

VOGTLE ELECTRIC GENERATING PLANT  
SURVEY OF THE FEEDING HABITS OF FISHES IN THE SAVANNAH RIVER,  
BURKE COUNTY, GEORGIA, FROM OCTOBER, 1980 THROUGH SEPTEMBER, 1981  
OPERATING LICENSE STAGE ENVIRONMENTAL REPORT  
TECHNICAL DOCUMENT

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### INTRODUCTION

Construction of the Vogtle Electric Generating Plant (VEGP) began in June, 1974, and was discontinued in September, 1974, as a result of unfavorable economic conditions. Construction resumed in January, 1977, with excavation activities beginning in February. The plant site is approximately 3169 acres and located in Burke County on the southwest side of the Savannah River, the natural boundary between Georgia and South Carolina. The site is at river mile 150.9 across from the Savannah River Plant (SRP) operated by E. I. DuPont DeNemours and Company for the U.S. Department of Energy. The plant site is approximately 26 miles south-southeast of Augusta, Georgia. The site is located in the coastal plain, which is characterized by sandy or sandy loam soil with rolling hills and mixed pine-hardwood association. Since the onset of construction, approximately 1391 acres of the site have been cleared for plant construction.

The original plans proposed a generating plant consisting of four units, but construction of two units has been cancelled. The plant will employ two pressurized water reactors producing 1160 MW each. Unit 1 is scheduled to go into service in March, 1987, and Unit 2 in September, 1988. The exhaust steam will be cooled by a closed-cycle cooling system employing natural draft cooling towers using make-up water from the Savannah River. Low volume waste and blowdown from both cooling towers will ultimately be discharged back into the river.

The Savannah River below Augusta, Georgia, and above the VEGP site receives wastewater discharges from municipalities and industries that add organic wastes, nutrients, metals, and other trace contaminants. Stream classification near the VEGP is listed as "Fishing."<sup>(1)</sup> The river near the plant site is typical of large southeastern coastal plain rivers except that a dredged channel is maintained by the Corps of Engineers for barge traffic. The biological community of the river is similar to that of other large southeastern rivers but has been affected by man's influence on the river. The impoundment of the river above Augusta, Georgia, has reduced the transport of sediments and allochthonous particulate organic material, and the dredging of the channel has reduced the natural shallow areas and backwaters that would normally support a diverse flora and fauna. Studies on the Savannah River flora and fauna have been conducted periodically since 1951 and were detailed in Patrick, et al.,<sup>(2)</sup> Academy of Natural Sciences of Philadelphia,<sup>(3)(4)</sup> and Matthews.<sup>(5)</sup>

Georgia Power Company was required by Chapter 2.2 of U.S. Nuclear Regulatory Commission Regulatory Guide 4.2, Revision 2, 1976, to conduct a biological study to describe the flora and fauna in the vicinity of the site, their habitats, and distribution. The study should also identify organisms defined to be "important" because of commercial or recreational value, threatened or endangered status, effects on other "important" species, or being a biological indicator of radionuclides in the environment.

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In addition, food chains and other interspecies relationships were to be identified. To this end, a study of the feeding habits of fishes in the Savannah River was conducted between October, 1980, through September, 1981.

### METHODS

Adult and juvenile fish were sampled with a Smith-Root V1-A electro-fisher mounted on a Valco boat between river miles 145 and 155. Sampling was conducted in October and December of 1980 and January, March, April, June, August, and September of 1981. Sampling usually began during the late afternoon and continued into the evening hours. An attempt was made to collect ten specimens of each species monthly; but for some species, this was not accomplished.

Large fish were measured, weighed, and the stomachs removed in the field and preserved in ten percent formalin. Smaller fish were enumerated and preserved in ten percent formalin. All samples were transported to the Environmental Affairs Center for laboratory processing and data analysis.

In the laboratory, length and weight measurements of the small fish were recorded. The stomachs were removed and preserved in 70 percent ethanol. Contents from each large and small specimen were filtered through a U.S. Standard #70 mesh sieve. Organisms in the sieve along with any debris were placed into a watch glass for sorting. The sample was examined under a stereo microscope (50X magnification) and all visible organisms removed and placed into a labeled vial of 70 percent ethanol. The vial containing the sorted sample was emptied into a petri dish and examined under a stereo microscope. Each organism was identified to the lowest practical taxon and enumerated. In some instances, samples were subsampled and total numbers estimated. Subsampling was accomplished by withdrawing a few milliliters from the sample and multiplying the results by the total volume in the sample.

An important food item was considered as an organism occurring in the greatest number of fish stomachs. A table for each species will present the number of stomachs analyzed per month, the food item eaten and number of stomachs in which it occurred, and totals for each.

### RESULTS AND DISCUSSION

As part of the food habit study, 22 species of fish representing 9 families and 13 genera were collected. No attempt was made to show seasonal dietary changes in the food organisms ingested. Each species will be discussed briefly to indicate the more important food items consumed.

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### Bowfin (Amia calva)

A total of 18 bowfins were analyzed ranging in length from 31.0 to 66.0 centimeters (cm) total length (TL) and weighing from 255.0 to 2175.2 grams (g). As a result of the low number of stomachs examined, very limited data were obtained. Published reports showed that bowfin fed mainly on crayfish, insects, and fish. <sup>(6)</sup> Table 1 presents the food items eaten by the bowfin and supported the findings given by Carlander. <sup>(6)</sup> An interesting note was the presence of a well-digested mammalian species.

### Chain Pickerel (Esox niger)

A total of 33 chain pickerels were analyzed ranging in length from 17.0 to 47.0 cm TL and weighing from 25.0 to 766.0 g. Carlander <sup>(6)</sup> stated that fish are the main food item for pickerel over 100 mm TL and invertebrates for individuals under 100 mm. Table 2 supported those findings because 12 of the 33 stomachs analyzed contained unknown fish. Bluegill (Lepomis macrochirus), the next important food item, was present in four stomachs. Ten of the food items consumed by the chain pickerel were fish.

