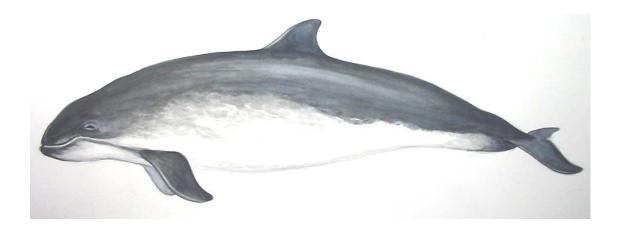


## Species at Risk Act (SARA)

### Legal Listing of Aquatic Species

# **Consultation Workbook**

For the Harbour Porpoise, Phocoena phocoena, Northwest Atlantic population, in eastern Canadian waters



#### 1.0 Objective of this Consultation

Your opinion is being sought to assist the government of Canada in making an informed decision on whether to add the Harbour Porpoise to the Schedule 1 (the List of Wildlife Species at Risk) of the *Species at Risk Act* (*SARA*) as a Species of Special Concern. Your input on the impacts of adding this species to the List is important.

This workbook has been developed to give you an opportunity to provide Fisheries and Oceans Canada with your feedback, advice, and other comments regarding adding the Harbour Porpoise to Schedule 1 of SARA as a Species of Special Concern (Schedule 1 identifies which species are legally protected under SARA).

At the end of this workbook there are a series of questions about SARA and the impacts of legally listing a species, as well as the role you or your community might eventually take in the recovery process. You are encouraged to complete any or all of the questions on pages 17-20 and provide any additional comments you feel are relevant. They are meant to stimulate discussion. You may have comments that do not fit with any of the questions and you are encouraged to provide those comments as well. Your ideas, knowledge and advice are important to this process and will help the Government of Canada assess the impacts of adding Harbour Porpoise to the species at risk legal list. Your ideas and views on participation in the management planning process will be used to refine our current approach.

For further information on how to submit your workbook please refer to page 16.

To make sure your comments are considered, please send in your submission by **October 29**, **2004**.

#### 2.0 What is the Species at Risk Act (SARA)?

The Government of Canada proclaimed the Species at Risk Act on June 5, 2003 as part of its strategy for the protection of wildlife species at risk. Attached to the Act is Schedule 1, the list of species that receive protection under SARA. This Schedule 1 list is commonly referred to as the 'SARA list'. The existing SARA list contains the 233 species the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) had assessed and found to be at risk at the time of the reintroduction of SARA to the House of Commons on October 9<sup>th</sup>, 2002.

The degree of risk is categorized according to the terms Extirpated, Endangered, Threatened and Special Concern. A species is assessed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) as Extirpated when it is no longer found in the wild in Canada but still exists elsewhere. It is Endangered if it is facing imminent extirpation or extinction. An assessment of Threatened means that the species is likely to become Endangered if nothing is done to reverse the factors leading to its extirpation or extinction. COSEWIC assesses a species as Special Concern if it may become a Threatened or Endangered Species because of a combination of biological characteristics and identified threats.

The Species at Risk Act (SARA) was created to ensure the survival of wildlife species and the protection of our natural heritage. It requires Canada to provide for the recovery of species at risk due to human activity, and to manage species of Special Concern to make sure they do not become Endangered or Threatened. It provides for the protection not only of species, but also of their residences and critical habitat once identified.

Environment Canada is responsible for implementing SARA as a whole, but Fisheries and Oceans Canada has responsibility for aquatic species at risk. No single organisation or entity can be responsible on its own for ensuring the survival of species. The federal, provincial and territorial governments, Aboriginal peoples, wildlife management boards, non-governmental organisations, landowners, resource users and individuals across Canada must all work together. The Act was designed to encourage such cooperation.

The following section discusses some key issues related to SARA. More about the Act can be found at the Species at Risk website: http://www.speciesatrisk.gc.ca

#### 2.1 The Role of COSEWIC

The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) is the body designated to assess the status of wildlife species in Canada. Based on the information found in a status report, COSEWIC classifies the species as being Extinct, Extirpated, Endangered, Threatened, of Special Concern, Data Deficient, or Not at Risk (the glossary at the end of this document explains these categories). COSEWIC's Species Specialist Subcommittees (SSC) provide expertise on particular groups of plants and animals and make recommendations as to the appropriate status designation of a species to the entire Committee.

