



**Maintaining and Conserving  
Nova Scotia's  
Wildlife Species:**

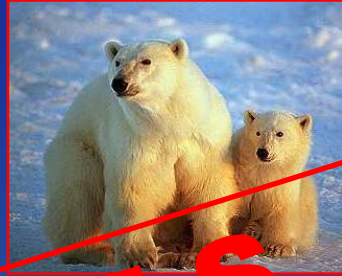
***Focus on Species at Risk***

**Samara Eaton and Sherman Boates**

*Northern NS and Cape Breton Island: Planning Meeting  
January 21<sup>st</sup>, 2004*

# 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

# Project Goal

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



***The goal is to:***

- Share information and explore the role municipalities may play in conservation and recovery of species at risk and their habitats



# Project Context

*Who is involved in species at risk conservation and recovery*



# Role of Municipalities?



## Recognition of municipal role:



- "...[we] require **greater acknowledgement of the role** that municipal governments can play in fostering stewardship at a local and regional level."



- "Municipal governments **should become more involved** in assisting with species at risk recovery..."

## However, we realize that:



- There has been "... **increased 'downloading' of responsibilities** on municipalities..."

# 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

## 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

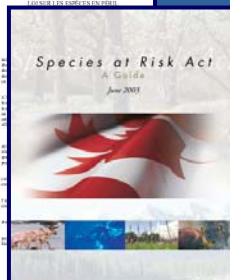
**Second Reading:** November 12, 1998

**Third Reading:** December 3, 1998 (WITH COMMITTEE AMENDMENTS)

- Applies to all private land and public (crown) land
- Prohibits the killing or harming of species at risk or their habitat

### What to do prior to alteration of any land:

- Follow appropriate permitting and assessment processes, species at risk must be considered
- Contact the Department of Natural Resources Regional Biologists or Wildlife Division who can:
  - Help assess whether species at risk are present
  - Flag areas of particular concern for municipalities
  - Assist stakeholders in finding solutions to issues and problems



## Federal Species at Risk Act



# Municipalities & Species at Risk *Legislation*

The importance of stewardship in species at risk protection







# The Role Municipalities Can Play

## *Level of Government Nearest to the People*

- Municipalities are a direct link to communities and citizens
- Municipalities could help in communicating and encouraging awareness and stewardship for species at risk
- Municipalities could be involved in species at risk conservation and recovery





# Municipalities & Species at Risk

## *Funding Opportunities*

Municipalities are eligible to apply for species at risk and habitat stewardship funds



- Species at Risk Conservation Fund



- Habitat Stewardship Program for Species at Risk



- Green Municipal Funds



- Endangered Species Recovery Fund



# Municipalities & Species at Risk

## *Health of Our Natural Environment*

Increased municipal awareness of Environmental Issues



### FCM Environmental Policy on Nature:

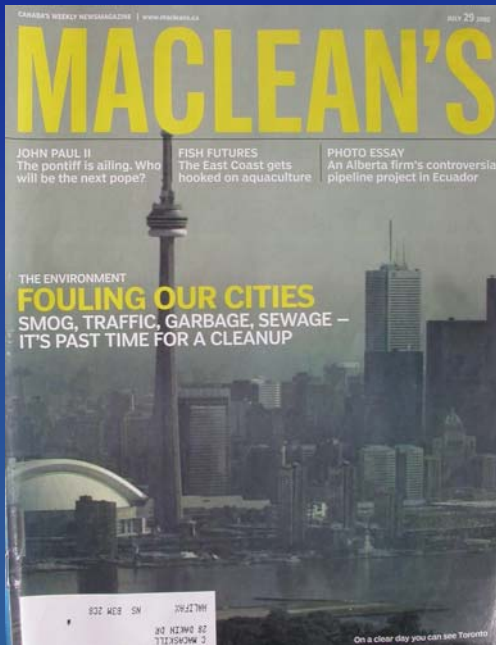
29. urge municipal governments to ensure that their policies, financial instruments and programs protect and *encourage conservation of ecologically significant lands*. Factors determining ecological significance include:
- a) wildlife habitat and wildlife movement corridors necessary for the long-term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



# The Role Municipalities Can Play

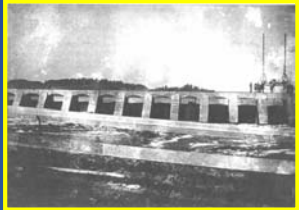
## *Municipal "Tools"*

- Some municipal "tools" have the potential to assist in species at risk conservation and recovery
- Examples of what we are referring to as municipal "tools":
  - Land use planning (strategic planning, zoning, development agreements)
  - Policies
  - By-laws
  - Parks and protected areas
- Not traditionally thought of as being able to help species at risk, wildlife and habitat

# Why Are Species at Risk?

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

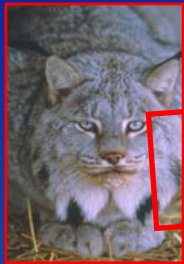
- Usually species are at risk of extinction due to human activities
- 4 Primary Threats:
  - Habitat loss and degradation
  - Over exploitation (i.e. over-harvesting)
  - Pollution
  - Transport of invasive species





