Dipper Harbour Creek

KBA, New Brunswick

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| --- |
| Bog Jacob's-ladder (*Polemonium vanbruntiae*) |

**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:** Dipper Harbour Creek
2. **Location (province or territory, mid-point lat/long):** New Brunswick

, 45.11

/-66.449

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

|  |  |
| --- | --- |
|  | ● Species: Bog Jacob's-ladder (*Polemonium vanbruntiae*) |

1. **Status Summary:**

Dipper Harbour Creek

qualifies as a candidate National

KBA for the following KBA criteria:

|  |  |
| --- | --- |
|  | ● A1b [criterion met by 1 species] - Site regularly holds ≥1% of the national population size AND ≥10 reproductive units of a Vulnerable species. |

1. **Site Description:**

Dipper Harbour Creek is a small stream in southwestern New Brunswick. It drains into the Bay of Fundy via Dipper Harbour. The site encompasses 2km of Dipper Harbour Creek and includes a small tributary of south of Dipper Harbour Creek which flows southwest from Sams Hill. The site is on provincially and privately owned land.

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

| **Species** | **Status** | **Criteria Met** | **# of Reproductive Units** | **Assessment Parameter** |  | **Site Estimate** | | | |  | | **National Estimate** | | | | **% of National Pop. at Site** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Min | Best | Max | Year | |  | | Min | Best | Max |  |
| *Polemonium vanbruntiae* | N2 (NatureServe) | A1b | 101 | Number of mature individuals |  | 625 | 15982 | 2570 | 2009, 2012 and 2014 | |  | |  | 200003 |  | 8 |

|  |
| --- |
| 1The site exceeds the minimum number of RUs required to meet the criteria, (AC CDC database, accessed January 2021). |
| 2In 2009 the population was estimated at between 250 and 1000 individuals, the mean (625) is used as the min site estimate. In 2012, a survey estimated the population at ~2,400 rosettes an additional population was discovered in 2014 and was estimated at around 170 rosettes. The sum of the newer data is used as the Max estimate. The best estimate is the mean of these two estimates. Note: the exact number of individuals is difficult to count since rosettes occur in dense patches and vegetative offsets may not be physiological independent. Source: AC CDC database accessed January 2021. |
| 3The best estimate for population size is approximately 20,000 individuals in 14 occurrences in Canada. Source: Environment Canada. 2012. Recovery Strategy for the Van Brunt’s Jacob’s-ladder (Polemonium vanbruntiae) in Canada, Species at Risk Act Recovery Strategy Series, Environment Canada, Ottawa, iv + 26 pp. |

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

Boundary is derived from a 5m vertical buffer of the stream and tributary containing trigger elements using a LiDAR derived digital elevation model for the province of New Brunswick. The vertical buffer captures some upland habitats which affect the hydrology and water quality of the habitat. The buffer allows for spatial inaccuracies in the delineation of the watercourses.

1. **Additional Site Information:**

|  |  |
| --- | --- |
| **Rationale for site nomination** | Bog Jacob’s-ladder is an herbaceous perennial endemic to the central Appalachians. In Canada, this species is only known to occur in 14 sites in Quebec and New Brunswick (Environment Canada, 2012). Van Brunt’s Jacob’s-ladder is found in moist, open or semi-open habitats subject to flooding in the spring, with rich soils, often located near the bottom of slopes or near streams. The plant is sensitive to major hydrological changes in its habitat, such as altered drainage or prolonged flooding and some populations in Quebec have been diminished or lost due to roadwork and agriculture (COSEWIC, 2002). For references see: DipperHarbourCreekKBAProposal\_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** | 0% - completely unprotected |
| **Customary jurisdiction at site** | - |
| **Ongoing conservation actions** | None |
| **Ongoing threats** | Agriculture & aquaculture; Biological resource use; Human intrusions & disturbance; Other options; Residential & commercial development |
| **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?

