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# Rare Vascular Plants of Ontario Fourth Edition



The full citation for this report is:

Oldham, M.J., and S.R. Brinker. 2009. Rare Vascular Plants of Ontario, Fourth Edition. Natural Heritage Information Centre, Ontario Ministry of Natural Resources. Peterborough, Ontario. 188 pp.

Cover photos from left to right: Juniper Sedge (*Carex juniperorum*), S.R. Brinker; American Lotus (*Nelumbo lutea*), M.J. Oldham; Ram's-head Lady's-slipper (*Cypripedium arietinum*), S.R. Brinker

Copies of this publication may be downloaded online at: [http://publicdocs.mnr.gov.on.ca/View.asp?Document\\_ID=15769&Attachment\\_ID=33140](http://publicdocs.mnr.gov.on.ca/View.asp?Document_ID=15769&Attachment_ID=33140)

ISBN 978-1-4249-8948-5 (PDF)

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# RARE VASCULAR PLANTS OF ONTARIO, FOURTH EDITION

March 2009

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## INTRODUCTION

The Ontario Natural Heritage Information Centre (NHIC), as part of its mission to help preserve the biological diversity of Ontario, maintains a systematic inventory of all known locations of rare native species and vegetation communities. The following list of rare vascular plants monitored (tracked) by the NHIC includes 726 taxa (species, subspecies and varieties), and supersedes the previous NHIC lists (Oldham 1994, 1996c, 1999). In general, the species included in this list are known from fewer than 80 populations (or element occurrences) in the province. Most species included in this list have no legal status. All plant species native to Ontario which are officially recognized by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) or the Species At Risk in Ontario (SARO) list of the Ontario Ministry of Natural Resources (OMNR) are included on this list, based on the most recent COSEWIC (2008) and Ontario Ministry of Natural Resources (2009) lists.

The NHIC is actively gathering occurrence information on rare species in Ontario. This list has been compiled over the past fifteen years from a variety of sources. A primary information source is the Canadian Museum of Nature's "Atlas of the Rare Vascular Plants of Ontario" (Argus *et al.* 1982-1987). We are interested in new or updated information on occurrences of any species appearing on this list. A "Rare Species Field Reporting Form" can be accessed on the NHIC web page for reporting new occurrences or updated information to the NHIC ([http://nhic.mnr.gov.on.ca/species/species\\_report.cfm](http://nhic.mnr.gov.on.ca/species/species_report.cfm)).

A list of the province's rare vascular plants has been prepared to assist in conservation and protection efforts by government and non-government organizations and the general public, to provide information for use in the environmental review process, and to provide information to educators and researchers about Ontario's rare plants.

A new feature of the 2009 list not found in previous editions is the inclusion of 12 "partially tracked" species (Table 2). These plants are locally common in far northern Ontario near Hudson and James Bays, but also occur very rarely around the shores of the Great Lakes, separated by hundreds of kilometers from the rest of their range. These Great Lakes populations are often referred to as arctic-alpine disjuncts (Given & Soper 1981) and are likely to be affected by global climate change and other anthropogenic impacts. Because of the high degree of conservation concern for these plants in the Great Lakes basin, they are tracked in this part of their Ontario range but not in the Hudson Bay Lowland (Oldham 2006). Also included in this publication is a list of excluded species (Table 3). These are plants included in the previous edition (Oldham 1999), but not this version. Appendix 1 contains images of 96 rare Ontario vascular plants.

## **ACKNOWLEDGEMENTS**

This fourth edition of the NHIC Rare Vascular Plants of Ontario list has benefitted from the technical review of the following individuals: Wasyl D. Bakowsky, C. Sean Blaney, Daniel F. Brunton, George Bryant, William J. Crins, Albert Garofalo, Jarmo Jalava, Judith Jones, James Kamstra, Burke Korol, Alan Harris, Anton A. Reznicek, Donald A. Sutherland, and David White. Various other people have assisted in the preparation of this list by reviewing previous editions, providing information on rare plants in Ontario, assisting with specimen identification, providing access to specimens or literature in their care, or in other ways: John D. Ambrose, Marilyn Anions, George W. Argus, Madeline Austen, Peter W. Ball, Harvey E. Ballard Jr., Mary E. Barkworth, Randall J. Bayer, Bruce A. Bennett, Sue Bryan, Melinda Thompson Black, Marcel Blondeau, Jane M. Bowles, David Bradley, Donald M. Britton, Kara E. Brodribb, Luc Brouillet, Vivian R. Brownell, Donald M. Britton, Graham Buck, Judith M. Canne-Hilliker, Paul M. Catling, Jacques Cayouette, William J. Cody, Mihai Costea, Daryl Coulson, Adele Crowder, Joan Crowe, Alison W. Cusick, Stephen J. Darbyshire, Mireille Delisle-Oldham, Tim Dickinson, Jennifer Doubt, William B. Draper, Dwayne Estes, Bruce A. Ford, Rob Foster, Mary E. Gartshore, Lynden Gerdes, Jim Goltz, Anthony G. Goodban, Joyce Gould, Daniel R. Gregory, Erich Haber, Zing-Ying Ho, Peter Hoch, Joe Johnson, Rosita Jones, John Klymko, Robert R. Kowal, Jacques Labreque, Carole Ann Lacroix, William Lamond, Walter Lewis, Dave McLeod, Mike McMurtry, Susan Meades, Deb Metsger, Gisele Mitrow, John K. Morton, Sergei Mosyakin, Gerry A. Mulligan, Todd Norris, Erica North, Mike Penskar, James B. Phipps, Paul D. Pratt, Robert Preston, James Pringle, Richard K. Rabeler, Kelly Ramster, John L. Riley, Carl J. Rothfels, Perry Scott, John C. Semple, Tyler W. Smith, S. Galen Smith, Dorothy Tiedje, Gordon C. Tucker, Steve Varga, Joan M. Venn, Warren H. Wagner, Gerry Waldron, Leanne Wallis, Stanley L. Welsh, B. Eugene Wofford, Allen Woodliffe, Steve Young, and Peter Zika. The extensive knowledge of these individuals greatly helped improve the list of species and associated ranks. In addition to these individuals dozens of others have assisted by submitting rare plant records to the NHIC, discussing the status of plants in Ontario, identifying plant specimens, forwarding copies of their research and publications, and in a variety of other ways. We welcome additional comments on the list and ranks.

## **LIST FORMAT**

The main list (Table 1) is organized alphabetically by scientific name. Information on each species is presented in ten columns: scientific name, English name, global conservation status rank (GRANK), provincial conservation status rank (SRANK), COSEWIC status, Ontario Ministry of Natural Resources (MNR) status, synonyms, counties of occurrence, notes, and family name. Following the main list is a list of vascular plants partially tracked in Ontario (Table 2); these species are tracked in the Great Lakes Basin but not in the Hudson Bay Lowland. Table 3 is a list of taxa included in the Third Edition of the NHIC Rare Vascular Plants of Ontario list (Oldham 1999), but not included in the current list. Appendix 1 contains images of 96 plants included in this list. To aid in the interpretation of the rare vascular plant list, a brief explanation of each column in Tables 1 and 2 follows.

### Column 1. Scientific Name

Nomenclature largely follows published volumes of the Flora of North America (FNA 1993, 1997, 2000, 2002a, 2002b, 2003a, 2003b, 2003c, 2005, 2006a, 2006b, 2007) for families covered to date by FNA and Kartesz (1999), Newmaster *et al.* (1998) or Morton and Venn (1990) for the remainder, with a few exceptions. A variety of other sources have been used for nomenclature including Fernald (1950), Voss (1972, 1985, 1996), Argus *et al.* (1982-1987), Gleason and Cronquist (1991), and Yatskievych (1999, 2006). Authorities have been omitted to save space; most can be found in Newmaster *et al.* (1998), others are in Kartesz (1999) or can be found in the references mentioned under Notes. Subspecies and varieties are listed in this column only where there may be confusion with other Ontario taxa (e.g. there is more than one subspecies or variety in the province), otherwise widely recognized subspecies and varieties occurring in Ontario are mentioned in the Notes column.

### Column 2. English Name

A common name is provided for the convenience of the user. Common names for plants are not standardized and many taxa have no entirely satisfactory common name. Common names used here primarily follow CESSC (2006), though a variety of additional sources, including Riley (1989), Oldham (1993b), Swink and Wilhelm (1994), Newmaster *et al.* (1998), and NatureServe (2008), have also been used.

### Column 3. Global Rank (GRANK)

Global conservation status ranks (Granks) are assigned by a consensus of the network of natural heritage programs (conservation data centres), scientific experts, and NatureServe to designate a conservation priority rank based on the range-wide status of a species, subspecies or variety. Global ranks are assigned in a manner similar to that described for provincial ranks (below), but consider these factors throughout the total range of the taxon. Global ranks in this list are current as of November 2008; check the NatureServe Explorer web page (<http://www.natureserve.org/explorer/>) for updated ranks.

- G1 Critically Imperiled**—At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors. [4 taxa]
- G2 Imperiled**—At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors. [3 taxa]
- G3 Vulnerable**—At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors. [39 taxa]
- G4 Apparently Secure**—Uncommon but not rare; some cause for long-term concern due to declines or other factors. [178 taxa]

- G5 Secure**—Common; widespread and abundant. [481 taxa]
- GH Possibly Extinct**— Missing; known from only historical occurrences but still some hope of rediscovery. [1 taxon]
- GU Unrankable**—Currently unrankable due to lack of information or due to substantially conflicting information about status or trends. Whenever possible, the most likely rank is assigned and a question mark qualifier may be added (e.g., G2?) to express minor uncertainty, or a range rank (e.g., G2G3) may be used to delineate the limits (range) of uncertainty. [1 taxon]
- GNR Unranked**—Global rank not yet assessed (**TNR** – infraspecific taxon not yet ranked). [19 taxa]
- ? Inexact Numeric Rank**—Denotes some uncertainty about the numeric rank (e.g. G3? - Believed most likely a G3, but some chance of either G2 or G4).
- Q Questionable taxonomy**—Taxonomic distinctiveness of this entity at the current level is questionable; resolution of this uncertainty may result in change from a species to a subspecies or hybrid, or the inclusion of this taxon in another taxon, with the resulting taxon having a lower-priority conservation priority.
- T# Intraspecific Taxon** (trinomial)—The status of infraspecific taxa (subspecies or varieties) are indicated by a "T-rank" following the species' global rank. Rules for assigning T-ranks follow the same principles outlined above for global conservation status ranks. For example, the global rank of a critically imperiled subspecies of an otherwise widespread and common species would be G5T1.

Rank ranges, e.g. G2G3, indicate that the Global Rank is either G2 or G3, but that the information currently available is insufficient to determine which rank applies.

#### Column 4. Provincial Rank (SRANK)

Provincial (or subnational) conservation status ranks are used by the NHIC to set conservation priorities for rare species and natural communities. These ranks are not legal designations. The most important factors considered in assigning provincial ranks are the total number of known, extant sites in Ontario, and the degree to which they are potentially or actively threatened with destruction. Other criteria include the number of known populations considered to be securely protected, the size and population trends of provincial occurrences, and the ability of the taxon to persist at its known sites. Hybrids, introduced species, and taxonomically dubious species, subspecies and varieties have generally not been included. By comparing the global and provincial ranks, the status, rarity, and the urgency of conservation needs can be ascertained. Provincial ranks have been assigned using the best available scientific information, and have been reviewed by a group of experts on the flora of Ontario (see Acknowledgements, page 2). The NHIC evaluates provincial ranks on a continual basis and produces updated lists, and welcomes information that will assist in assigning accurate provincial ranks. Provincial ranks are current as of March 2009; check the NHIC web site



([http://nhic.mnr.gov.on.ca/nhic\\_.cfm](http://nhic.mnr.gov.on.ca/nhic_.cfm)) for updated ranks.

- S1 Critically Imperiled**—Critically imperiled in Ontario because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the province. [242 taxa]
- S2 Imperiled**—Imperiled in Ontario because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the province. [224 taxa]
- S3 Vulnerable**—Vulnerable in Ontario due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation. [162 taxa]
- S4 Apparently Secure**—Uncommon but not rare; some cause for long-term concern due to declines or other factors. [5 taxa; partially tracked in Ontario; see Table 2]
- S5 Secure**—Common, widespread, and abundant in Ontario. [7 taxa; partially tracked in Ontario; see Table 2]
- SH Possibly Extirpated (Historical)**—Species occurred historically in Ontario, and there is some possibility that it may be rediscovered. Its presence in the province has not have been verified in the past 20 or more years. [60 taxa]
- SX Presumed Extirpated**—Species is believed to be extirpated from Ontario. Not located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered. [26 taxa]
- ? Inexact or Uncertain**—Denotes inexact or uncertain numeric rank.

Rank ranges, e.g. S2S3, indicate that the Ontario rank is either S2 or S3, but that the information currently available is insufficient to determine which rank applies. Rank ranges (e.g. S2S3) are sometimes used to indicate known rank based on number of occurrences (e.g. S2) and predicted rank with additional field surveys (e.g. S3).

#### Column 5. COSEWIC Status

Status assigned by COSEWIC, following the most recent COSEWIC (2008) list. Most species listed as at risk by COSEWIC are legally protected under the federal Species At Risk Act (SARA); see <http://www.sararegistry.gc.ca/>. Currently 73 Ontario vascular plants have been assigned to a formal national at risk category by COSEWIC.

- EXP Extirpated.** A wildlife species that no longer exists in the wild in Canada, but exists elsewhere. [2 taxa]
- END Endangered.** A wildlife species facing imminent extirpation or extinction. [40 taxa]

**THR Threatened.** A wildlife species that is likely to become endangered if nothing is done to reverse the factors leading to its extirpation or extinction. [20 taxa]

**SC Special Concern.** A wildlife species that may become threatened or endangered because of a combination of biological characteristics and identified threats. [11 taxa]

#### Column 6. MNR Status

Status assigned by the Ontario Ministry of Natural Resources (2009) based on the most recent Species at Risk in Ontario (SARO) list. Designations made by MNR are based on recommendations of a technical committee called the Committee on the Status of Species at Risk in Ontario (COSSARO). Endangered (END), Threatened (THR), and Extirpated (EXP) species are legally protected under the province's Endangered Species Act (ESA), 2007. Currently 73 Ontario vascular plants have been assigned to a formal provincial at risk category by MNR.

**EXP Extirpated.** A species that no longer exists in the wild in Ontario but still occurs elsewhere. [2 taxa]

**END Endangered.** A species facing imminent extinction or extirpation in Ontario. [41 taxa]

**THR Threatened.** A species that is at risk of becoming endangered in Ontario if limiting factors are not reversed. [20 taxa]

**SC Special Concern.** A species with characteristics that make it sensitive to human activities or natural events. [10 taxa]

#### Column 7. Synonyms

Alternate scientific names (synonyms) are provided with emphasis on those which have been recently used in literature relevant to Ontario.

#### Column 8. Counties

Presence in each of Ontario's 49 counties (used in this sense to include districts, district municipalities, and regional municipalities) is indicated in this column. The map on the next page shows the location of Ontario's counties and identifies the 4-letter acronyms used in this column (and the Notes column). Counties with acronyms in upper case letters have a record of the particular rare plant within the past 20 years. Those counties with acronyms in lower case letters have no records on file at the NHIC more recent than 20 years ago. County acronyms followed by a question mark (?) indicates there is some question regarding the presence of the species in that county. Counties with their acronym bracketed have only adventive (non-native, but outside of cultivation) records. Listings of counties for each species were assembled from a variety of data sources on file at the NHIC. These include specimens mapped during the "Atlas of the Rare Vascular Plants of Ontario" project (Argus *et al.* 1982-1987), records from COSEWIC

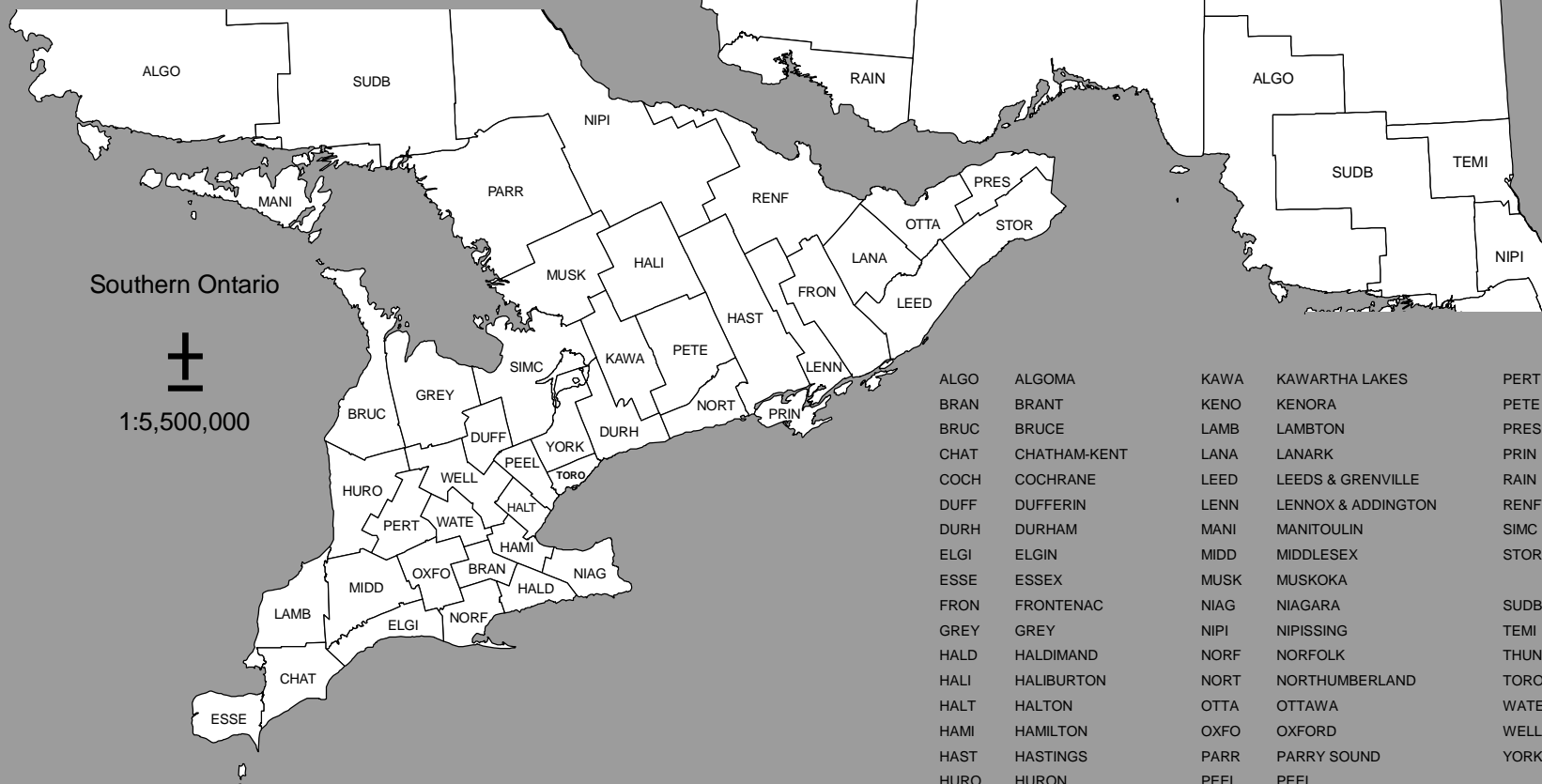


# Counties of Ontario

Northern Ontario



1:10,000,000



Southern Ontario



1:5,500,000

ALGO	ALGOMA	KAWA	KAWARTHA LAKES	PERT	PERTH
BRAN	BRANT	KENO	KENORA	PETE	PETERBOROUGH
BRUC	BRUCE	LAMB	LAMBTON	PRES	PRESCOTT & RUSSELL
CHAT	CHATHAM-KENT	LANA	LANARK	PRIN	PRINCE EDWARD
COCH	COCHRANE	LEED	LEEDS & GRENVILLE	RAIN	RAINY RIVER
DUFF	DUFFERIN	LENN	LENNOX & ADDINGTON	RENF	RENFREW
DURH	DURHAM	MANI	MANITOULIN	SIMC	SIMCOE
ELGI	ELGIN	MIDD	MIDDLESEX	STOR	STORMONT, DUNDAS & GLENGARRY
ESSE	ESSEX	MUSK	MUSKOKA	SUDB	SUDBURY
FRON	FRONTENAC	NIAG	NIAGARA	TEMI	TEMISKAMING
GREY	GREY	NIP1	NIPISSING	THUN	THUNDER BAY
HALD	HALDIMAND	NORF	NORFOLK	TORO	METROPOLITAN TORONTO
HALI	HALIBURTON	NORT	NORTHUMBERLAND	WATE	WATERLOO
HALT	HALTON	OTTA	OTTAWA	WELL	WELLINGTON
HAMI	HAMILTON	OXFO	OXFORD	YORK	YORK
HAST	HASTINGS	PARR	PARRY SOUND		
HURO	HURON	PEEL	PEEL		

status reports, technical literature, presumed reliable records in county and regional floras and checklists (e.g. Banville 1994, Beschel *et al.* 1970, Botham 1981, Crowder *et al.* 1997, Cruise 1969, Cuddy 1998, Dodge 1914a, 1914b, Moore 1978, Oldham 1993b, 2001, 2008a, Riley 1989, Smith 2003, Stewart & James 1969, Sutherland 1987, Varga *et al.* 2000, 2003, Webber 1984, White 2008, Woodliffe 1997, Zenkert 1934) and ANSI (Area of Natural and Scientific Interest) reports (see Jalava 1996, Riley *et al.* 1996), specimens examined in herbaria, the NHIC Biotics database, records from NHIC and collaborator fieldwork, and personal communications with colleagues and contributors.

There are undoubtedly some gaps and inaccuracies in the listings of counties. Readers aware of unlisted counties with records of a particular rare species in the wild are encouraged to submit a Rare Species Field Reporting Form (see [http://nhic.mnr.gov.on.ca/species/species\\_report.cfm](http://nhic.mnr.gov.on.ca/species/species_report.cfm)) or similar documentation to the NHIC. Similarly we would also be pleased to hear from readers knowing of a recent record (within the past 20 years) of a species in a county presently listed in lower case letters.

#### Column 9. Notes

Notes include information on the distribution, status, habitat, identification, taxonomy, and conservation of the plant in Ontario. Literature citations are provided for further information on the species, with emphasis on references pertaining to Ontario or adjacent areas. Subspecific or varietal status of Ontario plants is mentioned here. Plants with an image in Appendix 1 are indicated in this column.

#### Column 10. Family

Family names primarily follow the recommendations of the Angiosperm Phylogeny Group (Stevens 2001 onwards). Where family names differ from other sources (e.g. Morton and Venn 1990, FNA 1993, 1997, 2000, 2002a, 2002b, 2003a, 2003b, 2003c, 2005, 2006a, 2006b, 2007, Newmaster *et al.* 1998, Kartesz 1999, and Judd *et al.* 2008), alternate family names are mentioned in the Notes column.

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TABLE 1 -- RARE VASCULAR PLANTS OF ONTARIO, FOURTH EDITION (MARCH 2009)

SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Achillea alpina</i>	Siberian Yarrow	G5?	S1			<i>Achillea sibirica</i>	KENO (thun)	A western species known from a single native site on the West English River where found by Rob Foster in 2001. Also known as a weed around grain elevators in Thunder Bay. See Coffin & Pfannmuller (1988).	ASTERACEAE
<i>Actaea racemosa</i>	Black Cohosh	G4	S2			<i>Cimicifuga racemosa</i>	elgi? HALD hami? NIAG NORF toro wate	Rich woods and slopes in the Carolinian Zone, where it has apparently declined. Formerly included in the genus <i>Cimicifuga</i> (Compton <i>et al.</i> 1998a, 1998b). See Argus <i>et al.</i> (1982-1987), McIntosh & Catling (1979), Small & Catling (1998), Soper (1962), Sutherland (1987).	RANUNCULACEAE
<i>Adenocaulon bicolor</i>	American Trailplant	G5?	S1				bruc GREY	Collected by A.J. Massey at Cape Croker on the Bruce Peninsula in 1895 (Fernald 1935, Marquis & Voss 1981) and not found there since. Rediscovered in Ontario in 1994 near Meaford by Steve Varga (Anonymous 1995). See Argus <i>et al.</i> (1982-1987).	ASTERACEAE
<i>Adoxa moschatellina</i>	Muskroot	G5	S1				rain THUN	Known from a few sites in rich, moist woods in northwestern Ontario. See Argus <i>et al.</i> (1982-1987).	ADOXACEAE
<i>Aesculus glabra</i>	Ohio Buckeye	G5	S1				LAMB (FRON) (HALD) (HAMI) (NIAG) (NORT) (OXFO) (PERT) (PETE) (SIMC) (WATE) (WELL)	Native Canadian populations known only from Walpole Island (Darbyshire & Oldham 1985). An occasional escape from cultivation elsewhere in the province. Included in Hippocastanaceae by some authors. See Argus <i>et al.</i> (1982-1987); APPENDIX 1. Ontario plants are var. <i>glabra</i> (T5).	SAPINDACEAE
<i>Agalinis gattingeri</i>	Gattinger's Agalinis	G4	S2	END	END	<i>Gerardia gattingeri</i>	bran BRUC LAMB MANI	Recently identified on alvars on the Bruce Peninsula and Manitoulin Island. Otherwise known only from prairies on Walpole Island First Nation and a 1952 record from Glen Morris. Included in Scrophulariaceae by some authors. See Argus <i>et al.</i> (1982-1987), Brodowicz (1990), Coffin & Pfannmuller (1988).	OROBANCHACEAE
<i>Agalinis purpurea</i>	Large Purple Agalinis	G5	S1			<i>Gerardia purpurea</i>	CHAT ESSE HALD LAMB norf york	A large-flowered <i>Agalinis</i> of moist prairies and open sandy ground in southwestern Ontario similar to the more common <i>A. paupercula</i> (or <i>A. purpurea</i> ssp./var. <i>parviflora</i> ). Some literature reports are probably in error. Included in Scrophulariaceae by some authors. See Pennell (1929, 1935).	OROBANCHACEAE

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<i>Agalinis skinneriana</i>	Skinner's Agalinis	G3G4	S1	END	END	<i>Gerardia skinneriana</i>	ESSE LAMB	A pale-flowered species of prairie remnants. Included in Scrophulariaceae by some authors. See Argus <i>et al.</i> (1982-1987), Brodowicz (1990), Dieringer (1999), Kercher & Sytsma (2000).	OROBANCHACEAE
<i>Agastache scrophulariifolia</i>	Purple Giant Hyssop	G4	S1				chat ESSE niag	Recently rediscovered in Canada on Pelee Island by Mary Celestino; the three previous Ontario records are all from the late 1800s. See Argus <i>et al.</i> (1982-1987), Corrigan (2002).	LAMIACEAE
<i>Agrostis hyemalis</i>	Winter Bent Grass	G5	S1				ESSE NIAG	This is <i>A. hyemalis</i> in the strict sense, recently discovered in the province on Pelee Island by Michael Oldham in 1994 (Anonymous 1995), rather than the more common <i>A. scabra</i> which is treated by some authors as a variety of <i>A. hyemalis</i> . See Voss (1972).	POACEAE
<i>Agrostis mertensii</i>	Northern Bent Grass	G5	S2			<i>Agrostis borealis</i>	KENO	Largely restricted in Ontario to the Sutton Ridges (Argus <i>et al.</i> 1982-1987), where first collected in 1978 (Riley 1979). Canadian distribution mapped by Riley (2003). See Argus <i>et al.</i> (1982-1987), Schori (2004a).	POACEAE
<i>Aletris farinosa</i>	Colicroot	G5	S2	THR	THR		ELGI ESSE LAMB norf	Open sandy woods and edges; prairies. Has disappeared from several historically documented sites. Placed in the Stemonaceae by FNA (2002b) and included in Liliaceae by other authors. See Argus <i>et al.</i> (1982-1987), Killingbeck <i>et al.</i> (1998), Soper (1962), Stewart (1979), Sutherland (1987).	MELANTHIACEAE
<i>Allium cernuum</i>	Nodding Onion	G5	S2				ELGI? ESSE KENO	Alvars, roadsides. Most common on Pelee Island. ELGI occurrence perhaps adventive. Retained in Liliaceae by FNA (2002b). See Argus <i>et al.</i> (1982-1987); APPENDIX 1.	ALLIACEAE
<i>Allium tricoccum</i> var. <i>burdickii</i>	Narrow-leaved Wild Leek	G5T4T5	S1?			<i>Allium burdickii</i>	ESSE? HAMI MIDD NORF PRIN WATE	A narrow-leaved variety of Wild Leek. Status in Ontario poorly known (see Jones 1979). Retained in Liliaceae by FNA (2002b). See Hanes & Ownbey (1946), Small <i>et al.</i> (1999), Sutherland (1987), Vasseur (2001).	ALLIACEAE
<i>Alopecurus magellanicus</i>	Alpine Foxtail	G5	S3			<i>Alopecurus alpinus</i> (of Ontario reports), <i>A. borealis</i>	KENO	Restricted to the Hudson Bay coast where first collected at Fort Severn by W. Scott in 1940. Eastern Canadian distribution mapped by Riley (2003). See Argus <i>et al.</i> (1982-1987), Dore & McNeill (1980).	POACEAE

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SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Amelanchier amabilis</i>	Beautiful Serviceberry	G4?Q	S2S3			<i>Amelanchier sanguinea</i> var. <i>grandiflora</i>	ALGO CHAT FRON hali hami hast MUSK NIAG nipi SIMC SUDB thun YORK	A large-flowered <i>Amelanchier</i> sometimes included in <i>A. sanguinea</i> and known from scattered southern and central Ontario sites. See McKay (1973).	ROSACEAE
<i>Ammannia robusta</i>	Scarlet Ammannia	G5	S1	END	END	<i>Ammannia coccinea</i> (of Ontario reports)	ESSE	Moist muddy or sandy open areas particularly shorelines. First collected in Ontario in 1974 by Wilfred Botham at Hillman Marsh (Campbell & Reznicek 1977) and since then found at a few additional sites. Argus <i>et al.</i> (1982-1987), Baskin <i>et al.</i> (2002), Graham (1985).	LYTHRACEAE
<i>Amorpha canescens</i>	Downy Indigo-bush	G5	S1				KENO RAIN well?	Recently rediscovered in Bur Oak savannas in northwestern Ontario. The record from WELL is probably non-native. See Argus <i>et al.</i> (1982-1987).	FABACEAE
<i>Androsace occidentalis</i>	Western Rock Jasmine	G5	SH				rain (NORT) (THUN)	Recently found at disturbed sites in NORT and THUN where almost certainly non-native. Known historically from Lake of the Woods where probably native. See Scoggan (1978-1979).	PRIMULACEAE
<i>Anemone patens</i>	Prairie Crocus	G5	S1			<i>Pulsatilla patens</i>	KENO	Recently rediscovered in northwestern Ontario. See Argus <i>et al.</i> (1982-1987), Kalliovirta <i>et al.</i> (2006). Ontario plants are var. <i>multifida</i> (T4).	RANUNCULACEAE
<i>Anemone richardsonii</i>	Yellow Anemone	G5	SH				keno	Listed by Riley (2003) from Cape Henrietta Maria.	RANUNCULACEAE
<i>Angelica venenosa</i>	Hairy Angelica	G5	SH				esse	A collection by Wilfred Botham from the Ojibway Prairie area of Windsor in 1972 is the only confirmed Canadian record.	APIACEAE
<i>Antennaria microphylla</i>	Small-leaved Pussytoes	G4G5	SH			<i>Antennaria nitida</i>	coch	Restricted to the southern James Bay area where disjunct from western North America. See Argus <i>et al.</i> (1982-1987), Bayer (1984, 1988), Bayer & Stebbins (1987), Porsild (1950).	ASTERACEAE
<i>Antennaria parvifolia</i>	Small-leaved Pussytoes	G5	S1			<i>Antennaria aprica</i>	THUN	Populations on cliffs along the north shore of Lake Superior are disjunct from the primarily western distribution of this species. See Argus <i>et al.</i> (1982-1987), Bayer (1984), Bayer & Stebbins (1987).	ASTERACEAE

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SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Antennaria rosea</i>	Rosy Pussytoes	G5	S1S2			<i>Antennaria oxyphylla</i> , <i>A. subviscosa</i>	KENO THUN	<i>Antennaria rosea</i> is a taxonomically complex species (see Bayer 1984, 1989a, 1989b, 1990, Bayer & Stebbins 1987, Chmielewski & Chinnappa 1988) known from a few sites near Lake Superior and from the Hudson Bay Lowland. FNA (2006a) maps ssp. <i>confinis</i> (T4T5) and ssp. <i>rosea</i> (T3T5) from Ontario and a 1996 specimen from THUN has been identified by R.J. Bayer as ssp. <i>pulvinata</i> (T5?). The relative distribution and status of <i>A. rosea</i> subspecies in Ontario are poorly known. See Argus <i>et al.</i> (1982-1987), Bayer & Stebbins (1993), Hyypio (1952), Marquis & Voss (1981), Riley (2003).	ASTERACEAE
<i>Anthoxanthum arcticum</i>	Arctic Sweet Grass	G4G5	S2			<i>Hierochloë pauciflora</i>	KENO	Found in open wet tundra and fens near the Hudson Bay coast, where first collected in 1953 by Dutilly and Lepage at Cape Henrietta Maria (Riley 1979). See Argus <i>et al.</i> (1982-1987).	POACEAE
<i>Anthoxanthum monticola</i>	Alpine Sweet Grass	G5	S1			<i>Hierochloë alpina</i> , <i>H. monticola</i>	KENO	Known with certainty in Ontario only from the Sutton Ridges where first collected in 1978 (Riley 1979, 2003); an earlier report from Moose Factory (Macoun 1883-1890) is unsubstantiated. Ontario plants are ssp. <i>monticola</i> (T3T5), generally called <i>Hierochloë alpina</i> ssp. <i>orthantha</i> by previous Ontario authors. See Argus <i>et al.</i> (1982-1987), Dore & McNeill (1980), Löve & Löve (1965), Weimarck (1971).	POACEAE
<i>Aplectrum hyemale</i>	Puttyroot	G5	S2				BRUC CHAT ELGI ESSE FRON hami hast lamb leed MIDD MUSK niag NORF nort otta oxfo? pres SIMC stor wate york	A species of rich, moist deciduous woods which appears to have declined significantly in Ontario. Inconspicuous and most easily found in late fall and early spring when the solitary over-wintering basal leaf, bluish-green with white nerves, is most evident (Whiting & Catling 1986). See Argus <i>et al.</i> (1982-1987), Auclair (1972), Hogan (1982), Richburg (2004), Sutherland (1987); APPENDIX 1.	ORCHIDACEAE

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SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Arabidopsis arenicola</i>	Arctic Rockcress	G4G5	S2			<i>Arabis arenicola</i> var. <i>arenicola</i> , <i>A. arenicola</i> var. <i>pubescens</i>	KENO	Formerly tracked as <i>Arabis arenicola</i> var. <i>arenicola</i> and var. <i>pubescens</i> . These varieties are not recognized in the most recent treatment of the group (Warwick <i>et al.</i> 2006) though were recognized by Mulligan (1995). Found on dry sandy or gravelly beach ridges in the Hudson Bay Lowland. See Argus <i>et al.</i> (1982-1987), Riley (2003).	BRASSICACEAE
<i>Arabis alpina</i>	Alpine Rockcress	G5	S1				KENO	Shoreline gravels and meadows in the Hudson Bay area. See Argus <i>et al.</i> (1982-1987), Riley (2003).	BRASSICACEAE
<i>Arabis pycnocarpa</i> var. <i>adpressipilis</i>	Western Hairy Rockcress	G5T4Q	S1			<i>Arabis hirsuta</i> var. <i>adpressipilis</i>	chat ESSE huro	See Hopkins (1937). Most Ontario records of this species are var. <i>pycnocarpa</i> (T5).	BRASSICACEAE
<i>Arceuthobium americanum</i>	American Dwarf Mistletoe	G5	SH				keno	Disjunct in northwestern Ontario, where possibly extirpated. A parasite on <i>Pinus banksiana</i> in Ontario. Included in Viscaceae by some authors. See Hawksworth & Wiens (1996), Jerome & Ford (2002).	SANTALACEAE
<i>Arctagrostis latifolia</i>	Polar Grass	G5	S3?				KENO	Restricted to areas near the Hudson Bay coast. Eastern Canadian distribution mapped by Riley (2003). See Aiken & Lefkovitch (1990), Argus <i>et al.</i> (1982-1987). Ontario plants are ssp. <i>latifolia</i> (T5).	POACEAE
<i>Arctanthemum arcticum</i>	Arctic Daisy	G5	S3?			<i>Chrysanthemum arcticum</i> , <i>Dendranthema arctica</i>	COCH KENO	Restricted to coastal areas of Hudson and James Bays. See Riley (2003). Ontario plants are ssp. <i>polare</i> (T4?).	ASTERACEAE
<i>Arctophila fulva</i>	Pendent Grass	G5	S3?				KENO	Restricted wetlands near the Hudson Bay coast. See Argus <i>et al.</i> (1982-1987), Lepage (1966), Riley (2003).	POACEAE
<i>Arenaria humifusa</i>	Creeping Sandwort	G4	S2S3				KENO THUN	Known from moist mossy places in the Hudson Bay Lowland, where probably overlooked due to its small size, and from the Cavern Lake Canyon near Lake Superior where it is disjunct by hundreds of kilometers from its main range. See Argus <i>et al.</i> (1982-1987), Given & Soper (1981).	CARYOPHYLLACEAE
<i>Arisaema dracontium</i>	Green Dragon	G5	S3	SC	SC		BRAN CHAT ELGI ESSE HALD HAMI HURO LAMB MIDD NIAG NORF OXFO WATE	Rich floodplain woods in the Carolinian Zone. See Argus <i>et al.</i> (1982-1987), Boles <i>et al.</i> (1999), Cole (1962), Daoust & Cavers (1982), McIntosh & Catling (1979), Sanders & Burk (1992), Sutherland (1987).	ARACEAE



TABLE 1 -- RARE VASCULAR PLANTS OF ONTARIO, FOURTH EDITION (MARCH 2009)

SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Aristida basiramea</i>	Forked Three-awned Grass	G5	S2	END	END	<i>Aristida intermedia</i> (of Ontario reports)	SIMC (RAIN)	First found in SIMC in 1975 (Catling <i>et al.</i> 1977). An earlier record from NORF (reported as <i>A. intermedia</i> by Cruise 1969) is probably the result of a labelling error (Argus <i>et al.</i> 1982-1987). Recently discovered by Judith Jones at additional sites in SIMC. A population found along a roadside in RAIN in 2001 is probably non-native. See Brisson (2004), COSEWIC (2002d), Jones (2007), Shinnars (1940).	POACEAE
<i>Aristida dichotoma</i>	Churchmouse Three-awned Grass	G5	S1				LENN niag? (ELGI)	First collected in Ontario in 1880 at Port Colborne and not found again in the province until 1976 when collected in a Fort Erie railway yard (Catling <i>et al.</i> 1977). Discovered in 1994 as a native species in eastern Ontario granite barrens (Brownell <i>et al.</i> 1996). See Dore & McNeill (1980). Ontario plants are var. <i>dichotoma</i> (T5?).	POACEAE
<i>Aristida longespica</i> var. <i>geniculata</i>	Geniculate Three-awned Grass	G5T5?	S2			<i>Aristida necopina</i>	CHAT ELGI ESSE MIDD NORF	A plant of open sandy meadows and prairies first collected in Ontario in 1932 at Long Point (Catling <i>et al.</i> 1977). See Argus <i>et al.</i> (1982-1987), Sutherland (1987).	POACEAE
<i>Aristida longespica</i> var. <i>longespica</i>	Slim-spiked Three-awned Grass	G5T5?	S2				CHAT ESSE MIDD NORT	First collected in Ontario in 1976 at the now destroyed "Thamesville Moor", CHAT (Catling <i>et al.</i> 1977) and subsequently found at other moist or dry sandy meadows as far east as Presqu'ile, NORT. See Argus <i>et al.</i> (1982-1987).	POACEAE
<i>Aristida purpurascens</i>	Arrowfeather Three-awned Grass	G5	S1				ESSE lamb? NORF	First collected in Ontario by Wilf Botham in 1968 at Ojibway Prairie, Windsor (Catling <i>et al.</i> 1977). An earlier report from Squirrel Island, LAMB (Dodge 1914a), is apparently not supported by a specimen and the species has not been found in the county since (Gaiser & Moore 1966, Tiedje & Tiedje 1999). Discovered at Turkey Point in 1999 by Mary Gartshore. See Argus <i>et al.</i> (1982-1987). Ontario plants are var. <i>purpurascens</i> (T5).	POACEAE
<i>Armeria maritima</i>	Labrador Sea Thrift	G5	S3?			<i>Armeria labradorica</i> , <i>A. maritima</i> var. <i>labradorica</i>	KENO	Restricted to areas near the coast of Hudson Bay. See Argus <i>et al.</i> (1982-1987), Lefebvre & Vekemans (1995). Ontario plants are ssp. <i>sibirica</i> (T5).	PLUMBAGINACEAE