# What are Species at Risk?

## Species at Risk Categories



**SPECIES AT RISK**

**Endangered** - a species facing imminent extirpation or extinction

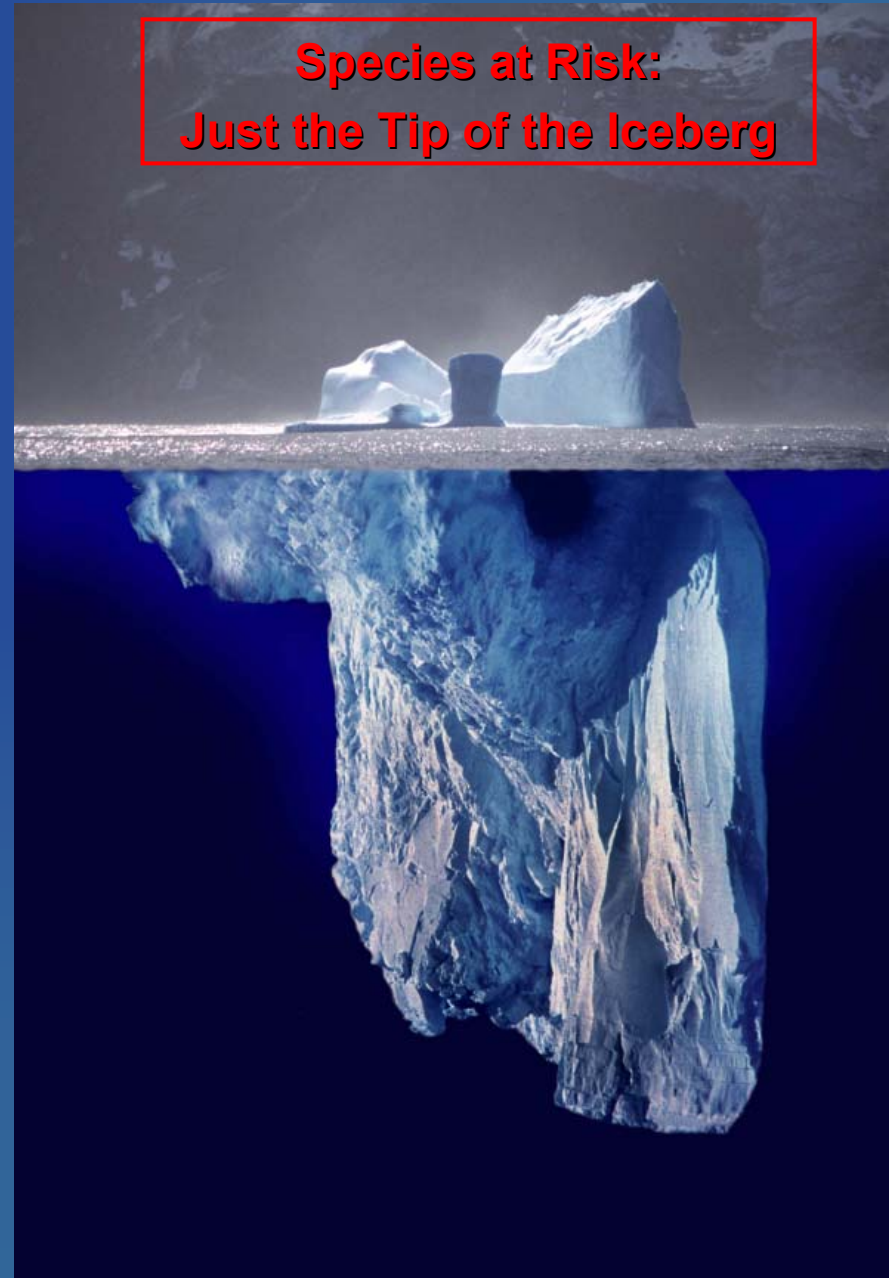
**Threatened** - a species likely to become endangered if limiting factors are not reversed

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

# NS's Wildlife: Not Just Species at Risk



- NS has over 10,000 wildlife species
- Only 40 species are at risk
- Cannot forget about the other species and their habitats



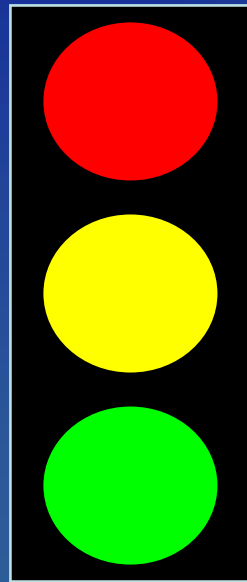




# NS's Wildlife: Not Just Species at Risk

## Prevention: General Status Assessment

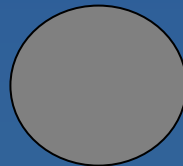
- First alert tool
- Examined over 2400 species in NS



**Red:** At risk or maybe at risk

**Yellow:** Sensitive

**Green:** Secure



**Grey:** Undetermined

# Municipalities and Species at Risk



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

## Species at Risk in Nova Scotia's Municipalities



# Municipality of the County of Antigonish

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



**Antigonish**

## **Species at Risk in Antigonish:**

- Moose (NS Mainland population) - Endangered
- Piping Plover - Endangered
- Boreal Felt Lichen - Endangered
- Wood Turtle - Special Concern

# Municipality of the District of Guysborough



**Guysborough**

## **Species at Risk in Guysborough:**

- Moose (NS Mainland population) - Endangered
- Roseate Tern - Endangered
- Boreal Felt Lichen - Endangered
- Wood Turtle - Special Concern

