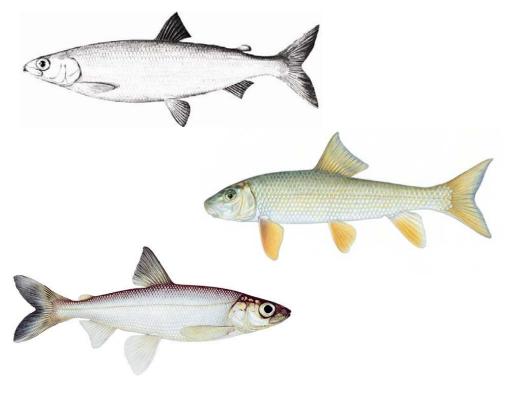
CONSULTATION WORKBOOK on the addition of three aquatic species to the SARA List:

Shortnose cisco

Black redhorse

Kiyi (Great Lakes population)



October 2005





Please send your comments on this consultation to Fisheries & Oceans Canada, Central and Arctic Region at:

fwisar@dfo-mpo.gc.ca

Or by regular mail comments should be sent to the following address:

Central and Arctic Region SARA Coordinator Freshwater Institute Fisheries & Oceans Canada 501 University Avenue Winnipeg, Manitoba R3T 2N6

To request additional copies of the workbook, please call 1-866-715-7272.

For more information on the Species at Risk Act, please visit the Public Registry at http://www.sararegistry.gc.ca

For more information on species at risk, please visit the Fisheries & Oceans Canada aquatic Species at Risk website:

http://www.aquaticspeciesatrisk.gc.ca

or

Environment Canada's Species at Risk website: www.speciesatrisk.gc.ca

Information on species at risk is also available on the website of the Committee on the Status of Endangered Wildlife in Canada (COSEWIC):

www.cosewic.gc.ca

Credits: Shortnose cisco - Koelz Black redhorse – J.R. Tomelleri Kiyi (Great Lakes population) – J.R. Tomelleri

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PART 1: ADDING A SPECIES OR POPULATION TO THE SARA LIST

INTRODUCTION

The Species at Risk Act (SARA) was proclaimed on June 5, 2003, by the Government of Canada. SARA provides a framework for actions across Canada to promote the survival of wildlife species and the protection of our natural heritage. It sets out how to decide which species are a priority for action and what to do to protect a species. It identifies ways governments, organizations and individuals can work together, and it establishes penalties for failures to obey the law.

Two federal Ministers are responsible for the administration of SARA. The Minister of Fisheries and Oceans is the competent Minister for aquatic species. The Minister of the Environment is the competent Minister for all other species at risk, including those found in national parks, national historic sites and other protected heritage areas. The Minister of the Environment is also responsible for the overall administration of the Act.

The Act protects the plants and animals included on a list within SARA (Schedule 1). Schedule 1 is also referred to as the List of Wildlife Species at Risk and will be referred to as the SARA List in the rest of this workbook. Species are put on the SARA List as a result of the work of the scientists and conservationists who are members of the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). They conduct scientific assessments of the status of species. The Government then decides which species are added to the SARA List as such action could have economic or social implications.

233 species were included on the SARA List of the Act when Parliament passed SARA in December 2002. COSEWIC had already assessed these species as "at risk" using new updated assessment criteria and current information. When the Act came into force in June 2003, these species were on the initial SARA List.

Since then, COSEWIC has identified more species that are at risk. The Minister of Environment is now considering recommending those species for addition to the SARA List. As part of that process, the Minister of Fisheries and Oceans is currently carrying out public consultations on the shortnose cisco, black redhorse, and kiyi (Upper Great Lakes population) that live in Ontario. The purpose of this consultation workbook is to invite Canadians to let us know whether these populations should be added to the SARA List.

BACKGROUND

The Species at Risk Act

The *Species at Risk Act* strengthens the Government of Canada's ability to protect Canadian plants and animals in danger of becoming extinct. This protection applies only to species which are included on the SARA List. Adding a species to the SARA List requires a two-step process. The first step is identifying a species at risk and the second step is the listing of that species.

Identifying a species at risk

COSEWIC is an independent group whose mandate is to assess the status of plants and animals in Canada and identify those at risk. The committee is made up of biologists, ecologists, geneticists and individuals with Aboriginal traditional knowledge who are experts on wildlife species at risk. Members come from many areas, including government, universities, Aboriginal organizations and non-government agencies.