Members of COSEWIC do not formally represent the agency, group, or region from which they are drawn. They are appointed on the basis of their expertise, and will, to the best of their ability, provide independent and impartial scientific advice and recommendations.

COSEWIC along with the SSC's assesses the biological status of a species using the best available information. It reviews research, considers community and Aboriginal traditional knowledge, and applies strict assessment criteria based on those developed by the International Union for the Conservation of Nature (IUCN). COSEWIC sends its assessment of the species to the Minister of the Environment to initiate the legal listing process.

More information about COSEWIC can be found on its website: http://www.cosewic.gc.ca

#### 2.2 Legal Listing - What does this mean?

Once a species is recognized as being "at risk" by COSEWIC, the first step in ensuring its safety is to undertake a legal listing process for the species. A species is not protected under SARA unless it is legally listed.

When COSEWIC releases their report, the federal government will have nine months to do one of the following:

- a) Accept the assessment and add the species to the List;
- b) Decide not to add the species to the List; or
- c) Refer the current assessment back to COSEWIC for further information or consideration.

The decision on whether to add the species to the list takes into account the COSEWIC assessment and other factors such as potential social and economic impacts of the listing. If the government takes no action, the species will be legally listed as assessed by COSEWIC.

When species are assessed through the normal regulatory process, a Regulatory Impact Analysis Statement (RIAS) is required. In preparing the RIAS, the federal government must consult about the species with affected stakeholders and undertake a socio-economic analysis on impacts to stakeholders should the species be added to the legal list.

#### 3.0 Significance of the addition of a species to the SARA list

The protection that comes into effect following the addition of a species to the SARA list depends upon the degree of risk assigned to that species.

#### 3.1 Protection for listed Extirpated, Endangered and Threatened species

Under the Act, prohibitions protect individuals of Extirpated, Endangered and Threatened species. These prohibitions make it an offence to kill, harm, harass, capture or take an individual of a species listed as Extirpated, Endangered or



Threatened, or to damage or destroy the residence of one or more individuals of an Endangered or a Threatened species. The Act also makes it an offence to possess, collect, buy, sell or trade an individual of a species that is Extirpated, Endangered or Threatened or a part or derivative of one. These prohibitions will come into force for the SARA listed species on June 1st, 2004.

Prohibitions apply to federal lands, Canada's exclusive economic zone and continental shelf areas, migratory birds, and aquatic species. In certain cases, prohibitions may apply to provincial and territorial lands.

#### 3.2 Protection for Listed Species of Special Concern

The prohibitions of SARA for species listed as Extirpated, Endangered and Threatened will not apply to species of Special Concern; however any existing protections and prohibitions, such as those authorized by the Migratory Birds Convention Act or the Canada National Parks Act, continue to be in force.

#### 3.3 Management Plans for Species of Special Concern

For species of Special Concern, such as the Harbour Porpoise, management plans will be prepared and made available on the Public Registry within five years of their addition to the SARA list, allowing for public review and comment. Management plans will include appropriate conservation measures for the species and for its habitat.

Management plans will be prepared in cooperation with aboriginal organizations, responsible jurisdictions, and relevant management boards directly affected by them. Stakeholders affected by the management plan will also be consulted.

#### 3.4 Public Registry

The SARA Public Registry is a comprehensive source of information relating to matters under the Act and allows for timely access to public documents relating to the administration of SARA. It is a key instrument in fulfilling the government's commitment to encourage public participation in environmental decision-making. The Public Registry can be accessed through the web at: http://www.sararegistry.gc.ca.

The Registry will include documents including regulations, orders, agreements, guidelines, standards, and codes of practice. In addition, it will provide species assessments and status reports, recovery strategies, action plans, and management plans for the recovery of wildlife species.

Page 6

Anyone may provide written comments on a proposed recovery strategy, action plan or management plan for a wildlife species. The general public has 60 days after the strategy or plan is posted on the Registry to provide feedback.

