Quinns Meadow

 KBA, Nova Scotia

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| --- |
| Thread-leaved Sundew (*Drosera filiformis*), Circular-leaf Peatmoss (*Sphagnum cyclophyllum*) |

**Instructions for Reviewers**

1. Read through the “Summary of Proposed KBA” section.
2. Read the questions after the summary and provide answers in the specified spaces.
3. Once you are done, make sure to save your work under a new file name (your answers will be lost if saving back to the original file name).
4. For additional information, see:
* [What are KBAs and how are they assessed?](http://www.kbacanada.org/wp-content/uploads/2020/09/What-are-KBAs-and-how-are-they-assessed.pdf)
* [Instructions for reviewers](http://www.kbacanada.org/wp-content/uploads/2020/09/Instructions-for-reviewers.pdf)

# Summary of Proposed KBA

*Please note that this summary has been generated automatically, and as a result there may be species scientific names that are not italicized.*

1. **KBA Name:** Quinns Meadow
2. **Location (province or territory, mid-point lat/long):** Nova Scotia

, 43.694

/-65.497

1. **KBA Scope:** National
2. **Trigger Biodiversity Element(s):**

|  |  |
| --- | --- |
|  | ● Species: Thread-leaved Sundew (*Drosera filiformis*), Circular-leaf Peatmoss (*Sphagnum cyclophyllum*) |

1. **Status Summary:**

Quinns Meadow

qualifies as a candidate National

 KBA for the following KBA criteria:

|  |  |
| --- | --- |
|  | ● A1a [criterion met by 2 species] - Site regularly holds ≥0.5% of the national population size AND ≥5 reproductive units of a Critically Endangered or Endangered species. |
|  | ● A1e [criterion met by 1 species] - Site regularly holds effectively the entire national population size of a Critically Endangered or Endangered species. |

1. **Site Description:**

Quinns Meadow is composed of multiple hydrologically connected peatlands and other wetland habitats along the eastern bank of the Clyde River including peatlands along a small tributary. The raised bog habitat in which Thread-Leafed Sundew occurs is an infertile, acidic, open wetland dominated by peat mosses, heath shrubs, short sedges and grasses. Thread-Leafed Sundew is typically found in peaty hollows where competition from other vegetation is limited. Circular-leaf Peatmoss is found in three shrub bog habitats adjacent to the Thread-Leafed Sundew bog, occurring in seasonally flooded depressions which become dry during summer (Clapp and Neily, 2017). Quinns Meadow is located in the Western ecoregion of Nova scotia within the Sable ecodistrict. This ecodistrict is known for an abundance of bogs and other wetlands, having the highest concentration of peatlands in the province (Neily et. al., 2017). The surrounding upland forest is composed of spruce and pine stands (Service Nova Scotia Provincial Landscape Viewer [accessed June 2020]). The KBA overlaps with the following protected areas: Quinns Meadow Nature Reserve (Nova Scotia Environment, Protected Areas Branch) and Quinns Meadow Conservation Lands (Nature Conservancy of Canada). For references see: QuinnsMeadowKBAProposal\_supplement.docx

1. **Assessment Details - KBA Trigger Species:**

| **Species** | **Status** | **Criteria Met** | **# of Reproductive Units** | **Assessment Parameter** |  | **Site Estimate** | **National Estimate** | **% of National Pop. at Site** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Value | Year |
| *Drosera filiformis* | N1 (NatureServe) | A1a | 51 | Number of localities |  | 12 | 2008 | 53 | 20 |
| *Sphagnum cyclophyllum* | N1 (NatureServe) | A1a; A1e | 54 | Number of localities |  | 35 | 2017 | 36 | 100 |

