



# Species and Ecosystems of Management Concern

## Program Guide



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	<u>Note:</u> This guide was based on a guide developed in 2014 and updated to reflect current guidelines and SFI requirements			

## 1.0 Introduction

Sustainable forest management is one of the three overarching principles that govern all BC Timber Sales (BCTS) activities. BCTS has both legal and stewardship obligations to manage and conserve specific species, ecosystems and habitats that might occur within BCTS operating areas and be adversely affected by forestry activities. These **species and ecosystems of management concern** (SOMC) are identified by a variety of sources, including provincial and federal legislation and policy; independent bodies such as the BC Conservation Data Centre (CDC) or the Committee on Status of Endangered Wildlife in Canada (COSEWIC); local resource management plans; and forest certification programs. Some of these species and ecosystems are considered at risk; others are not at risk but require special management for social and/or economic reasons.

This guide provides background on the various provincial and federal processes that rank the status of species populations and describes an approach to develop SOMC programs to support stewardship of rare species while meeting BCTS commitments under Sustainable Forestry Initiative (SFI) certification for the management of species at risk.

To meet legal requirements for managing wildlife, plants, and ecosystems, BCTS is required to meet several obligations under the following federal and provincial legislation:

- Federal *Species at Risk Act* (SARA)
- Federal *Migratory Birds Convention Act* (MBCA)
- Federal *Fisheries Act*
- Provincial *Wildlife Act*
- Provincial *Forest and Range Practices Act* (FRPA)
- Provincial Land Use Orders under the *Land Act* and Notices under the *Forest Planning and Practices Regulation*.

### 1.1 Conservation Status of Species

In the context of species conservation in British Columbia, the term “species” includes species, subspecies, plants, and ecological communities (plant communities). Plant communities are considered “species” in the context of rare species conservation. Additional information on the various ranking systems for evaluating the status of species at risk in BC and Canada are included in Appendix A. These ranking systems are used to identify species to be included in BCTS SOMC programs.

### 1.2 Legal and Policy Tools Related to Management of At Risk Species or Ecosystems

These regulatory policies are important to consider when establishing a SOMC program as they identify legal requirements for the management of species at risk. A summary of each of these acts are presented below.

### ***Forest and Range Practices Act (FRPA)***

To meet legal requirements under FRPA BCTS must consider the following:

- Section 7 Notices are objectives set by government for wildlife for the purposes of forestry planning including species at risk and ungulate winter range. The notices are found at: <http://www.env.gov.bc.ca/wld/frpa/notices/sar.html>
- Species at Risk, Regionally Important Wildlife, Ungulates (GAR S. 13) Species identified in the category of Species at Risk and in the category of Ungulates are listed at: <http://www.env.gov.bc.ca/wld/frpa/species.html>
- Wildlife Habitat Areas (GAR S.10), Wildlife Habitat Features (GAR S.11), Ungulate Winter Ranges (GAR S.12) and General Wildlife Measures (GAR S.9).

### ***Identified Wildlife Management Strategy (IWMS)***

The IWMS (2004) is the policy mechanism used by the BC government to guide establishment of Wildlife Habitat Areas (WHAs) and General Wildlife Measures (GWMs) for designated species at risk that are affected by forest or range operations. IWMS can be found at <http://www.env.gov.bc.ca/wld/frpa/iwms/iwms.html>.

### ***Wildlife Act – British Columbia***

Section 13 of the Designation and Exemption Regulation of the BC *Wildlife Act* specifically identifies four “endangered” or “threatened” species in B.C. (Burrowing Owl, Sea Otter, Vancouver Island Marmot, American White Pelican). Section 26 of the Act prohibits hunting, trapping, wounding, (etc.) of endangered or threatened species, while Section 5 allows designation of “critical wildlife areas” to protect habitat of endangered or threatened species within a Wildlife Management Area (a land designation under the *Wildlife Act*).

