

**Final Report:  
Year One and Two  
Of  
A Three Year Fish Faunal Survey  
Of Arkansas' Large Rivers**

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## **Introduction**

The purpose of this study was to sample areas or reaches of Arkansas' large rivers to find out what fish species inhabit those areas. Little sampling has been conducted on large rivers in Arkansas and continual changes in these systems is a cause for concern for native fish fauna. This report is an interim report summarizing capture of fishes in river reaches sampled during the first two years of a three year investigation of fish distribution in Arkansas' large river systems.

## **Materials and Methods**

Sites selected were sampled with a variety of gear types. We employed hoop nets that were four feet in diameter with 1.5 inch bar mesh. Experimental gill nets were also used in some cases where backwaters existed on some rivers, especially the Mississippi. Mini-fyke nets were used along shorelines in a variety of habitats and seining was used to sample areas that were relatively free of debris. Small trawls were used to sample open water habitats where possible. Six trawl hauls per reach was set as a goal. We had a goal of obtaining ten seine hauls in a river reach, usually conducting seine hauls in pairs.

Trawls were done in a manner to get fairly close to shorelines and then in the same areas, attempt to trawl farther out in the stream. In a few instances, trawl hauls were virtually impossible to make due to debris such as tree limbs. We also wanted to obtain a total of fourteen hoop net nights per river reach.

At each netting location or sampling activity, GPS coordinates were recorded so that data can be mapped in Arcview or similar programs. Depth, substrate, velocity, temperature, turbidity and habitat descriptors were recorded at each sampling location. Habitat was described by using a combination of codes that reflected the general habitat where sampling was conducted. Primary codes that were utilized were as follows: 1) sloping sandbar; 2) behind sandbar; 3) vertical bank; 4) eddy; 5) open stream; 6) sloping bottom; 7) weirs, jetties; 8) riprap; 9) backwater; 10) confluence; 11) vegetation; 12) gravel bar; 13) mud flat; 14) mud sloping bank; 15) side channel. Several codes may have been used at one location to adequately describe a sample location. Additionally notes were taken if sampling was on an inside bend, outside bend, etc. and will be used in future data analysis.

Substrates were examined either directly or in combination by dragging a chain from the boat and observing vibration in deeper waters. Substrate was coded as follows: 1) silt; 2) mud/clay; 3) sand; 4) gravel/cobble; 5) boulder; 6) bedrock. Most substrates sampled weir one of the first three with occasional gravel encountered. If sampling occurred directly on riprap, it was coded as 5.

Fish lengths were recorded and weights were recorded on larger fishes unless sometimes when caught in mini fyke nets. Ranges of weight in tables located in results often do not show ranges if some data were missing on individuals. However, excel data sheets are maintained that have lengths and weights for most specimens and will be farther analyzed at the project's conclusion.

## **Study Areas**

The sampling will occur over a three year period (contract years). Fourteen river reaches are sampled under each contract. This report lists fishes caught, locations, size of fishes, and general habitat conditions for each area sampled.

Areas sampled included the Red River of Arkansas. Two areas were the focus of our sampling efforts. The area above and below Garland City constituted one of the sampling reaches. The second area sampled was above and below the confluence of the Little River and the Red River. We also included some sampling data in this report that was collected in these areas as part of a study conducted on blue suckers which overlapped this survey, as the data on all fish captures have not been reported elsewhere.

The Arkansas River was sampled in Pool 2 above the hydropower dam on the Arkansas River below Pendleton. The river was also sampled in from the hydropower dam to the confluence with the Mississippi River.

The Ouachita River was sampled below Felsenthal Lock and Dam to the Louisiana border. One area of emphasis included the confluence of Mossy Creek with the Ouachita River. This area was sampled with hoop nets on three occasions in addition to sampling in the Ouachita River main stem.

The Saint Francis River was sampled above Lake City, immediately below Lake City, at Parkin, in the vicinity of Huxtabell pumping station, and in the lower reach below the confluence of the old and new river channels to the mouth. This resulted in five sample reaches on the St. Francis River.

The Black River was sampled at the Arkansas Game and Fish Commission Coffey Access area, downstream above Elgin's Ferry, below Elgin's Ferry, and on two occasions in the lower reach down to the confluence with the White River. This resulted in five sample reaches on the Black River with the latter being two of those samples.

The Mississippi River was sampled at Osceola (above the San Suis Access Area) on two occasions. The river was sampled twice above the Confluence of the St. Francis River, two times below the confluence of the St. Francis River downstream to Helena, two reaches below Helena, once at Arkansas City, and again near Big Island in the chute area around the island itself. We also participated in samples above Osceola with a multi-organizational team however the results of that effort are not included in this report.

The White River was sampled at New Port below the confluence with the Black River. It was also sampled on two occasions below Clarendon.

This resulted in twenty-eight reaches being sampled in the first two years of this large river survey. Fourteen more reaches will be sampled during the third contract year of the study.

## **Results**

The following accounts include tables of fishes collected at river reaches sampled and tables depicting locations of sampling efforts as well as physical data describing each location. One should refer back to the methods section to review habitat codes provided in tables.

### **Arkansas River Samples**

The Arkansas River was sampled in two reaches. The most upstream local to be sampled was the area above Pendleton which is located near Pendleton where U. S. Highway 165 crosses the Arkansas River. This reach of river is located in Pool 2 of the Kerr-McClellan Navigation System which is the first pool located above a dam on the main stem of the river. At the time of sampling this stretch of river, flows had been quite high for the entire summer of 2007. These flows were primarily influenced by heavy and frequent rains that occurred upstream in both Oklahoma and Kansas. Sand bars were not visible in this river reach. High water precluded effective seining which was limited to the perimeter of one island located in the pool. The right side of the river looking upstream was nearly vertical and armored with riprap. Backwaters occurred on the opposite side of the stream and included some vegetation in isolated areas.

Fishes collected in this river reach were not diverse. Only sixteen species of fishes were collected (Table 1) representing eight families. No fishes that were uncommon for the area were collected. Seven hoop nets were deployed on 9/20/07 and checked through 9/22/07 for a total of 14 net nights. Six trawls were made on 9/21/07. Five mini-fyke nets were also deployed on the same dates as hoop nets resulting in a total of ten net nights deployed. Seining was conducted on 08/13/07 with little success. All of the fishes captured by these efforts are displayed in Table 1. Physical data along with habitat descriptors and GIS coordinates were recorded for each net and sample effort (Table 2).

Fishes were collected below Pool 2 in the Lower Arkansas River below the last dam and the confluence with the Mississippi River Table 3. Thirty-five species were collected representing fourteen families. Seven hoop nets and five mini-fyke nets were set on 04/14/06 and ran through 04/017/06 for a total of ten net nights for each gear type. Nine trawl hauls were conducted on 04/15 and 04/16. Seine hauls were made on 04/16. We did collect the silverband shiner in this river reach which had not formerly been collected in the Arkansas River below the navigation channel. The weed shiner was also collected in this reach. We also collected the bigeye shiner in the lower Arkansas River. The river darter was also collected, formerly represented by pre-1960 collections. Physical and locational data for all samples are given in Table 4.



## **Black River**

The Black River was sampled in several reaches. The most upstream area sampled was near the Coffey Access in the Shirley Bay/Rainey Brake Wildlife Management Area. The reach sampled included the area both above and below the access area. Thirty three species of fishes representing eight families were collected (Table 5). The river darter had been previously collected near the mouth of the river as well as in some tributary streams. Bigeye shiners were also found in this river reach. Though noted in the tributaries entering the Black River from the Ozark Plateau and in the upper river portions, they had not been recorded in the lower portions of the Black River. Unusually low flows in the Black River for nearly two years may have resulted in less turbid conditions and the movement of the species into the lower stream reaches. Physical and location data of sampling efforts are given in Table 6. Fourteen hoop nets were deployed on 06/13/06 and checked on 06/14/06. Ten seine hauls were made on 06/13/06. Six trawl hauls were made on 06/14/06. Eight mini-fyke nets were placed in the river on 06/13/06 and checked on 06/16/06 for a total of 16 net nights.

Thirty-eight species representing twelve families of fishes were collected in the reach of the Black River sampled above Elgin's Ferry (Table 7). Fourteen hoop nets were deployed for one night on 06/11/06 as well as eight mini fyke nets. Mini-fyke nets were left in the river for two nights resulting in 16 net nights of sampling effort. Ten seine hauls were conducted on 06/11/06 and six trawls were made on 06/12/06. Location data and physical characteristics of samples are provided in Table 8. The western sand darter

and saddleback darter were both collected and had been previously collected either up or downstream of the area we sampled but not in this reach of the river. The shorthead redhorse had been collected at the confluence of the White and Black Rivers but not in the Black River previously.

The Black River was also sampled below Elgin Ferry in June of 2007. Ten hoop nets were deployed on 06/22/07 and ran for one night. Eight mini-fyke nets were set on 06/22 and retrieved on 06/24/07 for 16 net nights. Ten seine hauls were made on 06/22/07 and six trawls were made on the same day. Twenty-one species of fishes representing ten families were collected (Table 9). Physical and location data are provided (Table 10). A river redhorse was captured in this river reach. Previous records indicate one pre-1960 capture of this species in the black River. The blackside darter is also a significant capture with no previous records in the Black River main stem. Bluntnose darters were also collected and have been previously collected in many tributaries of the Black River.

The lower reach of the Black River was sampled. Seven hoop nets were set on 04/21/06 along with five mini-fyke nets. Nets were checked through 04/23/06. Ten seine hauls were conducted on 04/23/06. Six trawls were made on 06/13/06. Efforts resulted in the capture of twenty-eight species of fishes representing nine families (Table 11). Data from each sampling location is provided (Table 12). Notable catches include the gravel chub, wedgespot shiner, taillight shiner, and weed shiner. All of these species have been captured near the lower Black River previously, but not in the main stem in this river reach. A black redhorse was also captured in this river sampling effort.

The lower Black River was also sampled in August of 2006. Seven hoop nets and four mini-fyke nets were deployed on 08/02/06 and checked through 08/04/06. Ten seine hauls were made on 08/03/06 and also six trawls. Twenty-six species of fishes were captured that represented ten families (Table 13). Sampling data was also recorded (Table 14). Significant captures included the cypress minnow not previously collected in the Black River. A shorthead redhorse was also collected.

### **Mississippi River**

The Mississippi River at Osceola was sampled with ten hoop nets and two mini-fyke nets on 07/25/05. Captured fishes are given in Table 15 and locational data is provided (Table 16). This minimal effort was conducted while participating in efforts with personnel from various agencies and universities to collect fishes for the new edition of fishes of Arkansas. Dr. Tom Buchanan and Dr. Henry Robison maintained a complete list of species captured.

We again sampled the Mississippi River at Osceola with hoop nets and mini-fyke nets on 1/12/06 through 1/14/06 for a total of 20 hoop net nights and 18 mini-fyke net nights. Nine families of fishes with twenty-two species of fishes were collected. Noteworthy captures included the mud darter as well as several cyprinid species (Table 17). Ten seine hauls and six trawl hauls were made in this river reach on 09/01/07. Thirteen

species were collected with these methods (Table 18). Locational data is provided for all sample methods and locations (Table 19).

The area above the confluence of the St. Francis River was sampled on 05/25/06 with 14 hoop nets and eight mini-fyke nets for two nights. One trotline and one gill net were also deployed. Six trawls were made on 7/30/06 and ten seine hauls were made in the river reach on 07/12/06. These efforts resulted in twenty-four species of fishes representing ten families being captured (Table 20). Sample location data was tabulated (Table 21).

The area above the confluence of the St. Francis and Mississippi Rivers was sampled with seven hoop nets set on 08/14/06 and four mini-fyke nets. A single gill net was also deployed on the same date. Nets were run through 08/17/06. Four trawl hauls were conducted on 08/17/06 and ten seine hauls were made on 08/15/06. Fishes collected included twenty-one species representing six families (Table 22). Sampling location data was tabulated (Table 23).

The area between Helena and the St. Francis River confluence was sampled on two occasions. Efforts included 13 hoop nets and eight mini-fyke nets deployed on 07/29/06. Nets were run through 08/01/06. Six trawls and ten seine hauls were made on 07/29/06. Thirty-five fish species were captured representing eleven families (Table 24). Physical habitat data was also recorded (Table 25). The area was again sampled on 08/14/06 after water levels had dropped considerably. Seven hoop nets were deployed along with four mini-fyke nets and one gill net for three nights through 08/17/06. Five trawls were made

on 08/17/06 and ten seine hauls were made on 08/15/06. These efforts resulted in the capture of twenty-five species representing ten families (Table 26). Black buffalo and quillback were both among species captured at this location. Physical data at capture locations was recorded (Table 27).

Two river reaches were sampled below Helena. One extended below Helena for about four miles which we labeled below Helena, upstream. The other reach was below that area and we labeled it, below Helena downstream. Seven hoop nets, five mini-fyke nets, and two gill nets were deployed from 07/27/07 through 07/29/07. Ten seine hauls and six trawls were also conducted during this time period. Day-time temperatures exceeded 100 degrees and fish captures were low. Only fifteen species representing six families were captured (Table 28). Data at sampling points was recorded (Table 29).

At the upstream portion below Helena, twenty-three species were collected representing twelve families (Table 30). Physical habitats of sampling locations were recorded (Table 31). The sauger was collected at this site along with paddlefish and shovelnose sturgeon.

The Mississippi River was sampled at Arkansas City in its lower reaches in Arkansas. Fourteen hoop nets and eight mini-fyke nets were ran for two nights as well as one gill net from 08/08/06 through 08/10/06. Ten seine hauls were made on 09/03/07 in this reach and six trawls were made on the same day. Twenty-six species representing eight families were collected (Table 32). Physical data of sample efforts was recorded (Table 33).

The area between Choctaw Island and the mainland was also another reach sampled. This area sometimes has considerable flow and is quite deep while at other times it becomes dry when the Mississippi River drops below the elevation required to provide water to the chute. Thirteen hoop nets and eight mini-fyke nets and one gill net were deployed for two nights beginning on 07/21/06 and ending on 07/23/06. Six trawls and ten seine hauls were made in this river reach on 09/30/07. Twenty-four fish species representing nine families were captured (Table 34). Physical data was recorded for each sample area (Table 35).

### **Ouachita River**

Only one river reach was sampled on the Ouachita River. This area was from Felsenthal Lock and Dam to the Louisiana border. Twenty six species of fish in seven families were captured with fourteen hoop nets, eight mini-fyke nets, and six trawls conducted on 05/02/06 (Table 36). Ten seine hauls were made on 06/08/06. Physical data at sample locations was recorded (Table 37).

### **Red River**

A number of samples took place in two reaches of the Red river. One are was located near Garland City. The second reach was in the area near Fulton including the river

above and below the confluence with the Little River. We also sampled the Little River with hoop nets from Millwood Dam to the confluence with the Red River. Ten hoop nets were placed in the Little River on 03/02/06 and ran for two nights through 03/04/06. Only eight species were collected representing five families (Table 38). Physical data at sample locations is listed (Table 40). On these same dates, four hoop nets were deployed just downstream of the Little River confluence in the Red River. Seven species were captured in two nights representing four families (Table 39). Blue suckers were among fishes collected in the Red River but not in the Little River.

Fifteen hoop nets were placed near Garland City on 03/24/06 and ran for two nights through 03/26/06. Twelve fish species were captured from six families (Table 41). Thirty-one blue suckers were captured along with four black buffalo and one shovelnose sturgeon. Data from capture locations is provided (Table 42). Fishes were again sampled in this reach on 03/31/06 with 15 hoop nets which were ran through 04/02/06. Seven species of fish were captured (Table 43) and physical data was recorded at sample locations (Table 44). The river had dropped considerably during the preceding week.

Eight mini-fyke nets and six hoop nets were set near Fulton on 07/24/06 and ran through 07/26/06. Six trawl hauls and ten seine hauls were made on 07/25/06. Twenty-eight species of fishes representing twelve families were collected (Table 45). Species included the silver chub, chub shiner and blue sucker. Physical data was collected where samples were made (Table 46).

Fourteen hoop nets, eight mini-fyke nets, and one gill net were set on 07/14/06 near Garland City on the Red River and ran for one night. Six trawls and 10 seine hauls were made on 07/15/06. Thirty-one species in eleven families were caught (Table 47). Physical data at set locations was recorded (Table 48).

During April of 2007 an attempt was made to see if we could capture blue suckers during spawning in the Red River at either Garland City or Fulton. Seven hoop nets were set in each of the areas and ran for only one night beginning on 04/21/07. We discovered that blue suckers had already spawned at this point. Four species were collected at Garland City (Table 49) and six species at Fulton (Table 50). Physical data at net locations is given in Table 51.

### **St. Francis River**

The Saint Francis River was sampled above Lake City in 2006. Fourteen hoop nets and eight mini-fyke nets were set on 05/06/06. Six trawl hauls were made on 05/06/06. Four seine hauls were also made on that date. An additional seine sample was made on 06/30/06. Twenty-seven fish species in nine families were collected (Table 52). Logperch, slough darters, black buffalo, freckled madtom, and pirate perch were among interesting fishes collected in this reach. Physical data was recorded at capture locations (Table 53).



Below Lake City on the Saint Francis River, much debris prevented trawling and vertical banks below water level prevented seining. Only hoop nets and mini-fyke nets were used in this river reach. Seven hoop nets and five mini-fyke nets were ran for two days beginning on 06/03/07. Twenty-three species of fishes in eleven families were found (Table 54). Fishes collected included grass pickerel, pirate perch, bluntnose darter, mud darter, and blackside darter. Physical data at capture locations is given in Table 55.

Eight mini-fyke nets and fourteen hoop nets were set in the St. Francis River near Parkin including the confluence with the Tyronza River on 05/18/06. Three trawls were made in the area in stretches of stream that were clear of debris. Four seine hauls were made on 05/19/06 and six additional hauls were made on 06/30/06. Twenty fish species were collected in eight families (Table 56). Paddlefish was collected in the Tyronza River just upstream from its confluence with the St. Francis. Other fishes collected in this reach of the St. Francis included the bigeye shiner, tadpole madtom, and speckled chub. Capture location data is available (Table 57).

The lower St. Francis River was sampled two times. The first time included the area in the “old river channel” below Huxtabell Pumping Station. Hoop nets were also set upstream of the old and new channels in the newer river channel. Fourteen hoop nets and eight mini-fyke nets were set on 05/24/06 and ran through 05/26/06. Additionally six trawl hauls were made on 05/25/06. A trotline and gill net were also used and ran for two nights. Ten seine hauls were made in this reach on 07/12/06. Some twenty-five species

were collected in ten families (Table 58). Among fish collected were slough darters and sauger. Physical data of capture locations is given in Table 59.

The lower segment of the St. Francis near the Mississippi River was sampled in August of 2006. Due to vertical banks and extremely silted conditions along the shoreline, mini-fyke nets were not employed at this site. We did set fourteen hoop nets and conducted six trawls on 08/16/06. Only seven fish species were captured in five families (Table 60). Locations of samples are provided (Table 61).

### **White River**

The White River at Newport was sampled beginning on 08/02/06. Seven hoop nets were set and picked up on 08/04/06 along with six mini-fyke nets, while two mini-fyke nets were allowed to remain through until 08/05/06. Ten seine hauls were conducted on 08/02/06. Only four trawls were conducted on 08/04/06. Thirty-three species were collected representing eight families (Table 62). Physical data was also collected (Table 63). Fish species included shovelnose sturgeon, skipjack herring, cypress minnow, bigeye chub, silver chub, gravel chub, weed shiner, black buffalo, and shorthead redhorse.

The White River below Clarendon was sampled two times. Ten hoop nets were set on 01/05/06 along with nine mini-fyke nets. Nets were run for two days through 01/07/06.

Nine trawls were conducted in this river reach on 01/05/06. Seine data was collected in 08/14/07. Thirty-one species of fishes were collected in eight families (Table 64).

Physical data is given in Table 65. Fishes collected included mud darters, river darters, and the western sand darter. Also collected were speckled chubs and silver chubs.

The White River at Clarendon was again sampled in June of 2007. Seven hoop nets and five mini-fyke nets were deployed on 06/10/07 and retrieved on 06/12/07. Seine hauls were conducted on 06/12/07 and six trawls were conducted on 06/10/07. Thirty-nine species were captured in fourteen families (Table 66). Captured fishes included shovelnose sturgeon, speckled chub, silver chub, shorthead redhorse, golden topminnow, western sand darter, bluntnose darter, logperch, and river darter. Capture location data is provided in Table 67.

**Table 1: Fishes collected at the Arkansas River, Pool 2 Reach**

SPECIES	NUMBER OF FISH COLLECTED	LENGTH RANGE	WEIGHT RANGE	COLLECTIONS BY GEAR TYPE WITHIN REACH
<b>Lepisosteidae (Gars)</b>				
<i>Lepisosteus oculatus</i> (Spotted Gar)	4	369-525		F4, 5
<b>Clupeidae (Herrings)</b>				
<i>Dorosoma cepedianum</i> ( Gizzard Shad)	4	36-54		T3
<i>Dorosoma petenense</i> ( Threadfin Shad)	6	23-113		F3
<b>Cyprinidae (Minnows and Carps)</b>				
<i>Hybopsis storeriana</i> ( Silver Chub)	1	143		T4
<i>Notropis emiliae</i> (Pugnose Minnow)	2	46-47		T2,F4
<i>Pimephales vigilax</i> ( Bullhead Minnow)	59	14-43		T5
	25	27-37		F4
<b>Catostomidae (Suckers)</b>				
<i>Ictiobus bubalus</i> ( Smallmouth Buffalo)	2	420-615	916-4207	HN6,7
<b>Ictaluridae (Bullhead Catfishes)</b>				
<i>Ictalurus punctatus</i> ( Channel catfish)	6	40-95		T2,3,4
<b>Poeciliidae ( Livebearers)</b>				
<i>Gambusia affinis</i> ( Mosquitofish)	1	16		2A
<b>Moronidae (Temperate Basses)</b>				
<i>Morone Saxatilis</i> ( Striped Bass)	1	524	1029	HN7

<b>Centrarchidae ( Sunfishes)</b>				
<i>Lepomis macrochirus</i> ( Bluegill)	1	180	100	HN6
“”	2	19-35	19	F4,5
“”	1	73		T2
<i>Lepomis megalotis</i> ( Longear Sunfish)	1	58		F3
“”	3	48-80		T2,3
“”	1	228	188	HN6
<i>Micropterus punctulatus</i> ( Spotted Bass)	1	305	356	HN7
<i>Micropterus salmoides</i> ( Largemouth Bass)	1	109		F4
<i>Pomoxis annularis</i> ( White Crappie)	1	58		T3
<b>Sciaenidae ( Drums)</b>				
<i>Aplodinotus grunniens</i> ( Freshwater Drum)	2	418-530	968-1937	HN6
“”)	25	14-51		T1,2,3,4,5

**Table 2: Arkansas River Pool 2**

<b>Gear</b>	<b>Set No.</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Range(YDS)</b>	<b>Depth(ft)</b>	<b>Temp F</b>	<b>Velocity(m/s)</b>	<b>Secchi mm</b>	<b>Substrate</b>	<b>Habitat</b>
Hoop Net	1	N 34.01684	W 091.42590	5	4	77	0.192	525	3	2/5
Hoop Net	2	N 34.01658	W 091.42567	17	9	77	0.185	525	3	2/5
Hoop Net	3	N 34.01625	W 091.42512	19	11	77	0.185	525	3	2/5
Hoop Net	4	N 34.01566	W 091.42444	28	15	77	0.185	525	3	2/5
Hoop Net	5	N 34.01563	W 091.42534	85	12	77	1.185	525	3	2
Hoop Net	6	N 34.01502	W 091.42926	5	7-9	77	0.313	525	2/5	3/8
Hoop Net	7	N 34.01483	W 091.42876	8	11	77	0.357	525	2/5	3/8
Fyke Net	1	N 34.00842	W 091.40762	10	2	77	0.0500	525	3	14
Fyke Net	2	N 34.00863	W 091.40880	0	3-4	77	0	525	3	1
Fyke Net	3	N 34.00762	W 091.40061	0	11	77	0	525	3	1
Fyke Net	4	N 34.00865	W 091.39869	0	4	77	0	525	3	9/13
Fyke Net	5	N 34.00705	W 091.39799	0	1-2.5	77	0	525	2	13
Seine	1A	N 33.99482	W 091.39915	0	1	77	0	525	3	1
Seine	1B	N 33.99455	W 091.39887	0	1.5	77	0	525	3	1
Seine	2A	N 33.99480	W 091.39941	0	1.5	77	0	525	3	1
Seine	2B	N 33.99449	W 091.39928	0	2	77	0	525	3	1
Seine	3A	N 33.99434	W 091.39907	0	2	77	0	525	3	1
Seine	3B	N 33.99424	W 091.39893	0	2.5	77	0	525	3	1
Seine	4A	N 33.99398	W 091.39865	0	3	77	0	525	3	1
Seine	4B	N 33.99386	W 091.39853	0	3	77	0	525	3	1
Trawl	1	N 34.01521	W 091.42535	128	12-14	84	0.294	650	2/3	1/5
Trawl	2	N 34.01596	W 091.42542	59	11-14	84	0	650	1/2/3	1/5
Trawl	3	N 34.01506	W 091.42523	108	6	84	0.25	650	3	1/5
Trawl	4	N 34.01640	W 091.42719	138	4-11	84	0.2	650	1/3	1/5
Trawl	5	N 34.01766	W 091.42822	58	5-3	84	0.278	650	1/3	1/5
Trawl	6	N 34.01789	W 091.42933	102	8	84	0.278	650	3	1/5

**Table 3: Fishes Collected in the Lower Arkansas River Reach**

SPECIES	NUMBER OF FISH COLLECTED	LENGTH RANGE	WEIGHT RANGE	COLLECTIONS BY GEAR TYPE WITHIN REACH
<b>Lepisosteidae (Gars)</b>				
<i>Lepisosteus osseus</i> ( Longnose Gar)	2	937-949		HN7
<i>Lepisosteus platostomus</i> ( Shortnose Gar)	1	192		S5B
<b>Amiidae (Bowfins)</b>				
<i>Amia Calva</i> ( Bowfin)	1	498		F4
<b>Clupeidae (Herrings)</b>				
<i>Dorosoma cepedianum</i> ( Gizzard Shad)	1	324		HN4
<i>Dorosoma petenense</i> ( Threadfin Shad)	38	72-107		S1,S5A,S4A
<b>Esocidae ( Pikes)</b>				
<i>Hybognathus muchalis</i> ( Mississippi Silvery Minnow)	21	87-107		F5
“ ”	119	41-115		S1,S5A,S5B,S4A
<b>Cyprinidae (Minnows and Carps)</b>				
<i>Hybopsis storeriana</i> ( Silver Chub)	3	53-105		BTSH 51-60 (18)
<i>Notropis atherinoides</i> ( Emerald Shiner)	22	70-84		S1,S3A,S4B,S3B,S2B,S2A
“ “	1010	42-85		F1
<i>Notropis blennioides</i> ( River Shiner)	2	67-72		S3A
“ ”	3	42-58		F3
<i>Notropis boops</i> ( Bigeye Shiner)	2	47-55		F4
“ ”	4	60-62		S2,S5B
<i>Notropis burchanani</i> ( Ghost Shiner)	1	51		F4

“”	1	52		FY
<i>Notropis Shumardi (Silverband Shiner)</i>	1	52		T2
	1	72		F4
<i>Notropis texanus ( Weed Shiner )</i>	86	42-63		F2
“”	7	53-58		S4B,S5A,SA
<i>Notropis venustus ( Blacktail Shiner)</i>	24	46-62		F1,F3
“”	18	47-65		S3A,.S4B
<i>Notropis Volucellus ( Mimic Shiner)</i>	1	38		S3B
<i>Pimephales vigilax ( Bullhead Minnow)</i>	7	39-74		F3,F4,F5,FY
“”	3	40-57		S4B,S5A
<b>Catostomidae (Suckers)</b>				
<i>Carpionodes carpio (River Carpsucker)</i>	1	163		5A
<i>Cycleptus elongatus (Blue Sucker)</i>	1	644		HN6
<b>Ictaluridae (Bullhead Catfishes)</b>				
<i>Ictalurus punctatus ( Channel catfish)</i>	1	512		HN1
“”	1	95		F5
“”	1	118		T2
“”	2	514-558		S5A, S5B
<i>Pylodictis oliveras (Flathead Catfish)</i>	1	218		F4
<b>Fundulidae (Killifishes)</b>				
<i>Fundulus Olivaceus ( Blackspotted Topminnow)</i>	4	62-72		S1,S2
<b>Atherinidae (Silversides)</b>				
<i>Labidesthes sicculus ( Brook Silverside)</i>	4	58-98		S4A
<i>Menidia beryllina ( Inland Silverside)</i>	13	86-108		F1, F5
“”	23	74-104		S1,S2