### 4.0 Information on Species Designated by COSEWIC: Harbour Porpoise (Northwest Atlantic Population)

The rest of this workbook is structured to provide you with specific information on the Harbour Porpoise (Northwest Atlantic Population). Information is provided on COSEWIC status, distribution and biology, reason for designation by COSEWIC, potential management measures and impacts. For the full Harbour Porpoise status report that includes the threats and limiting factors please visit: http://www.sararegistry.gc.ca.

#### 4.1 What is the Harbour Porpoise?

The Harbour Porpoise (*Phocoena phocoena*) is a small marine mammal related to whales and dolphins. It rarely reaches a length greater than 1.7 meters, with females slightly larger than males. As the name suggests Harbour Porpoise are often seen in bays (especially in summer), although they have also been seen hundreds of kilometers offshore. Breeding takes place in early summer and 10 - 11 months later a single calf is born and nursed for at least 8 months. Females commonly reach sexual maturity between the ages of 3 and 4 years while males mature slightly earlier. The oldest recorded age for a Harbour Porpoise is 24 years but most do not live past their teens.

As a small marine mammal with limited energy reserves Harbour Porpoise are frequent feeders and their distribution at any given time is associated with the distribution of prey. They eat mainly small fish and cephalopods less than 30 cm in length. They are attracted to prey-rich areas, especially of fat-rich prey such as capelin and herring.

#### 4.2 Where is the Harbour Porpoise found?

Harbour Porpoise live in the temperate waters of the northern hemisphere. They are widely distributed on the continental shelves of the northern oceans with several separate and distinct populations. The Atlantic and Pacific populations of Canadian Harbour Porpoise are separate subspecies. Within the Atlantic Ocean Harbour Porpoise in the northeast Atlantic are effectively separated from those living in the northwest Atlantic. Recently, populations in the English Channel and the Baltic Sea have disappeared.

In eastern Canada Harbour Porpoise are found from the Bay of Fundy to Baffin Island. DNA and toxicology evidence suggests that there are three discrete populations summering in eastern Canada (Newfoundland and Labrador, Gulf of St.

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Lawrence and Bay of Fundy - Gulf of Maine). There is likely some mixing of these populations in the winter when less is known about their distribution (Figure 1.).

Figure 1. Adapted from Read's (2002) Update to the COSEWIC Status Report on Harbour Porpoise *Phocoena phocoena* (Northwest Atlantic Populations).

There is very little data on patterns of movement within the three Canadian populations with the exception of the western Bay of Fundy where radio-tagging studies have been conducted. There, tracked individuals travelled approximately 50 km per day. The home ranges of such individuals could encompass the entire Gulf of



Maine. The Bay of Fundy/Gulf of Maine population is transboundary and tends to move into U.S. waters in the fall. Individuals may return to the same areas on a seasonal basis from year to year. See COSEWIC Assessment and Update Status Report on the Harbour Porpoise Northwest Atlantic population 2003.

#### 4.3 COSEWIC Status: Harbour Porpoise (Northwest Atlantic population)

The Northwest Atlantic population of the Harbour Porpoise is currently designated by COSEWIC as a species of Special Concern. The most recent COSEWIC assessment of this species was in May 2003. From April 1990 until May 2003 when it was downlisted to a species of Special Concern this population had been listed by COSEWIC as a Threatened species.

Harbour porpoise were initially listed by COSEWIC due to a significant proportion of the population being accidentally killed each year as incidental bycatch particularly in groundfish gillnet fisheries. The magnitude of this problem may have decreased in recent years due to changes in the groundfish fishery. However, there are still many hundreds or thousands of porpoise that die each year by accidental entrapment in fishing gear. Since there is little known of the population dynamics of Harbour Porpoise, unintentional deaths as bycatch in the fishery are a significant conservation concern.