|  |
| --- |
| 1The site exceeds the minimum number of RUs required to meet the criteria, see: COSEWIC, 2001. COSEWIC assessment and update status report on the thread-leaved sundew Drosera filiformis in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. vi + 12 pp. |
| 2One of five known bog sites occurs in proposed KBA, see: COSEWIC, 2001. COSEWIC assessment and update status report on the thread-leaved sundew Drosera filiformis in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. vi + 12 pp. |
| 3The species is only known from five bogs in Canada, source: COSEWIC, 2001. COSEWIC assessment and update status report on the thread-leaved sundew Drosera filiformis in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. vi + 12 pp. |
| 4The site exceeds the minimum number of RUs required to meet the criteria, see: Clapp H., and Neily, T., 2017. Sphagnum cyclophyllum: a Second Site in Nova Scotia for a Rare Sphagnum Moss, Evansia 34(1), 6-8. [link](https://doi.org/10.1639/0747-9859-34.1.6). |
| 5Entire national population is within KBA boundary, source: Clapp H., and Neily, T., 2017. Sphagnum cyclophyllum: a Second Site in Nova Scotia for a Rare Sphagnum Moss, Evansia 34(1), 6-8. [link](https://doi.org/10.1639/0747-9859-34.1.6). |
| 6The species is only known from three bogs in Canada, source: Clapp H., and Neily, T., 2017. Sphagnum cyclophyllum: a Second Site in Nova Scotia for a Rare Sphagnum Moss, Evansia 34(1), 6-8. [link](https://doi.org/10.1639/0747-9859-34.1.6). |

1. **Assessment Details – KBA Trigger Ecosystems:** None
2. **Delineation Rationale:**

Boundary is derived from a 1m vertical buffer of the peatland polygons containing trigger elements, using a hydrologically correct 20m Digital Elevation Model (DEM) for the province of Nova Scotia. The vertical buffer was trimmed at a 1km horizontal distance to trigger element occurrences, the eastern bank of the Clyde River and its northwestern tributary and to the provincial highway in the south.

1. **Additional Site Information:**

|  |  |
| --- | --- |
| **Rationale for site nomination** | Quinns Meadow hosts nationally significant populations of two rare species: Thread-leaved Sundew and Circular-leaf Peatmoss. Thread-leaved Sundew is a small, carnivorous bog plant whose Canadian distribution is limited to five bogs in a small area of southwestern Nova Scotia. Its main global range is scattered along the coastal plain of the eastern United States, with a more concentrated distribution in the Gulf Coast of Florida and Louisiana (COSEWIC, 2001). The disjunct populations of Thread-leaved Sundew in southwestern Nova Scotia are part a group of unrelated plants referred to as Atlantic Coastal Plain Flora, that are rare or unknown elsewhere in Canada. Due to the large distance between the Nova Scotia populations and the closest population in the US, there is a low chance for immigration if the Canadian population is lost.Circular-leaf Peatmoss is a rare Sphagnum moss which occurs in coastal areas in New Jersey and from Virginia to Florida and Louisiana with a disjunct occurrence in Nova Scotia (NatureServe Explorer, 2020.) This rare Sphagnum moss is distinctive amongst Sphagnum species in Nova Scotia, and its entire Canadian range is limited to three bogs along a 12 km stretch of the Clyde River (Clapp and Neily, 2017). For references see: QuinnsMeadowKBAProposal\_supplement.docx |
| **Biodiversity elements that were assessed but did not meet KBA criteria** | *-* |
| **Other significant biodiversity elements** | none known |
| **Percent of site covered by protected areas** | 1-10% |
| **Customary jurisdiction at site** | - |
| **Ongoing conservation actions** | Site/area protection; Site/area management |
| **Ongoing threats** | Climate change & severe weather; Human intrusions & disturbance; Natural system modifications; Pollution |
| **Additional conservation actions needed** | Site/area protection |

**Questions for Reviewers**

If you run out of space for any of your answers to questions 5-11, please expand the text box by clicking it and then pulling the bottom border downwards.

*Required information for review completion:*

1. Name 

2. Email address 

3. Phone number (optional) 

4. I understand and agree that my name and contact information may be provided to additional reviewers indicating that I provided a technical review of this KBA





5. Are the global values (or national, for national-scale KBAs) used in the threshold calculation accurate and adequately documented?





*Additional comments*

6. Are the site-level estimates for each assessment parameter accurate and adequately documented?







7. Is it reasonable to assume that the KBA trigger element (species or ecosystem) is present at the site and has been correctly identified?







8. Is the proposed KBA boundary appropriate and at a useful scale to focus conservation efforts?







9. If they have been provided, are the mapped distributions of the biodiversity elements realistic?







*Additional information for review:*

10. If you are familiar with the site, please comment on the site description and provide any other information that may help its documentation and conservation, including about:

* ongoing conservation actions being applied to the site
* conservation actions needed at the site
* additional biodiversity elements at the site
* relevant information about customary jurisdiction(s) of the site (i.e. traditional territories, landowners, etc.)
* threats to the persistence of biodiversity at the site (pertaining to the trigger species or in general)



11. Any other comments?

