Bathurst Harbour

 KBA, New Brunswick

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| Maritime Ringlet (*Coenonympha nipisiquit*) |

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

, 47.648

/-65.604

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

|  |  |
| --- | --- |
|  | ● Species: Maritime Ringlet (*Coenonympha nipisiquit*) |

1. **Status Summary:**

Bathurst Harbour

qualifies as a candidate Global

 KBA for the following KBA criteria:

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

1. **Site Description:**

The salt marshes in and around Bathurst Harbour in northern New Brunswick host three of the ten sites home to the Endangered Maritime Ringlet butterfly. The KBA is located on the eastern side of Bathurst Harbour and the site encompasses the Daly Point, Carron Point and Bass River salt marsh sites. Together, this KBA hosts approximately 16% of the current known global population of Maritime Ringlet and three of the four natural populations in the province. The site encompasses part of Daly Point Nature Reserve, which is owned by the City of Bathurst. An additional butterfly species of conservation concern is present at this site: Saltmarsh Copper. Saltmarsh Copper is another salt marsh inhabiting butterfly endemic to eastern Canada and is restricted to salt marshes along the Gulf of St. Lawrence coasts of Quebec, New Brunswick, Nova Scotia and Prince Edward Island (NatureServe Explorer, 2020). For references see: BathurstHarbourKBAProposal\_supplement.docx

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

| **Species** | **Status** | **Criteria Met** | **# of Reproductive Units** | **Assessment Parameter** |  | **Site Estimate** |  | **Global Estimate** | **% of Global Pop. at Site** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Min | Best | Max | Year |  | Min | Best | Max |  |
| *Coenonympha nipisiquit* | G1 (NatureServe); N1 (NatureServe) | A1a | 51 | Number of mature individuals |  | 9500 | 97002 | 9900 | 1994, 1996 and 2002 |  | 56000 | 610003 | 66000 | 15.9 |

|  |
| --- |
| 1The site exceeds the minimum number of RUs required to meet the criteria, source: Environment Canada. 2012. Recovery Strategy for the Maritime Ringlet (Coenonympha nipisiquit) in Canada. Species at Risk Act Recovery Strategy Series. Environment Canada, Ottawa. iv + 27 pp. |
| 2This site encompasses three sub-populations: Daly Point, Carron Point and Bass River. The minimum site estimate is the population estimate for Carron Point (1996) because this site is the only one of the three with a numerical estimate. The max site estimate is the population estimate for Carron Point plus 400 (The populations at both Daly Point (1994) and Bass River (2002) are both estimated as "hundreds?" therefore assigning a numerical value of 200 individuals each is a conservative value). The best site estimate is the average of these two values. Source: Environment Canada. 2012. Recovery Strategy for the Maritime Ringlet (Coenonympha nipisiquit) in Canada. Species at Risk Act Recovery Strategy Series. Environment Canada, Ottawa. iv + 27 pp. |
| 3The global population of Maritime Ringlet is estimated at between 56 000 to 66 000 individuals. The best estimate is the mean of these values. Source: Environment Canada. 2012. Recovery Strategy for the Maritime Ringlet (Coenonympha nipisiquit) in Canada. Species at Risk Act Recovery Strategy Series. Environment Canada, Ottawa. iv + 27 pp. |

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

Boundary is derived from a 2m vertical buffer of the three salt marsh polygons containing trigger elements using a LiDAR derived digital elevation model for the province of New Brunswick. These DEM buffers were merged where they overlapped. A coastline buffer of 300m was used to trim the DEM seaward. The vertical buffer captures some upland habitats which affects the hydrology and water quality of the salt marsh system. The buffer also accounts for the dynamic nature of these habitats and allows for spatial inaccuracies in the delineation of the marsh.

1. **Additional Site Information:**

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| --- | --- |
| **Rationale for site nomination** | Maritime Ringlet is a small butterfly with an extremely restricted global distribution within a small area near Chaleur Bay in northern New Brunswick and the southern coast of the Gaspé Peninsula in Québec. This Canadian endemic has a life cycle entirely limited to the salt marsh habitats with only limited use of the adjacent habitats (Environment Canada, 2012). Maritime Ringlet has only been found at 10 sites (4 in Quebec and 6 in New Brunswick [2 of which are introduced populations]) and only three populations are large enough for long term survival to be probable (Environment Canada, 2012). Because their habitat is restricted to coastal salt marshes, populations are expected to experience habitat loss due to both sea level rise and increased storm frequency due to climate change (Environment Canada, 2012). The New Brunswick populations are also subject to threats associated with increased development and marsh infilling. For references see: BathurstHarbourKBAProposal\_supplement.docx |
| **Biodiversity elements that were assessed but did not meet KBA criteria** | *-* |
| **Other significant biodiversity elements** | Salt Marsh Copper (Lycaena dospassosi, G3, N3) |
| **Percent of site covered by protected areas** | 1-10% |
| **Customary jurisdiction at site** | - |
| **Ongoing conservation actions** | Site/area protection; Awareness & communications |
| **Ongoing threats** | Climate change & severe weather; Human intrusions & disturbance; Invasive & other problematic species, genes & diseases; Pollution; Residential & commercial development |
| **Additional conservation actions needed** | Site/area protection; Site/area management |

**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?

