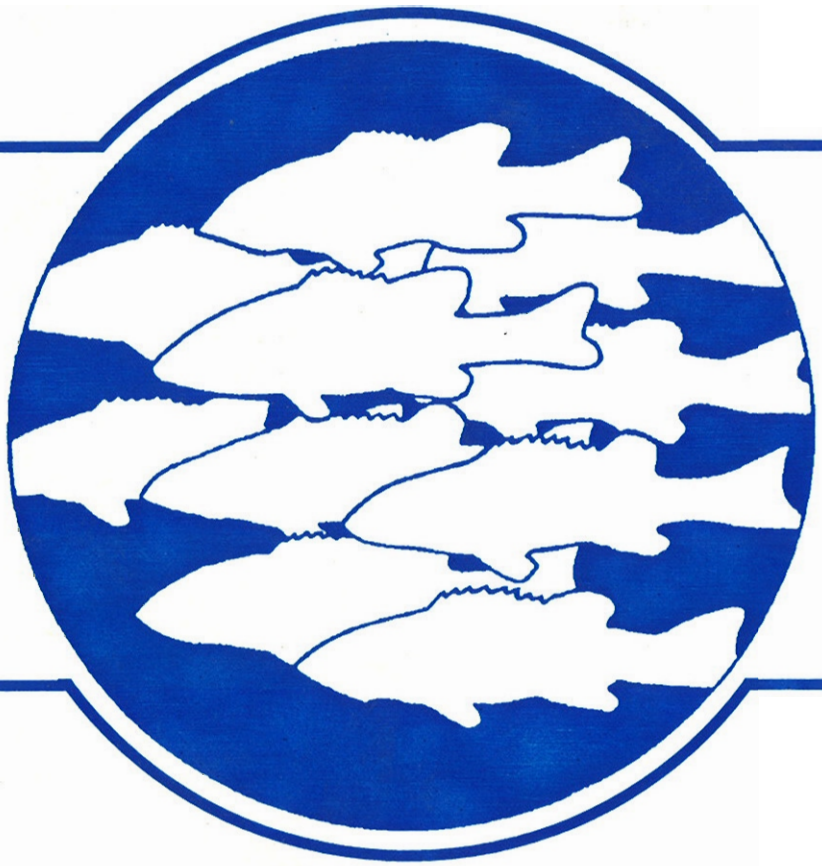

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Inventory and Classification of Streams in the Lower Cumberland River and Tennessee River Drainages

by
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ABSTRACT

The physical, chemical, and biological characteristics of principal tributaries within the lower Cumberland and Tennessee River drainages were inventoried by the Kentucky Department of Fish and Wildlife Resources. There were 89 survey sites in the lower Cumberland River drainage and 93 survey sites in the Tennessee River drainage. Ninety-three species of fish in 22 families were collected from the lower Cumberland River drainage. The most frequently collected species of fish in this drainage, excluding Barkley Lake, were creek chub, blackspotted topminnow, largescale stoneroller, bluntnose minnow, green sunfish, bluegill, longear sunfish, and banded sculpin. Ninety-seven species of fish in 20 families were collected from the lower Tennessee River drainage. The most frequently collected species of fish in this drainage, excluding Kentucky Lake, were largescale stoneroller, creek chub, yellow bullhead, blackspotted topminnow, green sunfish, bluegill, longear sunfish, and fantail darter. One endangered species and two threatened species from the Kentucky list of endangered and threatened species were captured from the lower Tennessee River drainage. The tailwaters of Barkley and Kentucky lakes were classified as having exceptional sport fisheries. In the lower Cumberland River drainage, Little River was considered to have high quality sport fisheries. Cumberland River below Hwy 62 bridge, Casey Creek, and Long Creek were considered to have good sport fisheries. The remaining streams in this drainage had fair to poor sport fisheries. In the lower Tennessee River drainage, Tennessee River below I-24 bridge, Clarks River, Johnathan Creek, and Blood River were classified as having good sport fisheries. The remaining streams in this drainage had fair to poor sport fisheries.

INTRODUCTION

Degradation of streams and fish management needs prompted the Kentucky Department of Fish and Wildlife Resources (KDFWR) to conduct a statewide survey to inventory and classify streams in Kentucky in 1968. This effort was part of a study to Sport Fish Restoration Project F-50, District Fisheries Management. Information was obtained on physical, chemical, and biological characteristics of streams. Many miles of streams have already been degraded by channelization, sedimentation, and chemical runoff from agriculture and industrial activities. The objectives of this study were to (1) determine fish species occurrence and distribution in the lower Cumberland River and Tennessee River drainages in Kentucky, (2) identify streams that are of sport fishery importance, and (3) document stream degradation.

STUDY AREA

Lower Cumberland River Drainage

The Cumberland River drains approximately 1,300 square mi in western Kentucky; there is a total of 17,914 square mi in its complete drainage. In western Kentucky, the Cumberland River flows northwestward from Tennessee through the counties of Trigg, Lyon, and Livingston where it joins the Ohio River near Smithland, Kentucky. It's drainage also encompasses portions of Todd, Christian, Caldwell, and Crittenden counties. The lower Cumberland River is located in the Interior Low Plateaus Province. The main stem of the lower Cumberland River in western Kentucky is 74.6 mi long. The lower Cumberland River was impounded by Barkley Lake dam to form a 57,897 acre reservoir which approximately 44 mi flow in Kentucky (Schwendeman 1958). Another 30.6 mi flow below Barkley Lake before entering the Ohio River.

The majority of streams that flow into the Barkley Lake portion of the Cumberland River are classified as upland in character, with some springs occurring throughout this drainage area. Streams on the east side of Barkley Lake drain through mostly gravel and karst topography, while streams on the west side, in the Land Between the Lakes area, drain soils mixed of gravel, rubble, and boulders. Little River is the largest tributary in the western Kentucky portion of the Cumberland River. It is characterized as an upland stream in its middle and head-water areas; lowland characteristics are found near its confluence with the Cumberland River (Burr and Warren 1986). The Red River drainage is another large tributary of the Cumberland River that drains southwestward through parts of Simpson, Logan, Todd, and Christian counties, then continues southward into Tennessee, entering the Cumberland River near Clarksville, Tennessee. The small streams along the Cumberland River below Barkley Lake have upland characteristics in their headwaters and assume lowland characteristics near their confluence with the Cumberland River.

Lower Tennessee River Drainage

The Tennessee River drains approximately 1,000 square mi in western Kentucky; its total drainage area is 40,900 square mi. This drainage is located in the Coastal Plain Province west of Kentucky Lake and the Interior Low Plateaus Province east of Kentucky Lake. In western Kentucky, the lower Tennessee River flows northwestward from Tennessee through the counties of Calloway, Trigg, Lyon, Marshall, Livingston, and McCracken, where it joins the Ohio River near Paducah, Kentucky. Some of its tributary streams also drain part of Graves County. The main stem of the Tennessee River in western Kentucky is 66.3 mi long; approximately 17 mi of this are shared with Tennessee along the state border. The Tennessee River was impounded by Kentucky Lake dam to form a 160,234 acre reservoir; 44 mi of this lies in the Kentucky portion of Kentucky Lake that has approximately 51,300 acres.

Another 22.4 mi flow below Kentucky Lake dam before entering the Ohio River. The Tennessee River comprises the largest tributary of the Ohio River (Schwendeman 1958, Burr and Warren 1986).

The majority of the streams flowing into the Kentucky Lake portion of the Tennessee River are classified as upland in character (Burr and Warren 1986). Streams on the west side of Kentucky Lake drain through the Coastal Plain Province and flow through loess type soil and some gravel, compared to the east side (Land Between the Lakes), where the streams drain soil mostly composed of gravel, rubble, and boulders. Clark's River, the largest tributary in the Kentucky portion of the lower Tennessee River, is characterized as an upland stream in its middle and headwater areas. The East and West forks of Clark's River drain broad floodplains in Calloway and Marshall counties (Burr and Warren 1986). The small streams along the Tennessee River below Kentucky Lake dam have upland characteristics in their headwaters and assume more lowland characteristics near their confluence with the Tennessee River.

METHODS

Streams were classified by order (Horton 1945) using TVA-USGS 1:24,000 topographic maps. Streams that did not have adequate flow and volume of water to support a fishable population were not sampled. In some cases, order II streams were sampled if flow and volume were sufficient. All Order III streams and larger were sampled; those with sport fish poulations were sampled at multiple locations.

A backpack electrofisher unit was often used to sample fish populations in streams. A common 20-foot seine was used if a backpack electrofisher unit was not applicable. If the streams were too large to sample using these methods, then rotenone was utilized. Fish were identified as to species, measured in inch groups, and categorized as shown in Appendix A. Those specimens not identified in the field were preserved in 10% formalin for later identification in the laboratory.

All the fish species collected in both the lower Cumberland River and lower Tennessee River drainages are listed in Appendix B along with their relative abundance. Species abundance by drainage was classified in the following manner:

O = species was not found.
A = abundant - species was collected at 25 or more different sample sites.
M = moderately abundant - species was collected at 15 - 24 sample sites.
S = sparse - species was collected 5 - 14 sample sites.
I = isolated - species was collected at 1 - 4 sample sites.

Fish listed in the "Endangered, Threatened, and Rare Plants and Animals of Kentucky" (Warren et al. 1986) are symbolized with either an "E" for endangered or "T" for threatened species.

Streams were also classified according to sport fishery importance as being either Class 1 (exceptional), Class 2 (high quality), Class 3 (good), Class 4 (fair), or Class 5 (poor - no sport fishery importance) based on a scoring system for occurrence of intermediate- and harvestable-size fish considered to have sport fishing value. Other conditions such as water quality and habitat influence on the level of sport fishery importance were not considered in classifying streams according to sport fishery importance.

Dissolved oxygen concentrations and surface temperatures were taken with a YSI Model 57 dissolved oxygen meter. The pH was taken with a Hach Pocket Pal pH meter, total alkalinity was determined with a Hach Alkalinity Test Kit Model AL-AP, turbidity was measured with a turbidity meter Model DRT 15, and specific conductivity was recorded with a YSI Model 33 S-C-T meter. The physical characteristics recorded at each sampling station are described in Appendix C.

Data from all sample sites in an upstream sequence have been included in Appendix D (lower Cumberland River drainage) and Appendix E (lower Tennessee River drainage). An index and map to the streams listed in the inventory have been provided in the back of the text. The three columns of numerals in the fish fauna list designates the total number of each species in each size group: fingerling, intermediate, and harvestable (Appendix A).

RESULTS AND DISCUSSION

Lower Cumberland River Drainage

Fish Fauna

Ninety-three species of fish were collected from 89 sample sites in the lower Cumberland River drainage (Appendix B). Longear sunfish was the most frequently collected species, followed by creek chub, green sunfish, blackspotted topminnow, bluegill, and banded sculpin. Sport fish collected incuded white bass, brown trout, rainbow trout, smallmouth bass, largemouth bass, spotted bass, white crappie, black crappie, blue catfish, channel catfish, flathead catfish, rock bass, and bluegill. There were no endangered or threatened fish species collected from this drainage.

Sport Fishing Quality

Sport fishing is excellent in the main stem of the lower Cumberland River below Barkley Lake dam. The best fishing lies between the dam and Highway 62 bridge (Table 1). A 1992 creel survey in this area estimated a harvest of 1,825 lb of fish per acre (McLemore et al. 1993). Sixty-six percent of the pounds were striped bass and 24% were blue catfish. Downstream from the Highway 62 bridge, the quality of the sport fishery decreases and is primarily confined to tributary stream mouths. Important sport fish such as white bass, sauger, largemouth bass, smallmouth bass, spotted bass, black crappie, and white crappie also occur in this section. Three species not taken in these stream samples, but harvested by anglers, are striped bass, hybrid striped bass, and blue catfish. An influential factor upon the quality of sport fishery below Barkley Lake dam is the water discharge through the hydropower generators that affects fishability and distribution of fish.

Little River was the only stream that was rated as having a high quality sport fishery with approximately 9 mi accessible by boat during certain parts of the year. Major sport fish included white bass, largemouth bass, spotted bass, black crappie, and white crappie. Two streams were rated as having good sport fisheries, Casey Creek and Long Creek. Casey Creek was rated good primarily due to a good population of rock bass. It also has a good population of brown and rainbow trout from annual stockings. Approximately 5 mi of fishable water exists for rainbow and brown trout. Long Creek, below Hemitite Lake in the Land-Between-the-Lakes area, receives high fishing pressure due to sport fish gaining access from Barkley Lake and overflow from Hemitite Lake.

Pollution

Degradation of streams in the lower Cumberland River stems from the dumping of household garbage, channelization, and agricultural runoff. Household garbage is a problem in several streams in Livingston County, such as in Ferguson and Sandy creeks. Foreman and Skinframe creeks (Livingston County) have been impacted from man-made disturbances such as removal of riparian vegetation and dredging. Skinframe Creek also receives substantial runoff from an adjacent hog lot during periods of precipitation. Chemical runoff from agriculture is a problem in eastern sections of the lower Cumberland River drainage. Other streams in this drainage fail to support substantial sport fish populations due to their small size and low water volume, especially in the late summer. Many of these streams only contain isolated pools during the late summer.

Lower Tennessee River Drainage

Fish Fauna

Ninety-seven species of fish were collected from 93 sample sites in the lower Tennessee River drainage (Appendix B). The most frequently collected species was the creek chub, followed by green sunfish, blackspotted topminnow, longear sunfish, largescale stoneroller, bluegill, yellow bullhead, and fantail darter. Important sport fishes included white bass, sauger, smallmouth bass, largemouth bass, spotted bass, white crappie, black crappie, channel catfish, flathead catfish, bluegill, and redear sunfish.

Endangered and Threatened Species

The cypress darter, crystal darter, central mudminnow, and lake chubsucker were fish species on the Kentucky list of endangered, threatened, and rare plants and animals (Warren et al. 1986) collected in this drainage (Table 2). The cypress (threatened) and crystal (endangered) darters were collected in the Clark's River drainage. Burr and Warren (1986) listed sources which previously recorded the cypress darter in both Clark's River and lower Tennessee River drainages. The crystal darter had only been previous recorded in the lower Cumberland River drainage. Also collected in the Clark's River drainage was the lake chubsucker, which has been classified as considered threatened. Burr and Warren (1986) listed the Ohio River near Paducah, Kentucky, as the nearest location for this species. The central mudminnow (threatened) was found in McCullogh Creek which flows into Blood River. The central mudminnow was listed in Burr and Warren (1986) as being locally common to Blood River, Clark's River, Terrapin Creek, and Running Slough, all in western Kentucky.

Sport Fishing Quality

Sport fishing is excellent in the main stem of the Tennessee River below Kentucky Lake dam to the I-24 bridge (Table 3). Anglers caught 714 lb of fish per acre in this section in 1992 according to creel survey results (McLemore et al. 1993). Blue catfish, striped bass, and paddlefish represented 41, 27, and 15% percent of the pounds harvested, respectively. Stream samples in the main stem below Kentucky Lake dam indicated that sport fish such as white bass, sauger, largemouth bass, smallmouth bass, spotted bass, black crappie, and white crappie occur in this section, primarily confined to tributary stream mouths. Striped bass, hybrid striped bass, blue catfish, and walleye were not collected in any samples but are harvested by angles in this area. An influential factor upon the quality of the sport fishery below Kentucky Lake dam is the water discharge through the hydropower

generators that impacts fishability and distribution of fish.

Three streams in the lower Tennessee River drainage were considered as having good sport fisheries. Clark's River was classified as having a good quality sport fishery which is mainly confined to the mouth; during normal or above normal water levels, about 10 mi are accessible to boats. Jonathan Creek and Blood River, drainages to Kentucky Lake, also support good quality sport fisheries. Boat access is limited to less than 1 mi in Jonathan Creek depending on the level of the water in Kentucky Lake. In all three of these streams, species such as channel catfish, largemouth bass, spotted bass, white bass, sauger, crappie, and bluegill can be expected to occur.

Factors that limit the quality of sport fisheries in the remaining streams throughout the lower Tennessee River drainage are low flow and small stream size. During late summer, decrease flows often leave streams intermittent.

Pollution

Streams on the west side of the lower Tennessee River drainage are degraded by chemical runoff from agriculture, and by sedimentation due to a large amount of row cropping in this region. These farming practices have also resulted in the removal of riparian vegetation and natural stream sections due to channelization, especially in the East Fork portion of Clark's River. Indiscriminate dumping of household garbage is an extensive problem in the Clark's River drainage in McCracken County, in tributary streams near Calvert City (Marshall County), and in streams in Calloway County. Non-point source pollution of industrial chemicals has been associated with streams near the Calvert City Industrial Complex in Marshall County. Fish species composition of these streams indicated that only pollution tolerant species (Karr et al. 1986) were present. Fish kills have been reported from Cypress Creek, one of the larger streams draining this complex. Fish kills have also been frequently reported in the East Fork of Clark's River in Calloway County below the Vanderbilt Chemical Company.

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Table 1. Sport fishery classification[a] of streams in the lower Cumberland River drainage based on sport fishery importance[b].

Stream	County	Class	Stream miles
Cumberland River			
Barkley Dam to Hwy 62 Bridge	Livingston	1	0.8
Hwy 62 Bridge to mouth	Livingston	3	29.9
McCormick Creek	Livingston	5	4.5
Ferguson Creek	Livingston	5	4.8
Smith Creek	Livingston	5	4.2
Hickory Creek	Livingston	5	7.7
Sandy Creek	Livingston	4	13.0
Dry Creek	Livingston	5	8.9
Sugar Creek	Livingston	5	9.2
Cypress Creek	Livingston	5	5.2
Claylick Creek	Crittenden	4	16.4
Cox Spring Branch	Livingston	5	4.0
Axle Creek	Crittenden	5	6.3
Clement Creek	Crittenden	5	6.4
Livingston Creek	Crittenden	4	27.8
Dry Fork Creek	Crittenden	5	9.2
Panther Creek	Lyon	5	10.7
Spring Creek	Lyon	5	5.5
Crab Creek	Lyon	5	8.5
Skinframe Creek	Lyon	5	4.0
Eddy Creek	Caldwell	4	9.0
Glass Creek	Lyon	5	5.0
Dry Creek	Caldwell	5	2.6
Dry Fork Creek	Caldwell	4	13.7
Hurricane Creek	Trigg	5	4.8
Little River	Christian	2	56.2
Casey Creek	Trigg	3	5.0
Sinking Fork	Trigg	4	9.6
Sinking Fork	Christian	4	21.0
Middle Fork	Christian	4	1.8
Lower Branch	Christian	4	2.5
Muddy Fork	Trigg	4	28.4
Dyer Creek	Trigg	5	3.9
Blue Springs	Trigg	5	4.2
Hopson Creek	Trigg	5	5.5
Beechy Creek	Trigg	5	4.6
Donaldson Creek	Trigg	4	4.5
Unnamed tributary to Dry Creek	Trigg	5	3.2
West Fork Red River	Christian	4	13.5
West Fork Red River	Todd	4	19.3
Montgomery Creek	Christian	5	6.5
Demumbers Creek	Lyon	5	2.7
Clay Creek	Lyon	5	1.0
Green Branch	Lyon	5	1.3
Fulton Creek	Lyon	5	2.9
Long Creek	Trigg	3	4.0
Jakes Fork	Trigg	5	2.7

Table 1 continued.

Stream	County	Class	Stream miles
Crooked Creek	Trigg	5	5.9
Shaw Branch	Trigg	5	2.3
Pond Creek	Trigg	5	2.1
Elbow Creek	Trigg	5	3.0
Lick Creek	Trigg	5	3.1
West Fork Laura Furnace	Trigg	5	3.6
Terripan Creek	Trigg	5	1.5

[a]Class 1 (exceptional), Class 2 (high quality), Class 3 (good), Class 4 (fair), Class 5 (poor - no sport fishery significance).

[b]Importance is determined from a scoring of species occurrence of intermediate- and harvestable-size fish of sport fish value that were taken in the sample.

Table 2. Stream location of endangered or threatened fish species in the lower Tennessee River drainage that are on the list of endangered, threatened, and rare plants and animals of Kentucky[a].

Sample Site	Species	Kentucky Status
Bee Creek, East Fork Clarks River Hwy 2075 - Calloway County	Cypress darter	Threatened
White Oak Creek, East Fork Clarks River - Laycock Road - Calloway County	Lake chubsucker	Threatened
Middle Fork of Clark's River Ford Road - Calloway County	Crystal darter	Endangered
McCullogh Creek Stateline Road - Calloway County	Central mudminnow	Threatened

[a]There were no fish species collected that are on the Federal list of endangered and threatened species.

Table 3. Sport fishery classification[a] of streams in the lower Tennessee River drainage based on sport fishery importance[b].

Stream	County	Class	Stream miles
Tennessee River			
Kentucky Dam to I-24 Bridge	Livingston	1	1.4
I-24 Bridge to mouth	Livingston	3	22.0
Clark's River	McCracken	3	10.0
East Fork	Marshall	4	35.0
East Fork	Calloway	4	40.0
Middle Fork	Calloway	4	10.5
West Fork	Graves	4	37.6
Garrison Creek	McCracken	5	2.4
White Oak Creek	Marshall	5	2.5
Cypress Creek	Marshall	4	12.6
Little Cypress Creek	Marshall	5	5.4
Angle Creek	Marshall	5	3.7
Lee Creek	Livingston	5	4.8
Cap Spring	Marshall	5	3.4
Jonathan Creek	Marshall	3	10.5
Unnamed tributary	Marshall	4	1.8
Olive Branch Creek	Marshall	5	1.9
Little Jonathan Creek	Calloway	5	5.3
Ledbetter Creek	Calloway	4	2.5
Blood River	Calloway	3	7.4
Little Sugar Creek	Calloway	5	2.4
Big Sugar Creek	Calloway	5	3.5
Wildcat Creek	Calloway	4	5.1
Goose Creek	Calloway	5	3.0
Dog Creek	Calloway	5	4.8
Lax Creek	Calloway	5	3.3
McCullogh Creek	Calloway	5	4.9
Panther Creek	Calloway	4	5.0
Unnamed stream at Edwards Indian Mound	Calloway	5	2.1
Beechy Creek	Calloway	4	9.5
Tan Branch	Calloway	5	3.2
Grindstone Creek	Calloway	5	0.7
Pisgah Creek	Lyon	5	2.3
Smith Creek	Lyon	5	2.1
Duncan Creek	Lyon	5	2.2
North Fork Sugar Creek	Trigg	5	2.3
Higgins Branch	Trigg	5	1.6
Rhodes Creek	Trigg	5	1.7
Vickers Creek	Trigg	5	1.4
Barnett Creek	Trigg	5	2.5
Turkey Creek	Trigg	5	2.1
Colson Hollow	Trigg	5	1.2

[a]Class 1 (exceptional), Class 2 (high quality), Class 3 (good), Class 4 (fair), Class 5 (poor - no sport fishery significance).

[b]Importance is determined from a scoring of species occurrence of intermediate- and harvestable-size fish of sportfish value that were taken in the sample.

Appendix A. Standard form used by the Kentucky Division of Fisheries for reporting population study data.

GROUP/Species	Fingerling size range (inch group)	Intermediate size range (inch group)	Harvestable size range (inch group)
GAME FISHES			
Rainbow trout	0-4	4-7	8
Ohio muskellunge	0-4	4-29	30
Chain pickerel	0-4	4-11	12
Grass pickerel	0-4	5-9	10
White bass	0-4	5-8	9
Striped bass	0-4	5-14	15
Sauger	0-4	5-11	12
Walleye	0-4	5-14	15
Largemouth bass	0-4	5-11	12
Smallmouth bass	0-4	5-11	12
Spotted bass	0-4	5-11	12
Black crappie	0-4	5-7	8
White Crappie	0-4	5-7	8
FOOD FISHES			
Blue catfish	0-4	5-9	10
Channel catfish	0-4	5-9	10
Flathead catfish	0-4	5-9	10
PREDATORY FISHES			
Skipjack herring	0-4	5-9	10
Goldeye	0-4	5-9	10
Mooneye	0-4	5-9	10
Longnose gar	0-4	5-23	24
Shortnose gar	0-4	5-23	24
Spotted gar	0-4	5-23	24
Bowfin	0-4	5-13	14
American eel	0-7	8-15	16
PANFISHES			
Rock bass	0-2	3-5	6
Bluegill	0-2	3-5	6
Green sunfish	0-2	3-5	6
Hybrid sunfish	0-2	3-5	6
Longear sunfish	0-2	3-5	6
Redear sunfish	0-2	3-5	6
Warmouth	0-2	3-5	6
COMMERCIAL FISHES			
Sturgeon	0-7	8-23	24
Paddlefish	0-7	8-23	24
Buffalofishes	0-4	5-11	12
Carpsuckers	0-4	5-11	12
Northern hog sucker	0-4	5-11	12

Appendix A continued.

GROUP/Species	Fingerling size range (inch group)	Intermediate size range (inch group)	Harvestable size range (inch group)
Grass carp			
Redhorses	0-4	5-11	12
White sucker	0-4	5-11	12
Spotted sucker	0-4	5-11	12
Carp	0-4	5-11	12
Bullheads	0-4	5-8	9
Freshwater drum	0-4	5-9	10
FORAGE FISHES			(above forage size)
Lamprey	0-3	4-7	8
Gizzard shad	0-3	4-7	8
Threadfin shad	0-3	4-7	8
Shiner	0-3	4-7	8
Misc. cyprinid	0-3	4-7	8
Madtom	0-3	4-7	8
Topminnow	0-3	4-7	8
Darter	0-3	4-7	8
Orangespotted sunfish	0-3	4-7	8
Brook silverside	0-3	4-7	8
Sculpin	0-3	4-7	8

Appendix B. Fish species checklist for the lower Cumberland River and Tennessee River drainages. Frequency of occurrence is indicated as follows; O - not collected in drainage, A - abundant (occurred at more than 25 sample sites), M - moderately abundant (occurred at 15-24 sample sites), S - sparse (occurred at 5-14 sample sites), and I - isolated (occurred at 1-4 sample sites). Fish that are on the Kentucky list as endangered (E) or threatened (T) species are also indicated.