COSEWIC assesses the biological status of a species using the best available information on the biological status of the species. It reviews research, considers community and Aboriginal traditional knowledge, and applies strict assessment criteria. COSEWIC meets once a year to assess the biological status of species. Species that COSEWIC considers to be "at risk" are designated to one of the following categories:

- *Extinct* A wildlife species that no longer exists.
- *Extirpated* A wildlife species that is no longer found in the wild in Canada but may be found elsewhere.
- Endangered A wildlife species facing imminent extirpation or extinction.
- *Threatened* A wildlife species likely to become Endangered if nothing is done to reverse the factors threatening it.
- Special Concern A wildlife species that may become a Threatened or Endangered species because of a combination of biological characteristics and identified threats.

Listing a species at risk

The process of listing a species begins when COSEWIC submits its assessment to the Minister of the Environment. Upon receiving the assessment the Minister has 90 days to issue a Response Statement on how he or she intends to respond to the assessment and, to the extent possible, provide time lines for action. The Minister then forwards the species assessment to Governor in Council (GIC)¹, along with his or her recommendation on whether GIC should...

- a) Accept the COSEWIC assessment and add the species to the SARA List;
- b) Not add the species to the SARA List; or,
- c) Refer the matter back to COSEWIC for further information or consideration.

GIC has nine months after receiving the COSEWIC assessment to decide whether the species should be added to the SARA List. If a decision has not been made within that time period, the Minister of the Environment will add the species to the SARA List.

¹ Governor in Council is the Governor General of Canada acting on the advice of the Queen's Privy Council of Canada (i.e. Cabinet).

What does it mean when a species or population is added to the SARA List?

The amount of protection the SARA provides depends on the assessed category. It is an offence to kill, harm, harass, possess, collect, buy, sell or trade an individual of an Extirpated, Endangered and Threatened species. It is also illegal under the Act to damage or destroy the residences of Endangered and Threatened species or for Extirpated species if a recovery strategy has recommended the introduction of the species into the wild in Canada. These prohibitions do not apply to species of Special Concern. SARA protects all listed birds covered under the *Migratory Birds Convention Act*, 1994, all listed aquatic species and all listed species on federal lands. The provinces and territories are responsible for making sure that all listed Extirpated, Endangered and Threatened species that are located outside federal lands receive adequate protection. However, if that protection is not given, the federal government can intervene, using "safety-net" provisions of SARA, but only after consulting with the province or territory concerned and carrying out public consultations.

The ministers of the Environment and of Fisheries and Oceans can, under special circumstances, make exceptions to SARA. For example, they can issue a permit that would allow a qualified scientist to carry out a research project that benefits a listed species or is required to enhance its chances of survival in the wild. Exceptions can only be made if all reasonable alternatives have been considered and if the Minister can be assured that the survival or recovery of the species will not be jeopardized.

Recovery strategies and action plans for Extirpated, Endangered and Threatened species

If a wildlife species is added to the SARA List as an Extirpated, Endangered or Threatened species, the competent Minister must prepare a strategy for its recovery. Recovery strategies must be completed and made available on the SARA Public Registry, for public review, within one year for newly listed Endangered species and within two years for Threatened and Extirpated species. The Recovery Strategy addresses known threats to the species, identifies critical habitat to the extent possible and gaps in knowledge. It also sets a recovery goal. The Recovery Strategy is followed up with one or more Action Plans that identify ways to reduce threats to the species and protect its critical habitat, as well as other measures to be taken to implement the Recovery Strategy.

The Recovery Strategy and Actions Plans are prepared in cooperation and consultation with Wildlife Management Boards, Aboriginal communities that are directly affected by the Recovery Strategy, and jurisdictions such as provincial or territorial governments who are responsible for the management of the species. Landowners and others who are directly affected will also be consulted.

Management plans for Species of Special Concern

If a wildlife species is listed as a species of Special Concern, the responsible Minister must prepare a Management Plan. It must be posted on the SARA Public Registry within three years of the species being added to the SARA List. The Management Plan identifies conservation measures aimed at protecting the species and its habitat. A Management Plan is prepared in cooperation with groups directly affected by the plans, including Wildlife Management Boards and Aboriginal organizations. To the extent possible, landowners, land users and others who may be directly affected by the plans will also be consulted.

PUBLIC CONSULTATION

Why are we having these consultations?

