

# Botrychium michiganense

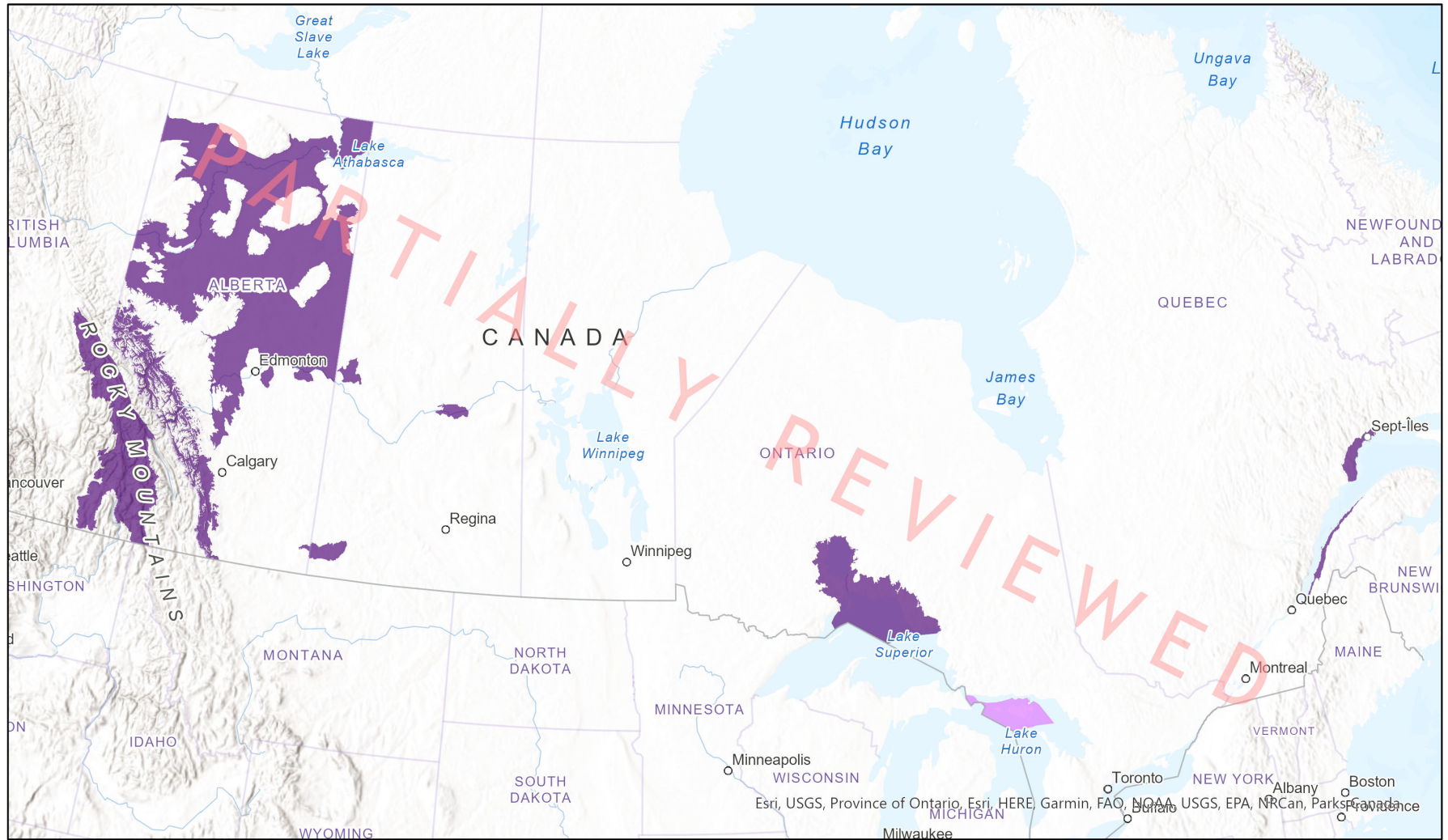


## Ecosystem-based Automated Range (EBAR)

- Present
- Presence Expected
- Historical

Date Generated: December 30, 2020; Version: 1.0; Stage: Expert Reviewed (Partially Reviewed); Scope: Canadian

Synonyms Used: None



0 350 700 km

Input Records - 10 AB Element Occurrences, 3 BC Element Occurrences, 9 BC Vascular Plant Observations, 18 GBIF, 3 iNaturalist, 9 ON Element Occurrences, 10 ON Observations, 5 QC Element Occurrences, 11 SK Source Feature Points, 5 SK Source Feature Polygons; Expert Reviews - 3 (average star rating = 4.5)

Map centre: 92.973° W 53.1943° N  
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EBAR is relatively coarse scale data and not intended for all applications and analysis. Please see full disclaimer in metadata.

