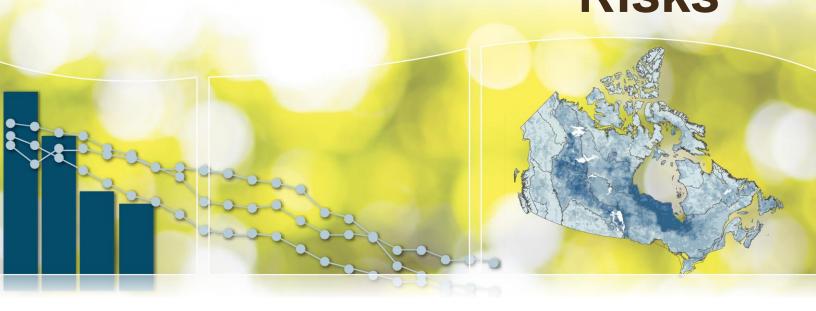




### Canadian Environmental Sustainability Indicators

## Changes in Wildlife Species Disappearance Risks





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# Canadian Environmental Sustainability Indicators Changes in Wildlife Species Disappearance Risks

**December 2016** 

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## Part 1. Changes in Wildlife Species Disappearance Risks Indicator

Identifying wildlife species at risk is the first step towards protecting these species. As of May 2016, 916 wildlife species have been assessed by the Committee on the Status of Endangered Wildlife in Canada (the Committee) and given a risk designation. Wildlife species previously designated as being at risk are reassessed, usually after 10 years, to determine if there is a change in status. Of the 447 wildlife species that have been assessed more than once, 65% show no change in status, 16% are in a lower risk category and 19% are in a higher risk category.

Changes vary across the extinction risk categories:

- Of the 30 species in the Extirpated and Extinct category, one species, the Lake Ontario population of Atlantic salmon, was moved up from Extirpated<sup>2</sup> to the higher risk category of Extinct in 2010.
- Of the 173 species in the Endangered category, 45 were moved up to that status and one species, the St. Lawrence Striped Bass, was moved down from Extirpated to Endangered after a reintroduction effort.
- Of 97 species in the Threatened category, 33 were moved up to that status and 16 were moved down to this status.
- Among the 111 species of Special concern, 7 had moved up and 30 moved down.
- Twenty-five species moved down and are no longer at risk.

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 $<sup>^{1}</sup>$  Species with a status category of Data deficient (54 species) are excluded from the indicator.

<sup>&</sup>lt;sup>2</sup> Extirpated species are no longer found in Canada.

Extirpated and Extinct
30 species

Endangered
173 species

Higher risk
86 species
19%

Threatened
97 species
65%

Special concern
111 species

Figure 1. Changes in risk of wildlife species disappearance from Canada, 2016

#### Data for Figure 1

Not at risk 36 species

**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 (i.e., a wildlife species that no longer occurs in the wild in Canada). Results from the Committee on the Status of Endangered Wildlife in Canada have been further analyzed as described in <a href="Part 2">Part 2</a> of this document.

Source: Committee on the Status of Endangered Wildlife in Canada, May 2016.

72 species 16% The pattern of a larger number of species moving up to higher risk categories than species moving down to lower risk categories holds across 8 of 12 species groups. Terrestrial mammals have shown the strongest improvement, while freshwater fishes and marine mammals show the strongest declines.

The Committee assigns one of seven status categories when assessing wildlife species:

- Extinct: a wildlife species that no longer exists
- Extirpated: a wildlife species no longer existing in the wild in Canada, but occurring elsewhere
- Endangered: a wildlife species facing imminent extirpation or extinction
- Threatened: a wildlife species likely to become endangered if limiting factors are not reversed
- Special concern: a wildlife species that may become a threatened or an endangered wildlife species because of a combination of biological characteristics and identified threats
- Not at risk: a wildlife species that has been evaluated and found to be not at risk of extinction given the current circumstances
- Data deficient: a category that applies when the available information is insufficient (a) to resolve a wildlife species' eligibility for assessment or (b) to permit an assessment of the wildlife species' risk of extinction

The Committee reports its results to the public and also makes recommendations for listing wildlife species under the Species at Risk Act. The Committee initially focused on vertebrates (mammals, birds, reptiles, amphibians and fishes) and plants, so these are the best-represented groups in the change analysis.