#### 4.4 What Threats Does the Species Face?

There are no estimates of the annual survival rates experienced by the various Harbour Porpoise populations. What data there are on the age distribution of a given population come from samples of dead animals from stranding events or fishing gear entrapments. These data are difficult to interpret as animals dying in this way may not be representative of the general population. Our knowledge of the age makeup and the potential rate of increase of Harbour Porpoise populations remains poor. There is a great deal of uncertainty in our understanding of how much humaninduced mortality Harbour Porpoise populations can sustain. Currently, human sources of mortality may pose a threat to the survival of the Harbour Porpoise. There is a concern that prevailing conditions may put the northwest Atlantic populations of Harbour Porpoise at risk of becoming threatened. Potential problems (presented in no particular order) faced by Harbour Porpoise include:

- Entanglement in fishing gear
- Habitat exclusion by Acoustic Harassment Devices
- Contaminants
- Habitat degradation and loss from oil and gas activity
- Potential for over fishing to reduce prey base
- Research activities and Eco-tourism



#### Entanglement in Fishing Gear

The largest known cause of human-induced mortality for Harbour Porpoise is entrapment in fishing gear, mainly bottom-set gillnets. In past decades large numbers of Harbour Porpoise died as fishery bycatch throughout eastern Canada. With recent closures of some groundfish fisheries the magnitude of this threat may be less than in the past. Despite reduced fishing effort, bycatch continues. For example, in Newfoundland and Labrador estimates of numbers caught accidentally by inshore fishing gear during the summer along the south coast, ranged from approximately 700 to 5,300 in 2002 alone.

In the Gulf of St. Lawrence estimates of the number of porpoises killed in fishing gear from 1989, 1990 and 1994 were in the range of 2,000 to 4,000 animals per year. Most deaths occurred during summer in groundfish gillnets.

In the Bay of Fundy, as else where, groundfish gillnets were also the main source of fatal porpoise entrapments. Since 1995 when a cap of 110 by-caught porpoise per year was set, the number of entrapped porpoise deaths declined from the low hundreds to tens of animals. Numbers in the Gulf of Maine were in the low thousands up to 1996 but have since declined to hundreds and in 2001 tens of animals. Declines may not simply be the result of a reduction in the threat level; a reduced number of porpoise would also lead to a reduction in the number of entrapments.

#### Habitat Exclusion by Acoustic Harassment Devices

There are concerns in the Bay of Fundy that the use of Acoustic Harassment Devices (AHDs) by the aquaculture industry may lead to large-scale exclusion of Harbour Porpoise from their preferred habitat. AHDs are used to scare seals away from aquaculture sites by producing high intensity sounds. These sounds are heard by Harbour Porpoise and appear to scare them away from the area as well. There is potential for a cumulative effect to develop if the use of such devices is allowed to spread through an area.

#### Contaminants

Increased levels of contaminants in areas of regular use by Harbour Porpoise can lead to elevated levels of contaminants in their body tissues. The large amount of fatty tissue carried by marine mammals makes them susceptible to accumulating concentrations of fat-soluble contaminants that are present in their environment or prey base. High levels of contaminants due to industrial development have negatively affected the health of some whale populations in Canada, for example, the beluga whale population in the St. Lawrence River. It is possible that Harbour

Porpoises could accumulate such toxins as well, and this might have negative consequences.

#### Habitat Degradation and Loss From Oil and Gas Activity

Offshore oil and gas installations may lead to localized habitat degradation and loss through physical disturbance and the use of the ocean as a waste treatment facility. The current Waste Treatment Guidelines allow disposal into the ocean of drilling waste and produced water. These operational wastes contain a variety of contaminants. While limits are imposed on the concentrations of contaminants that can be disposed into the sea there are no limits on the total amounts permitted. Therefore, the potential for cumulative effects is not prevented. With the growth of offshore oil and gas activity there is also a growth in the potential for cumulative negative effects on the quality of habitat occupied by marine life to develop.

The oil and gas industry uses seismic exploration to map areas of potential interest for future oil and gas development and the behavioural and physical impacts of seismic exploration on marine animals are not completely understood. There are no studies of the potential effects of seismic exploration on Harbour Porpoises. Seismic activity could be a source of acoustic harassment or cause displacement of Harbour Porpoises (or their prey) from preferred habitat.