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SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Arnica cordifolia</i>	Heart-leaved Arnica	G5	S1			<i>Arnica whitneyi</i>	THUN	Known in Ontario only from mixed woods in Sleeping Giant Provincial Park on the north shore of Lake Superior where disjunct from western North America (Marquis & Voss 1981). Eastern plants were described as a separate species, <i>Arnica whitneyi</i> , by Fernald (1935) though are now generally included in <i>A. cordifolia</i> . See Argus <i>et al.</i> (1982-1987), Maguire (1943).	ASTERACEAE
<i>Arnica lonchophylla</i>	Long-leaved Arnica	G4	S1			<i>Arnica alpina</i> ssp./var. <i>lonchocarpa</i> , <i>A. chionopappa</i> , <i>A. wilsonii</i>	KENO THUN	<i>Arnica wilsonii</i> , originally described from northern Ontario (see Boivin 1952), is now included with <i>A. chionopappa</i> and other taxa within <i>A. lonchophylla</i> (Downie & Denford 1988). See Argus <i>et al.</i> (1982-1987), Dutilly <i>et al.</i> (1954), Maguire (1943), Marquis & Voss (1981).	ASTERACEAE
<i>Arnoglossum plantagineum</i>	Tuberous Indian-plantain	G4G5	S3	SC	SC	<i>Cacalia plantaginea</i> , <i>C. tuberosa</i>	BRUC GREY HURO LAMB MIDD SIMC	A localized species of fens, wet meadows, and calcareous river flats. See Argus <i>et al.</i> (1982-1987), Cattley (1984), COSEWIC (2002g); APPENDIX 1.	ASTERACEAE
<i>Artemisia dracunculus</i>	Dragon Wormwood	G5	S1			<i>Artemisia glauca</i>	KENO (toro)	Discovered in 1997 at Ingolf, where probably native (Oldham 1999a) and subsequently found on islands in Lake of the Woods where undoubtedly native. An old TORO area record is non-native.	ASTERACEAE
<i>Artemisia frigida</i>	Prairie Sagebrush	G5	S3				KENO THUN (otta) (renf)	The habitat of some northwestern Ontario populations (e.g. cliff tops, prairie remnants) suggests they are native; others are undoubtedly adventive. Southern Ontario populations are non-native.	ASTERACEAE
<i>Artemisia tilesii</i>	Tilesius Wormwood	G5	S2				COCH KENO	Restricted primarily to raised beach ridges along the southern James Bay coast. See Argus <i>et al.</i> (1982-1987), Riley (2003), Riley & McKay (1980).	ASTERACEAE
<i>Asclepias hirtella</i>	Green Milkweed	G5	S1				ESSE	Known only from the Ojibway Prairie area of Windsor. Sometimes included in Asclepiadaceae. See Argus <i>et al.</i> (1982-1987), Woodson (1954).	APOCYNACEAE

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SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Asclepias ovalifolia</i>	Dwarf Milkweed	G5?	S2				KENO RAIN	Open rocky areas, prairie remnants, and riverbanks. Recently rediscovered in northwestern Ontario (Anonymous 1995), where first collected by Claude Garton in 1961. Sometimes included in Asclepiadaceae. See Argus <i>et al.</i> (1982-1987), Woodson (1954); APPENDIX 1.	APOCYNACEAE
<i>Asclepias purpurascens</i>	Purple Milkweed	G5?	S2				chat ESSE LAMB niag? NORF	A localized species of prairie remnants, old fields, and thickets. Sometimes included in Asclepiadaceae. See Argus <i>et al.</i> (1982-1987), Farnsworth & DiGregorio (2002), Sutherland (1987), Vande Water Natural Resource Services (2003), Woodson (1954).	APOCYNACEAE
<i>Asclepias quadrifolia</i>	Whorled Milkweed	G5	S1				hast niag PRIN	Dry, calcareous woods. Recently rediscovered in Canada at two sites in PRIN by Sean Blaney and David Bree (Oldham 2007). Currently being assessed by COSEWIC. Sometimes included in Asclepiadaceae. See Argus <i>et al.</i> (1982-1987), Pleasants & Chaplin (1983), Wilbur (1976), Woodson (1954).	APOCYNACEAE
<i>Asclepias sullivantii</i>	Prairie Milkweed	G5	S3				CHAT ESSE LAMB toro (MIDD)	Prairies, old fields, and thickets. Several recent records are from roadsides far from natural prairie vegetation and are presumably adventive. Sometimes included in Asclepiadaceae. See Argus <i>et al.</i> (1982-1987), Fox (1944), Woodson (1954).	APOCYNACEAE
<i>Asclepias variegata</i>	White Milkweed	G5	SX				hami	Not reported from Ontario since the late 1800s at Hamilton (Logie 1861), where it may have been introduced. Sometimes included in Asclepiadaceae. See Argus <i>et al.</i> (1982-1987), Woodson (1954).	APOCYNACEAE
<i>Asclepias viridiflora</i>	Green Comet Milkweed	G5	S2				BRAN CHAT ESSE halt? LAMB MANI NORF oxfo	Local in sand dunes, open sandy woods, and alvars. Sometimes included in Asclepiadaceae. See Argus <i>et al.</i> (1982-1987), Wilbur (1976), Woodson (1954).	APOCYNACEAE
<i>Asimina triloba</i>	Pawpaw	G5	S3				bran CHAT ELGI ESSE LAMB MIDD NIAG NORF wate	A species of rich, moist deciduous woods often on floodplains which appears to have declined significantly in Ontario. See Argus <i>et al.</i> (1982-1987), Bowden & Miller (1951), Fox & Soper (1952), Soper (1956), Soper & Heimburger (1982); APPENDIX 1.	ANNONACEAE

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SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Asplenium rutamuraria</i>	Wallrue Spleenwort	G5	S2			<i>Asplenium cryptolepis</i>	BRUC LEED MANI thun	Calcareous cliffs and crevices primarily on the Bruce Peninsula and Manitoulin Island. See Argus <i>et al.</i> (1982-1987), FNA (1993), Munro (1988), Soper (1955), Taylor (1934); APPENDIX 1.	ASPLENIACEAE
<i>Asplenium scolopendrium</i> var. <i>americanum</i>	American Hart's-tongue Fern	G4T3	S3	SC	SC	<i>Phyllitis scolopendrium</i> var. <i>americanum</i>	BRUC DUFF GREY HALT niag peel SIMC	Restricted to moist shaded calcareous rocky woods along the Niagara Escarpment. The NIAG population may have been introduced. The type material for the globally rare (T3) North American variety was collected at Inglis Falls, GREY, by Fernald (1935). See Argus <i>et al.</i> (1982-1987), Cinquemani <i>et al.</i> (1988), Cinquemani Kuehn & Leopold (1992, 1993), Faust (1969), Futyma (1980), Ransier (1913), Soper (1954), Taylor (1934), U.S. Fish and Wildlife Service (1989), Wagner (1955).	ASPLENIACEAE
<i>Aster alpinus</i>	Alpine Aster	G5	S1			<i>Aster culminis</i> (of Ontario reports), <i>Diplactis alpinus</i>	KENO	Semple <i>et al.</i> (2002) treat this as <i>Aster culminis</i> (see FNA 2006b for reasons to use <i>A. alpinus</i> ). Discovered in Ontario in 1977 on the coast of Hudson Bay (Riley 1979) and collected at a second Hudson Bay site by Michael Oldham in 2000. See Argus <i>et al.</i> (1982-1987), Riley (2003), Semple <i>et al.</i> (2002). Ontario plants are ssp. <i>vierhapperi</i> (T5).	ASTERACEAE
<i>Astragalus adsurgens</i>	Laxmann's Milk-vetch	G5	SH			<i>Astragalus laxmannii</i>	thun	The single Ontario specimen was collected from a railway embankment at Thunder Bay in 1950 and may have been an introduction. See Argus <i>et al.</i> (1982-1987). Ontario plants are var. <i>robustior</i> (T5).	FABACEAE
<i>Astragalus agrestis</i>	Meadow Milk-vetch	G5	SH			<i>Astragalus goniatus</i>	coch	Collected in 1946 by Arthème Dutilly and 1952 by Ernest Lepage from calcareous gravels along the Albany River near James Bay (Dutilly <i>et al.</i> 1954) and not documented in the province since. See Argus <i>et al.</i> (1982-1987), Riley (2003).	FABACEAE
<i>Astragalus americanus</i>	American Milk-vetch	G5	SH				keno	Documented from several sites along riverbanks and in forest openings in the Hudson Bay region, though not collected since 1978. See Argus <i>et al.</i> (1982-1987), Riley (2003).	FABACEAE

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<i>Astragalus australis</i>	Indian Milk-vetch	G5	S1			<i>Astragalus aboriginum</i>	TEMI	First collected in Ontario in 1956 at Lake Timiskaming by Jack Gillett and still known in the province only from the vicinity of this lake and seen as recently as 2003. See Argus <i>et al.</i> (1982-1987), Baldwin (1958). Ontario plants are probably var. <i>glabriusculus</i> (TNR).	FABACEAE
<i>Astragalus neglectus</i>	Cooper's Milk-vetch	G4	S3			<i>Astragalus cooperi</i>	BRUC GREY HALD HALT HAST KAWA LAMB LANA MANI MIDD niag NORT OTTA oxfo peel RENE wate	A local but widespread species of open, often calcareous, woods and alvars. See Schultz (2003a), Sutherland (1987); APPENDIX 1.	FABACEAE
<i>Astragalus tenellus</i>	Loose-flowered Milk-vetch	G5	S1				COCH	First collected in Ontario in 1979 along the Kenogami River by John Riley and later found along the Mattagami River where observed as recently as 2005. Canadian distribution mapped by Riley (2003). See Argus <i>et al.</i> (1982-1987), Riley & Walshe (1985).	FABACEAE
<i>Athyrium filix-femina</i> var. <i>cyclosorum</i>	Western Lady Fern	G5T5	SH			<i>Athyrium filix-femina</i> ssp. <i>cyclosorum</i> , <i>A. filix-femina</i> var. <i>sitchense</i>	algo thun	Mapped from Ontario in FNA (1993) based on collections from the Lake Superior area, where disjunct from western North America. Placed in the Dryopteridaceae by some authors. See Hosie (1938).	WOODSIACEAE
<i>Atriplex dioica</i>	Thick-leaved Orache	G4?	S2S3			<i>Atriplex patula</i> var. <i>subspicata</i> , <i>A. subspicata</i>	COCH KENO	A record from the Rainy River area mapped by Bassett & Crompton (1973) and Bassett <i>et al.</i> (1983) is probably non-native. Occurs natively only on the coast of Hudson and James Bays, where considered "restricted; occasional" by Riley (2003).	CHENOPODIACEAE
<i>Atriplex glabriuscula</i>	Glabrous Orache	G4	S2?			<i>Atriplex patula</i> ssp. <i>glabriuscula</i>	KENO	A halophyte of coastal wetlands along the James and Hudson Bay shores. See Riley (2003), Riley & McKay (1980). Ontario plants are var. <i>glabriuscula</i> (TNR).	CHENOPODIACEAE
<i>Aureolaria flava</i>	Yellow False Foxglove	G5	S2?				BRAN ESSE hald HALT HAMI LAMB MIDD NIAG norf PEEL toro wate well	A declining species of dry open woods and savannas. Placed in the Scrophulariaceae by some authors. See Soper (1952).	OROBANCHACEAE
<i>Aureolaria pedicularia</i>	Fern-leaved False Foxglove	G5	S2?				bran CHAT ESSE HALT HAMI LAMB midd niag NORF peel toro wate	A declining species of dry open woods and savannas. Placed in the Scrophulariaceae by some authors. See Argus <i>et al.</i> (1982-1987), Soper (1952), Werth & Riopel (1979).	OROBANCHACEAE
<i>Aureolaria virginica</i>	Downy Yellow False Foxglove	G5	S1				halt HAMI niag NORF WATE	A very local and declining species of dry open woods and savannas. Placed in the Scrophulariaceae by some authors. See Argus <i>et al.</i> (1982-1987), King (1989), Soper (1952).	OROBANCHACEAE

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<i>Azolla caroliniana</i>	Eastern Mosquito-fern	G5	S1?				hami leed NIAG YORK (OTTA)	Probably non-native in some areas (e.g. OTTA) and most or all Ontario populations are ephemeral. According to Evrard & Van Hove (2004), <i>A. caroliniana</i> is a synonym of <i>A. filicauloides</i> ; Ontario records of <i>A. caroliniana</i> are probably <i>A. cristata</i> . Placed by some authors in the Salviniaceae. See Argus <i>et al.</i> (1982-1987), Cody & Schueler (1988), Darbyshire (2002), Darbyshire & Thomson (2004).	AZOLLACEAE
<i>Baptisia tinctoria</i>	Yellow False-indigo	G5	S2				chat ESSE hami LAMB niag NORF	A declining species of prairies, savannas, dry open sandy woods and thickets. See Argus <i>et al.</i> (1982-1987), Soper (1952), Sutherland (1987).	FABACEAE
<i>Bartonia paniculata</i>	Branched Bartonia	G5	S1	THR	THR		MUSK PARR	An inconspicuous plant of <i>Sphagnum</i> peatlands in the southeastern Georgian Bay area. See Argus <i>et al.</i> (1982-1987), Brinker (2006), COSEWIC (2003a), Gillett (1959, 1963), Henson (1985), Hill (2003), Mathews <i>et al.</i> (2009), Reznicek & Whiting (1976); APPENDIX 1. Ontario plants are ssp. <i>paniculata</i> (T5).	GENTIANACEAE
<i>Bartonia virginica</i>	Yellow Bartonia	G5	S2				ELGI LAMB midd musk NIAG norf PERT SIMC	Open or lightly shaded moist mossy areas. See Argus <i>et al.</i> (1982-1987), Gillett (1959, 1963), Mathews <i>et al.</i> (2009), Reznicek & Whiting (1976), Wellwood (1975).	GENTIANACEAE
<i>Betula lenta</i>	Cherry Birch	G5	S1	END	END		NIAG	Deciduous woods in the Niagara area. Similar to <i>B. alleghaniensis</i> . See Argus <i>et al.</i> (1982-1987), COSEWIC (2006c), Fox & Soper (1954), Higginbotham <i>et al.</i> (1989), Sharik & Barnes (1979), Sharik & Ford (1984).	BETULACEAE
<i>Betula minor</i>	Dwarf White Birch	G4Q	S1?				COCH	A poorly known taxon, mapped from eastern Ontario by FNA (1997). Included by some authors in <i>B. occidentalis</i> . See Fernald (1945), Furlow & Mitchell (1990).	BETULACEAE
<i>Betula neoalaskana</i>	Alaska Paper Birch	G4G5	S2?			<i>Betula papyrifera</i> var. <i>neoalaskana</i> , <i>B. resinifera</i>	KENO	Taxonomic status uncertain; included by some authors within <i>B. papyrifera</i> .	BETULACEAE
<i>Betula occidentalis</i>	Water Birch	G4G5	S3?				coch KENO THUN	Widespread in northern Ontario typically on river banks (Soper & Heimburger 1982), though status in the province is poorly known. See Lepage (1976), Scott <i>et al.</i> (1992).	BETULACEAE



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<i>Bidens hyperborea</i>	Estuary Beggarticks	G4	S1S2				COCH	Originally described from James Bay based on an 1885 collection by John Macoun and restricted in Ontario to salt marshes on the James Bay coast. See Fassett (1925, 1946a), Fernald (1918b).	ASTERACEAE
<i>Bidens trichosperma</i>	Crowned Beggarticks	G5	S2			<i>Bidens coronata</i> , <i>B. coronatus</i>	CHAT ESSE LAMB midd MUSK NIAG NORF	Wetlands in the Carolinian Zone and southeastern Georgian Bay. See Argus <i>et al.</i> (1982-1987), Fernald (1938); APPENDIX 1.	ASTERACEAE
<i>Blephilia ciliata</i>	Downy Wood Mint	G5	S1				ESSE lamb	Currently restricted to roadsides, open woods, and alvars on Pelee Island. Collected in 1902 on Walpole Island by Charles Dodge (Argus <i>et al.</i> 1982-1987) but not seen there since.	LAMIACEAE
<i>Blephilia hirsuta</i>	Hairy Wood Mint	G5?	S1				lamb MIDD	Apparently first collected in Ontario by Lulu Gaiser in 1958 along the Ausable River; no specimen has been found to substantiate an earlier literature report from LAMB (Dodge 1914a). Rediscovered in 1999 along the Thames River by Todd Farrell. See Argus <i>et al.</i> (1982-1987). Ontario plants are var. <i>hirsuta</i> (T5?).	LAMIACEAE
<i>Blysmopsis rufa</i>	Red Bulrush	G5	S3?			<i>Blysmus rufus</i> , <i>Scirpus rufus</i> var. <i>neogaeus</i>	COCH KENO	Restricted to coastal salt marshes on James and Hudson Bays. See Argus <i>et al.</i> (1982-1987), Riley (2003), Riley & McKay (1980).	CYPERACEAE
<i>Boechera collinsii</i>	Collins' Rockcress	G5	S1			<i>Arabis holboellii</i> var. <i>collinsii</i>	THUN	Distribution and status in Ontario poorly known due to confusion with other members of the <i>B. holboellii</i> complex. See Windham & Al-Shehbaz (2006, 2007).	BRASSICACEAE
<i>Boechera dentata</i>	Short's Rockcress	G5	S2			<i>Arabis perstellata</i> var. <i>shortii</i> , <i>A. shortii</i> , <i>Boechera shortii</i>	ESSE	Moist or dry calcareous or sandy woods, mainly on islands in western Lake Erie. See Al-Shehbaz & Zarucchi (2008), Argus <i>et al.</i> (1982-1987).	BRASSICACEAE
<i>Boechera grahamii</i>	Purple Rockcress	GNR	S2?			<i>Arabis divaricarpa</i> var. <i>dacotica</i>	bruc KENO RAIN renf thun	An apomictic triploid more-or-less intermediate between the sexual diploids <i>B. stricta</i> and <i>B. collinsii</i> (Windham & Al-Shehbaz 2007). See Mulligan (1995).	BRASSICACEAE
<i>Bolboschoenus maritimus</i>	Saltmarsh Bulrush	G5	S3?			<i>Schoenoplectus maritimus</i> , <i>Scirpus maritimus</i> , <i>Scirpus paludosus</i>	COCH KENO (LAMB) (SUDB)	Native in salt marshes of James and Hudson Bays; a rare adventive halophyte in southern Ontario. See Argus <i>et al.</i> (1982-1987), Riley (2003), Riley & McKay (1980). Native Ontario plants are ssp. <i>paludosus</i> (TNR).	CYPERACEAE

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SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Botrychium acuminatum</i>	Pointed Moonwort	G1	S1				ALGO THUN	A species of more or less open dunes and grassy areas including railroad sidings and roadside ditches, similar to <i>B. matricariifolium</i> . Globally restricted to the Lake Superior area. See Wagner & Wagner (1990a).	OPHIOGLOSSACEAE
<i>Botrychium ascendens</i>	Upswept Moonwort	G2G3	S1				keno THUN	Known from near the mouth of the Severn River on the coast of Hudson Bay and from a recent collection near Marathon. See Argus <i>et al.</i> (1982-1987), Wagner & Wagner (1986).	OPHIOGLOSSACEAE
<i>Botrychium campestre</i>	Prairie Moonwort	G3G4	S1				THUN	Grassy railroad siding; occurring in lightly vegetated sand dunes and prairie remnants elsewhere in its range. See Chadde & Kudray (2001a), Nekola & Schlicht (1996a, 1996b), Wagner & Wagner (1986, 1990a).	OPHIOGLOSSACEAE
<i>Botrychium hesperium</i>	Western Moonwort	G3G4	S1			<i>Botrychium matricariifolium</i> ssp. <i>hesperium</i> , <i>B. michiganense</i> (name not yet published)	ALGO MANI THUN	Genus experts (Drs. Florence Wagner and Don Farrar) plan to separate the eastern plants of <i>B. hesperium</i> from the western (primarily Rocky Mountains) plants and call the midwestern plants <i>B. "michiganense"</i> . This split seems to be widely accepted, although the formal publication has not yet been made (NatureServe Explorer, 2009-01-16). See Argus <i>et al.</i> (1982-1987), Chadde & Kudray (2001c), Wagner & Wagner (1983, 1990a).	OPHIOGLOSSACEAE
<i>Botrychium lanceolatum</i>	Triangle Moonwort	G5	S3?				algo DURH elgi HALD LEED MUSK niag NIPI NORF nort OTTA peel pete RENF stor SIMC thun	Widespread in southern Ontario. Small and inconspicuous and undoubtedly overlooked. See Argus <i>et al.</i> (1982-1987), Chadde & Kudray (2001b), Cody & Britton (1989), Sutherland (1987). Ontario plants are ssp./var. <i>angustisegmentum</i> (TNR).	OPHIOGLOSSACEAE
<i>Botrychium oneidense</i>	Blunt-lobed Grapefern	G4Q	S3?			<i>Botrychium dissectum</i> var. <i>oneidense</i> , <i>B. multifidum</i> var. <i>oneidense</i> , <i>Sceptridium oneidense</i>	bran bruc chat durh ELGI ESSE grey hali halt HAMI LEED MIDD musk niag nipi NORF OTTA oxfo PERT prin simc WATE well york	Rich moist woods. Similar to <i>B. dissectum</i> and <i>B. multifidum</i> and probably overlooked. See Chadde & Kudray (2003b), Clausen (1944), Wagner (1961).	OPHIOGLOSSACEAE
<i>Botrychium pallidum</i>	Pale Moonwort	G3	S1				ALGO THUN	Sporadic, mainly in open fields (FNA 1993). See Chadde & Kudray (2003c), Wagner & Wagner (1990b); APPENDIX 1.	OPHIOGLOSSACEAE

TABLE 1 -- RARE VASCULAR PLANTS OF ONTARIO, FOURTH EDITION (MARCH 2009)

SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Botrychium pseudopinnatum</i>	False Northwestern Moonwort	G1	S1				ALGO THUN	An Ontario endemic known only from three sites near the north shore of Lake Superior. Originally described in 1990 and the only hexaploid <i>Botrychium</i> (Wagner & Wagner 1990a). See Chadde & Kudray (2003a).	OPHIOGLOSSACEAE
<i>Botrychium rugulosum</i>	Rugulose Grapefern	G3	S2			<i>Botrychium ternatum</i> , <i>Scepstridium rugulosum</i>	BRAN DUFF ESSE HALT hast LEED midd musk nipi NORF NORT OTTA PARR PERT simc WATE WELL	Woodlands and edges, grassy open areas, often with the similar <i>B. dissectum</i> and/or <i>B. multifidum</i> . Largely restricted to the Great Lakes region. See Argus <i>et al.</i> (1982-1987), Chadde & Kudray (2003d), Sutherland (1987), Wagner & Wagner (1982).	OPHIOGLOSSACEAE
<i>Botrychium spathulatum</i>	Spatulate Moonwort	G3	S1				coch THUN	Typically in sandy open or partially open situations. Similar to <i>B. minganense</i> , with which it often grows. The type locality for this recently described species is near Marathon (Wagner & Wagner 1990b). See Chadde & Kudray (2003e).	OPHIOGLOSSACEAE
<i>Bouteloua curtipendula</i>	Side-oats Grama	G5	S2				BRAN HAST KENO LANA NORF NORT PRIN SIMC	Prairies, dry sandy woods, and alvars in southern Ontario. Recently discovered in Bur Oak prairie remnants in northwestern Ontario. See Argus <i>et al.</i> (1982-1987), Dore & McNeill (1980), Engstrom (2004a), Sutherland (1987); APPENDIX 1. Ontario plants are var. <i>curtipendula</i> (T5).	POACEAE
<i>Bromus nottowayanus</i>	Nottoway Brome	G3G5	S1S2				BRAN CHAT MIDD NIAG	Originally reported from Ontario by Wagnon (1952) from NIAG where it was recently rediscovered. Floodplain woods. Similar to several other <i>Bromus</i> species. See Mackenzie & Ladd (1995), Pavlick (1995).	POACEAE
<i>Bromus pumpellianus</i>	Pumpelly's Brome	G5	SH			<i>Bromus inermis</i> ssp. <i>pumpellianus</i>	bruc keno thun	A western species similar to the introduced <i>B. inermis</i> , and probably native only at one or two sites in northwestern Ontario where it has not been seen recently. Some of the records from THUN and the BRUC record may be non-native. See Argus <i>et al.</i> (1982-1987), Dore & McNeill (1980), Elliott (1949), Guire & Voss (1963), Wagnon (1952).	POACEAE
<i>Buchnera americana</i>	Bluehearts	G5?	S1	END	END		LAMB	Restricted to moist interdunal sandy meadows at the south end of Lake Huron. Formerly it apparently occurred on Squirrel Island (Dodge 1914a, Pennell 1935). Placed in the Scrophulariaceae by some authors. See Argus <i>et al.</i> (1982-1987), COSEWIC (2000c); APPENDIX 1.	OROBANCHACEAE

TABLE 1 -- RARE VASCULAR PLANTS OF ONTARIO, FOURTH EDITION (MARCH 2009)

SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Calamagrostis deschampsoides</i>	Circumpolar Reed Grass	G4	SH				keno	First collected in Ontario in 1978 by Richard Sims (Riley 1979). See Argus <i>et al.</i> (1982-1987), Riley (2003).	POACEAE
<i>Calamagrostis lapponica</i>	Lapland Reed Grass	G5	S1				KENO	First reported from Ontario by Riley and Walshe (1985) based on collections from the Sutton Ridges. See Argus <i>et al.</i> (1982-1987).	POACEAE
<i>Calamagrostis purpurascens</i>	Purple Reed Grass	G5?	S2				KENO nipi THUN	Cliffs and open sandy or rocky ground. Widespread in central and northern Ontario but extremely localized. See Argus <i>et al.</i> (1982-1987), Brunton & McIntosh (1986), Dore & McNeill (1980), Given & Soper (1981), Kawano (1965); APPENDIX 1.	POACEAE
<i>Calamovilfa longifolia</i> var. <i>longifolia</i>	Prairie Sand Reed	G5T5	SX				keno	Known in Ontario from a single record from Ingolf where collected in 1940 by W. Denike and not seen since despite searches of the area. It is possible this collection was from an adventive railway population however the presence of many western prairie species in the area suggests it could also be native. See Argus <i>et al.</i> (1982-1987), Dore & McNeill (1980), Thieret (1960, 1966).	POACEAE
<i>Calamovilfa longifolia</i> var. <i>magna</i>	Great Lakes Sand Reed	G5T3T5	S3				BRUC CHAT huro LAMB MANI PRIN (ALGO) (MIDD) (SUDB)	A Great Lakes endemic largely restricted to sandy shores of Lake Huron. Occasionally introduced along roadsides and railways. Recently discovered in eastern Ontario by Vivian Brownell (Oldham 1999a), where it may be adventive. See Argus <i>et al.</i> (1982-1987), Bowles & Maun (1982), Darbyshire <i>et al.</i> (1984), Guire & Voss (1963), Maun (1981, 1996), Thieret (1960, 1966).	POACEAE
<i>Callitriche heterophylla</i>	Large Water-starwort	G5	S2?				algo hald halt HAST LANA leed musk niag NIPI PARR RAIN RENF THUN	An inconspicuous aquatic; probably overlooked. Placed in the Callitrichaceae by some authors. See Fassett (1951). Ontario plants are ssp. <i>heterophylla</i> (T5).	PLANTAGINACEAE
<i>Caltha natans</i>	Floating Marsh Marigold	G5	S2				KENO RAIN THUN	Usually found in shallow, small, slow moving streams, often associated with beaver activity. See Argus <i>et al.</i> (1982-1987), Lakela (1943), Senn (1941); APPENDIX 1.	RANUNCULACEAE
<i>Camassia scilloides</i>	Wild Hyacinth	G4G5	S2	THR	THR		ESSE	Moist deciduous woods and thickets on the Erie Islands. Placed in the Agavaceae or Liliaceae by some authors. See Argus <i>et al.</i> (1982-1987), Campbell & Reznicek (1977), COSEWIC (2002i).	HYACINTHACEAE

TABLE 1 -- RARE VASCULAR PLANTS OF ONTARIO, FOURTH EDITION (MARCH 2009)

SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Campsis radicans</i>	Trumpet Creeper	G5	S2?				ESSE (MIDD) (NIAG)	Deciduous woods, edges, roadsides, and hedges. Commonly cultivated and some populations probably originated as escapes from cultivation. See Argus <i>et al.</i> (1982-1987), Bertin (1982a, 1982b), Soper (1956); APPENDIX 1.	BIGNONIACEAE
<i>Cardamine maxima</i>	Large Toothwort	G5	S3			<i>Cardamine x maxima</i> , <i>Dentaria maxima</i>	BRAN ELGI MIDD OTTA	Variously treated as a species or a hybrid between <i>C. concatenata</i> and <i>C. diphylla</i> . See Doyon (1966), Montgomery (1955), Sweeney & Price (2001).	BRASSICACEAE
<i>Cardamine nymanii</i>	Nyman's Cuckoo Flower	G5	S2S3			<i>Cardamine pratensis</i> ssp. /var. <i>angustifolia</i> (of Ontario reports)	COCH KENO	Included in <i>C. pratensis</i> by most North American authors, though usually recognized as distinct in Europe. A northern member of the <i>C. pratensis</i> group. See Griffiths (2007).	BRASSICACEAE
<i>Carex aggregata</i>	Smooth Clustered Sedge	G5	S1				ESSE	First discovered in Ontario in open hackberry woods on Middle Island, Lake Erie, in 1982 by Michael Oldham and Tony Reznicek (Oldham & Crins 1988) and still known only from this location. See Argus <i>et al.</i> (1982-1987).	CYPERACEAE
<i>Carex alata</i>	Broad-winged Sedge	G5	S1				NORF	First discovered in Ontario in 1980 at Long Point (Reznicek & Catling 1982, 1989) and not known elsewhere in the province. See Argus <i>et al.</i> (1982-1987), Rothrock <i>et al.</i> (1997).	CYPERACEAE
<i>Carex albicans</i> var. <i>albicans</i>	White-tinged Sedge	G5T4T5	S3			<i>Carex artitecta</i>	BRAN CHAT ESSE FRON HALT HAMI HURO LEED MUSK NIAG NORF PRIN	Dry, open sandy or rocky woods. See Argus <i>et al.</i> (1982-1987).	CYPERACEAE
<i>Carex albicans</i> var. <i>emmonsii</i>	Emmon's White-tinged Sedge	G5T5	S2			<i>Carex emmonsii</i>	DUFF LEED NIAG	First collected in Ontario at Wainfleet Bog near Port Colborne in 1981 by Tony Reznicek and Paul Catling (1984). See Argus <i>et al.</i> (1982-1987).	CYPERACEAE
<i>Carex amphibola</i>	Eastern Narrow-leaved Sedge	G5	S2				CHAT ESSE NIAG	Moist woods and thickets, usually on clay soil. This is <i>C. amphibola</i> in the strict sense, i.e. not <i>C. amphibola</i> var. <i>turgida</i> (= <i>C. grisea</i> ). See Fernald (1942).	CYPERACEAE
<i>Carex annectens</i>	Yellow-fruited Sedge	G5	S2			<i>Carex brachyglossa</i>	ESSE HAST LAMB NIAG	Dry prairie, open woods, old fields. Frequently confused with the much more common <i>C. vulpinoidea</i> .	CYPERACEAE
<i>Carex appalachica</i>	Appalachian Sedge	G4	S2S3			<i>Carex radiata</i> (of early Ontario reports)	BRUC CHAT ELGI NIAG NORF NORT oro	Rich deciduous woods. Easily confused with two more common woodland sedges, <i>Carex rosea</i> (formerly <i>C. convoluta</i> ) and <i>C. radiata</i> (formerly <i>C. rosea</i> ). See Argus <i>et al.</i> (1982-1987), Brownell <i>et al.</i> (1994), Sutherland (1987), Webber & Ball (1979, 1984).	CYPERACEAE

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SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Carex argyrantha</i>	Silvery-flowered Sedge	G5	S2?				LEED LENN MUSK NORF SIMC	Frequently confused with the much more common <i>C. foenea</i> ( <i>C. aenea</i> Fern.).	CYPERACEAE
<i>Carex assiniboinensis</i>	Assiniboia Sedge	G4G5	S2				KENO RAIN	Moist sandy or rocky woods and thickets. First collected in Ontario in 1975 by Paul Maycock on Sable Island and later rediscovered at this site and elsewhere in the Lake of the Woods area. See Argus <i>et al.</i> (1982-1987), Bernard (1959), Oldham & Crins (1988); APPENDIX 1.	CYPERACEAE
<i>Carex atlantica</i>	Atlantic Sedge	G5	S1				LANA MIDD PRES STOR	First collected in 1940 from Alfred Bog and rediscovered there in 1981 by Paul Catling (Reznicek & Catling 1984). Subsequently found at several other bogs and shorelines, mostly in southeastern Ontario. See Argus <i>et al.</i> (1982-1987), Reznicek & Ball (1980). Ontario occurrences are var. or ssp. <i>capillacea</i> (T5?).	CYPERACEAE
<i>Carex atratiformis</i>	Scabrous Black Sedge	G5	S2			<i>Carex raymondii</i>	KENO THUN	Some authors recognize <i>C. raymondii</i> (or <i>C. atratiformis</i> ssp. <i>raymondii</i> ) as a distinct taxon (Calder 1952), though FNA (2002a) combines them. See Argus <i>et al.</i> (1982-1987), Harris (1999).	CYPERACEAE
<i>Carex bicknellii</i>	Bicknell's Sedge	G5	S2				BRAN ESSE HAST HAMI LAMB LENN NORT PRIN RAIN	Prairies and dry, open oak woods. See Argus <i>et al.</i> (1982-1987), Brownell <i>et al.</i> (1994), Rothrock & Reznicek (2001).	CYPERACEAE
<i>Carex bigelowii</i>	Bigelow's Sedge	G5	S1				KENO	Precambrian rock outcrops in the Hudson Bay Lowland where first reported by Riley (1979). See Argus <i>et al.</i> (1982-1987), Brooker <i>et al.</i> (2001), Riley (2003), Schori (2004b). Ontario plants are ssp. <i>bigelowii</i> (TNR).	CYPERACEAE
<i>Carex careyana</i>	Carey's Sedge	G4G5	S2				BRAN CHAT ELGI HALT HALD MIDD NORF OXFO PERT WATE well YORK	Rich deciduous woods, often on floodplains and slopes. See Argus <i>et al.</i> (1982-1987), Ball (1978), Sutherland (1987).	CYPERACEAE
<i>Carex conoidea</i>	Field Sedge	G5	S3			<i>Carex katahdinensis</i>	BRUC CHAT coch ESSE HAST KENO LAMB LANA LEED MANI MIDD MUSK NIAG NIPI OTTA peel PETE PRES PRIN RAIN RENF SIMC THUN	Prairies, river and lake shores. See Argus <i>et al.</i> (1982-1987), Coffin & Pfannmuller (1988).	CYPERACEAE
<i>Carex crus-corvi</i>	Ravenfoot Sedge	G5	S1				ESSE LAMB	Wet woods. First collected in Canada by Wilfred Botham in 1985. See Argus <i>et al.</i> (1982-1987), Botham (1985); APPENDIX 1.	CYPERACEAE



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<i>Carex davisii</i>	Davis' Sedge	G4	S2				ESSE LAMB niag	Moist woods and thickets. First reported in Canada by Catling & Reznicek (1977) based on a 1955 collection from the Canard River. See Argus <i>et al.</i> (1982-1987).	CYPERACEAE
<i>Carex duriuscula</i>	Needle-leaved Sedge	G5	S1			<i>Carex eleocharis</i>	KENO	A western species first collected in Ontario in 2004 from a cliff rim on Shoal Lake near the Manitoba border by Michael Oldham and Wasyl Bakowsky.	CYPERACEAE
<i>Carex festucacea</i>	Fescue Sedge	G5	S1				ESSE	Open woods, thickets, and old fields. Very similar to other species in Section Ovales (see Rothrock 1991). Reports from outside ESSE should be carefully checked.	CYPERACEAE
<i>Carex folliculata</i>	Northern Long Sedge	G4G5	S3				hali MUSK NIPI OTTA PARR PRES stor SIMC	Bogs, moist shorelines, and wet woods, mostly in the southeastern Georgian Bay region. See Argus <i>et al.</i> (1982-1987).	CYPERACEAE
<i>Carex frankii</i>	Frank's Sedge	G5	S2				ELGI ESSE	Moist woods, meadows, and ditches. See Argus <i>et al.</i> (1982-1987), Oldham & Crins (1988); APPENDIX 1.	CYPERACEAE
<i>Carex fuliginosa</i>	Short-leaved Sedge	G5	SH			<i>Carex misandra</i>	keno	Only known in Ontario from tundra in the Cape Henrietta Maria area of the Hudson Bay Lowland.	CYPERACEAE
<i>Carex glaucodea</i>	Blue Sedge	G5	S1			<i>Carex flaccosperma</i> <i>var. glaucodea</i>	ESSE HALD	Open woods and thickets on clay soil. First collected in Ontario by Michael Oldham from woods along the Canard River in 1982 (Oldham & Crins 1988). See Argus <i>et al.</i> (1982-1987), Sutherland (1987); APPENDIX 1.	CYPERACEAE
<i>Carex gravida</i>	Heavy Sedge	G5	S1				esse RAIN	Recently discovered in northwestern Ontario on an open wooded slope above Rainy River by Michael Oldham and Wasyl Bakowsky in 1998. The only southern Ontario record is a 1901 John Macoun collection from Walkerville (Windsor). See Argus <i>et al.</i> (1982-1987); APPENDIX 1.	CYPERACEAE
<i>Carex heleonastes</i>	Hudson Bay Sedge	G4	S2				COCH KENO	Known from moist tundra and fens near Hudson Bay. See Argus <i>et al.</i> (1982-1987), Reznicek & Henson (1982), Shackelford (2004).	CYPERACEAE
<i>Carex hirsutella</i>	Hairy Green Sedge	G5	S3				CHAT ELGI ESSE HALD MIDD NIAG	Dry, open woods and old fields. See Argus <i>et al.</i> (1982-1987), Smith & Waterway (2008a), Sutherland (1987).	CYPERACEAE

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<i>Carex inops</i>	Long-stoloned Sedge	G5	S1			<i>Carex heliophila</i> , <i>C. pensylvanica</i> ssp. <i>heliophila</i> , <i>C. pensylvanica</i> var. <i>digyna</i>	KENO NORF	Dry, sandy or rocky open areas. Similar to the common and widespread <i>C. pensylvanica</i> and easily overlooked. First collected in Ontario by Homer Scoggan in 1960 at Turkey Point (Oldham & Crins 1988), its most easterly location in North America. See Argus <i>et al.</i> (1982-1987), Crins & Ball (1983). Ontario plants are ssp. <i>heliophila</i> (T5).	CYPERACEAE
<i>Carex juniperorum</i>	Juniper Sedge	G3	S1	END	END		HALD HAST	A recently described species known only from Ontario, Ohio, Kentucky (Catling <i>et al.</i> 1993), and Virginia. Similar to <i>C. backii</i> and <i>C. jamesii</i> and growing in alvar woodland and open oak woods.	CYPERACEAE
<i>Carex krausei</i>	Krause's Sedge	G4	S1			<i>Carex capillaris</i> ssp. <i>krausei</i>	KENO	Known in Ontario only from tundra and beach ridges in the Cape Henrietta Maria area. See Löve <i>et al.</i> (1957).	CYPERACEAE
<i>Carex laeviconica</i>	Smooth Cone Sedge	G4G5	S2				RAIN	Moist meadows, shorelines, and woods along Rainy River where first found in 1998 by Michael Oldham and Wasyl Bakowsky. Similar to <i>C. atherodes</i> . See Oldham (1999a).	CYPERACEAE
<i>Carex leavenworthii</i>	Leavenworth's Sedge	G5	S1				ESSE	Dry, open ground; alvars. First collected in Canada by John Macoun in 1882 on Pelee Island and rediscovered there by Michael Oldham in 1984 (Oldham & Crins 1988). See Argus <i>et al.</i> (1982-1987).	CYPERACEAE
<i>Carex loliacea</i>	Ryegrass Sedge	G5	SH				coch keno thun	Widespread in northern Ontario in moist shaded coniferous forest and bogs. Similar to <i>C. disperma</i> . See Argus <i>et al.</i> (1982-1987), Baldwin (1958), Reznicek & Ball (1981).	CYPERACEAE
<i>Carex longii</i>	Long's Sedge	G5	SH				leed	Known in Ontario only from an old collection from Rockport. See Argus <i>et al.</i> (1982-1987), Rothrock (1991).	CYPERACEAE
<i>Carex lupuliformis</i>	False Hop Sedge	G4	S1	END	END		ELGI ESSE MIDD wate	First collected in Ontario by W. Herriot in 1902 near Galt and rediscovered in the province by Tony Reznicek in 1985 near Amherstburg (Oldham & Crins 1988). Very similar to the much more common <i>C. lupulina</i> and examination of mature fruits are needed to separate the two. See Argus <i>et al.</i> (1982-1987), Oldham <i>et al.</i> (1993), Reznicek & Ball (1974), Thompson & Paris (2004).	CYPERACEAE

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<i>Carex meadii</i>	Mead's Sedge	G4G5	S2			<i>Carex tetanica</i> var. <i>meadii</i>	CHAT ELGI ESSE LAMB MIDD	Prairies and moist or dry open areas. Some Ontario specimens are difficult to distinguish from <i>C. tetanica</i> . See Argus <i>et al.</i> (1982-1987).	CYPERACEAE
<i>Carex mesochorea</i>	Midland Sedge	G4G5	S1			<i>Carex cephalophora</i> var. <i>mesochorea</i>	BRAN fron hami PRIN	Known from a few scattered sites in southern Ontario mostly in somewhat disturbed situations (fields, roadsides) and perhaps not native to Ontario. Similar to <i>C. cephalophora</i> and <i>C. muehlenbergii</i> and possibly overlooked.	CYPERACEAE
<i>Carex muhlenbergii</i> var. <i>enervis</i>	Nerveless Muhlenberg's Sedge	G5T5	S1S2			<i>Carex plana</i>	durh FRON LEED SIMC	Rocky woods, dry open sandy ground. Perigynia are veinless. Most Ontario records of this species are var. <i>muhlenbergii</i> (T5).	CYPERACEAE
<i>Carex muskingumensis</i>	Muskingum Sedge	G4	S3				CHAT ESSE LAMB MIDD	Moist woods. See Argus <i>et al.</i> (1982-1987); APPENDIX 1.	CYPERACEAE
<i>Carex nardina</i>	Nard Sedge	G4G5	S1				KENO	First discovered in Ontario in 2001 by Michael Oldham and Donald Sutherland on dry, gravelly, old beach ridges near Hudson Bay. See Oldham & Sutherland (2003).	CYPERACEAE
<i>Carex nigromarginata</i>	Black-edged Sedge	G5	S1				NORF	First discovered in Ontario in 1980 at Long Point (Reznicek & Catling 1982, 1989) and still known only from there. See Argus <i>et al.</i> (1982-1987).	CYPERACEAE
<i>Carex obtusata</i>	Blunt Sedge	G5	S2				KENO RAIN	First discovered in Ontario in 1984 by Bill Crins and Mary Gartshore near Lake of the Woods (Oldham & Crins 1988) and subsequently found at additional dry, rocky sites in the area. See Argus <i>et al.</i> (1982-1987).	CYPERACEAE
<i>Carex oligocarpa</i>	Eastern Few-fruited Sedge	G4	S3				durh elgi ESSE HALT HAMI HAST LENN NIAG PRIN	Dry, usually calcareous woods. Similar to <i>C. hitchcockiana</i> . See Argus <i>et al.</i> (1982-1987), Hay & Gagnon (1986), Macdonald <i>et al.</i> (1992), and Smith & Oldham (1999).	CYPERACEAE
<i>Carex parryana</i>	Parry's Sedge	G4	S1?				RAIN (MIDD)	Collected from a roadside ditch near the Seine River in northwestern Ontario with other western species by Michael Oldham and Wasyl Bakowsky in 1995. The native or adventive status of this northwestern Ontario record is uncertain.	CYPERACEAE