Healthy wildlife populations

This indicator supports the measurement of progress towards the long-term goal of the <u>2016–2019 Federal Sustainable Development Strategy</u>: All species have healthy and viable populations.

## Part 2. Data Sources and Methods for the Changes in Wildlife Species Disappearance Risks Indicator

#### Introduction

The <u>Changes in Wildlife Species Disappearance Risks</u> indicator is part of the <u>Canadian Environmental Sustainability Indicators</u> (CESI) program, which provides data and information to track Canada's performance on key environmental sustainability issues. This indicator is also used to report and measure progress towards the goals of the <u>2016–2019 Federal Sustainable Development Strategy</u>.

## Description and rationale of the Changes in Wildlife Species Disappearance Risks indicator

#### **Description**

The Changes in Wildlife Species Disappearance Risks indicator reports on changes in wildlife species disappearance risks in Canada for species assessed by the Committee on the Status of Endangered Wildlife in Canada (the Committee). The Committee is composed of experts that determine the national status of Canadian wildlife species, subspecies, varieties or other designatable units that are suspected of being at risk of extinction or extirpation. The indicator measures conservation effectiveness and is developed with data provided by the Committee's Secretariat at Environment and Climate Change Canada.

#### **Rationale**

The recognition and assessment of a species as at risk of extinction or extirpation can focus management action towards high-priority issues. Successful management should reduce the risk of species extinction or extirpation. The conservation of species at risk is a key component of the Canadian Biodiversity Strategy, which aims to conserve biological diversity in Canada,<sup>3</sup> and is the goal of the Species at Risk Act, which provides legal protection of wildlife species to prevent extinction and secure the necessary actions for their recovery.<sup>4</sup>

Ecosystems are composed of a variety of animals, plants and other organisms, each of which performs a specialized role. This diversity of life supports vital ecological processes and provides a wide range of resources known as ecological goods and services, such as oxygen production and water purification. The loss of species has detrimental impacts on ecosystems and the goods and services they provide.

#### **Recent changes to the indicator**

The indicator is being updated to bring the data current to May 2016.

<sup>&</sup>lt;sup>3</sup> Government of Canada (2014) Accord for the Protection of Species at Risk. Retrieved on August 10, 2016.

<sup>&</sup>lt;sup>4</sup> Government of Canada (2016) Species at Risk Act. Retrieved on August 10, 2016.

<sup>&</sup>lt;sup>5</sup> Government of Canada (2014) Canadian Biodiversity Strategy. Retrieved on August 11, 2016.

#### **Data**

#### **Data source**

Data are drawn from the Committee on the Status of Endangered Wildlife in Canada (the Committee) Wildlife Species Status Reports, available at the Species at Risk Public Registry.

The Committee maintains a database of wildlife species assessment results, which were summarized for this indicator. A search can be made for wildlife species of interest at <u>Wildlife</u> Species Search.

Data contributing to the assessment of individual wildlife species are drawn from a wide range of sources, which are cited within the relevant status reports.

#### Spatial coverage

The indicator is national.

#### **Temporal coverage**

In general, wildlife species are reassessed every 10 years. The date of reassessment, therefore, varies widely within the dataset.

#### **Data completeness**

Data cover only the suite of wildlife species that have been reassessed by the Committee and are not Data deficient for one or both of the latest two assessments.

#### **Data timeliness**

The Committee meets twice per year to consider recent species reports, assess wildlife species' risk of extinction or extirpation, and designate a status category. Individual species are generally reassessed every 10 years. This indicator is current to May 2016.

#### **Methods**

The Committee on the Status of Endangered Wildlife in Canada (the Committee) uses science and Indigenous and community knowledge to assess wildlife species at risk. All native mammals, birds, reptiles, amphibians, fish, arthropods, molluscs, vascular plants, mosses and lichens are included in the Committee's current mandate.

