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CANADIAN COUNCIL ON ECOLOGICAL AREAS

CONSEIL CANADIEN DES AIRES ÉCOLOGIQUES

Newsletter

April 1990

Canadian Council on Ecological Areas

Conseil canadien des aires écologiques

CANADIAN COUNCIL ON ECOLOGICAL AREAS

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THE CANADIAN COUNCIL ON ECOLOGICAL AREAS

The Canadian Council on Ecological Areas is an incorporated, non-profit, independent national forum established in 1982 to encourage the selection, protection and stewardship of a comprehensive system of ecological areas in Canada. It draws its membership from federal, provincial and territorial governments, non-government organizations, universities and private citizens. CCEA will work toward completing a Canadian system of ecological areas by providing a forum for communication between interested agencies and individuals. To this end, issues of concern and interest to Council are reported in a regularly distributed newsletter, this being the fifth issue.

NEW ECOLOGICAL AREAS

British Columbia

The designation of Brackman Island Ecological Reserve brings British Columbia's total to 118 Ecological Reserves (total area of about 115,218 ha).

The Brackman Island Reserve was established to protect forest and wildflower stands on a pristine island in the Gulf Islands area, and adjacent marine habitats. Though representative of nearshore forest environments in the dry Gulf Islands area, this site is outstanding in that it has not been adversely affected by livestock grazing, logging or settlement. The island was purchased jointly by the B.C. Government, the Nature Conservancy of Canada and the Nature Trust of B.C.

For further information, please contact: Dr. Hans Roemer, Parks and Outdoor Recreation Division, Ministry of Environment and Parks, 4000 Seymour Place, Victoria, B.C. V8V 1X5, (604) 387-4596.

ANNOUNCEMENT

Canadian Workshop Symposium on Landscape Approaches to Wildlife and Ecosystem Management:

May 4-6, 1990 at the University of British Columbia Campus, Vancouver, British Columbia.

Proposed themes include:

Landscape conservation and protected areas management
Forested and agricultural ecosystems management
Managing wildlife in forested ecosystems
Agricultural landscapes for wildlife conservation
Managing remnant habitats in the urbanized landscape
Landscape ecology developments and research

Registration fee: $75 (students $30)

Supporters:

Canadian Society for Landscape Ecology and Management
Wildlife Working Group, Canada Committee on Ecological Land Classification
University of British Columbia
Environment Canada
Provincial Government (approached)
Non-government Conservation Foundation (approached)

Contacts: Prof. Brent Ingram, Landscape Architecture Program, Depts. Plant Science and Forest Resources Management, 344-2357 Main Mall, University of British Columbia, Vancouver, B.C. V6T 2A2 (phone: 604 228-5271) (FAX: 604 228-6394)

Mr. Clayton Rubec, CSLEM Secretariat, Sustainable Development, Environment Canada, Ottawa, Ontario, K1A 0H3 (phone: 819 953-1447) (FAX: 819 997-0547)

UNDERSTANDING CANADA'S WETLAND RESOURCE - A NEW BOOK

Making up 14% of Canada's land mass and almost one quarter of the world's total wetland area, Canada's wetlands are a vital natural resource of significant economic, environmental and social importance. Like many other nations, wetland areas across Canada have been seriously depleted through agricultural reclamation and adaptation for recreational use.

Until the 1970's, Canada's wetlands were not studied in a systematic manner. Research was limited to local and regional studies that did not provide an accurate and comprehensive national picture. Nor was there an adequate assessment of the types and functions of wetlands. While major achievements in wetland conservation have occurred in recent years, important gaps in knowledge have made regional and national conservation programs in Canada difficult to plan.

Currently, progress towards development of cohesive provincial and federal wetlands conservation policies and implementation of a range of cooperative ventures such as the North American Waterfowl Management Plan are changing the nation's perception and understanding of its wetlands resources. To an important extent, this is recognized as building upon the efforts of national science coordinating committees.

One such entity, the National Wetland Working Group (NWWG) of the Committee on Ecological Land Classification (CCELC) was formed in 1977 and since that time has worked to steadily increase and standardize knowledge about Canadian wetlands.

