



Municipalities and Species at Risk Conservation & Recovery Project:

Introduction to Species at Risk

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December 2005



**Maintaining and Conserving
Nova Scotia's Wildlife Species:
Focus on Species at Risk**



Project Goal and Objectives

The goal of this project is to:

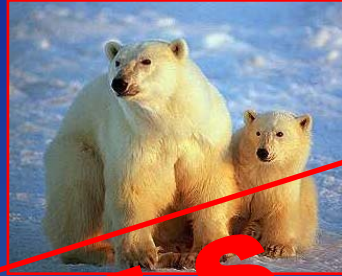
- Explore the important role that municipalities and communities may play in supporting conservation and recovery of species at risk and their habitats

The objectives of this project are to:

- Raise awareness of species at risk and their habitats
- Discuss the relevance of species at risk conservation and recovery to municipalities
- Help build stewardship capacity within municipalities and communities
- Explore and discuss municipal “tools” that might assist in the conservation and recovery of species at risk and their habitat

What are Species at Risk?

- Any animal, plant, or other organism that is considered at serious risk of extinction



- Usually species are at risk due to human activities that impact species or their habitat

- Extinction is occurring at a rate never before seen in the history of human existence

Species at Risk Categories



Endangered - a species facing imminent extirpation or extinction

Endangered

Threatened - a species likely to become endangered if limiting factors are not reversed

Threatened

Special Concern (Vulnerable) - a species of special concern because of characteristics that make it particularly sensitive to human activities or natural events

Special Concern (Vulnerable)

Species Status Assessment (National and Provincial Processes):

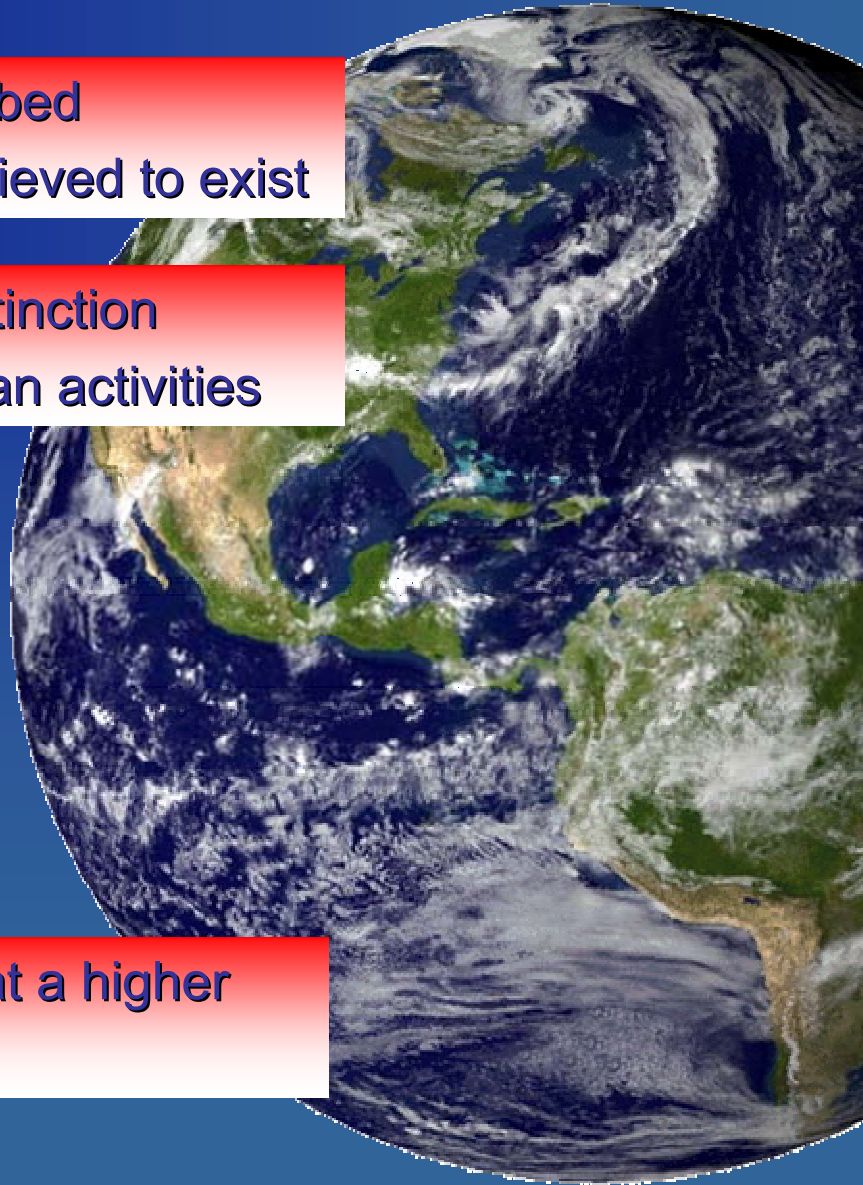
- **Committee on the Status of Endangered Wildlife in Canada (COSEWIC)** - species listed at the national level
- **NS Endangered Species Working Group** - species listed provincially under the NS Endangered Species Act