#### Potential for Over Fishing to Reduce Prey Base

The preferred prey of Harbour Porpoise, particularly herring, are fished commercially. Over-fishing of the preferred prey is therefore possible and could constitute a threat to Harbour Porpoise. While there is no evidence to suggest that this is currently the case, recent large-scale changes to the marine food web suggest the need for caution.

As one of the smaller cetaceans with limited energy reserves, Harbour Porpoise need to feed frequently. They are usually observed in association with prey and the Porpoises' limited abilities to go without food for long periods are demonstrated each year when numbers of starved juveniles are found dead on the east coast of the U.S. If fishing activity depletes the Porpoises' preferred prey such that Porpoises must spend more time searching for food, this could also constitute a threat to Harbour Porpoise.

#### **Research Activities and Eco-tourism**

Research activities and Eco-tourism -considered relatively benign activities by some - may impact Harbour Porpoise behaviour. Harbour Porpoise are generally considered shy. Development of widespread and intensive human activity in their



preferred habitats may pose a threat to their populations. They may be particularly vulnerable when birthing their calves.

#### 5.0 How Can the Species be Protected?

#### 5.1 Existing Measures

The Marine Mammal Regulations (SOR/93-56) of the Fisheries Act of Canada govern the management of Harbour Porpoise. These regulations do not address the problem of bycatch of Harbour Porpoise in commercial fisheries. Nor is there any mechanism presently in place for developing scientific advice regarding the sustainability of bycatch levels. Experiments on tools to reduce bycatch levels, such as acoustic alarms or modified nets, have been conducted in the Bay of Fundy. None of the measures investigated have been implemented in the gillnet fisheries of eastern Canada. Limits on gillnet fishing effort, in place to conserve groundfish stocks, may have indirectly benefited Harbour Porpoise by reducing their exposure to potential entrapment but this has not been demonstrated.

In the Bay of Fundy DFO implemented a Harbour Porpoise Conservation Strategy in 1995. A cap of 110 by-caught Harbour Porpoise was instituted. If exceeded, the cap triggers closure of the gillnet fishery. In other Atlantic regions no measures are in place to reduce the number of porpoise killed by fishing gear.

#### 5.2 Potential Management Measures

If the Harbour Porpoise is added to Schedule 1 of SARA as a Species of Special Concern, a management plan will be prepared. The management plan will likely expand the management measures taken to protect the species from harm. Fisheries and Oceans Canada wishes to gain a better understanding of how these measures could contribute to the recovery of the species, as well as the potential impacts of these measures on human activities and resource users. Some of the potential management measures listed below will require collaboration with other government departments and agencies to fully implement. Restrictions of activities posing threats or potential threats to the species where it is regularly found may be needed. Future management measures could include but are not restricted to:

- required use of Harbour Porpoise deterrent tools by those deploying gillnets during certain times of year or in certain locations
- restrictions on the use of gillnets
- restrictions on the use of Acoustic Harassment Devices deployed in the marine environment
- guidelines for oil and gas development/seismic exploration



- implementation of a programme to train and place independent marine mammal observers on oil and gas vessels and the increased use of fisheries observers
- potential time/area closures on seismic activity
- potential exclusion of oil and gas activity from areas of high use by Harbour Porpoise
- greater restrictions on waste disposal at sea and infractions subject to higher fines
- Maritime Forces Atlantic may be asked to develop guidelines for activities in areas regularly used by the species (such as for naval exercises and for sonar use)
- strict guidelines may be established for those who wish to carry out research on the species
- modifications to shipping/recreational boating traffic and guidelines for whale watching operators
- more research may be carried out on potential threats to the species and the level of impact of various human activities, especially more research on impacts of gillnets and human-created sounds, including non-military and research sonar

This list is not meant to cover all potential management measures. Other management measures may be proposed as we work through the consultation process and as more research is carried out. If the species is legally listed and proceeds to management planning, there will be further consultation on management measures.

### 6.0 Impacts on Stakeholders

This consultation workbook was developed to help us better understand the impacts on stakeholders of legally listing the Harbour Porpoise as a species of Special Concern. Based on the COSEWIC assessment and a review of activities in the area, we have described below how some stakeholders **may** be impacted. These descriptions are intended to assist you in filling out the questionnaire on pages 16-18. Please note that SARA was designed to take a cooperative approach to the recovery of species and further consultation with regulators and stakeholders will be taken on any future management actions, should the species be added to the legal list.

