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**"Inventory and Classification of Streams
in the Upper Cumberland River Drainage"**

Department of Fish and Wildlife Resources

Minor Clark, Commissioner

INVENTORY AND CLASSIFICATION OF
STREAMS IN THE UPPER CUMBERLAND
RIVER DRAINAGE OF KENTUCKY

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ABSTRACT

The streams of fishery importance in the Upper Cumberland River Drainage of Kentucky were listed and classified on the basis of stream order. Some of the physical, chemical, and biological characteristics of the streams are described as well as the general characteristics of the fishery.

Stream order provided a satisfactory means of classifying streams and selecting sampling areas when other factors influencing stream habitat were taken into consideration.

Approximately 1,040 miles of stream in the drainage are considered of fishery importance but 440 miles (42%) are polluted. At least 16 streams totaling 387 miles in length have been degraded by strip mine pollution — the most widespread and serious form of pollution in the drainage. Acid drainage from deep mines was found on 6 streams and gross sewage pollution occurred in one stream.

A grand total of 85 species of fishes representing 15 families were identified from 77 fish population samples. The rock bass occurred in 58% of the samples and was the most frequently recorded species. The bluntnose minnow was the most numerous species while the coosa bass was the rarest species.

INTRODUCTION

The increasing competition for water usage in Kentucky has created a growing concern for the future of streams and stream fishing in the Commonwealth. At the present time no less than three agencies are engaged in research studies related to determining the recreational significance of the stream resource.

The University of Kentucky has recently established the Water Resources Institute which is currently engaged in research related to stream economics.

The University of Louisville has recently established a Water Resources Laboratory which is currently engaged in a comprehensive study to determine post-impoundment changes occurring in the Salt River Drainage where flood control impoundments will be constructed.

The Game Division of the Kentucky Department of Fish and Wildlife Resources has recently initiated a study to determine the recreational potential of selected streams while the Fisheries Division will document existing conditions on the important streams in the Commonwealth. The specific objectives of this study are to list and classify the streams of fishery importance and to determine the existing physical, chemical, and biological characteristics of the more important streams.

Several milestones have recently been reached which may significantly alter the present course of stream degradation in Kentucky. In 1968, for the first time in its history, the Kentucky Water Pollution Control Commission collected damages for pollution caused fish kills in two streams. The Governor of Kentucky established a Wild Rivers Commission to select streams for preservation and also established a Water Resources Council for evaluating problems involved in water resource management. The U. S. Army Corps of Engineers has shelved plans for a flood control impoundment on an important section of the Rockcastle River, and after considerable controversy, they are reconsidering the location of another impoundment on the now famous Red River in eastern Kentucky.

DESCRIPTION OF THE UPPER CUMBERLAND RIVER DRAINAGE

The Upper Cumberland River Drainage is located in southeastern Kentucky and north central Tennessee. The drainage area encompasses approximately 6,290 square miles and the total area within Kentucky is approximately 5,180 square miles. The Cumberland River originates at the confluence of Clover Fork and Poor Fork in Harlan County. From this point it flows 137 miles before it enters Lake Cumberland and below Lake Cumberland the river flows 74.5 miles before it enters Tennessee.

There are 6 major tributaries to the Cumberland River which have a drainage area exceeding 200 square miles. The Big South Fork Cumberland River encompasses a drainage area of 1,382 square miles, and the Rockcastle River 763 square miles. Clear Fork, Buck Creek and Laurel River have drainage areas of 470, 294 and 289 square miles respectively while the area of Beaver Creek in Wayne County is 234 square miles.

The eastern two-thirds of the drainage is located in the Eastern Mountains and Coalfield physiographic region. The topography of this section of the drainage varies from rolling to mountainous and is heavily forested. This area is underlain with sandstones and shales and contains extensive coal deposits. Soils in this area are Muskingum associations and soil fertility ranges from very low to low.

The western third of the drainage is located in the Eastern Pennyroyal physiographic region. The topography of this area is rolling to hilly and some sections are karsted. Limestones, shales, and siltstones underly this area and soils are mainly Dixson, Baxter, and Westmoreland associations. Soil fertility here ranges from low to medium.

PROCEDURES

A list of the streams of fishery importance in the Upper Cumberland River Drainage was compiled by interviewing each conservation officer in the drainage and by reviewing files of the Kentucky Division of Fisheries. These streams were then classified on the basis of stream order by working from U. S. Geological Survey topography maps which were scaled 1:24,000. The stream order method of classification is based on branching. The headwater streams are classified as first order and the union of two such streams forms a stream of the second order. Whenever two streams of equal order join they form a stream of the next highest order.

Project personnel inspected the streams which were considered to be of fishery importance and selected sampling areas on the basis of stream order, access, and anticipated changes in habitat. An effort was made to locate one sampling area within each designated order of the more important fishing streams. The streams of lesser importance were sampled one time, usually within the section designated as their highest order. Some warmwater streams of minor importance and most trout streams were not sampled, but they were described and included in the listing.

Chemical Characteristics

The following chemical characteristics were determined at each sampling area: dissolved oxygen was determined by the Modified Winkler Method; total alkalinity was determined by using brom cresol-green, methyl-red as an indicator and titrating with 0.02N sulfuric acid; the hydrogen-ion concentration was determined using a portable electric meter.

Physical Characteristics

The following physical characteristics were determined at each study area: stream transparency or turbidity was measured in inches with a secchi

disk; the surface water temperature and air temperature was determined with a pocket-type alcohol thermometer; stream velocity was determined by floating a partially submerged object through a 100 foot section of stream three times and taking an average of the time the float required to traverse this distance in feet per second; the characteristic bottom type of each study area was recorded; and volume of flow was determined from the formula:

$$V = wdfc$$

where V = volume of flow

w = the average width

d = the average depth

f = the velocity in feet per second

c = co-efficient of roughness (0.9 smooth bottom; 0.8 rough bottom).

Biological Characteristics

The following biological characteristics were recorded at each sampling area: the fish population composition; the dominant forms of aquatic vegetation; the macrobenthos was recorded merely by inspecting the riffles and listing the dominate forms observed.

The fish population composition of most sampling areas was determined by using emulsifiable rotenone. Cresol or NaCN was used on some small cold-water streams while gill nets were used on the larger rivers when the use of chemicals was not feasible. When chemicals were used for sampling, small mesh nets were stretched across the width of the stream at each end of the sampling area. Rotenone and NaCN were applied to the sampling areas at a concentration of 1.0 ppm while cresol was used at a concentration of one quart per second foot. Potassium permanganate was used to oxidize the rotenone and eliminate downstream fish kills. This was accomplished by applying an amount of permanganate equal to twice the strength of rotenone to the stream immediately below the lower block net and by distributing the same amount of permanganate through the sampling area upon completion of the study. Fishes

were recovered with dip nets and the easily identified species were then grouped as fingerling, intermediate or harvestable and weighed on the site. Small fishes as well as questionable larger specimens were preserved in 10 per cent formalin and subsequently identified in the laboratory.

Most fish population samples were considered qualitative due to the small size of the sampling areas. When quantitative samples were obtained the standing crop was computed on a per-acre basis.

Previous stream studies conducted by the Kentucky Division of Fisheries were used where applicable.

FINDINGS

Stream Order

Stream order provided a satisfactory means of classifying streams for this study and also provided a good basis for selecting sampling areas when other factors influencing stream habitat were taken into consideration.

All streams of fishery importance were of Order III or greater. This is not to infer that the Order I or II streams were not significant to the fishery but merely that they were too small to support a population of sport fishes. Order III fishing streams are of course the smallest fishing streams in the drainage and although they range up to 22.0 miles in length many support a sport fishery only in short sections. The streams of major importance in this order are some of the trout streams: Rock Creek in McCreary County; Beaver Creek in Wayne County; and Hawk Creek in Laurel County.

Most of the streams of fishery importance were classified as Order IV. These are the principal tributaries to the major rivers in the drainage and they range up to 54 miles in length. Some of the important Order IV streams are Horse Lick Creek in Jackson County, Little South Fork Cumberland River in Wayne County, and the remainder of the trout streams.

The Order V streams range up to 55 miles in length and generally support a considerable sport fishery. Some of the more important streams in this order are Laurel River in Laurel County; Buck Creek and Fishing Creek in Pulaski County; South Fork and Middle Fork Rockcastle River in Jackson County; and Crocus Creek and Marrowbone Creek in Cumberland County.

The Cumberland River and Rockcastle River enter Lake Cumberland as Order VI streams and Lake Cumberland tailwater was considered an Order VII stream, the highest order in the drainage.

Stream Access

Fisherman access to most of the small fishing streams in the drainage is good except for several remote streams in the Daniel Boone National Forest. Very few of the streams inspected were posted.

The only public boat launching ramps on the major streams are located on Cumberland tailwater. Similar facilities are needed on Cumberland River downstream from Williamsburg and on the Rockcastle River in the vicinities of the bridges on U. S. 25 and Ky. 80.

Trout Streams

Thirteen streams in the Upper Cumberland River Drainage were stocked with trout in 1968 (Table 1). The U. S. Forest Service stocked 11 of these and the Kentucky Department of Fish and Wildlife Resources stocked two. Trout streams are located in five of the 18 counties in the drainage excluding three counties which border Lake Cumberland tailwater. Streams which were stocked with trout during 1968 may or may not be stocked in succeeding years since the supply of hatchery trout varies from year to year. Most of the streams being stocked with trout are considered marginal trout streams in that temperatures and flow may become critical during the late summer.

Table 1. A list of streams in the Upper Cumberland River Drainage which were stocked with trout in 1968.

STREAM	COUNTY
Bark Camp Creek	Whitley
Beaver Creek	McCreary
Beaver Creek	Wayne
Cane Creek	Laurel
Cloverbottom Creek	Jackson
Cumberland Tailwater	Russell - Cumberland
Dog Slaughter Creek	Whitley
Hawk Creek	Laurel
Indian Creek	Jackson
Lick Creek	McCreary
Little Hurricane Fork	McCreary
North Fork Dog Slaughter	Whitley
Rock Creek	McCreary

Distribution of Fishing Streams by County

The drainage encompasses twenty counties or portions thereof and includes approximately 1,040 miles of stream capable of providing a sport fishery (Table 2). Laurel, Harlan, and Whitley counties lead in total miles of potential fishing streams while Clay and Metcalf counties contain no fishing streams within this drainage.

Nine streams in the drainage were considered to be of outstanding quality on the basis of water quality, fishing potential, and/or uniqueness (Table 3).

Pollution

Of approximately 1,040 miles of fishing streams in the drainage about 440 miles (42%) have been degraded by pollution (Table 4).

Siltation and acid drainage from strip mines is the most widespread and serious form of stream pollution occurring in the drainage. Strip mine

Table 2. Linear miles of fishing streams by county
(includes polluted and non-polluted streams).

COUNTY	STREAM MILES
Adair	7
Bell	98
Casey	5
Clay	0
Clinton	8
Cumberland	79
Harlan	116
Jackson	48
Knox	61
Laurel	125
Letcher	14
Lincoln	10
McCreary	94
Metcalf	0
Monroe	32
Pulaski	93
Rockcastle	74
Russell	13
Wayne	55
Whitley	108
TOTAL	1,040

Table 3. The highest quality streams in the drainage.

STREAM	COUNTY
Buck Creek	Lincoln - Pulaski
Cane Creek	Laurel
Crocus Creek	Adair - Cumberland
Fishing Creek	Lincoln - Pulaski
Horse Lick Creek	Jackson
Little South Fork	Wayne - McCreary
Rockcastle River	Laurel
Rock Creek	McCreary
South Fork Cumberland River	McCreary
Martin's Fork (Headwaters)	Harlan

Table 4. Fishing streams which have been significantly degraded by pollution.

Stream	County	Stream miles polluted	Type pollution
Martin's Fork	Harlan	29	Strip mine and shaft mine, coal washer and sewage
Yellow Creek	Bell	15	Sewage
Little Laurel River	Laurel	17	Sewage
Clover Fork	Harlan	20	Strip mine and coal washer
Poor Fork	Harlan & Letcher	40	Strip mine and coal washer
Brownie's Creek	Bell	9	Strip mine
Little Clear Creek	Bell	6	Strip mine
Straight Creek	Bell	26	Strip mine and shaft mine
Stinking Creek	Knox	17	Shaft mine
Clear Fork	Whitley	23	Strip mine
Watts Creek	Whitley	5	Strip mine
Jellico Creek	Whitley	11	Strip mine
Marsh Creek	McCreary	25	Strip mine
Indian Creek	McCreary	10	Strip mine
Hawk Creek	McCreary	2	Strip mine
Rock Creek	McCreary	4	Shaft mine
Big South Fork	McCreary	17	Shaft mine and strip mine
South Fork Rockcastle	Laurel	27	Strip mine and shaft mine
Cumberland River	(above Lake Cumberland)	137	All of the above

pollution has degraded most streams in Harlan and Bell counties and many others in Whitley, McCreary, and Laurel counties have also suffered from this frequently insidious form of pollution.

No attempt was made to list all the streams in the drainage which receive pollution from strip mines, but if only the fishing streams are considered the toll is approximately 225 stream miles, not including a 137 mile section of the Cumberland River above Lake Cumberland.

Stream pollution in the form of acid drainage from shaft mines was found on Big South Fork Cumberland River, and Rock Creek in McCreary County; South Fork Rockcastle River in Laurel County; Straight Creek in Bell County; and Stinking creek in Knox County. The fish populations in extensive sections of Rock Creek, Stinking Creek and Straight Creek have been eradicated by acid mine drainage.

Martin's Fork, Clover Fork, and Poor Fork in Harlan County receive periodic coal washer wastes.

Sewage pollution has apparently had a devastating effect on the fish population of Yellow Creek in Bell County. A fish population sample along a 200 foot section of this stream yielded only one carp.

Stream bank alteration is widespread in the eastern sections of the drainage as a result of highway and railroad construction.

Fish Populations

A grand total of 85 species of fishes representing 15 families were identified from the Upper Cumberland River surveys (Table 5).

The rock bass occurred in 58% of the samples and it was the most frequently recorded species. The longear sunfish, bluntnose minnow, creek chub, and stoneroller were each recorded in 56% of the collections. The bluntnose minnow was the most abundant species in the combined sample while the coosa bass was the rarest fish.

Table 5. List of fishes collected from the Upper Cumberland River Drainage.

PETROMYZONTIDAE

Lampetra sp.

LEPISOSTEIDAE

Lepisosteus osseus (Linnaeus)

Longnose gar

CLUPEIDAE

Dorosoma cepedianum (LeSueur)

Gizzard shad

SALMONIDAE

Salmo gairdneri Richardson.

Rainbow trout

Salvelinus fontinalis (Mitchill)

Brook trout

CYPRINIDAE

Camptostoma anomalum (Rafinesque)

Stoneroller

Chrosomus erythrogaster (Rafinesque)

Southern redbelly dace

Cyprinus carpio Linnaeus

Carp

Ericymba buccata Cope

Silverjaw minnow

Hybopsis amblops (Rafinesque)

Bigeye chub

Hybopsis dissimilis (Kirtland)

Streamline chub

Hybopsis micropogon (Cope)

River chub

Notropis ardens (Cope)

Rosefin shiner

Notropis ariommus (Cope)

Popeye shiner

Notropis atherinoides Rafinesque

Emerald shiner

Notropis blennioides (Girard)

River shiner

Notropis boops Gilbert

Bigeye shiner

Notropis cornutus (Mitchill)

Common shiner

Notropis galacturus (Cope)

Whitetail shiner

Notropis leuciodus (Cope)

Tennessee shiner

Notropis photogenis (Cope)

Silver shiner

Notropis rubellus (Agassiz)

Rosyface shiner

Notropis spilopterus (Cope)

Spotfin shiner

Notropis umbratilis (Girard)

Redfin shiner

Notropis volucellus (Cope)

Mimic shiner

Notropis whipplei (Girard)

Steelcolor shiner

Phenacobius mirabilis (Girard)

Suckermouth minnow

Pimephales notatus (Rafinesque)

Bluntnose minnow

Pimephales promelas Rafinesque

Fathead minnow

Pimephales vigilax (Baird and Girard)

Bullhead minnow

Rhinichthys atratulus (Hermann)

Blacknose dace

Semotilus atromaculatus (Mitchill)

Creek chub

CATOSTOMIDAE

Carpionodes carpio (Rafinesque)

River carpsucker

Catostomus commersoni (Lacepede)

White sucker

Hypentelium nigricans (LeSueur)

Northern hog sucker

Moxostoma anisurum (Rafinesque)

Silver redhorse

Moxostoma carinatum (Cope)

River redhorse

Moxostoma duquesnei (LeSueur)

Black redhorse

Moxostoma erythrum (Rafinesque)

Golden redhorse

Table 5. (continued)

ICTALURIDAE

<i>Ictalurus melas</i> (Rafinesque)	Black bullhead
<i>Ictalurus natalis</i> (LeSueur)	Yellow bullhead
<i>Ictalurus punctatus</i> (Rafinesque)	Channel catfish
<i>Noturus eleutherus</i> Jordan	Mountain madtom
<i>Noturus flavus</i> Rafinesque	Stonecat
<i>Noturus miurus</i> Jordan	Brindled madtom
<i>Pylodictis olivaris</i> (Rafinesque)	Flathead catfish

CYPRINODONTIDAE

<i>Fundulus catenatus</i> (Storer)	Northern studfish
<i>Fundulus notatus</i> (Rafinesque)	Blackstripe topminnow

POECILIIDAE

<i>Gambusia affinis</i> (Baird and Girard)	Mosquitofish
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SERRANIDAE

<i>Roccus chrysops</i> (Rafinesque)	White bass
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CENTRARCHIDAE

