

MINNESOTA RIVER FISH TALES

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The Minnesota River begins at Big Stone Lake on the South Dakota-Minnesota border and flows a convoluted 330 miles to its confluence with the Mississippi in the Twin Cities (Minneapolis-St. Paul). There are dams in the headwaters, but the lower 250 miles remains a free-flowing river. The basin drains 17,000 square miles in the southern third of Minnesota and portions of Iowa and South Dakota (Figure 1). Before settlement, prairies and wetlands dominated the landscape, but the region has since been converted to intensive agriculture. Ditching and channelization of tributary streams is widespread throughout the basin.

Except in severe droughts, the waters of the main-stem Minnesota are always dark and muddy.

From this description, the Minnesota River does not sound like a mecca for fish collectors, but from 1990 through 1992 I conducted fish surveys as a member of a Minnesota Department of Natural Resources (MDNR) crew covering the entire basin and we found a few surprises. Overall, 70 species representing 18 families were found. Highlights include the American Eel, Largescale Stonerollers, Rosyface Shiners, Greater Redhorse, Banded Darters, and Rainbow Darters. These were all interesting and welcomed finds, but the best part of the job was searching through historical records and accounts. Information from several sources revealed the Minnesota had also been home to one former state record and seven rare fishes.

The Flathead Catfish is one of our largest, and some may say ugliest, fishes. The fish's name aptly describes its very wide, compressed forehead, which appears to have been flattened. For several years, the state-record Flathead Catfish had come from the Minnesota River near Henderson in 1930. The fish weighed an incredible 153 pounds, but because it had been speared, a revised hook-and-line rule forfeited the crown to another fish less than half its weight.

The Minnesota Department of Natural Resource's Heritage Program tracks the status of the native flora and fauna found in Minnesota. Rare species are reviewed for Endangered, Threatened, or Special Concern status. The Blue Catfish, Shovelnose Sturgeon, Lake Sturgeon, Paddlefish, and American Brook Lamprey have all been reported from the Minnesota River and designated Special Concern fishes.

The Blue Catfish is another large fish which closely resembles its much smaller and more common cousin, the Channel Catfish, but is blue in color and lacks spots. Both have forked tail fins and are handsomely streamlined in comparison to the very obese

