDUCATION WEEKEND WORKSHOP - OCTOBER 24 - 25 - 26

Name \_\_\_\_\_ School \_\_\_\_\_

Address \_\_\_\_\_ Board \_\_\_\_\_

Phone \_\_\_\_\_ Position \_\_\_\_\_

Registration Fee - \$30.00

Enclose cheque payable to - Simcoe County Board of Education

Mail registration form and cheque to: John Niddery,  
c/o Warnica Public School,  
211 Warnica Rd.,  
Barrie, Ont.  
L4N 3Z2  
(705) 728-0560.



KLEINBURG --- The Kortright Centre for Conservation's fall events program continues to provide a number of exciting and very different activities for the weekend visitor.

September 20, at 7:30 p.m., a new feature will be offered in the form of a "COYOTE HOWL," Attendants will learn 'how to talk to coyotes' (brush wolves,) see a film on red fox, coyotes and timber wolves, and hike through the Humber River Valley to call wild coyotes.

On Sunday, September 28, in cooperation with the Ontario Cyclists Association, there will be "BIKE HIKE" up to Kortright from Toronto's High Park. Bikers will arrive at Kortright around noon, have lunch and a short tour of the facilities and head back downtown.

The "ART TREKS", being held October 4, 11 and 18, will take visitors from Kortright to the McMichael Canadian Collection Galleries at Kleinburg on a six-kilometre return hike through the colourful Humber Valley. There will be an introductory slide talk and time to browse through the Gallery. Box lunches will be available at the Gallery at a cost of \$2.50 each.

Another popular program being repeated this year is the JAMS, JELLIES AND WINE-MAKING DEMONSTRATIONS being offered October 5, 12 and 19. The event includes hikes through field and forest to see natural fruits and some cultivated plants used in the processes.

The Kortright Centre for Conservation, operated by The Metropolitan Toronto and Region Conservation Authority, is located three kilometres west of Highway 401, just south of Major Mackenzie Drive on Pine Valley Drive.

For further information, contact Metro Region Conservation at 661-6600.



ONTARIO ARCHAEOLOGICAL SOCIETY  
SEVENTH ANNUAL SYMPOSIUM  
THE ARCHAEOLOGY OF THE LAKE ERIE BASIN  
LONDON, ONTARIO  
OCTOBER 25 - 26, 1980

SYMPOSIUM INCLUDES: Presentations of Current Archaeological Research concerning both the Prehistory and History of the Lake Erie Basin.  
\*Banquet and Guest Speaker, Dr. Charles Cleland. \*Hospitality Suite and the opportunity to renew acquaintances and meet new colleagues.  
For more information, write to:

The Ontario Archaeological Society  
55 Centre Street,  
London, Ontario.  
N6J 1T4

# REGIONAL NEWS

## North

### Outdoor Educator's Best Friend: The Press

The press is usually feared and often viewed with at least suspicious distrust by organizations in search of positive publicity. The following article, reprinted with the kind permission of the Barrie Examiner, is an example of the positive support members of the Fourth Estate can give to the outdoor education movement.

If you are planning an outdoor education program that will help to promote the movement, don't hesitate to contact the press well in advance, by letter, giving them an indication of what, where, when, why, who, and inviting them to cover the event.

Keep in mind that if you are going to screw-up, drown some one or conduct some sort of outdoor disaster, you will find you don't have to invite them--they'll come on their own.

The workshop described in this article was a great success. The site, operated by the South Lake Simcoe Conservation Authority, is an excellent facility and I recommend it to all persons looking for a facility for outdoor ed. workshops.

Ralph Ingleton, a past chairman of C.O.E.O., was the popular keynote speaker and there was excellent participation by the Ministers of Natural Resources and the Environment, Georgian College and the Nottawasaga Valley Conservation Authority.

The best news is that Simcoe County Board is planning another exciting weekend workshop at Scanlon Creek on October 24-25-26, 1980.

See you there!

John Niddery

### TEACHERS HEAD OUTDOORS FOR STUDIES

Teachers became students of nature here this weekend as they learned how to develop outdoor education in their own schools.