<i>Ambloplites rupestris</i> (Rafinesque)	Rock bass
<i>Chaenobryttus gulosus</i> (Cuvier)	Warmouth
<i>Lepomis cyanellus</i> Rafinesque	Green sunfish
<i>Lepomis macrochirus</i> Rafinesque	Bluegill
<i>Lepomis megalotis</i> (Rafinesque)	Longear sunfish
<i>Lepomis</i> sp. x sp.	Hybrid sunfish
<i>Micropterus coosae</i> Hubbs and Bailey	Redeye bass
<i>Micropterus dolomieu</i> Lacepede	Smallmouth bass
<i>Micropterus punctulatus</i> (Rafinesque)	Spotted bass
<i>Micropterus salmoides</i> (Lacepede)	Largemouth bass
<i>Pomoxis annularis</i> Rafinesque	White crappie
<i>Pomoxis nigromaculatus</i> (LeSueur)	Black crappie

PERCIDAE

<i>Etheostoma blennioides</i> Rafinesque	Greenside darter
<i>Etheostoma caeruleum</i> Storer	Rainbow darter
<i>Etheostoma camurum</i> (Cope)	Bluebreast darter
<i>Etheostoma cinereum</i> Storer	Ashy darter
<i>Etheostoma flabellare</i> Rafinesque	Fantail darter
<i>Etheostoma kennicotti</i> (Putnam)	Stripetail darter
<i>Etheostoma nigrum</i> Rafinesque	Johnny darter
<i>Etheostoma obeyense</i> Kirsch	Barcheek darter
<i>Etheostoma sagitta sagitta</i> (Jordan and Swain)	Arrow darter
<i>Etheostoma simotereum</i> (Cope)	Tennessee snubnose darter
<i>Etheostoma stigmaeum</i> (Jordan)	Speckled darter
<i>Etheostoma virgatum</i> (Jordan)	Striped darter
<i>Etheostoma zonale</i> (Cope)	Banded darter
<i>Percina caprodes</i> (Rafinesque)	Logperch
<i>Percina macrocephala</i> (Cope)	Longhead darter
<i>Percina maculata</i> (Girard)	Blackside darter
<i>Percina phoxocephala</i> (Nelson)	Slenderhead darter
<i>Percina squamata</i> (Gilbert and Swain)	Olive darter
<i>Stizostedion vitreum vitreum</i> (Mitchill)	Walleye

Table 5. (continued)

SCIAENIDAE	
<i>Aplodinotus grunniens</i> Rafinesque	Freshwater drum
COTTIDAE	
<i>Cottus carolinae</i> (Gill)	Banded sculpin
ATHERINIDAE	
<i>Labidesthes sicculus</i> (Cope)	Brook silverside

The smallmouth bass was the most abundant of the three black basses recorded and it occurred in 40% of the samples.

The rainbow darter occurred in 44% of the samples and it was the most widely distributed and abundant percid.

Standing crop estimates ranged from 11 pounds per acre (817 fish per acre) on Sinking Creek in Laurel County to 122 pounds per acre (1,365 fish per acre) on the South Fork Rockcastle River in Jackson County.

RECOMMENDATIONS

1. It is recommended that redbreast sunfish be stocked in a few streams in the drainage which have been degraded by strip mining.

2. It is recommended that consideration be given to the development of fisherman access sites on Rockcastle River and Cumberland River below Williamsburg.

3. It is recommended that consideration be given to the initiation of a research study to evaluate the effects of strip mining on a fishing stream in eastern Kentucky.

ACKNOWLEDGEMENTS

Thanks are extended to the twenty conservation officers of the Kentucky Department of Fish and Wildlife Resources, Law Enforcement Division, who provided information on sport fishing.

Especially thanks go to the officers and director of the Ninth Wildlife District who cooperated extensively by providing transportation into remote streams and assisting with fish population studies.

Bernard T. Carter, Director of Fisheries, provided helpful criticism during the study and edited the report.

Patsy Peavler typed the report.

Sam Riley served as Fishery Aide by assisting in each phase of the study.

T H E A P P E N D I X

The findings at each sampling location and a general description of the streams of fishery importance not sampled are found in the appendix. Here the streams are arranged in order of tributary progression, upstream sequence. Thus the first stream listed is Spring Creek, the furthest downstream tributary of fishery importance in the drainage. When more than one sampling area was established on a given stream the findings from each of these areas were described in upstream sequence before the order of tributary progression was resumed. For example: 3 sampling locations were established on Cumberland tailwater and the results of these 3 samples precede the section on Kettle Creek, the next tributary of fishery importance upstream from Spring Creek (see pages 17, 18 and 19).

Although most of the data presented in the appendix are self explanatory some terms may need clarification:

Stream length in miles designates the approximate length of that stream which supports a sport fishery, unless it is otherwise stated that the stream is of no fishing importance whatever. If the stream is of no fishing importance stream length designates its total length in miles as shown on a topography map. The stream order classification for each stream is given as well as the length and surface acres of the sample area. The terms qualitative and quantitative are arbitrary terms which refer to the size and success of the fish population sample. The three columns of numerals in the fish fauna list designate the total number of each species collected in each of the size groups — fingerling, intermediate, and harvestable.

An index to the streams listed in the inventory is provided in the rear of the text.

SPRING CREEK (Clinton County)
9/19/68 - p.m.
Location - above ford 1.0 mile above mouth
Method - Cresol
Stream length - 6.4 miles

Order IV
Lgth. of sample area 100'
Acreage - 0.11
Qualitative

Spring Creek rises in southeastern Clinton County and joins Dale Hollow Reservoir south of Albany. This high gradient stream supports a low population of black basses and panfishes and is the only stream of significance in Clinton County. It supports little fishing however, and is of minor importance.

Chemical and Physical Characteristics

D.O. - 9.8 ppm
pH - 7.6
Total alkalinity - 131 ppm
Temperature - 66° F.
Average width - 50'
Average depth - 1'
Velocity - 0.3 ft./sec.
Volume - 13.0 cfs
Secchi disk - clear to bottom
Bottom type - bedrock

Fish Fauna

Rock bass	1-0-0
Longear sunfish	8-0-0
Black bullhead	3-0-0
Bluntnose minnow	526-0-0
Stoneroller	21-23-0
Creek chub	2-0-0
Studfish	17-0-0
Whitetail shiner	24-0-0
Tennessee shiner	29-0-0

Fish Food Organisms

Gastropoda, decapoda

Aquatic Vegetation

Justicia sp., Cladophora sp.,
Eleocharis sp.

CUMBERLAND RIVER (Cumberland County)
7/2/68 - p.m.
Location - Wilburn Bar, 29.3 mi. above Tenn. line
Method - Rotenone
Stream length - 74.5 miles

Order VII
Lgth. of sample area 200'
Acreage - 0.32
Qualitative

Cumberland tailwater extends 74.5 miles from Wolf Creek Dam in Russell County to the Monroe County-Tennessee state line. The tailwater temperature remains cold year-round and the primary sport fishery is for rainbow trout. The Kentucky Division of Fisheries stocks trout at the dam and at Burkesville. In the vicinity of Burkesville and below, most of the trout fishing is from the bank at the mouths of small tributaries. There are good boat launching facilities at the dam and at Burkesville. Other access sites are located at Winfrey's Ferry on Ky. 379 and Cloyd's Landing on Ky. 1424 in Cumberland County. Temperatures recorded were above normal due to low rate of discharge required for dam repair.

Chemical and Physical Characteristics

D.O. - 8.0 ppm
pH - 7.0
Total alkalinity - 100 ppm
Temperature - 75° F.
Average width - 100'
Average depth - 2'
Velocity -
Volume -

Fish Fauna

Rock bass	3-0-0
Rainbow trout	0-0-1
White crappie	6-1-0
Bluegill	1-0-0
Longear sunfish	2-0-0
Green sunfish	2-0-0
Golden redhorse	0-7-1
Hog sucker	1-3-0

Secchi disk - clear to bottom
Bottom type - boulders, gravel

Fish Food Organisms

None

Aquatic Vegetation

None

Channel catfish	2-0-0
Rosefin shiner	3-0-0
Creek chub	7-1-0
Stoneroller	22-0-0
Log perch	2-0-0
Banded sculpin	1-3-0
Rainbow darter	6-0-0
Speckled darter	1-0-0

CUMBERLAND RIVER (Cumberland County)
7/2/68 - p.m.
Location - mouth of Crocus Creek (backwater)
Method - Rotenone
Stream length - 74.5 miles

Order VII
Lgth. of sample area 150'
Acreage - 0.34
Qualitative

Chemical and Physical Characteristics

D.O. - 6.8 ppm
pH - 7.3
Total alkalinity - 107 ppm
Temperature - 78° F.
Average width - 100'
Average depth - 2.8'
Velocity -
Volume -
Secchi disk - 15"
Bottom type - gravel

Fish Fauna

Spotted bass	1-0-0
Bluegill	1-2-0
Warmouth	0-1-0
Green sunfish	2-3-0
White crappie	11-0-0
Drum	1-0-0
Carp	0-0-3
Yellow bullhead	0-1-0
Whitetail shiner	4-0-0

Fish Food Organisms

None

Aquatic Vegetation

None

CUMBERLAND RIVER (Russell County)
5/22/68 - p.m.
Location - mouth of Indian Creek, 2.0 miles
below dam
Method - Rotenone
Stream length - 74.5 miles

Order VII
Lgth. of sample area 100'
Acreage - 0.28
Qualitative

This section of Cumberland tailwater supports a substantial trout fishery from introductions made by the Kentucky Division of Fisheries. A creel survey conducted on the tailwater immediately below the dam in 1965, revealed that 10,183 fishermen expended 40,729 fisherman hours during the period from April through October that year. Fisherman access is good below the dam and boat launching facilities are available. Fishing is generally best during periods of low discharge and although discharge schedules are unpredictable the week-end is generally most favorable. The tailwater is mainly fished from the bank but float trips are made when water levels permit. White bass, crappies, and sauger contribute to the creel in this section.

Chemical and Physical Characteristics

D.O. - 7.0 ppm
 pH - 7.6
 Total alkalinity - 66 ppm
 Temperature - 53° F.
 Average width - 150'
 Average depth - 7'
 Velocity -
 Volume -
 Secchi disk - 24"
 Bottom type - gravel

Fish Food Organisms

None

Aquatic Vegetation

None

Fish Fauna

Rainbow trout	0-0-1
Spotted bass	0-1-0
Bluegill	1-1-2
Black crappie	0-0-1
White crappie	1-0-0
Longear sunfish	0-0-1
Green sunfish	2-0-0
Channel catfish	0-1-0
River carpsucker	0-0-1
Stoneroller	0-1-0
Bluntnose minnow	6-0-0
Brook silverside	3-0-0
Creek chub	0-2-0
Common shiner	0-9-0
Gizzard shad	0-7-23
Striped darter	3-0-0

KETTLE CREEK (Cumberland and Monroe Counties)

Order IV

Stream length - 7.0 miles in Kentucky

This stream rises in Cumberland County and enters Cumberland River in Clay County, Tennessee. It provides some sucker gigging from the mouth to the Cumberland County line but supports only a few game fish. This stream is of minor importance.

McFARLAND CREEK (Monroe County)

Order IV

Stream length - 1 mile

McFarland Creek is too small to support a significant population of game fishes but during periods when backwater enters the mouth from Cumberland River trout and sauger are harvested. Access is by Ky. 216 south of Tompkinsville.

SULPHUR CREEK (Monroe County)

Order III

Stream length - 3.5 miles

This stream is too small to support a significant population of game fishes but fishing is generally good at the mouth during periods when the Cumberland tailwater is high and backwater is present. Access is via Ky. 100 east of Tompkinsville.

MESHACK CREEK (Monroe County)

Order IV

9/18/68 - p.m.

Location - 200 yards above mouth

Method - Rotenone

Stream length - 7.9 miles

Lgth. of sample area 150'

Acreage - 0.06

Qualitative

Meshack Creek is a small tributary to Cumberland River. Fishing from bank is recommended when backwater is present. Upstream sections support only a small panfish fishery. Access to the mouth of this stream is poor but it may be reached via Ky. 212 south of Meshack.

Chemical and Physical Characteristics

D.O. - 8.8 ppm
 pH - 7.0
 Total alkalinity - 116 ppm
 Temperature - 72° F.
 Average width - 20'
 Average depth - 1.5'
 Velocity - 0.1 ft./sec.
 Volume - 3.0 cfs
 Secchi disk - 24"
 Bottom type - gravel

Fish Food Organisms

Ephemeroptera

Aquatic Vegetation

None

Fish Fauna

Smallmouth bass	0-5-0
Largemouth bass	0-5-0
Rock bass	7-1-6
Green sunfish	0-2-0
Longear sunfish	1-7-0
Bluegill	39-7-0
Hog sucker	3-21-5
Golden redhorse	0-1-2
White sucker	0-0-1
Carp	0-2-0
Common shiner	0-5-0
Studfish	0-15-0
Stoneroller	0-13-0
Blackstripe topminnow	5-0-0
Whitetail shiner	5-2-0
Rosefin shiner	28-0-0
River chub	3-0-0
Bluntnose minnow	186-0-0
Popeye shiner	22-0-0
Barcheek darter	3-0-0
Rainbow darter	24-0-0
Greenside darter	1-0-0

MARROWBONE CREEK (Cumberland County)
 6/27/68 - a.m.
 Location - above ford at Grider
 Method - Rotenone
 Stream length - 19 miles

Order V
 Lgth. of sample area 130'
 Acreage - 0.17
 Qualitative

Marrowbone Creek rises in Metcalfe County and flows south through Cumberland County until it joins Cumberland River west of Burkesville. This stream provides a locally important fishery for black basses and panfishes from Ky. 691 upstream to Marrowbone. Trout are harvested in the backwater near the mouth and suckers are giggered here in the spring. Litter is a serious problem in the headwaters. Access is poor at the mouth but good along Ky. 90 west of Burkesville. This stream should be fished with light tackle by wading.

Chemical and Physical Characteristics

D.O. - 8.0 ppm
 pH - 8.0
 Total alkalinity - 70 ppm
 Temperature - 70° F.
 Average width - 60'
 Average depth - 2.6'

Fish Fauna

Smallmouth bass	0-5-1
Spotted bass	0-1-1
Green sunfish	3-0-0
Longear sunfish	8-19-0
Bluegill	0-7-0
Golden redhorse	0-47-21

Velocity - 0.3 ft./sec.
Volume - 46.8 cfs
Secchi disk - 20"
Bottom type - gravel

Fish Food Organisms

Decapoda, ephemeroptera

Aquatic Vegetation

Justicia sp.

Hog sucker	1-8-1
Gizzard shad	0-0-3
Stoneroller	99-31-0
Brook silverside	0-1-0
Whitetail shiner	0-4-0
Studfish	0-2-0
Bluntnose minnow	6-0-0
Spotfin shiner	2-0-0
Common shiner	2-0-0
Rosefin shiner	3-0-0
Emerald shiner	4-0-0
Bigeye shiner	17-0-0
Log perch	3-0-0
Greenside darter	2-0-0
Rainbow darter	28-0-0
Barcheek darter	5-0-0
Bluebreast darter	4-0-0
Speckled darter	8-0-0
Banded sculpin	1-0-0
Brindled madtom	2-0-0
Mountain madtom	3-0-0
Yellow bullhead	1-0-0

MARROWBONE CREEK (Cumberland County)
6/26/68 - p.m.
Location - 0.75 mile south of Marrowbone at ford
Method - Rotenone
Stream length - 19 miles

Order IV
Lgth. of sample area
Acreage - 0.06
Qualitative

Chemical and Physical Characteristics

D.O. - 6.5 ppm
pH - 7.3
Total alkalinity - 100 ppm
Temperature - 83° F.
Average width - 30'
Average depth - 2'
Velocity - 0.5 ft./sec.
Volume - 30 cfs
Secchi disk - clear to bottom
Bottom type - bedrock

Fish Fauna

Rock bass	1-0-0
Bluegill	0-3-0
Longear sunfish	0-0-6
Hog sucker	0-2-0
Stoneroller	8-0-0
Bluntnose minnow	4-0-0
Bigeye shiner	9-0-0
Whitetail shiner	4-1-0
Greenside darter	3-2-0
Barcheek darter	3-0-0
Rainbow darter	2-0-0

Fish Food Organisms

Decapoda

Aquatic Vegetation

None

BEAR CREEK (Cumberland County)
6/26/68 - a.m.
Location - below bridge at Bow
Method - Cresol
Stream length - 6.2 miles

Order IV
Lgth. of sample area 50'
Acreage - 0.02
Qualitative

Bear Creek provides sucker gigging in the spring and trout are taken near the mouth during periods when backwater enters from Cumberland tailwater. Upstream sections lack sufficient cover to support a significant game fish population. Access is via Ky. 90 south of Burkesville.

Chemical and Physical Characteristics

D.O. - 6.8 ppm
 pH - 7.6
 Total alkalinity - 109 ppm
 Temperature - 72° F.
 Average width - 20'
 Average depth - 2'
 Velocity - 0.1 ft./sec.
 Volume - 4 cfs
 Secchi disk - 20"
 Bottom type - gravel

Fish Fauna

Smallmouth bass	6-0-0
Longear sunfish	2-2-0
Rock bass	0-0-3
Hog sucker	4-8-5
Bluegill	2-0-0
Studfish	1-0-0
Common shiner	0-1-0
Whitetail shiner	1-0-0
Creek chub	21-0-0
Stoneroller	13-0-0
Rainbow darter	5-0-0

Fish Food Organisms

Decapoda

Aquatic Vegetation

None

BIG RENOX CREEK (Cumberland County)
 Stream length - 7.2 miles

Order IV

A small tributary to Cumberland River upstream from Burkesville. Trout fishing at mouth during periods of backwater and sucker gigging in the spring. Upstream sections support small populations of panfishes and minnows, but are of no fishing importance.

