Upper Saint John River Islands

KBA, New Brunswick

|  |
| --- |
| Cobblestone Tiger Beetle (*Cicindela marginipennis*) |

**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:** Upper Saint John River Islands
2. **Location (province or territory, mid-point lat/long):** New Brunswick

, 46.368

/-67.562

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

|  |  |
| --- | --- |
|  | ● Species: Cobblestone Tiger Beetle (*Cicindela marginipennis*) |

1. **Status Summary:**

Upper Saint John River Islands

qualifies as a candidate Global

KBA for the following KBA criteria:

|  |  |
| --- | --- |
|  | ● A1b [criterion met by 1 species] - Site regularly holds ≥1% of the global population size AND ≥10 reproductive units of a Vulnerable species. |
|  | ● B1 [criterion met by 1 species] - Site regularly holds ≥10% of the global population size AND ≥10 reproductive units of a geographically-restricted species. |

1. **Site Description:**

The islands in a ~20km long section of the Upper Saint John River host Canada’s largest population of Cobblestone Tiger Beetle. The islands occupied by the beetle are generally large, treed islands with sparsely vegetated cobblestone beach on the upstream ends. Cobblestone Tiger Beetles inhabit the cobblestone beaches of these islands. This beach habitat is flooded during the spring (and occasionally summer rains), which maintains the open, sparsely vegetated habitat which host the beetles.
This site overlaps Stickney Protected Natural Area (Department of Natural Resources, Government of New Brunswick).
Two other species of conservation concern have been recorded along the riverbank in this section of the Upper Saint John River: Black Ash (Threatened) and Anticosti Aster (Threatened) (AC CDC database, accessed December 2020). For references see: UpperSaintJohnRiverIslandsKBAProposal\_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** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Value | Year |
| *Cicindela marginipennis* | VU (IUCN); G2 (NatureServe) | A1b; B1 | 101 | Area of occupancy |  | 242 |  | 2403 | 10 |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1The site exceeds the minimum number of RUs required to meet the criteria, (AC CDC database, accessed February 2020). | | | | | | | | | |
| 2The estimated AOO at this site is 24 km2 (or 6 2x2km grid squares). Source: Atlantic Canada Conservation Data Centre database, accessed 2019. | | | | | | | | | |
| 3Estimated Area of Occupancy (km2) is reported in IUCN account as 120km2. Source: Kinsley, B. 2014. Cicindela marginipennis. The IUCN Red List of Threatened Species 2014: e.T4851A21424216. [link](https://dx.doi.org/10.2305/IUCN.UK.2014-1.RLTS.T4851A21424216.en. Recent surveys in New Brunswick have increased the estimated AOO by 120 km2 (or 30 2x2km grid squares). Source: Atlantic Canada Conservation Data Centre database, accessed 2019). | | | | | | | | | |

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

The KBA boundary is defined by a minimal 30m buffer of the river shore of the section of the Saint John River containing the islands with the trigger element occurrences. Additionally, the river section is buffered ~300m upstream and downstream of the northernmost and southern most occupied island.

1. **Additional Site Information:**

|  |  |
| --- | --- |
| **Rationale for site nomination** | Cobblestone Tiger Beetle is a distinctive species of tiger beetle endemic to eastern North America. It has a fragmented distribution which is limited to riparian cobblestone habitat along major river systems from Mississippi to Maine in the US and two rivers as well as in similar habitats in the Grand Lake complex in New Brunswick, Canada (Environment Canada, 2013; ACDC database accessed 2020). The species has been historically impacted by daming and faces current threats from development, habitat fragmentation, as well as specimen collection, pollution and flooding (Environment Canada, 2013). |
| **Biodiversity elements that were assessed but did not meet KBA criteria** | *-* |
| **Other significant biodiversity elements** | • Black Ash (Fraxinus nigra, G5, NNR, Threatened, IUCN:CR) • Anticosti Aster (Symphyotrichum anticostense, G3, N3, Threatened) |
| **Percent of site covered by protected areas** | 1-10% |
| **Customary jurisdiction at site** | - |
| **Ongoing conservation actions** | Formal education |
| **Ongoing threats** | Agriculture & aquaculture; Biological resource use; Climate change & severe weather; 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?

