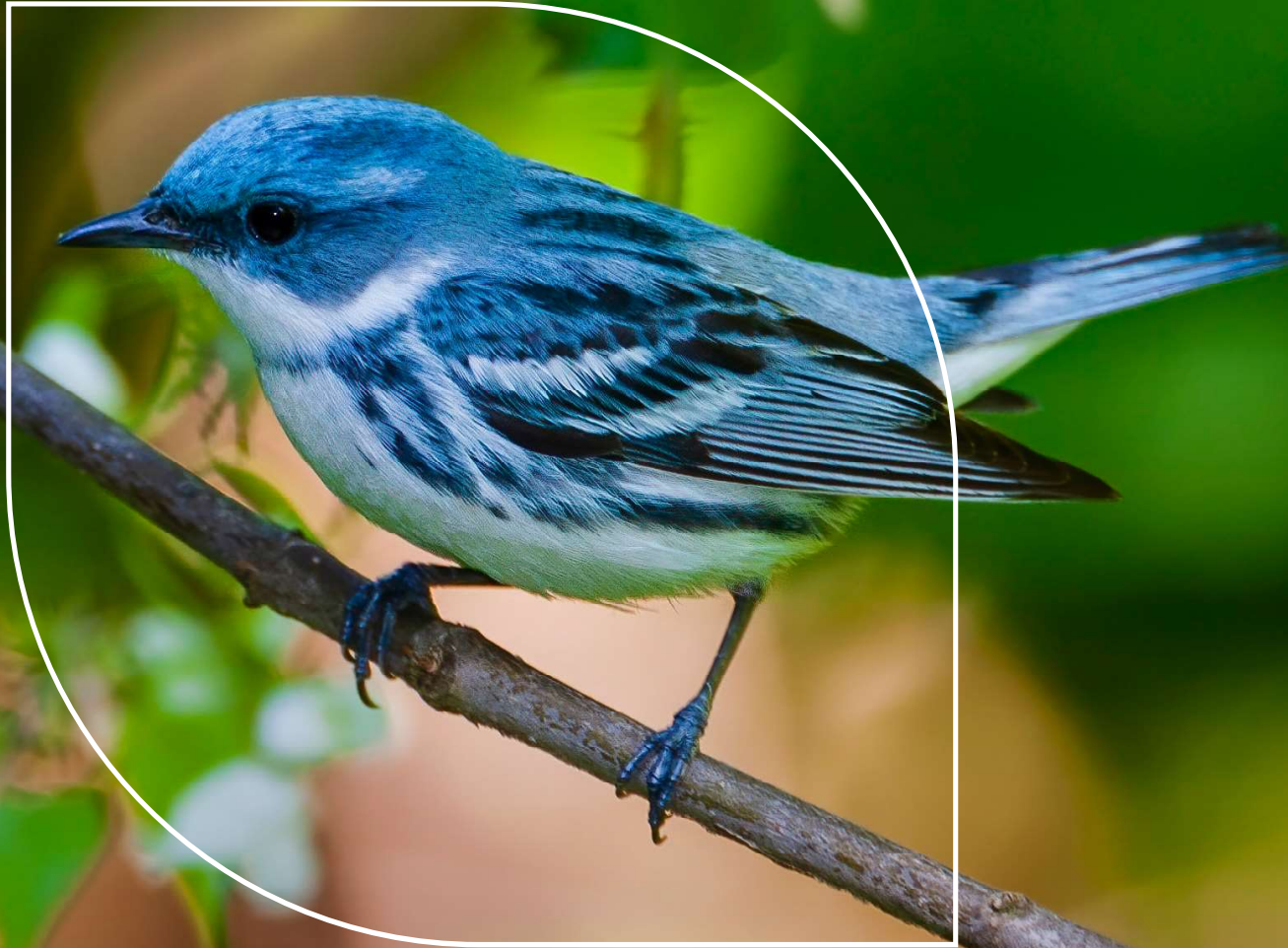


SPECIES AT RISK ACT



Annual Report to
Parliament for 2020



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Climate Change Canada

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1. Introduction



While this report covers activities from 2020, financial information is often recorded based on fiscal years (April 1 to March 31) and as such some of the content refers to fiscal year 2020-2021.

Section 126 of the Act states the report must include a summary of the following:

- (a) any assessments done by the Committee on the Status of Endangered Wildlife in Canada and the Minister's response to each of them;
- (b) the preparation and implementation of recovery strategies, action plans, and management plans;
- (c) all agreements made under sections 10 to 13;
- (d) all agreements entered into or renewed and permits issued or renewed under section 73 as well as all agreements and permits amended under section 75 or exempted under section 76;
- (e) enforcement and compliance actions taken, including the response to any requests for investigation;

- (f) regulations and emergency orders made under SARA; and
- (g) any other matters that the Minister considers relevant.

1.1. Background on SARA

SARA is the Government's key legislative tool for assessment, listing, recovery planning, protection, recovery action, and reporting on recovery for species at risk. It lays the groundwork for conserving and protecting Canada's biological diversity, and fulfills the Government of Canada's international commitments under the Convention on Biological Diversity. It also supports federal commitments under the 1996 *Accord for the Protection of Species at Risk* and the 2018 *Pan-Canadian Approach to Transforming Species at Risk Conservation in Canada* to prevent species in Canada from becoming extinct from human activity.

The purposes of the Act are:

- to prevent wildlife species from being extirpated or becoming extinct;
- to provide for the recovery of wildlife species that are extirpated, endangered or threatened as a result of human activity; and
- to manage species of special concern to prevent them from becoming endangered or threatened.

The Act establishes a process for conducting scientific assessments of the status of individual wildlife species and a mechanism for listing extirpated, endangered, threatened and special-concern species. SARA also includes requirements for the protection, recovery and management of listed wildlife species, and their critical habitats¹ and residences.²

¹ "Critical habitat" means the habitat that is necessary for the survival or recovery of a listed wildlife species and that is identified as the species' critical habitat in the recovery strategy or in an action plan for the species (see section 2(1) of SARA).

² "Residence" means a dwelling-place, such as a den, nest or other similar area or place, that is occupied or habitually occupied by one or more individuals during all or part of their life cycles, including breeding, rearing, staging, wintering, feeding or hibernating (see section 2(1) of SARA).

The responsibility for conservation of wildlife in Canada is shared among different levels of government in Canada. The Act recognizes this joint responsibility and that all Canadians have a role to play in the protection of wildlife.

1.2. Implementation of SARA

The Minister of Environment and Climate Change (the Minister) is responsible for the overall administration of SARA, except insofar as the Act gives responsibility to another minister (i.e. another competent minister).

The Parks Canada Agency (PCA)³, Fisheries and Oceans Canada (DFO), and Environment and Climate Change Canada (ECCC), often referred to as the “competent” departments, share responsibility for the implementation of SARA. The ministers responsible for these organizations are known as the “competent” ministers under SARA. The Minister is responsible for both ECCC and Parks Canada.

Figure 1: Competent Ministers



³ The Parks Canada Agency is referred to as Parks Canada throughout this report.

1.3. Canada's approach to transforming species at risk conservation



The Nature Legacy for Canada Initiative has set out a roadmap to protect Canada's biodiversity, ecosystems and natural landscapes through the protection of lands and waters, and species at risk. Under the Initiative's Canada Nature Fund (Budget 2018), the government committed:

- \$155 million over five years (2018-2023) for conservation actions to protect and aid in the recovery of up to 200 terrestrial wildlife species under the [Pan-Canadian Approach to Transforming Species at Risk Conservation in Canada \(Pan-Canadian Approach\)](#).
- \$55 million over five years (2018-2023) for aquatic species through the [Canada Nature Fund for Aquatic Species at Risk](#).
- Up to \$175 million over four years (2019-2023) under the Canada Nature Fund's Target 1 Challenge program to make a significant contribution to conserving 17 percent of Canada's land and fresh water, as well as support the expansion of a connected network of protected and conserved areas across Canada which may contribute to the recovery of species at risk. ([Canada's \\$175 million investment in nature kicks off conservation projects in every province and territory - Canada.ca](#))

1.3.1. ECCC and Parks Canada implementation of the Pan-Canadian Approach for terrestrial species at risk

ECCC and Parks Canada have been working closely with provinces and territories, Indigenous Peoples, and other partners to transform their approach to terrestrial species at risk conservation through advancing the implementation of the Pan-Canadian Approach and related policy and program improvements.

Priority places, species, sectors and threats

In collaboration with the provinces and territories, Indigenous Peoples, and other partners, implementation of the Pan-Canadian Approach continued through cooperative action for 11 established priority places, six terrestrial priority species, and three priority sectors and threats. Despite challenges posed by the COVID-19 pandemic, implementation continued with engagement of Indigenous partners and stakeholders, collaborative planning, and leveraging of collective resources to implement actions on the ground.

- **Priority places:**

A priority place is an area of high biodiversity value that is seen as a distinct place with a common ecological theme by the people who live and work there. There are now 11 federal/provincial/territorial priority places (identified in collaboration with provinces and territories) and 15 community-nominated priority places.

- **Federal/Provincial/Territorial**

- Nova Scotia – Kespukwitk/South West Nova Scotia
- New Brunswick – Wolastoq/Saint John River Valley
- Prince Edward Island – Forested landscape
- Quebec – St Lawrence Lowlands
- Ontario - Long Point Walsingham Forest
- Manitoba – Mixed Grass Prairie
- Saskatchewan – South of Divide
- Alberta – Summit to Sage
- British Columbia – Dry Interior

- British Columbia – South West British Columbia
- Yukon – South Beringia
- **Community nominated**
 - Cape Freels (Newfoundland and Labrador)
 - Long Range Biodiversity (Newfoundland and Labrador)
 - Maliamu’kik msit ko’kmanaq / Taking care of all our relations (Nova Scotia)
 - Îles-de-la-Madeleine (Quebec)
 - North Shore Prince Edward Island (Prince Edward Island)
 - Sikniktewa’q / Chignecto Isthmus (Nova Scotia and New Brunswick)
 - Wele’k Pemjajika’q Siknikt / Healthy Coasts New Brunswick (New Brunswick)
 - Les Montagnes Vertes du Nord (Quebec)
 - The Land Between (Ontario)
 - Georgian Bay Biosphere - Mnidoo Gamii (Ontario)
 - Tall Grass Prairie (Manitoba)
 - Greater Redberry Lake (Saskatchewan)
 - Sand Hills (Saskatchewan)
 - Southern Rocky Mountain Trench (British Columbia)
 - Kootenay Connect (British Columbia)

Investments in priority places

Across the 11 federal/provincial/territorial priority places, ECCC continues to engage Indigenous Peoples, conservation partners and stakeholders, establish governance frameworks, advance multi-species and ecosystem-based conservation action planning, and implement conservation actions. These federal-provincial-territorial priority places cover nearly 30 million hectares (with approximately two million hectares of critical habitat). An estimated 322 species at risk can be found within these priority places.

In 2020, the federal government invested up to \$10.1 million in 79 priority places projects across the country. Sixty-four of these projects in the federal/provincial/territorial priority places are being carried

out through a directed funding process. In addition to advancing foundational work (establishing governance frameworks, engagement of partners and stakeholders and conservation action planning), significant gains have been made in data collection to fill information gaps, education and outreach to raise awareness and encourage species at risk conservation in priority places, and support direct action through activities including habitat stewardship and restoration (including, for example, invasive species removal in wetlands and controlled burns for grassland restoration). Investments in on-the-ground action will increase as conservation action planning advances and is completed.

Fifteen of the 79 priority place projects fall under the community-nominated priority places initiative and were selected through an open call for proposals. Each community-nominated priority place is led by a group of partners working together to plan and implement actions to protect and recover species at risk. These projects complement ongoing species at risk conservation in the 11 federal/provincial/territorial priority places as they do not overlap geographically. One of the projects, the Kootenay Connect community-nominated priority place, focuses on restoring ecological connectivity and migration corridors for species at risk in four biodiversity hotspots within the Kootenays, covering almost one million hectares. Twenty-five partners are actively working together to enhance and restore habitat, expected to benefit 20 species at risk, including the Northern Myotis, Northern Leopard Frog, Williamson's Sapsucker, and Lewis's Woodpecker.

Parks Canada is responsible for protecting and managing the ecosystems of National Parks. National Parks overlap with six priority places allowing for collaboration with partners to maximize landscape-scale conservation benefits. For example, in Kespukwitk/South Nova Scotia Priority Place, Parks Canada (Kejimikujik National Park and National Historic Site) is providing expertise and support, and contributing to the identification of shared regional priorities using the Conservation Standards and two-eyed⁴ seeing approaches. Parks Canada is also highlighting opportunities to collaborate with partners in species at risk recovery at a landscape-scale, based on those identified in Kejimikujik's Multi-species Action Plan (for species such as bats, Blanding's Turtle and Eastern Ribbonsnake). Citizen

⁴ Two-Eyed Seeing (Etuaptmumk in Mi'kmaw) embraces "learning to see from one eye with the strengths of Indigenous knowledges and ways of knowing, and from the other eye with the strengths of mainstream knowledges and ways of knowing, and to use both these eyes together, for the benefit of all". (Elder Dr. Albert Marshall)

science and volunteer engagement is central to the implementation of these species' recovery measures at a landscape-scale. Parks Canada is also a key partner in at least five community-nominated priority place initiatives across the country.

- **Priority species:**

So far, the federal, provincial and territorial governments have identified six shared terrestrial priority species:

- Woodland Caribou, Boreal population ("Boreal Caribou")
- Woodland Caribou, Southern Mountain population (Southern Mountain Caribou)
- Peary caribou
- Barren-Ground Caribou, including the Dolphin and Union population ("Barren-Ground Caribou")
- Greater Sage-grouse (Alberta and Saskatchewan)
- Wood Bison (British Columbia, Alberta, Yukon and Northwest Territories)



Young Woodland Caribou

These species serve as cultural keystones for a significant number of Indigenous Peoples and hold a special meaning for many other Canadians.

In addition to the Parks Canada species at risk programming that occurs across the country for both terrestrial and aquatic species, priority species occur within more than 20 Parks Canada-administered places, and Parks Canada has active conservation programs for a number of the priority species including, but not limited to the Greater Sage-grouse, Barren-Ground Caribou, Southern Mountain Caribou and Wood Bison. For example, in collaboration with other government agencies, research

institutes, volunteers, park neighbours and stakeholders, Grasslands National Park is implementing recovery actions to grow and protect one of the last remaining populations of Greater Sage-grouse. Additionally, Wood Bison at Elk Island National Park are considered the primary source herd for Wood Bison reintroductions both nationally and internationally due to their disease-free status. Wood Buffalo National Park is home to the largest free-ranging herd of Wood Bison in the world. Parks Canada works collaboratively with partners to conduct research and monitoring to support Wood Bison recovery.

Investments in priority species (investments include those made in 2020-2021)

Significant progress has continued for the six priority species and other species at risk, particularly through collaborative stewardship-based arrangements, including the implementation of conservation agreements with provinces, territories and Indigenous Peoples. Notably, \$53.6 million was provided to partners to support Southern Mountain Caribou conservation measures, such as habitat protection and restoration and maternal penning, under the [Intergovernmental Partnership Agreement for the Conservation of the Central Group of the Southern Mountain Caribou](#) between Canada, British Columbia, and West Moberly and Sauteau First Nations signed in February 2020. In addition, 24 new and ongoing projects were funded across Canada in 2020-2021, totaling \$9.3 million in ECCC commitments, with additional funding leveraged via match funding from partners. Projects supporting this objective in 2020-2021 included:

- the enhancement of critical habitat for endangered Roseate Tern by removing invasive vegetation on North Brother Island (Nova Scotia) and provisioning the island with nesting shelters (boxes);
- modelling the impacts of climate change on Polar Bear population dynamics and engaging Indigenous Peoples on the sustainability of the indigenous harvest of Polar Bears in Nunavut;
- continued engagement with Indigenous partners in Labrador to address the harvest of *Threatened* Boreal Caribou, advance the Caribou Guardians programs, and initiate the drafting of Boreal Caribou range plans; and
- completion of a fire risk model to better understand the probability and location of fire occurrence in the Boreal Caribou range that overlaps Yukon.

- **Priority sectors and priority threats:**

Effective conservation of species at risk requires identifying and alleviating threats to their existence. Determining high impact sector activities or threats at the national or regional scale, where there is an opportunity to have a positive impact through sector-based or threat-based mitigation initiatives, is one of the key strategies to improving conservation outcomes across Canada. Key sectors and threats identified under the Pan-Canadian Approach are:

Sectors

- Agriculture
- Forestry
- Urban development

Threats

- Invasive alien species
- Wildlife disease
- Illegal wildlife trade

Investments in priority sectors

Priority sectors engaged Indigenous Peoples, conservation partners and stakeholders to initiate the co-creation of conservation action plans that aim to produce positive outcomes for species at risk while sustaining healthy priority sectors and communities.