## Ecosystem-based Automated Range (EBAR) Metadata

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### Species

National Scientific Name:	Botrychium michiganense
National English Name:	Michigan Moonwort
National French Name:	Botryche du Michigan
Element National ID:	231366
Element Global ID:	156575 ( <a href="#">go to NatureServe Explorer</a> )
Element Code:	PPOPH01200
Endemism Type:	N

### Rank/Status

Global Rank:	G3 (reviewed February 15, 2012)
National Rank (Canada):	N3 (reviewed 2019)
Subnational Ranks (Canada):	AB=SU, BC=S3, ON=S1S2, QC=S1, SK=S1
National Rank (United States):	NNR
Subnational Ranks (United States):	ID=S1, MI=S2, MN=S2, MT=S2, SD=S3S4, WA=S1, WY=S1
National Rank (Mexico):	None
Subnational Ranks (Mexico):	None
Canadian SARA Status:	None
Canadian COSEWIC Status:	None
US ESA Status:	None

## Range Map

<b>Date Generated:</b>	December 30, 2020
<b>Version:</b>	1.0
<b>Stage:</b>	Expert Reviewed (Partially Reviewed)
<b>Scope:</b>	Canadian
<b>Metadata:</b>	Primary Species Name - <i>Botrychium michiganense</i> (Williams et al., 2016) Input Records - 10 AB Element Occurrences, 3 BC Element Occurrences, 9 BC Vascular Plant Observations, 18 GBIF, 3 iNaturalist, 9 ON Element Occurrences, 10 ON Observations, 5 QC Element Occurrences, 11 SK Source Feature Points, 5 SK Source Feature Polygons; Expert Reviews - 3 (average star rating = 4.5)
<b>Comments:</b>	This range has been partially reviewed. The following jurisdictions have been reviewed: Ontario, Quebec, and British Columbia.
<b>Disclaimer:</b>	Please review our <a href="#">methods document</a> before using EBAR.  EBAR range data are relatively coarse scale and appropriate for screening and education purposes, but are not intended for all types of applications and analysis.  The absence of data in any geographic areas does not necessarily mean that a species is not present.  An ecoshape with a presence value does not necessarily mean that a species is present throughout the entire geographic area.
<b>Presence Definitions:</b>	Present - the species is found within the ecoshape based on species observation data, Element Occurrences, Source Features, Canadian Federal Critical Habitat, or expert opinion.  Presence Expected - expert opinion the species may be present, or the ecoshape overlapped with a range estimate or a habitat suitability model.  Historical - all species occurrence data within the ecoshape contains observation data greater than 40 years old or an Element Occurrence (EO) that was ranked as Extirpated or Historical (EO Rank of H, H?, X or X?).
<b>Map Projection:</b>	North America Albers Equal Area Conic (WKID 4269)

## Credits

<b>Suggested Citation:</b>	NatureServe Canada, 2020. Ecosystem-based Automated Range (EBAR) for <i>Botrychium michiganense</i> , Version 1.0, Expert Reviewed (Partially Reviewed) (Canadian Scope). Ottawa, Canada. Retrieved from [insert url] on [insert date]
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<b>Project Website:</b>	<a href="http://www.natureserve.org/natureserve-network/canada/biodiversity-data/ebar-range-mapping">www.natureserve.org/natureserve-network/canada/biodiversity-data/ebar-range-mapping</a>
<b>Contact:</b>	<a href="mailto:ebbar-kba@natureserve.ca">ebbar-kba@natureserve.ca</a>

**Input References:**

AB Element Occurrences - Alberta Conservation Information Management System, Alberta Environment and Parks, Edmonton  
BC Non-sensitive Element Occurrences - British Columbia Conservation Data Centre  
BC Vascular Plant Observations - British Columbia Conservation Data Centre  
GBIF - Global Biodiversity Information Facility (<https://www.gbif.org>)  
iNaturalist - California Academy of Sciences and the National Geographic Society (<https://www.inaturalist.org/>)  
ON Element Occurrences - Natural Heritage Information Centre, Ontario Ministry of Natural Resources and Forestry  
ON Observations - Natural Heritage Information Centre, Ontario Ministry of Natural Resources and Forestry  
QC Element Occurrences - Centre de données sur le patrimoine naturel du Québec  
SK Source Feature Points - Saskatchewan Conservation Data Centre  
SK Source Feature Polygons - Saskatchewan Conservation Data Centre