Species at Risk Around the World

- 2 million species described
- ~ 13 million species believed to exist

- 11,000 species face extinction
- 800 extinct due to human activities

- Extinction is occurring at a higher rate than ever before



Species at Risk in Canada and Nova Scotia

- ~ 71,000 species in Canada
- 431 species at risk in Canada

- Over 10,000 species in NS
- Over 40 species at risk in NS

- 12 species extinct in Canada
- 5 species extinct in NS

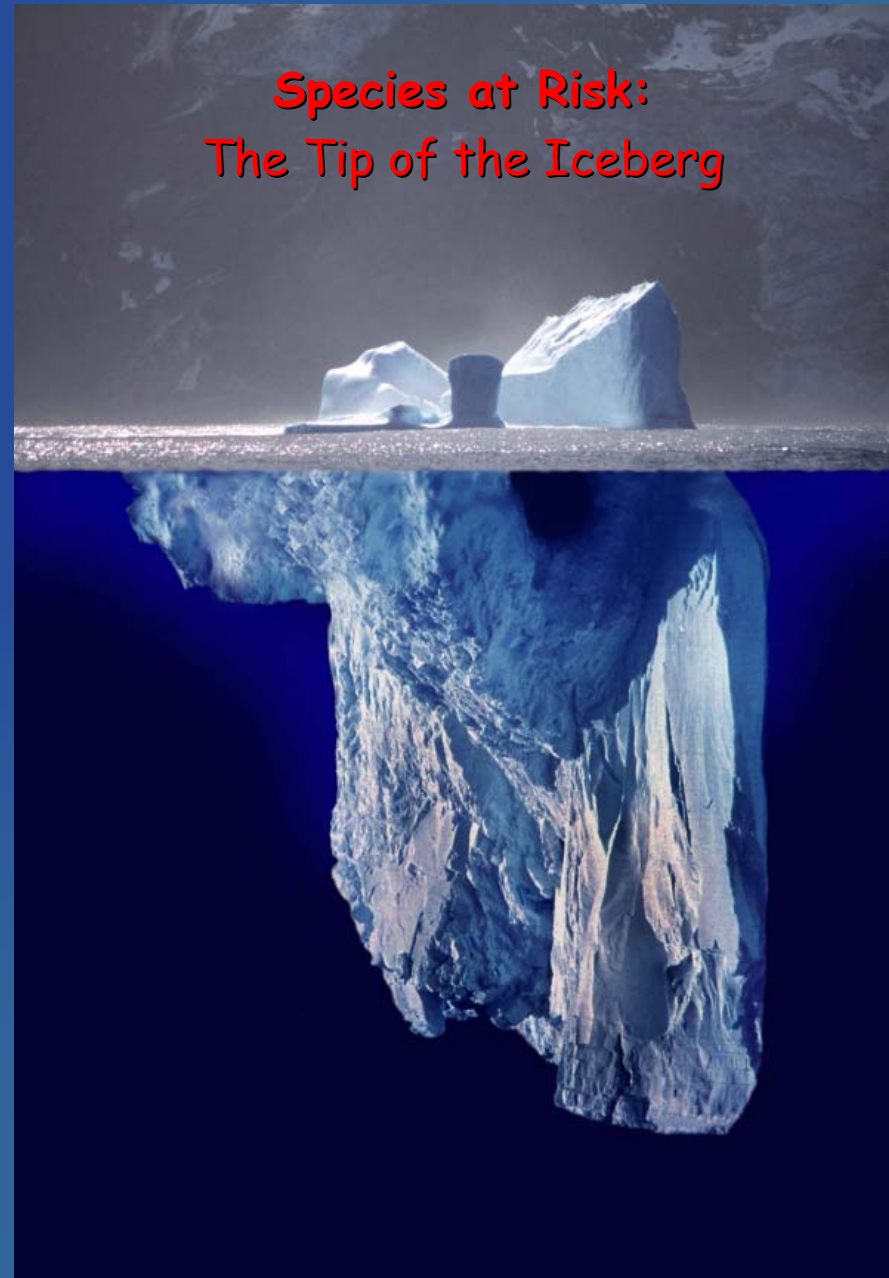
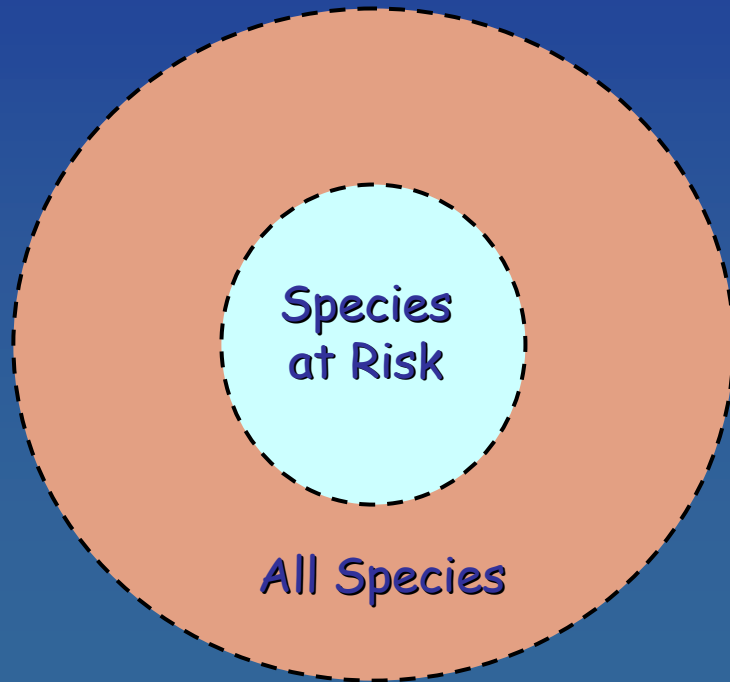


