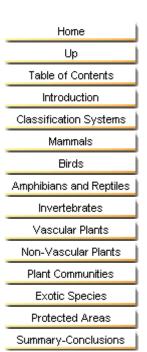
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# **Endangered Species and Spaces**



Appendix

# Freshwater Fishes Back Next

# 6.2 White Sturgeon: *Acipenser transmontanus* (Richardson)

Family: Acipenseridae - Sturgeons

#### **Status**

Global Rank: G4 Provincial Rank: S2 COSEWIC: Vulnerable

Provincial Listing: Red



## Distinguishing Features

The White Sturgeon is the largest North American sturgeon and probably the largest fish found in the fresh waters of Canada (Scott and Crossman, 1973). They may reach a maximum length of 20 feet (6.10m) and weigh up to 1800 pounds, although the largest authentic record is 1387 pounds and most weigh considerably less.

#### Distribution

Columbia Basin: Found in the mainstems of the Columbia and Kootenay Rivers, and in Kootenay, Arrow, Slocan and Duncan lakes. Prior to dam construction, they were found in the upper Columbia River, Trout Lake and Lake Revelstoke (Cannings and Ptolemy, 1998).

British Columbia: Within the remainder of B.C. they are found in the main Fraser, Nechako, and the Stuart rivers, and in some of the lower portions of larger tributaries of the Fraser such as the Bowron, McGregor and Harrison rivers. There are unconfirmed reports from the Kettle River, Christina Lake and the Kennedy and Cowichan rivers on Vancouver Island.

Global: Restricted to the Pacific watersheds of North America from the Aleutian Islands of Alaska to Monterey, California.

#### Habitat

White Sturgeon normally inhabit large, cool rivers or streams, although several populations are either restricted to large lakes or spend considerable time there.

They tend to prefer deeper water in winter than in summer. For spawning purposes they seem to require deep fast rapids, which may explain recruitment failures under regulated (dammed) water regimes.

#### **Threats**

Habitat alteration by hydroelectric dams and dyking is probably the greatest threat to the survival of white sturgeon in British Columbia. Dams have not only flooded spawning grounds and cut off migration routes, but

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also reduce flows while reservoirs are filled during the spring freshet. (Cannings and Ptolemy, 1998). Chemical contaminants may also have a deleterious effect on the survival and reproduction of white sturgeon.

## **Biology**

White Sturgeon can live to be over 100 years old. Long-lived fish such as the sturgeon tend to concentrate chemical contaminants such as copper, zinc and heavy metals. They tend to be inactive during the winter, spending their time in deeper water. Spawning occurs in spring in conjunction with elevated flows (Cannings and Ptolemy, 1998).



 $\begin{tabular}{ll} [$\underline{Mome}$ ] [$\underline{Up}$ ] [$\underline{Umatilla\ Dace}$ ] [$White\ Sturgeon\ ] [$\underline{Bull\ Trout}$ ] [$\underline{Chiselmouth}$ ] [$\underline{Mottled\ Sculpin}$ ] [$\underline{Shorthead\ Sculpin}$ ] [$\underline{Freswater\ Fish\ References}$ ] \\ \end{tabular}$