**Reviewers by Taxa:**

Invertebrate Animal - Ants, Wasps, and Sawflies - James Glasier, David McCorquodale  
Invertebrate Animal - Bee Flies - Joel Kits  
Invertebrate Animal - Bumble Bees - COSEWIC, Rich Hatfield  
Invertebrate Animal - Butterflies and Skippers - Taylor Davis, Mark Elderkin, Chris Friesen, Sylvain Giguere, Cary Hamel, Terrell Hyde, Jessica Petersen, Christian Schmidt, Stephanie Shepherd  
Invertebrate Animal - Caddisflies - Andrew Rasmussen, Eleanor Gaines, Kyle Johnson  
Invertebrate Animal - Dragonflies and Damselflies - Taylor Davis  
Invertebrate Animal - Flower Flies or Hoverflies - Colin Jones, Jeff Skevington  
Invertebrate Animal - Giant Silkworm and Royal Moths - Richard Westwood  
Invertebrate Animal - Grasshoppers - Chris Bomar, David Cuthrell, Terrell Hyde, Dan Johnson, Colin Jones, James Miskelly, Randi Mulder  
Invertebrate Animal - Mason Bees - Jeremy Siemers, Lusha Tronstad  
Invertebrate Animal - Mayflies - Lukas Jacobus  
Invertebrate Animal - Millipedes and Centipedes - Joel Gibson  
Invertebrate Animal - Other Beetles - David Cuthrell, Colin Jones  
Invertebrate Animal - Other Flies and Keds - Joel Gibson  
Invertebrate Animal - Other Insects - Joel Gibson, Colin Jones, Joel Kits  
Invertebrate Animal - Other Moths - Mike Burrell, Taylor Davis, Joel Gibson, Daniel Hipes, Kyle Johnson, Colin Jones, John Klymko, Randi Mulder, Gregory Pohl, Christian Schmidt, Sarah Semmler, Robert Somes, Lusha Tronstad, Richard Westwood  
Invertebrate Animal - Papaipema Moths - Kyle Johnson, Gregory Pohl, Sarah Semmler  
Invertebrate Animal - Robber Flies - Joel Gibson  
Invertebrate Animal - Stoneflies - Suzanne Carrière, Boris Kondratieff

Invertebrate Animal - Terrestrial Snails - Annegret Nicolai

Invertebrate Animal - Tiger Beetles - John Acorn, Taylor Davis, David McCorquodale, Robert Somes

Invertebrate Animal - Tiger Moths - Randi Mulder, Christian Schmidt

Invertebrate Animal - Worms, Leeches, and other Annelids - Joel Gibson

Nonvascular Plant - Liverworts - Richard Caners, Suzanne Carrière, Justin Fulkerson,

Nonvascular Plant - Mosses - Bruce Bennett, Richard Caners, Suzanne Carrière, Sue Vrilakas

Vascular Plant - Adder's-tongues, Grapeferns, and Moonworts - Wasyl Bakowsky, Jacques Labrecque, Diana Sawatzky

Vascular Plant - Dicots - Wasyl Bakowsky, Ryan Batten, Bruce Bennett, Diana Bizecki Robson, Sean Blaney, Owen Boyle, Gwen Brewer, Malissa Briggler, Suzanne Carrière, Varina Crisfield, Taylor Davis, Kevin Doyle, Karro Frost, Craig Freeman, Justin Fulkerson, Joyce Gould, Jill Handwerk, Bonnie Heidel, Daniel Hipes, Jacques Labrecque, Eric Lamb, Kristi Lazar, Sarah Lee, Joe Lemeris, William Nichols, Nebraska Heritage Program, Michael J. Oldham, John Pearson, Jennifer Penny, Andrea Pipp, Michael Rudy, Diana Sawatzky, Alfred Schotz, Jason Singhurst, Benoît Tremblay, Sarah Vinge-Mazer, Virginia Natural Heritage Program, Sue Vrilakas, Brenda Wichmann, Theo Witsel, Steve Young

Vascular Plant - Leptosporangiate Ferns - Ryan Batten, Jacques Labrecque

Vascular Plant - Monocots - Derek Anderson, Wasyl Bakowsky, Ryan Batten, Diana Bizecki Robson, Owen Boyle, Suzanne Carrière, Varina Crisfield, Taylor Davis, Kevin Doyle, Bonnie Heidel, Justin Fulkerson, Andrea Pipp, Jacques Labrecque, Kristi Lazar, Joe Lemeris, Nebraska Heritage Program, William Nichols, Michael J. Oldham, John Pearson, Michael Rudy, Alfred Schotz, Benoît Tremblay, Sarah Vinge-Mazer, Sue Vrilakas, Virginia Natural Heritage Program, Brenda Wichmann, Steve Young

Vertebrate Animal - Mammals - Todd Atwood, Ian Abernethy, Dan Bachen, Pierre-André Bernier, Christina Davy, Jonah Evans, Jason Fisher, Graham Forbes, Chuck Hayes, Casey Heimerl, Daniel Hipes, Chris Johnson, Cori Lausen, Randi Mulder, Nebraska Heritage Program, Cory Olson, Stephen Petersen, Jeremy Siemers, Virginia Natural Heritage Program, Ryan Wilson

Vertebrate Animal - Turtles - Ian Abernethy, Dan Bachen, Amanda Bennett, Pierre-André Bernier, Gwen Brewer, Paul Crump, Taylor Davis, Christina Davy, Paul Frese, Eleanor Gaines, Sylvain Giguere, Carol Hall, Casey Heimerl, Daniel Hipes, Michael Jones, Joe Lemeris, Dustin Lynch, Joshua Megyesy, Nebraska Heritage Program, Nathan Shepard, Jeremy Siemers, Travis Taggart, Virginia Natural Heritage Program, Brian Zarate