

2008



Status Report
of the Commissioner of
the Environment and
Sustainable Development
to the House of Commons

MARCH

Ecosystems

Chapter 5
Protection of Species at Risk



Office of the Auditor General of Canada

The March 2008 Status Report of the Commissioner of the Environment and Sustainable Development comprises The Commissioner's Perspective—2008, Main Points—Chapters 1 to 14, Appendices, and 14 chapters. The main table of contents for the Report is found at the end of this publication.

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Chapter

5

Protection of Species at Risk

All of the audit work in this chapter was conducted in accordance with the standards for assurance engagements set by The Canadian Institute of Chartered Accountants. While the Office adopts these standards as the minimum requirement for our audits, we also draw upon the standards and practices of other disciplines.

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Ecosystems

Protection of Species at Risk

Main Points

What we examined

As of June 2007, there were 389 species in Canada listed as at risk on Schedule 1 of the 2002 *Species at Risk Act*. Under the Act, the Minister of the Environment and the Minister of Fisheries and Oceans are responsible for preparing recovery strategies, action plans, and management plans for species at risk for which they are the competent minister.

In 2001, we found that there was a need for better baseline information to enable the government to effectively manage species at risk. We recommended that Environment Canada, Fisheries and Oceans Canada and Parks Canada develop a comprehensive inventory of species at risk under their jurisdiction and ensure that recovery strategies for these species be developed and implemented. The three organizations agreed with our recommendations.

Although our 2001 audit focused on activities in the Great Lakes—St. Lawrence River Basin, the three organizations manage their activities on a national basis and therefore, for this Status Report we examined progress made on our recommendation by the responsible departments from a national perspective. We also examined compliance with sections of the 2002 *Species at Risk Act*, which came into force after our last audit but which relate to our recommendations. These sections of the Act have specific and prescriptive requirements regarding recovery strategies.

Why it's important

Apart from its intrinsic value as part of Canada's natural heritage, Canada's biodiversity, including wild species of plants and animals, represents a vast storehouse of biological resources. The plants, mammals, and aquatic species found in ecosystems are interdependent and therefore maintaining ecological diversity is important to maintaining the health and integrity of the environment. Although it may go unnoticed by most people, the loss of one or two key species can have ripple effects across an ecosystem with potentially significant effects on our quality of life. According to various scientific sources, human activities in the twenty-first century have greatly increased the rate at which species are disappearing.

What we found

- Environment Canada and Fisheries and Oceans Canada have made unsatisfactory progress in responding to our 2001 recommendation relating to the development of a comprehensive inventory of species at risk, while Parks Canada has made satisfactory progress on this recommendation.
- The three organizations have made unsatisfactory progress in responding to our 2001 recommendation relating to the development of recovery strategies and have not complied with specific deadline requirements established by the *Species at Risk Act*. As of June 2007, recovery strategies should have been completed for 228 species at risk, but recovery strategies completed at that date address only 55 of those species.
- Departments and organizations are also required under the Act to identify to the extent possible, critical habitat necessary for the survival or recovery of species at risk. As of June 2007, critical habitat had been identified for 16 of the 228 species at risk for which recovery strategies were due.
- Despite the progress noted at Parks Canada, the federal government as a whole has made unsatisfactory progress in responding to our 2001 recommendations relating to the development of a comprehensive inventory of species at risk and of recovery strategies. While work is under way to develop appropriate data sharing agreements with third parties, such as provincial and territorial governments, and non-governmental organizations such as Nature Serve, inventory data collections vary across Canada. Ongoing improvements to data quality and data consistency are needed.

Introduction



Point Pelee National Park, Canada's smallest national park (15 square kilometres) is home to approximately 40 species at risk, more than in any other national park in Canada.

5.1 According to various scientific sources, Canada's wild animals and plants face unprecedented habitat degradation and destruction from human development activities. The growing number of invasive species in Canada is compounding these pressures. Invasive species compete with native species for territory and food and can change the ecology of the environment they occupy, thereby threatening native species. Other factors, such as harvesting, poaching, and diseases, also put pressure on native species. When animals, plants, insects, and other life forms can no longer find the food, clean water, shelter from predators, breeding sites, and climate that they need, their populations decline and some species disappear completely.

