

LITTLE FISH OF KANSAS, part I

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(This article is adapted from a Kansas Wildlife article entitled "Little Fish." In the December AC, we published a report on KF&G's program to popularize native fish as aquarium specimens. Members can obtain a complete version of this article, illustrated with color photos, from Ken Brunson, Kansas Fish & Game, Box 54A, Rural Route 2, Pratt, Kansas 67124. AC is reprinting with permission from Mr. Brunson.)

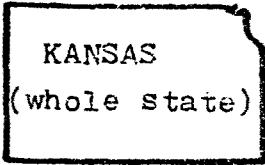
There are about 130 species of fish in Kansas, according to Dr. Frank Cross, University of Kansas, of which more than half can be considered small fish--less than eight inches adult length. Most of these species can be found in the large minnow family, which also includes the common carp and goldfish--both introduced species. Breaking these seventy or so species down, we find about twenty darters of the true perch family which also includes Walleye and the now famous Snail Darter. There are eight chubs besides the common Creek Chub, about twenty shiners, six madtoms that aren't really mad but look like small bullheads, a couple of topminnows, several other species of minnows closely associated with Fatheads (a common bait minnow), and an assortment of rather unique fish such as the Red-bellied Dace, Brook Silverside, and Banded Sculpin. Of course, all fish, even a ten-pound bass, start out small, so you may occasionally run into these infants of the fish world. Most of these Kansas fish are well adapted to streams and evolved in a natural plains setting devoid of the abundant lake- and pond-filled environment we know today.

The shiners are perhaps the best known group of minnows. Excepting the Golden Shiner (Notemigonus crysoleucas), these are all from one genus (Notropis) and include the Red Shiner, which is probably the most common fish in the state. The Topeka Shiner (Notropis topeka) is one of our state's threatened species and is running as a candidate for the state fish along with the Channel Catfish. There is a whole assortment of other less distinguished shiners--the Bigeye, Bigmouth, Sand, River, Ghost, Blacknose, and Bluntnose. With so many kinds in one group, it is sometimes difficult for even experts to tell which species they're looking at without the help of an identification key such as Fishes in Kansas by Dr. Frank Cross and Joseph T. Collins, published in 1975.

The darters are probably the most inconspicuous fish because they normally rest on sand or gravel bottoms of streams and are not easily captured with a seine. As their name implies, they dart about in quick movements interrupted by motionless rests on the stream bottom, perching on their front lower fins as if ready to pounce on any small morsel of food that may float by. Most darters are known to eat mainly small aquatic insect larvae. The species of this family display more brilliant colors than any other group of Kansas fishes. All the colors of

the rainbow can be found in the several members of this group in Kansas, including the Greenside, Banded, Speckled, Redfin, Arkansas, Orangethroat, and Fantail Darters.

Orangethroat Darter (Etheostoma spectabile)



It amazes me to continually encounter local residents who have fished a stream for years and have never seen Orangethroat Darters that occur quite commonly in these very waters. This is not so surprising, though, when you consider the habits of this fish. Despite its unique colors and form, it is not an easy fish to see or seine.

Like most other darters, the Orangethroat stays on the bottom, motionless, until it "darts" to catch food or escape predators. It perches on its front lower fins and can cock its head from side to side to watch for potential food and other distractions from its lower vantage point in the stream. The Orangethroat Darter is found nearly statewide and occurs in a variety of stream types, but is more common in smaller sand- or gravel-bottomed creeks.

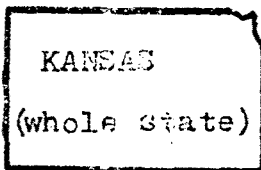
Arkansas Darter (Etheostoma cragini)



This Kansas threatened species is a rebel. It prefers not to rest on the bottom of streams, but is closely associated with aquatic plants-- particularly water cress and water primrose. In its primary range in southcentral Kansas, it is found almost exclusively in fairly clear, spring-fed creeks that have an abundant supply of the yellow-

flowered water primrose. In the aquarium, I have witnessed this fish resting in the branches of the primrose, waiting for food, while ignoring the more typical bottom sand and rocks preferred by the other darters, like the Orangethroat. As with other darters, the male Arkansas becomes much more brilliant during its spring breeding season, displaying a bright yellow-orange along its entire belly.