We urge all interested parties to answer all of the questions to help us better understand what impacts the addition of the species to the SARA legal list will have. If you are not included in the list of stakeholders below, it is still important for you to complete the questions so that DFO can gain a better understanding of impacts.



#### 6.1 Aboriginal Peoples

Aboriginal peoples will be consulted on the development of a management plan for Harbour Porpoise. Management strategies may be considered that could affect aboriginal peoples fishing with gillnets, or deploying Acoustical Harassment Devices at aquaculture sites. The harvest of Harbour Porpoise for cultural or ceremonial purposes may require reassessment.

#### 6.2 Fishing Industry

The fishing industry will be consulted on the development of a management plan for Harbour Porpoise in hopes that collectively a regime can be implemented to address the bycatch of Harbour Porpoise. Mitigation measures such as the use of acoustic alarms and acoustically modified gillnets as researched in the Bay of Fundy may be considered. In addition, other modifications of fishing gear, increased observer coverage in certain areas, and/or avoidance of identified known areas during periods of Harbour Porpoise present can be considered.

The simplest way to prevent the majority of Harbour Porpoise bycatch deaths would be to limit the overlap in time and space of Harbour Porpoise and gillnets. While this could represent a significant change in gear use it may indirectly benefit the industry in the long-term. A more ecologically friendly fishery would be more sustainable. As market place ecological awareness and concerns increase, a fishery that reduces unwanted bycatch would have a competitive advantage.

#### 6.3 Aquaculture Industry

Restrictions may be placed on the use of Acoustic Harassment Devices (AHDs). Such restrictions may range from time and area restrictions to time and area bans.

#### 6.4 Oil and gas Industry

Certain oil and gas activities may be excluded from areas of known Harbour Porpoise use or may be excluded at certain times of year. Guidelines for seismic exploration may be developed. These may include exclusion zones, exclusion zones at particular times of year, requirements for marine mammal observers, or other measures deemed appropriate. The oil and gas industry may need to accommodate the implementation of an independent marine observer programme.

#### 6.5 Researchers

Those wishing to carry out research on the species or in areas of where they are found may have to follow strict guidelines. This may limit the types of research permitted in areas of known use by Harbour Porpoise. It may also mean more lead time will be needed in planning research projects.



#### 6.6 Marine Eco-tourism Operators

Those wishing to carry out marine Eco-tourism activities in areas of known Harbour Porpoise use may have to follow strict guidelines. There may be seasonal area closures to boating traffic in such areas.

#### 6.7 Conservation Non-governmental Organisations

The conservation community may play a role in raising public awareness of the species and activities that could endanger it.

#### 6.8 Transportation Industry

The shipping sector may be asked to avoid areas of use by Harbour Porpoise, at certain times of the year.

#### 6.9 Naval Operations

The Canadian navy may be asked to prepare guidelines for naval exercises in areas where the species is seen regularly. They may be asked not to carry out naval exercises in these areas (such as activities with sonar). As with other conservation measures agreed to by the navy, these requirements could be waived in emergencies or in the case of national security requirements.

#### 7.0 Contact Information

If you have questions about the *Species at Risk Act* or the consultation process, please feel free to contact us.

Dr. Jack Lawson Research Scientist Fisheries and Oceans Canada Marine Mammals Section Northwest Atlantic Fisheries Centre, White Hills PO Box: PO Box 5667 St John's, Newfoundland Canada A1C 5X1

Telephone: (709) 772-2285 Fax: (709) 772-4105 E-mail: <u>lawsonj@dfo-mpo.gc.ca</u>

In Person: Any Fisheries and Oceans Office

#### **Feedback Section**

The government's decision on whether or not to list the species will be based on a full description and understanding of the costs and benefits of the impacts of protection and recovery on individuals, organizations, Aboriginal Peoples, industries, and Canadian society in general.

