

## Canadian Important Bird Areas Criteria (2<sup>nd</sup> edition; 2011)

Authors: Janet Moore and Andrew Couturier

*With consultation from Canada's National Technical Committee for IBAs and other experts*

In Canada, the IBA Program was initiated in 1996, in conjunction with the launch of parallel programs in the United States and Mexico. By 2001, about 600 IBAs had been identified in Canada based on our [original IBA selection criteria](#) (1<sup>st</sup> edition; 2001). BirdLife Partners now operate in over 100 countries and territories worldwide. Since this Programs' inception, criteria and thresholds have changed in light of new information and review of its global effectiveness for conserving birds and biodiversity.

These updated IBA selection criteria as well as our original criteria were developed such that, by applying different ('staggered') numerical thresholds, the significance of a site for a species may be categorized at three distinct geographical levels, Global, Regional, and Sub-regional. Respecting that bird species behave differently, require unique resources, and can be subject to intense pressures, BirdLife Partners also identify IBAs within four distinct categories; threatened birds, range-restricted species, biome-restricted species, and congregations (e.g. where birds gather in considerable numbers).

IBA DESIGNATIONS	Category 1 THREATENED BIRDS <sup>1</sup>	Category 2 RESTRICTED-RANGE SPECIES <sup>4</sup>	Category 3 BIOME-RESTRICTED SPECIES	Category 4 CONGREGATIONS <sup>1,2,3</sup>
<b>A - GLOBAL</b>	<b>A1</b> IUCN listed species Critically Endangered & Endangered = 1 Vulnerable = 30. Static thresholds.	Bird species with a natural (historical) breeding range of less than 50,000 km <sup>2</sup> . <i>No species meet this criterion in Canada.</i>	N/A <sup>6</sup> <i>To be determined in cooperation with Continental IBA Partners.</i>	<b>A4i/ii/iv</b> 1%; land/water/air <sup>5</sup> . Thresholds set based on species' global abundance.
<b>B - REGIONAL (Continental)</b>	<b>B1</b> IUCN listed species Near Threatened: non-Passeriformes = 30, Passeriformes = 90. Static thresholds. <i>This category is not fully determined yet. Coordination with Continental IBA Partners pending to identify species considered at risk within the Nearctic.</i>	N/A <sup>6</sup>	N/A <sup>6</sup> <i>To be determined in cooperation with Continental IBA Partners.</i>	<b>B4i/ii/iv</b> 1%; land/water/air <sup>5</sup> . Threshold set based on species' Nearctic abundance. <b>B4iii</b> threshold is 20,000 birds (single or mixed species by group; 20,000 seabirds or landbirds or waterbirds); land/water <sup>5</sup> . This criterion is used where species specific data is unavailable; otherwise birds are assessed against i/ii criteria and respective thresholds.
<b>C - SUB-REGIONAL (National)</b>	<b>C1</b> COSEWIC listed species 1% and network approach to capture all listed species (<1% + diversity of birds & habitats/pressures considered). Threshold set based on species abundance within the region of listing (e.g. if a species is listed in ON, the 1% threshold is derived based on its ON population).	N/A <sup>6</sup>	N/A <sup>6</sup>	N/A <sup>6</sup>

<sup>1</sup> Thresholds pertain to individuals. Regular use by birds is implied.

<sup>2</sup> Subspecies are eligible provided their numbers exceed species level thresholds.

<sup>3</sup> All birds are eligible, including species at risk. Birds can trigger IBA designation under more than one IBA criterion.

<sup>4</sup> Native Canadian bird species do not have restricted breeding ranges. This category is most relevant to southern/tropical areas and geographically isolated islands.

<sup>5</sup> Land/water/air refers to how birds are using IBAs and is correlated with IBA designations. 4i/ii are IBAs encompassing lands/waters, whereas 4iv are aerial corridor IBAs.

<sup>6</sup> Not applied.

Most of Canada's IBAs are designated because significant numbers of birds are congregating while breeding or during migration, or because they contain birds which are threatened: not all IBA criteria are applicable to our native birds. While species' thresholds primarily guide site selection processes, Canada's IBA technical experts may consider areas of exceptional species diversity and where potential exists to safeguard our threatened birds or birds with, relatively speaking, more restricted ranges and



which are subject to greater pressures. A “network approach” to site selection is being adopted to ensure all of Canada’s native bird species are represented within the best available habitats and where conservation activities have the potential to be most effective. Written justification for all of Canada’s IBAs is available upon request. Internal technical guidance has been developed and will be updated that reflects Canada’s network and site selection processes.

See below for additional information about Canada’s IBA selection criteria. Definitions of commonly used IBA terminology (e.g. simultaneous count, significant number, regular use, and trigger species etc.) are provided in Appendix 1.