Although not limited to endangered or threatened species, Section 34 of the *Wildlife Act* is relevant to BCTS business because it prohibits (except as provided by regulation) possession, taking, destruction (etc.) of birds and eggs, nests of an eagle, peregrine falcon, gyrfalcon, osprey, heron or burrowing owl, and other nests when occupied by a bird or its egg.

### ***Migratory Birds Convention Act (MBCA) – Canada***

Affords protections to a long list of North American migrating bird species and their nests during the nesting season. Most species of birds in Canada are protected under the MBCA and can be searched here [Birds protected under the Migratory Birds Convention Act - Canada.ca](http://Birds_protected_under_the_Migratory_Birds_Convention_Act_-_Canada.ca). Some species that are not protected under the MBCA are owls, jays, crows, ravens, falcons, eagles, and hawks. Some migratory birds are also considered Species at Risk under the SARA and the BC CDC.

## 2.0 Sustainable Forest Management Certification Requirements

In BC, forest certification supplements the comprehensive laws that the province has in place to ensure that its public forests are well managed. Third-party certification of forestry activities is broadly accepted as a best practice for sustainable forest and resource management and BCTS has committed to 100% of its operations subject to a form of SFM certification. All BCTS operations are certified under the SFI Forest Management Standard. Key components of SFI as they related to SOMC are described below.

The SFI standard ([SFI 2022 Standards - forests.org](https://forests.org)) specifies the requirements of compliance with the program.

### **Objective 4. Conservation of Biological Diversity**

*To maintain or advance the conservation of biological diversity at the stand- and landscape-level and across a diversity of forest and vegetation cover types and successional stages including the conservation of forest plants and animals, aquatic species, threatened and endangered species<sup>1</sup>, Forests with Exceptional Conservation Value<sup>2</sup>, old-growth forests<sup>3</sup>, and ecologically important sites<sup>4</sup>.*

**Performance Measure 4.2.** *Certified Organizations shall protect threatened and endangered species, critically imperiled and imperiled species (Forests with Exceptional Conservation Values), and natural communities and old-growth forests.*

**Indicator 4.2.1:** *Program to protect threatened and endangered species.*

**Indicator 4.2.2:** *Program to locate and protect known sites of flora and fauna associated with viable occurrences of critically imperiled and imperiled species and ecological communities, defined as Forests with Exceptional Conservation Value.*

SFI defines a *Program* as an organized system, process or set of activities to achieve an objective or performance measure.

Conformance with these indicators is being achieved through the development of Species of Management Concern (SOMC) guidance and implementation programs. This includes the identification of SOMC, development of training materials and delivery of SOMC awareness training for staff, and guidance on the management of SOMC. The SFI

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<sup>1</sup> Threatened and endangered: Listed under the Canadian Species at Risk Act and listed under applicable state or provincial laws requiring protection.

<sup>2</sup> Forests with Exceptional Conservation Value: Critically imperiled (G1) and imperiled (G2) species and ecological communities.

<sup>3</sup> Old-growth forests: A forested ecosystem distinguished by old trees and related structural attributes, such as tree size, down woody debris, canopy levels, and species composition. Certified Organizations should utilize a definition specific to their region and particular forest types.

<sup>4</sup> Ecologically important: Ecologically important can be defined as applying to natural communities, biological, ecological or physical features which, either by themselves or in a network, contribute significantly to an ecosystem's productivity, biodiversity, and resilience. Ecologically important areas may be so identified by the inclusion viable occurrences of species or natural communities that are integral to the identity or function of an ecosystem, but which may be relatively uncommon on the landscape, including species or ecological communities with a high "S-Rank" or "G-Rank" from NatureServe, subject to the discretion of the Certified Organization.

Provincial Roles and Responsibilities Matrix provides additional details on how specific indicators are being achieved. For additional details check the [BCTS Sustainable Forest Management Certification Intranet Site](#).