A recent result of the Working Group's effort is a publication entitled **Wetlands of Canada** - a 466 page book that covers the influencing factors, distribution, evolution, classification, regionalization and methodologies for the study of Canada's wetlands. Representing the current state of knowledge about these unique areas, the book provides detailed regional information as well as a comprehensive national picture. Separate chapters dealing with wetland areas of the Arctic, Subarctic, Boreal, Prairies, Eastern Temperate, Atlantic, and Pacific regions, as well as the salt marshes of Canada provide an ecological framework for the book. The book may act as catalyst and model for other nations in developing sustainable wetlands conservation programs.

The publication contains 135 photographs and over 90 illustrations and is available for $56 (CDN) in either English or French from Polyscience Publications Inc., 555 Legendre E., Suite 24, Montreal, Quebec, H2M 1G2, Canada (514) 381 - 0442.

LAND USE PLANNING AND SUSTAINABLE DEVELOPMENT IN CANADA

The Canadian Environmental Advisory Council (CEAC), of which CCEA member Diane Griffin is a member, recently published a report "Land Use Planning and Sustainable Development in Canada".

This report argues that land use planning can be a key element in devising a concrete, purposive strategy for sustainable development.

The CEAC is a body representing a cross-section of Canadians who are knowledgeable and concerned about the environment. It operates in a confidential advisory capacity to the Minister of the Environment. It provides the Minister with an alternative to the advice provided by the Department of the Environment and other federal agencies, and to the advice of specific interest groups.

The report on land use planning is available from The Executive Director, Canadian Environment Advisory Council, c/o Environment Canada, Ottawa, Canada K1A 0H3.

WORK IN MANITOBA ECOLOGICALLY SIGNIFICANT AREAS PROGRAM RECOGNIZED

Ross Thomasson, Chief of Land Use Planning in Manitoba and Chairman of the CCEA, was awarded an honourary membership in the Manitoba Naturalist Society recognizing his work in the province's Ecologically Significant Areas Program. This award was given for outstanding effort in furthering the objectives of the society and the cause of natural history.

From: Manitoba natural resources :Resource Focus" Volume 2, Issue 10, May 1989.

JENNIFER SHAY RECEIVES THE ORDER OF CANADA

Dr. Jennifer Shay, one of the founding members of CCEA and a long time member of Manitoba's Ecological Reserves Advisory Committee, has been honoured by the Governor General. Jennifer received the Order of Canada from Jean Suave on April 12 at a ceremony in Ottawa. Dr. Shay was recognized for her long term commitment to the Delta Research Station of the University of Manitoba, her commitment to the academic community and to the large number of students whom she has helped over the years. She was one of three Manitobans honoured in a similar way this spring when the awards were presented to a number of outstanding Canadians. Our congratulations to a fine lady and good friend.

Quebec

Quebec has recently designated four new ecological reserves, bringing the province's total to 21, comprising 9,597 ha. These new four include:

1. Tapani Ecological Reserve (17ha): established to protect the Black Ash (*Fraxinus nigra*) dominated forest ecosystems located within the large Yellow Birch-Balsam Fir forest area.
2. Louis-Zephirin-Rousseau Ecological Reserve (5.35 ha) (two islands): established to protect White Cedar groves (*Thuya occidentalis*) typical of dry environments with Sugar Maple, Yellow Birch and Lime trees.
3. Ile-Brion Ecological Reserve (670 ha): an island located north of the Magdalen Islands archipelago and having all the ecological characteristics of the archipelago; the only island in the archipelago that still has original forest cover, with very little disturbance by human activity; over 140 species of birds, including several colonies of sea birds; a few rare species of birds and plants, including the Piping Plover and Sand Heather (*Hudsonia tomentosa*).
4. Thomas-Sterry-Hunt International Ecological Reserve (231 ha, including 53 ha in Quebec): the creation of this international reserve is the result of close cooperation between the ministere de l'Environment du Quebec and the Maine State Planning Office. Straddling the Quebec-Maine border, this reserve protects a peat bog in the lower and middle Appalachian region, characterized by a structured fen, a domed, non-structured bog, and a wooded, non-structured bog. Protection of the peat bog is important, since it is located in a region of intensive peat exploitation.