### Eastern Silvery Minnow (Hybognathus regius)

A total of 29 eastern silvery minnows were analyzed ranging in length from 6.0 to 8.5 cm TL and weighing from 1.7 to 6.0 g. Published reports indicated that bottom ooze and algae were the principal food items. <sup>(6)</sup> Our data presented in table 3 supported those findings. Many of the stomachs contained food, but only two organisms could be identified.

### Golden Shiner (Notemigonus crysoleucas)

A total of 33 golden shiners were analyzed ranging in length from 6.5 to 20.0 cm TL and weighing from 2.0 to 72.5 g. Golden shiners were reported to feed on entomostraca, phytoplankton, insects, hydrachnids, molluscs, and Cladocera. <sup>(6)</sup> The food items presented in table 4 were in agreement with those reported by Carlander. <sup>(6)</sup> Cladocera and Bryozoa were the most important food items found in 24 and 20 stomachs, respectively.

### Spottail Shiner (Notropis hudsonius)

A total of 49 spottail shiners were analyzed ranging in length from 4.1 to 10.5 cm TL and weighing from 0.3 to 10.2 g. Spottail shiners were reported to feed on rotifers, algae, entomostraca, insects, Cladocera, Hydracarina, Mollusca, small shiners, and fish eggs. <sup>(6)</sup> The data presented in table 5 showed that the Chironomidae was the most important food item found in 32 stomachs. Algae and Pelecypoda were also very important found in 24 and 22 stomachs, respectively.

### Bannerfin Shiner (Notropis leedsii)

A total of 25 bannerfin shiners were analyzed ranging in length from 5.0 to 8.6 cm TL and weighing from 0.8 to 4.7 g. Documentation on the

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feeding habits of the bannerfin shiner was not available in the literature. Our data (table 6) indicated that the Chironomidae and Pelecypoda were the most important food items found in 16 and 14 stomachs, respectively.

Taillight Shiner (Notropis maculatus)

A total of 21 taillight shiners were analyzed ranging in length from 4.1 to 6.7 cm TL and weighing from 0.5 to 2.5 g. The feeding habits of the taillight shiner were not available in the literature. Our data, presented in table 7, showed the most important food items were Cladocera and Copepoda found in 11 and 9 stomachs, respectively.

Coastal Shiner (Notropis petersoni)

A total of 52 coastal shiners were analyzed ranging in length from 3.5 to 6.7 cm TL and weighing from 0.2 to 2.2 g. Data documenting the feeding habits of the coastal shiner were not available. Table 8 presents the food items ingested by the coastal shiner. The most important food item was Pelecypoda found in 20 stomachs. Algae and Cladocera were also important found in 15 and 13 stomachs, respectively.

Spotted Sucker (Minytrema melanops)

A total of 58 spotted suckers were analyzed ranging in length from 8.5 to 50.0 cm TL and weighing from 6.0 to 1247.4 g. White and Haag<sup>(7)</sup> reported that spotted suckers fed on organic fragments, diatoms, copepods, cladocerans, chironomids, ostracods, rotifers, and benthic invertebrates. The food items eaten by the spotted sucker presented in table 9 supported those findings. The most important food item was the Chironomidae found in 44 stomachs. The next important food items were the Cladocera, Ostracoda, and Copepoda found in 35, 35, and 33 stomachs, respectively.

Snail Bullhead (Ictalurus brunneus)

A total of 18 snail bullheads were analyzed ranging in length from 6.0 to 23.0 cm TL and weighing from 2.2 to 146.0 g. No data were found documenting the feeding habits of the snail bullhead. The food items consumed by the snail bullhead are presented in table 10. Chironomidae and Hydropsychidae were the most important food items, both were found in 15 stomachs. The next important food items were the unknown diptera and Philopotamidae which were found in seven stomachs.

White Catfish (Ictalurus catus)

A total of nine white catfishes were analyzed ranging in length from 25.5 to 43.0 cm TL and weighing from 100.0 to 1362.0 g. Published reports showed that white catfish fed on pondweeds, aquatic insects, amphipods, clams, crayfish, mysid shrimp, fish, and fish eggs.<sup>(6)(8)</sup>

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The data presented in table 11 supported those findings. The most important food item was the Chironomidae found in seven stomachs. The next important food items were the Cladocera, Hydropsychidae, unknown diptera, and algae all found in five stomachs.

Channel Catfish (Ictalurus punctatus)

A total of 20 channel catfishes were analyzed ranging in length from 9.0 to 60.0 cm TL and weighing from 5.7 to 2384.0 g. Channel catfish under 100 mm fed on aquatic insects and bottom arthropods; whereas, over 100 mm, they were omnivorous or piscivorous.<sup>(6)</sup> The most important food item, presented in table 12, was the Chironomidae found in 12 stomachs. The next important food items were the Hydropsychidae and Leptoceridae found in ten and eight stomachs, respectively.

Pirate Perch (Aphredoderus sayanus)

A total of four pirate perchs were analyzed ranging in length from 2.5 to 8.0 cm TL and weighing from 1.0 to 6.5 g. Very limited data were obtained due to the low number of stomachs analyzed. Published reports indicated that pirate perch fed on insects, cladocerans, isopods, amphipods, crayfish, and fish.<sup>(6)(9)</sup> The data presented in table 13 showed that the most important food item was the Chironomidae found in three stomachs. The next important food items were the Hydropsychidae and Philopotamidae both found in two stomachs.

Brook Silverside (Labidesthes sicculus)

A total of 54 brook silversides were analyzed ranging in length from 2.5 to 8.0 cm TL and weighing from only a trace to 2.6 g. Published reports showed that the brook silverside fed on Cladocera, insects, copepods, and small crustaceans.<sup>(10)(12)</sup> Data from table 14 indicated that the Chironomidae was the most important food item found in 39 stomachs. The next important food items were the Cladocera and Copepoda found in 26 and 21 stomachs, respectively.

Redbreast Sunfish (Lepomis auritus)

A total of 89 redbreast sunfishes were analyzed ranging in length from 5.5 to 20.5 cm TL and weighing from 2.6 to 198.5 g. Redbreast sunfish fed on insects, molluscs, bottom invertebrates, and possibly small fish.<sup>(10)(11)</sup> The most important food item, presented in table 15, was the Chironomidae found in 62 stomachs. The next important food items were the Hydropsychidae, unknown diptera, and Gastropoda found in 31, 28, and 28 stomachs, respectively.