TABLE 1 -- RARE VASCULAR PLANTS OF ONTARIO, FOURTH EDITION (MARCH 2009)

SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Carex praticola</i>	Northern Meadow Sedge	G5	S2				COCH hast KENO RAIN THUN (ELGI) (ESSE)	Recorded from natural habitats (rocky woods, woodland edges, river banks, talus slopes) in northern Ontario, though some recent southern Ontario sites are from disturbed areas and are likely introductions. See Coffin & Pfannmuller (1988).	CYPERACEAE
<i>Carex retroflexa</i>	Reflexed Sedge	G5	S2				ESSE NIAG	First collected in Ontario at Cedar Creek by Michael Oldham in 1982 and subsequently found at a couple of additional sites in ESSE (Oldham & Crins 1988). Discovered at Paradise Grove, NIAG, in 2006 by Michael Oldham. Dry, open woods and woodland edges. Similar to <i>C. radiata</i> and <i>C. rosea</i> and easily overlooked. See Argus <i>et al.</i> (1982-1987).	CYPERACEAE
<i>Carex rossii</i>	Ross' Sedge	G5	S3			<i>Carex deflexa</i> ssp./var. <i>rossii</i>	KENO RAIN THUN	Recent confirmed records from several sites in THUN and one site in each of KENO and RAIN. Probably overlooked in the Lake Superior area due to its similarity to <i>C. deflexa</i> . Rocky woods, talus slopes. See Boivin (1992), Coffin & Pfannmuller (1988); APPENDIX 1.	CYPERACEAE
<i>Carex rupestris</i>	Rock Sedge	G5	S2S3				KENO	First discovered in Ontario in 2000 near Cape Henrietta Maria by Michael Oldham and found at 14 additional sites in 2001. Dry gravel or sand old beach ridges. See APPENDIX 1	CYPERACEAE
<i>Carex saximontana</i>	Rocky Mountain Sedge	G5	S2			<i>Carex backii</i> var. <i>saximontana</i>	KENO	Discovered in Ontario in 1998 on an island in Lake of the Woods by Bruce Ford, Wasyl Bakowsky, and Michael Oldham. Dry open woods and rocky slopes. See Oldham (1999), Saarela & Ford (2001); APPENDIX 1.	CYPERACEAE
<i>Carex schweinitzii</i>	Schweinitz's Sedge	G3G4	S3				BRAN BRUC DUFF DURH ELGI GREY HALT HURO mani MIDD NORF NORT OXFO SIMC WATE WELL YORK	Seepages, river banks, wooded swamps. See APPENDIX 1	CYPERACEAE
<i>Carex scirpoidea</i> ssp. <i>convoluta</i>	Convolute Scirpuslike Sedge	G5T3	S3			<i>Carex scirpoidea</i> var. <i>convoluta</i>	BRUC MANI	A Great Lakes endemic confined primarily to alvars and shorelines around Lake Huron. Known only from Ontario and Michigan, with most of its global populations in Ontario. See Dunlop (1997), Dunlop & Crow (1999), Fernald (1935).	CYPERACEAE

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SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Carex seorsa</i>	Weak Stellate Sedge	G4	S2				ELGI HALD NIAG	First found in Ontario in moist acidic woods in the Niagara Peninsula growing around the edges of woodland pools (Reznicek & Catling 1984). See Argus <i>et al.</i> (1982-1987), Reznicek & Ball (1980), Sutherland (1987); APPENDIX 1.	CYPERACEAE
<i>Carex shortiana</i>	Short's Sedge	G5	S1				ELGI ESSE	First collected in Ontario in 1901 by John Macoun at Amherstburg. Rediscovered nearby on the floodplain of Big Creek in 1984 by Michael Oldham (Oldham & Crins 1988). Moist woods, floodplains. See Argus <i>et al.</i> (1982-1987).	CYPERACEAE
<i>Carex squarrosa</i>	Squarrose Sedge	G4G5	S2				CHAT ESSE niag	Moist woods. See Argus <i>et al.</i> (1982-1987).	CYPERACEAE
<i>Carex suberecta</i>	Prairie Straw Sedge	G4	S2				CHAT ESSE LAMB MIDD	A rare sedge of moist prairies, meadows and swamps in southwestern Ontario (Reznicek & Catling 1984). See Argus <i>et al.</i> (1982-1987), Rothrock <i>et al.</i> (1997).	CYPERACEAE
<i>Carex supina</i>	Weak Arctic Sedge	G5	S1				THUN	Known in Ontario only from cliff tops on North and South Fowl Lakes near the Minnesota border where first found by John Morton in 1973. See Argus <i>et al.</i> (1982-1987), Coffin & Pfannmuller (1988), Given & Soper (1981). Ontario plants are ssp./var. <i>spaniocarpa</i> (T3T5).	CYPERACEAE
<i>Carex tetanica</i>	Rigid Sedge	G4G5	S3				BRAN BRUC CHAT coch ELGI ESSE HALT HURO LAMB LEED MIDD NIAG NORF OTTA RAIN RENF WATE WELL	Seepages, fens, wet meadows, shorelines, moist prairies. Difficult to distinguish from <i>C. meadii</i> at some southwestern Ontario sites. See Argus <i>et al.</i> (1982-1987).	CYPERACEAE
<i>Carex tinctoria</i>	Tinged Sedge	G4G5	S1				KENO thun	Two specimen from northwestern Ontario were recently revised to this species (P.W. Ball and A.A. Reznicek, pers. comm.). See Fernald (1913).	CYPERACEAE
<i>Carex torreyi</i>	Torrey's Sedge	G4	S2				KENO RAIN	Discovered in 1998 by Michael Oldham and Wasyl Bakowsky at several sites in northwestern Ontario (Oldham 1999a). Prairies and open rocky Bur Oak slopes. See APPENDIX 1.	CYPERACEAE
<i>Carex torta</i>	Twisted Sedge	G5	SX				midd peel	Last collected in Ontario in 1910. Seepages, stream banks, moist grasslands. See Argus <i>et al.</i> (1982-1987).	CYPERACEAE

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<i>Carex trichocarpa</i>	Hairy-fruited Sedge	G4	S3				BRAN CHAT ELGI MIDD OXFO SIMC TORO WATE WELL	Floodplains and riverbanks where it can form extensive colonies. A hybrid with <i>C. lacustris</i> has been found at Toronto (Catling <i>et al.</i> (1989). See Argus <i>et al.</i> (1982-1987).	CYPERACEAE
<i>Carex typhina</i>	Cattail Sedge	G5	S2				ESSE OTTA PRES SIMC	Moist woods mainly along or near the Ottawa River. Similar to <i>C. squarrosa</i> . See Argus <i>et al.</i> (1982-1987).	CYPERACEAE
<i>Carex virescens</i>	Ribbed Sedge	G5	S3				ELGI ESSE HALD HAMI MIDD NIAG NORF NORT	First collected in Ontario in 1971 at Backus Woods by Peter Ball. Dry sandy woods, woodland edges and old fields. See Argus <i>et al.</i> (1982-1987), Goodban (1994), Smith & Waterway (2008b), Sutherland (1987).	CYPERACEAE
<i>Carex wiegandii</i>	Wiegand's Sedge	G4	S1				ALGO coch	Bogs and swamps. See Anonymous (2003a), Argus <i>et al.</i> (1982-1987), Nichols (2002), Reznicek & Ball (1980).	CYPERACEAE
<i>Carex willdenowii</i>	Willdenow's Sedge	G5	S1				HALD NIAG	First collected in Ontario by C.A. Gross in 1867 at Clinton (NIAG) and later by John Macoun in 1892 near Niagara-on-the-Lake. Rediscovered in the province by Mary Gartshore in 1986 at Caistor-Canborough Slough Forest (HALD). Moist clay woods, woodland openings, and meadows. See Argus <i>et al.</i> (1982-1987), Ford <i>et al.</i> (1998), Naczi <i>et al.</i> (1998), Sutherland (1987).	CYPERACEAE
<i>Carex williamsii</i>	Williams' Sedge	G4	S1S2			<i>Carex capillaris</i> var. <i>williamsii</i>	KENO	Restricted to moist tundra and mossy hummocks near Hudson Bay. Easily overlooked due to its similarity to <i>C. capillaris</i> . See Argus <i>et al.</i> (1982-1987), Löve <i>et al.</i> (1957).	CYPERACEAE
<i>Carex xerantica</i>	Dryland Sedge	G5	S2				KENO THUN	Open cliff tops, talus slopes, and other dry open areas. Recently found at several sites in THUN (Oldham 1996a) and one in KENO. See Coffin & Pfannmuller (1988).	CYPERACEAE
<i>Carya glabra</i>	Pignut Hickory	G5	S3			<i>Carya ovalis</i>	BRAN ELGI ESSE HALT HAMI NIAG NORF WATE	Some authors split <i>C. ovalis</i> from this taxon. If split, definitely identifiable Ontario material is <i>C. ovalis</i> . See Argus <i>et al.</i> (1982-1987), Manning (1950), Meyers (2005a, 2005b), Sutherland (1987).	JUGLANDACEAE
<i>Carya laciniosa</i>	Shellbark Hickory	G5	S3				CHAT elgi ESSE LAMB NIAG NORF	Moist to wet deciduous woods. See Argus <i>et al.</i> (1982-1987), Meyers (2005b), Sutherland (1987); APPENDIX 1.	JUGLANDACEAE



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SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Castanea dentata</i>	American Chestnut	G4	S2	END	END		BRAN CHAT ELGI ESSE HALD HALT HAMI lamb MIDD NIAG NORF OXFO WATE WELL	Healthy trees are extremely rare, although suckers and stump sprouts are locally common in the Carolinian Zone of Ontario. See Argus <i>et al.</i> (1982-1987), Brewer (1995), COSEWIC (2004a), Fox (1949, 1959), Fox & Soper (1953), Paillet (1982), Russell (1987), Soper (1962), Sutherland (1987), Tindall <i>et al.</i> (2004).	FAGACEAE
<i>Celtis tenuifolia</i>	Dwarf Hackberry	G5	S2	THR	THR		ESSE HAST LAMB (MIDD)	Dry, open sandy woods and dunes; alvar woodland. Recently discovered in southeastern Ontario (see Brownell <i>et al.</i> 1994). Placed in Ulmaceae by some authors. See Argus <i>et al.</i> (1982-1987), COSEWIC (2003c), Soper & Heimbürger (1982), Wagner (1974).	CANNABACEAE
<i>Cerastium beeringianum</i>	Bering Sea Chickweed	G5	SH				thun	Collected from North Fowl Lake by John Morton (pers. comm.). See Given & Soper (1981).	CARYOPHYLLACEAE
<i>Cerastium brachypodium</i>	Short-stalked Chickweed	G5	S2			<i>Cerastium nutans</i> var. <i>brachypodium</i>	HAST otta PRIN RAIN	Recently discovered in several southern Ontario alvars (Anonymous 1995, Oldham 1996a). Perhaps adventive. Included in <i>C. nutans</i> by some authors.	CARYOPHYLLACEAE
<i>Cerastium velutinum</i>	Large Field Chickweed	G4?	S2			<i>Cerastium arvense</i> ssp./var. <i>velutinum</i> , <i>C. arvense</i> var. <i>villosum</i> , <i>C.</i> <i>oblongifolium</i>	ESSE lamb	Sandy or rocky wood and edges, roadsides, alvars. Similar to <i>C. arvense</i> but with larger and more showy flowers. See Argus <i>et al.</i> (1982-1987)	CARYOPHYLLACEAE
<i>Ceratophyllum echinatum</i>	Prickly Hornwort	G4?	S3?				BRUC coch esse fron HALI MUSK NIPI OTTA PARR PRIN RENF SIMC THUN WATE	Widespread in southern and central Ontario usually in acidic and nutrient poor sites; probably overlooked due to its similarity to the more common <i>C. demersum</i> . See Les (1986), Scribailo & Alix (2002a).	CERATOPHYLLACEAE
<i>Cercis canadensis</i>	Eastern Redbud	G5	SX				esse (NIAG)	The only presumed native Ontario record was from 1892 on Pelee Island, where collected by John Macoun. Occasionally escaped from cultivation elsewhere. See Argus <i>et al.</i> (1982-1987), Fox & Soper (1953), Soper (1956).	FABACEAE

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<i>Chaerophyllum procumbens</i>	Spreading Chervil	G5	S2			<i>Chaerophyllum shortii</i>	ESSE LAMB	A spring ephemeral of rich, moist woods. Some authors recognize var. <i>procumbens</i> (T5) with glabrous fruits and var. <i>shortii</i> (T3T4Q) with pubescent fruits, both of which occur in Ontario. See Argus <i>et al.</i> (1982-1987), Baskin <i>et al.</i> (2004), Campbell & Reznicek (1977), Soper (1962), Tans & Read (1975).	APIACEAE
<i>Chamaelirium luteum</i>	Fairywand	G5	SX				niag norf	Meadows, thickets, and open woods. Last collected in Ontario in 1979 near Turkey Point. Included by some authors in the Liliaceae or Chionographidaceae. See Allard (2003), Argus <i>et al.</i> (1982-1987), Baskin <i>et al.</i> (2001), Meagher (1980, 1982, 1991), Soper (1962), Sutherland (1987).	MELANTHIACEAE
<i>Chenopodium album</i> var. <i>missouriense</i>	Missouri Goosefoot	G5T5	SH			<i>Chenopodium missouriense</i>	esse	Variouly treated as a species (e.g. Wahl 1954, Yatskievych 2006), a variety of <i>C. album</i> (e.g. Bassett & Crompton 1982), or included without rank within <i>C. album</i> (e.g. FNA 2003a). In areas adjacent to Lake Erie on light soils; sometimes weedy. Formerly placed in Chenopodiaceae by most authors. See Clemants (1992).	AMARANTHACEAE
<i>Chenopodium berlandieri</i> var. <i>bushianum</i>	Village Goosefoot	G5T4T5	S1S2			<i>Chenopodium bushianum</i>	ELGI HALD lamb NIAG	Dry, open disturbed ground. A sometimes weedy species. Formerly placed in Chenopodiaceae by most authors. See Bassett & Crompton (1982), Clemants (1992), Haines (2001).	AMARANTHACEAE
<i>Chenopodium foggii</i>	Fogg's Goosefoot	G3Q	S2				CHAT? ESSE LEED LAMB NIAG NORF RENF SIMC	Sandy or rocky open woods and edges. Easily confused with similar species. Sometimes included in <i>C. pratericola</i> (e.g. Clemants 1992, Gleason & Cronquist 2001). Formerly placed in Chenopodiaceae by most authors. See Argus <i>et al.</i> (1982-1987), Bassett & Crompton (1982), Cody (1982), Haines (2001), Haines & Newcomer (2002).	AMARANTHACEAE
<i>Chenopodium leptophyllum</i>	Slim-leaved Goosefoot	G5	S1				esse RAIN THUN	Open sandy ground, shaly cliffs. Similar to other narrow-leaved <i>Chenopodium</i> species. Formerly placed in Chenopodiaceae by most authors. See Argus <i>et al.</i> (1982-1987), Bassett & Crompton (1982).	AMARANTHACEAE

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<i>Chenopodium standleyanum</i>	Standley's Goosefoot	G5	S2				CHAT ESSE	Dry, sandy deciduous woods. Formerly placed in Chenopodiaceae by most authors. See Argus <i>et al.</i> (1982-1987), Bassett & Crompton (1982), Clemants (1992), Haines (2001).	AMARANTHACEAE
<i>Chimaphila maculata</i>	Spotted Wintergreen	G5	S1	END	END		hami musk NIAG NORF simc	Dry, sandy woods. Formerly placed in Pyrolaceae by some authors. See Argus <i>et al.</i> (1982-1987), COSEWIC (2000i), Hodgdon & Eastman (1973), Soper & Heimburger (1982), Standley <i>et al.</i> (1988), Sutherland (1987).	ERICACEAE
<i>Chrysosplenium tetrandrum</i>	Northern Golden Saxifrage	G5	S3?			<i>Chrysosplenium alternifolium</i> ssp./var. <i>tetrandrum</i>	KENO THUN	Moist areas in the Hudson Bay Lowland.	SAXIFRAGACEAE
<i>Cirsium discolor</i>	Field Thistle	G5	S3				BRAN CHAT durh ELGI ESSE HALD hali HAST kawa LAMB LANA LEED LENN MIDD niag OTTA oxfo PRES RAIN SIMC storm toro wate well	Prairies, roadsides, woodland clearings. See Cody (1982), Moore & Frankton (1974).	ASTERACEAE
<i>Cirsium drummondii</i>	Drummond's Thistle	G5	S1				keno THUN	Currently known in Ontario only from the vicinity of Stanley, west of Thunder Bay, where it grows in sandy fields with other western species. First collected in Ontario by John Macoun in 1886 from clay banks of the Severn River but not seen in that area since. See Argus <i>et al.</i> (1982-1987), Moore & Frankton (1964, 1974).	ASTERACEAE
<i>Cirsium flodmanii</i>	Flodman's Thistle	G5	S2?				RAIN THUN	Considered by some to be only adventive in Ontario, however some populations are in prairie remnants with apparently native associates. See Frankton & Moore (1961), Moore & Frankton (1969, 1974).	ASTERACEAE
<i>Cirsium hillii</i>	Hill's Thistle	G3	S3	THR	THR	<i>Cirsium pumilum</i> ssp./var. <i>hillii</i>	BRUC MANI SIMC	Sand dunes, sandy woods, alvar pavement and woodland. See Anonymous (2003a), COSEWIC (2004c), Moore & Frankton (1966, 1974).	ASTERACEAE

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<i>Cirsium pitcheri</i>	Pitcher's Thistle	G3	S2	END	END		BRUC huro LAMB MANI THUN	A Great Lakes endemic of Lake Huron sand dunes and one site on Lake Superior. See Argus <i>et al.</i> (1982-1987), Balogh & Scholtens (2001), Bowles <i>et al.</i> (1993), Chen & Maun (1998, 1999), D'Ulisse & Maun (1996), Guire & Voss (1963), Hamze & Jolls (2000), Keddy & Keddy (1984), Loveless & Hamrick (1988), Maun (1997), Maun <i>et al.</i> (1996), McEachern <i>et al.</i> (1994), Moore & Frankton (1974), Phillips & Maun (1996), Promaine (1999), Stanforth <i>et al.</i> (1997).	ASTERACEAE
<i>Cochlearia groenlandica</i>	Greenland Cochlearia	G4?	SH			<i>Cochlearia officinalis</i> (of Ontario reports)	keno	Restricted in Ontario to the Cape Henrietta Maria area of Hudson Bay, where first collected by Arthème Dutilly in 1953. See Argus <i>et al.</i> (1982-1987), COSEWIC (2000f).	BRASSICACEAE
<i>Collinsia verna</i>	Spring Blue-eyed Mary	G5	SX	EXP	EXP		elgi midd oxfo	A spring ephemeral of open deciduous woods. Not recorded in Ontario since 1954. Included in Scrophulariaceae by some authors. See Argus <i>et al.</i> (1982-1987), Baskin & Baskin (1983), Kalisz (1991).	PLANTAGINACEAE
<i>Conioselinum chinense</i>	Chinese Hemlock parsley	G5	S2				BRAN COCH HURO LAMB midd niag? NORF WATE WELL	Calcareous seepages, river margins, and White Cedar swamps. See Argus <i>et al.</i> (1982-1987), Riley & McKay (1980), Sutherland (1987).	APIACEAE
<i>Corallorhiza odontorhiza</i>	Autumn Coral-root	G5	S2				BRUC chat ELGI LAMB niag NORF NORT pete	Dry, sandy woods, including old pine plantations. Becoming more common in the northern part of its range (P.M. Catling, pers. comm.; Sheviak 1974). See Argus <i>et al.</i> (1982-1987), Brown (1984), Brownell <i>et al.</i> (1994), Catling (1983b), Freudenstein (1997), Landon (1944), Sutherland (1987). Var. <i>odontorhiza</i> (TNR) and var. <i>pringlei</i> (TNR) occur in Ontario.	ORCHIDACEAE
<i>Coreopsis tripteris</i>	Tall Tickseed	G5	S2				ESSE LAMB MIDD	Prairies and open woods. See Argus <i>et al.</i> (1982-1987), Eddy (2005).	ASTERACEAE
<i>Corispermum americanum</i>	American Bugseed	G5?	S1S3			<i>Corispermum hyssopifolium</i> var. <i>americanum</i>	coch keno RAIN THUN	There are several native <i>Corispermum</i> species in the Great Lakes area (Moskayin 1995); their distribution and taxonomy in the province is still tentative. Counties listed are based primarily on determinations by S. Moskayin. Sometimes weedy. Formerly placed in Chenopodiaceae by most authors. Ontario plants are var. <i>americanum</i> (T5?).	AMARANTHACEAE

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<i>Corispermum hookeri</i>	Hooker's Bugseed	G4G5	S1S3				BRUC LAMB NORF	There are several native <i>Corispermum</i> species in the Great Lakes area (Moskayin 1995); their distribution and taxonomy in the province is still tentative. Counties listed are based primarily on determinations by S. Moskayin. Sometimes weedy. Formerly placed in Chenopodiaceae by most authors. Ontario plants are var. <i>hookeri</i> (T4T5).	AMARANTHACEAE
<i>Corispermum pallasii</i>	Pallas' Bugseed	G4?	S1S3				CHAT ELGI LAMB NIAG nipi NORF temi THUN	There are several native <i>Corispermum</i> species in the Great Lakes area (Moskayin 1995); their distribution and taxonomy in the province is still tentative. Counties listed are based primarily on determinations by S. Moskayin. Sometimes weedy. Formerly placed in Chenopodiaceae by most authors.	AMARANTHACEAE
<i>Corispermum villosum</i>	Hairy Bugseed	G4?	S1S3			<i>Corispermum emarginatum</i>	BRAN LAMB MANI NIAG nipi rain thun	There are several native <i>Corispermum</i> species in the Great Lakes area (Moskayin 1995); their distribution and taxonomy in the province is still tentative. Counties listed are based primarily on determinations by S. Moskayin. Sometimes weedy. Formerly placed in Chenopodiaceae by most authors.	AMARANTHACEAE
<i>Cornus florida</i>	Eastern Flowering Dogwood	G5	S2?	END	END		bran CHAT ELGI ESSE HALD HALT HAMI LAMB MIDD NIAG NORF oxfo	Formerly a widespread species in the Carolinian now much reduced and declining due to habitat loss and dogwood anthracnose, a probably introduced fungal disease. See Carr & Banas (2000), COSEWIC (2007a), Jenkins & White (2002); APPENDIX 1.	CORNACEAE
<i>Corydalis flavula</i>	Yellow Corydalis	G5	S2				ESSE hald NIAG	Sandy or rocky woods and thickets, primarily on the Erie Islands. Recently rediscovered in NIAG by Albert Garofalo. Included in the Fumariaceae by some authors. See Argus <i>et al.</i> (1982-1987), Campbell & Reznicek (1977), Farnsworth (2001), Higman & Penskar (1999), Nuzzo (2005).	PAPAVERACEAE
<i>Crassula aquatica</i>	Water Pygmyweed	G5	S2			<i>Tillaea aquatica</i>	KENO RAIN	Mudflats and moist sandy shores. Small and easily overlooked. First collected in Ontario in 1961 by W.K.W. Baldwin. See Argus <i>et al.</i> (1982-1987), Cody (1954).	CRASSULACEAE
<i>Crataegus apiomorpha</i>	Fort Sheridan Hawthorn	G3G4Q	S1S2				BRUC chat ELGI GREY MIDD MUSK OTTA YORK	Taxonomic problems. Very similar to <i>C. macrosperma</i> (Phipps & Muniyamma 1980) and <i>C. schuettei</i> (Phipps <i>et al.</i> 1990) and may be the same as <i>C. fluviatilis</i> .	ROSACEAE

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<i>Crataegus beata</i>	Dunbar's Hawthorn	G2G4Q	SH				hald niag	Taxonomic problems. Listed by Phipps <i>et al.</i> (1990) only from New York. Listed by Morton & Venn (1990) from Ontario as "? extinct in Ontario". See Argus <i>et al.</i> (1982-1987), Phipps & Muniyamma (1980).	ROSACEAE
<i>Crataegus brainerdii</i>	Brainerd's Hawthorn	G5	S2				ELGI fron HALT hami MIDD NORF PRIN stor SIMC	Similar to <i>C. scabrada</i> . See Argus <i>et al.</i> (1982-1987), Phipps & Muniyamma (1980).	ROSACEAE
<i>Crataegus chrysocarpa</i> var. <i>phoenicea</i>	Fireberry Hawthorn	G5TNR	S1S2				FRON KAWA MUSK NIPI OTTA	Variable. Usually co-occurs with var. <i>chrysocarpa</i> . See Phipps & Muniyamma (1980), Smith & Phipps (1987).	ROSACEAE
<i>Crataegus coccinea</i> var. <i>fulleriana</i>	Fuller's Hawthorn	G5T3T5Q	S2?			<i>Crataegus chippewaensis</i> , <i>C. confragosa</i> , <i>C. fulleriana</i>	ELGI grey HALT hami lamb leed	Taxonomic problems. Similar to <i>C. holmesiana</i> . See Macklin & Phipps (2006), Phipps & Muniyamma (1980), Sargent (1908).	ROSACEAE
<i>Crataegus dissona</i>	Northern Hawthorn	G4G5	S3			<i>Crataegus pruinosa</i> var. <i>dissona</i>	ELGI ESSE HALT HAMI LAMB MIDD NIAG PEEI wate	Predominantly in the Niagara Peninsula (Phipps & Muniyamma 1980). Similar to <i>C. pruinosa</i> . See Argus <i>et al.</i> (1982-1987).	ROSACEAE
<i>Crataegus dodgei</i> var. <i>flavida</i>	Yellowish Dodge's Hawthorn	G4TNR	S3			<i>Crataegus flavida</i>	chat ELGI HURO LAMB MIDD NORF toro	Variouly treated as a species or a variety of <i>C. dodgei</i> . Very local, but sometimes abundant in old fields and along hedgerows. See Phipps & Muniyamma (1980), Smith & Phipps (1987).	ROSACEAE
<i>Crataegus formosa</i>	Waxy-fruit Hawthorn	G2G3Q	S2				HAMI NIAG	Taxonomic problems. See Argus <i>et al.</i> (1982-1987), Phipps & Muniyamma (1980).	ROSACEAE
<i>Crataegus intricata</i>	Copenhagen Hawthorn	G4Q	SH			<i>Crataegus boyntonii</i> , <i>C. foetida</i>	hami niag otta toro	Variable. See Argus <i>et al.</i> (1982-1987), Phipps & Muniyamma (1980), Phipps <i>et al.</i> (1990).	ROSACEAE
<i>Crataegus lumaria</i>	Round-leaved Hawthorn	G3G4	S3?			<i>Crataegus dodgei</i> var. <i>lumaria</i>	ELGI MIDD	Included in <i>C. dodgei</i> without rank by Phipps & Muniyamma (1980), but recognized as a species by Phipps <i>et al.</i> (1990). See Argus <i>et al.</i> (1982-1987).	ROSACEAE
<i>Crataegus margaretta</i>	Margaret's Hawthorn	G5?	SH			<i>Crataegus margarettiae</i>	hami lamb midd	A good macro-species (J.B. Phipps pers. comm.). Similar to <i>C. dodgei</i> . Variable, with several varieties sometimes recognized. See Argus <i>et al.</i> (1982-1987), Phipps & Muniyamma (1980).	ROSACEAE
<i>Crataegus pennsylvanica</i>	Pennsylvania Hawthorn	G3Q	S1S2			<i>Crataegus ellwangeriana</i> , <i>C. pedicellata</i> var. <i>ellwangeriana</i>	HALT HAMI NIAG	Similar to <i>C. submollis</i> . See Macklin & Phipps (2006), Phipps & Muniyamma (1980).	ROSACEAE



TABLE 1 -- RARE VASCULAR PLANTS OF ONTARIO, FOURTH EDITION (MARCH 2009)

SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Crataegus scabrida</i>	Rough Hawthorn	G5?	S3?			<i>Crataegus asperifolia</i>	halt hami	Variable and with several varieties recognized by Phipps & Muniyamma (1980), but not Phipps <i>et al.</i> (1990).	ROSACEAE
<i>Crataegus suborbiculata</i>	Caughuawaga Hawthorn	G3?	S2				ELGI GREY LAMB MIDD stor	Similar to <i>C. nitidula</i> . See Argus <i>et al.</i> (1982-1987), Phipps & Muniyamma (1980).	ROSACEAE
<i>Cryptogramma acrostichoides</i>	American Parsley Fern	G5	S2			<i>Cryptogramma crispum</i> ssp./var. <i>acrostichoides</i>	KENO	Open rocky areas and dry open woods. See Argus <i>et al.</i> (1982-1987), Fernald (1935), Marquis & Voss (1981).	PTERIDACEAE
<i>Cuscuta campestris</i>	Field Dodder	GNR	S2			<i>Cuscuta pentagona</i> var. <i>calycina</i>	CHAT ELGI ESSE KENO LEED niag pete (hald) (MIDD) (OTTA) (STOR) (TORO) (WATE) (WELL)	Weedy and probably not native at some Ontario sites. Included in Cuscutaceae by some authors. See Argus <i>et al.</i> (1982-1987), Costea & Tardiff (2006), Costea <i>et al.</i> (2006a), Crins & Ford (1988); APPENDIX 1.	CONVOLVULACEAE
<i>Cuscuta cephalanthi</i>	Buttonbush Dodder	G5	S2				ESSE HALD LAMB LENN leed RAIN THUN	Moist woods, ditches, wetland, and pond edges. Included in Cuscutaceae by some authors. See Argus <i>et al.</i> (1982-1987), Crins & Ford (1988).	CONVOLVULACEAE
<i>Cuscuta coryli</i>	Hazel Dodder	G5?	SH				esse lamb	Moist prairies. Included in Cuscutaceae by some authors. See Argus <i>et al.</i> (1982-1987), Crins & Ford (1988).	CONVOLVULACEAE
<i>Cuscuta polygonorum</i>	Smartweed Dodder	G5	S1				esse NIAG	Recently found in NIAG by Sam Brinker. Otherwise known in Ontario only from a 1964 Point Pelee collection by W.G. Benedict. Included in Cuscutaceae by some authors. See Argus <i>et al.</i> (1982-1987), Costea <i>et al.</i> (2006a), Crins & Ford (1988).	CONVOLVULACEAE
<i>Cuscuta umbrosa</i>	Bigfruit Dodder	GNR	SH			<i>Cuscuta megalocarpa</i>	thun	Collected in 1958 by Claude Garton along the Kaministiquia River near Thunder Bay; to be looked for elsewhere in northwestern Ontario. Sometimes included in <i>C. gronovii</i> . Included in Cuscutaceae by some authors. See Costea & Tardiff (2006), Costea <i>et al.</i> (2006b), Crins & Ford (1988).	CONVOLVULACEAE
<i>Cyperus dentatus</i>	Toothed Flatsedge	G4	S1				PRES	Rediscovered in 2008 along the Ottawa River by Sam Brinker, where first collected by Vivian Brownell and Paul Catling in 1982. See Argus <i>et al.</i> (1982-1987).	CYPERACEAE
<i>Cyperus flavescens</i>	Annual Yellow Flatsedge	G5	S2				CHAT ELGI LAMB NORF	First collected in Ontario in 1979 at Long Point by Tony Reznicek and Paul Catling (1982). Subsequently found at additional southwestern Ontario sites in moist, often sandy sites. See Argus <i>et al.</i> (1982-1987), Sutherland (1987).	CYPERACEAE

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<i>Cyperus houghtonii</i>	Houghton's Flatsedge	G4?	S3				esse? fron norf OTTA PETE RENF SIMC YORK (MANI)	Dry, open, sandy sites. See Argus <i>et al.</i> (1982-1987), Lew-Smith (2003).	CYPERACEAE
<i>Cyperus schweinitzii</i>	Schweinitz's Flatsedge	G5	S3				chat ESSE HALT HAMI LAMB NIAG NORT RAIN RENF SIMC YORK (ELGI) (KENO)	Dry sandy shores and dunes, and other open sandy sites. Sometimes in highly disturbed situations such as along railways where probably introduced. See Marcks (1974), Sabourin (2000).	CYPERACEAE
<i>Cypripedium arietinum</i>	Ram's-head Lady's-slipper	G3	S3				BRAN BRUC durh fron GREY HAST huro kawa KENO LAMB LANA MANI midd NIPI norf nort OTTA oxfo pert? PETE prin? rain renf SIMC stor THUN toro wate well	Moist coniferous swamps, dry, sandy woods, and limestone barrens. Has apparently declined in southern Ontario. See Bornbusch <i>et al.</i> (1994), Brzeskiewicz (2000), Saunders (1908), Whiting & Catling (1986).	ORCHIDACEAE
<i>Cypripedium candidum</i>	Small White Lady's-slipper	G4	S1	END	END		bruc chat HAST LAMB norf	Prairies and fens. Hybridizes with <i>C. parviflorum</i> at all Ontario sites. See Argus <i>et al.</i> (1982-1987), Bowles (1983), Catling & Knerer (1980), Curtis (1932, 1946, 1954), Falb & Leopold (1993), From (2007), Fuller (1932), Garay (1953), Klier <i>et al.</i> (1991), Marshall <i>et al.</i> (1966), Saunders (1926); APPENDIX 1.	ORCHIDACEAE
<i>Cystopteris laurentiana</i>	Laurentian Bladder Fern	G3	S3			<i>Cystopteris fragilis</i> var. <i>laurentiana</i>	ALGO BRUC coch GREY HALT KENO MANI simc temi THUN well	Easily overlooked and probably more common than records indicate. Thought to have arisen through hybridization between <i>C. bulbifera</i> and <i>C. fragilis</i> . Included in Dryopteridaceae by some authors. See Anonymous (2002a), Weatherby (1926).	WOODSIACEAE
<i>Cystopteris montana</i>	Mountain Bladder Fern	G5	S1				grey? THUN	Rich, moist woods near Lake Superior, where it is disjunct primarily from western North America. A specimen from Owen Sound cited by Blasdell (1963) was probably not from a natural population (Crowe 2001). Included in Dryopteridaceae by some authors. See Argus <i>et al.</i> (1982-1987), Blasdell (1963); APPENDIX 1.	WOODSIACEAE

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<i>Cystopteris protrusa</i>	Lowland Brittle Fern	G5	S2			<i>Cystopteris fragilis</i> var. <i>protrusa</i>	ELGI ESSE HALD HAMI LAMB MIDD NIAG	A fern of rich floodplain woods in southwestern Ontario. First found in Canada by William Stewart in 1979 near St. Thomas. Included in Dryopteridaceae by some authors. See Argus <i>et al.</i> (1982-1987), Blasdel (1963), Britton <i>et al.</i> (1985), Haufler <i>et al.</i> (1985), Sutherland (1987), Wagner & Hagenah (1956), Weatherby (1935).	WOODSIACEAE
<i>Dalea candida</i>	White Prairie-clover	G5	SX			<i>Petalostemum candidum</i>	keno	Known in Ontario only from a 1939 collection from Ingolf. See Argus <i>et al.</i> (1982-1987). Ontario plants are var. <i>candida</i> (T4T5).	FABACEAE
<i>Dalea purpurea</i>	Purple Prairie-clover	G5	S1			<i>Petalostemum purpureum</i>	KENO lamb	Rediscovered in Ontario near Lake of the Woods on an open rocky slope with other prairie species by Wasyl Bakowsky and Michael Oldham in 2004. See Argus <i>et al.</i> (1982-1987). Ontario plants are var. <i>purpurea</i> (T5).	FABACEAE
<i>Desmodium canescens</i>	Hoary Tick-trefoil	G5	S2				BRAN chat ESSE LAMB MIDD	Sandy woods and thickets. See Argus <i>et al.</i> (1982-1987).	FABACEAE
<i>Desmodium ciliare</i>	Hairy Small-leaved Tick-trefoil	G5	SX				niag	Dry, sandy thickets and woods. Not recorded in Ontario since 1891 at Niagara Falls. See Argus <i>et al.</i> (1982-1987). Ontario plants are var. <i>ciliare</i> (T5).	FABACEAE
<i>Desmodium cuspidatum</i>	Toothed Tick-trefoil	G5	S3				BRAN CHAT ELGI ESSE HALD HALT HALD HAMI LAMB LEED MIDD niag NORF WATE	Dry, sandy or rocky woods. See Cody (1982), Harper (2002). Ontario plants are var. <i>cuspidatum</i> (T5?).	FABACEAE
<i>Desmodium illinoense</i>	Illinois Tick-trefoil	G5	SX	EXP	EXP		midd	Recorded once in Ontario by John Dearness in 1888 at Komoka. See Argus <i>et al.</i> (1982-1987).	FABACEAE
<i>Desmodium marilandicum</i>	Smooth Small-leaved Tick-trefoil	G5	SX				esse lamb wate	Dry woods and thickets. Last collected in Ontario in 1903 (Argus <i>et al.</i> 1982-1987).	FABACEAE
<i>Desmodium rotundifolium</i>	Prostrate Tick-trefoil	G5	S2				CHAT esse LAMB LEED MIDD niag NORF	Dry sandy or rocky woods. See Argus <i>et al.</i> (1982-1987), Oldham (1983b), Sutherland (1987).	FABACEAE
<i>Desmodium sessilifolium</i>	Sessile-leaved Tick-trefoil	G5	SX				esse	Collected once in Ontario by John Macoun in 1901 at Sandwich (Windsor). See Argus <i>et al.</i> (1982-1987).	FABACEAE

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<i>Diarrhena obovata</i>	Ovate Beak Grass	G4G5	S1			<i>Diarrhena americana</i> var. <i>obovata</i>	LAMB MIDD	First found in Ontario by Dorothy Tiedje in 1988 along the Ausable River valley and subsequently found very locally in woods along the Thames and Sydenham Rivers (Oldham <i>et al.</i> 1995). See Brandenburg <i>et al.</i> (1991).	POACEAE
<i>Dichanthelium acuminatum</i> ssp. <i>spretum</i>	Sand Panic Grass	G5T5	S2			<i>Dichanthelium spretum</i> , <i>Panicum spretum</i>	KAWA MUSK SIMC	An Atlantic Coastal Plain species (Reznicek 1994) of sandy lakeshores in the southeastern Georgian Bay region. First collected in Ontario in 1975 at Matchedash Lake (Catling <i>et al.</i> 1977). Included in <i>P. acuminatum</i> by Morton & Venn (1990). See Argus <i>et al.</i> (1982-1987).	POACEAE
<i>Dichanthelium clandestinum</i>	Deer-tongue Panic Grass	G5?	S2			<i>Panicum clandestinum</i> , <i>Panicum latifolium</i> var. <i>clandestinum</i>	ESSE HURO LAMB MIDD NIAG NORF	Primarily in floodplain woods in southwestern Ontario. See Argus <i>et al.</i> (1982-1987), Dore & McNeill (1980), Sutherland (1987).	POACEAE
<i>Dichanthelium dichotomum</i>	Forked Panic Grass	G5	S2			<i>Panicum dichotomum</i>	bran CHAT ELGI GREY HALT hami LAMB LEED MIDD NORF wate	Dry, sandy or rocky oak or oak-pine woods. See Argus <i>et al.</i> (1982-1987), Brownell <i>et al.</i> (1994), Dore & McNeill (1980), Leblond (2001), Sutherland (1987). Ontario plants are ssp. <i>dichotomum</i> (T5).	POACEAE
<i>Dichanthelium leibergii</i>	Leiberg's Panic Grass	G5	S2			<i>Panicum leibergii</i>	LAMB HAST RAIN	Prairie remnants and open sandy woods. Plants formerly included in <i>Panicum leibergii</i> as var. <i>baldwinii</i> (type locality Mattice on the Missinaibi River; Baldwin 1958, Lepage 1959) are included in <i>D. xanthophysum</i> by FNA (2003a). See Argus <i>et al.</i> (1982-1987), Brownell <i>et al.</i> (1994), Dore & McNeill (1980).	POACEAE
<i>Dichanthelium meridionale</i>	Mat Panic Grass	G5	S1			<i>Panicum meridionale</i>	ESSE LAMB	Dry, sandy open ground. Included in <i>D. acuminatum</i> ssp. <i>acuminatum</i> by FNA (2003a), though seems distinct in Ontario and Michigan (A.A. Reznicek, pers. comm.). See Argus <i>et al.</i> (1982-1987).	POACEAE
<i>Dichanthelium ovale</i> ssp. <i>praecocius</i>	White-haired Panic Grass	G5T5?	S3			<i>Dichanthelium praecocius</i> , <i>D. villosissimum</i> var. <i>praecocius</i> , <i>Panicum lanuginosum</i> var. <i>praecocius</i> , <i>P. praecocius</i> , <i>P. villosissimum</i> (of Ontario reports)	BRAN CHAT ELGI ESSE HALT HAST hami KENO LAMB MIDD niag NORF NORT peel PETE YORK	Prairie remnants, dry, open, often sandy ground. A taxonomically difficult group treated differently by various authors. See Argus <i>et al.</i> (1982-1987), Brownell <i>et al.</i> (1994), Sutherland (1987).	POACEAE