Each of the priority sectors was chosen as an initial focus under the Pan-Canadian Approach for its impact on species at risk, national scope and relevance. The priority sectors initiative addresses each of these sectors through a three-pronged approach: supporting innovative projects to explore opportunities within the sector, creating a mechanism for collaboration, and developing sector-based conservation action plans for species at risk.

Work has progressed in all priority sectors. The forest and urban development sectors held scoping meetings in 2020 with representation from federal, provincial and territorial governments, Indigenous partners, environmental non-governmental organizations, industry and academia. The forest and

agriculture sectors also established core planning teams with the forest sector team being co-chaired by ECCC & Saskatchewan Forest Service and the Agriculture Sector's core planning team being co-chaired by ECCC and the Canadian Roundtable for Sustainable Beef. Investments made under the Canada Nature Fund, including matching investments from partners, are supporting on-the-ground projects in all three sectors.

In 2020, priority sectors and threats stream funded 11 new single and multi-year projects, which support improving conservation outcomes across Canada.

- Out of these projects, four are focused on agriculture, three on the urban sector, three on the forestry sector and one on conservation of species at risk in Canada through market-based instruments for Canada's agriculture and forestry sectors.

In focus: Helping farmers and ranchers identify stewardship opportunities for species at risk and habitat on their lands



Farmers and ranchers are important land managers for species at risk and there is now a tool available to help them identify actions they can take to conserve species at risk and habitat on agricultural lands.

The Canadian and Forage Grassland Association (CFGGA) received financial support from the Nature Legacy's Canada Nature Funds over the past two years for an innovative project to develop the new Habitat and Biodiversity Assessment Tool that can be used as a supplement to Environmental Farm Plan programs across Canada.

Environmental Farm Plans are a voluntary tool that farmers and ranchers can use to identify environmental risks and benefits from their own farming operations and identify actions to help reduce those risks. Having an Environmental Farm Plan and proof of its implementation is one way farmers and ranchers can demonstrate stewardship in response to regulations and emerging certification opportunities related to environmental sustainability.

This project, supported by the Canada Nature Fund, is part of the effort to support action for Species at Risk through the Agriculture Sector Initiative of the Pan-Canadian Approach. This tool was scaled up from a prior project in Alberta that was supported by the Species at Risk Partnerships on Agricultural Lands initiative (SARPAL).

The Habitat and Biodiversity Assessment Tool allows farmers and ranchers to enter information about their land and learn about what beneficial management practices they can do to maintain or improve wildlife habitat on their specific property. With this tool, they can now easily determine any risks to species and habitats and take actions to address those risks. These actions will further enable farmers and ranchers to continue to provide benefits to species listed under the *Species at Risk Act*, provincially-listed species, and migratory birds.

The tool is being used in Alberta and is undergoing release in Manitoba, Saskatchewan and Nova Scotia. The success of the project results from strong collaboration among agriculture practitioners, wildlife biologists, social and environmental scientists and government agencies within each province. Collectively more than 100 individuals have contributed to development or training aspects of the project, coordinated by the CFGGA.

Indigenous Partnerships Initiative

The Indigenous Partnerships Initiative (IPI) focuses on enabling Indigenous leadership in conservation by supporting projects that advance the implementation of the Pan-Canadian Approach and SARA in a manner that reflects the unique priorities, rights and knowledge of First Nations, Inuit and Métis Peoples.

In 2020, IPI invested over \$4 million in 32 projects. These include:

- targeted habitat restoration, monitoring, and threat management actions to accelerate the recovery of Boreal and Southern Mountain Caribou;
- enhanced capacity for the collaborative management of Grizzly Bear, leveraging Indigenous knowledge;
- increased leadership for threat mitigation using community-based wildlife health monitoring techniques;
- multi-nation conservation planning across traditional territories;
- Geographic Information System (GIS) mapping of species, habitats, and threats informed by Indigenous knowledge; and
- piloting an innovative approach to meeting the consultation and cooperation obligations under SARA.

1.3.2. Fisheries and Oceans Canada implementation of the Nature Legacy Initiative

DFO is advancing the implementation of the Nature Legacy of Canada Initiative, with additional resources to engage with partners from across the country through the \$55M Canada Nature Fund for Aquatic Species at Risk (CNFASAR).

CNFASAR aims to build relationships with Indigenous Peoples, provinces and territories, industry and other partners for aquatic species at risk by supporting and encouraging stewardship actions through the implementation of multi-species, threat, and place-based approaches to recovery and protection. CNFASAR is now funding 56 projects over five years, which target over 70 populations of aquatic

species at risk in seven priority freshwater places and over 60 populations of aquatic species at risk associated with two marine threats.

The seven priority freshwater places under CNFASAR are:

1. Fraser and Columbia Watersheds Priority Area (British Columbia);
2. Rocky Mountains' Eastern Slopes Priority Area (Alberta);
3. Southern Prairies Priority Area (Alberta, Saskatchewan, Manitoba);
4. Lower Great Lakes Watershed Priority Area (Ontario);
5. St. Lawrence Lowlands Priority Area (Quebec);
6. Southern Gulf of St. Lawrence Rivers Priority Area (New Brunswick, Nova Scotia, Prince Edward Island); and
7. Bay of Fundy and Southern Uplands Watersheds Priority Area (Nova Scotia, New Brunswick).

The two marine priority threats are:

1. fishing interactions – this threat includes entanglements and bycatch of aquatic species at risk (geographic scope: all Canadian oceans); and
2. physical and acoustic disturbance – this threat includes vessel collisions and marine noise.

In 2020-2021, projects supported by CNFASAR advanced work to recover and protect species at risk in priority places and to address priority threats, as well as to advance Indigenous partnerships and collaboration with provincial partners. Highlights of this work include the following:

- With the Quebec-Labrador Foundation's (QLF), extensive outreach and education activities are helping to address the threats of fishing interactions, bycatch mortality, and marine debris to marine species at risk. The project is gathering feedback from harvesters and harbour authorities on ways to reduce marine debris and entanglement of marine species at risk, developing an awareness campaign strategy, and providing presentations to students across Newfoundland.
- With the Gespe'gewaq Mi'gmaq Resource Council, priority habitats in the Restigouche River watershed and its estuary in New Brunswick are being identified and restored for three at-risk

fish species. By engaging with Indigenous communities and academic institutions, an understanding of Mi'gmaq Ecological Knowledge (MEK) systems will allow for co-development of a sustainable habitat restoration strategy based on available biological data, GIS tools and MEK.

- With the Nova Scotia Salmon Association, a project is underway in the West and South rivers (Antigonish) and the Mabou and Margaree rivers in Cape Breton to recover Atlantic Salmon, American Eel, and Atlantic Sturgeon. This project is supporting the recovery of these aquatic species at risk through establishing priority actions and implementing activities that mitigate identified threats (for example, decline in water quality, habitat fragmentation).
- With Nature Conservancy Canada and its partners, and with community support from local farmers, priority threats to aquatic species at risk are being addressed in the St. Lawrence Lowlands of Quebec by characterizing the distribution of invasive species and developing response plans, stabilizing shoreline erosion, and restoring aquatic habitats.
- With the Halton Region Conservation Foundation, threats to Redside Dace and American Eel are being reduced through stewardship activities that are restoring habitat in the Bronte Creek watershed and Sixteen Mile Creek (Ontario). Conservation activities have included riparian planting projects, re-establishment of creek channels, and dam removal.
- With Alberta Environment and Parks, restoration and outreach activities in the Mackenzie Creek watershed are eliminating or mitigating threats for endangered Rainbow Trout (Athabasca River populations) and special concern Bull Trout (Western Arctic populations) with long-term, on-the-ground activities such as removal of multiple off-highway vehicle stream crossings to reduce sedimentation to watercourses.
- With the Fraser Valley Watersheds Coalition and partners, protection and recovery of species at risk is being supported in Chilliwack waterways of British Columbia through restoration and creation of aquatic habitat and improvement of fish passage through increasing connectivity and restoration of spawning channels.

Parks Canada has active species at risk programming for aquatic species that complements the work in the CNFASAR and supports implementation of several projects across the country. For example, Waterton Lakes National Park is working collaboratively across jurisdictional boundaries towards the recovery of Bull Trout within the Rocky Mountain's Eastern Slope Priority Area, reconnecting populations that have been isolated and strengthening local populations in a unique watershed.

In focus: Reducing mortality to marine species at risk from entanglement in Atlantic waters

The Canadian Wildlife Federation (CWF), with support through CNFASAR, is completing a four-year project aimed at reducing mortality and serious injury to marine species at risk such as whales that get entangled in the ropes attached to fishing gear (for example, crab and lobster traps) in Atlantic Canadian waters. North Atlantic Right Whales are a focal species for the project due to their highly endangered status, declining health and risk of lethal entanglement. Studies are being carried out on how different types of fishing lines move in the water column to determine how factors such as the practices for setting gear in place and line type affect entanglement risk. The project also includes shipboard surveys to measure how marine species at risk use areas where risk from fishing gear are high and to monitor the health of the North Atlantic Right Whales.

Four different ropeless fishing gear systems were tested in 2020 with detailed data collected for over 200 individual deployments. The testing was expanded from the previous project year and was carried out in four new areas within the Maritime provinces. CWF has established partnerships with harvesters to carry out these tests. Depth sensors were acquired, calibrated and deployed off Cape Breton to support this work.

CWF and partners from the University of New Brunswick, Dalhousie University and the Canadian Whale Institute completed intensive surveys for North Atlantic Right Whales in the outer Bay of Fundy, using traditional survey methods, as well as drones to spot whales, and gliders that move through the water and record whale sounds. Although no right whales were sighted, other marine mammals were sighted and reported to DFO and project collaborators. Plankton samples were collected and will be used to assess abundance and distribution of the primary food source for Right Whales. Oceanographic gear was also deployed to characterize the environmental conditions in the area.

CWF hosted two successful workshops focused on North Atlantic Right Whale entanglement mitigation. Participants included fishers, researchers, universities, fishing associations, government and non-government groups.

As part of the Budget 2018 Nature Legacy Initiative investment, DFO Science funded approximately \$1.5M in research projects starting in 2020-2021 that support the implementation of science-related recovery actions, such as key knowledge gaps, and efficacy of recovery measures or threat abatement actions. These projects take a multi-species, place-based, and/or threats-based approach and contribute to the recovery of SARA-listed or COSEWIC-assessed species.

2. Assessment of species at risk

SARA defines the process for conducting assessments on the status of individual wildlife species. The Act separates the assessment process from the listing decisions, ensuring that scientists provide independent assessments and that decisions affecting Canadians are made by elected officials who are accountable for those decisions.



Ringed Seal on spring ice near Churchill, Manitoba
Photo: S.D. Petersen

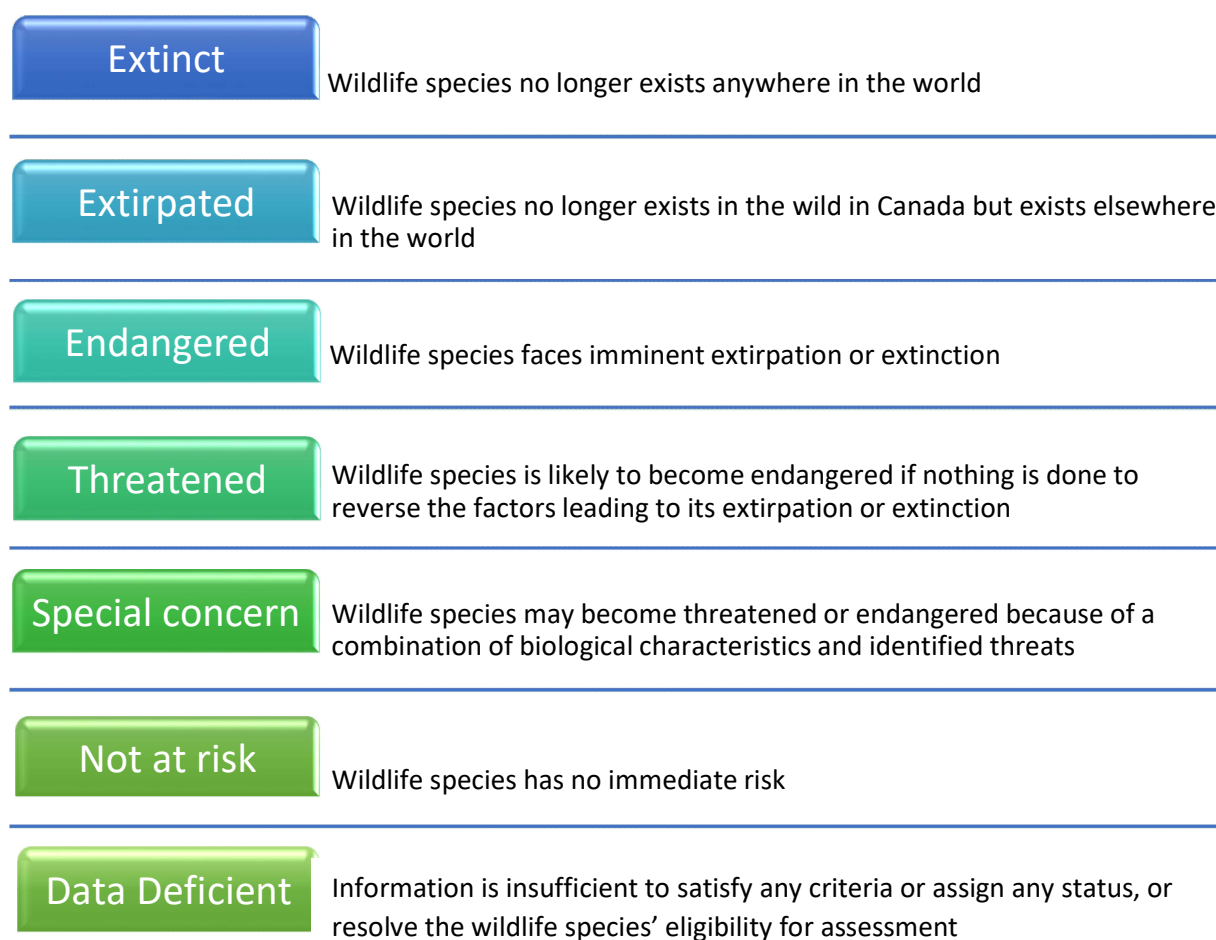
2.1. COSEWIC assessments

The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) is a committee of independent experts from government, academia, Indigenous organizations, non-governmental organizations and the private sector. It assesses the status of wildlife species in Canada on the basis of the best available information on the biological status of a species, including scientific knowledge, community knowledge and Indigenous traditional knowledge. COSEWIC provides assessments and supporting evidence annually to the Minister.

The federal government provides financial support to COSEWIC. ECCC provides COSEWIC with professional, technical, secretarial, clerical and other assistance via the COSEWIC Secretariat, which is housed within ECCC. In 2020, during the COVID-19 pandemic, the COSEWIC Secretariat hosted ten virtual Subcommittee meetings and three virtual Aboriginal Traditional Knowledge (ATK) Subcommittee meetings. The Secretariat also supported the Committee, adding one non-governmental science member and two early career scientist positions, and enhancing the equity, diversity and inclusion of COSEWIC membership.

COSEWIC prioritizes species for assessment and, as one of its sources of information, uses the general status ranks that are outlined in the reports called [Wild Species – The General Status of Species in Canada](#). These reports are required under section 128 of the Act and are published every five years by ECCC and the National General Status Working Group. The Wild Species Report for 2020 will be published in 2021.

Figure 2: Categories of wildlife species status used by COSEWIC



Note: More information on risk categories and COSEWIC can be found [online](#).

ECCC, Parks Canada and DFO gather and provide scientific input and Indigenous knowledge into the assessment process through staff experts who are members of COSEWIC. These experts act

independently from their organizations, and contribute information to status reports from scientific activities and surveys conducted by ECCC, Parks Canada and DFO. They are also involved in the peer review of COSEWIC status reports, which are carried out by government scientists, experts from academia and other stakeholders.

DFO regularly conducts peer reviews of existing DFO information relevant to the COSEWIC status assessment of a given species. Data related to the status of, the threats to, as well as the trends related to a species inside and outside of Canadian waters, are considered, along with the strengths and limitations of the information. The objective of these peer-review meetings is to inform the COSEWIC process. In 2020, DFO hosted two peer-review meetings both for Atlantic Salmon: one reviewing the information on Designatable Units⁵; and the other reviewing information regarding Atlantic Salmon in Quebec.

ECCC reviewed 53 status reports in 2020, including reports for both terrestrial and aquatic species. DFO reviewed 13 COSEWIC status reports and two Designatable Unit reports in 2020 for aquatic wildlife species before they were finalized. Parks Canada reviewed 29 COSEWIC status reports in 2020 for both terrestrial and aquatic species that are found in or on the lands and waters that it administers.

