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Pittsburg State University Ichthyology Field Notebooks

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Gosh

1966

A LIST OF FISHES KNOWN FROM SOUTHEASTERN KANSAS AND ENVIRONS

ORDER PETROMYZONTIFORMES

Family Petromyzontidae

Ichthyomyzon castaneus Girard-- Neosho River tributaries

ORDER AMIIFORMES

Family Amiidae

Amia calva
~~Xxxx xxxxx~~ (Linnaeus) Neosho-Spring River system

ORDER LEPISOSTEIFORMES

Family Lepisosteidae

Lepisosteus platostomus (Rafinesque) most of eastern Kansas
Lepisosteus osseus (Linnaeus) most of eastern Kansas.
Lepisosteus oculatus (Rafinesque) Neosho River
SPOTTED

ORDER CLUPEIFORMES

Suborder Clupeoidei

Family Clupeidae

Dorosoma cepedianum (LeSueur) most of Kansas

Suborder Salmonoidei

Family Salmonidae

Salmo gairdnerii (Richardson) "escapes" in Shoal Creek, planted elsewhere

Suborder Notopteroidei

Family Hiodontidae

Hiodon alosoides (Rafinesque) larger streams of eastern Kansas

ORDER CYPRINIFORMES

Suborder Cyprinoidei

Family Catostomidae

Cycleptus elongatus (LeSueur) Neosho River
Ictiobus cyprinella (Valenciennes) eastern Kansas
Ictiobus niger (Rafinesque) eastern Kansas
Ictiobus bubalus (Rafinesque) eastern Kansas

Carpiodes carpio (Rafinesque) all of Kansas
Carpiodes velifer (Rafinesque) Neosho River
Moxostoma carinatum (Cope) Spring River-Shoal Creek drainage (uncommon)
Moxostoma aureolum Shoal Creek
Moxostoma macrolepidotum pisolabrum (Trautman) Spring River-Neosho River
Moxostoma duquesnii (LeSueur) Spring River-Shoal Creek
Moxostoma erythrum (Rafinesque) eastern Kansas
Minytrema melanops (Rafinesque) southeastern and mideastern Kansas
Catostomus commersonii (Lacepede) Shoal Creek
Hypentelium nigricans (LeSueur) Spring River-Neosho River

Family Cyprinidae

Cyprinus carpio (Linnaeus) all of Kansas
Carassius auratus (Linnaeus) locally introduced
Notemigonus crysoleucas (Mitchill) all of Kansas
Semotilus atromaculatus (Mitchill) Spring River-Neosho River
Chrosomus erythrogaster (Rafinesque) Spring River, Neosho River
Hybopsis biguttata (Kirtland) eastern Kansas
Hybopsis amblops (Rafinesque) Spring River, Neosho River
Hybopsis storeriana (Kirtland) eastern Kansas
Hybopsis x-punctata (Hubbs and Crowe) Neosho River, Spring River
Phenacobius mirabilis (Girard) all of Kansas
Notropis percobromus (Cope) most of Kansas
Notropis rubellus (Agassiz) eastern Kansas
Notropis umbratilis (Girard) eastern Kansas
Notropis chrysocephalus (Rafinesque) (N. cornutus) Spring River, uncommon
Notropis pilsbryi (Fowler) Spring River, eastern tributaries of Neosho River (N. zonale) black hemal bar
Notropis boops (Gilbert) southeastern Kansas
Notropis camurus (Jordan and Meek) southeastern Kansas
Notropis spilopterus (Cope) Neosho and Spring Rivers
Notropis lutrensis (Baird and Girard) all of Kansas
Notropis topeka (Gilbert) Dry Wood Creek
Notropis volucellus (Cope) southeastern Kansas NOTROPIS CORNUTUS - SHOAL CK.
Notropis buchanani (Meek) eastern Kansas
Notropis stramineus (Cope) Spring and Neosho Rivers
Hybognathus placita (Girard) uncommon in Spring-Neosho River drainage
Dionda nubila (Forbes) Spring River, Shoal Creek
Pimephales tenellus (Girard) southeastern Kansas
Pimephales vigilax (Baird and Girard) southeastern Kansas
Pimephales notatus (Rafinesque) most of eastern Kansas
Pimephales promelas (Rafinesque) most of Kansas
Campostoma anomalum (Rafinesque) all of Kansas