<b>Moronidae (Temperate Basses)</b>				
<i>Morone chrysops</i> ( White Bass)	6	309-357		HN4
“ ”	6	288-437		F1,F5
<i>Morone mississippiensis</i> ( yellow Bass)	1	241		F5
“ ”	1	154		S2
<b>Centrarchidae (Sunfishes)</b>				
<i>Lepomis cyanellus</i> ( Green Sunfish)	1	161		F2
<i>Lepomis gulousus</i> ( Warmouth)	1	124		F2
<i>Lepomis humilis</i> ( Orangespotted Sunfish)	3	51-70		F4
“ ”	1	72		S5A
<i>Lepomis macrochirus</i> ( Bluegill)	1	45		F4
“ ”	1	49		T2
“ ”	3	47-48		S5A,S5B
<i>Lepomis megalotis</i> ( Longear Sunfish)	1	71		F4
“ ”	1	97		S5A
<i>Lepomis punctatus</i> (Spotted Sunfish)	4	115-121		F2,F3
<i>Pomoxis annularis</i> ( White Crappie)	1	284		HN2
“ ”	1	311		F4
<b>Percidae (Perches)</b>				
<i>Percina shumardi</i> ( River Darter)	1	15		F1
<b>Sciaenidae (Drums)</b>				
<i>Aplodinotus grunniens</i> ( Freshwater Drum)	1	342		HN1
“ ”	1	355		F4
“ ”	2	121-192		S5A,S5B

**Table 4: Arkansas River**

<b>Gear Type</b>	<b>Set No.</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Depth</b>	<b>Range</b>	<b>Velocity</b>	<b>Temp.</b>	<b>Secchi</b>	<b>Substrate</b>	<b>Habitat</b>
Hoop Net	1	N 33.97509	W 091.29734	34	24	0.270	72	661	6/3	3/8
Hoop Net	2	N 33.97310	W 091.27066	15	43	0.395	72	661	3	1
Hoop Net	3	N 33.95996	W 091.24857	15	46	0.182	72	661	3/6	3/8/1
Hoop Net	4	N 33.97028	W 091.24106	9	39	0.399	72	661	6/3	3/8
Hoop Net	5	N 33.93393	W 091.15435	19	18	0.290	72	661	2	3
Hoop Net	6	N 33.87210	W 091.14293	20	28	0.100	72	661	3/2	3
Hoop Net	7	N 33.86974	W 091.13813	11	23	0.068	72	661	3	1/5
Fyke Net	1	N 33.97642	W 091.28661	1-2	0	0.100	72	661	3	1
Fyke Net	2	N 33.97654	W 091.27604	4	0	0.100	72	661	3	3/1
Fyke Net	3	N 33.96555	W 091.26382	5	0	0	72	661	3	1/6/9
Fyke Net	4	N 33.95988	W 091.16808	4	0	0	72	661	3	1/3/6/9
Fyke Net	5	N 33.87065	W 091.12675	1-3	0	0	72	661	3	1/9
Trawl	1			4		0	72	661	3	1/6/9
Trawl	2			2-4		0	72	661	3	5
Trawl	3			9-12		0	72	661	3	5
Trawl	4			1-2		0	72	661	3	9
Trawl	5			7-9		0	72	661	3	5
Trawl	6			7-9		0	72	661	3	5
Trawl	7			17-22		0	72	661	3	5
Trawl	8			9-30		0	72	661	3	9/7
Trawl	9			4		0	72	661	3	1/6/9
Seine	1a	N 33.87826	W 091.13256	3	0	0	72	661	3	1/9
Seine	1b	N 33.87826	W 091.13256	3	0	0	72	661	3	1/9
Seine	2a	N 33.97325	W 091.29245	1.5	0	0	72°F	661	3	1
Seine	2b	N 33.97325	W 091.29245	0.5	0	0	72°F	661	3	1
Seine	3a	N 33.96304	W 091.26331	1.5	0	0	72	661	3	1/9
Seine	3b	N 33.96304	W 091.26331	1.5	0	0	72	661	3	1/9
Seine	4a	N 33.93750	W 091.15697	2	0	0	72	661	2	9
Seine	4b	N 33.93750	W 091.15697	2	0	0	72	661	2	9
Seine	5a	N 33.93856	W 091.15805	3	0	0	72	661	1/2	9
Seine	5b	N 33.93856	W 091.15805	3	0	0	72	661	2	9

**Table 5: Fishes Collected at the Black River, Coffey Access Reach.**

<b>SPECIES</b>	<b>NUMBER OF FISHES COLLECTED</b>	<b>LENGTH RANGE</b>	<b>WEIGHT RANGE</b>	<b>COLLECTIONS BY GEAR TYPE WITHIN REACH</b>
<b>Lepisosteidae (Gars)</b>				
<i>Lepisosteus osseus</i> ( Longnose Gar)	1	765	704	S2B
<i>Lepisosteus platostomus</i> ( Shortnose Gar)	7	346-659	122-541	F3,5,7
<b>Clupeidae (Herrings)</b>				
<i>Dorosoma cepedianum</i> ( Gizzard Shad)	14	46-278		S1B,2B,3A
<b>Cyprinidae (Minnows and Carps)</b>				
<i>Cyprinus carpio</i> ( Common Carp)	1	595	2360	HN12
<i>Hybognathus muchalis</i> ( Mississippi Silvery Minnow)	22	44-94		S1a,5a,5b
“ ”	1	76		F6
<i>Notropis atherinoides</i> ( Emerald Shiner)	6	86-92		S1a,2a,4a,2b
“ ”	427	30-91		F3,7,8
<i>Notropis boops</i> ( Bigeye Shiner)	64	36-49		F1,2,7
<i>Notropis buchmanii</i> ( Ghost Shiner)	1	45		F3
<i>Notropis greeni</i> ( Wedgespot Shiner)	262	32-60		F3,8
“ ”	1	37		T1
<i>Notropis rubellus</i> ( Rosyface Shiner)	1	47		T2
“ ”	7	38-41		F2,6
<i>Notropis Sabinae</i> ( Sabine Shiner)	69	35-55		F1,2,3,6,8
<i>Notropis venustus</i> ( Blacktail Shiner)	6	47-80		S1B,2A,2B,5B
“ ”	1	37		T4
“ ”	367	27-88		F1,5,6,7,8
<i>Pimephales notatus</i> ( Bluntnose Minnow)	4	33-44		F1
<i>Pimephales vigilax</i> ( Bullhead Minnow)	6	42-58		S3A,3B,4B
“ ”	10	46-58		F4,7
<b>Catostomidae (Suckers)</b>				
<i>Carpionodes carpio</i> ( River Carpsucker)	2	126-143		S5A,5B

<i>Ictiobus bubalus</i> ( <i>Smallmouth Buffalo</i> )	4	398-503	620-1460	HN3,4,9,12
<i>Ictiobus niger</i> ( <i>Black Buffalo</i> )	2	365-796	702-5100	HN2
<i>Moxostoma erythrurum</i> ( <i>Golden Redhorse</i> )	1	44		F7
<b>Ictaluridae (Bullhead Catfishes)</b>				
<i>Ictalurus punctatus</i> ( <i>Channel catfish</i> )	8	362-692	240-3400	HN7,10,12,13
<i>Pylodictus olivaris</i> ( <i>Flathead Catfish</i> )	1	391	554	F4
<b>Centrarchidae ( Sunfishes)</b>				
<i>Lepomis humilis</i> ( <i>Orangespotted Sunfish</i> )	27	48-72		S3A,3B,4A
<i>Lepomis macrochirus</i> ( <i>Bluegill</i> )	5	49-62		S3A,3B
“ ”	1	46		F7
<i>Lepomis megalotis</i> ( <i>Longear Sunfish</i> )	2	73-75		S1A,3B
<i>Micropterus punctulatus</i> ( <i>Spotted Bass</i> )	2	31-53		S2B,3A
“ ” “ ”	12	30-58		F3,4,7,8
<i>Micropterus salmoides</i> ( <i>Largemouth Bass</i> )	1	66		S3A
<i>Pomoxis annularis</i> ( <i>White Crappie</i> )	1	275	274	HN12
“ ”	2	34-40		F7,8
<i>Pomoxis nigromaculatus</i> ( <i>Black Crappie</i> )	2	36-37		F3,4
<b>Percidae ( Perches)</b>				
<i>Percina caprodes</i> ( <i>Logperch</i> )	28	35-57		F3,8
<i>Percina shumardi</i> ( <i>River Darter</i> )	4	20-27		T4
<b>Sciaenidae ( Drums)</b>				
<i>Aplodinotus grunniens</i> ( <i>Freshwater Drum</i> )	3	286-296	266-800	HN4,10

**Table 6: Black River-Coffey Access**

Gear Type	Set No.	Latitude	Longitude	Depth ft.	Range		Velocity m/s	Temp F	Secchi mm	Substrate	Habitat
					Yds.						
Hoop Net	1	N 35.97208	W 091.18064	10	10		0.4286	79	370	1/2/3	3
Hoop Net	2	N 35.97207	W 091.18150	3-4	8		0.6000	79	370	1/3	3
Hoop Net	3	N 35.97217	W 091.18259	8	8		0.3333	79	370	1/2/3	3
Hoop Net	4	N 35.97283	W 091.18096	6	13		0.5000	79	370	1/2/3	6
Hoop Net	5	N 35.97292	W 091.18172	4	9		0.3333	79	370	1/2/3	6
Hoop Net	6	N 35.97290	W 091.18267	4	31		0.6000	79	370	2	5
Hoop Net	7	N 35.97231	W 091.18176	6	33		0.6000	79	370	2	5
Hoop Net	8	N 35.97263	W 091.18174	5	38		0.5000	79	370	2/3	5
Hoop Net	9	N 35.97116	W 091.18639	10	35		0.3750	79	370	3	1/5
Hoop Net	10	N 35.96807	W 091.19336	20	32		0.3000	79	370	3	1/5
Hoop Net	11	N 35.96762	W 091.19373	7	2		0.4286	79	370	2	3
Hoop Net	12	N 35.96412	W 091.19199	8	8		0.3000	79	370	2	3
Hoop Net	13	N 35.96474	W 091.19286	8	18		0.2727	79	370	2	6
Hoop Net	14	N 35.96311	W 091.19231	7	48		0.5000	79	370	1/2/*3	5
Fyke Net	1	N 35.96684	W 091.19268	1-3	0		0	79	370	3	1
Fyke Net	2	N 35.96704	W 091.19277	2	0		0	79	370	3	1
Fyke Net	3	N 35.96818	W 091.19297	3	0		0	79	370	3	1
Fyke Net	4	N 35.96666	W 091.18760	4	0		0	79	370	3	1
Fyke Net	5	N 35.96653	W 091.18723	2	0		0	79	370	3	1
Fyke Net	6	N 35.96707	W 091.18599	<1	0		0	79	370	3	1
Fyke Net	7	N 35.96871	W 091.18462	3	0		0	79	370	2	3
Fyke Net	8	N 35.97044	W 091.18573	3	0		0	79	370	3	1
Seine	1A	N 35.94739	W 91.20141	2.5	0		0.5000	80	571	3	1
Seine	1B	N 35.94739	W 91.20141	2.5	0		0.5000	80	571	1/3	1
Seine	2A	N 35.94649	W 91.20320	3.5	0		0.4286	82	475	3	1
Seine	2B	N 35.94649	W 91.20320	3.5	0		0.4286	82	475	3	1
Seine	3A	N 35.94582	W 91.21434	3	0		0	84	471	1/2	3
Seine	3B	N 35.94582	W 91.21434	4	0		0	84	471	½	3
Seine	4A	N 35.94473	W 91.21328	2	0		0	82	575	1/3	1
Seine	4B	N 35.94473	W 91.21328	2	0		0	82	575	1/3	1

Seine	5A	N 35.97086	W 91.18604	2.5	0	0.5	84	605	3	1
Seine	5B	N 35.97086	W 91.18604	3.5	0	0.5	84	605	3	1
Trawl	1	N 35.97266	W 091.17883	10	23	0.5	79	370	1/2/3/4	3/5
Trawl	2	N 35.97241	W 091.17892	10	49	0.6	79	370	2	5
Trawl	3	N 35.97223	W 091.17950	13	38	0.5	79	370	1/2/3/4	3/5
Trawl	4	N 35.97924	W 091.18348	7	44	0.5	79	370	1/2/3/4	3/5
Trawl	5	N 35.97261	W 091.18338	9	36	0.6	79	370	2	5
Trawl	6	N 35.97217	W 091.18259	12	40	0.5	79	370	1/2/3/4	3/5

**Table 7: Fishes Collected at the Black River Above Elgin Ferry Reach.**

<b>SPECIES</b>	<b>NUMBER OF FISHES COLLECTED</b>	<b>LENGTH RANGE</b>	<b>WEIGHT RANGE</b>	<b>COLLECTIONS BY GEAR TYPE WITHIN REACH</b>
<b>Acipenseridae (Sturgeons)</b>				
<i>Scaphirhynchus platyrhynchus</i> ( Shovelnose Sturgeon)	1	487	320	HN11
<b>Lepisosteidae (Gars)</b>				
<i>Lepisosteus oculatus</i> (Spotted Gar)	3	368-526		F1,8
<i>Lepisosteus osseus</i> ( Longnose Gar)	1	690	550	F6
<i>Lepisosteus platostomus</i> ( Shortnose Gar)	20	392-578	160-500	F1,2,4,5
	1	612		S3a
<b>Clupeidae (Herrings)</b>				
<i>Dorosoma cepedianum</i> ( Gizzard Shad)	27	40-62		S1A,3A
<i>Dorosoma petenense</i> ( Threadfin Shad)	1	32		S5A
<b>Cyprinidae (Minnows and Carps)</b>				
<i>Hybognathus muchalis</i> ( Mississippi Silvery Minnow)	4	70-90		S1B,S5A
<i>Hybopsis amblops</i> ( Bigeye Chub)	1	36		T5
<i>Hybopsis x-punctata</i> ( Gravel Chub)	2	38-40		F5
<i>Notropis atherinoides</i> ( Emerald Shiner)	10	75-102		S2A,4A
<i>Notropis Sabinae</i> (Sabine Shiner)	15	34-42		S1B,S3B,S4A,5AS4b,5b
<i>Notropis venustus</i> ( Blacktail Shiner)	559	26-68		F1,4,5,6,8
<i>Notropis Volucellus</i> ( Mimic Shiner)	1	26		F1
<i>Pimephales notatus</i> (Bluntnose Minnow)	25	38-56		F8
<i>Pimephales vigilax</i> ( Bullhead Minnow)	32	26-63		F1,4
<b>Catostomidae (Suckers)</b>				
<i>Carpionodes carpio</i> (River Carpsucker)	3	62-118		S1A,4B
<i>Ictiobus bubalus</i> ( Smallmouth Buffalo)	3	490-500	1340-1800	Hn5,14
<i>Ictiobus niger</i> ( Black Buffalo)	4	430-581	900-2600	Hn1,4,13
<i>Moxostoma macrolepidotum</i> ( Shortheas Redhorse)	1	410	360	Hn4

<b>Ictaluridae (Bullhead Catfishes)</b>				
<i>Ictalurus punctatus</i> ( Channel catfish)	2	492-571	1100-1780	HN13
<i>Pylodictus olivaris</i> (Flathead Catfish)	1	362	1012	F1
“”	4	357-531	420-1400	HN9,11,12,13
<b>Fundulidae (Killifishes)</b>				
<i>Fundulus notatus</i> ( Blackstripe Topminnow)	2	64-66		F6
<i>Fundulus Olivaceus</i> ( Blackspotted Topminnow)	1	26		F4
<b>Poeciliidae ( Livebearers)</b>				
<i>Gambusia affinis</i> ( Mosquitofish)	1	46		F6
<b>Moronidae (Temperate Basses)</b>				
<i>Morone chrysops</i> ( White Bass)	1	366	529	HN11
<b>Centrarchidae ( Sunfishes)</b>				
<i>Centrarchus macropterus</i> (Flier)	5	31-36		F1,4
<i>Lepomis humilis</i> ( Orangespotted Sunfish)	6	41-47		F1,4
<i>Lepomis macrochirus</i> ( Bluegill)	2	26-70	F1	
<i>Lepomis megalotis</i> ( Longear Sunfish)	1	51		F6
<i>Lepomis microlophus</i> ( Redear Sunfish)	3	63-180		F1
<i>Micropterus punctulatus</i> ( Spotted Bass)	11	29-61		F1,3,4,6,8
<i>Micropterus salmoides</i> ( Largemouth Bass)	1	43		F6
<i>Pomoxis annularis</i> ( White Crappie)	2	143-266		F2,4
<i>Pomoxis nigromaculatus</i> ( Black Crappie)	170	29-200		F1,2,3,4,5,6
<b>Percidae ( Perches)</b>				
<i>Ammocrypta Clara</i> ( Western Sand Darter)	4	35-47		F7
Genus ( Percina)				
<i>Percina caprodes</i> ( Logperch)	1	53		F7
<i>Percina ouachitae</i> ( Saddleback Darter)	11	31-70		F7
<b>Sciaenidae ( Drums)</b>				
<i>Aplodinotus grunniens</i> ( Freshwater Drum)	1	395	680	F5



**Table 8: Black River Above Elgin Ferry**

<b>Gear Type</b>	<b>Set No.</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Depth ft.</b>	<b>Range yds.</b>	<b>Velocity m/s</b>	<b>Temp</b>	<b>Secchi</b>	<b>Substrate</b>	<b>Habitat</b>
Hoop Net	1	N 35.80914	W 091.25827	6	25	0.50000	84	361	3	1/5
Hoop Net	2	N 35.81186	W 091.25919	5	5	0.20000	84	361	1/3	4
Hoop Net	3	N 35.80984	W 091.26117	6	10	0.12000	84	361	3	1/6
Hoop Net	4	N 35.80971	W 091.26171	10	14	0.33333	84	361	2	3
Hoop Net	5	N 35.80607	W 091.26136	4	14	0.42857	84	361	1/3	3
Hoop Net	6	N 35.80295	W 091.25857	11	41	0.60000	84	361	3	5
Hoop Net	7	N 35.80295	W 091.25755	16	10	0.42857	84	361	2	3/8
Hoop Net	8	N 35.80391	W 091.25207	9	7	0.25000	84	361	2/3	3
Hoop Net	9	N 35.80273	W 091.24951	6	10	0.33333	84	361	2	3
Hoop Net	10	N 35.79912	W 091.24680	7-10	5	0.75000	84	361	2	3
Hoop Net	11	N 35.79847	W 091.24797	12	39	0.60000	84	361	3	5
Hoop Net	12	N 35.79439	W 091.26123	3	46	1.50000	84	361	3	5
Hoop Net	13	N 35.79094	W 091.27067	16	16	1.50000	84	361	1/2	3/7
Hoop Net	14	N 35.78917	W 091.27417	13	10	0.50000	84	361	3	5/6
Fyke Net	1	N 35.81090	W 091.25808	3	0	0	86	361	1/2	4/6
Fyke Net	2	N 35.81145	W 091.25831	4-10	0	0	86	361	3	1 / 2
Fyke Net	3	Near F 2	Near F 2	2-3	0	0	86	361	2	2
Fyke Net	4	N 35.79228	W 091.26742	2-3	0	0	86	361	1/3	1
Fyke Net	5	N 35.78778	W 091.27212	3	0	0	86	361	2	9
Fyke Net	6	N 35.78839	W 091.27160	1-3	0	0	86	361	2	9
Fyke Net	7	N 35.78971	W 091.27421	3-10	0	0	86	361	3	1
Fyke Net	8	N 35.79234	W 091.28074	2-3	0	0	86	361	3	1
Seine	1A	N 35.77004	W 091.29231	2	0	0.23077	82	392	3	1
Seine	1B	N 65.77004	W 091.2931	2	0	0.23077	82	392	3	1
Seine	2A	N 35.77392	W 091.28004	2	0	0.20000	82	392	3	3
Seine	2B	N 35.77392	W 091.28004	2	0	0.20000	82	392	3	3
Seine	3A	N 35.77203	W 091.29192	2	0	0.12500	82	392	3	1
Seine	3B	N 35.77203	W 091.29192	2	0	0.12500	82	392	3	1
Seine	4A	N 35.77103	W 091.29242	2	0	0.14286	82	392	1/3	1
Seine	4B	N 35.77103	W 091.29242	2	0	0.14286	82	392	1/3	1

Seine	5A	N 35.76516	W 091.29218	2-3	0	0	82	392	3	1
Seine	5B	N 35.76516	W 091.29218	2-3	0	0	82	392	3	1
Trawl	1	N 35.76816	W 091.29113	7	50	0.13636	82	361	3	5
Trawl	2	N 35.76795	W 091.29060	3	30	0.17647	82	361	3	1
Trawl	3	N 35.77351	W 091.28804	7	30	0.18750	82	361	1/3	3/5
Trawl	4	N 35.77297	W 091.28263	9	50	0.18750	82	361	2/3	3
Trawl	5	N 35.77543	W 091.28166	3-6	25	0.12000	82	361	3	1/6
Trawl	6	N 35.77537	W 091.28456	9	42	0.20000	82	361	3	5

**Table 9: Fishes Collected at the Black River Below Elgin Ferry**

SPECIES	NUMBER OF FISH COLLECTED	LENGTH RANGE	WEIGHT RANGE	COLLECTIONS BY GEAR TYPE WITHIN REACH
<b>Clupeidae (Herrings)</b>				
<i>Dorosoma cepedianum</i> ( Gizzard Shad)	1471	40-171		S1A,S2A,S2B,S3A,S3B, S4A,S5B
<b>Cyprinidae (Minnows and Carps)</b>				
<i>Hybognathus muchalis</i> ( Mississippi Silvery Minnow)	1	87		S2A
<i>Notropis atherinoides</i> ( Emerald Shiner)	3	77-84		S2B,S4A,S5A
“ ”	11	60-92		F1,F5
<i>Notropis venustus</i> ( Blacktail Shiner)	2	43-62		T5
“ ”	12	45-811		S3B,S4A
“ ”	194	37-94		F1,F2,F4,F5
<i>Notropis Sabinae</i> (Sabine Shiner)	13	35-57		SA2,S1A, S1B, S5A, S5B
“ ”		57		F5
<i>Pimephales vigilax</i> ( Bullhead Minnow)	3	47-66		F3,F5
<i>Notropis boops</i> (Bigeye Shiner)	2	56-58		T3,T6
<b>Catostomidae (Suckers)</b>				
<i>Carpionodes carpio</i> (River Carpsucker)	2	444-460	926-1300	HN 1, HN 2
<i>Ictiobus bubalus</i> ( Smallmouth Buffalo)	1	521	1960	HN2
<i>Moxostoma carinatum</i> ( River Redhorse)	1	410	870	HN5
<b>Ictaluridae (Bullhead Catfishes)</b>				
<i>Ictalurus punctatus</i> ( Channel catfish)	3	386-621	424-2560	HN5, HN7
“ ”	1	24		T6

<i>Pylodictus olivaris</i> (Flathead Catfish)	1	523	1540	HN7
<b>Atherinidae (Silversides)</b>				
<i>Menidia beryllina</i> ( Inland Silverside)	5			F3,F5
“	1	41		S3B
<b>Centrarchidae (Sunfishes)</b>				
<i>Lepomis macrochirus</i> ( Bluegill)	2	58-60		F3,F4
<i>Micropterus punctulatus</i> ( Spotted Bass)	19	35-78		S1A,S1B,S2B,S2A,S2B, S3A,S3B,S4A,S5A,S5B
“”	1	41		F1
“”	1	47		T5
<i>Lepomis humilis</i> ( Orangespotted Sunfish)	2	47-62		S1A
<i>Pomoxis annularis</i> ( White Crappie)	1	57		F4
<b>Percidae (Perches)</b>				
<i>Percina caprodes</i> ( Logperch)	8	43-50		F5,F5
<i>Percina maculata</i> ( Blackside Darter)	2	22-50		T3,T5
<i>Etheostoma chlorosomum</i> (Bluntnose Darter)	1	32		F3
<b>Sciaenidae (Drums)</b>				
<i>Aplodinotus grunniens</i> ( Freshwater Drum)	4	250-475	170-1440	HN5,HN7

**Table 10: Black River Below Elgin Ferry**

Gear	Set No.	Latitude	Longitude	Depth ft.	Range Yds.	Temp. F	Velocity m/s	Secchi mm	Substrate	Habitat
Hoop Net	1	N 35.74778	W 091.32598	3-4	31	82	0.500	410	3	1
Hoop Net	2	N 35.74881	W 091.32296	5	12	82	0.333	410	3	1
Hoop Net	3	N 35.74871	W 091.32240	3-4	12	82	0.455	410	3	1
Hoop Net	4	N 35.74832	W 091.32064	8	29	82	0.500	410	3	5
Hoop Net	5	N 35.74795	W 091.32212	13	10	82	0.500	410	2	3
Hoop Net	6	N 35.74832	W 091.31884	12	29	82	0.294	410	3	1/5
Hoop Net	7	N 35.74889	W 091.31750	17	12	82	0.500	410	2	3
Fyke Net	1	N 35.74862	W 091.22160	3	0	80	0.050	410	3	1
Fyke Net	2	N 35.74858	W 091.32147	3	0	80	0.050	410	3	1
Fyke Net	3	N 35.74850	W 091.31970	5	0	80	0	410	3	1
Fyke Net	4	N 35.75005	W 091.31706	2-3	0	79	0	410	3	10
Fyke Net	5	N 35.75194	W 091.31823	2-3	0	80	0.417	410	3	1
Seine	1A	N 35.74870	W 091.31847	4-5	0	82	0.200	410	3	1
Seine	1B	N 35.74851	W 091.31870	4	0	82	0.200	410	3	1
Seine	2A	N 35.74928	W 901.31806	4	0	82	0.200	410	3	1
Seine	2B	N 35.74897	W 091.31824	4	0	82	0.200	410	3	1
Seine	3A	N 35.75927	W 091.31976	3.5	0	82	0	410	2/3	1
Seine	3B	N 35.75539	W 091.31965	3.5	0	82	0.380	410	3	1
Seine	4A	N 35.76529	W 091.29286	2	0	82	0.417	410	3	1
Seine	4B	N 35.76356	W 091.29318	3	0	82	0.417	410	3	1
Seine	5A	N 35.76519	W 091.29211	3	0	82	0.417	410	3	1
Seine	5B	N 35.76520	W 091.29240	3	0	82	0.500	410	3	1
Trawl	1	N 35.74742	W 091.32658	6	36	82	0.313	410	3	1/5
Trawl	2	N 35.74759	W 091.32659	5	48	82	0.357	410	3	1/5
Trawl	3	N 35.75174	W 091.31830	3-4	25	82	1.000	410	3	1
Trawl	4	N 35.75156	W 091.31842	5-7	49	82	0.333	410	3	5
Trawl	5	N 35.74983	W 091.31793	5	13	82	0.417	410	3	1
Trawl	6	N 35.74968	W 091.31774	8-9	26	82	0.313	410	3	5