2.1.1. COSEWIC subcommittees

COSEWIC's Species Specialists Subcommittees (SSCs) provide species expertise to COSEWIC. Each SSC is led by two co-chairs, and members are recognized Canadian experts in the taxonomic group in question with a demonstrated knowledge of wildlife conservation. Members are drawn from universities, provincial wildlife institutions, museums, Conservation Data Centres, and other sources of expertise on Canadian species including Indigenous communities. SSC members support the co-chairs in developing candidate lists of species to be considered for assessment, commissioning status reports for priority species, reviewing reports for scientific accuracy and completeness, and proposing to

⁵ A designatable unit refers to a taxonomic entity below the species level (subspecies, varieties or geographically or genetically distinct populations).

COSEWIC a status for each species. Currently, COSEWIC has ten SSCs as follows:

- Amphibians and reptiles
- Arthropods
- Birds
- Freshwater fishes
- Marine fishes
- Marine mammals
- Molluscs
- Mosses and lichens
- Terrestrial mammals
- Vascular plants

COSEWIC also has an ATK Subcommittee. In 2020, this subcommittee's activities included the following:

- working on ATK Source Reports (which compile potential sources of ATK);
- working on ATK Assessment Reports (which summarize the relevant content of documented ATK sources);
- working on ATK Gathering Reports (which compile non-publicly available documented and non-documented ATK that is shared directly from Indigenous communities);
- completing a number of ATK reports for wildlife species, such as Steelhead Trout (all other Designatable Units (DUs) in the Fraser River drainage basin), Atlantic Salmon (16 DUs), and Atlantic Cod (6 DUs);
- completing a special project identifying knowledge holders with information to assist with species of concern in Nova Scotia; and
- completing an ATK Gathering Report on Grizzly Bear (*Ursus arctos*) in the Okanagan and Cascades regions of British Columbia.

Ongoing work on prioritization and selection of wildlife species for ATK reports, as well as the review of COSEWIC status reports to ensure that available ATK is appropriately and accurately integrated. In 2020, some of the planned ATK reports were not advanced due to the COVID-19 pandemic.

2.2. Wildlife species

From 2002 to 2020, COSEWIC assessed and classified more than 900 wildlife species in 17 batches. Batch 18, consisting of 21 wildlife species, was assessed in November 2019. COSEWIC forwarded the assessments to the Minister in September 2020. The assessments included:

- One wildlife species assessed as extinct; and
- 20 wildlife species assessed as at risk, of which four were confirmed at the classification already attributed to them on Schedule 1 of SARA.

The wildlife species assessment results for the 2019-2020 reporting period include the following:

- 1 species assessed as extinct;
- 9 species assessed as endangered;
- 5 species assessed as threatened; and
- 6 species assessed as special concern.

Of the 21 wildlife species examined, COSEWIC reviewed the classification of nine wildlife species that had been assessed previously.

No assessments were carried out at the April 2020 COSEWIC meeting due to COVID-19 pandemic related travel restrictions.

As of November 2020, COSEWIC's assessments included:

- 842 wildlife species in various risk categories
 - 369 as endangered
 - 197 as threatened
 - 235 as special concern
 - 22 as extirpated
 - 19 as extinct
- 199 wildlife species assessed as not at risk
- 62 wildlife species assessed as data deficient

3. Listing of species at risk

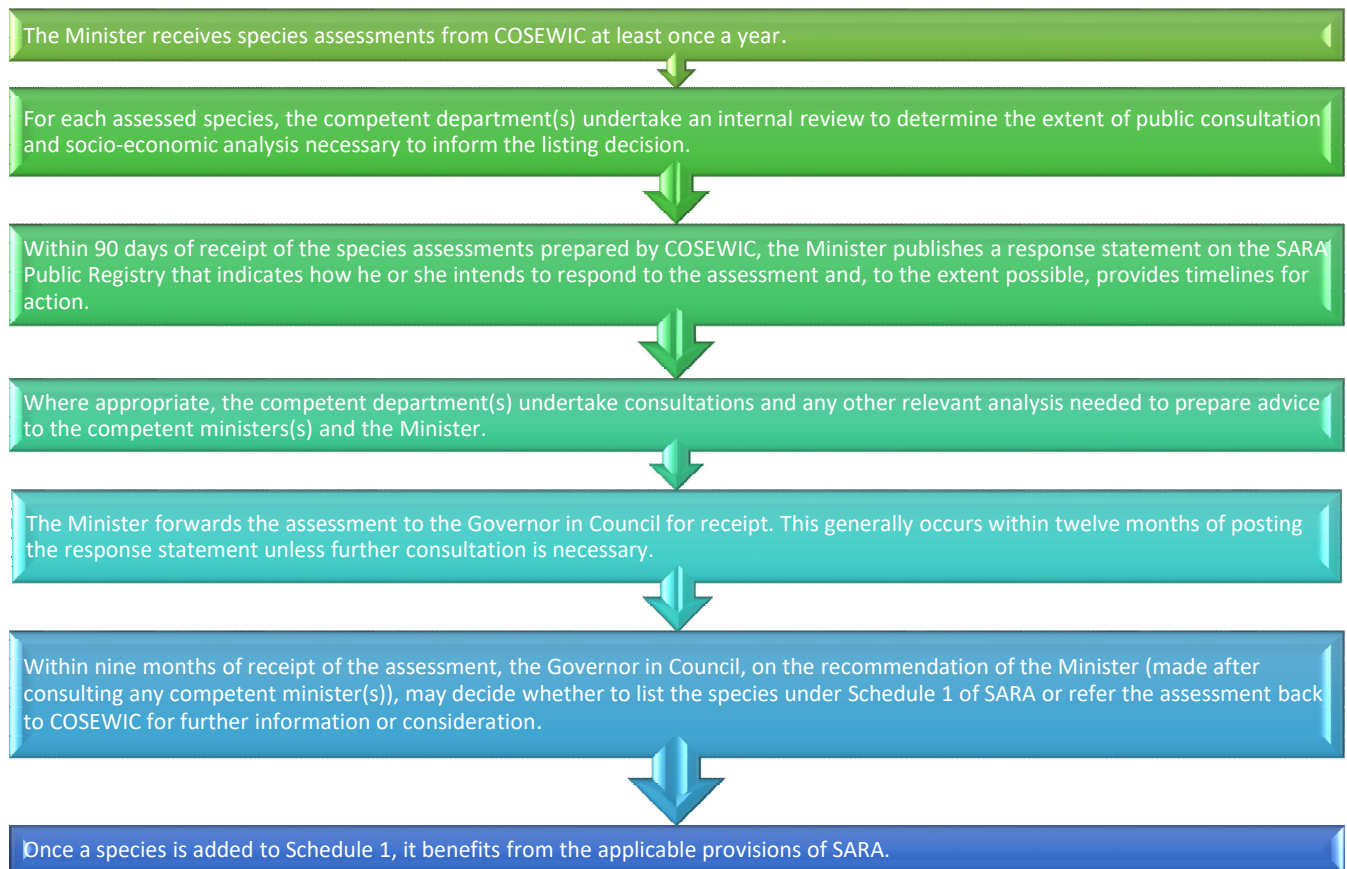


3.1. Listing process

The listing process refers to amendments to Schedule 1 of SARA through the addition, the reclassification, or the removal of a species from Schedule 1. Once the Minister receives the COSEWIC assessment, the Minister has 90 days to post a response statement on the Species at Risk Public Registry indicating how the Minister intends to respond to each assessment and, to the extent possible, provide timelines for action.

Species that COSEWIC had assessed prior to October 1999 (when it adopted new criteria) were included at proclamation on SARA's Schedule 2 (endangered and threatened) and Schedule 3 (special concern). COSEWIC reassesses these species using current criteria, to determine if they should be considered for addition to Schedule 1. All Schedule 2 species have since been reassessed by COSEWIC. For Schedule 3, taxonomy for the four remaining species needs to be clarified before they can be reassessed by COSEWIC.

Figure 3: Species listing process under SARA



Note: More information, can be found on the [SAR Public Registry](#).

3.2. Federal government response to COSEWIC assessments

In September 2020, the Minister received COSEWIC's assessments for 21 species in Batch 18. Of these assessments, 14 terrestrial and seven aquatic wildlife were assessed as species at risk. None of the species were assessed as data deficient or not at risk. The Minister provided response statements to COSEWIC's assessments in December 2020. There were six confirmations of status for species already on Schedule 1, and the remaining 15 species were eligible for addition or reclassification on Schedule 1. Ten of the 13 species required a four-month consultation period and three species required a nine-month consultation period (either because wildlife management boards are authorized by land claims agreements for that species or because longer consultations are needed to support a robust analysis of

the benefits and costs). As a result of the COVID-19 pandemic, the consultation periods were further extended to allow sufficient time for consultation.

Table 1: List of species for which assessments and risk status were received from COSEWIC in September 2020

COSEWIC risk status	Taxon	English legal name	Scientific name
Normal consultations			
Endangered	Arthropods	Reversed Haploa Moth	<i>Haploa reversa</i>
Endangered	Molluscs	Shagreen	<i>Infectarius inflectus</i>
Endangered	Molluscs	Toothed globe	<i>Mesodon zaletus</i>
Endangered	Mosses	Slender Yoke–moss	<i>Zygodon gracilis</i>
Endangered	Vascular Plants	Gillman's Goldenrod	<i>Solidago gillmanii</i>
Threatened	Molluscs	Carolina Mantleslug	<i>Philomycus carolinianus</i>
Special Concern	Arthropods	Manitoba Oakworm Moth	<i>Anisota manitobensis</i>
Special Concern	Reptiles	Plains Hog–nosed Snake	<i>Heterodon nasicus</i>
Special Concern	Vascular Plants	Puvirnituuq Mountain Draba	<i>Draba puvirnituuqii</i>
From Threatened to Endangered	Birds	Chestnut–collared Longspur	<i>Calcarius ornatus</i>
Extended consultations			
Endangered	Arthropods	Suckley's Cuckoo Bumble Bee	<i>Bombus suckleyi</i>
Special Concern	Mammals (marine)	Ringed Seal	<i>Pusa hispida</i>
From Special Concern to Endangered	Mammals	Western Harvest Mouse <i>megalotis</i> subspecies	<i>Reithrodontomys megalotis megalotis</i>
Status change for which there will be no consultations			
From Threatened to Endangered	Fishes (freshwater)	Coastrange Sculpin (Cultus Lake population)	<i>Cottus aleuticus</i>
Forward to GIC for decision - no consultations			
Extinct	Fishes (freshwater)	Striped Bass (St. Lawrence River population)	<i>Morone saxatilis</i>
Status confirmed – no consultations			
Endangered	Mammals	Western Harvest Mouse <i>dychei</i> subspecies	<i>Reithrodontomys megalotis dychei</i>
Threatened	Amphibians	Great Basin Spadefoot	<i>Spea intermontana</i>
Threatened	Fishes (freshwater)	Rocky Mountain Sculpin (Nelson River populations)	<i>Cottus sp.</i>
Threatened	Fishes (freshwater)	Rocky Mountain Sculpin (Missouri River populations)	<i>Cottus sp.</i>
Special Concern	Fishes (freshwater)	Columbia Sculpin	<i>Cottus hubbsi</i>
Special Concern	Fishes (freshwater)	Rocky Mountain Sculpin (Pacific populations)	<i>Cottus sp.</i>

The 2017 SARA policy on the [Timeline for amendments to Schedule 1 of the Species at Risk Act](#) includes a commitment to include a section in the SARA annual report describing the status of all species assessments that the Minister has not yet submitted to the GiC and the next step(s) for each species. In October 2018, the Minister received the first species assessments to which this policy applies. January 2020, therefore, marked the start of this reporting requirement. The list of species, which are due, but have not yet been submitted to the GiC appears in Annex 1, along with the next steps for each of the species. All species due for reporting in 2020 are terrestrial species.

3.3. Public consultations

Public consultations provide the Minister with a better understanding of the potential social and economic impacts of possible changes to Schedule 1, and of the potential consequences of adding or not adding a species to the List. Information collected during consultations is used to inform the Minister's recommendations to the Governor in Council on amending Schedule 1 of SARA.

In 2020, ECCC carried out consultations for 17 terrestrial species for which status assessments had been received from COSEWIC as part of Batch 17. The document titled [Consultation on Amending the List of Species under the Species at Risk Act. Terrestrial Species – January 2020](#) was posted on the Species at Risk Public Registry. At the end of 2020, ECCC started consultations for 12 terrestrial species for which status assessments had been received from COSEWIC as part of Batch 18. The document titled [Consultation on Amending the List of Species under the Species at Risk Act. Terrestrial Species – December 2020](#) was also posted on the Species at Risk Public Registry.

Prior to undertaking socio-economic analysis and consultations with Indigenous communities, stakeholders and the public, DFO develops science advice in the form of a Recovery Potential Assessment (RPA) for most aquatic species that have been assessed by COSEWIC as threatened, endangered or extirpated. The scientific information in an RPA includes species status, threats and limiting factors to the survival and recovery of the species, recovery targets, and feasibility of recovery in given scenarios. The RPA informs the development of advice to the Minister of Fisheries and Oceans

regarding the listing of aquatic species under SARA and is used when analyzing the socio-economic impacts, and during subsequent consultations. The RPA also provides advice needed to meet other requirements of the Act, including recovery planning and permitting decisions.

In 2020, DFO held six RPA peer-review meetings:

1. Lake Chub: Liard Hot Springs and Atlin Warm Springs designatable units;
2. Whitefish: Yukon Lakes designatable units;
3. Fraser River Chinook Salmon: Eleven designatable units;
4. White Sturgeon: Lower Fraser designatable unit;
5. Shortfin Mako Shark: Atlantic population; and
6. Leatherback Sea Turtle: Northwest Atlantic Sub-population.

In 2020, DFO engaged and consulted with Canadians on the possible listing on Schedule 1 of several aquatic species. Consultations involved other government departments, wildlife management boards, stakeholders, Indigenous groups and non-governmental organizations. Public consultations were also facilitated by inviting respondents to contribute to a web-based, species-specific survey hosted on the Species at Risk Public Registry for three aquatic species.

3.4. Listing decisions

Governor in Council decisions on whether or not to amend Schedule 1 according to the COSEWIC assessments are published as orders amending Schedule 1 of SARA in the *Canada Gazette*, and include Regulatory Impact Analysis Statements. Decisions to not add a species at risk to Schedule 1 of SARA or to refer the matter back to COSEWIC are published in the *Canada Gazette* with an explanatory note.

In 2020, no final listing decisions were made for terrestrial species. Final listing decisions were made for three aquatic species via an order published in the *Canada Gazette*, Part II in October 2020, which changed the status of all three aquatic species from threatened to endangered.

Table 2: Number of species at each stage of the listing process at year-end 2020 (Batches 1 to 18)

Batch (year) of Minister's receipt of assessments	COSEWIC at risk assessments received	Confirmation of current status	Added to Schedule 1	Uplisted (to a higher risk category)	Downlisted (to a lower risk category)	Delisted	Not listed	Referred back	Decision pending
(Proclamation)	233 ^a	–	233						–
Batch 1 (2004)	95	4	75				9	7	
Batch 2 (2004)	59		44				13	1	1
Batch 3 (2005)	60	4	44				6	1	5
Batch 4 (2006)	54	4	39	2			1	2	6
Emergency Assessment (2006)	1						1		
Batch 5 (2007)	53	8	30	2	3	1			9
Batch 6 (2008)	39	14	20	3			1		1
Batch 7 (2009)	46	17	20	3	1				5
Batch 8 (2010)	78	34	18	3	5		4		14
Batch 9 (2011)	82	31	19	5	7		1	3	16
Batch 10 (2012)	56	28	10	6	5	1		1	5
Emergency Assessment (2012)	3		3						
Batch 11 (2013)	67	33	16	3	5				10
Batch 12 (2014)	56	21	16	2	3	1	1		12
Batch 13 (2015)	54	24	18	3	2				7
Batch 14 (2016)	38	7	6	5	8				12
Batch 15 (2017)	55	17	3	3	4			1	27
Emergency Assessments (2018)	2						2		
Batch 16 (2018)	75	26	8	3	2				36
Batch 17 (2019)	52	15		2					35
Batch 18 (2020)	21	9	0	0	0	0	0	0	12 ^b
Listing amendments			622	45	45	3	39	16	201

a. At proclamation, 233 species were on Schedule 1.

b. The species from Batch 18 are currently underway as part of the listing process and are therefore not outstanding.

3.5. SARA Schedule 1 current status

When SARA was proclaimed in June 2003, Schedule 1 included 233 species. Starting in 2005, species have been added to the list every year, except in 2008, 2015 and 2016. As of December 31, 2020, Schedule 1 listed a total of 622 species as follows:

- 23 extirpated species;
- 273 endangered species;
- 144 threatened species; and
- 182 species of special concern.