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<i>Dichanthelium ovale</i> ssp. <i>pseudopubescens</i>	Common's Panic Grass	G5T5	S1			<i>Dichanthelium commonsianum</i> , <i>Panicum columbianum</i> var. <i>commonsianum</i> , <i>P. commonsianum</i> , <i>P. ovale</i> var. <i>pseudopubescens</i>	esse midd NORF	Very local in dry sandy ground. Taxonomically complicated group. See Argus <i>et al.</i> (1982-1987), Dore & McNeill (1980), Morton and Venn (1990).	POACEAE
<i>Dichanthelium perlongum</i>	Long-stalked Panic Grass	GNR	S2			<i>Panicum perlongum</i>	durh HAST KENO midd NORF NORT RAIN THUN	Dry, sandy or rocky areas in southern and northwestern Ontario. Very similar to <i>D. depauperatum</i> and <i>D. linearifolium</i> and included in <i>Panicum linearifolium</i> by Morton and Venn (1990). See Argus <i>et al.</i> (1982-1987), Brownell <i>et al.</i> (1994).	POACEAE
<i>Dichanthelium sphaerocarpon</i>	Round-fruited Panic Grass	G5	S3			<i>Panicum sphaerocarpon</i>	CHAT ELGI ESSE LAMB MIDD NORF SIMC	Open sandy sites, primarily in southwestern Ontario; disjunct in southeastern Georgian Bay. See Argus <i>et al.</i> (1982-1987), Catling <i>et al.</i> (1977), Sutherland (1987).	POACEAE
<i>Digitaria cognata</i>	Fall Crab Grass	G5	S1			<i>Leptoloma cognatum</i>	CHAT ELGI ESSE LAMB MIDD NORT peel SIMC WATE (ALGO) (NIAG) (NORF)	First reported in Ontario from Rockhouse Point, HALD, by Zenkert & Zander (1975), though this collection was later revised to <i>Panicum flexile</i> (Argus <i>et al.</i> 1982-1987). Collected in Ontario in 1971 at a prairie remnant at Lorne Park by Peter Ball and along railways in CHAT and NIAG (Catling <i>et al.</i> 1977). Apparently native in dry sandy open ground in southwestern Ontario, but also adventive along roadsides and railways. Ontario plants are ssp. <i>cognata</i> (T5) according to the revision of Wipff & Hatch (1994), though infraspecific taxa are not recognized in FNA (2003b). See Brownell <i>et al.</i> (1994).	POACEAE
<i>Diphasiastrum sabinifolium</i>	Ground-fir	G4	S3			<i>Lycopodium sabinifolium</i>	algo hali KENO LEED THUN	Considered to be a hybrid between <i>D. sitchense</i> and <i>D. tristachyum</i> by some authors (see Beitel 1979). See Fernald (1923b), Gilman (1994), Haines (2003).	LYCOPODIACEAE
<i>Draba alpina</i>	Alpine Whitlow-grass	G4G5	S2?				KENO	Restricted to areas near the coast of Hudson and James Bays and scattered from the vicinity of Cape Henrietta Maria to the Manitoba border. See Fernald (1934), Mulligan (1976).	BRASSICACEAE

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<i>Draba cana</i>	Hoary Whitlow-grass	G5	S3			<i>Draba breweri</i> var. <i>cana</i> , <i>D. lanceolata</i>	BRUC MANI THUN	Cliffs and talus slopes on the Bruce Peninsula, Manitoulin Island, and the north shore of Lake Superior. See Cody (1957), Fernald (1934), Morton & Venn (2000), Mulligan (1971, 1979), Rollins (1993).	BRASSICACEAE
<i>Draba cinerea</i>	Gray-leaved Whitlow-grass	G5	S1				KENO	Dry, open, gravel and sand beach ridges near Cape Henrietta Maria on Hudson Bay, where first collected by W. Spreadborough in 1904. See Argus <i>et al.</i> (1982-1987), Fernald (1934), Mulligan (1971), Riley (2003).	BRASSICACEAE
<i>Draba lactea</i>	Milky Whitlow-grass	G4	S1				KENO	Collected in 2001 from the Cape Henrietta Maria area by Michael Oldham. See Fernald (1934), Mulligan (1974), Scheen <i>et al.</i> (2001).	BRASSICACEAE
<i>Draba nivalis</i>	Yellow Arctic Whitlow-grass	G5	S2				KENO	Gravelly and sandy open beach ridges near Hudson and James Bays. First collected in 1953 at Cape Henrietta Maria by Arthème Dutilly and Ernest Lepage (Dutilly <i>et al.</i> 1954). See Argus <i>et al.</i> (1982-1987), Fernald (1934), Mulligan (1974), Riley (2003).	BRASSICACEAE
<i>Draba norvegica</i>	Norwegian Whitlow-grass	G5	S1				KENO	Known in Ontario only from Cape Henrietta Maria, where first collected in 1957 by Harry Lumsden. See Fernald (1934), Given & Soper (1981), Mulligan (1970), Riley (2003).	BRASSICACEAE
<i>Draba reptans</i>	Carolina Whitlow-grass	G5	S3				BRAN CHAT ESSE HAST lamb LENN LEED midd PRIN (KAWA) (PETE)	Dry sandy open areas and alvar pavements. Occasionally weedy in dry, often sandy, open areas. See Argus <i>et al.</i> (1982-1987), Fernald (1934), Zaremba (2004a); APPENDIX 1.	BRASSICACEAE
<i>Dryas drummondii</i>	Yellow Mountain Avens	G5	S1				coch THUN	Very rare on rocky island shores, gravel river flats, and rock crevices primarily near Lake Superior, where disjunct from western North America. See Argus <i>et al.</i> (1982-1987), Cossette & Blondeau (2006), Marquis & Voss (1981).	ROSACEAE
<i>Echinacea pallida</i>	Pale Purple Coneflower	G4	S1				ELGI	Found in a prairie remnant along a railway and perhaps adventive. Voss (1996) considers this western species to be non-native in Michigan. See Baskin <i>et al.</i> (1995), Binns <i>et al.</i> (2002).	ASTERACEAE
<i>Echinochloa walteri</i>	Coast Barnyard Grass	G5	S3				CHAT ESSE LAMB NIAG NORF NORT OTTA PRES	Marshes and shorelines primarily in southwestern Ontario. See Argus <i>et al.</i> (1982-1987), Dore (1953), Dore & McNeill (1980), Sutherland (1987); APPENDIX 1.	POACEAE
<i>Eclipta prostrata</i>	False Daisy	G5	S2			<i>Eclipta alba</i>	ESSE	Moist muddy shorelines. See Klugh (1906).	ASTERACEAE

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<i>Elatine americana</i>	American Waterwort	G4	S3			<i>Elatine triandra</i> var. <i>americana</i>	OTTA RENF THUN	Shallow water of lakeshores and river edges. See Argus <i>et al.</i> (1982-1987), Fassett (1939), Fernald (1941), Garneau (2006).	ELATINACEAE
<i>Elatine rubella</i>	Long-stemmed Waterwort	GNR	S1			<i>Elatine triandra</i> (of some Ontario reports)	keno RAIN	According to Argus <i>et al.</i> (1982-1987), known only from Quetico Provincial Park, though other northwestern Ontario records of <i>E. americana</i> may also belong to this species. See Fassett (1939).	ELATINACEAE
<i>Eleocharis diandra</i>	Wright's Spike-rush	G1G2	S1				RAIN	Only known in Ontario from a 1995 collection by Michael Oldham and Wasyl Bakowsky from a sandy shoreline of Lake of the Woods. See FNA (2002a), Haines (2001b, 2003c).	CYPERACEAE
<i>Eleocharis engelmannii</i>	Engelmann's Spike-rush	G4G5Q	S1			<i>Eleocharis obtusa</i> var. <i>detonsa</i> , <i>E. obtusa</i> var. <i>engelmannii</i>	ESSE LENN NORF	Moist shorelines; easily confused with <i>E. obtusa</i> . See Argus <i>et al.</i> (1982-1987), Brownell <i>et al.</i> (1996), Drapalik & Mohlenbrock (1960), Sutherland (1987).	CYPERACEAE
<i>Eleocharis equisetoides</i>	Horsetail Spike-rush	G4	S1	END	END		NORF	Known in Canada only from Long Point, where first collected by Monroe Landon in 1953. See Argus <i>et al.</i> (1982-1987), Environment Canada (2006).	CYPERACEAE
<i>Eleocharis geniculata</i>	Bent Spike-rush	G5	S1			<i>Eleocharis caribaea</i>	CHAT NORF	First collected in Ontario at Rondeau in 1934 by Roy Cain (Taylor 1935) and not seen there since. Subsequently discovered at Long Point and one site in CHAT. Currently being evaluated by COSEWIC.	CYPERACEAE
<i>Eleocharis kamschatica</i>	Kamchatka Spike-rush	G4	S2				COCH KENO	Known from saltwater and brackish wetlands along the coasts of Hudson and James Bays. Similar to <i>E. palustris</i> and <i>E. uniglumis</i> and possibly overlooked. See Argus <i>et al.</i> (1982-1987), Dutilly <i>et al.</i> (1958), FNA (2002), Riley (2003), Riley & McKay (1980).	CYPERACEAE
<i>Eleocharis macrostachya</i>	Long-headed Spike-rush	G5?	S1S3				ALGO keno	A primarily western species similar to <i>E. palustris</i> and probably overlooked. See FNA (2002).	CYPERACEAE
<i>Eleocharis mamillata</i>	Soft-stemmed Spike-rush	G4?	S1				RAIN thun	Known in Ontario from three collections between 1979 and 1981 by Claude Garton from THUN (S. Galen Smith, pers. comm.) and a 2008 Perry Scott collection from Quetico Provincial Park. Similar to <i>E. palustris</i> , <i>E. macrostachya</i> and <i>E. erythropoda</i> and perhaps overlooked elsewhere. See FNA (2002), Gregor (2003), Walters (1953). Ontario plants are ssp. <i>mamillata</i> (T4?)	CYPERACEAE



TABLE 1 -- RARE VASCULAR PLANTS OF ONTARIO, FOURTH EDITION (MARCH 2009)

SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Eleocharis nitida</i>	Quill Spike-rush	G4	<b>S2S3</b>				ALGO BRAN RAIN RENF TEMI THUN	A small and inconspicuous species of moist seepages and ditches. See Coffin & Pfannmuller (1988), Lakela (1947), Larson (1995); APPENDIX 1.	CYPERACEAE
<i>Eleocharis parvula</i>	Dwarf Spike-rush	G5	<b>S1</b>				COCH lamb?	Apparently first collected in Ontario in 2003 by Rosita Jones from coastal James Bay. A specimen substantiating the report by Dodge (1914a) from LAMB has never been found. See Alexander (1993), Gilly (1941, 1944).	CYPERACEAE
<i>Eleocharis quadrangulata</i>	Square-stemmed Spike-rush	G4	<b>S1</b>				CHAT lamb NORF	Ponds, wet meadows, and shores. See Argus <i>et al.</i> (1982-1987), Hickler (2004).	CYPERACEAE
<i>Eleocharis rostellata</i>	Beaked Spike-rush	G5	<b>S3</b>				BRAN BRUC GREY HAST LAMB MANI niag oxfo SIMC wate	Fens and calcareous shores and meadows. See Argus <i>et al.</i> (1982-1987), Coffin & Pfannmuller (1988), Glaser (1983), McIntosh & Catling (1979), Tans & Read (1975).	CYPERACEAE
<i>Eleocharis uniglumis</i>	Single-glumed Spike-rush	G5?	<b>S3?</b>			<i>Eleocharis halophila</i>	COCH KENO (ALGO)	Coastal sites on James and Hudson Bays. Similar to <i>E. erythropoda</i> , <i>E. kamchatica</i> , and <i>E. palustris</i> . A collection from a railway yard in Sault Ste. Marie is presumably introduced. See FNA (2002).	CYPERACEAE
<i>Elodea nuttallii</i>	Nuttall's Waterweed	G5	<b>S3</b>				coch elgi ESSE FRON hast huro keno LAMB mani MIDD NORF nort OTTA renf stor thun toro	Widespread in southern and central Ontario; easily confused with the more common <i>E. canadensis</i> . See Catling & Wojtas (1986), Cook & Urmi-König (1985), Simpson (1986, 1988), St. John (1965).	HYDROCHARITACEAE
<i>Elymus curvatus</i>	Awnless Wild Rye	G4G5	<b>S2S3</b>			<i>Elymus virginicus</i> var. <i>jenkinsii</i> , <i>E.</i> <i>virginicus</i> var. <i>submuticus</i>	nort pres RAIN thun	Primarily in northwestern Ontario. A Port Hope populatoin may have been introduced from further west (Dore & McNeill 1980).	POACEAE
<i>Elymus diversiglumis</i>	Interrupted Wild Rye	G3G4Q	<b>SH</b>				rain thun	A species of the northern Great Plains similar to <i>E. canadensis</i> . See Campbell (2002), Church (1967), Wiegand (1918).	POACEAE
<i>Elymus glaucus</i>	Blue Wild Rye	G5	<b>S1</b>				ALGO thun	A western species disjunct in the Great Lakes area where it is rare in the vicinity of Lake Superior. Argus <i>et al.</i> (1982-1987), Dore & McNeill (1980). Ontario plants are ssp. <i>glaucus</i> (T5).	POACEAE

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<i>Elymus lanceolatus</i> ssp. <i>psammophilus</i>	Great Lakes Wild Rye	G5T3	S3			<i>Agropyron dasystachyum</i> var. <i>psammophilum</i> , <i>A. psammophilum</i> , <i>Elymus psammophilus</i>	BRUC HURO MANI SIMC	Originally described as a Great Lakes endemic restricted to sandy shores (Gillett & Senn 1961), however similar plants have now been found throughout the western range of the species (FNA 2007). Occasionally hybridizes with <i>E. trachycaulus</i> . See Argus <i>et al.</i> (1982-1987), Guire & Voss (1963), Zhang & Maun (1990a, 1990b).	POACEAE
<i>Elymus macgregorii</i>	Macgregor's Wild Rye	GNR	S1S3				ESSE	A recently described species (Campbell 2000) similar to <i>E. virginicus</i> , to be watched for in southern Ontario. See Haines (2000).	POACEAE
<i>Elymus violaceus</i>	Alaska Wild Rye	GNR	S2S3			<i>Agropyron latiglume</i> , <i>A. violaceum</i> , <i>Elymus alaskanus</i> ssp. <i>latiglumis</i> , <i>Elymus trachycaulus</i> ssp. <i>violaceus</i>	KENO	Calcareous shorelines and occasionally in anthropogenically disturbed sites such as gravel runways. First collected in Ontario in 1952 (Riley 1979). See Argus <i>et al.</i> (1982-1987), Dore & McNeill (1980), Riley (2003).	POACEAE
<i>Enemion biternatum</i>	False Rue-anemone	G5	S2	THR	THR	<i>Isopyrum biternatum</i>	ELGI LAMB MIDD	Floodplain woods and rich wooded slopes. See Argus <i>et al.</i> (1982-1987), Boufford & Massey (1976), COSEWIC (2005a), Soper (1962); APPENDIX 1.	RANUNCULACEAE
<i>Epilobium brachycarpum</i>	Panicled Willowherb	G5	SH			<i>Epilobium paniculatum</i>	bruc mani simc	Collected historically from the Bruce Peninsula and MANI, though no recent Ontario records. Some or all Ontario records might be introductions. See Fernald (1935), Marquis & Voss (1981), Morton & Venn (2000).	ONAGRACEAE
<i>Epilobium hornemannii</i>	Hornemann's Willowherb	G5	S1				NIPI THUN	Cliffs and cliff tops. Easily confused with other <i>Epilobium</i> species. Collections from THUN and Algonquin Provincial Park were recently verified by Peter Hoch (pers. comm.) as this species. Ontario plants are ssp. <i>hornemannii</i> (T5).	ONAGRACEAE
<i>Eragrostis capillaris</i>	Lace Grass	G5	SH				lamb	Found in open sandy ground on Walpole Island in 1985 (Oldham <i>et al.</i> 1995) and not seen since in Ontario.	POACEAE
<i>Erigenia bulbosa</i>	Harbinger-of-Spring	G5	S3?				ELGI ESSE HURO LAMB MIDD peel pert WATE WELL york	An early flowering spring ephemeral of rich woods and moist deciduous woods, often on floodplains. May have declined in parts of southern Ontario. See Argus <i>et al.</i> (1982-1987), Buddell & Thieret (1985), Soper (1962), Soper & Rao (1958).	APIACEAE

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<i>Erigeron glabellus</i>	Smooth Fleabane	G5	S1				THUN	First discovered in Ontario in 1986 at a prairie remnant west of Thunder Bay by Wasyl Bakowsky. Ontario plants are var. <i>pubescens</i> (T4T5).	ASTERACEAE
<i>Erigeron humilis</i>	Low Fleabane	G4	S1				KENO	Restricted to the Cape Henrietta Maria area of the Hudson Bay Lowland.	ASTERACEAE
<i>Eriophorum callitrix</i>	Beautiful Cottongrass	G5	S2S3				KENO	Restricted in Ontario to tundra habitats near Hudson Bay. See Fernald (1925).	CYPERACEAE
<i>Eriophorum scheuchzeri</i>	Scheuchzer's Cottongrass	G5	S3?				KENO	Restricted in Ontario to tundra habitats near Hudson Bay. Ontario plants are ssp. <i>scheuchzeri</i> (T5) according to Cayouette (2004).	CYPERACEAE
<i>Euonymus atropurpurea</i>	Burning Bush	G5	S3			<i>Euonymus atropurpureus</i>	durh ELGI ESSE HALT hami MIDD NIAG NORF PETE? wate YORK	Deciduous woods and thickets. Easily confused with the introduced <i>E. europaea</i> which has glabrous rather than pubescent leaf undersurfaces. See Argus <i>et al.</i> (1982-1987), Fox & Soper (1953), Soper & Heimburger (1982).	CELASTRACEAE
<i>Eupatorium altissimum</i>	Tall Boneset	G5	S1				ESSE (CHAT) (DURH) (ELGI) (HALD) (HALT) (HAMI) (LAMB) (MIDD) (MUSK) (NIAG) (NORF) (OXFO) (PEEL) (TORO)	Apparently native in the province only on Pelee Island (Oldham 1988), but adventive along railways elsewhere in southern Ontario.	ASTERACEAE
<i>Euphorbia commutata</i>	Wood Spurge	G5	S1				HAST midd RENF	Alvar woodland, rocky thickets, limestone barrens and ridges. See Argus <i>et al.</i> (1982-1987).	EUPHORBIACEAE
<i>Euphorbia obtusata</i>	Blunt-leaved Spurge	G5	S1			<i>Euphorbia spathulata</i> (of Ontario reports)	ESSE	First discovered in Canada by Wilfred Botham in 1972 along the Canard River and later found on Pelee Island alvars (Campbell & Reznicek 1977). Sometimes included in a broadly circumscribed <i>E. spathulata</i> . See Argus <i>et al.</i> (1982-1987), Yatskievych (2006).	EUPHORBIACEAE
<i>Euphrasia vinacea</i>	Glacier Eyebright	GUQ	S1?				keno	Taxonomic status uncertain and included by some authors in <i>E. arctica</i> (e.g. Riley 2003). According to Sell & Yeo (1970), who record it from Lake River, this species is known with certainty only from the west coast of Hudson and James Bays. Formerly included in Scrophulariaceae by most authors.	OROBANCHACEAE
<i>Eurybia divaricata</i>	White Wood Aster	G5	S2	THR	THR	<i>Aster divaricatus</i>	HAMI NIAG toro wate?	Mesic to dry deciduous woods. Recently found at a number of new sites in NIAG. See Argus <i>et al.</i> (1982-1987), COSEWIC (2002h), Semple <i>et al.</i> (2002).	ASTERACEAE

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<i>Eurybia radula</i>	Rough Aster	G5	SH			<i>Aster radula</i>	coch	Wet, marshy or boggy soils along streams. First collected in Ontario by John Riley in 1979. See Argus <i>et al.</i> (1982-1987), Riley & Walshe (1985), Semple <i>et al.</i> (2002).	ASTERACEAE
<i>Eurybia schreberi</i>	Schreber's Aster	G4	S2S3			<i>Aster schreberi</i>	ELGI HALD HALT HAMI MIDD NIAG OXFO peel wate york	Woodlands. Easily confused with the common and widespread <i>E. macrophylla</i> (S5). See Semple <i>et al.</i> (2002)	ASTERACEAE
<i>Euthamia caroliniana</i>	Viscid Bushy Goldenrod	G5	S1			<i>Euthamia gymnospermoides</i> (of Ontario reports)	ESSE LAMB	First recognized in the Windsor area in 1992 and reported as <i>E. gymnospermoides</i> (e.g. Semple <i>et al.</i> 1999). Based on FNA (2006b) Ontario plants appear to be <i>E. caroliniana</i> (including <i>E. remota</i> ). A taxonomically difficult group. See Sieren (1981), Voss (1996).	ASTERACEAE
<i>Festuca baffinensis</i>	Baffin Fescue	G5	SH				keno	Known in Ontario only from Cape Henrietta Maria on Hudson Bay, where collected in 1953 by Dutilly and Lepage (Dutilly <i>et al.</i> 1954). See Aiken <i>et al.</i> (1994), Argus <i>et al.</i> (1982-1987), McNeill & Dore (1977).	POACEAE
<i>Festuca hallii</i>	Plains Rough Fescue	G4	S1			<i>Festuca altaica</i> ssp. <i>hallii</i> , <i>F. scabrella</i> (of Ontario reports)	KENO THUN	First documented in Ontario by Claude Garton and Bill Dore in 1950 at Stanley Cemetery, west of Thunder Bay, where it is a component of remnant prairie vegetation. Recently documented from two new localities in northwestern Ontario (Oldham 1996a, 1996b). See Aiken & Darbyshire (1990), Argus <i>et al.</i> (1982-1987), Dore & McNeill (1980), Pavlick & Looman (1984), Trottier (1986); APPENDIX 1.	POACEAE
<i>Festuca rubra</i> ssp. <i>arctica</i>	Arctic Fescue	G5T4	S1?			<i>Festuca richardsonii</i> , <i>F. rubra</i> var. <i>alaica</i> , <i>F. rubra</i> var. <i>arenaria</i> (of Ontario reports)	KENO	Restricted to areas near the coast of Hudson and James Bays. See Aiken & Darbyshire (1990), Dore & McNeill (1980), McNeill & Dore (1977).	POACEAE
<i>Fimbristylis puberula</i>	Hairy Fimbristylis	G5	S1			<i>Fimbristylis spadicea</i>	LAMB	First collected in Canada from prairies on Walpole Island in 1894 by C.K. Dodge and still known only from this area. See Argus <i>et al.</i> (1982-1987), Soper (1962). Ontario plants are var. <i>puberula</i> (T5?).	CYPERACEAE
<i>Frasera caroliniensis</i>	American Columbo	G5	S2	END	END	<i>Swertia caroliniensis</i>	BRAN HALD HALT HAMI lamb niag oxfo wate	Open woods. See Argus <i>et al.</i> (1982-1987), COSEWIC (2006a), Gillett (1963), Horn (1997), McIntosh & Catling (1979), Threadgill & Baskin (1978), Threadgill <i>et al.</i> (1979, 1981a, 1981b, 1981c).	GENTIANACEAE

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<i>Fraxinus profunda</i>	Pumpkin Ash	G4	S2?			<i>Fraxinus tomentosa</i>	CHAT ELGI ESSE HAMI LAMB MIDD? NORF	A recent discovery in Ontario, where previously overlooked (Waldron <i>et al.</i> 1996). The introduced Emerald Ash Borer is killing trees of this and other ash species in southwestern Ontario. See Anonymous (1994), McCormac <i>et al.</i> (1995).	OLEACEAE
<i>Fraxinus quadrangulata</i>	Blue Ash	G5	S3	SC	SC		CHAT ELGI ESSE LAMB MIDD	Floodplains, sandy woods and alvar woodland. Potentially threatened by the introduced Emerald Ash Borer (e.g. Anulewicz <i>et al.</i> 2008). See Argus <i>et al.</i> (1982-1987), Fox & Soper (1953).	OLEACEAE
<i>Fuirena pumila</i>	Dwarf Umbrella Sedge	G4	SX				niag	Collected once in Ontario in 1880 at Port Colborne (Reznicek & Catling 1984). See Argus <i>et al.</i> (1982-1987).	CYPERACEAE
<i>Galium brevipes</i>	Limestone Swamp Bedstraw	G4?	S2S3				bruc coch HALI MIDD niag NIPI RAIN THUN	A small and inconspicuous species of moist shorelines, undoubtedly overlooked and under reported. Relatively restricted global distribution centred on the Great Lakes. See Illitis (1957), Puff (1976).	RUBIACEAE
<i>Galium concinnum</i>	Shining Bedstraw	G5	S1				midd	The only confirmed Ontario record is a 1990 collection from dry deciduous woods near London by Michael Oldham. Other Ontario reports are mostly or entirely based on misidentifications of other species.	RUBIACEAE
<i>Galium kamtschaticum</i>	Boreal Bedstraw	G5	S2				ALGO thun	Cool moist woods and thickets in the eastern Lake Superior area. See Argus <i>et al.</i> (1982-1987), Marquis & Voss (1981), Schultz (2003b).	RUBIACEAE
<i>Galium pilosum</i>	Hairy Bedstraw	G5	S3				CHAT ELGI ESSE HALT LAMB LEED MIDD niag NORF	Dry, sandy or rocky woods and thickets. See Argus <i>et al.</i> (1982-1987), Sutherland (1987). Ontario plants are var. <i>pilosum</i> (T5?).	RUBIACEAE
<i>Gamochaeta purpurea</i>	Spoon-leaved Purple Everlasting	G5	SX			<i>Gnaphalium purpureum</i>	esse niag	Not collected in Ontario since 1901. Habitat for the two Ontario specimens (Leamington and Port Colborne) is "woods" and "damp pasture". Voss (1996) considers this species adventive in Michigan. See Argus <i>et al.</i> (1982-1987).	ASTERACEAE
<i>Gentiana alba</i>	White Prairie Gentian	G4	S1	END	END	<i>Gentiana flavida</i>	esse LAMB nort	Dry prairie and oak savanna. See Argus <i>et al.</i> (1982-1987), COSEWIC (2001), Heikens (2002), Pringle (1965).	GENTIANACEAE
<i>Gentiana puberulenta</i>	Downy Gentian	G4G5	SX			<i>Gentiana puberula</i> (of Ontario authors)	esse lamb toro	Prairies and sand plains. Not recorded in Ontario since 1946. See Argus <i>et al.</i> (1982-1987), Gillett (1963), Pringle (1967).	GENTIANACEAE

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<i>Gentianella quinquefolia</i>	Stiff Gentian	G5	S2			<i>Gentiana quinquefolia</i>	BRUC durh ELGI from HAMI LAMB LANA LEED MIDD niag toro wate	Both ssp. <i>occidentalis</i> (T4T5) and ssp. <i>quinquefolia</i> (T4T5) occur in the province. See Argus <i>et al.</i> (1982-1987), Gillett (1957, 1963).	GENTIANACEAE
<i>Gentianella tenella</i>	Dane's Gentian	G4G5	SH			<i>Gentiana tenella</i>	keno	The single Ontario record is from Cape Henreitta Maria in the Hudson Bay Lowland. See Gillett (1957, 1963). Ontario plants are ssp. <i>tenella</i> (T4).	GENTIANACEAE
<i>Gentianopsis detonsa</i>	Sheared Gentian	G3G5	S1			<i>Gentiana raupii</i> , <i>Gentianella detonsa</i> ssp. <i>raupii</i>	KENO	Restricted to the Hudson Bay coast. See Argus <i>et al.</i> (1982-1987), Gillett (1957, 1963), Riley (2003), Riley & McKay (1980). Ontario plants are ssp. <i>raupii</i> (T3T5).	GENTIANACEAE
<i>Geum virginianum</i>	Pale Avens	G5	SH				esse	Collected in 1985 from woods on East Sister Island by Michael Oldham, Mireille Delisle-Oldham, and Stephen Darbyshire. Most or all other Ontario reports are based on misidentifications of <i>G. canadense</i> or <i>G. laciniatum</i> .	ROSACEAE
<i>Glaux maritima</i>	Sea Milkwort	G5	S3?				COCH KENO	Salt marshes on the James Bay coast. Included in Primulaceae by some authors. See Argus <i>et al.</i> (1982-1987), Riley (2003), Riley & McKay (1980).	MYRSINACEAE
<i>Gleditsia triacanthos</i>	Honey-locust	G5	S2				CHAT ESSE LAMB NIAG	Dunes; mesic to wet deciduous forests and forest edges. Frequently planted and occasionally escaped from cultivation throughout southern Ontario. See Argus <i>et al.</i> (1982-1987), Fox & Soper (1953); APPENDIX 1.	FABACEAE
<i>Glyceria canadensis</i> var. <i>laxa</i>	Northern Manna Grass	G5T5	SH			<i>Glyceria laxa</i> , <i>G. x laxa</i>	algo hast otta	Variouly considered to be a hybrid ( <i>G. canadensis</i> X <i>G. grandis</i> ), variety, or species. See Bader (1993), Bowden (1960), Dore & McNeill (1980), McNeill & Dore (1977).	POACEAE
<i>Glycyrrhiza lepidota</i>	Wild Licorice	G5	S3				KENO niag RAIN wate	No recent southern Ontario records, but found to be locally common on river banks, lakeshores, and woodland edges in the Rainy River, Rainy Lake, and Lake of the Woods areas of northwestern Ontario. See Argus <i>et al.</i> (1982-1987).	FABACEAE
<i>Gratiola quartermaniae</i>	Limestone Hedgehyssop	GNR	S2				HAST LENN PETE PRIN	A recently described species similar to <i>G. neglecta</i> and known from alvars in southeastern Ontario (Estes & Small 2007). Included in Scrophulariaceae by some authors. See Oldham (2008b); APPENDIX 1.	PLANTAGINACEAE

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<i>Gymnocarpium jessoense</i>	Nahanni Oak Fern	G5	S3				ALGO KENO RAIN THUN	Cool cliffs and rocky crevices, primarily in the vicinity of Lake Superior. Hybrids with <i>G. dryopteris</i> ( <i>G. x intermedium</i> ) also occur in Ontario and make identification difficult. Included in Dryopteridaceae by some authors. See Sarvela <i>et al.</i> (1981); APPENDIX 1. Ontario plants are ssp. <i>parvulum</i> (T4).	WOODSIACEAE
<i>Gymnocarpium robertianum</i>	Limestone Oak Fern	G5	S2				algo BRUC COCH FRON keno MANI otta TEMI THUN	Widespread in central Ontario usually in calcareous rocky situations (occasionally in <i>Thuja</i> swamps), though rare at most sites. Included in Dryopteridaceae by some authors. See Argus <i>et al.</i> (1982-1987), Pryer (1990, 1992), Sarvela (1978), Sarvela <i>et al.</i> (1981), Schultz (2002a), Wagner (1966).	WOODSIACEAE
<i>Gymnocladus dioica</i>	Kentucky Coffeetree	G5	S2	THR	THR	<i>Gymnocladus dioica</i>	CHAT ESSE LAMB oxfo (HAMI) (NIAG) (NORF)	Rich woods and marsh edges; open Hackberry woods on shallow soil over limestone on the Erie Islands. Most Ontario populations are single-sex clones. Sometimes planted. See Ambrose (1984), Argus <i>et al.</i> (1982-1987), Fox & Soper (1953), Limbird <i>et al.</i> (1980), Sutherland (1987).	FABACEAE
<i>Helianthemum canadense</i>	Long-branched Frostweed	G5	S3				algo BRAN CHAT durh elgi ESSE FRON hami HAST huro LAMB LEED midd niag NORF NORT OTTA peel pert RENF SIMC toro wate YORK	Dry open or partly open, often sandy ground. Has apparently declined in Ontario, primarily due to loss of habitat. See Breitung (1957), Carbyn & Catling (1995), Cody (1982), Porsild (1941).	CISTACEAE
<i>Helianthus pauciflorus</i> ssp. <i>subrhomboideus</i>	Stiff Sunflower	G5T5	S2S3			<i>Helianthus laetiflorus</i> var. <i>subrhomboideus</i> , <i>H. rigidus</i> ssp. <i>subrhomboideus</i> , <i>H. subrhomboideus</i>	KENO RAIN (ELGI) (MIDD) (THUN)	Native in rocky prairie remnants in the Lake of the Woods area. Probably a non-native garden escape elsewhere in Ontario.	ASTERACEAE
<i>Hesperostipa comata</i>	Needle-and-thread Grass	G5	S1			<i>Stipa comata</i>	KENO THUN (SIMC)	Populations in natural habitat have been recently found in northwestern Ontario (Bakowsky 1995, Oldham 1996a). Known previously from southern Ontario where probably introduced (Webber <i>et al.</i> 1985). See Barkworth (1978, 1993). Ontario plants are var. <i>comata</i> (T5).	POACEAE



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SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Hesperostipa curtiseta</i>	Short-awned Porcupine Grass	GNR	S1			<i>Stipa curtiseta</i> , <i>S. spartea</i> var. <i>curtiseta</i>	KENO	Some possibility this is not native in Ontario, since found near railway tracks at Ingolf. However it grows on slopes near the tracks with other western species and as part of an apparently natural community. In the absence of evidence to the contrary we are considering it native. See Barkworth (1978, 1993).	POACEAE
<i>Heterotheca villosa</i>	Hairy Golden Aster	G5	S1			<i>Chrysopsis ballardii</i> , <i>C. villosa</i>	KENO (THUN)	Recently found in northwestern Ontario by Michael Oldham and Wasyl Bakowsky at an open rocky site where it is almost certainly native (identified as var. <i>minor</i> (T4T5) by J.C. Semple), though other populations are along railway lines and probably introduced. FNA (2006b) recognizes var. <i>villosa</i> (T5) and var. <i>ballardii</i> (T5?) from Ontario, but states that both are probably introduced. See Argus <i>et al.</i> (1982-1987), Nesson (2006), Semple (1996).	ASTERACEAE
<i>Heuchera americana</i>	American Alumroot	G5	S2				ESSE norf?	Deciduous woods and thickets. A 1953 collection from near Clear Creek (NORF) may be mis-labelled (Sutherland 1987). See Argus <i>et al.</i> (1982-1987). Ontario plants are var. <i>americana</i> (T5).	SAXIFRAGACEAE
<i>Hibiscus laevis</i>	Halberd-leaved Rose-mallow	G5	SX			<i>Hibiscus militaris</i>	esse	Known in Ontario only from a 1904 Pelee Island collection. See Argus <i>et al.</i> (1982-1987), Oldham (1983a).	MALVACEAE
<i>Hibiscus moscheutos</i>	Swamp Rose Mallow	G5	S3	SC	SC	<i>Hibiscus palustris</i> (of Ontario reports)	CHAT ELGI ESSE LAMB NIAG NORF PRIN	Marshes, shorelines, pond margins. Recently discovered in eastern Ontario at Sandbanks Provincial Park by Vivian Brownell (Oldham 1999a). See Argus <i>et al.</i> (1982-1987), COSEWIC (2004d), Ford (1989), Kudoh & Whigham (2001), Lin & Spira (2001), Soper (1962), Sutherland (1987). Ontario plants are ssp. <i>moscheutos</i> (T5).	MALVACEAE
<i>Hieracium gronovii</i>	Queen Devil	G5	S3?				DURH esse LAMB MIDD NORF SIMC TORO WATE	Wooded dunes, prairies, dry sandy woods. See Sutherland (1987).	ASTERACEAE
<i>Hieracium longipilum</i>	Hairy Hawkweed	G4G5	SX				lamb norf	Dry sandy woods and prairies. Last recorded in Ontario in 1918. See Argus <i>et al.</i> (1982-1987).	ASTERACEAE
<i>Hieracium paniculatum</i>	Panicled Hawkweed	G5	S2?				elgi HALT HAMI LEED niag norf	Dry, open sandy or rocky woods. See Argus <i>et al.</i> (1982-1987), Sutherland (1987).	ASTERACEAE

TABLE 1 -- RARE VASCULAR PLANTS OF ONTARIO, FOURTH EDITION (MARCH 2009)

SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Hieracium venosum</i>	Rattlesnake Hawkweed	G5	S2				ALGO fron LAMB niag NORF wate	Dry, open, sandy woods. See Argus <i>et al.</i> (1982-1987), Sutherland (1987).	ASTERACEAE
<i>Houstonia caerulea</i>	Bluets	G5	SH			<i>Hedyotis caerulea</i>	bruc peel renf simc	Moist, open or partially shaded sandy areas. See Argus <i>et al.</i> (1982-1987).	RUBIACEAE
<i>Hudsonia tomentosa</i>	Woolly Beach-heath	G5	S3				ALGO KENO niag NIPI OTTA RAIN RENF temi thun	Dry, open, sandy ground. See Fortin <i>et al.</i> (2006), Nelson <i>et al.</i> (1986).	CISTACEAE
<i>Huperzia appressa</i>	Mountain Firmoss	G4G5	S3?			<i>Huperzia appalachiana</i>	algo KENO THUN	Status poorly known in Ontario, particularly in the Hudson Bay and north shore of Lake Superior areas, due taxonomic problems, identification difficulty, and hybridization with related species. See Beitel and Mickel (1992), Haines (2003a); APPENDIX 1.	LYCOPODIACEAE
<i>Huperzia chinensis</i>	Pacific Firmoss	G4	S1			<i>Huperzia miyoshiana</i> , <i>H. selago</i> ssp./var. <i>miyoshiana</i>	KENO	Collected in the Sutton Ridges by Michael Oldham in 2001. See Brunton <i>et al.</i> (1992), Oldham & Sutherland (2003), Riley (2003).	LYCOPODIACEAE
<i>Huperzia porophila</i>	Rock Firmoss	G4	S1			<i>Lycopodium porophilum</i> , <i>L. selago</i> ssp./var. <i>patens</i>	COCH THUN	Recently collected by Michael Oldham and Wasyl Bakowsky from cliffs near the north shore of Lake Superior, where collected earlier by Claude Garton (and identified by Joseph Beitel) but not reported in FNA (1993). See Waterway (1986), Wilson (1932).	LYCOPODIACEAE
<i>Hybanthus concolor</i>	Eastern Green-violet	G5	S2			<i>Cubellium concolor</i>	BRAN BRUC elgi? grey HALT HAMI HURO lamb MIDD niag NORF peel pert WATE	Rich moist floodplain woods. See Argus <i>et al.</i> (1982-1987), McIntosh & Catling (1979), Sutherland (1987); APPENDIX 1.	VIOLACEAE
<i>Hydrastis canadensis</i>	Goldenseal	G4	S2	THR	THR		CHAT ESSE HURO LAMB MIDD niag (GREY)	Rich deciduous woods and wooded floodplains. See Anonymous (2003c), Argus <i>et al.</i> (1982-1987), Catling & Small (1994), Eichenberger & Parker (1976), Sanders & McGraw (2002), Sharp (2003), Sinclair & Catling (2000a, 2000b, 2001, 2002, 2003), Sinclair <i>et al.</i> (2000); APPENDIX 1.	RANUNCULACEAE
<i>Hydrophyllum appendiculatum</i>	Appendage Waterleaf	G5	S2				chat ELGI ESSE HALD MIDD norf? OXFO	Rich deciduous woods. Placed in Hydrophyllaceae by some authors. See Argus <i>et al.</i> (1982-1987), Baskin & Baskin (1985), Morgan (1971), Wolfe (1993); APPENDIX 1.	BORAGINACEAE

TABLE 1 -- RARE VASCULAR PLANTS OF ONTARIO, FOURTH EDITION (MARCH 2009)

SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Hymenoxys herbacea</i>	Lakeside Daisy	G3	S3	THR	THR	<i>Actinea herbacea</i> , <i>Hymenoxys acaulis</i> var. <i>glabra</i> , <i>Tetraneuris herbacea</i>	BRUC MANI	A Great Lakes endemic of alvars with most of its global range in Ontario. FNA (2006c), CESSC (2006), and Kartesz (1999) use the name <i>Tetraneuris herbacea</i> for this species, a name change that COSEWIC and MNR are likely to adopt. See Argus <i>et al.</i> (1982-1987), Campbell & Husband (2005, 2007), COSEWIC (2002e), Cusick (1991), DeMauro (1994).	ASTERACEAE
<i>Hypericum ascyron</i>	Great St. John's-wort	G4	S3?			<i>Hypericum pyramidatum</i>	BRAN BRUC CHAT DUFF DURH ELGI HURO FRON KAWA LAMB mani MIDD NIAG NORF NORT OXFO PEEL PERT SIMC STOR TORO WATE WELL YORK	Along streams and rivers; seepages. Included by some authors in Clusiaceae or Guttiferae. See Gillett & Robson (1981), Sutherland (1987). Ontario plants are ssp. <i>pyramidatum</i> (TNR).	HYPERICACEAE
<i>Hypericum gentianoides</i>	False St. John's-wort	G5	S1				ESSE	Dry prairie and open sandy ground in the Windsor area. Included by some authors in Clusiaceae or Guttiferae. See Argus <i>et al.</i> (1982-1987), Gillett & Robson (1981).	HYPERICACEAE
<i>Hypericum prolificum</i>	Shrubby St. John's-wort	G5	S2			<i>Hypericum spathulatum</i>	CHAT ESSE grey LAMB MIDD well YORK	Fields, thickets, prairies, and open woods. Included by some authors in Clusiaceae or Guttiferae. See Adams (1959), Argus <i>et al.</i> (1982-1987), Gillett & Robson (1981).	HYPERICACEAE
<i>Hypericum sphaerocarpum</i>	Round-fruited St. John's-wort	G5	S1				MIDD (esse)	First found in Ontario in 1983 along a railway in ESSE by Michael Oldham, then in 1992 in a moist prairie remnant along an abandoned railway near the Sydenham River by Michael Oldham and Jane Bowles. The MIDD population might be adventive and the ESSE population almost certainly is. Included by some authors in Clusiaceae or Guttiferae.	HYPERICACEAE
<i>Hypoxis hirsuta</i>	Yellow Stargrass	G5	S3				BRAN CHAT ESSE HAST hami LAMB MIDD norf PRIN york	Prairies, meadows, dry open sandy woods. Included in Liliaceae by many authors. See Argus <i>et al.</i> (1982-1987).	HYPOXIDACEAE
<i>Ipomoea pandurata</i>	Big-rooted Morning Glory	G5	S1				ESSE niag	Sandy woodland openings; fields and roadsides. See Argus <i>et al.</i> (1982-1987), Soper (1962), Stucky & Beckmann (1982).	CONVOLVULACEAE
<i>Iris brevicaulis</i>	Short-stemmed Iris	G4	S1				ESSE	Moist deciduous woods. See Argus <i>et al.</i> (1982-1987), Shields (1954); APPENDIX 1.	IRIDACEAE

