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Aquilegia canadensis

FIELD BOTANISTS OF ONTARIO

NEWSLETTER

Spring 1990

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UPCOMING FIELD TRIPS & WORKSHOPS:

The the remaining FBO field excursions for 1990 are listed below. Information on the Dundas Valley, Walpole Island, Big Chute and Saratoga trips and the Annual General Meeting are enclosed with this newsletter. You will receive information for the Niagara Peninsula trip with the summer newsletter.

May 12:	Carolinian Spring in Norfolk County.
June 9:	Day hike in Dundas Valley
June 15 to 17:	Annual General Meeting and Field Trips, Opinicon.
July 7 & 8:	Prairie Grasses on Walpole Island.
July 21:	Day trip to Big and Little Chutes.
August 12:	Ecology & Botany at Saratoga Swamp, Huron County.
October 14:	Shrubs and Trees of the Niagara Peninsula.

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NEWSLETTER
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ISSN: 1180-1417

The FBO is a non-profit organization founded in 1983 for those interested in botany and conservation in the province of Ontario.

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WE NOW HAVE AN ISSN:

The Field Botanists of Ontario Newsletter has been officially registered with the Canadian centre for the International Serials Data System and we now have an International Standard Serial Number (ISSN). This number will appear on the cover of the Newsletter from now on, and will not change unless the name of the Newsletter changes. The ISSN enables information about the F.B.O. Newsletter to be catalogued in an international registers in Paris.

PLANT DRAWINGS

You may have noticed a different style in the drawings in this Newsletter. All the drawings in this issue are the work of Bob Bowles, FBO member and field trip leader for the Big Chute excursion on July 21.

Until now all the Newsletter sketches have been done by Jane Bowles (no relation) the Editor of the Newsletter.

Are there any other artists out there who would like to contribute occasional drawings or illustrate a whole issue of the Newsletter? Please get in touch or just send a clean copy of pen and ink drawings and a covering note giving us permission to reproduce them. We are always glad of the input.

CALL FOR NOMINATIONS

This is to remind you that under the FBO constitution, nominations for positions to the FBO Executive should be submitted to the Chairperson of the Nominating Committee, Past-President Doug Geddes, at least two weeks before the Annual General Meeting. Nominations should be in writing and include the permission of the person being nominated.

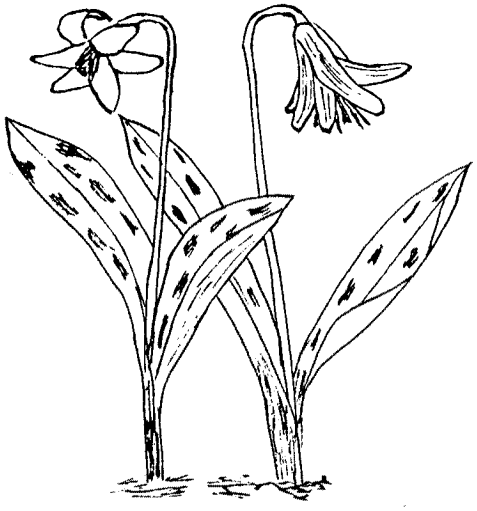
Doug Geddes address is:
45 Massey Street
BRAMALEA
Ontario, L5O 2V8

CONTRIBUTIONS WELCOME!

Bringing you an information-packed newsletter four times a year requires quite an effort in gathering material. A newsletter of this kind should come from FBO members, but at present most of it originates from the executive.

We welcome articles, news items, reviews, field trip reports, comments and suggestions from the membership. The more material we have, the better the selection for publication and the more interesting and entertaining the newsletter (**your** newsletter) will be.

The botanizing season is gearing up and will soon be in full swing, you have a pencil and paper, you are interested in plants, you can write and we need your contributions! Let's get together and expand the scope and value of the newsletter!