5.2 Responsibility for the protection and conservation of wildlife is shared between the federal and provincial and territorial governments. Each jurisdiction has passed laws to protect wildlife species. Coordinated efforts for protecting species at risk in Canada started more than three decades ago. In 1978, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) began assessing wildlife species and classifying them according to their perceived risk of extinction.

5.3 In 1988, the program for the Recovery of Nationally Endangered Wildlife in Canada (RENEW) was established as a cooperative response to the growing number of species at risk in Canada. The program involves federal, provincial, and territorial governments, as well as various stakeholders. In 1996, federal, provincial, and territorial governments signed the Accord for the Protection of Species at Risk and committed to protecting species at risk in their respective jurisdictions (Exhibit 5.1).

What we found in 2001

5.4 In 2001, we reported that there was no comprehensive inventory of species at risk on federal lands. As well, the federal government had not developed recovery strategies for almost half of the species known to be at risk.

Events since 2001

5.5 The Interdepartmental Recovery Fund, which provides financial resources to federal departments for implementing recovery activities for species at risk on federal lands or under federal jurisdiction, became operational in 2002.

Exhibit 5.1 Milestones in protecting species at risk

1978	The Committee on the Status of Endangered Wildlife in Canada began assessing wildlife species and classifying their chances of survival.
1988	The Wildlife Ministers' Council of Canada established RENEW, the program for the Recovery of Nationally Endangered Wildlife.
1992	Canada signed the United Nations Convention on Biological Diversity and committed to protecting endangered and threatened wildlife.
1996	The federal, provincial, and territorial governments endorsed the Accord for the Protection of Species at Risk, agreeing to develop laws and programs that would work together to protect species at risk and their habitat throughout the country.
1999	The Committee on the Status of Endangered Wildlife in Canada adopted updated criteria, based on criteria that the International Union for the Conservation of Nature had developed, to assess and classify wildlife species at risk.
2000	The Habitat Stewardship Program for Species at Risk became operational. It provides funding to citizens for implementing activities that protect or conserve habitat for species at risk.

Source: *Species at Risk Act: A Guide*, 2003

Definitions under the *Species at Risk Act*

Endangered species—A wildlife species that is facing imminent extirpation or extinction.

Extirpated species—A wildlife species that no longer exists in the wild in Canada, but exists elsewhere in the wild.

Species of special concern—A wildlife species that may become a threatened or an endangered species because of a combination of biological characteristics and identified threats.

Threatened species—A wildlife species that is likely to become an endangered species if nothing is done to reverse the factors leading to its extirpation or extinction.

Critical habitat—The habitat that is necessary for the survival or recovery of a listed species and that is identified in a recovery strategy or an action plan as the species' critical habitat.

5.6 The *Species at Risk Act* was also passed in 2002 and came into force, for the most part, in 2003. Under the Act, species are listed under four risk levels: **extirpated**, **endangered**, **threatened**, or of **special concern**. The Act provides for the legal protection of species at risk, their residence, and their **critical habitat**, and is intended to

- 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; and
- provide for the management of species of special concern to prevent them from becoming endangered or threatened.

5.7 The Act established the requirement for the responsible ministers to produce recovery strategies, including goals and objectives to improve the population status of listed species. The Committee on the Status of Endangered Wildlife in Canada continues, under the *Species at Risk Act*, to provide scientific assessments of the status of species. The number of species listed has increased from 233 in 2002 when Parliament passed the *Species at Risk Act*, to 389 in June 2007. In its 2000, 2003, and 2007 budgets, the federal government committed a total of \$563 million to species at risk.

5.8 Under the Act, recovery strategies must include goals and objectives and identify the main types of activities to improve the species population status. Action plans must specify the activities required to meet the goals and objectives outlined in the recovery strategies. The development and implementation of recovery strategies require the involvement of many federal and provincial partners, as well as organizations outside government. As such, the Act recognizes the need for federal, provincial, and territorial legislation to work in a complementary fashion.

Federal role and responsibilities

5.9 Parks Canada is responsible for protecting species at risk in national parks and on other federal land it administers. Fisheries and Oceans Canada and Environment Canada carry more extensive responsibilities. Fisheries and Oceans Canada is responsible for protecting aquatic species at risk. Environment Canada is responsible for protecting migratory birds listed under the *Migratory Birds Convention Act* and species at risk on federal lands (except land administered by Parks Canada). Environment Canada is also responsible for the overall administration of the *Species at Risk Act* on behalf of the federal government, including coordination with provinces and territories.