CROCUS CREEK (Cumberland County)
 7/3/68 - p.m.
 Location - one mile below mouth of Pine Branch
 Method - Antimycin
 Stream length - 27.1 miles

Order V
 Lgth. of sample area 100'
 Acreage - 0.09
 Qualitative

Crocus Creek rises in southern Adair County and flows south through Cumberland County and joins Cumberland River 25.8 miles below the dam. This is one of the better streams in the drainage and it supports good smallmouth bass and spotted bass fishing from the Ky. 912 bridge upstream into Adair County. There is also trout fishing at the mouth. Access is excellent along Ky. 704 between Columbia and Burkesville. Bank fishing and wading are recommended. Fish sample not representative of area.

Chemical and Physical Characteristics

D.O. - 7.8 ppm
 pH - 7.8
 Total alkalinity - 121 ppm
 Temperature - 73° F.
 Average width - 40'
 Average depth - 1.5'

Fish Fauna

Bluegill	1-0-0
Green sunfish	1-0-0
Smallmouth bass	1-0-0
Black bullhead	1-0-0
Studfish	0-1-0
Whitetail shiner	1-3-0

Velocity - 0.3 ft./sec.
Volume - 21.4
Secchi disk - clear to bottom
Bottom type - gravel, bedrock

Stoneroller 4-0-0
Popeye shiner 6-0-0

Fish Food Organisms

Ephemeroptera

Aquatic Vegetation

Justicia sp.

CROCUS CREEK (Adair County)
5/23/68 - p.m.
Location - 0.5 mile above mouth of Burns Creek
Method - Rotenone
Stream length - 27.1 miles

Order III
Lgth. of sample area 100'
Acreage - 0.07
Qualitative

Chemical and Physical Characteristics

D.O. - 8.0 ppm
pH - 8.2
Total alkalinity - 115 ppm
Temperature - 72° F.
Average width - 100'
Average depth - 1'
Velocity - 0.4 ft./sec.
Volume - 40 cfs
Secchi disk - clear to bottom
Bottom type - bedrock

Fish Fauna

Smallmouth bass 4-5-3
Longear sunfish 0-3-0
Golden redhorse 2-11-5
Hog sucker 0-3-0
Stonecat 0-1-0
Common shiner 0-1-1
Studfish 3-2-0
Whitetail shiner 6-2-0
Popeye shiner 5-0-0
Spotfin shiner 2-0-0
Bigeye chub 2-0-0
Fathead minnow 2-0-0
Johnny darter 3-3-0
Barcheek darter 27-0-0
Speckled darter 5-0-0
Rainbow darter 8-0-0
Fantail darter 3-0-0
Redline darter 13-0-0

Fish Food Organisms

Ephemeroptera, coleoptera, decapoda

Aquatic Vegetation

None

HARROD'S FORK (Adair County)
5/24/68 - p.m.
Location - one mile above ford at Chance
Method - Cresol
Stream length - 6.1 miles

Order II
Lgth. of sample area 100'
Acreage - 0.01
Qualitative

A small tributary to Crocus Creek which is of no fishing importance but supports a population of minnows.

Chemical and Physical Characteristics

D.O. - 7.8 ppm
pH - 8.1
Total alkalinity - 120 ppm
Temperature - 66° F.
Average width - 50'
Average depth - 0.5'

Fish Fauna

Smallmouth bass 0-1-0
Hog sucker 0-4-0
Stoneroller 0-6-0
Bluntnose minnow 1-0-0
Whitetail shiner 2-1-0
Barcheek darter 1-0-0

Velocity - 2.7 ft./sec.
Volume - 67.5 cfs
Secchi disk - clear to bottom
Bottom type - bedrock, gravel

Fish Food Organisms

Ephemeroptera

Aquatic Vegetation

None

OTTER CREEK (Wayne County)
3/27/68 - a.m.
Location - pool below Ky. 200 bridge at Powersburg
Method - NaCn
Stream length - 13.2 miles

Order IV
Lgth. of sample area 400'
Acreage - 0.32
Qualitative: Ref.; F-32-R-1

Otter Creek supports a low population of black basses and panfishes and trout provide the primary fishery during the winter and spring. White bass from Lake Cumberland also "run" the lower reaches in the spring. Many homes are located along the stream in the upper reaches and littering is a problem. Bank fishing or wading is recommended and access is available via Ky. 90 or Ky. 200 southwest of Monticello.

Chemical and Physical Characteristics

D.O. - 8.5 ppm
pH - 7.0
Total alkalinity - 150 ppm
Temperature - 52° F.
Average width - 35'
Average depth - 2'
Velocity - approx. 1 ft./sec.
Volume - approx. 70 cfs
Secchi disk - clear to bottom
Bottom type - bedrock

Fish Fauna

Largemouth bass	1-0-0
Bluegill	1-0-0
Hog sucker	1-0-0
Brindled madtom	1-0-0
Stoneroller	20-50-10
Bigeye chub	15-6-0
Common shiner	20-70-19
Whitetail shiner	35-4-0
Rosyface shiner	15-18-0
Bluntnose minnow	23-16-0
Greenside darter	6-2-0
Rainbow darter	12-1-0
Banded darter	3-0-0
Log perch	12-3-0

Fish Food Organisms

None

Aquatic Vegetation

None

BEAVER CREEK (Wayne County)
9/7/68 - p.m.
Location - below Ky. 167 bridge
Method - Rotenone
Stream length - 11.6 miles

Order III
Lgth. of sample area 100'
Acreage - 0.05
Qualitative

Beaver Creek rises in south-central Wayne County and joins Lake Cumberland west of Monticello. This stream is stocked with trout in the section above Cooper and it supports a population of rock bass in the lower section. This stream may best be fished by wading with light spinning gear. Access is available at several points along Ky. 167 south of Monticello.

Chemical and Physical Characteristics

D.O. - 7.6 ppm
 pH - 7.1
 Total alkalinity - 169
 Temperature - 66° F.
 Average width - 21'
 Average depth - 1'
 Velocity - 0.3 ft./sec.
 Volume - 6.3 cfs
 Secchi disk - clear to bottom
 Bottom type - rubble, gravel

Fish Fauna

Rainbow trout	0-0-3
Rock bass	8-14-9
Smallmouth bass	1-0-0
Hog sucker	2-2-0
Stoneroller	10-12-0
Creek chub	2-0-0
Rosefin shiner	46-0-0
Greenside darter	2-3-0
Barcheek darter	39-0-0
Rainbow darter	20-0-0

Fish Food Organisms

Gastropoda, decapoda, ephemeroptera

Aquatic Vegetation

None

GREASY CREEK (Russell County)
 Stream length - 1.6 miles

Order III

Trout from Lake Cumberland "run" the lower section of Greasy Creek in the winter. The upper reaches of this stream support a fair population of minnows but very few game fish. Access to the mouth is available from U.S. 127 south of Jamestown.

FISHING CREEK (Pulaski County)
 8/7/68 - a.m.
 Location - 1.5 miles east of Kingbee
 Method - Rotenone
 Stream length - 21.0 miles

Order V
 Lgth. of sample area 200'
 Acreage - 0.21
 Qualitative

Fishing Creek rises in southwestern Lincoln County and joins Lake Cumberland about five miles west of Somerset. This is one of the most important streams in the drainage providing black bass and panfish from the mouth to Eubank in Lincoln County. Trout "run" the lower section of Fishing Creek in the winter and white bass are taken there during the spring. The stream may best be fished by wading with spinning gear or fly rod. Access is good via Ky. 635 or Ky. 1345 west of Science Hill. The Pulaski County Road Department collects gravel from Fishing Creek and the stream habitat is being altered at two locations.

Chemical and Physical Characteristics

D.O. - 8.6
 pH - 7.6
 Total alkalinity - 98 ppm
 Temperature - 78° F.
 Average width - 45'
 Average depth - 1'
 Velocity - 0.5 ft./sec.
 Volume - 1.5 cfs
 Secchi disk - clear to bottom
 Bottom type - bedrock, rubble, gravel

Fish Fauna

Smallmouth bass	10-0-1
Spotted bass	2-1-0
Largemouth bass	1-1-0
Rock bass	0-4-7
Longear sunfish	1-7-3
Bluegill	0-23-0
Green sunfish	2-7-0
Yellow bullhead	0-1-0
Channel catfish	0-3-1
Golden redhorse	0-8-2

Fish Food Organisms

Ephemeroptera, gastropoda

Aquatic VegetationJusticia sp., Cladophora sp.

Hog sucker	3-31-6
Gizzard shad	0-4-5
Stoneroller	31-52-0
Common shiner	2-3-0
Bigeye chub	7-1-0
Popeye shiner	2-0-0
Whitetail shiner	16-0-0
Studfish	1-3-0
Bluntnose minnow	45-0-0
Brook silverside	4-0-0
Rosefin shiner	14-0-0
River shiner	1-0-0
Bigeye shiner	33-0-0
Log perch	45-0-0
Barcheek darter	13-0-0
Fantail darter	1-0-0
Rainbow darter	3-0-0
<u>Etheostoma</u> sp.	11-0-0
<u>Etheostoma</u> sp.	1-0-0

FISHING CREEK (Lincoln County)

8/8/68 - a.m.

Location - at mouth of first tributary upstream
from Pilot Creek

Method - Cresol

Stream length - 21.0 miles

Order IV

Lgth. of sample area 100'

Acreage - 0.03

Qualitative

Chemical and Physical Characteristics

D.O. - 7.4 ppm

pH - 7.4

Total alkalinity - 85 ppm

Temperature - 73° F.

Average width - 15'

Average depth - 0.5'

Velocity - 0.5 ft./sec.

Volume - 1.2 cfs

Secchi disk - clear to bottom

Bottom type - bedrock, gravel

Fish Food Organisms

Ephemeroptera, trichoptera, decapoda

Aquatic Vegetation

None

Fish Fauna

Smallmouth bass	7-0-0
Rock bass	3-5-1
Longear sunfish	0-1-0
Green sunfish	0-3-0
Bluegill	0-2-0
Golden redhorse	8-0-0
Hog sucker	30-4-0
Creek chub	1-1-0
Common shiner	3-12-0
Stoneroller	20-116-0
Studfish	11-4-0
Bluntnose minnow	105-0-0
Popeye shiner	7-0-0
Rosefin shiner	32-0-0
Whitetail shiner	3-0-0
Mimic shiner	3-0-0
Barcheek darter	80-0-0
Greenside darter	6-0-0
Log perch	1-0-0
Rainbow darter	29-0-0
Fantail darter	13-0-0
<u>Etheostoma</u> sp.	4-0-0

PILOT CREEK (Lincoln County)
6/5/68 - a.m.
Location - 1.5 miles west of Eubank
Method - Cresol
Stream length - 2.0 miles

Order I
Lgth. of sample area 100'
Acreage - 0.01
Qualitative

This is a tributary to Fishing Creek which is too small to support game fish populations.

Chemical and Physical Characteristics

D.O. - 8.8 ppm
pH - 7.7
Total alkalinity - 104 ppm
Temperature - 66° F.
Average width - 4'
Average depth - 1'
Velocity - 0.7 ft./sec.
Volume - 3.5 cfs
Secchi disk - clear to bottom
Bottom type - gravel, bedrock

Fish Fauna

Creek chub 14-7-2
Green sunfish 7-2-0

Fish Food Organisms

Diptera, trichoptera,
ephemeroptera, plecoptera,
gastropoda

Aquatic Vegetation

None

BIG CLIFTY CREEK (Pulaski County)
Stream length - 3.3 miles

Order III

A tributary to Fishing Creek. This stream supports a minnow population and trout from Lake Cumberland are harvested in the lower sections in winter. Upstream sections provide little or no fishing.

COLDWEATHER CREEK (Pulaski County)
Stream length - 4.0 miles

Order III

A tributary to Fishing Creek. A minnow stream and trout from Lake Cumberland are taken near the mouth. Upstream sections provide little or no fishing.

POINTER CREEK (Pulaski County)
Stream length - 5.6 miles

Order IV

A tributary to Fishing Creek. It supports a fair population of minnows and trout from Lake Cumberland are harvested near the mouth during the winter. Upstream sections provide little or no fishing.

PUNCHEON CREEK (Pulaski County)
6/5/68 - p.m.
Location - Ky. 70 west of Eubank
Method - Cresol
Stream length - 3.4 miles

Order III
Lgth. of sample area 100'
Acreage - 0.01
Qualitative

This is one of the major tributaries to Fishing Creek. It is too small to support game fish populations but it is an excellent minnow stream.

Chemical and Physical Characteristics

D.O. - 10.0 ppm
pH - 7.7
Total alkalinity - 9.0 ppm
Temperature - 68° F.
Average width - 8'
Average depth - 1'
Velocity - 0.7 ft./sec.
Volume - 5.6 cfs
Secchi disk - clear to bottom
Bottom type - gravel, bedrock

Fish Food Organisms

Diptera, ephemeroptera

Aquatic Vegetation

None

Fish Fauna

Longear sunfish	0-1-0
Hog sucker	3-1-0
Stoneroller	28-10-0
Creek chub	6-5-1
Common shiner	0-1-0
Bluntnose minnow	3-0-0
Studfish	2-0-0
Rosefin shiner	9-0-0
Southern redbelly dace	4-0-0
Log perch	6-0-0
Rainbow darter	4-0-0
Fantail darter	1-0-0
Barcheek darter	31-0-0

SIMS BRANCH (Lincoln County)
6/5/68 - p.m.
Location - county road crossing south of
King's Mt.
Method - Cresol
Stream length - 1.6 miles

Order II
Lgth. of sample area 100'
Acreage - 0.01
Qualitative

Sims Branch is a small headwater tributary to Fishing Creek which is too small to be of fishing importance.

Chemical and Physical Characteristics

D.O. - 8.8 ppm
pH - 7.7
Total alkalinity - 84 ppm
Temperature - 67° F.
Average width - 6'
Average depth - 0.5'
Velocity - 0.9 ft./sec.
Volume - 27.0 cfs
Secchi disk - clear to bottom
Bottom type - gravel, bedrock

Fish Food Organisms

Decapoda, ephemeroptera, trichoptera
coleoptera

Fish Fauna

Bluegill	2-0-1
Green sunfish	0-1-0
Creek chub	7-0-2
Common shiner	0-1-0
Stoneroller	8-7-4
Fathead minnow	1-0-0
Rainbow darter	4-1-0

Aquatic Vegetation

None

CANEY FORK (Russell County)
Stream length - 1.9 miles

Order III

This is another small tributary to Lake Cumberland which supports some trout fishing during the winter and early spring "run". Access is poor at the mouth and the upstream section supports little or no fishing.

WOLF CREEK (Pulaski County)
Stream length - 6.1 miles

Order III

Wolf Creek is another tributary to Lake Cumberland. Fishing is limited to trout during the winter and spring near the mouth. Access is poor but the stream can be reached from Ky. 837 south of Cains Store on Ky. 80.

WHITE OAK CREEK (Pulaski County)
Stream length - 4.8 miles

Order III

A small tributary to Lake Cumberland which supports some trout fishing in the winter near the mouth. Access is poor but the stream may be reached from Ky. 761 south of Nancy on Ky. 80.

PITMAN CREEK (Pulaski County)
8/26/68 - p.m.
Location - 100 yards above Ky. 769 bridge
south of Somerset
Method - Rotenone
Stream length - 22.9 miles

Order IV
Lgth. of sample area 150'
Acreage - 0.15
Qualitative

Pitman Creek rises in northcentral Pulaski County and joins Lake Cumberland about two miles south of Somerset. The lower sections of this stream provide a good fishery for black bass and panfish and fishing is considered good at the mouth in the spring. Access is available at many county road bridges. Many homes are located along the stream and littering is a problem in the headwaters.

Chemical and Physical Characteristics

D.O. - 8.1 ppm
pH - 8.5
Total alkalinity - 151 ppm
Temperature - 75° F.
Average width - 46'
Average depth - 1'
Velocity - 0.22 ft./sec.
Volume - 12.6 cfs
Secchi disk - 20"
Bottom type - bedrock, rubble, gravel

Fish Fauna

Rock bass	0-0-1
Bluegill	0-1-0
Longear sunfish	0-3-0
Green sunfish	1-0-0
Hog sucker	3-8-0
Stoneroller	0-2-0
Popeye shiner	35-3-0
Rosefin shiner	0-1-0
Creek chub	1-0-0
Barcheek darter	4-0-0
Rainbow darter	5-0-0
Greenside darter	0-2-0
Log perch	0-14-0

Fish Food Organisms

Gastropoda, ephemeroptera, trichoptera

Aquatic Vegetation

Justicia sp.