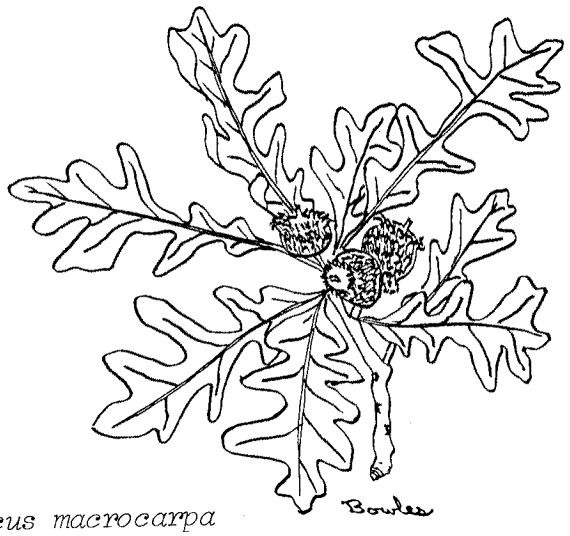
Erythronium americanum

GUIDE TO THE TREES OF CANADA

Lauriault, Jean (1989) Identification Guide to the Trees of Canada. Fitzhenry & Whiteside, Markham, Ontario. 479 pp. $25.00

Addressed primarily to the beginner, "Identification Guide to the Trees of Canada" will also be a valuable addition to the bookshelves of the experienced botanist. The book evolved from reference material given to participants of a workshop offered to the public by the National Museum of Natural Sciences in 1977, and grew into a comprehensive list of Canadian trees, native or introduced.

Each entry includes notes on nomenclature, a description, distribution maps, illustrations, and comments on the systematics, history, folklore, mythology, pharmacology, or ecology of each tree. I am particularly partial to fascinating information on the origin of names. In that respect, the book is much more than just a translation of Lauriault's "Guide d'identification des arbres du Canada." The Office of the Secretary of State coordinated a true adaptation of the original text, including discussions on the meaning of many English, French, and Latin names used to designate trees. Bilingual users of Hosie's "Native Trees of Canada", who may have been annoyed by having to consult the two uniligual versions in order to equate English and French common names, will be happy to find them fully cross-referenced in this book.



Quercus macrocarpa

All users of Hosie's guide will no doubt be glad to see Lauriault's distribution maps not come to an abrupt stop at the U.S.-Canada border. The identification method used by Lauriault will be appreciated by people who have difficulties with dichotomous keys found in other guides to Canadian trees. A four-digit code constructed pictorially sends the reader to an appropriate section of the book, following which the specimen to be identified is compared page by page with individual pictures or descriptions. The identification code method has a vague resemblance to that used in "Newcomb's Wildflower Guide", but the idea is not exploited to its full potential. Several cases exist where a single code applies to a wide range of species.

The illustrations are skillful ink drawings by Marcel Jomphe and Susan Laurie-Bourque. They include, in the introductory chapters, useful pictorial definitions of anatomical terms. In a few cases, however, excessive reduction has resulted in loss of definition.

Responsibly so, the author warns readers against stripping trees of their bark, or collecting specimens from rare or privately owned plants. On the other hand the reader is encouraged to construct a personal herbarium, a practice which some might find questionable. Lists of rare trees for Canada and each province are worthy of mention. Overall, I recommend this book to tree lovers with much enthusiasm.

André Lachance

WHO WAS MICHX.?

Plant guides and floras are studded with the authority "Michx." indicating that this person discovered, classified or named many plants. Have you ever wondered who he was?

André Michaux was a gifted French botanist who has studied under Bernard de Jussieu whose system of classification challenged that of Linnaeus. He was sent to Persia by the French government to find useful plants. He travelled extensively in the region between the Indian Ocean and the Caspian Sea. There he was once robbed by bandits and left naked in the desert to die, but he survived and returned to France with thousands of seeds and a French-Persian dictionary he had written.

French officials were pleased with his Persian work and sent him to America in 1786 with a commission to collect plants, especially trees, which might be useful to France. He set up a nursery in New Jersey from which he sent back live specimens and seeds. He started exploring the wildest parts of the Carolinas and found many plants others had overlooked. Later he visited Florida which he found a "disagreeable place" full of snakes and alligators. He also made his way north and west through Canada to Hudson Bay where no botanist had ventured before.