About 20 Simcoe County public and separate school teachers attended the three-day workshop to learn ways of instilling outdoors' appreciation in their students.

The workshop, held at Scanlon Creek conservation area, was arranged by the county school board outdoor education subject council as part of a growing emphasis on moving the classroom outdoors.

Ecology experts provided the teachers with background information and showed them techniques for instructing classes in environmental studies.

Topics ranged from wetlands management and aquatic biology to canoeing for beginners.

The weekend gave local teachers a chance to talk about facets of outdoor education and to exchange ideas with teachers from areas that already have extensive outdoor education programs.

But the teachers spend much of their time in "class" attending a series of two-hour workshop periods.

Some of those sessions were designed to expand the teacher's understanding of environmental issues.

George Trewin, chairman of the Lake-Simcoe Couchiching report committee told the group about the basin's water quality problems and ways they may be solved.

Ron Mills, Nottawasaga Valley Conservation Authority senior technician, talked about wetlands management. He suggested students could learn about the importance of swamplands by visiting them, but he urged teachers to concentrate on specific aspects of the swamp during field trips.

Too often, he said, teachers confuse students on outings by trying to show them too much.

"You can't teach a class all about wetlands in three or four hours," said Mills. "Kids get so blitzed with things, they don't know why they were there."

Instructors also taught vegetation study and beekeeping.

Representatives from the Scarborough and Peel boards talked about their programs.

Ministry of natural resources staff discussed proposals for Copeland Forest management area and asked teachers for suggestions on educational uses.

Several workshops were intended to teach classroom instruction techniques.

Bill Fell, a Barrie Central Collegiate environmental studies teacher, showed ways of teaching stream study with devices as simple as a kitchen strainer and a magnifying glass.

Using these tools, students may learn about the effect of pollution on stream life.

"A simple way of doing this is to have the students count organisms in sections of a stream above, at and below an area where you think there may be pollution," Fell told teachers.

"You will notice a lot of different kinds of things living in the clean portion of the stream. There's a lot of competition."

"As you move past the area (pollution source) you'll find the variety of organisms drops way off. Only a few species can tolerate the conditions. There may only be a few different kinds of organisms, but there will be many of each kind because they are able to do well. Further downstream things start to clear up and competition returns."

#### EXCHANGE OF TECHNIQUES

Between workshop sessions, the teachers exchanged notes on techniques, literature and study locations.

John Niddery, workshop chairman, said the attending teachers are enthusiastic about outdoor education and they participated keenly.

"These are very dedicated people," said Niddery. "Many of them are paying the \$30 (fee) out of their own pockets. They are spending the weekend here, away from their families, to learn about things to teach the kids."

The teachers say the outdoors environment is becoming important as both a subject and a setting for classes today.



Prof. E. A. Smith Natural Resources Centre,  
Scanlon Creek, Bradford, Ontario



# POT POURRI

CANOEING MECHANICS - by - Andy Wickens

## Problems and Exercises

- 1) Try sitting in a canoe. Now try kneeling while resting on the seat. Which feels more stable? Why?
- 2) Perform a running pry. Now try a standing pry from a stationary position.  
Which is easier? Why?
- 3) Step from a canoe onto the dock.  
Why does the canoe want to move away from the dock?  
If you were stepping from an ocean liner onto a dock, would you expect the ocean liner to move?
- 4) Perform a draw from solo position.  
In what direction is the force applied?  
Which way does the canoe move?  
Which Law of Motion did you just prove?
- 5) (a) You are falling out of your canoe and you instinctively grab the far gunwhale to save yourself.  
Why doesn't this work?  
(b) You are half asleep and are falling out of your armchair. You instinctively grab the arm of your chair to save yourself.  
Why does this work?  
(c) Why is the canoe different from the chair?
- 6) Perform a standing pry with the paddle about even with your knees. Now try it reaching as far forward as you can.  
Which is more efficient? Why?
- 7) (a) Identify 5 uses of first class levers in canoeing.  
(b) Identify 3 uses of third class levers in canoeing.  
(c) Can you think of any second class levers used in canoeing?
- 8) You want to paddle across a fast flowing river. Which direction will you need to paddle in order to reach a point directly across from your present point?  
Draw a diagram to illustrate the forces involved.