**Table 11: Fishes Collected at the Lower Black River Reach**

SPECIES	NUMBER OF FISHES COLLECTED	LENGTH RANGE	WEIGHT RANGE	COLLECTIONS WITHIN REACH BY GEAR TYPE
<b>Acipenseridae (Sturgeons)</b>				
<i>Scaphirhynchus platyrhynchus</i> ( Shovelnose Sturgeon)	2	578-655		HN5,6
<b>Lepisosteidae (Gars)</b>				
<i>Lepisosteus oculatus</i> (Spotted Gar)	1	582		F4
<i>Lepisosteus osseus</i> ( Longnose Gar)	2	902-945		HN 5
<i>Lepisosteus platostomus</i> ( Shortnose Gar)	11	465-579		F1,2,4
“”	4	518-607		S1A,1B,4A,4B
<b>Clupeidae (Herrings)</b>				
<i>Dorosoma cepedianum</i> ( Gizzard Shad)	2	142-142		S2A,3A
“	5	41-215		S4B
<b>Cyprinidae (Minnows and Carps)</b>				
<i>Hybognathus hayi</i> ( Cypress Minnow)	3	38-43		T6
<i>Hybognathus muchalis</i> ( Mississippi Silvery Minnow)	95	24-109		F3,4
“”	101	53-117		S1A,2A,3A,4A,1B,2B,3B,4B,5B
<i>Hybopsis x-punctata</i> ( Gravel Chub)	1	75		S3A
<i>Notropis atherinoides</i> ( Emerald Shiner)	3	75-94		S1A,2A,4A
<i>Notropis greeniei</i> ( Wedgespot Shiner)	9	40-83		S1A,5A,5B,1B
<i>Notropis maculatus</i> (Taillight Shiner)	1	70		S2A
<i>Notropis texanus</i> ( Weed Shiner )	4	40-75		S2A,5A,1B
“”	3	38-42		T5
<i>Notropis venustus</i> ( Blacktail Shiner)	2	46-65		S4A,5B
<i>Pimephales notatus</i> (Bluntnose Minnow)	6	35-55		S1B
“”	33	12-51		T3,T4
<i>Pimephales vigilax</i> ( Bullhead Minnow)	19	30-66		F1,F5
<b>Catostomidae (Suckers)</b>				

<i>Carpoides carpio</i> (River Carpsucker)	1	436		HN6
“”	15	53-93		S3A,S2B
<i>Ictiobus bubalus</i> ( Smallmouth Buffalo)	2	110-115		S4A
<i>Ictiobus niger</i> ( Black Buffalo)	2	350-506		HN3,5
<i>Moxostoma duquesnei</i> ( Black Redhorse)	1	160		S4A
<b>Ictaluridae (Bullhead Catfishes)</b>				
<i>Ictalurus punctatus</i> ( Channel catfish)	1	434		HN3
<i>Pylodictus olivaris</i> (Flathead catfish)	1	484		Hn5
<b>Moronidae (Temperate Basses)</b>				
<i>Morone Saxatilis</i> ( Striped Bass)	1	281		S4A
<b>Centrarchidae ( Sunfishes)</b>				
<i>Lepomis humilis</i> ( Orangespotted Sunfish)	1	51		F3
“”	14	38-47		S4A
<i>Lepomis macrochirus</i> ( Bluegill)	5	40-150		F3,5
“”	8	30-32		T3,4
“”	4	44-139		S3A,4A,2B
<i>Lepomis megalotis</i> ( Longear Sunfish)	10	44-121		S2A,3A,4A,4B
<i>Micropterus punctulatus</i> ( Spotted Bass)	2	217-222		F4,5
“”	2	159-179		S4B
<i>Pomoxis annularis</i> ( White Crappie)	1	91		F3
<b>Sciaenidae ( Drums)</b>				
<i>Aplodinotus grunniens</i> ( Freshwater Drum)	1	338		HN6
“”	2	435-446		S4A

**Table 12: Lower Black River**

<b>Gear</b>	<b>Set No.</b>	<b>Latitudes</b>	<b>Longitude</b>	<b>Depth ft</b>	<b>Range yd</b>	<b>Temp ft.</b>	<b>Velocity m/s</b>	<b>Secchi mm</b>	<b>Substrate</b>	<b>Habitat</b>
Hoop Net	1	N 35.67835	W 091.35410	12	10	74	0.309	680	2	3
Hoop Net	2	N 35.67567	W 091.34977	4	25	74	0.441	680	4	12
Hoop Net	3	N 35.67466	W 091.34956	5	2	74	0.076	680	4	15
Hoop Net	4	N 35.67006	W 091.34349	15	22	74	0.260	680	3	1/5
Hoop Net	5	N 35.66882	W 091.34535	5	8	74	0.248	680	3/2	3
Hoop Net	6	N 35.64653	W 091.32307	6	35	74	0.423	680	3	1/5
Hoop Net	7	N 35.64447	W 091.32121	6	23	74	0.288	680	3	5
Fyke Net	1	N 35.67922	W 091.35208	2	0	74	0.154	680	1/3	10
Fyke Net	2	N 35.67790	W 091.35317	2-15	0	74	0	680	3	1
Fyke Net	3	N 35.67222	W 091.34268	3-6	0	74	0	680	1/3	9
Fyke Net	4	N 35.66457	W 091.33798	3	0	74	0.224	680	4	12
Fyke Net	5	N 35.64628	W 091.32145	2.5	0	74	0.224	680	4	12
Seine	1A	N 35.63970	W 091.32209	1-3	0	74	0	680	4	12
Seine	1B	N 35.63970	W 091.32209	1-2	0	74	0	680	4/1	12
Seine	2A	N 35.66725	W 091.34712	3	0	74	0.32	680	3	1
Seine	2B	N 35.66725	W 091.34712	0.5	0	74	0.32	680	3	1
Seine	3A	N 35.67526	W 091.34889	1.5	0	74	0	680	4	12
Seine	3B	N 35.67526	W 091.34889	<1	0	74	0.05	680	4	12
Seine	4A	N 35.67534	W 091.34952	2.5	0	74	0	680	4	12
Seine	4B	N 35.67534	W 091.34952	1.5	0	74	0.441	680	4	12
Seine	5A	N 35.67488	W 091.35010	3	0	74	0.4	680	3 / 4	12/15
Seine	5B	N 35.67488	W 091.35010	0.5	0	72	0.4	680	3	12/15
Trawl	1	N 35.67512	W 091.34818	2-5	47	84	0.429	368	4	12
Trawl	2	N 35.67582	W 091.35019	7	70	84	0.6	368	4	12/5
Trawl	3	N 35.66958	W 091.34428	10	20	84	0.429	368	4/2	3/5
Trawl	4	N 35.66920	W 091.34804	2-3	30	84	0.214	368	4	5
Trawl	5	N 35.64634	W 091.32286	9	61	84	0.429	368	3	1/5
Trawl	6	N 35.63970	W 091.32209	4	35	84	0.2	368	4	12/5



**Table 13: Fishes Collected in the Lower Black River Effort Two**

SPECIES	NUMBER OF FISHES COLLECTED	LENGTH RANGE	WEIGHT RANGE	COLLECTIONS BY GEAR TYPE WITHIN REACH
<b>Lepisosteidae (Gars)</b>				
<i>Lepisosteus oculatus</i> (Spotted Gar)	2	442-560		F1
<i>Lepisosteus osseus</i> (Longnose Gar)	2	859-1112	960-1598	HN3,7
<i>Lepisosteus platostomus</i> (Shortnose Gar)	1	572		GN1
“”	27	402-610	422-600	F1,2,3,4
“”	3	424-472		S3A
<b>Clupeidae (Herrings)</b>				
<i>Dorosoma cepedianum</i> (Gizzard Shad)	1	62		F3
“”	13	62-125		S2B,3A,4A
<b>Cyprinidae (Minnows and Carps)</b>				
<i>Hybognathus hayi</i> (Cypress Minnow)	3	38-43		T6
<i>Hybognathus muchalis</i> (Mississippi Silvery Minnow)	21	40-56		F1
<i>Notropis fumeus</i> (Ribbon Shiner)	29	34-58		F2,4
<i>Notropis texanus</i> (Weed Shiner)	3	38-42		T5
<i>Notropis venustus</i> (Blacktail Shiner)	115	31-67		F1,2,3,4
“”	9	19-57		S1A,2A,2B
<i>Pimephales notatus</i> (Bluntnose Minnow)	27	12-30		T3
<i>Pimephales vigilax</i> (Bullhead Minnow)	2	44-44		F3
<b>Catostomidae (Suckers)</b>				
<i>Carpionodes carpio</i> (River Carpsucker)	1	30		S3A
<i>Ictiobus bubalus</i> (Smallmouth Buffalo)	1	485	1169	HN4
“”	2	31-32		S1A
<i>Ictiobus niger</i> (Black Buffalo)	2	370-561	620-2160	HN1,7
<i>Moxostoma macrolepidotum</i> (Shorthead Redhorse)	1	425	628	F4
<b>Ictaluridae (Bullhead Catfishes)</b>				
<i>Pylodictus olivaris</i> (Flathead Catfish)	1	740	4440	HN7

<b>Fundulidae (Killifishes)</b>				
<i>Fundulus Olivaceus ( Blackspotted Topminnow)</i>	26	41-63	F1,4	
<b>Poeciliidae ( Livebearers)</b>				
<i>Gambusia affinis( Mosquitofish)</i>	2	39-39		F3
“”	3	34-61		S2B,4A,4B
<b>Atherinidae ( Silversides)</b>				
<i>Labidesthes sicculus ( Brook Silverside)</i>	1	51		S1B
<i>Menidia beryllina ( Inland Silverside)</i>	1	153		S3A
<b>Centrarchidae ( Sunfishes)</b>				
<i>Lepomis macrochirus ( Bluegill)</i>	5	33-61		S2B,3A,4A
	13	20-51		T3,4
<i>Lepomis megalotis( Longear Sunfish)</i>	1	37		F1
<i>Micropterus punctulatus( Spotted Bass)</i>	1	220	140	F4
“”	6	57-81		S3A,4A,4B
<i>Micropterus salmoides ( Largemouth Bass)</i>	5	56-96		S2A,3A
<i>Pomoxis nigromaculatus ( Black Crappie)</i>	4	49-61		F1,2
<b>Sciaenidae ( Drums)</b>				
<i>Aplodinotus grunniens ( Freshwater Drum)</i>	2	250-555	184-1640	HN1,7

**Table 14: Lower Black River Second Sampling Effort**

<b>Gear Type</b>	<b>Set No.</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Depth ft.</b>	<b>Range yds.</b>	<b>Velocity m/s</b>	<b>Temp. ft.</b>	<b>Secchi mm.</b>	<b>Substrate</b>	<b>Habitat</b>
Hoop Net	1	N 35.64599	W 091.32280	11	26	0.4167	84	874	3/2	3
Hoop Net	2	N 35.64658	W 091.32474	7	72	5	84	874	3	1/5
Hoop Net	3	N 35.64783	W 091.33037	4	15	0.2381	84	874	3	6
Hoop Net	4	N 35.64965	W 091.33290	7	18	0.3846	84	874	3	6
Hoop Net	5	N 35.65021	W 091.33645	8	23	0.3333	84	874	2/3	3/6
Hoop Net	6	N 35.65739	W 091.34034	7	40	0.4545	84	874	2/3	3/6
Hoop Net	7	N 35.65750	W 091.33938	10	34	0.5000	84	874	2/3	3
Gill Net	1	N 35.67226	W 091.34317	3-10	30	0	84	874	1	9
Fyke Net	1	N 35.67372	W 091.34828	1.5	0	0	84	874	2	3
Fyke Net	2	N 35.67396	W 091.34829	1.5	0	0	84	874	2	3
Fyke Net	3	N 35.67428	W 091.34811	1	0	0	84	874	1/3/6	2/6
Fyke Net	4	N 35.67472	W 091.34958	1-35	0	0	84	874	2	3
Seine	1A	N 35.67470	W 091.34815	1	0	0.10	84	874	1/4	12
Seine	1B	N 35.67470	W 091.34815	1	0	0.10	84	874	1/4	12
Seine	2A	N 35.67500	W 091.34842	1	0	0.10	84	874	1/4	12
Seine	2B	N 35.67506	W 091.34858	1.5	0	0.10	84	874	1/4	12
Seine	3A	N 35.67506	W 091.34858	2.5	0	0.10	84	874	4	12
Seine	4A	N 35.67506	W 091.34858	4	0	0.10	84	874	4	12
Seine	4B	N 35.67506	W 091.34858	4	0	0.5000	84	874	4	12
Trawl	1	N 35.67506	W 091.34858	5	49	0.4545	84	874	1 / 4	5/6
Trawl	2	N 35.67571	W 91.34950	3-4	44	0.4545	84	874	1 / 4	5/6
Trawl	3	N 35.64090	W 091.32281	2	16	0.2000	84	874	4	12
Trawl	4	N 35.64050	W 091.32239	3-8	41	0.2500	84	874	4	12
Trawl	5	N 35.64019	W 091.32287	10-11	76	0.2500	84	874	4	5
Trawl	6	N 35.64006	W 091.32312	14	24	0.2000	84	874	2/3/4	3/5

**Table 15: Fishes Collected at the Mississippi River, Osceola as Part of a Multi-Agency Effort**

SPECIES/GEAR TYPE	NUMBER OF FISH COLLECTED	LENGTH RANGE	WEIGHT RANGE	COLLECTIONS WITHIN REACH BY GEAR TYPE
<b>Lepisosteidae (Gars)</b>				
<i>Lepisosteus platostomus</i> ( Shortnose Gar)	1	723		HN6
	1	740		F2
<b>Catostomidae (Suckers)</b>				
<i>Carpionodes carpio</i> (River Carpsucker)	12	327-432		HN2,HN3,HN4,HN5
<i>Ictiobus bubalus</i> ( Smallmouth Buffalo)	1	568		HN9
<b>Ictaluridae (Bullhead Catfishes)</b>				
<i>Ictalurus punctatus</i> ( Channel catfish)	1	380		HN7
<i>Pylodictus olivaris</i> (Flathead Catfish)	4	468-1045	6931	HN2,HN6,HN8
<b>Aplodinotus grunniens ( Freshwater Drum)</b>				
“”	2	237-547		HN1, HN7
“”	10	211-368		F1,F2

**Table 16: Mississippi River Osceola**

Gear	Set	Latitude	Longitude	Depth ft.	Range yds	Velocity	Substrate	Habitat
Hoop Net	1	N 35.68165	W 089.94568	8	15	0.57	5	8
Hoop Net	2	N 35.67666	W 089.94604	19	30	0.26	3	1/5
Hoop Net	3	N 35.67384	W 089.94476	10	20	0.28	3	1
Hoop Net	4	N 35.67081	W 089.94219	27	20	0.80	5	3/5
Hoop Net	5	N 35.66878	W 089.94094	29	20	0.56	2	3
Hoop Net	6	N 35.66235	W 089.93989	11	25	0.30	5	3/8
Hoop Net	7	N 35.66608	W 089.93898	14	20	0.54	5	3/8
Hoop Net	8	N 35.66562	W 089.93876	12	25	0.52	5	3/8
Hoop Net	9	N 35.66432	W 089.93730	39	50	0.76	2/3	5
Hoop Net	10	N 36.66360	W 089.83660	8	27	0.62	5	3/8
Fyke Net	1	N 35.68043	W 089.94631	3.0	0	0	3	1
Fyke Net	2	N 35.68043	W 089.94631	3.4	0	0	3	7

**Table: 17 Fishes Collected at the Mississippi River, Osceola Reach.**

<b>SPECIES</b>	<b>NUMBER OF FISHES COLLECTED</b>	<b>LENGTH RANGE</b>	<b>WEIGHT RANGE</b>	<b>COLLECTIONS BY GEAR WITHIN REACH</b>
<b>Clupeidae (Herrings)</b>				
<i>Dorosoma cepedianum</i> ( Gizzard Shad)	145	37-122		F1,2,3,4
<b>Cyprinidae (Minnows and Carps)</b>				
<i>Hybognathus muchalis</i> ( Mississippi Silvery Minnow)	15	79-94		F2,3,4
<i>Hybopsis aestivalis</i> ( Speckled Chub)	1	33		F8
<i>Notropis atherinoides</i> ( Emerald Shiner)	24	32-78		F1,2,3,4,5,6
<i>Notropis blennioides</i> ( River Shiner)	17	28-59		F1,2,6,8
<i>Notropis greeni</i> ( Wedgespot Shiner)	8	35-53		F5
<i>Notropis shumardi</i> ( Silverband Shiner)	156	32-63		F3,4,5,6,8
<i>Notropis venustus</i> ( Blacktail Shiner)	41	30-74		F3,4,5,6
<i>Notropis Volucellus</i> ( Mimic Shiner)	20	29-47		F1,2,3,4,5,6
<i>Pimephales vigilax</i> ( Bullhead Minnow)	3	37-43		F8
<b>Catostomidae (Suckers)</b>				
<i>Carpionodes carpio</i> ( River Carpsucker)	10	68-131		F4,7,8
“ ”	2	304-384		HN1
<i>Cycleptus elongatus</i> ( Blue Sucker)	2	457-492		HN4,5
<b>Ictaluridae (Bullhead Catfishes)</b>				
<i>Ictalurus furcatus</i> ( Blue Catfish)	1	54		F8
<b>Atherinidae ( Silversides)</b>				
<i>Menidia beryllina</i> ( Inland Silverside)	22	83-111		F1
<b>Moronidae (Temperate Basses)</b>				
<i>Morone chrysops</i> ( White Bass)	1	291		HN1
<b>Centrarchidae ( Sunfishes)</b>				
<i>Lepomis macrochirus</i> ( Bluegill)	12	30-167		F4,5,6

<i>Lepomis megalotis</i> ( Longear Sunfish)	1	177		F4
<i>Pomoxis annularis</i> ( White Crappie)	2	97-113		F4,6
“ ”	7	204-319		HN1
<i>Pomoxis nigromaculatus</i> ( Black Crappie)	2	104-141		F4,6
“ ”	6	175-238		HN1
<b>Percidae ( Perches)</b>				
<i>Etheostoma aprigene</i> ( Mud Darter)	3	62-67		F1
<i>Stiostedion canadense</i> ( Sauger)	5	162,417		F3,4
<b>Sciaenidae ( Drums)</b>				
<i>Aplodinotus grunniens</i> ( Freshwater Drum)	6	84-129		F1,2,3,4,6
“ ”	2	474-587		HN1

**Table 18: Fishes Collected by Seine and Trawl at the Mississippi River, Osceola Reach.**

<b>SPECIES</b>	<b>NUMBER OF FISHES COLLECTED</b>	<b>LENGTH RANGE</b>	<b>WEIGHT RANGE</b>	<b>COLLECTIONS BY GEAR TYPE WITHIN REACH</b>
<b>Lepisosteidae (Gars)</b>				
<i>Lepisosteus osseus</i> ( Longnose Gar)	1	600		S1A
<i>Lepisosteus platostomus</i> ( Shortnose Gar)	1	537		S1B
<b>Clupeidae (Herrings)</b>				
<i>Dorosoma petenense</i> ( Threadfin Shad)	90	39-82		S2A,2B
<b>Cyprinidae (Minnows and Carps)</b>				
<i>Hybognathus muchalis</i> ( Mississippi Silvery Minnow)	35	65-88		S2A,3B,4A,4B
<i>Hybopsis aestivalis</i> ( Speckled Chub)	71	26-49		T3,4,5,6
<i>Hybopsis storeriana</i> ( Silver Chub)	5	147-187		T5
<i>Notropis atherinoides</i> ( Emerald Shiner)	5	52-83		S3A,3B,4B,5A
<i>Notropis shumardi</i> (Silverband Shiner)	9	34-58		S3A,4A,4B,5A
<b>Catostomidae (Suckers)</b>				
<i>Carpionodes carpio</i> (River Carpsucker)	176	56-96		S1A,2A,3A,3B,4A,4B,5A,5B
<b>Ictaluridae (Bullhead Catfishes)</b>				
<i>Ictalurus furcatus</i> ( Blue Catfish)	10	28-160		T3,4,5,6
<i>Ictalurus punctatus</i> ( Channel catfish)	6	48-92		S1A,2A,3B,4A,4B
“”	83	20-145		T3,4,5
<b>Percidae ( Perches)</b>				
<i>Percina shumardi</i> ( River Darter)	2	45-57		T5
<b>Sciaenidae ( Drums)</b>				
<i>Aplodinotus grunniens</i> ( Freshwater Drum)	3	78-142		T4

**Table 19: Mississippi River Osceola**

Gear Type	Set No.	Latitude	Longitude	Depth ft.	Range		Velocity m/s	Temp F	Secchi mm	Substrate	Habitat
					yd.						
Hoop Net	1	N 35.69822	W 089.95707	14	15		0	46	270	2	7/8
Hoop Net	2	N 35.69829	W 089.95673	39	40		0.009	46	270	6	3/8/7
Hoop Net	3	N 35.69552	W 089.95712	10	35		0	46	270	2	3
Hoop Net	4	N 35.67539	W 089.94588	14	25		0.42	46	270	2/3	3/6
Hoop Net	5	N 35.67419	W 089.94536	14-17	20		0.40	46	270	3/4	1/6
Hoop Net	6	N 35.67196	W 089.94369	12	12		0.32	46	270	2	3/8
Hoop Net	7	N 35.66440	W 089.93786	14	15		0.21	46	270	3	3/8
Hoop Net	8	N 35.63783	W 084.88441	13	20		0.08	46	270	3	3/8
Hoop Net	9	N 35.62794	W 089.88392	8	30		0.42	46	270	2	3
Hoop Net	10	N 35.63052	W 089.88370	2-3	50		0.23	46	270	2	3
Fyke Net	1	N 35.67652	W089.94658	1-5	0		0	42°	270	3	1
Fyke Net	2	N 35.67788	W 089.94714	1-3	0		0.14	42°	270	3/2	1
Fyke Net	3	N 35.67846	W 089.94746	1-3	0		0	42	270	2	1
Fyke Net	4	N 35.67990	W 089.94871	1-4	0		0	42	270	2	1
Fyke Net	5	N 35.69621	W 089.95736	1-8	0		0	42	270	2	3
Fyke Net	6	N 35.69788	W 089.95720	1-7	0		0	42	270	2/3	3
Fyke Net	7	N 35.63733	W 089.88441	2-6	0		0	42	270	3	1
Fyke Net	8	N 35.62880	W 089.88420	1-3	0		0	42	270	2/3	3/6
Fyke Net	9	N 35.63114	W 089.88378	1-2	0		0.12	42	270	3	1
Seine	1a	N 35.62109	W 089.88655	3	0		0	85	220	3	1
Seine	1b	N 35.62109	W 089.88655	1.25	0		0	85	220	3	1
Seine	2a	N 35.62175	W 089.88661	2	0		0	85	220	3	1
Seine	2b	N 35.62175	W 089.88661	1.5	0		0	85	220	3	1
Seine	3a	N 35.62246	W 089.88640	0.5	0		0	85	220	3	1
Seine	3b	N 35.62262	W 089.88640	1	0		0	85	220	3 / 4	1
Seine	4a	N 35.62285	W 089.88646	2	0		0.5	85	220	3	1
Seine	4b	N 35.62293	W 089.88650	0.25	0		0.5	85	220	3 / 4	1 / 2
Seine	5a	N 35.62293	W 089.88659	1.25	0		0.5	85	220	3	2
Seine	5b	N 35.62266	W 089.88664	1	0		0	85	220	1	2



Trawl	1	N 35.64683	W 089.88085	19	205	0.56	85	220	3	5
Trawl	2	N 35.64595	W 089.87893	8	135	0.63	85	220	3	3 / 5
Trawl	3	N 35.63536	W 089.88345	10	80	0.56	85	220	3	5 / 6
Trawl	4	N 35.63600	W 089.88395	6-8	28	0.42	85	220	3	5 / 6
Trawl	5	N 35.63144	W 089.88361	6	25	0.83	85	220	4	5 / 6
Trawl	6	N 35.63036	W 089.88352	8-10	49	0.83	85	220	2/3	5

**Table 20: Fishes Collected at the Mississippi River, Helena, above the Confluence with the St. Frances River Effort One**

SPECIES/GEAR TYPE	NUMBER OF FISHES COLLECTED	LENGTH RANGE	WEIGHT RANGE	COLLECTIONS BY GEAR TYPE WITHIN REACH
<b>Lepisosteidae (Gars)</b>				
<i>Lepisosteus osseus</i> ( Longnose Gar)	3	885-911	1360-1600	HN4,6
<i>Lepisosteus platostomus</i> ( Shortnose Gar)	1	562	346	TROT 1
“”	13	492-601	110-138	F2,3,6,7
<b>Amiidae (Bowfins)</b>				
<i>Amia Calva</i> ( Bowfin)	1	461	720	F2
<b>Clupeidae (Herrings)</b>				
<i>Dorosoma cepedianum</i> ( Gizzard Shad)	228	42-98		S1A,1B,2A,2B,3A,3B
“”	1	93		F6
<i>Dorosoma petenense</i> ( Threadfin Shad)	1	21		T5
“”	1	90		F7
<b>Cyprinidae (Minnows and Carps)</b>				
<i>Hybognathus muchalis</i> ( Mississippi Silvery Minnow)	14	35-64		F6
<i>Notemigonus crysoleucas</i> ( Golden Shiner)	1	50	F2	
<i>Notropis atherinoides</i> ( Emerald Shiner)	15	11-34		T2,3,5
“”	1	91		S1A
“”	3,235	32-41		F2
<i>Notropis Shumardi</i> (Silverband Shiner)	2	47-48		T6
<i>Notropis texanus</i> ( Weed Shiner )	18	41-62		F2,3,6,7
<i>Notropis venustus</i> ( Blacktail Shiner)	19	32-64		F2,7,6
<i>Pimephales notatus</i> (Bluntnose Minnow)	1	61		S5A
<b>Catostomidae (Suckers)</b>				
<i>Carpiodes carpio</i> (River Carpsucker)	1	16		T3
“”	1	42		S2B
“”	1	141	40	F3

<i>Ictiobus bubalus</i> ( <i>Smallmouth Buffalo</i> )	1	708	6520	HN3
“ ”	1	550	2820	GN1
<i>Unidentified sucker</i>	2	25-25		T3,4
<b>Ictaluridae ( Bullhead Catfishes )</b>				
<i>Ictalurus furcatus</i> ( <i>Blue Catfish</i> )	3	32-92		T5,6
“ ”	1	604	2,020	HN5
“ ”	2	360-664	1100-3240	TROT 1
<i>Ictalurus punctatus</i> ( <i>Channel catfish</i> )	3	352-464	110-820	HN12
<i>Pylodictus olivaris</i> ( <i>Flathead Catfish</i> )	1	598	2,520	HN3
<b>Atherinidae ( Silversides )</b>				
<i>Menidia beryllina</i> ( <i>Inland Silverside</i> )	1	62		S3A
	267	30-37		F7
<b>Moronidae ( Temperate Basses )</b>				
<i>Morone chrysops</i> ( <i>White Bass</i> )	6	58-125		S1A,2B,2A,2B
<b>Centrarchidae ( Sunfishes )</b>				
<i>Lepomis macrochirus</i> ( <i>Bluegill</i> )	2	47-64		F2,7
<i>Pomoxis annularis</i> ( <i>White Crappie</i> )	1	290	96	F8
<b>Sciaenidae ( Drums )</b>				
<i>Aplodinotus grunniens</i> ( <i>Freshwater Drum</i> )	2	28-32		T5,6
	7	306-739	110-6,140	HN3,4,11,12
	1	84		F7