Species	Lower Cumberland River Drainage	Lower Tennessee River Drainage
Polyodontidae - paddlefish		
Polyodon spathula (paddlefish)	I	I
Lepisosteidae - gars		
Lepisosteus oculatus (spotted gar)	I	I
Lepisosteus osseus (longnose gar)	I	I
Lepisosteus platostomus (shortnose gar)	I	S
Amiidae - bowfins		
Amia calva (bowfin)	I	I
Hiodontidae - mooneyes		
Hiodon alosoides (goldeye)	I	I
Hiodon tergisus (mooneye)	I	O
Anguillidae - freshwater eels		
Anguilla rostrata (American eel)	I	I
Clupeidae - herrings		
Alosa chrysochloris (skipjack herring)	I	I
Dorosoma cepedianum (gizzard shad)	S	S
Dorosoma petenense (threadfin shad)	I	I
Cyprinidae - carps and minnows		
Campostoma anomalum (central stoneroller)	I	S
Campostoma oligolepis (largescale stoneroller)	A	A
Clinostomus funduloides (rosyside dace)	O	I
Ctenopharyngodon idella (grass carp)	I	O
Cyprinella lutrensis (red shiner)	I	I
Cyprinella spiloptera (spotfin shiner)	I	S
Cyprinella venusta (blacktail shiner)	O	I
Cyprinella whipplei (steelcolor shiner)	S	S
Cyprinus carpio (common carp)	S	S
Hybognathus nuchalis (Mississippi silvery minnow)	O	I
Luxilus chrysocephalus (striped shiner)	S	O
Lythrurus ardens (rosefin shiner)	S	I
Lythrurus fumeus (ribbon shiner)	S	I
Lythrurus umbratilis (redfin shiner)	M	S
Nocomis effusus (redtail chub)	I	O

Appendix B. continued

Species	Lower Cumberland River Drainage	Lower Tennessee River Drainage
Notemigonus crysoleucas (golden shiner)	I	S
Notropis atherinoides (emerald shiner)	I	M
Notropis blennius (river shiner)	O	I
Notropis hudsonius (spottail shiner)	I	I
Notropis rubellus (rosyface shiner)	I	O
Notropis volucellus (mimic shiner)	I	O
Opsopoeodus emiliae (pugnose minnow)	I	I
Phenacobius mirabilis (suckermouth minnow)	M	S
Phoxinus erythrogaster (southern redbelly dace)	I	O
Pimephales notatus (bluntnose minnow)	A	M
Pimephales promelas (fathead minnow)	O	I
Rhinichthys atratulus (blacknose dace)	I	O
Semotilus atromaculatus (creek chub)	A	A
Catostomidae - suckers		
Carpiodes carpio (river carpsucker)	I	S
Carpiodes cyprinus (quillback)	I	I
Catostomus commersoni (white sucker)	S	I
Erimyzon oblongus (creek chubsucker)	M	M
Erimyzon sucetta (lake chubsucker)	O	I,T
Hypentelium nigricans (northern hog sucker)	M	M
Ictiobus bubalus (smallmouth buffalo)	I	S
Ictiobus cyprinellus (bigmouth buffalo)	I	I
Minytrema melanops (spotted sucker)	S	S
Moxostoma anisurum (silver redhorse)	I	I
Moxostoma carinatum (river redhorse)	I	I
Moxostoma duquesnei (black redhorse)	O	I
Moxostoma erythrurum (golden redhorse)	S	S
Ictaluridae - catfishes		
Ameiurus melas (black bullhead)	I	S
Ameiurus natalis (yellow bullhead)	S	A
Ictalurus punctatus (channel catfish)	S	S
Noturus gyrinus (tadpole madtom)	O	I
Noturus miurus (bridled madtom)	O	I
Noturus nocturnus (freckled madtom)	I	I
Pylodictis olivaris (flathead catfish)	I	I
Esocidae - pikes		
Esox americanus vermiculatus (grass pickerel)	M	S
Esox niger (chain pickerel)	I	I
Umbridae - mudminnows		
Umbra limi (central mudminnow)	O	I,T
Salmonidae - trouts		
Oncorhynchus mykiss (rainbow trout)	I	O
Salmo trutta (brown trout)	I	O

Appendix B. continued

Species	Lower Cumberland River Drainage	Lower Tennessee River Drainage
Aphredoderidae - pirate perches		
Aphredoderus sayanus (pirate perch)	M	I
Amblyopsidae - cavefishes		
Chologaster agassizi (spring cavefish)	I	O
Cyprinodontidae - killifishes		
Fundulus notatus (blackstriped topminnow)	O	I
Fundulus olivaceus (blackspotted topminnow)	A	A
Poeciliidae - livebearers		
Gambusia affinis (western mosquitofish)	I	M
Atherinidae - silversides		
Labidesthes sicculus (brook silverside)	I	S
Cottidae - sculpins		
Cottus bairdi (mottled sculpin)	I	O
Cottus carolinae (banded sculpin)	A	O
Percichthyidae - temperate basses		
Morone chrysops (white bass)	S	I
Morone mississippiensis (yellow bass)	I	I
Centrarchidae - sunfishes		
Ambloplites rupestris (rock bass)	S	O
Centrarchus macropterus (flier)	O	I
Lepomis cyanellus (green sunfish)	A	A
Lepomis gulosus (warmouth)	S	S
Lepomis humilis (orangespotted sunfish)	I	I
Lepomis macrochirus (bluegill)	A	A
Lepomis megalotis (longear sunfish)	A	A
Lepomis microlophus (redear sunfish)	S	I
Micropterus dolomieu (smallmouth bass)	I	I
Micropterus punctulatus (spotted bass)	S	M
Micropterus salmoides (largemouth bass)	M	M
Pomoxis annularis (white crappie)	S	S
Pomoxis nigromaculatus (black crappie)	I	I
Percidae - perches		
Ammocrypta asprella (crystal darter)	O	I,E
Etheostoma asprigene (mud darter)	M	S
Etheostoma blennioides (greenside darter)	S	O
Etheostoma caeruleum (rainbow darter)	S	S
Etheostoma chlorosomum (bluntnose darter)	O	I
Etheostoma crossopterum (fringed darter)	S	O
Etheostoma flabellare (fantail darter)	S	A
Etheostoma gracile (slough darter)	I	S

Appendix B. continued

Species	Lower Cumberland River Drainage	Lower Tennessee River Drainage
Etheostoma histrio (halequin darter)	O	I
Etheostoma oophylax (guardian darter)	O	S
Etheostoma nigrum (johnny darter)	S	I
Etheostoma proeliare (cypress darter)	I	I,T
Etheostoma rufilineatum (redline darter)	I	O
Etheostoma simoterum (snubnose darter)	S	I
Etheostoma smithi (slabrock darter)	I	O
Etheostoma spectabile (orangethroat darter)	M	O
Etheostoma squamiceps (spottail darter)	S	I
Etheostoma stigmaeum (speckled darter)	O	I
Etheostoma virgatum (striped darter)	I	O
Etheostoma zonistium (bandfin darter)	O	S
Percina caprodes (logperch)	S	S
Percina maculata (blacksided darter)	I	S
Percina sciera (dusky darter)	O	I
Percina uranidea (stargazing darter)	O	I
Stizostedion canadense (sauger)	I	I
Sciaenidae - drums		
Aplodinotus grunniens (freshwater drum)	S	S

Appendix C. Stream survey form.

STREAM SURVEY

Date_____ Time_____ am pm

Name of stream_____
Station No._____ Order_____ Stream Length_____mi Crew_____

Exact Location_____

Photo No._____ Description_____
Sampling method_____ Quantitative_____ Qualitative_____
Sampling time: electrofishing_____ gill net (describe net)_____
Length of area_____ Avg. width_____ Avg. depth_____ Max. depth_____
Surface acres_____

PHYSICAL AND CHEMICAL CHARACTERISTICS

Air temp_____°F Surf. temp_____°F D.O._____mg/L pH_____ Alk._____mg/L Sal._____ppt
Spec.Cond._____umhos/cm Turbidity_____NTU Stream condition: High__ Low__ Normal__
Stream Velocity_____ft/sec Volume of flow_____ft^3/sec Gradient_____ft/mi
Annual flow: Constant___ Intermittent___

Pollution: Absent___ Present___ Type_____ Continuous___ Periodic___

Source_____

Fish Shelter: Abundant____ Medium____ Sparse____
Type: Undercut banks___ Boulders___ Ledges___ Logs___ Brush___ Vegetation___
Riparian zone: 0-10 m____ 10-20 m____ 20-30 m ____ >30 m____
Shade: 75-100%_____ 50-75%_____ 25-50%_____ 5-25%_____ 0-5%_____

Bottom type (%):
(1) Pool area: Bedrock_____ Boulder(>12 in)_____ Large rubble (6-12 in)_____
Small rubble (3-6 in)_____ Course gravel (1-3 in)_____
Fine gravel (0.1-1 in)_____ Sand_____ Clay_____ Silt_____ Muck_____
Detritus_____
(2) Riffle area: Bedrock_____ Boulder(>12 in)_____ Large rubble (6-12 in)_____
Small rubble (3-6 in)_____ Course gravel (1-3 in)_____
Fine gravel (0.1-1 in)_____ Sand_____ Clay_____ Silt_____ Muck_____
Detritus_____

Pool-Riffle ratio in section: _____%Pool _____%Riffle
Aquatic vegetation: Abundant____ Common____ Sparse____

Type_____

Observations on macroinvertebrates: Type_____

_____

Appendix C continued.

Major land usage in the watershed_____

_____

SPORT FISHING

General reputation: Excellent_____ Good_____ Fair_____ Poor_____

Dominant species in creel:_____

_____

Fishing pressure: Bank_____ Wade_____ Boat_____ Float_____

Best sections:_____

_____

Access: Good_____ Fair_____ Poor_____

Locations:_____

_____

_____

Aesthetic value: Excellent_____ Good_____ Fair_____ Poor_____

Recommendations for management or research:_____

_____

_____

LIMITING FACTORS OR PROBLEMS

Fishery potential limited by: low flow_____ pollution_____ other_____

Other problems: littering or dumping_____ shoreline clearing_____
channelization_____

Flooding: heavy_____ moderate_____ limited_____

Remarks:_____

_____

APPENDIX D

The findings for each sampling location in the lower Cumberland River drainage and a general description of the streams of fishery importance follow. The streams are arranged in order of tributary progression, upstream. When more than one sampling site was established on a given stream, the findings from each of these areas were described in an upstream sequence. Stream length in miles designates the approximate length of the stream indicated on a TVA-USGS 1:24,000 topographic map.

Stream: Cumberland River
County: Crittenden Stream length: 30.7 mi

Description: This sample site was located between Dycusbury, Kentucky and continued downstream to the mouth of Claylick Creek. Within this study area tree tops, root wades, riprap banks, and creek mouths were sampled.

STUDY AREA DATA

Date: May 28, 1993
Location: Cumberland River, Dycusbury, Kentucky

Method: electrofishing by boat
Length of sample area: 2.6 mi
Sample effort: 0.83 hour

Physical - Chemical		Fish Fauna	No. per size group[a] F	I	H
D.O:	11.7 mg/l	White bass		30	2
pH:	8.0	Sauger			2
Total alkalinity:	143.6 mg/l	Largemouth bass		8	5
Temperature:	72.0°F	Smallmouth bass		3	1
Conductivity:	191 umhos/cm	Spotted bass		3	4
Turbidity:	23.4 NTU	White crappie	1	3	1
Bottom type:	bedrock, boulders, large gravel, and clay	Channel catfish			10
		Flathead catfish			3
Fish shelter:	medium; boulders, ledges, tree tops, stumps	Skipjack herring			2
		Goldeye			1
Shade:	0-5%	Mooneye			1
Fish food:	crayfish	Shortnose gar		9	3
Aquatic vegetation:	none	American eel			1
		Bluegill		7	4
		Green sunfish		1	
		Longear sunfish		3	5
		Smallmouth buffalo			8
		Bigmouth buffalo			2
		River carpsucker		2	3
		Quillback		2	5
		Silver redhorse			1
		Carp			12
		Freshwater drum		9	10
		Gizzard shad		32	21
		Threadfin shad	1	2	
		Steelcolor shiner	6	5	
		Emerald shiner		6	
		Grass carp			1
		Bowfin			1
		Yellow bass	2	5	

[a]F = fingerling, I = intermediate, and H = harvestable size; refer to Appendix A.

Stream: Cumberland River
County: Crittenden Stream length: 30.7 mi

Description: This sample site was located between Dycusbury, Kentucky, and continued upstream to the mouth of Livingston Creek. Within this study area, tree tops, root wades, riprap banks, and creek mouths were sampled.

STUDY AREA DATA

Date: May 28, 1993
Location: Cumberland River, Dycusbury, Kentucky

Method: electrofishing by boat
Length of sample area: 1.0 mi
Sample effort: 0.33 hour

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	11.5 mg/l	White bass		3	2
pH:	8.4	Largemouth bass		1	8
Total alkalinity:	119.7 mg/l	Smallmouth bass		1	
Temperature:	71.0°F	Spotted bass		1	
Conductivity:	167.5 umhos/cm	White crappie		1	
Turbidity:	21.0 NTU	Channel catfish			3
Bottom type:	bedrock, boulders, large gravel, and clay	Flathead catfish		1	4
		Longnose gar			1
Fish shelter:	medium; boulders, ledges, tree tops, stumps	Shortnose gar			1
		Spotted gar			1
Shade:	05%	American eel			1
Fish food:	crayfish	Bowfin			1
Aquatic vegetation:	none	Bluegill		3	13
		Longear sunfish	5		
		River carpsucker			1
		Carp			6
		Freshwater drum		1	27
		Gizzard shad		14	13
		Threadfin shad		5	
		Emerald shiner	2	23	
		Steelcolor shiner	5		

Stream: Cumberland River
County: Lyon Stream length: 30.7 mi

Description: This sample site was located below Barkley Lake in the tailwater area and continued downstream to river mile 29. Within this study area, tree tops, root wades, and riprap banks were sampled.

STUDY AREA DATA

Date: June 23, 1993
Location: Cumberland River below Barkley Lake Dam

Method: electrofishing by boat
Length of sample area: 1.6 mi
Sample effort: 1.03 hours

Physical - Chemical		Fish Fauna	No. per size group[a] F	I	H
D.O:	6.5 mg/l	White bass	1		
pH:	8.1	Largemouth bass		14	4
Total alkalinity:	124.0 mg/l	Smallmouth bass		3	
Temperature:	86.0°F	Black crappie		1	1
Conductivity:	198 umhos/cm	White crappie		1	
Turbidity:	7.8 NTU	Yellow bass		1	
Bottom type:	bedrock, boulders, large gravel, and clay	Channel catfish		1	
		Skipjack herring	5	7	3
Fish shelter:	medium; boulders, ledges, tree tops, stumps	Shortnose gar		3	8
		Bluegill		18	
Shade:	0-5%	Longear sunfish		8	
Fish food:	crayfish	Redear sunfish		5	
Aquatic vegetation:	none	Paddlefish			1
		Smallmouth buffalo		1	3
		Bigmouth buffalo			1
		River carpsucker			3
		Golden redhorse		1	1
		Carp			9
		Freshwater drum			3
		Gizzard shad		19	57
		Threadfin shad	250		
		Emerald shiner	200		
		Steelcolor shiner		2	

Stream: McCormick Creek
County: Livingston
Order: III
Stream length: 4.5 mi

Description: The water flow through this stream was below normal. This left only isolated pools of water for sampling; these pools contained many brush snags.

STUDY AREA DATA

Date: June 7, 1988
Location: Hwy 80 E of Smithland
Method: backpack electrofishing
Length of sample area: 220 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	11.2 mg/L	Green sunfish	3	3	1
pH:	6.5	Bluegill		1	
Total alkalinity:	174.0 mg/L	Yellow bullhead		1	
Temperature:	71°F	Mud darter	5		
Average width:	25.0 ft	Pirate perch	2		
Average depth:	0.9 ft	Western mosquitofish	1		
Bottom type:	silt, muck, and detritus	Suckermouth minnow	4		
		Creek chub	3		
Fish shelter:	abundant; undercut banks, logs, ledges, and brush				
Shade:	75-100%				
Fish food:	crayfish				
Aquatic vegetation:	filamentous algae				

Stream: Ferguson Creek Order: IV
County: Livingston Stream length: 4.8 mi

Description: This stream site was well suited for obtaining bait fish and bank fishing for small game fish. The major land usage is silviculture. This stream had a good flow at the time of sampling. The water was clear and the pool to riffle ratio was 2:3.

STUDY AREA DATA

Date: June 13, 1988 Method: backpack electrofishing
Location: Chapel Road 2 mi SE of Smithland on Hwy 70 at mouth of Dunn Creek
Length of sample area: 210 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	12.4 mg/L	Grass pickerel	3	1	
pH:	8.0	Green sunfish	1	1	
Total alkalinity:	105.0 mg/L	Longear sunfish	1		
Temperature:	75°F	Bluegill		1	
Average width:	20.0 ft	Fringed darter	11		
Average depth:	0.42 ft	Largescale stoneroller	12		
Bottom type:	bedrock, boulders and sand	Blackspotted topminnow	2		
		Bluntnose minnow	3		
Fish shelter:	medium; boulders, and brush	Creek chub	11		
		Yellow bullhead	1	1	
Shade:	50-75%				
Fish food:	crayfish and mussels				
Aquatic vegetation:	filamentous algae				

Stream: Ferguson Creek Order: III
County: Livingston Stream length: 4.8 mi

Description: Water flow through this stream was below normal. Garbage was dumped at this site.

STUDY AREA DATA

Date: June 13, 1988 Method: backpack electrofishing
Location: Hwy 70, 2 mi E of Smithland Length of sample area: 200 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	12.2 mg/L	Bluegill	2	3	
pH:	7.9	Green sunfish	3	2	
Total alkalinity:	130.0 mg/L	Mud darter	11		
Temperature:	72°F	Fringed darter	12		
Average width:	20.0 ft	Redfin shiner	4		
Average depth:	0.83 ft	Largescale stoneroller	8		
Bottom type:	small rubble, gravel, sand, and clay	Blackspotted topminnow	8		
		Bluntnose minnow	9		
Fish shelter:	medium; logs				
Shade:	70-100%				
Fish food:	crayfish				
Aquatic vegetation:	filamentous algae				

Stream: Smith Creek
County: Livingston
Order: III
Stream length: 4.2 mi

Description: The water flow through this creek was below normal. Samples were taken from three large isolated pools.

STUDY AREA DATA

Date: June 18, 1988
Location: Chapel Road off Hwy 70 S of Smithland
Method: backpack electrofishing
Length of sample area: 295 ft

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	9.2	mg/L	Green sunfish		5	1
pH:	7.9		Bluegill		1	
Total alkalinity:	96.0	mg/L	Redfin shiner	1		
Temperature:	78°F		Steelcolor shiner	6		
Average width:	16.0	ft	Blackspotted topminnow	1		
Average depth:	1.1	ft	Suckermouth minnow	30		
Bottom type: bedrock, sand, muck, and gravel			Western mosquitofish	2		
Fish shelter: medium; boulders and brush						
Shade:	75-100%					
Fish food: crayfish						
Aquatic vegetation: filamentous algae						

Stream: Hickory Creek
County: Livingston

Order: IV
Stream length: 7.7 mi

Description: This portion of the creek had been channelized. There was little flow and water color was lime green. The major land usage was in silviculture. The only use was for bait fish.

STUDY AREA DATA

Date: June 13, 1988
Location: Vaughn Road off Hwy 70 E of Smithland

Method: backpack electrofishing
Length of sample area: 203 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	8.4 mg/L	Bluegill		1	
pH:	7.6	Longear sunfish		3	
Total alkalinity:	120.0 mg/L	Green sunfish		4	
Temperature:	75°F	Gizzard shad			1
Average width:	12.5 ft	Redfin shiner	1		
Average depth:	1.0 ft	Ribbon shiner	3		
Bottom type:	coarse gravel, silt, clay, and muck	Mud darter	1		
		Johnny darter	1		
Fish shelter:	medium; undercut banks and logs	Blackspotted topminnow	6		
		Bluntnose minnow	1		
Shade:	75-100%	Creek chub	1		
Fish food:	crayfish				
Aquatic vegetation:	filamentous algae				

Stream: Sandy Creek
County: Livingston

Order: IV
Stream length: 13.0 mi

Description: This site was located almost at the mouth of the creek at the confluence with the Cumberland River. At this sample site, the creek has cut through bedrock.

STUDY AREA DATA

Date: July 18, 1988
Location: gravel road at the "Y" with Hwy 1433 SE of Salem

Method: backpack electrofishing
Length of sample area: 210 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	5.0 mg/L	Largemouth bass	5		
pH:	7.7	Green sunfish	4	3	
Total alkalinity:	110.0 mg/L	Longear sunfish	5		
Temperature:	83°F	Spotfin shiner	1		
Average width:	60.0 ft	Redfin shiner	1		
Average depth:	1.4 ft	Mud darter	2		
Bottom type:	bedrock, coarse gravel, muck, and detritus	Creek chub	7		
		Spotted sucker	1		
Fish shelter:	medium; undercut banks, logs, brush, and boulders	Creek chubsucker	3		
		Yellow bullhead	4		
Shade:	25-50%				
Fish food:	crayfish				
Aquatic vegetation:	filamentous algae				

Stream: Sandy Creek
County: Livingston

Order: III
Stream length: 13.0 mi

Description: This site was polluted with garbage and concrete. The water conditions were below normal and muddy. There were a few riffles.

STUDY AREA DATA

Date: July 12, 1988
Location: Hwy 1433 SE of Salem

Method: backpack electrofishing
Length of sample area: 136 ft

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	8.2	mg/L	Green sunfish		2	
pH:	8.1		Longear sunfish	2	7	
Total alkalinity:	152.0	mg/L	Pirate perch	1		
Temperature:	75°F		Bluntnose minnow	1		
Average width:	23.0	ft	Rainbow darter	1		
Average depth:	1.3	ft	Mud darter	2		
Bottom type: small rubble, gravel, sand, silt, and muck			Creek chub	5		
			Creek chubsucker	4		1
Fish shelter: medium; undercut banks and logs			Golden redhorse		1	
Shade: 75-100%						
Fish food: crayfish						
Aquatic vegetation: none						

Stream: Sandy Creek Order: III
County: Livingston Stream length: 13.0 mi

Description: This site had many deep pools which were used for swimming and fishing.

STUDY AREA DATA

Date: July 18, 1988 Method: backpack electrofishing
Location: Cobbs Road off Hwy 1433 SE of Salem Length of sample area: 132 ft

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	6.9	mg/L	Bluegill		2	1
pH:	7.8		Longear sunfish		5	
Total alkalinity:	138.0	mg/L	Green sunfish		4	
Temperature:	79°F		Largescale stoneroller	16		
Average width:	22.0	ft	Mud darter	2		
Average depth:	1.6	ft	Creek chub	4	1	
Bottom type: coarse gravel, muck, silt, and detritus			Yellow bullhead		2	
			White sucker	2		
Fish shelter: medium; undercut banks, logs, and brush						
Shade:	75-100%					
Fish food: none						
Aquatic vegetation: none						

Stream: Sandy Creek
County: Livingston

Order: III
Stream length: 13.0 mi

Description: This site consisted mainly of isolated pools.

STUDY AREA DATA

Date: July 18, 1988
Location: Hodges Road off Hwy 60 W of Salem

Method: backpack electrofishing
Length of sample area: 180 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	4.6 mg/L	Spotted bass		1	
pH:	7.8	Longear sunfish	1	10	
Total alkalinity:	118.0 mg/L	Bluegill	2	1	
Temperature:	80°F	Pirate perch	3		
Average width:	20.0 ft	Redfin shiner	1		
Average depth:	1.8 ft	Largescale stoneroller	14		
Bottom type:	large rubble, gravel, silt, and detritus	Creek chub	4		
		Mud darter	7		
Fish shelter:	medium; undercut banks, logs, and brush	Creek chubsucker	2		
Shade:	50-75%				
Fish food:	crayfish				
Aquatic vegetation:	none				

Stream: Dry Fork - Sandy Creek Order: III
County: Livingston Stream length: 8.9 mi

Description: The water flow through this creek was below normal. Dredging around the bridge had caused an increase in turbidity.

STUDY AREA DATA

Date: July 12, 1988 Method: backpack electrofishing
Location: Hwy 1443 SE of Salem Length of sample area: 182 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	12.2 mg/L	Grass pickerel		1	
pH:	8.3	Green sunfish		2	1
Total alkalinity:	168.0 mg/L	Longear sunfish		10	
Temperature:	84.0	Pirate perch	2		
Average width:	8.0 ft	Redfin shiner	1		
Average depth:	0.75 ft	Johnny darter	1		
Bottom type: silt, muck, and detritus		Blackside darter	2		
Fish shelter: medium; undercut banks, logs, and brush		Blackspotted topminnow	1		
		Suckermouth minnow	1		
Shade: 50-75%					
Fish food: none					
Aquatic vegetation: filamentous algae					

Stream: Sugar Creek Order: IV
County: Livingston Stream length: 9.2 mi

Description: The water flow through this stream was below normal and slightly turbid. The major land usage was in silviculture. The only use was for bait fish.

STUDY AREA DATA

Date: June 13, 1988 Method: backpack electrofishing
Location: Hwy 70 E of Smithland and W of Tiline Length of sample area: 160 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	9.6 mg/L	Bluegill		1	
pH:	7.7	Longear sunfish		3	
Total alkalinity:	164.0 mg/L	Green sunfish		4	
Temperature:	77°F	Gizzard shad			1
Average width:	16.0 ft	Redfin shiner	1		
Average depth:	1.25 ft	Ribbon shiner	3		
Bottom type: coarse gravel, sand, and clay		Mud darter	1		
		Johnny darter	1		
Fish shelter: sparse; undercut banks		Blackspotted topminnow	6		
		Bluntnose minnow	1		
Shade:	50-75%	Creek chub	1		
Fish food: none					
Aquatic vegetation: filamentous algae and duckweed					

Stream: Cypress Creek
County: Livingston

Order: III
Stream length: 5.2 mi

Description: This sample site consisted of pools that contained many brushy snags.

STUDY AREA DATA

Date: June 15, 1988
Location: Hwy 70 E of Smithland

Method: backpack electrofishing
Length of sample area: 195 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	9.4 mg/L	Grass pickerel	2	1	
pH:	7.7	Bluegill		1	
Total alkalinity:	110.0 mg/L	Longear sunfish		1	
Temperature:	69°F	Redear sunfish		3	
Average width:	20.0 ft	Pirate perch	1		
Average depth:	0.83 ft	Blackspotted topminnow	9		
Bottom type:	coarse gravel, sand, silt, muck, and detritus	Mud darter	1		
		Creek chub	1		
Fish shelter:	abundant; undercut banks, logs, and brush	Suckermouth minnow	4		
		Western mosquitofish	1		
Shade:	75-100 %				
Fish food:	none				
Aquatic vegetation:	none				

Stream: Claylick Creek
County: Livingston

Order: IV
Stream length: 16.4 mi

Description: The water flow through the stream was below normal; only a few small riffles remained. The turbidity of the water caused some difficulty in collecting fish at this sample site.

STUDY AREA DATA

Date: June 15, 1988
Location: Off Hwy 133 S of Salem at Shelby, Cummus Church Road at Crittenden/Livingston Co. line

Method: backpack electrofishing
Length of sample area: 210 ft

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	8.8	mg/L	Grass pickerel	1		
pH:	7.6		Longear sunfish		2	
Total alkalinity:	155.0	mg/L	Green sunfish		1	
Temperature:	73°F		Bluegill	1		
Average width:	13.0	ft	Mud darter	2		
Average depth:	1.25	ft	Redfin shiner	3		
Bottom type: coarse gravel, sand, silt, and detritus			Red shiner	3		
			Emerald shiner	6		
Fish shelter: sparse; undercut banks, and logs			Blackspotted topminnow	3		
			Bluntnose minnow	13		
Shade:	75-100%		Banded sculpin	5		
Fish food:	crayfish					
Aquatic vegetation:	filamentous algae					

Stream: Claylick Creek Order: IV
County: Livingston/Crittenden line Stream length: 16.4 mi

Description: This site consists of primarily pool habitat, with one large riffle at the bridge. The water was turbid with a surface water flow of 7.5 ft per minute. A total of 0.411 surface acre was sampled with rotenone.

STUDY AREA DATA

Date: August 16, 1988 Method: rotenone
Location: Seven Ridge Road off Hwy 70 N of Dycusburg Sample area: 0.411 acre; 275 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	11.8 mg/L	White crappie	1		
pH:	8.0	Bluegill	3	8	
Total alkalinity:	168.0 mg/L	Longear sunfish	8	8	
Temperature:	84°F	Pirate perch	7		
Average width:	39.5 ft	Channel catfish		7	
Average depth:	1.65 ft	Golden redhorse			1
Conductivity:	395.0 umhos/cm	Freshwater drum		1	
Bottom type:	boulders, rubble, silt, muck, and detritus	Spotted sucker	2	1	
		Gizzard shad	1	42	18
Fish shelter:	abundant; undercut banks, boulders, logs, and brush	Freckled madtom	3		
		Redfin shiner	11		
Shade:	50-75%	Emerald shiner	1		
Fish food:	crayfish, Corbicula sp.	Brook silverside	1		
Aquatic vegetation:	filamentous algae	Orangethroat darter	9		
		Blackspotted topminnow	6		
		Bluntnose minnow	13		

Stream: Claylick Creek
County: Crittenden

Order: IV
Stream length: 16.4 mi

Description: The water flow through this stream was below normal, leaving only large isolated pools. There were many log snags in these pools.

STUDY AREA DATA

Date: June 16, 1988
Location: Hwy 855 N of Dycusburg

Method: backpack electrofishing
Length of sample area: 174 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	7.2 mg/L	Longear sunfish		3	
pH:	7.6	Green sunfish		2	
Total alkalinity:	165.0 mg/L	Pirate perch		1	
Temperature:	75°F	Banded sculpin	6		
Average width:	20.0 ft	Spottail darter	2		
Average depth:	1.5 ft	Redfin shiner	6		
Bottom type: silt, muck, and detritus		Bluntnose minnow	1		
Fish shelter: abundant; undercut banks, logs, and brush		Blackspotted topminnow	11		
		Creek chub	2		
Shade:	50-75%				
Fish food:	none				
Aquatic vegetation:	filamentous algae				

Stream: Cox Spring Branch Order: III
County: Livingston Stream length: 4.0 mi

STUDY AREA DATA

Date: June 15, 1988 Method: backpack electrofishing
Location: Hwy 133, 2 mi S of Salem Length of sample area: 130 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	13.2 mg/L	Green sunfish	1	4	1
pH:	8.4	Fringed darter	19		
Total alkalinity:	230.0 mg/L	Creek chub	14		
Temperature:	77°F				
Average width:	1.75 ft				
Average depth:	0.41 ft				

Bottom type: fine gravel, sand, and silt
Fish shelter: medium; brush, undercut banks, and logs
Shade: 75-100%
Fish food: crayfish
Aquatic vegetation: filamentous algae

Stream: Axel Creek
County: Crittenden

Order: III
Stream length: 6.3 mi

Description: The water flow through this stream was below normal; therefore, only isolated pools were sampled.