- Some species at risk in NS are found no where else in Canada and are globally rare

Conservation Context



- NS has > 10,000 wildlife species
- NS has ~ 30 species at risk



Conservation Context



Coarse Filter: General Status

- An assessment process done by the province as 1st alert mechanism
- > 2400 species examined
- Status categories: Red, Yellow, Green, & Undetermined

Fine Filter: Species at Risk

- An assessment process done provincially and nationally resulting in species being legally protected
- 31 species
- Status categories: Endangered, Threatened, Special Concern (Vulnerable)

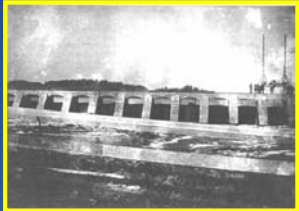
General Status - Species Assessed

Plants	1685
FW Mollusca	48
FW Fishes	45
Butterflies	71
Dragonflies etc.	116
Mammals	55
Amphibians	13
Reptiles	9
Breeding Birds	429
Lichens	42

Why Are Species at Risk?

Maintaining and Conserving
Nova Scotia's
Wildlife Species:
Focus on Species at Risk

- Usually species are at risk of extinction due to human activities
- 4 Primary Threats:
 - Habitat loss and degradation
 - Over exploitation (i.e. over-harvesting)
 - Pollution
 - Transport of invasive exotic (alien) species





SAR Recovery & Conservation Context

Who's involved in species at risk conservation & recovery

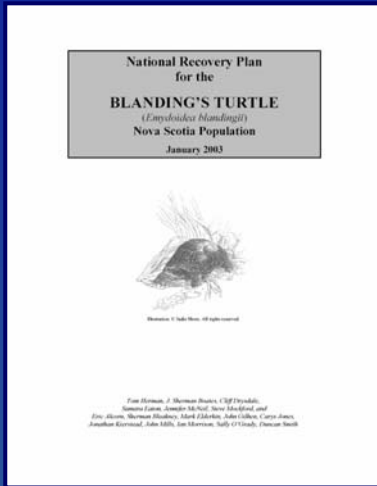


- Up until now municipalities have not been formally engaged in the Recovery and Conservation or Species at Risk
- Through this project we are exploring their possible role(s)

Conservation and Recovery Actions

What's Already Being Done

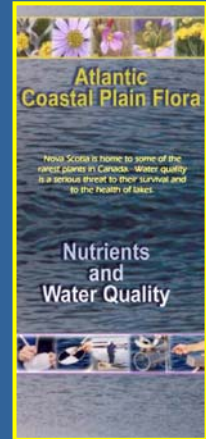
Recovery Teams & Recovery Plans



Legislation

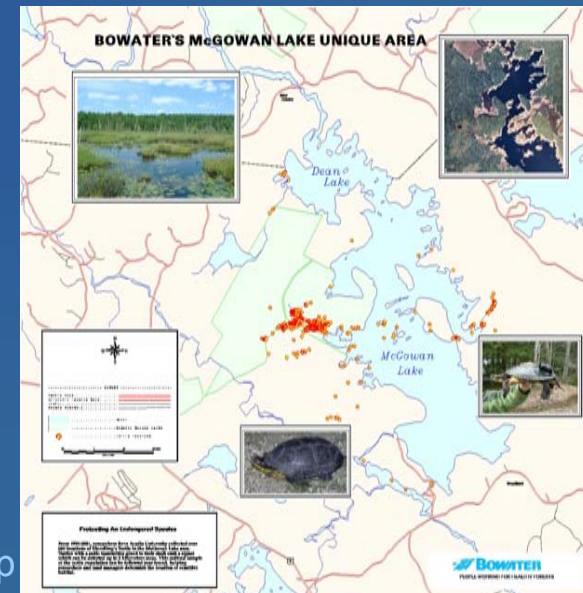


Stewardship Initiatives Education and Awareness



NS DNR General Status Assessment

- University Research
- Industry Stewardship



General Status of Wildlife of Nova Scotia - NetScape

http://www.gov.ns.ca/hatr/wildlife/genstatus/

Nova Scotia Canada
Natural Resources

General Status Ranks of Wild Species in Nova Scotia

Evaluating the status of wild species to maintain biodiversity and ensure that no species becomes at risk as a consequence of human activities.