Table 3: Number of species added to Schedule 1 or reclassified by year and risk status as of December 2020

Risk status					
Year	Extirpated	Endangered	Threatened	Special concern	Total
June 2003 (proclamation)	17	107	67	42	233
2005	4	46 ^a	25 ^a	36 ^a	111 ^a
2006	0	18 ^b	11	13 ^b	42 ^b
2007	0	19	8	9	36
2008	0	0	0	0	0
2009	0	8	2	12	22
2010	0	11 ^c	8	4	23 ^c
2011	2	9	4	9	23
2012	0	11	2	5	18
2013	0	1	2	4	7
2014	0	3	0	0	3
2015	0	0	0	0	0
2016	0	0	0	0	0
2017	1	10	10	14	35
2018	0	7	5	11	23
2019	1	11	9	19	40
2020	0	0	0	0	0
Total	23	273	144	182	622 ^d

^a The Spring Salamander was split into two populations. The new populations inherited the species' status on Schedule 1 of SARA before it was split, and both new populations were uplisted in 2017. For the purpose of this table, one of the new Spring Salamander populations were treated as additions to Schedule 1.

^b The Chanel Darter was split into three populations. The new populations inherited the species' status on Schedule 1 of SARA before it was split, and both new populations were uplisted in 2019. For the purpose of this table, one of the new Chanel Darter populations were treated as additions to Schedule 1.

^c The Eastern Foxsnake was split into two populations. The new populations inherited the species' status on Schedule 1 of SARA before it was split, and both new populations were uplisted in 2010. For the purpose of this table, one of the new Eastern Foxsnake populations was treated as an addition to Schedule 1.

^d Although the total number of listed species (622) is correct, the totals for each risk category (i.e. extirpated, endangered, threatened and special concern) are slightly different than the actual number of species for each of the categories listed on Schedule 1 because the values presented in this table do not reflect status changes (i.e., uplisting or downlisting of a species).

4. Recovery actions for species at risk

Under SARA, the competent ministers must prepare recovery strategies and action plans for the species listed as extirpated, endangered or threatened, and management plans for those listed as special concern.

Recovery strategies identify, among other things, threats to the survival of the species and its habitat, critical habitat to the extent possible based on the best available information, and set population and distribution objectives for the species. Action plans specify the projects or activities required to meet the objectives outlined in the recovery strategy. Management plans include measures for species listed as special concern.



Blue Heron

Recovery planning documents are developed in cooperation with federal, provincial and territorial jurisdictions, Indigenous communities, stakeholders and the public. The proposed recovery strategies, action plans and management plans are posted on the Species at Risk Public Registry for a 60-day public comment period. The competent ministers consider comments and make changes where appropriate. The final recovery strategy, action plan or management plan, as applicable, is to be published on the public registry within 30 days after the expiry of the public comment period. Five years

after a recovery strategy, action plan or management plan comes into effect, the competent minister must report on the progress made towards achieving the stated objectives.

4.1. Recovery strategies

Recovery strategies have the following steps:

1. Identify threats to the species and its habitat;
2. Identify critical habitat to the extent possible; and
3. Set population and distribution objectives for the species.

Table 4 lists the species for which final and proposed recovery strategies were posted in 2020.

Table 4: Species for which recovery strategies were posted in 2020, by lead competent department

Competent department	Final recovery strategies: species	Proposed recovery strategies: species
Environment and Climate Change Canada	Wood Turtle* Gray Ratsnake (Carolinian population) Gray Ratsnake (Great Lakes/St. Lawrence population)* Boreal Felt Lichen (Atlantic population) (amended) Sharp-tailed Snake* Bicknell's Thrush* Goldenseal Vancouver Island Marmot Hungerford's Crawling Water Beetle Phantom Orchid Eastern Foxsnake (Carolinian population)* Eastern Foxsnake (Great Lakes/St. Lawrence population)* Small-mouthed Salamander Rusty-patched Bumble Bee	Tweedy's Lewisia Cerulean Warbler* Woodland Caribou (Atlantic-Gaspésie population) (amended)

Competent department	Final recovery strategies: species	Proposed recovery strategies: species
	Woodland Caribou (Boreal population) (amended)*	
Parks Canada	Sable Island Sweat Bee	Sable Island Sweat Bee
Fisheries and Oceans Canada	Bull Trout (Saskatchewan-Nelson Rivers population)* Rainbow Trout (Athabasca River population)* Loggerhead Sea Turtle Nooksack Dace (amended) Salish Sucker (amended) Northern Wolffish (amended) Spotted Wolffish (amended)	Bull Trout (Saskatchewan-Nelson Rivers population)* Rainbow Trout (Athabasca River population)* Loggerhead Sea Turtle Lilliput Threehorn Wartyback Fawnsfoot

* Parks Canada is also a competent department for this species, as it occurs in its lands/waters; and contributed to the development of the recovery strategy.

4.2. Action plans

An action plan identifies the conservation measures required to address the threats to the species and meet the population and distribution objectives outlined in the recovery strategy. An action plan may include identification of the species' critical habitat, to the extent possible, based on the best available information and consistent with the recovery strategy.

Table 5: Species for which action plans were posted in 2020

Competent department	Final action plans	Proposed action plans
Environment and Climate Change Canada	Blanding’s Turtle, Nova Scotia population* Boreal Felt Lichen (Atlantic population) Vole Ears Lichen* Fernald’s Braya (amended)* Long’s Braya (amended)	
Parks Canada	Sable Island Sweat Bee	Sable Island Sweat Bee Multi-species Action Plan for La Mauricie National Park and National Historic Sites of La Mauricie and Western Quebec regions (addresses 32 species listed on Schedule I of SARA)
Fisheries and Oceans Canada	Basking Shark (Pacific)* Blue Whale (Atlantic population)* Leatherback Sea Turtle (Atlantic) Lake Utopia Rainbow Smelt (Small bodied population) Northern Wolffish Spotted Wolffish Speckled Dace Nooksack Dace (amended) Salish Sucker (amended) Paxton Lake and Vananda Creek stickleback species pairs <ul style="list-style-type: none"> • Vananda Creek Benthic Threespine Stickleback • Vananda Creek Limnetic Threespine Stickleback • Paxton Lake Benthic Threespine stickleback • Paxton Lake Limnetic Threespine Stickleback Misty Lake Sticklebacks <ul style="list-style-type: none"> • Misty Lake Lotic Threespine Stickleback 	North Atlantic Right Whale Lilliput Threehorn Wartyback Fawnsfoot Nooksack Dace (amended) Salish Sucker (amended)

Competent department	Final action plans	Proposed action plans
	<ul style="list-style-type: none"> • Misty Lake Lentic Threespine Stickleback <p>To Reduce the Impact of Noise on the Beluga Whale (<i>Delphinapterus leucas</i>) and Other Marine Mammals at Risk in the St. Lawrence Estuary</p> <ul style="list-style-type: none"> • Beluga Whale (St. Lawrence Estuary) • Blue Whale (Atlantic) • Fin Whale (Atlantic) • North Atlantic Right Whale <p>For the Ausable River in Canada: an ecosystem approach</p> <ul style="list-style-type: none"> • Eastern Sand Darter (Ontario) • Kidneyshell • Lake Chubsucker • Northern Riffleshell • Pugnose Shiner • Snuffbox • Mapleleaf (Great Lakes Western St. Lawrence) • Rainbow 	

* Parks Canada is also a competent department for this species, as it occurs in its lands/waters, and the agency contributed to the development of the action plan.

Closer look: Several species targeted for action



Blanding's Turtle (Nova Scotia population)
Photo: Jeffie McNeil

Blanding's Turtles are medium sized freshwater turtles with a semi-hinged shell. One of their most distinctive features is the bright yellow chin and throat. The Nova Scotia population of Blanding's Turtle is listed as Endangered under the Nova Scotia Endangered Species Act (2000) and SARA. The high priority threats include: mortality from on and off road vehicles and machinery, cottage and residential development, and road development. More information on the action plan is available [online](#).



Photo: John Klymko



Photo: Jason Gibbs

Sable Island Sweat Bee

Sable Island Sweat Bee (*Lasioglossum sablense*) is a small (5–6 mm), dull-metallic Sweat Bee in the family Halictidae whose sole habitat is on Sable Island, Nova Scotia. The species was assessed by COSEWIC as threatened in 2014 and then listed under the SARA in 2018. The primary threats to the Sable Island Sweat Bee include: habitat shifting, alteration associated with large scale processes of climate change, potential invasive species introductions and influences of non-native species. More information on the action plan can be found [online](#).



Eastern Sand Darter
Photo: Alan Dextrase

The Eastern Sand Darter is a small benthic and translucent fish. The silting of sandy habitats represents the main cause for the decline in abundance and range of Eastern Sand Darter. Threats to Canadian populations include: sediment loading, nutrient loading, and pollution resulting from agricultural and urban development. More information on the action plan can be found [online](#).

4.3. Management plans

Species of special concern are those that may become threatened or endangered because of a combination of biological characteristics and identified threats. SARA requires competent ministers to prepare management plans for species of special concern. A management plan differs from a recovery strategy and an action plan, in that it identifies conservation measures needed to prevent a species of special concern from becoming threatened or endangered, but does not identify critical habitat. Where appropriate, these management plans may be prepared for multiple species on an ecosystem or landscape level.

Table 6: Species for which management plans were posted in 2020

Competent department	Final management plans: species	Proposed management plans: species
Environment and Climate Change Canada	Lake Erie Watersnake* Western Toad (Calling population)* Western Toad (Non calling population)* Great Blue Heron <i>fannini</i> subspecies* Snapping Turtle* Crooked-stem Aster	Blue Felt Lichen*
Parks Canada Agency	Nil	Nil
Fisheries and Oceans Canada	Atlantic Wolffish	

* Parks Canada is also a competent department for this species, as it occurs in its lands/waters, and therefore contributed towards the development of the management plan.

4.4. Critical habitat

SARA defines “critical habitat” as the habitat that is necessary for the survival or recovery of a listed wildlife species and that is identified as the species’ critical habitat in the recovery strategy or in an action plan for the species.

4.4.1. Identification and descriptions of critical habitat

In 2020, ECCC published notices in the *Canada Gazette* for critical habitat descriptions for the following eight species that occur on federally protected lands and national wildlife areas:

1. Spotted Turtle;
2. American Ginseng;
3. Northern Leopard Frog;
4. Western Tiger Salamander;
5. Pallid Bat;
6. Great Basin Spadefoot;
7. Eastern Foxsnake (Carolinian population); and
8. Marbled Murrelet.

In 2020, DFO published no notices for descriptions of critical habitat in the *Canada Gazette*. In 2020, Parks Canada published notices for descriptions of critical habitat in the *Canada Gazette* for the following seven species in eight national parks, national park reserves and other lands/waters under the Agency’s administration:

1. Bicknell’s Thrush (Cape Breton Highlands National Park) (Forillon National Park);
2. Blanding’s Turtle – Great Lakes / St. Lawrence population (Rouge National Urban Park);
3. Bull Trout – Saskatchewan-Nelson Rivers populations (Banff National Park) (Jasper National Park) (Waterton Lakes National Park);
4. Eastern Foxsnake – Carolinian (Point Pelee National Park);

5. Eastern Foxsnake – Great Lakes / St. Lawrence populations (Georgian Bay Islands National Park);
6. Rainbow Trout – Athabasca River populations (Jasper National Park); and
7. Westslope Cutthroat Trout – Saskatchewan-Nelson Rivers population (Banff National Park).

Identification of critical habitat in recovery documents

In 2020, ECCC published final recovery strategies in which critical habitat was identified for 15 species, and proposed recovery strategies in which critical habitat was identified for three species. Parks Canada identified critical habitat in a final recovery strategy and action plan for one species. DFO published two proposed recovery strategies for five species, one final recovery strategy for two species, and three amended final recovery strategies for four species in which critical habitat was identified for those species.

4.4.2. Protection orders for critical habitat

In 2020, ECCC and Parks Canada published no protection orders. DFO published eight orders to protect critical habitat for the following aquatic species at risk:

1. Nooksack Dace;
2. Northern Wolffish;
3. Paxton Lake Benthic Threespine Stickleback;
4. Paxton Lake Limnetic Threespine Stickleback;
5. Spotted Wolffish;
6. Vananda Creek Benthic Threespine Stickleback;
7. Vananda Creek Limnetic Threespine Stickleback; and
8. Vancouver Lamprey.

To help in further protecting aquatic species at risk, DFO encourages those who are considering a project to consult the [Aquatic species at risk map](#) to assist in project planning.

The provinces and territories are primarily responsible for the management of non-federal lands, natural resources and wildlife located on those lands. This includes the protection of the critical habitat of species at risk on non-federal lands (other than aquatic species) and implementation of protection measures through their own legislation and programs. In 2020, the Minister of the Environment and Climate Change published two reports on steps taken and protection of critical habitat for species at risk in Canada, to track and report on critical habitat protection for 228 terrestrial species at risk with critical habitat identified on non-federal lands.

4.5. Imminent threat assessments

Under section 80(2) of SARA, the competent Minister must make a recommendation to the Governor in Council for an emergency order if he or she is of the opinion that the species faces imminent threats to its survival or recovery. An imminent threat is one that would render the survival or recovery of the species impossible or highly unlikely, and which cannot be eliminated without immediate intervention.

Wood Bison

(Bison bison athabascaae)

Since 2003, Wood Bison has been listed as Threatened on Schedule 1 of SARA, occurring in 12 free-ranging herds (also known as local populations) in Canada and totaling approximately 8500 individuals. Currently, Wood Bison occupy only 6% of their original range.



Wood Bison
Wood Buffalo National Park © Parks Canada. All rights reserved.

In 2020, ECCC with Parks Canada, finalized an assessment to determine whether Wood Bison are facing imminent threats to their survival or recovery, based on the best available information and

incorporating Indigenous knowledge. On January 29, 2020, the Minister of Environment and Climate Change announced that he had determined that Wood Bison are facing imminent threats to their recovery, and published a [summary of the imminent threat assessment](#). The Minister also considered whether there were imminent threats to survival of the species and concluded that such threats do not exist at this time.

4.6. Recovery activities

In supporting species at risk recovery, Government of Canada biologists across Canada led or supported dozens of activities, including research, habitat restoration or enhancement initiatives, monitoring, assessment, and more.



In 2020, ECCC helped advance recovery activities for a wide variety of terrestrial species at risk, including the six priority species, with conservation measures focused on research and monitoring, partnership development, conservation planning and implementation of conservation agreements under SARA.

In 2020, DFO helped advance recovery activities for a wide variety of aquatic species at risk, including finfish, shellfish and marine mammals. Collaboration with other federal departments, experts outside government and others was a key element of success. For example, 2020 was the fourth year that DFO implemented specific fisheries management efforts to protect the North Atlantic Right Whale. As in previous years, measures were based on the best available science and input from industry, provincial governments, Indigenous communities, academia, non-governmental organizations, and other stakeholders, including partners in the United States. As of December 31, 2020, no new entanglements or deaths were reported in Canadian waters. New measures for 2020 included expanding the dynamic closure area into the Bay of Fundy, replacing the static closure area in the Gulf of St. Lawrence with a new dynamic season-long closure protocol, and mandatory gear markings. DFO also began working with industry to identify “whale safe” gear modifications that will phase in starting in 2021.

Abandoned, lost or discarded fishing gear (ALDFG) is a known threat to aquatic species at risk, including the iconic North Atlantic Right Whale. In 2020, DFO funded 22 projects through the [Sustainable Fisheries Solutions and Retrieval Support Contribution Program](#), also known as the “Ghost Gear Fund”. The Fund provides \$8.3 million to assist fish harvesters, environmental groups, Indigenous partners, the aquaculture industry, and coastal communities for the retrieval and responsible disposal of ALDFG. The Fund also supports fish harvesters to acquire new clean technologies to reduce gear loss. Early estimates show that 63 tonnes of ALDFG was retrieved from Atlantic Canada waters in 2020 through the Program.



In focus: “Recovery” of a single whale: successful rescue for Humpback in Grand Manan

On December 21, 2020, DFO was notified of a Humpback Whale in the waters south of Grand Manan, New Brunswick that had become entangled in ropes from fishing gear. Fishery officers provided assistance to the Campobello Whale Rescue Team (CWRT).

The whale’s location was tracked by aerial surveillance as it swam, barely breaking the surface with the top of its head, taking quick breaths. The whale had very limited movement and was in a head up/tail down position due to rope around its tail that was anchoring the whale to the bottom. After assessing the situation on site, the CWRT began work to remove the rope, with fishery officers providing safety support and assistance. Multiple cuts were made to remove the rope around the whale’s head and body, and especially its tail.

After approximately three hours of cutting, the whale made three strong lunge-like movements, and on the third, disappeared. Seeing as there was no visible signs of the whale after 45 minutes, the CWRT and fishery officers determined that the Humpback Whale was freed from the entanglement - a successful rescue effort.