# Municipality of the County of Richmond

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



**Richmond**

## **Species at Risk in Richmond:**

- Canada Lynx - Endangered
- Boreal Felt Lichen - Endangered
- New Jersey Rush - Special Concern
- Wood Turtle - Special Concern

# Municipality of the County of Inverness

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



Inverness

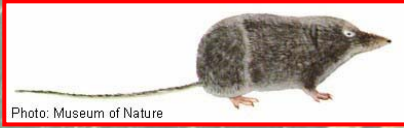


Photo: Museum of Nature



## Species at Risk in Inverness:

- Canada Lynx - Endangered
- American Marten - Endangered
- Boreal Felt Lichen - Endangered
- Piping Plover - Endangered
- Gaspe Shrew - Special Concern
- Bicknell's Thrush - Special Concern
- Wood Turtle - Special Concern

# Municipality of the County of Victoria

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



Victoria

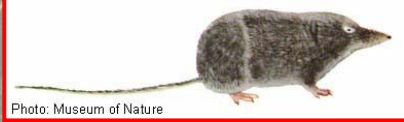


Photo: Museum of Nature

## Species at Risk in Victoria:

- Canada Lynx - Endangered
- American Marten - Endangered
- Boreal Felt Lichen - Endangered
- Gaspe Shrew - Special Concern
- Bicknell's Thrush - Special Concern
- Wood Turtle - Special Concern

# Cape Breton Regional Municipality

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



## Species at Risk in Cape Breton Regional:

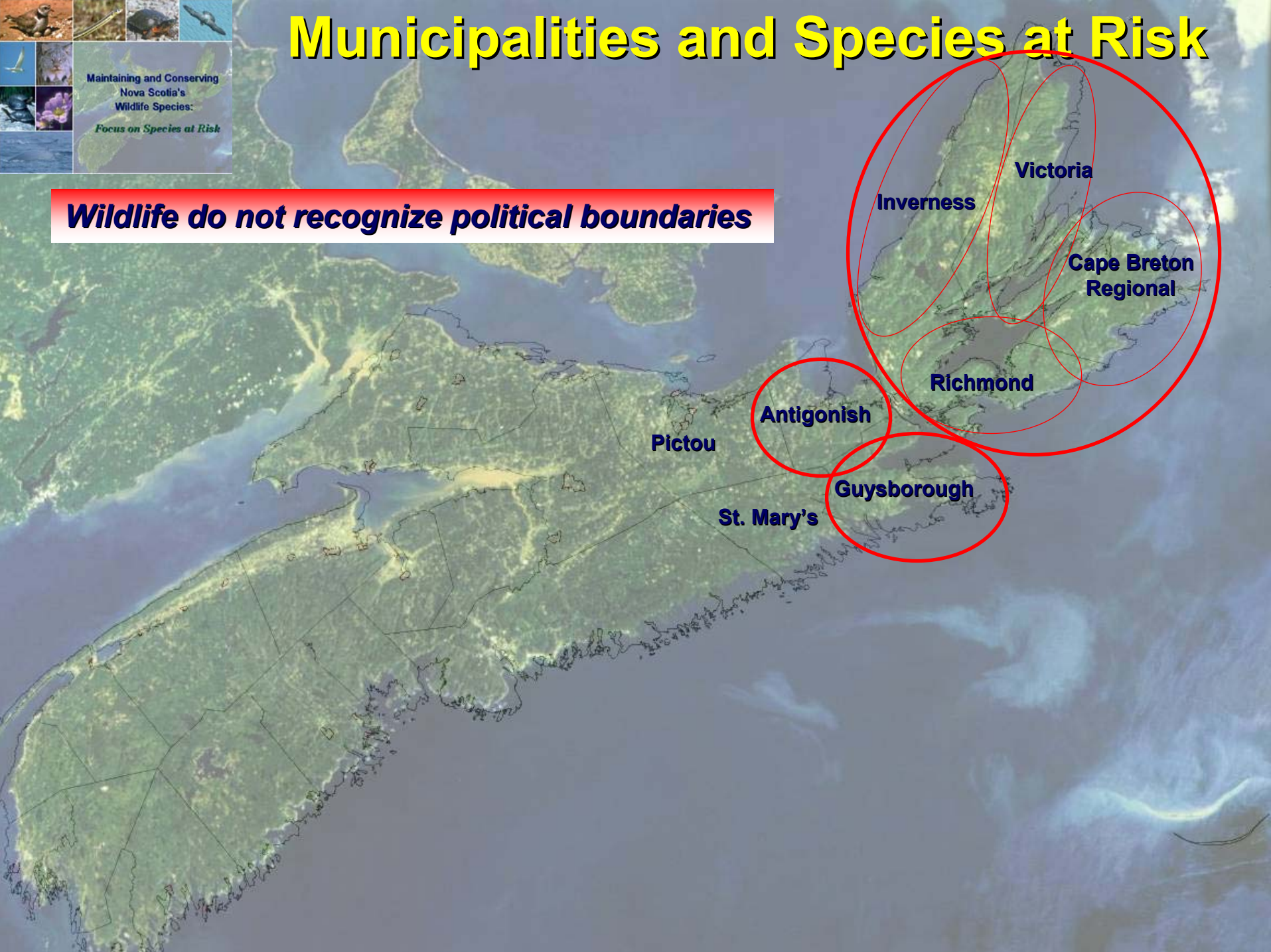
- Canada Lynx - Endangered
- Piping Plover - Endangered
- Boreal Felt Lichen - Endangered
- Wood Turtle - Special Concern
- New Jersey Rush - Special Concern