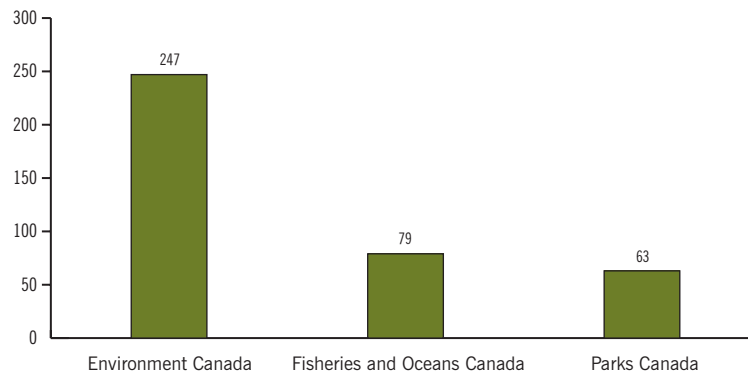
5.10 All three organizations are responsible for preparing recovery strategies for species that are under the endangered, extirpated, or threatened risk category and management plans for species under the special concern risk category and to report on their implementation. Of the 389 species at risk listed as of June 2007, Environment Canada is responsible for recovery strategies or management plans for 247 species, Fisheries and Oceans Canada for 79, and Parks Canada for 63 (Exhibit 5.2).

5.11 Provincial and territorial governments have jurisdiction and are responsible for the conservation of wildlife including species at risk on their lands. However, even if a province or territory leads the development of a recovery strategy, the federal ministers are ultimately responsible, under the *Species at Risk Act*, for ensuring that recovery strategies and management plans are completed on time and action plans are put in place as appropriate to implement the strategies.

5.12 Although this situation has never occurred, if the Minister of the Environment believes that a listed species—other than aquatic species or a species of migratory birds protected by the *Migrating Birds Convention Act*, 1994—its residence, or its critical habitat is not

effectively protected by provincial or territorial legislation or regulation, the Minister must recommend that the Governor in Council order the Act's protection measures to apply on private, provincial, or territorial lands. The Governor in Council then decides whether to act on the recommendation.

Exhibit 5.2 The federal government is responsible for preparing recovery strategies or management plans for 389 species at risk



Focus of the audit

5.13 The objective of this follow-up audit was to determine whether Environment Canada, Fisheries and Oceans Canada, and Parks Canada have made satisfactory progress implementing our 2001 recommendations concerning the development of a comprehensive inventory of species at risk, and the development and implementation of recovery strategies for those species. Since the *Species at Risk Act* came into force after our audit, setting prescriptive process and content requirements for recovery strategies, we also examined the federal government's compliance with the relevant sections of the Act. Although our 2001 audit focused on the departments' activities in the Great Lakes and St. Lawrence River Basin, (since species at risk are managed on a national basis), this follow-up audit examined the management of species at risk from a national perspective.

5.14 More details on the audit objective, scope, approach, and criteria are in About the Audit at the end of this chapter.

Observations

Species at risk inventory

Canadian Biodiversity Strategy—Canada's response to the United Nations Convention on Biological Diversity. The Strategy provides a framework for action at all levels that will enhance our ability to ensure the productivity, diversity, and integrity of our natural systems and, as a result, our ability as a nation to develop sustainably.

Source: The Canadian Biodiversity Strategy, 1995

There is no comprehensive inventory of species at risk

5.15 Although the *Species at Risk Act* does not specifically address inventories, the **Canadian Biodiversity Strategy** clearly indicates that comprehensive and reliable inventories are a fundamental requirement for the conservation of biodiversity, providing the foundation for, among other things, determining the status of species, conducting research, and developing resource and land use plans. Inventories provide essential baseline information for effective management of species.

5.16 In our 2001 audit, we recommended that Environment Canada, Fisheries and Oceans Canada, and Parks Canada (the Agency) should develop a comprehensive inventory of species at risk under their jurisdiction. The three organizations agreed with our recommendation and responded that they would continue to work with holders of data on species at risk to develop a database of information on these species. We expected to find that the organizations had developed, for species at risk under their jurisdiction, a comprehensive inventory, including information on abundance and distribution, and that they would know the extent to which it is complete. We found that the three organizations have made varying degrees of progress.