The Committee develops the prioritized <u>Candidate Wildlife Species List</u> of wildlife species needing assessment, manages the production of wildlife species status reports, and holds meetings at which wildlife species are assessed and assigned to risk categories. In all of its actions, the Committee uses the best available information to assess a wildlife species' risk of extinction or extirpation, which it may obtain from any credible source of knowledge of the wildlife species and its habitat.

The Committee annually commissions status reports for high-priority candidate wildlife species on the Candidate Wildlife Species List or for wildlife species that require reassessment (update status reports).

All status reports (including updated status reports and unsolicited reports) must meet the Committee's standards for quality and completeness. The reports are subject to thorough reviews by the appropriate Species Specialist Subcommittee and the Aboriginal Traditional Knowledge Subcommittee, as well as by jurisdictions that have a responsibility for the wildlife species (including governments of the provinces and territories where the wildlife species occurs, federal departments responsible for the wildlife species, and wildlife management boards). Additional outside experts may also be asked to review status reports. When the

reviews are complete and any required revisions have been incorporated, the report is distributed to all Committee members.

The Committee members use status reports as a basis for discussion and for status assignment at semi-annual Wildlife Species Assessment Meetings. For each wildlife species considered at a Wildlife Species Assessment Meeting, the Committee sequentially considers each of five items to determine a Canadian status designation:

- 1. Is there sufficient information presented in the report to determine wildlife species eligibility?
- 2. Given sufficient information, is the wildlife species eligible for assessment?
- 3. Is the status report adequate and acceptable for assessment purposes?
- 4. What status is suggested by application of the Committee's approved quantitative assessment criteria and guidelines?
- 5. Does the suggested status conform to the Committee definition for the proposed status category?

Following the completion of the assessment process, wildlife species are assigned one of seven status categories by the Committee: Extinct, Extirpated, Endangered, Threatened, Special concern, Not at risk or Data deficient. As of May 2016, 970 wildlife species had status categories assigned (Table 1).

#### Committee on the Status of Endangered Wildlife in Canada change status

The Committee also notes a <u>change status</u> in its assessments. The seven possible change statuses are: New, No change, In a higher risk category, No longer at risk, In a lower risk category, Changed and Reassigned. Species that have been assessed only once are given a change status of New. For all other species, the change status is based on the two most recent assessments. Species that are Data deficient on one date are given a status of Changed. The Reassigned status is used in cases where the unit being assessed has changed based on new information; examples might include a species that is split into subspecies or geographical units.

Table 1. Committee on the Status of Endangered Wildlife in Canada, number of species by status category and change status

Status category of wildlife species	New	No change	In a higher risk category	No longer at risk	In a lower risk category	Changed	Reassigned
Extinct	1	11	1	0	0	0	2
Extirpated	2	18	0	0	0	1	2
Endangered	119	124	43	0	1	1	32
Threatened	63	47	32	0	16	0	14
Special concern	81	72	7	0	28	2	19
Not at risk	130	11	0	24	0	2	10
Data deficient	33	4	0	0	0	13	4

Status category of wildlife species	New	No change	In a higher risk category	No longer at risk	In a lower risk category	Changed	Reassigned
Total	429	287	83	24	45	19	83

#### **Derivation of indicator data**

The Committee change status provides the base information for the Changes in Wildlife Species Disappearance Risks indicator. The indicator does not include species with a change status of New as they have only been assessed once. Species with a status of Changed are also excluded as they are Data deficient on one of the most recent assessments (Table 2). Species that are Data deficient in both recent assessments are assigned a change status of No change by the Committee, but are removed from the Changes in Wildlife Species Disappearance Risk indicator.