Suborder Silurcidei
FAMILY: ICTALURIDAE

Ictalurus punctatus (Rafinesque) all of Kansas
Ictaluris natalis (LeSueur) easterm Kansas
Ictaluris melas (Rafinesque) all of Kansas
Ictaluris nebulosis (LeSueur) introduced, uncommon in Shoal Creek
Pylodictis olivaris (Rafinesque) most of Kansas
Noturus flavus (Rafinesque) eastern Kansas
Noturus nocturnus (Jordan and Gilbert) southeastern Kansas
Noturus exilis (Nelson) Spring and Neosho Rivers drainages
Noturus miurus (Jordan) Spring and Neosho Rivers

ORDER ANGUILLIFORMES

Family Anguillidae

Anguilla rostrata (LeSueur) Neosho and Spring Rivers

ORDER CYPRINODONTIFORMES

Suborder Cyprinodontoidei

Family Cyprinodontidae

Fundulus notatus (Rafinesque) eastern Kansas
Fundulus sciadicus (Cope) not yet taken in Kansas; Shoal Creek, Missouri
Fundulus catenatus (Storer) Shoal Creek, south of Joplin, Mo.; Dry Wood Creek, Mex

Family Poeciliidae

Gambusia affinis (Baird and Girard) all of eastern and southeastern Kansas

ORDER MUGILIFORMES

Family Atherinidae

Labidesthes sicculus (Cope) all of southern Kansas

ORDER PERCIFORMES

Suborder Percoidei

Family Serranidae

Roccus chrysops (Rafinesque) Spring and Neosho Rivers

Family Centrarchidae

Micropterus dolomieui (Lacepede) Spring and Neosho River systems
Micropterus punctulatus (Rafinesque) all of southern Kansas
Micropterus salmoides (Lacepede) all of Kansas
Chaenobryttus gluosus (Cuvier) eastern Kansas
Lepomis cyanellus (Rafinesque) all of Kansas
Lepomis microlophus (Gunther) introduced, uncommon in Shoal Creek
Lepomis megalotis (Rafinesque) eastern Kansas
Lepomis humilis (Girard) all of Kansas
Lepomis macrochirus (Rafinesque) all of Kansas
Ambloplites rupestris (Rafinesque) Spring and Neosho Rivers
Pomoxis nigromaculatus (DeSueur) all of Kansas
Pomoxis annularis (Rafinesque) all of Kansas

Family Percidae

Stizostedion canadense (Smith) Neosho and Spring Rivers
Percina phoxocephala Nelson) southeastern Kansas
Percina caprodes (Rafinesque) eastern Kansas
Percina shumardi (Girard) Neosho and Spring Rivers
Percina copelandi (Jordan) southeastern Kansas
Etheostoma stigmaeum (Jordan) Spring and Neosho Rivers
Etheostoma nigrum - subsp. Spring River, Shoal Creek, Dry Wood Creek
Etheostoma chlorosomum (Hay) Neosho and Spring Rivers

Etheostoma zonale (Cope) Spring and Neosho Rivers
Etheostoma blenniodes subsp. Spring River, Shoal Creek
Etheostoma whipplii (Girard) southeastern Kansas
Etheostoma punctulatum (Agassiz) Spring River, Shoal Creek
Etheostoma cragini (Gilbert) southeastern Kansas
~~Etheostoma~~ *Etheostoma spectabile* (Agassiz) most of Kansas
Etheostoma flabellare (Rafinesque) Spring and Neosho Rivers
Etheostoma gracile (Girard) Spring River drainage
Etheostoma microperca (Jordan and Gilbert) Shoal Creek, just inside Missouri

Family Sciaenidae

Aplodinotus grunniens (Rafinesque) most of Kansas

Suborder Cottoidei

Family Cottidae

Cottus carolinae (Gill) Spring River And Neosho River

GASH

A LIST OF FISHES KNOWN FROM SOUTHEASTERN KANSAS AND ENVIRONS

small stream fish soft integument.