Visit Canada’s [national IBA website](#) for site-specific details, downloadable maps, bird threshold tables, guidance about defining boundaries, and other resources for stakeholders, IBA Partners, and Caretakers.

## **Category 1: Threatened Birds**

### **A1. Globally Threatened Birds**

The site qualifies if it is known, or thought to hold a population of a species categorized by the IUCN Red List as Critically Endangered, Endangered, or Vulnerable. In general, the regular presence of a Critically Endangered or Endangered species, irrespective of population size, may be sufficient for a site to qualify as an IBA. For Vulnerable species, the presence of more than threshold numbers (10 pairs or 30 individuals) at a site is necessary to trigger selection. Species listed as Near Threatened by the IUCN are considered under B1 (Regionally threatened species).

Where a species at risk is relatively widespread (despite their high extinction risk) higher thresholds may apply or priority sites chosen. For example, where a bird species is listed as Globally Threatened by the IUCN but its population within Canada is relatively high compared to other regions in the world where this bird exists, higher thresholds or priority sites may be selected; based on stability of local conditions to support them in the longer-term and on-going conservation initiatives.

### **B1. Regionally Threatened Birds**

The site qualifies if it is known, or thought to regularly hold a population of a species categorized by the IUCN Red List as Near Threatened. The threshold for non-Passeriformes is 10 pairs or 30 individuals and for Passeriformes (e.g. perching/songbirds) is 30 pairs or 90 individuals.

This is a newly established criterion in Canada, hence there were no IBAs originally designated under this category. Bird species identified by established continental working groups as being threatened, such as those cooperating via the North American Bird Conservation Initiative (e.g. the North American Waterfowl Management Plan, Partners in Flight, the Canadian Shorebird Conservation Plan and the North American Waterbird Conservation Plan) will likely be considered. However, we aim to standardize our approach and maintain consistency in designation strategies with our Continental IBA Partners in the US and Mexico and international discussions are required prior to the full establishment of this



criterion. At present solely those species categorized by the IUCN Red List as Near Threatened are being considered.

### **C1. Sub-Regional Birds at Risk**

The site qualifies if it is known, or thought to regularly hold significant numbers of a bird species, subspecies, or otherwise distinct population which is considered by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) as Endangered, Threatened, or of Special Concern in Canada. The threshold is generally 1% of the respective population where the species is considered at risk (i.e. if a species is considered by COSEWIC as Endangered in Ontario but exists elsewhere, the threshold is 1% of its Ontario population and solely these Ontario birds would be considered eligible to trigger IBA designation under this criterion).

However, to target species most at risk and quickly declining in numbers, thresholds for Endangered species, subspecies, or otherwise distinct populations may be lower than 1%. Conversely, where a species at risk is relatively abundant (despite their high extinction risk) higher thresholds may apply or priority sites chosen based on stability of local conditions to support them in the longer-term and on-going conservation initiatives. Consideration may be given to the degree species and habitats are threatened and if multiple species at risk share overlapping territories. Thresholds will be established and sites selected on a species by species and site by site basis by Canada's IBA technical experts.

### **Category 2: Restricted-range species**

A minority of bird species have small breeding ranges, restricted to less than 50,000 km<sup>2</sup>, and these species are eligible to trigger IBA designation. Most of Canada's birds have breeding ranges larger than 50,000 km<sup>2</sup>. This category is most relevant to southern/tropical areas and geographically isolated islands.

### **A2. Global**

The site qualifies if it is known or thought to regularly hold a significant component of a group of species or, in some particular cases, a single bird species with a natural (i.e. historical) breeding range of less than 50,000 km<sup>2</sup>.

No species meet this criterion in Canada.

### **Category 3: Biome-restricted species**

In Canada there are no IBAs designated under this category; in future this criterion may be established. We aim to standardize our approach and maintain consistency in designation strategies with other IBA Partners.



## Category 4: Congregations

This category applies to large numbers of single or mixed species that are vulnerable as a consequence of their congregatory behavior(s). Sites must be regularly used during breeding or non-breeding seasons and could include foraging, roosting, rafting, migratory stopover sites, and aerial bottlenecks.

### A4. Global

A site may qualify if one or more of the following criteria are met:

**A4i/ii.** The site is known or thought to hold, on a regular basis, 1% or more of the global population of a bird species during breeding, wintering, foraging, roosting, rafting, or migration.

\* If a bird species solely exists in the Nearctic (North America) its thresholds for A4i/ii and B4i/ii are the same.

**A4iv.** The site is known or thought to hold, on a regular basis, 1% or more of the global population of a migratory bird species at an aerial bottleneck site during migration. Subspecies or otherwise distinct populations are considered provided their numbers exceed 1% or more of the global population for their species. This category is primarily targeted to capture the air space raptors and other birds regularly use during migration; seasonal totals could be used to determine eligibility.