Table 2. Relationship between the Committee change status and Changes in Wildlife Species Disappearance Risk indicator

Committee on the Status of Endangered Wildlife in Canada change status	Definition	Changes in Wildlife Species Disappearance Risk indicator
New	Wildlife species examined for the first time are assigned a category of New	Excluded from the indicator
Changed	Wildlife species moved to the Data deficient category from a risk category or to a risk category from the Data deficient category	Excluded from the indicator
No change	Wildlife species stays in the same category after reassessment	No change <sup>[A]</sup>
In a higher risk category	Wildlife species placed in a higher risk category after the most recent reassessment	Higher risk
In a lower risk category	Wildlife species placed in a lower risk category after reassessment	Lower risk
No longer at risk	Wildlife species moved to the Not at risk category from a risk category	Lower risk
Reassigned	Wildlife species that has been assigned to a different designatable unit than previously	Case-by-case assignment

**Note:** [A] Wildlife species that are Data deficient on both dates when an assessment was made are excluded from the indicator.

Wildlife species with a change status of Reassigned are individually examined, and grouped into units that can be considered as a whole. For example, a wildlife species that was split into two subspecies on reassessment would be treated as one unit in the indicator. As of May 2016, 83 wildlife species with a status change of Reassigned were grouped into 41 units whose status could be examined. If the direction of change could be determined unambiguously, the units were given a change category for the indicator. If the direction of change could not be determined, the unit was given a category Unknown and was not included in the indicator.

Of the 41 units, 12 were included in the indicator: 6 were assigned to the No change category, 3 to Lower risk and 3 to Higher risk. The remaining 29 could not be determined. For detailed information on the allocation of wildlife species with a change status of Reassigned from the Committee, consult Annex B.

Overall, the Changes in Wildlife Species Disappearance Risk indicator provide information on 447 wildlife species.

#### **Caveats and limitations**

Knowledge of which wildlife species may be at risk is far from complete, and only a portion of those suspected to be at risk can be assessed. The Committee on the Status of Endangered Wildlife in Canada (the Committee) prioritizes assessments based on expert opinion. Early efforts focused mainly on vertebrates and plants, and these are also the best-known wildlife species. As a result, these wildlife species are over-represented among wildlife species that have been reassessed. Similarly, knowledge of wildlife species is greatest in southern Canada and in terrestrial systems.

Species that are at risk can take a long time to recover, especially if they are long-lived and slow to reproduce. Also, improvements to habitat, for example, can take many decades. Under the Species at Risk Act, the Committee is required to reassess wildlife species previously designated in a category of risk with an update status report every 10 years or earlier.<sup>6</sup>

Many wildlife species in Canada have not yet been assessed by the Committee, but are suspected of being at some risk of extinction or extirpation. These wildlife species, referred to as candidate wildlife species, are identified and prioritized by the Species Specialist Subcommittees or by the Aboriginal Traditional Knowledge Subcommittee as candidates for detailed status assessment. Candidates may also include wildlife species already assessed by the Committee as Not at risk or Data deficient, but where new information suggests they may be at risk.

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<sup>&</sup>lt;sup>6</sup> Government of Canada (2016) Status Reports. Retrieved on August 11, 2016.

#### Part 3. Annexes

## Annex A. Data tables for the figures presented in this document

Table A.1. Data for Figure 1. Changes in risk of wildlife species disappearance from Canada, 2016

Species status categories	Higher risk (number of species)	No change (number of species)	Lower risk (number of species)
Extirpated and Extinct	1	29	0
Endangered	45	127	1
Threatened	33	48	16
Special concern	7	74	30
Not at risk	0	11	25
Total	86	289	72

**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 (i.e., a wildlife species that no longer occurs in the wild in Canada). Results from the Committee on the Status of Endangered Wildlife in Canada have been further analyzed as described in <a href="Part 2">Part 2</a> of this document.

Source: Committee on the Status of Endangered Wildlife in Canada, May 2016.