For further information contact: Francis Boudreau or Leopold Gaudreau, Direction du patrimoine ecologique, Ministere de l'-Environment, 3900, rue Marly, Sainte-Foy, Quebec, G1C 4E4.

Canadian Heritage Rivers

The Canadian Heritage Rivers System CHRS is a co-operative program established in 1984 by the federal government and, as of April, 1989, eight provinces (Newfoundland, Prince Edward Island, Nova Scotia, New Brunswick, Quebec, Ontario, Manitoba and Saskatchewan) and the Yukon and Northwest Territories. The objectives of the CHRS are to give national recognition to the important rivers of Canada and to ensure long-term management which will conserve their natural, historical, and recreational values. The following includes those rivers (or river sections), included in CHRS system:

DESIGNATED RIVERS

River	Province	Designation Date	Length
French	Ontario	Feb. 1986	110 km
Alsek	Yukon	Feb. 1986	90 km
Clearwater	Saskatchewan	June 1986	187 km
South Nahanni	N.W.T.	Jan. 1987	300 km
Bloodvein	Manitoba	June 1987	200 km
Mattawa	Ontario	Jan. 1988	33 km
Athabasca	Alberta	Jan. 1989	168 km
North Saskatchewan	Alberta	Jan. 1989	49 km
Kicking Horse	British Columbia	Jan. 1989	67 km
		Total	1,204 km

CANADIAN ENVIRONMENTAL DEFENSE FUND

The Canadian Environmental Defense Fund is an organization dedicated to helping fund citizens involved in significant precedent-setting environmental law cases.

The fund was launched in 1985 and been endorsed by a prominent Honourary Board including June Callwood, Norman Cousins, Jack McClelland, Farley Mowat and David Suzuki.

The Fund offers environmental groups recognition for their case from a national perspective, expertise in fundraising and development of resources, networking through information and publications, and financial resources to retain counsel and hire expert witnesses for hearings and tribunals.

All members receive a membership card and quarterly newsletters on recycled paper. If you interested, please contact the Canadian Environmental Defense Fund, 347 College Street, Suite 301, Toronto, Ontario M5T 2V8.

MCMILLAN BECOMES GRASSROOTS ENVIRONMENTALIST

Tom McMillan, former federal Minister of Environment has been elected to the Board of Directors of the Island Nature Trust, Prince Edward Island's highest profile environmental group.

Mr. McMillan is a native of Charlottetown and served the area as a Member of Parliament. As the Minister for the Environment, he had responsibility for major natural areas such as National Parks and National Wildlife Areas.

When asked as to his biggest challenge in that role, he replied that "It was in adding to the system, particularly those areas under seige, notably South Moreshy in the Queen Charlotte Islands. Another challenge was to obtain the resources necessary to maintain the existing areas at a high level of protection."

The Island Nature Trust's objective is to protect the remnant natural areas in the province through either outright purchase or

NOMINATED RIVERS

River	Province	Nomination Date	Length
St. Croix	New Brunswick	June 1984	185 km
Missinaibi	Ontario	June 1985	426 km
Bloodvein	Ontario	June 1986	106 km
Boundary waters	Ontario	June 1987	250 km
Seal	Manitoba	June 1987	260 km
Jacques Cartier	Quebec	June 1987	128 km
The Thirty Mile	Yukon	Jan. 1988	48 km
		Total	1,403 km

There are five key challenges that face the CHRS as it enters the 1990's:

1. Continue to build the vision to sustain the CHRS. At least one river should be designated in every province and territory;
2. Meet public expectations. As water management is at the top of the public environment agenda, CHRS must continue to strengthen its efforts in research and monitoring;
3. Strengthen the constituency for heritage rivers in Canada. The constituency needs to be broadened to include a wide variety of interests and efforts must continue in the area of public education and river heritage interpretation at the community level;
4. Broaden the co-operative marketing effort to allow for joint ventures with tourism associations and the private sector.
5. Develop and devise innovative funding sources to support the CHRS program. Increased funding is necessary for studies and monitoring, and for marketing and promoting heritage rivers.