Before the Minister of the Environment makes a recommendation to GIC about whether to add a species to the SARA List, he or she will consider the balance between the social and economic benefits and costs associated with adding the species to the SARA List and the potential consequences for the species and Canadians of not adding it. The Government will meet with wildlife management boards, Aboriginal groups or organizations and other members of the public who have either a direct interest in the species under consideration or wish to comment on the issue. This includes – but is not limited to – landowners, land users, non-government environmental organizations, industries and industry groups. This consultation workbook is another way in which you can let us know what you think.

Comments received from Canadians will be carefully reviewed, evaluated and documented in a Regulatory Impact Analysis Statement (RIAS). The RIAS is an important part of the federal government's regulatory process. In addition, a draft Order (an instrument that serves notice of a decision taken by the executive arm of government) proposing to add the species to the SARA List is prepared. This draft Order along with the RIAS will be published in the Canada Gazette Part I for a period of time to allow Canadians another opportunity to comment. The Minister of the Environment will take into consideration all received comments before recommending to the GIC whether to add the species to the SARA List or not. The GIC's decision will be published in the Canada Gazette Part II and made available on the SARA Public Registry.

Invitation to submit comments

Consultations concerning adding species to the SARA List are part of the Government's commitment to encourage public participation in programs designed to protect Canadian plants and animals and their habitat. Three aquatic species – shortnose cisco, black redhorse, and kiyi (Upper Great Lakes population) - have been recently reassessed by COSEWIC as species at risk and are being considered for addition to the SARA List. We welcome your comments about whether these fish populations should be added to the SARA List.

A questionnaire has been provided near the end of this workbook. Please fill it out and mail your answers and comments to

Central & Arctic Region SARA Coordinator Freshwater Institute Fisheries & Oceans Canada 501 University Avenue Winnipeg MB R3T 2N6

or

fwisar@dfo-mpo.gc.ca

The deadline for submission of comments is March 31, 2006.

SARA PUBLIC REGISTRY

The SARA Public Registry, available on the Internet, is a complete source of information on topics covered by the Act and offers access to public records concerning the administration of SARA. It is a key instrument that allows the government to respect its commitment to support public contribution in the environmental decision-making process. The Public Registry can be found at the following address:

http://www.sararegistry.gc.ca

PART 2: INFORMATION ABOUT THE SPECIES

Shortnose cisco

Status: Endangered

Last Examination by COSEWIC: May 2005

Biology

The shortnose cisco was endemic to the Great Lakes. It can be distinguished from other cisco species found in these lakes by the distinctive dark colouration of the snout.

Freshwater shrimps were the main prey items in lakes Huron and Ontario.

Spawning occurred from April to June at depth of 52-146 m. Age of maturity was reported as 2+ to 3+ years in Lake Michigan. Maximum known age is 11 years for females and 9 years for males. Maximum known length and weight is 265 mm in total length and 420 g.

Where is this fish found?

The shortnose cisco was endemic to lakes Huron, Michigan and Ontario. As it was last recorded in Lake Huron in 1985, Lake Michigan in 1982 and Lake Ontario in 1964, it might well be extinct.

The shortnose cisco was reported at depths ranging from 22 m to 146 m.

How many fish are there?

There are no known extant populations.

Threats to the population

Overfishing by the commercial deepwater cisco fishery (commonly known as the "chub fishery") is the likely cause for the decline of the shortnose cisco. Competition with, or predation by, introduced fish species may also have contributed to the decline of remnant populations

COSEWIC Reason for Designation:

Endemic to three of the Great Lakes, this species was last recorded in Lake Michigan in 1982, in Lake Huron in 1985, and in Lake Ontario in 1964. Although it has probably disappeared throughout its range, searches for this species have not been extensive enough to declare this species extinct. The species' apparent demise is suspected to be the result of commercial overfishing and possibly competition or predation from introduced species.

What will happen if this population is added to the SARA List?

- If listed, general prohibitions under SARA would come into effect making it unlawful to kill, harm, harass, capture or take individuals of this species
- Under SARA, a recovery strategy must be developed within one year of the shortnose cisco being listed

Black redhorse

Status: Threatened

Last Examination by COSEWIC: May 2005

Biology

The black redhorse is a sucker that can be distinguished from other redhorse species by a combination of tail colour, shape and contours of the lips, and the number of scales on the lateral line.

The black redhorse is a bottom feeder using the grazing and picking method to feed mostly on crustaceans and insects. Young black redhorse, less than 65 mm in length, are thought to feed mainly on minute plant and animal material.