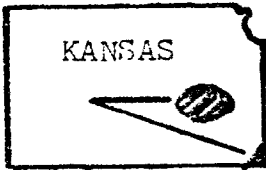
Red Shiner (Notropis lutrensis)



The Red Shiner is probably the most common fish in Kansas. It is found in both streams and slack waters of ponds and lakes. A very prolific species, it provides ample forage for a host of predatory fish including Largemouth Bass. As with many other fish, the Red Shiner has a sheaf of colloquial names. In at least the western part of the state, locals call

this minnow the "Redhorse," though it is probably more commonly known as just "Shiner." The "shiner" available in most bait shops is actually the Golden Shiner, and is not the same species. Red Shiners seem to be tolerant of a wide range of environmental stresses, and this, plus the fact that they spawn from spring to fall, accounts for their wide distribution. Their name is derived from the brilliant red color of the males' fins in late spring and summer as they "color up" to attract mates for their courtship activities. During this period, they also take on a light blue metallic sheen on their sides.

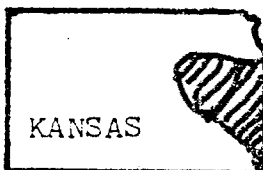
Duskystripe Shiner (Notropis pilsbryi)



Of all Kansas fish, the Duskystripe Shiner may undergo the most marked appearance change from its normal coloration to its spring breeding adornment. Most of the time, this fish is fairly drab, displaying only gray-olive and white colors along with its characteristic gold horizontal line about midway down its sides, but in

April or early May, the male changes into a spectacular suitor for the unaltered females. Anxious to compete aggressively for the lady shiners, the males turn crimson as they initiate spawning activities over large gravel riffles. As do many other species, the males develop tubercles or pointed bumps on their heads to help them fend off intruders to their territories. The Duskystripe Shiner is one of those Kansas fish that have an irregular distribution. They are found in Chase, Lyon, and Coffey counties in the Flint Hills, but also in Shoal Creek and Spring River in Cherokee County. It is not unusual to find more and different species of fish in the biologically rich portion of southeast Kansas, but occasionally a species found there may have a limited and isolated occurrence elsewhere in the state. This small fish is also a good representative of a class of animals biologists refer to as indicator species. It is usually found only in clear, relatively unpolluted water that flows permanently, thus "indicating" a healthy environment. When certain streams that are normally free of pollution become altered, or affected by contaminants, indicator species such as Duskystripe Shiners are the first fish to disappear.

Slender Madtom (Noturus exilis)



There is a group of small, bullhead-like fish in the catfish family that, when seined up by bait-seeking anglers, are quite commonly mistaken for young bullheads. These are the madtoms, of which the Slender Madtom is representative. It is hard to imagine that these fish, which rarely grow to

more than a few inches in length, are in the same family as the Blue Catfish (Ictalurus furcatus) and Flathead Catfish (Pylodictis olivaris), either of which, at adult size, could gulp a bucket full of madtoms at one feeding. The other madtoms include the

Stonecat (Noturus flavus) (the most common); the Tadpole (N. gyrinus); Brindled (N. miurus); Freckled (N. nocturnus); and Neosho Madtom (N. placidus), a Kansas endangered species. A peculiar feature of the madtoms is the mild irritant exuded by the spines on the side and back fins. This is not a toxic venom, but can cause the fleshy part of the hand between the thumb and index finger to ache noticeably after being punctured by the stiffened-spine tactic used by these small catfish when you're trying to coax them from net to hand to minnow bucket. Unlike some of the minnows, these fish retain about the same coloration throughout the year. Like his small cousins, the Slender Madtom is secretive, hiding in the rocks of riffles, coming out only to snatch an insect larva or other minute parcel of food.

TO BE CONTINUED

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