Comments, suggestions or requests for information about the Canadian Heritage Rivers System should be addressed to:

The Secretary, Canadian Heritage Rivers Board, c/o Canadian Parks Service, Environment Canada, Ottawa, Ontario, K1A 0H3

Manitoba Designs User-Friendly Field Methodology for Knowledgeable Volunteers

The Manitoba Ecologically Significant Areas Program is reaching out to naturalists and other people interested in protecting ecologically significant areas. This is designed to solicit help from the public in the early stages of area identification that is often very expensive and time consuming. The concept is that a fairly simple methodology easily implemented will stimulate reports from volunteers which, when combined with aerial photographs, can be used to screen likely prospects from those unlikely to fit the program criteria. Staff can then concentrate on the most likely areas and make the best use of limited time and funds.

The methodology is packaged in a ten page hand-out that describes the Ecologically Significant Areas Program, the methodology for initial surveys and the report format. The material also "walks" the cooperator through the report format indicating the information required and provides a sample report, complete with sketch map, as a model to follow. A phone number for assistance, a request to ask the landowner's permission before entering private land and a note of thanks complete the material.

Information about this aspect of Manitoba's program can be obtained from Ross Thomasson, Department of Natural Resources, Box 38, 1495 St. James Street, Winnipeg R3H 0M9.

Alberta's Natural Areas: New Sites, Volunteers and Public Communications

Planning is underway to establish 36 new Natural Areas by the end of 1992. There are presently 112 Natural Areas in Alberta totalling about 35,000 ha (plus an additional 146 candidate natural areas totalling about 65,000 ha).

The very active Volunteer Steward program, initiated in 1987, is expanding at an accelerating rate (presently increasing by about 6 new volunteers per month). There are presently 186 Volunteer Stewards. They represent conservation organizations, recreation clubs, industry, church groups, families and individuals. Some have organized to form incor-

porated non-profit natural area societies to "look after" their sites. A "Natural Areas Newsletter" is published four times a year to keep stewards informed of program activities. The first Volunteer Steward Conference is now being organized for the spring of 1990.

The Natural Areas Program has published a wide range of public information materials, most recently ten Information Papers, including: Volunteer Steward Program; Natural Areas Newsletter; Strategic Thrusts - 1989 to 1992; General Management; Vision, Mission, Objectives, Principles; Generic Management Plan; Alphabetic List of Sites; Numeric List of Sites; Legal List of Sites; Program Update.

For further information contact: Peter Lee, Alberta Forestry, Lands and Wildlife, 4th Petroleum Plaza South, 9915-108 Street, Edmonton, Alberta T5K 2C9 (403) 427-5209.

Newfoundland

Following the Newfoundland provincial election in May, 1988 Parks Division has been moved to the new Department of Environment and Lands. This department also includes the Wildlife Division. The consolidation of environmental protection, crown lands, parks and wildlife under one departmental banner is a positive step toward increased natural heritage conservation in the province.

The Parks Division recently received an updated listing of rare plants on the island portion of the province from Dr. Andre Bouchard of the Montreal Botanic Garden. Additional assistance was be given to Dr. Bouchard and his researchers to complete their fieldwork inventory in the summer of 1989. It is anticipated that such an inventory will assist in the future designation of ecological reserves.

Two river resource assessment projects were conducted during 1989. One project is in cooperation with the Atlantic Centre for the Environment, Ipswich, and is focused on the historic Exploits River in central Newfoundland. The other is a joint venture with the Canadian Heritage Rivers System. This project will assess the potential of the Main River on Newfoundland's northwest coast for CHRS designation.

It is anticipated that during 1989 two new ecological reserves will be designated. One will preserve calcareous flora; the other will protect marine fossils. Proposals for five additional provisional ecological reserves have been formulated. It is possible that some of these may be given protective status in 1989 and then designated during 1990-91.