STUDY AREA DATA

Date: June 15, 1988
Location: Seven Ridge Road off Hwy 70 near Dycusburg

Method: backpack electrofishing
Length of sample area: 174 ft

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	11.2	mg/L	Grass pickerel		1	
pH:	7.1		Green sunfish		1	
Total alkalinity:	97.0	mg/L	Pirate perch	1		
Temperature:	77°F		Blackspotted topminnow	1		
Average width:	12.0	ft	Creek chub	14		
Average depth:	0.67	ft	Creek chubsucker		1	
Bottom type: coarse gravel and sand			White sucker	5		
Fish shelter: sparse; undercut banks						
Shade: 75-100%						
Fish food: crayfish						
Aquatic vegetation: filamentous algae						

Stream: Clement Creek Order: III
County: Crittenden Stream length: 6.4 mi

Description: There was a 3:1 ratio of pools to riffles.

STUDY AREA DATA

Date: June 10, 1988 Method: backpack electrofishing
Location: Frances Road off Hwy 91 S of Marion Length of sample area: 165 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	8.6 mg/L	Longear sunfish		2	
pH:	7.7	Green sunfish		1	
Total alkalinity:	165.0 mg/L	Fringed darter	1		
Temperature:	64°F	Banded sculpin	7		
Average width:	8.0 ft	Redfin shiner	1		
Average depth:	1.16 ft	Blackspotted topminnow	1		
Bottom type:	boulders, small rubble, sand, and silt	Bluntnose minnow	4		
		Creek chub	1		
Fish shelter:	medium; undercut banks and brush				
Shade:	75-100%				
Fish food:	none				
Aquatic vegetation:	filamentous algae				

Stream: Livingston Creek Order: IV
County: Crittenden/Lyon (line) Stream length: 27.8 mi

Description: At this site, there were many large isolated pools and very few riffles. The pools were deep with silt. There was very little fisheries use evident. The flow was steady; a spring was located under the bridge at this site.

STUDY AREA DATA

Date: June 23, 1988 Method: backpack electrofishing
Location: Off Hwy 1948 at Crittenden/Lyon Co. line just past Skinframe Creek Length of sample area: 210 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	7.6 mg/L	Longear sunfish		1	4
pH:	8.0	Banded sculpin	12	3	
Total alkalinity:	205.0 mg/L				
Temperature:	73°F				
Average width:	17.0 ft				
Average depth:	1.33 ft				

Bottom type: coarse gravel in riffles and silt, muck, and detritus in pools
Fish shelter: medium; undercut banks, logs, and brush
Shade: 75-100%
Fish food: crayfish
Aquatic vegetation: filamentous algae

Stream: Livingston Creek Order: IV
County: Crittenden/Caldwell (line) Stream length: 27.8 mi

Description: At this site, the stream consisted mainly of pools. The creek bed consisted of many snags. Fishing use is minimal. The total surface acreage sampled with rotenone was 0.286.

STUDY AREA DATA

Date: August 16, 1988 Method: backpack electrofishing
Location: Hwy 902 at Livingston Station on Crittenden/Caldwell Co. line Length of sample area: 254 ft

Physical - Chemical		Fish Fauna	No. per size group[a] F	I	H
D.O:	4.8 mg/L	Black crappie		1	
pH:	7.8	Largemouth bass	2		
Total alkalinity:	154.0 mg/L	Bluegill	2	8	2
Temperature:	77°F	Longear sunfish	24	8	2
Average width:	24.8 ft	Green sunfish	16	2	
Average depth:	1.98 ft	Pirate perch	12		
Conductivity:	320.0 umhos/cm	Carp			14
Bottom type:	boulders, small rubble, silt, muck, and detritus	Golden redhorse		2	
		White sucker	2	3	
Fish shelter:	abundant; undercut banks, logs, brush, and boulders	Spotted sucker	6	8	
		River carpsucker		1	
Shade:	75-100%	Freshwater drum		4	
Fish food:	crayfish	Gizzard shad		2	28
Aquatic vegetation:	filamentous algae	Yellow bullhead	1	1	
		Orangethroat darter	4		
		Blackside darter	2		
		Fringed darter	3		
		Striped darter	92	40	
		Striped shiner	1	7	
		Redfin shiner	24		
		Blackspotted topminnow	50		
		Creek chubsucker	8	24	
		Creek chub		1	

Stream: Livingston Creek Order: III
County: Crittenden/Caldwell line Stream length: 27.8 mi

Description: This creek had little to no flow during the dry conditions of June. At this site, only isolated pools were left. Little fishing pressure occurs at this site.

STUDY AREA DATA

Date: June 23, 1988 Method: backpack electrofishing
Location: Hwy 641 Crittenden/ Caldwell Co. line Length of sample area: 189 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	5.4 mg/L	Green sunfish	1	3	1
pH:	7.6	Longear sunfish	1		
Total alkalinity:	150.0 mg/L	Northern hog sucker		1	
Temperature:	76°F	White sucker	2		
Average width:	30.5 ft	Redfin shiner	7		
Average depth:	1.13 ft	Bluntnose minnow	19		
Conductivity:	385.0 umhos/cm	Striped shiner	1		
Bottom type: bedrock, silt, muck, and detritus		Fringed darter	7		
		Creek chub	2		

Fish shelter: abundant; undercut banks, logs, brush, and boulders
Shade: 50-75%
Fish food: crayfish
Aquatic vegetation: filamentous algae

Stream: Dry Fork Creek-Livingston Creek Order: III
County: Crittenden Stream length: 9.2 mi

Description: This site was located upstream from a dry section of this stream. Only pools were sampled.

STUDY AREA DATA

Date: June 23, 1988 Method: backpack electrofishing
Location: Hwy 70 SW of Mexico Length of sample area: 173 ft

Physical - Chemical			No. per size group		
		Fish Fauna	F	I	H
D.O:	9.4 mg/L	Longear sunfish		3	
pH:	8.1	Green sunfish		1	
Total alkalinity:	198.0 mg/L	Redfin shiner	1		
Temperature:	73°F	Spottail shiner	6		
Average width:	13.0 ft	Creek chub	2	1	
Average depth:	0.48 ft	Blackspotted topminnow	1		
Bottom type: small to coarse gravel, sand, silt, and detritus		Bluntnose minnow	5		
Fish shelter: medium; undercut banks and logs		Largescale stoneroller	9		
Shade: 75-100%					
Fish food: crayfish					
Aquatic vegetation: filamentous algae					

Stream: Panther Creek
County: Lyon

Order: III
Stream length: 10.7 mi

Description: Water flow was below normal and clear.

STUDY AREA DATA

Date: July 14, 1988
Location: Hwy 819 W of Eddyville

Method: backpack electrofishing
Length of sample area: 176 ft

Physical - Chemical			No. per size group		
		Fish Fauna	F	I	H
D.O:	9.8 mg/L	Redfin shiner	2		
pH:	8.1	Blackspotted topminnow	6		
Total alkalinity:	170.0 mg/L	Pirate perch	2	1	
Temperature:	78°F	Bluntnose minnow	11		
Average width:	9.0 ft	Suckermouth minnow	3		
Average depth:	0.58 ft	Mud darter	7		
Bottom type:	muck and detritus	Creek chubsucker	1		
Fish shelter:	abundant; undercut banks, logs, and brush	Creek chub	5		
Shade:	75-100%				
Fish food:	crayfish				
Aquatic vegetation:	filamentous algae and water primrose				

Stream: Spring Creek
County: Lyon

Order: III
Stream length: 5.5 mi

Description: The major land use for this drainage was cattle pasture. There is a spring just upstream from this sample site.

STUDY AREA DATA

Date: July 14, 1988
Location: Bill Thomas Road off Hwy 295 W of Eddyville

Method: backpack electrofishing
Length of sample area: 212 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	10.8 mg/L	Largescale stoneroller	14		
pH:	8.2	Creek chub	12		
Total alkalinity:	182.0 mg/L	Mud darter	12		
Temperature:	76°F	Greenside darter	3		
Average width:	9.0 ft	Banded sculpin	6		
Average depth:	0.67 ft				

Bottom type: coarse gravel, fine gravel, and sand
Fish shelter: sparse; undercut banks and brush
Shade: 0-5%
Fish food: crayfish
Aquatic vegetation: filamentous algae

Stream: Crab Creek
County: Lyon

Order: III
Stream length: 8.5 mi

Description: Bait fish is the only use of this sample area.

STUDY AREA DATA

Date: June 16, 1988
Location: Joe Peek Road off Hwy 373 outside of Kuttawa

Method: backpack electrofishing
Length of sample area: 227 ft

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	8.8	mg/L	Longear sunfish	4		
pH:	7.7		Blackspotted topminnow	8		
Total alkalinity:	210.0	mg/L	Largescale stoneroller	2		
Temperature:	70°F		Redfin shiner	2		
Average width:	17.0	ft	Creek chub	1		
Average depth:	0.83	ft	Bluntnose minnow	2		

Bottom type: coarse gravel, sand, and muck
Fish shelter: medium; undercut banks, logs, and brush
Shade: 75-100%
Fish food: crayfish
Aquatic vegetation: filamentous algae

Stream: Skinframe Creek Order: III
County: Lyon Stream length: 4.0 mi

Description: This stream had some shoreline clearing, due to local cattle and hog pasture creating a source of pollution. General fishing pressure has been for rainbow trout which used to be stocked by the Kentucky Department of Fish and Wildlife Resources until 1992.

STUDY AREA DATA

Date: August 20, 1987 Method: backpack electrofishing
Location: Hwy 1943 at bridge where trout were stocked NE of Eddyville Length of sample area: 200 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	11.1 mg/L	Grass pickerel		1	
pH:	7.8	Bluegill	1		
Total alkalinity:	192.0 mg/L	Creek chub	4	2	
Temperature:	68°F	Largescale stoneroller		1	
Average width:	30.0 ft	Banded sculpin	4	4	
Average depth:	3.0 ft				
Conductivity:	235.0 umhos/cm				

Bottom type: coarse gravel, sand, silt, and detritus
Fish shelter: medium; logs, undercut banks, and ledges
Shade: 75-100%
Fish food: none
Aquatic vegetation: common naiad

Stream: Eddy Creek
County: Caldwell

Order: IV
Stream length: 9.0 mi

Description: This site of Eddy Creek was the only accessible site before it became influenced by Barkley Lake backwater.

STUDY AREA DATA

Date: July 13, 1988
Location: Mitchell Road off Hwy 903 at Lyon-Caldwell Co. line SW of Princeton

Method: backpack electrofishing
Length of sample area: 120 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	9.6 mg/L	Largemouth bass		1	
pH:	7.9	Bluegill	2	2	
Total alkalinity:	169.0 mg/L	Largescale stoneroller	3		
Temperature:	70°F	Banded sculpin	9		
Average width:	25.0 ft	Gizzard shad		2	
Average depth:	1.42 ft	Northern hog sucker		1	
Bottom type:	small rubble, gravel, sand, muck, and detritus	Golden redhorse		1	
Fish shelter:	abundant; undercut banks, logs, and brush				
Shade:	50-75%				
Fish food:	crayfish				
Aquatic vegetation:	filamentous algae				

Stream: Eddy Creek
County: Caldwell
Order: III
Stream length: 9.0 mi

Description: This sample site consisted of isolated pools of water and many brushy snags. The major land use was in cattle pasture.

STUDY AREA DATA

Date: July 13, 1988
Location: Hwy 903 SW of Princeton off Hwy 293
Method: backpack electrofishing
Length of sample area: 279 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	8.4 mg/L	Green sunfish		1	
pH:	8.0	Longear sunfish	3	5	
Total alkalinity:	132.0 mg/L	Pirate perch	1		
Temperature:	76°F	Striped shiner	1		
Average width:	30.0 ft	Largescale stoneroller	4	7	
Average depth:	0.75 ft	Bluntnose minnow	3		
Bottom type:	coarse gravel, sand, silt, muck, and detritus	Blackspotted topminnow	1		
		Creek chub	4		
Fish shelter:	abundant; undercut banks, logs, and brush	Mud darter	3		
		Banded sculpin	18	2	
Shade:	50-75%	Northern hog sucker	1		
Fish food:	crayfish	White sucker	1		
Aquatic vegetation:	filamentous algae				

Stream: Glass Creek Order: III
County: Lyon Stream length: 5.0 mi

Description: This sample area consisted mostly of isolated pools.

STUDY AREA DATA

Date: July 13, 1988 Method: backpack electrofishing
Location: Hwy 293 S of Eddyville Length of sample area: 40 ft

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	8.8	mg/L	Mud darter	1		
pH:	8.0		Blackspotted topminnow	1		
Total alkalinity:	115.0	mg/L	Creek chub	1		
Temperature:	76°F		Largescale stoneroller	4		
Average width:	30.0	ft				
Average depth:	1.0	ft				

Bottom type: coarse gravel, sand, silt, muck, and detritus
Fish shelter: medium; undercut banks and brush
Shade: 50-75%
Fish food: none
Aquatic vegetation: none

Stream: Dry Creek Order: III
County: Caldwell Stream length: 2.6 mi

Description: This sample site consisted of isolated pools with many brushy snags.

STUDY AREA DATA

Date: July 13, 1988 Method: backpack electrofishing
Location: Hwy 139 S of Princeton Length of sample area: 125 ft
N of Hopson

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	9.2	mg/L	Bluegill	2		
pH:	8.3		Longear sunfish		3	
Total alkalinity:	98.0	mg/L	Green sunfish	1	1	
Temperature:	75°F		Pirate perch	1		
Average width:	18.5	ft	Striped shiner	1		
Average depth:	0.79	ft	Redfin shiner	2		
Bottom type: small rubble, gravel, silt, muck, and detritus			Bluntnose minnow	1		
			Blackspotted topminnow	3		
Fish shelter: medium; logs and brush			Creek chub	2		
Shade:	50-75%		Yellow bullhead		1	
Fish food:	none		Golden redhorse		1	
Aquatic vegetation:	none		White sucker	1	1	

Stream: Dry Fork Creek - Dry Creek Order: III
County: Lyon Stream length: 13.7 mi

Description: Only isolated pools remained in this stream due to dry conditions in June.

STUDY AREA DATA

Date: June 24, 1988 Method: backpack electrofishing
Location: Hwy 93 SE of Lamasco Length of sample area: 150 ft

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	7.9	mg/L	Longear sunfish	1	2	
pH:	8.0		Pirate perch	1		
Total alkalinity:	92.0	mg/L	Blackspotted topminnow	5		
Temperature:	82°F		Creek chub	1	1	
Average width:	120.0	ft	White sucker	4		
Average depth:	0.45	ft				

Bottom type: coarse gravel, sand, and silt
Fish shelter: medium; undercut banks, logs, and brush
Shade: 75-100%
Fish food: crayfish
Aquatic vegetation: filamentous algae

Stream: Dry Fork Creek - Dry Creek Order: III
County: Lyon Stream length: 13.7 mi

Description: This was a very clear stream with a pool to riffle ratio of 4:1.

STUDY AREA DATA

Date: July 13, 1988 Method: backpack electrofishing
Location: Hwy 903 S of Princeton at Lyon-Caldwell Co. line Length of sample area: 243 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	8.8 mg/L	Largemouth bass		1	
pH:	7.9	Bluegill		1	2
Total alkalinity:	124.0 mg/L	Striped shiner	3	1	
Temperature:	72°F	Largescale stoneroller	58		
Average width:	21.0 ft	Mud darter	12		
Average depth:	1.67 ft	Fantail darter	3		
Bottom type: small rubble, gravel, and detritus		Creek chub	1	1	
		Northern hog sucker	6		
Fish shelter: sparse; undercut banks and brush		White sucker	13		
Shade:	50-75%				
Fish food: none					
Aquatic vegetation: filamentous algae and smartweed					

Stream: Hurricane Creek Order: III
County: Trigg Stream length: 4.8 mi

Description: This sample site had mostly isolated pools and a few riffles. Other sites on this stream were dry due to below normal rainfall during June.

STUDY AREA DATA

Date: June 24, 1988 Method: backpack electrofishing
Location: Hwy 274 back of embayment of Prizer Point Marina at Rockcastle Length of sample area: 184 ft

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	6.0	mg/L	Green sunfish	3	1	
pH:	7.9		Longear sunfish		4	
Total alkalinity:	156.0	mg/L	Blackspotted topminnow	1		
Temperature:	77°F		Rainbow darter	14		
Average width:	15.5	ft	Fringed darter	4	1	
Average depth:	1.3	ft				

Bottom type: coarse gravel, sand, silt, and detritus
Fish shelter: medium; undercut banks, logs, and brush
Shade: 75-100%
Fish food: crayfish
Aquatic vegetation: filamentous algae

Stream: Little River
County: Christian

Order: V
Stream length: 56.2 mi

Description: This site was downstream of the old Binn's Mill. The water was turbid and below normal flow conditions.

STUDY AREA DATA

Date: August 25, 1977
Location: Hwy 287 at Binn's Mill N of La Fayette

Method: rotenone
Length of sample area: 378 ft

Physical - Chemical	
Temperature:	74°F
Average width:	103 ft
Average depth:	2.5 ft
Bottom type:	bedrock and gravel
Fish shelter:	medium; boulders, ledges, logs, and brush
Fish food:	crayfish, Corbicula sp.
Aquatic vegetation:	pondweed

Fish Fauna	No. per size group F	I	H
White crappie			4
Largemouth bass		1	1
Smallmouth bass		1	
Spotted bass	1		
White bass		1	
Flathead catfish			3
Channel catfish		4	10
Spotted gar			2
Skipjack herring		4	
Bluegill		2	3
Longear sunfish		21	2
Warmouth		1	
Freshwater drum		35	33
Carp		27	
White sucker		67	19
Spotted sucker		2	2
Northern hog sucker		1	1
Logperch	3	6	
Pirate perch	1		
Gizzard shad		39	148
Brook silverside		1	
Johnny darter	1		

Stream: Little River
County: Christian

Order: V
Stream length: 56.2 mi

Description: There was very little access to this sample site due to the steep banks. This section was mostly in pools and runs.

STUDY AREA DATA

Date: August 8, 1978
Location: near Spring Hill Church between Hwy 107 and 117; gravel road near bridge

Method: rotenone
Length of sample area: 300 ft

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	7.5	mg/L	Largemouth bass		1	1
Total alkalinity:	176.0	mg/L	White crappie		1	
Temperature:	69°F		Bluegill	1	10	2
Average width:	50.6	ft	Channel catfish			25
Average depth:	2.5	ft	Green sunfish		5	
Bottom type: boulder and gravel			Longear sunfish		22	
Fish shelter: medium; undercut banks and ledges			Redear sunfish		2	
			Warmouth		1	
Aquatic vegetation: pondweed			Logperch		5	
			Carp			5
			Gizzard shad		39	4
			Northern hog sucker			6
			Spotted sucker		2	7
			Golden redhorse		1	16
			Freshwater drum		20	11

Stream: Little River
County: Christian

Order: V
Stream length: 56.2 mi

STUDY AREA DATA

Date: August 8, 1978
Location: 6 mi W of Herndon on Old Mason Mill Road

Method: rotenone
Length of sample area: 300 ft

Physical - Chemical		
D.O:	10.5	mg/L
Total alkalinity:	1.4	mg/L
Temperature:	75°F	
Average width:	55.0	ft
Average depth:	3.0	ft

Bottom type: boulder, gravel, sand, clay, and silt

Fish shelter: medium; undercut banks

Aquatic vegetation: none

Fish Fauna	No. per size group F	I	H
Largemouth bass		1	
Spotted bass	1	1	
White bass		1	
Channel catfish			11
Green sunfish		2	
Longear sunfish		5	1
Bluegill	5		
Logperch	5	4	
Carp			3
Skipjack herring		2	
Northern hog sucker		3	1
Spotted sucker		1	
Golden redhorse			2
Pirate perch	2		
Gizzard shad		6	21
Freshwater drum		23	22

Stream: Casey Creek
County: Trigg

Order: IV
Stream length: 5.0 mi

Description: General fishing pressure is for rainbow and brown trout, which are stocked by the Kentucky Department of Fish and Wildlife Resources. Brown trout have been stocked since 1988. Fishing for carry-over trout is fair according to trout anglers. This creek consists of many deep pools and large riffles. This sample site is at the mouth of Casey Creek.

STUDY AREA DATA

Date: August 19, 1987
Location: Hwy 1253 bridge at Casey Creek mouth SE of Cadiz

Method: backpack electrofishing
Length of sample area: 300 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	9.2 mg/L	Spotted bass		1	
Temperature:	70°F	Longear sunfish		4	
Average width:	45.0 ft	Northern hog sucker		1	
Average depth:	3.0 ft	Brook silverside	1		
Bottom type:	coarse gravel, sand, and silt	Largescale stoneroller	15	8	
		Blackspotted topminnow	6		
Fish shelter:	medium; boulders, ledges, and logs	Suckermouth minnow	3		
		Steelcolor shiner	1		
Shade:	50-100%	Greenside darter	2		
Fish food:	crayfish	Orangethroat darter	4		
Aquatic vegetation:	filamentous algae	Gizzard shad		1	1
		Banded sculpin	6		

Stream: Casey Creek
County: Trigg

Order: IV
Stream length: 5.0 mi

Description: This stream has had some shoreline clearing by local farm landowners. General fishing pressure is for rainbow and brown trout, which are stocked by the Kentucky Department of Fish and Wildlife Resources. Brown trout have been stocked since 1988. Carry-over trout fishing is fair according to trout anglers. This creek consists of many deep pools and large riffles. This site is at the headwater where one of many springs enter this creek.

STUDY AREA DATA

Date: August 19, 1987
Location: off Hwy 525 behind Corinth Baptist Church

Method: backpack electrofishing
Length of sample area: 100 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
Average width:	6.0 ft	Grass pickerel		1	
Average depth:	1.5 ft	Longear sunfish			1
Bottom type:	coarse gravel and sand	Green sunfish		2	
Fish shelter:	medium; boulders and ledges	White sucker	8		
		Creek chub		2	
Shade:	75-100%	Largescale stoneroller		9	
Fish food:	none	Pirate perch	3		
Aquatic vegetation:	filamentous algae	Suckermouth minnow	1		
		Banded sculpin	4		
		Orangethroat darter	13		

Stream: Casey Creek
County: Trigg

Order: IV
Stream length: 5.0 mi

Description: This stream has had some shoreline clearing by local farm landowners. General fishing pressure is for rainbow and brown trout which are stocked by the Kentucky Department of Fish and Wildlife Resources. Brown trout have been stocked since 1988. Carry-over trout fishing is fair according to some trout anglers. This creek consists of many deep pools and large riffles.

STUDY AREA DATA

Date: August 18, 1987
Location: Hwy 525 at bridge where trout are stocked SE of Cadiz

Method: backpack electrofishing
Length of sample area: 300 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	9.4 mg/L	Rainbow trout		1	5
pH:	8.5	Rock bass		3	1
Total alkalinity:	166.0 mg/L	Green sunfish		1	
Temperature:	68°F	Longear sunfish	1	2	
Average width:	45.0 ft	Carp		1	
Average depth:	1.5 ft	White sucker		1	
Conductivity:	240.0 umhos/cm	Northern hog sucker		1	
Bottom type:	coarse gravel and sand	Creek chub	3	2	
Fish shelter:	medium; logs, undercut banks, and ledges	Largescale stoneroller	7	4	
		Steelcolor shiner	1		
Shade:	50-75%	Greenside darter	20	1	
Fish food:	none	Banded sculpin	8	3	
Aquatic vegetation:	none				

Stream: Sinking Fork - Little River Order: IV
County: Trigg Stream length: 30.6 mi

Description: This site is close to the confluence with Little River. Steep banks and deep bedrock lined pools made access limited.

STUDY AREA DATA

Date: July 29, 1993 Method: backpack electrofishing
Location: at bridge on Kings Chapel Road Off of Hwy 272 Sample effort: 0.22 hour

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	5.5 mg/L	Spotted bass			1
pH:	7.8	Northern hog sucker		1	
Total alkalinity:	324.9 mg/L	Logperch		1	
Temperature:	70°F	Orangethroat darter	1		
Average width:	35.0 ft	Striped shiner	1		
Average depth:	0.80 ft	Creek chub		1	
Conductivity:	190 umhos/cm	Largescale stoneroller	1		
Turbidity:	19.0 NTU	Banded sculpin	7	11	

Bottom type: bedrock, rubble, gravel, and clay
Fish shelter: abundant; undercut banks, logs, and boulders
Shade: 75-100%
Fish food: crayfish
Aquatic vegetation: none

Stream: Sinking Fork - Little River Order: IV
County: Trigg Stream length: 30.6 mi

Description: This site is just outside of Caledonia, Kentucky. Steep banks and deep bedrock lined pools made access limited.

STUDY AREA DATA

Date: July 29, 1993 Method: backpack electrofishing
Location: Caledonia-Montgomery Road at junction with Hwy 272 Sample effort: 0.21 hour

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	6.3 mg/L	Grass pickerel		1	
pH:	7.5	Longear sunfishcker		1	
Total alkalinity:	342.9 mg/L	Green sunfish	1	4	
Temperature:	66°F	Northern hog sucker		1	
Average width:	35.0 ft	Banded sculpin	10	22	
Average depth:	0.60 ft				
Conductivity:	360 umhos/cm				
Turbidity:	18.0 NTU				

Bottom type: bedrock, boulders, rubble, gravel, and clay
Fish shelter: medium; undercut banks and boulders
Shade: 75-100%
Fish food: crayfish
Aquatic vegetation: none

Stream: Sinking Fork - Little River Order: IV
County: Christian Stream length: 30.6 mi

Description: At this site, stream quality was not as good. Water was pooled up by large root wades. There was considerably more silt, and water was warmer than downstream.

STUDY AREA DATA

Date: July 29, 1993 Method: backpack electrofishing
Location: on Hwy 117 off of Hwy 272 at Julien, Kentucky Sample effort: 0.20 hour

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	4.3 mg/L	Spotted bass	1		
pH:	7.6	Longear sunfishcker	8	10	4
Total alkalinity:	256.0 mg/L	Green sunfish		7	2
Temperature:	77°F	Bluegill	5	3	
Average width:	15.0 ft	Creek chublpin	2		
Average depth:	0.40 ft	Blackspotted topminnow	3		
Conductivity:	400 umhos/cm	Bluntnose minnow	24		
Turbidity:	22.0 NTU	Redfin shiner	13		
Bottom type: bedrock, gravel, silt, muck, and detritus		Slabrock darter	1		
		Banded sculpin	6	9	
Fish shelter: abundant; boulders, logs, and brush					
Shade:	75-100%				
Fish food:	crayfish				
Aquatic vegetation:	none				

Stream: Sinking Fork - Little River Order: IV
County: Christian Stream length: 30.6 mi

Description: This site had clear flowing water. Several large pools with bedrock bottoms were also sampled.

STUDY AREA DATA

Date: July 29, 1993 Method: backpack electrofishing and seine
Location: at Shilo Church on Hwy 68/80 W of Hopkinsville Sample effort: 0.31 hour

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	7.0 mg/L	Spotted bass	1	1	
pH:	7.6	Grass pickerel	1		
Total alkalinity:	359.1 mg/L	Green sunfish	3	11	
Temperature:	62.6°F	Longear sunfish	13	50	3
Average width:	30.0 ft	Striped shiner	63	13	
Average depth:	0.60 ft	Largescale stoneroller	1	3	
Conductivity:	390 umhos/cm	Bluntnose minnow	14		
Turbidity:	15.0 NTU	Redfin shiner	12		
Bottom type:	bedrock, boulders, gravel, and clay	Blackspotted topminnow	1		
		Creek chubsucker	1		
Fish shelter:	abundant; boulders, logs, and brush	Blackside darter	2		
		Orangethroat darter	12		
Shade:	75-100%	Greenside darter	2		
Fish food:	crayfish	Banded sculpin	5	6	
Aquatic vegetation:	none				

Stream: Sinking Fork - Little River Order: IV
County: Christian Stream length: 30.6 mi

Description: This site had clear flowing water. Several large pools with bedrock bottoms were also sampled. This site is most distal from the mouth of the stream.