Black redhorse spawns, in spring, in riffle habitats over small cobbles at water temperatures ranging from 13-21°C. During spawning, males exhibits colouration of the body and have tubercles on their anal and caudal fins while females show little or no colour. Lengths of fry at emergence range between 8.2 and 9.1 mm. In the Grand River, youngest mature females were 3 and males were 4 years of age. Maximum known age is 16 years and maximum known length is 658 mm total length and weight of 3200g.

Where is this fish found?

In Canada, the black redhorse is found only in southwestern Ontario. It occurs in drainages of Lake Erie (Grand River watershed); Lake St. Clair (Thames River watershed); Lake Huron (Bayfield River, Maitland River and the Ausable River watersheds); and western Lake Ontario (Spencer Creek watershed.)

Black redhorse general inhabits moderately sized, cool, clear streams. They prefer pools in summer and move into deeper pools in winter.

How many fish are there?

Despite extensive recent sampling, population sizes at all locations are unknown.

Threats to the population

It is likely impacted by changes in water quality and quantity related to agriculture, urbanization, dams and impoundments. Difficulty in identification and recreational bycatch together may also impact populations.

COSEWIC Reason for Designation:

A freshwater fish with a very small, highly fragmented distribution and area of occupancy, as well as restricted spawning habitat preferences. Native populations are found in only 5 Ontario watersheds in areas heavily impacted by urbanization and agriculture. It is at risk of habitat loss and degradation as a result of increased siltation and turbidity. Dams may adversely affect flow regimes and have fragmented populations in the two major rivers where this species occurs.

What would happen if this species is added to the SARA List?

- If listed, general prohibitions under SARA would come into effect making it unlawful to kill, harm, harass, capture or take individuals of this species
- Under SARA, a recovery strategy must be developed within four years of the black redhorse being listed
- The black redhorse is included in the Ausable River, Thames River and Grand River ecosystem recovery strategies. These strategies are in the process of being reviewed
- Plans for the black redhorse under the Ausable River Recovery Strategy include research into the distribution, abundance and identification of critical habitat
- Plans for the black redhorse under the Grand River Recovery Strategy include research to identify critical habitat, develop and implement programs to protect known habitats, facilitate migration, protect from harvest, monitor known populations and their habitats, stewardship and awareness and community outreach
- Plans for black redhorse under the Thames River Recovery Strategy include research into its distribution, abundance and genetics, identification of critical habitat, and awareness and community outreach programs

Kiyi (Upper Great Lakes population)

Status: Special Concern

Last Examination by COSEWIC: May 2005

Biology

The kiyi is endemic to the Great Lakes and can be distinguished from other cisco species found in these lakes by its unique combination of large eyes and long paired fins.

Diet of kiyi in lakes Huron and Ontario consisted mainly of small freshwater shrimps.

Spawning occurs from September to January at depths of 106-165 m. Age of maturity is attained at 2+ to 3+ years old in Lake Michigan and minimum size at maturity is 132 mm total length. Maximum known age is 10+ years for females and 7+ years for males. Maximum known length is 250 mm total length.

Where is this fish found?

The kiyi is endemic to all the Laurentian Great Lakes of North America except Lake Erie. In Canada, the kiyi is known from lakes Huron, Ontario and Superior. It is believed to be currently extant only in Lake Superior.

The kiyi prefers the deepest parts of lakes where it is clear, poorly lit and cold. It is rarely collected in waters less than 108 m deep and has been reported at depths ranging from 35 m to 200 m.

How many fish are there?

Recent surveys (2000-01) suggest that there are between 22 and 330 tonnes of kiyi found in the deepest parts of Lake Superior.

Threats to the population

Commercial overfishing was likely the cause of decline of the kiyi in the lakes Huron, Michigan and Ontario. Competition with, or predation by, introduced fish species may also have contributed to the decline of remnant populations. However, these threats are not currently significant in Lake Superior where the only extant population remains.

COSEWIC Reason for Designation:

Currently found only in Lake Superior, the subspecies has been extirpated from lakes Huron and Michigan, as the result of a complex of factors, which included exploitation and introduced exotic species. The extirpation in Lake Huron and Michigan occurred more than three generations in the past. The remaining population in Lake Superior appears to be stable, and supports a small, regulated fishery. Other threats such as the introduction of exotic species which have impacted populations in the lower Great Lakes do not appear to be important in Lake Superior.

What will happen if this population is added to the SARA List?

Under SARA, a management plan for the Kiyi must be developed within three years of species listing

PART 3: LET US KNOW WHAT YOU THINK

By answering the following questions you will help the federal government understand the benefits and impacts of adding the three aquatic species – shortnose cisco black redhorse and kiyi (Upper Great Lakes population) - to the SARA List.