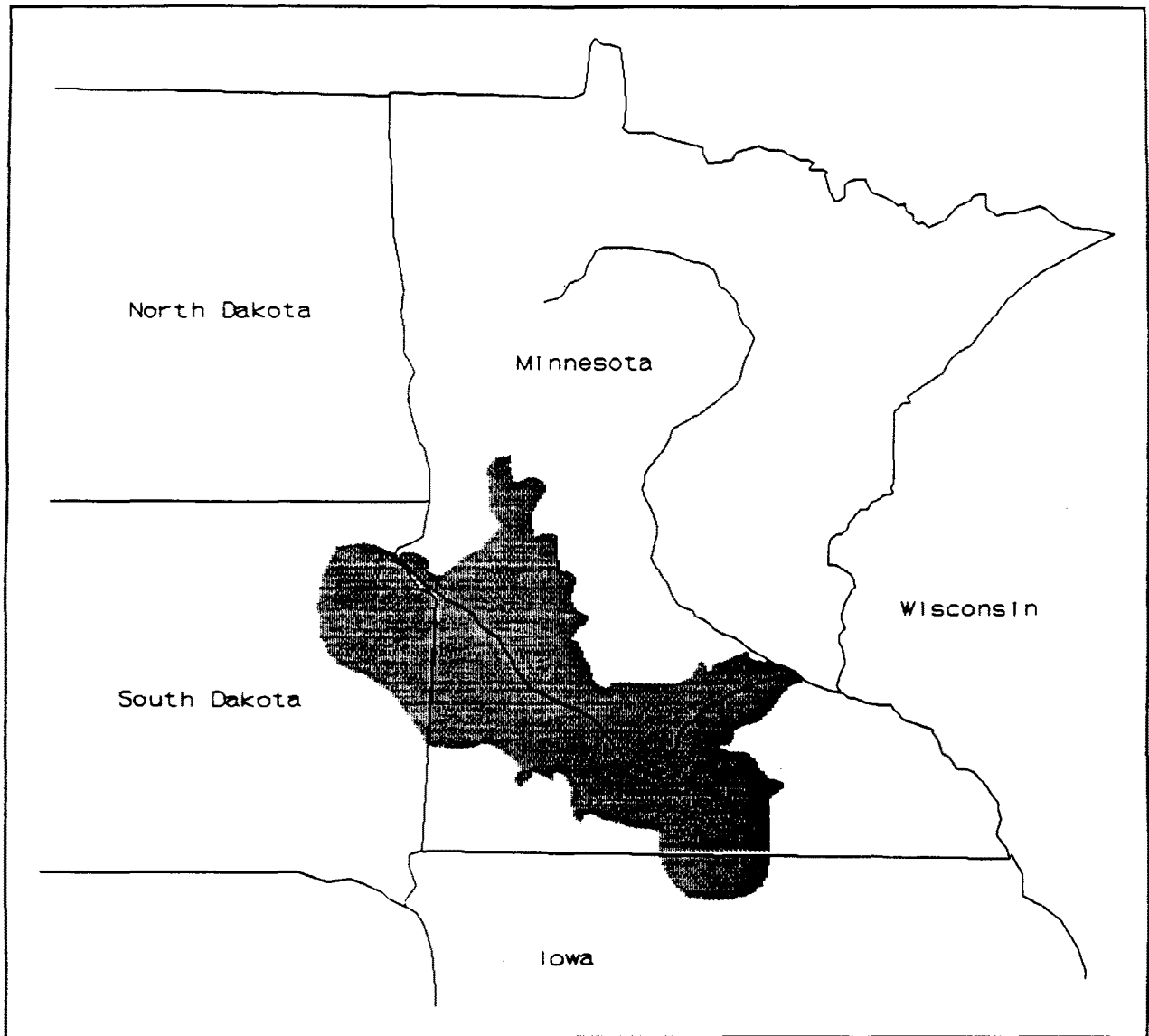


Figure 1. The Minnesota River Watershed.

Flathead Catfish. There is only one early written account of the Blue Catfish from the Minnesota River, near Hanley Falls. This fish must of been another impressive sight, weighing in at 160 pounds.

Both sturgeon and Paddlefish are extremely primitive fishes. Their skeletons are composed mostly of cartilage and have very few bones which is "standard equipment" in the "modern" fishes. These fishes are often referred to as living fossils because they have not changed significantly since the age of dinosaurs.

The Shovelnose is much smaller and more slender than the Lake Sturgeon and has a head resembling a spade. Although not common or abundant, the Shovelnose is still found from the mouth of Minnesota upstream to Granite Falls. The Lake Sturgeon is the largest of Minnesota's fishes. Another former state record came from Lake of the Woods in 1911, weighed 236 pounds, and was eight feet long. In the Minnesota basin, a dead "laker" weighing in the neighborhood of 100 pounds was found on the shores of Big Stone Lake in the 1940's, and a commercial fisherman netted several in the Minnesota River below Granite Falls in the 1950's.

The Paddlefish is yet another monster fish. A very old account from Iowa reported one weighing over 200 pounds. The body somewhat resembles a shark, but has a long nose that sometimes comprises one-third of the fish's total length. Judging by its overall appearance, most would assume this is a predatory fish, but actually it's a filter feeder and sifts zooplankton through fine screens in the same way the baleen whales of the oceans feed. This fish was also taken commercially below Granite Falls in the 1950's. In 1991, an angler caught one near Mankato, and in January 1993, Northern States Power Company informed the MDNR that a four-footer had been found in cooling waters removed from Minnesota River at their Black Dog Power Plant near Burnsville.

The American Brook Lamprey spends most of its life as a filter-feeding ammocoete. As an adult, it ceases feeding and differs from parasitic lampreys which have a sucking mouth equipped with functional teeth to pierce the "host" fish's flesh. There are accounts of thousands of American Brook Lampreys ascending the Credit River (Minnesota tributary) in Savage every May to spawn. The runs declined in the late 1930's and the last specimens were collected in the early 1940's. The suspected cause was urban sprawl from the Twin Cities.

Two additional fishes are also extremely rare, but recent collections will require a review of their official status. The Skipjack Herring ranges in size up to 15 inches. One reference compares its streamlined body to that of a "torpedo-boat chaser". The Skipjack historically made annual spawning migrations up the Minnesota River to Big Stone Lake, but have not been reported there since 1920. The migration runs sharply

declined and eventually ceased a few years after a large dam was completed on the Mississippi River near Keokuk, Iowa in 1913. No Skipjacks were reported from Minnesota waters until 1986, when they mysteriously reappeared in Lake Pepin (southeastern Minnesota), but they have since again vanished.

The Black Buffalo is one of the largest members of the sucker family, and fish over 70 pounds have been reported from Wisconsin. The body is very deep and robust, and with some imagination, the large head does resemble a Buffalo's. The Black Buffalo has long been suspected in Minnesota, but was not confirmed until 1990 when a fisherman caught one in the Cottonwood River at New Ulm. This fish, by default of being the only one, is also the state record.

Some species may likely never return to the basin, but with the public's increasing interest and concern in our rivers and water quality, I think we'll be getting more reports of Black Buffalo, Paddlefish, and who knows, maybe even the Skipjack Herring will someday make another unexplained appearance.

References

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3. Fishes of Wisconsin
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5. Fishing for Buffalo
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