Background & Process **Photo Gallery**

Overview & Results **Related Web Sites**

Search General Status **Contact Us**

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Why a Municipality May be Interested in Species at Risk?

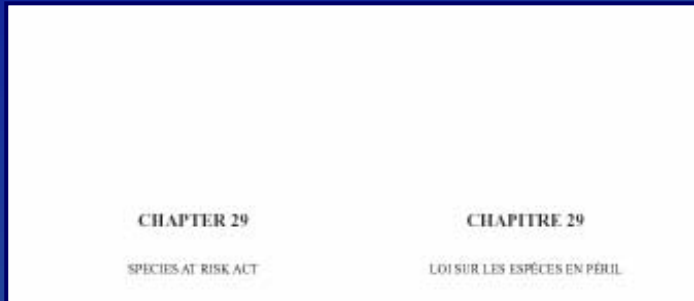
Maintaining and Conserving
Nova Scotia's Wildlife Species:
Focus on Species at Risk



1. *Legislation* exists to protect species at risk and applies to private and municipal lands
2. Municipal government is the level of *government nearest to the people*
3. *Funding opportunities* exist for species at risk conservation initiatives
4. Species at risk can serve as indicators of the *health of our natural environment*
5. *Municipal "tools" may* be able to assist in species at risk conservation and recovery



Municipalities & Species at Risk Legislation



Applies to all species at risk on federal land and all migratory birds and marine species

Applies to all species at risk on provincial public (crown) land and all private land



Municipalities & Species at Risk Legislation

The Federal Species at Risk Act

- Applies to all species at risk on federal land and all migratory birds and marine species



CHAPTER 29
SPECIES AT RISK ACT

SUMMARY

The purpose of this enactment is to prevent Canadian species, subspecies and distinct populations of wildlife from extirpated or extinct, to provide for the recovery of endangered species, to encourage the management of other species from their becoming at risk.

This enactment establishes the Committee on the Status of Wildlife in Canada (COSWIC) as an independent expert body responsible for assessing and identifying species; provides that COSWIC's assessments are to be reported to the Minister of the Environment and to the Canadian Endangered Species Conservation Council and it authorizes the Governor in Council to establish the official list of species at risk based on these reports.

It requires that the best available knowledge be used to set and determine objectives in a recovery strategy for endangered species and it provides for action plans to meet these objectives.

It creates prohibitions to protect listed threatened and endangered species and their critical habitat.

It recognizes that compensation may be needed to meet the objectives of the critical habitat prohibitions.

It creates a public registry to assist in making documents under the Act more accessible to the public.

It is consistent with Aboriginal and treaty rights and the authority of other federal, provincial and territorial governments.



Purposes of the Act:

- Prevent wildlife species from being extirpated or becoming extinct...
- Provide for the recovery of wildlife species that are extirpated, endangered or threatened as a result of human activity...

Prohibitions (No person shall):

- Kill or disturb species
- Destroy or disturb residence
- Habitat - critical habitat



Municipalities & Species at Risk Legislation

The Nova Scotia Endangered Species Act

BILL NO. 65

(as amended)



1st Session, 57th General Assembly
Nova Scotia
47 Elizabeth II, 1998

Government Bill

Endangered Species Act

CHAPTER 11 OF THE ACTS OF 1998

The Honourable Kenneth MacAskill
Minister of Natural Resources

[First Reading](#): November 5, 1998

[Second Reading](#): November 12, 1998

[Third Reading](#): December 3, 1998 (WITH COMMITTEE AMENDMENTS)

- Applies to all species at risk on provincial public (crown) land and all private land

Purpose of the Act:

- “To provide protection, designation, recovery, and other relevant aspects of conservation of species at risk in NS, including habitat”

Prohibitions - No person shall:

- **Kill or disturb species**
- Destroy or disturb **dwelling place**
- Habitat - **core habitat**



Municipalities & Species at Risk Legislation

Both acts promote species at risk protection by encouraging stewardship, education, and partnerships

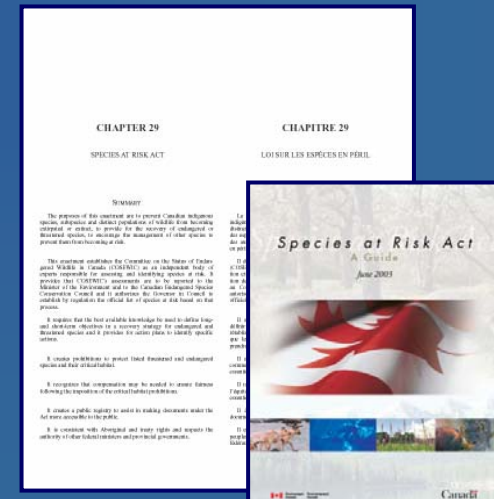
The Nova Scotia Endangered Species Act Recognizes:

- *All Nova Scotians share responsibility for the conservation of species at risk and governments have a leadership role to play*
- *The importance of promoting the purposes of this Act primarily through **non-regulatory means** such as co-operation, stewardship, education and partnerships instead of punitive measures ...*



The Federal Species at Risk Act Recognizes:

- *The importance of promoting the purposes of this Act through alternative means such as co-operation, education and partnerships instead*





Municipalities & Species at Risk

Legislation & Stewardship

There is a balance between stewardship and legislation in species at risk protection

Stewardship

Legislation

Stewardship means “Canadians - including landowners, private companies, governments, voluntary organizations, and individual citizens - are caring for the land, air and water, and sustaining the natural processes on which life depends.”



Municipalities & Species at Risk

Health of Our Natural Environment

Increased municipal awareness of Environmental Issues



FCM Environmental Policy on Nature:

- FCM Policy makes reference to endangered species
- Not too many municipalities in NS have policies relating to species at risk

29. urge municipal governments to ensure that their policies, financial instruments and programs protect and *encourage conservation of ecologically significant lands*. Factors determining ecological significance include:
- wildlife habitat and wildlife movement corridors necessary for the long-term sustainability of affected wildlife within the ecosystem of the area;
 - land necessary for the protection of rare and endangered species and to prevent species from becoming endangered; ...**



Municipalities & Species at Risk

Health of Our Natural Environment

Increased public awareness of environmental issues and interconnections



Water Quality, Air Quality, Pollution, Climate Change



Nature, Wildlife, Species at Risk, Natural Habitats

Environmental
Issues
(species at risk)