Warmouth (Lepomis gulosus)

A total of 21 warmouths were analyzed ranging in length from 6.5 to 21.5 cm TL and weighing from 5.0 to 270.5 g. Warmouth fed on entomostaca, insects, crayfish, and fish.<sup>(11)</sup> The most important food item

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was the Chironomidae found in six stomachs (table 16). The next important food items were the Decapoda and Gastropoda both found in four stomachs.

Bluegill (Lepomis macrochirus)

A total of 88 bluegills were analyzed ranging in length from 8.5 to 24.0 cm TL and weighing from 8.0 to 270.0 g. Bluegill fed on aquatic insects, crustacea, rotifers, copepods, crayfish, terrestrial arthropods, small fish, and aquatic vegetation.<sup>(11)</sup> The most important food item, presented in table 17, was the Chironomidae found in 85 stomachs. The next important food items were the unknown diptera and Cladocera found in 55 and 45 stomachs, respectively.

Redear Sunfish (Lepomis microlophus)

A total of 72 redear sunfishes were analyzed ranging in length from 9.5 to 29.0 cm TL and weighing from 15.0 to 623.7 g. Published reports showed that redear sunfish fed on insects, snails, cladocerans, and copepods.<sup>(11)</sup> Table 18 showed the most important food item was Pelecypoda found in 60 stomachs. The next important food items were the Chironomidae and Gastropoda found in 55 and 45 stomachs, respectively.

Spotted Sunfish (Lepomis punctatus)

A total of 29 spotted sunfishes were analyzed ranging in length from 8.0 to 16.0 cm TL and weighing from 8.5 to 100.0 g. Spotted sunfish fed on Pqrrifera, polychaetas, molluscs, insects, crustaceans, fish, and algae.<sup>(13)</sup> As presented in table 19, the most important food item was algae found in eight stomachs.

Largemouth Bass (Micropterus salmoides)

A total of 91 largemouth basses were analyzed ranging in length from 5.5 to 42.0 cm TL and weighing from 1.8 to 1078.0 g. Largemouth bass fed on microcrustaceans, cladocerans, amphipods, entomostraca, rotifers, decapods, insects, fish, frogs, salamanders, and mammals.<sup>(11)</sup> The most important food item, presented in table 20, was unknown fish found in 35 stomachs. The next important food items were the Cyprinidae and Chironomidae found in 12 and 10 stomachs, respectively.

Black Crappie (Pomoxis nigromaculatus)

A total of 35 black crappies were analyzed ranging in length from 11.5 to 28.0 cm TL and weighing from 17.0 to 300.0 g. Black crappie fed<sup>(11)</sup> on entomostraca, copepods, cladocerans, insects, fish, and algae. The most important food item was the Chironomidae found in 26 stomachs (table 21). The next important food items were the Culicidae and Copepoda found in 13 and 12 stomachs, respectively.

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Yellow Perch (Perca flavescens)

A total of 51 yellow perches were analyzed ranging in length from 8.0 to 35.0 cm TL and weighing from 4.0 to 681.0 g. Yellow perch fed on invertebrates, cladocerans, ostracods, insects, decapods, molluscs, fish, and fish eggs.<sup>(10)</sup> Table 22 showed that the Chironomidae found in 40 stomachs was the most important food item. The next important food items were the Copepoda and Gastropoda found in 24 and 17 stomachs, respectively.

CONCLUSIONS

Results of the monitoring program on the food habits of the Savannah River fishes generally supported existing data. Most organisms occurring in the aquatic habitat were being utilized as indicated by the variety of food items observed. The food items most utilized were the Chironomidae followed by the Cladocera, Copepoda, and Hydropsychidae.

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TABLE 1

FOOD HABITS OF THE BOWFIN (AMIA CALVA)  
IN THE SAVANNAH RIVER 1980-1981

<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
Invertebrate Material		
Crustacea		
Decapoda		
Cambaridae	1	1
Palaemonidae	1	1
Insecta		
Diptera		
Chironomidae	1	1
Coleoptera	P(a)	1
Trichoptera		
Unknown trichoptera	1	1
Vertebrate Material		
Teleostomi		
Notropis spp.	1	1
<u>Labidesthes sicculus</u>	1	1
Unknown fishes	1	1
Mammal	P	1

a. P indicates body parts were present but an accurate count of organisms could not be made.

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TABLE 2

FOOD HABITS OF THE CHAIN PICKEREL (ESOX NIGER)  
IN THE SAVANNAH RIVER 1980-1981

<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
Invertebrate Material		
Bryozoa	P <sup>(a)</sup>	1
Crustacea		
Cladocera	1	1
Insecta		
Diptera		
Chironomidae	3	2
Tipulidae	1	1
Unknown diptera	5	1
Coleoptera		
Coleoptera larvae	1	1
Trichoptera		
Hydropsychidae	1	1
Gastropoda	1	1
Vertebrate Material		
Teleostomi		
<u>Dorosoma</u> spp.	1	1
<u>Hybognathus regius</u>	3	2
<u>Notropis</u> spp.	2	2
<u>Lepomis auritus</u>	2	2
<u>Lepomis gulosus</u>	1	1
<u>Lepomis macrochirus</u>	4	4
<u>Lepomis punctatus</u>	1	1
<u>Lepomis</u> spp.	3	3
<u>Micropterus salmoides</u>	1	1
Unknown fishes	13	12

a. P indicates body parts were present but an accurate count of organisms could not be made.