5.17 Through various funding agreements with third parties, inventory work for species at risk under Environment Canada's responsibility is being carried out. Although some information is available, officials from the Department could not provide us with evidence to demonstrate the completeness of the inventory for the 247 species at risk for which the Department must ensure that recovery strategies or management plans are prepared. Department officials told us that with the passage of the *Species at Risk Act*, which came into full force in 2004, it is not appropriate for Environment Canada to apply resources to a comprehensive inventory for all the species for which it now has accountabilities. The Department will conduct (or request others to conduct) inventories (including information on abundance and distribution) to the extent necessary to develop and implement action plans that follow from recovery strategies.

5.18 Fisheries and Oceans Canada carries out inventory work related to aquatic species. Most of this work is done in Fisheries and Oceans Canada regional offices. While we found that information on some aquatic species at risk exists, the Department did not provide us with

evidence that data on the 79 species at risk under its responsibility were readily available.

5.19 Parks Canada also carries out biodiversity and species at risk inventories in its national protected heritage areas. It has implemented processes to plan and prioritize work, and has created inventory systems, including standards and methodology, to collect, compile, and share data. The Agency has conducted inventories on most lands under its jurisdiction. It has an overall picture of the presence and location of species at risk on the lands it administers and is working toward completing and regularly updating the information. Since 2006, the Agency has made species at risk inventory information available on its website. We consider Parks Canada to have achieved satisfactory progress on this recommendation.

5.20 However, on a national basis, considering progress made by all three organizations, the federal government’s progress has been unsatisfactory. There is no comprehensive inventory of species at risk to provide the baseline information needed for the development of science-based recovery strategies and action plans (Exhibit 5.3).

Exhibit 5.3 Progress on addressing our recommendation on developing a comprehensive inventory of species at risk is unsatisfactory

Recommendation	Progress
Environment Canada, Fisheries and Oceans [Canada] and Parks Canada should develop a comprehensive inventory of all species at risk under their jurisdiction. (2001 Report of the Commissioner of the Environment and Sustainable Development, Chapter 1, see section 5.1.24)	Unsatisfactory

Satisfactory—Progress is satisfactory, given the significance and complexity of the issue, and the time that has elapsed since the recommendation was made.

Unsatisfactory—Progress is unsatisfactory, given the significance and complexity of the issue and the time that has elapsed since the recommendation was made.

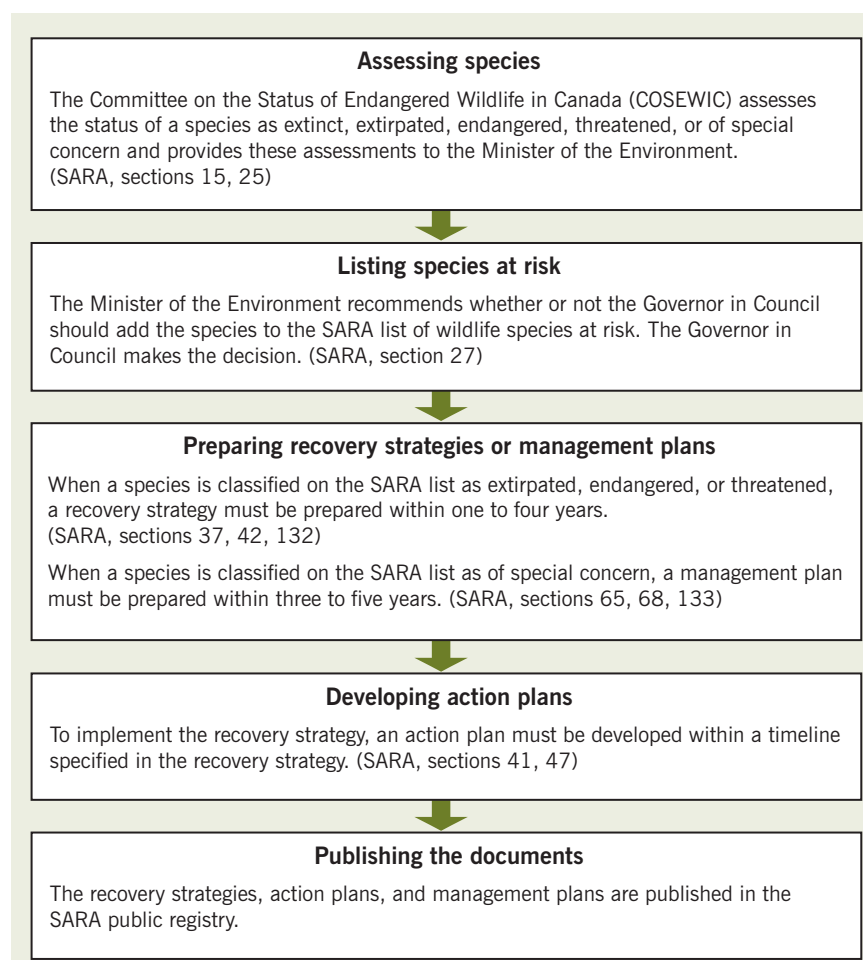
Recovery strategies and management plans