**Table 21: Mississippi River Helena Above St. Francis River Effort One**

Gear Type	Set No.	Latitude	Longitude	Depth ft.	Range		Velocity m/s	Temp.	Secchi mm	Substrate	Habitat
					yds.						
Hoop Net	1	N 34.62423	W 090.59693	15	12		0.500	85	223	2/3	10
Hoop Net	2	N 34.62422	W 090.59595	8	10		0	85	223	2/3	3/10
Hoop Net	3	N 34.62518	W 090.59559	11	23		0.750	85	223	2/3	3/10
Hoop Net	4	N 34.62539	W 090.59434	8	15		0.333	85	223	2/3	3/10
Hoop Net	5	N 34.62725	W 090.59298	7	17		0.428	85	223	6	3/8
Hoop Net	6	N 34.62873	W 090.59267	11	11		0.428	85	223	6	3/8
Hoop Net	7	N 34.63124	W 090.59195	10	12		1.000	85	223	6	3/8
Hoop Net	8	N 34.63292	W 090.59153	8	16		NA	85	223	2	3/6
Hoop Net	9	N 34.64567	W 090.58878	10	12		0.250	85	223	2/3	3/8
Hoop Net	10	N 34.64910	W 090.58801	7	23		0.428	75	522	3	9
Hoop Net	11	N 34.65362	W 090.58598	8	10		0.375	85	223	3	1
Hoop Net	12	N 34.67273	W 090.58823	6	10		0.250	85	223	3	3
Hoop Net	13	N 34.67624	W 090.58345	4	84		0.600	85	223	3	5
Hoop Net	14	N 34.67668	W 090.58382	5	36		0.428	85	223	3	7
Fyke Net	1	N 34.67701	W 090.58442	5	0		0	75	522	5	7
Fyke Net	2	N 34.67426	W 090.58473	2	0		0	75	522	3	1
Fyke Net	3	N 34.67200	W 090.58795	2-3	0		0	75	522	3	1
Fyke Net	4	N 34.67057	W 090.58927	9	0		0	75	522	2/3	3
Fyke Net	5	N 34.66827	W 090.58960	10	0		0	75	522	2/3	3
Fyke Net	6	N 34.66526	W 090.58802	3	0		0	75	522	3	1
Fyke Net	7	N 34.66364	W 090.58732	3	0		0	75	522	3	1
Fyke Net	8	N 34.65775	W 090.58630	3	0		0	75	522	3	1
Trot Line	1	N 34.65322	W 090.58580	8	0		0.250	88	223	2	3/6
Gill Net	1	N 34.65966	W 090.58390	2-8	10		0	75	765	3	2
Seine	1A	400 yds W of T4	400 yds W of T4	2	0		0	88	765	3	1
Seine	1B	400 yds W of T4	400 yds W of T4	2	0		0	88	765	3	1
Seine	2A	400 yds W of T4	400 yds W of T4	2	0		0	88	765	3	1
Seine	2B	400 yds W of T4	400 yds W of T4	2	0		0	88	765	3	1

Seine	3A	400 yds W of T4	400 yds W of T4	1.5	0	0	88	765	3	1
Seine	3B	400 yds W of T4	400 yds W of T4	1.5	0	0	88	765	3	1
Seine	4A	N 34.66700	W 090.57782	2	0	0	88	765	3	1
Seine	4B	N 34.66700*	W 090.57782*	3.5	0	0	88	765	3/4	1
Seine	5A	N 34.66700*	W 090.57782*	2	0	0	88	765	3	1
Seine	5B	N 34.66700*	W 090.57782*	2	0	0	88	765	3	1
Trawl	1	N 34.66076	W 090.58032	7	400	0.200	88	765	3	5
Trawl	2	N 34.66082	W 090.58039	3	375	0.200	88	765	3	5
Trawl	3	N 34.66022	W 090.57959	11	425	0.250	88	765	3	5
Trawl	4	N 34.66404	W 090.57695	5	400	0.200	88	765	3	5
Trawl	5	N 34.62495	W 090.59614	9-17	28	0.156	88	765	1/2/3	10
Trawl	6	N 34.62483	W 090.59586	18	47	0.156	88	765	1/2/3	10

**Table 22: Fishes Collected at the Mississippi River Above St. Francis River Confluence, Effort Two**

<b>SPECIES/GEAR TYPE</b>	<b>NUMBER OF FISH COLLECTED</b>	<b>LENGTH RANGE</b>	<b>WEIGHT RANGE</b>	<b>COLLECTIONS BY GEAR TYPE WITHIN REACH</b>
<b>Lepisosteidae (Gars)</b>				
<i>Lepisosteus oculatus</i> (Spotted Gar)	2	588-603	772-598	F1,F3
<i>Lepisosteus osseus</i> (Longnose Gar)	9	810-1020	900-3260	HN1,HN3,HN4,HN5,HN7
“”	4	489-662	230-760	F2
“”	2	940-1035	1600-2840	GN1
<i>Lepisosteus platostomus</i> (Shortnose Gar)	9	487-607	345-950	F1,F2,F4
<b>Clupeidae (Herrings)</b>				
<i>Dorosoma cepedianum</i> (Gizzard Shad)	2	76-95		F2
“	27	38-153		S1B,S2A,S2B,S3B,S4A
<i>Dorosoma petenense</i> (Threadfin Shad)	1	78		S1A
<b>Cyprinidae: (Minnows and Carps)</b>				
<i>Hybognathus muchalis</i> (Mississippi Silvery Minnow)	45	67-86		S1A,S5A
<i>Hybopsis aestivalis</i> (Speckled Chub)	88	21-32		T1,T2
<i>Hybopsis storeriana</i> (Silver Chub)	5	21-66		T2
<i>Hypophthalmichthys molitrix</i> (Silver Carp)	4	730-888	3920-6300	GN1
<i>Notropis atherinoides</i> (Emerald Shiner)	1088	30-63		F1,F2,F4
“”	13	17-37		T1,T2
“”	2	42-70		S1B,S3A
<i>Notropis fumeus</i> (Ribbon Shiner)	1	67		F4
<i>Notropis shumardi</i> (Silverband Shiner)	54	58-75		S1B,S2A,S3A,S3B, S4A,S4B,S5A
<i>Notropis venustus</i> (Blacktail Shiner)	4	55-61		F2,F3
<i>Notropis Volucellus</i> (Mimic Shiner)	60	21-38		T2

<i>Pimephales vigilax</i> ( <i>Bullhead Minnow</i> )	5	25-39		T1, T2,T3
“ ”	3	31-46		F2
“ ”	20	25-87		F1,F3
<b>Catostomidae (Suckers)</b>				
<i>Carpiodes carpio</i> ( <i>River Carpsucker</i> )	25	32-185		S1A,S2A,S2B,S3B,S4A
	7	31-58		F2
<i>Ictiobus bubalus</i> ( <i>Smallmouth Buffalo</i> )	2	357-481	564-1100	HN2
<i>Ictiobus niger</i> ( <i>Black Buffalo</i> )	1	481	1040	HN7
“ ”	2	572-630	3060-3600	GN1
<b>Ictaluridae (Bullhead Catfishes)</b>				
<i>Ictalurus furcatus</i> ( <i>Blue Catfish</i> )	4	54-117		T3
“ ”	1	253	130	F2
“ ”	1	1230	18012	GN1
“ ”	5	39-71		T1
<i>Ictalurus punctatus</i> ( <i>Channel catfish</i> )	1	751	3400	HN4
	2	162-355	262	F1
	2	666-800	3400-6840	GN1
	1	56		S1A
<i>Pylodictus olivaris</i> ( <i>Flathead Catfish</i> )	2	666-730	400-2620	HN4
<b>Fundulidae (Killifishes)</b>				
<i>Aplodinotus grunniens</i> ( <i>Freshwater Drum</i> )	4	260-670	200-444	HN4,HN5
	5	36-62		F1
	19	17-46		T1,T2
	1	82		S1A

**Table 23: Mississippi River Above St. Francis River Confluence Effort Two**

Gear Type	Set No.	Latitude	Longitude	Depth ft	Range		Velocity m/s	Temp. F	Secchi mm	Substrate	Habitat
					yd						
Hoop Net	1	N 34.62927	W 090.59231	4	11		0.750	84	600	2/5	3/8
Hoop Net	2	N 34.63478	W 090.59104	5	6		0.428	84	600	2/5	3/8
Hoop Net	3	N 34.63634	W 090.59057	8	10		0.600	84	600	2/5	3/8
Hoop Net	4	N 34.64247	W 090.58924	6	13		0.500	84	600	2/5	3/8
Hoop Net	5	N 34.64130	W 090.58839	5	11		0.375	84	600	2/5	3/8
Hoop Net	6	N 34.64904	W 090.58728	10	44		0.500	84	600	3	1
Hoop Net	7	N 34.65393	W 090.58576	10	13		0.136	84	600	3/2	3/6
Fyke Net	1	N 34.65844	W 090.58344	3.5	0		0	92	274	3	9/2
Fyke Net	2	N 34.65860	W 090.58339	1.75	0		0	92	274	3	9/2
Fyke Net	3	N 34.65882	W 090.58342	4.5	0		0	92	274	3	9/2
Fyke Net	4	N 34.65940	W 090.58357	1	0		0	92	274	3	9/2
Gill Net	1	N 34.65714	W 090.58447	8-13	50		0	92	274	3/1	2/9
Seine	1A	N 34.66713	W 090.57750	2.5	0		0	84	600	3	1
Seine	1B	N 34.66713	W 090.57750	2.5	0		0	84	600	3	1
Seine	2A	N 34.66697	W 090.57775	2	0		0	84	600	3	1
Seine	2B	N 34.66697	W 090.57775	2	0		0	84	600	3	1
Seine	3A	N 34.66659	W 090.57798	3.5	0		0	84	600	3	1
Seine	3B	N 34.66659	W 090.57798	3.5	0		0	84	600	3	1
Seine	4A	N 34.66644	W 090.57810	2	0		0	84	600	3	1
Seine	4B	N 34.66644	W 090.57810	1	0		0	84	600	3	1
Seine	5A	N 34.66628	W 090.57882	1	0		0	84	600	3	1
Seine	5B	N 34.66628	W 090.57882	6	0		0	84	600	3	1
Trawl	1	N 34.65823	W 090.58064	9	60		0.142	84	600	2	1/5
Trawl	2	N 34.65773	W 090.58165	4	65		0	84	600	2/3	1/5
Trawl	3	N 34.65487	W 090.58421	5	150		0.150	84	600	1/3	1/5
Trawl	4	N 34.65517	W 090.58459	12	75		0	84	600	3/1	1/5



**Table 24: Fishes Collected on the Mississippi River between Helena and the St. Francis River Confluence, Effort One**

SPECIES	NUMBER OF FISH COLLECTED	LENGTH RANGE	WEIGHT RANGE	COLLECTIONS BY GEAR TYPE WITHIN REACH
<b>Acipenseridae (Sturgeons)</b>				
<i>Scaphirhynchus platyrhynchus</i> ( Shovelnose Sturgeon)	2			HN11
<b>Lepisosteidae (Gars)</b>				
<i>Lepisosteus osseus</i> ( Longnose Gar)	2	1015-1160	3840-3840	HN11,HN13
<i>Lepisosteus platostomus</i> ( Shortnose Gar)	5	582-615	390-688	S4A,S4B,S5B
	19	370-727	300-1280	F3,F4,F6,F8
<b>Clupeidae (Herrings)</b>				
<i>Alosa chrysochloris</i> ( Skipjack Herring)	4	24-35		T6
“”	1	112		S1A
<i>Dorosoma cepedianum</i> ( Gizzard Shad)	368	37-210		S1B,S2A,S4A,S4B
“”	2	15-30		F4
<i>Dorosoma petenense</i> ( Threadfin Shad)	15	50-64		S5A
	15	27-34		F8
	2	25-26		T6
<b>Cyprinidae (Minnows and Carps)</b>				
<i>Cyprinus carpio</i> ( Common Carp)	1	696	4540	GN1
<i>Hybognathus muchalis</i> ( Mississippi Silvery Minnow)	40	52-92		S2A,S2B,S3A,S3B, S4A,S4B
<i>Hybopsis aestivalis</i> ( Speckled Chub)	12	18-24		T6
<i>Hybopsis storeriana</i> ( Silver Chub)	9	27-44		T6
<i>Notropis atherinoides</i> ( Emerald Shiner)	4	35-46		S2A,S5A

“”	2289	15-53		F1,F4,F8
<i>Notropis blennioides</i> ( River Shiner)	4	41-51		F6,F8
	2	38-54		S1A
<i>Notropis shumardi</i> (Silverband Shiner)	2	44-57		F4,F6
“”	1	51		S2A
<i>Notropis texanus</i> ( Weed Shiner )	4	29-41		F8
<i>Notropis venustus</i> ( Blacktail Shiner)	3	53-78		F3,F11
“”	1	77		S1A
“”	8	28-57		F6,F8
<i>Notropis volucellus</i> ( Mimic Shiner)	1	37		T6
<i>Pimephales vigilax</i> ( Bullhead Minnow)	1352	26-75		F4,F5,F6,F7
<b>Catostomidae (Suckers)</b>				
<i>Carpionotus carpio</i> (River Carpsucker)	19	41-90		S2A,S4A,S4B,S5A
	2	63-210	102	F6
<i>Carpionotus cyprinus</i> (Quillback)	1	88		S2B
<i>Carpionotus velifer</i> (Highfin Carpsucker)	3	92-94		S2B
<i>Cyprinotus elongatus</i> (Blue Sucker)	1	672	3720	HN7
“”	1	31		F8
<i>Ictalurus bubalus</i> ( Smallmouth Buffalo)	13	23-46		S1B,S2B
“”	1	60		T6
“”	2	36-39		F6,F8
<i>Ictalurus niger</i> ( Black Buffalo)	1	810	4940	GN1
<b>Ictaluridae (Bullhead Catfishes)</b>				
<i>Ictalurus furcatus</i> ( Blue Catfish)	1	530	1580	HN2
“”	2	32-62		T5
<i>Ictalurus punctatus</i> ( Channel catfish)	1	444	600	HN1
“””””	6	62-95		S2A,S3A,S4A

“”	5	45-580	1200	F1,F8,F4,F7,F6
<i>Pylodictus olivaris (Flathead Catfish)</i>	5	210-700	142-3300	HN1,HN7
“”	1	560	1240	F3
“”	3	53-65		S1B
<b>Atherinidae (Silversides)</b>				
<i>Labidesthes sicculus ( Brook Silverside)</i>	1	60		F4
<b>Moronidae (Temperate Basses)</b>				
<i>Morone chrysops ( White Bass)</i>	1	39		F8
<i>Morone mississippiensis ( yellow Bass)</i>	2	47-101		S5A
<i>Morone Saxatilis ( Striped Bass)</i>	2	320-410	344-422	HN5,HN11
“”	2	62-78		F4
“”	3	65-160		S2A,S3B,S4A
<b>Centrarchidae (Sunfishes)</b>				
<i>Lepomis humilis ( Orangespotted Sunfish)</i>	3	60-70		F7
<i>Lepomis macrochirus ( Bluegill)</i>	51	20-75		F1,F5,F6,F7,F8
“”	1	30		T6
<i>Pomoxis annularis ( White Crappie)</i>	1	76		S4B
<b>Percidae (Perches)</b>				
<i>Etheostoma aprigene ( Mud Darter)</i>	1	42		F1
<b>Sciaenidae (Drums)</b>				
<i>Aplodinotus grunniens ( Freshwater Drum)</i>	2	333-370	552-640	HN5,HN6
“”	31	15-41		T5,T6
“”	13	51-104		S2A,S4A
“”	58	20-470	55	F1,F3,F4,F6

**Table 25: Mississippi. River Helena to St. Francis, Effort One.**

<b>Gear Type</b>	<b>Set No.</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Depth ft.</b>	<b>Range yds.</b>	<b>Velocity m/s</b>	<b>Temp F.</b>	<b>Turbidity</b>	<b>Substrate</b>	<b>Habitat</b>
Hoop Net	1	N 34.56944	W 090.55847	8	82	0.555	86	514	3	1
Hoop Net	2	N 34.56846	W 090.55791	6	52	0.555	86	514	3	1/5
Hoop Net	3	N 34.56735	W 090.55702	3	37	0.555	86	514	3	1/5
Hoop Net	4	N 34.56535	W 090.55337	8	200	0.625	86	514	3	4/7
Hoop Net	5	N 34.56223	W 090.55060	4-6	30	0.333	86	514	3	1/5/7
Hoop Net	6	N 34.56188	W 090.54942	13	250	0.833	86	514	3	5
Hoop Net	7	N 34.55883	W 090.54742	6	70	0.625	86	514	3	1/5
Hoop Net	8	N 34.55788	W 090.54617	6	135	1.000	86	514	3	5
Hoop Net	9	N 34.55600	W 090.54475	4	118	1.000	86	514	3	5
Hoop Net	10	N 34.55422	W 090.54391	4-6	200	0.357	86	514	3	1/5
Hoop Net	11	N 34.55251	W 090.54419	3	123	0.625	86	514	3	1/5
Hoop Net	12	N 34.55086	W 090.54349	6	123	0.416	86	514	3	5
Hoop Net	13	N 34.54982	W 090.54324	6	115	0.833	86	514	3	5
Fyke Net	1	N 34.57920	W 090.56863	0-12	0	0	86°	582mm	3	7
Fyke Net	2	N 34.57849	W 090.57031	0-22	0	0	86°	526mm	5	7
Fyke Net	3	N 34.5771	W 090.56858	0-4	0	0	86	530	2/3	1
Fyke Net	4	N 34.57607	W 090.56715	1-3.5	0	0.250	86	530	2	6
Fyke Net	5	N 34.57503	W 090.56665		0	0	86	530	3	7
Fyke Net	6	N 34.57399	W 090.56641	1-4	0	0	86	530	2	6
Fyke Net	7	N 34.57217	W 090.56613	1-5	0	0	86	530	2	7/6
Fyke Net	8			1-3	0	0	86	530	2	13
Gill Net	1	N 34.57279	W 090.56584	3-19	5	0	88	510	2/1	7/9
Trawl	1	N 34.53927	W 090.54870	6	57	0.500	86	514	3	5
Trawl	2	N 34.53585	W 090.54783	9	88	0.500	86	514	3	5
Trawl	3	N 34.53932	W 090.54832	11	120	0.500	86	514	3	5
Trawl	4	N 34.52622	W 090.57021	7	200	0.277	86	514	3	5
Trawl	5	N 34.52844	W 090.57468	15	87	0	87	514	½	5
Trawl	6	N 34.52980	W 090.57428	4	52	0	87	514	3	5

Seine	1A	N 34.54789	W 090.54360	2.5	0	0	88	535	3	1
Seine	1B	N 34.54766	W 090.54371	3.5	0	0	88	535	3	1
Seine	2A	N 34.54737	W 090.54365	3-4	0	0	86	535	3	1
Seine	2B	N 34.54725	W 090.54362	2.5	0	0	86	535	3	1
Seine	3A	N 34.54596	W 090.54391	3.5	0	0	86	535	3	1
Seine	3B	N 34.54596	W 090.54391	3	0	0	86	535	3	1
Seine	4A	N 34.54565	W 090.54442	3	0	0	88	535	1	9
Seine	4B	N 34.54598	W 090.54478	3	0	0	88	535	1	9
Seine	5A	N 34.52672	W 090.57358	2	0	0	88	535	1/2	13
Seine	5B	N 34.52672	W 090.57358	2	0	0	88	535	1/2	13

**Table 26: Fishes Collected at the Mississippi River, Helena to St. Francis River Confluence Reach, Effort Two**

<b>SPECIES</b>	<b>NUMBER OF FISHES COLLECTED</b>	<b>LENGTH RANGE</b>	<b>WEIGHT RANGE</b>	<b>COLLECTIONS BY GEAR TYPE WITHIN REACH</b>
<b>Polyodontidae (Paddle Fishes)</b>				
<i>Polyodon spathula (Paddlefish)</i>	3	720-900	3960-7580	GN1
<b>Lepisosteidae (Gars)</b>				
<i>Lepisosteus oculatus (Spotted Gar)</i>	1	486	340	F1
<i>Lepisosteus osseus (Longnose Gar)</i>	4	288-942	920-1780	HN1,3,7
<i>Lepisosteus platostomus (Shortnose Gar)</i>	12	512-657	380-976	F1,3,4
<b>Clupeidae (Herrings)</b>				
<i>Dorosoma cepedianum (Gizzard Shad)</i>	671	50-148		S1A,2B,3B,4A
<i>Dorosoma petenense (Threadfin Shad)</i>	23	48-66		1B,2A
<b>Cyprinidae (Minnows and Carps)</b>				
<i>Cyprinus carpio (Common Carp)</i>	2	624-750	4120-6140	GN1
<i>Hybognathus muchalis (Mississippi Silvery Minnow)</i>	6	76		S1B,2A,2B
“ ”	5	51-65		F2,3,4
<i>Hybopsis storeriana (Silver Chub)</i>	2	30-61	F3	
<i>Hypophthalmichthys molitrix (Silver Carp)</i>	8	750-981	4300-9440	GN1
<i>Notropis atherinoides (Emerald Shiner)</i>	17	28-96		S1A,1B,3A,4B,2B
“ ”	86	25-57		F2,3,4
<i>Notropis shumardi (Silverband Shiner)</i>	3	42-68		S1A,1B,4A
<i>Notropis texanus (Weed Shiner)</i>	7	35-47		T2
<i>Notropis venustus (Blacktail Shiner)</i>	2	32-41		F1
<i>Pimephales vigilax (Bullhead Minnow)</i>	45	27-47		F1,2,3
<i>Unknown cyprinid</i>	1	67		T2
<b>Catostomidae (Suckers)</b>				
<i>Carpiodes carpio (River Carpsucker)</i>	2	42-64		F1
“ ”	2	37-97		S5B,2A

“”	2	421-469	680-1040	HN2,3
<i>Carpiodes cyprinus</i> (Quillback)	2	66-115		S2A,5A
<i>Ictiobus niger</i> (Black Buffalo)	1	920		HN2
“”	1	630	4100	GN1
<b>Ictaluridae (Bullhead Catfishes)</b>				
<i>Ictalurus furcatus</i> (Blue Catfish)	2	562-600	1580-2200	HN3,5
<i>Ictalurus punctatus</i> (Channel catfish)	4	62-541		F1,2,3
“”	4	66-72		S1B,2A,4A
“”				
<i>Pylodictus olivaris</i> (Flathead Catfish)	12	262-842	142-6340	HN2,3,5,6
<b>Atherinidae (Silversides)</b>				
<i>Menidia beryllina</i> (Inland Silverside)	2	61-75		F3,4
<b>Moronidae (Temperate Basses)</b>				
<i>Morone saxatilis</i> (Striped Bass)	3	244-433	162-922	HN3,5
“”	3	57-92		F3
<b>Centrarchidae (Sunfishes)</b>				
<i>Lepomis macrochirus</i> (Bluegill)	3	22-61		F2,4
<b>Sciaenidae (Drums)</b>				
<i>Aplodinotus grunniens</i> (Freshwater Drum)	2	65-67		F2,3
“”	9	222-509	162-1540	HN1,2,4

**Table 27: Mississippi River: Helena to St. Francis Effort Two**

Gear Type	Set No.	Latitude	Longitude	Depth ft.	Range		Velocity m/s	Temp. F	Secchi mm	Substrate	Habitat
					yds,						
Hoop Net	1	N 34.52308	W 090.57682	7	44		0.375	82°	680	6	1/3/8
Hoop Net	2	N 34.52180	W 090.57825	17	33		0.750	82°	680	6	1/3/8
Hoop Net	3	N 34.52044	W 090.57972	11	16		0.428	82°	680	2	1/3/8
Hoop Net	4	N 34.55880	W 090.54588	6	229		1.000	91	680	3	1/9/5
Hoop Net	5	N 34.56224	W 090.55041	6	43		0.500	91	680	3	1/7
Hoop Net	6	N 34.58574	W 090.57385	19	22		0.750	91	680	1/3	1
Hoop Net	7	N 34.62337	W 090.59318	10	13		0.428	91	680	2	3/7/10
Fyke Net	1	N 34.52684	W 090.57039	1.5	0		0	91	680	2/3	1
Fyke Net	2	N 34.52699	W 090.57022	1.5	0		0	91	680	2/3	1
Fyke Net	3	N 34.52723	W 090.56988	1	0		0	91	680	3	1
Fyke Net	4	N 34.52676	W 090.57071	1.5	0		0	91	680	2	1
Gill Net	1	N 34.52786	W 090.57484	9-13	30		0	91	680	2	9
Seine	1A	N 34.52707	W 090.56873	2.5	0		0	91	680	3	1
Seine	1B	N 34.52707	W 090.56873	2.5	0		0	91	680	3	1
Seine	2A	N 34.52946	W 090.56348	2.5	0		0	91	680	3	1
Seine	2B	N 34.52946	W 090.56348	2.5	0		0	91	680	3	1
Seine	3A	N 34.53618	W 090.55312	2	0		0	91	680	2/3	1
Seine	3B	N 34.53618	W 090.55312	1.5	0		0	91	680	3	1
Seine	4A	N 34.55251	W 090.54441	1.5	0		0	91	680	3	1
Seine	4B	N 34.55251	W 090.54441	1	0		0	91	680	3	1
Seine	5A	N 34.55798	W 090.54724	2	0		0.375	91	680	3	1
Seine	5B	N 34.55798	W 090.54724	2	0		0.375	91°	680		1
Trawl	1	N 34.55030	W 090.54340	3	84		0.250	91	680	3	1/5
Trawl	2	N 34.55050	W 090.54321	5	95		0.230	91	680	3	1/5
Trawl	3	N 34.54831	W 090.54271	7	165		0.250	91	680	3	1/5
Trawl	4	N 34.55231	W 090.54301	11	120		0.250	91	680	3	1/5
Trawl	5	N 34.56019	W 090.54806	8	87		0.157	91	680	3	1/5
Trawl	6	N 34.56019	W 090.54806	8	87		0.157	91	680	3	1/5



**Table 28: Fishes Collected at the Mississippi River Below Helena Downstream Reach.**

SPECIES	NUMBER OF FISHES COLLECTED	LENGTH RANGE	WEIGHT RANGE	COLLECTIONS BY GEAR TYPE WITHIN REACH
<b>Lepisosteidae (Gars)</b>				
<i>Lepisosteus platostomus</i> ( Shortnose Gar)	1	614	582	GN1
“	20	359-633		F1,2,3,4,5
<b>Clupeidae (Herrings)</b>				
<i>Dorosoma petenense</i> ( Threadfin Shad)	201	56-148		S2A,2B,3A,3B,5A
<b>Cyprinidae (Minnows and Carps)</b>				
<i>Cyprinus carpio</i> ( Common Carp)	7	610-698	3859-5902	GN1,2
<i>Hybognathus muchalis</i> ( Mississippi Silvery Minnow)	298	40-69		F1,2,3,4,5
“	6	59-72		S1B,3B,4B
<i>Hybopsis aestivalis</i> ( Speckled Chub)	2	27-31		T1,4
<i>Hybopsis storeriana</i> ( Silver Chub)	8	50-87		T1,4
<i>Notropis atherinoides</i> ( Emerald Shiner)	26	40-96		F1,4
“	2	48-79		S3B,4B
“	1	35		T1
<i>Notropis Volucellus</i> ( Mimic Shiner)	2	45-47		F1
“	11	48-61		T1,2,4
“				
<b>Catostomidae (Suckers)</b>				
<i>Carpiodes carpio</i> ( River Carpsucker)	1	392	794	HN1
“	1	197		F1
“	1	73		S3B
<i>Cycleptus elongatus</i> ( Blue Sucker)	2	406-679	568-4313	HN1,5
<b>Ictiobus (Buffaloes)</b>				
<i>Ictiobus bubalus</i> ( Smallmouth Buffalo)	1	558	3632	642
<i>Ictiobus cyprinellus</i> ( Bigmouth Buffalo)	1	520	2951	GN2
<b>Ictaluridae (Bullhead Catfishes)</b>				

<i>Ictalurus furcatus</i> ( <i>Blue Catfish</i> )	1	67	T2	
<i>Ictalurus punctatus</i> ( <i>Channel catfish</i> )	1	38		T4
“”	1	991	2315	HN1
“”	1	372		F1
“”	1	58		S2A
<b>Moronidae (Temperate Bases)</b>				
<i>Morone Saxatilis</i> ( <i>Striped Bass</i> )	1	632	2769	GN1
	6	57-72		S1A,1B,2A