A further example of efforts to advance recovery, is the continuation of a suite of measures for Southern Resident Killer Whales (SRKW) recovery. In 2020, DFO and Transport Canada put in place measures including: closing area-based fisheries in key SRKW foraging areas; curtailing certain activities in interim sanctuary zones; continuing regulation of approach distances and encouraging voluntary reductions of noise from echo sounders and engines, so the SRKW can echo-locate prey and communicate easier. In collaboration with Transport Canada, the Vancouver Fraser Port Authority (VFPA) and member organizations of the VFPA’s Enhancing Cetacean Habitat and Observation (ECHO) Program, DFO continued to support ECHO in reducing the impact of large commercial vessels on SRKW and their critical habitat.

DFO officials and external partner organizations carried out 271 responses nationally for species at risk including:

- disentangling whales from fishing gear;

- refloating live stranded animals;
- reuniting stranded animals with their pods;
- warming cold, stunned sea turtles; and
- performing necropsies on dead animals to determine cause of death.

The information collected during these response activities helps DFO in monitoring and evaluating the threat level from these forms of harm, and finding ways to reduce entanglements and vessel collisions. Outreach activities assist in educating the public on ways to help protect and avoid harming marine animals.

In 2020, Parks Canada implemented recovery measures in and around the lands and waters it administers, including research, restoration activities, and public outreach and education. As part of the work under the Nature Legacy for Canada Initiative, Parks Canada allocated approximately \$5.48M in 2020-2021 to 74 projects across the country to implement recovery measures identified in SARA action plans. This included conducting several projects in partnership with non-governmental organizations, academic institutions, private citizens and Indigenous communities. These projects contributed to recovering, restoring and enhancing ecosystems and species at risk across Canada, such as:

- adapting proven methods in Atlantic Salmon restoration for broad-scale benefits in four national parks;
- conserving and restoring Five-needle Pines in seven national parks;
- enhancing the protection of Beluga Whale in Saguenay St. Lawrence Marine Park;
- implementing a cross-functional approach to restore non-functional habitat and ensure the persistence of the Canadian Greater Sage-grouse population.

In focus: Finding innovative solutions to save the Greater Sage-grouse

The Greater Sage-grouse population in Grasslands National Park's West Block is at risk of extirpation. While habitat loss is considered one of the main factors that has led to the species' decline, field studies conducted in the park suggest that man-made structures (for example, outbuildings, overhead power lines, fences) are a significant, local threat to the species' recovery. These man-made structures indirectly impact sage-grouse survival rates by providing perching opportunities and nesting/denning habitats for predators.



Greater Sage-grouse



In the fall of 2020, Parks Canada partnered with SaskPower to reroute and decommission nearly 11 kilometres of service lines to reduce the amount of overhead lines running through Sage-grouse critical habitat, while maintaining power service to the ranches still operational in the park.

By eliminating above ground power poles, an estimated 400 hectares of previously impacted critical habitat in the park's West Block have now been restored. This project has also improved sight lines within the park and lowered the risk of uncontrolled, devastating grass fires associated with power lines that can be a significant threat to Sage-grouse and many other species at risk.

Over the next few years, Grasslands National Park will continue its efforts to remove selected man-made structures while implementing other recovery actions for Sage-grouse, including beneficial grazing, ecological restoration and conservation translocations.



One of Parks Canada's collaborative recovery activities was led by Wapusk National Park. Parks Canada's officials brought together representatives of Cree, Dene, Inuit, Métis, and local communities (including youth and Elders), researchers, partners, and other territorial, provincial and federal delegates, to participate in the Beyond Borders Caribou Workshop in February 2020 and 2021. Focus was placed on both the Qamanijuaq herd (Barren-ground) and the Cape Churchill Herd (Eastern Migratory) whose ranges overlap within Wapusk National Park and the Greater Wapusk Ecosystem. The goal of the workshop was to strengthen and form new relationships, highlight areas of concern, identify knowledge gaps and outline priority actions for effective caribou conservation. Local Indigenous voices and knowledge systems were woven throughout the workshop and brought forward a set of diverse themes that helped identify cultural significance, conservation priorities, best ways to develop strategies for engaging and educating youth, and highlighted the need to address threats to caribou. The workshop participants identified opportunities to support biological and cultural approaches to conservation and to advance reconciliation.

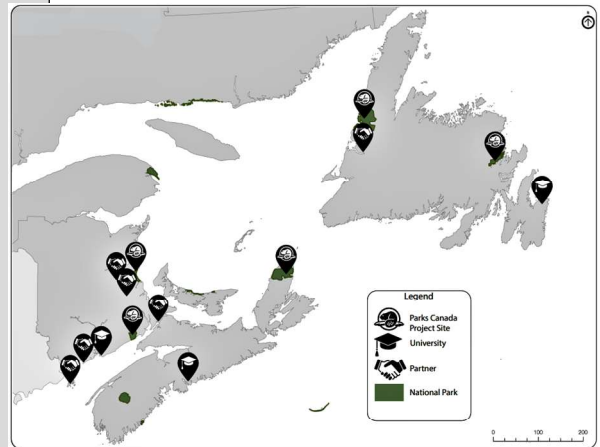
Parks Canada has also been actively involved in the conservation and protection of Southern Resident Killer Whales through management, research and monitoring that includes an at-sea marine mammal survey, assessment of forage fish populations and their habitats, and decreasing the level of non-compliance vessel operators through expanded outreach efforts. The work also involves proactive law enforcement, establishing agreements with Indigenous partners to identify Indigenous-led stewardship and conservation activities.

In focus: Working together, protecting salmon

Wild Atlantic Salmon are an iconic Canadian species that have been dramatically declining across their range. For decades, recovery actions have taken place in dedicated Parks Canada sites.

Through Parks Canada's Conservation and Restoration program, five National Parks and Indigenous, government, academic and industrial partners have teamed up for Atlantic Salmon conservation. Together, researchers in Fundy, Cape Breton Highlands, Gros Morne, Terra Nova, and Kouchibouguac National Parks have the opportunity to simultaneously study conservation across a spectrum of declining populations. The information gathered will inform future decisions on when and how conservation actions may be most effective to prevent populations from becoming endangered. This extensive conservation project provides a safeguard for juvenile salmon so they can one day return to park rivers and spawn the next generation. However, once those salmon return to the rivers their protection does not end. Federal, provincial, and Indigenous law enforcement agencies have teamed up to provide education, monitoring, and enforcement for Atlantic Salmon. Led by Parks Canada park wardens, teams are working both inside and outside of the boundaries of national parks, monitoring freshwater and saltwater habitats critical to Atlantic Salmon conservation.

In 2020, Parks Canada's Atlantic Salmon Recovery project established Parks Canada's first Research Chair. This position was developed in partnership with the University of New Brunswick to study aquatic restoration through ecosystem scale effects of recovery actions at each park.



4.6.1. Agreements and collaboration

On February 21, 2020, two conservation agreements under section 11 of SARA for the Southern Mountain Caribou in British Columbia were finalized and published on the Species at Risk Public Registry:

- [the Canada British Columbia Conservation Agreement for Southern Mountain Caribou in British Columbia](#) (Bilateral Agreement), which establishes a framework for cooperation, and includes commitments to science and Indigenous knowledge, monitoring, and herd planning for the recovery throughout the species' distribution in the province; and,

- [the Intergovernmental Partnership Agreement for the Conservation of the Central Group of the Southern Mountain Caribou](#) (Partnership Agreement) between the Government of Canada, the Government of British Columbia, the Saultheau First Nations and the West Moberly First Nations; it focuses on three Central Group local population units of Southern Mountain Caribou within the Peace Region of British Columbia, and includes commitments to interim and long-term habitat protection and conservation (e.g., creation of protected areas), and to operational recovery activities (e.g., maternal penning) and habitat restoration.

Together, these agreements will advance the recovery of Southern Mountain Caribou in the province, a priority species whose numbers are in serious decline. They represent a historic collaboration between all levels of government, including Indigenous partners, to implement critical measures to support the species' recovery.

In October 2020, to support the recovery of Boreal and Southern Mountain Caribou, a [conservation agreement for Woodland Caribou](#) was finalized with the Government of Alberta. Negotiations were further advanced for conservation agreements in support of Boreal Caribou recovery with the Government of Manitoba, as well as with two First Nations. These agreements aim to support the conservation of the species and the protection of its critical habitat through concrete measures, including commitments to range-level planning, habitat protection, habitat and population management, and monitoring.

4.6.2. Habitat Stewardship Program

The Government of Canada's [Habitat Stewardship Program for Species at Risk](#) (HSP) was established in 2000 and is administered by ECCC (for terrestrial species) and DFO (for aquatic species). The objectives of HSP are to:

- support habitat projects that benefit species at risk and prevent others from becoming a conservation concern;

- enable Canadians to become actively involved in stewardship projects for species at risk which will result in tangible and measurable conservation benefits; and
- improve the scientific, sociological and economic understanding of stewardship as a conservation tool.

ECCC administers HSP funds that support terrestrial stewardship projects while DFO is responsible for administering aquatic stewardship projects, both on a regional basis. Regional implementation boards include representatives from federal, provincial and territorial governments, and various stakeholders. These boards provide advice on priorities and project selection for their regions.

HSP focuses on projects addressing the recovery of species at risk listed on Schedule 1 of SARA. Results are focused on the following:

- important habitat for species at risk recovery is secured or otherwise protected;
- important habitat for species at risk recovery is improved (restored/enhanced) and/or managed to meet species' recovery needs;
- threats to species at risk and/or their habitat that are caused by human activities are stopped, removed and/or mitigated; and
- project benefits are sustained over time by engaging Canadians (landowners, resource users, volunteers) to participate directly in activities that support the recovery of species at risk.

The most complete data available for the HSP at the end of 2020 is for the 2019-2020 fiscal year.

During the 2019-2020 fiscal year, 22 new projects and 81 previously-approved multi-year projects involving 84 unique funding recipients contributed to recovery efforts of SARA-listed terrestrial species across Canada. Of the 22 new projects, 16 addressed terrestrial priority species. Twenty-two projects addressed priority sectors and/or threats specifically. A total of \$5.3 million was provided to these 103 projects, with an additional \$10.7 million (cash and in-kind) leveraged from partners. This provided support to stewardship efforts across Canada that resulted in the securement and protection of land, including protection through legally binding means (e.g., acquisition, conservation easements). Non-legally binding protection was also put in place through the use of written conservation agreements

with landowners. Since the program's inception, the HSP has supported the legal protection of 219,969 hectares of land, as well as the improvement of 475,705 hectares of land and 3330 kilometres of shoreline.

Further, DFO has consolidated the Species at Risk and Prevention streams for aquatic projects into a single funding stream. The [Habitat Stewardship Program for Aquatic Species at Risk](#) provides funding for projects that contribute directly to the recovery of endangered, threatened, and other aquatic species at risk and encourages engagement of Canadians from all walks of life in conservation actions to benefit wildlife. Activities that respond to program priorities are reviewed regionally and recommended for funding in six regions: Pacific, Ontario and Prairie, Quebec, Gulf, Maritimes, and Newfoundland & Labrador.

In 2019-2020, the Habitat Stewardship Program for Aquatic Species at Risk invested nearly \$4 million dollars in new and previously approved projects. These contributions provided support to stewardship efforts across Canada that resulted in outreach activities that reached 183,766 people. Groups conducted 64 habitat/species surveys/inventories and completed 1691 monitoring studies.



In focus: DFO contributes to improving habitat for species at risk in the Nottawasaga River watershed

The Habitat Stewardship Program for Aquatic Species at Risk has provided \$165,000 over three years to the Nottawasaga Valley Conservation Authority (NVCA) to help restore habitat for two species at risk in the Nottawasaga River Watershed - Lake Sturgeon and Northern Brook Lamprey. Degradation of habitat and water pollution have contributed to declines in their populations.

Spawning habitats are impacted by soil released from eroding river banks and surrounding land. Excess soil particles can clog up the pores in spawning gravel, eliminating the flow of water which provides oxygen and removes waste products from the fertilized eggs. Urban and agricultural areas also contribute phosphorus to the spawning grounds. Phosphorus promotes excess algae growth on the gravel which can reduce oxygen concentrations for incubating eggs.

The funding has allowed NVCA and partners, such as Nottawasaga Futures, the South Simcoe Streams Committee and Nottawasaga Steelheaders, to initiate a multi-year project to stabilize soil and reduce sediment and nutrient inputs to the Nottawasaga River. This work includes a floodplain construction component where low flat shelves are excavated adjacent to the river and revegetated. The floodplains reduce erosion by allowing floodwaters to spread out and slow down. They also reduce flooding for adjacent landowners, as well as providing habitat for a range of amphibians and birds.

4.6.3. Aboriginal Fund for Species at Risk

Established in 2004, the [Aboriginal Fund for Species at Risk](#) (AFSAR) is delivered by ECCC (terrestrial species) and DFO (aquatic species), and supports the development of Indigenous capacity to participate actively in the implementation of SARA. The Act recognizes the important role that Indigenous Peoples play in wildlife conservation and the need to consider Indigenous traditional knowledge in the

assessment of which species may be at risk, as well as in the development and implementation of protection and recovery measures. Additionally, many AFSAR projects proactively prevent species, other than species at risk, from becoming a conservation concern.

AFSAR focuses on getting results in five main areas:

- strengthening capacity in Indigenous communities to lead in the stewardship of species at risk and contribute to broader SARA implementation;
- stopping, removing and/or mitigating threats to individuals or populations of species at risk,
- protecting, improving or managing critical and important habitat of species at risk;
- documenting and conserving Indigenous knowledge on species at risk and, where appropriate, using it in the development of recovery objectives; and
- enhancing collaboration, information sharing and partnership between Indigenous communities, governments and organizations and other interested parties (e.g. federal/provincial/territorial governments, academia, industry, private sector).

The most complete data available for AFSAR at the end of 2020 is for the 2019-2020 fiscal year.

During the 2019-2020 fiscal year, for terrestrial projects, AFSAR:

- provided \$2.5 million to 31 new projects and 27 previously-approved multi-year projects;
- leveraged additional funds that exceeded \$1.8 million (cash and in-kind); and
- involved 29 Indigenous organizations and communities as unique recipients.

For ECCC, these contributions provided support to Indigenous stewardship efforts across Canada including over 30 projects that addressed priority species, sectors and/or threats (selected to align with the *Pan-Canadian Approach to Transforming Species at Risk Conservation in Canada*). The projects resulted in the protection of over 150 ha of land. The program also supported the improvement or restoration of 64 kilometres of shoreline.

In focus: Assessing recovery of Lake Sturgeon stocks in the upper Nelson River

Lake Sturgeon is a culturally significant species to many Indigenous groups in northern Manitoba, and has been assessed by COSEWIC as endangered in the Saskatchewan-Nelson River drainage.

In 2019-2020, AFSAR awarded \$20,000 to the Nelson River Sturgeon Board (NRSB) to support the assessment of Lake sturgeon stocks in the upper Nelson River. Activities were carried out in the East Channel of the Nelson River between Norway House Cree Nation and Cross Lake First Nation.

Monitoring activities included the use of mark-recapture methods to determine Lake Sturgeon abundance in the upper Nelson River. The goal of the study was to determine whether the population continues to grow, if previously stocked fish are remaining in the area, to monitor growth rates, and to see if mortality increases for larger fish. The information gathered by the NRSB was subsequently used to support management actions and communicate with resource users in the area.

NRSB has contributed critical data to support the conservation and recovery of Lake Sturgeon in the upper Nelson River, while also promoting engagement and participation of Indigenous People in Lake Sturgeon stewardship.

Beginning in 2019, DFO consolidated the SAR and Prevention streams for aquatic projects into a single funding stream (i.e., the AFSAR Aquatic Stream), targeting species ranging from COSEWIC-assessed as a minimum eligibility to those listed on Schedule 1 of SARA. The objectives are to:

- promote the conservation and recovery of aquatic species at risk and their habitats; and
- support the engagement and participation of Indigenous Peoples in SAR stewardship and implementation of SARA.

During the 2019-2020 fiscal year, the AFSAR Aquatic Stream:

- provided over \$1.8 million to 27 new projects and 13 previously-approved multi-year projects;
- leveraged additional funds that exceeded \$1.1 million (cash and in-kind); and
- involved 34 Indigenous organizations and communities as recipients.

In focus: American Eel recruitment and migration in Newfoundland and Labrador

The American Eel (Kat, Kataq, or Katau in Mi'kmaq) is a very important resource to the Mi'kmaq people of Newfoundland, and was traditionally harvested for medicine, sustenance, and cultural practices. The American Eel was designated as a species of special concern by COSEWIC in 2006, and in 2012, was re-examined and designated as threatened.

In the Newfoundland and Labrador Region, the Qalipu First Nation and the Miawpukek First Nation have come together under the Aboriginal Aquatic Resource and Oceans Management (AAROM) program to form the Mi'kmaq Alsumk Mowimsikik Koqoey Association (MAMKA). In 2019-2020, MAMKA received \$56,000 through AFSAR to support American Eel recruitment and migration monitoring, and to carry out community engagement activities.