5.21 In our 2001 audit, we recommended that Environment Canada, Fisheries and Oceans Canada, and Parks Canada should ensure that recovery strategies developed for species at risk are implemented. The three organizations agreed with our recommendation. Since then, Parliament passed the *Species at Risk Act*, requiring the organizations to prepare recovery strategies for species that are under the endangered, extirpated, or threatened risk category and management plans for species under the special concern risk category, and to report on their implementation.

5.22 Recovery strategies and management plans must be prepared according to specific timelines and cooperation arrangements. The time allowed to produce the recovery strategies and management plans varies from one to five years, depending on when the species was listed under the Act and its risk category. We expected that the organizations would prepare recovery strategies and management plans in compliance with legal timeline requirements and cooperation arrangements (Exhibit 5.4).

5.23 A single recovery strategy can address more than one species at risk found in the same ecosystem, sharing a common threat, or belonging to the same scientific group of organisms. For example, three multi-species recovery strategies were developed covering a total of 20 species found in the Garry Oak Ecosystems in British Columbia. All three organizations develop multi-species recovery strategies where appropriate.

Exhibit 5.4 Summary of the *Species at Risk Act* (SARA) recovery planning process



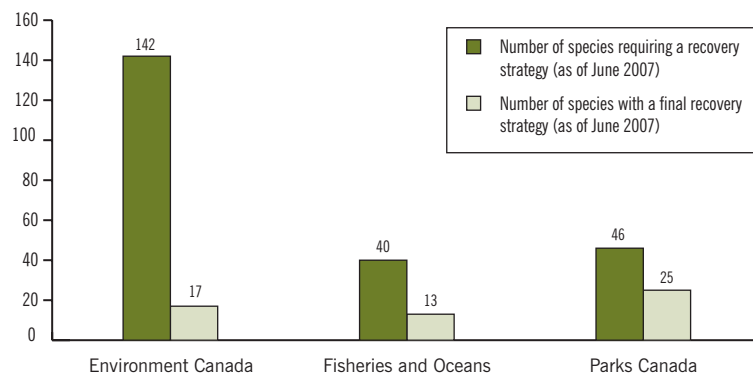
5.24 The three organizations have tools to track their progress in preparing recovery strategies and management plans. Parks Canada and Fisheries and Oceans Canada have developed specific internal guidelines and tools to ensure they produce recovery strategies in compliance with the Act. Environment Canada has yet to finalize its internal approach and guidelines.

Legislated deadlines are not being met

5.25 Under the Act, as of June 2007, completed recovery strategies were required for 228 species at risk. None of the three organizations met this requirement. In total, recovery strategies for 55 species were completed at that date. Parks Canada produced strategies for 54 percent of the species it is responsible for (25 out of 46), Fisheries and Oceans Canada produced strategies for 32 percent (13 out of 40), and Environment Canada for 12 percent (17 out of 142) (Exhibit 5.5).

5.26 New deadlines were approaching for additional recovery strategies. Under the Act, Environment Canada was required to complete recovery strategies or management plans for another 30 species by February 2008. Fisheries and Oceans Canada was required to complete recovery strategies for an additional seven species, and Parks Canada for an additional three.