STUDY AREA DATA

Date: July 30, 1993 Method: backpack electrofishing
Location: at Hwy 91, NW of Hopkinsville Sample effort: 0.25 hour

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	6.3 mg/L	Spotted bass		2	
pH:	7.8	Grass pickerel	1		
Total alkalinity:	307.8 mg/L	Green sunfish	6		
Temperature:	68°F	Longear sunfish	5	19	13
Average width:	25.0 ft	Golden redhorse	1		
Average depth:	0.60 ft	Largescale stoneroller		2	
Conductivity:	260 umhos/cm	Bluntnose minnow	6		
Turbidity:	30.0 NTU	Redfin shiner	3		
Bottom type:	bedrock, boulders, gravel, and clay	Striped shiner	7	31	
		Pirate perch	1		
Fish shelter:	abundant; boulders, logs, and brush	Creek chubsucker	2		
		Blackspotted topminnow	2		
Shade:	75-100%	Orangethroat darter	13	4	
Fish food:	crayfish				
Aquatic vegetation:	none				

Stream: Middle Fork Little River Order: III
County: Christian Stream length: 1.8 mi

STUDY AREA DATA

Date: August 15, 1978 Method: seine
Location: off of Hwy 107 just N
of Hopkinsville below Lake Tandy

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	8.2	mg/L	Largemouth bass		8	
Total alkalinity:	82.0	mg/L	Longear sunfish		1	1
Temperature:	84°F		Carp			1
Average width:	20.0	ft	Blackspotted topminnow	1		
Average depth:	1.5	ft				

Bottom type: bedrock and rubble
Fish shelter: medium; undercut
banks and brush
Aquatic vegetation: none

Stream: Lower Branch - Little River Order: III
County: Christian Stream length: 2.5 mi

STUDY AREA DATA

Date: August 15, 1978 Method: seine
Location: off of Hwy 507 NE of Hopkinsville below Lake Boxley Length of sample area: 100 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	9.8 mg/L	Largemouth bass		1	
Total alkalinity:	137.0 mg/L	Bluegill	2	7	5
Temperature:	82°F				
Average width:	30.0 ft				
Average depth:	2.5 ft				

Bottom type: bedrock and rubble
Fish shelter: medium; boulders and ledges
Fish food: Corbicula sp.
Aquatic vegetation: none

Stream: Muddy Fork - Little River Order: IV
County: Trigg Stream length: 33.3 mi

Description: This site was at the I-24 bridge. The water at this sample site was turbid because of the silt coming from construction of the bridge.

STUDY AREA DATA

Date: June 18, 1979 Method: rotenone
Location: first bridge upstream from Hwy 139 N of Cadiz Length of sample area: 170 ft

Physical - Chemical	
Temperature:	68°F
Average width:	52.7 ft
Average depth:	5.7 ft
Bottom type:	boulders, silt, clay, and mud
Fish shelter:	medium; boulders, ledges, logs, and undercut banks

Fish Fauna	No. per size group F	I	H
Channel catfish		4	3
Warmouth			2
Bluegill		2	5
Longear sunfish	3	6	1
Green sunfish	2	2	
Carp			3
Spotted sucker		4	
White sucker		1	
River redhorse			1
Freshwater drum		12	3
Blackspotted topminnow	1		
Gizzard shad		41	33

Stream: Muddy Fork - Little River Order: III
County: Christian Stream length: 33.3 mi

Description: Only water quality measurements were taken at this site due not being considered as having any fishery importance. Longear sunfish were noted on beds.

STUDY AREA DATA

Date: June 19, 1979
Location: Hwy 91 12 mi NW of Hopkinsville

Physical - Chemical

D.O: 3.2 mg/L
Total alkalinity: 140.0 mg/L
Temperature: 76°F
Bottom type: boulders, gravel, silt, clay, and mud
Fish shelter: medium; brush
Aquatic vegetation: none

Stream: Dyer Creek Order: III
County: Trigg Stream length: 3.9 mi

Description: There was very little flow at this site. The pool to riffle ratio was about 9:1.

STUDY AREA DATA

Date: June 24, 1988 Method: backpack electrofishing
Location: off Hwy 274 NW of Cadiz Length of sample area: 167 ft

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	5.9	mg/L	Green sunfish	1		
pH:	7.6		Longear sunfish		4	
Total alkalinity:	142.0	mg/L	Bluegill		1	
Temperature:	75°F		Blackspotted topminnow	3		
Average width:	9.0	ft	Creek chub		1	
Average depth:	0.61	ft	Largescale stoneroller	13	6	
Bottom type: coarse gravel and sand			Rainbow darter	8		
Fish shelter: medium; undercut banks, logs, and brush			Yellow bullhead		1	
Shade: 50-75%						
Fish food: none						
Aquatic vegetation: filamentous algae						

Stream: Blue Spring
County: Trigg
Order: III
Stream length: 4.2 mi

Description: This site was influenced by a spring. Little fishing pressure occurs in this creek because it flows through a golf course. The annual flow is constant, due to the spring.

STUDY AREA DATA

Date: June 23, 1988
Method: backpack electrofishing
Location: at the 4-way stop at Hwy 918 and 1489 N of Hwy 68-801 adjacent to Barkley Lake Resort Golf Course
Length of sample area: 212 ft

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	9.8	mg/L	Longear sunfish	1		
pH:	7.9		Northern hog sucker		1	
Total alkalinity:	172.0	mg/L	Banded sculpin	10	2	
Temperature:	68°F		Rainbow darter	10		
Average width:	10.5	ft				
Average depth:	0.52	ft				

Bottom type: coarse gravel and sand
Fish shelter: sparse; undercut banks
Shade: 0-5%
Fish food: crayfish and leeches
Aquatic vegetation: filamentous algae

Stream: Hopson Creek
County: Trigg

Order: III
Stream length: 5.5 mi

Description: This site was influenced by the constant flow of a spring. Little fishing pressure occurs in this creel.

STUDY AREA DATA

Date: June 24, 1988
Location: gravel road off Hwy 68-80 NE of Canton

Method: backpack electrofishing
Length of sample area: 194 ft

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	8.6	mg/L	Southern redbelly dace	9		
pH:	8.0		Largescale stoneroller	17	7	
Total alkalinity:	88.0	mg/L	Fringed darter	7		
Temperature:	75°F		Rainbow darter	9		
Average width:	6.5	ft	Fantail darter	2		
Average depth:	0.53	ft				

Bottom type: large to coarse gravel, sand, and silt
Fish shelter: sparse; undercut banks
Shade: 25-50%
Fish food: crayfish
Aquatic vegetation: filamentous algae

Stream: Beechy Creek
County: Trigg

Order: III
Stream length: 4.6 mi

STUDY AREA DATA

Date: August 25, 1983
Location: SE of Canton, on Hwy 164 at concrete bridge

Method: backpack electrofishing
Length of sample area: 210 ft

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	7.5	mg/L	Bluegill		1	
Total alkalinity:	1630.0	mg/L	Suckermouth minnow	1		
Temperature:	61.7°F		Orangethroat darter	18		
Average width:	18.0	ft	Banded sculpin	21	14	
Average depth:	0.92	ft				

Bottom type: sand, gravel, and silt
Fish shelter: abundant; brush, undercut banks, and ledges
Shade: 25-50%
Fish food: none
Aquatic vegetation: filamentous algae

Stream: Donaldson Creek
County: Trigg

Order: IV
Stream length: 4.5 mi

STUDY AREA DATA

Date: August 25, 1983
Location: SE of Canton, 1.5 mi E of Hwy 164 on Hwy 807

Method: backpack electrofishing
Length of sample area: 220 ft

Physical - Chemical	
D.O:	6.0 mg/L
Total alkalinity:	1002.0 mg/L
Temperature:	76.9°F
Average width:	23.0 ft
Average depth:	0.52 ft
Bottom type:	sand and gravel
Fish shelter:	medium; logs and undercut banks
Shade:	25-50%
Fish food:	none
Aquatic vegetation:	filamentous algae

Fish Fauna	No. per size group F	I	H
Rock bass	1		1
Green sunfish	1	3	
Longear sunfish			1
Northern hog sucker	2	1	
Yellow bullhead	6		
Creek chub	12	3	
Redtail chub		3	
Central stoneroller	94	57	
Suckermouth minnow	1		
Pirate perch		1	
Blackspotted topminnow	1		
Fantail darter	18		
Snubnose darter	6		
Orangethroat darter	12		
Banded sculpin	6	4	

Stream: Donaldson Creek
County: Trigg

Order: IV
Stream length: 4.5 mi

STUDY AREA DATA

Date: August 24, 1983
Location: SE of Canton, 2 mi E of Hwy 164 on Hwy 807

Method: backpack electrofishing
Length of sample area: 220 ft

Physical - Chemical		Fish Fauna	No. per size group[a] F	I	H
Temperature:	73.6°F	Grass pickerel		1	
Average width:	23.0 ft	Bluegill			1
Average depth:	0.75 ft	Green sunfish		1	
Bottom type:	coarse gravel and sand	Longear sunfish		1	
Fish shelter:	abundant; logs, brush, and undercut banks	Redear sunfish		2	
		Northern hog sucker		1	
Shade:	50-75%	Yellow bullhead	1		
Fish food:	none	Creek chub	5	2	
Aquatic vegetation:	filamentous algae	Redtail chub		4	
		Central stoneroller	76	26	
		Blackspotted topminnow	1		
		Fantail darter	8		
		Snubnose darter	11		
		Orangethroat darter	19		
		Banded sculpin	3	8	

Stream: Donaldson Creek
County: Trigg
Order: IV
Stream length: 4.5 mi

Description: This site is downstream of the concrete ford at the former trout hatchery site.

STUDY AREA DATA

Date: August 25, 1983
Location: SE of Canton, E of Hwy 164 on Hwy 208 3.4 mi
Method: backpack electrofishing
Length of sample area: 220 ft

Physical - Chemical	
D.O:	8.6 mg/L
Total alkalinity:	143.0 mg/L
Temperature:	68°F
Average width:	10.0 ft
Average depth:	0.5 ft
Bottom type:	boulders, rubble, gravel, sand, and silt
Fish shelter:	abundant; logs, brush, and undercut banks
Shade:	25-50%
Fish food:	crayfish
Aquatic vegetation:	duckweed

Fish Fauna	No. per size group F	I	H
Grass pickerel			1
Green sunfish		3	
Creek chub	9	7	
Creek chubsucker		1	
Redtail chub		3	
Central stoneroller	17	20	
Fantail darter	54		
Snubnose darter	14		
Orangethroat darter	51		
Banded sculpin	8	18	

Stream: Unnamed tributary of Dry Creek Order: III
County: Trigg Stream length: 3.2 mi

Description: This site was under the influence of a spring. Little fishing pressure occurs in this creek. The annual flow is constant due to the spring. It was flowing into Dry Creek, which for the most part, was dry.

STUDY AREA DATA

Date: June 21, 1988 Method: backpack electrofishing
Location: Hwy 164 E of Linton

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	5.5	mg/L	Spring cavefish	2		
pH:	7.5		Blackspotted topminnow	1		
Total alkalinity:	42.0	mg/L	Creek chub	1		
Temperature:	73°F		Johnny darter	13		
Average width:	17.0	ft	Blacknose dace	1		
Average depth:	0.45	ft				

Bottom type: coarse gravel
Fish shelter: sparse; brush
Shade: 50-75%
Fish food: crayfish
Aquatic vegetation: filamentous algae

Stream: West Fork Red River Order: IV
County: Christian Stream length: 32.8 mi

Description: Several rock bass were observed, though few were captured. The substrate was mostly boulders. This part of the river had numerous large, deep pools of water and riffles. There were several log jams and root snags.

STUDY AREA DATA

Date: July 1, 1990
Location: bridge at pump station on Carter Road S of Pembroke

Method: backpack electrofishing and seine
Length of sample area: 600 ft
Sampling effort: 0.50 hour and 4 20-ft seine hauls

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	9.9 mg/L	Rock bass			1
pH:	8.1	Longear sunfish			1
Total alkalinity:	222.3 mg/L	Northern hog sucker		4	
Temperature:	70°F	Freshwater drum		1	1
Average width:	30.0 ft	Rosefin shiner	1		
Average depth:	3.00 ft	Largescale stoneroller	69	8	
Conductivity:	300.0 umhos/cm	Greensided darter		3	
Turbidity:	22.0 NTU	Redline darter	46		
Bottom type:	bedrock to fine gravel, silt, and muck	Fantail darter	4		
		Orangethroat darter	1		
Fish shelter:	abundant; boulders, logs, ledges, and undercut banks	Banded sculpin	272	23	
Shade:	50%				
Fish food:	crayfish				
Aquatic vegetation:	filamentous algae				

Stream: West Fork Red River Order: IV
County: Christian Stream length: 32.8 mi

Description: This sample area consisted of large, deep pools with abundant rubble substrate and several log jams. The sides of the river basin had several caves in the large rock walls.

STUDY AREA DATA

Date: July 2, 1990
Location: Hwy 1453 S of Pembroke

Method: backpack electrofishing and seine
Length of sample area: 600 ft
Sampling effort: 0.79 hour and 5 20-ft seine hauls

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	9.4 mg/L	Rock bass		3	2
pH:	8.3	Northern hog sucker		2	
Total alkalinity:	239.4 mg/L	Freshwater drum			1
Temperature:	69°F	Rosefin shiner	7		
Average width:	45.0 ft	Largescale stoneroller	28	38	
Average depth:	3.0 ft	Creek chub	2	2	
Conductivity:	292.0 umhos/cm	Greensided darter		1	
Turbidity:	36.0 NTU	Logperch		1	
Bottom type:	bedrock to coarse gravel and silt	Rainbow darter	3		
		Fantail darter	1		
Fish shelter:	abundant; boulders, undercut banks, logs, and ledges	Banded sculpin	18	39	
		Mottled sculpin	1		
Shade:	50%				
Fish food:	crayfish				
Aquatic vegetation:	filamentous algae				

Stream: West Fork Red River Order: IV
County: Todd Stream length: 32.8 mi

Description: This is a large open area of the stream. It has a bedrock bottom and numerous boulders. There is good flow and several large riffles. Runoff into this area comes from agricultural and timber covered land.

STUDY AREA DATA

Date: June 26, 1990
Location: Fredricks Road off Hwy 41 SW of Trenton
Method: backpack electrofishing and seine
Length of sample area: 300 ft
Sampling effort: 0.15 hour and 7 20-ft seine hauls

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	12.8	mg/L	Northern hog sucker	1		
pH:	7.8		Rosefin shiner	11	3	
Total alkalinity:	222.3	mg/L	Largescale stoneroller	14	5	
Temperature:	66°F		Bluntnose minnow	1		
Average width:	40.0	ft	Logperch	1		
Average depth:	0.75	ft	Banded sculpin	9	1	
Conductivity:	320.0	umhos/cm				

Bottom type: bedrock and boulders
Fish shelter: medium; boulders, ledges, logs, and undercut banks
Shade: 50%
Fish food: crayfish, snails, and *Corbicula* sp.
Aquatic vegetation: none

Stream: West Fork Red River Order: IV
County: Todd Stream length: 32.8 mi

Description: This sample site has a large creek basin with substrate primarily of boulders and bedrock. The stream flow gets 8 to 10 feet high at this site during flooding conditions. This site has a fishery for rock bass and panfish.

STUDY AREA DATA

Date: June 27, 1990
Location: Hwy 41 W of Trenton
Method: backpack electrofishing
Length of sample area: 125 ft
Sampling effort: 0.25 hour

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	5.5 mg/L	Rock bass			2
pH:	6.4	Bluegill		1	
Total alkalinity:	222.3 mg/L	Northern hog sucker		1	
Temperature:	66.2°F	Rosefin shiner	8		
Average width:	27.5 ft	Creek chub		1	
Average depth:	0.65 ft	Largescale stoneroller		9	
Conductivity:	350.0 umhos/cm	Orangethroat darter	2		
Turbidity:	38.0 NTU	Banded sculpin	9	1	

Bottom type: bedrock and fine gravel
Fish shelter: abundant; boulders, logs, and undercut banks
Shade: 75%
Fish food: crayfish
Aquatic vegetation: none

Stream: West Fork Red River Order: III
County: Todd Stream length: 32.8 mi

Description: This sample area has several large, deep pools of water. Large rubble is the primary substrate. At normal water conditions, this section has numerous riffles. Land use in this area is in silviculture and agriculture.

STUDY AREA DATA

Date: June 26, 1990 Method: seine
Location: Maton Road SW of Elkton off of Hwy 475 Length of sample area: 100 ft
Sampling effort: 5 20-ft seine hauls

Physical - Chemical		Fish Fauna	No. per size group[a] F	I	H
D.O:	12.2 mg/L	Grass pickerel		1	
pH:	8.2	Rosefin shiner	64		
Total alkalinity:	273.6 mg/L	Blackspotted topminnow	5		
Temperature:	65°F	Largescale stoneroller	2		
Average width:	25.0 ft	Banded sculpin	7		
Average depth:	0.83 ft				
Conductivity:	980.0 umhos/cm				
Turbidity:	14.0 NTU				

Bottom type: large rubble to fine gravel and muck
Fish shelter: medium; boulders, logs, brush, and undercut banks
Shade: 75%
Fish food: snails, crayfish, and Corbicula sp.
Aquatic vegetation: none

Stream: West Fork Red River Order: III
County: Todd Stream length: 32.8 mi

Description: This sample area had minimum flow and was mostly in pools with a deep pool under the bridge. Land use was in silviculture and agriculture.

STUDY AREA DATA

Date: June 26, 1990
Location: Hwy 80 W of Elkton

Method: backpack electrofishing and seine
Length of sample area: 100 ft
Sampling effort: 0.04 hour and 3 20-ft seine hauls

Physical - Chemical		
D.O:	7.8	mg/L
pH:	8.3	
Total alkalinity:	153.9	mg/L
Temperature:	65.0	
Average width:	6.0	ft
Average depth:	0.67	ft
Conductivity	230.0	umhos/cm

Bottom type: large rubble to fine rubble and muck
Fish shelter: medium; boulders and logs
Shade: 75%
Fish food: crayfish
Aquatic vegetation: none

Fish Fauna	No. per size group[a] F	I	H
Green sunfish		1	
Rosefin shiner	10		
Blackspotted topminnow	1		
Spottail darter	6		

Stream: Unnamed tributary - West Fork Red River Order: III
County: Todd Stream length: 7.0 mi

Description: This section of the creek is limited by low flow and has very few riffles. The creek bed is comprised mostly of boulders. Land use is mostly in silviculture.

STUDY AREA DATA

Date: June 27, 1990
Location: Author Henderson Road off of Hwy 80 W of Elkton
Method: backpack electrofishing
Length of sample area: 275 ft
Sampling effort: 0.20 hour

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	5.9 mg/L	Green sunfish	2	2	
pH:	7.8	Longear sunfish	3		
Total alkalinity:	307.8 mg/L	Bluntnose minnow	1		
Temperature:	66.2°F	Snubnose darter	2		
Average width:	30.0 ft	Spottail darter	5		
Average depth:	1.00 ft	Orangespotted sunfish	2		
Conductivity	385.0 umhos/cm	Banded sculpin	17		
Turbidity:	38.0 NTU				

Bottom type: large rubble to fine gravel, silt, muck, and detritus
Fish shelter: abundant; boulders, logs, and undercut banks
Shade: 75%
Fish food: none
Aquatic vegetation: none

Stream: Unnamed tributary - West Fork Red River Order: II
County: Todd Stream length: 7.0 mi

Description: This site shows no sign of any fishing pressure. Land use is both agriculture and silviculture. A source of pollution is from a hog and cattle farm. This area of the creek is 90% pool habitat. The water was turbid and had very little flow.

STUDY AREA DATA

Date: June 26, 1990
Location: Tabernacle Road off Hwy 80 NW of Elkton
Method: backpack electrofishing and seine
Length of sample area: 750 ft
Sampling effort: 0.1 hour and 5 20-ft seine hauls

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	9.8 mg/L	Longear sunfish	1		
pH:	7.4	Creek chub	1		5
Total alkalinity:	290.7 mg/L	Suckermouth minnow	1		
Temperature:	64°F	Spottail darter	1		
Average width:	7.0 ft				
Average depth:	0.42 ft				
Conductivity:	410.0 umhos/cm				
Turbidity:	104.0 NTU				

Bottom type: boulders to coarse gravel and muck
Fish shelter: medium; boulders and logs
Shade: 75%
Fish food: crayfish and tadpoles
Aquatic vegetation: none

Stream: Unnamed tributary
County: Todd

Order: II
Stream length: 7.0 mi

Description: Land use in this section is silviculture and cattle farming. This is a small creek with limited flow.

STUDY AREA DATA

Date: June 27, 1990
Location: Hwy 80 W of Elkton

Method: backpack electrofishing
Length of sample area: 235 ft
Sampling effort: 0.12 hour

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	3.2 mg/L	Green sunfish	1	3	
pH:	7.9	Longear sunfish	5		
Total alkalinity:	376.2 mg/L	Creek chub	15	3	
Temperature:	64.4°F	Bluntnose minnow	13		
Average width:	12.0 ft	Creek chubsucker	2	2	
Average depth:	0.62 ft	Spottail darter	13		
Conductivity:	325.0 umhos/cm	Banded sculpin	3		
Turbidity:	9.8 NTU				

Bottom type: boulder to fine gravel, silt, muck, and detritus
Fish shelter: abundant; undercut banks, boulders, and logs
Shade: 75%
Fish food: crayfish
Aquatic vegetation: filamentous algae

Stream: Montgomery Creek – West Fork Red River Order: III
County: Christian Stream length: 6.5 mi

Description: This sample site has a lot of rock shelter for fish. There are several springs that flow into this section. In this sample area, 85% of the stream is in pools and 15% is in riffles.

STUDY AREA DATA

Date: July 2, 1990 Method: backpack electrofishing and seine
Location: Anderson Road next to Todd Co. line SE of Pembroke Length of sample area: 250 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	6.8 mg/L	Rock bass			2
pH:	7.8	Green sunfish		2	4
Total alkalinity:	256.5 mg/L	Northern hog sucker		3	
Temperature:	56.3°F	Rosefin shiner	21		
Average width:	27.0 ft	Suckermouth minnow	1		
Average depth:	0.50 ft	Creek chub	4	5	
Conductivity:	302.0 umhos/cm	Bluntnose minnow	1		
Turbidity:	8.8 NTU	Largescale stoneroller		2	
Bottom type: bedrock to fine gravel, silt, and muck		Fantail darter	3		
		Snubnose darter	10		
Fish shelter: abundant; boulders, logs, and undercut banks		Banded sculpin	40	10	
Shade: 75%					
Fish food: crayfish					
Aquatic vegetation: filamentous algae					

Stream: Montgomery Creek - West Fork Red River Order: II
County: Christian Stream length: 6.5 mi

Description: This sample site consists of about 60% pool and 40% riffle areas. There are a lot of log jams for fish habitat.

STUDY AREA DATA

Date: June 26, 1990
Location: Mason Lane S of US Hwy 41 and Pembroke
Method: seine
Length of sample area: 92 ft
Sampling effort: 7 20-ft seine hauls

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	13.8 mg/L	Rosefin shiner	18		
pH:	7.8	Creek chub	3		
Total alkalinity:	256.5 mg/L	Snubnose darter	1		
Temperature:	68°F	Fantail darter	1		
Average width:	25.0 ft	Banded sculpin	3		
Average depth:	0.92 ft				
Conductivity:	355.0 umhos/cm				
Turbidity:	28.0 NTU				

Bottom type: bedrock to fine gravel, silt, and detritus
Fish shelter: abundant; logs, brush, boulders, and undercut banks
Shade: 75%
Fish food: crayfish
Aquatic vegetation: none

Stream: Montgomery Creek - West Fork Red River Order: II
County: Christian Stream length: 6.5 mi

Description: Land use in is silviculture. This stream was limited in flow and consisted of only pools. There were several log jams and the water was turbid. The bottom was primarily large rubble and silt.

STUDY AREA DATA

Date: June 27, 1990
Location: Hwy 115 NE of Pembroke

Method: backpack electrofishing and seine
Length of sample area: 145 ft
Sampling effort: 0.03 hour and 3 20-ft seine hauls

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	6.2 mg/L	Longear sunfish	4	2	
pH:	8.0	Rosefin shiner	35		
Total alkalinity:	239.4 mg/L	Golden shiner	3		
Temperature:	69°F	Bluntnose minnow	20		
Average width:	20.0 ft	Suckermouth minnow	2		
Average depth:	1.34 ft	Creek chubsucker	1		
Conductivity:	345.0 umhos/cm	Orangespotted sunfish	3		
Turbidity:	16.0 NTU				

Bottom type: boulder to coarse gravel, silt, and muck
Fish shelter: medium; boulders, logs, brush, and undercut banks
Shade: 75%
Fish food: none
Aquatic vegetation: none

Stream: Montgomery Creek - West Fork Red River Order: II
County: Christian Stream length: 6.5 mi

Description: This section of the small creek has limited flow. Sampling centered around a large, deep pool at the bridge. Land use is in silviculture.

STUDY AREA DATA

Date: June 27, 1990 Method: backpack electrofishing
Location: Hammack Road off Hwy 115 Length of sample area: 60 ft
N of Pembroke

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	8.5 mg/L	Bluegill	2		
pH:	7.2	Green sunfish	5		
Total alkalinity:	256.5 mg/L	Longear sunfish	2	2	
Temperature:	70.2°F	Rosefin shiner	1		
Average width:	20.0 ft	Creek chub		1	
Average depth:	1.21 ft	Blackspotted topminnow	1		
Conductivity:	340.0 umhos/cm	Creek chubsucker	2		
Turbidity:	22.0 NTU	Snubnose darter	2		
Bottom type: boulder to fine gravel, silt, and muck		Banded sculpin		1	
Fish shelter: abundant; undercut banks, logs, brush, and boulders					
Shade:	75%				
Fish food:	none				
Aquatic vegetation:	none				

Stream: Demumbers Creek Order: III
County: Lyon Stream length: 2.6 mi

Description: Several springs flow into this stream. The substrate in this area was of small gravel. The pool to riffle ratio was 75:25.

STUDY AREA DATA

Date: July 6, 1989 Method: backpack electrofishing
Location: LBL Road 112 at ford Length of sample area: 200 ft
Sampling effort: 8.53 min

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	9.2	mg/L	Creek chub	25		
pH:	8.6					
Total alkalinity:	17.1	mg/L				
Temperature:	64°F					
Average width:	4.0	ft				
Average depth:	0.67	ft				
Conductivity:	31	umhos/cm				
Turbidity:	4.2	NTU				

Bottom type: coarse to fine gravel, sand, silt, and detritus
Fish shelter: medium; undercut banks, and logs
Shade: 75%
Fish food: frogs
Aquatic vegetation: none

Stream: Clay Creek
County: Lyon

Order: I
Stream length: 1.0 mi

Description: The substrate at this sample site is composed of mainly muck and detritus. Fish habitat was comprised of logs and brush. Barkley Lake influences this sample area during summer pool level of the lake.

STUDY AREA DATA

Date: July 6, 1989
Location: LBL Road 123 at Barnetts

Method: backpack electrofishing
Length of sample area: 175 ft
Sampling effort: 0.16 hour

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	8.2	mg/L	Grass pickerel		3	
pH:	7.9		Bluegill	7	1	
Total alkalinity:	17.1	mg/L	Green sunfish	2	1	1
Temperature:	82°F		Warmouth sunfish		1	
Average width:	4.0	ft	Yellow bullhead	3		
Average depth:	0.42	ft	Creek chubsucker		1	
Conductivity:	41.0	umhos/cm	Golden shiner		1	
Turbidity:	2.2	NTU	Pugnose minnow	1		
			Suckermouth minnow	13		

Bottom type: fine gravel, silt, muck, and detritus
Fish shelter: medium; logs and brush
Shade: 5%
Fish food: none
Aquatic vegetation: none

Stream: Green Branch
County: Lyon

Order: II
Stream length: 1.3 mi

Description: This is a small gravel creek that had a good flow of water at the sample time. The pool riffle ratio was 50:50.

STUDY AREA DATA

Date: July 7, 1989
Location: LBL Road 409 off of LBL Road 129

Method: backpack electrofishing
Length of sample area: 239.0 ft
Sampling effort: 5.53 min

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	8.0 mg/L	Grass pickerel	1		
pH:	8.0	Green sunfish		1	
Total alkalinity:	139.9 mg/L	Yellow bullhead		1	
Temperature:	70°F	Creek chubsucker		1	
Average width:	4.0 ft				
Average depth:	0.42 ft				
Conductivity:	130 umhos/cm				
Turbidity:	2.2 NTU				

Bottom type: small rubble to fine gravel and sand
Fish shelter: medium; undercut banks and brush
Shade: 75%
Fish food: crayfish and tadpoles
Aquatic vegetation: none

Stream: Fulton Creek
County: Lyon

Order: III
Stream length: 2.9 mi

Description: This sample area is located at the junction of the creeks of both Curry Hollow and Racetrack Hollow. The pool/riffle ratio was 70:30.

