

The Silver Chub... a *Species at Risk* in the Prairie Provinces

as designated under the federal Species at Risk Act



This species has been identified as Special Concern by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). It is listed under the federal *Species at Risk Act* (SARA) and was afforded protection under the SARA as of June 2004. Additional protection is afforded through the federal *Fisheries Act*. Under the SARA, a management plan must be developed for this species.

General Description

The Silver Chub (*Macrhybopsis storeriana*) is a member of the Minnow family (Cyprinidae) and has the following characteristics:

- Body is stout and thick
- Average length is 100 to 150 mm long; maximum fork length being 182 mm
- Well developed barbel usually present at posterior end of maxillary
- Eye diameter relatively large
- Overall colouration silvery with olive green on back and silvery white below, faint lateral band usually present
- Caudal fin distinctly forked, lightly pigmented except for lower three to four rays, which are white



Distribution

The Silver Chub lives in central North America, especially in the lakes of the Mississippi drainage area from the Gulf Coast north to the Laurentian Great Lakes, east to the foothills of the Appalachians and as far west as the Great Plains. In Manitoba, it occurs in the Red and Assiniboine River systems and in the south basin of Lake Winnipeg.

Habitat and Life History

Throughout its range, the Silver Chub is primarily found in streams and rivers. Substrate preferences range from gravel to silt. This species is likely intolerant of low dissolved oxygen levels and prefers temperatures between 4° and 10°C for most of the year and above 21°C for at least three months for normal growth and reproduction. It spawns in open water areas in May and June.

Diet

The Silver Chub feeds on aquatic insect larvae (particularly mayfly nymphs), *Daphnia*, molluscs (including *Dreissena* species) and small fishes.

Threats

The Silver Chub was considered common in Lake Erie until the 1950s. Its decline there coincided with declines in prey such as mayfly nymphs. In the 1950s and 1960s, excessive runoff of nutrients from urban and farmland pollution resulted in eutrophication of lakes, likely causing these declines. A stable population of Silver Chub, one of the few remaining in North America, occurs in the Assiniboine and Red Rivers in Manitoba.

Similar Species

This species is most like Hornyhead and River Chubs (*Nocomis biguttatus* and *N. micropogon*) but these species have smaller eyes and light brown colouration. Gravel Chub (*Erimystax x-punctatus*) have spotting over the body and less body depth.

Text Sources: Trautman 1981; Parker *et al.* 1987; Scott and Crossman 1998; COSEWIC Status Report 2001; Stewart and Watkinson 2004.

For more information, visit the SARA Registry Website at www.SARAregistry.gc.ca and the Fisheries and Oceans Canada (DFO) Website noted below.

SILVER CHUB DISTRIBUTION



Cette publication est également disponible en français.

DFO/2005-856

©Her Majesty the Queen in Right of Canada 2005 Cat. No. Fs22-4/36-2005E-PDF ISBN 0-662-41541-8



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."