Exhibit 5.5 Government departments did not meet the requirements for developing species at risk recovery strategies



National coordination is needed

5.27 The Act requires that recovery strategies be prepared in cooperation and consultation with many parties, including officials from one or more of the three federal organizations, other federal departments, the provinces and territories, wildlife management boards, Aboriginal organizations, and other interested parties such as species experts. Since management of many species falls under the responsibility of the province or territory, provinces or territories lead recovery teams in the preparation of approximately 75 percent of the recovery strategies for which Environment Canada is ultimately responsible for preparing.

5.28 Officials from all three organizations have indicated that the cooperation and consultation process often delays the completion of recovery strategies. According to department officials, a shared understanding of what constitutes “effective protection” under the Act, and the restrictions that could apply on provincial or territorial land with regards to protecting terrestrial species, is a key area requiring clearer definition. Officials from Environment Canada indicated the Department is developing a working definition of “effective protection.” Clarifying the issue appears critical to providing provincial and territorial governments with more certainty.

5.29 Environment Canada has led the development of a National Framework for Species at Risk Conservation with core federal departments and provincial and territorial governments. This framework guides the involvement of those jurisdictions in the recovery planning process and is expected to facilitate delivery of recovery strategies and management plans on time. Federal, provincial, and territorial deputy ministers, representing the Canadian Councils of Resource Ministers, approved a draft document in June 2007, which is expected to guide decision-making across jurisdictions.

5.30 Under the Framework, policies will be developed in various areas, including recovery planning, which will encompass the identification of critical habitat and aspects of critical habitat protection. An interdepartmental committee, with members from the three responsible organizations, is developing this recovery planning policy.

5.31 Environment Canada is negotiating bilateral agreements with provinces and territories. Department officials told us that those agreements are expected to facilitate better cooperation. At the time of our examination, two bilateral agreements had been signed: one with British Columbia and one with Quebec. The federal government was about to sign a third agreement with Saskatchewan and was in the final stages of negotiations with Alberta, Yukon, the Northwest Territories, New Brunswick, and Prince Edward Island.

Critical habitat has not been identified

5.32 While other federal legislation can provide some protection for the habitat of species at risk, the *Species at Risk Act* protects critical habitat by prohibiting its destruction. The critical habitat of a species at risk is defined as the habitat that is necessary for its survival or recovery. That habitat can include breeding sites, nursery areas, and feeding grounds. Identification of critical habitat is a complex undertaking with potential implications for provinces, territories, Aboriginal people, industries, private landowners, and various land users.

5.33 As previously mentioned, of the 228 species at risk for which recovery strategies were required as of June 2007, recovery strategies were in place for 55. We expected that when developing recovery strategies, the organizations would have identified critical habitat to the extent possible, as required by the Act. However, critical habitat was identified for 4 of the 55 species for which a recovery strategy was completed. Critical habitat has been partially identified for another 12 species. A schedule of studies to conduct critical habitat identification was included in all recovery strategies.

5.34 Department officials mentioned the lack of scientific knowledge, such as information about the type of habitat that species require at various developmental stages and the size of habitat required to meet the recovery objectives, as the primary impediment to the identification of critical habitat when developing recovery strategies.

Action plans are still in their infancy

5.35 Action plans outline the activities required to meet the objectives set in the recovery strategies. A timeline for the development of each action plan is to be specified in each recovery strategy. As of June 2007, no action plans were due for the 55 species for which a recovery strategy had been produced. However, Parks

Canada had finalized one action plan and had started drafting another one. Environment Canada had started drafting eight plans and Fisheries and Oceans Canada had started drafting eighteen.

5.36 Although some recovery strategies have been completed and progress has been accomplished on the development of action plans, the three organizations have fallen far short of the deadlines specified by the Act for the preparation of recovery strategies. They have not made the progress we expected following our 2001 recommendation (Exhibit 5.6).

Exhibit 5.6 Progress on addressing our recommendation on developing and implementing recovery strategies for species at risk is unsatisfactory

Recommendation	Progress
Environment Canada, Fisheries and Oceans [Canada], and Parks Canada Agency should ensure that recovery strategies developed for species at risk are implemented. (2001 Report of the Commissioner of the Environment and Sustainable Development, Chapter 1, see section 5.1.25)	Unsatisfactory

Satisfactory—Progress is satisfactory, given the significance and complexity of the issue, and the time that has elapsed since the recommendation was made.