#### "METRO AUTHORITY PHOTO SERVICE"

TORONTO --- A photo service, free of charge, to all media, is now being offered by the Metropolitan Toronto and Region Conservation Authority.

Quality slides and black and white photographs will be supplied upon request to specifications and theme. Outlines and a brief description will be included.

After almost a quarter of a century of operation, and with an extensive photographic department, the Authority has a wide variety of slides and photographs taken throughout the region.

Recreation theme photographs include swimming, fishing, picnicking, hiking, boating, canoeing, camping, outdoor education, specialty events, and generally people enjoying themselves in 13 conservation areas, Black Creek Pioneer Village, and the new Kortright Centre for Conservation.

The Authority will also supply photographs and slides dealing with its water and land management programs, soil, and reforestation programs.

The Authority has jurisdiction over an area covering 1,350 square miles, with 26,000 acres under direct ownership, ranging from Pickering to Etobicoke and Lake Ontario shoreline to Highway 9. The conservation areas within the boundary are Albion Hills, Black Creek, Boyd, Bruce's Mill, Claremont, Clairesville, Cold Creek, Glen Haffy, Greenwood, Heart Lake, Humber Trails and Petticoat Creek.

For further information and requests, contact Metro Region Conservation at 661-6600, Extension 235.

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#### Ontario Government and Solar Energy

Ontario Minister of Energy, the Honourable Robert Welch recently outlined the role of the Ontario Government in the development of renewable energy resources, including solar.

According to the minister, "A key Ontario Government role will be in 'seed' finding and pilot project investment." Demonstration projects such as the Applewood School are funded by the government to study solar technologies in various operating conditions. It is hoped that results from these demonstrations, along with financial assistance to research in non-profitable areas, will encourage participation from the private sector, particularly the petroleum industry, and also from Ontario Hydro.

The goal by 1995 is to produce 1.8 percent of Ontario's energy from solar - the equivalent of 15 million barrels of oil per year.

# A Beginner's Guide To Solar Energy

## What is solar energy?

Solar energy is radiation from the sun that is the basis of all life on earth. Vegetation, oil, gas, petroleum, rain and wind would not exist if it were not for the sun's energy.

Solar radiation can be collected and converted to useful energy for space heating, hot water heating and for generating electricity. What methods are used to do This?

Three methods:  
The active solar system  
The passive solar system  
The photovoltaic cell

## What is an active solar system?

An active solar heating system collects radiation from the sun and converts it to usable energy - either for heating a building's water supply or for keeping the building itself warm.

The underlying principles of active solar heating are easy to understand. A typical system includes a collector that absorbs the sun's rays, a transport medium that carries heat from the collector to a storage tank and a distribution system that takes the heat from storage as it is needed - to warm either the air or water for laundry and bathing.

### The collector

A typical collector is a flat insulated box with a transparent cover for its top. Inside is a plate that absorbs the sun's radiation, converting it into heat. (The insulation and transparent top prevent the heat from being lost to the outside.) A transport medium (air or liquid) flows around the plate, picks up the heat and carries it to the storage system.

### The transport medium

The transport medium (air, water or anti-freeze) removes heat from the collector and carries it through pipes to a storage reservoir.