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SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Iris lacustris</i>	Dwarf Lake Iris	G3	S3	THR	THR		BRUC esse huro MANI	Sandy woods, dunes, alvars. See Argus <i>et al.</i> (1982-1987), COSEWIC (2004b), Cruise & Catling (1972), Guire & Voss (1963), Hannan & Orick (2000), Larson (1998), Planisek (1983), Simonich & Morgan (1990), Van Kley & Wujek (1993).	IRIDACEAE
<i>Isoetes engelmannii</i>	Engelmann's Quillwort	G4	S1	END	END		HALI MUSK SIMC	First collected in Ontario by Paul Catling, Steve Varga, and Jim Norris in 1988 in the Severn River (Britton <i>et al.</i> 1991). The hybrid with <i>I. echinospora</i> ( <i>I. x eatonii</i> ) occurs at both known Ontario sites. See Brunton (1998), Engelmann's Quillwort Recovery Team (2006), Kott & Bobbette (1980).	ISOETACEAE
<i>Isoetes riparia</i>	Riverbank Quillwort	G5?	S3			<i>Isoetes canadensis</i>	HAST LEED OTTA RENF	On mud or gravel in shallow water. The hybrid with <i>I. echinospora</i> ( <i>I. x dodgei</i> ) occurs at some <i>I. riparia</i> sites and the hybrid with <i>I. macrospora</i> ( <i>I. x jeffreyi</i> ) is known from nearby Quebec, but not yet from Ontario. See Argus <i>et al.</i> (1982-1987), Britton & Brunton (1989, 1992), Brunton (1998), Brunton & Britton (1999), Caplen & Werth (2000a, 2000b).	ISOETACEAE
<i>Isoetes tuckermanii</i>	Tuckerman's Quillwort	G4?	S1				HALI MUSK PARR	A species primarily of the Atlantic Coastal Plain, <i>I. tuckermanii</i> was first collected in Ontario by Mirek Sharp in McQuaby Lake in 1987 (Sharp & Britton 1991) and subsequently found at a few additional sites. The hybrid with <i>I. echinospora</i> ( <i>I. x echtuckerii</i> ) was originally described from Ontario by Brunton and Britton (1999), and the hybrid with <i>I. lacustris</i> ( <i>I. x harveyi</i> ) also occurs in Ontario (Britton 1991). See Brunton (1998).	ISOETACEAE
<i>Isotria medeoloides</i>	Small Whorled Pogonia	G2	S1	END	END		ELGI	First discovered in Ontario in 1977 by William Stewart and still known only from a single site. Rare throughout its range. See Argus <i>et al.</i> (1982-1987), Case & Schwab (1971), COSEWIC (2000h), McConnell (2007), Mehrhoff (1983, 1989), Stewart (1977, 1978, 1983).	ORCHIDACEAE

TABLE 1 -- RARE VASCULAR PLANTS OF ONTARIO, FOURTH EDITION (MARCH 2009)

SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Isotria verticillata</i>	Large Whorled Pogonia	G5	S1	END	END		MIDD NORF OXFO	First found in Ontario in 1879 near Komoka by W.E. Saunders (Whiting & Catling 1986) and discovered at a few additional southwestern Ontario sites since then. See Anderson & Britton (1986), Argus <i>et al.</i> (1982-1987), Klinkenberg (1986), Mehrhoff (1983), Soper (1962).	ORCHIDACEAE
<i>Juglans cinerea</i>	Butternut	G4	S3?	END	END		algo bruc CHAT DUFF ELGI ESSE FRON GREY hald HALT HAMI HAST huro KAWA LAMB LANA LEED lenn MANI MIDD MUSK NIAG NORF NORT OTTA OXFO PEEL PERT PETE PRES PRIN RENF SIMC STOR TEMI TORO WATE WELL YORK	The abundance and condition are both in rapid decline due to butternut canker disease, with no known remedy. Even with the canker evident and widespread, there are a large number of occurrences persisting and apparently resistant trees, though rare, are found in parts of the range. See Catling & Small (2001), COSEWIC (2003b), Furnier <i>et al.</i> (1998), Katovich & Ostry (1998), Michler <i>et al.</i> (2005), Ross-Davis <i>et al.</i> (2008), Schultz (2003c).	JUGLANDACEAE
<i>Juncus acuminatus</i>	Sharp-fruited Rush	G5	S3				ELGI ESSE HALI HALD HAMI hast KAWA LAMB LEED MIDD NIAG NORF parr SIMC wate WELL? york	Sandy and gravelly shorelines, ditches, old fields, prairies. See Argus <i>et al.</i> (1982-1987).	JUNCACEAE
<i>Juncus anthelatus</i>	Greater Poverty Rush	G5TNR	S1			<i>Juncus tenuis</i> var. <i>anthelatus</i>	ALGO ESSE	Taxonomic status and Ontario distribution uncertain (see Clemants 1990). Similar to the common and widespread <i>J. tenuis</i> . See Brooks & Whitemore (1999), Haines (2001d).	JUNCACEAE
<i>Juncus arcticus</i>	Arctic Rush	G5	S2S3			<i>Juncus arcticus</i> ssp. <i>alaskanus</i> , <i>J. arcticus</i> ssp./var. <i>arcticus</i> (of Ontario reports), <i>J. balticus</i> var. <i>alaskanus</i>	KENO	Moist open areas near Hudson and James Bays. See Argus <i>et al.</i> (1982-1987). Ontario plants are var. <i>alaskanus</i> (T4T5), which is sometimes included in the Eurasian var. <i>arcticus</i> .	JUNCACEAE
<i>Juncus biflorus</i>	Two-flowered Rush	G5	S1			<i>Juncus marginatus</i> var. <i>biflorus</i> , <i>J. marginatus</i> var. <i>odoratus</i>	ESSE norf	Open sandy ground, prairies. Often included in <i>J. marginatus</i> , though seems distinct in Ontario and considered a good species by Knapp & Naczi (2008). See Argus <i>et al.</i> (1982-1987), Sutherland (1987).	JUNCACEAE
<i>Juncus brachycarpus</i>	Short-fruited Rush	G4G5	S1				ESSE	Known in Ontario only from sandy prairie at Windsor. See Argus <i>et al.</i> (1982-1987).	JUNCACEAE
<i>Juncus castaneus</i>	Chestnut Rush	G5	S3				KENO	Moist tundra in the Hudson Bay Lowland. See Riely (2003).	JUNCACEAE

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SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Juncus ensifolius</i>	Dagger-leaved Rush	G5	SH				coch	Moist riverbank. See Argus <i>et al.</i> (1982-1987), Dutilly & Lepage (1963), Riley (2003), Riley & Mckay (1980). Ontario plants are var. <i>ensifolius</i> (TNR).	JUNCACEAE
<i>Juncus greenei</i>	Greene's Rush	G5	S3				ALGO bruc ESSE hast LAMB LENN musk NORF OTTA RENF sudb	Open sandy ground. See Argus <i>et al.</i> (1982-1987), Sutherland (1987).	JUNCACEAE
<i>Juncus longistylis</i>	Long-styled Rush	G5	S3				COCH esse KENO RAIN (CHAT) (MANI) (OTTA) (THUN)	Calcareous river banks and seepages. Some of the more southerly populations are adventive in saline highway ditches (Darbyshire <i>et al.</i> 1987).	JUNCACEAE
<i>Juncus marginatus</i>	Grass-leaved Rush	G5	S3				ELGI ESSE MIDD NIAG NORF	Open sandy ground, prairies. See Argus <i>et al.</i> (1982-1987), Knapp & Naczi (2008), Sutherland (1987).	JUNCACEAE
<i>Juncus secundus</i>	One-sided Rush	G5?	S3				ESSE FRON HAST KAWA LENN LEED MUSK NIPI PETE SIMC	Alvar pavement, granitic rock barrens. See Argus <i>et al.</i> (1982-1987).	JUNCACEAE
<i>Juncus subtilis</i>	Creeping Rush	G4	S3				COCH KENO nipi OTTA RENF SUDB THUN	A small and inconspicuous species of moist shorelines, undoubtedly overlooked and under reported. First reported from Ontario by Lepage (1966).	JUNCACEAE
<i>Juncus vaseyi</i>	Vasey's Rush	G5?	S3				FRON HAST KENO LAMB RAIN SUDB THUN	Widespread but local in open sandy ground. See Anonymous (2004a), Haines (2003b), Judziewicz & Nekola (1997).	JUNCACEAE
<i>Justicia americana</i>	American Water-willow	G5	S1	THR	THR	<i>Dianthera americana</i>	chat elgi ESSE LEED NIAG NORF	Marshes and stream margins. Discovered in 2008 on the St. Lawrence River by Shaun Thompson. See Argus <i>et al.</i> (1982-1987), Fritz & Feminella (2003), Hill (1981), Howell (1975), Koryak & Reilly (1984), Lewis (1980), Penfound (1940); APPENDIX 1.	ACANTHACEAE
<i>Kalmia microphylla</i>	Alpine Bog Laurel	G5	S2?			<i>Kalmia polifolia</i> ssp./var. <i>microphylla</i>	KENO	Mossy tundra and spruce woods near Hudson Bay. See Argus <i>et al.</i> (1982-1987), Ebinger (1974), Southall & Hardin (1974).	ERICACEAE
<i>Kobresia myosuroides</i>	Bellard's Kobresia	G5	S2			<i>Kobresia bellardii</i>	KENO	An inconspicuous sedge of calcareous open tundra and thickets near the Hudson Bay coast. Similar to the more common and widespread <i>K. simpliciuscula</i> . First collected in Ontario in 1977 by John Riley (1979). See Argus <i>et al.</i> (1982-1987), Bell & Bliss (1979), Riley (2003).	CYPERACEAE
<i>Koenigia islandica</i>	Iceland Purslane	G4	SH				keno	Known in Ontario only from Cape Henrietta Maria where collected by Paul Maycock in 1973. See Argus <i>et al.</i> (1982-1987), Löve & Sarkar (1957).	POLYGONACEAE

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SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Krigia biflora</i>	Two-flowered Dwarf Dandelion	G5	S2				chat ESSE LAMB	Prairies and open sandy woods. See Argus <i>et al.</i> (1982-1987).	ASTERACEAE
<i>Krigia virginica</i>	Dwarf Dandelion	G5	S1				LAMB	Dry, sandy woods. First found in Ontario by Graham Buck in 2000 at Pinery Provincial Park. See APPENDIX 1	ASTERACEAE
<i>Lactuca floridana</i>	Woodland Lettuce	G5	S2				ESSE	Sandy woods. See Argus <i>et al.</i> (1982-1987); APPENDIX 1.	ASTERACEAE
<i>Lechea minor</i>	Thyme-leaved Pinweed	G5	SX				esse	Known in Ontario only from a 1901 John Macoun specimen from Sandwich (Windsor). See Argus <i>et al.</i> (1982-1987), Hodgdon (1938).	CISTACEAE
<i>Lechea mucronata</i>	Hairy Pinweed	G5	S3			<i>Lechea villosa</i>	BRAN CHAT ESSE LAMB MIDD NORF	Dry prairies and open, sandy woods. See Argus <i>et al.</i> (1982-1987), Hodgdon (1938), Sutherland (1987).	CISTACEAE
<i>Lechea pulchella</i>	Leggett's Pinweed	G5	S1			<i>Lechea leggettii</i>	ESSE	Prairies and dry, sandy open fields in the Windsor area. See Argus <i>et al.</i> (1982-1987), Hodgdon (1938).	CISTACEAE
<i>Lechea stricta</i>	Strict Pinweed	G4?	S1				RAIN	Discovered in 1995 in dry, sandy open ground on Sable Island, Lake of the Woods, by Michael Oldham and Wasyl Bakowsky. Previous Ontario reports (e.g. from Belleville, Scoggan 1978-1978) are apparently in error (Morton & Venn 1990). See Hodgdon (1938).	CISTACEAE
<i>Lespedeza frutescens</i>	Violet Bush-clover	G5	S1			<i>Hedysarum violaceum</i> , <i>Lespedeza violacea</i> (of Ontario authors)	ESSE NIAG	Open deciduous woods and shorelines. Long known as <i>L. violacea</i> in Ontario, a name which apparently should be applied to the species traditionally known as <i>L. intermedia</i> (Reveal & Barrie 1991). See Argus <i>et al.</i> (1982-1987), Soper (1962).	FABACEAE
<i>Lespedeza procumbens</i>	Trailing Bush-clover	G5	S1				HALD	Known in Canada only from oak-hickory woods at Oriskany where found by Graham Buck in 1999.	FABACEAE
<i>Lespedeza virginica</i>	Slender Bush-clover	G5	S1	END	END		ESSE	Prairies, open oak woods, thickets. See Argus <i>et al.</i> (1982-1987), COSEWIC (2000g), Soper (1962).	FABACEAE
<i>Leucophysalis grandiflora</i>	Large-flowered Ground Cherry	G4?	S3			<i>Chamaesaracha grandiflora</i> , <i>Physalis grandiflora</i>	BRUC coch fron lamb LANA MANI MUSK NIPI OTTA PETE RAIN RENF temi THUN	Grows in naturally or artificially disturbed habitats. See APPENDIX 1	SOLANACEAE
<i>Leucospora multifida</i>	Cliff Conobea	G5	S2			<i>Conobea multifida</i>	CHAT ESSE (ELGI) (MIDD)	Moist shorelines, alvars, damp sand or gravel; sometimes in disturbed situations. Placed in Scrophulariaceae by some authors. See Argus <i>et al.</i> (1982-1987), Baskin <i>et al.</i> (1994), Oldham & McLeod (1993); APPENDIX 1.	PLANTAGINACEAE

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SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Liatris aspera</i>	Tall Blazing Star	G4G5	<b>S2</b>				chat ESSE LAMB peel	Prairies and open sandy woods. See Argus <i>et al.</i> (1982-1987), Gaiser (1946).	ASTERACEAE
<i>Liatris cylindracea</i>	Slender Blazing Star	G5	<b>S3</b>				BRUC CHAT LAMB MANI midd niag NORF NORT sudb toro wate	Alvars, moist sandy meadows. See Gaiser (1946), Sutherland (1987); APPENDIX 1.	ASTERACEAE
<i>Liatris spicata</i>	Dense Blazing Star	G5	<b>S3</b>	THR	THR		CHAT ELGI ESSE HALT LAMB MIDD PEEL (FRON) (LANA) (NIAG) (YORK)	Prairie and oak savanna remnants; occasionally along roadsides or railways. See Argus <i>et al.</i> (1982-1987), Catling & McKay (1974), Cruise (1964), Gaiser (1946), Medve (1985, 1987), Roberts <i>et al.</i> (1977). Ontario plants are var. <i>spicata</i> (T5?).	ASTERACEAE
<i>Ligusticum scoticum</i>	Scotch Lovage	G5	<b>S2</b>				COCH KENO	Marshes, mudflats, and beach ridges near the James Bay coast. The species name is frequently misspelled <i>scothicum</i> (Argus <i>et al.</i> 1982-1987). See Riley & McKay (1980), Riley (2003). Ontario plants are ssp. <i>scoticum</i> (T4T5).	APIACEAE
<i>Lilium canadense</i>	Canada Lily	G5	<b>S1?</b>				HAMI niag stor	Both ssp. <i>canadense</i> (T4?) and ssp. <i>editorum</i> (T4) are mapped from southern Ontario by Adams and Dress (1982), however no infraspecific taxa are recognized by FNA (2002b). Status and distribution in Ontario uncertain. See Dolan (2004).	LILIACEAE
<i>Limosella aquatica</i>	Northern Mudwort	G5	<b>S2</b>				coch KENO	Lagoons, sandy shores, and open clay flats. Included in Scrophulariaceae by some authors. See Argus <i>et al.</i> (1982-1987), Pennell (1935), Riley (2003), Riley & McKay (1980).	PLANTAGINACEAE
<i>Lindernia dubia</i> var. <i>anagallidea</i>	Slender False Pimpernel	G5T4	<b>S1</b>			<i>Lindernia anagallidea</i>	ESSE HAMI LENN NORF	Recently discovered in southeastern Ontario (Brownell <i>et al.</i> 1996). Var. <i>dubia</i> (S5) is the more common variety in Ontario. Included in Scrophulariaceae by some authors. See Lewis (2000).	LINDERNIACEAE
<i>Linum lewisii</i>	Lewis Blue Flax	G4G5	<b>S2S3</b>			<i>Linum lepagei</i>	KENO	Sandy or gravelly shorelines and beach ridges near the Hudson and James Bay coasts. Ontario plants are ssp. or var. <i>lepagei</i> , which is of global conservation concern (T2) and restricted to the shores of Hudson Bay. See Argus <i>et al.</i> (1982-1987), Mosquin (1971), Riley (2003).	LINACEAE



TABLE 1 -- RARE VASCULAR PLANTS OF ONTARIO, FOURTH EDITION (MARCH 2009)

SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Linum medium</i> <i>var. medium</i>	Stiff Yellow Flax	G5T3T4Q	S3?				BRUC chat hast MANI MUSK niag parr SIMC toro	Moist rocky and sandy shores of Georgian Bay and Lake Huron. This variety is virtually restricted to Ontario, and is of global conservation concern. See Argus <i>et al.</i> (1982-1987), Rogers (1963).	LINACEAE
<i>Linum medium</i> <i>var. texanum</i>	Texas Stiff Yellow Flax	G5T5	S1				ELGI lamb MIDD NORF	Wet meadows, moist sandy shores. See Argus <i>et al.</i> (1982-1987), Rogers (1963), Sutherland (1987).	LINACEAE
<i>Linum striatum</i>	Ridged Yellow Flax	G5	S1				MUSK SIMC	Moist rocky or sandy lakeshores and riverbanks. A disjunct Atlantic Coastal Plain species found in the southeastern Georgian Bay region of Ontario. See Argus <i>et al.</i> (1982-1987), Reznicek (1994), Rogers (1963).	LINACEAE
<i>Linum sulcatum</i>	Grooved Yellow Flax	G5	S3				BRUC ELGI HAST HAMI MANI NORF NORT OTTA	Alvars, prairies, dry sandy woods. See Dugal (1981), Rogers (1963), Zaremba (2003).	LINACEAE
<i>Linum virginianum</i>	Woodland Flax	G4G5	S2				CHAT ESSE HALT hald lamb niag norf toro wate	Dry, open woods and fields. See Argus <i>et al.</i> (1982-1987), Rogers (1963), Sutherland (1987).	LINACEAE
<i>Liparis liliifolia</i>	Purple Twayblade	G5	S2	END	END		CHAT ELGI ESSE midd niag YORK	Colonizes previously open and disturbed habitats during early and mid-successional stages of reforestation and apparently increasing in the northern part of its range (Case 1987, Sheviak 1974, Whiting & Catling 1986). See Andrews (1961), Argus <i>et al.</i> (1982-1987), Matrick (2004).	ORCHIDACEAE
<i>Lipocarpa micrantha</i>	Small-flowered Lipocarpa	G5	S2	END	THR	<i>Hemicarpha micrantha</i>	esse RAIN	First documented in 1892 and 1901 from the shore of the Detroit River south of Amherstburg by John Macoun and rediscovered at nearby Big Creek on Lake Erie in 1984 by Michael Oldham (Oldham & Crins 1988). More recently discovered at several sites on Rainy Lake and Lake of the Woods in northwestern Ontario. See Argus <i>et al.</i> (1982-1987), COSEWIC (2002f), Oldham (1996a); APPENDIX 1.	CYPERACEAE
<i>Listera auriculata</i>	Auricled Twayblade	G3G4	S3				algo coch hali hast keno NIPI renf THUN	Sandy or humic soil under alders and conifers, along streambanks and lakeshores where they survive seasonal flooding (Whiting & Catling 1986). A hybrid with <i>L. convallarioides</i> , called <i>L. x veltmanii</i> (Case 1964), occurs in Ontario (Catling 1976b). See Brunton & Crins (1975), Hoy (2001), Judziewicz & Nekola (1997), Platt <i>et al.</i> (1982), Whiting & Catling (1977).	ORCHIDACEAE

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<i>Listera australis</i>	Southern Twayblade	G4	S2				HAST HURO lenn MUSK NIPI OTTA pres PARR renf simc	Openings in <i>Sphagnum</i> peatlands with Black Spruce and Tamarack; small and inconspicuous. See Argus <i>et al.</i> (1982-1987), Desmeules (2002), Greenwood (1962), Hoy (2003), MacKenzie & Greenwood (1969), Mousley (1940), Whiting (1971), Whiting & Bobbette (1974); APPENDIX 1.	ORCHIDACEAE
<i>Listera borealis</i>	Northern Twayblade	G4	S1S2				ALGO coch keno temi thun	Widespread but rare in northern Ontario in moist coniferous forests and shrub thickets (Whiting & Catling 1986). See Argus <i>et al.</i> (1982-1987), Case (1965).	ORCHIDACEAE
<i>Lithospermum canescens</i>	Hoary Puccoon	G5	S3				BRAN ESSE KENO LAMB MIDD NORF PRIN RAIN THUN wate	Dry prairies and open woods, often on sandy soil. See Kittelson & Handler (2006).	BORAGINACEAE
<i>Lithospermum caroliniense</i>	Golden Puccoon	G4G5	S3			<i>Lithospermum croceum</i>	BRUC CHAT ESSE LAMB MANI NIAG NORF OTTA PRIN SIMC	Sand dunes, fields, prairies, open woods. See Cusick (1985), Fernald (1935), Levin (1972), Senn (1938), Weller (1980), Weller <i>et al.</i> (2000). Ontario plants are ssp./var. <i>croceum</i> (T4T5).	BORAGINACEAE
<i>Lithospermum incisum</i>	Narrow-leaved Puccoon	G5	S1				ESSE HALT hami LAMB PEEL	Dry sandy woods and open ground. See Argus <i>et al.</i> (1982-1987); APPENDIX 1.	BORAGINACEAE
<i>Lithospermum latifolium</i>	American Gromwell	G4	S3				BRAN chat ELGI esse HALT HURO LAMB MIDD norf oxfo pert WATE WELL york	Floodplain woods. See Argus <i>et al.</i> (1982-1987), Larson (1995).	BORAGINACEAE
<i>Littorella uniflora</i>	American Shoreweed	G5	S3			<i>Littorella americana</i>	HALI kawa KENO MUSK NIPI OTTA RAIN RENF THUN	Moist, open shorelines of lakes and slow-moving rivers. See Bassett (1973), Brunton & Di Labio (1989), Coffin & Pfannmuller (1988), Fernald (1918a), Lakela (1958), Tans & Read (1975).	PLANTAGINACEAE
<i>Ludwigia alternifolia</i>	Bushy Seedbox	G5	S1				ELGI ESSE	Moist prairies, ditches. See Argus <i>et al.</i> (1982-1987).	ONAGRACEAE
<i>Ludwigia polycarpa</i>	Many-fruited Primrose-willow	G4	S2S3				CHAT ELGI ESSE hald LAMB niag	Moist open areas, ditches. See Argus <i>et al.</i> (1982-1987), Ramstetter & Mott-White (2001).	ONAGRACEAE
<i>Lupinus perennis</i>	Sundial Lupine	G5	S3				BRAN ESSE LAMB midd niag NORF NORT PEEL PETE TORO wate	Prairies, oak savannas, dry sandy woods. See Argus <i>et al.</i> (1982-1987), Dunn & Gillett (1966), Grigore & Tramer (1996), Hess (1981), Isely (1998), Sutherland (1987). Ontario plants are ssp. <i>perennis</i> (T4?).	FABACEAE
<i>Luzula confusa</i>	Northern Woodrush	G5	S1				KENO	Restricted in Ontario to the Sutton Ridges where first collected in 1978 by John Riley (1979). See Argus <i>et al.</i> (1982-1987), Riley (2003).	JUNCACEAE

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<i>Luzula echinata</i>	Hedgehog Woodrush	G5	S1			<i>Luzula campestris</i> var. <i>echinata</i>	CHAT ESSE	Sandy open oak woods and edges. First collected in Ontario in 1990 by Michael Oldham. See Clemants (1990).	JUNCACEAE
<i>Lycopus rubellus</i>	Taper-leaved Bugleweed	G5	S3				CHAT ELGI ESSE HALD NIAG NORF	Wet woods and thickets. See Argus <i>et al.</i> (1982-1987), Sutherland (1987).	LAMIACEAE
<i>Lycopus virginicus</i>	Virginia Bugleweed	G5	S3				CHAT ELGI ESSE hald? HAMI LAMB MIDD NIAG OTTA	Moist woods and shorelines. Hybridizes with <i>L. uniflorus</i> in southern Ontario to form <i>L. x sherardii</i> . See Argus <i>et al.</i> (1982-1987), Campbell & Reznicek (1977).	LAMIACEAE
<i>Lysimachia hybrida</i>	Lowland Yellow Loosestrife	G5	S1			<i>Lysimachia lanceolata</i> ssp./var. <i>hybrida</i>	otta RAIN	Distribution and status poorly known in Ontario. Included in Primulaceae by some authors. See Coffey & Jones (1980), Ray (1956), Oldham (1996a).	MYRSINACEAE
<i>Lysimachia lanceolata</i>	Lance-leaved Yellow Loosestrife	G5	SH				huro	Distribution and status poorly known in Ontario. Included in Primulaceae by some authors. See Coffey & Jones (1980), Ray (1956).	MYRSINACEAE
<i>Lythrum alatum</i>	Winged Loosestrife	G5	S3				CHAT durh ELGI ESSE hald HAMI LAMB MIDD NORF otta PETE wate	Prairies, meadows, open woods and thickets. See Argus <i>et al.</i> (1982-1987), Cody (1978), Sutherland (1987).	LYTHRACEAE
<i>Magnolia acuminata</i>	Cucumber Tree	G5	S2	END	END		NIAG NORF WELL?	Rich deciduous woods. See Ambrose & Kirk (2007), Argus <i>et al.</i> (1982-1987), Fox & Soper (1952), Sutherland (1987), Yaki (1970); APPENDIX 1.	MAGNOLIACEAE
<i>Malaxis paludosa</i>	Bog Adder's-mouth	G4	S1				coch temi THUN	An inconspicuous orchid of open or partly shaded wet peaty or turfy bogs and fens (Whiting & Catling 1986). See Argus <i>et al.</i> (1982-1987), Baldwin (1961), Marquis & Voss (1981), Morris & Eames (1929), Reeves & Reeves (1985), Riley (2003).	ORCHIDACEAE
<i>Mertensia virginica</i>	Virginia Lungwort	G5	S3				chat ELGI ESSE HALT HALD HAMI LAMB MIDD NIAG norf PEEL wate york	Moist deciduous woods and thickets, usually on floodplains. Sometimes cultivated and some populations may have originated as garden escapes. See Argus <i>et al.</i> (1982-1987); APPENDIX 1.	BORAGINACEAE
<i>Micranthes pensylvanica</i>	Eastern Swamp Saxifrage	G5	S1			<i>Saxifraga pensylvanica</i>	niag? RAIN	Openings in boggy spruce woods in northwestern Ontario. No specimens have been located to support reports from NIAG (Macoun 1883-1890, Zenkert 1934), but given the distinctiveness of the species they are probably accurate. See Argus <i>et al.</i> (1982-1987), Harms (1983).	SAXIFRAGACEAE

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<i>Mimulus alatus</i>	Sharp-winged Monkey Flower	G5	S2				CHAT ELGI ESSE HALD niag	Moist woods, ditches, and stream banks. A hybrid with <i>M. ringens</i> has been collected at one site in Ontario by Graham Buck. Included in Scrophulariaceae by some authors. See Argus <i>et al.</i> (1982-1987), Sutherland (1987), Windler <i>et al.</i> (1976).	PHRYMACEAE
<i>Mimulus glabratus</i>	Round-leaved Monkey Flower	G5	S1			<i>Mimulus glabratus</i> var. <i>fremontii</i>	COCH toro	Springs, marshes, sedge meadows, moist stream banks. Included in Scrophulariaceae by some authors. See Argus <i>et al.</i> (1982-1987), De Vries (1971). Ontario plants are var. <i>jamesii</i> (T5).	PHRYMACEAE
<i>Mimulus moschatus</i>	Muskflower	G4G5	S2?				ALGO DUFF MANI musk PARR SIMC toro wate	Some or all of the Ontario populations may be non-native. Included in Scrophulariaceae by some authors. See Ewing (2001), Fernald (1935), Marquis & Voss (1981), Pennell (1935). Ontario plants are var. <i>moschatus</i> (T5).	PHRYMACEAE
<i>Minuartia groenlandica</i>	Greenland Stitchwort	G5	S1			<i>Arenaria groenlandica</i>	KENO	Restricted in Ontario to the Sutton Ridges where first collected in 1978 by John Riley (1979). See Argus <i>et al.</i> (1982-1987), Riley (2003); APPENDIX 1.	CARYOPHYLLACEAE
<i>Minuartia rubella</i>	Boreal Stitchwort	G5	S2			<i>Arenaria rubella</i>	COCH KENO	Sandy or gravelly old beach ridges near Hudson Bay. See Argus <i>et al.</i> (1982-1987), Morton (1976), Riley (2003).	CARYOPHYLLACEAE
<i>Moehringia macrophylla</i>	Large-leaved Sandwort	G4	S2			<i>Arenaria macrophylla</i>	algo THUN	Cliffs, ledges, crevices, rocky woods and talus slopes near Lake Superior. See Argus <i>et al.</i> (1982-1987), Marquis & Voss (1981).	CARYOPHYLLACEAE
<i>Monarda didyma</i>	Scarlet Beebalm	G5	S3				BRAN BRUC CHAT ELGI esse fron GREY hali HALD hami HURO LAMB MIDD niag NORF oxfo PARR pert stor wate WELL york (lana)	A showy and frequently cultivated species; some Ontario occurrences are undoubtedly escapes from cultivation, and the species may have a more restricted natural range in the province than indicated by the listed counties. See Argus <i>et al.</i> (1982-1987), Gill (1977), McClintock & Epling (1942), Scora (1967), Whitten (1981).	LAMIACEAE
<i>Monarda fistulosa</i> var. <i>menthifolia</i>	Mintleaf Bergamot	G5T5	S2S3			<i>Monarda fistulosa</i> var. <i>menthaefolia</i> , <i>M. menthaefolia</i> , <i>M.</i> <i>menthifolia</i>	KENO RAIN	Restricted to dry, open ground in northwestern Ontario, often in prairie or savanna remnants. See Fernald (1901, 1944), Fosberg & Artz (1953), McClintock & Epling (1942), Scora (1967).	LAMIACEAE
<i>Monarda media</i>	Purple Bergamot	G4?	S1			<i>Monarda fistulosa</i> var. <i>media</i> , <i>M. x</i> <i>media</i>	hami huro NORF	Treated as a species by some authors, others consider it a hybrid between <i>M. didyma</i> and <i>M. fistulosa</i> . See Fernald (1901), McClintock & Epling (1942), Scora (1967), Whitten (1981).	LAMIACEAE

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<i>Monarda punctata</i>	Spotted Beebalm	G5	S1			<i>Monarda punctata</i> ssp. <i>punctata</i> var. <i>villicaulis</i> , <i>M. punctata</i> ssp. <i>villicaulis</i>	lamb MIDD NORF (pete) (stor)	Dry, open sandy areas. Often in disturbed situations and difficult to distinguish native from adventive populations. See Argus <i>et al.</i> (1982-1987), Gill (1977), McClintock & Epling (1942), Scora (1967), Sutherland (1987); APPENDIX 1. Ontario plants are var. <i>villicaulis</i> (T5?).	LAMIACEAE
<i>Montia fontana</i>	Water Blinks	G5	S2			<i>Montia lamprosperma</i>	COCH KENO	Moist meadows and fens near the Hudson Bay coast. See Argus <i>et al.</i> (1982-1987)	PORTULACACEAE
<i>Morella pensylvanica</i>	Northern Bayberry	G5	S1			<i>Myrica pensylvanica</i>	NORF	Known in Ontario only from Turkey Point and nearby areas. Primarily a species of the Atlantic Coastal Plain. See Argus <i>et al.</i> (1982-1987), Soper & Heimbucher (1982), Sutherland (1987).	MYRICACEAE
<i>Morus rubra</i>	Red Mulberry	G5	S2	END	END		CHAT durh ESSE HALT HAMI midd NIAG york	Rich woods, often on floodplains. Hybridization with the introduced <i>M. alba</i> is a problem at most Ontario <i>M. rubra</i> locations. See Argus <i>et al.</i> (1982-1987), Burgess & Husband (2004, 2006), Burgess <i>et al.</i> (2008), Fox & Soper (1953), Soper (1956).	MORACEAE
<i>Muhlenbergia cuspidata</i>	Plains Muhly	G4	S1				KENO	Discovered in a rocky Bur Oak prairie remnant on Lake of the Woods in 2002 by Wasyl Bakowsky and Michael Oldham.	POACEAE
<i>Muhlenbergia richardsonis</i>	Mat Muhly	G5	S2S3				BRAN COCH HURO KENO RAIN	Calcareous shorelines and seepages of rivers flowing into James Bay and prairie fens and calcareous river shores in southern Ontario. See Dore & McNeill (1980), Eddy & Harriman (1992), Schultz (2002b).	POACEAE
<i>Muhlenbergia sobolifera</i>	Rock Muhly	G5	S1				ESSE	Known only from dry, calcareous rocky woodland on Pelee Island where first collected in 1992 (Oldham <i>et al.</i> 1995).	POACEAE
<i>Muhlenbergia sylvatica</i>	Woodland Muhly	G5	S2				ELGI HALT LEED LENN NORF OTTA PEEL PETE well?	A rare woodland grass similar to the common and widespread <i>M. frondosa</i> and <i>M. mexicana</i> . See Argus <i>et al.</i> (1982-1987), Dore & McNeill (1980), Pohl (1969).	POACEAE
<i>Muhlenbergia tenuiflora</i>	Slim-flowered Muhly	G5	S2				CHAT halt hast HAMI HURO LAMB leed MIDD NIAG NORF OTTA wate	Rocky or sandy woods. See Argus <i>et al.</i> (1982-1987), Dore & McNeill (1980), Pohl (1969).	POACEAE
<i>Myosotis macrosperma</i>	Large-seeded Forget-me-not	G5	S1				chat ESSE	Moist deciduous woods and thickets, alvars. First collected in Ontario in 1970 by John Morton on Pelee Island (Campbell & Reznicek 1977). See Argus <i>et al.</i> (1982-1987).	BORAGINACEAE

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<i>Myosurus minimus</i>	Tiny Mousetail	G5	S2				HAST LENN PRIN (toro)	Taxonomic and native status of Ontario plants needs study. Occurs in undisturbed alvars with native associates in eastern Ontario, but also occasionally in weedy habitats. See Argus <i>et al.</i> (1982-1987); APPENDIX 1.	RANUNCULACEAE
<i>Najas gracillima</i>	Thread-like Naiad	G5?	S2				hast MUSK NIPI norf PARR PETE RENF SIMC	Lakes and ponds. Included by some authors in Najadaceae. See Argus <i>et al.</i> (1982-1987), Brayshaw (1964), Haynes (1979), Scribailo & Alix (2002b), Wentz & Struckey (1971).	HYDROCHARITACEAE
<i>Najas guadalupensis</i>	Southern Naiad	G5	S3				CHAT esse FRON LAMB LANA LEED MUSK NORF prin SIMC	Both ssp. <i>guadalupensis</i> (T5) and ssp. <i>olivacea</i> (T4?) are mapped from Ontario by Haynes (1979) and FNA (2000), though the relative distribution and status of each in the province are poorly known. Included by some authors in Najadaceae. See Clausen (1936), Fernald (1923c), Hellquist (1977), Rosendahl & Butters (1935).	HYDROCHARITACEAE
<i>Najas marina</i>	Spiny Naiad	G5	S1				FRON	First discovered in Ontario by Marianne Stainback in 1997 north of Kingston. The species is thought to be native in New York state and might have been previously overlooked in southeastern Ontario, or the Ontario population may have been an accidental introduction. Included by some authors in Najadaceae. See Handley & Davy (2000, 2002), Haynes (1979), McMullen (2003), Stuckey (1985), Tans & Read (1975).	HYDROCHARITACEAE
<i>Nelumbo lutea</i>	American Lotus	G4	S2				CHAT ESSE lamb NORF simc	Marshes, river margins. The recent discovery of populations in areas where not present historically (e.g. Point Pelee, Pelee Island) suggests this species may be increasing in southwestern Ontario. See Argus <i>et al.</i> (1982-1987), Hall & Penfound (1944), Soper (1962).	NELUMBONACEAE
<i>Nuphar advena</i>	Large Yellow Pond-lily	G5	S3			<i>Nuphar lutea</i> ssp. <i>advena</i>	elgi ESSE HALD HAMI MIDD niag NORF	Marshes, edges of rivers, oxbows. See Argus <i>et al.</i> (1982-1987), Padgett (2007), Wiersema & Hellquist (1994); APPENDIX 1.	NYMPHAEACEAE
<i>Nuphar microphylla</i>	Small Yellow Pond-lily	G4G5	S3			<i>Nuphar lutea</i> ssp. <i>microphylla</i> , <i>N. lutea</i> ssp. <i>pumila</i> , <i>N. pumilum</i>	HALI LEED NIPI OTTA PRES RENF STOR	Ponds, margins of lakes, slow-moving streams. Padgett (2007) comments that "the current range of this species appears to be contracting and it is now recognized as rare in most of its range". See Padgett (1988).	NYMPHAEACEAE

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<i>Nuttallanthus canadensis</i>	Old-field Toadflax	G5	S1			<i>Linaria canadensis</i>	elgi NIAG	Disturbed peaty ground of mined peat bog, cultivated fields. Weedy and difficult to distinguish native from non-native populations. Included by some authors in Scrophulariaceae. See Argus <i>et al.</i> (1982-1987).	PLANTAGINACEAE
<i>Nyssa sylvatica</i>	Black Gum	G5	S3				CHAT ELGI ESSE HALD HAMI LAMB MIDD NIAG NORF	Moist or dry woods. See Argus <i>et al.</i> (1982-1987), Fox & Soper (1953), McCaw & Eckenwalder (1985), Sutherland (1987).	NYSSACEAE
<i>Oenothera clelandii</i>	Cleland's Evening Primrose	G3G5	S1				ELGI MIDD peel	Prairie; dry open ground, sometimes disturbed. First collected in Ontario by Daniel Brunton in 1984 at Mississauga. See Argus <i>et al.</i> (1982-1987), Pennell (1935).	ONAGRACEAE
<i>Oenothera fruticosa</i>	Narrow-leaved Evening Primrose	G5	SX				niag	Commonly cultivated and the Ontario specimen may be an escape from cultivation. See Argus <i>et al.</i> (1982-1987). Ontario plants are ssp. <i>glauca</i> (T5).	ONAGRACEAE
<i>Oenothera gaura</i>	Biennial Gaura	G5	S3			<i>Gaura biennis</i>	BRAN ELGI ESSE hald? HURO NIAG OXFO york	Some populations are in weedy sites and are perhaps adventive. <i>Gaura</i> is now included in <i>Oenothera</i> according to Wagner <i>et al.</i> (2007). The similar <i>O. filiformis</i> ( <i>Gaura longiflora</i> ) has been found in disturbed situations in southwestern Ontario and is probably non-native. See Argus <i>et al.</i> (1982-1987), McIntosh & Catling (1979).	ONAGRACEAE
<i>Oenothera pilosella</i>	Pilose Evening Primrose	G5	S2				BRAN ELGI GREY HALT HAMI LAMB MIDD simc wate (ESSE) (HALD) (peel)	Woodland edges; open disturbed ground. Some records are probably escapes from cultivation. See Argus <i>et al.</i> (1982-1987). Ontario plants are ssp. <i>pilosella</i> (T5?).	ONAGRACEAE
<i>Oenothera villosa</i>	Hairy Evening Primrose	G5	S2?				ELGI esse fron hald leed musk NORT otta THUN YORK	Part of the difficult <i>Oenothera biennis</i> group. Taxonomic and identification problems. See Dietrich <i>et al.</i> (1997), Voss (1985). Ssp. <i>strigosa</i> (T4T5) and ssp. <i>villosa</i> (T5?) have been reported from Ontario.	ONAGRACEAE
<i>Onosmodium molle</i> ssp. <i>hispidissimum</i>	Soft-hairy False Gromwell	G4G5T4	S2			<i>Onosmodium bejariense</i> var. <i>hispidissimum</i>	BRAN ELGI hami HAST HURO lamb MIDD NORF wate	Woods, fields, thickets, alvars; often on floodplains. See Argus <i>et al.</i> (1982-1987), Cochrane (1976), Turner (1995), Williams (1999).	BORAGINACEAE
<i>Onosmodium molle</i> ssp. <i>occidentale</i>	Western Soft-hairy False Gromwell	G4G5T4?	S1			<i>Onosmodium bejariense</i> var. <i>occidentale</i>	RAIN	Discovered in an open oak wooded slope above Rainy River in 1998 by Michael Oldham and Wasyl Bakowsky. See Cochrane (1976), Turner (1995), Williams (1999).	BORAGINACEAE