**Table 29: Mississippi River Below Helena Downstream Reach**

Gear	Set No.	Latitude	Longitude	Depth ft	Range Yds	Temp F	Velocity(m/s)	Secch (mm)	Substrate	Habitat
Hoop Net	1	N34.39101	W090.63582	8	30	84	0.714	490	2/5	3/8
Hoop Net	2	N34.3933	W090.63435	4	20	84	0 collapsed net	490	3	3/8
Hoop Net	3	N34.39136	W090.63237	4	20	84	0.455	490	3	3/1
Hoop Net	4	N34.39236	W090.62987	4	15	84	0.625	490	3	1
Hoop Net	5	N34.39267	W090.62931	4	10	84	0.714	490	2	2/3
Hoop Net	6	N34.39328	W090.82578	11	13	84	0.455	490	2	3
Hoop Net	7	N34.39373	W090.62401	11	30	84	1	490	2	3/2
Fyke Net	1	N34.40248	W090.60087	2.5	0	81	0	490	2/3	1
Fyke Net	2	N34.40245	W090.60107	1.5	0	81	0	490	3	1
Fyke Net	3	N34.40236	W090.60133	2	0	81	0	490	1/3	1
Fyke Net	4	N34.40232	W090.60143	1	0	81	0	490	1/2/3	1
Fyke Net	5	N34.40222	W090.60153	2	0	81	0	490	2/3	1
Seine	1A	N34.40899	W090.59165	2.5	0	84	0	490	2/3	1
Seine	1B	N34.40886	W090.59184	3	0	84	0.2	490	3	1
Seine	2A	N34.40872	W090.59197	2.5	0	84	0.2	490	3	1
Seine	2B	N34.40874	W090.59214	3.5	0	84	0.2	490	2/3	1
Seine	3A	N34.39823	W090.60758	3	0	84	0.208	490	3	1
Seine	3B	N34.39807	W090.60758	3.25	0	84	0.208	490	3	1
Seine	4A	N34.39798	W090.60780	3	0	84	0.217	490	3	1
Seine	4B	N34.39791	W090.60791	3	0	84	0.217	490	3	1
Seine	5A	N34.39223	W090.62859	2	0	84	0.143	490	3	1
Seine	5B			4	0	84	0	490	1/3	1
Trawl	1	N34.4051	W090.59567	7	51	84	0.277	490	3	5
Trawl	2	N34.40498	W090.59534	10	105	84	0.313	490	3	5
Trawl	3	N34.40496	W090.59505	13	125	84	0.5	490	3	5
Trawl	4	N34.39880	W090.60569	6	43	84	0.294	490	3	5
Trawl	5	N34.39866	W090.60553	9	56	84	0.417	490	3	5
Trawl	6	N34.39825	W090.60488	16	167	84	0.5	490	3/4	5
Gill Net	1	N 34.41797	W 090.58788	3-9	10	85	0	490	1/2/3	7/9
Gill Net	2	N 94.42392	W 090.58814	7-16	10	85	0	490	1/2/3	7/9

**Table 30: Fishes collected at the Mississippi River Below Helena Upstream Reach**

SPECIES/GEAR TYPE	NUMBER OF FISHES COLLECTED	LENGTH RANGE	WEIGHT RANGE	COLLECTIONS BY GEAR TYPE WITHIN REACH
<b>Acipenseridae (Sturgeons)</b>				
<i>Scaphirhynchus platyrhynchus</i> ( Shovelnose Sturgeon)	1	430	248	HN7
<b>Polyodontidae (Paddle Fishes)</b>				
<i>Polyodon spathula</i> (Paddlefish)	1	660	3072	G2
<b>Lepisosteidae (Gars)</b>				
<i>Lepisosteus osseus</i> ( Longnose Gar)	1	922		F1
<i>Lepisosteus platostomus</i> ( Shortnose Gar)	13	473-690		F1,2,3,4,5
“”	2	550-565		S4A
<b>Clupeidae (Herrings)</b>				
<i>Dorosoma petenense</i> ( Threadfin Shad)	2	89-92		F3,5
“”	281	36-135		S1A,1B,2A,2B,3A,4B
<b>Esocidae (Pikes)</b>				
<i>Esox masquinongy</i> ( Muskellunge)				
<b>Cyprinidae (Minnows and Carps)</b>				
<i>Cyprinus carpio</i> ( Common Carp)	3	635-714	3299-4661	G1
<i>Hybognathus muchalis</i> ( Mississippi Silvery Minnow)	8	54-73		S1B,2B,3B,4A,4B
<i>Hybopsis storeriana</i> ( Silver Chub)	2	24-95		T4,T6
<i>Notropis atherinoides</i> ( Emerald Shiner)	37	30-78		F1,2,4,5
“”	7	30-86		S2A,2B,5B
<i>Notropis blennioides</i> ( River Shiner)	23	47-61		F1,2,4,5
<i>Notropis shumardi</i> (Silverband Shiner)	6	37-51		F5
<i>Notropis volucellus</i> ( Mimic Shiner)	146	27-49		F1,2,3,4,5
“”	22	35-50		T1,2,3,4,6

<b>Catostomidae (Suckers)</b>				
<i>Carpionodes carpio (River Carpsucker)</i>	5	114-228		F3,5
<i>Ictiobus bubalus ( Smallmouth Buffalo)</i>	1	622	2618	G1
“ ”	4	37-57		S1A,1B
“ ”	1	27		F5
<i>Ictiobus cyprinellus ( Bigmouth Buffalo)</i>	1	546	2164	G2
<b>Ictaluridae (Bullhead Catfishes)</b>				
<i>Ictalurus furcatus ( Blue Catfish)</i>	1	77		T2
<i>Ictalurus punctatus ( Channel catfish)</i>	1	545		F4
“ ”	3	38-512		S2A,2B,5B
<i>Pylodictus olivaris (Flathead catfish)</i>	2	311-795	290-6855	HN4,6
<b>Poeciliidae ( Livebearers)</b>				
<i>Gambusia affinis( Mosquitofish)</i>	1	40		S1B
<b>Moronidae (Temperate Basses)</b>				
<i>Morone Saxatilis ( Striped Bass)</i>	6	58-107		S2B,3A,5B
<b>Centrarchidae ( Sunfishes)</b>				
<i>Pomoxis annularis ( White Crappie)</i>	1	65		F5
	1	54		S5A
<b>Percidae ( Perches)</b>				
<i>Stiostedion canadense ( Sauger)</i>	1	82		F3
<b>Sciaenidae ( Drums)</b>				
<i>Aplodinotus grunniens ( Freshwater Drum)</i>	1	461	1029	G2
	4	52-142		S1A,1B,3A
	1	234		F1

**Table 31: Mississippi River Below Helena Upstream Reach**

<b>Gear</b>	<b>Set No.</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Depth ft.</b>	<b>Range yds</b>	<b>Temp F</b>	<b>Velocity m/s</b>	<b>Secchi mm</b>	<b>Substrate</b>	<b>Habitat</b>
Hoop Net	1	N 34.42157	W 090.58607	2-3	98	84	0.333	490	3	1/5
Hoop Net	2	N 34.42024	W 090.58556	12	200	84	0.625	490	3	2/5
Hoop Net	3	N 34.41801	W 090.58668	12	77	84	0.625	490	3/4	7/5
Hoop Net	4	N 34.41797	W 090.58679	22	29	84	0.625	490	3	7/5
Hoop Net	5	N 34.41655	W 090.58742	5	45	84	0.625	490	3	1/5
Hoop Net	6	N 34.41592	W 090.58709	7	96	84	0.625	490	3	1/5
Hoop Net	7	N 34.41535	W 090.58580	16	400	84	0.833	490	3	5
Fyke Net	1	N 34.41278	W 090.58909	2	0	81	0	491	3	1
Fyke Net	2	N 34.41301	W 090.58908	1	0	81	0	491	3	1
Fyke Net	3	N 34.41268	W 090.58919	0.5	0	81	0	491	3	1
Fyke Net	4	N 34.41240	W 090.58927	1.5	0	81	0	491	3/4	1
Fyke Net	5	N 34.41115	W 090.59026	3	0	81	0	491	3	1
Seine	1A	N 34.42286	W 090.58835	3.5	0	81	0	491	1/2	9/7/1
Seine	1B	N 34.42315	W 090.58833	5	0	81	0	491	1/2	9/7/1
Seine	2A	N 34.42318	W 090.58778	4.5	0	81	0	491	1/2	1/7
Seine	2B	N 34.42283	W 090.58751	3.5	0	81	0	491	2	1/7
Seine	3A	N 34.42232	W 090.58708	4	0	81	0	491	3	1
Seine	3B	N 34.42204	W 090.58704	1.5	0	81	0.2	491	2/3/4	1
Seine	4A	N 34.41985	W 090.58708	3	0	81	0.333	491	3/4	1
Seine	4B	N 34.41968	W 090.58716	3	0	81	0.333	491	3	1
Seine	5A	N 34.41928	W 090.58728	2.5	0	81	0.333	491	3/4	1
Seine	5B	N 34.41902	W 090.58736	3	0	81	0.25	491	2/3/4	1
Trawl	1	N 34.41706	W 090.58787	8	44	84	0.25	490	3	5
Trawl	2	N 34.41669	W 090.58871	9	121	84	0.625	490	3	5
Trawl	3	N 34.41719	W 090.58631	10	137	84	0.625	490	3	5
Trawl	4	N 34.41215	W 090.58872	5	57	84	0.625	490	3	5
Trawl	5	N 34.41227	W 090.58845	7	95	84	0.417	490	3	5
Trawl	6	N 34.41255	W 090.58766	10	200	84	0.278	490	3	5
Gill Net	1	N 34.41479	W 090.58788	3-9	10	85	0	490	1/2/3	7/9
Gill Net	2	N 34.42392	W 090.58814	7-16	10	85	0	490	1/2/3	7/9

**Table 32: Fishes Collected at the Arkansas City, Mississippi River Reach.**

SPECIES	NUMBER OF FISHES COLLECTED	LENGTH RANGE	WEIGHT RANGE	COLLECTIONS BY GEAR TYPE WITHIN REACH
<b>Lepisosteidae (Gars)</b>				
<i>Lepisosteus osseus</i> ( Longnose Gar)	1	1000	2680	HN14
<i>Lepisosteus platostomus</i> ( Shortnose Gar)	3	670-785	1140-1620	HN10,12,13
“”	1	686	1020	F1
“”	2	520-560		S4B
<b>Clupeidae (Herrings)</b>				
<i>Dorosoma cepedianum</i> ( Gizzard Shad)	1	194		S3B
<i>Dorosoma petenense</i> ( Threadfin Shad)	2	42-69		F5,7
“”	225	51-115		S1B,3B,4B,4A,5A,5B
<b>Cyprinidae (Minnows and Carps)</b>				
<i>Hybognathus muchalis</i> ( Mississippi Silvery Minnow)	18	72-85		S4A,4B,5A,5B
<i>Hybopsis aestivalis</i> ( Speckled Chub)	2	30-38		T3
<i>Notropis atherinoides</i> ( Emerald Shiner)	10	42-91		F5,7
<i>Notropis blennioides</i> ( River Shiner)	7	63-68		F6,7,8,1
<i>Notropis shumardi</i> ( Silverband Shiner)	2	56-63		F4,6
“”	3	32-47		S1A,2A
<i>Notropis venustus</i> ( Blacktail Shiner)	19	55-84		F4,5,6,8
<i>Notropis volucellus</i> ( Mimic Shiner)	1	43		F6
“”	1	28		S2B
<i>Pimephales vigilax</i> ( Bullhead Minnow)	57	35-75		F3,4,6,7,8
“”	1	29		S1A
<b>Catostomidae (Suckers)</b>				
<i>Carpionodes carpio</i> ( River Carpsucker)	49	28-104		S1A,1B,2B,3A,4A,4B,5A
<i>Ictiobus bubalus</i> ( Smallmouth Buffalo)	1	491	2080	GN1
<i>Ictiobus cyprinellus</i> ( Bigmouth Buffalo)	2	565-688	2820-5040	GN1

<b>Ictaluridae (Bullhead Catfishes)</b>				
<i>Ictalurus furcatus</i> ( Blue Catfish)	2	342 (1 ESCAPED)	348	HN14
“”	41	22-126		T1,3,4,5
<i>Ictalurus punctatus</i> ( Channel catfish)	3	420-425	380-610	HN12,14
“”	1	179		F5
“”	5	50-75		S1A,3B,4A,4B,5A
<i>Pylodictus olivaris</i> (Flathead Catfish)	2	468-516	900-1040	HN4,9
	1	443	869	F4
<b>Atherinidae ( Silversides)</b>				
<i>Labidesthes sicculus</i> ( Brook Silverside)	11	62-74		F4
“”	1	51		S1B
<b>Centrarchidae ( Sunfishes)</b>				
<i>Centrarchus macropterus</i> (Flier)	1	92		F1
<i>Lepomis macrochirus</i> ( Bluegill)	30	32-142		F1,3,5,6,7,8
“”	2	52-64		S4A
<i>Lepomis microlophus</i> ( Redear Sunfish)	1	69		F8
<i>Micropterus punctulatus</i> ( Spotted Bass)	1	139		F5
<i>Pomoxis annularis</i> ( White Crappie)	7	70-182		F3,4,6,8
<b>Sciaenidae ( Drums)</b>				
<i>Aplodinotus grunniens</i> ( Freshwater Drum)	1	350	620	HN12



**Table 33: Lower Mississippi River, Arkansas City**

Gear Type	Set No.	Latitude	Longitude	Depth ft..	Range		Velocity m/s	Temp. F	Secchi mm	Substrate	Habitat
					yds.						
Hoop Net	1	N 33.59731	W 91.13596	10	227		0.5000	82	550	3	5
Hoop Net	2	N 33.59697	W 91.13676	4	109		0.3333	82	550	3	5
Hoop Net	3	N 33.59902	W 91.13610	4	132		0.7500	82	550	3	1/5
Hoop Net	4	N 33.59956	W 91.13589	4.5	135		0.7500	82	550	3	1/5
Hoop Net	5	N 33.59984	W 91.13575	7.5	143		0.3333	82	550	3	1/5
Hoop Net	6	N 33.60058	W 91.13577	7	115		0.2727	82	550	3	3/5
Hoop Net	7	N 33.60082	W 91.13606	5	77		0.6000	82	550	3	3/5
Hoop Net	8	N 33.60182	W 91.13576	6	71		0.3750	82	550	3	3/5
Hoop Net	9	N 33.60321	W 91.13557	7	69		0.6000	82	550	3	5/6
Hoop Net	10	N 33.60446	W 91.13572	6	30		0.4286	82	550	3	1
Hoop Net	11	N 33.60872	W 91.13629	6	61		0.5000	82	550	3	1
Hoop Net	12	N 33.61399	W 91.13786	6	12		0.2143	82	550	3	3/8
Hoop Net	13	N 33.16489	W 91.13802	4	39		0.6000	82	550	3	3/8
Hoop Net	14	N 33.61447	W 91.13761	8	53		0.4286	82	550	3	1
Fyke Net	1	N 33.62240	W091.14306	1			0	82°F	550	3	1
Fyke Net	2	N 33.62240	W091.14306	6			0	78°F	550	3	1
Fyke Net	3	N 33.62240	W091.14306	3			0	83°F	550	3	1/8
Fyke Net	4	N 33.62240	W091.14306	2.5-3			0	82	550	6	8
Fyke Net	5	N 33.63838	W091.16392	5			0	82	550	3	8
Fyke Net	6	N 33.63810	W091.16412	4			0	82	550	2	8
Fyke Net	7	N 33.63777	W091.16442	6-7			0	82	550	3	1/7
Fyke Net	8	N 33.63760	W091.16456	5-6			0	82	550	3	1/7
Gill Net	1	N 33.63777	W091.16442	13	10-40		0	82	550	1/3	7/9
Trawl	1	N 33.58648	W 091.14593	8	62		0.42	84	270	3	1/5
Trawl	2	N 33.58713	W 091.14485	11	111		0.63	84	270	3	1/5
Trawl	3	N 33.58624	W 091.14552	13	112		0.71	84	270	3	1/5
Trawl	4	N 33.58508	W 091.14757	14	50		0.83	84	270	3	1/3/5
Trawl	5	N 33.58571	W 091.14640	15	90		0.83	84	270	3	1/3/5
Trawl	6	N 33.58565	W 091.14585	16	158		0.71	84	270	3	1/3/5

Seine	1a	N 33.58930	W 091.16618	0.5	0	0	84	392	1/3	1
Seine	1b	N 33.58935	W 091.16616	2	0	0	84	392	3	1
Seine	2a	N 33.59006	W 091.16618	1	0	0	84	392	3	1
Seine	2b	N 33.58993	W 091.16612	1.5	0	0	84	392	3	1
Seine	3a	N 33.58898	W 091.16644	0.5	0	0	84	392	3	1
Seine	3b	N 33.58883	W 091.16631	3.0	0	0	84	392	2/3	1
Seine	4a	N 33.58797	W 091.66520	2.0	0	0	84	392	1/3	1
Seine	4b	N 33.58797	W 091.66520	2.0	0	0	84	392	3	1
Seine	5a	N 33.58790	W 091.16659	2.0	0	0	84	392	3	1
Seine	5b	N 33.58762	W 091.16662	2.0	0	0	84	392	3	1

**Table 34: Fishes Collected at the Mississippi River, Choctaw Island Reach**

SPECIES	NUMBER OF FISH COLLECTED	LENGTH RANGE	WEIGHT RANGE	COLLECTIONS BY GEAR TYPE WITHIN REACH
<b>Lepisosteidae (Gars)</b>				
<i>Lepisosteus osseus</i> ( Longnose Gar)	2	958-1000	1380-2340	HN3
<i>Lepisosteus platostomus</i> ( Shortnose Gar)	3	572-620	576-584	F5,F4,F8
“”	1	682	1120	HN10
<b>Clupeidae (Herrings)</b>				
<i>Dorosoma cepedianum</i> ( Gizzard Shad)	8	34-52		1A,1B,4B
<i>Dorosoma petenense</i> ( Threadfin Shad)	26	32-46		F3,F4,F5
	115	32-86		1B,2A,2B,3A,3B,4A,5B
<b>Cyprinidae (Minnows and Carps)</b>				
<i>Hybognathus muchalis</i> ( Mississippi Silvery Minnow)	2	66-70		F5
<i>Hybopsis aestivalis</i> ( Speckled Chub)	73	20-40		T1,T2,T3,T4,T5,T6
<i>Notemigonus crysoleucas</i> ( Golden Shiner)	1	76		F5
<i>Notropis atherinoides</i> ( Emerald Shiner)	1	45		T5
“”	1	59		5A
<i>Notropis blennioides</i> ( River Shiner)	1	32		T1
<i>Notropis shumardi</i> ( Silverband Shiner)	18	25-62		1A,2A,2B,3A,3B, 4B,5A,5B
<i>Notropis venustus</i> ( Blacktail Shiner)	5	57-81		F2,F3,F5,F7
<i>Notropis volucellus</i> ( Mimic Shiner)	1	40		F7
<i>Pimephales vigilax</i> ( Bullhead Minnow)	11	27-58		1A,2A,3A,3B,4A,5A,5B
<b>Catostomidae (Suckers)</b>				
<i>Carpoides carpio</i> ( River Carpsucker)	159	45-68		1A,2A,3A,3B,4A,5A,5B

<i>Ictiobus cyprinellus</i> ( <i>Bigmouth Buffalo</i> )	1	44		5A
<b>Ictaluridae (Bullhead Catfishes)</b>				
<i>Ictalurus furcatus</i> ( <i>Blue Catfish</i> )	5	76-98		T3,T4
<i>Ictalurus punctatus</i> ( <i>Channel catfish</i> )	1	434		F4
“”	31	51-99		T1,T2,T3
“	2	53-58		
<b>Atherinidae (Silversides)</b>				
<i>Menidia beryllina</i> ( <i>Inland Silverside</i> )	4	55-98		3B,4B,5B
<b>Centrarchidae (Sunfishes)</b>				
<i>Centrarchus macropterus</i> ( <i>Flier</i> )	2	72-92		F7
<i>Lepomis macrochirus</i> ( <i>Bluegill</i> )	17	28-136		F1,F2,F3,F4,F5,F6,F7
<i>Pomoxis annularis</i> ( <i>White Crappie</i> )	2	207-302	140-418	F7
“”	1	76		3B
<i>Pomoxis nigromaculatus</i> ( <i>Black Crappie</i> )	47	36-258		F3,F4,F5,F7,F8
<b>Percidae (Perches)</b>				
<i>Stiostedion canadense</i> ( <i>Sauger</i> )	1	130		F8
<b>Sciaenidae (Drums)</b>	<b>1</b>	<b>138</b>		<b>F2</b>
<i>Aplodinotus grunniens</i> ( <i>Freshwater Drum</i> )	2	38-42		T2

**Table 35: Mississippi River- Choctaw Island Desha County**

Gear Type	Set No.	Latitude	Longitude	Depth ft	Range		Velocity m/s	Temp F.	Turbidity mm	Substrate	Habitat
					yd						
Hoop Net	1	N 33.62675	W 91.16077	9	76		0.4167	88	492	3	1/5
Hoop Net	2	N 33.62439	W 91.16108	4	100		0.3846	88	492	3	1/5
Hoop Net	3	N 33.62062	W 91.16231	4	103		0.4167	88	492	3	1/5
Hoop Net	4	N 33.61964	W 91.16244	12	70		0.3846	88	492	3	1/5
Hoop Net	5	N 33.61082	W 91.16259	19	57		0.2500	88	492	3	1/5/7
Hoop Net	6	N 33.61942	W 91.16216	4	119		0.3125	88	492	3	1/5
Hoop Net	7	N 33.61425	W 91.16238	6	127		0.6250	88	492	3	1/5
Hoop Net	8	N 33.60732	W 91.16631	17	15		0.6250	88	492	2	3/8
Hoop Net	9	N 33.60689	W 91.16630	13	12		0.7143	88	492	2	3/8
Hoop Net	10	N 33.66576	W 91.16615	6	8		0.4167	88	492	2	1/3
Hoop Net	11	N 33.60444	W 91.16551	15	33		0.6250	88	492	2	1/3
Hoop Net	12	N 33.60461	W 91.16388	15	49		0.2500	88	492	2	1
Hoop Net	13	N 33.60389	W 91.16335	15	71		0.3333	88	492	2	1/5
Fyke Net	1	N 33.62981	W 91.16081	1	0		0	88°F	492	1/3	1
Fyke Net	2	N 33.63001	W 91.16115	1.5	0		0	88°F	492	1	1
Fyke Net	3	N 33.62990	W 91.16112	2	0		0	88°F	492	1	1
Fyke Net	4	N 33.62980	W 91.16110	2.5	0		0	88°F	492	1	1
Fyke Net	5	N 33.62985	W 91.16066	2	0		0	88°F	492	3	1
Fyke Net	6	N 33.62918	W 91.15886	2	0		0	88°F	492	5	7
Fyke Net	7	N 33.61039	W 91.16742	2	0		0	88	492	2	13
Fyke Net	8	N 33.61104	W 91.16622	2	0		0	88	492	3	1
Gill Net	1	N 33.61120	W 91.16743	5-8	48		0	88	492	2	9
Trawl	1	N 33.58099	W 091.16872	10	331		0.36	87	464	3	5
Trawl	2	N 33.58049	W 091.16950	7	118		0.34	87	464	3	5
Trawl	3	N 33.58705	W 091.16591	6	336		0.3333	87	464	4	5
Trawl	4	N 33.57953	W 091.16890	17	277		0.33	87	464	3	5
Trawl	5	N 33.60634	W 091.16147	8	87		0.4545	87	464	1/2	5
Trawl	6	N 33.60721	W 091.16111	6	66		0.6250	87	464	3	5

Seine	1A	N 33.58008	W 091.17132	1.5	0	0	81°F	310	3	1
Seine	1B	N 33.58008	W 091.17132	1.5	0	0	81°F	310	3	1
Seine	2A	N 33.5804	W 091.17112	1.5	0	0	81°F	310	3	1
Seine	2B	N 33.5804	W 091.17112	1.5	0	0	81°F	310	3	1
Seine	3A	N 33.58080	W 091.17088	1.5	0		81°F	310	3	1
Seine	3B	N 33.58080	W 091.17088	1.5	0		81°F	310	3	1
Seine	4A	N 33.58115	W 091.17067	0.75	0	0	81°F	310	3	2
Seine	4B	N 33.58115	W 091.17067	0.75	0	0	81°F	310	3	2
Seine	5A	N 33.58138	W 091.17012	2	0		81°F	310	3	2
Seine	5B	N 33.58138	W 091.17012	1.5	0	0	81°F	310	3	2

**Table 36: Fishes Collected in the Ouachita River**

SPECIES	NUMBER OF FISH COLLECTED
<b>Lepisosteidae (Gars)</b>	
<i>Lepisosteus osseus</i> ( Longnose Gar)	4
<i>Lepisosteus platostomus</i> ( Shortnose Gar)	5
<b>Clupeidae (Herrings)</b>	
<i>Dorosoma cepedianum</i> ( Gizzard Shad)	2
“”	1
<i>Dorosoma petenense</i> ( Threadfin Shad)	5
<b>Cyprinidae (Minnows and Carps)</b>	
<i>Hybognathus muchalis</i> ( Mississippi Silvery Minnow)	37
<i>Hybopsis aestivalis</i> ( Speckled Chub)	3
<i>Notropis atherinoides</i> ( Emerald Shiner)	5
<i>Notropis boops</i> ( Bigeye Shiner)	1
“”	8
<i>Notropis emiliae</i> ( Pugnose Minnow)	10
<i>Notropis texanus</i> ( Weed Shiner )	12
<i>Notropis venustus</i> ( Blacktail Shiner)	38
<i>Pimephales notatus</i> ( Bluntnose Minnow)	2
<i>Pimephales vigilax</i> ( Bullhead Minnow)	1
<b>Catostomidae (Suckers)</b>	
<i>Ictiobus bubalus</i> ( Smallmouth Buffalo)	1
<b>Ictaluridae (Bullhead Catfishes)</b>	

<i>Ictalurus furcatus</i> ( <i>Blue Catfish</i> )	3
“”	5
<i>Ictalurus punctatus</i> ( <i>Channel catfish</i> )	8
<i>Pylodictus olivaris</i> ( <i>Flathead Catfish</i> )	3
<b>Aphredoderidae (Pirate Perches)</b>	
<i>Aphredoderus sayanus</i> ( <i>Pirate Perch</i> )	15
“”	5
<b>Atherinidae (Silversides)</b>	
<i>Menidia beryllina</i> ( <i>Inland Silverside</i> )	1
<b>Centrarchidae (Sunfishes)</b>	
<i>Lepomis humilis</i> ( <i>Orangespotted Sunfish</i> )	1
<i>Lepomis macrochirus</i> ( <i>Bluegill</i> )	1
“”	1
“”	6
<i>Lepomis megalotis</i> ( <i>Longear Sunfish</i> )	19
“”	1
<i>Lepomis microlophus</i> ( <i>Redear Sunfish</i> )	1
<i>Micropterus punctulatus</i> ( <i>Spotted Bass</i> )	7
<i>Pomoxis annularis</i> ( <i>White Crappie</i> )	3
<b>Sciaenidae (Drums)</b>	
<i>Aplodinotus grunniens</i> ( <i>Freshwater Drum</i> )	1
	3
	2



