"NEW FRONTIERS"--A Year of Collecting in Kentucky by Doug Carpenter, Lexington, Kentucky

For the past ten years, I had kept primarily the darters found near home in Central Kentucky (Rainbow, Greenside, Fantail, Orangethroat, and Logperch), Longear Sunfish, and a few miscellaneous minnows. My only "exotic" fish had been Variegate and Blackfin Darters from the Red River (9h on the map, see pp. 14-15) and a gar from Obion Creek (1b) that was a gift. I knew that many other fish species lived in Kentucky, but had never tried very hard to locate them.

Then, early in 1988, I got a copy of a new reference book: <u>A Distributional Atlas of Kentucky Fishes</u> (see book review, AC, Feb. 88). It does not describe the fish, nor does it contain pictures or drawings, but it does a great job of telling you where the fish reside.

After studying the Atlas and consulting my road maps, I headed out on May 31 trying to find some new varieties of darters. The first stop was the Green River (6) directly below the dam forming the Green River Lake. I found few darters; the only notable one was a very small Gilt Darter in 4" water. Some Rosyface Shiners in brilliant colors were in a pool below a riffle, and large schools of 2"-long Northern Studfish were everywhere they could find still water. The Studfish would really put on a show, running and jumping in front of the seine, which made them very hard to capture. Many times they would jump over the net when cornered. The jumping has continued at home in the aquarium; a lid is a necessity.

Moving on to the headwaters of the Green River, I found an Orangefin Darter, three Slenderhead Darters, and a 12" Channel Catfish which gave me a good shower. Unfortunately, the Slenderhead Darters all had blackspot disease. I have since given them two baths with Aquatronics' blackspot control, but with no noticeable improvement.

Leaving there, I went to Russell Creek (6i), an easier place to seine. Kentucky Snubnose Darters were extremely abundant in the shallow water over gravel. A few Banded and Orangefin Darters, as well as three madtoms, were in 2"-deep water. Small Studfish were once again plentiful.

My next trip was on July 2, during our severe drought. The Arrow Darter was my main objective. I searched several small, polluted tributaries of the Cumberland River before finally finding one small Arrow Darter, and very little else, in Wolf Creek (3m). I caught three more small Arrow Darters from the considerably cleaner Poplar Creek (3n). Another small tributary, Youngs Creek (3p), had a few Stripetail Darters. Further west along the Cumberland River, you can escape the silt and pollution from the coal mines. Buck Creek (3e) is a moderately sized stream that is mainly slabrock. Bluebreast and Bloodfin Darters were both fairly plentiful in what was left of the riffles from the drought. In a still pool of a small stream just off Buck Creek, I caught three Striped Darters. They were another of the fish I was particularly interested in finding. In many places I saw farmers bulldozing out pools in the streams to provide water for their livestock during future dry spells.

The adjacent Pittman Creek (3d) also had Bluebreast and Bloodfin as well as Redline Darters. Then I was extremely surprised by a 5" Northern Studfish. Unlike the gray 2" fish, this one was bright blue with orange lines. Do they have to be this large to have color? Also, the strangely shaped mouth was more apparent on the larger fish. I did not know what it was until returning home.

On July 8, I went back to some tributaries of the upper Green River. I found Teardrop Darters in both Brush (6n) and Trace Creeks (6m) along with one female Speckled Darter. Kentucky Snubnose and Orangefin Darters were also present. Both gravel creeks were nearly dry.

Next came a trip to Western Kentucky on September 26. Here the Cumberland River flows north out of Tennessee and enters the Ohio River. Slabrock and Fringed Darters were fairly plentiful in the slow-moving pools of Ferguson Creek (3q) before it enters the Cumberland River. I was mainly looking for the Slabrock Darter and did not realize I had another species. They do not look much alike in a tank, but they do in a net.