Healthy,
Sustainable
Communities

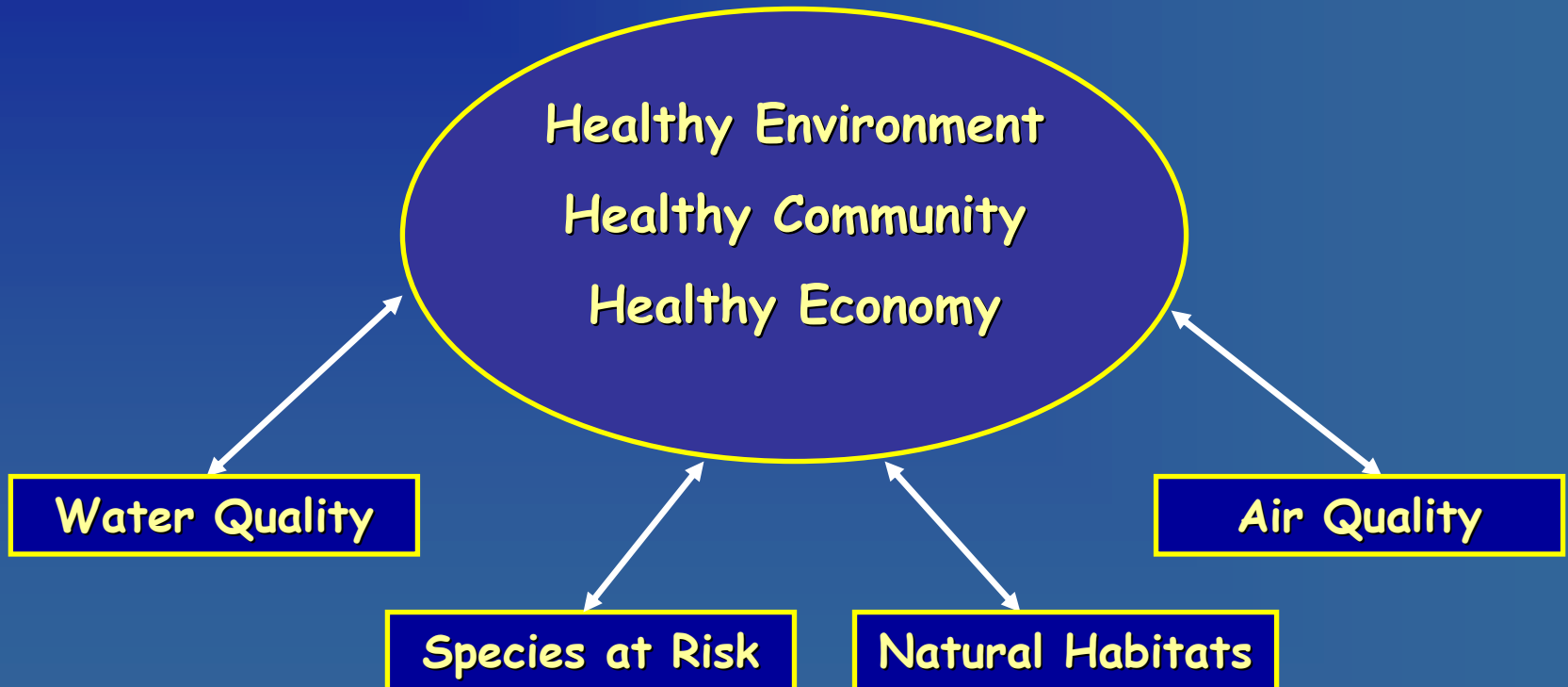
QUALITY OF LIFE



Municipalities & Species at Risk

Health of Our Natural Environment

QUALITY OF LIFE

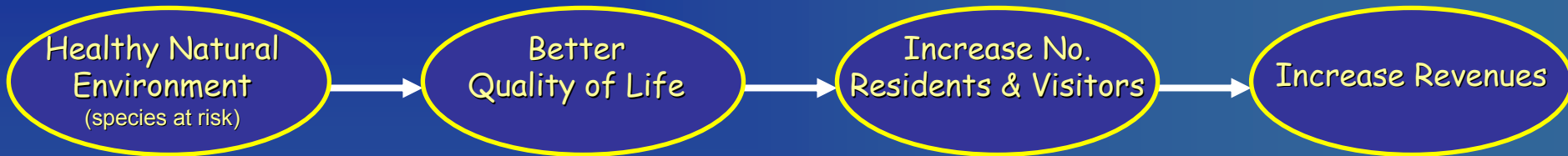




Municipalities & Species at Risk

Health of Our Natural Environment

How a healthy environment, including species at risk, can directly impact on municipalities



- Participating in initiatives that enhance the natural environment, including species at risk projects...
- Will contribute to retaining and attracting residents and visitors and ...
- If done in a sustainable manner...
- Will continue to increase revenues in the future



Municipalities & Species at Risk

Funding Opportunities

Municipalities are eligible to apply for species at risk and habitat stewardship funds, but should coordinate efforts with recovery teams and others working on species at risk:



- The Nova Scotia Government: *Species at Risk Conservation Fund* supports a broad range of conservation and recovery activities



- The Government of Canada: *Habitat Stewardship Program for Species at Risk* supports stewardship initiatives



- The Federation Canadian Municipalities: *Green Municipal Funds* promotes healthy, sustainable communities, and improved quality of life.



- The World Wildlife Fund: *Endangered Species Recovery Fund* supports research, education and stewardship initiatives

Resources on Species at Risk & Municipalities



Nova Scotia's Species at Risk: Municipal & Community Stewardship - Netscape

File Edit View Go Bookmarks Tools Window Help

Back Forward Reload Stop <http://www.speciesatrisk.ca/municipalities/>

Conservation & Recovery of
Nova Scotia's Species at Risk
Municipal & Community Stewardship

Species at Risk in Your Municipality

Species at Risk in Nova Scotia

How Municipalities Can Help

Species at Risk Legislation

Stewardship Actions

Recovery Teams

About Us The Project Resources Contact Us

[Species at Risk in Your Municipality](#) | [Species at Risk in NS](#) | [How Municipalities Can Help](#) |
[Legislation](#) | [Stewardship Actions](#) | [Recovery Teams](#)

[About Us](#) | [The Project](#) | [Resources](#) | [Contact Us](#)

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Website Content and Design By [Samara Eaton](#)
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<http://www.speciesatrisk.ca/municipalities/>

Resources on Species at Risk & Municipalities

Handout: Project Overview & 'why a municipality might be interested in species at risk'

Maintaining and Conserving
Nova Scotia's
Wildlife Species:
Focus on Species at Risk



Municipalities & Species At Risk Project Overview

PROJECT DESCRIPTION:

Species at risk are animals, plants, and other organisms that are considered risk of extinction. Usually species are at risk due to human activities which the species or their habitat. In Nova Scotia there are over ten thousand wild life we know that 5 are already extinct and 47 are seriously at risk. In order to for wildlife, including species at risk, we need the participation and cooper of government, industry, community groups, and individuals.

In August 2003, the Wildlife Division of the Nova Scotia Department of Natural Resources initiated a project to work with municipalities on species at risk conservation. Up until now little has been done to explore the important role that municipalities in supporting conservation and recovery of species and their habitat. This awareness of species at risk, help build stewardship capacity within municipalities, and explore municipal "tools" that might assist in the recovery of species at risk.