The objectives of this project were to document American Eel elver (mid-development stage) recruitment using micro-mesh fyke nets; document yellow and silver American Eel behaviors and abundance using eel pots and commercial fyke nets; monitor the instances of coexistence of Green Crab (an aquatic invasive species) and American Eel; and develop information and engagement materials for MAMKA's members and communities. The project helped fill information gaps, including on the effects of Green Crab introduction, and provided the Indigenous community with an opportunity to participate in and share knowledge on species at risk.

The results of this project will help protect species at risk by providing resource and species at risk managers with additional scientific and traditional knowledge on the American Eel, while promoting stewardship initiatives by providing species at risk information to the Indigenous community.

4.7. Outreach and education

All Canadians have a role to play in the conservation of wildlife species and their habitats, and education and awareness is essential.

In 2020, ECCC published [new Priority Species web pages](#) that provide a centralized location for up-to-date information on each priority species under the Pan-Canadian Approach, including conservation and recovery efforts and educational materials.

ECCC produced and delivered information in various forms to educate Canadians about the role they can play in protecting species at risk and their habitats. ECCC also responded to numerous requests on SARA and species at risk, which included requests from high school students, as well as stakeholders who were seeking information about the application of SARA. There was also a strong focus on engaging other government departments to provide training on SARA for employees who work directly with the Act. For example, two training sessions were provided to Transport Canada to help land managers understand and meet obligations under SARA.

ECCC continues to educate Canadians about species at risk through its long-standing partnership with the Canadian Wildlife Federation in delivering the [Hinterland Who's Who](#) wildlife education program, and by developing and publishing species profiles on the Species at Risk Public Registry.

Parks Canada continues to promote species at risk protection through the Integrated Compliance and Law Enforcement Planning Process. The process maintains its focus on proactive communication with visitors to highlight the connection between their actions and the effect they can have on the protection and recovery of species at risk and their habitat.

Public engagement activities related to species at risk occur in national historic sites, national parks, and national marine conservation areas across the country. These activities include interpretative programs, field trips, social media campaigns, special events and volunteer activities, including participation in restoration and monitoring projects (i.e., citizen science).

In addition, Parks Canada has a number of outreach programs that focus on reaching youth, families and new Canadians in urban areas, in order to increase awareness, understanding, and foster support for species at risk protection and recovery. In 2020, this included digital outreach programs delivered by national historic sites, national parks and national marine conservation areas public outreach and education, as well as visitor experience staff. As part of ongoing collaborations with education partners in order to leverage their digital outreach expertise to schools, Parks Canada collaborated with École en réseau, a virtual learning network and partner based out of Quebec to deliver live and available for streaming, a total of seven outreach and educational programs focused on wildlife, history, archaeology, and oceanography. Audiences exceeded over 20,000 students and teachers. Information about species at risk was also shared through the Parks Canada website, social media, traditional media and organizations that reach out to the public with various programs, articles and websites.

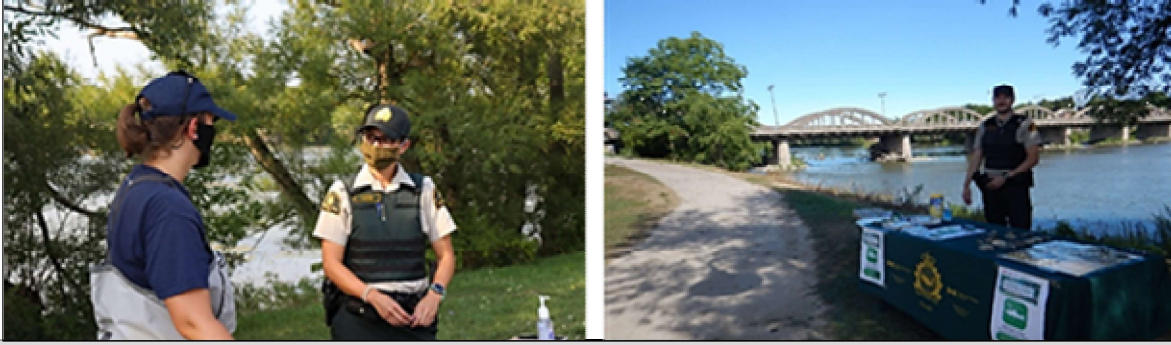
Every year since 2017, the Parks Canada National Merchandise Program has been reinvesting proceeds from the online sale of official merchandise to support species at risk and ecosystem conservation. To date, proceeds have helped multiple projects, including managing prescribed fires in Grasslands

National Park to improve habitat for birds, and restoring the Sand Spit Savannah in Point Pelee National Park which sustains the milkweed for Monarch butterflies. In 2018, the [Protecting Wildlife merchandise collection](#) was launched to raise awareness for species at risk in Canada.

DFO's outreach and education efforts ranged from school visits to information booths at important gatherings, participation at trade shows, workshops and community meetings, promotion of awareness, and species at risk identification and disentanglement training, production of information materials and static displays in DFO offices. Highlights of these activities included:

- For a fifth year in a row, DFO's Quebec Region and Parks Canada jointly undertook the "Show you care, keep your distance" outreach campaign to inform recreational boaters and kayakers about the rules to adopt in the presence of endangered Beluga Whales. In addition, for the second year in a row, a "Beluga Blitz" event took place in the St-Lawrence estuary, within and outside the Saguenay-St-Lawrence Marine Park. The event helped raise public awareness on approach distances and disturbance levels for marine mammals, and on the *Marine Mammal Regulations* under the *Fisheries Act* in general. Fishery officers visited more than 300 locations and met with nearly 850 individuals from the public, the commercial fishing fleet, marine mammal observation companies and tourists.
- In the spring of 2020, a new online training course entitled "Navigating in Whale Habitat" was launched. Quick to complete, free and bilingual, this course allows boaters and kayakers to acquire knowledge about whales and the relevant regulations in the waters of the St. Lawrence and Saguenay. This course was developed by the Réseau d'observation de mammifères marins and the Group for Research and Education on Marine Mammals in partnership with DFO (Quebec Region) and Parks Canada.
- Various outreach and communication pieces were developed by DFO in the Pacific region to educate the public on aquatic species at risk, their critical habitat and SARA prohibitions in place. Highlights include:
 - A Vancouver lamprey species expert and local stewardship group were engaged to develop posters for the community and presentations for local schools on the importance of protecting this prehistoric species.

- Transport Canada and Parks Canada collaborated to host a one-day workshop focused on outreach and education efforts regarding best boating practices around Southern Resident Killer Whales. Representatives from 17 organizations with expertise in education on protecting and conserving marine ecosystems participated. These on-the-water educators provided an opportunity to learn how to best communicate the Southern Resident Killer Whale management measures. The success of this event has resulted in new partnerships, consistent messaging across groups, and increased awareness.
- Other products were developed to aid in species identification and to communicate protocols for identifying and reporting incidents with marine mammals and to assist commercial, recreational and First Nations fishers in properly identifying and recording their catch. Species identification guides have been developed for pinnipeds (to highlight differences between Steller and California Sea Lions); otters (Sea versus River Otter); sturgeon and rockfish. These guides are available online and are also distributed through partner organizations along the Pacific coast.
- In March 2020, DFO in the Gulf Region developed a life-sized Atlantic Wolffish model named “Ruby” mounted on a wood base platform in portable transport case. The model will be displayed in the Atlantic Science Enterprise Centre at the Gulf Fisheries Centre in Moncton, New Brunswick and will also be available for events and activities outside DFO.
- The Gulf Fisheries Centre developed a Memorandum of Agreement with Ingenium (Canadian Museum of Science and Technology) to develop and share educational materials to raise awareness and promote stewardship measures targeting various aquatic species at risk. Work initiated in 2020 through the collaborative agreement will be continued and expanded in 2021.



In focus: Largest mussel relocation initiative to date

As part of the authorization for a construction of a new bridge in the Grand River system, a mussel survey and large scale mussel relocation exercise was undertaken to ensure their survival throughout construction. This was the largest mussel relocation to date in Canada.

The visibility of this project in the downtown of the small community of Caledonia drew a lot of public interest as residents were curious as to what the 20 plus consultants were doing in the river. This was an opportunity for DFO fishery officers to connect with the community, show DFO's presence, and highlight the importance of freshwater mussels in the Grand River system, both the more abundant species and species at risk.

During the summer both fishery officers and staff from DFO's Species at Risk Program conducted two outreach sessions to update residents on the mussel relocation, reaching a total of over 100 people at these sessions. A total of 167,595 mussels were found. Of the mussels found, 2639 were of species that are listed under the *Species at Risk Act*.

4.8. CESI species at risk indicators

For many wildlife species at risk, population objectives are set out in a recovery strategy or management plan and are periodically reassessed. Population trends and changes in the status category of at risk species can provide a preliminary assessment of whether recovery efforts are working, recognizing that recovery may take many years. The following summary is taken from the Canadian Environmental Sustainability Indicators (CESI) program and results are available on the [Environmental indicators](#) website.

In 2020, COVID-19 restrictions resulted in the cancellation of the May 2020 COSEWIC wildlife species assessment meeting. As the indicators use data derived from COSEWIC wildlife species assessment meetings, the cancellation has resulted in the indicators being current to November 2019 instead of May 2020. The November 2019 indicators were published in December 2020.

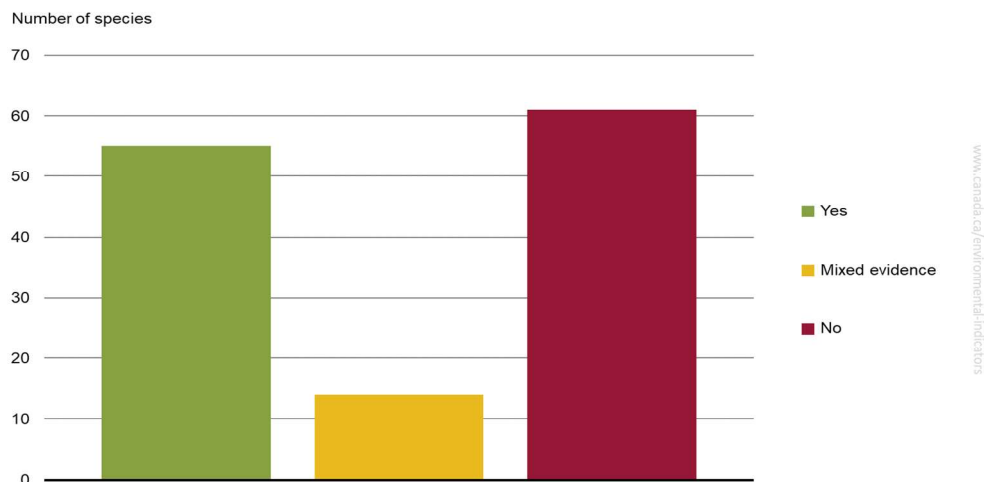
4.8.1. Species at risk population trends indicator

The [Species at risk population trends indicator](#) shows whether population and distribution trends of species at risk are consistent with the objectives in final recovery strategies or management plans.

Final recovery strategies were published for 332 extirpated, endangered or threatened species and management plans were published for 110 species of special concern. Of those 442 species, 189 species with population and distribution objectives in their recovery strategy or management plan were reassessed by COSEWIC. Of the 189 species, 59 did not contain enough information to determine population and distribution trends. Of the 130 species for which trends could be determined:

- 55 species (42%) showed progress towards their population and distribution objectives;
- 61 species (47%) did not show progress; and
- 14 species (11%) showed mixed evidence, meaning that some information suggested improving trends, but that there was also some evidence of decline.

Figure 4: Are population and distribution trends of species at risk consistent with objectives? November 2019



Note: There are also 59 species for which recovery or management objectives and reassessments exist, but insufficient evidence is available in the reassessment to assess trends. Information on these species can be found in the [detailed data table](#). Categories account for the amount of time that has been available for recovery. "Mixed evidence" means that some information suggests improving trends, but that there is also some evidence of decline.

Source: Environment and Climate Change Canada, Fisheries and Oceans Canada, Parks Canada, and the Committee on the Status of Endangered Wildlife in Canada Secretariat (2020).

One animal species was added and two animal species were removed from the indicator. There was also one animal species that changed from its population and distribution trends being consistent with the objectives, to no longer being consistent with the objectives.

- The bird species (Chestnut-collared Longspur) that was added did not show a trend consistent with their population and distribution objectives.
- The two fish species (Coastrange Sculpin and Columbia Sculpin) were removed because their recovery strategies did not contain population and distribution objectives.
- The most recent COSEWIC assessment for the Striped Bass fish (St. Lawrence River population) assessed the original St. Lawrence River population as extinct. Striped Bass from the Miramichi River were stocked in the St. Lawrence River and established a self-reproducing population. As these established fish originated from a different population, the original St. Lawrence River population is considered to no longer exist.

Recovery of species is affected by many factors, including the species' life span, reproductive cycle, the state of their habitat and threats such as habitat loss and pollution. In addition, recovery or results of management of rare species can be difficult to detect, particularly if the species is hard to find and identify. Results should not be interpreted as a measure of recovery or management success until sufficient time has passed to allow species to respond and to allow enough information to be collected to assess the recovery or management.

4.8.2. Changes in the status of wildlife species at risk indicator

Identifying wildlife species at risk is the first step towards protecting them. Wildlife species previously designated as being at risk are reassessed, usually after 10 years, to determine if there is a change in status. The [Changes in the status of wildlife species at risk indicator](#) reports on changes in wildlife species designations for wildlife species assessed by COSEWIC.

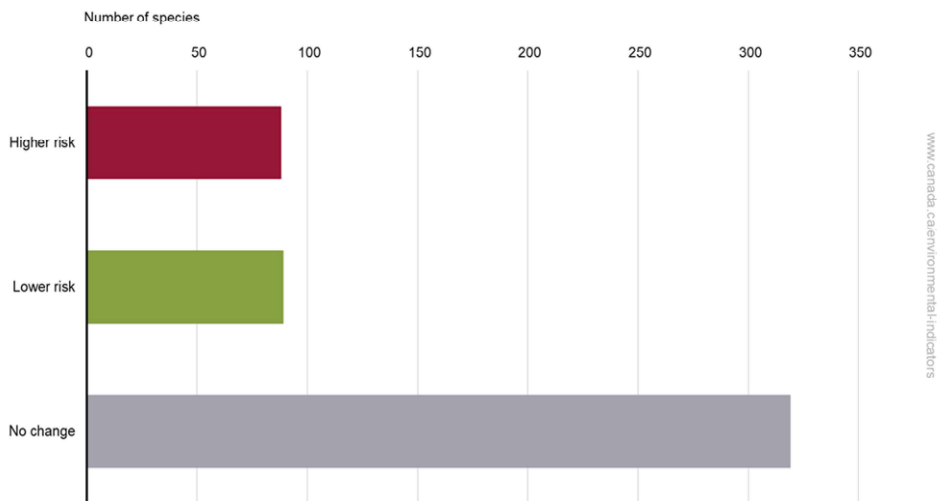
Of the 492 wildlife species that were reassessed as of November 2019, and for which sufficient data were available to determine if there had been a change in status:

- 315 (64%) showed no change in status;
- 89 (18%) were in a lower risk category; and
- 88 (18%) were in a higher risk category (Figure 5).

Nine wildlife species were reassessed, of which two were in the endangered status category (facing imminent extirpation or extinction) in the previous assessment:

- Western Harvest Mouse (dychei subspecies) remained in the endangered status category;
- Striped Bass (original St. Lawrence River population) was designated extinct;
- Western Harvest Mouse (megalotis subspecies), Coastrange Sculpin and Chestnut-collared Longspur had moved from a lower risk category in the previous assessment to the endangered category in the most recent assessment; and
- the other four species showed no change in their status.

Figure 5: Changes in the risk of disappearance of wildlife species at risk from Canada, November 2019



Note: In this analysis, wildlife species refers to a species, subspecies or a genetically or geographically distinct population. Wildlife species disappearance may refer to extinction or extirpation (an extirpated species no longer occurs in the wild in Canada). Lower risk consists of species reassessed as no longer at risk, as well as species in a lower risk category compared to the previous assessment.

Source: Committee on the Status of Endangered Wildlife in Canada, November 2020. Canadian Environmental Sustainability Indicators: [Changes in the status of wildlife species at risk](#).

5. Permits

The competent minister may enter into an agreement or issue a permit under section 73 of SARA for the following:

- scientific research related to the conservation of a listed species, and conducted by qualified persons;
- activities that benefit a listed species or enhance its chance of survival in the wild; and
- activities that incidentally affect a listed species.