In the Clarks River (2a), I caught three very small Bluntnose Darters and one unidentified snubnose darter that slipped away before I could get it into the bucket. When I returned home, I made the mistake of putting the Bluntnose Darters in the same tank with two large Bluebreast Darters. Two of the little darters were evidently eaten, and I did not see the third until I'd removed the Bluebreasts.

Another stop was at Skinframe Creek, a small, deep, very cold tributary of Livingston Creek (3r). Besides catching and releasing some of the stocked Rainbow Trout I caught Pirate Perch, crappie, Grass Pickerel, and Banded Sculpin. The Pirate Perch are so ugly that they're pretty; however, they are not very active in the tank. They remain motionless in one spot, and will not move much even to eat live food. I had never encountered problems with cannibalism in a transportation bucket before now, but I lost a Pirate Perch and some small sculpins to a 5"-inch-long sculpin during a onehour ride. We have sculpins near home, but I have not had much luck keeping them.



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RIVER SYSTEMS

1. Mississippi River a. Mayfield Creek

b. Obion Creek

c. Bayou du Chien

d. Terrapin Creek (Obion River)

2. Tennessee River

a. Clarks River

b. Blood River

3. Cumberland River

a. Little River

b. Red River

c. Fishing Creek

d. Pitman Creek e. Buck Creek

L. Big South Fork

g. Little South Fork

h. Rockcastle River

i. Laurel River

j. Poor Fork

k. Martins Fork

1. Cumberland Falls

4. Tradewater River

a. Clear Creek

5. Ohio River

a. Massac Creek

b. Highland Creek

c. Sinking Creek

d. Kinniconick Creek

e. Tygarts Creek

f. Little Sandy River

6. Green River

a. Panther Creek b. Pond River

c. Cypress Creek

d. Rough River

e. Mud River

Bear Creek f.

g. Nolin River

h. Little Barren River

Russell Creek í.

j. Pitman Creek

k. Robinson Creek

1. Casey Creek

7. Barren River

a. Gasper River

b. Drakes Creek

c. Trammel Fork

d. Bays Fork

e. Skeggs Creek

f. Beaver Creek

8. Salt River

a. Floyds Fork

b. Brashears Creek

c. Rolling Fork

d. Beech Fork

e. Chaplin River

9. Kentucky River a. Little Kentucky River

b. Eagle Creek

Elkhorn Creek c.

d. Dix River

e. Hickman Creek

f. Paint Lick Creek

g. Silver Creek

h. Red River

Station Camp Creek i.

Sturgeon Creek j.

k. South Fork

1. Red Bird River

m. Goose Creek

n. Middle Fork

o. North Fork

p. Quicksand Creek

q. Troublesome Creek

10. Licking River

a. South Fork

b. North Fork

c. Fleming Creek

d. Fox Creek e. Slate Creek

f. Triplett Creek

11. Big Sandy River

a. Blaine Creek

b. Levisa Fork

Johns Creek c.

d. Beaver Creek

e. Russell Fork

f. Tug Fork

B. Lake Barkley С. Lake Beshear D. Lake Malone E. Rough River Lake F. Nolin Lake G. Barren River Lake Η. Green River Lake I. Taylorsville Lake J. Herrington Lake Κ. Lake Cumberland L. Dale Hollow Lake M. Laurel River Lake N. Cave Run Lake O. Buckhorn Lake P. Carr Fork Lake Q. Martins Fork Lake R. Grayson Lake

RESERVOIRS

A. Kentucky Lake

S. Paintsville Lake

T. Dewey Lake

U. Fishtrap Lake

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The last stop was at Ward Creek (4b) before it runs into the Tradewater River. The only darters I could find here were fairly small Spottail Darters, but it was full of 3"-long Blackspotted Topminnows. These were very similar to the Blackstripe Topminnows I could find near home, except they were much larger.