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TABLE 3

FOOD HABITS OF THE EASTERN SILVERY MINNOW  
(HYBOGNATHUS REGIUS) IN THE SAVANNAH RIVER 1980-1981

<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
Invertebrate Material		
Insecta		
Coleoptera		
Elmidae	1	1
Acari	1	1

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TABLE 4

FOOD HABITS OF THE GOLDEN SHINER  
(NOTEMIGONUS CRYSOLEUCAS) IN THE SAVANNAH RIVER 1980-1981

<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
Invertebrate Material		
Bryozoa	P (a)	20
<u>Pectinatella</u> sp.	P	2
<u>Plumatella</u> spp.	P	1
Crustacea		
Cladocera	1592	24
Copepoda	80	10
Ostracoda	40	6
Insecta		
Diptera		
Ceratopogonidae	11	5
Chironomidae	25	12
Unknown diptera	37	11
Hemiptera		
Corixidae	2	2
Trichoptera		
Unknown trichoptera	2	2
Homoptera		
Unknown homoptera	1	1
Hymenoptera		
Formicidae	1216	4
Unknown hymenoptera	6	3
Lepidoptera		
Lepidoptera larvae	1	1
Turbellaria		
Planaridae	5	1
Acari	4	3
Araneae	2	2
Pelecypoda	P	2
Invertebrate eggs	P	2
Plant Material		
Algae	P	4
Vascular plants	P	6

a. P indicates body parts were present but an accurate count of organisms could not be made.

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TABLE 5

FOOD HABITS OF THE SPOTTAIL SHINER (NOTROPIS HUDSONIUS)  
IN THE SAVANNAH RIVER 1980-1981

<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
<b>Invertebrate Material</b>		
Bryozoa		
<u>Pectinatella</u> sp.	P <sup>(a)</sup>	1
Crustacea		
Cladocera	13	6
Copepoda	14	6
Insecta		
Diptera		
Chironomidae	152	32
Coleoptera		
Unknown coleoptera	1	1
Plecoptera		
Unknown plecoptera	2	2
Hemiptera	P	1
Trichoptera	P	1
Hydropsychidae	10	7
Philopotamidae	1	1
Unknown trichoptera	7	4
Hymenoptera		
Formicidae	1	1
Unknown hymenoptera	8	2
Homoptera		
Aphidae	1	1
Collembola	1	1
Oligochaeta	1	1
Acari	1	1
Araneae	2	1
Pelecypoda	14,781	22
Invertebrate eggs	7	2
<b>Plant Material</b>		
Algae	P	24

a. P indicates body parts were present but an accurate count of organisms could not be made.

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TABLE 6

FOOD HABITS OF THE BANNERFIN SHINER  
(NOTROPIS LEEDSI) IN THE SAVANNAH RIVER 1980-1981

<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
Invertebrate Material		
Crustacea		
Cladocera	6	4
Copepoda	1	1
Insecta		
Diptera		
Chironomidae	277	16
Coleoptera		
Carabidae	1	1
Unknown coleoptera	3	3
Hemiptera		
Corixidae	10	1
Tingidae	1	1
Unknown hemiptera	2	2
Trichoptera		
Hydropsychidae	21	8
Unknown trichoptera	6	4
Homoptera		
Unknown homoptera	1	1
Hymenoptera		
Unknown hymenoptera	2	1
Araneae	3	2
Pelecypoda	6703	14
Plant Material		
Algae	P	4

a. P indicates body parts were present but an accurate count of organisms could not be made.

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TABLE 7

FOOD HABITS OF THE TAILLIGHT SHINER  
(NOTROPIS MACULATUS) IN THE SAVANNAH RIVER 1980-1981

<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
Invertebrate Material		
Crustacea	P (a)	4
Cladocera	233	11
Copepoda	438	9
Insecta		
Diptera		
Chironomidae	1	1
Unknown diptera	3	2
Plant Material		
Vascular plant	P	1

a. P indicates body parts were present but an accurate count of organisms could not be made.

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TABLE 8

FOOD HABITS OF THE COASTAL SHINER  
(NOTROPIS PETERSONI) IN THE SAVANNAH RIVER 1980-1981

<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
<b>Invertebrate Material</b>		
Bryozoa		
<u>Pectinatella sp.</u>	P <sup>(a)</sup>	3
Crustacea		
Cladocera	105	13
Copepoda	65	5
Insecta		
Diptera		
Chironomidae	9	5
Culicidae	3	2
Unknown diptera	40	10
Coleoptera	P	1
Unknown coleoptera	4	4
Ephemeroptera		
Unknown ephemeroptera	1	1
Trichoptera		
Hydropsychidae	5	4
Unknown trichoptera	8	6
Hymenoptera		
Unknown hymenoptera	8	6
Unknown insects	5	5
Nematoda	1	1
Pelecypoda	3871	20
Invertebrate eggs	8	1
<b>Vertebrate Material</b>		
Teleostomi		
Fish eggs	1	1
<b>Plant Material</b>		
Algae	P	15
Vascular plants	P	1

a. P indicates body parts were present but an accurate count of organisms could not be made.

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TABLE 9 (PAGE 1 OF 2)

FOOD HABITS OF THE SPOTTED SUCKER  
(MINYTREMA MELANOPS) IN THE SAVANNAH RIVER 1980-1981

<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
Invertebrate Material		
Crustacea	P (a)	3
Amphipoda	2	1
Cladocera	11,137	35
Copepoda	15,786	33
Ostracoda	7,286	35
Insecta		
Diptera	P	1
Ceratopogonidae	372	25
Chironomidae	16,906	44
Culicidae	366	6
Empididae	10	7
Tipulidae	10	2
Diptera pupa	7	5
Unknown diptera	298	17
Coleoptera		
Dytiscidae	1	1
Elmidae	43	10
Ephemeroptera		
Caenidae	2	2
Unknown ephemeroptera	16	6
Plecoptera		
Unknown plecoptera	1	2
Trichoptera		
Hydropsychidae	39	9
Hydroptilidae	1	1
Leptoceridae	3	2
Philopotamidae	P	1
Unknown trichoptera	14	9
Odonata		
Gomphidae	1	1
Unknown odonata	11	5
Hymenoptera		
Formicidae	1	1
Unknown hymenoptera	1	1
Hemiptera		
Corixidae	1	1
Unknown insects	3	2
Oligochaeta	63	3
Nematoda	14	5
Acari	11	5

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TABLE 9 (PAGE 2 OF 2)

<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
Mollusca	P	1
Gastropoda	P	5
Pelecypoda	P	16
Vertebrate Material		
Teleostomi		
Fish eggs	85	3
Plant Material		
Algae	P	1
Vascular plants	P	3

a. P indicates body parts were present but an accurate count of organisms could not be made.