Before issuing a permit, the competent minister must be of the opinion that all preconditions listed under subsection 73(3) have been met. This requires applicants to demonstrate that:

- all reasonable alternatives to the activity that would reduce the impact on the species have been considered and the best solution has been adopted;
- all feasible measures will be taken to minimize the impact of the activity on the species or its critical habitat or the residences of its individuals; and
- the survival or recovery of the species is not jeopardized.

Under section 74, an agreement, permit, licence, order or other similar document authorizing a person or organization to engage in an activity affecting a species at risk authorized by the competent minister under another Act of Parliament can have the same effect as an agreement or permit under section 73 of SARA if certain conditions are met (e.g., preconditions listed under subsection 73(3)). Authorizations that have the same effect as a SARA permit are issued under other federal statutes, such as the *Fisheries Act*, the *Canada National Parks Act*, the *Migratory Birds Convention Act, 1994* and the *Canada Wildlife Act*. These permits are considered to be SARA-compliant.

Table 7: Permits, agreements and licences issued or enabled under SARA in 2020

Competent department	SARA permits and agreements (under s.73 of the Act)	Licences and other documents that act as SARA permits (enabled under s.74 of the Act)	Grand total
Environment and Climate Change Canada	51	283	334
Parks Canada Agency	10	12	22⁶
Fisheries and Oceans Canada	197	13,699 ⁷	13,896
Total	258	13,994	14,252

In 2020, ECCC, Parks Canada and DFO jointly issued a total of 14,252 SARA permits and SARA-compliant permits.

ECCC issued 51 section 73 permits to allow for activities affecting over 30 species, including reptiles, amphibians, birds, vascular plants, arthropods, molluscs and mammals. Of the 51 permits issued:

- 4 were for scientific research related to the conservation of a species;
- 6 were for activities benefiting a species or required to enhance its chance of survival in the wild;
- 31 were for activities incidentally affecting a species; and
- 10 were for more than one of the three purposes.

Six of these permits were issued for activities carried out in an area affected by an emergency protection order.

ECCC also issued 283 SARA-compliant permits affecting, or with the potential to affect, threatened and endangered migratory bird species under the *Migratory Birds Convention Act, 1994*. Details regarding delivery of permits against [ECCC service standards](#) are available online.

Parks Canada issued a total of 22 permits, some of which were SARA-compliant permits issued under

⁶ Total of permits issued was 22, but some were for more than one activity.

⁷ Of these, 13,657 were commercial fishing licences that permitted incidental bycatch of species at risk while fishing for other not-at-risk species.

the *Canada National Parks Act*:

- 10 permits covering at least 15 listed species, were issued to academic and government researchers, as well as Parks Canada scientists, for conservation research affecting species at risk (for example, inventory, population monitoring, habitat use and restoration, and conservation genetics);
- 8 permits were issued for an activity necessary or beneficial to nine listed species; and
- 5 permits were issued for activities that may incidentally affect at least 10 listed species.

Parks Canada maintains an online research permitting system to enhance services to researchers, and to ensure that the agency is informed of research being conducted on the lands and waters it administers. The system incorporates a mandatory peer-review mechanism that ensures SARA requirements are considered for every research activity.

DFO issued a total of 197 SARA permits in 2020. Under the *Fisheries Act*, DFO also issued 17 fishing licences for experimental, scientific, and educational purposes under section 52 of the *Fishery (General) Regulations*, eight authorizations under section 38 of the *Marine Mammal Regulations*, and 17 authorizations under paragraph 35(2)(b) of the *Fisheries Act* that have the same effect as SARA permits.

Of these 239 permits, licences and authorizations described in the paragraph above:

- 62 were for scientific research related to the conservation of an aquatic species;
- 34 were for other activities that benefit the species or enhance its chance of survival in the wild (e.g. monitoring surveys or marine mammal rescue); and
- 143 were for activities that incidentally affected the listed species (examples include accidental capture while undertaking research on other non-listed species, or fish or mussel relocation during construction activities).

In 2020, DFO issued 13,657 commercial fishing licences under the *Fisheries Act* where incidental catch of White Shark, Basking Shark and Loggerhead Sea Turtles were recognized to be a possibility.

Conditions in fishing licences require mandatory reporting of interactions in log-books, and release of species back into the water in the manner that causes the least harm.

[Explanations for all SARA permits](#) issued by ECCC, Parks Canada and DFO are posted on the Species at Risk Public Registry.

6. Enforcement

ECCC, Parks Canada and DFO work jointly and in partnership with Indigenous, provincial, territorial and international authorities to protect SARA-listed species and their critical habitat.

ECCC Wildlife Enforcement Officers are responsible for ensuring compliance with SARA, as well as related conservation statutes: the *Migratory Birds Convention Act, 1994* (MBCA), the *Canada Wildlife Act* (CWA), the *Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act* (WAPPRIITA) and the provisions of the *Antarctic Environmental Protection Act* concerning wildlife. In general, these statutes aim to protect species at risk, migratory birds, and terrestrial species on federal lands. Throughout Canada, ECCC Wildlife Enforcement Officers enforce the prohibitions, emergency protection orders and permit conditions found in these Acts.

In 2020, ECCC focused on two enforcement priorities:

- species at high risk for conservation loss and for non-compliance, such as illegal hunting or trade; and
- habitats or protected areas at high risk for conservation loss and for non-compliance, such as destroying nests or polluting land.

ECCC operated with 56 Wildlife Enforcement Officers to ensure compliance with SARA and related conservation statutes. These officers have jurisdiction in 146 protected areas (National Wildlife Areas (NWA), Migratory Bird Sanctuaries) and other lands to ensure compliance with SARA. The protection of these habitats, which include critical habitat identified in SARA recovery strategies, is important for the conservation, recovery and survival of species.

In 2020, ECCC Wildlife Enforcement Officers:

- conducted 77 inspections under SARA. About 60% of the inspections were planned in order to inspect potential conservation loss in federal protected areas. The remaining unplanned

inspections involved responses to complaints or tips from the public, and commercial trafficking of species at risk;

- issued several warnings and opened four new investigations under SARA;
- issued three Compliance Orders under the MBCA to an aviculturist to prevent or stop disturbance and/or destruction of nests/habitats; and
- initiated five prosecutions.

Notably, two forestry companies pled guilty to violating the Emergency Order for the Protection of the Western Chorus Frog, leading to court convictions totalling \$40,000. There was another conviction for the destruction of Bank Swallows' nest amounting to \$10,000.



Photos: Wildlife Enforcement Office Québec

\$40,000 in fines related to the Emergency Order for the Protection of the Western Chorus Frog

On November 3, 2020, at the Longueuil courthouse, two Québec forestry companies were charged and ordered to pay a total of \$40,000 in fines for violating the SARA Emergency Order for the Protection of the Western Chorus Frog (Great Lakes / St. Lawrence — Canadian Shield Population). The companies pleaded guilty to the charge of carrying out a prohibited activity, namely pruning vegetation— including trees, shrubs, and bushes—in a sensitive area.

In April 2018, employees of the forestry companies carried out vegetation-cutting work under high-voltage power lines in the municipality of La Prairie, near Montréal. This type of work in an area of the Emergency Order requires a permit under SARA. Neither company had a permit authorizing the brush-clearing activities. The Enforcement Officers attended the site following a complaint received from a citizen. Officers regularly patrol the Emergency Order area and citizens may report any illegal actions they witness in relation to this Order.



\$10,000 Fine for Bank Swallow nest destruction

In 2018, the Wildlife Enforcement Directorate office in Yellowknife, Northwest Territories (NWT) responded to a report from an ECCC Canadian Wildlife Service biologist concerning the destruction of Bank Swallow nests. Following a series of site visits and interviews, Wildlife Enforcement Officers learned that during the period identified by the biologist as when Bank Swallow nest destruction was occurring, the sandpit/fill quarries were being reshaped. An enforcement investigation determined that an active colony of approximately 12 birds and their nests had been destroyed at a quarry site near Edzo, which is operated by the NWT Department of Infrastructure. The Bank Swallow is listed as a threatened species under SARA and it is an offence to damage or destroy the residence of this migratory bird as per section 33. On December 8, 2020, the Government of NWT plead guilty to one count under this section of the Act, which resulted in a \$10,000 fine ordered by the Territorial Court of the NWT on January 28, 2021. This monetary penalty was directed to the Environmental Damages Fund.

DFO's enforcement actions for species at risk are carried out by fishery officers who have been trained and designated as enforcement officers under SARA. They incorporate SARA enforcement activities alongside their duties under the *Fisheries Act* and other federal statutes and regulations. The Nature Legacy Initiative has enabled DFO's Conservation & Protection (C&P) program to increase its capacity to verify compliance with, and enforce SARA in freshwater ecosystems from Ontario to British Columbia.

In 2020, DFO's fishery officers:

- dedicated over 22,280 hours to patrols, inspections, investigations, court cases, public relations and other duties related to enforcing the prohibitions of SARA;
- initiated approximately 228 investigations and spent approximately 2524 hours on investigative work related to species at risk; and
- recorded a total of 115 SARA violations involving species at risk that resulted in fines, seizures, charges and warnings.

The Prairies Detachment, covering Manitoba, Alberta and Saskatchewan, conducted seven investigations involving freshwater mussels, Athabasca Rainbow Trout and Westslope Cutthroat Trout; two of which had been ongoing since 2018 and were successfully concluded in 2020. A series of inspections were carried out at Silvester Creek, Waiparous Creek, Girardi Creek, McCue Creek, Klein Lake, the Morse and Assiniboine Rivers and at Crowsnest Pass where over 100 recreational fishing checks resulted in 23 tickets being issued.

DFO's Conservation and Protection group in the Pacific Region has significantly increased its on-water capacity dedicated to the enforcement of Southern Resident Killer Whale (SRKW) management measures since 2019. The group dedicated six new Whale Protection Unit fishery officers in 2020, which now brings the total to 10 overall. These dedicated fishery officers spent nearly 1500 hours working on enforcement activities related to SRKW. There were roughly 312 hours spent conducting on-water patrols in 2020, nearly tripling the hours from 2019. In addition, there were 20 aerial surveillance patrols conducted in 2020, an increase of eight from the previous year.

Parks Canada's Law Enforcement Branch is responsible for enforcing all legislation related to the Agency's mandate, including SARA, on all lands and waters it administers. In 2020, there were 86 operational park wardens dedicated to law enforcement activities in all Parks Canada-administered places. Parks Canada's SARA-related enforcement activities included targeted patrols and investigations of reported violations of the SARA prohibitions. Park wardens recorded a total of 80 law enforcement incidents related to the protection of species at risk in Parks Canada-administered Places. These incidents led park wardens to

issue one charge and one warning under SARA, as well as to lay 38 charges and to issue 50 warnings under other legislation.

Parks Canada joined the efforts with DFO, Transport Canada, ECCC and other partners in 2019, to protect the SRKW. By 2020, Parks Canada had staffed two additional park wardens in Pacific Rim National Park Reserve, two additional park wardens in Gulf Islands National Park Reserve, and equipped each office with a dedicated patrol vessel to enforce interim management measures for the recovery of the SRKW and educate people about them. In 2020, park wardens conducted over 1000 hours of dedicated patrols within SRKW Critical Habitat and Interim Sanctuary Zones. Park wardens worked collaboratively with External Relations staff in Parks Canada as well as other non-governmental organizations to help promote the new protection measures and educate the boating community.

7. Monitoring

Monitoring of wildlife species provides the scientific foundation for all aspects of the species at risk program, from assessment and recovery planning, to implementing and evaluating conservation actions. For assessment, monitoring programs provide information on the distribution, abundance and population trends of species, which are key parameters in the COSEWIC assessment process.



Recovery planning depends upon data from monitoring programs to determine the current distribution and identify critical habitat for listed species at risk. Conservation actions accompanied by appropriate monitoring, allows the evaluation of their effectiveness and guides further actions through an adaptive management process.

ECCC manages or coordinates monitoring programs for all species of migratory birds in Canada, as well as selected other wildlife. The North American Breeding Bird Survey, which completed its 55th year of surveys in 2020, provides the foundation for monitoring the status of most species of land birds across Canada and the USA. This survey, like many others in North America, depends upon thousands of skilled volunteers who can identify all the bird species in their area by sight and sound. Data from this survey have been instrumental in identifying major population declines in many species of birds.

In 2020, data collection for Newfoundland's first Breeding Bird Atlas began. Bird Atlases are an important suite of monitoring programs that contribute to assessment and conservation of species at

risk. These projects typically involve an intensive effort over about five years using a combination of skilled volunteers and professional staff to obtain detailed information on the distribution and abundance of birds across a region. ECCC has worked in collaboration with [Birds Canada](#), as well as many other partners, to deliver atlases in British Columbia, Saskatchewan, Manitoba, Ontario, southern Quebec and the Maritimes.

Federal funding programs administered by ECCC and, in some cases, co-managed by ECCC, DFO and Parks Canada (including the Habitat Stewardship Program, the Aboriginal Fund for Species at Risk and the Interdepartmental Recovery Fund), also support monitoring activities. Information from these initiatives, along with information from partner organizations and researchers, allows the tracking of progress towards meeting recovery goals.

DFO collects data on species at risk through scientific work, and supporting citizen science through its grants and contributions programs. DFO has heavily focused monitoring activities on marine mammal populations and distribution, with particular focus on the endangered Southern Resident Killer Whales, North Atlantic Right Whales, and St. Lawrence Estuary Beluga.

In 2020, DFO advanced several areas of monitoring work including:

- providing scientific advice on the design of a comprehensive long-term monitoring program for Redside Dace to inform recovery and management decisions;
- providing guidance on the use of targeted environmental DNA (eDNA) analysis for the management of aquatic species at risk and species at risk, including the use of eDNA to monitor aquatic species at risk populations;
- expanding the use of existing technologies and approaches to monitor and track whales in Canadian waters, as well as developing, testing, and implementing new ones for several purposes, including to inform vessel slowdown and fisheries management measures;
- monitoring contaminants levels in whales and their prey;
- monitoring the North Atlantic Right Whale;
- peer reviewing an updated Steller Sea Lion population abundance estimate;

- peer reviewing the results from a Pacific coast-wide systematic survey that included at risk marine mammals such as Fin and Humpback Whales; and
- peer reviewing updated information on important habitat for Northern and Southern Resident Killer Whales.

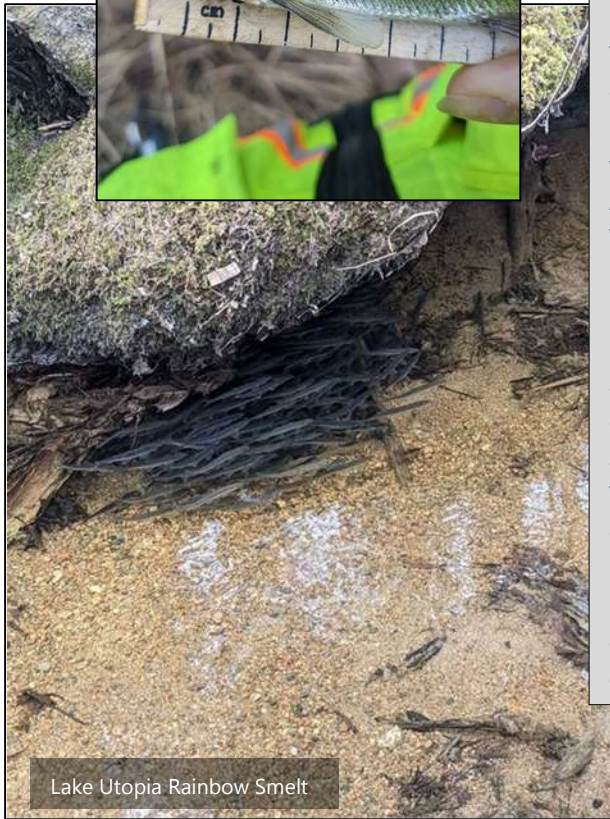


In focus: Peskotomuhkati Nation play a key role in stewardship for the Lake Utopia Rainbow Smelt

The Peskotomuhkati Nation at Skutik located in Southwest New Brunswick is taking a leadership role in monitoring Lake Utopia Rainbow Smelt (LURS) spawning streams.

The LURS are a rare example of two genetically-different populations of the same species that live together. Both populations of LURS are listed under SARA as endangered.

The Peskotomuhkati Nation at Skutik is actively involved in environmental stewardship in the area. They have long-term knowledge and experience of this land and its waterways and a vested interest in protecting the viability of the fish stocks. After one season of being mentored by the Eastern Charlotte Waterways environmental group in 2019, the Peskotomuhkati Fisheries Technicians were enthusiastic to take on a leadership role in monitoring LURS abundance and distribution, and monitoring of their environment, beginning in mid-March 2020 and stretching over nine weeks. Despite the logistical difficulties of working safely during the COVID-19 pandemic, and working in remote locations, the Peskotomuhkati Fisheries Technicians documented and photographed water level issues, deployed temperature sensors, and collected valuable data on LURS spawner abundance and distribution. This work would not have been possible without their commitment to conservation and fortitude under such challenging circumstances.