Table A.2. Data for Figure 1. Changes in risk of wildlife species disappearance from Canada, 2016

Wildlife species group	Higher risk (number of species)	No change (number of species)	Lower risk (number of species)
Amphibians	3	13	1
Arthropods	3	17	1
Birds	12	47	11
Fishes (freshwater)	14	44	9
Fishes (marine)	5	8	4
Lichens	1	6	2
Mammals (marine)	7	20	4
Mammals (terrestrial)	4	27	9
Molluscs	2	17	3
Mosses	0	9	1

Reptiles	9	19	2
Vascular plants	26	62	25
Total	86	289	72

**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 (i.e., a wildlife species that no longer occurs in the wild in Canada). Results from the Committee on the Status of Endangered Wildlife in Canada have been further analyzed as described in <a href="Part 2">Part 2</a> of this document.

**Source:** Committee on the Status of Endangered Wildlife in Canada, May 2016.

## Annex B. Allocation of wildlife species assigned with a change status of Reassigned by the Committee on the Status of Endangered Wildlife in Canada, 2016

For the Changes in Wildlife Species Disappearance Risks indicator, species assigned with a change status of Reassigned by the Committee on the Status of Endangered Wildlife in Canada (the Committee) were grouped into 41 units, whose status could be assessed.

Where the direction of change could be determined unambiguously, the unit was given a change category of Higher risk, Lower risk or No change. This table summarizes the rationale for and conclusions of that classification.

Each Canadian Environmental Sustainability Indicators (CESI) change unit is given a permanent CESI ID. Once the species involved in a CESI change unit have been reassessed and no longer categorized as Reassigned by the Committee, they are removed from this analysis.

#### Allocation of wildlife species assigned with a change status of Reassigned by the Committee on the Status of Endangered Wildlife in Canada, 2016

Common name	Scientific name	CESI	Committee on the Status of Endangered Wildlife in Canada IDs	Last assessed	Change unit status	Rationale for assignment	Taxonomic group
Lake Sturgeon	Acipenser fulvescens	1	954, 955, 956, 957, 958	Nov 2006	No change	Western populations unit designated Endangered in May 2005. Western populations unit was split into five separate populations in November 2006; all new populations designated Endangered.	Fishes (freshwater)
Eastern Sand Darter	Ammocrypta pellucida	2	1075, 1076	Nov 2009	No change	The species was considered a single unit and designated Threatened in April 1994 and November 2000. Split into two separate units in November 2009; both units were	Fishes (freshwater)

Common name	Scientific name	CESI	Committee on the Status of Endangered Wildlife in Canada IDs	Last assessed	Change unit status	Rationale for assignment	Taxonomic group
						designated Threatened.	
Bowhead Whale	Balaena mysticetus	3	1054	Apr 2009	Lower risk	Hudson Bay-Foxe Basin population and Davis Strait-Baffin Bay population were both designated Threatened in May 2005. In April 2009, these populations were considered a single unit (Eastern Canada-West Greenland population) and designated Special concern.	Mammals (marine)
Fin Whale	Balaenoptera physalus	5	874, 875	May 2005	Unknown	A single unit was designated Special concern in April 1987. In May 2005, the Pacific population was designated Threatened and the Atlantic population was designated Special concern.	Mammals (marine)
Mountain Sucker	Catostomus platyrhynchus	6	1115, 1116, 1117	Nov 2010	Unknown	A single unit was designated Not at risk in April 1991. Split into three populations in 2010, the Pacific unit was designated Special concern, the Milk River unit was designated Threatened, and the Saskatchewan-Nelson River unit was designated Not at risk.	Fishes (freshwater)

Common name	Scientific name	CESI ID	Committee on the Status of Endangered Wildlife in Canada IDs	Last assessed	Change unit status	Rationale for assignment	Taxonomic group
Kiyi	Coregonus kiyi subsp	8	873, 876	May 2005	Unknown	The Kiyi was designated Special concern in April 1988. Split into two subspecies in May 2005; the Upper Great Lakes Kiyi was designated Special concern, the Lake Ontario Kiyi was designated Extinct.	Fishes (freshwater)
Beluga Whale	Delphinapterus leucas	9	130, 366	May 2004	Unknown	Part of the Southeast Baffin Island–Cumberland Sound population was moved to a different unit in 2004; comparisons over time are not possible.	Mammals (marine)
Allegheny Mountain Dusky Salamander	Desmognathus ochrophaeus	10	963, 1004	Apr 2007	Unknown	A single unit was designated Threatened in 2001. In April 2007, split into two populations which were designated Endangered and Threatened.	Amphibians
Peregrine Falcon anatum/ tundrius	Falco peregrinus anatum/ tundrius	12	995	Apr 2007	Unknown	Two subspecies (Threatened in 2000 and Special concern in 1992) were combined and designated Special concern in 2007.	Birds
Atlantic Cod (Maritime)	Gadus morhua	13	1108, 1109	Apr 2010	Higher risk	In 2003, the Maritimes population was designated Special concern. The	Fishes (marine)

