

Since the late 1800s, there have been 104 different species of fishes found in the Minnesota River Basin. Over the past years, 12 of those species have not been seen for over 30 years and are believed to be extirpated (Schmidt and Proulx, 2007). The fishes live in a variety of habitats which include, “shallow lakes and low-gradient streams on the uplands flanking the Minnesota River valley, high-gradient streams where tributaries to the river descend into the valley, and the winding main stem of the Minnesota and floodplain lakes on the valley floor” (Schmidt and Proulx, 2007). Some fish biologists use Darters as indicators of water quality. The presence or absence of some species can tell experts about water quality. Historically 10 different species of Darters have been found in the Minnesota River Basin, but over the past few years, only 6 have been documented. The Crystal Darter has not been found since the 1960s, while the Johnny Darter is quite abundant. All Darters are about finger length or 2-3 inches.

To learn more about Darters identified in this fact sheet “Peterson Field Guides: A Field Guide to Freshwater Fishes” by Lawrence M. Page and Brooks M Burr. Bell Museum: Fishes of Minnesota [http://hatch.cehd.umn.edu/research/fish/fishes/Minnesota River Basin Data Center](http://hatch.cehd.umn.edu/research/fish/fishes/Minnesota%20River%20Basin%20Data%20Center) - <http://mrdbc.mnsu.edu/>



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Rainbow Darter - *Etheostoma caeruleum*

The Rainbow Darter is sensitive to pollution and silt. It spawns in clean gravel riffles from March to June and lives for about four years. Males can be identified by the 8-13 blue bands along the side of their body and anal fins with an orange-reddish center surrounded by blue.



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Iowa Darter - *Etheostoma exile*

Iowa Darters spawn from April to June in quiet shallow water, depositing eggs on the roots and stems of plants. They have 9-12 dark squarish blotches along their side which turn blue on males during spawning. They are mainly light brown with a white or cream colored underbelly and throat. There is a short lateral line which ends below the first dorsal fin and a distinct tear drop under the eye. Breeding males have a dark blue base to the dorsal fin, followed by a narrow clear band, a wide red-orange band, another thin clear band, and a thin blue band on the outer edge. Males also have some blue on the anal fin and the spaces between the blotches on their side with lower sides flushed with red. Females lack all reds but occasionally have some faint blue in the blotches along their side.



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River Darter - *Percina shumardi*

As the common name implies, River Darters almost always occur in large bodies of water. Unlike most other darters, it is also found in some reservoirs with slow-moving current. River darters have 10-15 dark vertical bars along its side which often fuse together near the tail. There are also 6-12 dark blotches or saddles down the center of their back. The first dorsal fin has a dark blotch at the front bottom edge and a larger blotch at the rear bottom edge on the membrane between the last three spines. River darters also have a well developed tear drop under the eye. They are typically darker brown or yellowish-brown on their back which fades to a light cream color on their belly.



Least Darter - *Etheostoma microperca*

Least Darters are one of the smallest species in the family reaching about 1.5 inches in length. They reach sexual maturity at one year and have a typical life span less than two years. They have an overall light olive brown body covered in darker brown speckles. The lateral line is often absent or very short when present. There are 7-15 dark blotches along their side which is wider than their height. They have a distinct tear drop under the eye and several dark lines radiating outward on the head and snout. Breeding males have a band of red spots in the middle of their first dorsal fin, over sized pelvic fins and orange or red pectoral, pelvic, and anal fins. Females look similar but lack color and have smaller pelvic fins.



Johnny Darter - *Etheostoma nigrum*

Johnny Darters provide food for sport fishes, but its populations are too small for it to be considered an important forage fish. One of the easiest darters to maintain in captivity, they are often used in behavioral studies. The common name was first used by Dr. David Starr Jordan and Dr. Barton Warren Evermann in 1896 in reference to a specimen in their aquarium that they referred to as "Little Johnny, our earliest aquarium friend." Johnny darters have a series of black "w" or "x" shapes scattered across their sides. They have a light brown color and many dark speckles on their dorsal fins and tail. Their snout does not stick out past the upper jaw. Breeding males can have an almost black head, fins, and several black bars along their side.



Slenderhead Darter - *Percina phoxocephala*

Populations have declined in some silty streams. The male Slenderhead Darter moves to spawning grounds in May and establishes a territory in swift shallow riffles over gravel. After spawning in May and June, it returns to deeper water. Slenderhead darters have a pointed snout and a rather long narrow body. They have 14-22 dark blotches down the center of their back and a row of 11-16 blotches down their sides that are taller than they are wide, connected by a thin lateral stripe. The first dorsal has a dark brown band near the base and an orange band near the outer edge. The second dorsal fin and tail have many small spots that often form rows. The other fins are transparent. Slenderheads are light tan with a cream belly. Breeding males can have a thicker and more intense orange band on the dorsal fin.



Fantail Darter - *Etheostoma flabellare*

A Fantail Darter spawns upside-down under flat rocks, which the male scrapes clean with the fleshy tips of its dorsal fin. After spawning, the male remains with eggs until they hatch. Fantail Darters have a straight forward pointing mouth and pointed snout. They have various shades of brown and 10-15 dark vertical bars along their sides. Fantail darters have small dark spots on their second dorsal and tail fins that form wavy lines. They have a faint tear drop under their eye. Breeding males often have a very dark colored head and very distinct vertical bars.



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Crystal Darter - *Crystallaria asprella*

Crystal Darters prefer clear to slightly turbid waters over sandy substrates. They are often found in moderate to strong currents in large rivers and occupy riffles, bars, and pools. Crystal Darters have an extremely slender body with a distinctly forked tail, pronounced snout, and translucent body. The back and upper sides are yellowish green with 3-4 broad saddle marks on the back. There are 10-12 oblong blotches along the sides. Crystal darters grow to about 5-6 inches in size.



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Banded Darter - *Sympetrum pedemontanum*

This darter spawns in riffles between April and June, depositing the eggs in the algae and moss growing on the surface of stones and boulders. It reaches maturity in one to two years and lives no longer than four years. Banded darters are rather short and stubby with a rusty red band at the base of their first dorsal fin. They have 4-7 darker saddle markings over their back and distinct teardrop marking under the eye. Breeding males have 8-13 bright green narrow vertical bands. Females have faint green bands.



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Blackside Darter - *Percina maculata*

Unlike most darters, the Blackside Darter swims in mid-depths during the day and rests on the bottom at night. The young feed on very small crustaceans. When they reach a length of 1.5-2.5", their diet changes to aquatic insects. This species lives up to four years. Blackside darters have a series of black blotches down their side that often form a lateral stripe. These blotches are never taller than they are wide. Blackside darters have a well developed tear drop marking under the eye and have a dark blotch in the center at the base of their tail. They are generally light brown and black only.



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Logperch Darter - *Percina caprodes*

Logperch is the most widespread Percina species, but it has disappeared from streams contaminated by silt and pollution. It feeds on aquatic insects, frequently using its long snout to flip stones in search of prey. Logperch are a pale yellow to olive color with numerous, narrow brown vertical bars on their sides. They usually also have a dusky bar beneath the eye and a small black spot at the base of the tail fin. They have a small mouth and a very pointed snout.

Photos courtesy of Minnesota DNR, wwwjic, Scott Kudelka, Ron Bolduan.

"Ask an Expert about the Minnesota River" project profiles scientists and citizens answering questions about the health of the Minnesota River. More answers to questions about the Minnesota River can be found at: mrbdc.mnsu.edu/learn

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