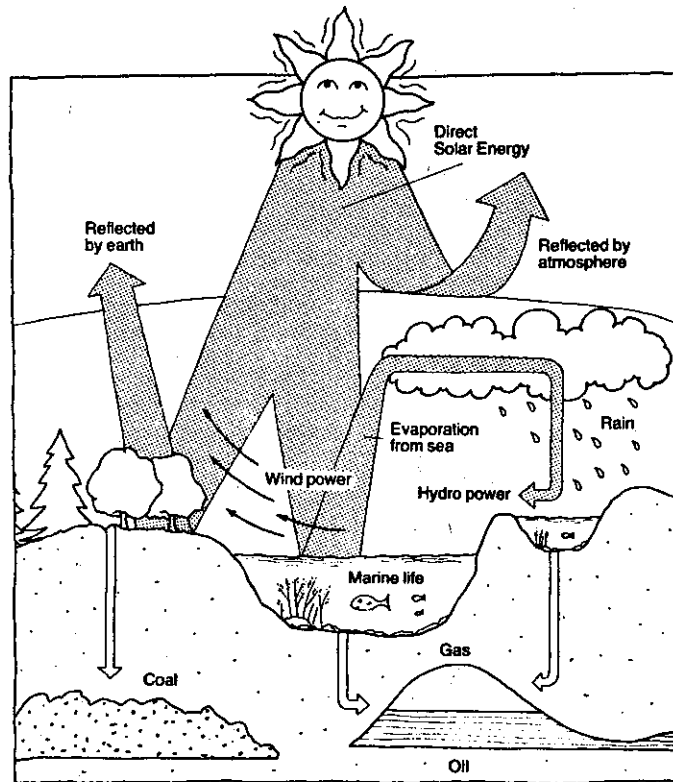
### Storage

Collected solar heat is usually stored in water or clean pebbles. Systems can be designed for short (several sunless days) or long-term (several months) storage.

### Distribution

The systems used to distribute stored heat throughout the house are similar to most existing heating systems. (Most Canadian houses have natural gas, electric or oil-fired forced air distribution systems.) As it's needed, the heat is drawn out of storage.

## What is a passive solar system? How does it differ from an active solar system?



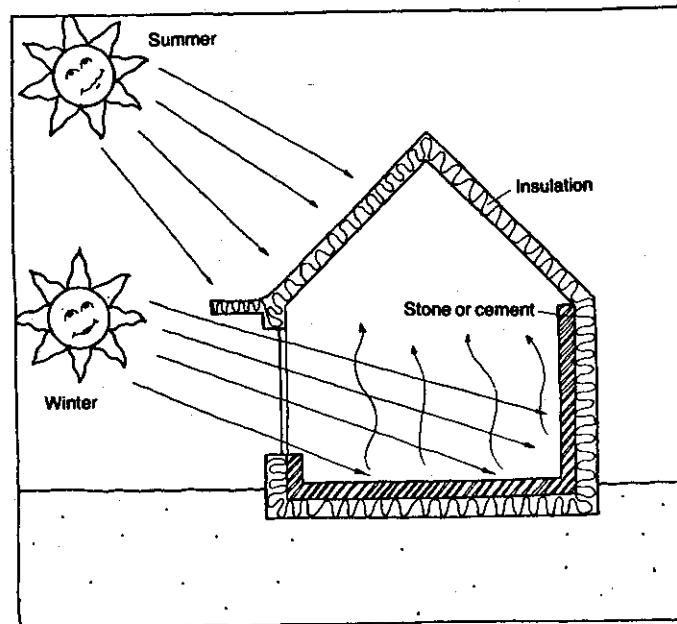
The difference between active and passive solar systems is that active systems tend to have pumps and piping or fans and ductwork while passive systems function without mechanical equipment. A typical passive solar system is simply a carefully designed building with south-facing windows that function as solar collectors (the south side of a building receives the most sunlight) and walls made of stone or cement that absorb and store heat. Warming a house with sunlight is not a new idea - early Canadian settlers knew how to position their homes to take advantage of the sun: windows on the cold, less sunny sides were small or non-existent, shutters kept in daytime warmth at night. (Modern solar homes - both active and passive - also use shutters to retain warmth at night on cloudy days.)

During the summer, when the angle of the sun is higher, a passive solar house keeps cool with a roof overhang shading the windows.