**Table 37: Ouachita River, Felsenthal**

Gear Type	Set No.	Latitude	Longitude	Depth ft	Range		Velocity m/s	Temp. F.	Secchi mm	Substrate	Habitat
						yds					
Hoop Net	1	N 33.05510	W 092.11830	9-12	18		0.067	78	615	3/4	3
Hoop Net	2	N 33.05357	W 092.11742	15	22		0.067	78	615	6	3
Hoop Net	3	N 33.05238	W 092.11670	13	13		0.067	78	615	1/3	3
Hoop Net	4	N 33.05011	W 092.11533	14	17		0.061	78	615	3/6	3/6
Hoop Net	5	N 33.04794	W 092.11397	5-6	18		0.172	78	615	1/3/4	5/10
Hoop Net	6	N 33.00963	W 092.06952	12	20		0.180	78	615	3	1
Hoop Net	7	N 33.01051	W 092.07025	10-22	22		0.273	78	615	2	3
Hoop Net	8	N 33.01215	W 092.07212	6	19		0.176	78	615	3	1
Hoop Net	9	N 33.01475	W 092.02569	14	23		0.210	78	615	3	1
Hoop Net	10	N 33.01708	W 092.07811	14	10		0.114	78	615	3	3/1
Hoop Net	11	N 33.02263	W 092.07887	6	30		0	78	615	1/3	1
Hoop Net	12	N 33.02457	W 092.08063	10	18		0.241	78	615	3	3
Hoop Net	13	N 33.02808	W 092.08092	16	25		0.287	78	615	1	10
Hoop Net	14	N 33.02919	W 092.08123	18	19		0.301	78	615	2	10
Fyke Net	1	N 33.05031	W 092.11535	5-8	0		0	78	615	1/3	3
Fyke Net	2	N 33.04759	W 092.11675	5	0		0	78	615	1	9
Fyke Net	3	N 33.06125	W 092.11435	2-5	0		0	78	615	6	8
Fyke Net	4	N 33.06073	W 092.11428	2-6	0		0	78	615	2	8/3
Fyke Net	5	N 33.05750	W 092.11167	2-5	0		0	78	615	2	9
Fyke Net	6	N 33.05036	W 092.11088	2-4	0		0	78	615	2	13
Fyke Net	7	N 33.00863	W 092.06939	2-8	0		0	78	615	3	3
Fyke Net	8	N 33.01178	W 092.07104	2-6	0		0	78	615	3	1
Trawl	1	N 33.05661	W 092.11932	14	15		0.067	78	615	6	5
Trawl	2	N 33.04929	W 092.11341	18	42		0	78	725	1	9/10
Trawl	3	Near Trawl 2	Near Trawl 2	19	68		0	78	725	1/3	9/10
Trawl	4	N 33.05382	W 092.11012	14	20		0	78	725	1	9
Trawl	5	N 33.04586	W 092.11291	22	43		0.301	78	615	6	10/5
Trawl	6	N 33.00863	W 092.06939	12-17	20		0.301	78	615	3	5
Seine	1A	N 33.03297	W 092.08590	2	0		0	88°F	742	3	1

Seine	1B	N 33.03297	W 092.08590	3	0	0	88	742	3	1
Seine	2A	N 33.03324	W 092.09350	3	0	0.125	88	557	3	1
Seine	2B	N 33.03324	W 092.09350	3	0	0.125	88	557	3	1
Seine	3A	N 33.03923	W 092.10965	2.5	0	0.091	81oF	561	3/4	
Seine	3B	N 33.03923	W 092.10965	2.5	0	0.09090m/s		561	3 / 4	1
Seine	4A	N 33.04018	W 092.10975	2	0	0.09090m/s		561	1/3	1
Seine	4B	N 33.04018	W 092.10975	2	0	0.09090m/s		561	1/3	1
Seine	5A	N 33.03895	W 092.10958	2.5	0	0.09090m/s		561	3	1
Seine	5B	N 33.03895	W 092.10958	2.5	0	0.09090m/s		561	3	1

**Table 38: Fishes Collected in the Little River Reach.**

<b>SPECIES</b>	<b>NUMBER OF FISHES COLLECTED</b>	<b>LENGTH RANGE</b>	<b>WEIGHT RANGE</b>	<b>COLLECTIONS BY GEAR TYPE WITHIN REACH</b>
<b>Lepisosteidae (Gars)</b>				
<i>Lepisosteus osseus</i> ( Longnose Gar)	1	1089		HN7
<b>Catostomidae (Suckers)</b>				
<i>Carpionodes carpio</i> (River Carpsucker)	10	228-362		HN1,2,4,5,7
<b>Moronidae (Temperate Basses)</b>				
<i>Morone chrysops</i> ( White Bass)	11	248-389		HN1,2,4,5,7
<b>Centrarchidae ( Sunfishes)</b>				
<i>Lepomis macrochirus</i> ( Bluegill)	1	156		HN7
<i>Micropterus punctulatus</i> ( Spotted Bass)	3	247-285		HN2,3,5
<i>Pomoxis annularis</i> ( White Crappie)	2	242-330		HN1,3
<i>Pomoxis nigromaculatus</i> ( Black Crappie)	2	303-313		HN1,7
<b>Sciaenidae ( Drums)</b>				
<i>Aplodinotus grunniens</i> ( Freshwater Drum)	1	228		HN10

**Table 39: Fishes collected at the Red River, Fulton Reach**  
**Date: 3-03-06.**

<b>SPECIES</b>	<b>NUMBER OF FISHES COLLECTED</b>	<b>LENGTH RANGE</b>	<b>WEIGHT RANGE</b>	<b>COLLECTIONS BY GEAR TYPE WITHIN REACH</b>
<b>Catostomidae (Suckers)</b>				
<i>Carpionodes carpio</i> (River Carpsucker)	16	286-494		HN11,13,14
<i>Cycleptus elongatus</i> (Blue Sucker)	2	619-693	2020-2440	HN11
<b>Ictaluridae (Bullhead Catfishes)</b>				
<i>Ictalurus furcatus</i> ( Blue Catfish)	5	441-624		HN12,13,14
<i>Ictalurus punctatus</i> ( Channel catfish)	2	304-319		HN13,14
<i>Pylodictus olivaris</i> (Flathead Catfish)	1	501		HN11
<b>Moronidae (Temperate Basses)</b>				
<i>Morone chrysops</i> ( White Bass)	5	276-526		HN11,12,14
<b>Centrarchidae ( Sunfishes)</b>				
<i>Micropterus punctulatus</i> ( Spotted Bass)	1	336		HN11

**Table 40: Little River and Red River**

**Date: 03/02/06 – 03/04/06**

<b>Gear Type</b>	<b>Set No.</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Depth ft/</b>	<b>Range</b> <b>yd.</b>	<b>Velocity m/s</b>	<b>Temp. F</b>	<b>Secchi mm</b>	<b>Substrate</b>	<b>Habitat</b>
<b>Little River</b>										
Hoop Net	1	N 33.67982	W 093.96576	10			61	655	4	5
Hoop Net	2	N 33.67939	W 093.96619	6-8			61	655	4	5
Hoop Net	3	N 33.65768	W 093.94501	19			61	655	2	3
Hoop Net	4	N 33.65771	W 093.92968	23			61	655	2	3
Hoop Net	5	N 33.64632	W 93.90242	20			61	655	2	5
Hoop Net	6	N 33.64536	W 093.90305	44			61	655	2	5
Hoop Net	7	N 33.64110	W 093.90961	6			61	655	4	12
Hoop Net	8	N 33.64133	W 093.90869	5			61	655	4	12
Hoop Net	9	N 33.64157	W 093.90791	7			61	655	4/5	12
Hoop Net	10	N 33.62966	W 093.91660	10			61	655	2	3/10
<b>Red River Fulton</b>										
Hoop Net	11	N 33.60897	W 093.82336	8	15	0.292	61	497	2	3/8
Hoop Net	12	N 33.60823	W 093.82367	10	15			497	2	3/8
Hoop Net	13	N 33.60714	W 093.82410	12	15			497	2	3/8
Hoop Net	14	N 33.60977	W 093.81539	26-34			61	507	2/3	5
Hoop Net	15	N 33.60975	W 093.81512	24					2	3

**Table 41: Fishes Collected at the Red River, Garland City Reach**

**Date: 03/27/06.**

SPECIES	NUMBER OF FISHES COLLECTED	LENGTH RANGE	WEIGHT RANGE	COLLECTIONS BY GEAR TYPE WITHIN REACH
<b>Acipenseridae (Sturgeons)</b>				
<i>Scaphirhynchus platyrhynchus</i> ( Shovelnose Sturgeon)	1	628		14
<b>Clupeidae (Herrings)</b>				
<i>Dorosoma cepedianum</i> ( Gizzard Shad)	17	67-352		HN1,2,6,8,9,15
<b>Catostomidae (Suckers)</b>				
<i>Carpionodes carpio</i> (River Carpsucker)	18	333-475		HN1,2,8,9,12
<i>Cycleptus elongatus</i> (Blue Sucker)	31	527-692	1120-3780	4,6,12,14
<i>Ictiobus bubalus</i> ( Smallmouth Buffalo)	5	218-261		Hn4,5,6,8,15
<i>Ictiobus cyprinellus</i> ( Bigmouth Buffalo)	2	673-834	-2516	HN5,15
<i>Ictiobus niger</i> ( Black Buffalo)	4	467-527		HN5,8
<i>Moxostoma duquesnei</i> ( Black Redhorse)	1	348		
<b>Ictaluridae (Bullhead Catfishes)</b>				
<i>Ictalurus furcatus</i> ( Blue Catfish)	3	396-488		HN12,14
<i>Ictalurus punctatus</i> ( Channel catfish)	2	225-365		HN1,5
<b>Moronidae (Temperate Basses)</b>				
<i>Morone mississippiensis</i> ( yellow Bass)	1	231		HN15
<b>Sciaenidae ( Drums)</b>				
<i>Aplodinotus grunniens</i> ( Freshwater Drum)	2	199-411		HN2,8

**Table 42: Red River Garland****Date: 3/24/06 - 3/26/06**

<b>Gear Type</b>	<b>Set No.</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Depth ft.</b>	<b>RangeYds.</b>	<b>Velocity m/s</b>	<b>Temp F</b>	<b>Secchi mm</b>	<b>Substrate</b>	<b>Habitat</b>
Hoop Net	1	N 33.3514	W 093.7070	13	30	0.288	56		3	2/3
Hoop Net	2	N 33.3819	W 093.6960	8	12	0.331	56		2	3
Hoop Net	3	N 33.3816	W 093.6957	13	33	0.447	56		2/3	5
Hoop Net	4	N 33.3823	W 093.6964	17	20	0.389	56		2	3
Hoop Net	5	N 33.3827	W 093.6942	18	20	0.333	56		3	1
Hoop Net	6	N 33.3805	W 093.6926	24	20	0.539	56		2	3
Hoop Net	6a	N 33.3807	W 093.6948	24	83	0.539	56		2/3	5
Hoop Net	7	N 33.3846	W 093.6961	12	15	0.219	56		2/3/	3/1/15
Hoop Net	8	N 33.3857	W 093.6975	12	15	0.390	56		3	1/3
Hoop Net	9	N 33.3869	W 093.6995	6	15	0.115	56		3	1
Hoop Net	10	N 33.3933	W 093.7091	6	12	0.382	56		3	1
Hoop Net	11	N 33.3957	W 093.7121	12	15	0.215	56		2	3
Hoop Net	12	N 33.3940	W 093.7113	23	15	0.442	56		2	3
Hoop Net	13	N 33.3931	W 093.7107	30	15	Lost net	Lost net	Lost net	2	3
Hoop Net	14	N 33.3733	W 093.6978	10	15	0.443	56		3	1
Hoop Net	15	N 33.3751	W 093.6954	3	17	0.304	56		3	1

**Table 43: Fishes Collected at the Garland City, Red River Reach 3/31/06 through 04/02/06.**

<b>SPECIES/GEAR TYPE</b>	<b>NUMBER OF FISHES COLLECTED</b>	<b>LENGTH RANGE</b>	<b>WEIGHT RANGE</b>	<b>COLLECTIONS BY GEAR TYPE WITHIN REACH</b>
<b>Acipenseridae (Sturgeons)</b>				
<i>Scaphirhynchus platyrhynchus</i> ( Shovelnose Sturgeon)	1	615		HN5
<b>Catostomidae (Suckers)</b>				
<i>Carpionodes carpio</i> (River Carpsucker)	66	391-486		HN3,5,8,9,12
<b>Ictaluridae (Bullhead Catfishes)</b>				
<i>Ictalurus furcatus</i> ( Blue Catfish)	7	344-654		HN5,6,8,9
<i>Ictalurus punctatus</i> ( Channel catfish)	1	378		HN8
<b>Moronidae (Temperate Basses)</b>				
<i>Morone Saxatilis</i> ( Striped Bass)	1	325		HN6
<b>Centrarchidae ( Sunfishes)</b>				
<i>Lepomis megalotis</i> ( Longear Sunfish)	4	148-174		HN3,6,8
<b>Sciaenidae ( Drums)</b>				
<i>Aplodinotus grunniens</i> ( Freshwater Drum)	1	278		HN3



**Table 44: Red River Garland 3/31/06 - 04/02/06**

<b>Gear Type</b>	<b>Set No.</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Depth ft.</b>	<b>Range yds.</b>	<b>Velocity m/s</b>	<b>Temp. F</b>	<b>Secchi mm</b>	<b>Substrate</b>	<b>Habitat</b>
Hoop Net	1	N 33.38310	W 093.69718	10-13	7	0.160	68		3	1
Hoop Net	2	N.33.38292	W 093.69704	8-10	12	0.122	68		3	1
Hoop Net	3	N33.38259	W 093.69663	6	15	0.003	68		3	1
Hoop Net	4	N 33.38235	W 093.69619	6	10	0.223	68		2	3
Hoop Net	5	N 33.37460	W 093.69518	10	20	0.176	68		3	3/1
Hoop Net	6	N 33.37267	W 093.69822	10	33	0.207	68		3	1
Hoop Net	7	N 33.37085	W 093.70130	7	30	1.711	68		3	1
Hoop Net	8	N 33.36812	W 093.70314	10	20	0.159	68		3	1/3
Hoop Net	9	N 33.35399	W 093.70689	6	20	0.205	68		2	3
Hoop Net	10	N 33.33951	W 093.69702	9	7	0.172	68		3	1
Hoop Net	11	N 33.33972	W 093.69627	7	35	0.317	68		2/3	5
Hoop Net	12	N 33.34139	W 093.69597	6	20	0.715	68		2/3	5

**Table 45: Fishes Collected at the Red River, Fulton Reach During Summer 2006.**

SPECIES	NUMBER OF FISHES COLLECTED	LENGTH RANGE	WEIGHT RANGE	COLLECTIONS BY GEAR TYPE WITHIN REACH
<b>Acipenseridae (Sturgeons)</b>				
<i>Scaphirhynchus platyrhynchus</i> ( Shovelnose Sturgeon)	1	560	662	HN3
<b>Lepisosteidae (Gars)</b>				
<i>Lepisosteus oculatus</i> (Spotted Gar)	1	543	520	F8
<i>Lepisosteus platostomus</i> ( Shortnose Gar)	1	522-685	460-1060	F2,3,5,6,8
<b>Clupeidae (Herrings)</b>				
<i>Dorosoma cepedianum</i> ( Gizzard Shad)	249	48-202		S1A,2A,2B,3B,4A
<i>Dorosoma petenense</i> ( Threadfin Shad)	2	34-71		S4B
“”	4	53-88		F8
<b>Cyprinidae (Minnows and Carps)</b>				
<i>Hybognathus muchalis</i> ( Mississippi Silvery Minnow)	14	51-67		S2B,4A,4B,5A
“”	3	66-71		F2,3
<i>Hybopsis storeriana</i> ( Silver Chub)	1	73		S4B
“”	3	41-73		F1,7
<i>Notropis atherinoides</i> ( Emerald Shiner)	2	37-40		T3,5
“”	5	23-87		S3B,4B,5A
“”	524	27-57		F1,5,6,8
<i>Notropis buchanani</i> ( Ghost Shiner)	1	38		S4A
“”	1	34		F8
<i>Notropis lutrensis</i> ( Red Shiner)	5	52-69		S3B,4A,4B
“”	51	27-65		F1,2,5,8
<i>Notropis potteri</i> ( Chub Shiner)	1	47		S4B
<i>Notropis shumardi</i> ( Silverband Shiner)	13	44-101		S2B,4B,5A
“”	179	29-73		F1,2,3,5
“”	1	50		T2
<i>Notropis venustus</i> ( Blacktail Shiner)	1	78		S4B
<i>Pimephales vigilax</i> ( Bullhead Minnow)	31	27-66		F1,2,3,5,6,8

<b>Catostomidae (Suckers)</b>				
<i>Carpiodes carpio</i> (River Carpsucker)	156	36-83		S2B,3A,3B,4A,4B
“”	39	62-280		F1,2,3,5,7,8
<i>Cycleptus elongatus</i> (Blue Sucker)	1	630	1340	HN1
<i>Ictiobus cyprinellus</i> (Bigmouth Buffalo)	4	46-131		S1A
<b>Ictaluridae (Bullhead Catfishes)</b>				
<i>Ictalurus furcatus</i> (Blue Catfish)	6	339-451	300-840	HN6
<i>Ictalurus punctatus</i> (Channel catfish)	2	390-560		HN6
“”	2	62-197	76	F1,8
<b>Poeciliidae (Livebearers)</b>				
<i>Gambusia affinis</i> ( Mosquitofish)	1	34		F3
<b>Atherinidae (Silversides)</b>				
<i>Menidia beryllina</i> (Inland Silverside)	8	45-65		S4B,5A
“”	73	35-71		F2,5,6,8,1
<b>Moronidae (Temperate Basses)</b>				
<i>Morone saxatilis</i> (Striped Bass)	2	102-118		F2
<b>Centrarchidae (Sunfishes)</b>				
<i>Lepomis humilis</i> (Orangespotted Sunfish)	1	58		4A
“”	14	13-58		F6,8
<i>Lepomis macrochirus</i> (Bluegill)	26	19-161		F5,6,7
<i>Lepomis megalotis</i> (Longear Sunfish)	1	57		S4A
“”	24	32-125	60	F2,5,6,7,8
<i>Micropterus punctulatus</i> (Spotted Bass)	6	52-62		S2B,3B,4A,4B
“”	12	34-89		F1,3,6,8
<b>Sciaenidae (Drums)</b>				
<i>Aplodinotus grunniens</i> (Freshwater Drum)	1	143		S2A

**Table 46: Red River Fulton Summer 2006**

Gear Type	Set No.	Latitude	Longitude	Depth	Range		Velocity m/s	Temp F.	Secchi mm	Substrate	Habitat
						yds					
Seine	1A	N 33.61121	W 093.82565	3		0	0	90	400	3	1
Seine	1B	N 33.61102	W 093.82390	1.5		0	0	90	400	3	1
Seine	2A	N 33.61180	W 093.8234	4		0	0	90	400	3	1
Seine	2B	N 33.61202	W 093.82306	4		0	0	90	400	3	1/4
Seine	3A	N 33.60524	W 093.82638	2		0	0.3333	90	400	3	1
Seine	3B	N 33.60532	W 093.82624	1		0	0.294	90	400	3	1
Seine	4A	N 33.60488	W 093.82683	3.5		0	0.500	90	400	3	1
Seine	4B	N 33.60506	W 093.82664	3		0	0.500	90	400	3	1
Seine	5A	N 33.60612	W 093.82567	1		0	0.384	90	400	3	1
Seine	5B	N 33.60618	W 093.82558	1		0	0.416	90	400	3	1
Fyke Net	1	N 33.60849	W 093.82461	1		0	0.200	89	330	1/3	1/3
Fyke Net	2	N 33.60826	W 093.82470	1.5		0	0.200	89	330	3	1/3
Fyke Net	3	N 33.60812	W 093.82467	0.5		0	0	89	330	3	1/3
Fyke Net	4	N 33.60778	W 093.82458	0.5		0	0.100	89	330	3	1/3
Fyke Net	5	N 33.60756	W 093.82460	0.5		0	0	89	330	3	1/3
Fyke Net	6	N 33.60947	W 093.82407	1		0	0	89	330	1/3	1/3
Fyke Net	7	N 33.61138	W 093.82345	4		0		89	330	3	1/3
Fyke Net	8	N 33.61111	W 093.82369	1		0	0	89	330	3	1/3
Hoop Net	1	N 33.68339	W 093.82885	6	20		0.833	91	472	2	3/8
Hoop Net	2	N 33.60375	W 093.82776	6	20		0.833	91	472	2	3/8
Hoop Net	3	N 33.60432	W 093.82641	6	20		0.833	91	472	2	3/8
Hoop Net	4	N 33.60545	W 093.82505	8	30		1.000	91	472	2	3/8
Hoop Net	5	N 33.60697	W 093.82440	4	80		1.000	91	472	3	1/5/6
Hoop Net	6	N 33.60795	W 093.82377	6	25		1.250	91	472	2	3/8
Trawl	1	N 33.61086	W 093.82328	1-4	68		0.416	89	330	3	1/10
Trawl	2	N 33.60693	W 093.82367	1-4	40		0.454	91	472	3	1/3
Trawl	3	N 33.60861	W 093.82401	2-4	50		0.500	91	472	3	1
Trawl	4	N 33.60914	W 093.82366	5	60		0.500	91	472	3	1
Trawl	5	N 33.60914	W 093.82366	5	60		0.500	91	472	3	1
Trawl	6	N 33.60638	W 093.82448	6-7	100		0.500	91	472	3	5/6

**Table 47: Fishes Collected at the Red River, Garland City Reach, July 2006**

<b>SPECIES</b>	<b>NUMBER OF FISHES COLLECTED</b>	<b>LENGTH RANGE</b>	<b>WEIGHT RANGE</b>	<b>COLLECTIONS BY GEAR TYPE WITHIN REACH</b>
<b>Polyodontidae (Paddle Fishes)</b>				
<i>Polyodon spathula (Paddlefish)</i>	1	5100		GN1
<b>Lepisosteidae (Gars)</b>				
<i>Lepisosteus osseus (Longnose Gar)</i>	1	793	746	F6
“”	1	120		S2B
“”	1	900	1800	HN14
<i>Lepisosteus platostomus (Shortnose Gar)</i>	4	540-651	364-982	F1,4,5
	3	680-711	1120-2100	HN1,5
<b>Clupeidae (Herrings)</b>				
<i>Dorosoma cepedianum (Gizzard Shad)</i>	78	38-182		F1,8
“”	9	39-46		S4A
<i>Dorosoma petenense (Threadfin Shad)</i>	19	22-107		S4B,5A
“”	1	37		F5
<b>Cyprinidae (Minnows and Carps)</b>				
<i>Hyboganthus hayi (Cypress Minnow)</i>	4	53-67		T5
“”	1	51		F5
<i>Hybopsis aestivalis (Speckled Chub)</i>	60	18-36		T4,5,6
<i>Notropis atherinoides (Emerald Shiner)</i>	58	30-56		F4,5,6
“”	11	38-59		S4A,5A
<i>Notropis buchanani (Ghost Shiner)</i>	14	14-45		T4,5
“”	12	22-44		F5
<i>Notropis lutrensis (Red Shiner)</i>	199	31-148		F1,4,5,6,7,8
“”	38	41-68		S1A,1B,2A,2B,3A,3B
“”	1	56		T1
<i>Notropis rubellus (Rosyface Shiner)</i>	4	32-54		S4A,5B
<i>Notropis Shumardi (Silverband Shiner)</i>	7	57-81		S2A,2B,5A
“”	4	60-65		F5

<i>Pimephales vigilax</i> ( <i>Bullhead Minnow</i> )	8	38-75		F1,4,5,8
“ ”	96	17-59		T4,5
<b>Catostomidae (Suckers)</b>				
<i>Carpiodes carpio</i> ( <i>River Carpsucker</i> )	14	59-411	78-820	F1,5,7,8
“ ”	61	40-148		S1A,2A,2B,3A,4B
“ ”	14	323-555	330-2040	HN4,7,8,9,11
<i>Cycleptus elongatus</i> ( <i>Blue Sucker</i> )	1	37		T6
“ ”	4	550-650	1140-2280	HN9,11
<i>Ictiobus bubalus</i> ( <i>Smallmouth Buffalo</i> )	1	541	2400	GN1
“ ”	1	490	1300	HN4
<i>Ictiobus cyprinellus</i> ( <i>Bigmouth Buffalo</i> )	3	605-638	3000-3440	GN1
“ ”	1	583	2470	HN4
<b>Ictaluridae (Bullhead Catfishes)</b>				
<i>Ictalurus furcatus</i> ( <i>Blue Catfish</i> )	12	20-117		T6
“ ”	1	665	3040	GN1
“ ”	2	375-499	140-640	HN9
“ ”	1	27		T6
<i>Ictalurus punctatus</i> ( <i>Channel catfish</i> )	1	144	48	F2
“ ”	5	17-41		T5
“ ”	7	350-500	280-1240	HN1,5,10,13
<i>Pylodictus olivaris</i> ( <i>Flathead Catfish</i> )	2	570-571	1700-1920	HN10,13
<b>Poeciliidae (Livebearers)</b>				
<i>Gambusia affinis</i> ( <i>Mosquitofish</i> )	15	22-52		F1,4,5,7,8
<b>Atherinidae (Silversides)</b>				
<i>Menidia beryllina</i> ( <i>Inland Silverside</i> )	50	44-71		F1,4,5,6,8
	4	46-57		S1B,2B,5B
<b>Moronidae (Temperate Basses)</b>				
<i>Morone chrysops</i> ( <i>White Bass</i> )	1	157	64	F8
	1	270	100	HN11

<b>Centrarchidae ( Sunfishes)</b>				
<i>Lepomis cyanellus</i> ( <i>Green Sunfish</i> )	3	66-75		F5
<i>Lepomis humilis</i> ( <i>Orangespotted Sunfish</i> )	1	75		F7
“”	1	63		T4
<i>Lepomis macrochirus</i> ( <i>Bluegill</i> )	10	21-94		F5,7,8,4
“”	8	18-25		T4
<i>Lepomis megalotis</i> ( <i>Longear Sunfish</i> )	5	48-148	24-60	F5,7,8
“”	2	36-41		T4
<i>Lepomis punctatus</i> ( <i>Spotted Sunfish</i> )	2	58-60		F1
<i>Micropterus punctulatus</i> ( <i>Spotted Bass</i> )	3	67-82		F1
<i>Micropterus salmoides</i> ( <i>Largemouth Bass</i> )	1	88		S1B,2A
<b>Sciaenidae ( Drums)</b>				
<i>Aplodinotus grunniens</i> ( <i>Freshwater Drum</i> )	1	86		T4

**Table 48: Red River Garland City, July 2006**

Gear Type	Set No.	Latitude	Longitude	Depth ft.	Range	Velocity m/s	Temp.	Secchi	Substrate	Habitat
					yds.		F	mm		
Hoop Net	1	N 33.39363	W 93.71105	11	20	0.3333	91	472	2	3/8
Hoop Net	2	N 33.39253	W 93.71000	18	35	0.2143	91	472	2	3/5/8
Hoop Net	3	N 33.39192	W 93.70925	15	35	0.5000	91	472	2	3/5/8
Hoop Net	4	N 33.39069	W 93.70777	11	30	0.3000	91	472	3	1/6
Hoop Net	5	N 33.38973	W 93.70636	4	15	0.2727	91	472	3	1/3
Hoop Net	6	N 33.38662	W 93.70454	5	15	0.7500	91	472	2	3/8
Hoop Net	7	N 33.38600	W 93.70351	4	15	0.7500	91	472	2	3/8
Hoop Net	8	N 33.38493	W 93.70192	11	15	0.7500	91	472	2	3/8
Hoop Net	9	N 33.38321	W 93.69723	12	30	0.6000	91	472	3	1
Hoop Net	10	N 33.38311	W 93.69712	5	15	0.7500	91	472	3	1
Hoop Net	11	N 33.38282	W 93.69656	5	40	0.7500	91	472	2/3	5/6
Hoop Net	12	N 33.38292	W 93.69638	6	20	1.0000	91	472	2/3	3
Hoop Net	13	N 33.80010	W 93.69258	12	20	0.6000	91	472	2/3	3
Hoop Net	14	N 33.38010	W 93.69298	4	25	0.2500	91	472	3	1
Fyke Net	1	N 33.38248	W 93.69637	1	0	0	94	472	1	1/3
Fyke Net	2	N 33.38248	W 93.69637	2	0	0	94	472	1	1/3
Fyke Net	3	N 33.38248	W 93.69637	1.5	0	0	94	472	1	1
Fyke Net	4	N 33.39293	W 93.69473	2	0	0	94	472	3	1
Fyke Net	5	N 33.39293	W 93.69473	2	0	0	94	472	1/3	2/11
Fyke Net	6	N 33.39293	W 93.69473	2	0	0	94	472	1/3	2/11
Fyke Net	7	N 33.39293	W 93.69473	2	0	0	94	472	1/3	2/11
Fyke Net	8	N 33.39293	W 93.69473	2	0	0	94	472	1/3	2/11
Seine	1A	N 33.38062	W 093.69351	2	0	0	94	472	3	1
Seine	1B	N 33.38062	W 093.69351	2	0	0	94	472	3	1
Seine	2A	N 33.38062	W 093.69351	2	0	0	94	472	3	1
Seine	2B	N 33.38062	W 093.69351	2	0	0	94	472	3	1
Seine	3A	N 33.38062	W 093.69351		0	0	94	472	3	1
Seine	3B	N 33.38062	W 093.69351	2	0	0	94	472	3	1
Seine	4A	Immediately downstream		1	0	0.5000	94	472	3	1