STUDY AREA DATA

Date: June 14, 1989
Location: LBL Road 312, Racetrack and Curry Hollow

Method: backpack electrofishing
Length of sample area: 300.0 ft
Sample effort: 14.72 min

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	10.2 mg/L	Grass pickerel	1	1	
pH:	7.4	Largemouth bass	4		
Total alkalinity:	68.4 mg/L	Longear sunfish	3	1	
Temperature:	65°F	Green sunfish		3	
Average width:	5.0 ft	Yellow bullhead	1		
Average depth:	1.0 ft	Logperch		4	
Conductivity:	69 umhos/cm	Pirate perch	1		
Turbidity:	5.2 NTU	Spottail darter	1		
Bottom type:	small rubble to fine gravel and sand	Blackspotted topminnow	1		
		Suckermouth minnow	14		
Fish shelter:	medium; undercut banks, logs, and brush	Creek chubsucker	2		
Shade:	50%				
Fish food:	crayfish				
Aquatic vegetation:	none				

Stream: Fulton Creek
County: Lyon

Order: III
Stream length: 4.7 mi

Description: This sample site consists mostly of large isolated pools.

STUDY AREA DATA

Date: July 1, 1988
Location: on LBL Road 312 (area 4)

Method: backpack electrofishing
Length of sample area: 186 ft

Physical - Chemical		
D.O:	4.0	mg/L
pH:	7.2	
Total alkalinity:	54.0	mg/L
Temperature:	66°F	
Average width:	12.0	ft
Average depth:	1.16	ft
Bottom type:	coarse gravel and sand	
Fish shelter:	medium; undercut banks and logs	
Shade:	75-100%	
Fish food:	crayfish	
Aquatic vegetation:	none	

Fish Fauna	No. per size group F	I	H
Largemouth bass	4		
Green sunfish	2	1	
Longear sunfish	3	1	
Pirate perch	1		
Yellow bullhead	3	2	
Blackspotted topminnow	1		
Spotted darter	1		
Creek chubsucker	2		

Stream: Long Creek - Hematite Creek Order: III
County: Trigg Stream length: 4.0 mi

Description: This sample area is in the tailwater area below Hematite Lake. The substrate was composed mostly of undercut banks and logs. Some garbage from family picnics was present. Pool to riffle ratio was 90:10.

STUDY AREA DATA

Date: June 14, 1989 Method: backpack electrofishing
Location: LBL Road 134 at Hematite Park below spillway Length of sample area: 200 ft
Sampling effort: 12.62 min

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	8.9	mg/L	Yellow bass		1	
pH:	7.9		Largemouth bass		8	
Total alkalinity:	68.4	mg/L	Bluegill		5	7
Temperature:	77°F		Redear sunfish			1
Average width:	5.0	ft	Longear sunfish		1	
Average depth:	1.0	ft	Warmouth		1	1
Conductivity:	87	umhos/cm	Black bullhead			4
Turbidity:	5.9	NTU	Yellow bullhead		2	
Bottom type: bedrock to rubble, silt, muck, and detritus			Gizzard shad			10
			Blackspotted topminnow	1		
Fish shelter: medium; substrate, undercut banks, logs, and brush			Logperch		4	
Shade:	50%					
Fish food: none						
Aquatic vegetation: water willow, coontail, filamentous algae, and pondweed						

Stream: Long Creek - Hematite Lake Order: III
County: Trigg Stream length: 4.7 mi

Description: This sample site is in the tailwater area of Hematite Lake. There is some fishing pressure along this creek. It is mostly isolated pools.

STUDY AREA DATA

Date: July 1, 1988 Method: backpack electrofishing
Location: In LBL, on LBL Road 134 off of Mulberry Flat Road (area 17) Length of sample area: 211 ft

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	5.2	mg/L	Largemouth bass			1
pH:	7.7		Grass pickerel		1	
Total alkalinity:	128.0	mg/L	Longear sunfish	2		
Temperature:	69°F		Bluegill	1		
Average width:	30.0	ft	Blackspotted topminnow	3		
Average depth:	0.91	ft				

Bottom type: large rubble, gravel, sand, and detritus
Fish shelter: medium; undercut banks, brush, and logs
Shade: 75-100%
Fish food: crayfish
Aquatic vegetation: filamentous algae and pondweed

Stream: Jakes Fork
County: Trigg

Order: II
Stream length: 2.7 mi

Description: This creek had low water conditions. There was a 60:40 pool to riffle ratio.

STUDY AREA DATA

Date: June 14, 1989
Location: LBL Road 134 at Jake Fork Bay

Method: backpack electrofishing
Length of sample area: 130 ft
Sampling effort: 6.87 min

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	9.9	mg/L	Green sunfish	2	4	
pH:	6.6		Spring cavefish	1		
Total alkalinity:	34.2	mg/L	Creek chubsucker	20		
Temperature:	64°F					
Average width:	5.0	ft				
Average depth:	0.67	ft				
Conductivity:	45 umhos/cm					
Turbidity:	13.1 NTU					

Bottom type: small rubble to fine gravel and sand
Fish shelter: medium; undercut banks and logs
Shade: 25%
Fish food: tadpoles
Aquatic vegetation: none

Stream: Crooked Creek Order: IV
County: Trigg Stream length: 4.4 mi

Description: This site is accessible for the taking of bait fish in deep pools. This site provided good pool and riffle habitat.

STUDY AREA DATA

Date: June 23, 1988 Method: backpack electrofishing
Location: at ford on Ferguson Springs Road in LBL Length of sample area: 158 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	6.2 mg/L	Largemouth bass	1		
pH:	7.6	Longear sunfish	1	1	
Total alkalinity:	122.0 mg/L	Rosefin shiner	14		
Temperature:	77°F	Creek chub	3		
Average width:	22.0 ft	Blackspotted topminnow	3		
Average depth:	0.88 ft	Largescale stoneroller	7		
Bottom type:	coarse gravel and sand	Bluntnose minnow	5		
Fish shelter:	medium; undercut banks, brush, and logs	Fringed darter	2		
		Fantail darter	3		
Shade:	75-100%				
Fish food:	crayfish				
Aquatic vegetation:	filamentous algae				

Stream: Crooked Creek
County: Trigg

Order: III
Stream length: 5.9 mi

Description: The main fish habitat is brush. The sample area consisted mainly of long shallow pools, except at the ford where there were some deeper pools.

STUDY AREA DATA

Date: June 23, 1989
Location: LBL Road 144 at ford (Site 4)

Method: backpack electrofishing
Length of sample area: 230.0 ft
Sampling effort: 5.58 min

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	9.0	mg/L	Largemouth bass	1		
pH:	7.9		Bluegill	1		
Total alkalinity:	51.3	mg/L	Longear sunfish	3	1	
Temperature:	72°F		Warmouth	1	1	
Average width:	8.0	ft	Green sunfish		3	
Average depth:	0.5	ft	Pirate perch	5		
Conductivity:	60	umhos/cm	Creek chubsucker	10	1	
Turbidity:	2.8	NTU	Golden shiner	1		
Bottom type: small rubble to fine gravel and sand			Striped shiner	2		
			Creek chub	2	3	
Fish shelter: medium; undercut banks and brush			Largescale stoneroller	4	4	
			Fringe darter	2		
Shade:	25%					
Fish food:	none					
Aquatic vegetation: sparse; filamentous algae						

Stream: Crooked Creek
County: Trigg

Order: III
Stream length: 5.9 mi

Description: This sample site consisted of mostly riffles and a few deep pools.

STUDY AREA DATA

Date: June 23, 1989
Location: LBL Road 145 at ford close to powerlines (site 2)

Method: backpack electrofishing
Length of sample area: 275.0 ft
Sampling effort: 9.35 min

Physical - Chemical		
D.O:	7.6	mg/L
pH:	7.8	
Total alkalinity:	51.3	mg/L
Temperature:	69°F	
Average width:	8.0	ft
Average depth:	0.17	ft
Conductivity:	51 umhos/cm	
Turbidity:	2.6 NTU	

Bottom type: boulders to fine gravel and sand
Fish shelter: medium; undercut banks and brush
Shade: 75%
Fish food: tadpoles and crayfish
Aquatic vegetation: none

Fish Fauna	No. per size group F	I	H
Blackspotted topminnow	2		
Creek chubsucker	2		
Creek chub	14	1	
Fringed darter	2	1	

Stream: Crooked Creek
County: Trigg

Order: II
Stream length: 5.9 mi

Description: This sample site was located at the bridge where there were several large pools.

STUDY AREA DATA

Date: June 23, 1989
Location: LBL Road 134 near junction of 145

Method: backpack electrofishing
Length of sample area: 250 ft
Sampling effort: 6.76 min

Physical - Chemical			Fish Fauna	No. per size group[a] F	I	H
D.O:	8.9	mg/L	Longear sunfish	2	7	
pH:	7.9		Pirate perch	1		
Total alkalinity:	51.3	mg/L	Creek chubsucker	7	1	
Temperature:	69°F		Largescale stoneroller	1		
Average width:	5.0	ft	Creek chub	10	2	
Average depth:	0.25	ft	Suckermouth minnow	7		
Conductivity:	52	umhos/cm	Fringed darter	17		
Turbidity:	4.5	NTU				

Bottom type: boulders to fine gravel and sand
Fish shelter: medium; undercut banks and brush
Shade: 50%
Fish food: crayfish
Aquatic vegetation: none

Stream: Shaw Branch
County: Trigg

Order: II
Stream length: 2.2 mi

Description: This sample area consisted of two arms of the creek. One arm was clear while the other was turbid and blocked by a beaver dam. The substrate was composed mainly of muck and silt. Fish shelter was mostly by undercut banks and logs.

STUDY AREA DATA

Date: June 14, 1989
Location: LBL Road 134 S arm of Crooked Creek

Method: backpack electrofishing
Length of sample area: 160.0 ft
Sampling effort: 6.01 min

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	8.8	mg/L	Largemouth bass	1		
pH:	7.2		Green sunfish	5	4	
Total alkalinity:	68.4	mg/L	Blackspotted topminnow	1		
Temperature:	63°F		Creek chubsucker	1		
Average width:	3.5	ft	Creek chub	2		
Average depth:	0.17	ft				
Conductivity:	50 umhos/cm					
Turbidity:	12.0 NTU					

Bottom type: fine gravel, sand, silt, muck, and detritus
Fish shelter: medium; undercut banks, logs, and brush
Shade: 75%
Fish food: none
Aquatic vegetation: none

Stream: Pond Creek
County: Trigg

Order: II
Stream length: 2.1 mi

Description: The substrate at this sample site was composed mainly of silt and detritus. Fish habitat is mostly logs and undercut banks. There was only pool type habitat in this sample area.

STUDY AREA DATA

Date: June 14, 1989
Location: LBL Road 134, Energy Lake Road

Method: backpack electrofishing
Length of sample area: 141 ft
Sampling effort: 5.95 min

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	5.2	mg/L	Grass pickerel	1		
pH:	6.5		Green sunfish		2	
Total alkalinity:	68.4	mg/L	Creek chubsucker	1		
Temperature:	68°F		Creek chub	1		
Average width:	4.0	ft	Slough darter	1		
Average depth:	0.42	ft				
Conductivity:	52 umhos/cm					
Turbidity:	6.2 NTU					

Bottom type: coarse to fine gravel, silt, muck, and detritus
Fish shelter: medium; undercut banks, logs, and brush
Shade: 75%
Fish food: tadpoles and crayfish
Aquatic vegetation: none

Stream: Elbow Creek
County: Trigg

Order: III
Stream length: 3.0 mi

Description: This sample area consisted of large, deep pools and riffles. This sample area at times may be influenced by Barkley Lake. This creek seems to be normally intermittent. This site is accessed only by a dirt road.

STUDY AREA DATA

Date: June 14, 1989
Location: dirt road off of Hwy 68-80 just past LBL Road 148 going E

Method: backpack electrofishing
Length of sample area: 150 ft
Sampling effort: 7.88 min

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	9.0	mg/L	Orangethroat darter	1		
pH:	7.5					
Total alkalinity:	34.2	mg/L				
Temperature:	68°F					
Average width:	5.0	ft				
Average depth:	0.17	ft				
Conductivity:	25 umhos/cm					
Turbidity:	9.2 NTU					

Bottom type: large rubble to fine gravel, sand, and silt
Fish shelter: medium; undercut banks, logs, and brush
Shade: 75%
Fish food: none
Aquatic vegetation: none

Stream: Lick Creek
County: Trigg
Order: II
Stream length: 3.1 mi

Description: Due to drought conditions, this sample area consisted only of isolated pools of water. The composition of the substrate was mostly gravel and sand. Fish shelter consisted of undercut banks and woody material such as logs.

STUDY AREA DATA

Date: June 7, 1989
Location: LBL Road 165, Junction 407
Method: backpack electrofishing
Length of sample area: 110.0 ft
Samplin effort: 2.40 min

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	8.3	mg/L	Green sunfish			1
pH:	7.6		Creek chub		1	
Total alkalinity:	34.2	mg/L				
Temperature:	65°F					
Average width:	3.0	ft				
Average depth:	0.67	ft				
Conductivity:	45 umhos/cm					
Turbidity:	3.8 NTU					

Bottom type: large rubble to fine gravel and sand
Fish shelter: sparse; undercut banks, brush, and logs
Shade: 50%
Fish food: frogs
Aquatic vegetation: none

Stream: West Fork Laura Furnace Order: III
County: Trigg Stream length: 3.6 mi

Description: This sample area was one of two sites sampled in this stream. This site was closer to the creek mouth where it intersects with Laura Furnace Creek. The pool to riffle ratio was 80:20.

STUDY AREA DATA

Date: June 7, 1989 Method: backpack electrofishing
Location: LBL Road 349 off of 165 Length of sample area: 75 ft
Sampling effort: 3.77 min

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	7.5 mg/L	Creek chubsucker	8		
pH:	7.1	Creek chub	14		
Total alkalinity:	17.1 mg/L	Orangethroat darter	5		
Temperature:	67°F				
Average width:	4.0 ft				
Average depth:	0.25 ft				
Conductivity:	28 umhos/cm				
Turbidity:	2.6 NTU				
Bottom type:	large rubble to fine gravel and sand				
Fish shelter:	medium; undercut banks, logs, and brush				
Shade:	75%				
Fish food:	none				
Aquatic vegetation:	sparse; filamentous algae				

Stream: West Fork Laura Furnace Order: II
County: Trigg Stream length: 3.6 mi

Description: This sample site is one of two on this creek. This site is more distal from the mouth of the creek. At normal conditions, this sample area only consists of isolated pools. Access to this site is a dirt road, LBL Road 349 off of 170.

STUDY AREA DATA

Date: June 7, 1989 Method: backpack electrofishing
Location: LBL Road 349 off of 170

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	6.9	mg/L	Steelcolor shiner	1		
pH:	7.0		Creek chubsucker	2	1	
Total alkalinity:	20.0	mg/L	Creek chub	2	5	
Temperature:	66°F					
Average width:	5.0	ft				
Average depth:	0.5	ft				
Conductivity:	32 umhos/cm					
Turbidity:	2.0 NTU					

Bottom type: small rubble to fine gravel, sand, silt, and muck
Fish shelter: medium; undercut banks, logs, and brush
Shade: 75%
Fish food: frogs
Aquatic vegetation: none

Stream: Terripan Creek Order: II
County: Trigg Stream length: 1.5 mi

Description: This sample area is under heavy influence by Barkley Lake. Stream flow was very low. The sample area consisted mainly large isolated pools. The substrate composition was mostly of sand, muck, and detritus.

STUDY AREA DATA

Date: June 7, 1989
Location: LBL Road 174 back of Terripan Bay

Method: backpack electrofishing
Length of sample area: 150 ft
Sampling effort: 3.86 min

Physical - Chemical		
D.O:	8.6	mg/L
pH:	7.1	
Total alkalinity:	85.5	mg/L
Temperature:	76°F	
Average width:	4.0	ft
Average depth:	0.5	ft
Conductivity:	185	umhos/cm
Turbidity:	2.2	NTU

Bottom type: small rubble to fine gravel, sand, muck, and detritus
Fish shelter: medium; undercut banks, logs, and brush
Shade: 75%
Fish food: none
Aquatic vegetation: none

Fish Fauna	No. per size group F	I	H
Longear sunfish			1
Blackspotted topminnow	3		

APPENDIX E

The findings for each sampling location in the lower Tennessee River drainage and a general description of the streams of fishery importance follow. The streams are arranged in order of tributary progression, upstream. When more than one sampling site was established on a given stream, the findings from each of these areas were described in an upstream sequence. Stream length in miles designates the approximate length of the stream indicated on a TVA-USGS 1:24,000 topographic map.

Stream: Tennessee River
County: McCracken Stream length: 22.4 mi

Description: This sample site is located between Tennessee River mile 7 and 8. The area sampled included riprap banks, tree tops, willow trees, and old boat docks.

STUDY AREA DATA

Date: May 27, 1993
Location: Tennessee River, near Paducah, Kentucky
Method: electrofishing boat
Length of sample area: 1.0 mi
Sampling effort: 0.33 hour

Physical - Chemical		Fish Fauna	No. per size group[a] F	I	H
D.O:	7.9 mg/L	White bass		1	
pH:	7.7	Sauger		1	
Total alkalinity:	135.4 mg/L	Largemouth bass		1	
Temperature:	70°F	Yellow bass		1	
Conductivity:	180 umhos/cm	White crappie		5	
Turbidity:	40.0 NTU	Channel catfish			1
Bottom type:	boulders, large gravel, and clay	Flathead catfish			1
		American eel			1
Fish shelter:	medium; boulders, ledges, tree tops, and stumps	Bluegill	2	10	
		Longear sunfish		1	
Shade:	0-5%	River carpsucker			8
Fish food:	crayfish	Quillback			2
Aquatic vegetation:	none	Carp		1	
		Freshwater drum		5	5
		Gizzard shad		15	1
		Brook silverside		1	
		Shortnose gar			1

[a]F = fingerling, I = intermediate, and H = harvestable size; refer to Appendix A.

Stream: Tennessee River
County: Marshall Stream length: 22.4 mi

Description: This sample site was located between Tennessee River mile 8 and 10.5. The area sampled included the streams which drain the Calvert City Industrial Complex. The sample area consisted of creek mouths, riprap banks, tree tops, and willow trees.

STUDY AREA DATA

Date: May 27, 1993
Location: Tennessee River, near Paducah, Kentucky

Method: electrofishing boat
Length of sample area: 2.5 mi
Sampling effort: 0.67 hour

Physical - Chemical	
D.O:	10.7 mg/L
pH:	7.6
Total alkalinity:	114.0
Temperature:	70°F
Conductivity:	140 umhos/cm
Turbidity:	24.0 NTU
Bottom type:	boulders, large gravel, and clay
Fish shelter:	medium; boulders, ledges, tree tops, and stumps
Shade:	0-5%
Fish food:	crayfish
Aquatic vegetation:	none

Fish Fauna	No. per size group F	I	H
Sauger		7	
Largemouth bass		2	
White crappie	2	22	
Black crappie		1	
Yellow bass	1	3	
Channel catfish			1
Shortnose gar			1
Bowfin			1
Bluegill	14	8	6
Longear sunfish	3	3	2
Warmouth			1
Smallmuth buffalo		2	15
River carpsucker			4
Quillback			1
Carp	1	1	3
Freshwater drum	2	1	2
Gizzard shad		62	6
Threadfin shad	1	1	
Emerald shiner	1	1	
Steelcolor shiner	1		
Golden shiner		1	
Pugnose minnow	3		
Brook silverside		1	

Stream: Tennessee River
County: Marshall Stream length: 22.4 mi

Description: This sample site was located below Kentucky Lake near river mile 18. This site included both the area around the mouth of Cooper Creek and B.F. Goodrich plant near Calvert City. Creek mouths, riprap banks, and tree tops were sampled.

STUDY AREA DATA

Date: May 26, 1993
Location: Tennessee River below Kentucky Lake dam

Method: electrofishing boat
Length of sample area: 0.5 mi
Sampling effort: 0.33 hour

Physical - Chemical	
D.O:	7.8 mg/L
pH:	7.6
Total alkalinity:	145.4
Temperature:	69°F
Conductivity:	180 umhos/cm
Turbidity:	45.0 NTU
Bottom type:	boulders, large gravel, and clay
Fish shelter:	medium; boulders, ledges, tree tops, and stumps
Shade:	0-5%
Fish food:	crayfish
Aquatic vegetation:	none

Fish Fauna	No. per size group F	I	H
Grass pickerel	1		
Largemouth bass		5	2
Yellow bass		1	
Skipjack herring			1
Bluegill	6	15	3
Longear sunfish		3	
Redear sunfish			1
Smallmouth buffalo		6	2
River carpsucker			1
Quillback			1
Carp		1	5
Freshwater drum			1
Shortnose gar			1
Gizzard shad	1	52	16
Threadfin shad		1	
Emerald shiner	1		
Golden shiner		1	
Blackspotted topminnow		1	

Stream: Tennessee River
County: Marshall Stream length: 22.4 mi

Description: This sample site was located below Kentucky Lake dam in the tailwater and continued downstream to the pipeline crossing. Within this study area, tree tops, root wades, and riprap banks were sampled.

STUDY AREA DATA

Date: May 26, 1993
Location: Tennessee River below Kentucky Lake dam
Method: electrofishing boat
Length of sample area: 2.7 mi
Sampling effort: 0.67 hour

Physical - Chemical	
D.O:	9.5 mg/L
pH:	7.8
Total alkalinity:	118.6
Temperature:	69°F
Conductivity:	104 umhos/cm
Turbidity:	15.3 NTU
Bottom type:	boulders, large gravel, bedrock, and clay
Fish shelter:	medium; boulders, ledges, tree tops, and stumps
Shade:	0-5%
Fish food:	crayfish
Aquatic vegetation:	none

Fish Fauna	No. per size group F	I	H
White bass	1	14	
Sauger		1	
Largemouth bass		11	8
Smallmuth bass		10	
Spotted bass		1	
Yellow bass	4	2	
White crappie		14	1
Black crappie		1	
Channel catfish			7
Flathead catfish		13	3
American eel			1
Bluegill	1	15	9
Lonear sunfish	1	21	11
Warmouth		2	
Bigmouth buffalo			3
Smallmuth buffalo			5
River carpsucker		1	2
Carp			1
Freshwater drum		3	3
Gizzard shad		36	91
Threadfin shad		8	
Emerald shiner		41	
Steelcolor shiner	2	1	
Suckermouth minnow	1		
Golden shiner		2	
Bowfin			1
Yellow bullhead			2
Shortnose gar			1

Stream: Clark's River Order: VI
County: McCracken Stream length: 34.6 mi

Description: This part of the stream is not channelized. Land use in the area includes logging, row crops of corn, beans, and milo, and some residential use. Fishing pressure is fair, with catfish and crappie as the dominant fish in the creel. There are some problems with garbage dumping and shoreline clearing. Fishing access can be made by boat at the KDFWR boat ramp located at the Hwy 62 crossing.

STUDY AREA DATA

Date: May 6, 1986 Method: electrofishing by boat
Location: from the mouth upstream Length of sample area: 7.5 mi

Physical - Chemical		Fish Fauna	No. per size group F	I	H
Temperature:	69°F	Largemouth bass		2	9
Average width:	45.0 ft	Spotted bass	2		
Bottom type:	gravel, clay, silt, and muck	Black crappie			2
		White crappie	1	19	23
Fish shelter:	sparse	Goldeye			1
Shade:	25-50%	Shortnose gar		6	3
Aquatic vegetation:	sparse	Spotted gar		18	
		Bowfin			4
		American eel			1
		Bluegill	2	10	9
		Longear sunfish	3	11	8
		Redear sunfish			3
		Warmouth	1		
		Smallmouth buffalo		6	21
		Bigmouth buffalo		1	
		Quillback carpsucker		1	
		Carp			18
		Freshwater drum			6
		Gizzard shad	1	71	4
		Threadfin shad		1	
		Emerald shiner	3		

Stream: Clark's River
County: McCracken
Order: V
Stream length: 34.6 mi

Description: This section of stream is not channelized. Land usage includes row crops of corn and beans. Fishing pressure is moderate. This section of the stream is influenced by backwaters from the Tennessee River.

STUDY AREA DATA

Date: August 5, 1986
Location: Bryan Fords Bridge
Method: seine hauls (5)
Length of sample area: 200 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
Temperature:	78°F	Spotted bass	4		
Average width:	70.0 ft	Channel catfish	1		
Average depth:	1.0 ft	Flathead catfish	3		
Bottom type: gravel, sand, silt, and detritus		Northern hog sucker	3		
		Freshwater drum		4	6
Fish shelter:	sparse	Gizzard shad		1	4
Shade:	25-50%	Steelcolor shiner	27		
Aquatic vegetation:	sparse	Largescale stoneroller	5		
		Redfin shiner	3		
		Creek chub	1		
		Mississippi silvery minnow	6		
		Blackspotted topminnow	4		
		Stargazing darter	5		

Stream: East Fork Clark's River Order: V
County: Marshall Stream length: 202.4 mi

Description: This section of stream has been channelized. Land usage in this area includes row crops of corn, beans, and milo, along with pasture. Fishing can be good in this section of the stream, but access is limited to road crossings. Dominant fish in the creel are catfish and panfish.

STUDY AREA DATA

Date: August 5, 1986 Method: rotenone
Location: near McCoy Bridge Road off Hwy 795 Length of sample area: 114 ft

Physical - Chemical		Fish Fauna	No. per size group[a] F	I	H
D.O:	9.0 mg/L	Channel catfish			3
Temperature:	75°F	Flathead catfish	2	1	
Average width:	59.0 ft	Bluegill	2	1	
Average depth:	4.4 ft	Longear sunfish	7	3	
Bottom type:	detritus, silt, clay, and muck	Yellow bullhead	3		
		Freshwater drum			3
Fish shelter:	abundant	Gizzard shad		1	
Shade:	50-75%	Emerald shiner	3		
Aquatic vegetation:	sparse	Tadpole madtom	5		
		Blackspotted topminnow	5		
		Blackside darter	2		
		Slough darter	2		
		Dusky darter	3		
		Mud darter	3		

Stream: East Fork Clark's River Order: V
County: Marshall Stream length: 202.4 mi

Description: This section of the stream has been channelized. Land usage includes row crops and pasture. Fishing can be good in this section of the stream, but access is limited to road crossings. Dominant fish in the creel are catfish and panfish.

STUDY AREA DATA

Date: August 5, 1986 Method: seine hauls (4)
Location: Old Briensburg Road NE of Benton Length of sample area: 100 ft

Physical - Chemical		Fish Fauna	No. per size group[a] F	I	H
D.O:	8.9 mg/L	Green sunfish	2		
Temperature:	72°F	Longear sunfish	4		
Average width:	45.0 ft	Northern hog sucker	4		
Average depth:	2.5 ft	Spotted sucker	1		
Bottom type:	gravel, muck, silt, clay, and detritus	Spotfin shiner	3		
		Emerald shiner	3		
Fish shelter:	sparse	Bluntnose minnow	1		
Shade:	50-75%	Tadpole madtom	1		
Aquatic vegetation:	sparse	Blackspotted topminnow	1		
		Western mosquitofish	6		
		Blackside darter	5		
		Slough darter	1		
		Stargazing darter	1		

Stream: East Fork Clark's River Order: V
County: Calloway Stream length: 202.4 mi

Description: Most of this stream has been channelized. The land usage in this area is in row crops. There are several industrial plants in this area that have a history of causing fish kills. Fishing pressure is light, with mainly catfish and panfish being sought by anglers. Problems with dumping trash into the stream occur regularly.

STUDY AREA DATA

Date: August 6, 1986 Method: seine hauls (3)
Location: 1.1 mi NW of Olive on Union Hill Road Length of sample area: 100 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
Temperature:	73°F	Grass pickerel	1		
Average width:	40.0 ft	Largemouth bass	1		
Average depth:	1.0 ft	spotted bass	1		
Bottom type:	gravel, sand, silt, and detritus	Green sunfish	2		
		Longear sunfish	7	3	
Fish shelter:	medium	Northern hog sucker	2		
Shade:	50-75%	Spotted sucker	2		
Aquatic vegetation:	sparse	Gizzard shad	2		
		Ribbon shiner	4		
		Steelcolor shiner	14		
		Suckermouth minnow	5		
		Bluntnose minnow	1		
		Central silvery minnow	4		
		Blackspotted topminnow	4		

Stream: East Fork Clark's River Order: V
County: Marshall Stream length: 202.4 mi

Description: This section of the stream has been channelized. Land usage is in row crops and pasture. Fishing is good in this section of the stream, but access is limited to road crossings. Primary fish sought by anglers are catfish and panfish.