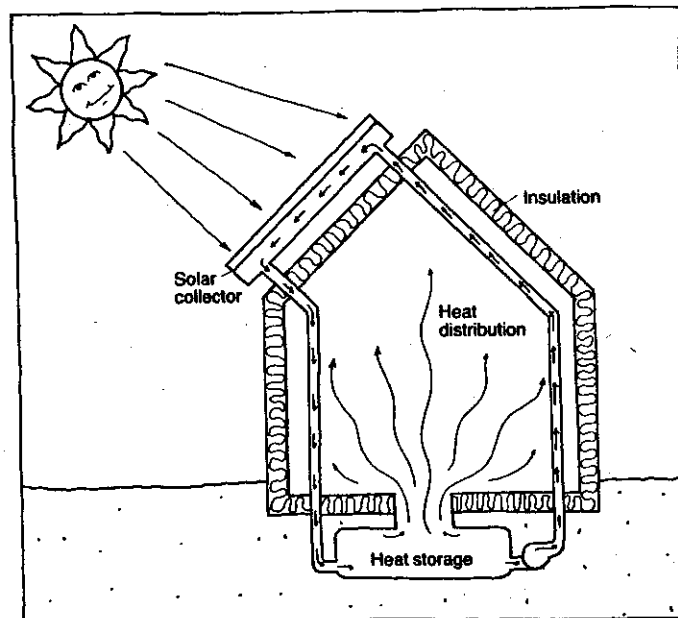
#### What do active and passive solar systems cost to install?

Active air space heating solar systems start at \$8,000 and are usually feasible for new buildings only. Active residential hot water systems cost about \$2,500 to \$3,500 and can be installed in existing buildings. Passive solar systems can often be incorporated in new buildings at little additional cost. Costs for renovating existing buildings with passive solar features can vary greatly, depending on the condition of the building and the type of features desired. For both active and passive solar systems, do-it-yourself systems are often less expensive.

How a passive system differs from an active solar system



**Passive Solar Heat:** a passive solar space heating system is composed of a building with large south-facing windows and walls (or floors) with heat-storing capability: during the day, sunlight passes through the windows and heat is absorbed by the walls: at night, heat is released by the walls.



**Active Solar System:** an active solar space heating system is composed of a collector, a transport medium, a storage medium and a distribution system.

How important is insulation to active and passive systems?

It is extremely important to both types of systems to have enough insulation to retain heat generated on sunny days for use during cloudy periods. It is also important to seal any cracks around doors and windows to prevent heat loss.

A good example of a well-insulated passive solar house is Conservation House in Regina, built three years ago by the Saskatchewan Government. The house has triple-glazed windows (windows are a great source of heat loss,) double wall construction and insulation to R-40 and R-60 (triple what is normal in new Canadian housing.)

(It is interesting to note that a house can be too tightly sealed, causing over-retention of humidity and preventing the escape of cooking odours.)

Can solar radiation be used to generate electricity?

Yes, in two ways: in a photovoltaic cell or a power tower. A photovoltaic cell converts sunlight directly into electricity. The cell is made of two layers of specially treated semi-conducting materials. When light falls on the cell, it creates a voltage between both layers, like that between the ends of a conventional dry cell battery.

Heat from sunlight concentrated in a power tower or focusing collectors can produce steam. The steam drives turbines which spin generators just like those in conventional generating stations.

Both systems are being developed but photovoltaic applications are already in use. In Canada, photovoltaic cells are the power sources for navigational aids, transmitters, railway crossing signals and in portable surveying and communication equipment. In these remote locations, photovoltaics are less expensive and require less maintenance than diesel generators.

"The trouble with photovoltaic cells is that they're so expensive to make," says Dr. John Simpson, co-ordinator of photovoltaic research for the National Research Council in Ottawa. "The break-through won't come until we can find a cheaper way to process the silicon or similar materials.

On the brighter side of the story, photovoltaic cells have decreased in price dramatically during the last 10 years (from \$500 to \$10 per peak watt) and will undoubtedly continue to decrease over the next few years. According to U.S. Government estimates (most of the research activity in photovoltaics is in the U.S.) the cost of photovoltaics should drop by 1986 to approximately 70 cents per peak watt. (One watt of power produced during peak generating conditions. The term is usually used with regard to photovoltaics. For most solar systems, peak generating conditions occur on clear winter days or noon on a sunny day in June, when the sun is highest in the sky.)

Photovoltaics are expected to displace significant amounts of conventional electricity generating capacity by 1990, where oil is used or the air conditioning load is high.