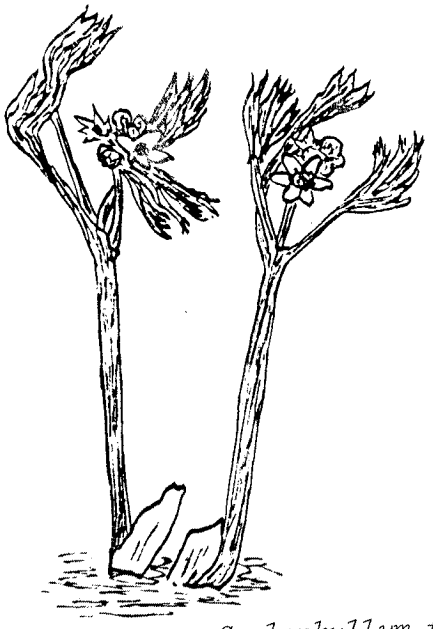
His dream was to travel west to the Pacific and in 1792 he sent a letter to Thomas Jefferson, then Secretary of State, offering, for the sum of 3,600 pounds, to travel to the headwaters of the Missouri River and the rivers which empty into the Pacific Ocean.

The American Philosophical Society of which Jefferson was a prominent member, agreed to sponsor him and gave detailed and specific instructions about what he should do and the notes he should take. The instructions ended with the recommendation "expose yourself in no unnecessary dangers".

France at this time was trying to get the US involved with her war with England. Michaux, as a patriotic Frenchman became involved in the intrigue. While mixing politics with botanizing he found several new plants one of which was named *Jeffersonia diphylla* after his patron, but when the French scheme collapsed Michaux found he was politically compromised and the trip west had to be abandoned.

Even so, Andre Michaux managed to be the first botanist to visit the prairies west of the Mississippi and had set some indelible landmarks in the history of North American botany. He returned to France with more new species to his credit than anyone else.

J.B.

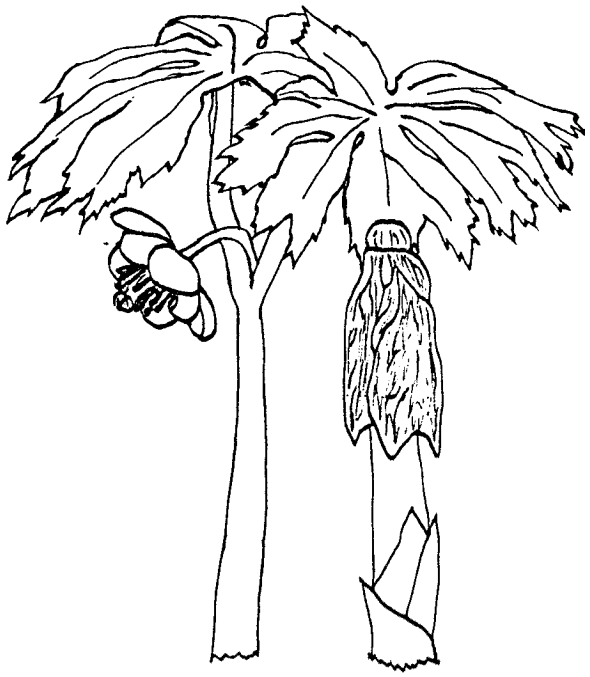


Caulophyllum thalictroides

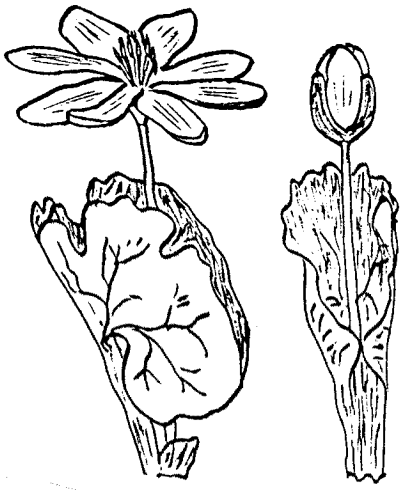
PLANT ALERT BOOKLET

Metsger, Deborah, A. (1990) Plant Alert. Royal Ontario Museum. $4.95.