British Columbia: Research and Volunteers

During 1988, there were 48 research projects ongoing and 67 papers published on research completed in ecological reserves in B.C. Three types of research have taken place since the start of the program: inventory, census, and basic research. In total, 351 inventories (including IBP surveys) and 90 census have been conducted (1968 to November, 1988), and 139 basic research projects were conducted, varying from an Honours student thesis to a 10-yearplus investigation of ecological phenomena. At least 432 manuscripts and 240 publications have been produced in relation to these research projects. Seventy percent of the publications are related to only 9 reserves, since these have attracted the majority of the researchers.

The ecological reserves' active volunteers warden program has grown to 73 people in 1988. These dedicated people check on "their" reserves at least twice a year, many visit more times than that, and report to the program coordinators of any management concerns.

For more information, contact: Dr. Hans Roemer, Parks and Outdoor recreation Division, Ministry of Environment and Parks, 4000 Seymour Place, Victoria, B.C. V8V 1X5, (604) 387-4596.

FEATURE: QUEBEC - Ecological Reserves and Recent Related Initiatives

Quebec's ecological reserves (ERs) legislation was enacted in 1974. Ecological Reserves and provincial parks are the categories protected by legislation from resource extraction and development. Although provincial parks plays a much greater role in protecting the range of natural diversity, including both representative and rare ecosystems, ecological reserves are more highly protective. This is typical throughout most jurisdictions in Canada. For example, access to ecological reserves in Quebec requires written authorization from the Minister of the Environment and this is given only for purposes of scientific research and sometimes for

educational purposes. The highly restrictive legislation has made establishment of new reserves sometimes difficult.

There are now 21 ecological reserves in Quebec (see chart and map). There has been almost a doubling of the number of sites in the last five years (amounting to less than a 50% increase in total area protected over the same period). These sites range in size from 5.35 ha (Louis-Zephirin-Rousseau ER) to 2000 ha (Lac-Malakisis ER) and average 457 ha in size. These sites protect a range of features, from representative forest habitat types to areas of high biological diversity to ecosystems recovering from high human disturbance, from relict forest stands to provincially rare birds and plants to species at the edges of their ranges, from the peaks of mountains to the floodplain of the St. Lawrence.

In June, 1987 the Quebec Government agreed to have established a total of 54 ecological reserves on public lands within three years and once accomplished, one-half of Quebec's proposed ER's will have been established. By June, 1989 less than one quarter of the target number of sites and less than one percent of the target area has been completed.

Proposed Amendments to ER Legislation

Due to the extent of proposed amendments to the current ER legislation, a new act is being considered. Major changes include: increasing the powers of the Minister to delegate management responsibility, accept donations and bequests, prepare plans and establish standards for protection, development, use and management of reserves.

Threatened or Vulnerable Species Legislation

On June 21, 1989 the Government of Quebec adopted Bill 108, An Act Respecting Threatened or Vulnerable Species and Amending the Act Respecting the Conservation and Development of Wildlife. This act establishes for the first time in Quebec, the importance of preserving biological diversity in all its forms. It covers all species of fauna (vertebrates and invertebrates) and flora (vascular and non-vascular). It provides for mechanisms to protect the habitats of endangered species. Penalties for infractions are stiff, with fines up to $40,000 for the first offense and up to $80,000 for a subsequent offense.

Conservation and Development of Wildlife Legislation

In June of 1988 this act was modified. It focuses on the protection of whitetail deer and moose habitats, caribou calving sites, muskrat habitat, heronies, bird colonies, tidal reservoirs, fish habitats, etc.

St. Lawrence River

In June, 1989 the Canada and Quebec governments signed an agreement for cooperation in the clean up and protection of the St. Lawrence River. The federal government is prepared to invest $103 million over five years and Quebec $61.5 million. Activities will include improved industrial and urban water treatment, protection of wildlife habitats and endangered species and wetland restoration. Efforts are also being made to promote the survival of the Beluga whale. These efforts include coordination of research, publication of educational materials and creation of a marine park in the Saguenay-St. Lawrence estuary region.

Round Table on Economy and Environment

The Quebec Round Table, chaired by the Minister of the Environment, has met and consulted with some 200 representatives from professional associations, the financial sector, the media, industry and various interested groups. The Round Table intends on submitting an action plan to Cabinet in early 1990.