This year, the Canadian Government will only spend \$1 million on photovoltaic research and development, compared with the U.S. effort of \$120 million.

"I realize this doesn't sound like much," says Simpson, "but really, we don't have the technological background to handle a major program right now. We're only starting to get people who can make these things."

Meanwhile, private industry has begun to show an interest in photovoltaics. In West Germany, the first solar generator that can be mass produced was recently demonstrated to journalists by AEG Telefunken at its research centre near Hamburg. Tests have shown that the photovoltaic cells can generate enough electricity to power water pumps or operate refrigeration systems. The company will demonstrate its invention in a Mexican village. In the United States, five companies have decided to merge to produce photovoltaic cells. The companies - Arco Solar, Energy Conversion Devices, Photon Power, SES and Solarex are all backed by....multinational oil companies.

Reprinted from CURRENT - June, 1980 - Vol. 1, #3

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#### Solar By Law

Niger, a small country in the heart of Africa, has recognized since 1965, when it set up its Solar Energy Office, that sun power could help relieve its energy problems. The Government requires that all hospitals, hotels, schools and all public housing for government employees must have solar water heaters. Solar dryers are used to dry tobacco and cereal crops and solar stills desalinate water.

Brampton, Ont., among the fastest growing municipalities in Canada, has changed zoning so that new housing developments are now laid out for maximum solar gain. Height restrictions have also been implemented to protect solar dwellings from shadows.

For the first time anywhere in North America, the use of solar energy has been made mandatory. A San Diego, California ordinance requires the installation of solar hot water heaters in new homes. For older homes, regulations that were in effect at the time of building still apply but the California tax system, which allows for a 55 per cent write-off of solar equipment should be a strong incentive to homeowner's wishing to convert to solar.

#### Heavenly Heat

The first church in Canada to install a solar heating system is St. Barnabus Anglican Church in London, Ont., which recently unveiled its 104 solar collectors. According to Pastor Noel Patterson, the \$38,000 system is expected to save up to \$2,000 per year (more than half the amount spent last year for heating fuel.) A \$15,000 grant from the Anglican Foundation made the project possible.



AN INVITATION TO JOIN . . .

# COEO COUNCIL OF OUTDOOR EDUCATORS OF ONTARIO

## MEMBERSHIP APPLICATION FORM

PLEASE PRINT

COMPLETE AND SEND WITH REMITTANCE TO ADDRESS BELOW

NAME (mr.)(mrs.)(miss)(ms) \_\_\_\_\_

HOME ADDRESS \_\_\_\_\_ MAILING ADDRESS IF DIFFERENT FROM HOME \_\_\_\_\_

POSTAL CODE \_\_\_\_\_

POSTAL CODE \_\_\_\_\_

TELEPHONE NUMBER (where you can be most easily reached) ( ) \_\_\_\_\_  
If applying for a FAMILY MEMBERSHIP, please list persons who will be using the membership \_\_\_\_\_

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

UNIVERSITY OR COLLEGE ATTENDING FULLTIME IF A STUDENT \_\_\_\_\_

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

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

NORTHERN Parry Sound, Nipissing, Muskoka, Haliburton, North Bay, Simcoe County

WESTERN Essex, Kent, Elgin, Middlesex, Huron, Bruce, Grey, Perth, Wellington, Waterloo, Oxford, Brant, Haldimand-Norfolk, Dufferin, Lambton

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, Dundas, Russell, Stormont, Prescott, Glengarry, Lanark

OUT OF PROVINCE Any area in Canada outside of Ontario

OUT OF CANADA

THE C.O.E.O. MEMBERSHIP YEAR IS FROM SEPTEMBER 1 TO AUGUST 31. ANY MEMBERSHIP APPLICATIONS RECEIVED AFTER MAY 1 WILL BE APPLIED TO THE FOLLOWING YEAR

Please check Type of membership NEW \_\_\_\_\_ RENEWAL \_\_\_\_\_ Give current membership number \_\_\_\_\_

Fees attached: Regular \$15.00 \_\_\_\_\_ Student \$8.00 \_\_\_\_\_ Family \$25.00 \_\_\_\_\_  
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