Lake Utopia Rainbow Smelt

Parks Canada monitors various ecosystem indicators and species at risk in the places it administers. In 2020, the progress of activities in Parks Canada’s final multi-species action plans continued to be tracked in its national ecological monitoring database system. The information obtained from monitoring

activities and action plan targets is used to determine progress towards achieving both the population and distribution objectives and recovery measures, as outlined in the multi-species action plans.

In 2020, Parks Canada continued to track the distribution of the species found within the lands and waters it administers. This information contributes to the Wildlife Species reports, COSEWIC status reports, and the development of multi-species action plans.

8. Consultation and governance

8.1. SARA policies

SARA policies address key areas of the SARA management cycle. They are designed to provide clarity for provinces and territories, Indigenous Peoples, organizations, stakeholders and the public on the requirements of the Act and to clarify how the competent ministers fulfill their obligations under SARA.

In 2020, notable advancements were made towards finalizing SARA policies on Recovery and Survival, and Permitting. Progress was also made on development of a draft policy on the assessment of imminent threats.

8.2. Species at Risk Advisory Committee

The Species at Risk Advisory Committee's (SARAC) recent membership of 28 stakeholders included a balanced representation of non-governmental organizations from industry, business, academia, agriculture and environment. The committee also invited participation of Indigenous partners from the Assembly of First Nations, Métis National Council and Inuit Tapiriit Kanatami. The current members have fulfilled their three-year term from 2017-2020.

The final face-to-face meeting of the SARAC took place in Ottawa in January 2020 and offered federal representatives an opportunity to thank the committee for their contributions to advancing SAR recovery over their three-year term. In turn, SARAC members had the opportunity to assess the committee's work to-date, and present their views on the key results and outcomes of the working groups, offering perspective on the impacts of each. In doing so, the committee offered recommendations on how to improve the effectiveness of SAR recovery, including to ensure that efforts on the *Pan-Canadian Approach to Transforming Species at Risk Conservation in Canada* (Pan-Canadian Approach), and other key SAR programs, are not stalled by efforts related to departmental mandate priorities as articulated in most recent ECCC mandate letters; and ensuring that positive

communications between SAR committees provide space to further encourage engagement and collaboration with Indigenous partners into the future. SARAC members further communicated the importance of building on historical expertise, ensuring any targeted and strategic advice aligns with program timelines, to be most effective.

During the meeting, and directly related to the aforementioned mandate letters, members stressed that the Minister of Environment and Climate Change must continue to work to protect biodiversity and species at risk, while engaging with provinces, territories, Indigenous communities, scientists, industry and other stakeholders to evaluate the effectiveness of SARA and assess the need for modernization. In this context, federal officials sought SARAC's perspectives on the structure of the next Committee, the approach to stakeholder engagement in evaluating the need for SARA modernization, and any other advice on key programmatic or policy changes. Critical discussion among all meeting participants resulted in a number of key recommendations from committee members, including the need to provide increased federal feedback to advisory bodies, reporting on how advice and recommendations are being incorporated or not, as well as ensuring the future of advisory bodies in support of SAR are managed efficiently and in consideration of the value of diversity in engagement modelling and subsequent membership.

8.3. Indigenous Peoples and SARA

National Aboriginal Council on Species at Risk

The National Aboriginal Council on Species at Risk (NACOSAR) is composed of six representatives of Indigenous Peoples of Canada, appointed by the Minister. It was created under section 8.1 of SARA to advise the Minister on the administration of the Act and to provide advice and recommendations to the Canadian Endangered Species Conservation Council (CESCC). While CESCC is not currently formally established, the participating Ministers do meet regularly.

In 2020, NACOSAR continued its efforts on the council's prioritized work plan, while also continuing to promote and advance collaborative engagements with other forums, committees, and partners, who

share an interest in species at risk conservation and protection. In February 2020, NACOSAR met for the third time under its renewed mandate, with the purpose of sharing updates on strategic priorities and key species at risk files. The meeting also offered an opportunity for the council to reinforce identified species at risk committee synergies and promote collaboration and partnership amongst council members and federal colleagues. The Minister articulated the importance of the Council's role in supporting species at risk and in transformation under the Pan-Canadian Approach, noting progress towards greater federal, Indigenous, provincial and territorial collaboration on species at risk will yield concrete results, such as with the Southern Mountain Caribou partnership agreement and the establishment of Indigenous Protected and Conserved Areas (IPCAs).

In keeping with NACOSAR's identified priorities, the Council continued its efforts to ensure Indigenous consideration in the federal socio-economic analysis process. In 2020, a contract was executed by ECCC on behalf of NACOSAR to seek research, analysis and reporting services to support the Council's development of advice to identify gaps in current cost benefit analysis modelling – as it applies to the broader socio-economic analysis framework. The key goal of the contract is to work towards strengthening cost benefit analysis processes as applied to species at risk policies and regulations to ensure a full account of impacts from an Indigenous perspective.

Work in 2020 was undertaken to ensure a collaborative approach to NACOSAR's future membership, considering the current terms end in March 2021. Based on NACOSAR's advice, and federal commitment to diversity, any incoming membership will strive for a balanced representation of nations and gender.

First Nation Advisory Committee on Species at Risk

In 2017, ECCC and the Assembly of First Nations (AFN) co-developed the First Nation Advisory Committee on Species at Risk (FNACSAR) under section 9 of the Act. Managed by AFN and co-chaired by AFN and ECCC for a three-year term, 2020 brought ongoing progress for this committee as it continued to focus its efforts on engaging First Nations to find solutions to SARA implementation as it relates to First Nations peoples in Canada.

FNAC SAR gathered for its final face-to-face meeting in January 2020 in Ottawa. This meeting provided a valuable opportunity for the committee to consider advancements for First Nations engagement in species at risk, and how to translate FNAC SAR's work plan to further development of collaborative mechanisms for species at risk conservation on First Nation lands. During the meeting, the FNAC SAR received updates from federal partners on a variety of federal issues, including the role of the Committee in relation to DFO and aquatic SAR, the National Boreal Caribou Knowledge Consortium, and SARA section 11 conservation agreements. FNAC SAR also continued its discussions on opportunities for First Nation engagement in the implementation of the Pan-Canadian Approach, receiving updates on the federal approaches to priority species and sectors conservation, as well as Indigenous Partnerships Initiative conservation agreements.

FNAC SAR's contribution agreement sunset on March 31, 2020. Shortly thereafter, ECCC began exploring external engagement mechanisms and models that would promote a more strategic, efficient and integrated approach to conservation and nature issues, with opportunity to enhance cooperation and partnership for species at risk in a manner that is inclusive of Indigenous and stakeholder perspectives and voices. This work will continue into 2021.

8.4. Bilateral administrative agreements

The federal government has bilateral administrative agreements on species at risk with individual provinces and territories. The agreements set out shared objectives, as well as commitments for how governments will cooperate on species at risk initiatives. An agreement is in place with the government of Quebec. Discussions to renew agreements with other provinces and territories were ongoing in 2020.

8.5. Species at Risk Public Registry

The online [Species at Risk Public Registry](#) fulfills the requirement under SARA for the Minister to establish a public registry to facilitate access to documents relating to matters under SARA. The Registry

is an important tool for engaging and informing Canadians on species at risk issues. In addition to providing access to documents and information related to SARA, it provides a forum for Canadians to submit comments on documents related to SARA being developed by the Government of Canada.

Section 123 of SARA identifies documents that must be published on the Registry, including:

- regulations and orders made under the Act;
- agreements entered into under section 10 of the Act;
- COSEWIC's criteria for the classification of wildlife species;
- status reports on wildlife species that COSEWIC has prepared or has received with an application;
- the List of Wildlife Species at Risk;
- codes of practice, national standards or guidelines established under the Act;
- agreements and reports filed under section 111 or subsection 113(2) of the Act, or notices that these have been filed in court and are available to the public; and
- all reports made under sections 126 and 128 of the Act.

Other documents, including recovery strategies, action plans, management plans and reports on the progress of recovery strategy implementation, are also published on the Registry.

In 2020, 506 documents were published on the Registry. Documents included 309 permit explanations, 51 documents for public consultation, SARA and COSEWIC annual reports, consultation documents, COSEWIC status reports and status appraisal summaries, ministerial response statements, and recovery documents.

9. Additional information

To obtain further information or publications and to submit questions or comments concerning species at risk programs and activities, please contact any of the following:

Environment and Climate Change Canada
Public Inquiries Centre
7th Floor, Fontaine Building
200 Sacré-Cœur Boulevard
Gatineau QC K1A 0H3
Telephone: 819-938-3860
Toll Free: 1-800-668-6767 (in Canada only)
Email: enviroinfo@ec.gc.ca

Fisheries and Oceans Canada
Communications Branch
200 Kent Street
3rd Floor, Station 13228
Ottawa ON K1A 0E6
Canada
Tel.: 613-993-0999
Fax: 613-990-1866
Email: info@dfo-mpo.gc.ca

Parks Canada Agency
National Office
30 Victoria Street
Gatineau QC J8X 0B3
Canada
Tel.: 888-773-8888
TTY: 866-787-6221
Email: information@pc.gc.ca

For more information on the Species at Risk Public Registry, and to submit questions or comments on the Public Registry, please contact:

SAR Public Registry Office
351 St. Joseph Boulevard, 20th Floor
Gatineau QC K1A 0H3
Canada
Email: SARregistry@ec.gc.ca

Annex 1

Assessed species that have not yet been forwarded to the Governor in Council for decision

Wildlife species	SARA status	Consultation path	COSEWIC status	Rationale and next steps
Terrestrial Species				
Barren-ground Caribou (Dolphin and Union population)	Special Concern	Extended	Endangered (Nov. 2017)	Consultations delayed. Further analysis is required.
Peregrine Falcon Anatum/Tundrius	Special Concern	Extended	Not at Risk (Nov. 2017)	Other species in regulatory package required further consultations; these are now completed. The Minister is expected to forward the package to Governor in Council before late fall 2021 or early winter 2021-2022.
Downy Yellow False Foxglove	No Status	Normal	Endangered (Apr. 2018)	Further consultations were required for this species. The Minister is expected to forward the package to Governor in Council by late fall 2021 or early winter 2021-2022.
Striped Whitelip	No Status	Normal	Endangered (Apr. 2018)	Further consultations were required for this species. The Minister is expected to forward the package to Governor in Council by late fall 2021 or early winter 2021-2022.
Fern-leaved Yellow False Foxglove	No Status	Normal	Threatened (Apr. 2018)	Further consultations were required for this species. The Minister is expected to forward the package to Governor in Council by late fall 2021 or early winter 2021-2022.
Smoker's Lung Lichen	No Status	Normal	Threatened (Apr. 2018)	Other species in regulatory package required further consultations; these are now complete. The Minister is expected to forward the package to Governor in Council by late fall 2021 or early winter 2021-2022.
Smooth Yellow False Foxglove	No Status	Normal	Threatened (Apr. 2018)	Further consultations were required for this species. The Minister is expected to forward the package to Governor in Council by late fall 2021 or early winter 2021-2022.
Common Nighthawk	Threatened	Extended	Special Concern (Apr. 2018)	Other species in regulatory package required further consultations; these are now complete. The Minister is expected to forward the package to Governor in Council by late fall 2021 or early winter 2021-2022.

Wildlife species	SARA status	Consultation path	COSEWIC status	Rationale and next steps
Olive-sided Flycatcher	Threatened	Extended	Special Concern (Apr. 2018)	Other species in regulatory package required further consultations; these are now complete. The Minister is expected to forward the package to Governor in Council by late fall 2021 or early winter 2021-2022.
Hairy Valerian	No Status	Normal	Endangered (Nov. 2018)	Consultations were extended due to COVID from April to December 2020. The consultation period has been expanded to April 2, 2021 to allow for sufficient time for all consultations to be completed. The Minister is expected to forward the package to Governor in Council by late fall 2021 or early winter 2021-2022.
Ute Ladies'-tresses	No Status	Normal	Endangered (Nov. 2018)	Consultations were extended due to COVID from April to December 2020. The consultation period has been expanded to April 2, 2021 to allow for sufficient time for all consultations to be completed. The Minister is expected to forward the package to Governor in Council by April 2022.
Black Ash	No Status	Extended	Threatened (Nov. 2018)	Consultations were extended due to COVID from April to December 2020. The consultation period has been expanded to September 2, 2021 to allow for sufficient time for all consultations to be completed. The Minister is expected to forward the package to Governor in Council by April 2022.
American Bumble Bee	No Status	Normal	Special Concern (Nov. 2018)	Consultations were extended due to COVID from April to December 2020. The consultation period has been expanded to April 2, 2021 to allow for sufficient time for all consultations to be completed. The Minister is expected to forward the package to Governor in Council by late fall 2021 or early winter 2021-2022.
Greater Short-horned Lizard	Endangered	Normal	Special Concern (Nov. 2018)	Consultations were extended due to COVID from April to December 2020. The consultation period has been adjusted to allow for sufficient time for all consultations to be completed. The Minister is expected to forward the package to Governor in Council by late fall 2021 or early winter 2021-2022.

Wildlife species	SARA status	Consultation path	COSEWIC status	Rationale and next steps
Yellow Scarab Hunter Wasp	No Status	Normal	Special Concern (Nov. 2018)	Consultations were extended due to COVID from April to December 2020. The consultation period has been expanded to April 2, 2021 to allow for sufficient time for all consultations to be completed. The Minister is expected to forward the package to Governor in Council by late fall 2021 or early winter 2021-2022.
Yukon Draba	No Status	Extended	Special Concern (Nov. 2018)	Consultations were extended due to COVID from April to December 2020. The consultation period has been expanded to September 2, 2021 to allow for sufficient time for all consultations to be completed. The Minister is expected to forward the package to Governor in Council by spring 2022.
Carey's Small Limestone Moss	No Status	Normal	Endangered (May 2019)	Consultations were extended due to COVID from April to December 2020. The consultation period has been expanded to April 2, 2021 to allow for sufficient time for all consultations to be completed. The Minister is expected to forward the package to Governor in Council by late fall 2021 or early winter 2021-2022.
Columbia Quillwort	No Status	Normal	Endangered (May 2019)	Consultations were extended due to COVID from April to December 2020. The consultation period has been expanded to April 2, 2021 to allow for sufficient time for all consultations to be completed. The Minister is expected to forward the package to Governor in Council by late fall 2021 or early winter 2021-2022.
Dalton's Moss	No Status	Normal	Endangered (May 2019)	Consultations were extended due to COVID from April to December 2020. The consultation period has been expanded to April 2, 2021 to allow for sufficient time for all consultations to be completed. The Minister is expected to forward the package to Governor in Council by late fall 2021 or early winter 2021-2022.
Drooping-leaved Beard-moss	No Status	Normal	Endangered (May 2019)	Consultations were extended due to COVID from April to December 2020. The consultation period has been expanded to April 2, 2021 to allow for sufficient time for all consultations to be completed. The Minister is expected to forward the package to Governor in Council by late fall 2021 or early winter 2021-2022.

Wildlife species	SARA status	Consultation path	COSEWIC status	Rationale and next steps
Dwarf Hesperochiron	No Status	Normal	Endangered (May 2019)	Consultations were extended due to COVID from April to December 2020. The consultation period has been expanded to April 2, 2021 to allow for sufficient time for all consultations to be completed. The Minister is expected to forward the package to Governor in Council by late fall 2021 or early winter 2021-2022.
Hairy Paintbrush	No Status	Normal	Endangered (May 2019)	Consultations were extended due to COVID from April to December 2020. The consultation period has been extended to April 2, 2021 to allow for sufficient time for all consultations to be completed. The Minister is expected to forward the package to Governor in Council by late fall 2021 or early winter 2021-2022.
Cryptic Paw Lichen	Special Concern	Extended	Threatened (May 2019)	Consultations were extended due to COVID from April to December 2020. The consultation period has been expanded to September 2, 2021 to allow for sufficient time for all consultations to be completed. The Minister is currently expected to forward the package to Governor in Council by spring 2022.
Hudsonian Godwit	No Status	Extended	Threatened (May 2019)	Consultations were extended due to COVID from April to December 2020. The consultation period has been expanded to September 2, 2021 to allow for sufficient time for all consultations to be completed. The Minister is currently expected to forward the package to Governor in Council by spring 2022.
White-rimmed Shingle Lichen	No Status	Normal	Threatened (May 2019)	Consultations were extended due to COVID from April to December 2020. The consultation period has been expanded to April 2, 2021 to allow for sufficient time for all consultations to be completed. The Minister is currently expected to forward the package to Governor in Council by spring 2022.
Goldenseal	Threatened	Normal	Special Concern (May 2019)	Consultations were extended due to COVID from April to December 2020. The consultation period has been expanded to April 2, 2021 to allow for sufficient time for all consultations to be completed. The Minister is expected to forward the package to Governor in Council by late fall 2021 or early winter December 2021.