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TABLE 10

FOOD HABITS OF THE SNAIL BULLHEAD  
(ICTALURUS BRUNNEUS) IN THE SAVANNAH RIVER 1980-1981

<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
Invertebrate Material		
Crustacea		
Cladocera	3	1
Ostracoda	2	1
Insecta		
Diptera		
Chironomidae	67	15
Unknown diptera	48	7
Coleoptera		
Elmidae	2	1
Coleoptera larvae	1	1
Ephemeroptera		
Heptageniidae	9	4
Unknown ephemeroptera	3	2
Plecoptera	P <sup>(a)</sup>	1
Trichoptera		
Hydropsychidae	153	15
Leptoceridae	5	4
Limnephilidae	1	1
Philopotamidae	20	7
Polycentropodidae	2	2
Trichoptera pupa	1	1
Unknown trichoptera	8	5
Odonata		
Libellulidae	2	2
Hymenoptera		
Unknown hymenoptera	1	1
Unknown insects	1	1
Gastropoda	13	3

a. P indicates body parts were present but an accurate count of organisms could not be made.

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TABLE 11 (PAGE 1 OF 2)

FOOD HABITS OF THE WHITE CATFISH  
(ICTALURUS CATUS) IN THE SAVANNAH RIVER 1980-1981

<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
Invertebrate Material	P <sup>(a)</sup>	1
Bryozoa		
<u>Pectinatella</u> sp.	P	2
<u>Plumatella</u> spp.	P	1
Crustacea		
Cladocera	36,003	5
Copepoda	3	1
Ostracoda	28	2
Insecta		
Diptera		
Ceratopogonidae	1	1
Chironomidae	119	7
Diptera pupa	3	2
Unknown diptera	12	1
Coleoptera	P	1
Dytiscidae	6	2
Elmidae	1	1
Coleoptera larvae	1	1
Ephemeroptera		
Unknown ephemeroptera	1	1
Plecoptera		
Unknown plecoptera	1	1
Trichoptera		
Hydropsychidae	28	5
Leptoceridae	56	4
Polycentropodidae	1	1
Trichoptera adults	4	1
Trichoptera pupa	5	2
Unknown trichoptera	38	5
Unknown insects	6	2
Hirudinea	1	1
Acari	24	1
Invertebrate eggs	330	1
Gastropoda	P	4
Pelecypoda	P	2
Vertebrate Material		
Teleostomi		
<u>Hybognathus regius</u>	5	1
<u>Notropis maculatus</u>	1	1

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TABLE 11 (PAGE 2 OF 2)

<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
<u>Lepomis punctatus</u>	1	1
Fish eggs	26,000	2
Plant Material		
Algae	P	5

a. P indicates body parts were present but an accurate count of organisms could not be made.

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TABLE 12 (PAGE 1 OF 2)

FOOD HABITS OF THE CHANNEL CATFISH  
(ICTALURUS PUNCTATUS) IN THE SAVANNAH RIVER 1980-1981

<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
Invertebrate Material		
Crustacea	P (a)	1
Cladocera	3	1
Insecta		
Diptera		
Ceratopogonidae	4	1
Chironomidae	142	12
Empididae	1	1
Unknown diptera	12	2
Coleoptera		
Dytiscidae	4	4
Elmidae	6	2
Gyrinidae	1	1
Coleoptera adult	6	4
Coleoptera larvae	3	2
Unknown coleoptera	11	3
Ephemeroptera		
Heptageniidae	10	3
Unknown ephemeroptera	5	3
Hemiptera		
Corixidae	1	1
Unknown hemiptera	12	7
Trichoptera		
Hydropsychidae	609	10
Leptoceridae	10	8
Limnephilidae	1	1
Philopotamidae	31	4
Polycentropodidae	1	1
Trichoptera pupa	2	2
Unknown trichoptera	4	3
Odonata		
Coenagrionidae	1	1
Libellulidae	1	1
Unknown odonata	21	4
Hymenoptera		
Unknown hymenoptera	9	4
Megaloptera	P	1
Unknown megaloptera	2	1
Lepidoptera		
Lepidoptera larvae	3	2
Unknown lepidoptera	2	1

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TABLE 12 (PAGE 2 OF 2)

<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
Unknown insects	13	6
Gastropoda	P	1
Pelecypoda	P	5
Vertebrate Material		
Teleostomi		
<u>Notemigonus crysoleucas</u>	1	1
<u>Notropis leedsi</u>	1	1
<u>Noturus spp.</u>	1	1
Unknown fishes	1	1
Fish eggs	6	1
Chelonia		
Kinosternidae	1	1
Plant Material		
Algae	P	6
Vascular plants	P	8

a. P indicates body parts were present but an accurate count of organisms could not be made.

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TABLE 13

FOOD HABITS OF THE PIRATE PERCH  
(APHREDODERUS SAYANUS) IN THE SAVANNAH RIVER 1980-1981

<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
Invertebrate Material		
Crustacea	P (a)	1
Ostracoda	2	1
Insecta		
Diptera		
Chironomidae	52	3
Unknown diptera	1	1
Trichoptera		
Hydropsychidae	10	2
Philopotamidae	3	2
Unknown trichoptera	1	1
Ephemeroptera	P	1

a. P indicates body parts were present but an accurate count of organisms could not be made.