Seine	4B	Immediately downstream		3	0	0.5000	94	472	3	1
Seine	5A	Immediately downstream		3	0	0	94	472	3	1
Seine	5B	Immediately downstream		3	0	0	94	472	3	1
Trawl	1	N 33.36829	W 093.70227	6	57	1.5000	91	472	3	5/6
Trawl	2	N 33.37034	W 093.70015	3.5	40	0.3750	91°	472	3	5/6
Trawl	3	N 33.37061	W 093.70049	6	83	0.3333	91	472	3	5/6
Trawl	4	N 33.37535	W 093.69434	4	20	0.3333	91°	472	3	5/6
Trawl	5	N 33.37546	W 093.69406	6.5	40	0.3000	91	472	3	5/6
Trawl	6	N 33.37464	W 093.69462	16	40	0.1250	91	472	2	3/5/6/8
Gill Net	1			6 -14	10	0	94	472	1/2/3	7/9

**Table 49: Fishes Collected at the Red River, Garland City, April 2007**

SPECIES	NUMBER OF FISH COLLECTED	LENGTH RANGE	WEIGHT RANGE	COLLECTIONS BY GEAR TYPE WITHIN REACH
<b>Clupeidae (Herrings)</b>				
<i>Alosa chrysochloris</i> ( Skipjack Herring)	1	347	440	HN7
<b>Catostomidae (Suckers)</b>				
<i>Carpionodes carpio</i> (River Carpsucker)	32	367-650	600-1480	HN3
<i>Cycleptus elongatus</i> (Blue Sucker)	1	500	2000	HN3
<b>Ictaluridae (Bullhead Catfishes)</b>				
<i>Ictalurus punctatus</i> ( Channel catfish)	7	364-463	352-872	HN3,HN7

**Table 50: Fishes Collected at the Red River Fulton, April 2007**

SPECIES	NUMBER OF FISH COLLECTED	LENGTH RANGE	WEIGHT RANGE	COLLECTIONS BY GEAR TYPE WITHIN REACH
<b>Acipenseridae (Sturgeons)</b>				
<i>Scaphirhynchus platyrhynchus</i> ( Shovelnose Sturgeon)	2	553-602	680-1038	HN10
<b>Catostomidae (Suckers)</b>				
<i>Carpionodes carpio</i> (River Carpsucker)	36	209-489	105-810	HN10,HN11,HN12
<i>Carpionodes velifer</i> (Highfin Carpsucker)	1	445	1240	HN10
<i>Cycleptus elongatus</i> (Blue Sucker)	3	523-704		1320-3060
<i>Ictiobus bubalus</i> ( Smallmouth Buffalo)	1	525	2180	HN10
<b>Ictaluridae (Bullhead Catfishes)</b>				
<i>Ictalurus punctatus</i> ( Channel catfish)	3	329-436	292-642	HN10

**Table 51: Red River Garland City and Fulton, April 2007**

<b>Gear Type</b>	<b>Set No.</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Range yds,</b>	<b>Depth ft.</b>	<b>Temp F</b>	<b>Velocity m/s</b>	<b>Secchi mm</b>	<b>Substrate</b>	<b>Habitat</b>
<b>Garland City</b>										
Hoop Net	1	N33.38307	W093.69708	7	6	72	1.5		3	1
Hoop Net	2	N33.38296	W093.69681	30	9	72	1		3	1/5
Hoop Net	3	N33.38282	W093.69636	49	8	72	1.25		3	1/5
Hoop Net	4	N33.38257	W093.69628	39	5	72	1.25		3	1/5
Hoop Net	5	N33.38277	W093.69445	29	9	72	1.75		2	3
Hoop Net	6	N33.38288	W093.69576	103	9	72	1.25		3	5
Hoop Net	7	N33.38258	W093.69538	117	8	72	1.75		3	5
<b>Fulton</b>										
Hoop Net	8	N33.61166	W093.81685	50	17	72	2.25		2	3
Hoop Net	9	N33.60973	W093.82308	10	8	70	0.75		1/2/3	3/9
Hoop Net	10	N33.60857	W093.82349	6	12	72	1.25		2	3
Hoop Net	11	N33.60642	W093.82487	69	5	72	1.25		3	1/5
Hoop Net	12	N33.60952	W093.82918	10	4	68	0.12		3	1
Hoop Net	13	N33.61904	W093.84124	60	17	68	0.12		3	1
Hoop Net	14	N33.61955	W093.84201	70	18	68	0		3	5

**Table 52: Fishes Collected St. Francis River Above Lake City**

SPECIES	NUMBER OF FISH COLLECTED	LENGTH RANGE	WEIGHT RANGE	COLLECTIONS BY GEAR TYPE WITHIN REACH
<b>Lepisosteidae (Gars)</b>				
<i>Lepisosteus oculatus</i> (Spotted Gar)	2	494-581		S1A,S3A
<i>Lepisosteus osseus</i> (Longnose Gar)	1	606		T3
<i>Lepisosteus platostomus</i> (Shortnose Gar)	1	577	640	HN10
“”	1	611		T2
<b>Cyprinidae (Minnows and Carps)</b>				
<i>Cyprinus carpio</i> (Common Carp)	1	513	1980	HN13
<i>Notemigonus crysoleucas</i> (Golden Shiner)	1	67		S1B
<i>Notropis umbratilis</i> (Redfin Shiner)	3	64-67		S1A,S3A,S2A
“	8	42-54		F7
<i>Notropis venustus</i> (Blacktail Shiner)	9	45-67		S1B,S2B
<i>Pimephales notatus</i> (Bluntnose Minnow)	26	25-67		F3,F4,F7
<i>Pimephales vigilax</i> (Bullhead Minnow)	6	60-71		S1A,S2A,S3A
	11	41-82		F1,F2,F5
<b>Catostomidae (Suckers)</b>				
<i>Ictiobus bubalus</i> (Smallmouth Buffalo)	11	311-619	360-4300	HN1,HN2,HN9,HN10,HN14
<i>Ictiobus cyprinellus</i> (Bigmouth Buffalo)	6	454-767	1480-7640	HN1,HN2,HN10
<i>Ictiobus niger</i> (Black Buffalo)	2	416-420	1060-1140	HN2
<b>Ictaluridae (Bullhead Catfishes)</b>				
<i>Ictalurus punctatus</i> (Channel catfish)	1	207		F5
<i>Noturus nocturnus</i> (Freckled Madtom)	1	87		T2

<b>Aphredoderidae (Pirate Perches)</b>				
<i>Aphredoderus sayanus</i> ( <i>Pirate Perch</i> )	4	23-32		S1B,S2B
“	21	20-36		F1,F4,F7,F8
“	98	13-39		T1,T2
<b>Poeciliidae (Liver Bearers)</b>				
<i>Gambusia affinis</i> ( <i>Mosquitofish</i> )	4	41-47		S1A,S2A
<b>Centrarchidae</b>				
<i>Lepomis gulosus</i> ( <i>Warmouth</i> )	4	54-163		S1A,S1B,S3B,S2A
	1	91		F8
<i>Lepomis humilis</i> ( <i>Orangespotted Sunfish</i> )	97	38-65		S1A,S2A,S3A,S1B,S2B,S3B
“	2	62-67		F4,F5
<i>Lepomis macrochirus</i> ( <i>Bluegill</i> )	34	36-107		S1A,S2A,S3A,S1B,S2B,S3B
“	1	45		F4
<i>Lepomis marginatus</i> ( <i>Dollar Sunfish</i> )	1	55		S3A
<i>Lepomis megalotis</i> ( <i>Longear Sunfish</i> )	18	62-127		S1A,S1B,S3B,S2A,S3A
	4	61-92		F1,F4,F8
<i>Micropterus salmoides</i> ( <i>Largemouth Bass</i> )	4	24-166		S1A,S2A,S3A,S2B
<i>Pomoxis annularis</i> ( <i>White Crappie</i> )	4	22-64		F2,F3,F4,F5
<i>Pomoxis nigromaculatus</i> ( <i>Black Crappie</i> )	1	257		F2
<b>Percidae (Perches)</b>				
<i>Etheostoma gracile</i> ( <i>Slough Darter</i> )	15	19-42		F1,F2,F4,F7
<i>Percina caprodes</i> ( <i>Logperch</i> )	1	25		T1
<b>Sciaenidae (Drums)</b>				
<i>Aplodinotus grunniens</i> ( <i>Freshwater Drum</i> )	44	235-654	110-3540	HN1,HN3,HN7,HN8,HN9, HN10,HN12,HN13,HN14

**Table 53: St. Francis Above Lake City**

<b>Gear Type</b>	<b>Set No.</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Depth ft.</b>	<b>Range yd</b>	<b>Velocity m/s</b>	<b>Temp. F</b>	<b>Secchi</b>	<b>Substrate</b>	<b>Habitat</b>
Hoop Net	1	N 35.84058	90.44465	4	6	0.18	70	111	2	3/13
Hoop Net	2	35.84072	90.44426	5	10	0.25	70	111	2	3/13/5
Hoop Net	3	35.839658	90.44557	4	7	0.17	70	111	2	3/13
Hoop Net	4	35.83876	W 090.44587	5	14	0.19	70	111	2	3/13/10
Hoop Net	5	35.83840	90.44595	6	12	0.14	70	111	2	3/13/10
Hoop Net	6	35.83697	90.44568	4	7	0.12	70	111	2	3/13
Hoop Net	7	35.83718	W 090.44819	11	13	0.06	70	111	2	3/13/15
Hoop Net	8	35.83504	W 090.44613	11	12	0.05	70	111	2	3/13/15
Hoop Net	9	35.83431	90.44572	22	8	0.16	70	111	2	3/14
Hoop Net	10	35.83241	90.44559	5-6	6	0.12	70	111	2	14
Hoop Net	11	35.83081	90.44396	6	11	0.07	70	111	2	9
Hoop Net	12	35.82901	90.44381	9	14	0.20	70	111	2	14/10
Hoop Net	13	35.828459	90.44358	6	16	0.20	70	111	2	14/10
Hoop Net	14	35.82777	W 90.44299	13	16	0.21	70	111	2	3/5
Fyke Net	1	N 35.83042	W 090.44483	4	0	0	70	111	1	14
Fyke Net	2	N 35.82768	W 090.44442	2-3	0	0	70	111	1	14
Fyke Net	3	N 35.82781	W 090.44424	4	0	0	70	111	1	14
Fyke Net	4	N 35.82659	W 090.44336	2-3	0	0	70	111	1	14
Fyke Net	5	N 35.82645	W 090.44284	2-3	0	0	70	111	1	14
Fyke Net	6	N 35.82579	W 090.44251	2-6	0	0	70	111	1	14
Fyke Net	7	N 35.82582	W 090.44215	2-4	0	0	70	111	1	14
Fyke Net	8	N 35.82229	W 090.43802	1-4	0	0	70	111	1	14
Seine	1A	N 35.82190	W 090.43618	1-4	0	0	70	111	2	13
Seine	1B	N 35.82190	W 090.43618	1-4	0	0	70	111	1 / 2	13
Seine	2A	N 35.82209	W 090.43620	1-4	0	0	70	111	1 / 2	13
Seine	3A	N 35.82374	w 090.43937	1-4	0	0	70	111	1 / 2	13
Seine	4A	N 35.82195	W090.43486	3	0	0	84	123	1 / 2	13
Trawl	1	N 35.82174	W 090.43666	5-6	30	0	70	111	1	5/9
Trawl	2	N 35.83125	W 090.44572	8	15	0.057	70	111	1/2	5/15
Trawl	3	N 35.82908	W 090.44406	9	15	0.057	70	111	1/2	10/15
Trawl	4	N 35.83600	W 090.44710	9	20	0.060	70	111	1/2	5/15
Trawl	5	N 35.83479	W 90.44566	6	30	0.202	70	111	2	5
Trawl	6	N 35.83709	W 090.44554	4	30	0.202	70	111	2	5

**Table 54: Fishes Collected at the St. Francis River Below Lake City**

<b>SPECIES</b>	<b>NUMBER OF FISH COLLECTED</b>	<b>LENGTH RANGE</b>	<b>WEIGHT RANGE</b>	<b>COLLECTIONS BY GEAR TYPE WITHIN REACH</b>
<b>Esocidae (Pikes)</b>				
<i>Esox americanus</i> ( Grass Pickerel)	1	158	28	F1
<b>Cyprinidae (Minnows and Carps)</b>				
<i>Notropis atherinoides</i> ( Emerald Shiner)	2	50-57		F1
<i>Notropis texanus</i> ( Weed Shiner )	5	55-65		F1
<i>Notropis venustus</i> ( Blacktail Shiner)	4	47-89		F1
<i>Pimephales vigilax</i> ( Bullhead Minnow)	4	35-70		F5
“ ”	162	25-64		F1
<b>Catostomidae (Suckers)</b>				
<i>Carpionodes carpio</i> (River Carpsucker)	1	473	1560	HN7
<i>Ictiobus bubalus</i> ( Smallmouth Buffalo)	7	363-517	660-2430	HN1,2,3
<b>Ictaluridae (Bullhead Catfishes)</b>				
<i>Ictalurus punctatus</i> ( Channel catfish)	1	30		F2
“	1	325	300	HN3
<b>Aphredoderidae (Pirate Perches)</b>				
<i>Aphredoderus sayanus</i> ( Pirate Perch)	58	25-62		F2,3,4,5
<b>Fundulidae (Killifishes)</b>				
<i>Fundulus Olivaceus</i> ( Blackspotted Topminnow)	9	27-66		F1
<b>Poeciliidae (Live Bearers)</b>				

<i>Gambusia affinis</i> ( Mosquitofish)	1	33		F1
<b>Atherinidae (Silversides)</b>				
<i>Labidesthes sicculus</i> ( Brook Silverside)	1	41		F1
<b>Centrarchidae (Sunfishes)</b>				
<i>Lepomis cyanellus</i> ( Green Sunfish)	4	64-116		F1,2
<i>Lepomis gulosus</i> ( Warmouth)	3	73-108		F2,5
<i>Lepomis humilis</i> ( Orangespotted Sunfish)	10	50-75		F1,2
<i>Lepomis macrochirus</i> ( Bluegill)	3	30-65		F1,2,5
<i>Micropterus punctulatus</i> ( Spotted Bass)	5	32-47		F1
<i>Pomoxis annularis</i> ( White Crappie)	9	21-60		F2,3
“ ”	25	41-52		F1
<i>Pomoxis nigromaculatus</i> ( Black Crappie)	3	43-45		F3.5
<b>Percidae (Perches)</b>				
<i>Etheostoma chlorosomum</i> (Bluntnose Darter)	91	25-50		F1,F2
<i>Etheostoma aprigene</i> ( Mud Darter)	1	36		F1
<i>Percina maculata</i> ( Blackside Darter)	7	35-46		F1,F2
<b>Sciaenidae (Drums)</b>				
<i>Aplodinotus grunniens</i> ( Freshwater Drum)	2	292-365	320-770	F3,4
“ ”	10	383-585	740-3200	HN1,3,6,7



**Table 55: St. Francis River Below Lake City**

<b>Gear</b>	<b>Set</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Depth ft.</b>	<b>Range yds.</b>	<b>Temp. F</b>	<b>Velocity m/s</b>	<b>Secchi m/s</b>	<b>Substrate</b>	<b>Habitat</b>
Hoop Net	1	N 35.80114	W 090.20382	12	7	84	0.333	140	2	5
Hoop Net	2	N 35.80148	W 090.40368	12	10	84	0.357	140	2	5
Hoop Net	3	N 35.80217	W 090.40387	12	10	84	0.357	140	2	5
Hoop Net	4	N 35.80257	W 090.40369	10	10	84	0.333	140	2	5
Hoop Net	5	N 35.80286	W 090.40378	13	18	84	0.333	140	2	5
Hoop Net	6	N 35.80398	W 090.40384	13	11	84	0.294	140	2	5
Hoop Net	7	N 35.80434	W 090.40363	11	6	84	0.2	140	2	3
Fyke Net	1	N 35.80366	W 090.40401	2-4	0	84	0	140	2	9/10
Fyke Net	2	N 35.80370	W 090.40360	2-4	0	84	0	140	2	10
Fyke Net	3	N 35.80454	W 090.40357	12	0	84	0.2	140	2	3
Fyke Net	4	N 35.80693	W 090.40474	9	0	84	0	140	2	10/9
Fyke Net	5	N 35.81372	W 090.41294	7	0	84	0	140	2	10/9

**Table 56: Fishes Collected at the St. Francis River Parkin Reach**

SPECIES	NUMBER OF FISH COLLECTED	LENGTH RANGE	WEIGHT RANGE	COLLECTIONS BY GEAR TYPE WITHIN REACH
<b>Polyodontidae (Paddle Fishes)</b>				
<i>Polyodon spathula</i> (Paddlefish)	1	784	5800	F2
<b>Lepisosteidae (Gars)</b>				
<i>Lepisosteus osseus</i> ( Longnose Gar)	1	839	1220	
<i>Lepisosteus platostomus</i> ( Shortnose Gar)	1	400		S1A
“”	1	519	408	F1
<b>Cyprinidae (Minnows and Carps)</b>				
<i>Cyprinus carpio</i> ( Common Carp)	1	588	2720	HN7
<i>Hybopsis aestivalis</i> ( Speckled Chub)	4	40-60		S1A
<i>Notropis boops</i> ( Bigeye Shiner)	1	47		F8
<i>Notropis venustus</i> ( Blacktail Shiner)	29	24-77		S1A,1B,2A,2B
“”	16	22-44		F8
“”	3	37-46		S1A
<i>Pimephales vigilax</i> ( Bullhead Minnow)	5	65-71	S1A	S1A
“”	16	30-70		F1,F2, F3,F4,F5,F8
<b>Catostomidae (Suckers)</b>				
<i>Ictiobus bubalus</i> ( Smallmouth Buffalo)	2	416-438	1100-1460	HN4,HN12
<b>Ictaluridae (Bullhead Catfishes)</b>				
<i>Ictalurus punctatus</i> ( Channel catfish)	1	ESCAPED		HN10
“”	17	57-470		S1A,1B,2B

<i>Noturus gyrinus (Tadpole Madtom)</i>	1	58		F3
<b>Aphredoderidae (Pirate Perches)</b>				
<i>Aphredoderus sayanus (Pirate Perch)</i>	3	24-34		F1,F3
<b>Poeciliidae (Livebearers)</b>				
<i>Gambusia affinis( Mosquitofish)</i>	1	26		S2A
<b>Centrarchidae (Sunfishes)</b>				
<i>Lepomis cyanellus (Green Sunfish)</i>	2	84-88		S1A,1B
<i>Lepomis humilis (Orangespotted Sunfish)</i>	2	57-61		S1B
“”	1	57		F3
<i>Lepomis macrochirus (Bluegill)</i>	1	63		F2
<i>Lepomis megalotis( Longear Sunfish)</i>	1	86		S1A
<i>Micropterus punctulatus( Spotted Bass)</i>	2	136-151		S1A,1B
<i>Pomoxis nigromaculatus (Black Crappie)</i>	1	74		F1
<b>Sciaenidae (Drums)</b>				
<i>Aplodinotus grunniens (Freshwater Drum)</i>	8	231-508	144-1120	HN4,HN7,HN12
“”	1	125		S1A

**Table 57: St. Francis River Parken Reach**

Gear Type	Set No.	Latitude	Longitude	Depth ft.	Range yds.	Velocity m/s	Temp. F	Secchi mm	Substrate	Habitat
Hoop Net	1	N 35.29548	W 090.58127	8	12	0.6000	78	90	2	14
Hoop Net	2	N 35.29418	W 090.58034	4-5	8	0.2500	78	90	2	3/14
Hoop Net	3	N 35.29280	W 090.57861	6	9	0.5000	78	90	2	3
Hoop Net	4	N 35.29149	W 090.57696	8	18	0.6000	78	90	2	14
Hoop Net	5	N 35.29116	W 090.57559	4-5	8	0.3750	78	90	2	14
Hoop Net	6	N 35.29028	W 090.57395	5-6	12	0.2500	78	90	2	3
Hoop Net	7	N 35.28970	W 090.57253	6	23	0.7500	78	90	2	5
Hoop Net	8	N 35.28899	W 090.57131	30	18	0.6000	78	90	2	14
Hoop Net	9	N 35.28875	W 090.57021	4-5	10	2.0000	78	90	2	3
Hoop Net	10	N 35.28702	W 090.56723	5	11	0.3750	78	90	2	2
Hoop Net	11	35.288696	W 090.56620	26	36	0.7500	78	90	2	10
Hoop Net	12	N 35.28679	W 090.567579	14	4	0.5000	78	90	2	10
Hoop Net	13	N 35.288733	W 090.56585	8	7	0	78	90	2	3/14
Hoop Net	14	N 35.288733	W 090.56585	6	12	0	78	90	2	3/14
Fyke Net	1	N 35.28620	W 090.56066	4-5	0	0	78	90	2	3
Fyke Net	2	N 35.28664	W 090.56119	3	0	0	78	90	2	13
Fyke Net	3	N 35.28809	W 090.56332	4	0	0	78	90	2	10/13
Fyke Net	4	N 35.28746	W 090.56544	4	0	0	78	90	2	10
Fyke Net	5	N 35.29583	W 090.58242	3-6	0	0	78	90	2	13
Fyke Net	6	N 35.28745	W 090.56254	5	0	0	78	90	2	13
Fyke Net	7	N 35.28775	W 090.56323	5	0	0	78	90	2	13
Fyke Net	8	N 35.28809	W090.56332	4	0	0	78	90	2	10
Seine	1A	N 35.27148	W 090.57032	1-3	0	0.550	78	90	4	1
Seine	1B	N 35.27148	W 090.57032	1-3	0	0.550	78	90	4	1
Seine	2A	N 35.28400	W 090.56055	1-3	0	0.4286	78	90	2/3	13
Seine	2B	N 35.28400	W 090.56055	1-3	0	0.4286	78	90	2/3	13
Seine	3A	N 35.28492	W 090.56054	2	0	0.375	86	195	1 / 4	1
Seine	3B	N 35.28492	W 090.56054		0	0.375	86	195	1 / 4	1
Seine	4A	N 35.27112	W 090.57011	2	0	0.600	86	195	1 / 4	1
Seine	4B	N 35.27112	W 090.57011	2	0	0	86	195	1 / 4	1

Seine	5A	N 35.27021	W 090.57013	1.5	0	0.600	86	197	1 / 4	1
Seine	5B	N 35.27021	W 090.57013	1	0	0.600	86	197	1 / 4	1
Trawl	1	N 35.27027	W 090.56996	5	30	0.6000	78	90	4	5
Trawl	2	N 35.27094	W 090.57000	3-5	20	0.2000	78	90	4	5
Trawl	3	N 35.27148	W 090.57032	5	20	0.200	78	90	4	5

**Table 58: Fishes Collected in the St. Francis River, below Huxtable**

SPECIES	NUMBER OF FISH COLLECTED	LENGTH RANGE	WEIGHT RANGE	COLLECTIONS BY GEAR TYPE WITHIN REACH
<b>Lepisosteidae (Gars)</b>				
<i>Lepisosteus oculatus</i> (Spotted Gar)	1	456	264	F5
<i>Lepisosteus osseus</i> (Longnose Gar)	6	868-1380	470-5200	HN7,8,10,11,14
“”	1	85		F5
<i>Lepisosteus platostomus</i> (Shortnose Gar)	3	494-600		F6,8
<b>Clupeidae (Herrings)</b>				
<i>Dorosoma cepedianum</i> (Gizzard Shad)	1	237	318	F6
<i>Dorosoma petenense</i> (Threadfin Shad)	3	48-110		F8
<b>Cyprinidae (Minnows and Carps)</b>				
<i>Cyprinus carpio</i> (Common Carp)	3	493-625	1520-3680	HN4,9,13
“”	1	486	946	F6
<i>Notropis atherinoides</i> (Emerald Shiner)	9	44-62		F2,7,8
<i>Notropis blennioides</i> (River Shiner)	17	34-50		S3A
<i>Notropis venustus</i> (Blacktail Shiner)	30	26-72		F1,2,4,7,8
<i>Pimephales vigilax</i> (Bullhead Minnow)	15	32-57		F1,3,4,5,6,7,8
<b>Catostomidae (Suckers)</b>				
<i>Carpionodes carpio</i> (River Carpsucker)	2	441-514	1060-1720	HN14
“”	1	457	1210	F1
<i>Ictiobus bubalus</i> (Smallmouth Buffalo)	3	490-625	1660-3540	HN8,11,12
	2	35-40		S3A

<b>Ictaluridae (Bullhead Catfishes)</b>				
<i>Pylodictus olivaris</i> (Flathead Catfish)	2	326-479	240-1120	HN13
<i>Ictalurus punctatus</i> ( Channel catfish)	1	110		F7
<b>Aphredoderidae (Pirate Perches)</b>				
<i>Aphredoderus sayanus</i> ( Pirate Perch)	12	21-54		F1,2,5,6,8
“”	14	21-31		T4,T5
<b>Moronidae (Temperate Basses)</b>				
<i>Morone chrysops</i> ( White Bass)	2	37-46		F6
<b>Centrarchidae</b>				
<i>Lepomis cyanellus</i> ( Green Sunfish)	1	108		F5
<i>Lepomis humilis</i> ( Orangespotted Sunfish)	4	45-63		F3,8
“”	1	51		T2
<i>Lepomis macrochirus</i> ( Bluegill)	1	46		F8
<i>Micropterus salmoides</i> ( Largemouth Bass)	8	26-42		F4,6
<i>Pomoxis annularis</i> ( White Crappie)	35	11-23		F1,2,3,4,5,6
<i>Pomoxis nigromaculatus</i> ( Black Crappie)	6	24-140		F7,8
<b>Percidae (Perches)</b>				
<i>Etheostoma gracile</i> ( Slough Darter)	10	29-38		F3,5,6
<i>Stiostedion canadense</i> ( Sauger)	1	449	740	F8
<b>Sciaenidae (Drum)</b>				
<i>Aplodinotus grunniens</i> ( Freshwater Drum)	10	250-546	140-2420	HN3,4,7,10,12,13,14
	6	26-185		F2,4,6

**Table 59: St. Francis River below Huxtable**

Gear Type	Set No.	Latitude	Longitude	Depth ft.	Range		Velocity m/s	Temp. F	Turbidity mm	Substrate	Habitat
						yds					
Fyke Net	1	N 34.72878	W 090.64846	2	0		0			2	3
Fyke Net	2	N 34.72906	W 090.64846	2	0		0			2	5/11
Fyke Net	3	N 34.72945	W 090.64874	3	0		0			2	5/11
Fyke Net	4	N 34.72097	W 090.66415	1-4	0		0			2	6/11
Fyke Net	5	N 34.71971	W 090.66447	1-6	0		0			2	5
Fyke Net	6	N 34.72079	W 090.66930	1-5	0		0			2	5/13
Fyke Net	7	N 34.72396	W 090.66960	2-4	0		0.100			2	5
Fyke Net	8	N 34.73761	W 090.67491	1-5	0		0			2/3	3/2
Hoop Net	1	N 34.73325	W 090.64882	19	76		*			2	5
Hoop Net	2	N 34.73308	W 090.64873	16	59		*			2	5
Hoop Net	3	N 34.73271	W 090.64876	18	52		*			2	5
Hoop Net	4	N 34.73211	W 090.64949	24	34		*			2	5
Hoop Net	5	N 34.73201	W 090.64932	26	76		*			2	5
Hoop Net	6	N 34.73185	W 090.64895	22	34		*			2	5
Hoop Net	7	N 34.73897	W 090.67353	8-14	5		0.20000			2	3
Hoop Net	8	N 34.94052	W 090.67181	5-7	15		0.37500			2	1/13
Hoop Net	9	N 34.73963	W 090.67129	7	10		0			2	13
Hoop Net	10	N 34.75184	W 090.67524	19	20		0.37500			2	3
Hoop Net	11	N 34.72323	W 090.67023	10-14	21		0.23077			2	13
Hoop Net	12	N 34.72152	W 090.66956	16-19	7		0.30000			2	3/13
Hoop Net	13	N 34.72023	W 090.66977	26	100		0			2	5
Hoop Net	14	N 34.71967	W 090.67137	19-20	21		0			2	6
Trawl	1	N 34.72986	W 090.65004	15	28		*			2	5
Trawl	2	N 34.72717	W 090.65189	9-10	40		*			2	5
Trawl	3	N 34.72670	W 090.65204	12	66		*			2	5
Trawl	4	N 34.72339	W 090.65817	12	40		*			2	5
Trawl	5	N 34.74042	W 090.67160	12	23		*			1/2/3	5
Trawl	6	N 34.74047	W 090.67137	19-21	68		*			2	5
Trot line	1	N. 34.65408	W 090.63466	3-10	5					2	3