PITMAN CREEK (Pulaski County)
 8/8/68 - p.m.
 Location - 200 feet above Ky. 635 bridge east
 of Science Hill
 Method - Rotenone
 Stream length - 22.9 miles

Order IV
 Lgth. of sample area 120'
 Acreage - 0.08
 Qualitative

Chemical and Physical Characteristics

D.O. - 7.0 ppm
 pH - 7.4
 Total alkalinity - 116 ppm
 Temperature - 79° F.
 Average width - 30'
 Average depth - 1'
 Velocity - 0.13 ft./sec.
 Volume - 0.07 cfs
 Secchi disk - 15"
 Bottom type - bedrock, rubble

Fish Food Organisms

Ephemeroptera, gastropoda, decapoda

Aquatic Vegetation

None

Fish Fauna

Smallmouth bass	2-1-0
Spotted bass	1-0-0
Largemouth bass	1-0-0
Rock bass	2-2-3
Longear sunfish	1-28-0
Bluegill	19-4-0
Green sunfish	1-28-0
Hog sucker	7-0-0
Golden redhorse	1-0-0
White sucker	0-1-0
Studfish	12-2-0
Common shiner	0-36-0
Stoneroller	0-49-0
Creek chub	4-3-0
Bluntnose minnow	15-0-0
Whitetail shiner	2-0-0
Popeye shiner	4-0-0
Rosefin shiner	22-0-0
Barcheek darter	54-0-0
Fantail darter	4-0-0
Greenside darter	1-0-0
Rainbow darter	15-0-0

SOUTH FORK CUMBERLAND RIVER (McCreary County)
 8/28/68 - a.m.
 Location - mouth of Bear Creek
 Method - Rotenone
 Stream length - 13.7 miles (in Kentucky)

Order V
 Lgth. of sample area 200'
 Acreage - 0.09
 Qualitative

South Fork Cumberland River rises in Scott County and Morgan County, Tennessee and joins Lake Cumberland near Yamacraw. This remote and scenic stream receives pollution from strip mines in Tennessee and acid drainage from abandoned mines in Kentucky. The main sources of pollution in Kentucky are located on Rock Creek, Roaring Paunch, and a small tributary at Worley. The South Fork was formerly known for its walleye "runs" and more recently for its white bass "runs". Fishing is considered fair for black basses and catfishes above the mouth of Bear Creek. Access is limited to jeep trails in Kentucky; the river may best be fished by floating from access near Oneida, Tennessee. The South Fork is one of the best streams in the drainage.

Chemical and Physical Characteristics

D.O. - 8.0 ppm
 pH - 7.0
 Total alkalinity - 25 ppm

Fish Fauna

Smallmouth bass	5-0-0
Rock bass	1-0-0
Bluegill	3-0-0

Temperature - 72° F.
Average width - 140'
Average depth - 2.5'
Velocity -
Volume -
Secchi disk - clear to bottom
Bottom type - boulder, bedrock

Fish Food Organisms

Ephemeroptera, megaloptera

Aquatic Vegetation

Eleocharis sp., Justicia sp.

Longear sunfish	7-0-0
Channel catfish	1-0-0
Golden redhorse	15-0-0
Hog sucker	5-0-0
Stoneroller	26-0-0
Rosyface shiner	9-0-0
Silver shiner	1-0-0
Whitetail shiner	1-0-0
Log perch	0-8-0
Greenside darter	18-0-0
Olive darter	5-0-0
Spotted darter	2-0-0
Bluebreast darter	6-0-0
Ashy darter	3-0-0
Banded darter	3-0-0
Speckled darter	1-0-0

SOUTH FORK CUMBERLAND RIVER (McCreary County)

9/13/68

Location - mouth of Troublesome Creek

Method - 2 gill nets 150' x 8' x 2"
(2 net days)

Stream length - 13.7 miles (in Kentucky)

Order V

Lgth. of sample area 500'

Acreage -

Qualitative

Chemical and Physical Characteristics

D.O. - 7.2 ppm

pH - 7.1

Total alkalinity - 25 ppm

Temperature - 68° F.

Average width - 150'

Average depth - 3'

Velocity -

Volume -

Secchi disk - clear to bottom

Bottom type - boulders, bedrock

Fish Fauna

Smallmouth bass	0-0-2
Spotted bass	0-1-0
Walleye	0-0-1
White bass	0-0-1
Channel catfish	0-0-1
Flathead catfish	0-0-1
River redhorse	0-0-1
Silver redhorse	0-0-1
Golden redhorse	0-0-1
Freshwater drum	0-0-2
Gizzard shad	0-0-14

Fish Food Organisms

Megaloptera, ephemeroptera

Aquatic Vegetation

Justicia sp.

LITTLE SOUTH FORK (Wayne County)

8/27/68 - a.m.

Location - mouth of Kennedy Creek

Method - Rotenone

Stream length - 39.0 miles

Order IV

Lgth. of sample area 200'

Acreage - 0.35

Qualitative

The Little South Fork rises in Pickett County, Tennessee and joins the Big South Fork of Cumberland River near Ritner in Wayne County. This clear flowing stream provides a fair smallmouth bass and rock bass fishery from Parmleysville to the mouth and the section from Ky. 92 bridge downstream may be floated with a small boat or canoe. This unpolluted stream provides habitat for many species of fish, some of which are undescribed. Access is limited

but fishable water can be reached at Ritner, Ky. 92 bridge, and Parmleysville southeast of Monticello. Little South Fork is one of the highest quality streams in the drainage.

Chemical and Physical Characteristics

D.O. - 6.8 ppm
 pH - 7.5
 Total alkalinity - 125 ppm
 Temperature - 68° F.
 Average width - 77'
 Average depth - 2.7'
 Velocity - 0.1 ft./sec.
 Volume - 20.7 cfs
 Secchi disk - 48"
 Bottom type - bedrock, gravel

Fish Food Organisms

Gasgropoda, decapoda, ephemeroptera

Aquatic Vegetation

Cladophora sp., Chara sp., Saggitaria sp.

Fish Fauna

Smallmouth bass	5-1-0
Rock bass	8-9-1
White bass	0-1-0
Longear sunfish	10-31-0
Yellow bullhead	0-1-0
Carp	0-0-1
Longnose gar	0-1-1
Golden redhorse	1-1-4
Hog sucker	5-3-0
Stoneroller	2-1-2
Common shiner	3-12-0
Whitetail shiner	0-2-0
Silver shiner	16-16-0
Mimic shiner	7-0-0
Popeye shiner	42-1-0
Rosefin shiner	21-0-0
Rosyface shiner	5-0-0
Bluntnose minnow	14-2-0
Brook silverside	2-0-0
Streamline chub	5-46-0
River chub	2-0-0
Log perch	0-16-0
Greenside darter	8-2-0
Barcheek darter	2-3-0
Banded sculpin	1-0-0
Suckermouth minnow	5-0-0
<u>Notropis</u> sp.	4-0-0

LITTLE SOUTH FORK (Wayne County)
 10/11/68 - a.m.
 Location - 100 yards below bridge at
 Parmleysville
 Method - NaCN
 Stream length - 39.0 miles

Order IV
 Lgth. of sample area 500'
 Acreage - 0.56
 Quantitative: 540 fish/acre
 41.0 lbs./acre

This section of the stream may best be fished by wading with light spinning gear or fly rod. It supports a population of rock bass and longear sunfish.

Chemical and Physical Characteristics

D.O. - 8.4 ppm
 pH - 7.3
 Total alkalinity - 138 ppm
 Temperature - 68° F.
 Average width - 49'
 Average depth - 1.5'

Fish Fauna

Smallmouth bass	1-4-1
Rock bass	11-13-8
Longear sunfish	0-40-8
Black bullhead	1-0-0
Stonecat	1-0-0
Golden redhorse	5-3-4

Velocity - 0.2 ft./sec.
Volume - 14.7 cfs
Secchi disk - clear to bottom
Bottom type - bedrock, sand

Fish Food Organisms

Ephemeroptera, decapoda

Aquatic Vegetation

Valisineria sp., Chara sp., Cladophora sp.
Potamogeton sp., Justicia sp.

Black redhorse	0-7-2
Hog sucker	5-7-0
Longnose gar	0-3-0
Streamline chub	0-4-0
River chub	2-5-4
Stoneroller	3-3-7
Common shiner	60-12-1
Whitetail shiner	1-11-0
Bluntnose minnow	34-5-0
Bigeye shiner	1-0-0
Rosefin shiner	30-0-0
Popeye shiner	205-0-0
Rosyface shiner	12-0-0
Notropis sp.	8-0-0
Studfish	1-0-0
Log perch	3-3-0

LITTLE SOUTH FORK (Wayne County)
8/29/68 - a.m.
Location - 1.0 mile above Mt. Pisgah
Method - Rotenone
Stream length - 39.0 miles

Order III
Lgth. of sample area 120'
Acreage - 0.03
Qualitative

Chemical and Physical Characteristics

D.O. - 7.2 ppm
pH - 7.3
Total alkalinity - 180 ppm
Temperature - 66° F.
Average width - 14'
Average depth - 0.5'
Velocity - none
Volume - none
Secchi disk - clear to bottom
Bottom type - bedrock, gravel

Fish Fauna

Rock bass	1-4-0
Hog sucker	0-1-0
Common shiner	5-12-0
Bluntnose minnow	1-0-0
Creek chub	21-2-0
Stoneroller	7-5-0
Mimic shiner	11-0-0
Rosefin shiner	12-0-0
Popeye shiner	64-1-0
Greenside darter	5-0-0
Striped darter	8-0-0
Rainbow darter	14-0-0

Fish Food Organisms

Gastropoda, coleoptera, ephemeroptera

Aquatic Vegetation

None

LICK CREEK (McCreary County)
Stream length - 2.4 miles

Order III

Lick Creek rises west of Whitley City and joins the South Fork Cumberland River below Yamacraw. This small stream is stocked with trout by the U. S. Forest Service.

ROCK CREEK (McCreary County)
8/27/68 - p.m.
Location - pool below mouth of Koger Fork
Method - Cresol
Stream length - 22 miles

Order III
Lgth. of sample area 100'
Acreage - 0.04
Qualitative

Rock Creek rises in Scott County, Tennessee and joins the South Fork Cumberland River at Yamacraw, Kentucky. This stream is seriously polluted with acid mine drainage from White Oak downstream, but the upper section is stocked with trout by the U. S. Forest Service. The upper section also supports a fair population of smallmouth bass and rock bass and may be fished by wading with light spinning tackle. Access is good along Ky. 1363 south of Yamacraw.

Chemical and Physical Characteristics

Fish Fauna

D.O. - 7.6 ppm
pH - 6.5
Total alkalinity - 10 ppm
Temperature - 72° F.
Average width - 20'
Average depth - 1.5'
Velocity - 0.8 ft./sec.
Volume - 24.0 cfs
Secchi disk - clear to bottom
Bottom type - rubble, gravel

Bluegill 1-0-0

Fish Food Organisms

Aquatic Vegetation

None

None

ROCK CREEK (McCreary County)
Location - above White Oak Branch
Stream length - 22.0 miles

Order III
Reference: Project F-27-R
Final Report

Studies conducted under D-J project F-27-R in 1965-1966 showed that the water quality of Rock Creek above White Oak Branch was high. Ten species of fishes were collected in this section of the stream and the estimated standing crop was 12.5 pounds per acre (505 fish per acre). The stoneroller dominated the samples numerically. A creel survey conducted on a 15 mile section of the stream stocked with trout revealed that 3,783 fishermen expended 15,128 man-hours on this stream from April through October 1965. This section of the stream is highly scenic and is characterized by deep narrow valleys and wooded mountainsides. Rock Creek is probably the best trout stream in the drainage.

ROARING PAUNCH (McCreary County)
8/15/68 - p.m.
Location - 0.25 mile upstream from Ky. 741
bridge
Method - Cresol
Stream length - 15.2 miles

Order IV
Lgth. of sample area 100'
Acreage - 0.04
Qualitative

Roaring Paunch rises in Scott County, Tennessee and joins the South Fork Cumberland River at Barthell. This small stream supports a low population of rock bass and smallmouth bass above Ky. 741 while the lower section is severely polluted by acid mine drainage. Roaring Paunch is one of the main sources of acid mine pollution to the South Fork Cumberland River. A pH reading of 3.6 was recorded near the mouth of this stream on 8/15/68.

Chemical and Physical Characteristics

D.O. - 8.2 ppm
 pH - 7.3
 Total alkalinity - 41 ppm
 Temperature - 74° F.
 Average width - 20'
 Average depth - 0.5'
 Velocity - 0.8 ft./sec.
 Volume - 8.1 cfs
 Secchi disk - clear to bottom
 Bottom type - bedrock, boulder, rubble

Fish Fauna

Smallmouth bass	9-2-0
Rock bass	3-12-0
Longear sunfish	0-9-0
Bluegill	0-1-0
Stoneroller	0-1-0
Creek chub	0-1-0
Arrow darter	3-1-0
Fantail darter	14-0-0

Fish Food Organisms

Ephemeroptera, decapoda

Aquatic Vegetation

Justicia sp.

BUCK CREEK (Pulaski County)
 8/1/62 - a.m.
 Location - below Ky. 80 bridge at Stab
 Method - Electric shocker
 Stream length - 54.5 miles

Order V
 Lgth. of sample area 1,000'
 Acreage - 1.1
 Qualitative
 Reference: Ky. Div. of
 Fisheries - Buck
 Creek Surveys
 Unpublished

Buck Creek is one of the highest quality fishing streams in the drainage. It rises near Halls Gap in Lincoln County and flows south most of the length of Pulaski County, then joins Lake Cumberland near the Ky. 192 bridge east of Somerset. The SCS has proposed stream channel alterations and small dams for Buck Creek in the section from Ky. 39 bridge upstream into Lincoln County. This work is well underway in Lincoln County but alterations in Pulaski County have been postponed. Buck Creek provides good to excellent fishing for spotted bass and largemouth bass from the Ky. 39 bridge downstream. Rock bass and longear sunfish are also common in the creel. Near Lake Cumberland white bass and other lake species are harvested. Bank fishing is popular at numerous bridges on the stream and the section from Ky. 80 bridge to Ky. 192 is fished by floating when the flow is adequate.

Chemical and Physical Characteristics

D.O. - 7.6 ppm
 pH - 7.5
 Total alkalinity - 55 ppm
 Temperature - 74° F.
 Average width - 50'
 Average depth - 20"

Fish Fauna

Smallmouth bass	0-1-0
Spotted bass	2-3-1
Rock bass	15-10-7
Longear sunfish	10-6-31
Bluegill	1-0-0
Channel catfish	0-0-1

Velocity - approx. 0.4 ft./sec.
Volume - approx. 10 cfs
Secchi disk - clear to bottom
Bottom type - bedrock, rubble

Drum	0-0-2
Golden redhorse	20-15-20
Hog sucker	0-6-0
Gizzard shad	0-0-10
Longnose gar	0-1-0
Stoneroller	6-5-2
Common shiner	0-4-0

Fish Food Organisms

Ephemeroptera, coleoptera, megaloptera,
trichoptera

Aquatic Vegetation

Justicia sp., Cladophora sp.

BUCK CREEK (Pulaski County)
7/30/62 - a.m.
Location - pool below Ky. 70 bridge
Method - Electric shocker

Order IV
Lgth. of sample area 300'
Acreage - 0.30
Qualitative
Reference: Ky. Div. of
Fisheries - Buck
Creek Surveys
Unpublished

Chemical and Physical Characteristics

D.O. - 7.5 ppm
pH - 7.2
Total alkalinity - 40 ppm
Temperature - 75° F.
Average width - 50'
Average depth - 2'
Velocity - approx. 0.4 ft./sec.
Volume - approx. 40 cfs
Secchi disk - clear to bottom
Bottom type - rubble, gravel

Fish Fauna

Smallmouth bass	0-1-0
Spotted bass	0-0-1
Rock bass	3-4-1
Bluegill	0-5-0
Longear sunfish	21-6-2
Green sunfish	2-4-0
Hog sucker	0-2-0
Golden redhorse	0-7-4
Stone cat	0-1-0
Log perch	0-2-0
Common shiner	0-8-0

Fish Food Organisms

Decapoda, ephemeroptera, gastropoda

Aquatic Vegetation

Justicia sp.

BUCK CREEK (Pulaski County)
7/31/62 - a.m.
Location - 1 mile below Ky. 39 bridge
Method - Electric shocker
Stream length - 54.5 miles

Order IV
Lgth. of sample area 500'
Acreage - 0.53
Qualitative
Reference: Ky. Div. of
Fisheries - Buck
Creek Surveys
Unpublished

Chemical and Physical Characteristics

D.O. - 7.3 ppm
pH - 7.0

Fish Fauna

Spotted bass	5-1-1
Largemouth bass	10-4-2

Total alkalinity - 40 ppm
 Temperature - 75° F.
 Average width - 70'
 Average depth - 1'
 Velocity - approx. 0.5 ft./sec.
 Volume - approx. 35 cfs
 Secchi disk - clear to bottom
 Bottom type - bedrock, rubble

Longear sunfish	43-18-0
Green sunfish	0-6-0
Golden redbreast	24-22-0
Hog sucker	1-1-1
Gizzard shad	0-0-5
Common shiner	0-6-0
Drum	0-0-1
Yellow bullhead	0-1-0

Fish Food Organisms

Decapoda

Aquatic Vegetation

None

BEAVER CREEK (McCreary County)
 Stream length - 4.7 miles

Order IV

Beaver Creek rises near Parkers Lake, Kentucky in northern McCreary County and joins Lake Cumberland about four miles below the mouth of Rockcastle River. This small stream is located in a very remote section of the Daniel Boone National Forest and it is stocked with trout by the U. S. Forest Service. Access is limited but the stream can be reached via a good road off U. S. 27 north of Greenwood. Fishing with light tackle by wading is recommended.

HURRICANE FORK (McCreary County)
 Stream length - 2.9 miles

Order III

This is a small tributary to Beaver Creek which is also stocked with trout by the U. S. Forest Service. Access is via the road to Beaver Creek north of Greenwood on U. S. 27.

