



## Evaluation at a Glance Migratory Birds Program

### About the program

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The Migratory Birds Program (MBP) includes a range of activities that contribute to migratory bird protection and conservation. It is responsible for implementing the [Migratory Birds Convention Act, 1994](#) (MBCA), which designates 368 species as “migratory birds”. The goal of the MBP is to ensure that migratory bird populations are maintained at healthy levels. Key program activities include:

- Monitoring the status of birds
- Expanding the base of scientific research and knowledge
- Protecting populations, individual birds, eggs, nests and habitats through conservation actions, stewardship and policy development
- Enforcing the MBCA and its regulations
- Providing advice and permits to support the effective management of migratory birds

Environment and Climate Change Canada’s (ECCC) Canadian Wildlife Service delivers the MBP with support from the department’s Science and Technology Branch and Enforcement Branch, and in partnership with other governments and non-governmental organizations. In fiscal year 2016 to 2017, ECCC’s expenditures for the program totalled about \$29 million.

### What the evaluation found

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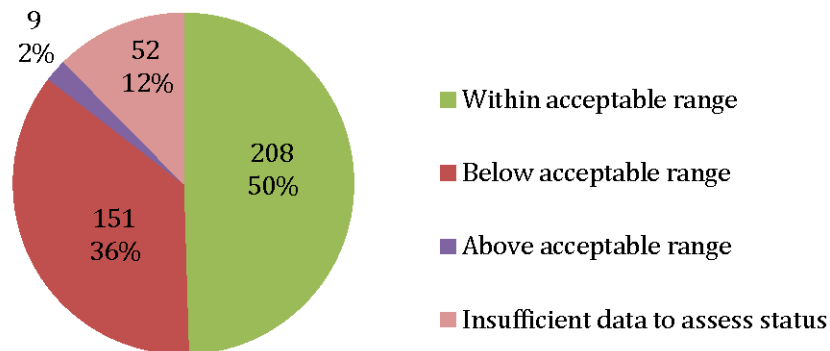
- Ensuring that knowledge and data are available to manage and assess bird populations is a key focus of the MBP. This data is needed to identify actions needed to work towards the program’s long-term goal of making sure that migratory bird populations are maintained at healthy levels.
- Given the large number of bird species in Canada over a large geographic area, there are gaps in the data needed to estimate long-term trends for about 30% of all bird species in Canada.
- The MBP generates extensive information and data through monitoring and research. Partners consider the MBP’s work in this area to be of high quality; however, the evaluation identified a need to improve data management within ECCC, to increase data accessibility, support collaboration and make sure data is protected for the longer term.
- Not all data and scientific knowledge is currently being shared in a systematic manner. Improving the dissemination of knowledge and data would increase the degree to which interested partners and external stakeholders make use of this knowledge when planning their conservation actions.



- As Figure 1 shows, for the 420 migratory bird populations for which ECCC is responsible:
  - 12% (52 populations) have insufficient data to assess their status
  - 50% (208 populations) is known to have populations sizes within an acceptable range
  - 38% (9 + 151 populations) do not

Of the 38% of populations that are outside of acceptable ranges, 94% have population levels below acceptable ranges (not enough of the species) and 6% have levels above acceptable ranges (too many of the species).

**Figure 1: population status for migratory birds in Canada, 2013**



- The MBP has been effective in ensuring that harvests of migratory birds are kept at sustainable levels. It publishes updated hunting regulations every two years to reflect changes in species populations.
- The MBP has contributed to reducing threats to public health and safety and to economic loss caused by migratory birds, including from those with overabundant populations. Ongoing work is needed in this area.
- The MBP is delivered in partnership with many other government and non-government organizations representing various jurisdictions. Engagement and collaboration with the provinces and territories and environmental non-governmental organizations on bird issues is considered quite strong, but opportunities were identified to improve the level of engagement with others, especially with municipalities and internationally. Engagement of these stakeholders is critical to bird conservation and enhances the efficiency of program delivery.

## Recommendations

Four recommendations are addressed to the Assistant Deputy Minister, Canadian Wildlife Service, who has accepted them and has developed management action plans in response:



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## **Recommendation 1: take steps to address current gaps in migratory bird monitoring data**

**Management response:** Through the Avian Monitoring Review (2012) and subsequent work by the Avian Monitoring Committee (AMC), ECCC has worked to maximize the efficiency and coverage of its existing bird monitoring programs, but recognizes that there are still significant gaps. Fully addressing all of these gaps will not be possible without significant new resources, but we have identified four areas with high risk gaps where we will take steps to reduce the gaps in context of resources currently available: shorebirds, boreal forest birds, colonial seabirds, and sea ducks.

Shorebirds face a particularly high risk, as several species are already listed under SARA or are potential candidates for COSEWIC evaluation. To enhance understanding of shorebird status, we propose to complete an analysis of the first round of Arctic breeding ground surveys, including a strategy for future surveys; and also complete an evaluation of approaches to enhance migration surveys.