# Municipalities and Species at Risk



***Wildlife do not recognize political boundaries***



**Inverness**

**Victoria**

**Cape Breton Regional**

**Richmond**

**Antigonish**

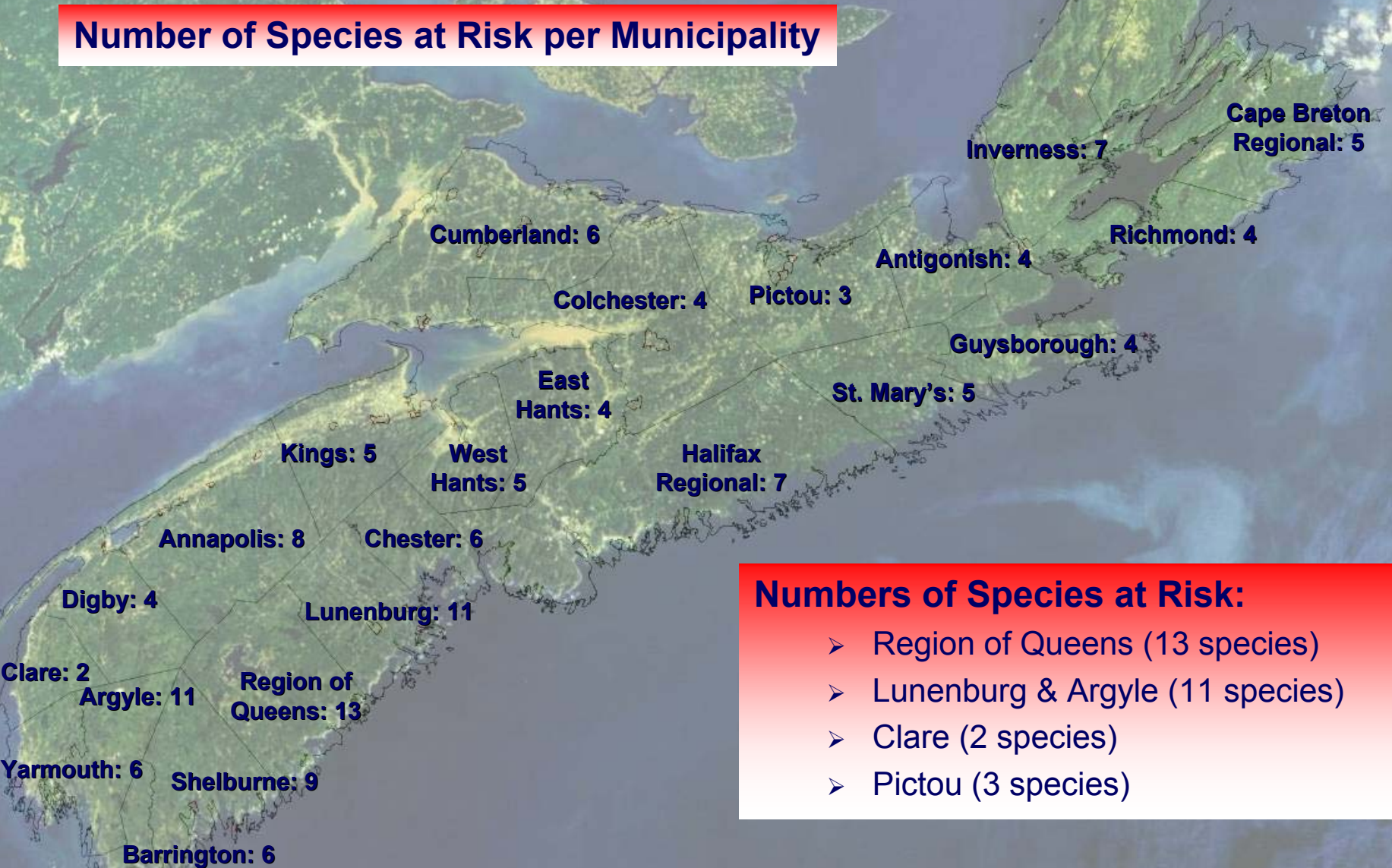
**St. Mary's**

**Guysborough**

# Municipalities and Species at Risk



## Number of Species at Risk per