ROCKCASTLE RIVER (Laurel County)
 10/16/68 - p.m.
 Location - 0.25 mile above mouth of Pine
 Island Branch
 Method - Rotenone
 Stream length - 58 miles

Order VI
 Lgth. of sample area 300'
 Acreage - 0.68
 Qualitative

The Rockcastle River is formed by the South Fork Rockcastle and Middle Fork Rockcastle at the point where Laurel, Jackson and Rockcastle Counties join. From this point the river flows southwest through Daniel Boone National Forest and joins Lake Cumberland. The Kentucky Wild Rivers Commission is considering placing the lower section of this stream on the Kentucky Wild Rivers list. This remote and rugged 16 mile section, from Billows on Ky. 80 to Lake Cumberland, provides the best fishing in the river. Float fishing from a canoe or small boat is recommended and the float fisherman should travel light as some riffles are treacherous and a portage is required at the Narrows near the mouth. Access to this section of the river is limited to jeep roads or foot trails. Smallmouth bass, spotted bass, rock bass and catfishes are common in the creel here. This is also one of the few remaining streams in the state which still supports a significant walleye fishery.

Chemical and Physical Characteristics

D.O. - 7.6 ppm
 pH - 7.5
 Total alkalinity - 68 ppm
 Temperature - 62° F.
 Average width - 100'
 Average depth - 3.0'
 Velocity -
 Volume -
 Secchi disk - 36"
 Bottom type - boulder, bedrock

Fish Food Organisms

Ephemeroptera, diptera

Aquatic Vegetation

Justicia sp., Sagittaria sp.

Fish Fauna

Smallmouth bass	1-0-1
Spotted bass	3-0-0
Rock bass	8-2-1
Walleye	0-0-1
Longear sunfish	16-2-1
Bluegill	2-0-0
Channel catfish	1-0-5
Flathead catfish	2-0-2
Drum	0-0-7
Hog sucker	4-0-1
Golden redhorse	0-2-0
Striped darter	2-0-0
Johnny darter	10-0-0
Longhead darter	6-0-0
Banded darter	1-0-0
Arrow darter	1-0-0
Log perch	2-0-0
Silver shiner	1-1-0
Bluntnose minnow	5-0-0
Popeye shiner	3-0-0
Mimic shiner	4-0-0
Rosyface shiner	82-0-0

ROCKCASTLE RIVER (Rockcastle County)

10/15/68 - p.m.

Location - mouth of Skaggs Creek

Method - NaCN

Stream length - 58 miles

Order VI

Lgth. of sample area 150'

Acreage - 0.3

Qualitative

This section of the Rockcastle River is characterized by long, deep pools which provide boat or bank fishing. This section of the river was turbid most of 1968 as a result of construction work on Interstate 75 and Wood Creek Reservoir.

Chemical and Physical Characteristics

D.O. - 6.0 ppm
 pH - 6.9
 Total alkalinity - 65 ppm
 Temperature - 64° F.
 Average width - 125'
 Average depth - 5'
 Velocity -
 Volume -
 Secchi disk - 14"
 Bottom type - gravel, bedrock

Fish Fauna

Spotted bass	0-0-1
Rock bass	3-0-1
Longear sunfish	16-4-0
Bluegill	0-1-0
Walleye	0-1-0
Channel catfish	1-0-0
Drum	0-0-2
Hog sucker	1-0-0
Golden redhorse	1-0-2
Gizzard shad	0-0-1
River chub	1-0-0
Popeye shiner	2-8-0
Bluntnose minnow	4-0-0
Rosyface shiner	29-0-0
Banded sculpin	0-1-0

Fish Food Organisms

Ephemeroptera, gastropoda

Aquatic VegetationJusticia sp.

Mimic shiner	55-0-0
Log perch	2-1-0
Slenderhead darter	0-5-0
Fantail darter	1-0-0
Striped darter	1-0-0
Blackside darter	5-0-0
Longhead darter	13-0-0
Speckled darter	13-0-0

CANE CREEK (Laurel County)

7/24/68 - a.m.

Location - 200 feet above Rooks Branch

Method - Cresol

Stream length - 5.7 miles

Order IV

Lgth. of sample area 100'

Acreage - 0.05

Qualitative

Cane Creek is one of the higher quality streams in the drainage. It is located in a very remote section of the Daniel Boone National Forest and is stocked with trout by the U. S. Forest Service. Cane Creek also provides a fair smallmouth bass and rock bass fishery. The stream has a high aesthetic value and may best be fished with spinning gear by wading. Cane Creek rises west of Cold Hill and joins the Rockcastle River a short distance below the Rockcastle Narrows. Access is limited but the stream may be reached by a jeep trail off state highway 192 near the Baldrock Picnic Area south of London.

Chemical and Physical Characteristics

D.O. - 7.3 ppm

pH - 6.9

Total alkalinity - 13 ppm

Temperature - 68° F.

Average width - 25'

Average depth - 1'

Velocity - 1.1 ft./sec.

Volume - 25.0 cfs

Secchi disk - clear

Bottom type - boulder, bedrock

Fish Fauna

Rainbow Trout 0-0-7

Rock bass 0-4-0

Hog sucker 2-6-0

Creek chub 13-5-0

Rosefin shiner 15-0-0

Whitetail shiner 2-0-0

Greenside darter 4-2-0

Fish Food Organisms

Ephemeroptera, trichoptera

Aquatic Vegetation

None

SINKING CREEK (Laurel County)

7/24/68 - p.m.

Location - at bridge crossing stream one mile east of Bunch

Method - Rotenone

Stream length - 18.7 miles

Order IV

Lgth. of sample area 130'

Acreage - 0.13

Quantitative: 817 fish/acre
10.7 lbs./acre

Formerly a high quality smallmouth and rock bass stream, Sinking Creek has suffered from acid mine water pollution and siltation, however this stream still provides fair fishing by wading with a fly rod or spinning gear. Sinking

Creek rises about four miles west of London and joins the Rockcastle River in a remote section below Ky. 80. A dry weather access road crosses Sinking Creek about one mile west of Bunch.

Chemical and Physical Characteristics

D.O. - 7.6 ppm
 pH - 7.0
 Total alkalinity - 20 ppm
 Temperature - 78° F.
 Average width - 45'
 Average depth - 2'
 Velocity - 0.25 ft./sec.
 Volume - 14.6 cfs
 Secchi disk - 15"
 Bottom type - boulder, bedrock, silt

Fish Fauna

Spotted bass	1-0-1
Smallmouth bass	1-2-0
Rock bass	3-7-1
Longear sunfish	19-6-0
Hog sucker	39-14-0
White sucker	5-0-0
Stonecat	0-2-0
Creek chub	0-18-0
Stoneroller	2-1-0
Bluntnose minnow	27-2-0
Rosefin shiner	80-10-0
Log perch	21-0-0
Blackside darter	18-0-0
<u>Etheostoma</u> sp.	13-0-0

Fish Food Organisms

Ephemeroptera, trichoptera

Aquatic Vegetation

None

HAWK CREEK (Laurel County)
 Stream length - 4.4 miles

Order III

Hawk Creek is a small, remote stream which rises near Bernstadt and joins the Rockcastle River above the Ky. 80 bridge near Billows. Hawk Creek is stocked with trout by the U. S. Forest Service. An unimproved road about 3 miles west of Bernstadt provides access. The lower section of Hawk Creek has recently become polluted by strip mines.

SKEGGS CREEK (Rockcastle County)
 7/25/68 - a.m.
 Location - 100 yards below Ky. 1249 bridge
 Method - Rotenone
 Stream length - 10.0 miles

Order V
 Lgth. of sample area 85'
 Acreage - 0.08
 Qualitative

Skeggs Creek rises in southwestern Rockcastle County and joins the Rockcastle River about 5 miles downstream from the U. S. 25 bridge. The West Fork of this stream provides a locally important fishery for black basses and panfishes. Access is poor but the stream may be reached via Ky. 1249 south of Mt. Vernon. It may best be fished from the bank or by wading with light spinning gear.

Chemical and Physical Characteristics

D.O. - 6.0 ppm
 pH - 7.4
 Total alkalinity - 140 ppm

Fish Fauna

Smallmouth bass	0-2-1
Rock bass	8-7-2
Bluegill	0-1-0

Temperature - 76° F.
 Average width - 45'
 Average depth - 2'
 Velocity - 0.9 ft./sec.
 Volume - 81 cfs
 Secchi disk - 15"
 Bottom type - rubble, gravel

Longear sunfish	10-14-0
Green sunfish	0-1-0
Golden redhorse	0-2-0
Hog sucker	0-2-0
Stoneroller	19-45-0
Common shiner	12-10-0
Creek chub	11-2-0
Bluntnose minnow	12-0-0
Mimic shiner	22-0-0
Bullhead minnow	3-0-0

Fish Food Organisms

Ephemeroptera

Aquatic Vegetation

None

LITTLE ROCKCASTLE RIVER (Laurel County)
 Stream length - 2.1 miles

Order IV

This small stream is formed by Hazel Patch Creek and Wood Creek near the village of Hazel Patch in northern Laurel County. It joins the Rockcastle River about 100 yards upstream from the U. S. 25 bridge crossing the Rockcastle River. Black basses and suckers are harvested from the bank near the mouth.

WOOD CREEK TAILWATER (Laurel County)
 Stream length - 1.8 miles

Order III

Wood Creek rises about 2 miles north of London and flows north to Hazel Patch. A major portion of this stream will be impounded by Wood Creek Dam in the near future but the tailwater will provide a put-take trout fishery. Access is available near the U. S. 25 bridge south of Hazel Patch.

HAZEL PATCH CREEK (Laurel County)
 12/11/68 - p.m.
 Location - 2 miles north of East Bernstadt
 Method - NaCN
 Stream length - 7.7 miles

Order IV
 Lgth. of sample area 100'
 Acreage - 0.03
 Qualitative

Hazel Patch Creek rises in the village of East Bernstadt north of London and joins Wood Creek near Hazel Patch to form a short section of stream known locally as the Little Rockcastle River. Hazel Patch Creek has a limited potential as a fishing stream but it does provide a sucker fishery in the spring.

Chemical and Physical Characteristics

D.O. - 7.8 ppm
 pH - 6.9
 Total alkalinity - 39 ppm
 Temperature - 38° F.
 Average width - 15'
 Average depth - 2'
 Velocity - 1.6 ft./sec.
 Volume - 10.0 cfs

Fish Fauna

Hog sucker	3-0-0
Hybrid sunfish	7-0-0
Stoneroller	1-5-0
Creek chub	20-6-0
Striped darter	10-3-0

Secchi disk - clear to bottom
Bottom type - bedrock

Fish Food Organisms

Ephemeroptera, decapoda

Aquatic Vegetation

None

ROUNDSTONE CREEK (Rockcastle County)
10/16/68 - a.m.
Location - below iron bridge at Mullins Station
Method - NaCN
Stream length - 24.4 miles

Order IV
Lgth. of sample area 100'
Acreage - 0.04
Qualitative

Roundstone Creek rises in northern Rockcastle County and joins the Rockcastle River at Livingston. This low gradient stream provides a locally important fishery for black basses and sunfishes but often runs turbid. Long deep pools in the mid section provide the best fishing and it may best be fished from the bank or a small boat. Access is available along U. S. 25 and several county roads east of Mt. Vernon.

Chemical and Physical Characteristics

D.O. - 5.8 ppm
pH - 7.0
Total alkalinity - 140 ppm
Temperature - 62° F.
Average width - 20'
Average depth - 2'
Velocity - 1.2 ft./sec.
Volume - 48 cfs
Secchi disk - 24"
Bottom type - gravel, sand

Fish Food Organisms

Ephemeroptera, megaloptera, gastropoda

Aquatic Vegetation

None

Fish Fauna

Rock bass	0-4-1
Longear sunfish	21-3-0
Bluegill	0-1-0
Hog sucker	5-5-0
Golden redhorse	14-1-2
White sucker	1-0-0
Banded sculpin	14-4-0
Stoneroller	128-13-0
Bluntnose minnow	13-0-0
Rosefin shiner	17-0-0
Common shiner	186-5-0
Log perch	4-3-0
Greenside darter	2-0-0
Fantail darter	1-0-0
Rainbow darter	7-0-0
Striped darter	2-0-0
Blackside darter	3-0-0
Etheostoma sp.	4-0-0

CROOKED CREEK (Rockcastle County)
7/25/68 - p.m.
Location - Great Salt Peter Cave
Method - Cresol
Stream length - 9.8 miles

Order III
Lgth. of sample area 100'
Acreage - 0.07
Qualitative

Crooked Creek rises in northeastern Rockcastle County and joins Roundstone Creek near Mullins Station. This stream was stocked with trout at one time but stocking was discontinued due to posting. The stream carries a moderate silt load and provides fair fishing for smallmouth bass and rock bass. The stream can be reached via Ky. 1004 west of Mt. Vernon.

Chemical and Physical Characteristics

D.O. - 7.6 ppm
 pH - 7.6
 Total alkalinity - 107 ppm
 Temperature - 70° F.
 Average width - 35'
 Average depth - 1.5'
 Velocity - 0.4 ft./sec.
 Volume - 21 cfs
 Secchi disk - 12"
 Bottom type - rubble, silt

Fish Food Organisms

Gastropoda, decapoda

Aquatic Vegetation

None

Fish Fauna

Smallmouth bass	1-1-0
Rock bass	0-5-0
Longear sunfish	6-4-0
Golden redhorse	0-2-0
Hog sucker	1-0-0
Common shiner	19-0-0
Creek chub	3-0-0
Bluntnose minnow	4-0-0
Mimic shiner	10-0-0
Rosefin shiner	35-0-0
Log perch	1-0-0
Blackside darter	1-0-0
Striped darter	3-0-0
Rainbow darter	4-0-0
Fantail darter	1-0-0
<u>Etheostoma</u> sp.	2-0-0

CLEAR CREEK (Rockcastle County)

7/23/68 - p.m.

Location - at bridge 1.0 mile south of Wilde

Stream length - 4.0 miles

Order III

Lgth. of sample area 100'

Acreage - 0.07

Clear Creek rises in northeastern Rockcastle County and joins Roundstone Creek at Wilde. The banks of this stream have been cleared along most of its length and the channel has been altered to improve runoff. The stream is of limited fishing value now as cover and deep pools are lacking but it still supports some sucker gigging in the spring. Access is via a county road south of Wilde.

Chemical and Physical Characteristics

D.O. - 9.0 ppm
 pH - 7.8
 Total alkalinity - 109 ppm
 Temperature - 82° F.
 Average width - 25'
 Average depth - 1.2'
 Velocity - 0.3 ft./sec.
 Volume - 9 cfs
 Secchi disk - 9"
 Bottom type - gravel, sand

Fish Food Organisms

Gastropoda, decapoda

Aquatic Vegetation

None

Fish Fauna

Smallmouth bass	2-0-0
Spotted bass	1-0-0
Largemouth bass	0-1-0
Rock bass	1-3-1
Bluegill	2-2-0
Longear sunfish	5-11-0
Yellow bullhead	1-0-0
Hog sucker	0-6-0
Golden redhorse	0-6-0
Stoneroller	170-40-0
Common shiner	0-10-0
Bluntnose minnow	8-1-0
Creek chub	10-0-0
Rosefin shiner	12-0-0
Emerald shiner	1-0-0
Rainbow darter	25-0-0
<u>Etheostoma</u> sp.	3-0-0

HORSE LICK CREEK (Jackson County)
7/9/68 - a.m.
Location - mouth of Raccoon Creek
Method - Rotenone
Stream length - 16.3 miles

Order IV
Lgth. of sample area 132'
Acreage - 0.17
Quantitative: 1,594 fish/acre
79.3 lbs./acre

Horse Lick Creek rises in northwestern Jackson County and flows south where it joins the Rockcastle River near the common boundaries of Laurel, Rockcastle, and Jackson Counties. This stream provides good fishing for small-mouth bass and rock bass from the mouth upstream to Ky. 1955, and a spring sucker fishery in the lower sections. Access to the best section of this stream is limited. The lower section can be reached from a Jackson County road off Ky. 89 and a jeep trail leads to the stream from the U. S. Forest Service S-Tree Campsite, west of McKee. One of the higher quality streams in the drainage.

Chemical and Physical Characteristics

D.O. - 7.0 ppm
pH - 7.5
Total alkalinity - 88 ppm
Temperature - 68° F.
Average width - 57'
Average depth - 1.6'
Velocity - 0.12 ft./sec.
Volume - 10.6 cfs
Secchi disk - 24"
Bottom type - boulders, rubble

Fish Food Organisms

Trichoptera, ephemeroptera,
decapoda, gastropoda

Aquatic Vegetation

Justicia sp., Potamogeton sp.

Fish Fauna

Smallmouth bass	0-2-0
Rock bass	1-16-7
Longear sunfish	8-45-0
Yellow bullhead	1-2-0
Hog sucker	1-2-0
Golden redhorse	14-5-3
Mimic shiner	2-0-0
Stoneroller	5-0-0
Creek chub	8-0-0
Bluntnose minnow	11-0-0
Rosefin shiner	62-0-0
Rosyface shiner	4-0-0
Common shiner	15-7-0
Banded sculpin	2-0-0
Greenside darter	0-4-0
Log perch	13-0-0
Striped darter	15-0-0
Rainbow darter	7-0-0
Etheostoma sp.	4-0-0
Blackside darter	6-0-0

HORSE LICK CREEK (Jackson County)
5/15/68 - a.m.
Location - 100 yards above Ky. 1955 bridge
Method - Cresol
Stream length - 16.3 miles

Order IV
Lgth. of sample area 100'
Acreage - 0.02
Qualitative

Chemical and Physical Characteristics

D.O. - 7.8 ppm
pH - 7.3
Total alkalinity - 90 ppm
Temperature - 65° F.
Average width - 10'
Average depth - 0.5'
Velocity - 0.3 ft./sec.