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TABLE 14 (PAGE 1 OF 2)

FOOD HABITS OF THE BROOK SILVERSIDE  
(LABIDESTHES SICCULUS) IN THE SAVANNAH RIVER 1980-1981

<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
Invertebrate Material		
Crustacea	P <sup>(a)</sup>	8
Cladocera	1428	26
Copepoda	124	21
Ostracoda	P	5
Insecta		
Diptera	P	2
Calliphoridae	1	1
Chironomidae	474	39
Unknown diptera	50	5
Coleoptera		
Chrysomelidae	1	1
Scolytidae	1	1
Staphylinidae	12	7
Unknown coleoptera	4	4
Ephemeroptera		
Unknown ephemeroptera	8	4
Hemiptera		
Corixidae	3	3
Unknown hemiptera	10	3
Trichoptera		
Philopotamidae	2	2
Trichoptera pupa	3	2
Unknown trichoptera	3	3
Hymenoptera		
Diapriidae	1	1
Formicidae	34	6
Unknown hymenoptera	15	6
Homoptera		
Aphidae	26	8
Cixiidae	1	1
Unknown homoptera	8	4
Psocoptera		
Unknown psocoptera	3	1
Thysanoptera		
Thripidae	1	1
Collembola	1	1
Insect eggs	P	1
Unknown insects	2	1
Acari	1	1

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TABLE 14 (PAGE 2 OF 2)

<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
Araneae	9	3
Pelecypoda	110	2

a. P indicates body parts were present but an accurate count of organisms could not be made.

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TABLE 15 (PAGE 1 OF 3)

FOOD HABITS OF THE REDBREAST SUNFISH  
(LEPOMIS AURITUS) IN THE SAVANNAH RIVER 1980-1981

<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
Invertebrate Material		
Bryozoa	P <sup>(a)</sup>	3
<u>Pectinatella</u> ap.	P	5
<u>Plumatella</u> spp.	P	1
Crustacea	P	1
Amphipoda	13	5
Cladocera	32	8
Copepoda	14	7
Ostracoda	6	4
Insecta		
Diptera		
Ceratopogonidae	21	11
Chironomidae	1074	62
Culicidae	5	4
Empididae	7	5
Tabanidae	1	1
Tipulidae	26	1
Diptera adult	2	2
Unknown diptera	448	28
Coleoptera	P	1
Dytiscidae	17	10
Elmidae	10	8
Gyrinidae	1	1
Haliplidae	5	3
Coleoptera adult	27	13
Coleoptera larvae	4	3
Unknown coleoptera	8	4
Ephemeroptera	P	1
Baetidae	2	2
Caenidae	2	2
Ephemerellidae	8	7
Heptageniidae	3	3
Tricorythidae	3	2
Unknown ephemeroptera	38	13
Plecoptera	P	1
Perlidae	7	4
Unknown plecoptera	7	5
Hemiptera	P	2
Belostomatidae	P	1
Corixidae	15	6
Unknown hemiptera	18	11

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TABLE 15 (PAGE 2 OF 3)

<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
Trichoptera		
Hydropsychidae	3001	31
Hydroptilidae	1	1
Leptoceridae	55	18
Philopotamidae	256	19
Polycentropodidae	132	20
Trichoptera adult	34	10
Trichoptera pupa	99	15
Unknown trichoptera	160	23
Odonata	P	2
Coenagrionidae	1	1
Gomphidae	4	4
Libellulidae	4	1
Unknown odonata	3	2
Hymenoptera		
Formicidae	2829	7
Unknown hymenoptera	165	13
Homoptera		
Unknown homoptera	5	3
Megaloptera		
Sialidae	9	5
Sisyridae	9	4
Corydalidae	4	1
Unknown megaloptera	5	3
Lepidoptera		
Lepidoptera larvae	11	6
Unknown lepidoptera	1	1
Unknown insects	62	14
Oligochaeta	1	1
Nematoda	1	1
Acari	5	4
Araneae	5	5
Gastropoda	117	28
Pelecypoda	25	11
Sphaeridae	10	1
Vertebrate Material		
Teleostomi		
Fish eggs	86	3
Squamata		
Iguanidae	1	1

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TABLE 15 (PAGE 3 OF 3)

<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
Plant Material	P	1
Algae	P	13
Vascular plants	P	11

a. P indicates body parts were present but an accurate count of organisms could not be made.

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TABLE 16

FOOD HABITS OF THE WARMOUTH  
(LEPOMIS GULOSUS) IN THE SAVANNAH RIVER 1980-1981

<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
Invertebrate Material		
Crustacea	P <sup>(a)</sup>	3
Cladocera	18	2
Copepoda	9	1
Ostracoda	3	1
Decapoda	4	4
Insecta		
Diptera		
Chironomidae	23	6
Unknown diptera	8	2
Coleoptera		
Dytiscidae	P	1
Haliplidae	1	1
Coleoptera adult	1	1
Ephemeroptera		
Baetidae	P	1
Caenidae	1	1
3		1
Plecoptera		
Plecoptera	P	1
Hemiptera		
Corixidae	2	2
Unknown hemiptera	1	1
Trichoptera		
Unknown trichoptera	2	2
Odonata		
Odonata	P	1
Hymenoptera		
Unknown hymenoptera	1	1
Megaloptera		
Sialidae	2	1
Unknown insects	2	1
Nematoda	1	1
Gastropoda	P	4
Vertebrate Material		
Teleostomi		
Fish eggs	P	1
<u>Lepomis macrochirus</u>	1	1
Unknown fishes	2	2

a. P indicates body parts were present but an accurate count of organisms could not be made.

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TABLE 17 (PAGE 1 OF 3)

FOOD HABITS OF THE BLUEGILL  
(LEPOMIS MACROCHIRUS) IN THE SAVANNAH RIVER 1980-1981

<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
Invertebrate Material		
Bryozoa	P <sup>(a)</sup>	22
<u>Pectinatella</u> sp.	P	16
<u>Plumatella</u> spp.	P	3
Crustacea		
Amphipoda	54	13
Cladocera	4565	45
Copepoda	629	34
Ostracoda	450	30
Isopoda	10	5
Insecta		
Diptera		
Ceratopogonidae	89	19
Chironomidae	7695	85
Culicidae	34	8
Empididae	3	3
Unknown diptera	1631	55
Coleoptera	P	3
Dytiscidae	33	14
Elmidae	35	15
Gyrinidae	39	6
Haliplidae	1	1
Helodidae	1	1
Curculionidae	1	1
Coleoptera adult	44	16
Coleoptera larvae	5	4
Unknown coleoptera	2	2
Ephemeroptera		
Baetidae	3	3
Caenidae	8	8
Ephemerellidae	4	2
Tricorythidae	2	1
Heptageniidae	5	3
Unknown ephemeroptera	26	19
Plecoptera	P	1
Nemouridae	1	1
Unknown plecoptera	1	1
Hemiptera	P	3
Corixidae	57	17
Unknown hemiptera	43	13