Unsatisfactory—Progress is unsatisfactory, given the significance and complexity of the issue and the time that has elapsed since the recommendation was made.

Recovery activities are taking place

5.37 Although many recovery strategies have not been completed, organizations are carrying out recovery activities. Many of these activities were initiated before the Act came into force and are being carried forward. They range from research, public awareness, and education, to control of human activities, protection of habitat, and reintroduction of species.

5.38 Parks Canada has established a systematic approach to manage its recovery activities supported by priority-based funding. Final reports due at the completion of projects allow the Agency to track results and collect data. The Agency reports some of its results on its website and in various departmental reports. Below is an example of one of its recovery activities:

- **Working with the community.** In Kejimikujik National Park in southern Nova Scotia, Parks Canada has developed a volunteer program where park visitors and local community members work with recovery scientists to help with recovery efforts. In the spring, park staff, researchers, and volunteers monitor Blanding’s turtle

nesting sites. Once females lay their eggs, the nests are covered with enclosures to protect them from predators. In the fall, park staff and volunteers check nests daily and count, measure, and release hatchlings.

5.39 Fisheries and Oceans Canada has also taken action on a priority basis. The Department allocates funds, receives annual status reports from regional offices, and monitors progress. Below are two examples of its recovery activities:

- **Countering poaching.** In the Pacific Region, Fisheries and Oceans Canada has focused its enforcement efforts on preventing poaching of the northern abalone, a mollusc listed as threatened under the *Species at Risk Act*. An Abalone Coast Watch program, supported by First Nations communities and the Department's enforcement patrols, led to convictions for illegal possession and harvest of abalone.
- **Changing marine vessel traffic.** To protect the endangered North Atlantic right whale population from collisions with ships, new shipping lanes were put into operation in the Bay of Fundy in 2003. The new shipping lanes, resulting from a joint effort by Fisheries and Oceans Canada, Transport Canada, and the Canadian Whale Institute, are organized so that ships are now bypassing an area containing the largest number of the right whales.

5.40 Environment Canada does not have a systematic approach to planning and implementing recovery activities. Although the Department has been focusing its implementation activities on migratory birds, it has also initiated recovery activities for other species, such as the boreal felt lichen. Below is an example of the recovery activity Environment Canada has put in place:

- **Working with provinces.** Boreal felt lichen is a rare species found in two populations in Canada (Atlantic and Newfoundland), apparently the two last remaining populations in the world. The Atlantic population was designated endangered under the *Species at Risk Act* in 2005. Environment Canada, Nova Scotia, and New Brunswick completed a recovery strategy in June 2007. Evidence suggests that the rate of population growth is extremely slow and full recovery cannot be expected in this century.

5.41 Exhibit 5.7 highlights two other recovery actions that are under way, involving the two departments and the Agency.

Exhibit 5.7 Examples of cooperation between multiple organizations**The Whooping Crane (endangered)**

Location. The natural nesting grounds of the whooping crane are almost entirely in Wood Buffalo National Park, which straddles the Alberta–Northwest Territories border. The flock migrates to the Texas Gulf Coast, where they winter in or near the Aransas National Wildlife Refuge.



Status. With fewer than 20 individuals, whooping cranes were on the verge of extinction in the early 1940s, according to the assessment of the Committee on the Status of Endangered Wildlife in Canada.

In 1978, the Committee designated the whooping crane as endangered. Its status remained unchanged when re-evaluated in 2000. The whooping crane has been listed as endangered under the *Species at Risk Act* since 2003.

Recovery activities. Whooping cranes have been studied for decades. Recovery activities include protecting nesting grounds, public education, captive breeding, and reintroducing young birds into the wild.

Achievements. The Wood Buffalo/Aransas population increased by 35 percent from 1989 to 1999. Today, the wild Wood Buffalo/Aransas population is estimated at 237, but the species remains endangered. Recovery efforts have involved many American and Canadian partners.

Sources: Parks Canada, Environment Canada, Committee on the Status of Endangered Wildlife in Canada.

The Atlantic Salmon, Inner Bay of Fundy Population (endangered)

Location. This population of the Atlantic salmon spawns in rivers of Nova Scotia and New Brunswick that drain into the Bay of Fundy. After going to sea, these salmon remain in the Bay of Fundy.