WHY A MUNICIPALITY MAY BE INTERESTED IN SPECIES AT RISK

- Legislation exists to protect species at risk and municipalities should know how these laws apply to private and municipal lands:
 - The Nova Scotia Endangered Species Act protects all species provincial crown (public) land and all private land.
 - The federal Species at Risk Act (SARA) protects all species at risk on land, as well as all marine and migratory bird species at risk.
 - Both acts promote species at risk protection by encouraging stewardship education, and partnerships.
- Funding opportunities exist for initiatives that support the conservation of species at risk, and municipalities would be eligible:
 - The Government of Canada Habitat Stewardship Program for supports stewardship initiatives.
 - The Federation of Canadian Municipalities promotes healthy, communities, and improved quality of life through funding grants.
- Species at risk can serve as indicators of the health of our natural environment and municipalities could benefit from supporting species at risk:
 - People are aware of the importance of a healthy natural environment direct connection to healthy, sustainable communities, and a high quality of life.
 - Participating in initiatives that enhance the natural environment species at risk projects, will contribute to retaining and attracting visitors.
- Municipal government is the level of government nearest to the citizen and can play an important role in species at risk conservation and recovery:
 - Municipalities could help in communicating and encouraging stewardship for species at risk.
- Municipalities may have "tools" that could be used to assist in recovering species at risk:
 - Land use planning, zoning, by-laws, policies, and parks and recreation programs are all "tools" that can potentially assist in species at risk conservation.

PROJECT TIMELINE:

We will be contacting all municipalities in NS and meeting with them to present information on species at risk, and to discuss the role municipalities may play in conservation and recovery. If you have not heard from us yet and would like to discuss this initiative further or arrange a meeting please do not hesitate to contact us!

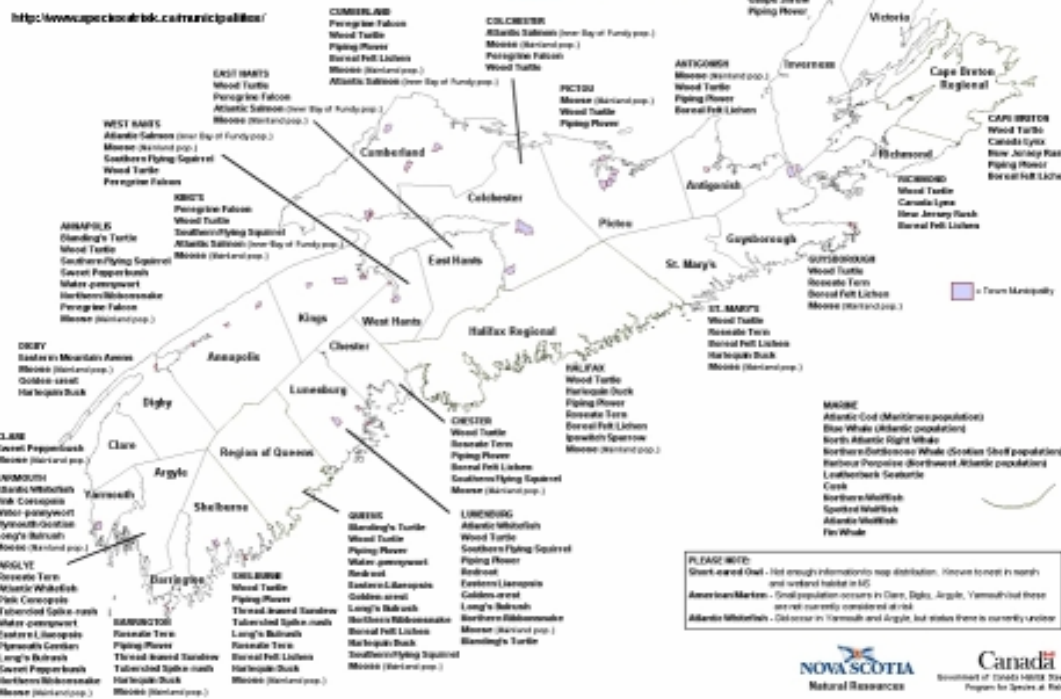
<http://www.speciesatrisk.ca/municipalities/>

Species at Risk Found in Nova Scotia's Municipalities

Note: Includes species listed provincially under the NS Endangered Species Act and species listed nationally by COSEWIC. Compiled October 2003.

For Further Information Contact:
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<http://www.speciesatrisk.ca/municipalities/>



Maintaining and Conserving
Nova Scotia's Wildlife Species:
Focus on Species at Risk