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<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
Trichoptera		
Hydropsychidae	364	16
Hydroptilidae	8	3
Leptoceridae	41	16
Philopotamidae	50	6
Polycentropidae	194	14
Trichoptera adult	45	19
Trichoptera pupa	25	10
Unknown trichoptera	22	11
Odonata	5	3
Coenagrionidae	1	1
Libellulidae	1	1
Hymenoptera	65	19
Formicidae	7422	11
Xyelidae	1	1
Homoptera	1	1
Aphidae	21	1
Neuroptera	1	1
Megaloptera	6	4
Sialidae	1	1
Sisyridae	14	1
Orthoptera	1	1
Collembola	1	1
Lepidoptera	4	3
Lepidoptera larvae	3	2
Lepidoptera adult	1	1
Unknown insects	42	12
Oligochaeta	1	1
Hirudinea	1	1
Acari	26	14
Araneae	16	6
Gastropoda	219	27
Ancyliidae	1	1
Pelecypoda	43	13
Sphaeridae	22	3
Vertebrate Material		
Teleostomi		
<u>Lepomis</u> spp.	1	1
Unknown fishes	1	1
Fish eggs	10,767	13
Fish larvae	589	1

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TABLE 17 (PAGE 3 OF 3)

<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
Plant Material		
Phycomycetes	P	1
Algae	P	28
Vascular plants	P	14

a. P indicates body parts were present but an accurate count of organisms could not be made.

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TABLE 18 (PAGE 1 OF 2)

FOOD HABITS OF THE REDEAR SUNFISH  
(LEPOMIS MICROLOPHUS) IN THE SAVANNAH RIVER 1980-1981

<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
Invertebrate Material		
Bryozoa	P <sup>(a)</sup>	2
<u>Pectinatella sp.</u>	P	3
Crustacea		
Amphipoda	10	6
Cladocera	307	7
Copepoda	53	9
Ostracoda	23	8
Isopoda	12	6
Insecta		
Diptera	P	3
Ceratopogonidae	48	22
Chironomidae	1466	55
Culicidae	6	6
Tipulidae	1	1
Unknown diptera	437	24
Coleoptera	P	1
Dytiscidae	23	7
Elmidae	9	8
Haliplidae	2	2
Coleoptera adult	1	1
Coleoptera larvae	3	3
Unknown coleoptera	1	1
Ephemeroptera		
Baetidae	2	2
Caenidae	3	3
Metretopodidae	1	1
Tricorythidae	5	2
Unknown ephemeroptera	15	10
Plecoptera	P	1
Nemouridae	1	1
Perlidae	1	1
Unknown plecoptera	1	1
Hemiptera		
Corixidae	8	5
Tingidae	1	1
Unknown hemiptera	2	2
Trichoptera		
Hydropsychidae	11	8
Hydroptilidae	7	3
Leptoceridae	19	12
Philopotomidae	4	4

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TABLE 18 (PAGE 2 OF 2)

<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
Polycentropodidae	435	21
Trichoptera adult	2	2
Trichoptera pupa	5	4
Unknown trichoptera	89	15
Odonata		
Coenagrionidae	1	1
Gomphidae	6	5
Libellulidae	1	1
Unknown odonata	4	3
Hymenoptera		
Unknown hymenoptera	4	3
Megaloptera		
Sialidae	37	14
Sisyridae	4	3
Unknown megaloptera	29	5
Orthoptera		
Unknown orthoptera	1	1
Lepidoptera		
Lepidoptera larvae	4	2
Insect eggs	P	1
Unknown insects	5	4
Hirudinea	1	1
Nematoda	3	2
Oligochaeta	28	1
Polychaeta	7	2
Acari	54	4
Araneae	1	1
Gastropoda	P	45
Ancyliidae	1	1
Pelecypoda	P	60
Vertebrate Material		
Teleostomi		
Fish eggs	2081	4
Plant Material		
Algae	P	22
Vascular plants	P	6

a. P indicates body parts were present but an accurate count of organisms could not be made.

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TABLE 19 (PAGE 1 OF 2)

FOOD HABITS OF THE SPOTTED SUNFISH  
(LEPOMIS PUNCTATUS) IN THE SAVANNAH RIVER 1980-1981

<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
Invertebrate Material		
Crustacea	P(a)	1
Amphipoda	1	1
Cladocera	3	1
Copepoda	11	2
Ostracoda	9	2
Decapoda	1	1
Insecta		
Diptera		
Ceratopogonidae	2	1
Chironomidae	159	17
Culicidae	12	2
Diptera pupa	1	1
Coleoptera		
Dytiscidae	8	4
Gyrinidae	1	1
Haliplidae	3	3
Coleoptera adult	11	4
Unknown coleoptera	4	2
Ephemeroptera		
Caenidae	1	1
Heptageniidae	5	2
Unknown ephemeroptera	4	3
Plecoptera		
Nemouridae	1	1
Perlodidae	1	1
Unknown plecoptera	2	2
Hemiptera	P	2
Corixidae	7	2
Unknown hemiptera	2	1
Trichoptera		
Hydropsychidae	24	4
Leptoceridae	49	4
Philopotamidae	5	3
Polycentropodidae	8	3
Trichoptera adult	12	1
Trichoptera pupa	2	2
Unknown trichoptera	23	4
Odonata		
Aeshnidae	1	1
Gomphidae	1	1
Unknown odonata	3	3

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TABLE 19 (PAGE 2 OF 2)

<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
Hymenoptera		
Unknown hymenoptera	7	2
Megaloptera		
Sisyridae	1	1
Lepidoptera		
Lepidoptera larvae	4	4
Unknown insects	1	1
Nematoda	3	3
Turbellaria		
Planariidae	1	1
Acari	1	1
Araneae	1	1
Gastropoda	P	4
Pelecypoda	P	3
Vertebrate Material		
Teleostomi		
Unknown fishes	1	1
Plant Material		
Algae	P	8
Vascular plants	P	4

a. P indicates body parts were present but an accurate count of organisms could not be made.