This interesting booklet has been published in response to an increasing number of queries about toxic plants from poison information centres across Canada. The intent of the booklet is to assist people making enquires about plants over the phone. The plants in question can be indoor or outdoor, wild or cultivated. The book provides a very simple identification guide and points out which parts of which plants may be poisonous or harmless. Frequently encountered poisonous plants are described along with their poisonous features, the nature of the toxin and the symptoms of poisoning.



Podophyllum peltatum



Sanguinaria canadensis

To a field botanist the text contains some interesting information on the toxicity of some old friends. Black cherry (*Prunus serotina*), yew (*Taxus* spp.) and jack-in-the pulpit (*Arisaema triphyllum*) all have notable poisonous capabilities. The book also contains a section on those non-poisonous plants which often cause panic calls to hospitals. Among these are mulberry (*Morus* spp.) Tartarian honeysuckle (*Lonicera tatarica*) and mountain ash (*Sorbus* spp.).

Poisonous and non-poisonous house plants are covered in a separate section. In many calls to poison information centres people do not know the identity of a plant, but fear that their child may have eaten some. Some common house plants are illustrated and a short synopsis is provided explaining the results of ingesting them.

It is hoped that the booklet will be distributed widely, not only among poison information centres and other medical facilities, but also to nurseries and green houses. It represents a novel association between medicine and botany.

G.B.

GRASS, SEDGE AND RUSH WORKSHOP

This workshop was offered to introduce interested members to the seemingly bewildering world of grasses, sedges and rushes - the "graminoids". Thirty-three members registered, but only 28 made it to the University of Toronto Botany Department labs for the hands-on experience in identification. This was a surprisingly large turnout considering the subject, because these plants are traditionally avoided by many amateur botanists.

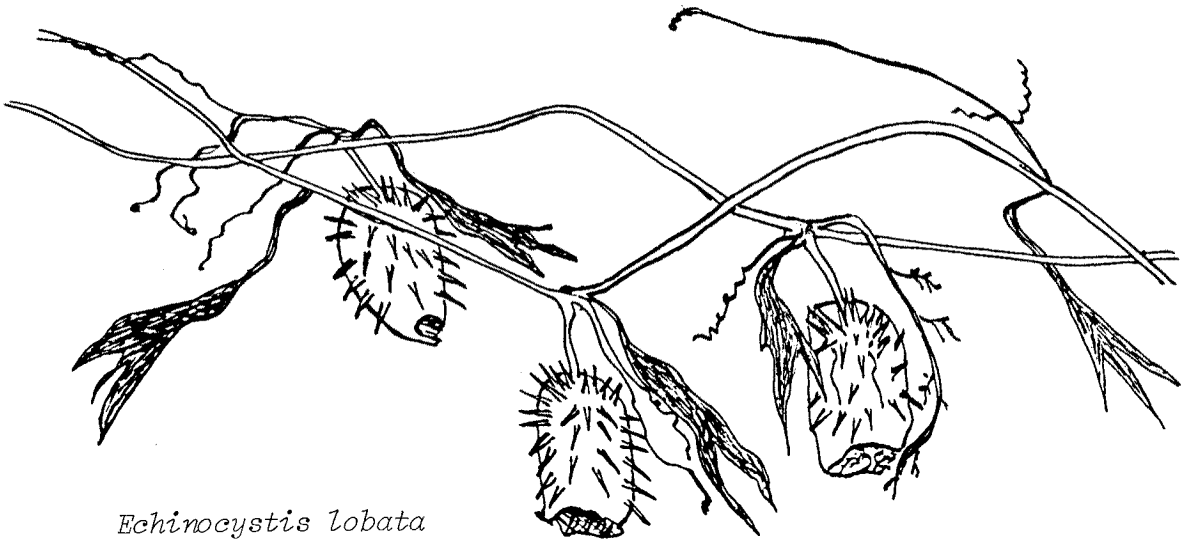
Most botanizers ignore the graminoids because such plants are considered too difficult and bothersome to identify. To be sure, on casual observation most grasses appear to be look-alikes, sedges and rushes tend to look like grasses, and all three groups, unlike many other plants, lack colourful, conspicuous flowers. Also, there are hundreds of these bewildering species to content with.