For migratory birds primarily using terrestrial lands and waters at stopover bottlenecks (to forage for example), category 4i/ii or 4iii would apply.

### B4. Regional

A site may qualify if one or more of the following criteria are met:

**B4i/ii.** The site is known or thought to hold, on a regular basis, 1% or more of the Nearctic (North American) bird population during breeding, wintering, foraging, roosting, rafting, or migration.

\* If a bird species solely exists in the Nearctic (North America) its thresholds for A4i/ii and B4i/ii are the same.

**B4iii.** The site is known or thought to hold, on a regular basis, 20,000 or more waterbirds, seabirds or landbirds (one or several species) during breeding, wintering, foraging, roosting, rafting, or migration. Subspecies or otherwise distinct populations are considered provided their numbers exceed the abovementioned threshold.

This category is utilized where considerable numbers are birds are congregating and it is not possible to accurately differentiate between species (e.g. offshore/rafting waterbirds) or where daily abundances are documented based on all birds using an area at a specific time (e.g. migratory 'hotspots'). Category 4i/ii otherwise applies.



This category is modeled, in part, on Criterion 5 of the Ramsar Convention for identifying wetlands of international importance.

- B4iv.** The site is known or thought to hold, on a regular basis, 1% or more of the Nearctic (North American) population of a migratory bird species at an aerial bottleneck site during migration. Subspecies or otherwise distinct populations are considered provided their numbers exceed 1% or more of the Nearctic population for their species. This category is primarily targeted to capture the air space raptors and other birds regularly use during migration.

For migratory birds primarily using terrestrial lands and waters at stopover bottlenecks (to forage for example), category 4i/ii or 4iii would apply.

#### **C4. Sub-regional**

Apart from national species at risk (C1), IBAs are no longer identified based on 1% of flyway or Canadian populations of bird species or subspecies. This change reflects our updated network approach to site selection and is in response to our better understanding of the conservation requirements of birds (refer to the [national IBA website](#) for additional information).

## Appendix 1: IBA Terminology

**Numerical Threshold:** Thresholds are established based on reliable population data and estimates, and based on the advice and consensus of experts nationally and internationally. Thresholds are used to guide decisions about whether a bird(s) could “trigger” IBA designation. For species that tend to congregate in large numbers, the threshold is oftentimes 1% of its global or regional (continental) population. Note: thresholds are subject to change as abundance or population information is updated.

**Regular Use:** IBAs are designated because more often than not they contain sufficient numbers of birds and/or species diversity to merit protection and conservation within the context of the IBA Program. If information on a species’ abundance was known for several years, abundance data from the most recent years will be compared against current thresholds.

IBAs are classified according to the regularity birds are present in sufficient numbers and/or diversity. If birds no longer use an area even though it remains relatively unaltered, site information will be retained and made available via the national IBA website. IBA conservation actions may still occur at these disused sites where no conspicuous reason exists to believe that birds would not return if ecological characteristics are consistent with when the trigger species were present.

**Significant Number:** The bird population threshold used as the basis for defending IBA selection. Where bird abundances regularly exceed significant numbers, birds are deemed to trigger IBA designations.

**Trigger species:** Birds are referred to as trigger species when they are in sufficient numbers to merit IBA designation. The numbers or abundances required to trigger designations are generically outlined under each criterion within Canada’s updated criteria. Species diversity may be used to complement selection processes.

**Simultaneous Count:** Refers to bird observations made at a specific point in time and is normally associated with the highest number of birds present within a specific area/IBA. The highest number of birds regularly present are evaluated against thresholds (significant numbers), to determine if they could trigger IBA designation.

**Boundaries:** IBAs include key resources for trigger species during the specific time of year they are present. If a site was designated for breeding birds, its boundary may not encompass essential foraging areas, but it would encompass the core areas used by nesting trigger species.

Each IBAs web published summary includes information pertaining to: the degree of stakeholder collaboration and scrutiny involved during boundary review processes; what key resources may not exist to sustain trigger species within the boundary (e.g. foraging areas); and the mapping methods used for digitization.



Originally, IBA boundaries were generalized and include key resources: boundaries were digitized according to information received during the nomination process (late 1990's), and using mapping software and spatial layers available at this time.

Mapping software and methods have improved and spatial layers have become more broadly available. IBAs have also become more widely recognized as highly valuable to conserve, and more frequently are being considered during planning, development, and regulatory decision-making processes. So, while bird populations can naturally shift from year-to-year, making defining boundaries challenging, Canada's IBA Partners have agreed to try and more definitively define boundaries where possible. Regional technical committees will work in cooperation with the IBA national technical committee to more definitively describe and map IBA boundaries. Guidance about how to define IBA boundaries has been developed and will be regularly updated.