Common name	Scientific name	CESI	Committee on the Status of Endangered Wildlife in Canada IDs	Last assessed	Change unit status	Rationale for assignment	Taxonomic group
						Maritimes population was split into two units in 2010, both of which were designated Endangered.	
Atlantic Cod (Arctic)	Gadus morhua	14	1106, 1107	Apr 2010	Unknown	In May 2003, the Arctic population was designated Special concern. The Arctic population was split in 2010 into two units, designated Special concern and Data deficient.	Fishes (marine)
Southern Flying Squirrel	Glaucomys volans	16	945, 946	Apr 2006	Lower risk	Designated Special concern in April 1988. Split into two populations in 2006 and both were designated Not at risk.	Mammals (terrestrial)
Chestnut Lamprey	Ichthyomyzon castaneus	17	1137, 1138	Nov 2010	Unknown	The species was considered a single unit and designated Special concern in 1991. Split into two populations in 2010 and both were placed in the Data deficient category.	Fishes (freshwater)
Northern Brook Lamprey	Ichthyomyzon fossor	18	970, 971	Apr 2007	Unknown	The species was considered a single unit and designated Special concern in 1991. The species was split into separate units in April 2007; one unit was designated Special concern and the other Data	Fishes (freshwater)

Common name	Scientific name	CESI	Committee on the Status of Endangered Wildlife in Canada IDs	Last assessed	Change unit status	Rationale for assignment	Taxonomic group
						deficient.	
Bigmouth Buffalo	Ictiobus cyprinellus	19	1016	Apr 2008	Unknown	A single unit was designated Special concern in 1989; in 2008 the unit was split and this subunit assessed as Not at risk. The other subunit (ID 1024) was reassessed in 2009 as Special concern.	Fishes (freshwater)
Deepwater Sculpin	Myoxocephalus thompsonii	21	914	Apr 2006	Unknown	In 2006, the unit was enlarged from the unit considered in 1987.	Fishes (freshwater)
Atlantic Walrus	Odobenus rosmarus rosmarus	22	915	Apr 2006	Unknown	Two separate populations: Eastern Arctic (Not at risk in 2000) and Northwest Atlantic (Extirpated in 1987 and 2000) were combined in 2006 and designated Special concern.	Mammals (marine)
Eastern Foxsnake	Pantherophis gloydi	23	1021, 1022	Apr 2008	Higher risk	A single unit was designated Threatened in 2000. The unit was split into two populations in 2008 and both were designated Endangered.	Reptiles
Gray Ratsnake	Pantherophis spiloides	24	983, 984	Apr 2007	Unknown	A single unit was designated Threatened in 2000. Split into two populations in April 2007, designated Endangered and Threatened.	Reptiles

Common name	Scientific name	CESI	Committee on the Status of Endangered Wildlife in Canada IDs	Last assessed	Change unit status	Rationale for assignment	Taxonomic group
Five-lined Skink	Plestiodon fasciatus	25	973, 974	Apr 2007	Unknown	A single unit was designated Special concern in 1998. In 2007, two units were designated Endangered (Carolinian population) and Special concern (Great Lakes/St. Lawrence population).	Reptiles
Western Chorus Frog	Pseudacris triseriata	26	1018, 1019	Apr 2008	Unknown	A single unit was designated Not at risk in 2001. In 2008, the unit was split into two populations, designated Threatened (Great Lakes/St. Lawrence-Canadian Shield population) and Not at risk (Carolinian population).	Amphibians
Dolphin and Union Caribou	Rangifer tarandus groenlandicus	27	822	May 2004	Lower risk	In 1991 the Low Arctic population was designated Threatened. The Dolphin and Union population is composed of a portion of the former Low Arctic population, and it was designated Special concern in May 2004.	Mammals (terrestrial)
Showy Goldenrod	Solidago speciosa	29	1113, 1114	Nov 2010	Unknown	The species was considered a single unit and designated Endangered in 1999, confirmed in 2000. Split into two populations designated	Vascular plants