STUDY AREA DATA

Date: August 4, 1986 Method: seine hauls (5)
Location: 2 mi E of Hardin on Hwy 80 Length of sample area: 100 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	10.2 mg/L	Largemouth bass			1
Temperature:	79°F	Spotted bass	2	1	2
Average width:	60.0 ft	Green sunfish	1	1	
Average depth:	3.0 ft	Longear sunfish	6	1	
Bottom type: gravel, muck, silt, clay, and detritus		Northern hog sucker	4		
		Golden redhorse	2		
Fish shelter: medium		Spotted sucker	4		
Shade:	50-75%	Freshwater drum		1	
Aquatic vegetation: sparse		Emerald shiner	4		
		River shiner	6		
		Redfin shiner	10		
		Spotfin shiner	1		
		Blackspotted topminnow	6		
		Largescale stoneroller	10		
		Bluntnose minnow	9		
		Western mosquitofish	6		
		Fantail darter	1		
		Blackside darter	18		
		Slough darter	5		
		Bluntnose darter	3		

Stream: East Fork Clark's River Order: V
County: Marshall Stream length: 202.4 mi

Description: Most of this stream has been channelized. The land usage in this area is in row crops. There are several industrial plants in the area that have caused fish kills. Fishing pressure is light, with catfish and panfish being the most sought after fish by anglers. Problems exist from people dumping trash into the stream regularly.

STUDY AREA DATA

Date: August 4, 1986 Method: seine
Location: Holland Bridge on Squire Holland Road NE of Murray Length of sample area: 100 ft
Sample effort: 3 hauls

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	14.5 mg/L	Longear sunfish	12	4	
Temperaure:	79°F	Black redhorse		1	
Average width:	30.0 ft	Silver redhorse		1	
Average depth:	4.0 ft	Steelcolor shiner	1		
Bottom type: gravel, muck, silt, and detritus		Rosyface shiner	3		
		Spotfin shiner	13		
Fish shelter: medium		Emerald shiner	48		
Shade:	5-25%	Central stoneroller	1		
Aquatic vegetation: sparse		Bluntnose minnow	5		
		Creek chub	3		

Stream: East Fork Clark's River Order: IV
County: Calloway Stream length: 202.4 mi

Description: This sample site is a large open area under a railroad and street bridge just south of Murray. Fishing potential is good for panfish.

STUDY AREA DATA

Date: August 5, 1980 Method: rotenone
Location: at Hwy 121 S just outside of Murray Length of sample area: 300 ft

Physical - Chemical	Fish Fauna	No. per size group F	I	H
Average width: 50.0 ft	Largemouth bass	6		1
Bottom type: silt, gravel, and muck	Spotted bass	3		
	White crappie		4	1
Fish shelter: abundant; undercut banks, logs, and brush	Longnose gar			1
	Spotted gar			1
Shade: 50-75%	Bluegill	3	8	2
Fish food: none	Longear sunfish	9	10	
Aquatic vegetation: none	Green sunfish	1	5	
	Northern hog sucker	1		
	Golden redhorse		1	5
	River carpsucker			9
	Spotted sucker			1
	Carp			63
	Yellow bullhead			2
	Black bullhead			1
	Freshwater drum			8
	Gizzard shad			6
	Spottail shiner	3		
	Flathead minnow	5		
	Bluntnose minnow	20		
	Pugnose minnow	1		
	Creek chubsucker	6		
	Tadpole madtom		1	
	Logperch	1		

Stream: East Fork Clark's River Order: IV
County: Calloway Stream length: 202.4 mi

Description: The pool to riffle ratio is 80:20. Fishing pressure is for panfish.

STUDY AREA DATA

Date: August 5, 1980 Method: seine
Location: bridge on Green Plains Road off Hwy 641 S, N of Hazel

Physical - Chemical	Fish Fauna	No. per size group F	I	H
Bottom type: gravel and sand	Grass pickerel	1		
Fish shelter: medium; undercut banks, logs, and brush	Largemouth bass	1		
	Bluegill	1	6	
Shade: 50-75%	Northern hog sucker	4		
Fish food: crayfish and mayflies	White sucker	1		
Aquatic vegetation: sparse	Redfin shiner	19		
	Bluntnose minnow	1		
	Creek chub	8	1	
	Creek chubsucker	5		
	Blackspotted topminnow	7		

Stream: East Fork Clark's River Order: IV
County: Calloway Stream length: 202.4 mi

Description: The local fishing potential is for panfish. The pool to riffle ratio is 90:10.

STUDY AREA DATA

Date: August 5, 1980 Method: seine
Location: at bridge on Meyers Road off Hwy 641 S, just N of Hazel; first sample site just outside of Hazel

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O.:	8.7 mg/L	Bluegill		2	
pH:	6.9	Longear sunfish		1	
Total alkalinity:	37.0 mg/L	Northern hog sucker	1		
Temperature:	75.7°F	Spotfin shiner	1		
Bottom type:	gravel and sand	Creek chub	55		
Fish shelter:	medium; undercut banks, logs, and brush	Bluntnose minnow	12		
		Blackspotted topminnow		1	
Shade:	50-75%	Johnny darter	17		
Aquatic vegetation:	sparse				

Stream: Dunn Slough
County: McCracken

Order: III
Stream length: 18.8 mi

Description: This marsh area has intermittent flow during periods of high water. The main land usage in the area is silviculture. Fishing opportunities are limited.

STUDY AREA DATA

Date: August 5, 1986
Location: off Hwy 795 between Sharp Elva Bridge and Elva Town

Method: seine hauls

Physical - Chemical		Fish Fauna	No. per size group F	I	H
Temperature:	72°F	Grass pickerel		1	
Average width:	68.0 ft	White crappie	2		
Average depth:	2.0 ft	Bluegill	1		
Bottom type:	silt, muck, detritus, and sand	Longear sunfish	2		
		Flier	1		
Fish shelter:	abundant	Golden shiner	8		
Shade:	50-75%	Blackspotted topminnow	11		
Aquatic vegetation:	abundant	Western mosquitofish	3		
		Slough darter	3		

Stream: John's River Order: III
County: Marshall Stream length: 5.4 mi

Description: This section of stream has been channelized. Land usage includes row crops and pasture. Fishing pressure is very limited. This is a repeated sample of this site that was surveyed on July 31, 1985 at John's River.

STUDY AREA DATA

Date: August 5, 1986 Method: seine hauls (4)
Location: Old Benton-Briensburg Road off Hwy 408E, NE of Benton Length of sample area: 100 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
Temperature:	65°F	Grass pickerel	1		
Average width:	4.0 ft	Green sunfish	3		
Average depth:	0.5 ft	Flier	2		
Bottom type:	gravel, muck, silt, sand, and detritus	Golden shiner	5		
		Largescale stoneroller	1		
Fish shelter:	sparse	Blackspotted topminnow	1		
Shade:	75-100%	Mud darter	1		
Aquatic vegetation:	sparse	Slough darter	9		
		Orangethroat sunfish	2		

Stream: John's River Order: III
County: Marshall Stream length: 2.0 mi

Description: This creek is a small tributary of East Fork Clark's River. This site has been degraded with cardboard containers, leaves, cans, and used washing machines.

STUDY AREA DATA

Date: July 31, 1985 Method: backpack electrofishing
Location: on Old Benton-Briensburg Road off Hwy 408 E, NE of Benton

Physical - Chemical		Fish Fauna	No. per size group F	I	H
pH:	7.5	Grass pickerel	1		
Total alkalinity:	350.0 mg/L	Flier	2		
Temperature:	75°F	Green sunfish	3	2	
Bottom type:	fine sand	Yellow bullhead	1	2	
Fish shelter:	sparse; undercut banks	Creek chubsucker		1	
		Lollipop darter	1		
Shade:	75-100%	Golden shiner	5		
Aquatic vegetation:	none	Largescale stoneroller	1		
		Blackspotted topminnow	1		
		Mud darter	1		
		Slough darter	9		
		Orangespotted sunfish	2		

Stream: Woodall Branch
County: Marshall

Order: III
Stream length: 4.1 mi

Description: This section of stream is channelized. Land usage in the area includes row crops and pasture. Fishing potential is limited.

STUDY AREA DATA

Date: August 6, 1986
Location: 0.75 mi S of Hwy 408 and intersection and Soldier Creek Road

Method: seine hauls (3)
Length of sample area: 100 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
Average width:	5.0 ft	Yellow bullhead	1		
Average depth:	0.3 ft	Creek chub	7		
Bottom type:	gravel, silt, and sand	Largescale stoneroller	5		
		Blackspotted topminnow	4		
Fish shelter:	sparse				
Shade:	50-75%				
Aquatic vegetation:	sparse				

Stream: Watch Creek
County: Marshall
Order: III
Stream length: 1.2 mi

Description: The pool to riffle ratio is 85:15.

STUDY AREA DATA

Date: July 31, 1985
Location: 0.5 mi E to Dogtown off Hwy 1445 at Creek Ford
Method: backpack electrofishing
Length of sample area: 200 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
pH:	7.6	Grass pickerel		1	
Total alkalinity:	310.0 mg/L	Longear sunfish			1
Temperature:	86°F	Green sunfish		9	
Average width:	2.0 ft	Yellow bullhead	2	1	
Average depth:	0.2 ft	Creek chub	11	5	
Conductivity:	45.0 umhos/cm	Largescale stoneroller	20		
Bottom type:	coarse to fine gravel	Creek chubsucker		1	
		Blackspotted topminnow	2		
Fish shelter:	abundant; undercut banks and ledges	Lollipop darter	4		
Shade:	25-50%				
Aquatic vegetation:	sparse				

Stream: Beaver Dam Slough Order: III
County: Marshall Stream length: 4.6 mi

Description: This stream showed no signs of a sport fishery. The pool to riffle ratio was 80:20.

STUDY AREA DATA

Date: July 31, 1985 Method: backpack electrofishing
Location: 3.5 mi E of Dogtown on unimproved road Length of sample area: 300 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
pH:	7.2	Bluegill		2	
Total alkalinity:	430.0 mg/L	Green sunfish	3		
Temperature:	75°F	Yellow bullhead	1	1	
Average width:	4.0 ft	Spotted sucker	1		
Average depth:	0.4 ft	Creek chub	7		
Conductivity:	90.0 umhos/cm	Creek chubsucker	3		

Bottom type: fine gravel, muck, and detritus
Fish shelter: abundant; logs
Shade: 75-100%
Aquatic vegetation: sparse; filamentous algae

Stream: Wood's Creek
County: Marshall
Order: III
Stream length: 34.6 mi

Description: This section of stream has been channelized. It has intermittent flow. Land use is in row crops and pasture. Fishing potential is limited.

STUDY AREA DATA

Date: August 4, 1986
Location: on Hwy 80 E of Hardin 1.75 mi near Clark's River
Method: seine hauls (3)
Length of sample area: 75 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	9.5 mg/L	Longear sunfish	5	1	
Temperature:	73°F	Northern hog sucker		1	
Average width:	10.0 ft	River redhorse			1
Average depth:	20.0 ft	Golden redhorse		1	
Bottom type:	gravel, sand, silt, and muck	White sucker	4		
Fish shelter:	medium	Gizzard shad	1		
Shade:	75-100%	Emerald shiner	4		
Aquatic vegetation:	sparse	Spotfin shiner	3		
		Bluntnose minnow	6		
		Flathead minnow	1		
		Blackstripe topminnow	1		
		Blackspotted topminnow	4		
		Western mosquitofish	5		
		Blackside darter	1		
		Johnny darter	2		

Stream: Wades Creek
County: Marshall

Order: III
Stream length: 13.0 mi

Description: The pool to riffle ratio is 75:25.

STUDY AREA DATA

Date: July 30, 1985
Location: 0.25 mi S of Hardin on Hwy 1824

Method: backpack electrofishing
Length of sample area: 100 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
Average width:	1.5 ft	Spotted bass	2	1	
Average depth:	0.4 ft	Longear sunfish	2	2	
Bottom type:	clay and silt	Yellow bullhead	3		
Fish shelter:	sparse	Golden redhorse		4	
Shade:	50-75%	Creek chub	1		
Fish food:	crayfish	Largescale stoneroller	53		
Aquatic vegetation:	sparse	Blackspotted topminnow	6		
		Lollipop darter	1		
		Bandfin darter	4		

Stream: Wades Creek
County: Calloway

Order: III
Stream length: 13.0 mi

Description: This creek is a small tributary of East Fork Clark's River. The pool to riffle ratio is 60:40.

STUDY AREA DATA

Date: August 12, 1980
Location: bridge on Robert Jackson Road W of Dexter

Method: seine
Length of sample area: 200 ft

Physical - Chemical	Fish Fauna	No. per size group F	I	H
Bottom type: gravel and sand	Bluegill	1		
Fish shelter: medium; undercut banks, logs, and brush	Longear sunfish			1
Shade: 50-75%	Northern hog sucker	3		
Aquatic vegetation: none	White sucker	2		
	Golden redhorse	12		
	Yellow bullhead	1		
	Rosefin shiner	24		
	Creek chub	27	1	
	Central stoneroller	10		
	Creek chubsucker	1		
	Blackspotted topminnow	9		
	Speckled darter	15		
	Mud darter	9		

Stream: Wades Creek
County: Calloway

Order: III
Stream length: 13.0 mi

Description: This site provides a very limited sport fishery. This sample area consisted of one large pool.

STUDY AREA DATA

Date: July 30, 1985
Location: 2.5 mi W of Hwy 641 on Charlie Miller Road W of Dexter

Method: backpack electrofisher
Length of sample area: 100 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	6.0 mg/L	Spotted bass		1	
pH:	5.9	Longear sunfish	2	5	1
Total alkalinity:	210.0 mg/L	Green sunfish	3	1	
Temperature:	75°F	Northern hog sucker		1	2
Average width:	4.0 ft	Golden redhorse		1	
Average depth:	1.5 ft	Creek chub		3	
Bottom type:	clay and silt	Largescale stoneroller	7	2	
Fish shelter:	abundant; boulders and logs	Creek chubsucker		3	
		Blackspotted topminnow	1		
Shade:	25-50%	Lollipop darter	1		
Aquatic vegetation:	sparse				

Stream: Rockhouse Creek Order: IV
County: Calloway Stream length: 9.8 mi

Description: The pool to riffle ratio is 30:70. Household garbage and used tires litter the area.

STUDY AREA DATA

Date: July 30, 1985 Method: backpack electrofishing
Location: Hwy 1346 E of Dexter Length of sample area: 100 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	7.6 mg/L	Grass pickerel	1		
pH:	6.4	Longear sunfish		5	1
Total alkalinity:	230.0 mg/L	Green sunfish		10	
Temperature:	81°F	Largescale stoneroller	1		
Average width:	15.0 ft				
Average depth:	1.0 ft				
Bottom type:	clay and silt				
Fish shelter:	abundant; logs				
Shade:	75-100%				
Aquatic vegetation:	sparse				

Stream: Rockhouse Creek Order: IV
County: Calloway Stream length: 9.8 mi

Description: The pool to riffle ratio is 95:5.

STUDY AREA DATA

Date: July 30, 1985 Method: backpack electrofisher
Location: Hopkins Short Road NW of Almo Heights of Hwy 464 Length of sample area: 300 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	7.5 mg/L	Bluegill	1		
pH:	7.0	Longear sunfish	8	5	
Total alkalinity:	270.0 mg/L	Green sunfish	2	3	
Temperature:	57°F	Yellow bullhead	4		
Average width:	15.0 ft	Blackspotted topminnow	3		
Average depth:	0.7 ft	Creek chub	8	1	
Bottom type:	coarse to fine gravel and sand	Largescale stoneroller	22	5	
		Bluntnose minnow	15	2	
Fish shelter:	abundant; undercut banks, logs, and brush	Lollipop darter	1		
		Bandfin darter	1		
Shade:	25-50%				
Aquatic vegetation:	sparse				

Stream: Unnamed Creek Order: III
County: Calloway Stream length: 1.3 mi

Description: This unnamed creek is next to the Holland Road north of Murray near Vanderbilt Chemical Company and is a drainage ditch east of the ICG Railroad. The pool to riffle ratio is 80:20.

STUDY AREA DATA

Date: July 31 1986 Method: backpack electrofishing
Location: Holland Road N of Murray off Hwy 641 Length of sample area: 100 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
pH:	6.3	Bluegill	7	1	
Total alkalinity:	405.0 mg/L	Green sunfish	1	7	
Temperature:	82°F	Blackspotted topminnow	12	1	
Average width:	7.5 ft	Western mosquitofish	3		
Average depth:	0.5 ft				
Bottom type:	silt and muck				
Fish shelter:	sparse				
Shade:	0-5%				
Aquatic vegetation:	abundant; water primrose and filametous algae				

Stream: Bee Creek
County: Calloway

Order: III
Stream length: 5.0 mi

Description: This creek is a tributary of East Fork Clark's River. The pool to riffle ratio is 90:10.

STUDY AREA DATA

Date: August 7, 1980
Location: Hwy 2075 off of Hwy 641 N of Murray by the radio station

Method: seine
Length of sample area: 200 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
Average width:	15.0 ft	Green sunfish		1	
Average depth:	0.8 ft	Creek chub	32	12	
Bottom type:	boulders to gravel and sand	Blackspotted topminnow	1		
		Cypress darter	5		
Fish shelter:	medium; undercut banks, logs, and brush				
Shade:	75-100%				
Fish food:	none				
Aquatic vegetation:	none				

Stream: White Oak Creek Order: II
County: Calloway Stream length: 6.5 mi

Description: This creek is a tributary of East Fork Clark's River. The pool to riffle ratio is 90:10. Fishing is primarily for panfish.

STUDY AREA DATA

Date: August 7, 1980 Method: seine
Location: on Laycock Road off of Hwy 641 just E of Green Plain Church Length of sample area: 150 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
Temperature:	88°F	Grass pickerel	1		
Average width:	4.0 ft	Bluegill	28	4	
Average depth:	1.0 ft	Rosefin shiner	13		
Bottom type:	boulders to gravel and sand	Golden shiner	1	2	
		Creek chub	31	1	
Fish shelter:	medium; undercut banks, logs, and brush	Creek chubsucker	4	2	
		Lake chubsucker	22		
Shade:	75-100%	Central stoneroller	3		
Fish food:	dragonfly larva	Blackspotted topminnow	16		
Aquatic vegetation:	water willow				

Stream: Middle Fork Clark's River Order: IV
County: Calloway Stream length: 10.5 mi

Description: The pool to riffle ratio at this site is 80:20. The fishing pressure is high for panfish. This site transects several cleared fields, making it susceptible to agricultural runoff.

STUDY AREA DATA

Date: August 7, 1980 Method: seine
Location: at bridge on Hwy 641 just S of Murray

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	7.5	mg/L	Spotted bass	3	1	
pH:	7.1		Bluegill			1
Total alkalinity:	38.0	mg/L	Longear sunfish		1	1
Temperature:	80.6	°F	Northern hog sucker		1	
Average width:	25.0	ft	Golden redhorse		2	
Average depth:	3.0	ft	Steelcolor shiner	9	2	
Bottom type: sand, gravel, and detritus			Rosefin shiner	30		
			Bluntnose minnow	4		
Fish shelter: medium; undercut banks, logs, and brush			Central stoneroller	5	1	
			Blackspotted topminnow	1		
Shade:	75-100%		Logperch		1	
Fish food: none						
Aquatic vegetation: none						

Stream: Middle Fork Clark's River Order: IV
County: Calloway Stream length: 10.5 mi

Description: The pool to riffle ratio at this site is 80:20. The fishing pressure is high for panfish.

STUDY AREA DATA

Date: August 7, 1980 Method: seine
Location: at bridge on Martin Chapel Road off of Hwy 1550 S of Murray Length of sample area: 150 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
Average width:	20.0 ft	Largemouth bass	1		
Average depth:	1.0 ft	Bluegill		2	
Bottom type:	silt, gravel, and muck	Golden redhorse	4	1	
		Carp		1	
Fish shelter:	medium; undercut banks, logs, and brush	Blacktail shiner	9	1	
		Bluntnose minnow	2		
Shade:	75-100%	Pugnose minnow	26		
Fish food:	none	Creek chub	3		
Aquatic vegetation:	none	Central stoneroller	1		
		Blackspotted topminnow	3		

Stream: Middle Fork Clark's River Order: IV
County: Calloway Stream length: 10.5 mi

Description: The pool to riffle ratio at this site is 95:5. The fishing pressure is high for panfish.

STUDY AREA DATA

Date: August 7, 1980 Method: seine
Location: at bridge on Ford Road off of Hwy 1550, S of Murray Length of sample area: 75 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
Average width:	20.0 ft	Bluegill		1	
Average depth:	2.0 ft	Longear sunfish	1		
Bottom type: sand, gravel, silt, and detritus		Steelcolor shiner	7		
		Redfin shiner	114		
Fish shelter: medium; undercut banks, logs, and brush		Blackspotted topminnow	3		
		Crystal darter	3		
Shade:	75-100%				
Fish food:	none				
Aquatic vegetation:	none				

Stream: Pleasant Grove Creek Order: III
County: Calloway Stream length: 5.5

Description: This creek is a tributary of Middle Fork Clark's River. The pool to riffle ratio is 95:5.

STUDY AREA DATA

Date: August 7, 1980 Method: seine
Location: at Barkers Crossroads Length of sample area: 75 ft
SE of Murray

Physical - Chemical		Fish Fauna	No. per size group F	I	H
Temperature:	87°F	Spotted bass	1		
Average width:	15.0 ft	Green sunfish	2	5	
Average depth:	1.0 ft	White sucker	6		
Bottom type:	gravel and sand	Creek chub	39	3	
Fish shelter:	medium; undercut banks, logs, and brush	Central stoneroller	6		
		Spottail darter	3		
Shade:	75-100%	Snubnose darter	1		
Fish food:	none				
Aquatic vegetation:	none				

Stream: Pleasant Grove Creek Order: III
County: Calloway Stream length: 5.5 mi

Description: This creek is a tributary of Middle Fork Clark's River. The sample site consisted of one large pool.

STUDY AREA DATA

Date: August 5, 1980 Method: seine
Location: Browns Road at bridge, 2 mi S of Bakers Crossing Length of sample area: 50 ft

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	7.6	mg/L	Longear sunfish		1	
pH:	6.8		Green sunfish	2	6	
Total alkalinity:	30.0	mg/L	Rosefin shiner	44		
Temperature:	88°F		Bluntnose minnow	9		
Average width:	30.0	ft	Creek chub	12	6	
Average depth:	1.2	ft	Creek chubsucker	14		
Bottom type:	gravel and sand		Blackspotted topminnow	13		
Fish shelter:	medium; undercut banks, logs, and brush		Slough darter	3		
Shade:	75-100%					
Fish food:	none					

Stream: West Fork Clark's River Order: V
County: Graves Stream length: 37.6 mi

Description: This site receives very little fishing pressure. The pool to riffle ratio is 75:25.

STUDY AREA DATA

Date: July 17, 1985 Method: rotenone
Location: Carter's Mill Bridge near jct of Hwy 450 and 348 Length of sample area: 190 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	9.0 mg/L	Channel catfish		3	
pH:	7.6	Yellow bullhead	2		
Total alkalinity:	310.0 mg/L	Redfin shiner	9		
Temperature:	63°F				
Average width:	52.0 ft				
Average depth:	1.0 ft				
Bottom type:	sand				
Fish shelter:	sparse; logs				
Shade:	25-50%				

Stream: West Fork Clark's River Order: V
County: Graves Stream length: 37.6 mi

Description: This site receives very limited fishing pressure.

STUDY AREA DATA

Date: July 18, 1985 Method: rotenone
Location: Hwy 408, off of Hwy 301, at Chandler Bridge Length of sample area: 220 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	9.5 mg/L	Spotted bass	1	2	
pH:	8.2	Channel catfish	5	2	
Total alkalinity:	200.0 mg/L	Bluegill	14	5	
Temperature:	59°F	Longear sunfish		10	
Average width:	42.0 ft	Northern hog sucker		5	
Average depth:	2.0 ft	Golden redhorse	4	1	
Bottom type:	sand	Yellow bullhead	7		
Fish shelter:	sparse; undercut banks	Freshwater drum		3	1
		Gizzard shad			6
Shade:	5%	Steelcolor shiner	15		
		Creek chub	4		
		Largescale stoneroller		1	
		Bluntnose minnow	4		
		Brindled madtom	1		
		Fantail darter	1		
		Bandfin darter	1		
		Blackside darter	2		
		Dusky darter	2		

Stream: Blizzard Pond Drainage Ditch Order: IV
County: McCracken Stream length: 5.7 mi

Description: This site has been channelized. The extensive channelization has produced a very limited sport fishery. The pool to riffle ratio is 5:95.

STUDY AREA DATA

Date: July 16, 1985 Method: backpack electrofishing
Location: Hwy 195 bridge off of Hwy 348 NW of Hardmoney

Physical - Chemical			No. per size group		
		Fish Fauna	F	I	H
D.O:	14.9 mg/L	Bluegill		1	
pH:	7.4	Longear sunfish	8	2	
Total alkalinity:	470.0 mg/L	Red shiner		1	
Temperature:	69°F	Creek chub		1	
Average width:	8.0 ft	Creek chubsucker	2	9	
Average depth:	0.3 ft	Largescale stoneroller	22	2	
Bottom type: clay, coarse gravel, and fine gravel		Blackspotted topminnow	2		
Fish shelter: sparse; undercut banks					
Shade:	0-5%				

Stream: Camp Creek
County: Graves

Order: IV
Stream length: 7.6 mi

Description: This site has been channelized. It provides a limited sport fishery to bank anglers. The pool to riffle ratio is 85:15.

STUDY AREA DATA

Date: July 16, 1985
Location: Bonds Road off Hwy 450 NE of Hardmoney

Method: backpack electrofishing
Length of sample area: 400 ft

Physical - Chemical			No. per size group		
		Fish Fauna	F	I	H
D.O:	11.5 mg/L	Largemouth bass	1		
pH:	7.1	White crappie		1	
Total alkalinity:	360.0 mg/L	Bluegill	3	4	
Average width:	4.0 ft	Longear sunfish	1	11	
Average depth:	0.4 ft	Green sunfish		5	
Bottom type: clay, coarse gravel, and fine gravel		Warmouth		1	
		Flyer		1	
Fish shelter: sparse; undercut banks		Smallmouth buffalo		1	
Shade:	75-100%	Spotted sucker		2	
Fish food: crayfish		Black bullhead	2	4	2
		Creek chub	15	3	
		Western mosquitofish	3		
		Blackspotted topminnow	3		

Stream: Camp Creek
County: McCracken
Order: IV
Stream length: 7.6 mi

Description: This site is a channelized portion of the creek. It has a limited panfish fishery for bank anglers. The pool to riffle ratio is 25:75.

STUDY AREA DATA

Date: July 17, 1985
Location: at bridge on Hwy 1684 in Hardmoney
Method: backpack electrofishing
Length of sample area: 100 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
Average width:	12.0 ft	Green sunfish	1		
Average depth:	4.0 ft	Creek chub	15	1	
Bottom type:	small to large gravel and sand	Largescale stoneroller	1		
		Blackspotted topminnow	3		
Fish shelter:	sparse; undercut banks	Western mosquitofish	3		
Shade:	50-75%				
Fish food:	tubiflex worms				

Stream: Trace Creek Order: III
County: Graves Stream length: 4.9 mi

Description: This site has been channelized. The pool to riffle ratio is 95:5.

STUDY AREA DATA

Date: July 16, 1985 Method: backpack electrofishing
Location: Hwy 301 3.75 mi N of Hwy 80 at bridge Length of sample area: 200 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	14.7 mg/L	Spotted bass		1	
pH:	7.1	Longear sunfish		3	
Total alkalinity:	100.0 mg/L	Green sunfish		2	1
Temperature:	55°F	Yellow bullhead		1	
Average width:	5.0 ft	Creek chub	3	2	
Average depth:	1.5 ft	Largescale stoneroller	1		
Bottom type:	boulders, rubble, and sand	Creek chubsucker	3		
		Blackspotted topminnow	1		
Fish shelter:	abundant; undercut banks, logs, and boulders	Fantail darter	3		
		Bandfin darter	1		
Shade:	75-100%	Lollipop darter	3		
Fish food:	crayfish				

Stream: Panther Creek
County: Graves

Order: IV
Stream length: 7.0 mi

Description: This site has moderate sport fishing potential. The pool to riffle ratio is 10:90.