Fish Fauna

Creek chub	1-0-0
Stoneroller	3-1-0
Common shiner	10-3-0
Rosefin shiner	25-0-0
Popeye shiner	1-0-0
Rainbow darter	4-0-0
Striped darter	1-0-0

Volume - 15 cfs
Secchi disk - clear to bottom
Bottom type - bedrock, gravel

Fish Food Organisms

Ephemeroptera, decapoda

Aquatic Vegetation

None

CLOVERBOTTOM CREEK (Jackson County)
Stream length - 7.8 miles

Order III

A tributary to Horse Lick Creek, this stream rises near the village of Cloverbottom on U. S. 421 in northern Jackson County. Sections of this stream flow underground or become dry in the summer but the section near the mouth is stocked with trout by the U. S. Forest Service. Access is via an unimproved road south of Sand Gap on U. S. 421.

MIDDLE FORK ROCKCASTLE RIVER (Jackson County)
7/9/68 - p.m.
Location - pool below ford at Indian Creek Church
on Ky. 89
Method - Rotenone
Stream length - 8.0 miles

Order V
Lgth. of sample area 147'
Acreage - 0.20
Quantitative: 1,225 fish/acre
77.7 lbs./acre

This is one of the few streams in the drainage which still supports a walleye fishery. Walleye apparently use this stream for spawning although this has not been documented. The stream is characterized by deep, medium length pools and short riffles, and it may best be fished from a small boat or from the bank. Access is good at several sites along Ky. 89 south of McKee. Black bass fishing is considered fair to good and the fishing pressure is moderate.

Chemical and Physical Characteristics

D.O. - 6.5 ppm
pH - 7.5
Total alkalinity - 60 ppm
Temperature - 78° F.
Average width - 60'
Average depth - 2.8'
Velocity - 0.2 ft./sec.
Volume - 33.6 cfs
Secchi disk - 30"
Bottom type - boulders

Fish Food Organisms

Decapoda, ephemeroptera

Aquatic Vegetation

Justicia sp., Sagittaria sp.

Fish Fauna

Spotted bass	2-0-0
Largemouth bass	0-0-1
Rock bass	1-7-2
Longear sunfish	6-34-0
Bluegill	1-18-0
Golden redhorse	1-48-7
Hog sucker	2-3-0
Bluntnose minnow	13-2-0
Mimic shiner	12-0-0
Stoneroller	6-0-0
Rosyface shiner	10-0-0
Rosefin shiner	33-0-0
Log perch	17-3-0
Rainbow darter	2-0-0
Fantail darter	8-0-0
Speckled darter	1-0-0
Blackside darter	9-0-0
<u>Etheostoma sp.</u>	5-0-0

LAUREL FORK (Jackson County)
7/8/68 - p.m.
Location - 0.75 mile above Ky. 290 bridge south
of McKee
Method - Cresol
Stream length - 8.6 miles

Order IV
Lgth. of sample area 100'
Acreage - 0.03
Qualitative

Laurel Fork rises near Gray Hawk, south of McKee, and joins Indian Creek to form Middle Fork of Rockcastle River. The lower section of Laurel Fork provides walleye fishing in the spring and fair to good black bass fishing. Access to this section is limited to foot trails and bank fishing is recommended. The upper section of Laurel Fork is a cold water stream and has been stocked with trout in years past. Trout were not stocked here in 1968 however, due to access problems.

Chemical and Physical Characteristics

D.O. - 7.8 ppm
pH - 6.9
Total alkalinity - 50 ppm
Temperature - 70° F.
Average width - 20'
Average depth - 1'
Velocity - 0.1 ft./sec.
Volume - 2.0 cfs
Secchi disk - clear to bottom
Bottom type - bedrock, gravel

Fish Food Organisms

Decapoda, ephemeroptera

Aquatic Vegetation

None

Fish Fauna

Rock bass	1-1-0
Green sunfish	1-0-0
Hog sucker	2-1-0
Creek chub	9-7-0
Stoneroller	4-1-2
Rosefin shiner	6-0-0
Common shiner	3-0-0
Southern redbelly dace	2-0-0
Log perch	1-0-1
Rainbow darter	21-0-0
Striped darter	15-0-0
<u>Lampetra</u> sp.	0-14-0

INDIAN CREEK (Jackson County)
Stream length - 7.2 miles

Order IV

This stream rises in northern Jackson County and flows south of McKee where it joins Laurel Fork to form Middle Fork Rockcastle River. U. S. 421 and Ky. 89 follow the entire course of the stream and extensive sections along the banks have been cleared. The stream becomes turbid easily and is of little fishing value except for the lowermost section which is spring fed and stocked with trout by the U. S. Forest Service. Access is good along Ky. 89 south of McKee.

SOUTH FORK ROCKCASTLE RIVER (Jackson County)
7/10/68 - a.m.
Location - 0.5 mile above mouth of Pond Creek
Method - Rotenone
Stream length - 26.8 miles

Order V
Lgth. of sample area 154'
Acreage - 0.20
Quantitative: 1,365 fish/acre
121.8 lbs./acre

South Fork Rockcastle River rises in Clay County and flows northeastward to the point where Jackson, Laurel, and Rockcastle Counties join. From the mouth upstream to Eberle the gradient is moderate. This section of the stream is rather remote and may be fished by floating in a canoe at normal water level. Black bass and panfish dominate the creel and fishing success is considered fair to good. Upstream from Eberle the stream gradient is lower and long, and deep pools are characteristic. This section of the stream supports populations of panfishes and catfishes and receives moderate fishing pressure from the bank. Access is available on Ky. 89 and Ky. 30 southwest of McKee. This stream carries a moderate to heavy silt load.

Chemical and Physical Characteristics

D.O. - 6.6 ppm
 pH - 7.0
 Total alkalinity - 22 ppm
 Temperature - 68° F.
 Average width - 44'
 Average depth - 2.3'
 Velocity - 0.4 ft./sec.
 Volume - 40.4 cfs
 Secchi disk - 30"
 Bottom type - rubble, boulders, silt

Fish Food Organisms

Gastropoda, ephemeroptera

Aquatic Vegetation

Justicia sp.

Fish Fauna

Spotted bass	0-2-4
White crappie	0-0-1
Rock bass	0-0-4
Bluegill	8-26-0
Longear sunfish	1-18-0
Green sunfish	4-2-0
Hybrid sunfish	0-2-1
Black bullhead	0-1-2
Yellow bullhead	0-5-1
Drum	0-0-1
White sucker	0-18-0
Hog sucker	0-1-0
Golden redhorse	0-13-5
Stonecat	0-1-0
Common shiner	10-0-0
Bluntnose minnow	24-0-0
Creek chub	9-0-0
Rosefin shiner	61-0-0
Rosyface shiner	10-0-0
Mimic shiner	23-0-0
Log perch	0-1-0
Fantail darter	1-0-0
Rainbow darter	1-0-0
Blackside darter	13-0-0
Striped darter	15-0-0

SOUTH FORK ROCKCASTLE RIVER (Laurel County)
 7/11/68 - a.m.
 Location - 0.75 mile above Langnau on Rt. 472
 Method - Rotenone
 Stream length - 26.8 miles

Order IV
 Lgth. of sample area 100'
 Acreage - 0.03
 Qualitative

This section of the South Fork provides no fishing but it supports a moderate population of minnows.

Chemical and Physical Characteristics

D.O. - 5.5 ppm
 pH - 6.9
 Total alkalinity - 45 ppm
 Temperature - 65° F.

Fish Fauna

Longear sunfish	4-7-0
Green sunfish	0-3-0
White sucker	0-6-0
Creek chub	18-20-0

Average width - 15'
 Average depth - 1'
 Velocity - 0
 Volume - 0
 Secchi disk - clear to bottom
 Bottom type - gravel, silt, rubble

Common shiner	3-0-0
Rosefin shiner	20-0-0
Bluntnose minnow	2-0-0
Southern redbelly dace	101-0-0
Rainbow darter	8-0-0
Striped darter	25-0-0

Fish Food Organisms

Ephemeroptera

Aquatic Vegetation

None

BIG RACCOON CREEK (Laurel County)
 Stream length - 6.0 miles

Order IV

Big Raccoon Creek rises in northeastern Laurel County and flows north to join the South Fork of the Rockcastle River near McWhorter. Although this stream earlier provided fishing in the lower sections it has suffered from acid mine water drainage and siltation from both strip mines and shaft mines. Although the mines along this stream were not in operation at this writing, they continue to be a source of pollution to the South Fork of the Rockcastle River.

LITTLE RACCOON CREEK (Laurel County)
 Stream length - 2.2 miles

Order III

This is a tributary to Big Raccoon Creek and it is also polluted by old strip mines.

LAUREL RIVER (Laurel County)
 11/8/68 - a.m.
 Location - at bridge on Rt. 830 below Laurel
 River Church
 Method - NaCN
 Stream length - 46.8 miles

Order V
 Lgth. of sample area 150'
 Acreage - 0.07
 Qualitative

Laurel River originates in eastern Laurel County near the Clay County-Knox County line and flows southwest to Lake Cumberland. The Laurel River Reservoir Dam (U. S. Army Corps of Engineers) will impound 19.2 miles of this stream in the near future. The Laurel River above Corbin is a low gradient, frequently turbid stream of limited fishery value. Two small water supply impoundments located on the river upstream from Corbin will block the migration of fishes from Laurel River Reservoir into Laurel River. Fish population investigations conducted on the lower section of Laurel River (in the section to be impounded) in 1961 indicated a standing crop of 43 pounds per acre or 219 fish per acre (F-16-R-3 Ky. Div. of Fisheries).

Chemical and Physical Characteristics

D.O. - 5.4 ppm
 pH - 7.4

Fish Fauna

Spotted bass	1-1-0
Green sunfish	0-11-0

Total alkalinity - 30 ppm
 Temperature - 50° F.
 Average width - 21'
 Average depth - 1.6'
 Velocity - 1.5 ft./sec.
 Volume - 50.4 cfs
 Secchi disk - clear to bottom
 Bottom type - silt, gravel

White sucker	1-8-0
Hog sucker	1-0-0
Creek chub	27-180-2
Emerald shiner	1-0-0
Bluntnose minnow	38-3-0
Fantail darter	72-0-0
Blackside darter	6-0-0

Fish Food Organisms

Ephemeroptera

Aquatic Vegetation

None

CRAIG CREEK (Laurel County)
 Stream length - 10.8 miles

Order III

Craig Creek is a remote stream which rises near High Top on Ky. 192 and joins the Laurel River just above the Laurel River Reservoir dam site. This stream has provided a good smallmouth-rock bass fishery in the past but a major portion will be inundated with the impoundment of Laurel River Reservoir.

LITTLE LAUREL RIVER (Laurel County)
 12/12/68 - a.m.
 Location - at bridge crossing river on 1006,
 south of London
 Method - NaCN
 Stream length - 20.9 miles

Order IV
 Lgth. of sample area 200'
 Acreage - 0.07
 Qualitative

Little Laurel River is a tributary to Laurel River and it rises in the city limits of London. The lower sections of this stream (from Pine Grove to mouth) formerly supported good smallmouth bass and rock bass fishing, but it has been degraded in recent years by sewage pollution from London. A new sewage treatment plant has been constructed but at the present time fishing success is considered poor.

Chemical and Physical Characteristics

D.O. - 8.5 ppm
 pH - 7.2
 Total alkalinity - 20 ppm
 Temperature - 40° F.
 Average width - 17'
 Average depth - 25'
 Velocity - 0.3 ft./sec.
 Volume - 12.7 cfs
 Secchi disk - 30"
 Bottom type - mud, silt

Fish Fauna

Largemouth bass	3-0-0
Green sunfish	6-4-0
Bluntnose minnow	35-0-0
Rosefin shiner	10-0-0
Creek chub	12-0-0
Stoneroller	1-1-0
Silverjaw minnow	1-0-0
Barcheek darter	3-1-0
Blackside darter	4-0-0

Fish Food Organisms

Ephemeroptera

Aquatic Vegetation

None

ROBINSON CREEK (Laurel County)
Stream length - 13.5 miles

Order III

A tributary to Laurel River, Robinson Creek is a small, low gradient stream which is of little fishing significance except as a sucker rigging stream.

BARK CAMP CREEK (Whitley County)
Stream length - 3.7 miles

Order IV

Bark Camp Creek rises east of Highway 25W in northwestern Whitley County and flows northwestwardly to join the Cumberland River approximately 7.0 miles below Cumberland Falls. This small stream is located in a remote section of the Daniel Boone National Forest and approximately 1.5 miles of its length is stocked with trout by the U. S. Forest Service. Access is provided via a Forest Service road. Fishing with light tackle while wading is recommended.

DOG SLAUGHTER CREEK (Whitley County)
Stream length - 1.6 miles

Order IV

Dog Slaughter rises near the junction of Highway 90 and Highway 25W in northwestern Whitley County and flows westwardly to join the Cumberland River approximately 2.5 miles below Cumberland Falls. This small stream is located in a remote section of the Daniel Boone National Forest and it is stocked with trout by the U. S. Forest Service. Fishing with light tackle by wading is recommended. Access is limited but the stream can be reached via a road off U. S. 25W north of Jct. 90.

NORTH FORK DOG SLAUGHTER (Whitley County)
Stream length - 2.0 miles

Order III

This is a small tributary to Dog Slaughter which is stocked simultaneously with Dog Slaughter and access is via the same route to Dog Slaughter.

CUMBERLAND RIVER (Whitley County)
8/29/68 - a.m.
Location - mouth of Jellico Creek
Method - Rotenone
Stream length - 137 miles above Lake Cumberland,
59.3 miles in or bordering Whitley County

Order VI
Lgth. of sample area 140'
Acreage - 0.20
Qualitative

The best fishing in the Cumberland River above Lake Cumberland is found in the section from Cumberland Falls upstream to the Ky. 204 bridge below Williamsburg. The rugged and remote section from the falls upstream to the point where the river enters Whitley County is characterized by long shallow riffles and medium sized, deep pools. This section is fished by floating but the extensive riffles present a problem if the flow is not adequate. Upstream to the Ky. 204 bridge the river is characterized by deep pools and a few deep riffles. Bank or boat fishing is recommended here but access is limited. A small boat can be launched over the stream bank at Ky. 204 bridge. In recent years this section of the river has remained turbid for extended periods.

Chemical and Physical Characteristics

D.O. - 6.8 ppm
 pH - 6.7
 Total alkalinity - 14 ppm
 Temperature - 76° F.
 Average width - 65'
 Average depth - 2.6'
 Velocity - back water
 Volume - back water
 Secchi disk - 20"
 Bottom type - boulder, sand

Fish Fauna

Smallmouth bass	1-2-0
Spotted bass	2-0-0
Rock bass	4-1-0
Longear sunfish	1-0-0
Flathead catfish	4-1-0
Channel catfish	19-0-2
Golden redhorse	0-0-1
Brook silverside	2-0-0
Spotfin shiner	1-0-0
Emerald shiner	1-0-0
Posyface shiner	3-0-0
Log perch	12-0-0
Blackside darter	2-0-0
Stoneroller	2-0-0

Fish Food Organisms

None

Aquatic Vegetation

Justicia sp.

CUMBERLAND RIVER (Whitley County)

8/10/68 - a.m.

Location - mouth of Clear Fork

Method - Gill nets (6 net days)

Stream length - 137 miles above Lake Cumberland

59.3 miles in or bordering Whitley County

Order V

Lgth. of sample area

Acreage -

Qualitative

Above Williamsburg fishing is considered fair for panfish and catfish. This section is characterized by long deep pools and a few riffles. Access is limited and boat or bank fishing is recommended.

Chemical and Physical Characteristics

D.O. 8.8 ppm
 pH - 7.8
 Total alkalinity - 119 ppm
 Temperature - 64° F.
 Average width - 200'
 Average depth - 7'
 Velocity -
 Volume -
 Secchi disk - 12"
 Bottom type - silt, bedrock, rubble

Fish Fauna

White crappie	0-1-0
Bluegill	0-0-1
Channel catfish	0-1-3
Flathead catfish	0-0-1
Golden redhorse	0-0-5
Hog sucker	0-0-2

Fish Food Organisms

Ephemeroptera

Aquatic Vegetation

None

CUMBERLAND RIVER (Knox County)

11/7/68 - p.m.

Location - 4.0 miles south of Barbourville on
Ky. 11

Method - NaCN

Stream length - 137 miles above Lake Cumberland
31.7 miles in Knox County

Order V

Lgth. of sample area 200'

Acreage - 0.20

Qualitative

This section of the Cumberland River is characterized by extensive pools of medium depth and few riffles. The stream gradient averages about two feet per mile. The stream is often murky to turbid and the fishing pressure is light. Catfishes and panfishes dominate the creel and bank or boat fishing is recommended. Access is fair at numerous bridges in the vicinity but boats must be launched over steep banks.

Chemical and Physical Characteristics

D.O. - 5.5 ppm
pH - 7.2
Total alkalinity - 127 ppm
Temperature - 52° F.
Average width - 45'
Average depth - 3'
Velocity -
Volume -
Secchi disk - 20"
Bottom type - rubble, silt, boulder

Fish Food Organisms

None

Aquatic Vegetation

None

Fish Fauna

Spotted bass	2-1-1
Bluegill	0-0-1
Channel catfish	18-1-1
Flathead catfish	7-1-0
Golden redhorse	4-0-12
Spotted sucker	5-0-0
Bluntnose minnow	37-6-0
Creek chub	1-0-0
Steelcolor shiner	4-0-0
Rosyface shiner	23-0-0
Mimic shiner	87-0-0
Rainbow darter	6-0-0
Greenside darter	2-0-0
Blackside darter	3-0-0
Fantail darter	1-0-0

CUMBERLAND RIVER (Bell County)

11/25/68 - p.m.