Gill Net	1	N 34.65654	W 090.63510	6-7	20	0		1	4/9
Seine	1A	N 34.65964	W 090.63550	4	0	0		2	13
Seine	1B	N 34.65964	W 090.63550	4	0	0		2	13
Seine	2A	N 34.65903	W 090.63537	3.5	0	0		2	13
Seine	2B	N 34.65903	W 090.63537	3.5	0	0		2	13
Seine	3A	N 34.65865	W 090.63527	2	0	0		1 / 2	13
Seine	3B	N 34.65865	W 090.63527	2	0	0		1 / 2	13
Seine	4A	N 34.64811	W 090.63479	2	0	0		2	13
Seine	4B	N 34.64811	W 090.63479	2	0	0		2	13
Seine	5A	N 34.64811	W 090.63479	1	0	0		2	13
Seine	5B	N 34.64811	W 090.63479	1	0	0		2	13

\* High Winds, no velocity recorded

**Table 60: Fishes Collected at the Lower St. Francis River Reach**

SPECIES	NUMBER OF FISH COLLECTED	LENGTH RANGE	WEIGHT RANGE	COLLECTIONS BY GEAR TYPE WITHIN REACH
<b>Cyprinidae (Minnows and Carps)</b>				
<i>Notropis atherinoides</i> ( Emerald Shiner)	1	35		T3
<b>Catostomidae (Suckers)</b>				
<i>Ictiobus bubalus</i> ( Smallmouth Buffalo)	4	534-702	1400-4640	HN11,HN12,HN14
<b>Ictaluridae (Bullhead Catfishes)</b>				
<i>Pylodictus olivaris</i> (Flathead Catfish)	5	603-745	1800-3880	HN3,HN5,HN7,HN11
<i>Ictalurus furcatus</i> ( Blue Catfish)	1	70		t3
<i>Ictalurus punctatus</i> ( Channel catfish)	3	461-571	344-540	HN4,HN5,HN14
	2	17-46		T3
<b>Centrarchidae (Sunfishes)</b>				
<i>Pomoxis annularis</i> ( White Crappie)	1	312	180	HN14
<b>Sciaenidae (Drums)</b>				
<i>Aplodinotus grunniens</i> ( Freshwater Drum)	3	319-619	186-2260	HN1,HN8,MHN14

**Table 61: Lower St. Francis River**

<b>Gear Type</b>	<b>Set No.</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Depth ft.</b>	<b>Range yds.</b>	<b>Velocity m/s</b>	<b>Temp. F.</b>	<b>Secchi mm</b>	<b>Substrate</b>	<b>Habitat</b>
Hoop Net	1	N 34.66471	W 090.63644	7	23	0.3571	84	345	2	5
Hoop Net	2	N 34.66337	W 090.63595	8	52	0.3333	84	345	2	5
Hoop Net	3	N 34.66305	W 090.63605	11	47	0.6250	84	345	2	5
Hoop Net	4	N 34.66181	W 090.63566	8	30	0.4545	84	345	2	5
Hoop Net	5	N 34.65279	W 090.63497	6	26	0.3125	84	345	2	13
Hoop Net	6	N 34.65321	W 090.63514	6	65	0.7143	84	345	2	5
Hoop Net	7	N 34.65314	W 090.63555	4	41	0.5000	84	345	2	13
Hoop Net	8	N 34.62512	W 090.61945	5	32	0.2632	84	345	2	5
Hoop Net	9	N 34.62508	W 090.61969	8	50	0.6250	84	345	2	5
Hoop Net	10	N 34.62492	W 090.61987	11	51	0.5556	84	345	2	5
Hoop Net	11	N 34.62455	W 090.61956	12	35	0.6250	84	345	2	5
Hoop Net	12	N 34.62463	W 090.61991	12	18	0.5556	84	345	2	5
Hoop Net	13	N 34.62447	W 090.61892	11	56	0.5556	84	345	2	5
Hoop Net	14	N 34.62465	W 090.61855	4	19	0.5556	84	345	2	5
Trawl	1	N 34.62379	W 090.61576	4-11	25	0.333	84	345	2	5
Trawl	2	N 34.62374	W 090.61429	5	25	0.454	84	345	2	5
Trawl	3	N 34.62322	W 090.61223	13	65	0.625	84	345	2	5
Trawl	4	N 34.62262	W 090.60996	12	40	0.500	84	345	2	5
Trawl	5	N 34.62282	W 090.60313	7	20	0.312	84	345	2	5
Trawl	6	N 34.62338	W 090.59980	15	68	0.714	84	345	2	5

**Table 62: Fishes Collected at the White River, Newport Reach**

SPECIES	NUMBER OF FISHES COLLECTED	LENGTH RANGE	WEIGHT RANGE	COLLECTIONS BY GEAR TYPE WITHIN REACH
<b>Acipenseridae (Sturgeons)</b>				
<i>Scaphirhynchus platyrhynchus</i> ( Shovelnose Sturgeon)	1	526	384	HN3
<b>Lepisosteidae (Gars)</b>				
<i>Lepisosteus oculatus</i> (Spotted Gar)	1	540	260	F4
<i>Lepisosteus osseus</i> ( Longnose Gar)	1	791		2A
<i>Lepisosteus platostomus</i> ( Shortnose Gar)	10	420-580	182-640	F1,2,4
<b>Clupeidae (Herrings)</b>				
<i>Alosa chrysochloris</i> ( Skipjack Herring)	3	91-95		S4B,2A
<i>Dorosoma cepedianum</i> ( Gizzard Shad)	20	86-243		S1A,2A,2B,3A,4A,4B,5B
<b>Cyprinidae (Minnows and Carps)</b>				
<i>Hybognathus hayi</i> ( Cypress Minnow)	2	54-58		F2
“ ”	4	50-58		F2
<i>Hybognathus muchalis</i> ( Mississippi Silvery Minnow)	56	34-112		S3B,4B,5B
<i>Hybopsis amblops</i> ( Bigeye Chub)	1	32		T4
<i>Hybopsis storeriana</i> ( Silver Chub)	1	50		S1A
<i>Hybopsis x-punctata</i> ( Gravel Chub)	2	26-30		T3
<i>Notropis atherinoides</i> ( Emerald Shiner)	8	62-98		S1A,1B,2A,2B,3B
“ ”	6	39-43		T4
<i>Notropis fumeus</i> ( Ribbon Shiner)	12	56-67		F4
<i>Notropis texanus</i> ( Weed Shiner )	6	39-43		T3
<i>Notropis venustus</i> ( Blacktail Shiner)	4	46-77	S4A,4B,5A	
“ ”	177	25-64		F1,4
<i>Notropis Volucellus</i> ( Mimic Shiner)	3	37-40		T4
<i>Pimephales vigilax</i> ( Bullhead Minnow)	98	30-70		F1,2,3

<b>Catostomidae (Suckers)</b>				
<i>Carpiodes carpio</i> (River Carpsucker)	1	122		S4A
<i>Ictiobus bubalus</i> ( Smallmouth Buffalo)	1	496	1260	HN3
<i>Ictiobus niger</i> ( Black Buffalo)	2	400-440	640-1000	HN6,7
<i>Moxostoma macrolepidotum</i> ( Shortheas Redhorse)	5	294-390	222-584	HN3
<b>Ictaluridae (Bullhead Catfishes)</b>				
<i>Ictalurus punctatus</i> ( Channel catfish)	4	290-447	160-900	HN2,3,7
<i>Pylodictus olivaris</i> (Flathead Catfish)	1	720	3740	HN7
<b>Atherinidae ( Silversides)</b>				
<i>Labidesthes sicculus</i> ( Brook Silverside)	1	53		S2B
<b>Centrarchidae ( Sunfishes)</b>				
<i>Lepomis gulousus</i> ( Warmouth)	1	64		F1
<i>Lepomis humilis</i> ( Orangespotted Sunfish)	7	52-61		F1,2
<i>Lepomis macrochirus</i> ( Bluegill)	54	22-100		F1,2,4
<i>Micropterus punctulatus</i> ( Spotted Bass)	3	71-183		S1A
<i>Pomoxis annularis</i> ( White Crappie)	11	42-220		F1,2,3
<i>Pomoxis nigromaculatus</i> ( Black Crappie)	1	230	160	F3
<b>Percidae ( Perches)</b>				
<i>Percina caprodes</i> ( Logperch)	1	72		S3B
<b>Sciaenidae ( Drums)</b>				
<i>Aplodinotus grunniens</i> ( Freshwater Drum)	1	257	184	HN7

**Table 63: White River Newport**

Gear Type	Set No.	Latitude	Longitude	Depth ft. .	Range		Velocity m/s	Temp. F	Secchi mm	Substrate	Habitat
					yds.						
Hoop net	1	N 35.62930	W 091.31456	6	18		0.5556	81	890	2	3/8
Hoop net	2	N 35.62440	W 091.30083	12	12		0.5000	81	890	2/3	3
Hoop net	3	N 35.62268	W091.29723	4	79		0.4167	81	890	3	1
Hoop net	4	N 35.62837	W 091.29040	6	63		0.6250	81	890	3	1/5
Hoop net	5	N 35.62918	W 091.28840	9	16		0.3571	81	890	2/3	3
Hoop net	6	N 35.62991	W 091.28677	8	45		0	81	890	3	1/9
Hoop net	7	N 35.62957	W 091.28591	23	39		0.3125	81	890	3	1
Fyke Net	1	N 35.62109	W 091.29752	2-4	0		0	81	890	2/3	1
Fyke Net	2	N 35.62121	W 091.29780	2	0		0	81	890	2/3	9
Fyke Net	3	N 35.62167	W 091.29709	2-3	0		0	81	890	2/3	9
Fyke Net	4	N 35.62245	W 091.29860	3.5	0		0	81	890	3	1/3
Seine	1A	N 35.62407	W 091.29310	3.5	0		0	81	890	2/3	1
Seine	1B	N 35.62407	W 091.29310	3.5	0		0	81	890	2/3	1
		Immediately	Immediately								
Seine	2A	Above 1B	Above 1B	3.5	0		0	81	890	2/4	1/12
		Immediately	Immediately								
Seine	2B	Above 1B	Above 1B	4	0		0	81	890	2/4	1/12
Seine	3A	N 35.62245	W 091.31175	4	0		0	81	890	4	12
Seine	3B	N 35.62245	W 091.31175	4	0		0	81	890	4	12
		Immediately	Immediately								
Seine	4A	Above 3b	Above 3b	3.5	0		0.4167	81	890	3/4	12
		Immediately	Immediately								
Seine	4B	Above 3b	Above 3b	3.5	0		0.4167	81	890	3/4	12
Seine	5A	N 35.62474	W 091.31539	3	0		0.3571	81	890	4	12
Seine	5B	N 35.62474	W 091.31539	3	0		0.3571	81	890	4	12
Trawl	1	N 35.62775	W 091.31616	9	117		0.3333	81	890	2/4	5
Trawl	2	N 35.62424	W 091.31548	10	62		0.4167	81	890	4	5
Trawl	3	N 35.62302	W 091.31421	7	32		0.2500	81	890	4	5
Trawl	4	N 35.62231	W 091.31318	9	79		0.2778	81	890	4	5

**Table 64: Fishes collected at the Clarendon White River Reach Effort One**

SPECIES/GEAR TYPE	NUMBER OF FISHES COLLECTED	LENGTH RANGE	WEIGHT RANGE	COLLECTIONS BY GEAR TYPE WITHIN REACH
<b>Lepisosteidae (Gars)</b>				
<i>Lepisosteus osseus</i> ( Longnose Gar)	2	796-853		Hn4
<i>Lepisosteus platostomus</i> ( Shortnose Gar)	1	635		HN9
<b>Clupeidae (Herrings)</b>				
<i>Dorosoma cepedianum</i> ( Gizzard Shad)	1	119		S1A
<i>Dorosoma petenense</i> ( Threadfin Shad)	78	70-119		S1B,2A,3A,3B,4A,5A,5B
<b>Cyprinidae (Minnows and Carps)</b>				
<i>Hybognathus muchalis</i> ( Mississippi Silvery Minnow)	2	57-67		
<i>Hybopsis aestivalis</i> ( Speckled Chub)	206	23-58		T2,6,3,5,7,9
<i>Hybopsis storeriana</i> ( Silver Chub)	4	65-107		T2,5,7
<i>Notropis atherinoides</i> ( Emerald Shiner)	2059	27-71		F12,13,14,15,16,17
“ ”	18	79-93		S2B,3A,3B,4A,5B
<i>Notropis blennioides</i> ( River Shiner)	6	59-67		S2A
<i>Notropis burchanani</i> ( Ghost Shiner)	3	33-56		F14
<i>Notropis maculatus</i> (Taillight Shiner)	1	46		F14
<i>Notropis texanus</i> ( Weed Shiner )	2	56-60		F12
<i>Notropis venustus</i> ( Blacktail Shiner)	15	45-61		
“ ”	2	61-71		S1B,4B
<i>Notropis Volucellus</i> ( Mimic Shiner)	27	27-40		T2,6,3
“ ”	1	47		S1A
<i>Pimephales vigilax</i> ( Bullhead Minnow)	2	50-52		T3,6
<b>Ictaluridae (Bullhead Catfishes)</b>				
<i>Ictalurus punctatus</i> ( Channel catfish)	2	58-67		T2,5
<b>Atherinidae ( Silversides)</b>				
<i>Labidesthes sicculus</i> ( Brook Silverside)	6	55-76		F1

“”	4	47-60		S1A,1B,3B
<i>Menidia beryllina</i> ( <i>Inland Silverside</i> )	3	57-65		S2B,4A,4B
<b>Moronidae (Temperate Basses)</b>				
<i>Morone chrysops</i> ( <i>White Bass</i> )	1	362		Hn3
<b>Centrarchidae ( Sunfishes)</b>				
<i>Lepomis cyanellus</i> ( <i>Green Sunfish</i> )	1	107		F13
<i>Lepomis gulousus</i> ( <i>Warmouth</i> )	2	31-42		F12
<i>Lepomis humilis</i> ( <i>Orangespotted Sunfish</i> )	12	32-86		F14,16,17,18,19
“”	3	45		S1A
<i>Lepomis macrochirus</i> ( <i>Bluegill</i> )	1	35		S1A
<i>Lepomis megalotis</i> ( <i>Longear Sunfish</i> )	1	101		F11
<i>Micropterus punctulatus</i> ( <i>Spotted Bass</i> )	10	65-68		S1A,1B,2A,3A,4A,4B,5A
<i>Pomoxis annularis</i> ( <i>White Crappie</i> )	2	98-154		11,14
<i>Pomoxis nigromaculatus</i> ( <i>Black Crappie</i> )	2	301-329		Hn6,10
“”	3	98-118		F19
<b>Percidae ( Perches)</b>				
<i>Ammocrypta Clara</i> ( <i>Western Sand Darter</i> )	2	40-51		T3,6
<i>Etheostoma aprigene</i> ( <i>Mud Darter</i> )	1	45		F12
<i>Percina shumardi</i> ( <i>River Darter</i> )	3	53-60		T2,3,5



**Table 65: White River Clarendon, Effort One**

Gear Type	Set No.	Latitude	Longitude	Depth ft.	Range		Velocity m/s	Temp F.	Secchi mm	Substrate	Habitat
					yds.						
Trawl	1	Near 4	Near 4	1-4	100		0.08	42	320	1/3	5
Trawl	2	Near 4	Near 4	12-15	100		0.29	42	320	2/3	5
Trawl	3	Near 4	Near 4	8-10	125		0.26	42	320	1/3	5
Trawl	4	N 34.65701	W 091.30666	16-21	150		0.17	42	320	3	1/6
Trawl	5	N 34.65607	W 091.30829	14-16	200		0.13	42	320	2	3/5/6
Trawl	6	N 34.66928	W 091.31819	2-3	30		0.18	42	320	3/2	1
Trawl	7	N 34.66823	W 091.31722	6-7	70		0.40	42	320	3	5
Trawl	8	N 34.66161	W 091.31751	4 *	100		0.73	42	320	3	1/5
Trawl	9	Near 8	Near 8	9	30		0.73	42	320	2	5
Hoop Net	1	N 34.66140	W 91.32067	5	15		0.20	42	320	3	3
Hoop Net	2	N 34.66227	W 91.31902	10	12		0.45	42	320	2	3
Hoop Net	3	N 34.66137	W 91.31086	12	12		0.50	42	320	2	3
Hoop Net	4	N 34.65946	W 91.31210	11	10		0.10	42	320	2	3
Hoop Net	5	N 34.65684	W 91.30656	15	20		0.00	42	320	3	1
Hoop Net	6	N 34.65969	W 91.30750	4	15		0.05	42	320	3	1
Hoop Net	7	N 34.65984	W 91.30794	4-6	20		0.05	42	320	3	1
Hoop Net	8	N 34.66000	W 91.30878	8	20		0.05	42	320	3	1
Hoop Net	9	N 34.66011	W 91.31000	4	25		0.05	42	320	3	1/5
Hoop Net	10	N 34.66046	W 91.31182	3	30		0.17	42	320	3	1/5
Fyke Net	11	N 34.66132	W 91.31638	2	0		0	44	320	3	1
Fyke Net	12	N 34.66138	W 91.31621	1.5	0		0	44	320	3	1
Fyke Net	13	N 34.66111	W 91.31552	2	0		0	44	320	3	1
Fyke Net	14	N 34.66106	W 91.31513	1.5	0		0	44	320	3	1
Fyke Net	15	N 34.66091	W 91.31470	2	0		0	44	320	3	1
Fyke Net	16	N 34.66092	W 91.31425	2	0		0	44	320	3	1
Fyke Net	17	N 34.66084	W 91.31392	2	0		0	44	320	3	1
Fyke Net	18	N 34.66071	W 91.31337	2.5	0		0	44	320	3	1
Fyke Net	19	N 34.66068	W 91.31305	3.5	0		0	44	320	3	1
Seine	1a	N 34.62080	W 091.34216	2.5	0		0	83	285	3	1
Seine	1b	N 34.62051	W 091.34192	3	0		0	83	285	3	1

Seine	2a	N 34.63251	W 091.33461	3	0	0	82	285	3	1
Seine	2b	N 34.63222	W 091.33458	4	0	0	82	285	3	1
Seine	3a	N 34.63333	W 091.33441	3	0	0	82	285	3	1
Seine	3b	N 34.63318	W 091.33444	3	0	0	82	285	3	1
Seine	4a	N 34.63301	W 091.33445	2	0	0	82	285	3	1
Seine	4b	N 34.63280	W 091.33452	3	0	0	82	285	3	1
Seine	5a	N. 34.63286	W 091.33454	4	0	0	82	285	3	1
Seine	5b	N 34.63264	W 091.33459	3	0	0	82	285	3	1

**Table 66: Fishes Collected at the White River, Clarendon Reach, Second Effort**

SPECIES	NUMBER OF FISHES COLLECTED	LENGTH RANGE	WEIGHT RANGE	COLLECTIONS BY GEAR TYPE WITHIN REACH
<b>Acipenseridae (Sturgeons)</b>				
<i>Scaphirhynchus platyrhynchus</i> ( Shovelnose Sturgeon)	1	545		S3A
“”	2	490-515	340-515	HN4
<b>Lepisosteidae (Gars)</b>				
<i>Lepisosteus oculatus</i> (Spotted Gar)	1	521	484	F1
<i>Lepisosteus osseus</i> ( Longnose Gar)	1	112		S3A
“”	2	896-985	1520-1900	HN1
<i>Lepisosteus platostomus</i> ( Shortnose Gar)	6	413-601	288-744	F3,5
<b>Clupeidae (Herrings)</b>				
<i>Dorosoma cepedianum</i> ( Gizzard Shad)	30	40-336		S4B,5A
“”	1	65		F1
<i>Dorosoma petenense</i> ( Threadfin Shad)	337	42-140		S1A,2A,3A
“”	3	41-46		F8,4,5
<b>Hiodontidae (Mooneyes)</b>				
<i>Hiodon tergisus</i> ( Mooneye)	1	57		T2
<b>Cyprinidae (Minnows and Carps)</b>				
<i>Hybognathus muchalis</i> ( Mississippi Silvery Minnow)	71	37-95		S1B,2A,3A,4A,4B,5A
“ ”	3	41-82		F5,3,4
<i>Hybopsis aestivalis</i> ( Speckled Chub)	5	35-62		F1
“ ”	4	40-48		T1,2
<i>Hybopsis storeriana</i> ( Silver Chub)	1	93		S2A
“ ”	2	42-49		F1
<i>Notropis atherinoides</i> ( Emerald Shiner)	22	31-93		S1A,1B,3A,3B,4B

“”	602	25-86		F1,3,4
<i>Notropis blennioides</i> ( River Shiner)	2	32-57		S3A,5B
<i>Notropis emiliae</i> (Pugnose Minnow)	1	42		F1
<i>Notropis shumardi</i> (Silverband Shiner)	1	48		F5
<i>Notropis venustus</i> ( Blacktail Shiner)	40	17-84		S1A,1B,2A,2B,3A,3B,4B,5A,5B
“”	454	38-72		F1,3,5,4
<i>Notropis volucellus</i> ( Mimic Shiner)	23	28-37		S3A,3B,5B
“”	590	31-50		F1,3,4
“”	58	29-45		T1,2,4,5
<i>Pimephales vigilax</i> ( Bullhead Minnow)	15	45-65		F4,1
<b>Catostomidae (Suckers)</b>				
<i>Carpionotus carpio</i> (River Carpsucker)	6	58-97		S4A,5A
“”	1	455	1120	HN3
<i>Ictiobus bubalus</i> ( Smallmouth Buffalo)	2	550-810	2700-8460	HN2,5
<i>Moxostoma macrolepidotum</i> ( Shortheas Redhorse)	3	45-60		S2A,3A,5B
<b>Ictaluridae (Bullhead Catfishes)</b>				
<i>Ictalurus furcatus</i> ( Blue Catfish)	1	34		T5
<i>Ictalurus punctatus</i> ( Channel catfish)	1	380	500	HN2
<i>Pylodictus olivaris</i> (Flathead Catfish)	1	356	440	F4
<b>Fundulidae (Killifishes)</b>				
<i>Fundulus chrysotus</i> ( Golden Topminnow)	2	59-74		S2A,5A
<i>Fundulus olivaceus</i> ( Blackspotted Topminnow)	1	48		F5
<b>Poeciliidae ( Livebearers)</b>				
<i>Gambusia affinis</i> ( Mosquitofish)	10	40-47		S5A,5B
“”	2	46-51		F3,5
<b>Atherinidae ( Silversides)</b>				
<i>Menidia beryllina</i> ( Inland Silverside)	1	55		F4
<b>Moronidae (Temperate Basses)</b>				

<i>Morone chrysops</i> ( White Bass)	1	40		F1
<b>Centrarchidae ( Sunfishes)</b>				
<i>Lepomis humilis</i> ( Orangespotted Sunfish)	30	34-146		S1A,1B,2A,3A, 3B,4A,4B,5A
“	5	24-66		F1,3,4
<i>Lepomis macrochirus</i> ( Bluegill)	3	49-67		S2A,,3B,5A
“”	8	45-172		F1,4,5
<i>Lepomis megalotis</i> ( Longear Sunfish)	20	14-66		F2,3
<i>Micropterus punctulatus</i> ( Spotted Bass)	30	34-146		S1A,1B,2A,3A,3B,4A,4B,5 A
“”	5	24-66		F1,3,4
“”	1	40		T1
<i>Pomoxis annularis</i> ( White Crappie)	5	42-122		S3A,5B
“”	10	16-255	18-210	F1,3,5
<i>Pomoxis nigromaculatus</i> ( Black Crappie)	6	40-145		S3A,3B,4B
“”	6	25-176	-98	F2,4
<b>Percidae ( Perches)</b>				
<i>Ammocrypta Clara</i> ( Western Sand Darter)	7	25-51		F1
<i>Etheostoma chlorosomum</i> (Bluntnose darter)	1	25		F1
<i>Percina caprodes</i> ( Logperch)	1	51		F4
<i>Percina shumardi</i> ( River Darter)	3	27-41		F1,5
<b>Sciaenidae ( Drums)</b>				
<i>Aplodinotus grunniens</i> ( Freshwater Drum)	3	37-185		F4,1
“”	7	234-344	142-662	HN1,2,8,4,6

**Table 67: White River Clarendon, Second Effort**

Gear Type	Set No.	Latitude	Longitude	Depth ft	Range		Velocity m/s	Temp. F	Secchi		Habitat
						yd			mm	Substrate	
Hoop net	1	N 34.65694	W 091.31347	14	12	0.38	84	440	2/3	3	
Hoop net	2	N 34.65690	W 091.31268	9-12	13	0.38	84	440	2/3	3	
Hoop net	3	N 34.65677	W 091.31173	10	13	0.42	84	440	3	1	
Hoop net	4	N 34.65661	W 091.31207	17	44	0.71	84	440	2	5	
Hoop net	5	N 34.65597	W 091.30900	10	23	0.71	84	440	3	3	
Hoop net	6	N 34.65979	W 091.30795	8	21	0.56	84	440	3	1	
Hoop net	7	N 34.65990	W 091.30895	20	46	0.83	84	440	3	5	
Fyke Net	1	N 34.65896	W 091.30603	3	0	0	76	228	3	1/3	
Fyke Net	2	N 34.65899	W 091.30599	.35	0	0	76	228	2/3	3	
Fyke Net	3	N 34.65645	W 091.61017	2-3	0	0.2	82	325	2	1	
		30 meters above	30 meters above								
Fyke Net	4	N 34.65645	W 091.31020	3	0	0.2	82	325	2	1	
Fyke Net	5	N 34.65645	W 091.31020	2.5	0	0.2	82	325	2	1	
Seine	1A	N 34.66776	W 091.31928	3	0	0.02	84	440	3	1	
Seine	1B	N 34.66776	W 091.31928	5	0	0.02	84	440	3	1	
Seine	2A	N 34.66724	W 091.31935	5.5	0	0.42	84	440	3	1/3	
Seine	2B	N 34.66724	W 091.31935	3	0	0.42	84	440	3	1/3	
Seine	3A	N 34.66458	W 091.31977	1.5	0	0.5	84	440	1/3	1	
Seine	3B	N 34.66458	W 091.31977	1.5	0	0.5	84	440	1	1	
Seine	4A	N 34.66269	W 091.31637	2	0	0.20	84	440	3	1	
Seine	4B	N 34.66230	W 091.31666	2	0	0.63	84	440	3	1	
Seine	5A	N 34.66224	W 091.31645	3	0	0	84	270	3	1	
Seine	5B	N 34.66204	W 091.31631	1	0	0	84	270	3	1	
Trawl	1	N 34.65767	W 091.30630	5-8	46	0.19	84	440	3	1	
Trawl	2	N 34.65831	W 091.30718	9-11	64	0.26	84	440	3	5	
Trawl	3	N 34.65680	W 091.30677	7	15	0.1	84	440	3	3	
Trawl	4	N 34.67010	W 091.31831	7-8	18	1	84	440	3	5	
Trawl	5	N 34.66971	W 091.31794	8	66	1	84	440	3	5	
Trawl	6	N 34.66825	W 091.31747	8	174	0.83	84	440	3	5	