### 3.0 BCTS Species of Management Concern Program

Each Business Area is required to have the following SOMC program components to meet SFI certification requirements and to support BCTS in meeting legislative requirements:

- Species of Management Concern and At Risk Ecological Communities Standard Operating Procedures
- Business Area Focus List
- Species at Risk Awareness Training including Forests with Exceptional Conservation Value – critically imperiled and imperiled species and ecological communities as well as other measures to protect biodiversity and wildlife habitat

BCTS is creating a variety of corporate resources to support Business Area development of SOMC programs. These products are available for use by Business Areas and can be downloaded from the BCTS Sustainability Intranet site under [Species of Management Concern](https://intranet.gov.bc.ca/for/bcts/sustainability/sustainability/species-of-management-concern) (https://intranet.gov.bc.ca/for/bcts/sustainability/sustainability/species-of-management-concern). Business Areas may choose to use the BCTS corporate products or develop their own comparable materials to satisfy SFI certification program requirements. The following sections provide background and a description of the corporate resources that are available.

#### **Species of Management Concern Standard Operating Procedure**

A Standard Operating Procedure (SOP) outlining key process steps and responsibilities is a standard component of the required SOMC program. SOP templates are provided for Business Areas to use as a foundation piece of their program. The SOP templates can be adapted and customized to suit Business Area needs. Templates have been developed for SOMC (plants and animals) and for At Risk Ecological Communities (AREC). The templates are available to download from the [BCTS SOMC website](#).

#### ***Master Species List***

The Species of Management Concern (SOMC) Master Species Lists were derived from the BC Conservation Data Centre Species and Ecosystems Explorer tool. BC's Conservation Data Centre is a member of NatureServe and incorporates NatureServe data into its mapping and conservation assessments of BC's species and ecosystems available through the BC Species and Ecosystem Explorer tool. The data extracted from the site was based on filters to select red- and blue-listed species and ecosystems, some yellow-listed species of regional management concern, critically imperiled (G1/S1) and imperiled species and ecosystems (G2/S2), species identified under FRPA and GAR order species. The Master Species Lists include all species and ecosystems meeting these filter requirements in the province and can be sorted or further filtered by many categories including Business Area, Forest District, conservation status and risk rating.



## Animals and Plants

The Master Species Lists for animals and plants were developed through the application of selected filters to the BC Conservation Data Centre Species and Ecosystems Explorer. The Master Species Lists are separated into two excel files, one for animals and one for plants.

The list includes:

- Provincial Red and Blue Listed animals and plants (vascular plants, moss, and lichen) species,
- NatureServe Global G1/G2 species
- Species at Risk Act (SARA), Schedule 1 listed species
- Forest and Range Practices Act (FRPA), FPPR Section 7 (GAR) species
- Species included in the Identified Wildlife Management Strategy (IWMS)
- BC Wildlife Act species

## At Risk Ecological Communities

Plans are in place to establish a contract in the 2022/2023 fiscal year, to compile a Master Species List for At Risk Ecological Communities. Additional detail will be added once the contract is completed.

### ***Risk Rating System***

A key component of the BCTS SOMC process is the application of a risk assessment to determine the subset of species that are considered a management priority, known as the SOMC **Focus List**. The Risk Rating System was used to rank each species within the Master Species Lists. The risk assessment incorporates elements such as the probability of impacts due to forest operations and the consequences (social, economic, or environmental) of impacts to the specific species or ecosystem, with or without special management measures being applied. The rating system outlines the rules used to create the ranking system and is therefore objective and repeatable. A Risk Rating System was created for plants and animals (Appendix B) as well as a specific system for rating At Risk Ecological Communities (Appendix C).

The rank that was determined for each species or ecosystem in the Master Species Lists is included in the Excel file.

### ***Business Area Focus List***

The finalized Risk Rating System was applied to the Master Species Lists to determine the species or ecosystems to be included in the Focus Lists. For the plants and animals, all species that were rated as High based on the Risk Rating (Appendix B) were included on the Focus List with additions to include any species that were not ranked as High but are an Identified Wildlife Species or are listing in the *Wildlife Act*. This list was filtered based on the geographic location of the species to develop 12 Business Area Focus Lists. The Focus Lists present the minimum number of species to be included in the SOMC program. Business Areas may add additional species to their Focus List that are of specific concern or interest to their operating area.