Photo: Hans-Petter Fjeld

Status. Over 30 years, this population has declined by more than 95 percent. In 2001, the Committee on the Status of Endangered Wildlife in Canada designated the Inner Bay of Fundy Atlantic salmon as endangered. The population has been listed as endangered under the *Species at Risk Act* since 2003.

Recovery activities. Recovery activities include preserving salmon genetic diversity through captive breeding, according to breeding plans involving representatives from each remaining genetic family.

Achievements. In 2003, fewer than 100 adults were estimated to have returned to rivers known to have contained the species. The population's status remained unchanged when re-evaluated in 2006. Recovery efforts have involved many partners, including Parks Canada, Fisheries and Oceans Canada, the Atlantic Salmon Federation, Fort Folly First Nation, and the University of New Brunswick.

Source: Parks Canada, Fisheries and Oceans Canada, Environment Canada, Committee on the Status of Endangered Wildlife in Canada, the Atlantic Salmon Federation.

Conclusion

5.42 The federal government's progress, considered here as the combined progress achieved by the three responsible organizations, in responding to our 2001 recommendations regarding the development of a comprehensive inventory and recovery strategies for species at risk, is unsatisfactory.

5.43 The federal government does not have a comprehensive inventory of species at risk on its land. The government is late in preparing recovery strategies and it has not finalized some of the guidance material needed to achieve the objectives of the *Species at Risk Act*. In our view, taking into account the rate of progress to date and the approaching deadlines for additional strategies, the government is at risk of falling further behind in preparing recovery strategies.

5.44 However, we have noted that Parks Canada has made satisfactory progress in developing an inventory of species at risk under its jurisdiction. Parks Canada and Fisheries and Oceans Canada have established structured approaches to manage recovery planning and implementation. As a result, we believe these organizations are in a better position to comply with the requirements of the Act.

5.45 Environment Canada is responsible for the largest number of species at risk in Canada. The Department is clearly behind in delivering on its responsibilities.

5.46 Environment Canada is also responsible for coordinating the efforts of federal, provincial, and territorial governments, and stakeholders. As such, it needs to provide national coordination. As the leader on the *Species at Risk Act*, the Department needs to clarify the implications of the Act for provincial, territorial, and private landowners and to finalize bilateral agreements with provinces and territories.

About the Audit

Objective

The objective of our follow-up audit was to determine whether Environment Canada, Fisheries and Oceans Canada, and Parks Canada have made satisfactory progress in implementing selected major recommendations from Chapter 1 of our 2001 Report on the Great Lakes and St. Lawrence River Basin. The recommendations concerned the need to develop and implement recovery strategies for species at risk under their jurisdiction.

Scope, and approach

Our audit work focused on measures that the three organizations have taken to address selected 2001 recommendations and the results they have achieved. Recommendations were selected based on their significance and interest to Parliament. Our examination did not include 2001 recommendations that related to the assessment of funding and Fisheries and Oceans Canada's role and responsibilities. Since species at risk are being managed as a national program, our scope for this follow-up audit is national.

Since our 2001 audit, the *Species at Risk Act* (SARA) was adopted, requiring the three organizations to prepare recovery strategies and action plans for extirpated, endangered, and threatened species and management plans for species of special concern. Consequently, we've considered the relevant sections of the *Species at Risk Act*. We assessed the performance of the federal government and not the performance of other levels of governments.

In carrying out the audit, we interviewed department officials and relevant stakeholders and reviewed and analyzed departmental files, including reports, databases, policies, and action plans.

Criteria

We used the following criteria to assess progress the three organizations made in developing and implementing recovery strategies for species at risk under their jurisdiction based on our 2001 recommendations and the *Species at Risk Act*. We expected Environment Canada, Fisheries and Oceans Canada, and Parks Canada to be

- developing and maintaining inventories of species at risk under their jurisdiction;
- preparing recovery strategies and management plans for the listed species at risk for which they are responsible (SARA, sections 37, 39, 41, 42, 65, 66, 68);
- preparing action plans to implement recovery strategies for species at risk for which they are responsible (SARA, sections 47, 48, 49); and
- implementing recovery actions.

Audit work completed

Audit work for this chapter was substantially completed on 30 June 2007.

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