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TABLE 20 (PAGE 1 OF 2)

FOOD HABITS OF THE LARGEMOUTH BASS  
(MICROPTERUS SALMOIDES) IN THE SAVANNAH RIVER 1980-1981

<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
<b>Invertebrate Material</b>		
<b>Crustacea</b>		
Amphipoda	1	1
Copepoda	1	1
Isopoda	1	1
Decapoda	9	6
Cambaridae	8	4
Palaemonidae	1	1
<b>Insecta</b>		
<b>Diptera</b>		
Chironomidae	48	10
Unknown diptera	4	2
<b>Coleoptera</b>		
Gyrinidae	P <sup>(a)</sup>	1
<b>Ephemeroptera</b>		
Baetidae	P	1
Heptageniidae	1	1
Unknown ephemeroptera	2	2
<b>Plecoptera</b>		
Perlidae	1	1
<b>Trichoptera</b>		
Hydropsychidae	12	3
Polycentropodidae	5	4
Trichoptera adult	1	1
Trichoptera pupa	1	1
Unknown trichoptera	11	4
<b>Odonata</b>		
Libellulidae	1	1
<b>Hemiptera</b>		
Corixidae	35	4
Unknown hemiptera	5	2
<b>Hymenoptera</b>		
Unknown insects	1	1
Unknown insects	2	2
<b>Mollusca</b>		
Gastropoda	26	1
Ancylidae	2	2
Pelecypoda	1	1
Pelecypoda	1	1
<b>Vertebrate Material</b>		
<b>Teleostomi</b>		
Clupeidae	1	1
Esox spp.	1	1

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<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
<u>Ictaluridae</u>	1	1
<u>Hybognathus regius</u>	9	5
<u>Notemigonus crysoleucas</u>	1	1
<u>Notropis maculatus</u>	9	5
<u>Notropis spp.</u>	9	7
<u>Cyprinidae</u>	23	12
<u>Labidesthes sicculus</u>	2	2
<u>Lepomis macrochirus</u>	1	1
<u>Lepomis spp.</u>	4	4
<u>Centrarchidae</u>	3	3
<u>Etheostoma spp.</u>	1	1
Unknown fishes	54	35

- a. P indicates body parts were present but an accurate count of organisms could not be made.

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FOOD HABITS OF THE BLACK CRAPPIE  
(POMOXIS NIGROMACULATUS) IN THE SAVANNAH RIVER 1980-1981

<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
<b>Invertebrate Material</b>		
Bryozoa		
<u>Pectinatella</u> spp.	P <sup>(a)</sup>	1
<b>Crustacea</b>		
Amphipoda	2	2
Cladocera	19	2
Copepoda	709	12
Ostracoda	2	2
<b>Insecta</b>		
<b>Diptera</b>		
Ceratopogonidae	3	1
Chironomidae	371	26
Culicidae	1858	13
Unknown diptera	36	9
<b>Coleoptera</b>		
Dytiscidae	1	1
Elmidae	8	2
<b>Ephemeroptera</b>		
Baetidae	44	1
Caenidae	1	1
Ephemerellidae	2	1
Leptophlebiidae	2	1
Tricorythidae	3	2
Unknown ephemeroptera	9	6
<b>Hemiptera</b>		
Corixidae	69	8
Unknown hemiptera	12	2
<b>Plecoptera</b>		
Nemouridae	21	2
<b>Trichoptera</b>		
Hydropsychidae	22	5
Philopotamidae	11	6
Leptoceridae	1	1
Polycentropodidae	1	1
Trichoptera adult	25	3
Unknown trichoptera	9	1
<b>Vertebrate Material</b>		
<b>Teleostomi</b>		
<u>Esox</u> spp.	1	1
<u>Hybognathus regius</u>	1	1

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<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
<u>Notropis hudsonius</u>	1	1
<u>Notropis spp.</u>	2	2
Cyprinidae	4	1
Unknown fishes	15	9

a. P indicates body parts were present but an accurate count of organisms could not be made.

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FOOD HABITS OF THE YELLOW PERCH  
(PERCA FLAVESCENS) IN THE SAVANNAH RIVER 1980-1981

<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
Invertebrate Material		
Bryozoa	P(a)	7
<u>Pectinatella</u> sp.	P	3
<u>Plumatella</u> spp.	P	2
Crustacea		
Amphipoda	1	1
Cladocera	518	19
Copepoda	1287	24
Isopoda	2	1
Ostracoda	29	7
Insecta		
Diptera	P	1
Ceratopogonidae	8	6
Chironomidae	394	40
Culicidae	3	3
Empididae	1	1
Diptera pupa	2	2
Unknown diptera	61	13
Coleoptera		
Dytiscidae	31	10
Elmidae	2	2
Coleoptera larvae	20	2
Ephemeroptera		
Caenidae	1	1
Heptageniidae	1	1
Unknown ephemeroptera	11	6
Hemiptera	P	1
Corixidae	182	11
Unknown hemiptera	2	1
Trichoptera		
Hydropsychidae	23	7
Leptoceridae	4	3
Philopotamidae	2	2
Polycentropodidae	13	7
Trichoptera pupa	3	2
Unknown trichoptera	1	1
Plecoptera		
Unknown plecoptera	1	1
Odonata		
Unknown odonata	4	2
Homoptera		
Unknown homoptera	1	1

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<u>Food Items</u>	<u>Total Number of Organisms</u>	<u>Number of Stomachs Containing Organism</u>
Megaloptera		
Sialidae	11	2
Orthoptera		
Unknown orthoptera	1	1
Insect eggs	P	1
Acari	47	12
Araneae	2	1
Gastropoda	P	17
Ancyliidae	5	4
Pelecypoda	P	15
Vertebrate Material		
Teleostomi		
<u>Notropis</u> spp.	1	1
Unknown fishes	3	3
Fish eggs	582	2
Plant Material		
Algae	P	1
Vascular Plants	P	1

a. P indicates body parts were present but an accurate count of organisms could not be made.