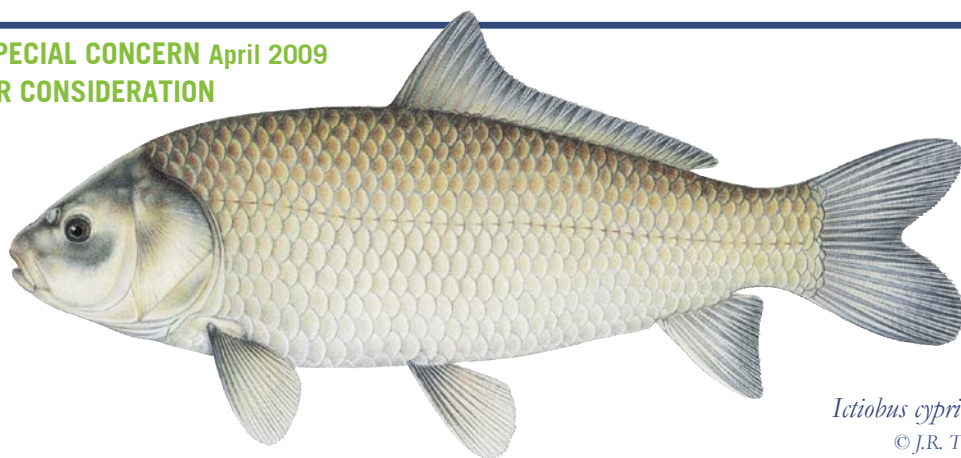


## Aquatic Species at Risk



# The Bigmouth Buffalo (Saskatchewan – Nelson River) a *Species at Risk* in the Prairie Provinces

COSEWIC Status – SPECIAL CONCERN April 2009  
SARA Status – UNDER CONSIDERATION



*Ictiobus cyprinellus*  
© J.R. Tomerelli

### General Description

The Bigmouth Buffalo (*Ictiobus cyprinellus*) is a member of the sucker family Catostomidae. It is 1 of 18 sucker species found in Canada. It has the following characteristics:

- Body is large, deep and laterally compressed;
- Caudal peduncle is very short and deep;
- Very large, oblique, terminal mouth with thin, faintly striated lips;
- Dorsal fin ray count at 24 to 32;
- Slate or olive bronze dorsal surface, olive yellow sides, and yellow and white belly;
- Light brownish-slate fins;
- Measures 254 to 457 mm in length; maximum reported length of 914 mm; and
- Maximum weight reported as 36 kg.

This species has been identified as Special Concern by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). It is currently being considered for listing under the federal *Species at Risk Act* (SARA).

Protection is currently afforded through the federal *Fisheries Act*. If listed under SARA, a management plan will be developed for this species.



## Distribution

The distribution of Bigmouth Buffalo is limited to central North America where it is found in the Mississippi drainage from the Gulf of Mexico northward to Minnesota and North Dakota, including the Missouri and Ohio rivers. In the Great Lakes basin, it has been reported in Lake Erie, Lake St. Clair, the Bay of Quinte, Hamilton Harbour and in several rivers including the Grand, Sydenham, Thames, Welland and Ausable. Within the Hudson Bay basin, Bigmouth Buffalo has been reported in the Red and Assiniboine rivers, as well as the south basin of Lake Winnipeg and Lake Manitoba (likely entering via the Assiniboine River floodway). This species is relatively abundant in the Qu'Appelle Lakes in Saskatchewan and has been reported in the North Saskatchewan River at Prince Albert.

## Habitat and Life History

The Bigmouth Buffalo has a preference for warm, turbid, highly eutrophic waters. It is usually found in schools near the middle of the water column as well as along the bottom of medium- to large-sized rivers of low gradient and moderate to slow current. Spring flooding is an important factor in successful reproduction as it provides access to spawning areas and activates spawning activity. Also required for spawning is an increase in water temperature. Bigmouth Buffalo spawn in groups. There is no nest preparation and eggs are scattered and abandoned. Lifespan may exceed 20 years of age.

## Diet

Using a highly adapted and size-selective filtering mechanism, the Bigmouth Buffalo feeds almost exclusively on invertebrates. They are also known to consume dead plant material and sediment. Unlike other suckers, the Bigmouth Buffalo has the ability to feed on the bottom as well as within the water column, giving it a wider range of prey sources.

## Threats

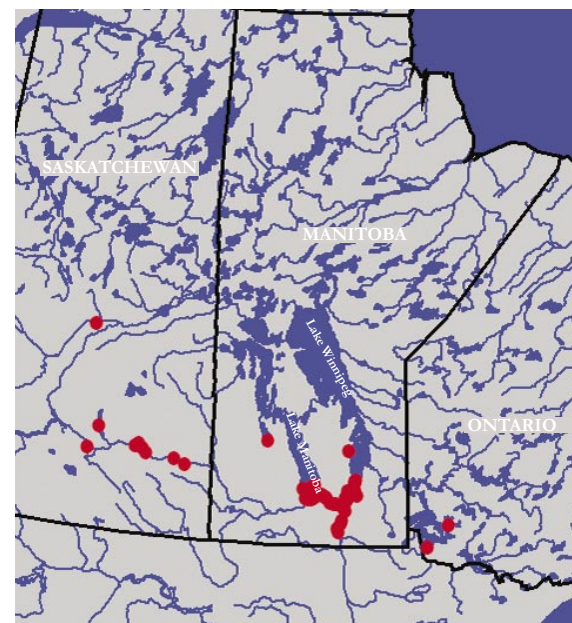
The loss and degradation of spawning habitat due to water management practices, particularly the regulation of water levels and channelization, have contributed to declines in Bigmouth Buffalo in the Qu'Appelle River basin. In addition, prolonged periods of drought, agricultural demands for water, and commercial exploitation have also reduced the population size. The genetic integrity of this fish could also be compromised through hybridization with other buffalo species.

## Similar Species

The Bigmouth Buffalo is easily distinguished from the Black (*I. niger*) and Smallmouth (*I. bubalus*) Buffalo by its large, oblique, terminal mouth, and from most other suckers by its long dorsal fin.

Text Sources: Scott & Crossman 1973; COSEWIC Status Report 2009.

## BIGMOUTH BUFFALO DISTRIBUTION - Prairies



For more information, visit the SARA Registry website at [www.SARAREgistry.gc.ca](http://www.SARAREgistry.gc.ca) and the Fisheries and Oceans Canada (DFO) website noted below.

*Cette publication est également disponible en français.*

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[www.aquaticspeciesatrisk.gc.ca](http://www.aquaticspeciesatrisk.gc.ca)

Section 32 (1) of the *Species at Risk Act* (SARA) states that “no person shall kill, harm, harass, capture or take an individual of a wildlife species that is listed as an extirpated species, an endangered species or a threatened species.”