Municipality



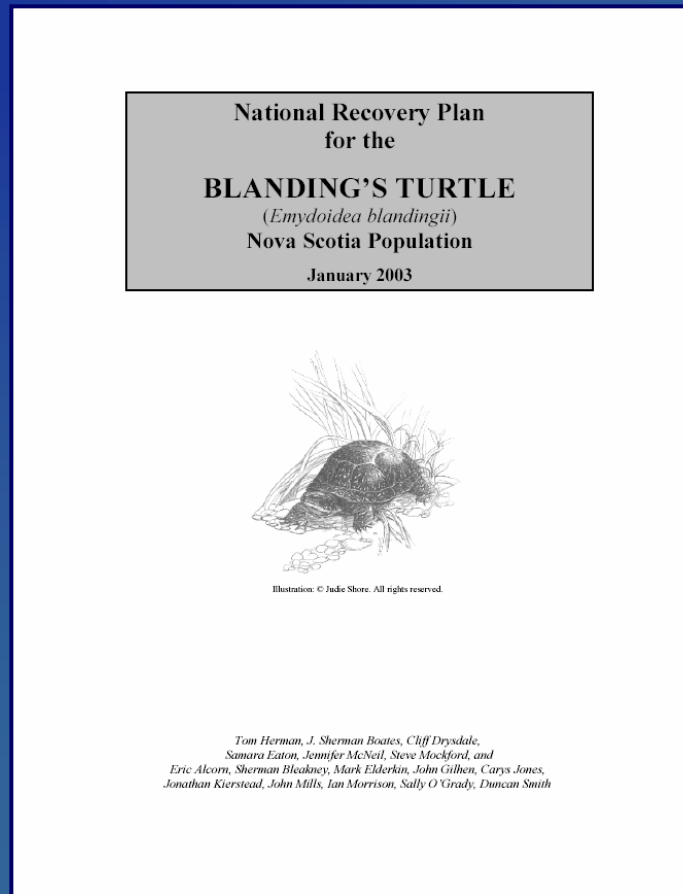
## Numbers of Species at Risk:

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



# Conservation and Recovery of Species at Risk: What's Already Being Done

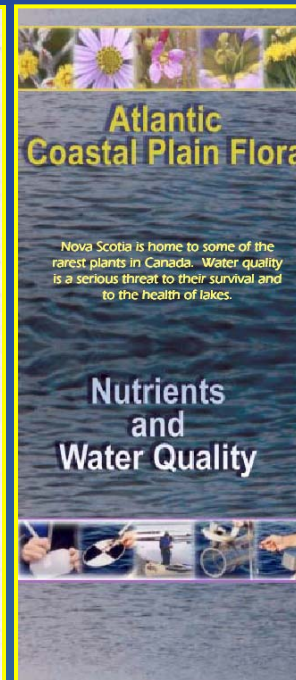
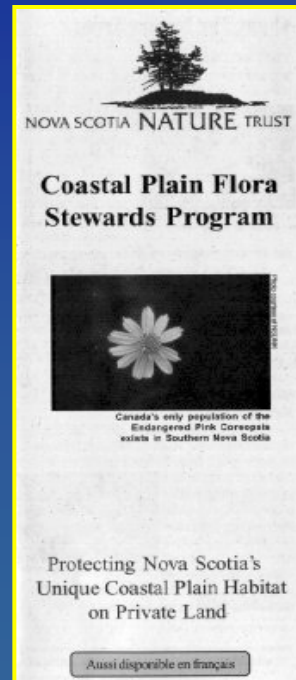
## Recovery Teams & Recovery Plans