Business Areas must establish a list of species based on legal and SFI requirements that are locally relevant to operations, and ensure relevant staff, contractors, and licensees are aware of these species and management requirements. The provincially created Business Area Focus List identifies species that should be included in their local program. Business Areas may wish to adjust this list based on local circumstances or based on review from a local qualified professional. A rationale for any changes in the species on a Focus List should be documented and included in the local SOMC program.

### ***SOMC Awareness and Training Materials***

Business Areas must make available and / or provide training to staff, licensees, and contractors sufficient to their roles and responsibilities at least once every two years as per provincial training matrices and SFI certification standards. Training must be recorded as per Environmental Management System requirements.

The following SOMC awareness and training materials have been developed and are available for Business Areas to utilize:

- **Field Cards** were developed for each plant or animal species that is included on the Focus Species List. The cards include descriptive information and photos to aid in field identification of SOMC for use by BCTS staff and contractors. The cards are 2 pages in length and include the following sections: description, biology, breeding phenology, habitat, range, status, BEC zones, natural resource district, field action required, management recommendations and a blank section for Business Area specific management actions which will allow customization by Business Areas.
- **PowerPoint Slides** have been developed for each plant or animal species on the Focus Species List. The slides can be used for species of management concern awareness training sessions. Business Areas can select these slides from the corporate materials to create their own Business Area specific packages. Awareness training must include Forests with Exceptional Conservation Value – critically imperiled and imperiled species and ecological communities as well as other measures to protect biodiversity and wildlife habitat.
- **Operator Awareness Sheets** have been developed for each Business Area. These sheets are 2 to 3 pages and include selected species from the Business Area Focus List that are managed at the stand level and most likely to be identified by BCTS licensee workers, road construction and silviculture contractors. Business Areas must provide awareness materials to licensees and some contractors based on their responsibilities. These sheets are designed to meet that requirement, however BAs may choose a different method.

## 4.0 SOMC Program Components – Storage Location and Access

The SOMC program components will be available for access through the corporate intranet site at the [BCTS Sustainability and Forestry section](https://intranet.gov.bc.ca/for/bcts/sustainability/sustainability):  
<https://intranet.gov.bc.ca/for/bcts/sustainability/sustainability>.

This location will include the various corporate products that have been developed and could be used to satisfy certification requirements. Business Areas can download their Focus List and select the corresponding Field Cards and Training Slides for the species of management concern included on their list. These items can be customized to suit their needs and then packaged to create Business Area Field Cards and a SOMC awareness training session. The resulting Business Area specific components could then be posted to their Business Area section of the [BCTS – Business Area Environmental Management \(EMS\) and Sustainable Forest Management \(SFM\) internet sites](https://www2.gov.bc.ca/gov/content/industry/forestry/bc-timber-sales/forest-certification/ems-sfm):  
<https://www2.gov.bc.ca/gov/content/industry/forestry/bc-timber-sales/forest-certification/ems-sfm>.

Business Areas must make their local program materials available to staff, licensees, and contractors; it is recommended they are posted on BA external websites.

An important component of the BCTS species of management concern program is the regular review of the SOMC program components to incorporate regulatory changes, updated species information and other relevant information. This process will be completed annually by a BCTS Wildlife Resource Specialist and will be scheduled to occur following the annual updates of species ratings by the BC Conservation Data Centre. Any changes or updates will be noted and communicated to affected Business Areas and posted on the BCTS SOMC Intranet site. Posted material will be maintained and current including a date for verification of status. Business Areas are encouraged to check this site for updates to ensure that their SOMC program components are up to date. If Business Areas generate their own SOMC materials, they must ensure they are reviewed at regular intervals to ensure they are current.