Our workshop instructor, Sheila McKay-Kuja of the Botany Department at U. of T. introduced us to the grass family (GRAMINEAE) in the morning and to the sedges (CYPERACEAE) and rushes (JUNCACEAE) in the afternoon. The handouts we received included keys, diagrams of grass parts and descriptions of the two grass sub-families FESTUCOIDEAE and PANICOIDEAE. We learned to identify the vegetative and flowering parts of plants from the handouts and from illustrations on the blackboard, then Sheila led us through the keys to identify dried specimens of various species.

While we worked at dissecting microscopes to identify the plants in one room, another room had many herbarium specimens of grasses, sedges and rushes on display so that participants could see the plants properly mounted and identified.

By the end of the day we could distinguish a first glume from a second glume, a lemma from a palea and a floret from a spikelet, among other accomplishments. So, for the participants of this workshop there is now an opportunity for less selective botanizing this summer. We can start confidently directing our attention not only towards trees, shrubs, vines and wildflowers, but also towards the equally fascinating (and beautiful) grasses, sedges and rushes.

Judy K. Hernandez



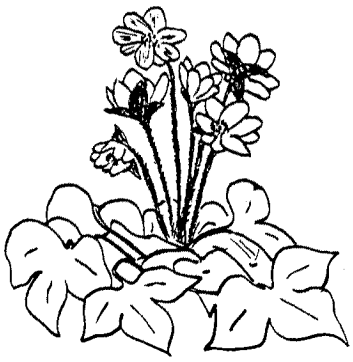
Echinocystis lobata

TIMES HAVE CHANGED!

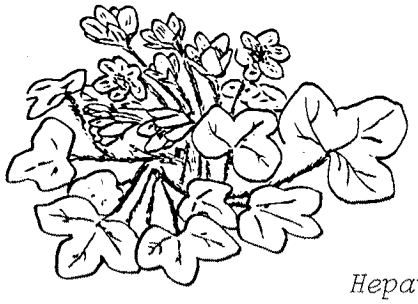
Did you know that the first commercial crop species planted in London Township, Middlesex County, Ontario was *Canabis sativa* otherwise known as Italian hemp or marijuana?

John Applegarth in 1813 was the first registered landowner in London Township. He tried, but failed, to grow a crop of hemp on a site now a cemetery within the City of London. Soon he gave up and moved elsewhere.

Then, as now in some places, hemp was grown for the strong, straight fibres in the stem and was used to make ropes. Around that time the British were at war with France and Canadian forests were being decimated to obtain oaks to build ships for the British Navy and white pines to make the masts. Those ships also needed rigging and hemp was used to make the ropes. Also, the seams of the ships were caulked with wadding made from short fibres left over from rope making or salvaged from old ropes. This was known as oakum and was sometimes smoked by the sailors when their tobacco ran out! Hemp was quite extensively grown in southern Ontario and some naturalized populations are still fairly common in some places.



Hepatica acutiloba



Hepatica americana

THE NATURAL HISTORY OF ONTARIO

Theberge, John B. (1990) Legacy: The Natural History of Ontario. McClelland and Stewart Inc., 397 pp. $75.00

The publication of this book represents a new level of natural history books in Canada. It contains a wealth of current scientific information directed to the layman about all aspects of Ontario's natural history.

The book has a coffee-table appearance, but the contents of a field guide. It contains over eighty maps, many illustrations and 250 colour photographs. One does not have to be a botanist to appreciate the superb photographs of fly agaric (*Amanita muscaria*), cardinal flower (*Lobelia cardinalis*) and interrupted fern (*Osmunda claytoniana*) among others.

The book includes almost 100 short chapters covering the whole gamut of natural history in Ontario as well as 42 vignettes of nature. There are about a dozen articles of special interest to botanists, including ones on fungi, prairie floras, spring ephemerals, orchids and trilliums.

Although the cost of the book may seem prohibitive, the contents and appearance will more than justify the initial investment. If one is interested in obtaining a general knowledge of Ontario's environment, this book will prove very valuable.

G.B.