# Conservation and Recovery of Species at Risk: What's Already Being Done



## Stewardship Initiatives & Educational Awareness

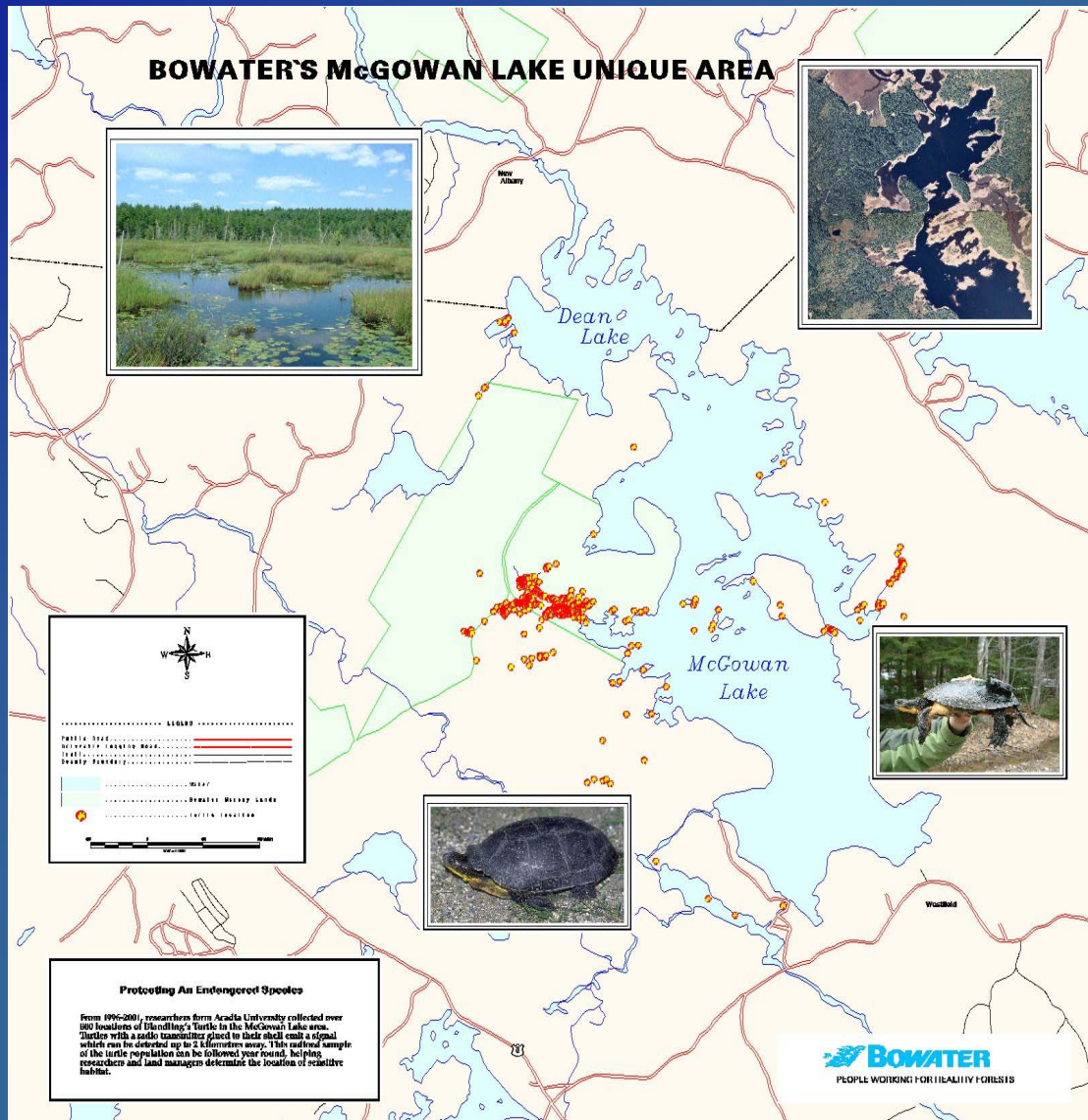




Maintaining and Conserving  
Nova Scotia's  
Wildlife Species:  
*Focus on Species at Risk*

# Conservation and Recovery of Species at Risk: What's Already Being Done

## University Research & Industry Stewardship

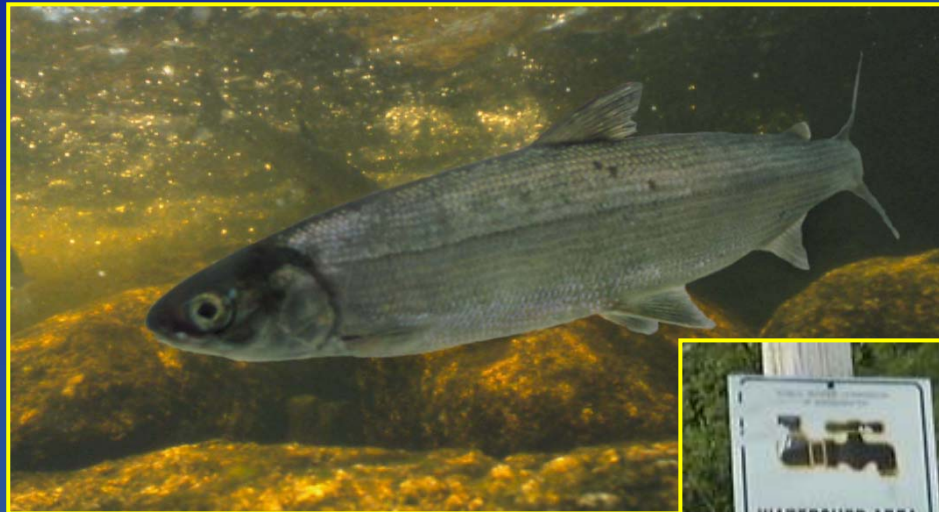




# How Could Municipalities Help?

## *Municipal "Tools"*

Example in the Town of Bridgewater:



- Atlantic Whitefish:
  - Only found in NS
  - Only in the Petite Rivière
- Town of Bridgewater watershed area