## 5.0 Business Areas Customization

The SOMC components are available to support Business Areas in their creation of their own programs. The products can be customized to suit their needs and support during this process is available from regional Wildlife Resource Specialists – see contact information on the BCTS Sustainability Page: [BC Timber Sales – Sustainability – Forests, Lands, Natural Resource Operations and Rural Development \(gov.bc.ca\)](https://www2.gov.bc.ca/gov/content/sustainability/forests-lands-natural-resource-operations-and-rural-development)

Changes to the Focus List species should be made in consultation with a Wildlife Resource Specialist or a Qualified Professional to ensure that any adjustments are supported by the Risk Rating system and are documented so that changes are defensible during an audit process.

Field Cards have a placeholder for Business Area Specific Management Actions. This is a place where any local BMPs or predetermined management actions can be added. If there are none then this title can be deleted.

Field cards can be selected from the existing library and bundled into a document to create a species at risk field card package for a Business Area. The PowerPoint slides for each species can also be imported into a presentation and used for species of management concern awareness training, with local modifications as deemed appropriate. Business Areas must have procedures in place to ensure document control.

## **6.0 SOMC Product Maintenance**

An important component of the BCTS species at risk management program is the regular review of the SOMC and associated Focus Lists to incorporate regulatory changes, updated species information, changes in legislation, land use orders or a certification standard. This process will be completed annually by a Wildlife Resource Specialist and scheduled to occur following the annual updates of species ratings by the BC Conservation Data Centre. Any changes or updates will be noted and communicated to affected Business Areas and posted on the intranet site.

## Appendix A – Species Conservation Status

### **BC Conservation Data Centre (CDC) – British Columbia**

The BC CDC assesses the conservation status of species in BC from a provincial perspective. Species and ecological communities in BC are assigned to one of three colour-coded status categories by the BC CDC:

#### **Red List**

- Extirpated elements no longer exist in the wild in British Columbia but do occur elsewhere.
- Endangered elements are facing imminent extirpation or extinction.
- Threatened elements are likely to become endangered if limiting factors are not reversed.

#### **Blue List**

- Vulnerable species or ecological communities are of special concern because of characteristics that make them particularly sensitive to human activities or natural events.

#### **Yellow List**

- Ecological communities and indigenous species which are not at risk of extinction in British Columbia.

### **NatureServe – Global**

NatureServe is a global organization acting as the authoritative source for biodiversity data throughout North America. Their mission is to leverage the power of science, data, and technology to guide biodiversity conservation and stewardship. NatureServe Canada's data, information and expertise guide effective conservation action and natural resource management. NatureServe ranks species/ecological communities with Global ranks across the species entire range (G ranks) and subnational provincially ranks (S ranks).

<b>Global</b>	<b>Conservation Status<sup>1</sup></b>	<b>Provincial</b>	<b>Conservation Status<sup>1</sup></b>
GX	Presumed extinct (species) / collapsed (ecosystems)	SX	Presumed extirpated from province
GH	Possibly extinct (species) / collapsed (ecosystems) – known from only historical occurrences but still some hope of rediscovery	SH	Possibly extirpated – known from only historical records but still some hope of rediscovery
G1	Critically imperiled – at very high risk of extinction	S1	Critically imperiled – at very high risk of extirpation in the province
G2	Imperiled – At high risk of extinction or collapse	S2	Imperiled – at high risk of extirpation in the province
G3	Vulnerable – at moderate risk of extinction or collapse	S3	Vulnerable – at moderate risk of extirpation in the province
G4	Apparently secure – At fairly low risk of extinction or collapse	S4	Apparently secure – at a fairly low risk of extirpation in the province
G5	Secure – At very low risk of extinction or collapse	S5	Secure – at very low risk of extirpation in the province
NA	Not applicable	NA	Not applicable
NR	Unranked – Global Rank not yet assessed	NR	Unranked
GU	Unrankable	SU	Unrankable

<sup>1</sup> – Full conservation status rank definitions available at [Statuses | NatureServe Explorer](#)

## **COSEWIC – Canada**

Committee on the Status of Endangered Wildlife in Canada (COSEWIC) is the advisory panel that assess the status of wildlife species in Canada. Their assessment and ranking are considered when establishing the legal list of species at risk (Schedule 1) in Canada under the *Species at Risk Act*.