Natural Heritage Data Centre - Nature Conservancy of Canada

In 1988, Quebec and The Nature Conservancy of Canada (NCC) signed a three-year agreement to start up a Natural Heritage Data Centre. Such centres are operational in all 50 U.S. states and 10 Latin American countries. The Quebec centre is Canada's first and the NCC hopes to establish similar centres across Canada. The centre's activities in Quebec concentrates on the area along the St. Lawrence.

Biosphere Reserves

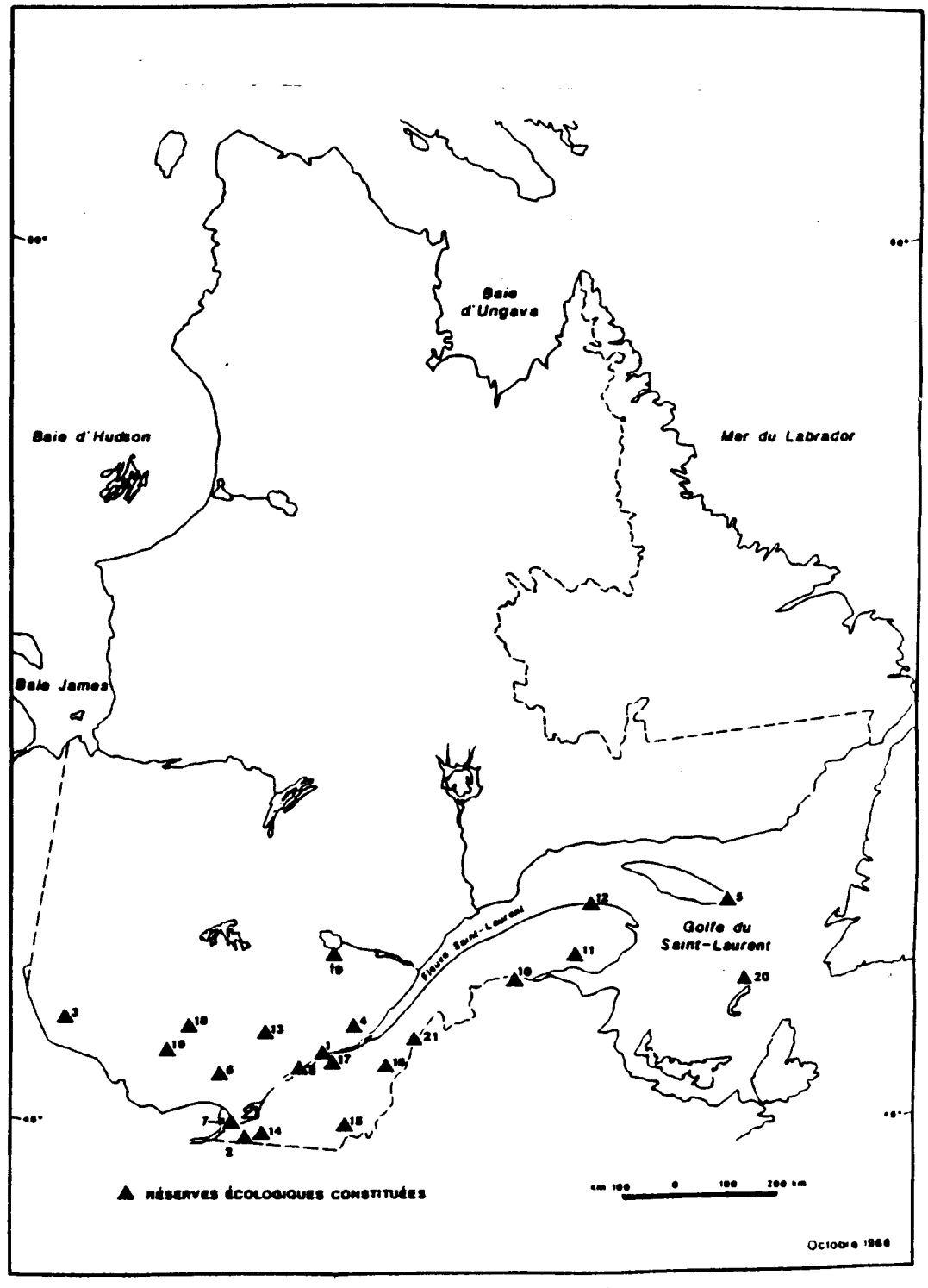
In November, 1988 the nomination of the Charlevoix Biosphere Reserve was approved by the International Coordinating Council of the Program on Man and the Biosphere (MAB) under UNESCO. This is the