- Municipality and community are participating on the recovery team

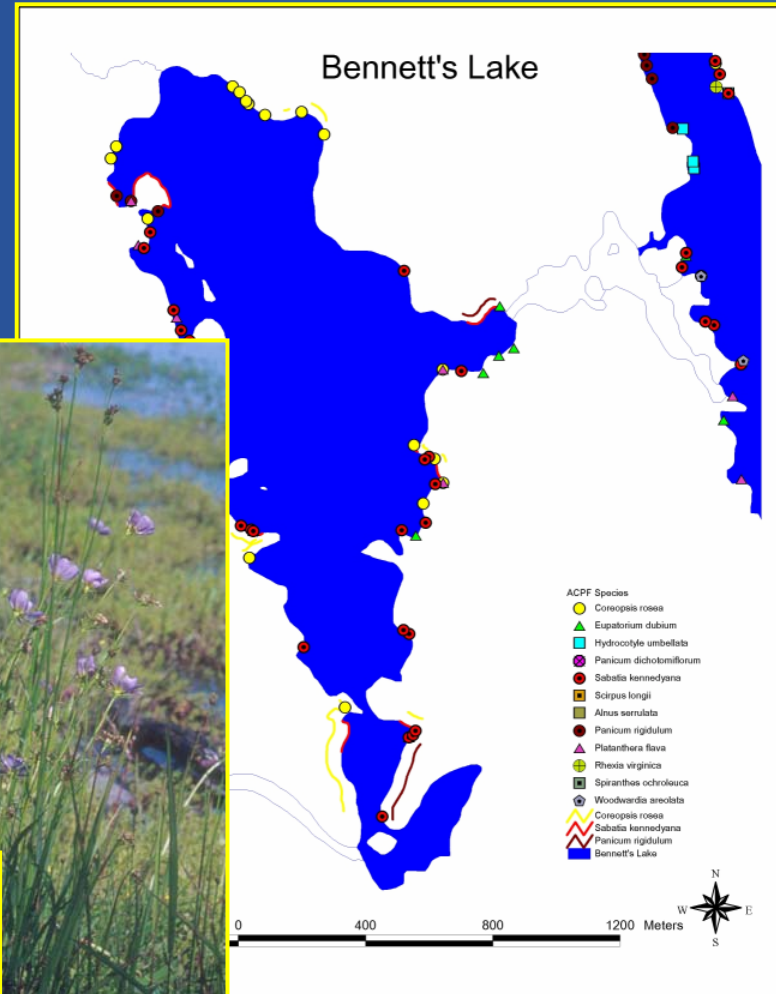


# How Could Municipalities Help?

## Municipal "Tools"

### Example in Municipality of the District of Argyle & Yarmouth:

- Atlantic Coastal Plain Plants:
  - Nationally & globally endangered
  - Only on aprox. 12 lakes
- Sub-division proposed
- Collaboration and coordination:
  - Provincial: DOEL, DNR
  - Municipal: Yarmouth and Argyle
  - Land owner and developer
- Preventative approach:
  - Key lakes identified
  - Prior to development on these lakes, regional DNR biologist must be contacted





# How Could Municipalities Help?

## Municipal "Tools"

### Example in Municipality of the County of Kings:

- Study to address water quality in relation to increased development on lakeshores
- Amendments to Municipal Planning Strategy and Land Use Bylaws
  - *Zoning and Building permits* (limited the number of homes & cottages, buffers)
  - *Policies, development agreements & regulations*
  - *Community water quality monitoring program*
- Municipal "tools" address multiple issues and have multiple benefits
  - Added benefits for wildlife species & habitats

### Transforming Theory into Practice: Lakeshore Planning in Kings County, Nova Scotia

*"...The transition to sustainable communities involves new kinds of adaptations, and some alternative ways of doing things. While we may find the transition difficult, the long-term rewards should prove well worth the effort."*  
(Sustainable Development in Residential Land Use Planning Grant 1993: page 87)

#### INTRODUCTION

In the summer of 1997, Kings County Council adopted amendments to its Municipal Planning Strategy and Land Use Bylaw to manage land use around freshwater lakes. The amendments implemented a new approach to controlling shoreline development on freshwater lakes in Nova Scotia. This approach also relied on the Municipality's adaptation of a scientific method that ties development controls directly to the capability of the lakes to sustain development.

The aim of this paper is to describe the new planning framework, the process which led up to it and Council's expectations in terms of the benefits of a proactive watershed management program. This paper is one of a number of ways in which we are sharing the Kings County experience with interested municipalities and organizations. Not only do we believe the Kings County approach has put a tangible face on the notion of sustainable development, we have committed to a long-term monitoring program that sets out to prove it.

#### SHORELINE DEVELOPMENT AND THE STATUS QUO:

County Council and residents of Kings County take great pride in the pristine lakes and rivers that characterize the watersheds of the South Mountain Plateau. In the 1950s,

60s and 70s, cottage development spread around dozens of freshwater lakes in a 400 square kilometre watershed. At least three generations of cottagers have summered on many of these lakes.



Obliteration of a lake's natural shoreline, consequent habitat loss and reduced water quality.

Unfortunately, by the mid 1970s the more accessible lakes experienced stresses which led to public health concerns for recreational swimming. In fact, health officials closed the public beach at Lake George in successive years due to high coliform levels. The contamination was attributed to cottage development, and either the failure of or complete absence of private septic systems along the shoreline. In the face of a growing stigma of pollution on Lake George, cottage owners finally organized. With the support of the Provincial Department of Health, and a ground swell of citizen action, cottagers turned the situation around within just a few years. Almost twenty years later, Lake George can boast excellent water quality and a safe and appealing public beach despite a



# Where to Go From Here?

- Meet with all regional and rural municipalities
- Help municipalities get the information they need: <http://www.speciesatrisk.ca/municipalities/>
- Help municipalities develop “tools” that can assist with conservation and recovery
- Help coordinate municipalities with common interests
- Get feedback from municipalities on this project

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



# Where to Go From Here?


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

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](#)

© 2003 NS DNR  
Website Content and Design By [Samara Eaton](#)  
Last Updated December 5, 2003

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

# Where to Go From Here?

- Meet with all regional and rural municipalities
- Help municipalities get the information they need: <http://www.speciesatrisk.ca/municipalities/>
- Help municipalities develop “tools” that can assist with conservation and recovery
- Help coordinate municipalities with common interests
- Get feedback from municipalities on this project