Location - 0.75 mile below Varilla off U. S. 119

Method - Rotenone

Stream length - 137 miles above Lake Cumberland
28.9 miles in Bell County

Order V

Lgth. of sample area 300'

Acreage - 1.48

Qualitative

The Cumberland River from the Bell County line upstream to Pineville is characterized by long deep pools and few riffles. Above Pineville the gradient increases considerably and long riffles with shallow pools are common. The river provides fair fishing for catfishes and panfishes in Bell County, and most fishing is conducted from the bank in the vicinity of the Kentucky Utilities Dam on U. S. 25E north of Pineville. The river receives a considerable amount of silt from the Clear Creek watershed and it is frequently discolored below the mouth of Yellow Creek. Access is generally limited to various bridges in the county.

Chemical and Physical Characteristics

D.O. - 11.6 ppm
 pH - 7.4
 Total alkalinity - 58 ppm
 Temperature - 68° F.
 Average width - 200'
 Average depth - 3'
 Velocity -
 Volume -
 Secchi disk - 12"
 Bottom type - silt, boulder, rubble

Fish Fauna

Largemouth bass	0-1-0
Channel catfish	11-2-1
River redhorse	0-0-1
River chub	0-3-1
Bluntnose minnow	13-3-0
Common shiner	0-2-0
Rosyface shiner	44-0-0
Spotfin shiner	1-0-0
Rainbow darter	4-0-0
Blackside darter	1-0-0
Greenside darter	1-0-0
Log perch	20-5-2

Fish Food Organisms

Ephemeroptera

Aquatic Vegetation

None

INDIAN CREEK (McCreary County)
 8/28/68
 Location - 100 yards below Ky. 700 bridge
 Method - Rotenone
 Stream length - 9.8 miles

Order V
 Lgth. of sample area 153'
 Acreage - 0.20
 Qualitative

Indian Creek rises northeast of Whitley City and joins the Cumberland River about 5 miles above Cumberland Falls. This small stream is polluted by strip mines on the Barren Fork watershed and has provided very little fishing in recent years.

Chemical and Physical Characteristics

D.O. - 8.2 ppm
 pH - 7.2
 Total alkalinity - 9 ppm
 Temperature - 68° F.
 Average width - 57'
 Average depth - 2'
 Velocity - 0.9 ft./sec.
 Volume - 91 cfs
 Secchi disk - 30"
 Bottom type - bedrock, boulder

Fish Fauna

Smallmouth bass	3-0-0
Rock bass	6-4-0
Bluegill	0-10-0
Creek chub	2-1-0
Fantail darter	12-0-0
Greenside darter	2-0-0
Blackside darter	3-0-0

Fish Food Organisms

Gastropoda

Aquatic Vegetation

None

MARSH CREEK (McCreary County)
 8/16/68 - a.m.
 Location - pool below Ky. 478 bridge
 Method - Rotenone
 Stream length - 24.5 miles

Order V
 Lgth. of sample area 150'
 Acreage - 0.10
 Qualitative

Marsh Creek rises in Scott County, Tennessee and joins the Cumberland River about six miles upstream from Cumberland Falls. The Marsh Creek watershed was stripmined several years ago and the stream has been degraded as a result. There were sizeable deposits of fine gravel and silt in the study area. Although the stream still supports low populations of smallmouth bass and rock bass, fishing success is considered poor.

Chemical and Physical Characteristics

D.O. - 7.0 ppm
 pH - 6.9
 Total alkalinity - 22 ppm
 Temperature - 77° F.
 Average width - 49'
 Average depth - 1'
 Velocity - 0.4 ft./sec.
 Volume - 19 cfs
 Secchi disk - 24"
 Bottom type - silt, rubble, bedrock

Fish Fauna

Smallmouth bass	0-0-1
Spotted bass	3-0-0
Rock bass	19-4-2
Longear sunfish	0-4-0
Bluegill	1-0-0
Creek chub	68-1-0
Hog sucker	8-6-1
Rosefin shiner	12-0-0
Rosyface shiner	1-0-0
Fantail darter	22-0-0
Arrow darter	3-0-0
Blackside darter	8-0-0
Log perch	0-1-0

Fish Food Organisms

Decapoda, ephemeroptera

Aquatic Vegetation

None

JELICO CREEK (Whitley County)

8/28/68 - a.m.
 Location - below mouth of Pleasant Run
 Method - Rotenone
 Stream length - 24.9 miles (in Kentucky)

Order III
 Lgth. of sample area 240'
 Acreage - 0.30
 Qualitative

Historically Jellico Creek was known to Whitley County anglers as an excellent black bass and rock bass stream. However, during the late forties or early fifties strip mines were opened on Pleasant Run and the acid mine water eradicated the fish population from there to the mouth of the creek. This section of Jellico Creek continues to be affected by strip mine pollution. Access to the lower section of Jellico Creek is limited.

Chemical and Physical Characteristics

D.O. - 7.0 ppm
 pH - 6.7
 Total alkalinity - 0.0
 Temperature - 64° F.
 Average width - 60'
 Average depth - 2'
 Velocity - 0.9 ft./sec.
 Volume - 86 cfs
 Secchi disk - 24"
 Bottom type - boulders, rubble, silt, bedrock

Fish Fauna

Spotted bass	3-0-0
Rock bass	2-1-0
Bluegill	2-0-0
Longear sunfish	0-1-0
Lepomis sp. x sp.	0-1-0
Log perch	2-0-0
Arrow darter	2-0-0
Blackside darter	9-0-0

Fish Food Organisms

None

Aquatic Vegetation

None

JELLICO CREEK (Whitley County)
8/27/68 - a.m.
Location - Ray's Ford, across Rt. 1898 from
Zion Hill Church
Method - Rotenone
Stream length - 24.9 miles (in Kentucky)

Order III
Lgth. of sample area 224'
Acreage - 0.35
Qualitative

Jellico Creek rises in Tennessee and flows northward to join the Cumberland River approximately 10 miles west of Williamsburg, Kentucky. The upper half of Jellico Creek is readily accessible via Highway 1898 which parallels this section of the stream. This stream may be fished from the bank or by wading and floating with a small boat. The fishing pressure is light, however fishing is considered fair to good and the fishes taken by anglers include mainly rock bass, longear sunfish and spotted bass. A moderate amount of fish shelter is provided by ledges, logs and brush.

Chemical and Physical Characteristics

D.O. - 6.0 ppm
pH - 6.5
Total alkalinity - 19 ppm
Temperature - 58° F.
Average width - 68'
Average depth - 2'
Velocity -
Volume -
Secchi disk - 8"
Bottom type - bedrock, boulders, rubble

Fish Fauna

Spotted bass	2-0-2
Rock bass	3-7-10
Longear sunfish	14-27-1
White sucker	3-0-0
Hog sucker	1-1-1
Creek chub	8-6-2
Stoneroller	0-2-0
Bluntnose minnow	3-0-0
Rosefin shiner	3-0-0
Log perch	4-10-0
Black side darter	18-0-0
Arrow darter	1-0-0
Barcheek darter	5-0-0

Fish Food Organisms

Ephemeroptera, odonata

Aquatic Vegetation

Justicia sp.

WATTS CREEK (Whitley County)
8/28/68 - a.m.
Location - 1/4 mile above Gatliff Hatchery Dam
Method - Rotenone
Stream length - 5 miles

Order IV
Lgth. of sample area 130'
Acreage - 0.10
Qualitative

Watts Creek rises approximately 3/4 mile north of Faber, Kentucky and flows southward to join the Cumberland River two miles north of Williamsburg, Kentucky. This stream has pollution in the form of siltation from inactive strip mines near Faber. The overall fishing pressure is light, however during the spring the pressure is heavy along that section of the stream bordering the Department of Fish and Wildlife Resources hatchery. This stream is best fished with live bait from the bank. The creel includes longear sunfish, bullhead, rock bass, bluegill and largemouth bass.

Chemical and Physical Characteristics

D.O. - 7.4 ppm
 pH - 7.2
 Total alkalinity - 43 ppm
 Temperature - 67° F.
 Average width - 30'
 Average depth - 0.8'
 Velocity - 0.3 ft./sec.
 Volume - 7.2 cfs
 Secchi disk - 10"
 Bottom type - silt overlying bedrock, rubble
 and gravel

Fish Food Organisms

Ephemeroptera

Aquatic Vegetation

Justicia sp.

Fish Fauna

Largemouth bass	2-2-0
Bluegill	0-1-0
Rock bass	6-1-0
Longear sunfish	2-6-1
Warmouth	1-0-0
Green sunfish	3-2-0
Yellow bullhead	1-0-0
White sucker	5-1-0
Hog sucker	0-5-0
Creek chub	7-0-2
Stoneroller	0-1-0
Bluntnose minnow	75-0-0
Rosefin shiner	4-0-0
Blackside darter	5-0-0
Johnny darter	1-0-0
Arrow darter	7-0-0
Fantail darter	7-0-0
Cumberland fantail darter	4-0-0
Barcheek darter	16-0-0

CLEAR FORK (Whitley County)
 3/18/69 - a.m.
 Location - mouth of Wolf Creek
 Method - NaCN
 Stream length - 22.7 miles (in Kentucky)

Order V
 Lgth. of sample area 150'
 Acreage - 0.07
 Qualitative

Clear Fork flows northward out of Tennessee near Jellico to join the Cumberland River above Williamsburg. Clear Fork carries a heavy silt load due to the strip mine operations in both Kentucky and Tennessee. Fishing success is low and there is very little fishing pressure. Access to this stream is via U. S. 25W south of Williamsburg.

Chemical and Physical Characteristics

D.O. - 10.8 ppm
 pH - 7.4
 Total alkalinity - 22 ppm
 Average width - 15'
 Average depth - 3'
 Velocity - 0.8 ft./sec.
 Volume - 36 cfs
 Secchi disk - 14"
 Bottom type - silt

Fish Food Organisms

None

Fish Fauna

Largemouth bass	1-0-1
Bluegill	17-1-0
Warmouth	11-1-0
Hog sucker	0-2-1
Brook silverside	11-0-0
Bluntnose minnow	6-0-0
Emerald shiner	1-0-0
Rosyface shiner	1-0-0

Aquatic Vegetation

None

CLEAR FORK (Whitley County)
3/18/69 - p.m.
Location - Emlyn, Kentucky
Method - NaCN
Stream length - 22.7 miles

Order V
Lgth. of sample area 300'
Acreage - 0.27
Qualitative

The fish population sample is not representative of the area.

Chemical and Physical Characteristics

D.O. - 11.1 ppm
pH - 7.0
Total alkalinity - 21 ppm
Temperature - 42° F.
Average width - 40'
Average depth - 3.5'
Velocity - 1.0 ft./sec.
Volume - 140 cfs
Secchi disk - 20"
Bottom type - rubble, gravel and silt overlying
bedrock

Fish Fauna

Rock bass	1-0-0
Rosyface shiner	7-0-0
Mimic shiner	2-0-0
Bluntnose minnow	11-0-0
Blackside darter	0-1-0
Log perch	0-2-0
Fantail darter	2-0-0
Johnny darter	1-0-0

Fish Food Organisms

None

Aquatic Vegetation

None

POPLAR CREEK (Whitley County)
8/29/68 - a.m.
Location - approximately 3 miles above mouth
Method - Rotenone
Stream length - 12.8 miles

Order IV
Lgth. of sample area 90'
Acreage - 0.05
Qualitative

The access to this stream is good however there is no fishing, except at the mouth. Poplar Creek rises south of Siler, Kentucky and flows northwesterly to join the Cumberland River approximately 2.2 miles above Loudon bridge (Ky. 1064). The watershed has been stripmined and the stream has been degraded by siltation and at the present time this stream supports very little fishing.

Chemical and Physical Characteristics

D.O. - 7.4 ppm
pH - 7.5
Total alkalinity - 79.5 ppm
Temperature - 62° F.
Average width - 24'
Average depth - 18'
Velocity -
Volume -
Secchi disk - 6"
Bottom type - sand, silt, Detritus

Fish Fauna

Rock bass	1-0-0
Longear sunfish	0-2-0
Channel catfish	1-0-0
Golden redhorse	7-0-0
White sucker	4-3-0
Hog sucker	1-1-0
Mosquitofish	1-0-0
Creek chub	6-0-0
Rosefin shiner	1-0-0
Bluntnose minnow	12-0-0
Log perch	3-0-0

Fish Food Organisms

None

Aquatic Vegetation

None

LITTLE POPLAR CREEK (Knox County)
Stream length - 5.1 miles

Order IV

This is a small tributary to the Cumberland River which is of limited fishery value. Some fishing is provided at the mouth in the spring whereas the upper sections are of no fishery importance.

RICHLAND CREEK (Knox County)
6/20/68 - a.m.
Location - 0.1 mile below mouth of Knox Fork
Method - Cresol
Stream length - 17.5 miles

Order IV
Lgth. of sample area 100'
Acreage - 0.02
Qualitative

This low gradient stream rises in northern Knox County and joins the Cumberland River at the city limits of Barbourville. It provides a locally important fishery for black basses and panfishes from its mouth to the Ky. 229 bridge. The shoreline along this section of the stream has been cleared of trees and the S.C.S. has proposed channel alterations to enhance runoff. Several access sites are available along Ky. 229 and the stream may best be fished from the bank.

Chemical and Physical Characteristics

D.O. - 7.0 ppm
pH - 7.4
Total alkalinity - 90 ppm
Temperature - 80° F.
Average width - 10'
Average depth - 1.5'
Velocity - 0.3 ft./sec.
Volume - 4.5 cfs
Secchi disk - 20"
Bottom type - gravel, mud

Fish Fauna

Spotted bass	2-2-1
Rock bass	0-1-0
Longear sunfish	0-10-2
Bluegill	0-0-1
Warmouth	0-0-1
Creek chub	23-16-2
Stoneroller	12-3-0
Bluntnose minnow	13-0-0
Fathead minnow	3-1-0
Log perch	0-1-0
Rainbow darter	1-0-0

Fish Food Organisms

Decapoda

Aquatic Vegetation

Potamogeton sp., Sargitaria sp.

LITTLE RICHLAND CREEK (Knox County)
Stream length - 9.3 miles

Order III

This small tributary to Richland Creek supports a small fishery for panfish from Heidrick to the mouth of Trace Branch. A stream of minor fishery importance.

BRUSH CREEK (Knox County)
Stream length - 9.8 miles

Order IV

Brush Creek is a small tributary to the Cumberland River in southern Knox County. It provides a limited fishery for panfishes but is of minor importance.

STINKING CREEK (Knox County)
 6/19/68 - a.m.
 Location - mouth of Bailey Branch
 Method - Cresol
 Stream length - 18.2 miles

Order IV
 Lgth. of sample area 125'
 Acreage - 0.04
 Qualitative

Stinking Creek rises in the western tip of Knox County and joins the Cumberland River about 3 miles east of Barbourville. This sizeable stream formerly supported a significant smallmouth bass, rock bass, and spotted bass fishery and was considered the best fishing stream in Knox County. In recent years however, the main stem has been polluted by acid mine drainage from an abandoned mine in Bell County. The pollution enters the stream via Alex Branch in the headwaters. The pH readings in the polluted section of the headwaters ranged from 3 to 3.1.

Chemical and Physical Characteristics

D.O. - 9.0 ppm
 pH - 4.1
 Total alkalinity - 0
 Temperature - 79° F.
 Average width - 15'
 Average depth - 2'
 Velocity - 0.8 ft./sec.
 Volume - 24 cfs
 Secchi disk - clear to bottom
 Bottom type - gravel, bedrock, boulders

Fish Fauna

None

Fish Food Organisms

None

Aquatic Vegetation

None

ROAD FORK OF STINKING CREEK (Knox County)
 6/19/68 - a.m.
 Location - at bridge below mouth Cole Fork
 Method - Rotenone
 Stream length - 5.9 miles

Order III
 Lgth. of sample area 100'
 Acreage - 0.05
 Qualitative

This small tributary to Stinking Creek provides a locally important fishery for black bass and sunfishes. Most of its length has been cleared of shade and siltation is moderate to heavy.

Chemical and Physical Characteristics

D.O. - 6.2 ppm
 pH - 7.1
 Total alkalinity - 25 ppm
 Temperature - 76° F.
 Average width - 25'
 Average depth - 2.1'
 Velocity - 0.5 ft./sec.
 Volume - 52.5 cfs
 Secchi disk - 24"
 Bottom type - silt, gravel

Fish Fauna

Largemouth bass	3-11-1
Rock bass	1-0-1
Green sunfish	0-3-0
Bluegill	0-4-0
Longear sunfish	15-26-6
Hog sucker	3-1-0
Rosyface shiner	0-1-0
Stoneroller	2-3-0
Creek chub	22-4-0
Bluntnose minnow	21-2-0
Fantail darter	17-0-0
Blackside darter	1-0-0
Rainbow darter	1-0-0

Fish Food OrganismsAquatic Vegetation

Decapoda

None

MIDDLE FORK OF STINKING CREEK (Knox County)

6/19/68 - p.m.

Location - 100 yards above mouth

Method - Cresol

Stream length - 4.4 miles

Order III

Lgth. of sample area 100'

Acreage - 0.01

Qualitative

This is a small tributary to Stinking Creek which has no fishing importance, but it supports a substantial population of minnows.

Chemical and Physical CharacteristicsFish Fauna

D.O. - 7.2 ppm

pH - 7.0

Total alkalinity - 29 ppm

Temperature - 75° F.

Average width - 4'

Average depth - 0.6'

Velocity - 1.0 ft./sec.

Volume - 2.4 cfs

Secchi disk - clear

Bottom type - silt, gravel

Spotted bass 1-0-0

Smallmouth bass 1-0-0

Rock bass 1-0-0

Bluegill 2-0-0

Hog sucker 3-0-0

Rosyface shiner 1-0-0

Common shiner 3-0-0

Creek chub 14-0-0

Fish Food OrganismsAquatic Vegetation

Decapoda

None

STRAIGHT CREEK (Bell County)

6/19/68 - a.m.