Please fill out the questionnaire that follows and send us your answers either by mail

Central and Arctic Region SARA Coordinator Freshwater Institute Fisheries & Oceans Canada 501 University Avenue Winnipeg, Manitoba R3T 2N6

by fax (204) 983-5192

or by e-mail fwisar@dfo-mpo.gc.ca

The deadline for receiving comments is March 31, 2006.

For questions or comments concerning the *Species at Risk Act* or concerning this consultation process, please write to us at the address given above or call us at (204) 984-0599.

THANK YOU

Shortnose cisco questionnaire

Your name (optional): _____

Population of interest: shortnose cisco

What is your interest in shortnose cisco? (for example: fishing/hunting as a food source, tourism, guiding, research, etc.)

1) Are you in favour of the Government of Canada adding the shortnose cisco to the SARA List?

| | □ Yes | | No |
|-----|---------------------|----------|---|
| | Why? | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| 2a) | | | e learned about the <i>Species at Risk Act</i> , do you think adding ARA List would affect your activities? |
| | □ Yes | | No |
| b) | If "Yes", do you se | ee these | e effects as a cost or benefit to you, and in what way? |

| c) If you think adding shortnose cisco to the SARA List will have a negative | |
|--|----|
| effect on you or your activities, can you suggest ways to reduce the impact | t? |

3. Do you think you could contribute to the conservation of shortnose cisco as an individual or organization? Can you give a few examples of activities?

4. To be effective, the recovery or conservation of a species at risk must be a cooperative process that includes organizations and individuals with knowledge of

Shortnose cisco questionnaire

the population and the threats it faces. Please tell us which organizations or individuals you feel should be involved in the recovery or conservation of shortnose cisco?

| 5. | Please add any other comments or concerns (include additional sheets, if |
|----|--|
| | necessary). |

PLEASE SEND COMMENTS BY March 31, 2006

Black redhorse questionnaire

Your name (optional): _____

Population of interest: black redhorse

What is your interest in black redhorse? (for example: fishing/hunting as a food source, tourism, guiding, research, etc.)

| 1) | Are you in favour | of the Government of | of Canada | adding the | black redh | orse to the |
|----|-------------------|----------------------|-----------|------------|------------|-------------|
| | SARA List? | | | | | |

| □ Yes | No | |
|-------|----|--|
| Why? | | |

| 2a) | Based on what you have learned about the | Species | at Risk Act, | do you think | adding |
|-----|--|------------|--------------|--------------|--------|
| | black redhorse to the SARA List would affect | ct your ac | tivities? | | - |

| No |
|----|
| |

b) If "Yes", do you see these effects as a cost or benefit to you, and in what way?

| c) If you think adding black redhorse to the SARA List will have a negative | |
|---|---|
| effect on you or your activities, can you suggest ways to reduce the impact | ? |

3. Do you think you could contribute to the conservation of black redhorse as an individual or organization? Can you give a few examples of activities?

4. To be effective, the recovery or conservation of a species at risk must be a cooperative process that includes organizations and individuals with knowledge of the population and the threats it faces. Please tell us which organizations or individuals you feel should be involved in the recovery or conservation of black redhorse?

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

PLEASE SEND COMMENTS BY March 31, 2006

| Kiyi (Upper Great Lakes population) questionnaire |
|--|
| Your name (optional): |
| Population of interest: kiyi (Upper Great Lakes population) |
| What is your interest in kiyi? (for example: fishing/hunting as a food source, tourism, guiding, research, etc.) |
| Are you in favour of the Government of Canada adding the kiyi to the SARA List? Yes No Why? |
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| |
| 2a) Based on what you have learned about the <i>Species at Risk Act</i>, do you think adding kiyi to the SARA List would affect your activities? |
| |
| b) If "Yes", do you see these effects as a cost or benefit to you, and in what way? |
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| |

| c) If you think adding kiyi to the SARA List will have a negative effect on you or your activities, can you suggest ways to reduce the impact? |
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| 3. Do you think you could contribute to the conservation of kiyi as an individual or organization? Can you give a few examples of activities? |
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4. To be effective, the recovery or conservation of a species at risk must be a cooperative process that includes organizations and individuals with knowledge of the population and the threats it faces. Please tell us which organizations or individuals you feel should be involved in the recovery or conservation of kiyi?

| 5. | Please add any other comments or concerns (include additional sheets, if necessary). |
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PLEASE SEND COMMENTS BY March 31, 2006