COSEWIC determines the conservation status of species based on their range in Canada only; the status at a provincial scale and/or outside Canada is a very minor consideration.

COSEWIC assigns the following conservation status categories to species at risk and evaluates species but not ecological communities:

- **NAR** (Not at Risk) – the species has been determined to be not of conservation concern.
- **SC** (Special Concern) – species may become threatened or endangered because of biological factors and identified threats.
- **T** (Threatened) – species may become endangered if limiting factors are not reversed.
- **E** (Endangered) – species is facing imminent extinction or extirpation.
- **XT** (Extirpated) – species no longer exists in the wild in Canada but exists elsewhere.
- **X** (Extinct) – species no longer exists.
- **DD** (Data Deficient) – species that lack sufficient data to determine a conservation status.

## **Species at Risk Act (SARA) – Canada**

The SARA is the legislation that legally assigns the national biological conservation status of all wildlife in Canada and provides for protection and conservation of species at risk. This is done through Schedule 1 of SARA.

The SARA has three “Schedules”:

1. Schedule 1 – lists all the species that legally fall under SARA – that is, the Extirpated, Endangered, Threatened and Special Concern species to which prohibitions, obligations and/or requirements of SARA apply.
2. Schedule 2 – lists all the species that COSEWIC listed as Endangered or Threatened when SARA came into force, but for which the COSEWIC status report was inadequate.
3. Schedule 3 – lists all the species that COSEWIC listed as Special Concern when SARA came into force, but for which the COSEWIC status report was inadequate.

Prohibitions and protections of species and habitats under SARA only apply to federal lands in most circumstances. The provincial government has responsibility for wildlife and species at risk management on provincial lands however the federal Minister may intercede under SARA if provincial management is deemed insufficient for conservation and recovery of a Listed species.



## Appendix B – Plant and Animal Risk Rating System

Likelihood of species being impacted by forestry activities	
RANK	CRITERIA
0	parks, protected areas; non forested subalpine and alpine; beaches and sand dunes; roadsides and rocky areas; cliffs; ocean dwelling spp only; extirpated from BC; ecosystem where BCTS does not harvest (CDF)
1	Non-forested ecosystems (other than above); non-productive forests which won't be harvested (e.g. bog); all fish bearing streams and lakes
2	All coniferous or mixedwood forest types
Species at Risk and Conservation Threat Status***	
RANK	CRITERIA
1	CDC no status, blue or yellow listed; COSEWIC NAR/SC; Global G3/4/5 or GNA/GNR/GU; S2S4, S3/4/5 or SNA/SU/SX
2	CDC red listed; S1S3, S2, S2?, S2S3; G2; COSEWIC T, E, DD; SARA SC or Sched 3; UWR; Fisheries Act, Migratory Birds Act OR Sec 34 Wildlife Act
3	S1,S1B,S1N,S1?, S1S2; G1; Sara E or T; WHA; Section 7/9 Notice
Biological Risk to Forestry Activities	
RANK	CRITERIA
1	Red or Blue/Yellow Listed, not in WHA or UWR, and no SAR/UWR Notice: habitat suitability, ecological community and population size/viability will not be significantly reduced by forestry activity including road building; if species has "0" rating of impact by forestry activities
2	Blue/Yellow Listed, not in WHA or UWR, and no SAR/UWR Notice and impacts from forestry and/or road building: habitat suitability significantly reduced; ecological community significantly damage but will recover; pop size/viability significantly reduced possibly to zero; red listed and potential to be impacted by road building only red listed and minor riparian impacts
3	Red listed spp, WHA, UWR, SAR/UWR Notice: habitat suitability significantly reduced; habitat suitability will be permanently damaged or destroyed; ecological community will be damaged and potentially not recover; pop size/viability sig reduced
<b>Overall Risk Rank</b>	<b>Using the three categories of Risk above, sum the risk for the species in question. Risk will fall into the following score values of: High (7-8), Medium (5-6), and Low (2-4). A minimum score is 2.</b>

## **Appendix C – AREC Risk Rating System**

To be added once developed in 2023.