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



# Maintaining and Conserving Nova Scotia's Wildlife Species:

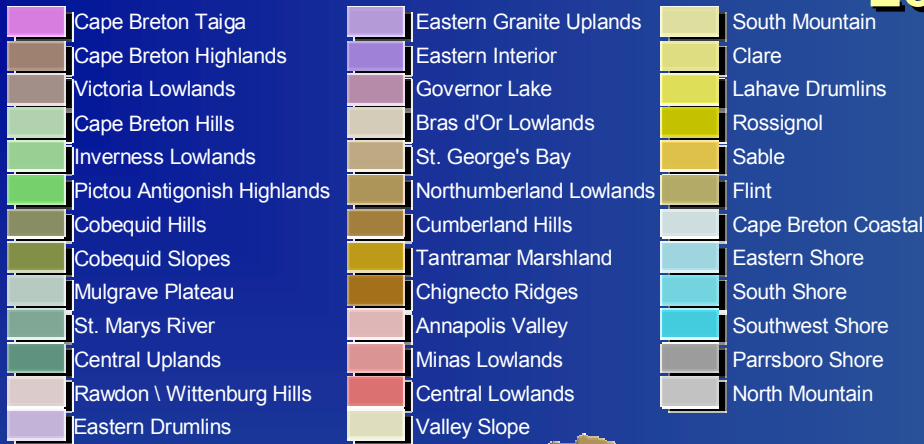
*Focus on Species at Risk*



## EXTRA SLIDES

# Ecological Land Classification Map

## EcoDistricts



100 km

- Wildlife Do Not recognize political boundaries
- Look at ecological boundaries on map
- Work with neighbouring municipalities



# 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

2. (1) The purpose of this Act is to provide for the protection, designation, recovery and other relevant aspects of conservation of species at risk in the Province, including habitat protection, while recognizing the following:
  - a) the goal of preventing any species in the Province from becoming *extirpated or extinct as a consequence of human activities*;
  - b) the conservation of species at risk is a key component of a broader strategy to *maintain biodiversity* and to use biological resources in a sustainable manner;
  - c) the *commitment of Government* to a national cooperative approach for the conservation of species at risk, as agreed to in the National Accord for the Protection of Species at Risk;
  - d) *all Nova Scotians share responsibility* for the conservation of species at risk and governments have a leadership role to play in this regard;
  - e) Nova Scotians be provided with the opportunity for *meaningful participation* in relation to conservation of species at risk;
  - f) the *aboriginal peoples* of the Province have an important role in conserving species at risk;
  - g) the importance of promoting the purposes of this Act primarily through *non-regulatory means* such as cooperation, stewardship, education and partnerships instead of punitive measures, including such preventative actions as education, incentives, sustainable management practices and integrated resource management; and
  - h) the *precautionary principle* that a lack of full scientific certainty, where such cannot be reasonably obtained, must not be used as a reason for postponing measures to avoid or minimize the threat of a species at risk in the Province.



# 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

13. (1) No person shall

- a) kill, injure, possess, disturb, take or interfere with or attempt to kill, injure, possess, disturb, take or interfere with an endangered or threatened species or any part or product thereof;
- b) possess for sale, offer for sale, sell, buy, trade or barter an endangered or threatened species or any part or product thereof;
- c) destroy, disturb or interfere with or attempt to destroy, disturb or interfere with the specific dwelling place or area occupied or habitually occupied by one or more individuals or populations of an endangered or threatened species, including the nest, nest shelter, hibernaculum or den of an endangered or threatened species;
- d) contravene any regulation made with respect to a core habitat; or  
...

22. (1) Every person who contravenes this Act or the regulations is guilty of an offence and is liable on summary conviction

- a) in the case of a corporation, to a fine not exceeding one hundred thousand dollars; or
- b) in the case of an individual, to a fine not exceeding fifty thousand dollars or to imprisonment for a term of not more than six months, or to both.



# Municipalities & Species at Risk Legislation

## The Federal Species at Risk Act



OFFENCES AND PUNISHMENT

**97.** (1) Every person who contravenes subsection 32(1) or (2), section 33, subsection 36(1), 58(1), 60(1) or 61(1) or section 91 or 92 or any prescribed provision of a regulation or an emergency order, or who fails to comply with an alternative measures agreement the person has entered into under this Act,

(a) is guilty of an offence punishable on summary conviction and is liable

- (i) in the case of a corporation, other than a non-profit corporation, to a fine of not more than \$300,000,
- (ii) in the case of a non-profit corporation, to a fine of not more than \$50,000, and
- (iii) in the case of any other person, to a fine of not more than \$50,000 or to imprisonment for a term of not more than one year, or to both; or

(b) is guilty of an indictable offence and is liable

- (i) in the case of a corporation, other than a non-profit corporation, to a fine of not more than \$1,000,000,
- (ii) in the case of a non-profit corporation, to a fine of not more than \$250,000, and
- (iii) in the case of any other person, to a fine of not more than \$250,000 or to imprisonment for a term of not more than five years, or to both.

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



# Municipalities & Species at Risk Legislation



## The Federal Species at Risk Act



### MEASURES TO PROTECT LISTED WILDLIFE SPECIES

#### General Prohibitions

**32.** (1) No person shall kill, harm, harass, capture or take an individual of a wildlife species that is listed as an extirpated species, an endangered species or a threatened species.

(2) No person shall possess, collect, buy, sell or trade an individual of a wildlife species that is listed as an extirpated species, an endangered species or a threatened species, or any part or derivative of such an individual.

(3) For the purposes of subsection (2), any animal, plant or thing that is represented to be an individual, or a part or derivative of an individual, of a wildlife species that is listed as an extirpated species, an endangered species or a threatened species is deemed, in the absence of evidence to the contrary, to be such an individual or a part or derivative of such an individual.

**33.** No person shall damage or destroy the residence of one or more individuals of a wildlife species that is listed as an endangered species or a threatened species, or that is listed as an extirpated species if a recovery strategy has recommended the reintroduction of the species into the wild in Canada.

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