Mashkiigobag; Wézawbegëk

Labrador tea (*Rhododendron groenlandicum*)

Mashkiigobag is an evergreen shrub that grows in cool bogs, conifer swamps, and other wetlands. They are native to North America and provide food and medicine to Anishinaabek, other people, and animals. Mashkiigobag leaves are fragrant and have wooly undersides that turn from bright white to rusty brown within the first two years of age.

How vulnerable is Mashkiigobag to climate-driven change in Michigan?

**VULNERABILITY RATING**

- **LOW**
  - No major change in abundance, range extent, or tribal access by the year 2050

- **MODERATE**
  - Abundance, range extent, or tribal access may decrease by the year 2050

- **HIGH**
  - Abundance, range, or tribal access may decrease greatly by the year 2050

- **EXTREME**
  - Abundance, tribal access, or range may decrease or disappear by year 2050

**Growth**
Mashkiigobag reproduces by seed and layering.

**Habitat**
Mashkiigobag grows in cool forests with spruce and other conifers.

**Protections**
Mashkiigobag habitat has declined in Michigan due to changing land use and wetland loss.
Changes in climate may impact how and where Mashkiigobag grows

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<th>Climate-driven changes</th>
<th>Possible impacts on Mashkiigobag</th>
<th>What to watch for</th>
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<td><strong>Increasing temperatures</strong>&lt;br&gt;The average temperature increased by 2°F over the past century and may increase 4-6°F by 2050.</td>
<td>Mashkiigobag is at it’s southern limit in Michigan and grows in cooler areas of the forest, which may become too warm for Mashkiigobag to grow.</td>
<td>Have you noticed changes in how or where Mashkiigobag grows? Are they limited to the coolest areas of the forest?</td>
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<td><strong>Drier soils</strong>&lt;br&gt;Increased air temperatures may lead to warmer and drier soils, especially in mid- to late-summer.</td>
<td>Mashkiigobag may be out-competed by other plants as soils warm, dry out, and become more nutrient-rich.</td>
<td>Have there been changes in how wet or dry the places are where Mashkiigobag grows?</td>
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<th>Other considerations</th>
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<td><strong>Dependence on other plants</strong>&lt;br&gt;Bog habitats are controlled by sphagnum moss, which maintains soil conditions.</td>
<td>Loss of spagnum moss may change soils and water availability. This may lower Mashkiigobag growth and reproduction.</td>
<td>Have you noticed changes in the plants that grow with Mashkiigobag?</td>
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</tbody>
</table>

Working together to support native forest understory plants

Anishinaabeg maintain important knowledges on, and relationships with, local forests, waters, seasons, and cycles. The Inter-Tribal Council of Michigan is working with the Bay Mills Indian Community, Lac Vieux Desert Band of Lake Superior Ojibwe, Pokagon Band of Potawatomi, Saginaw Chippewa Indian Tribe, Michigan Natural Features Inventory, and Northern Institute of Applied Climate Science to understand and support forest understory plants across Michigan, based on Anishinaabe and Western scientific knowledges and ways.

For more information or to get involved, contact:

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