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SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Oplopanax horridus</i>	Devil's Club	G4	S1				THUN	A western species disjunct in the Great Lakes area where it is rare in the vicinity of Lake Superior in mixed or coniferous woods or thickets. See Argus <i>et al.</i> (1982-1987), Marquis & Voss (1981), Soper & Heimbürger (1982); APPENDIX 1.	ARALIACEAE
<i>Opuntia fragilis</i>	Brittle Prickly Pear	G4G5	S3				KENO LENN RAIN	Open rocky sites in the Lake of the Woods area and disjunct in southeastern Ontario in rock barrens near Kaladar. See Argus <i>et al.</i> (1982-1987), Beshel (1967), Consaul <i>et al.</i> (1998), Frego & Staniforth (1986), Hancock <i>et al.</i> (2005), Ribbens (2008); APPENDIX 1.	CACTACEAE
<i>Opuntia humifusa</i>	Eastern Prickly Pear Cactus	G5	S1	END	END	<i>Opuntia compressa</i>	elgi ESSE norf (CHAT)	Dry, open or sem-shaded sandy ground near Lake Erie. See Argus <i>et al.</i> (1982-1987), COSEWIC (2000d), Reznicek (1982), Wallace & Fairbrothers (1987). Ontario plants are var. <i>humifusa</i> (T5).	CACTACEAE
<i>Orobanche fasciculata</i>	Clustered Broomrape	G4	SH				bruc mani	Alvars on the Bruce Peninsula and Great La Cloche Island. An obligate root parasite, primarily on <i>Artemisia campestris</i> . See Argus <i>et al.</i> (1982-1987), Guire & Voss (1963), Reuter (1986).	OROBANCHACEAE
<i>Oxypolis rigidior</i>	Stiff Cowbane	G5	S2				CHAT ESSE	Moist prairies and woods. See Argus <i>et al.</i> (1982-1987), Soper (1962).	APIACEAE
<i>Oxytropis borealis</i> var. <i>hudsonica</i>	Hudson Bay Boreal Locoweed	G5TNR	S3			<i>Oxytropis viscida</i> var. <i>hudsonica</i>	coch KENO	Old gravel and sand beach ridges mainly near Hudson Bay. See Argus <i>et al.</i> (1982-1987), Welsh (2001).	FABACEAE
<i>Oxytropis borealis</i> var. <i>viscida</i>	Sticky Boreal Locoweed	G5T4?	S1			<i>Oxytropis ixodes</i> , <i>O. viscida</i> var. <i>viscida</i>	KENO THUN	Gravel beach ridges near Hudson Bay. Also open cliff tops near the Pigeon River, where originally described as a separate species, <i>O. ixodes</i> (Butters & Abbe 1943). See Argus <i>et al.</i> (1982-1987), Coffin & Pfannmüller (1988), Gervais & Blondeau (1999), Welsh (2001).	FABACEAE
<i>Oxytropis campestris</i> var. <i>minor</i>	Small Northern Yellow Locoweed	G5TNR	SH			<i>Oxytropis campestris</i> var. <i>terrae-novae</i> , <i>O. terrae-novae</i>	coch	Collected on a railway embankment at Moosonee by W.K.W. Baldwin in 1949, where it may have been introduced. Taxonomic problems. Included in var. <i>johannensis</i> by Riley (2003). See Argus <i>et al.</i> (1982-1987), Isely (1998), Welsh (2001).	FABACEAE
<i>Oxytropis deflexa</i> var. <i>foliolosa</i>	Pendant-pod Locoweed	G5T3T5	S2			<i>Oxytropis foliolosa</i>	KENO	Dry open woods, beach ridges, gravel river flats. Included by some authors in var. <i>deflexa</i> . See Argus <i>et al.</i> (1982-1987), Gervais & Blondeau (1999), Isely (1998), Welsh (2001).	FABACEAE



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SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Oxytropis deflexa</i> var. <i>sericea</i>	White Pendant- pod Locoweed	G5T5	S1			<i>Oxytropis deflexa</i> ssp. <i>sericea</i>	KENO	Dry open woods, beach ridges, gravel river flats in the Hudson Bay region, where at its eastern range limit. See Argus <i>et al.</i> (1982-1987), Welsh (2001).	FABACEAE
<i>Oxytropis splendens</i>	Showy Locoweed	G5	S3				COCH KENO THUN	Cliff tops, open spruce woods. Some specimens from near James Bay appear to be intermediate between <i>O. splendens</i> and <i>O. campestris</i> var. <i>johannensis</i> (Welsh 2001). See Riley (2003); APPENDIX 1.	FABACEAE
<i>Packera glabella</i>	Grass-leaved Ragwort	G5	SX			<i>Senecio glabellus</i>	esse	Collected in 1974 from Pelee Island (Campbell & Reznicek 1977) but site subsequently destroyed. Perhaps only adventive in Ontario. See Argus <i>et al.</i> (1982-1987)	ASTERACEAE
<i>Packera obovata</i>	Round-leaved Groundsel	G5	S3			<i>Senecio obovatus</i>	BRUC GREY MANI	Alvars and rocky or sandy woods on the Bruce Peninsula and Manitoulin Island. See Argus <i>et al.</i> (1982-1987), Barkley (1962).	ASTERACEAE
<i>Packera paupercula</i> var. <i>pseudotomentosa</i>	False Tomentose Balsam Groundsel	G5TNR	S2S3				CHAT ESSE LAMB MIDD	Prairies, sandy open woods and savanna. Ontario records of <i>Packera plattensis</i> are probably most or entirely this plant. See Mahonney & Kowal (2008).	ASTERACEAE
<i>Packera paupercula</i> var. <i>savannarum</i>	Savanna Balsam Groundsel	G5TNR	SH				esse	A recently described variety from mesic prairies, savannas, open woodlands and woodland margins in the American Upper Midwest. Although not mentioned from Canada in Mahonney & Kowal (2008), a 1982 Windsor collection by Michael Oldham was recently identified as this variety by Robert Kowal (pers. comm.).	ASTERACEAE
<i>Packera pseudoaurea</i>	Streambank Groundsel	G5	S1S2				KENO RAIN	Moist areas in northwestern Ontario. See Barkley (1962). Ontario plants are var. <i>pseudoaurea</i> (T5).	ASTERACEAE
<i>Panax quinquefolius</i>	Ginseng	G3G4	S3	END	END	<i>Panax quinquefolium</i>	bran BRUC chat duff DURH ELGI ESSE FRON GREY HALI HALT HALD hast HAMI huro KAWA LAMB LANA LEED midd musk niag NORT OTTA OXFO peel PETE pres prin RENF STOR SIMC WATE york	Rich, moist deciduous woods, particularly on calcareous rocky shaded slopes. Declining due to habitat loss and harvesting for its root which is highly prized for its supposed medicinal properties. See Anderson <i>et al.</i> (1993), Anonymous (2003d), Argus <i>et al.</i> (1982-1987), Carpenter & Cottam (1982), Case <i>et al.</i> (2007), Charron & Gagnon (1991), COSEWIC (2000a), Fountain (1986), F & McGraw (2004), Grubbs & Case (2004), Hu (1976), Lewis (1984, 1988), Lewis & Zenger (1982), McIntosh & Catling (1979), Nantel <i>et al.</i> (1996), Proctor (1987), Small <i>et al.</i> (1994).	ARALIACEAE

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SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Panicum rigidulum</i>	Redtop Panic Grass	G5	S3				ELGI FRON HALD HAST KAWA LAMB MIDD MUSK NORF PARR SIMC	Sandy or rocky shorelines, moist ditches. See Argus <i>et al.</i> (1982-1987), Catling <i>et al.</i> (1977), Dore & McNeill (1980), Oldham <i>et al.</i> (1995). Ontario plants are ssp. <i>rigidulum</i> (T5?).	POACEAE
<i>Parnassia kotzebuei</i>	Kotzebue's Grass of-parnassus	G5	S2S3				KENO	Moist tundra, riparian willow thickets. Included in Saxifragaceae by some authors. See Argus <i>et al.</i> (1982-1987).	PARNASSIACEAE
<i>Paronychia canadensis</i>	Smooth-forked Nailwort	G5	SH				esse	Open, often sandy, woods. See Argus <i>et al.</i> (1982-1987).	CARYOPHYLLACEAE
<i>Paronychia fastigiata</i>	Cluster-stemmed Nailwort	G5	S1				HALD niag	Deciduous woods on clay soils. See Argus <i>et al.</i> (1982-1987), Cody (1970), Sutherland (1987).	CARYOPHYLLACEAE
<i>Pascopyrum smithii</i>	Western Wheat Grass	G5	S2			<i>Agropyron smithii</i> , <i>Elymus smithii</i>	KENO MANI? THUN (bran) (COCH) (durh) (hald) (NIAG) (MUSK) (nort) (OTTA) (PEEL) (RAIN) (renf) (SIMC) (well)	A common native grass in the prairies which is probably native at some northwestern Ontario sites, though adventive elsewhere (Dore & McNeill 1980). See Gillett & Senn (1960).	POACEAE
<i>Paspalum setaceum</i>	Slender Paspalum	G5	S2			<i>Paspalum ciliatifolium</i>	CHAT ELGI ESSE LAMB MIDD NORF PEEL	First found in Ontario in 1975 by Bill Crins and others in the Ojibway Prairie area of Windsor (Crins <i>et al.</i> 1978). Generally in open sandy ground; some populations are weedy along roadsides and perhaps introduced. See Argus <i>et al.</i> (1982-1987), Banks (1966), Oldham <i>et al.</i> (1995), Sutherland (1987). Both vars. <i>muhlenbergii</i> (TNR) and <i>stramineum</i> (TNR) have been reported from Ontario.	POACEAE
<i>Pellaea atropurpurea</i>	Purple-stemmed Cliff-brake	G5	S3				BRUC FRON hali LANA LEED MANI NIAG NIPI RENF well	Locally common on calcareous cliffs and crevices, primarily on the Niagara Escarpment. See Argus <i>et al.</i> (1982-1987), Britton & Rigby (1969), Britton <i>et al.</i> (1967), Brunton (1972), Brunton & Lafontaine (1974), Hainault (1966), Munro (1988), Rigby & Britton (1970), Tryon (1972).	PTERIDACEAE
<i>Peltandra virginica</i>	Green Arrow-arum	G5	S2				BRUC CHAT FRON hast LANA LEED MANI MUSK NIAG NORF NORT PRIN SIMC YORK	Shallow waters of streams, rivers and marshes. Some populations probably introduced by waterfowl (Toner <i>et al.</i> 1995). See Argus <i>et al.</i> (1982-1987), Cody (1982), Dore (1966), Garwood (1965), Laking (1951), Robb (1968), West & Whigham (1976).	ARACEAE
<i>Persicaria arifolia</i>	Halberd-leaved Tearthumb	G5	S3			<i>Polygonum arifolium</i>	CHAT ESSE fron HALD hami LEED MUSK NIAG NORF OTTA RENF SIMC stor	Moist woods, swamps, and thickets. See Argus <i>et al.</i> (1982-1987).	POLYGONACEAE

TABLE 1 -- RARE VASCULAR PLANTS OF ONTARIO, FOURTH EDITION (MARCH 2009)

SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Persicaria robustior</i>	Stout Smartweed	G4G5	S2			<i>Polygonum punctatum</i> var. <i>majus</i> , <i>Polygonum robustius</i>	LEED OTTA PRES STORM	Until recently generally included with <i>Polygonum punctatum</i> , often as var. <i>majus</i> . Wetlands and stream edges in eastern Ontario; to be looked for elsewhere in southern Ontario. See Brunton (2007), Cayouette (2005), Fassett (1949).	POLYGONACEAE
<i>Phacelia franklinii</i>	Franklin's Scorpionweed	G5	S2				THUN	Cliff tops, sandy fields, roadsides. Placed in Hydrophyllaceae by some authors. See Argus <i>et al.</i> (1982-1987), Gillett (1960), Judziewicz (1997); APPENDIX 1.	BORAGINACEAE
<i>Phacelia purshii</i>	Miami-Mist	G5	S1				ESSE	Sandy or rocky woods and thickets on islands in western Lake Erie. Placed in Hydrophyllaceae by some authors. See Argus <i>et al.</i> (1982-1987), Baskin & Baskin (1976), Campbell & Reznicek (1977).	BORAGINACEAE
<i>Phegopteris hexagonoptera</i>	Broad Beech Fern	G5	S3	SC	SC	<i>Dryopteris hexagonoptera</i> , <i>Thelypteris hexagonoptera</i>	BRAN CHAT ELGI ESSE FRON HALD HALT HAMI LAMB LEED midd MUSK NIAG NORF nort PRES simc wate york	Rich deciduous woods in southern Ontario. Many records are old and has probably declined due to forest clearing. See Argus <i>et al.</i> (1982-1987), Goltz <i>et al.</i> (1984), Mulligan <i>et al.</i> (1972), Oldham (1993a), Sutherland (1987); APPENDIX 1.	THELYPTERIDACEAE
<i>Phleum alpinum</i>	Alpine Timothy	G5	S1S2			<i>Phleum commutatum</i>	COCH KENO	Coastal beach ridges and tundra near James Bay. Highly disjunct to the Keweenaw Peninsula, Michigan, and reported (but without specimen verification) from Pukaskwa National Park, Lake Superior (Given & Soper 1981). See Argus <i>et al.</i> (1982-1987), Dore & McNeill (1980). Ontario plants are ssp. <i>alpinum</i> (TNR).	POACEAE
<i>Phlox pilosa</i>	Downy Phlox	G5	SX				esse	Collected once in Ontario in 1882 at Amherstburg by John Macoun. See Argus <i>et al.</i> (1982-1987). Ontario plants are ssp. <i>pilosa</i> (T5).	POLEMONIACEAE
<i>Phlox subulata</i>	Moss Phlox	G5	S1?				elgi HALT hami lamb midd NORF well (LEED) (NORT) (STOR) (WATE) (YORK)	Dry, sandy, open woods and open ground. Frequently cultivated in gardens and cemeteries. Sometimes difficult to distinguish between native and adventive populations. Both ssp. <i>brittonii</i> (T4?) and ssp. <i>subulata</i> (T5) have been reported from Ontario, but subspecific identity of Ontario populations is poorly known. See Argus <i>et al.</i> (1982-1987), Sutherland (1987).	POLEMONIACEAE

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SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Phyla lanceolata</i>	Northern Fogfruit	G5	S2			<i>Lippia lanceolata</i>	CHAT ESSE LAMB	Moist, muddy stream and river banks and ditches. See Argus <i>et al.</i> (1982-1987), Soper (1962).	VERBENACEAE
<i>Phylodoce caerulea</i>	Purple Mountain Heather	G5	S1				KENO	First collected in Ontario from an open White Spruce - lichen woodland near the Sutton River mouth in 1978 by Richard Sims (Riley 1979). See Argus <i>et al.</i> (1982-1987), Cody (1953), Riley (2003); APPENDIX 1.	ERICACEAE
<i>Picea glauca</i> var. <i>porsildii</i>	Western White Spruce	G5TNR	SH			<i>Picea albertiana</i> ssp. <i>albertiana</i> var. <i>porsildii</i>	keno	A western variety of White Spruce with smooth light-grey bark and resin blisters which reaches its eastern range limit near the coast of Hudson Bay. Included in <i>P. glauca</i> without rank in FNA (1993) but recognized as a distinct taxon in other sources (e.g. Riley 2003, Riley & Walshe 1985, Strong & Hills 2006).	PINACEAE
<i>Picea rubens</i>	Red Spruce	G5	S3				from HALI hast lenn musk NIPI OTTA pres RENF	Scattered in mixed forests in south-central Ontario. Has experienced a substantial decline over most of its eastern North American range. Similar to and hybridizes with <i>P. mariana</i> . See Brunton (2007), Gordon (1957, 1976), Hadley <i>et al.</i> (1991), Heimburger & Porsild (1938), LeBlanc (1992), Major <i>et al.</i> (2005), Mosseler <i>et al.</i> (2000), Rajora <i>et al.</i> (2000).	PINACEAE
<i>Pinguicula villosa</i>	Hairy Butterwort	G4	S2S3				KENO	An inconspicuous acidophile of fen and bog wetlands developing well back of the Hudson Bay coast (Riley 1979). See Riley (2003).	LENTIBULARIACEAE
<i>Pinus rigida</i>	Pitch Pine	G5	S2?				LEED	Shallow soil of dry rock outcrops and ridges. Locally common, but declining. See Argus <i>et al.</i> (1982-1987), Cody (1982), Dendron Resource Surveys Inc. (1995), Mosseler <i>et al.</i> (2004), Šrútek <i>et al.</i> (2008), Vander Kloet (1973); APPENDIX 1.	PINACEAE
<i>Piptochaetium avenaceum</i>	Black Oat Grass	G5	SX			<i>Stipa avenacea</i>	lamb	Collected in 1965 by M. Eddy at Pinery Provincial Park and not seen since in Ontario despite several searches in the vicinity of the original collection. To be looked for in dry sandy oak woods. See Argus <i>et al.</i> (1982-1987), Dore & McNeill (1980).	POACEAE

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<i>Plantago cordata</i>	Heart-leaved Plantain	G4	S1	END	END		esse LAMB MIDD	Moist woods, stream banks, wooded swamps. See Allen & Oldham (1985), Argus <i>et al.</i> (1982-1987), Bassett (1973), Bowles & Apfelbaum (1989), Harper (1944), Mymudes & Les (1993), Parfitt (2002), Stromberg & Stearns (1989), Tessene (1969).	PLANTAGINACEAE
<i>Platanthera ciliaris</i>	Yellow Fringed-orchid	G5	SX			<i>Habenaria ciliaris</i>	esse	Collected in Ontario four times in the vicinity of Leamington between 1886 and 1901 and reported from Windsor (Dodge 1914b) but not seen in Ontario in more than a century. See Argus <i>et al.</i> (1982-1987), Robertson & Wyatt (1990a, 1990b), Sharp (2004), Smith & Snow (1976); APPENDIX 1.	ORCHIDACEAE
<i>Platanthera flava</i> var. <i>herbiola</i>	Tuberclcd Orchid	G4T4Q	S3			<i>Habenaria flava</i> var. <i>herbiola</i>	BRUC chat ELGI ESSE fron HALD HAST lamb LANA lenn LEED MIDD musk niag NIPI OTTA peel PETE RENF simc	Meadows and moist open areas near rivers and lakes. See Keenan (1984).	ORCHIDACEAE
<i>Platanthera grandiflora</i>	Large Purple Fringed-orchid	G5	S1			<i>Habenaria psycodes</i> var. <i>grandiflora</i>	niag? OTTA pres	Acid swamps in eastern Ontario. See Argus <i>et al.</i> (1982-1987), Reddoch (1976), Reddoch & Reddoch (1997), Stoutamire (1974).	ORCHIDACEAE
<i>Platanthera hookeri</i>	Hooker's Orchid	G4	S3			<i>Habenaria hookeri</i>	BRUC CHAT DURH GREY HURO KENO LAMB LANA LEED MANI MIDD MUSK niag NIPI norf OTTA PARR PRES RAIN RENF SIMC THUN york	Dryish woods. Has apparently declined in much of its range, including Ontario. See Reddoch & Reddoch (2007); APPENDIX 1.	ORCHIDACEAE
<i>Platanthera leucophaea</i>	Eastern Prairie Fringed-orchid	G3	S2	END	END	<i>Habenaria leucophaea</i>	BRUC chat? durh ESSE GREY hami hast huro LAMB LEED LENN midd nort? OTTA oxfo? SIMC STOR YORK	Prairies, fens, calcareous shorelines, moist old fields with scattered shrubs. Hybrids with <i>P. lacera</i> ( <i>P. x hollandiae</i> ; Catling & Brownell 1999) and <i>P. psycodes</i> ( <i>P. x reznicekii</i> ; Catling <i>et al.</i> 1999) have been described from Ontario. See Argus <i>et al.</i> (1982-1987), Bowles (1983), Bowles <i>et al.</i> (1992, 2002, 2005), Brown (1985), COSEWIC (2003d), Reddoch (1977), Sheviak & Bowles (1986), Wallace (2003), Zettler <i>et al.</i> (2001); APPENDIX 1.	ORCHIDACEAE
<i>Platanthera macrophylla</i>	Large Round-leaved Orchid	G4	S2			<i>Habenaria macrophylla</i> , <i>Platanthera orbiculata</i> var. <i>macrophylla</i>	algo BRUC chat GREY HALI HALT huro lana mani MUSK nipi parr renf simc	Similar to <i>P. orbiculata</i> and sometimes considered a variety of it. See Argus <i>et al.</i> (1982-1987), Reddoch & Reddoch (1993, 1997).	ORCHIDACEAE

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<i>Poa arctica</i>	Arctic Blue Grass	G5	S3				KENO	Restricted to the Hudson Bay Lowland. Both ssp. <i>arctica</i> (T4T5) and ssp. <i>caespitans</i> (TNR) have been reported from Ontario, though the relative distribution and status of each is poorly known.	POACEAE
<i>Poa saltuensis</i> ssp. <i>languida</i>	Weak Blue Grass	G5T3T4Q	S3			<i>Poa languida</i>	CHAT ELGI FRON HALT HAMI HAST LAMB LEED MIDD MUSK NORF PETE SIMC WATE WELL york	A widespread but infrequent woodland grass. See Dore & McNeill (1980), Haines (2004b).	POACEAE
<i>Poa secunda</i>	Curly Blue Grass	G5	S1			<i>Poa canbyi</i>	BRUC THUN	A western grass disjunct in the Great Lakes region on cliffs and dry rock ledges. See Argus <i>et al.</i> (1982-1987), Dore & McNeill (1980), Kellogg (1985), Marquis & Voss (1981). Ontario plants are ssp. <i>secunda</i> (TNR).	POACEAE
<i>Poa sylvestris</i>	Woodland Blue Grass	G5	S1				CHAT ESSE MIDD	First collected in Ontario by Mary Barkworth in 1963 at Rondeau Park (Webber <i>et al.</i> 1985) and subsequently found at a few additional sites in rich woods in southwestern Ontario (Oldham <i>et al.</i> 1995). See Argus <i>et al.</i> (1982-1987).	POACEAE
<i>Podostemum ceratophyllum</i>	Horn-leaved Riverweed	G5	S2				HAST NIPI OTTA renf	Fast-flowing rivers and streams. See Argus <i>et al.</i> (1982-1987), Capers & Les (2001), Meijer (1976), Philbrick (1981, 1984), Philbrick & Bogle (1988), Philbrick & Crow (1983).	PODOSTEMACEAE
<i>Polygala cruciata</i>	Cross-leaved Milkwort	G5	SX				esse	An 1894 specimen from Windsor is the only Canadian record. See Argus <i>et al.</i> (1982-1987). The Ontario specimen is var. <i>aquilonia</i> (T4).	POLYGALACEAE
<i>Polygala incarnata</i>	Pink Milkwort	G5	S1	END	END		ESSE LAMB niag?	Prairies. No specimen has been located to substantiate a very old literature record from near Niagara Falls (Macoun 1883-1890). See Argus <i>et al.</i> (1982-1987), Gillett (1968)	POLYGALACEAE
<i>Polygala sanguinea</i>	Blood-red Milkwort	G5	S3				CHAT ELGI ESSE LAMB LANA LEED MUSK NORF OTTA PEEL PRES STOR WATE	Damp open meadows and fields, prairies. See Gillett (1968)	POLYGALACEAE
<i>Polygonatum biflorum</i> var. <i>melleum</i>	Honey-flowered Solomon's Seal	G5TH	SH				lamb	Known globally only from southeastern Michigan and southwestern Ontario, though not seen anywhere in several decades. Placed by some authors in the Asparagaceae, Liliaceae or Rusceae. See Ownbey (1944), Voss (1972).	CONVALLARIACEAE

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<i>Polygonum erectum</i>	Erect Knotweed	G5	SH				elgi esse hami midd niag york	Disturbed open areas. Recorded from about a dozen sites historically in southern Ontario, though not seen at any sites in the province in the past 20 years. Has apparently declined elsewhere in its range also (Argus <i>et al.</i> 1982-1987).	POLYGONACEAE
<i>Polygonum fowleri</i> ssp. <i>hudsonianum</i>	Hudsonian Knotweed	G5T3?	S2?			<i>Polygonum caurianum</i> ssp. <i>hudsonianum</i> , <i>P. hudsonianum</i>	COCH KENO	Moist open areas on the Hudson and James Bay coasts. Subspecies <i>fowleri</i> (TNR) also occurs along the Hudson and James Bay coasts (Riley 2003).	POLYGONACEAE
<i>Polygonum tenue</i>	Slender Knotweed	G5	S2				ESSE LAMB midd NIAG? NORF	Dry, sandy open prairie, savanna, and woodland. See Argus <i>et al.</i> (1982-1987), Sutherland (1987).	POLYGONACEAE
<i>Polypodium appalachianum</i>	Appalachian Polypody	G4G5	S1				LEED NIPI OTTA	Known from a few sites Algonquin Park and eastern Ontario. Similar to the much more common <i>P. virginianum</i> with which it hybridizes in Ontario and elsewhere to form <i>P. x incognitum</i> (Cusick 2002). See Keller (2003), Kott & Britton (1982) and Haufler & Windham (1991).	POLYPODIACEAE
<i>Polypodium sibiricum</i>	Siberian Polypody	G5?	S1				KENO thun	Known from the Sutton Ridges in the Hudson Bay Lowland and from Kakabeka Falls, west of Thunder Bay (Don Britton, pers. comm.). Similar to <i>P. virginianum</i> and to be looked for elsewhere in northwestern Ontario. See Haufler & Windham (1991), Haufler & Zhongren (1991).	POLYPODIACEAE
<i>Polystichum braunii</i>	Braun's Holly Fern	G5	S3				ALGO durh MANI NIPI PETE THUN WATE	Primarily in deciduous or mixed rocky woods near Lake Superior, but also at a few isolated southern Ontario sites. See Argus <i>et al.</i> (1982-1987), Brzeskiewicz & Fields (2003), Kott (1980), Taylor (1934).	DRYOPTERIDACEAE
<i>Populus deltoides</i> ssp. <i>monilifera</i>	Plains Cottonwood	G5T5	S2?				KENO RAIN	Local in open woods and on sandy shores in the Lake of the Woods and Rainy Lake areas of northwestern Ontario. Ssp. <i>deltoides</i> (T5) is common in southern Ontario. See Smith (2008).	SALICACEAE
<i>Populus heterophylla</i>	Swamp Cottonwood	G5	S1				LAMB	First discovered in Canada by Gerry Waldron, John Ambrose and Lindsay Rodger in a wooded swamp at Bickford Oak Woods in 2002. See McMaster (2003), Pearsall (1990), Searcy & Ascher (2001), Wagner <i>et al.</i> (1980), Waldron <i>et al.</i> (2003); APPENDIX 1.	SALICACEAE

TABLE 1 -- RARE VASCULAR PLANTS OF ONTARIO, FOURTH EDITION (MARCH 2009)

SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Porteranthus trifolius</i>	Bowman's-root	G4G5	SX			<i>Gillenia trifoliata</i>	bran elgi fron halt hami lamb york	Open sandy woods and edges. See Argus <i>et al.</i> (1982-1987), Soper (1962).	ROSACEAE
<i>Potamogeton bicupulatus</i>	Snailseed Pondweed	G4	S3				HALI MUSK NIPI PARR SIMC	Acid waters of ponds, lakes, and streams, primarily in the southeastern Georgian Bay area. See Argus <i>et al.</i> (1982-1987), Reznicek (1994), Reznicek & Bobbette (1976).	POTAMOGETONACEAE
<i>Potamogeton confervoides</i>	Alga Pondweed	G4	S2				algo HALI MANI MUSK PARR TEMI THUN	An inconspicuous Atlantic Coastal Plain pondweed with submersed filiform leaves which grows in acidic, oligotrophic ponds, bogs, lakes, and slow-moving streams. See Argus <i>et al.</i> (1982-1987), Hodgdon <i>et al.</i> (1952), Schultz (2003d), Voss (1965).	POTAMOGETONACEAE
<i>Potamogeton hillii</i>	Hill's Pondweed	G3	S2	SC	SC		BRUC elgi GREY MANI PEEL WELL	Alkaline waters of ditches, beaver ponds, and slow-moving cold waters. See Argus <i>et al.</i> (1982-1987), COSEWIC (2005b), Hellquist (1977, 1984), Voss (1965).	POTAMOGETONACEAE
<i>Potamogeton ogdenii</i>	Ogden's Pondweed	G1G2	SH	END	END		hast lana leed	Only three Ontario records are known and the species has not been relocated at historic sites, despite searches. See COSEWIC (2007b), Hellquist & Hilton (1983), Hellquist & Mertinooke-Jongkind (2003).	POTAMOGETONACEAE
<i>Potamogeton pulcher</i>	Spotted Pondweed	G5	SH				chat	The only Ontario record is a 1948 collection by R.W. Neal from Rondeau. See Argus <i>et al.</i> (1982-1987), Scribailo & Alix (2002b), Williams (1997).	POTAMOGETONACEAE
<i>Potamogeton subsibiricus</i>	Yenissei River Pondweed	G3G4	SH				keno	Known in Ontario only from a 1953 collection by Arthème Dutilly from Cape Henrietta Maria. See Argus <i>et al.</i> (1982-1987)	POTAMOGETONACEAE
<i>Potentilla bimundorum</i>	Staghorn Cinquefoil	G5	SH			<i>Potentilla multifida</i> (of Ontario reports)	keno nipi thun	Sandy or rocky roadsides, beaches, and shorelines. See Argus <i>et al.</i> (1982-1987), Given & Soper (1981), Riley (2003).	ROSACEAE
<i>Potentilla canadensis</i>	Canada Cinquefoil	G5	S2?				CHAT durh FRON LAMB HAMI HURO LEED LENN MANI MUSK NORT oxfo parr pres toro	Similar to the common and widespread <i>P. simplex</i> and probably overlooked and frequently misidentified (some county records doubtful). See Fernald (1931).	ROSACEAE
<i>Potentilla crantzii</i>	Spring Cinquefoil	G3G5	S1				KENO	First collected in Ontario in 2001 by Michael Oldham and Donald Sutherland from two gravel beach ridges near Cape Henrietta Maria. See Oldham & Sutherland (2003).	ROSACEAE



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<i>Potentilla hippiana</i>	Horse Cinquefoil	G5	S1				THUN (renf)	Lakeshore meadows, rocky beaches, and old fields. Some or all Ontario records may be based on introductions from further west. See Argus <i>et al.</i> (1982-1987), Brayshaw (1964), Cayouette (1966), Marquis & Voss (1981).	ROSACEAE
<i>Potentilla nivea</i>	Snowy Cinquefoil	G5	S2			<i>Potentilla prostrata</i> ssp. <i>floccosa</i>	KENO RAIN	Cliffs, tundra, gravel beach ridges, and rocky shores, primarily near Hudson and James Bays. A site on a lakeshore cliff in Quetico Provincial Park (Walshe 1980) is disjunct by hundreds of kilometers from the main range. Sojak (1989) calls the Quetico plants <i>P. nivalis</i> var. <i>nipharga</i> and the Hudson Bay area plants <i>P. prostrata</i> ssp. <i>floccosa</i> ; other authors include both of these within <i>P. nivea</i> . See Argus <i>et al.</i> (1982-1987), Riley (2003).	ROSACEAE
<i>Potentilla pensylvanica</i>	Pennsylvania Cinquefoil	G5	S3				KENO RAIN	Dry rocky slopes and open Bur Oak savannas. Excluding <i>P. litoralis</i> (= <i>P. pensylvanica</i> var. <i>litoralis</i> ). See Kohli & Packer (1976); APPENDIX 1.	ROSACEAE
<i>Potentilla pulchella</i>	Pretty Cinquefoil	G4G5	S2				KENO	Sand and gravel beach ridges near Hudson Bay. See Argus <i>et al.</i> (1982-1987), Riley (2003); APPENDIX 1.	ROSACEAE
<i>Potentilla pulcherrima</i>	Soft Cinquefoil	G5	S2			<i>Potentilla gracilis</i> var. <i>pulcherrima</i>	ALGO keno THUN (otta) (renf)	Stony lakeshores, meadows, and old fields. Some or all Ontario records may be based on introductions from further west. See Argus <i>et al.</i> (1982-1987), Brayshaw (1964).	ROSACEAE
<i>Potentilla rivalis</i>	Brook Cinquefoil	G5	SH			<i>Potentilla millegrana</i>	keno renf (algo)	Collected at three widely separated Ontario locations, with little habitat information: Ignace (no habitat data on specimen), Sault Ste. Marie (railway embankment), and Chalk River ("in the forest"; Brayshaw 1964). Some or all of these populations may have been introduced from further west. See Argus <i>et al.</i> (1982-1987).	ROSACEAE
<i>Primula incana</i>	Mealy Primrose	G4G5	S1				RAIN	Discovered in 1998 in a roadside ditch in northwestern Ontario with other western prairie species (Oldham 1999a), where it might be non-native. Earlier Ontario reports from along Hudson and James Bays are probably based on misidentified <i>P. laurentiana</i> .	PRIMULACEAE

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SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Prosartes trachycarpa</i>	Rough-fruited Fairybells	G5	SH			<i>Disporum trachycarpum</i>	coch keno	Rich floodplain woods and thickets. Included in Liliaceae or Calochortaceae by some authors. See Argus <i>et al.</i> (1982-1987), Judziewicz <i>et al.</i> (1997).	CONVALLARIACEAE
<i>Prunus pumila</i> var. <i>besseyi</i>	Bessey's Sand Cherry	G5T3T5	S1			<i>Prunus besseyi</i>	KENO mani RAIN york	A western taxon found at scattered sandy sites on or near the Great Lakes and on Lake of the Woods and Rainy Lake in northwestern Ontario. See Catling <i>et al.</i> (1999), Rohrer (2000).	ROSACEAE
<i>Prunus pumila</i> var. <i>pumila</i>	Sand Cherry	G5T4	S3				BRUC chat ELGI esse HURO LAMB MANI NORF NORT niag OTTA PRIN SIMC	Sandy Great Lakes shores and dunes. Has declined along the Canadian shores of the lower Great Lakes in part due to heavy browsing by White-tailed Deer (Catling & Larson 1997). See Catling <i>et al.</i> (1999), Fernald (1923a), Rohrer (2000).	ROSACEAE
<i>Ptelea trifoliata</i>	Common Hoptree	G5	S3	THR	THR		BRAN CHAT ELGI ESSE HALD NIAG (hami) (york)	Sand dunes and sandy shores along Lake Erie; rare inland. Also alvars, roadsides and open woods on the Erie Islands. See Ambrose <i>et al.</i> (1985), Argus <i>et al.</i> (1982-1987), Bailey <i>et al.</i> (1970), COSEWIC (2002b), Fox & Soper (1952), McLeod & Murphy (1977a, 1977b, 1983); APPENDIX 1.	RUTACEAE
<i>Pterospora andromedea</i>	Woodland Pinedrops	G5	S2				algo bruc hast hami huro kawa lamb LANA leed MANI midd norf nort? OTTA RENF SIMC york	Mixed woods. No recent records from southwestern Ontario; very local. Placed in the Monotropaceae or Pyrolaceae by some authors. See Anonymous (2004b), Argus <i>et al.</i> (1982-1987), Bakshi (1959), Gillett (1972), Marquis & Voss (1981), Schori (2002).	ERICACEAE
<i>Puccinellia pumila</i>	Dwarf Alkali Grass	G2G4Q	S2			<i>Puccinellia ambigua</i>	COCH KENO	Generally grows in sand and among stones in protected intertidal areas (FNA 2007).	POACEAE
<i>Puccinellia tenella</i>	Tundra Alkali Grass	G4?	SH			<i>Puccinellia langeana</i>	keno	A halophyte of the Hudson and James Bay coasts. See Consaul <i>et al.</i> (2008), Riley & McKay (1980). Ontario plants are ssp. <i>langeana</i> (T4?).	POACEAE
<i>Puccinellia vaginata</i>	Tussock Alkali Grass	G4	SH			<i>Puccinellia angustata</i> var. <i>vaginata</i>	keno	Known from a single Hudson Bay coast record (J.L. Riley, pers. comm.).	POACEAE
<i>Pycnanthemum incanum</i>	Hoary Mountain-mint	G5	S1	END	END		HALT HAMI	Dry oak woods and openings. See Argus <i>et al.</i> (1982-1987), COSEWIC (2000e), Crins (1989b), Grant & Epling (1943), Thompson & Rothfels (2006). Ontario plants are var. <i>incanum</i> (T5).	LAMIACEAE

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<i>Pycnanthemum tenuifolium</i>	Slender Mountain-mint	G5	S3			<i>Pycnanthemum flexuosum</i> (of Ontario reports)	BRUC CHAT durh ELGI ESSE grey LAMB leed MIDD NORF PRES OTTA YORK	Dry fields and thickets. Some Ontario populations are probably adventive. See Grant & Epling (1943).	LAMIACEAE
<i>Pycnanthemum verticillatum</i> var. <i>pilosum</i>	Hairy Mountain-mint	G5T5	S1			<i>Pycnanthemum pilosum</i>	CHAT ESSE HALD	Open sandy woods and woodland edges. See Argus <i>et al.</i> (1982-1987), Grant & Epling (1943).	LAMIACEAE
<i>Pycnanthemum verticillatum</i> var. <i>verticillatum</i>	Whorled Mountain-mint	G5T5?	S1?				elgi FRON NORF	A poorly known taxon in the province. See Grant & Epling (1943).	LAMIACEAE
<i>Quercus ellipsoidalis</i>	Northern Pin Oak	G5	S3				BRAN ELGI HALD HAMI KENO NIAG? NORF OXFO RAIN WATE	Dry, sandy or rocky woods, roadsides, fencerows. Occurrences in ELGI and OXFO are not yet confirmed by specimens. See Argus <i>et al.</i> (1982-1987), Ball (1981), Jensen <i>et al.</i> (1984, 1993), Maycock <i>et al.</i> (1980), Overlease (1977), Sutherland (1987), Wadmond (1933).	FAGACEAE
<i>Quercus ilicifolia</i>	Bear Oak	G5	S1				LENN	A recent addition to the Canadian flora from open granitic rock barrens in LENN, where first found in 1994 by Sean Blaney, Vivian Brownell, and Paul Catling (Brownell <i>et al.</i> 1996). See Barden (2000); APPENDIX 1.	FAGACEAE
<i>Quercus prinoides</i>	Dwarf Chinquapin Oak	G5	S2				BRAN LAMB NORF WATE	Dry, open sandy woods and open areas. This is <i>Q. prinoides</i> in the strict sense, not <i>Q. muehlenbergii</i> , which is sometimes considered a variety (var. <i>acuminata</i> ) of <i>Q. prinoides</i> . See Argus <i>et al.</i> (1982-1987), Sutherland (1987).	FAGACEAE
<i>Quercus shumardii</i>	Shumard Oak	G5	S3	SC	SC		CHAT ELGI ESSE LAMB NIAG	Easily confused with similar oaks and not detected in Ontario until 1978 by Gerry Waldron near Amherstburg. See Argus <i>et al.</i> (1982-1987), COSEWIC (1999), Hess (1990), Meyers (1983, 1984), Morsink & Pratt (1984), Waldron (1983), Waldron <i>et al.</i> (1989); APPENDIX 1.	FAGACEAE
<i>Ranunculus hispidus</i> var. <i>hispidus</i>	Bristly Buttercup	G5T5	S3				BRAN CHAT esse HALD HALT HAMI MIDD NIAG NORT PEEL SIMC WATE YORK	Dry, open deciduous woods. <i>Ranunculus hispidus</i> var. <i>caricetorum</i> (= <i>R. septentrionalis</i> ), Swamp Buttercup, is not provincially rare. See Haines (2007); APPENDIX 1.	RANUNCULACEAE
<i>Ranunculus hyperboreus</i>	Far-northern Buttercup	G5	S2				KENO	Tundra pools. See Argus <i>et al.</i> (1982-1987), Riley (2003).	RANUNCULACEAE

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<i>Ranunculus pallasii</i>	Pallas' Buttercup	G5	S2				COCH KENO	Moist open fens and marshes near the Hudson and James Bay coasts. See Argus <i>et al.</i> (1982-1987), Riley (2003), Riley & McKay (1980).	RANUNCULACEAE
<i>Ranunculus pedatifidus</i>	Northern Buttercup	G5	S2?				KENO	Moist tundra and gravel or rocky beach ridges near Hudson Bay. See Argus <i>et al.</i> (1982-1987). Ontario plants are ssp. <i>affinis</i> (T5).	RANUNCULACEAE
<i>Ratibida pinnata</i>	Gray-headed Prairie Coneflower	G5	S3				CHAT ELGI ESSE LAMB MIDD	Praires and dry sandy open ground. See Argus <i>et al.</i> (1982-1987), Richards (1968); APPENDIX 1.	ASTERACEAE
<i>Rhinanthus minor</i> ssp. <i>groenlandicus</i>	Greenland Yellow Rattle	G5T5?	S3?			<i>Rhinanthus minor</i> ssp. <i>borealis</i>	KENO	Salt marshes and moist open areas near the Hudson and James Bay coasts. Included in Scrophulariaceae by some authors. Ssp. <i>minor</i> (T5) is weedy in a variety of open habitats. See Riley (2003).	OROBANCHACEAE
<i>Rhododendron canadense</i>	Rhodora	G5	S1				PRES STOR	Bogs in far southeastern Ontario. See Argus <i>et al.</i> (1982-1987), Soper & Heimbürger (1982).	ERICACEAE
<i>Rorippa aquatica</i>	Lakecress	G4?	S3?			<i>Armoracia aquatica</i> , <i>A. lacustris</i> , <i>Neobeckia aquatica</i>	BRUC fron GREY hald hast LANA leed lenn MANI midd musk nipi otta PEEL pete pres RENFsimc stor sudb york	A widespread aquatic thought to be declining throughout much of its range (see Les <i>et al.</i> 1995); current status in Ontario poorly known. See Al-Shehbaz & Bates (1987), Gabel & Les (2001), Judziewicz & Nekola (1997), Les (1994), McCormac (1992).	BRASSICACEAE
<i>Rosa setigera</i>	Climbing Prairie Rose	G5	S3	SC	SC		CHAT ESSE LAMB MIDD prin	Open woods, roadsides, thickets, alvars, prairies. See Argus <i>et al.</i> (1982-1987), COSEWIC (2003f), Kemp <i>et al.</i> (1993).	ROSACEAE
<i>Rotala ramosior</i>	Toothcup	G5	S1	END	END		LENN norf	First found in Ontario in 1984 by Donald Sutherland, Gary Allen, and Michael Oldham in a moist sandy field near Turkey Point; a population which has subsequently been destroyed. Recently discovered in southeastern Ontario (Brownell <i>et al.</i> 1996). See Argus <i>et al.</i> (1982-1987), Baskin <i>et al.</i> (2002), Sutherland (1987).	LYTHRACEAE
<i>Rudbeckia fulgida</i>	Orange Coneflower	G5	S1				ESSE (BRUC)	Collected recently in natural habitat at Stone Road Alvar on Pelee Island by John Ambrose, a location with many rare southern species. Probably introduced at a BRUC site where found by Joe Johnson. See Anonymous (2003e). Ontario plants are var. <i>speciosa</i> (T4?).	ASTERACEAE