second biosphere reserve in Quebec, after the Mount Saint-Hilaire, located about 30 km east of the island of Montreal and covering about 55 square kilometres. The Charlevoix reserve covers about 4,600 square kilometres and comprises mountains, forests and coastlines north of the St. Lawrence estuary.

Quebec's Ecological Reserves

	NAME	YEAR ESTABLISHED	SIZE (HA)
1.	Riviere-du-Moulin	1975	11
2.	Pin-Rigide	1977	66
3.	Lac-Malikisis	1978	2000
4.	Tantare	1978	1491
5.	Pointe-Heath	1978	864
6.	Laurentides	1981	604
7.	Micocoulier	1981	29
8.	Ile-aux-Sternes	1981	20
9.	Couchepaganiche	1983	39
10.	Ristigouche	1983	468
11.	Ernest-Lepage	1983	810
12.	Manche-d'Epee	1984	446
13.	Irenee-Marie	1985	189
14.	Marcel-Raymond	1987	65
15.	Samuel-Brisson	1988	789
16.	Claude-Melancon	1988	520
17.	Lione-Cinq-Mars	1988	440
18.	Tapani	1988	17
19.	Louis-Zephirin-Rousseau	1988	5
20.	Ile-Brion	1987	670
21.	Thomas-Sterry-Hunt	1988	53
			Total 9,597

April, 1990



Ecological Reserves in Quebec

Future newsletter submissions should be sent to: Mr. Peter Lee, Alberta Forestry, Lands and Wildlife, 4th Floor, Petroleum Plaza, South Tower, 9915 - 108 Street, Edmonton, Alberta T5K 2C9 (403) 427-5209

CANADIAN COUNCIL ON ECOLOGICAL AREAS

EXECUTIVE COMMITTEE

Chairman: Mr. Ross Thomasson, Chief, Land Use Planning, Department of Natural Resources, P.O. Box 38, 1495 St. James Street, WINNIPEG, Manitoba R3H 0W9 (204) 945-6661

Vice-Chairman: Mr. Paul Gray, Wildlife Branch, Ontario Ministry of Natural Resources, Queen's Park, 99 Wellesley Street, TORONTO, Ontario M7A 1W3 (416) 965-7641

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Co-ordinator, Scientific Committee: Dr. Paul Keddy, Department of Biology, University of Ottawa, 30 Somerset Street East, OTTAWA, Ontario K1N 6N5 (613) 564-3447

Co-ordinator, Management and Administration Committee: Mr. Tom Beechey, Parks and Recreation Areas, Ministry of Natural Resources, Whitney Block, Queen's Park, Room 3301, Wellesley Street West, TORONTO, Ontario M7A 1W3 (416) 965-2745

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Director: Mr. T. Beck, 422-33rd Avenue NW, CALGARY, Alberta T2K 0B4.

Director: Dr. D. Gagnon, Department of Biological Sciences, University of Quebec, C.P. 8888, Succersale "A", Montreal, Quebec, H3C 3P8

THE NATIONAL REGISTRY OF ECOLOGICAL AREAS IN CANADA

The CCEA, through the hard work of Paul Gray, has completed its comprehensive document: THE NATIONAL REGISTRY OF ECOLOGICAL AREAS IN CANADA. This document represents one of many projects initiated by the CCEA to promote public understanding of, and support for, the establishment of a comprehensive Canadian system of ecological areas. In addition, it will facilitate continued exchange of relevant information among governments, universities, conservation groups and other organizations throughout Canada.

New components to the registry will be added as they become available and the index revised periodically, which is the reason for the document in a binder format. All agencies across Canada are encouragedto forward any changes or corrections to the Data sheets to the CCEA.