



Ray-finned Fishes

Round Whitefish

Prosopium cylindraceum

Priority 1 Species of Greatest Conservation Need (SGCN)

Class: Ray-finned Fishes (*Actinopterygii*)

Order: Salmon, Trout, And Whitefish (*Salmoniformes*)

Family: Salmonids (*Salmonidae*)



General comments:

Round Whitefish (*Prosopium cylindraceum*) are native to northern cold-water lakes and are historically found in select Maine waters. Additional information can be found through the Maine Department of Inland Fisheries and Wildlife's species profile. Conservation concerns include limited distribution and habitat vulnerability.

Species Conservation Range Maps:

Town Map: [Prosopium cylindraceum_Towns.pdf](#)

Subwatershed Map: [Prosopium cylindraceum_HUC12.pdf](#)

SGCN Priority Ranking - Designation Criteria:

High Climate Change Vulnerability:	Vulnerability: 3, Confidence: High, Reviewers: Decided in Workshop (W)
High Regional Conservation Priority:	Northeast Regional Synthesis (RSGCN): Responsibility: High, Concern: High

Professional Discretion:

Current criteria ranked *Prosopium cylindraceum* as SGCN priority 2, however, species should qualify as SGCN priority 1 based on professional discretion.

Justification: Kennebec population decline - what about others?

Habitat Associations:

Formation: Freshwater Aquatic

Macrogroup: Lentic

* Primary Habitat	Habitat System: Deep Littoral and Mixed Habitat Lakes
* Primary Habitat	Habitat System: Deep Pelagic Lakes
	Habitat System: Lakes without Depth Data <i>Migration corridor or seasonal habitat use</i>
	Habitat System: Shallow and Intermediate Depth Mixed Habitat Lakes
* Primary Habitat	Habitat System: Shallow and Intermediate Depth Pelagic Lakes

Macrogroup: Lotic

	Habitat System: Transitional Small and Medium Rivers
	Habitat System: Unknown Thermal Regime Small and Medium Rivers

Round Whitefish *Prosopium cylindraceum*

Priority 1 SGCN



Threats

Threat Priority Level based on Severity and Actionability		Moderate Severity		High Severity	
	Highly Actionable		Medium-High		High
	Moderately Actionable		Medium		Medium-High
	Actionable with Difficulty		Low		Low

IUCN Level 1 Threat Other Options

IUCN Level 2 Threat: Lack of knowledge

Severity: Moderate Severity

Actionability: Highly Actionable

Notes: Dedicate time and effort toward updating population status and distribution information.

IUCN Level 1 Threat Biological Resource Use

IUCN Level 2 Threat: Logging and Wood Harvesting

Severity: Moderate Severity

Actionability: Moderately Actionable

Notes: Excessive sedimentation due to run-off of commercial of commercial forest practices.

IUCN Level 1 Threat Pollution

IUCN Level 2 Threat: Agricultural and Forestry Effluents

Severity: Moderate Severity

Actionability: Moderately Actionable

Notes: Run-off from extensive forest spraying is a likely stressor, ex. Budworm mitigation

IUCN Level 1 Threat Climate Change and Severe Weather

IUCN Level 2 Threat: Changes in Temperature Regimes

Severity: Moderate Severity

Actionability: Actionable with Difficulty

Notes: The effects of thermal changes on round whitefish waters is not well known.

Round Whitefish *Prosopium cylindraceum*

Priority 1 SGCN



IUCN Level 1 Threat Invasive and Other Problematic Species, Genes and Diseases

IUCN Level 2 Threat: Invasive Non-native-Alien Species-Diseases

Severity: High Severity	Actionability: Actionable with Difficulty
--------------------------------	--

Notes: Poor competitors with large predatory fishes. MUS, PIK and black basses primarily.

IUCN Level 2 Threat: Problematic Native Species-Diseases

Severity: High Severity	Actionability: Actionable with Difficulty
--------------------------------	--

Notes: Poor competitors with large predatory fishes.

IUCN Level 1 Threat Natural Systems Modifications

IUCN Level 2 Threat: Dams and Water Management-Use

Severity: Moderate Severity	Actionability: Actionable with Difficulty
------------------------------------	--

Notes: Inappropriate water level management on lakes controlled by a dam.

IUCN Level 1 Threat Pollution

IUCN Level 2 Threat: Domestic and Urban Waste Water

Severity: Moderate Severity	Actionability: Actionable with Difficulty
------------------------------------	--

Notes: Residential development on whitefish lakes can affect water quality and contribute to excessive nutrient run-off.

Species Level Conservation Actions:

None. Only species specific conservation actions that address high (red) or medium-high (orange) priority threats are summarized here.

Conservation Actions Associated with the Whitefishes Guild:

Conservation Action	Category	Biological Priority	Type
Identify factors that have contributed to declining populations of lake and round whitefish.	Research	high	on-going

Round Whitefish *Prosopium cylindraceum*

Priority 1 SGCN

**Threat(s) Addressed By This Conservation Action**

- Agricultural and Forestry Effluents
- Lack of knowledge
- Fishing and Harvesting of Aquatic Resources
- Problematic Native Species-Diseases
- Problematic Species-Diseases of Unknown Origin
- Invasive Non-native-Alien Species-Diseases

Conservation Action	Category	Biological Priority	Type
Determine population abundance, habitat use, size and age structure and interaction with other fish species in representative waters	Research	critical	on-going

Threat(s) Addressed By This Conservation Action

- Lack of knowledge
- Dams and Water Management-Use
- Problematic Native Species-Diseases
- Problematic Species-Diseases of Unknown Origin
- Invasive Non-native-Alien Species-Diseases
- Habitat Shifting or Alteration
- Fishing and Harvesting of Aquatic Resources

Conservation Action	Category	Biological Priority	Type
Develop and implement rehabilitation programs for fisheries that have declined.	Species Management	critical	on-going

Threat(s) Addressed By This Conservation Action

- Problematic Species-Diseases of Unknown Origin
- Invasive Non-native-Alien Species-Diseases
- Dams and Water Management-Use
- Habitat Shifting or Alteration
- Lack of knowledge

Broad Taxonomic Group Conservation Actions:

Additional relevant conservation actions for this species are assigned within broader taxonomic groups in Maine's Wildlife Action Plan: Element 4.

Habitat Based Conservation Actions:

Additional conservation actions that may benefit habitat(s) associated with this species can be found in Maine's Wildlife Action Plan: Element 4. Click on the Habitat Grouping of interest to launch a habitat based report summarizing relevant conservation actions and associated SGCN.

Round Whitefish *Prosopium cylindraceum*

Priority 1 SGCN



The Wildlife Action Plan was developed through a lengthy participatory process with state agencies, targeted conservation partners, and the general public. The Plan is non-regulatory. The species, threats, and voluntary conservation actions identified in the Plan complement, but do not replace, existing work