Common name	Scientific name	CESI	Committee on the Status of Endangered Wildlife in Canada IDs	Last assessed	Change unit status	Rationale for assignment	Taxonomic group
						Endangered (Great Lakes Plains population) and Threatened (Boreal population) in 2010.	
Spring Salamander	Gyrinophilus porphyriticus	31	1160, 1161	May 2011	Higher risk	The species was considered a single unit and designated Special concern in 1989 and 2002. Split into two populations in 2011, designated Extirpated and Threatened.	Amphibians
White Sturgeon	Acipenser transmontanus	32	1216, 1217, 1218, 1219	Nov 2012	Unknown	A single unit was designated Special concern in 1990, but Endangered in 2003. In 2012, the unit was split into four populations, three of which were designated Endangered and one Threatened.	Fishes (freshwater)
Grizzly Bear	Ursus arctos	33	1195, 1196	May 2012	Unknown	The species was considered a single unit and designated Not at risk in April 1979. In 1991, the unit was split into Prairie and Northwestern populations, each of which was assessed in 1991 and 2002. In 2012, the entire species was reexamined and split into Western and Ungava populations. The Western population was designated	Mammals (terrestrial)

Common name	Scientific name	CESI ID	Committee on the Status of Endangered Wildlife in Canada IDs	Last assessed	Change unit status	Rationale for assignment	Taxonomic group
						Special concern and the Ungava population was designated Extinct.	
Tiger Salamander	Ambystoma mavortium or Ambystoma tigrinum	34	1223, 1224, 1227, 1231	Nov 2013	Unknown	Tiger Salamander was originally assessed by the Committee in 2001 as three separate populations. In 2012, Tiger Salamander was split into two separate species, Eastern Tiger Salamander (Ambystoma tigrinum) and Western Tiger Salamander (Ambystoma mavortium), each with two populations, for a total of four units.	Amphibians
Western Toad	Anaxyrus boreas	35	1214, 1215	Nov 2012	No change	The species was considered a single unit and designated Special concern in 2002. In 2012, the unit was split into a Calling and a Non-calling population; both were designated Special concern.	Amphibians
Leatherback Sea Turtle	Dermochelys coriacea	36	1191, 1192	May 2012	No change	The species was considered a single unit and designated Endangered in 1981 and 2001. In May 2012, the unit was split into Atlantic and Pacific populations, both of which were designated	Reptiles

Common name	Scientific name	CESI	Committee on the Status of Endangered Wildlife in Canada IDs	Last assessed	Change unit status	Rationale for assignment	Taxonomic group
						Endangered.	
Northern Dusky Salamander	Desmognathus fuscus	37	1189, 1190	May 2012	Unknown	The species was considered a single unit and designated Not at risk in 1999. Split into two populations in 2012; the Carolinian population was designated Endangered and the Quebec/New Brunswick population was designated Not at risk.	Amphibians
Silver Chub	Macrhybopsis storeriana	38	1193, 1194	May 2012	Unknown	The species was considered a single unit and designated Special concern in 1985 and in 2001. Split into two populations in May 2012; the Great Lakes-Upper St. Lawrence populations unit was designated Endangered and the Saskatchewan-Nelson River populations unit was designated Not at risk.	Fishes (freshwater)
Massasauga	Sistrurus catenatus	39	1220, 1221	Nov 2012	Unknown	A single unit was designated Threatened in 1991 and 2002. Split into two populations in November 2012; the Great Lakes/St. Lawrence population was designated Threatened and the Carolinian population was designated Endangered.	Reptiles