#### How to use this workbook:

Please consider the questions provided below, and provide a response to any or all of the questions that interest you. It is important that you indicate which species your comments are intended for. After you have completed the questions, please send the questions and answers only <u>to</u>:

#### Dr. Jack Lawson

Research Scientist Fisheries and Oceans Canada Marine Mammals Section Northwest Atlantic Fisheries Centre White Hills PO Box: PO Box 5667 St John's, Newfoundland Canada A1C 5X1

### Mail completed hard copies of the questions and answers to the address above.

Workbook answer sheets must be submitted by October 29, 2004.



#### Questions

Once a species is legally listed as a species of Special Concern, a management plan will need to be drafted. Stakeholders will be asked to participate in the development of a management plan to ensure the conservation of the Harbour Porpoise. It may evolve that management practices would be implemented that may have significant socio-economic impacts (positive or negative). The government's decision on whether or not to list the species will be based on a full description and understanding of the costs and benefits of the impacts on individuals, organizations, Aboriginal Peoples, industries, and Canadian society in general. Please take some time to carefully answer the questions below and send in your answers by **October 29, 2004**.

Name:

Affiliation:

Species of Interest:

Canada

1.a) Based on what you have learned about the *Species at Risk Act*, do you think the listing of the species of interest to you, would affect your activities? How?

b) If a legal listing will affect your activities, do you see these effects as a cost or benefit to you? In what way?

| c) | For you, would the costs or benefits of a legal listing change over time? If so, how would they change and do you have any suggestions on how to minimize the impacts? |
|----|--|

2. In order to be truly effective, the recovery of species at risk must be a cooperative process that includes organizations and individuals with knowledge of these species and the threats it faces. How can relevant parties be included in the recovery of the species?



| łow can you a | as an individual, or | your industry or | organization as a gr | oup, |
|---------------|----------------------|------------------|----------------------|------|

3. How can you as an individual, or your industry or organization as a group, participate in the recovery of the species? Give examples of particular activities, if you can.

4. Please add any other comments or concerns (include additional sheets, if necessary).



Please send us your comments by October 29, 2004

THANK YOU



#### Appendix 1: Glossary of Terms

Action Plan: A document that sets out specific ways to put a recovery strategy into effect.

Aquatic species: All 'fish' including:

- a) parts of fish
- b) shellfish, crustaceans, marine animals and any parts of shellfish, crustaceans or marine animals
- c) the eggs, sperm, spawn, larvae, spat and juvenile stages of fish, shellfish, crustaceans and marine animals

**Competent Minister:** The Minister of Fisheries and Oceans is the competent minister for listed aquatic species. The Minister of Canadian Heritage (Parks Canada Agency) is the competent minister for listed species found in national parks national historic sites and other national protected heritage areas. The Minister of the Environment is the competent minister for all other listed species and for the overall administration of the law.

**Critical habitat:** Habitat that is necessary for the survival or recovery of a listed wildlife species and that is identified as the species' critical habitat in the recovery or in an action plan for the species

**Data deficient species:** Wildlife species for which there is insufficient evidence to determine whether or not the species is in fact at risk.

**Endangered species:** Wildlife species that is facing imminent extirpation or extinction

Extinct species: Wildlife species that no longer exists anywhere.

**Extirpated species:** Wildlife species that no longer exist in the wild in Canada, but exist elsewhere in the wild

**Habitat:** In respect to aquatic species, spawning grounds and nursery, rearing, food supply, migration and any other areas on which aquatic species depend directly or indirectly in order to carry out their life processes, or areas where aquatic species formerly occurred and have the potential to be reintroduced

**Management Plan:** A document that sets out specific ways to manage threats to a species of special concern in order to prevent the species of special concern from becoming threatened or endangered.

**Recovery Strategy:** A document prepared by the competent minister in cooperation and consultation with other governments, wildlife management boards, Aboriginal organizations, landowners and others who are likely to be affected by the strategy. It identifies the population goal and objectives, and broad recovery approaches to abate threats.

**Species of Special Concern:** Wildlife species that may become a threatened or endangered species because of a combination of biological characteristics and identified threats

**Threatened species:** Wildlife species that is likely to become an endangered species if nothing is done to reverse the factors leading to its extirpation or extinction