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<i>Rumex altissimus</i>	Pale Dock	G5	S2?				CHAT ELGI esse lamb MIDD PRES simc toro	Variable habitats including prairie, ditches, swamps, and shorelines. See Sarkar (1958).	POLYGONACEAE
<i>Rumex subarcticus</i>	Subarctic Dock	GNR	S1			<i>Rumex pallidus</i> ssp. <i>subarcticus</i> , <i>R.</i> <i>salicifolius</i> var. <i>subarcticus</i>	COCH	Endemic to the Hudson and James Bay region. Originally described by Lepage (1955) based on material from southern James Bay in Ontario and Quebec. See Blondeau (2008), Dutilly & Lepage (1963).	POLYGONACEAE
<i>Ruppia maritima</i>	Sea Ditchgrass	G5	S2				COCH	Saline marshes and pools on the James Bay coast. Included in Potamogetonaceae by some authors. See Argus <i>et al.</i> (1982-1987), Richardson (1980), Riley (2003), Riley & McKay (1980), Voss (1965).	RUPPIACEAE
<i>Sabatia angularis</i>	Square-stemmed Rose Pink	G5	SX				hami	The only Ontario specimen was collected in 1865 from Hamilton. See Argus <i>et al.</i> (1982-1987), Gillett (1963); APPENDIX 1.	GENTIANACEAE
<i>Sagittaria cristata</i>	Crested Arrowhead	G4?	S3			<i>Sagittaria graminea</i> var. <i>cristata</i>	BRUC chat? HALD kawa lamb MANI MUSK NORF RAIN RENF SIMC thun YORK	Shallow water and rocky or sandy shorelines. Similar to <i>S. graminea</i> . See Argus <i>et al.</i> (1982-1987); APPENDIX 1.	ALISMATACEAE
<i>Salix arbusculoides</i>	Little-tree Willow	G5	S1				KENO	First collected in Ontario by John Riley in 1978 from calcareous clays and silts along the lower Black Duck River (Riley & Walshe 1985). See Argus <i>et al.</i> (1982-1987), Riley (2003), Soper & Heimbürger (1982).	SALICACEAE
<i>Salix arctica</i>	Arctic Willow	GNR	S3				KENO	Beach ridges near Hudson Bay. Hybrids with <i>S. arctophila</i> have been collected in Ontario (George W. Argus, pers. comm.). See Argus <i>et al.</i> (1982-1987), Soper & Heimbürger (1982).	SALICACEAE
<i>Salix ballii</i>	Ball's Willow	G5?	SH			<i>Salix myrtillofolia</i> var. <i>brachypoda</i>	keno thun	Known only from near the Hudson Bay coast, where it reaches its western range limits. See Dorn (1975).	SALICACEAE
<i>Salix maccalliana</i>	Mccalla's Willow	G5?	S3				COCH KENO RAIN	Bogs and moist forest. Widespread in northern Ontario. Status in the province poorly known; perhaps more overlooked than rare. See Soper & Heimbürger (1982).	SALICACEAE
<i>Salix myricoides</i>	Blue-leaved Willow	G4	S3			<i>Salix glaucophylloides</i>	coch BRUC ESSE hami keno LAMB MANI NORF PRIN SIMC THUN toro	Varieties <i>albovestita</i> (T4) and <i>myricoides</i> (T4), recognized by some authors (e.g. Dorn 1975, 1995) but not others (e.g. Argus 2007), occur in Ontario. See Haines (2004a), Soper & Heimbürger (1982).	SALICACEAE

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<i>Salix pseudomonticola</i>	False Mountain Willow	G4G5	S3				COCH KENO thun	Widespread in northern Ontario from Lake Superior to James Bay. Status in Ontario poorly known; perhaps more overlooked than rare. See Blondeau (2005), Dorn (1975), Soper & Heimbürger (1982).	SALICACEAE
<i>Sanicula canadensis</i> var. <i>grandis</i>	Long-styled Canadian Sanicle	G5T3T5	S2				BRAN chat elgi HAMI midd wate	Rich, deciduous woods. With longer styles than the more common var. <i>canadensis</i> (T5). See Argus <i>et al.</i> (1982-1987), Fernald (1940), Pryer & Phillippe (1988).	APIACEAE
<i>Saururus cernuus</i>	Lizard's-tail	G5	S3				CHAT ELGI ESSE from HALT HAMI HURO LAMB MIDD musk NIAG OTTA OXFO PERT pres stor SIMC WATE	Edges of streams and rivers; low wet woods. See Batcher (2003), McIntosh & Catling (1979), Soper (1956); APPENDIX 1.	SAURURACEAE
<i>Saxifraga cernua</i>	Nodding Saxifrage	G4	SH				keno	Collected once in Ontario by D.R. Moir in 1953 near the mouth of the Black Duck River in "flooded sedge meadow between treeless beach ridges". See Argus <i>et al.</i> (1982-1987).	SAXIFRAGACEAE
<i>Saxifraga cespitosa</i>	Tufted Saxifrage	G5	S2				KENO	Moist or dry areas of gravel beach ridges, tundra, and rocky shores near Hudson Bay. See Argus <i>et al.</i> (1982-1987); APPENDIX 1.	SAXIFRAGACEAE
<i>Saxifraga oppositifolia</i>	Purple Mountain Saxifrage	G4G5	S1				KENO THUN	Discovered in 2001 on a cliff on the north shore of Lake Superior by Linda Melynk-Ferguson, the first Great Lakes Basin record. Also known from the Cape Henrietta Maria area near Hudson Bay. See Argus <i>et al.</i> (1982-1987), Gugerli (1998), Stenstrom <i>et al.</i> (1997), von Flue <i>et al.</i> (1999); APPENDIX 1. Ontario plants are ssp. <i>oppositifolia</i> (T4T5).	SAXIFRAGACEAE
<i>Schizachyrium littorale</i>	Shore Bluestem	G5	S2?			<i>Andropogon scoparius</i> var. <i>littoralis</i> , <i>Schizachyrium scoparium</i> var. <i>littorale</i>	CHAT ESSE LAMB NIAG NORF SIMC	Sand dunes and sandy shores of the lower Great Lakes. Similar to <i>S. scoparium</i> and often considered a variety of it. See Dore & McNeill (1980), Fernald & Griscom (1935).	POACEAE
<i>Schoenoplectus heterochaetus</i>	Slender Bulrush	G5	S3			<i>Scirpus heterochaetus</i>	coch KENO MUSK nipi otta RAIN stor SIMC THUN	Scattered in marshes and shores over a wide area of Ontario, but locally common only in parts of northwestern Ontario. Similar to <i>S. acutus</i> and <i>S. tabernaemontani</i> . See Argus <i>et al.</i> (1982-1987).	CYPERACEAE

TABLE 1 -- RARE VASCULAR PLANTS OF ONTARIO, FOURTH EDITION (MARCH 2009)

SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Schoenoplectus purshianus</i>	Weak-stalked Bulrush	G4G5	S1?			<i>Scirpus purshianus</i>	MUSK RENF	Moist shorelines. Status uncertain due to confusion with <i>S. smithii</i> . See Baskin <i>et al.</i> (2000), Blondeau <i>et al.</i> (1996), Schuyler (1972), Smith & Hayasaka (2002), Strong (1994). Ontario plants are var. <i>purshianus</i> (TNR).	CYPERACEAE
<i>Schoenoplectus smithii</i>	Smith's Bulrush	G5?	S3			<i>Scirpus smithii</i>	CHAT fron grey halt LAMB MIDD MUSK niag NORF NORT pete stor simc sudb wate well york	Moist sandy or muddy shorelines. See Argus <i>et al.</i> (1982-1987), Schuyler (1972), Smith & Hayasaka (2002), Strong (1994); APPENDIX 1. Both var. <i>smithii</i> (TNR) and var. <i>setosus</i> (TNR) occur in Ontario.	CYPERACEAE
<i>Scirpus expansus</i>	Woodland Bulrush	G4	S1				LAMB RENF	Streambanks, seepages, and marshes. First collected in Ontario in 1990 by Michael Oldham and Dorothy Tiedje along the Ausable River. See Strong (1994).	CYPERACEAE
<i>Scirpus georgianus</i>	Georgia Bulrush	G5	S1?			<i>Scirpus atrovirens</i> var. <i>georgianus</i>	HALI	Similar to <i>S. atrovirens</i> . See Haines (2002a).	CYPERACEAE
<i>Scleria pauciflora</i>	Few-flowered Nutrush	G5	S1				ESSE	First found in Ontario in 1988 by Michael Oldham at a sandy prairie remnant in LaSalle. See Fairy (1969), Zaremba (2004b). Ontario plants are var. <i>pauciflora</i> (T5?).	CYPERACEAE
<i>Scleria triglomerata</i>	Tall Nutrush	G5	S1				ESSE LAMB midd york	Sandy prairies and thickets. Has disappeared from several sites. See Argus <i>et al.</i> (1982-1987), Clark (2004), Coffin & Pfannmuller (1988), Soper (1962).	CYPERACEAE
<i>Scleria verticillata</i>	Low Nutrush	G5	S3				BRAN BRUC ELGI hast LAMB NORF NORT PRIN SIMC toro wate	Wet meadows and fens usually on or near the Great Lakes shoreline. See Argus <i>et al.</i> (1982-1987), Coffin & Pfannmuller (1988), Smith (1983), Soper (1962).	CYPERACEAE
<i>Scutellaria nervosa</i>	Veined Skullcap	G5	S1				ESSE	Floodplain deciduous woods. See Argus <i>et al.</i> (1982-1987), Fritsch (1992). Ontario plants are recognized by some as var. <i>calvifolia</i> (TNR).	LAMIACEAE
<i>Scutellaria parvula</i> var. <i>missouriensis</i>	Leonard's Small Skullcap	G4T4	S3			<i>Scutellaria leonardii</i> , <i>S. parvula</i> var. <i>leonardii</i>	KENO MIDD RAIN	Open rocky ground. Recently discovered in northwestern Ontario. <i>Scutellaria parvula</i> var. <i>parvula</i> is more common in Ontario.	LAMIACEAE
<i>Senecio eremophilus</i>	Desert Ragwort	G5	S2				KENO THUN	Open rocky cliffs, talus slopes, and lakeshores. Ontario plants are var. <i>eremophilus</i> (T5).	ASTERACEAE
<i>Senna hebecarpa</i>	Wild Senna	G5	S1			<i>Cassia hebecarpa</i>	CHAT ESSE	Along roadsides, railways, river flats, and old fields. See Argus <i>et al.</i> (1982-1987), Clark (2001), Soper (1956).	FABACEAE

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SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Sida hermaphrodita</i>	Virginia Mallow	G3	S1				HALD NIAG	Moist open sites, often on floodplains; sometimes in disturbed sites. Currently being assessed by COSEWIC. See Kujawski <i>et al.</i> (1997), Spooner <i>et al.</i> (1985), Sutherland (1987), Thomas (1979).	MALVACEAE
<i>Silene acaulis</i>	Moss Campion	G5	S1				THUN	Discovered in 2000 on open rocky shoreline of an island off the Black Bay Peninsula by Michael Oldham, the first record for the Great Lakes Basin. No specimens are known to substantiate reports from the Hudson Bay Lowland and the species was excluded from its flora by Riley (2003). See Alatalo & Molau (2001).	CARYOPHYLLACEAE
<i>Silene drummondii</i>	Drummond's Campion	G5	S1				KENO	Known in the province only from an open rocky slope with other western species east of Ingolf where found in 2007 by Michael Oldham. Ontario plants are ssp. <i>drummondii</i> (T5).	CARYOPHYLLACEAE
<i>Silene involucrata</i>	Arctic Catchfly	G5	S1S2			<i>Silene tayloriae</i>	KENO	Gravelly tundra near Hudson Bay. See Argus <i>et al.</i> (1982-1987), Riley (2003). Ontario plants are mostly ssp. <i>tenella</i> (T4?), though FNA (2005) also maps ssp. <i>involucrata</i> (T5) from northern Ontario.	CARYOPHYLLACEAE
<i>Silene uralensis</i>	Apetalous Catchfly	G4	SH				keno	Damp, gravelly tundra near Hudson Bay. See Argus <i>et al.</i> (1982-1987). FNA (2005) maps both ssp. <i>uralensis</i> (T4?) and ssp. <i>ogilviensis</i> (T2) from northern Ontario.	CARYOPHYLLACEAE
<i>Silphium laciniatum</i>	Compass Plant	G5	S1				ELGI (ESSE) (NIAG)	The ELGI population grows in a prairie remnant along a railway and may be adventive. Other Ontario populations are in highly disturbed situations along railways and are certainly non-native.	ASTERACEAE
<i>Silphium perfoliatum</i>	Cup Plant	G5	S2				CHAT ELGI MIDD (BRAN) (HAMI) (MUSK) (NORT) (OTTA) (PETE) (SIMC) (TORO)	Appears to be native in floodplain woods along the Thames River; populations elsewhere in the province may be garden escapes. See Argus <i>et al.</i> (1982-1987), Perry (1937), Soper (1962). Ontario plants are var. <i>perfoliatum</i> (T5?).	ASTERACEAE
<i>Silphium terebinthinaceum</i>	Prairie Rosinweed	G4G5	S1				bran ESSE LAMB (bran) (hald)	Prairies and thickets. See Argus <i>et al.</i> (1982-1987), Perry (1937), Soper (1962). Ontario plants are var. <i>terebinthaceum</i> (T4T5).	ASTERACEAE
<i>Sisyrinchium albidum</i>	White Blue-eyed-grass	G5?	S1				ESSE LAMB	Prairies and open sandy woods. See Argus <i>et al.</i> (1982-1987), Marchand & Gear (1975).	IRIDACEAE



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SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Smilax ecirrhata</i>	Upright Carrion Flower	G5?	S3?			<i>Smilax herbacea</i> var. <i>ecirrhata</i>	CHAT ESSE LAMB MIDD	Distribution and status in Ontario poorly known. Frequent confusion with the more common <i>S. lasioneura</i> .	SMILACACEAE
<i>Smilax illinoensis</i>	Illinois Carrion Flower	G4?	S2?				BRAN ESSE LAMB NORF?	Taxonomic status uncertain, perhaps a hybrid between <i>S. ecirrhata</i> and <i>S. lasioneura</i> . See Mangaly (1968).	SMILACACEAE
<i>Smilax rotundifolia</i>	Round-leaved Greenbrier	G5	S2	THR	THR		ESSE NIAG NORF	Woods, woodland edges, thickets. See Argus <i>et al.</i> (1982-1987), COSEWIC (2007c), Kevan <i>et al.</i> (1991), Soper & Heimbürger (1982).	SMILACACEAE
<i>Solidago altissima</i> ssp. <i>gilvocanescens</i>	Great Plains Late Goldenrod	G5T5	S1			<i>Solidago altissima</i> var. <i>gilvocanescens</i> , <i>S. canadensis</i> ssp./var. <i>gilvocanescens</i> , <i>S. gilvocanescens</i> ,	RAIN	Semple <i>et al.</i> (1999) suggest that the primarily western ssp. <i>gilvocanescens</i> is not native to Ontario, though recent collections by Wasyl Bakowsky and Michael Oldham from a prairie remnant in RAIN suggest that at least some populations are native to the province. See Halverson <i>et al.</i> (2008).	ASTERACEAE
<i>Solidago houghtonii</i>	Houghton's Goldenrod	G3	S2	SC	THR	<i>Oligoneuron houghtonii</i>	BRUC MANI	Sand dunes and moist alvars near Lake Huron on the Bruce Peninsula and Manitoulin Island. A Great Lakes endemic, which may have arisen through hybridization between <i>S. ptarmicoides</i> and <i>S. ohioensis</i> or <i>S. riddellii</i> . See Argus <i>et al.</i> (1982-1987), COSEWIC (2005c), Guire & Voss (1963), Morton (1979), Semple <i>et al.</i> (1999).	ASTERACEAE
<i>Solidago missouriensis</i>	Missouri Goldenrod	G5	S2				KENO rain THUN	Prairies and open rocky areas in northwestern Ontario. Some populations along railway lines may be introduced. Ontario plants are recognized as var. <i>fasciculata</i> (T5) by Semple <i>et al.</i> (1999), though no infraspecific taxa are recognized by FNA (2006b). See Argus <i>et al.</i> (1982-1987), Semple <i>et al.</i> (1999).	ASTERACEAE
<i>Solidago nemoralis</i> ssp. <i>decemflora</i>	Gray-stemmed Goldenrod	G5T5	S1S2			<i>Solidago nemoralis</i> var. <i>decemflora</i> , <i>S. nemoralis</i> ssp./var. <i>longipetiolata</i>	KENO	Probably native at some sites in northwestern Ontario (Argus <i>et al.</i> 1982-1987). First collected in Ontario in 1985 in Woodland Caribou Provincial Park by Daniel Brunton. See Brammall & Semple (1990), Semple <i>et al.</i> (1990, 1999).	ASTERACEAE
<i>Solidago puberula</i>	Downy Goldenrod	G5	S2				LEED otta	Acidic sandy soils in eastern Ontario. See Argus <i>et al.</i> (1982-1987), Semple <i>et al.</i> (1999). Ontario plants are ssp. <i>puberula</i> (T4T5).	ASTERACEAE
<i>Solidago riddellii</i>	Riddell's Goldenrod	G5	S3	SC	SC	<i>Oligoneuron riddellii</i>	chat ELGI ESSE LAMB MIDD	Moist prairies and seepy banks. See Argus <i>et al.</i> (1982-1987), Semple <i>et al.</i> (1999).	ASTERACEAE

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<i>Solidago rigida</i> <i>ssp. rigida</i>	Stiff Goldenrod	G5T5	S3			<i>Oligoneuron rigidum</i> var. <i>rigidum</i>	BRAN CHAT elgi ESSE halt HAMI LAMB MIDD PERT thun	Dry, open ground, particularly in prairie remnants. Occasionally along roadsides and railways. Ssp. <i>humilis</i> (T5), occurring in northwestern Ontario and along a railway in RENF, is probably adventive in the province. See Argus <i>et al.</i> (1982-1987), Brown (2002), Heard & Semple (1988), Semple <i>et al.</i> (1999).	ASTERACEAE
<i>Solidago simplex</i> var. <i>gillmanii</i>	Gillman's Goldenrod	G5T3?	S1			<i>Solidago gilmanii</i> , <i>S. glutinosa</i> ssp. <i>randii</i> var. <i>gillmanii</i>	MANI	A Great Lakes endemic restricted to Lake Michigan and Lake Huron dunes and sandy shores. See Ringius & Semple (1987), Semple <i>et al.</i> (1999).	ASTERACEAE
<i>Solidago simplex</i> var. <i>ontarioensis</i>	Ontario Goldenrod	G5T3?	S3?			<i>Solidago glutinosa</i> ssp. <i>randii</i> var. <i>ontarioensis</i>	ALGO BRUC MANI	Rocky shores of Lakes Huron and Superior. A Great Lakes endemic. See Ringius & Semple (1987), Semple <i>et al.</i> (1999).	ASTERACEAE
<i>Solidago speciosa</i>	Showy Goldenrod	G5	S1	END	END		KENO LAMB pert?	Restricted to prairies on Walpole Island First Nation in southern Ontario and recently found near Kenora in northwestern Ontario. Subspecific identity of the northwestern Ontario plants is uncertain; those from southwestern Ontario are var. <i>rigidiuscula</i> (T4). See Argus <i>et al.</i> (1982-1987), Semple <i>et al.</i> (1999).	ASTERACEAE
<i>Solidago ulmifolia</i>	Elm-leaved Goldenrod	G5	S1				ESSE MIDD	First collected in Ontario by W.G. Cosegrove in 1935 at Cairngorm, MIDD, and recently rediscovered in Ontario on Pelee Island (Oldham & Semple 1991). See Argus <i>et al.</i> (1982-1987), Semple <i>et al.</i> (1999). Ontario plants are var. <i>ulmifolia</i> (T5).	ASTERACEAE
<i>Sparganium androcladum</i>	Branching Burreed	G4G5	SH				bruc esse fron grey leed midd niag otta pres renf	Similar to <i>S. americanum</i> and perhaps overlooked. The widespread southern Ontario records are all at least 20 years old. Included in Sparganiaceae by some authors. See Argus <i>et al.</i> (1982-1987).	TYPHACEAE
<i>Sparganium glomeratum</i>	Clustered Burreed	G4?	SH				thun	No recent records known. Mapped from Thunder Bay area of northwestern Ontario by R.B. Kaul in FNA (2000), based on specimen examined and mapped by Hebert (1973) (R. Kaul pers. comm. 2000). Whereabouts of specimen not known. Probably present in Thunder Bay area of northwestern Ontario in shallow emergent wetlands and Black Ash or willow swamps. Included in Sparganiaceae by some authors. See Coffin & Pfanmuller (1988), Lakela (1941).	TYPHACEAE

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<i>Sparganium hyperboreum</i>	Northern Burreed	G5	S2?				KENO	Tundra pools. Included in Sparganiaceae by some authors. See Harms (1973).	TYPHACEAE
<i>Spergularia canadensis</i>	Canada Sandspurry	G5	S2				COCH KENO	A halophyte of coastal salt marshes on James Bay. See Argus <i>et al.</i> (1982-1987), Fernald & Wiegand (1910), Harms (1989), Riley (2003), Riley & McKay (1980). Ontario plants are var. <i>canadensis</i> (T5).	CARYOPHYLLACEAE
<i>Spergularia salina</i>	Saltmarsh Sandspurry	G4G5Q	SH			<i>Spergularia marina</i>	coch (ESSE) (MIDD) (OTTA) (YORK)	A presumably native halophyte in southern James Bay where last collected in 1953. Also an uncommon but increasing adventive halophyte along southern Ontario highways (Brunton 1990, Catling & McKay 1975, 1980, 1981, Darbyshire 1987). See Argus <i>et al.</i> (1982-1987), Fernald & Wiegand (1910), Harms (1989), Riley (2003), Riley & McKay (1980).	CARYOPHYLLACEAE
<i>Sphenopholis nitida</i>	Shiny Wedge Grass	G5	S1				HALT HAMI niag norf wate	Rich woods. See Argus <i>et al.</i> (1982-1987), Dore & McNeill (1980), Erdman (1965), Harper (2003).	POACEAE
<i>Sphenopholis obtusata</i>	Prairie Wedge Grass	G5	S1				chat ELGI ESSE HAST LAMB PRIN	Prairies, meadows, and alvars. Similar to the much more common <i>S. intermedia</i> and perhaps overlooked. See Argus <i>et al.</i> (1982-1987), Dore & McNeill (1980), Erdman (1965).	POACEAE
<i>Spiranthes lacera</i> var. <i>gracilis</i>	Southern Slender Ladies'-tresses	G5T4T5	S1			<i>Spiranthes gracilis</i>	CHAT ELGI LAMB niag york	Dry old fields and open oak woods. Var. <i>lacera</i> (T5) is much more common in the province. See Argus <i>et al.</i> (1982-1987), Fernald (1946), McIntosh & Catling (1979), Voss (1966).	ORCHIDACEAE
<i>Spiranthes magnicamporum</i>	Great Plains Ladies'-tresses	G4	S3?				BRAN BRUC CHAT ELGI ESSE LAMB MIDD NIAG NORF WELL	Meadows, roadsides, old fields, and prairies. See Argus <i>et al.</i> (1982-1987), Case (1983), Catling (1976a), Larson (1995), Reznicek & Catling (1989), Sheviak (1973, 1982), Whiting & Catling (1986).	ORCHIDACEAE
<i>Spiranthes ochroleuca</i>	Yellow Ladies'-tresses	G4	S2			<i>Spiranthes cernua</i> var. <i>ochroleuca</i>	CHAT ELGI fron huro LAMB MIDD NIAG NORF	Dry, open sites, usually on acidic sandy soil. See Argus <i>et al.</i> (1982-1987), Brown & Catling (1980), Case (1983), Sheviak (1973, 1982), Sheviak & Catling (1980), Sutherland (1987).	ORCHIDACEAE
<i>Spiranthes ovalis</i>	Oval Ladies'-tresses	G5?	S1				ESSE LAMB	First discovered in Ontario by Ross Brown, Gary Allen, and Larry Lamb on Walpole Island in 1985 (Brown 1986, Whiting & Catling 1986). See Argus <i>et al.</i> (1982-1987), Case & Catling (1983), Catling (1983a). Ontario plants are var. <i>erostellata</i> (T4?).	ORCHIDACEAE

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<i>Sporobolus heterolepis</i>	Prairie Dropseed	G5	S3				BRAN BRUC FRON HAST KAWA KENO LANA MANI MUSK nort OTTA RENF	Prairies, alvars, and rocky or sandy open areas. Recently discovered in northwestern Ontario. See Argus <i>et al.</i> (1982-1987), Dore & McNeill (1980), Engstrom (2004b), Oldham <i>et al.</i> (1995).	POACEAE
<i>Sporobolus vaginiflorus</i> var. <i>ozarkanus</i>	Ozark Sheathed Dropseed	G5T5?	S2?			<i>Sporobolus ozarkanus</i>	CHAT durh FRON HAST lenn NORT	The taxonomic status and distribution of this taxon in Ontario are poorly known. See Dore & McNeill (1980).	POACEAE
<i>Stellaria humifusa</i>	Saltmarsh Starwort	G5?	S2S3				COCH KENO	Salt marshes and coastal ponds on Hudson and James Bays. See Argus <i>et al.</i> (1982-1987).	CARYOPHYLLACEAE
<i>Strophostyles leiosperma</i>	Slick-seed Wild Bean	G5	S1				KENO	First found in Ontario on an open wooded slope of the Winnipeg River, north of Kenora, in 2005 by Wasyl Bakowsky and Michael Oldham.	FABACEAE
<i>Stylophorum diphyllum</i>	Wood-poppy	G5	S1	END	END		MIDD	Rich woods and wooded river banks. Similar to the introduced <i>Chelidonium majus</i> . See Argus <i>et al.</i> (1982-1987), Baskin & Baskin (1984), Bowles (2000, 2007), COSEWIC (2007d), Soper (1962).	PAPAVERACEAE
<i>Suaeda calceoliformis</i>	Horned Sea-blite	G5	S2			<i>Suaeda depressa</i> (of Ontario authors)	COCH (ELGI) (HALT) (HAMI) (MIDD) (NIAG) (NORT) (OXFO)	Native in salt marshes of James Bay (Riley & McKay 1980); a rare adventive halophyte along southern Ontario roadsides (Catling & McKay 1980). Included in Chenopodiaceae by some authors. See Argus <i>et al.</i> (1982-1987), Bassett & Crompton (1978), Riley (2003), Riley & McKay (1980).	AMARANTHACEAE
<i>Subularia aquatica</i>	Water Awlwort	G5	S3				ALGO coch HALI KENO MUSK NIPI RAIN THUN	Widespread in central and northern Ontario. A small and easily overlooked species of lake and river shorelines. See Bowles (1993), Coffin & Pfannmuller (1988), Mulligan & Calder (1964). Ontario plants are ssp. <i>americana</i> (T5).	BRASSICACEAE
<i>Symphotrichum dumosum</i>	Bushy Aster	G5	S2			<i>Aster dumosus</i>	CHAT ESSE LAMB NORF NORT PRIN simc	Prairies, wet meadows, primarily in the Carolinian Zone. Var. <i>strictior</i> (T4), recognized by Semple <i>et al.</i> (2002) is not recognized by FNA (2006b). See Argus <i>et al.</i> (1982-1987).	ASTERACEAE

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<i>Symphotrichum ericoides</i> var. <i>pansum</i>	Prairie White Heath Aster	G5T5	S2			<i>Aster ericoides</i> var. <i>pansus</i> , <i>Aster pansus</i>	KENO RAIN	Sometimes difficult to distinguish native from adventive populations, though populations in Bur Oak prairie remnants on Lake of the Woods are certainly native. Some populations along railways are probably non-native. See Argus <i>et al.</i> (1982-1987), Jones (1978), Semple <i>et al.</i> (2002).	ASTERACEAE
<i>Symphotrichum praealtum</i>	Willowleaf Aster	G5	S2	THR	THR	<i>Aster praealtum</i>	CHAT ESSE LAMB MIDD NIAG? pert	Prairie and savanna remnants, old fields. Easily confused <i>S. lanceolatum</i> (S5). Var. <i>praealtum</i> (T5?), recognized by Semple <i>et al.</i> (2002) is not recognized by FNA (2006b). See Argus <i>et al.</i> (1982-1987), Chmielewski & Semple (1984), COSEWIC (2003e); APPENDIX 1.	ASTERACEAE
<i>Symphotrichum prenanthoides</i>	Crooked-stem Aster	G4G5	S2	THR	THR	<i>Aster prenanthoides</i>	ELGI MIDD niag? NORF OXFO	Riverbanks, seepages. See Argus <i>et al.</i> (1982-1987), COSEWIC (2002c), Semple <i>et al.</i> (2002), Sutherland (1987).	ASTERACEAE
<i>Symphotrichum sericeum</i>	Western Silvery Aster	G5	S1	THR	END	<i>Aster sericeus</i> , <i>Lasallea sericea</i> , <i>Virgulus sericeus</i>	KENO RAIN	A distinctive species of Bur Oak prairie remnants and open rocky sites in northwestern Ontario. Despite recent surveys, not relocated at Ingolf or Rainy Lake, where historically collected. See Argus <i>et al.</i> (1982-1987), Semple & Brouillet (1980), Semple <i>et al.</i> (2002).	ASTERACEAE
<i>Tephrosia virginiana</i>	Virginia Goat's-rue	G5	S1	END	END		NORF	Dry, open, sandy woods on the Norfolk Sand Plain. See Argus <i>et al.</i> (1982-1987), Soper (1962), Sutherland (1987); APPENDIX 1.	FABACEAE
<i>Thalictrum revolutum</i>	Skunk Meadow-rue	G5	S2				chat ESSE HALD LAMB niag NORF	Similar to other Ontario <i>Thalictrum</i> and possibly overlooked. See Argus <i>et al.</i> (1982-1987).	RANUNCULACEAE
<i>Thalictrum sparsiflorum</i>	Few-flowered Meadow-rue	G5	SH				coch	Known in Ontario only from Fort Albany near James Bay where first collected by Ernest Lepage in 1953. See Argus <i>et al.</i> (1982-1987).	RANUNCULACEAE
<i>Thalictrum thalictroides</i>	Rue-anemone	G5	S3			<i>Anemonella thalictroides</i>	BRAN chat ESSE HALT HAMI HAST LEED midd NIAG NORF NORT peel WATE well york	Dry, open deciduous woods. See Cody (1982), Soper <i>et al.</i> (1963); APPENDIX 1.	RANUNCULACEAE

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<i>Thaspium barbinode</i>	Hairy-jointed Meadow Parsnip	G5	SH				niag	Woodlands. Most Ontario records of <i>T. barbinode</i> are actually <i>T. chapmanii</i> (B.E. Wofford, pers. comm.), which has more dissected leaves and flowers that are creamy yellow, rather than sulfur yellow. True <i>T. barbinode</i> has only been collected in NIAG, where it has not been seen recently. See Argus <i>et al.</i> (1982-1987)	APIACEAE
<i>Thaspium chapmanii</i>	Chapman's Meadow Parsnip	GNR	S2				CHAT ESSE	Woods in southwestern Ontario. See APPENDIX 1. See <i>Thaspium barbinode</i> .	APIACEAE
<i>Thaspium trifoliatum</i>	Purple Meadow Parsnip	G5	S2			<i>Thaspium aureum</i>	CHAT ESSE	Rich woods. See Argus <i>et al.</i> (1982-1987), Ball (1979). Ontario plants are the yellow-flowered var. <i>aureum</i> (or var. <i>flavum</i> ) (T5).	APIACEAE
<i>Thelypteris simulata</i>	Massachusetts Fern	G4G5	S1			<i>Dryopteris simulata</i>	PERT PRES STOR	Bogs and shaded Red Maple bog margins. Similar to <i>T. palustris</i> . First collected in Ontario by Paul Catling in 1983. See Argus <i>et al.</i> (1982-1987), Catling (1985), Hartley (1965), Svenson (1948).	THELYPTERIDACEAE
<i>Torreyochloa pallida</i> var. <i>pallida</i>	Pale False Manna Grass	G5T5?	S2			<i>Glyceria pallida</i> , <i>Puccinellia pallida</i>	ELGI HALD hast HAMI LANA lenn LEED NIAG otta	Local but widespread in southern Ontario wetlands. Var. <i>feraldii</i> (T4Q), considered by some to be a full species, is more common in the province. See Argus <i>et al.</i> (1982-1987), Davis (1991), Dore & McNeill (1980), Fassett (1946b), FNA (2007), Sutherland (1987).	POACEAE
<i>Tradescantia ohioensis</i>	Ohio Spiderwort	G5	S2				ESSE hald LAMB (musk)	Prairies and oak savanna. See Argus <i>et al.</i> (1982-1987), Dean (1953).	COMMELINACEAE
<i>Trichophorum clintonii</i>	Clinton's Clubrush	G4	S2S3			<i>Scirpus clintonii</i>	ALGO coch ESSE HAMI LAMB MUSK NIPI PEEL RAIN SIMC SUDB TEMI THUN	A small and inconspicuous sedge of prairies, open woods, and rocky crevices along rivers. Widespread but generally locally rare. See Argus <i>et al.</i> (1982-1987), Oldham & Darbyshire (1983), Smith (1995).	CYPERACEAE
<i>Trichophorum planifolium</i>	Bashful Bulrush	G4G5	S1	END	END	<i>Scirpus verecundus</i>	HAMI TORO	Dry open wooded slopes. See Argus <i>et al.</i> (1982-1987), COSEWIC (2000b), Crins (1989a), Fernald (1948), Smith & Rothfels (2007).	CYPERACEAE
<i>Trichostema dichotomum</i>	Forked Bluecurls	G5	S1				HALD (ELGI)	Sandy woodland openings. First collected in Ontario by Fred Montgomery in 1971 at Turkey Point. A site in ELGI is in disturbed open ground along an abandoned railway and probably introduced. See Argus <i>et al.</i> (1982-1987), Montgomery & Morton (1973), Sutherland (1987).	LAMIACEAE

TABLE 1 -- RARE VASCULAR PLANTS OF ONTARIO, FOURTH EDITION (MARCH 2009)

SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Trifolium reflexum</i>	Buffalo Clover	G3G4	SX				esse lamb	Early records from southwestern Ontario (Dodge 1914a, Macoun 1883-1890, Scoggan 1978-1979) are probably from natural occurrences, though there are no Ontario records in more than a century. See Vincent (1991).	FABACEAE
<i>Trillium flexipes</i>	Drooping Trillium	G5	S1	END	END		ELGI esse MIDD niag	Rich deciduous woods, often on floodplains. Some Ontario specimens are hybrids with <i>T. erectum</i> . Placed in the Liliaceae or Melanthiaceae by some authors. See Argus <i>et al.</i> (1982-1987), Case & Burrows (1962).	TRILLIACEAE
<i>Triosteum angustifolium</i>	Yellow-leaved Tinkersweed	G5	S1				ESSE	Known in Canada only from Pelee Island where first found in 1971 by Thomas Duncan. See Argus <i>et al.</i> (1982-1987), Duncan (1973).	CAPRIFOLIACEAE
<i>Triosteum perfoliatum</i>	Perfoliate Tinkersweed	G5	S1				chat ESSE LAMB	Similar to the more common <i>T. aurantiacum</i> which is included by some authors within <i>T. perfoliatum</i> as var. <i>aurantiacum</i> . See Voss (1996), Wiegand (1923).	CAPRIFOLIACEAE
<i>Triphora trianthophora</i>	Nodding Pogonia	G3G4	S1	END	END		CHAT ESSE	First found in Ontario in 1950 by C.H. Zavitz. Rich hardwood forests. See Argus <i>et al.</i> (1982-1987), Keenan (1984), Ramstetter (2001), Soper (1962), Van Arsdale (1982), Whiting (1968), Williams (1994, 1998), Zavitz & Gaiser (1956), Zika (1983). Ontario plants are ssp. <i>trianthophora</i> (T3T4).	ORCHIDACEAE
<i>Tripleurospermum maritima</i> ssp. <i>phaeocephala</i>	Seashore Chamomile	G5T4T5	S3?			<i>Matricaria ambigua</i> , <i>M. inodora</i> var. <i>phaeocephala</i> , <i>M. maritima</i> ssp. <i>phaeocephala</i> , <i>Tripleurospermum hookeri</i> , <i>T. phaeocephalum</i>	COCH KENO	Restricted to gravelly and sandy areas near the shore of Hudson and James Bays. See Riley (2003).	ASTERACEAE
<i>Utricularia geminiscapa</i>	Twin-stemmed Bladderwort	G4G5	S3?				HALI HAST HURO LENN MUSK OTTA PARR PETE PRES SIMC	Bog pools. Easily overlooked. See Argus <i>et al.</i> (1982-1987), Haber (1979, 1980), Rossbach (1939).	LENTIBULARIACEAE
<i>Utricularia ochroleuca</i>	Yellowish-white Bladderwort	G4?	SH			<i>Utricularia x ochroleuca</i>	keno mani thun	Considered by some authors to be a hybrid between <i>U. intermedia</i> and <i>U. minor</i> , though treated as a species by others. It is possible that Ontario populations of <i>U. ochroleuca</i> actually belong to the recently described <i>U. stygia</i> . See Ceska & Bell (1973), Griffiths (2007), Riley & Walshe (1985), Rossbach (1939), Thor (1988)	LENTIBULARIACEAE

TABLE 1 -- RARE VASCULAR PLANTS OF ONTARIO, FOURTH EDITION (MARCH 2009)

SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Uvularia perfoliata</i>	Perfoliate Bellwort	G5	S1				HALT HAMI NIAG NORF	Rich woods and thickets. Placed in the Colchicaceae or Liliaceae by some authors. See Argus <i>et al.</i> (1982-1987), Dietz (1952), McIntosh & Catling (1979), Soper (1952).	CONVALLARIACEAE
<i>Vaccinium membranaceum</i>	Mountain Huckleberry	G5	S1				THUN	Moist mature mixed woods on acidic soils in the eastern Lake Superior region where disjunct from its main range in western North America. See Argus <i>et al.</i> (1982-1987), Barclay-Estrup (1987), Fernald (1935), Marquis & Voss (1981), Yang <i>et al.</i> (2008).	ERICACEAE
<i>Vaccinium ovalifolium</i>	Oval-leaved Bilberry	G5	S3				ALGO thun	Mixed woods in the eastern Lake Superior region. See Argus <i>et al.</i> (1982-1987), Marquis & Voss (1981), Soper & Heimburger (1982).	ERICACEAE
<i>Vaccinium stamineum</i>	Deerberry	G5	S1	THR	THR		LEED NIAG	Dry woods with shallow sandy or rocky soil. See Argus <i>et al.</i> (1982-1987), Cane <i>et al.</i> (1985), Cody (1982), Ford (1984, 1995), Hill (2002), Kreher <i>et al.</i> (2000), Soper & Heimburger (1982), Yaki (1984), Yakimowski & Eckert (2007).	ERICACEAE
<i>Vahlodea atropurpurea</i>	Mountain Hair Grass	G5	SH			<i>Deschampsia atropurpurea</i>	keno	First collected in Ontario from an open White Spruce - lichen woodland near the Sutton River mouth in 1978 by Richard Sims (Riley 1979). See Argus <i>et al.</i> (1982-1987), Haraldsen <i>et al.</i> (1991).	POACEAE
<i>Valeriana edulis</i>	Hairy Valerian	G5	S1			<i>Valeriana ciliata</i>	BRAN HURO midd wate	Wet prairies, swampy river flats and meadows. See Anonymous (2003f), Argus <i>et al.</i> (1982-1987), Faivre & Windus (2002). Ontario plants belong to ssp./var. <i>ciliata</i> (T3).	VALERIANACEAE
<i>Valeriana uliginosa</i>	Mountain Valerian	G4Q	S2			<i>Valeriana sitchensis</i> ssp. <i>uliginosa</i>	bran durh grey hald HAST kawa mani norf nort OTTA PETE SIMC wate WELL york	Fens, wet meadows, swamps, ditches. See Argus <i>et al.</i> (1982-1987), Schmidt (2003), St. Hilaire (2003).	VALERIANACEAE
<i>Valerianella chenopodiifolia</i>	Goosefoot Cornsalad	G5	S1				elgi niag PRIN	Open woods, wooded creeks and riverbanks. Known to be extant in Ontario only on Yorkshire Island in Lake Ontario, where seen as recently as 2008. See Argus <i>et al.</i> (1982-1987), Hainault (1966), Soper (1962).	VALERIANACEAE