Boreal forest birds represent a particular challenge, because the vast size and limited accessibility of the boreal forest require substantial resources for comprehensive on-the-ground monitoring. CWS is developing a flexible and adaptable boreal bird monitoring strategy incorporating innovative approaches, such as new technologies and partnerships, to address risks.

For colonial seabirds, the highest risk gaps are associated with poorly surveyed major Arctic breeding colonies, where climate change and increased human activity pose threats. ECCC will focus efforts on surveying selected high priority colonies identified in the recently completed colony monitoring strategy.

Sea ducks are relatively heavily exploited, both by Indigenous and recreational hunters, but there is much uncertainty on population sizes, creating risks of over-exploitation. ECCC, with support from the Sea Duck Joint Venture, will complete a three-year pilot survey of scoters to provide a preliminary estimate of current population sizes and inform design of a potential future operational survey.

## **Recommendation 2: develop and implement improved internal data management systems for the scientific data generated by the Migratory Birds Program**

**Management response:** Some advances have recently been made in relation to data management within ECCC, as well as within CWS. CWS has put in place a Data and Information Management Committee that has manager-level representation from each division and each region, supported by a data management working group. CWS has also created the first version of a centralized data management system of geospatial data that allows regional offices and NCR to seamlessly merge and share geospatial datasets (that is, the Geospatial Knowledge Management Initiative [GKMI]).

Priorities for the medium term include completing a detailed needs assessment related to the evolution of the centralized data management system (GKMI), to ensure that it responds to needs from across all CWS program areas and regions while also taking full advantage of available database



capacities. The needs analysis will consider systems and structures that will need to be created or enhanced within CWS as well as efforts that would need to be advanced by CSFB or SSC\*. The degree to which and pace at which the needs assessment can be advanced will depend on resources available to support this effort. Priority will be placed on placing a larger portion of CWS's data on centralized databases, as well as on open data platforms, as appropriate. CWS will also advance a pilot project (Ground to Cloud) that will consider whether there are opportunities to better leverage technologies and stakeholders, to reduce the lag time and processing effort between the data collection (that is, field work) and the integration of data into a national database.

\*Critical to successfully advancing this recommendation is the support provided by others within ECCC, most notably Corporate Services and Finance Branch (CSFB) and other federal departments, most notably Shared Services Canada (SSC).

### **Recommendation 3: improve the dissemination of program knowledge and data to stakeholders and partners, to allow them to make greater use of available knowledge when planning and undertaking conservation actions**

**Management response:** Many elements of recommendation #3 depend on successfully advancing recommendation #2 in that the ability to make data available to other Departments and external audiences, including via the Federal Geospatial Platform, requires that the data first be made available across CWS given the data work flow established by ECCC.

CWS has invested energy in the dissemination of data and knowledge and increasing its uptake by decision makers. Nonetheless, important gaps remain and effort will be directed to filling priority gaps as resources allow. CWS will continue to prioritize the communication of information on the health of bird populations within Canada including directing efforts towards making more data available to the public. CWS will produce a State of Canada's Birds report in 2018. This will represent an update to previous "State of Canada's Birds" reports that relay important information to decision makers and the general public on the health of Canadian birds. CWS has also invested in disseminating web-based information on how to avoid harm to birds including providing information on when different species are likely to be nesting in different parts of Canada. CWS will continue to update the information available on the website to reflect new information, and will engage directly with key stakeholders interested in providing advice on how to reduce adverse impacts on migratory birds.

Ensuring the effective and efficient dissemination of program knowledge and data will facilitate and enhance the shift to priority places, species and threats, enabling stakeholders and partners to combine their information and knowledge with that of CWS, to improve planning and actions to improve conservation outcomes. Improved dissemination of program knowledge and data will also advance the Government of Canada's renewed priority of regional environmental impact assessments and addressing cumulative impacts of activities within an area which in turn will also improve conservation outcomes in the long term. CWS will continue to make additional priority CWS datasets available on Open Data platforms each year, beginning in fiscal year 2018 to 2019, and will continue to advance efforts to enable additional priority datasets to be made available.



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#### **Recommendation 4: review current stakeholder engagement and outreach processes and develop a strategy to enhance awareness and educate the different stakeholder groups on issues affecting migratory birds**

**Management response:** CWS recognizes that enhancing awareness of migratory birds and their conservation by different stakeholder groups is an essential component of the program's continued success. Therefore, CWS will prepare a strategy that addresses the approach for engagement with Indigenous people and the following stakeholder groups: general public, North American Bird Conservation Initiative (NABCI), municipalities, other government departments (OGDs), and international partners.

The engagement strategy will include specific targeted activities that will be undertaken with each group. These activities will primarily include strategic meetings and presentations, engagement through social media, and collaboration with key partners. This engagement strategy will consider how to advance migratory bird conservation outcomes in context of place-based, priority species and threats-based strategies.

#### **About the evaluation**

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The evaluation covered activities from fiscal year 2011 to 2012 to fiscal year 2016 to 2017. Information was gathered using different methods such as a document review, 31 interviews with internal and external stakeholders, a file review, four case studies and a focus group on the role of partnerships.