STUDY AREA DATA

Date: July 16, 1986
Location: Hwy 80 1/8 mi E of jct with Hwy 301

Method: backpack electrofishing
Length of sample area: 200 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	16.0 mg/L	Spotted bass		3	
pH:	5.5	Longear sunfish		8	
Total alkalinity:	140.0 mg/L	Northern hog sucker	2	1	
Temperature:	54°F	Creek chub	19	10	1
Average width:	10.0 ft	Steelcolor shiner	2		
Average depth:	1.5 ft	Bluntnose minnow	3		
Conductivity:	40.0 umhos/cm	Largescale stoneroller	92	1	
Bottom type:	clay and coarse to fine gravel	Fantail darter	8		
		Lollipop darter	2		
Fish shelter:	sparse; undercut bank	Bandfin darter	2		
Shade:	75-100%				
Fish food:	crayfish				

Stream: Soldier Creek
County: Marshall

Order: IV
Stream length: 5.5 mi

Description: This site receives limited panfish fishing. The pool to riffle ratio is 20:80.

STUDY AREA DATA

Date: July 16, 1985
Location: W of Brewers N of Hwy 80 on Vanzora Church Road

Method: seine (2)
Length of sample area: 100 ft

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	5.1	mg/L	Spotted bass		1	
pH:	6.6		Longear sunfish		2	1
Total alkalinity:	20.0	mg/L	Bluegill	4		
Temperature:	62°F		Golden redhorse		1	
Average width:	21.0	ft	Northern hog sucker		2	1
Average depth:	1.5	ft	Golden shiner	2		
Bottom type:	small rubble to coarse gravel and sand		Redfin shiner	16		
			Bluntnose minnow	2		
Fish shelter:	sparse; undercut banks and logs		Largescale stoneroller	1	4	
			Blackspotted topminnow	5		
Shade:	75-100%					

Stream: Garrison Creek Order: III
County: McCracken Stream length: 2.4 mi

Description: This site has periodic pollution from a local sewage treatment plant. This creek is influenced by backwater from the Tennessee River.

STUDY AREA DATA

Date: August 8, 1987 Method: backpack electrofishing
Location: Kenmar Road off of Hwy 62/62 E of Paducah Length of sample area: 100 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	10.5 mg/L	Green sunfish	2		
pH:	7.9	Yellow bullhead	2		
Total alkalinity:	35.0 mg/L	Western mosquitofish	3		
Temperature:	76°F	Largescale stoneroller	71		
Average width:	25.0 ft	Creek chub	9	1	
Average depth:	0.5 ft	Fantail darter	4		
Conductivity:	135.0 umhos/cm				

Bottom type: small rubble, sand, and clay
Fish shelter: sparse; brush and logs
Shade: 75-100%
Fish food: crayfish
Aquatic vegetation: sparse

Stream: Garrison Creek
County: McCracken
Order: III
Stream length: 2.4 mi

Description: This site has periodic pollution from a local sewage plant. This creek is influenced by backwater from the Tennessee River.

STUDY AREA DATA

Date: August 8, 1987
Location: bridge on Hwy 68/62 E of Paducah
Method: backpack electrofishing
Length of sample area: 100 ft

Physical - Chemical		
D.O:	5.5	mg/L
pH:	7.5	
Total alkalinity:	55.0	mg/L
Temperature:	77°F	
Average width:	13.0	ft
Average depth:	1.0	ft
Conductivity:	145.0	umhos/cm
Bottom type:	coarse gravel and sand	
Fish shelter:	sparse; brush, undercut banks, and ledges	
Shade:	75-100%	
Aquatic vegetation:	sparse	

Fish Fauna	No. per size group F	I	H
Green sunfish	3	2	
Western mosquitofish	3		
Largescale stoneroller	12		
Creek chub	1		
Fantail darter	1		

Stream: White Oak Creek
County: Marshall

Order: III
Stream length: 2.5 mi

Description: This stream has been cleared in some parts, and would be a good source for bait fish. Pollution occurs from dumping of household garbage, and agricultural runoff. This creek is influenced at times by backwater from the Tennessee River.

STUDY AREA DATA

Date: July 23, 1987
Location: on Hwy 62 NW of Possum Trot

Method: backpack electrofishing
Length of sample area: 100 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	6.2 mg/L	Green sunfish	7	20	
pH:	7.8	Bluegill	3		
Total alkalinity:	120.0 mg/L	Yellow bullhead		3	
Temperature:	68°F	Creek chubsucker	15	8	
Average width:	15.0 ft	Blackspotted topminnow	1		
Average depth:	0.8 ft	Fantail darter	1		
Conductivity:	265.0 umhos/cm	Creek chub	10	8	
Bottom type:	coarse gravel, sand, and muck	Largescale stoneroller	34		
		Western mosquitofish	1		

Fish shelter: sparse; brush, logs, and undercut banks
Shade: 75-100%
Fish food: crayfish
Aquatic vegetation: sparse

Stream: Cypress Creek
County: Marshall

Order: IV
Stream length: 12.6 mi

Description: Pollution occurs from dumping household, industrial, and agricultural material. This creek is part of the large drainage of the Calvert City industrial complex and is influenced by backwater from the Tennessee River at times. This section is also partly channelized.

STUDY AREA DATA

Date: July 22, 1987
Location: off Hwy 1523 near Altona

Method: backpack electrofishing
Length of sample area: 100 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	8.8 mg/L	Western mosquitofish	42		
pH:	7.5				
Total alkalinity:	162.0 mg/L				
Temperature:	73.9°F				
Average width:	26.0 ft				
Average depth:	0.8 ft				
Conductivity:	48.0 umhos/cm				
Bottom type:	small rubble, sand, and silt				
Fish shelter:	medium; logs, brush, ledges, and undercut banks				
Shade:	75-100%				
Fish food:	small freshwater mussels				
Aquatic vegetation:	sparse				

Stream: Cypress Creek
County: Marshall
Order: IV
Stream length: 12.6 mi

Description: Pollution occurs from dumping of household, industrial, and agricultural material. This particular area is also influenced by a hog farm. This creek is part of the large drainage of the Calvert City industrial complex and is influenced by backwater from the Tennessee River at times.

STUDY AREA DATA

Date: July 22, 1987
Location: off Oak Lane Road
Method: backpack electrofishing
Length of sample area: 100 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	6.2 mg/L	Green sunfish		1	
pH:	7.4	Warmouth		1	
Total alkalinity:	70.2 mg/L	Bluegill	1		
Temperature:	80.6°F	Pirate perch	1		
Average width:	26.0 ft	Western mosquitofish	6		
Average depth:	0.8 ft	Blackspotted topminnow	1		
Conductivity:	145.0 umhos/cm				

Bottom type: silt, muck, and detritus
Fish shelter: medium; undercut banks, logs, and brush
Shade: 50-75%
Aquatic vegetation: sparse

Stream: Cypress Creek
County: Marshall
Order: IV
Stream length: 12.6 mi

Description: Pollution occurs from dumping of household, industrial, and agricultural material. This creek is part of the large drainage of the Calvert City industrial complex and is influenced by backwater from the Tennessee River at times.

STUDY AREA DATA

Date: July 22, 1987
Method: backpack electrofishing
Location: off Hwy 1523 E of Calvert City
Length of sample area: 100 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	7.4 mg/L	Largemouth bass		1	
pH:	7.7	Bowfin		1	
Total alkalinity:	147.0 mg/L	Western mosquitofish	6		
Temperature:	82.4°F				
Average width:	30.0 ft				
Average depth:	3.0 ft				

Bottom type: large rubble, sand, and muck
Fish shelter: medium; undercut banks, logs, and brush
Shade: 50-75%
Aquatic vegetation: sparse

Stream: Cypress Creek
County: Marshall

Order: IV
Stream length: 12.6 mi

Description: Pollution occurs from dumping of household, industrial, and agricultural material. Although this site is above the Calvert City industrial complex, it is part of the large drainage of the complex and is influenced by backwater from the Tennessee River at times.

STUDY AREA DATA

Date: July 23, 1987
Location: on Hwy 62 near I-24 E of Calvert City

Method: backpack electrofishing
Length of sample area: 100 ft

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	4.2	mg/L	Bluegill	50	3	
pH:	7.6		Warmouth		1	
Total alkalinity:	60.0	mg/L				
Temperature:	72°F					
Average width:	20.0	ft				
Average depth:	1.5	ft				
Conductivity:	110.0	umhos/cm				
Bottom type: silt, muck, and detritus						
Fish shelter: sparse; logs and brush						
Shade:	25-50%					
Aquatic vegetation:	sparse					

Stream: Little Cypress Creek Order: III
County: Marshall Stream length: 5.4 mi

Description: Pollution occurs from dumping of household and agricultural material. This creek is influenced by backwater from the Tennessee River at times.

STUDY AREA DATA

Date: July 23, 1987 Method: backpack electrofishing
Location: on Hwy 1042 N of Possum Trot Length of sample area: 100 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	5.8 mg/L	Green sunfish		2	
pH:	7.7	Warmouth	2		
Total alkalinity:	161.0 mg/L	Bluegill	1	1	
Temperature:	76.9°F	Creek chubsucker		4	
Average width:	20.0 ft	Western mosquitofish	2		
Average depth:	2.0 ft	Fantail darter	2		
Conductivity:	110.0 umhos/cm	Creek chub	7		

Bottom type: coarse gravel and silt
Fish shelter: abundant; logs, brush, and undercut banks
Shade: 75-100%
Aquatic vegetation: sparse

Stream: Angle Creek
County: Marshall
Order: III
Stream length: 3.7 mi

Description: This stream has been cleared in some places along the shoreline, and is subjected to agricultural runoff. The fishing potential is poor.

STUDY AREA DATA

Date: July 23, 1987
Location: Old Paducah/Calvert City Road NE of Possumtrot
Method: backpack electrofishing
Length of sample area: 100 ft

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	5.9	mg/L	Green sunfish	5		
pH:	7.6		Black bullhead	11		
Total alkalinity:	162.0	mg/L	Western mosquitofish	5		
Temperature:	80.6°F		Blackspotted topminnow	1		
Average width:	15.0	ft				
Average depth:	0.7	ft				
Conductivity:	295.0	umhos/cm				

Bottom type: coarse gravel, sand, and muck
Fish shelter: medium; undercut banks, logs, and brush
Shade: 75-100%
Aquatic vegetation: sparse

Stream: Lee Creek
County: Livingston
Order: III
Stream length: 4.8 mi

Description: This small creek has mostly gravel substrate.

STUDY AREA DATA

Date: June 7, 1988
Location: on Hwy 937 S of Smithland
Method: backpack electrofishing
Length of sample area: 205 ft

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	8.2	mg/L	Green sunfish	1	1	
pH:	5.9		Bluegill	1		
Total alkalinity:	96.0	mg/L	Mud darter	17		
Temperature:	72°F		Creek chub	10		
Average width:	6.0	ft				
Average depth:	0.5	ft				

Bottom type: large rubble, gravel, and sand
Fish shelter: sparse; undercut banks and brush
Shade: 50-75%
Aquatic vegetation: none

Stream: Cap Spring
County: Marshall

Order: III
Stream length: 3.4 mi

Description: This stream has been cleared in some places along the stream. Pollution occurs from dumping of household and agricultural material.

STUDY AREA DATA

Date: July 23, 1987
Location: off of Hwy 962 N of Fairdealing, Capp Spring Road

Method: backpack electrofishing
Length of sample area: 100 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	6.8 mg/L	Creek chub	22		
pH:	7.1	Western mosquitofish	1		
Total alkalinity:	30.0 mg/L				
Temperature:	80.6°F				
Average width:	6.0 ft				
Average depth:	0.7 ft				
Conductivity:	100.0 umhos/cm				
Bottom type:	coarse gravel and sand				
Fish shelter:	sparse; brush and undercut banks				
Shade:	75-100%				
Aquatic vegetation:	sparse				

Stream: Jonathan Creek Order: V
County: Marshall Stream length: 10.5 mi

Description: This stream has been cleared in some places along the shoreline, and subjected to agricultural runoff. This section of the stream would be influenced at times by Kentucky Lake; therefore, fishing potential is good for fish from the lake.

STUDY AREA DATA

Date: July 17, 1987 Method: electrofishing boat
Location: mouth upstream about 2 mi Length of sample area: 2 mi

Physical - Chemical		Fish Fauna	No. per size group F	I	H
Average width:	40.0 ft	Largemouth bass	25	1	2
Average depth:	6.0 ft	White crappie	9		
Bottom type:	sand, silt, and clay	Shortnose gar		1	1
Fish shelter:	abundant; undercut banks, ledges, logs, and brush	Skipjack herring		1	
		Longear sunfish		2	
Shade:	50-75%	Bluegill			2
Aquatic vegetation:	sparse; filamentous algae	Redear sunfish			1
		Warmouth		1	1
		Carp			2
		River redhorse			2
		Spotted sucker		5	4
		Gizzard shad	50	2	2

Stream: Jonathan Creek
County: Calloway
Order: IV
Stream length: 10.5 mi

Description: This stream has been cleared in some places along the shoreline. Periodic pollution into the stream would occur from agricultural runoff and dumping of garbage.

STUDY AREA DATA

Date: August 3, 1987
Location: Hwy 1346 just E of Nelson Road E of Dexter
Method: backpack electrofishing
Length of sample area: 100 ft
Sampling effort: 15 min

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	4.4 mg/L	Black bullhead	25		
pH:	7.7	Blackspotted topminnow	3		
Total alkalinity:	22.0 mg/L	Suckermouth minnow	1		
Temperature:	80.6°F	Golden shiner	2	1	
Average width:	22.0 ft				
Average depth:	2.0 ft				
Conductivity:	80.0 umhos/cm				

Bottom type: sand, silt, and muck
Fish shelter: sparse; brush, undercut banks, and logs
Shade: 75-100%
Fish food: crayfish
Aquatic vegetation: sparse; filamentous algae

Stream: Jonathan Creek Order: III
County: Calloway Stream length: 10.5 mi

Description: This stream has been cleared in some places along the shoreline, and is subjected to agricultural runoff. This section is also partly channelized. The fishing reputation is fair for panfish.

STUDY AREA DATA

Date: August 3, 1987 Method: backpack electrofishing
Location: Hwy 464 at Shiloh Length of sample area: 100 ft

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	9.0	mg/L	Largemouth bass		1	
pH:	7.7		Bluegill			1
Total alkalinity:	20.0	mg/L	Green sunfish		3	
Temperature:	85°F		Creek chubsucker	1	7	
Average width:	45.0	ft	Blackspotted topminnow	7		
Average depth:	6.0	ft	Largescale stoneroller	13		
Conductivity:	80.0	umhos/cm	Suckermouth minnow	7		
Bottom type: small rubble and sand			Fantail darter	9		
Fish shelter: sparse; logs, ledges, and brush						
Shade:	50-75%					
Fish food: crayfish						
Aquatic vegetation: sparse; filamentous algae						

Stream: Unnamed Creek between Ruff and Olive Creeks Order: II
County: Marshall Stream length: 1.8 mi

Description: This stream has been cleared in some places along the shoreline and is subjected to agricultural runoff. The fishing potential is poor.

STUDY AREA DATA

Date: July 28, 1987 Method: backpack electrofishing
Location: on Hwy 1364 SE of Benton Length of sample area: 100 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	10.5 mg/L	Spotted bass	2		
pH:	7.8	Green sunfish		1	
Total alkalinity:	15.0 mg/L	Longear sunfish	2	2	
Temperature:	82°F	Yellow bullhead	3		
Average width:	25.0 ft	Blackspotted topminnow	5		
Average depth:	1.2 ft	Largescale stoneroller	4		
Conductivity:	55.0 umhos/cm	Creek chub	3		
Bottom type:	small rubble and sand	Creek chubsucker	3	5	
Fish shelter:	sparse; rocks and logs				
Shade:	50-75%				
Aquatic vegetation:	sparse				

Stream: Olive Branch Creek
County: Marshall
Order: III
Stream length: 1.9 mi

Description: This stream has been cleared in some places along the shoreline, and is subjected to agricultural runoff. Fishing is poor.

STUDY AREA DATA

Date: July 28, 1987
Location: on Hwy 1364 SE of Benton
Method: backpack electrofishing
Length of sample area: 100 ft

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	7.2	mg/L	Green sunfish	2	1	
pH:	7.6		Longear sunfish		1	
Total alkalinity:	20.0	mg/L	Blackspotted topminnow	1		
Temperature:	82°F		Suckermouth minnow	2		
Average width:	13.0	ft	Creek chub	5		
Average depth:	1.0	ft				
Conductivity:	72.0	umhos/cm				
Bottom type:	fine gravel and sand					
Fish shelter:	sparse; ledges					
Shade:	75-100%					
Aquatic vegetation:	sparse					

Stream: Little Jonathan Creek Order: III
County: Calloway Stream length: 5.3 mi

Description: This stream has been cleared in some places along the shoreline, and is subjected to agricultural runoff.

STUDY AREA DATA

Date: August 3, 1987 Method: backpack electrofishing
Location: Collins Road off Hwy 1346 Length of sample area: 100 ft
E of Dexter

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	4.8 mg/L	Bluegill		2	
pH:	7.6	Blackspotted topminnow	10		
Total alkalinity:	22.0 mg/L				
Temperatue:	81.6°F				
Average width:	20.0 ft				
Average depth:	1.0 ft				
Conductivity:	61.0 umhos/cm				

Bottom type: sand, silt, and muck
Fish shelter: medium; brush, undercut banks, logs, and ledges
Shade: 50-75%
Fish food: crayfish
Aquatic vegetation: sparse; filamentous algae

Stream: Little Jonathan Creek Order: III
County: Calloway Stream length: 5.3 mi

Description: This stream has been cleared in some places along the shoreline, and is subjected to agricultural runoff.

STUDY AREA DATA

Date: August 3, 1987 Method: backpack electrofishing
Location: Palestine Church Road off of Hwy 1346 Length of sample area: 100 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	4.4 mg/L	Green sunfish	3		
pH:	7.5	Northern hog sucker	1		
Total alkalinity:	24.0 mg/L	Blackspotted topminnow	4	1	
Temperature:	78.4°F	Creek chub	2	2	
Average width:	20.0 ft	Rainbow darter	3		
Average depth:	1.0 ft	Fantail darter	4		
Conductivity:	72.0 umhos/cm				

Bottom type: coarse gravel and sand
Fish shelter: sparse; logs and brush
Shade: 75-100%
Fish food: crayfish
Aquatic vegetation: sparse; filamentous algae

Stream: Hopkins Branch Order: III
County: Calloway Stream length: 1.9 mi

Description: This stream has been cleared in some places along the shoreline, and is subjected to agricultural runoff.

STUDY AREA DATA

Date: August 3, 1987 Method: backpack electrofishing
Location: Collins Road off of Hwy 1346 E of Dexter Length of sample area: 100 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	4.4 mg/L	Green sunfish			1
pH:	7.7	Largescale stoneroller	1		
Total alkalinity:	25.0 mg/L	Creek chubsucker		1	
Temperature:	81.5°F	Suckermouth minnow	12		
Average width:	20.0 ft	Creek chub	10		
Average depth:	1.0 ft	Fantail darter	10		
Conductivity:	74.0 umhos/cm				

Bottom type: coarse gravel, sand, and detritus
Fish shelter: sparse; logs, ledges, and brush
Shade: 75-100%
Fish food: crayfish
Aquatic vegetation: sparse; filamentous algae

Stream: Ledbetter Creek
County: Calloway

Order: III
Stream length: 2.5 mi

Description: This stream has some shoreline clearing. Periodic pollution occurs from dumping and agricultural runoff.

STUDY AREA DATA

Date: August 3, 1987
Location: Hwy 94E, E of Murray

Method: backpack electrofishing
Length of sample area: 100 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	5.3 mg/L	Grass pickerel		1	
pH:	7.2	Smallmouth bass	4		
Total alkalinity:	17.0 mg/L	Spotted bass	2		
Temperature:	76.1°F	Bluegill		1	
Average width:	20.0 ft	Longear sunfish	5	7	
Average depth:	0.5 ft	Yellow bullhead	2		
Conductivity:	39.0 umhos/cm	Logperch	1	1	
Bottom type: small rubble, sand, and detritus		Creek chub	4	1	1
		Creek chubsucker		1	
Fish shelter: sparse; ledges, logs, and brush		Largescale stoneroller	10	2	
		Blackspotted topminnow	3		
Shade:	75-100%	Brook silverside	3		
Aquatic vegetation:	sparse	Fantail darter	6		

Stream: Blood River
County: Calloway
Order: IV
Stream length: 7.4 mi

Description: The fishing potential is good in this area since it is influenced by Kentucky Lake.

STUDY AREA DATA

Date: July 17, 1987
Location: mouth upstream about 2 mi
Method: electrofishing boat
Length of sample area: 2 mi

Physical - Chemical		Fish Fauna	No. per size group F	I	H
Average width:	45.0 ft	Channel catfish			1
Average depth:	6.0 ft	Skipjack herring		1	
Bottom type:	sand, clay, and silt	Bluegill			1
Fish shelter:	abundant; brush, undercut banks, logs, and ledges	River redhorse			1
		Spotted sucker			4
Shade:	75-100%	Gizzard shad		3	7
Aquatic vegetation:	sparse; filamentous algae	Threadfin shad	3	1	

Stream: Blood River
County: Calloway
Order: IV
Stream length: 7.4 mi

Description: This site receives some periodic pollution by agricultural runoff. Fishing potential is moderate as this drainage is influenced by Kentucky Lake.

STUDY AREA DATA

Date: July 9, 1987
Location: Hwy 444 (Winchester Road) off of Hwy 121 S of Murray
Method: rotenone
Length of sample area: 300 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	11.8 mg/L	Largemouth bass		2	
pH:	6.0	Grass pickerel		1	
Total alkalinity:	13.0 mg/L	Longear sunfish	1	9	
Temperature:	75.2°F	Bluegill	5	11	
Average width:	38.0 ft	Green sunfish		3	
Average depth:	2.0 ft	Warmouth	1		
Conductivity:	30.0 umhos/cm	Spotted sucker		24	13
Bottom type: large rubble to coarse gravel, sand, and silt		Blackspotted topminnow	4		
		Emerald shiner	10		
Fish shelter: medium; brush, undercut banks, and boulders		Largescale stoneroller	10	8	
		Creek chub		2	
Shade:	50-75%	Logperch	3	8	
Aquatic vegetation: sparse		Brook silverside	1		
		Fantail darter	1		
		Freckled madtom	1	1	
		Brindled madtom	15		
		Rosyside dace		5	

Stream: Little Sugar Creek Order: II
County: Calloway Stream length: 2.4 mi

Description: This stream has some shoreline clearing. Periodic pollution occurs from dumping and agricultural runoff.

STUDY AREA DATA

Date: July 31, 1987 Method: backpack electrofishing
Location: on Hwy 732 off of Hwy 94 E Length of sample area: 100 ft

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	9.0	mg/L	Green sunfish	1		
pH:	7.5		Blackspotted topminnow	1		
Total alkalinity:	15.0	mg/L	Largescale stoneroller	13		
Temperature:	82°F		Creek chub	11		
Average width:	15.0	ft	Rainbow darter	1		
Average depth:	0.7	ft	Fantail darter	5		
Conductivity:	120.0	umhos/cm				

Bottom type: small rubble, coarse gravel, and sand
Fish shelter: sparse; logs and brush
Shade: 75-100%
Aquatic vegetation: sparse

Stream: Big Sugar Creek Order: IV
County: Calloway Stream length: 3.5 mi

Description: This stream has some shoreline clearing. Periodic pollution occurs by dumping and agricultural runoff. General fishing reputation would be for bait fish.

STUDY AREA DATA

Date: July 31, 1987 Method: backpack electrofishing
Location: on Hwy 732 off of Hwy 94 E Length of sample area: 100 ft

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	10.5 mg/L	Channel catfish		1	
pH:	7.8	Longear sunfish	2	4	
Total alkalinity:	10.0 mg/L	Brook silverside	1		
Temperature:	77°F	Blackspotted topminnow	1		
Average width:	55.0 ft	Creek chub		3	
Average depth:	1.3 ft	Largescale stoneroller	5	4	
Conductivity:	40.0 umhos/cm	Emerald shiner	1		
Bottom type: small rubble, sand, and silt		Steelcolor shiner		3	
		Rainbow darter	6		
Fish shelter: sparse; logs and brush		Fantail darter	2		
Shade:	50-75%				
Aquatic vegetation:	sparse				

Stream: Unnamed Tributary to Big Sugar Creek Order: II
County: Calloway Stream length: 3.7 mi

Description: This stream has some shoreline clearing. The pool to riffle ratio is 75:25. This stream is influenced by Kentucky Lake at times.

STUDY AREA DATA

Date: July 31, 1987 Method: backpack electrofishing
Location: on Hwy 732 off of Hwy 94E at jct of Bean Road Length of sample area: 100 ft

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	9.5	mg/L	Green sunfish	4	6	
pH:	7.9		Creek chubsucker	14	3	
Total alkalinity:	25.0	mg/L	Blackspotted topminnow	2		
Temperature:	79°F		Golden shiner	1	1	
Average width:	10.0	ft	Creek chub	8		
Average depth:	1.0	ft	Fantail darter	4		
Conductivity:	35.0	umhos/cm				
Bottom type:	sand and muck					
Fish shelter:	sparse; brush					
Shade:	50-75%					
Aquatic vegetation:	sparse					

Stream: Wildcat Creek
County: Calloway

Order: III
Stream length: 5.1 mi

Description: This site receives periodic pollution from agricultural runoff. This creek is influenced by Kentucky Lake. Fishing potential is moderate.

STUDY AREA DATA

Date: July 7, 1987
Location: off of Hwy 280, W of Murray

Method: backpack electrofishing
Length of sample area: 150 ft
Sampling effort: 0.25 hour

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	13.2 mg/L	Grass pickerel		1	
pH:	6.0	Spotted bass	2		
Total alkalinity:	11.1 mg/L	Black bullhead		1	
Temperature:	71.6°F	Bluegill		2	
Average width:	12.0 ft	Green sunfish		1	
Average depth:	1.3 ft	Longear sunfish		11	
Conductivity:	28.0 umhos/cm	Largescale stoneroller	10	4	
Bottom type:	coarse to fine gravel, sand, silt, muck, and detritus	Creek chub	4	2	
		Blackspotted topminnow	2		
Fish shelter:	medium; brush, undercut banks, and logs	Emerald shiner	1		
		Rainbow darter	3		
Shade:	50-75%	Mud darter	3		
Aquatic vegetation:	sparse; filamentous algae	Fantail darter	1		

Stream: Wildcat Creek Order: III
County: Calloway Stream length: 5.1 mi

Description: This site has periodic pollution from agricultural runoff. This creek is influenced by Kentucky Lake. Fishing pressure is moderate.

STUDY AREA DATA

Date: July 7, 1987
Location: off of Hwy 280 on Ralph Wright Road
Method: backpack electrofishing
Length of sample area: 100 ft
Sampling effort: 0.25 hour

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	12.2 mg/L	Longear sunfish		3	
pH:	5.5	Blackspotted topminnow	3		
Total alkalinity:	10.0 mg/L	Creek chub	1		
Temperature:	69°F	Rainbow darter	1		
Average width:	8.0 ft	Mud darter	3		
Average depth:	1.0 ft				
Conductivity:	25.0 umhos/cm				

Bottom type: clay
Fish shelter: medium; brush, undercut banks, and ledges
Shade: 25-50%
Aquatic vegetation: sparse; filamentous algae

Stream: Unnamed tributary to Wildcat Creek Order: III
County: Calloway Stream length: 2.1 mi

Description: This site receives periodic pollution from agricultural runoff. This creek is influenced by Kentucky Lake. Fishing potential is moderate.

STUDY AREA DATA

Date: July 7, 1987
Location: off of Hwy 280 NE of Pottertown
Method: backpack electrofishing
Length of sample area: 150 ft
Sampling effort: 0.25 hour

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	11.1 mg/L	Longear sunfish		5	
pH:	6.0	Green sunfish		2	
Total alkalinity:	16.0 mg/L	Bluegill	1	3	
Temperature:	69°F	Creek chub	7	7	
Average width:	15.0 ft	Largescale stoneroller	3	1	
Average depth:	1.7 ft	Emerald shiner	1		
Conductivity:	29.0 umhos/cm	Blackspotted topminnow	5		
Bottom type: coarse to fine gravel, sand, clay, silt, and muck		Creek chubsucker		3	
Fish shelter: medium; brush, undercut banks, and logs		Golden shiner	1		
Shade:	75-100%	Fantail darter	7		
Fish food: crayfish					
Aquatic vegetation: sparse; filamentous algae					

Stream: Goose Creek
County: Calloway

Order: II
Stream length: 3.0 mi

Description: This stream has been cleared in some places along the shoreline. Periodic pollution occurs from agricultural runoff and dumping. The fishing reputation is poor.