On November 10, I made a return visit to Western Kentucky. Unfortunately, the creeks were up and muddy from an inch of rain early that morning, but after a 250-mile drive, you need to go ahead and try. The first step was at Clarks River, which had more current than any of the other places visited. Even in the poor conditions, I found some Bluntnose Darters large enough not to be eaten, two Blackside Darters, and several Orangespotted Sunfish. Then, trying to cross the river, I managed to collect two gallons of water in my waders. Clarks River was well remembered for the rest of the day.

Next was Beechy Creek, a tributary of the Blood River (2b). In a shallow gravel section, there were more Orangespotted Sunfish and a female Lollypop Darter. Again the male Lollypop was one I particularly wanted but could not Then in a deeper, muddy section, I caught three small find. Cypress Darters. Mayfield Creek (la) was more of the same deep mud habitat. This was, more or less, a 4%'-deep channel with steep, sloping mud banks. Getting in was easy--slide; but getting out was a problem. It was also difficult to seine by myself. I probably caught twenty Slough Darters before finally managing to get five into the bucket. It was hard to find a place to set the bucket. I could raise the seine out of the water (nearly face level), but with no place to set the net the fish would slip through the mesh before reaching the bucket. The steep mud banks were the main obstacle.

I went on to Obion Creek (1b) and Bayou de Chien (1c), but channelization has made them difficult to seine. According to the Atlas, these both held a great many species not found elsewhere in Kentucky, but they were too much for me that day; I will have to try again in the future.

My final stop was Cypress Creek (2c), a tributary of the Tennessee River shortly before it in turn empties into the Ohio. It was hard to find any life at all here, but I finally caught a small sunfish called a Flier. One interesting characteristic is its round, instead of oval, shape. This one also has an orange spot at the base of its dorsal fin which is not described in my book. All of this collecting during 1988 has put a serious strain on my house. I started the year with three aquariums totalling eighty gallons. Now I have been forced to increase to eight crowded tanks totalling one hundred sixty gallons. More would be nice, but I cannot find the money or the space.

This year I have brought home thirty different species from Kentucky that I had never kept before. I had kept thirty species that I know of prior to this year. Due to both a lack of space and a lack of interest in breeding fishes, generally I am not interested in keeping the less-colorful female darters; I like to keep three males if possible.

Several times, after coming home from collecting, I have been surprised by a species I was unaware I had. Right now I have an unidentified fish resembling a Bluntnose Darter in shape but with broad, dark vertical bands. Because I thought I was collecting Bluntnose Darters from three different river systems on the same trip using the same bucket for all the small darters, I do not know where it came from.

It is exciting to go to a new site and be able to find the new, intriguing species you are expecting from looking at the distribution maps. Of course, I also went to at least 20 "dry holes." Further, this article has omitted describing some of the duplicative catches of new species and catches of the more common species to which I had already been exposed. Each new fish seems to have some unique color, shape, habit, or other characteristic that makes it particularly interesting. I have probably caught several different shiner species, but since my main interests are darters and sunfish, I have only kept a few shiners that appealed to me, and have not yet taken the time to learn about them.

Now I am trying to figure out where to put the Speckled, Lollypop, Harlequin, Saddleback, and Tippecanoe Darters that will, I hope, be caught next year.

NOTE:Nomenclature from Brooks M. Burr & Melvin R. Warren, Jr., <u>A Distributional Atlas of Kentucky Fishes</u>, Kentucky Nature Preserves Commission Scientific and Technical Series Number 4 (Frankfort, Ky.: Kentucky Nature Preserves Commission), 1986, \$10. Make checks payable to Kentucky Nature Preserves Commission, 407 Broadway, Frankfort, KY 40601. Species mentioned in this article not widely published elsewhere, as yet, include: BLACKFIN DARTER, undescribed <u>Percina</u>; BLOODFIN DARTER, <u>Etheostoma</u> <u>sanguifluum</u>; FRINGED DARTER, <u>Etheostoma</u> crossopterum. Other names available through other standard reference works (Atlas, <u>Handbook of Darters</u>, <u>The American Darters</u>, state books, etc.).

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