Common name	Scientific name	CESI	Committee on the Status of Endangered Wildlife in Canada IDs	Last assessed	Change unit status	Rationale for assignment	Taxonomic group
American Badger jeffersonii subspecies	Taxidea taxus jeffersonii	40	1229, 1230	Nov 2012	No change	A single unit was designated Not at risk in 1979. In 2000, each of three subspecies was given a separate designation (Endangered, Endangered and Not at risk). In November 2012, the jeffersonii subspecies was further split into two populations (Western and Eastern), and both were designated Endangered.	Mammals (terrestrial)
Wolverine	Gulo gulo	41	618	May 2014	No change	The species was considered a single unit and designated Special concern in 1982. In 1989, it was split into Western (Special concern) and Eastern (Endangered) populations. In 2014, the Eastern and Western populations were considered as a single unit and designated Special concern.	Mammals (terrestrial)
Loggerhead Shrike Eastern subspecies	Lanius Iudovicianus ssp.	42	1265	May 2014	Unknown	The excubitorides subspecies was confirmed as Threatened in 2004. In 2014, the subspecies was split into a Prairie population, which retained the Threatened designation and new unnamed Eastern subspecies, which was	Birds

Common name	Scientific name	CESI	Committee on the Status of Endangered Wildlife in Canada IDs	Last assessed	Change unit status	Rationale for assignment	Taxonomic group
						designated Endangered.	
Caribou	Rangifer tarandus	43	1266, 1294, 1295	May 2014	Unknown	Following the designatable unit report on caribou (the Committee 2011), a new population structure was proposed and accepted by the Committee.	Mammals (terrestrial)
Eastern Wolf	Canis sp. cf. lycaon	44	608	May 2015	Unknown	Previously considered a subspecies of the Grey Wolf and designated Special concern in 2001. Genetic analyses indicate that the Eastern Wolf is not a subspecies of Grey Wolf and, in 2015, Eastern Wolf was designated Threatened.	Mammals (terrestrial)
Winter Skate	Leucoraja ocellata	45	1291, 1292	May 2015	Unknown	The population structure was revised in 2013, resulting in new designatable units: Eastern Scotian Shelf- Newfoundland and Gulf of St. Lawrence.	Fishes (marine)
Toothcup	Rotala ramosior	46	1283, 1284	Nov 2014	Unknown	A single unit was designated Endangered in 1999 and confirmed in 2000. In 2014, it was split into two populations, designated Endangered (Southern Mountain) and Threatened (Great Lakes	Vascular plants

Common name	Scientific name	CESI	Committee on the Status of Endangered Wildlife in Canada IDs	Last assessed	Change unit status	Rationale for assignment	Taxonomic group
						Plains).	
River Darter	Percina shumardi	47	1318, 1319, 1320	Apr 2016	Unknown	The species was considered a single unit and designated Not at risk in 1989. The species was split into three units in 2016. Two units were designated Not at risk and one was designated Endangered.	Fishes (freshwater)
Northern Sunfish	Lepomis peltastes	48	1321, 1322	Apr 2016	Unknown	The species was considered a single unit and designated Not at risk in 1987. In 2016, the unit was split into one unit designated Not at risk and another designated Special concern.	Fishes (freshwater)

#### Annex C. References and additional information

#### References and further reading

Government of Canada (2016) <u>Committee on the Status of Endangered Wildlife in Canada</u>. Retrieved in June 2016.

Government of Canada (2016) Species at Risk Public Registry. Retrieved in June 2016.

International Union for Conservation of Nature (2016) <u>The IUCN Red List of Threatened Species</u>. Retrieved in June 2016.

National General Status Working Group (2015) Wild Species Reports. Retrieved in June 2016.

#### **Related information**

General Status of Species in Canada

Global Trends in Bird Species Survival

Species at Risk Population Trends

#### www.ec.gc.ca

Additional information can be obtained at:

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