TABLE 1 -- RARE VASCULAR PLANTS OF ONTARIO, FOURTH EDITION (MARCH 2009)

SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Valerianella umbilicata</i>	Navel Cornsalad	G3G5	S1			<i>Valerianella intermedia</i>	ESSE LAMB	First collected in Ontario at Stone Road Alvar, Pelee Island, by Thomas Duncan in 1971. Both <i>V. umbilicata</i> and <i>V. intermedia</i> were originally reported as new to Canada by Duncan (1973), though the two are now generally recognized as forms of the same species (Eggers Ware 1983). See Argus <i>et al.</i> (1982-1987), Dyal (1938); APPENDIX 1.	VALERIANACEAE
<i>Verbesina alternifolia</i>	Wingstem	G5	S3			<i>Actinomeris alternifolia</i>	CHAT ELGI ESSE LAMB	Floodplain woods and woodland edges. See Argus <i>et al.</i> (1982-1987), Larson (1995), Soper (1962).	ASTERACEAE
<i>Vernonia gigantea</i>	Giant Ironweed	G5	S1?			<i>Vernonia altissima</i>	CHAT ELGI ESSE LAMB niag norf?	A difficult genus. Most Ontario records previously attributed to this species are probably <i>V. missurica</i> (see Voss 1996). See Argus <i>et al.</i> (1982-1987), Urbatsch (1972).	ASTERACEAE
<i>Vernonia missurica</i>	Missouri Ironweed	G4G5	S3?				ESSE LAMB	Probably more common than <i>V. gigantea</i> in Ontario, though the two seem to intergrade. See Urbatsch (1972), Voss (1996).	ASTERACEAE
<i>Veronicastrum virginicum</i>	Culver's Root	G4	S2				CHAT ESSE LAMB (thun)	Prairies, meadows, and open woods. Formerly included in Scrophulariaceae by most authors. See Argus <i>et al.</i> (1982-1987).	PLANTAGINACEAE
<i>Vicia caroliniana</i>	Carolina Vetch	G5	S2				BRAN CHAT elgi ESSE hami hast LAMB lenn niag norf WATE	Dry oak woods, thickets, prairies. See Argus <i>et al.</i> (1982-1987).	FABACEAE
<i>Viola bicolor</i>	Field Pansy	G5	S1			<i>Viola rafinesquii</i>	ESSE	Dry alvar and alvar woodland on Pelee Island. See Argus <i>et al.</i> (1982-1987), Baskin & Baskin (1972), Clausen <i>et al.</i> (1964), Shinnars (1961).	VIOLACEAE
<i>Viola epipsila</i>	Northern Marsh Violet	G4	S3				COCH KENO THUN	See Ballard (1985). Ontario plants are ssp./var. <i>repens</i> (T4).	VIOLACEAE
<i>Viola novae-angliae</i>	New England Violet	G4Q	S3			<i>Viola sororia</i> var. <i>novae-angliae</i>	KENO RAIN THUN	River shores, rocky woods and open areas. Gil-ad (1997, 1998) recognizes two subspecies, <i>grisea</i> (TNR, but a Great Lakes region endemic) and <i>novae-angliae</i> (TNR), both of which occur in Michigan. The subspecific identity of Ontario plants is not known. See Ballard (1994), Ballard & Gawler (1994), Gil-ad (1997, 1998), House (1904), McKinney (1992).	VIOLACEAE

TABLE 1 -- RARE VASCULAR PLANTS OF ONTARIO, FOURTH EDITION (MARCH 2009)

SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Viola palmata</i>	Palmate-leaved Violet	G5	S2S3			<i>Viola triloba</i>	BRAN CHAT elgi ESSE HALD midd NORF PRIN?	A taxonomically difficult group. <i>Viola triloba</i> ( <i>V. palmata</i> var. <i>dilatata</i> ), recognized by some authors as a distinct species, occurs rarely in HALD and NORF. See Argus <i>et al.</i> (1982-1987), Ballard (1994), Brainerd (1910, 1912), Gil-ad (1997, 1998), Haines (2001a, 2002b), McKinney (1992), McKinney & Blum (1981), Russell (1965), Sutherland (1987).	VIOLACEAE
<i>Viola pedata</i>	Bird's-foot Violet	G5	S1	END	END		BRAN lamb niag NORF	Dry, sandy oak woods. See Argus <i>et al.</i> (1982-1987), COSEWIC (2002), Hutchison & Kavanagh (1994), Russell (1956), Sutherland (1987), Thompson (2006). Ontario plants are var. <i>pedata</i> (TNR).	VIOLACEAE
<i>Viola pedatifida</i>	Prairie Violet	G5	S1				BRAN	First collected in the province by John Macoun from "south of Brantford" in 1907 (McKinney 1992, Scoggan 1978-1979). Rediscovered near Brantford in Ontario in 1996 by Wasyl Bakowsky and Michael Oldham (Oldham 1996b), where it grew with <i>V. x subsinuata</i> , considered to be a hybrid between <i>V. pedatifida</i> and <i>V. sororia</i> by some authors and a full species by others. See Ballard (1994), Gil-ad (1997, 1998), Russell (1956). Ontario plants are ssp./var. <i>pedatifida</i> (TNR).	VIOLACEAE
<i>Viola rotundifolia</i>	Round-leaved Yellow Violet	G5	SH				leed midd? niag	Rich woods. See Argus <i>et al.</i> (1982-1987), Bouchard & Maycock (1970), Haines (2001a).	VIOLACEAE
<i>Viola striata</i>	Striped Cream Violet	G5	S3				BRAN chat ELGI ESSE LAMB MIDD PERT	Floodplain woods. Hybridizes with <i>V. rostrata</i> (to form <i>V. x braunii</i> ; Ballard 1990, Cooperrider 1986) and <i>V. labradorica</i> (to form <i>V. x eclipses</i> ; Ballard, 1989, 1990) in southern Ontario. See Argus <i>et al.</i> (1982-1987).	VIOLACEAE
<i>Vitis labrusca</i>	Fox Grape	G5	S1				CHAT ESSE HALD LAMB NORF (BRUC) (HAMI) (LEED) (MIDD) (NIAG) (PEEL) (PRIN) (YORK)	Several occurrences in southwestern Ontario are from native plant communities, most other populations are probably escapes from cultivation.	VITACEAE
<i>Vitis vulpina</i>	Frost Grape	G5	S1				ESSE	First found in Canada by Joe Johnson in 1977 from floodplain woods along the Canard River. See Argus <i>et al.</i> (1982-1987).	VITACEAE

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SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Vulpia octoflora</i>	Slender Vulpia	G5	S2			<i>Festuca octoflora</i>	elgi ESSE hast LAMB LEED niag NORF PRIN wate	Sandy or rocky woods and open areas. Has apparently disappeared from a number of areas with early records. See Argus <i>et al.</i> (1982-1987), Dore & McNeill (1980). Ontario plants are var. <i>glauca</i> (T5), though var. <i>octoflora</i> (T5) may also occur.	POACEAE
<i>Wolffia brasiliensis</i>	Brazilian Watermeal	G5	S2?			<i>Wolffia papulifera</i>	FRON LANA	First reported from Ontario in 2005 by Eleanor Thomson, although previously collected in 1964 (Thomson 2005). Traditionally placed in the Lemnaceae by most authors. See Hess (1986).	ARACEAE
<i>Woodsia alpina</i>	Alpine Woodsia	G4	S2				algo HAST THUN	Largely restricted to cool, moist, crevices and cliffs along Lake Superior. See Argus <i>et al.</i> (1982-1987), Catling (1975), Given & Soper (1981), Soper & Maycock (1963), Tryon (1948); APPENDIX 1.	WOODSIACEAE
<i>Woodsia obtusa</i>	Blunt-lobed Woodsia	G5	S1	THR	END		FRON LEED	South-facing calcareous rocky slopes in the Frontenac Axis region. See Argus <i>et al.</i> (1982-1987), Britton (1977), COSEWIC (2006b), Lafontaine (1973), Wild & Gagnon (2005). Ontario plants are ssp. <i>obtusa</i> (T5).	WOODSIACEAE
<i>Woodsia scopulina</i>	Mountain Woodsia	G5	S3				algo KENO NIPI RENF THUN	Acidic rocky ledges, cliffs, and crevices in the Lake Superior and Algonquin Park areas. See Argus <i>et al.</i> (1982-1987), I303, Reznicek (1972), Watson & Vazquez (1981), Wherry (1934). Ontario plants are ssp. <i>laurentiana</i> (TNR).	WOODSIACEAE
<i>Zizania aquatica</i>	Indian Wild Rice	G5	S3				CHAT ESSE FRON hami HAST LEED LENN NORF NIAG NORT OTTA PRES PRIN STOR (DURH)	Var. <i>subbrevis</i> Biovin (1966-1967), with its type from Casselman in eastern Ontario, is included in var. <i>aquatica</i> by FNA (2007). Apparently declining in parts of southern Ontario. Some populations are probably introduced (Dore & McNeill 1980). See Aiken <i>et al.</i> (1988), Fassett (1924), Small & Catling (2004). Ontario plants are var. <i>aquatica</i> (T5).	POACEAE
<i>Zizia aptera</i>	Heart-leaved Alexanders	G5	S1				BRUC HURO midd RAIN THUN (coch) (leed)	Rocky calcareous river flats and shorelines. Also along roadsides and railways where probably in part non-native. See Argus <i>et al.</i> (1982-1987), Farnsworth (2003).	APIACEAE
<i>Zostera marina</i>	Common Eelgrass	G5	S2				COCH	Intertidal mudflats on James Bay. See Argus <i>et al.</i> (1982-1987), Riley (2003), Riley & Mckay (1980).	ZOSTERACEAE

**TABLE 2 -- PARTIALLY TRACKED VASCULAR PLANTS OF ONTARIO (tracked only in the Great Lakes Basin)**

SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Anemone parviflora</i>	Small-flowered Anemone	G5	S5				COCH KENO THUN	An arctic-alpine species in Ontario found in a few sites near Lake Superior where very rare and local and disjunct from there to the Hudson Bay area where more common and widespread (see Given & Soper 1981). Only tracked in the Great Lakes basin. See APPENDIX 1.	RANUNCULACEAE
<i>Carex glacialis</i>	Glacier Sedge	G5	S4				THUN	Collected from a rocky Lake Superior shoreline on the Slate Islands by Michael Oldham and Wasyl Bakowsky in 2001. Only tracked in the Great Lakes basin. See Riley (2003).	CYPERACEAE
<i>Carex saxatilis</i>	Russet Sedge	G5	S5				algo COCH KENO	Widespread and locally common in the Hudson Bay Lowland, but known from only a single collection in the Great Lakes basin, Corbeil Point on Lake Superior where collected by T.M.C. Taylor in 1935 and not seen since. Only tracked in the Great Lakes basin. See Given & Soper (1981), Hosie (1938), Riley (2003); APPENDIX 1.	CYPERACEAE
<i>Cerastium alpinum</i>	Alpine Chickweed	G5?	S4				COCH KENO THUN	Formerly tracked provincially, but found to be widespread in the Hudson Bay Lowland and no longer tracked there. Disjunct Lake Superior populations are few, on cool, rocky Lake Superior shorelines and continue to be tracked. See Given & Soper (1981), Riley (2003).	CARYOPHYLLACEAE
<i>Draba aurea</i>	Golden Whitlow-grass	G5	S5				THUN	Locally common along Hudson and James Bays, but restricted in the Great Lakes basin to the Sibley Peninsula. Only tracked in the Great Lakes basin. See Fernald (1934), Given & Soper (1981).	BRASSICACEAE
<i>Dryas integrifolia</i>	Entire-leaved Mountain Avens	G5	S5				KENO THUN	Common on dry tundra and gravel beach ridges near Hudson Bay. Highly disjunct on Lake Superior where restricted to a few exposed rocky Lake Superior shores on the Slate Islands. Only tracked in the Great Lakes basin. Only tracked in the Great Lakes basin. See Given & Soper (1981), Tremblay & Schoen (1999); APPENDIX 1. Ontario plants are ssp. <i>integrifolia</i> (T5?).	ROSACEAE
<i>Pyrola grandiflora</i>	Arctic Pyrola	G5	S4				KENO THUN	Widespread in the Hudson Bay Lowland, but known in the Great Lakes region only from mossy talus at the base of Ouimet and Cavern Lake Canyons near the north shore of Lake Superior. Placed in Pyrolaceae by some authors. Only tracked in the Great Lakes basin. See Given & Soper (1981).	ERICACEAE

**TABLE 2 -- PARTIALLY TRACKED VASCULAR PLANTS OF ONTARIO (tracked only in the Great Lakes Basin)**

SCIENTIFIC NAME	ENGLISH NAME	GRANK	SRANK	COSEWIC	MNR	SYNONYMS	COUNTIES	NOTES	FAMILY
<i>Saxifraga tricuspidata</i>	Prickly Saxifrage	G4G5	S4				KENO THUN	Known from exposed rocky shorelines on a few Lake Superior islands off the Black Bay Peninsula, where disjunct in Ontario from other populations hundreds of kilometers to the north. Only tracked in the Great Lakes basin. See Calder & Saville (1959), Given & Soper (1981), Riley (2003).	SAXIFRAGACEAE
<i>Solidago multiradiata</i>	Multi-rayed Goldenrod	G5	S5				KENO THUN	Locally common in tundra-like habitats of the Hudson Bay Lowland. Disjunct and rare on cliffs in the Lake Superior region where first found by John Riley. Tracked only in the Great Lakes basin. See Semple <i>et al.</i> (1999); APPENDIX 1.	ASTERACEAE
<i>Tanacetum bipinnatum</i>	Floccose Tansy	G5	S4			<i>Tanacetum huronense</i>	ALGO KENO	Sand beaches and dunes in the eastern Lake Superior area. Gravel riverbanks in the Hudson Bay area, where more common. Only tracked in the Great Lakes basin. See Anonymous (2002b), Given & Soper (1981), Guire & Voss (1963), Riley (2003); APPENDIX 1.	ASTERACEAE
<i>Taraxacum ceratophorum</i>	Horned Dandelion	G5	S5			<i>Taraxacum officinale</i> ssp. <i>ceratophorum</i>	KENO THUN	Cliffs and exposed rocky sites along the north shore of Lake Superior. Only tracked in the Great Lakes basin. See Brock (2004), Given & Soper (1981).	ASTERACEAE
<i>Tofieldia pusilla</i>	Small False Asphodel	G5	S5				KENO THUN	Edges of rock pools in exposed Lake Superior shoreline sites. Included by some authors in the Liliaceae or Tofieldiaceae. Only tracked in the Great Lakes basin. See Given & Soper (1981).	MELANTHIACEAE

TABLE 3 -- EXCLUDED NAMES (tracked in Oldham 1999, not tracked in Oldham and Brinker 2009)

SCIENTIFIC NAME	ENGLISH NAME	REASON EXCLUDED	NOTES	FAMILY
<i>Agrimonia parviflora</i>	Swamp Agrimony	additional records		ROSACEAE
<i>Alisma gramineum</i>	Narrow-leaved Water-plantain	additional records		ALISMATACEAE
<i>Allium stellatum</i>	Prairie Onion	additional records	Included in Liliaceae by some authors.	ALLIACEAE
<i>Ammophila breviligulata</i>	Marram Grass	additional records	<i>Ammophila champlainensis</i> ( <i>A. breviligulata</i> ssp. <i>champlainensis</i> ) is not recognized as a distinct taxon, following Delisle-Oldham <i>et al.</i> (2008).	POACEAE
<i>Amorpha fruticosa</i>	Indigo Bush	doubtfully native; weedy		FABACEAE
<i>Antennaria oxyphylla</i>	Pussy-toes	taxonomy	Included in <i>Antennaria rosea</i> (tracked at species level, see Table 1).	ASTERACEAE
<i>Antennaria subviscosa</i>	Pussy-toes	taxonomy	Included in <i>Antennaria rosea</i> (tracked at species level, see Table 1).	ASTERACEAE
<i>Arabis arenicola</i> var. <i>arenicola</i>	Rock-cress	taxonomy	Included in <i>Arabidopsis arenicola</i> (tracked at species level, see Table 1).	BRASSICACEAE
<i>Arabis arenicola</i> var. <i>pubescens</i>	Rock-cress	taxonomy	Included in <i>Arabidopsis arenicola</i> (tracked at species level, see Table 1).	BRASSICACEAE
<i>Arnica lonchophylla</i> ssp. <i>chionopappa</i>	Snowy Arnica	taxonomy	Included in <i>Arnica lonchophylla</i> (tracked at species level, see Table 1).	ASTERACEAE
<i>Arnica lonchophylla</i> ssp. <i>lonchophylla</i>	Arnica	taxonomy	Included in <i>Arnica lonchophylla</i> (tracked at species level, see Table 1).	ASTERACEAE
<i>Asclepias verticillata</i>	Whorled Milkweed	additional records; weedy	Included in Asclepiadaceae by some authors.	APOCYNACEAE
<i>Aster brachyactis</i>	Rayless Aster	additional records; weedy	Also known as <i>Symphotrichum ciliatum</i> .	ASTERACEAE
<i>Aster shortii</i>	Short's Aster	additional records	Also known as <i>Symphotrichum shortii</i> .	ASTERACEAE
<i>Bulbostylis capillaris</i>	Hair-like Bulbostylis	additional records; weedy		CYPERACEAE
<i>Carex annectens</i> var. <i>annectens</i>	Large Yellow Fox Sedge	taxonomy	Included in <i>Carex annectens</i> (tracked at species level, see Table 1).	CYPERACEAE
<i>Carex annectens</i> var. <i>xanthocarpa</i>	Small Yellow Fox Sedge	taxonomy	Included in <i>Carex annectens</i> (tracked at species level, see Table 1).	CYPERACEAE
<i>Carex emoryi</i>	Riverbank Sedge	additional records		CYPERACEAE
<i>Carex formosa</i>	Awnless Graceful Sedge	additional records		CYPERACEAE
<i>Carex gracilescens</i>	Slender Wood Sedge	additional records		CYPERACEAE
<i>Carex haydenii</i>	Long-scaled Tussock Sedge	additional records		CYPERACEAE
<i>Carex jamesii</i>	Grass Sedge	additional records		CYPERACEAE
<i>Carex marina</i>	Sea Sedge	additional records		CYPERACEAE
<i>Carex novae-angliae</i>	New England Sedge	additional records		CYPERACEAE
<i>Carex raymondii</i>	Raymond's Sedge	taxonomy	Included in <i>Carex atratiformis</i> (tracked at species level, see Table 1).	CYPERACEAE
<i>Carex swanii</i>	Downy Green Sedge	additional records		CYPERACEAE
<i>Carex trisperma</i> var. <i>billingsii</i>	Billings' Three-seeded Bog Sedge	additional records	Also known as <i>Carex billingsii</i> .	CYPERACEAE
<i>Castilleja miniata</i>	Greater Red Indian-paintbrush	doubtfully native; weedy	Included in Scrophulariaceae by some authors.	OROBANCHACEAE

TABLE 3 -- EXCLUDED NAMES (tracked in Oldham 1999, not tracked in Oldham and Brinker 2009)

SCIENTIFIC NAME	ENGLISH NAME	REASON EXCLUDED	NOTES	FAMILY
<i>Cerastium alpinum</i>	Alpine Chickweed	additional records		CARYOPHYLLACEAE
<i>Chaerophyllum procumbens</i> var. <i>procumbens</i>	Spreading Chervil	taxonomy	Included in <i>Chaerophyllum procumbens</i> (tracked at species level, see Table 1).	APIACEAE
<i>Chaerophyllum procumbens</i> var. <i>shortii</i>	Spreading Chervil	taxonomy	Included in <i>Chaerophyllum procumbens</i> (tracked at species level, see Table 1).	APIACEAE
<i>Chenopodium pratericola</i>	Goosefoot	additional records	Included in Chenopodiaceae by some authors.	AMARANTHACEAE
<i>Coeloglossum viride</i> var. <i>viride</i>	Bracted Orchid	taxonomy	Included in <i>Coeloglossum viride</i> .	ORCHIDACEAE
<i>Collinsia parviflora</i>	Small-flowered Blue-eyed Mary	additional records; weedy	Included in Scrophulariaceae by some authors.	PLANTAGINACEAE
<i>Crataegus ater</i>	Hawthorn	taxonomy		ROSACEAE
<i>Crataegus compta</i>	Hawthorn	taxonomy	Included in <i>Crataegus populnea</i> .	ROSACEAE
<i>Crataegus conspecta</i>	Hawthorn	taxonomy	Included in <i>Crataegus coccinioides</i> .	ROSACEAE
<i>Crataegus corusca</i>	Hawthorn	taxonomy	Possible hybrid.	ROSACEAE
<i>Crataegus dilatata</i>	Hawthorn	taxonomy	Included in <i>Crataegus coccinioides</i> .	ROSACEAE
<i>Crataegus disperma</i>	Hawthorn	taxonomy	Possible hybrid.	ROSACEAE
<i>Crataegus grandis</i>	Grand Hawthorn	taxonomy		ROSACEAE
<i>Crataegus nitidula</i>	Hawthorn	taxonomy	Included in <i>Crataegus suborbiculata</i> (see Table 1).	ROSACEAE
<i>Crataegus perjucunda</i>	Hawthorn	taxonomy		ROSACEAE
<i>Crataegus persimilis</i>	Hawthorn	taxonomy	Possible hybrid.	ROSACEAE
<i>Cyperus erythrorhizos</i>	Red-rooted Nut Sedge	additional records; weedy		CYPERACEAE
<i>Cyperus lupulinus</i> ssp. <i>lupulinus</i>	Slender Sand Sedge	presence in Ontario unconfirmed	Mapped from Ontario by Marcks (1974), but no specimens seen.	CYPERACEAE
<i>Cypripedium calceolus</i> var. <i>planipetalum</i>	Flat-petalled Yellow Lady's-slipper	taxonomy	Included in <i>Cypripedium parviflorum</i> var. <i>pubescens</i> .	ORCHIDACEAE
<i>Danthonia compressa</i>	Flat-stemmed Oat Grass	additional records; weedy		POACEAE
<i>Eleocharis halophila</i>	Salt-marsh Spike-rush	taxonomy	Included in <i>Eleocharis uniglumis</i> (see Table 1).	CYPERACEAE
<i>Elymus virginicus</i> var. <i>jenkinsii</i>	Wild Rye	taxonomy	Included in <i>Elymus curvatus</i> (see Table 1).	POACEAE
<i>Elymus virginicus</i> var. <i>submuticus</i>	Wild Rye	taxonomy	Included in <i>Elymus curvatus</i> (see Table 1).	POACEAE
<i>Eragrostis pilosa</i>	Hairy Love Grass	doubtfully native; weedy		POACEAE
<i>Eragrostis spectabilis</i>	Purple Love Grass	additional records; weedy		POACEAE
<i>Eupatorium maculatum</i> ssp. <i>bruneri</i>	Spotted Joe Pye Weed	additional records	Also known as <i>Eutrochium maculatum</i> var. <i>bruneri</i> .	ASTERACEAE
<i>Eupatorium purpureum</i>	Purple-jointed Joe Pye Weed	additional records	Also known as <i>Eutrochium purpureum</i> .	ASTERACEAE
<i>Geum vernum</i>	Spring Avens	additional records		ROSACEAE
<i>Huperzia selago</i>	Fir Clubmoss	additional records		LYCOPODIACEAE
<i>Juncus interior</i>	Inland Rush	additional records		JUNCACEAE
<i>Juncus militaris</i>	Bayonet Rush	additional records		JUNCACEAE
<i>Koeleria macrantha</i>	June Grass	additional records		POACEAE
<i>Liatris sphaeroidea</i>	Blazing-star	taxonomy		ASTERACEAE

TABLE 3 -- EXCLUDED NAMES (tracked in Oldham 1999, not tracked in Oldham and Brinker 2009)

SCIENTIFIC NAME	ENGLISH NAME	REASON EXCLUDED	NOTES	FAMILY
<i>Lycopus asper</i>	Rough Water Horehound	additional records; weedy		LAMIACEAE
<i>Muhlenbergia racemosa</i>	Upland Wild Timothy	additional records		POACEAE
<i>Gnaphalium sylvaticum</i>	Woodland Cudweed	additional records	Also known as <i>Omalotheca sylvatica</i> .	ASTERACEAE
<i>Onosmodium molle</i>	Soft-hairy False-gromwell	taxonomy	Split between <i>Onosmodium molle</i> ssp. <i>hispidissimum</i> and <i>O. molle</i> ssp. <i>occidentale</i> , both of which are tracked (see Table 1).	BORAGINACEAE
<i>Panicum gattingeri</i>	Gattinger's Panic Grass	additional records; weedy		POACEAE
<i>Panicum leibergii</i> var. <i>baldwinii</i>	Baldwin's Panic Grass	taxonomy	Included in <i>Dichantherium xanthophysum</i> (not tracked).	POACEAE
<i>Panicum leibergii</i> var. <i>leibergii</i>	Leiberg's Panic Grass	taxonomy	Included in <i>Dichantherium leibergii</i> (see Table 1).	POACEAE
<i>Panicum sphaerocarpon</i> var. <i>sphaerocarpon</i>	Round-fruited Panic Grass	taxonomy	Included in <i>Dichantherium sphaerocarpon</i> (see Table 1)	POACEAE
<i>Penstemon gracilis</i>	Slender Beard-tongue	additional records	Included in Scrophulariaceae by some authors.	PLANTAGINACEAE
<i>Polygonum careyi</i>	Carey's Smartweed	additional records	Also known as <i>Persicaria careyi</i> .	POLYGONACEAE
<i>Platanthera blephariglottis</i>	White Fringed Orchid	additional records		ORCHIDACEAE
<i>Poa interior</i>	Inland Bluegrass	additional records		POACEAE
<i>Polygonella articulata</i>	Coast Jointweed	additional records; weedy		POLYGONACEAE
<i>Polygonum franktonii</i>	Frankton's Knotweed	taxonomy	Not recognized in FNA (2005).	POLYGONACEAE
<i>Potentilla paradoxa</i>	Bushy Cinquefoil	additional records; weedy	Also known as <i>Potentilla supina</i> ssp. <i>paradoxa</i> .	ROSACEAE
<i>Potentilla tabernaemontani</i>	Spotted Cinquefoil	taxonomy	An introduced species (also known as <i>Potentilla verna</i> ) known from a single southern Ontario site. Similar to the native <i>P. crantzii</i> (Table 1).	ROSACEAE
<i>Puccinellia nuttalliana</i>	Nuttall's Alkali Grass	doubtfully native; weedy		POACEAE
<i>Quercus palustris</i>	Pin Oak	additional records		FAGACEAE
<i>Ranunculus hispidus</i> var. <i>nitidus</i>	Hispid Buttercup	presence in Ontario unconfirmed	Mapped from Ontario by Duncan (1980), but no specimens seen.	RANUNCULACEAE
<i>Ranunculus reptans</i> var. <i>ovalis</i>	Creeping Spearwort	taxonomy	Included in <i>Ranunculus flammula</i> var. <i>ovalis</i> (not tracked).	RANUNCULACEAE
<i>Ranunculus rhomboideus</i>	Prairie Buttercup	additional records		RANUNCULACEAE
<i>Rhexia virginica</i>	Virginia Meadow-beauty	additional records		MELASTOMATACEAE
<i>Rhus copallinum</i>	Winged Sumac	additional records		ANACARDIACEAE
<i>Rumex salicifolius</i>	Willow Dock	taxonomy	In the strict sense (e.g. FNA 2005) this species does not occur in Ontario.	POLYGONACEAE
<i>Salix lutea</i>	Willow	taxonomy	Included in <i>Salix famelica</i> (not tracked).	SALICACEAE
<i>Salix myricoides</i> var. <i>albovestita</i>	Shoreline Willow	taxonomy	Included in <i>Salix myricoides</i> (see Table 1)	SALICACEAE
<i>Salix myricoides</i> var. <i>myricoides</i>	Blue-leaf Willow	taxonomy	Included in <i>Salix myricoides</i> (see Table 1)	SALICACEAE
<i>Selaginella densa</i>	Prairie Spikemoss	additional records		SELAGINELLACEAE
<i>Senecio plattensis</i>	Prairie Ragwort	taxonomy	Also known as <i>Packera plattensis</i> . Ontario records are largely <i>Packera paupercula</i> var. <i>pseudotomentosa</i> (see Table 1).	ASTERACEAE
<i>Silene virginica</i>	Fire Pink	presence in Ontario unconfirmed	A LAMB report (Dodge 1914a) is unconfirmed by a specimen and a specimen from "islands in the Detroit River" (Argus <i>et al.</i> 1982-1987) may have been collected in the United States.	CARYOPHYLLACEAE



**TABLE 3 -- EXCLUDED NAMES (tracked in Oldham 1999, not tracked in Oldham and Brinker 2009)**

SCIENTIFIC NAME	ENGLISH NAME	REASON EXCLUDED	NOTES	FAMILY
<i>Solidago arguta</i>	Sharp-leaved Goldenrod	additional records		ASTERACEAE
<i>Solidago simplex</i> ssp. <i>randii</i>	Goldenrod	taxonomy	Split between <i>Solidago simplex</i> var. <i>gillmanii</i> and <i>S. simplex</i> var. <i>ontarioensis</i> , both of which are tracked (see Table 1).	ASTERACEAE
<i>Sparganium multipedunculatum</i>	Many-stalked Burweed	taxonomy	Included in <i>Sparganium angustifolium</i> (not tracked). Included in Sparganiaceae by some authors.	TYPHACEAE
<i>Sporobolus asper</i>	Rough Dropseed	additional records; weedy	Also known as <i>Sporobolus compositus</i> .	POACEAE
<i>Stachys pilosa</i>	Hedge Nettle	taxonomy	Status in Ontario uncertain.	LAMIACEAE
<i>Stipa spartea</i>	Porcupine Grass	additional records	Also known as <i>Hesperostipa spartea</i> .	POACEAE
<i>Strophostyles helvula</i>	Trailing Wild Bean	additional records		FABACEAE
<i>Triadenum virginicum</i>	Marsh St. John's-wort	additional records	Included in Clusiaceae by some authors.	HYPERICACEAE
<i>Trisetum melicoides</i>	Purple False Oats	additional records		POACEAE
<i>Viola palmata</i> var. <i>dilatata</i>	Cleft Violet	taxonomy	Included in <i>Viola palmata</i> (see Table 1).	VIOLACEAE
<i>Viola palmata</i> var. <i>palmata</i>	Palmate Violet	taxonomy	Included in <i>Viola palmata</i> (see Table 1).	VIOLACEAE
<i>Woodsia glabella</i>	Smooth Woodsia	additional records		WOODSIACEAE
<i>Woodsia oregana</i>	Western Woodsia	additional records		WOODSIACEAE
<i>Xyris difformis</i>	Tall Yellow-eyed-grass	additional records		XYRIDACEAE
<i>Zizania aquatica</i> var. <i>subbrevis</i>	Wild Rice	taxonomy	Included in <i>Zizania aquatica</i> (see Table 1).	POACEAE

## **Appendix 1. Rare Vascular Plants of Ontario Images**

M.J. Oldham



Ohio Buckeye (*Aesculus glabra*) - Walpole Island, Lambton County

S.R. Brinker



Nodding Onion (*Allium cernuum*) - Pelee Island, Essex County

D.A. Sutherland



Puttyroot (*Aplectrum hyemale*) - South Walsingham Forest, Norfolk County



M.J. Oldham



Small-flower Anemone (*Anemone parviflora*)  
Aguasabon Gorge, Thunder Bay District

W.D. Bakowsky



Pawpaw (*Asimina triloba*) - St. Davids, Niagara Regional Municipality

S.R. Brinker



Dwarf Milkweed (*Asclepias ovalifolia*) - Ingolf, Kenora District





S.R. Brinker

Tuberous Indian-plantain (*Arnoglossum plantagineum*)  
Dorcas Bay, Bruce County



S.R. Brinker

Wallrue Spleenwort (*Asplenium ruta-muraria*)  
Bruce Peninsula National Park, Bruce County



S.R. Brinker

Cooper's Milk-vetch (*Astragalus neglectus*) - Bruce County





Branched Bartonia (*Bartonia paniculata*) - Muskoka District



Crowned Beggarticks (*Bidens trichosperma*) - Long Point, Norfolk County



Purple Reed Grass (*Calamagrostis purpurascens*)  
Sleeping Giant Provincial Park, Thunder Bay District





Pale Moonwort (*Botrychium pallidum*)  
Paiponge Township, Thunder Bay District



Side-oats Grama (*Bouteloua curtipendula*) - Brantford, Brant County





Bluehearts (*Buchnera americana*) - Port Franks, Lambton County



Floating Marsh Marigold (*Caltha natans*) - Malachi Lake, Kenora District



Trumpet Creeper (*Campsis radicans*) - Pelee Island, Essex County



S.R. Brinker



Assiniboia Sedge (*Carex assiniboinensis*) - Shoal Lake, Kenora District

S.R. Brinker



Ravenfoot Sedge (*Carex crus-corvi*) - Tilbury, Essex County

S.R. Brinker



Frank's Sedge (*Carex frankii*) - Pelee Island, Essex County



Blue Sedge (*Carex glaucoidea*)  
Caistor Canborough Slough Forest, Niagara Regional Municipality



Heavy Sedge (*Carex gravida*)  
Manitou Rapids, Rainy River District





Muskingum Sedge (*Carex muskingumensis*)  
Pelee Island, Essex County



Ross's Sedge (*Carex rossii*)  
Sleeping Giant Provincial Park, Thunder Bay District





M.J. Oldham

Rock Sedge (*Carex rupestris*) - Cape Henrietta Maria, Kenora District



M.J. Oldham

Russett Sedge (*Carex saxatilis*) - Winisk River, Kenora District



S.R. Brinker



Rocky Mountain Sedge (*Carex saximontana*) - Shoal Lake, Kenora District

Photo & insert: S.R. Brinker



Weak Stellate Sedge (*Carex seorsa*) - Niagara Regional Municipality

S.R. Brinker



Schweinitz's Sedge (*Carex schweinitzii*)  
Waterloo Regional Municipality



S.R. Brinker



Torrey's Sedge (*Carex torreyi*) - Manitou Mounds, Rainy River District

S.R. Brinker



Shellbark Hickory (*Carya laciniosa*) - Navy Island, Niagara R.M.

S.R. Brinker



Eastern Flowering Dogwood (*Cornus florida*)  
Spooky Hollow Nature Sanctuary, Norfolk County





S.R. Brinker

Field Dodder (*Cuscuta campestris*) - Jack Miner Woods, Essex County



S.R. Brinker

Small White Lady's-slipper (*Cypripedium candidum*) - Hastings County



M.J. Oldham



Mountain Bladder Fern (*Cystopteris montana*)  
Slate Islands, Thunder Bay District

M.J. Oldham



Entire-leaved Mountain-avens (*Dryas integrifolia*)  
Polar Bear Provincial Park, Kenora District

S.R. Brinker



Carolina Whitlow-grass (*Draba reptans*)  
Point Pelee National Park, Essex County





S.R. Brinker

Coast Barnyard Grass (*Echinochloa walteri*)  
Rondeau Provincial Park, Chatham - Kent



S.R. Brinker

Quill Spike-rush (*Eleocharis nitida*) - Thunder Bay District



M.J. Oldham



False Rue-anemone (*Enemion biternatum*)  
Ausable River Valley, Lambton County

S.R. Brinker



Honey Locust (*Gleditsia triacanthos*)  
Point Pelee National Park, Essex County

S.R. Brinker



Plains Rough Rescue (*Festuca hallii*) - Stanley, Thunder Bay District



S.R. Brinker



Limestone Hedge-hyssop (*Gratiola quartermaniae*) - Prince Edward County

M.J. Oldham



Northern Oak Fern (*Gymnocarpium jessoense*)  
Gravel River, Thunder Bay District

S.R. Brinker



Eastern Green-violet (*Hybanthus concolor*)  
Niagara Escarpment, City of Hamilton



M.J. Oldham



Appalachian Firmoss (*Huperzia appressa*) - Thunder Bay District

S.R. Brinker



Goldenseal (*Hydrastis canadensis*) - Brant County

S.R. Brinker



Appendage Waterleaf (*Hydrophyllum appendiculatum*)  
Point Pelee National Park, Essex County

M. J. Oldham



Short-stemmed Iris (*Iris brevicaulis*) - Sturgeon Creek, Essex County





M.J. Oldham

Dwarf Dandelion (*Krigia virginica*)  
Pinery Provincial Park, Lambton County



W.D. Bakowsky

American Water-willow (*Justicia americana*)  
Dufferin Islands, Niagara Regional Municipality



S.R. Brinker

Woodland Lettuce (*Lactuca floridana*) - Pelee Island, Essex County





Large-flowered Ground Cherry (*Leucophysalis grandiflora*)  
Stanley, Thunder Bay District



Cliff Conoclinium (*Leucospora multifida*) - Pelee Island, Essex County



Small-flowered Lipocarpha (*Lipocarpha macrantha*)  
Lake-of-the-Woods, Kenora District





S.R. Brinker

Slender Blazing Star (*Liatris cylindracea*) - Long Point, Norfolk County



M.J. Oldham

Southern Twayblade (*Listera australis*)  
Georgian Bay, Muskoka District





S.R. Brinker

Narrow-leaved Puccoon (*Lithospermum incisum*)  
Point Pelee National Park, Essex County



D.A. Sutherland

Cucumber Tree (*Magnolia acuminata*) - Smith Tract, Norfolk County



S.R. Brinker

Virginia Lungwort (*Mertensia virginica*)  
Stoney Creek, Haldimand County



M.J. Oldham

Greenland Stichwort (*Minuartia groenlandica*)  
Sutton Ridges, Kenora District





S.R. Brinker

Spotted Beebalm (*Monarda punctata*) - Turkey Point, Norfolk County



D.A. Sutherland

Tiny Mousetail (*Myosurus minimus*) - Blue Haven Park, York Region



S.R. Brinker

Large Yellow Pond-lily (*Nuphar advena*)  
Point Pelee National Park, Essex County



M.J. Oldham



Devil's Club (*Oplopanax horridus*)  
Porphy Island - Lake Superior, Thunder Bay District

W.D. Bakowsky



Brittle Prickly Pear (*Opuntia fragilis*)  
Lake-of-the-Woods, Kenora District

S.R. Brinker



Showy Locoweed (*Oxytropis splendens*)  
Sleeping Giant Provincial Park, Thunder Bay District





Franklin's Scorpionweed (*Phacelia franklinii*)  
Stanley, Thunder Bay District



Purple Mountain Heather (*Phyllodoce caerulea*)  
Hudson Bay Lowland, Kenora District





S.R. Brinker

Broad Beech Fern (*Phegopteris hexagonoptera*)  
Frontenac Provincial Park, Frontenac County



M.J. Oldham

Pitch Pine (*Pinus rigida*) - Hill Island, Leeds & Grenville County



M.J. Oldham



Eastern Prairie Fringed-orchid (*Platanthera leucophaea*)  
Windsor, Essex County

P.A. Woodliffe



Yellow Fringed-orchid (*Platanthera ciliaris*) - Kitty Todd Reserve, Ohio

W.D. Bakowsky



Hooker's Orchid (*Platanthera hookeri*) - Gunflint Lake, Thunder Bay District





Swamp Cottonwood (*Populus heterophylla*)  
Bickford Woods, Lambton County



Pennsylvania Cinquefoil (*Potentilla pensylvanica*)  
Shoal Lake, Kenora District



M.J. Oldham



Pretty Cinquefoil (*Potentilla pulchella*) - Cape Henrietta Maria, Kenora

M.J. Oldham



Shumard Oak (*Quercus shumardii*) - Amherstburg, Essex County

M.J. Oldham



Common Hoptree (*Ptelea trifoliata*) - Pelee Island, Essex County



M.J. McMurtry



Scrub Oak (*Quercus ilicifolia*) - Puzzle Lake, Lennox & Addington County

S.R. Brinker



Bristly Buttercup (*Ranunculus hispidus* var. *hispidus*)  
Selkirk Provincial Park, Haldimand County

M.J. Oldham



Lizard's Tail (*Saururus cernuus*) - Elgin County



W.D. Bakowsky



Gray-headed Prairie Coneflower (*Ratibida pinnata*)  
Dunwich, Elgin County

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M.J. Oldham and S.R. Brinker 2009

M.J. Oldham



Square-stemmed Rose Pink (*Sabatia angularis*)  
Berrien County, Michigan

Natural Heritage Information Centre,  
Ontario Ministry of Natural Resources





S.R. Brinker

Crested Arrowhead (*Sagittaria cristata*)  
Georgian Bay Islands National Park, Muskoka District



M.J. Oldham

Tufted Saxifrage (*Saxifraga caespitosa*)  
Cape Henrietta Maria, Kenora District



M.J. Oldham

Purple Mountain Saxifrage (*Saxifraga oppositifolia*)  
Cape Henrietta Maria, Kenora District





Smith's Bulrush (*Schoenoplectus smithii*)  
Lake Erie, Niagara Regional Municipality



Multi-rayed Goldenrod (*Solidago multiradiata*)  
Polar Bear Provincial Park, Kenora District





S.R. Brinker

Willowleaf Aster (*Symphotrichum praealtum*)  
Ojibway Prairie, Essex County



M.J. Oldham

Floccose Tansy (*Tanacetum bipinnatum*)  
Severn River, Kenora District



S.R. Brinker

Virginia Goat's-rue (*Tephrosia virginiana*)  
Turkey Point Provincial Park, Norfolk County



S.R. Brinker

Rue Anemone (*Thalictrum thalictroides*)  
Coote's Paradise, City of Hamilton



M.J. Oldham



Chapman's Meadow-parsnip (*Thaspium chapmanii*)  
Rondeau Provincial Park, Chatham - Kent

M.J. Oldham



Alpine Woodsia (*Woodsia alpina*)  
Lake Superior, Thunder Bay District

S.R. Brinker



Navel Corn-salad (*Valerianella umbilicata*)  
Pelee Island, Essex County