CONTACT US:
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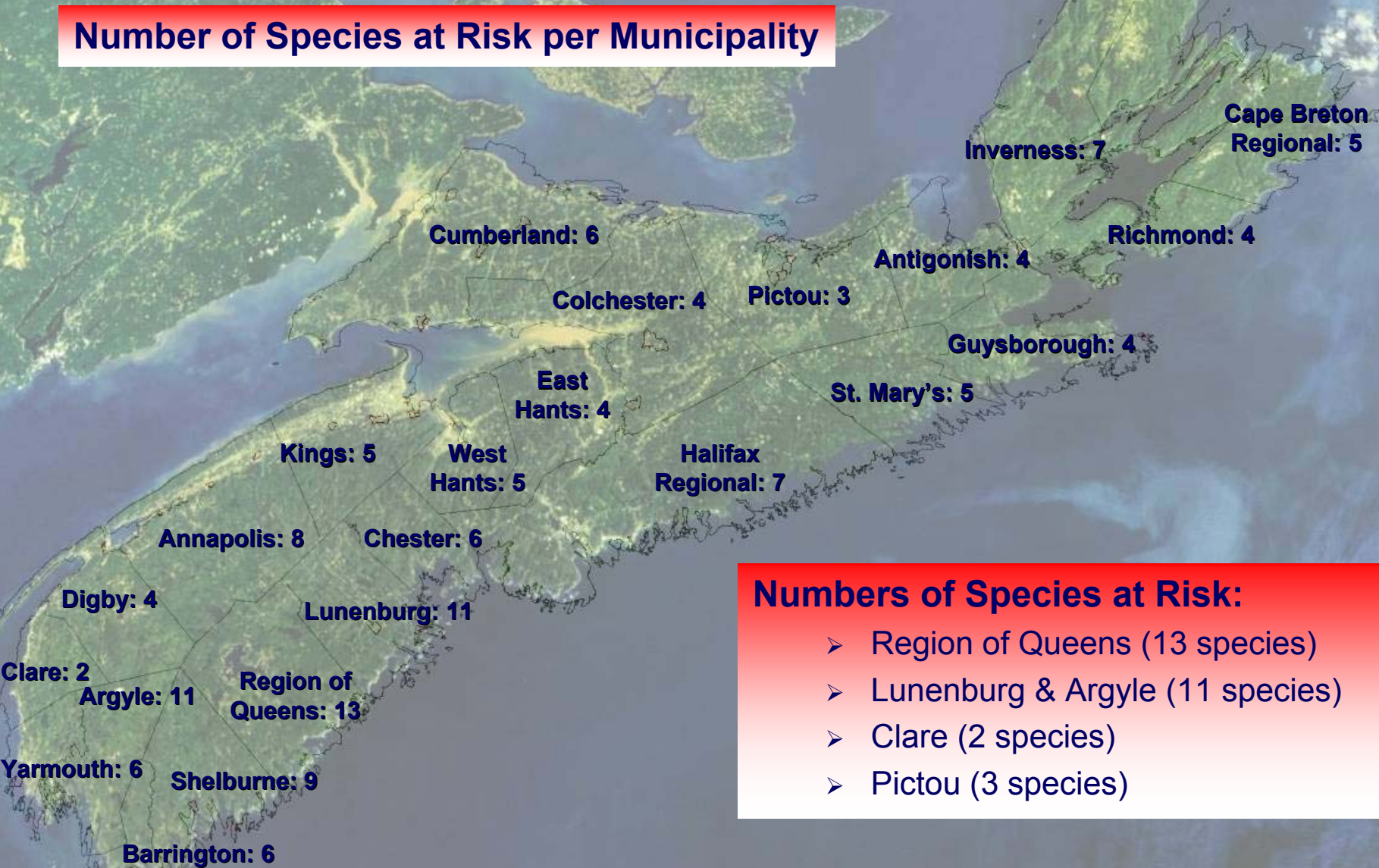
Map: which species at risk occur in each municipality

Available at: <http://www.speciesatrisk.ca/municipalities/>

Municipalities and Species at Risk



Number of Species at Risk per Municipality



Numbers of Species at Risk:

- Region of Queens (13 species)
- Lunenburg & Argyle (11 species)
- Clare (2 species)
- Pictou (3 species)

Municipalities and Species at Risk

Maintaining and Conserving
Nova Scotia's
Wildlife Species:
Focus on Species at Risk

**Adjacent Municipalities & Their Species at Risk:
Wildlife do not recognize political boundaries**



A satellite-style map of Nova Scotia, Canada, showing municipal boundaries. The map is overlaid with a semi-transparent grid. Three municipalities are labeled: 'West Hants' in the southwest, 'East Hants' in the center, and 'Colchester' in the northeast. The 'East Hants' municipality is circled in red. The 'Halifax' region is also labeled in the south. The map shows a mix of green land and blue water, with various geographical features like rivers and coastlines.

Colchester
East Hants
West Hants
Halifax

➤ **Must work with neighbouring municipalities**



Contact Information

If you have any questions please contact:

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➤ **Sherman Boates**

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Key Websites

- **Municipalities and Species at Risk Project Website**

A website designed for municipalities and others interested in Species at Risk conservation and recovery in NS and within their municipality.

<http://www.speciesatrisk.ca/municipalities/>

- **NS Department of Natural Resources, Wildlife Division Website**

Information on the Biodiversity Program which is running this project, species at risk in Nova Scotia, as well as information on the General Status Assessment process

<http://www.gov.ns.ca/natr/wildlife/>

- **NS Department of Natural Resources, Significant Wildlife and Habitat Database**

An online GIS mapping database with location information for significant wildlife species and habitat. GIS files can be downloaded.

<http://www.gov.ns.ca/natr/wildlife/Thp/disclaim.htm>