Location - 7 miles east of Pineville on Route 221 at Mill Creek

Method - Rotenone

Stream length - 17.3 miles

Order IV

Lgth. of sample area 120'

Acreage - 0.15

Qualitative

Straight Creek rises in Harlan County and flows southwestward to join the Cumberland River at Pineville. This stream has been degraded by pollution from strip mines but still provides a moderate amount of fishing above Kettle Island.

Chemical and Physical CharacteristicsFish Fauna

D.O. - 8.0 ppm

pH - 7.1

Total alkalinity - 15 ppm

Temperature - 67° F.

Average width - 53'

Average depth - 4.3'

Velocity - 0.22 ft./sec.

Volume - 50 cfs

Rock bass 0-1-0

Longear sunfish 1-6-1

Golden redhorse 0-4-0

Hog sucker 1-0-0

Creek chub 4-1-0

Stoneroller 0-2-0

Common shiner 7-0-0

Fantail darter 2-0-0

Secchi disk - 30"
Bottom type - gravel

Rainbow darter 1-0-0

Fish Food Organisms

Aquatic Vegetation

Plecoptera

Justicia sp.

STRAIGHT CREEK (Bell County)
6/11/68 - p.m.
Location - on Left Fork 0.25 mile above mouth
Method - Rotenone
Stream length - 10 miles

Order III
Lgth. of sample area 100'
Acreage - 0.02
Qualitative

A tributary to Straight Creek which is severely polluted most of length by acid water from shaft mines and siltation from strip mines. This stream could support a local fishery but at the present time it is of no fishery importance whatever. A severely degraded stream.

Chemical and Physical Characteristics

Fish Fauna

D.O. - 7.2 ppm
pH - 7.4
Total alkalinity - 26 ppm
Temperature - 72° F.
Average width - 10'
Average depth - 1'
Velocity - 0.5 ft./sec.
Volume - 4.5 cfs
Secchi disk - clear to bottom
Bottom type - silt and fine gravel

None

Fish Food Organisms

Aquatic Vegetation

None

None

CLEAR CREEK (Bell County)
6/6/68 - a.m.
Location - at railroad bridge below Davisburg
Method - Cresol
Stream length - 15.6 miles

Order III
Lgth. of sample area 200'
Acreage - 0.05
Qualitative

Clear Creek is fished from the bank and by wading. There is a medium amount of fishing pressure on this stream from Chenoa Lake downstream to the mouth. Included in the creel are smallmouth bass, largemouth bass, rock bass, bluegill, and longear sunfish. Highway 190 follows the course of a large part of this stream, providing access.

Chemical and Physical Characteristics

Fish Fauna

D.O. - 8.6 ppm
pH - 7.4
Total alkalinity - 19 ppm
Temperature - 71° F.

Spotted bass 1-0-0
Rock bass 0-1-0
Bluegill 1-0-0
Creek chub 1-0-0

Average width - 20'
Average depth - 2.5'
Velocity - 0.4 ft./sec.
Volume - 12 cfs
Secchi disk - 18"
Bottom type - gravel

Fish Food Organisms

Ephemeroptera

Aquatic Vegetation

Cladophora sp., Justicia sp.

LITTLE CLEAR CREEK (Bell County)
11/26/68 - p.m.
Location - first bridge upstream from mouth
Method - NaCN
Stream length - 6.2 miles

Order III
Lgth. of sample area 200'
Acreage - 0.01
Qualitative

This stream formerly supported a locally important fishery for smallmouth bass and panfishes but more recently it has been degraded by strip mine pollution and at the present time it is of almost no fishing importance.

Chemical and Physical Characteristics

D.O. - 8.0 ppm
pH - 6.8
Total alkalinity - 18 ppm
Temperature - 65° F.
Average width - 20'
Average depth - 1.5'
Velocity - 0.3 ft./sec.
Volume - 12.5 cfs
Secchi disk - 10"
Bottom type - bedrock, silt

Fish Fauna

Smallmouth bass	0-2-1
Hog sucker	1-1-0
Spotted sucker	1-0-0
Stoneroller	1-1-0
Creek chub	46-3-3
Bluntnose minnow	3-0-0
Fantail darter	1-0-0
Rainbow darter	1-0-0

Fish Food Organisms

Ephemeroptera

Aquatic Vegetation

None

YELLOW CREEK (Bell County)
6/11/68 - a.m.
Location - one mile south of Highway 25E on
Route 188
Method - Cresol
Stream length - 21.2 miles

Order IV
Lgth. of sample area 200'
Acreage - 0.02
Qualitative

Historically a smallmouth - rock bass stream, Yellow Creek is now polluted by sewage from Middlesboro downstream to the mouth. The fishing pressure on this stream is practically nil. Yellow Creek is a severely degraded stream.

Chemical and Physical Characteristics

D.O. - 2.6 ppm
pH - 7.2
Total alkalinity - 58 ppm
Temperature - 74° F.

Fish Fauna

Carp	1-0-0
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Average width - 20'
Average depth - 0.6'
Velocity - 0.5 ft./sec.
Volume - 6 cfs
Secchi disk - 8"
Bottom type - boulders, sand, sludge

Fish Food Organisms

Tubificidae

Aquatic Vegetation

None

YELLOW CREEK (Bell County)
6/11/68 - p.m.
Location - edge of Middlesboro city limits on
Ky. 74
Method - Cresol
Stream length - 21.2 miles

Order IV
Lgth. of sample area 100'
Acreage 0.02
Qualitative

There is no fishing in this section of Yellow Creek. This stream has been extensively dredged above Middlesboro and any potential fishery destroyed in the process.

Chemical and Physical Characteristics

D.O. - 9.1 ppm
pH - 7.4
Total alkalinity - 20 ppm
Temperature - 73° F.
Average width - 8'
Average depth - 0.8'
Velocity - 0.2 ft./sec.
Volume - 12 cfs
Secchi disk - clear to bottom
Bottom type - boulders, rubble, gravel

Fish Fauna

Creek chub 6-6-0
Southern redbelly
dace 5-0-0

Fish Food Organisms

None

Aquatic Vegetation

None

POOR FORK OF CUMBERLAND RIVER (Harlan County)
6/12/68 - a.m.
Location - 1 mile above Totz off U. S. 119
Method - Rotenone
Stream length - 48 miles

Order IV
Lgth. of sample area 100'
Acreage - 0.04
Qualitative

Poor Fork rises near the Kentucky-Virginia state line in southwestern Letcher County and flows southwestward to Harlan where it joins Clover Fork to form the Cumberland River. Formerly considered one of the best fishing streams in eastern Kentucky, this sizeable stream has been degraded by strip mining. The stream still retains much of its natural beauty but fishing success is generally poor. Large deposits of silt and fine gravel were noted in the study area. The fish population sample was not considered representative.

Chemical and Physical Characteristics

D.O. - 9.8 ppm
pH - 8.1
Total alkalinity - 126 ppm

Fish Fauna

Common shiner 0-5-0
Bluntnose minnow 0-3-0
Rosyface shiner 0-2-0

Temperature - 77° F.	<u>Fish Food Organisms</u>
Average width - 100'	
Average depth - 1.1'	Ephemeroptera
Velocity - 1.5 ft./sec.	
Volume - 165 cfs	<u>Aquatic Vegetation</u>
Secchi disk - clear to bottom	
Bottom type - silt, boulders, rubble	<u>Justicia sp.</u>

POOR FORK OF CUMBERLAND RIVER (Harlan County)	Order IV
9-5-68 - a.m.	Lgth. of sample area 165'
Location - Harlan-Letcher County line 100 yards below bridge	Acreage - 0.15
Method - Rotenone	Qualitative
Stream length - 48.0 miles	

This section of Poor Fork still supports a fair population of rock bass and smallmouth bass in isolated sections where the habitat has not been drastically changed. However, strip mining activities in the headwaters have recently been accelerated and the stream will undoubtedly suffer further degradation in the future. Access is found at numerous locations along U. S. 119. This section of the stream may be fished from the bank or by wading.

Chemical and Physical Characteristics

D.O. - 7.6 ppm
 pH - 8.0
 Total alkalinity - 40 ppm
 Temperature - 64° F.
 Average width - 40'
 Average depth - 2'
 Velocity - 0.5 ft./sec.
 Volume - 20 cfs
 Secchi disk - 20"
 Bottom type - bedrock, boulder, sand

Fish Food Organisms

Gastropoda

Aquatic Vegetation

None

Fish Fauna

Smallmouth bass	3-3-3
Rock bass	31-8-10
Spotted bass	1-2-0
Longear sunfish	0-8-0
Warmouth	0-1-0
Bluegill	9-0-0
Green sunfish	3-0-0
White sucker	0-7-0
Hog sucker	0-22-0
Yellow bullhead	17-0-0
Common shiner	4-0-0
Stoneroller	0-7-0
Rosyface shiner	87-0-0
Mimic shiner	10-0-0
Spotfin shiner	2-0-0
Rosefin shiner	14-0-0
Bluntnose minnow	26-0-0
Creek chub	3-0-0
Greenside darter	0-2-0
Rainbow darter	6-0-0
Blackside darter	1-0-0

POOR FORK CUMBERLAND RIVER (Letcher County)	Order III
9/5/68 - p.m.	Lgth. of sample area 25'
Location - Ky. 932 bridge about 100 yards from Virginia line	Acreage - 0.01
Method - Cresol	Qualitative
Stream length - 48 miles	

Chemical and Physical Characteristics

D.O. - 7.0 ppm
 pH - 6.6
 Total alkalinity - 20 ppm
 Temperature - 64° F.
 Average width - 6'
 Average depth - 0.5'
 Velocity - 0.7 ft./sec.
 Volume - 3.5 cfs
 Secchi disk - clear to bottom
 Bottom type - rubble

Fish Fauna

Creek chub	28-7-0
White sucker	7-1-0
Southern redbelly dace	47-0-0
Fantail darter	3-0-0
Arrow darter	3-0-0

Fish Food Organisms

Decapoda

Aquatic Vegetation

Justicia sp.

CLOVERLICK CREEK (Harlan County)
 Stream length - 2.3 miles

Order III

Cloverlick Creek rises in a remote section of eastern Harlan County and joins Poor Fork of Cumberland River in the city of Cumberland. This small stream has been stocked with trout in the past but recent habitat alterations in the form of stream bank destruction and strip mining have degraded the stream and left it unsuitable for stocking.

CLOVER FORK, CUMBERLAND RIVER (Harlan County)
 9/4/68 - p.m.
 Location - 2.8 miles above Harlan city limits
 Method - NaCN
 Stream length - 29.6 miles

Order IV
 Lgth. of sample area 300'
 Acreage - 0.25
 Qualitative

Clover Fork of the Cumberland River rises in Harlan County near the Virginia-Kentucky state line and flows eastward to Harlan where it joins Martin's Fork and Poor Fork to form the main stem of the Cumberland River. The Clover Fork watershed has been heavily mined for coal for a number of years and this has directly or indirectly resulted in severe degradation of this stream. Pollution from strip mines and coal washers has plagued this stream for several years and although the coal washer waste seems to be less severe than it once was, periodic pollution still exists. There are numerous villages along the length of Clover Fork and many houses are located near the stream bank. The stream channel has been altered in several sites to enhance the runoff. Trash dumping has degraded the stream, especially in the vicinity of Harlan. Clover Fork provides very little fishing at the present time.

Chemical and Physical Characteristics

D.O. - 7.4 ppm
 pH - 7.8
 Total alkalinity - 173 ppm
 Temperature - 68° F.

Fish Fauna

Smallmouth bass	2-1-0
Rock bass	19-1-0
Longear sunfish	6-0-0
Green sunfish	1-0-0

Average width - 40'
Average depth - 1.2'
Velocity - 0.6 ft./sec.
Volume - 25 cfs
Secchi disk - 10"
Bottom type - silt

Fish Food Organisms

Decapoda, gastropoda

Aquatic Vegetation

None

Yellow bullhead	1-0-0
Hog sucker	1-0-0
Stoneroller	3-0-0
Log perch	3-0-0
Rainbow darter	20-0-0
Bullhead minnow	1-0-0
Bluntnose minnow	1-0-0
Spotfin shiner	0-1-0
Rosyface shiner	62-16-0
Common shiner	0-4-0
Silverjaw minnow	32-0-0

CLOVER FORK CUMBERLAND RIVER (Harlan County)

9/4/68 - p.m.

Location - below Closplint bridge

Method - Cresol

Stream length - 29.6 miles

Order IV

Lgth. of sample area 100'

Acreage - 0.03

Qualitative

This section of Clover Fork is of moderate gradient with small pools and long shallow riffles. It supports a low population of smallmouth bass and panfish and is generally clear.

Chemical and Physical Characteristics

D.O. - 8.0 ppm

pH - 8.6

Total alkalinity - 88 ppm

Temperature - 74° F.

Average width - 15'

Average depth - 1'

Velocity - 0.7 ft./sec.

Volume - 11 cfs

Secchi disk - clear to bottom

Bottom type - boulders, bedrock, gravel

Fish Fauna

Smallmouth bass 0-3-0

Rock bass 0-0-3

Longear sunfish 0-0-1

Creek chub 0-2-0

White sucker 0-2-0

Hog sucker 0-2-0

Rainbow darter 5-0-0

Rosyface shiner 17-0-0

Bluntnose minnow 11-0-0

Common shiner 5-0-0

Fish Food Organisms

Ephemeroptera, megaloptera, trichoptera

Aquatic Vegetation

None

BROWNIES CREEK (Harlan and Bell Counties)

11/25/68 - a.m.

Location - 1 mile above Oaks

Method - NaCN

Stream length - 8.9 miles

Order III

Lgth. of sample area 220'

Acreage - 0.37

Qualitative

Brownies Creek is a small stream which once provided a locally important fishery for sunfishes and black basses. Strip mine pollution has substantially reduced its potential and at the present time it supports very little fishing.

Chemical and Physical Characteristics

D.O. - 11.6 ppm
 pH - 7.7
 Total alkalinity - 21 ppm
 Temperature - 43° F.
 Average width - 15'
 Average depth - 2'
 Velocity - 0.2 ft./sec.
 Volume - 5 cfs
 Secchi disk - clear to bottom
 Bottom type - gravel, silt

Fish Fauna

Spotted bass	1-0-1
Golden redhorse	1-0-0
Spotted sucker	12-0-0
Hog sucker	0-1-0
Creek chub	14-13-13
Bluntnose minnow	81-5-0
Silverjaw minnow	7-0-0
Emerald shiner	5-0-0
Common shiner	3-0-0
Posefin shiner	40-1-0
Blackside darter	6-3-0
Rainbow darter	3-1-0
Fantail darter	5-0-0

Fish Food Organisms

Ephemeroptera

Aquatic Vegetation

None

MARTIN'S FORK (Harlan County)
 7/17/69 - p.m.
 Location - at mouth of Laurel Branch
 Method - NaCN
 Stream length - 34.7 miles

Order IV
 Both. of sample area 150'
 Acreage - 0.08
 Qualitative

Martin's Fork rises in Bell County near the Kentucky-Virginia state line and joins Clover Fork then Poor Fork to form the Cumberland River at Harlan. The stream was investigated in the early sixties to determine the effects of coal washer wastes which continue to be a problem from the mouth of Turtle Creek downstream. The stream channel in this section is periodically bulldozed to enhance runoff. From the mouth of Turtle Creek upstream to the mouth of Cranks Creek the stream supports a significant black bass and catfish fishery and further upstream it supports the only known population of coosa bass in Kentucky.

Chemical and Physical Characteristics

D.O. - 6.6 ppm
 pH - 6.3
 Total alkalinity - 3 ppm
 Temperature - 78° F.
 Average width - 25'
 Average depth - 0.6'
 Velocity - 1.0 ft./sec.
 Volume - 20 cfs
 Secchi disk - clear to bottom
 Bottom type - boulder, rubble

Fish Fauna

Coosa bass	0-1-0
Hog sucker	5-4-1
Stoneroller	9-11-7
Creek chub	1-0-0
Rosyface shiner	2-0-0
Bluntnose minnow	1-0-0
Rainbow darter	3-3-0
Arrow darter	4-3-0
Speckled darter	1-0-0
Log perch	1-0-0
Stripetail darter	10-18-0

Fish Food Organisms

Trichoptera, plecoptera, ephemeroptera

Aquatic Vegetation

None

MARTIN'S FORK (Harlan County)
7/18/69 - p.m.
Location - pool above Quadrule Falls
Method - NaCN
Stream length - 34.7 miles

Order IV
Lgth. of sample area 100'
Acreage - 0.04
Qualitative

This section of Martin's Fork has characteristics vastly different from the lower sections. This section is entirely wooded and devoid of human habitation. Access is limited to a few jeep trails and foot paths. The U. S. Bureau of Sport Fisheries and Wildlife has introduced brook trout into the extreme headwaters and they have recently provided a new fishery in this section. Martin's Fork is a unique stream in eastern Kentucky.

Chemical and Physical Characteristics

D.O. - 7.0 ppm
pH - 6.3
Total alkalinity - 6 ppm
Temperature - 71° F.
Average width - 20'
Average depth - 1'
Velocity - 1.5 ft./sec.
Volume - 24 cfs
Secchi disk - clear to bottom
Bottom type - bedrock, boulders

Fish Fauna

Brook trout 0-0-2
Blacknose dace 0-5-0

Fish Food Organisms

Ephemeroptera, diptera,
plecoptera

Aquatic Vegetation

None

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UPPER CUMBERLAND RIVER DRAINAGE

UPPER CUMBERLAND RIVER DRAINAGE

Stream Inventory Studies - 1968