STUDY AREA DATA

Date: July 7, 1987
Location: Hwy 280 off of Hwy 121

Method: backpack electrofishing
Length of sample area: 100 ft
Sampling effort: 15 min

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	14.0	mg/L	Spotted bass	2		
pH:	6.0		Creek chub	10	3	
Total alkalinity:	10.2	mg/L	Fantail darter	6		
Temperature:	75°F		Rainbow darter	5		
Average width:	5.0	ft	Mud darter	6		
Average depth:	0.8	ft	Largescale stoneroller	12		
Conductivity:	30.0	umhos/cm				

Bottom type: coarse to fine gravel, sand, clay, and silt
Fish shelter: sparse; brush and undercut banks
Shade: 75-100%
Fish food: crayfish
Aquatic vegetation: sparse; filamentous algae

Stream: Dog Creek
County: Calloway

Order: III
Stream length: 4.8 mi

Description: This stream had been cleared in some places along the shoreline. Periodic pollution occurs from agricultural runoff and dumping. The fishing reputation is poor.

STUDY AREA DATA

Date: July 7, 1987
Location: East State Line Road

Method: backpack electrofishing
Length of sample area: 100 ft
Sampling effort: 15 min

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	11.2 mg/L	Yellow bullhead		1	
pH:	5.7	Warmouth		1	
Total alkalinity:	11.0 mg/L	Bluegill		2	
Temperature:	71°F	Spotted sucker		1	
Average width:	15.0 ft	Fantail darter	5		
Average depth:	1.3 ft	Rainbow darter	4		
Conductivity:	30.0 umhos/cm	Johnny darter	2		
Bottom type: coarse to fine gravel, sand, clay, and silt		Redfin shiner	11		
		Emerald shiner	7		
Fish shelter: medium; brush, undercut banks, logs, and ledges		Largescale stoneroller	4		
		Blackspotted topminnow	1		
Shade:	75-100%				
Fish food: frogs					
Aquatic vegetation: sparse; filamentous algae					

Stream: Lax Creek
County: Calloway
Order: III
Stream length: 3.3 mi

Description: This stream has been cleared in some places along the shoreline. Periodic pollution occurs from agricultural runoff and dumping. The fishing reputation is fair for panfish.

STUDY AREA DATA

Date: July 8, 1987
Location: East State Line Road
Method: backpack electrofishing
Length of sample area: 100 ft
Sampling effort: 15 min

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	10.8	mg/L	Green sunfish	9	9	
pH:	6.0		Blackspotted topminnow	12		
Total alkalinity:	16.0	mg/L	Creek chubsucker	9		
Temperature:	66°F		Suckermouth minnow	7		
Average width:	8.0	ft	Redfin shiner	2		
Average depth:	1.3	ft	Emerald shiner	3		
Conductivity:	30.0	umhos/cm	Fantail darter	5		
Bottom type: fine gravel, sand, and clay			Mud darter	3		
Fish shelter: medium; brush, logs, and undercut banks						
Shade:	75-100%					
Fish food: crayfish						
Aquatic vegetation: sparse; filamentous algae						

Stream: McCullogh Creek Order: IV
County: Calloway Stream length: 4.9 mi

Description: This site receives some periodic pollution from agricultural runoff. This is a small drainage of Blood River. The general fishing reputation is poor.

STUDY AREA DATA

Date: July 8, 1987 Method: backpack electrofishing; seine hauls (3)
Location: on State Line Road off of of Hwy 121 Length of sample area: 100 ft
Sampling effort: 0.25 hour

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	11.8 mg/L	Longear sunfish	2		
pH:	6.0	Blackspotted topminnow	9	2	
Total alkalinity:	12.0 mg/L	Creek chub	19	1	
Temperature:	62.6°F	Emerald shiner	44		
Average width:	30.0 ft	Redfin shiner	2		
Average depth:	1.4 ft	Largescale stoneroller	79		
Conductivity:	29.0 umhos/cm	Mud minnow	1		

Bottom type: coarse to fine gravel, sand, clay, silt, muck, and detritus
Fish shelter: sparse; brush and undercut banks
Shade: 75-100%
Fish food: crayfish
Aquatic vegetation: sparse; filamentous algae

Stream: Panther Creek Order: III
County: Calloway Stream length: 5.0 mi

Description: This site has periodic pollution from agricultural runoff. This creek is influenced by Kentucky Lake. Fishing pressure is moderate.

STUDY AREA DATA

Date: July 6, 1987
Location: Parkers Field; gravel road off of Hwy 280
Method: backpack electrofishing
Length of sample area: 100 ft
Sampling effort: 0.25 hour

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	11.9	mg/L	Spotted bass	1		
pH:	6.0		Yellow bullhead	3	4	
Total alkalinity:	11.0	mg/L	Longear sunfish	2	1	
Temperature:	80°F		Green sunfish	1	1	
Average width:	13.0	ft	Bluegill	2		
Average depth:	1.0	ft	Logperch	7		
Bottom type: coarse to fine gravel and sand			Largescale stoneroller	12	1	
			Brook silverside	9		
Fish shelter: medium; brush, undercut banks, and ledges			Creek chub	1		
			Steelcolor shiner	1	1	
Shade:	50-75%		Emerald shiner	1		
Aquatic vegetation: sparse			Mimic shiner	5		
			Rainbow darter	3		
			Harlequin darter	1		
			Fantail darter	21		

Stream: Unnamed stream at Edwards Indian Mound Order: III
County: Calloway Stream length: 2.1 mi

Description: This small creek has received some clearing and is subjected to agricultural runoff.

STUDY AREA DATA

Date: July 7, 1987
Location: Hwy 280 just N of crossing of Panther Creek

Method: backpack electrofishing
Length of sample area: 100 ft
Sampling effort: 15 min

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	13.4 mg/L	Creek chub	18	2	
pH:	6.0	Mud darter	12		
Total alkalinity:	9.0 mg/L				
Temperature:	69°F				
Average width:	6.0 ft				
Average depth:	0.5 ft				
Conductivity:	22.0 umhos/cm				

Bottom type: coarse to fine gravel, sand, and silt
Fish shelter: sparse; brush, undercut banks, and logs
Shade: 75-100%
Aquatic vegetation: sparse; filamentous algae

Stream: Beechy Creek
County: Calloway

Order: IV
Stream length: 9.5 mi

Description: This site has received some shoreline clearing and receives some periodic pollution by agricultural runoff. This creek is influenced by Kentucky Lake. Fishing potential is moderate.

STUDY AREA DATA

Date: July 8, 1987
Location: on Hwy 444 S of Murray

Method: backpack electrofishing
Length of sample area: 100 ft
Sampling effort: 0.25 hour

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	14.8 mg/L	Largemouth bass		1	
pH:	6.0	Yellow bullhead	1		
Total alkalinity:	19.0 mg/L	Longear sunfish		1	
Temperature:	79.7°F	Green sunfish		1	
Average width:	25.0 ft	Blackspotted topminnow	5		
Average depth:	1.5 ft	Emerald shiner	12		
Conductivity:	50.0 umhos/cm	Western mosquitofish	3		
Bottom type: coarse to fine gravel, sand, and silt		suckermouth minnow	4		
		Creek chub	3		
Fish shelter: sparse; brush and undercut banks		Redfin shiner	5		
		Rainbow darter	5		
Shade:	50-75%	Fantail darter	1		
Aquatic vegetation: sparse; filamentous algae					

Stream: Beechy Creek
County: Calloway

Order: III
Stream length: 9.5 mi

Description: This site receives periodic pollution by agricultural runoff. This creek is influenced by Kentucky Lake. Fishing potential is moderate.

STUDY AREA DATA

Date: July 8, 1987
Location: on Hwy 121 S of Murray

Method: backpack electrofishing
Length of sample area: 100 ft
Sampling effort: 0.25 hour

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	13.1	mg/L	Green sunfish	1		
pH:	6.0		Longear sunfish	1		
Total alkalinity:	6.0	mg/L	Creek chub	11	4	
Temperature:	77°F		Suckermouth minnow	10		
Average width:	20.0	ft	Largescale stoneroller	21		
Average depth:	1.4	ft				
Conductivity:	55.0	umhos/cm				

Bottom type: coarse to fine gravel, sand, silt, muck, and detritus
Fish shelter: medium; brush and undercut banks
Shade: 50-75%
Aquatic vegetation: sparse; filamentous algae

Stream: Tan Branch Order: III
County: Calloway Stream length: 3.2 mi

Description: This stream has been cleared in some places along the shoreline. Periodic pollution occurs from agricultural runoff and dumping.

STUDY AREA DATA

Date: July 6, 1987 Method: backpack electrofishing
Location: Hwy 444 off of Hwy 121 Length of sample area: 100 ft
Sampling effort: 15 min

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	8.9	mg/L	Spotted bass	1		
pH:	6.0		Green sunfish		4	2
Total alkalinity:	15.0	mg/L	Longear sunfish		1	
Temperature:	78°F		Creek chub	6	6	
Average width:	8.0	ft	Largescale stoneroller	4	2	
Average depth:	1.3	ft	Blackspotted topminnow	5		
Conductivity:	40.0	umhos/cm	Mud darter	1		
Bottom type: coarse to fine gravel, clay, sand, silt, muck, and detritus			Fantail darter	16		
Fish shelter: medium; brush, logs, ledges, and undercut banks						
Shade:	75-100%					
Fish food: crayfish						
Aquatic vegetation: sparse; filamentous algae						

Stream: Grindstone Creek Order: III
County: Calloway Stream length: 0.7 mi

Description: A limited panfish fishery exists on this creek.

STUDY AREA DATA

Date: July 6, 1987 Method: backpack electrofishing
Location: Hwy 444 off of Hwy 121 Length of sample area: 100 ft
Sampling effort: 15 min

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	9.8 mg/L	Longear sunfish	6	7	
pH:	6.0	Green sunfish		1	
Total alkalinity:	12.0 mg/L	Creek chub		1	
Temperature:	77.9 °F	Blackspotted topminnow	1	1	
Average width:	3.0 ft	Logperch		1	
Average depth:	0.5 ft	Largescale stoneroller	8		
Conductivity:	40.0 umhos/cm	Brook silverside	1		
Bottom type: coarse to fine gravel, sand, clay, silt, and muck		Fantail darter	6		
		Rainbow darter		1	
Fish shelter: medium; brush, logs, and undercut banks					
Shade:	75-100%				
Fish food: crayfish					
Aquatic vegetation: sparse; filamentous algae					

Stream: Pisgah Creek Order: II
County: Lyon Stream length: 2.3 mi

Description: This sample area was just off the main road at a large gravel opening, accessed by a foot path. The above normal rainfall for the month caused this stream to have flow. The pool to riffle ratio was 70:30.

STUDY AREA DATA

Date: July 7, 1989 Method: backpack electrofishing
Location: foot path off of LBL Road #114 Length of sample area: 175 ft
Sampling effort: 5.13 min

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	8.4	mg/L	Creek chub	20		
pH:	8.6					
Total alkalinity:	17.1	mg/L				
Temperature:	66°F					
Average width:	4.0	ft				
Average depth:	0.67	ft				
Conductivity:	32 umhos/cm					
Turbidity:	4.0 NTU					

Bottom type: small rubble to fine gravel and sand
Fish shelter: sparse; undercut banks and brush
Shade: 50%
Fish food: frogs
Aquatic vegetation: sparse; filamentous algae

Stream: Pisgah Creek
County: Lyon

Order: II
Stream length: 2.3 mi

Description: The fish habitat was undercut banks and brush. This section of stream had good flow. Shading on the creek was reduced to about 50%.

STUDY AREA DATA

Date: July 6, 1989
Location: Old Ferry Road (LBL Road #114) at crossing

Method: backpack electrofishing
Length of sample area: 125 ft
Sampling effort: 7.83 min

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	9.6	mg/L	Largemouth bass	1		
pH:	7.8		Green sunfish	2	1	
Total alkalinity:	17.1	mg/L	Creek chub	19	3	
Temperature:	69°F		Largescale stoneroller	7		
Average width:	5.0	ft				
Average depth:	0.33	ft				
Conductivity:	30 umhos/cm					
Turbidity:	4.8 NTU					
Bottom type:	small rubble to fine gravel and sand					
Fish shelter:	medium; undercut banks and logs					
Shade:	50%					
Fish food:	none					
Aquatic vegetation:	none					

Stream: Smith Creek
County: Lyon

Order: III
Stream length: 2.1 mi

Description: This sample site was at a large gravel basin with very little shade. The pool to riffle ratio was 40:60.

STUDY AREA DATA

Date: July 7, 1989
Location: LBL Road #130 at the Waterfowl Refuge

Method: backpack electrofishing
Length of sample area: 350 ft
Sampling effort: 7.36 min

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	9.0	mg/L	Largemouth bass	2		
pH:	8.2		Longear sunfish	2		
Total alkalinity:	17.1	mg/L	Green sunfish	1		
Temperature:	72°F		Yellow bullhead	2		
Average width:	5.0	ft	Largescale stoneroller	21	1	
Average depth:	0.5	ft	Lollipop darter	11		
Conductivity:	40 umhos/cm					
Turbidity:	3.9 NTU					

Bottom type: large rubble to fine gravel, sand, and silt
Fish shelter: medium; undercut banks and brush
Shade: 25%
Fish food: none
Aquatic vegetation: sparse; filamentous algae

Stream: Duncan Creek
County: Lyon

Order: I
Stream length: 2.2 mi

Description: This sample area was located just below Duncan Lake dam, where the creek is influenced by Duncan Lake. The substrate was composed more of mud and silt than any type of gravel. The aquatic vegetation was influenced by the lake. The pool to riffle ratio was 90:10.

STUDY AREA DATA

Date: July 7, 1989
Location: LBL Road #132 below dam at Duncan Lake

Method: backpack electrofishing
Length of sample area: 300 ft
Sampling effort: 5.48 min

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	7.6	mg/L	Largemouth bass	10		
pH:	8.2		Bluegill	4	2	
Total alkalinity:	34.2	mg/L	Green sunfish	1		
Temperature:	85°F		Largescale stoneroller	14		
Average width:	4.0	ft	Lollipop darter	3		
Average depth:	0.67	ft				
Conductivity:	43 umhos/cm					
Turbidity:	4.8 NTU					

Bottom type: boulders to fine gravel, sand, clay, silt, muck, and detritus
Fish shelter: medium; undercut banks and brush
Shade: 75%
Fish food: none
Aquatic vegetation: abundant; filamentous algae, pondweed, coontail, and water primrose

Stream: North Fork Sugar Creek Order: III
County: Trigg Stream length: 2.3 mi

Description: This sample site was close to the mouth of the creek. This creek consisted of large pools, which had very little flow of water. Access to this sample site was by four-wheelers.

STUDY AREA DATA

Date: June 21, 1989 Method: backpack electrofishing
Location: Four-wheeler road off of LBL Road #318 Length of sample area: 325 ft
Sampling effort: 11.01 min

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	8.2 mg/L	Bluegill	2		
pH:	7.4	Longear sunfish	3	4	
Total alkalinity:	153.9 mg/L	Hybrid sunfish		1	
Temperature:	57°F	Green sunfish	5	4	3
Average width:	2.0 ft	Northern hog sucker			15
Average depth:	0.5 ft	Yellow bullhead	2	3	
Conductivity:	135 umhos/cm	Largescale stoneroller	4	2	
Turbidity:	2.0 NTU	Suckermouth minnow	3		
Bottom type: small rubble to fine gravel and sand		Logperch		1	
		Lollipop darter	6		
Fish shelter: medium; undercut banks and brush					
Shade:	50%				
Fish food: crayfish and tadpoles					
Aquatic vegetation: sparse; filamentous algae					

Stream: North Fork Sugar Creek Order: II
County: Trigg Stream length: 2.3 mi

Description: This area of sampling was located just above an unnamed tributary that had two springs. This area had a pool to riffle ratio of 80:20.

STUDY AREA DATA

Date: June 21, 1989 Method: backpack electrofishing
Location: LBL Road #318 upstream from the two springs Length of sample area: 250 ft
Sampling effort: 7.93 min

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	4.0 mg/L	Longear sunfish	1	1	
pH:	7.5	Green sunfish	3	1	
Total alkalinity:	136.8 mg/L	Northern hog sucker			25
Temperature:	64°F	Creek chubsucker	2	3	
Average width:	8.0 ft	Johnny darter	1		
Average depth:	0.67 ft	Lollipop darter	13		
Conductivity:	105 umhos/cm				
Turbidity:	3.9 NTU				
Bottom type:	small rubble to fine gravel and sand				
Fish shelter:	medium; undercut banks and brush				
Shade:	75%				
Fish food:	frogs				
Aquatic vegetation:	none				

Stream: Unnamed tributary to North Fork Sugar Creek Order: II
County: Trigg Stream length: 1.9 mi

Description: Two springs flowed into the stream upstream of the sample site. The pool to riffle ratio was 70:30.

STUDY AREA DATA

Date: June 21, 1989
Location: LBL Road #318 at crossing
Method: backpack electrofishing
Length of sample area: 250 ft
Sampling effort: 7.95 min

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	8.6 mg/L	Green sunfish		2	
pH:	7.6	Creek chub	7	5	
Total alkalinity:	205.2 mg/L	Largescale stoneroller	1		
Temperature:	66°F	Johnny darter	1		
Average width:	6.0 ft	Lollipop darter	48		
Average depth:	0.5 ft				
Conductivity:	170 umhos/cm				
Turbidity:	1.4 NTU				

Bottom type: large rubble to fine gravel, sand, and silt
Fish shelter: medium; undercut banks and brush
Shade: 75%
Fish food: crayfish and mudpuppy
Aquatic vegetation: none

Stream: Higgins Branch
County: Trigg

Order: II
Stream length: 1.6 mi

Description: This sample site had only a few isolated pools. It is influenced by Kentucky Lake during high water.

STUDY AREA DATA

Date: July 10, 1989
Location: LBL Road #141 at Higgins Bay at the spring

Method: backpack electrofishing
Length of sample area: 275 ft
Sampling effect: 5.75 min

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	7.4	mg/L	Bluegill	1		
pH:	8.3		Longear sunfish		1	
Total alkalinity:	34.2	mg/L	Green sunfish	2	5	
Temperature:	61°F		Yellow bullhead	7	1	
Average width:	3.0	ft	Creek chub	1		
Average depth:	0.42	ft				
Conductivity:	31 umhos/cm					
Turbidity:	4.2 NTU					

Bottom type: small rubble to fine gravel, sand, and silt
Fish shelter: medium; undercut banks and brush
Shade: 75%
Fish food: frogs and crayfish
Aquatic vegetation: sparse; filamentous algae

Stream: Rhodes Creek Order: II
County: Trigg Stream length: 1.7 mi

Description: This sample site has intermittent flow, and is influenced by Kentucky Lake.

STUDY AREA DATA

Date: July 10, 1989 Method: backpack electrofishing
Location: LBL Road #141 at Rhodes Bay just past spring Length of sample area: 300 ft
Sampling effort: 8.92 min

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	8.6	mg/L	Largemouth bass	1		
pH:	8.5		Smallmouth bass	1		
Total alkalinity:	34.2	mg/L	Bluegill	3		
Temperature:	69°F		Longear sunfish	5	1	
Average width:	4.0	ft	Green sunfish	7	7	
Average depth:	0.42	ft	Yellow bullhead	4	3	
Conductivity:	40 umhos/cm					
Turbidity:	4.4 NTU					

Bottom type: small rubble to fine gravel and sand
Fish shelter: medium; undercut banks and brush
Shade: 75%
Fish food: frogs
Aquatic vegetation: sparse; filamentous algae

Stream: Vickers Creek Order: II
County: Trigg Stream length: 1.4 mi

Description: This sample site has intermittent flow, and is most likely under the influence of Kentucky Lake.

STUDY AREA DATA

Date: July 10, 1989 Method: backpack electrofishing
Location: LBL Road #141 at the back of Vickers Bay Length of sample area: 200 ft
Sampling effort: 8.56 min

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	7.8	mg/L	Largemouth bass	1		
pH:	8.5		Yellow bullhead	7	1	
Total alkalinity:	17.1	mg/L				
Temperature:	67°F					
Average width:	4.0	ft				
Average depth:	0.5	ft				
Conductivity:	31 umhos/cm					
Turbidity:	3.2 NTU					

Bottom type: small rubble to fine gravel and sand
Fish shelter: medium; undercut banks and brush
Shade: 75%
Fish food: frogs and salamanders
Aquatic vegetation:

Stream: Barnett Creek - Tennessee River Order: II
County: Trigg Stream length: 2.5 mi

Description: Large pools and small riffles composed the majority of this sample area, which had running water due only to the above normal rainfall during June.

STUDY AREA DATA

Date: June 21, 1989 Method: backpack electrofisher
Location: N of Hwy 68 on LBL Road # 339 Length of sample area: 220 ft
Sampling effort: 4.53 min

Physical - Chemical		Fish Fauna	No. per size group F	I	H
D.O:	9.6 mg/L	Longear sunfish		1	
pH:	8.0				
Total alkalinity:	32.2 mg/L				
Temperature:	60°F				
Average width:	6.0 ft				
Average depth:	0.33 ft				
Conductivity:	30 umhos/cm				
Turbidity:	4.2 NTU				
Bottom type:	small rubble to fine gravel and sand				
Fish shelter:	medium; undercut banks				
Shade:	75%				
Fish food:	none				
Aquatic vegetation:	none				

Stream: Turkey Creek
County: Trigg
Order: III
Stream length: 2.0 mi

Description: Springs in this drainage keep the water in this creek very cool. The sample site was near a spring. It seemed to be perfect habitat for darters. This creek was in an off-road vehicle area, causing disturbance of fish habitat. The pool to riffle ratio was 60:40.

STUDY AREA DATA

Date: June 9, 1989
Location: LBL Road #167 back of open field
Method: backpack electrofishing
Length of sample area: 150 ft
Sampling effort: 11.92 min

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	5.8	mg/L	Bluegill		5	
pH:	7.2		Longear sunfish	1	4	
Total alkalinity:	34.2	mg/L	Green sunfish			4
Temperature:	59°F		Yellow bullhead	1	2	
Average width:	6.0	ft	Logperch		1	
Average depth:	0.67	ft	Creek chub	1		
Conductivity:	31	umhos/cm	Lollipop darter	6		
Turbidity:	2.4	NTU				

Bottom type: coarse to fine gravel, sand, and detritus
Fish shelter: medium; undercut banks, logs, and brush
Shade: 75%
Fish food: none
Aquatic vegetation: sparse; filamentous algae

Stream: Colson Creek
County: Trigg

Order: II
Stream length: 1.2 mi

Description: The sample site consisted of mostly isolated pools except where influenced by Kentucky Lake. The substrate was mostly of gravel, and the fish shelter was from undercut banks.

STUDY AREA DATA

Date: June 9, 1989
Location: Colson Hollow campground on LBL Road #169

Method: backpack electrofishing
Length of sample area: 200.0 ft
Sampling effort: 7.38 min

Physical - Chemical			Fish Fauna	No. per size group F	I	H
D.O:	6.8	mg/L	Grass pickerel	1		
pH:	7.4		Bluegill	2	6	
Total alkalinity:	68.4	mg/L	Longear sunfish	2		
Temperature:	64°F		Green sunfish	1	2	
Average width:	4.0	ft	Yellow bullhead	2	1	
Average depth:	0.5	ft	Largescale stoneroller	3		
Conductivity:	73 umhos/cm		Lollipop darter	14		
Turbidity:	1.6 NTU					

Bottom type: small rubble to fine gravel, sand, silt and detritus
Fish shelter: medium; undercut banks, logs and brush
Shade: 75%
Fish food: frogs
Aquatic vegetation: none

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Streams Surveyed In The Lower Cumberland River Drainage

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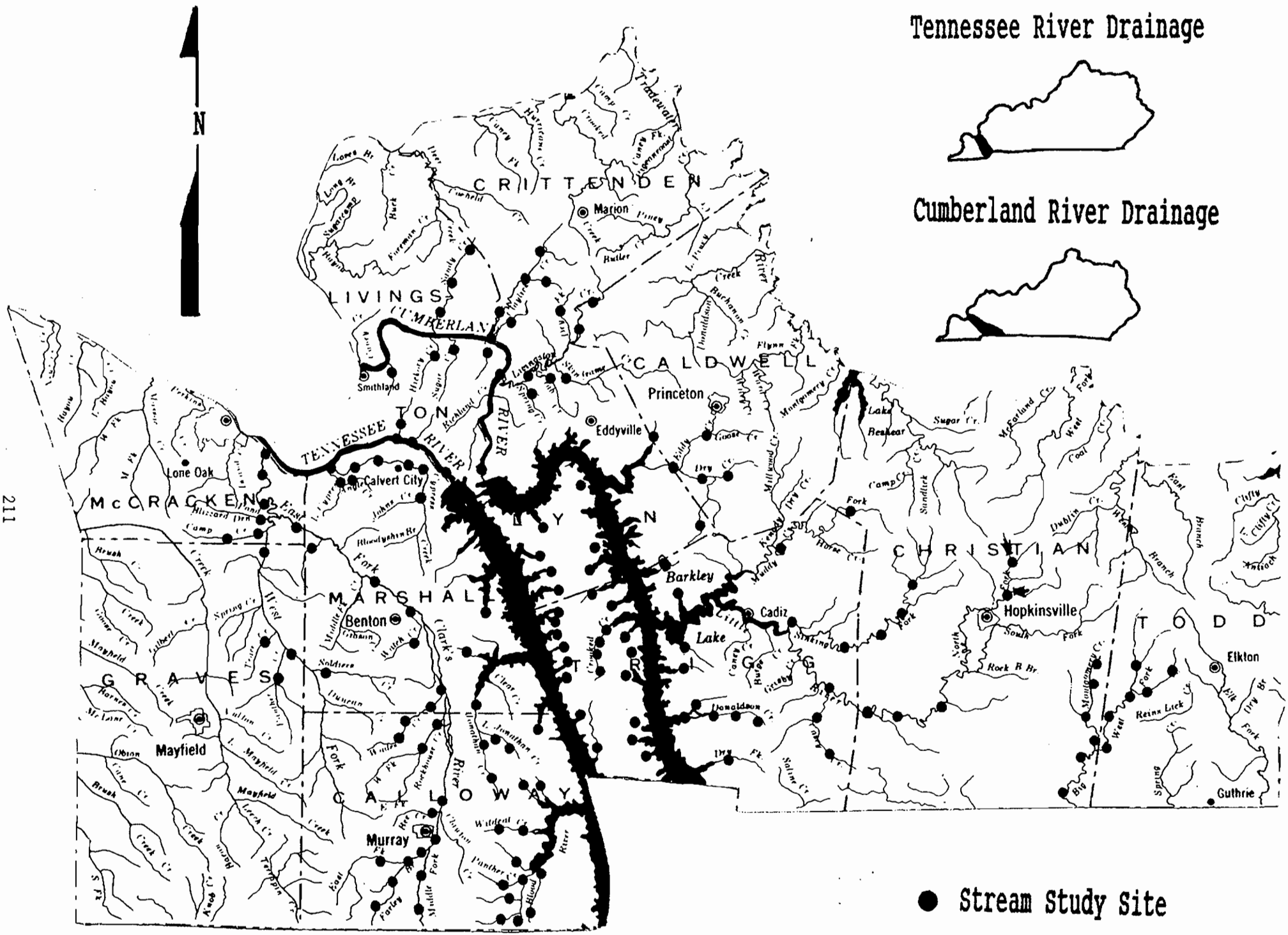
Streams surveyed in the lower Tennessee River Drainage

Dog Creek	III	185
Lax Creek	III	186
McCullogh Creek	IV	187
Panther Creek	III	188
Unnamed stream at Edwards Indian Mound	III	189
Beechy Creek	IV	190
Beechy Creek	III	191
Tan Branch	III	192
Grindstone Creek	III	193
Drainages Within Land-Between-The Lakes		
Pisgah Creek	II	194
Smith Creek	III	196
Duncan Creek	I	197
North Fork Sugar Creek	III	198
North Fork Sugar Creek	II	199
Unnamed tributary	II	200
Higgins Branch	II	201
Rhodes Creek	II	202
Vickers Creek	II	203
Barnett Creek	II	204
Turkey Creek	III	205
Colson Hollow	II	206

^LBL - Land-Between-The-Lakes


Tennessee River Drainage
Cumberland River Drainage
N
CRITTENDEN
Marion
LIVINGSTON
CUMBERLAND
RIVER
Smithland
CALDWELL
Princeton
Eddyville
TENNESSEE
RIVER
LYON
Lake
Barkley
Cadiz
McCRACKEN
Lone Oak
Calvert City
MARSHALL
Benton
GRAVES
Mayfield
CALLOWAY
Murray
CHRISTIAN
Hopkinsville
TODD
Elkton
Guthrie
Stream Study Site