1. Ichthyomyzon castaneus Girard Chestnut lamprey-Neosho River tributaries

PRIMITIVE circ. form. Ganoid scales - homocercal tail

2. Amia calva Linnaeus Bowfin-Neosho and Spring River systems

fins yellowish. spots on SOCM GAR 1.5 CM. IN DIA.

3. Lepisosteus platostomus Rafinesque Shortnose gar-most of eastern Kansas

Spawning in late May - June.

4. Lepisosteus osseus (Linnaeus) Longnose gar - most of eastern Kansas

↳ BEAK 2-2.5X that of shortnose

5. Lepisosteus oculatus (Cope) Spotted gar - Neosho River system

first specimen (Spring) 1963. St. Paul Refuge.

Rotatory - teeth on teeth jaws. gill breathing inadequate.

6. Dorosoma cepedianum (LeSueur) Gizzard shad - most of Kansas

" petenense Threadfin shad

7. Salmo gairdnerii Richardson Rainbow trout - escaped to Shoal Creek

OSAGE R.

soft ray, deep skin covers scales - large teeth

8. Hiodon alosoides (Rafinesque) Goldeye - larger streams and lakes

♂ A. fin ♀ do have smallmouth Bonemouth "

9. Cycleptus elongatus (LeSueur) Blue sucker - Neosho River system

10. Ictiobus cyprinella (Valenciennes) Bigmouth buffalofish- eastern Kansas

MAX - 20-30 lbs

11. Ictiobus niger (Rafinesque) Black buffalofish - eastern Kansas

hard to distinguish

12. Ictiobus bubalus (Rafinesque) Smallmouth buffalofish - eastern Kansas

13. Carpiodes carpio (Rafinesque) River carpsucker-all of Kansas anterior ray of dorsal fin extended. reach at apex of lower lip. - 5 lbs max

14. Carpiodes velifer (Rafinesque) Highfin carpsucker-Neosho River system

↳ hump on anterior limit of dorsal fin. coloration similar

15. Moxostoma carinatum (Cope) River redhorse-Spring River/Shoal Creek

14-20 lbs 2 ½ ft in length good eaters - breeding colors beautiful

16. Moxostoma aureolum (LeSueur) Shorthead redhorse-Shoal Creek

17. Moxostoma macrolepidotum pisolabrum (Trautman) Eastern redhorse-Spring and Neosho River systems

18. Moxostoma duquesnii (LeSueur) Black redhorse-Spring River and Shoal Creek

19. Moxostoma erythrurum (Rafinesque) Golden redhorse-eastern Kansas

20. Minytrema melanops (Rafinesque) Spotted sucker-eastern Kansas well defined melanistic spots - maybe bands

21. Catostomus commersonii (Lacepede) White sucker-eastern Kansas

22. Hypentelium nigricans (LeSueur) Northern hogsucker-Spring and Neosho River systems

23. Cyprinus carpio Linnaeus All of Kansas

24. Carassius auratus (Linnaeus) Goldfish-introduced

teeth .. 58

25. Notemigonus crysoleucas (Mitchill) Golden shiner-all of Kansas

26. Semotilus atromaculatus (Mitchill) Creek chub-Spring and Neosho Rivers Marmaton and Osage River systems

27. Chrosomus erythrogaster (Rafinesque) Southern Redbelly Dace-Spring and Neosho River systems

SAR'S.

(3-5): SPAWNING: Typically for every ♀, there will be 2 ♂, swimming in tandem.

Spawning takes place in weeds. ♀ spin when releasing eggs. Eggs gran pellet. TOXIC!!! FATAL.
Egg ovaries highly toxic.

8 - surface feeders - insectivorous; 8-10 ft deep. to 30-40
Clear water - length to .5 meters

all suckers have cycloid scales

5 Catostomidae - no spines
- dn dorsal fin 10+ rays.
inferior mouth, lips thickened
pharyngeal teeth 1 row typically 10+

Cyprinidae - at least 1 fin w/ usually spines
usually not more than 2 spines

dorsal fin 10 or less rays
lips typically thinner
mouth - not inferior - teeth 8 or less

~~Cyprinidae~~

28. Hybopsis biguttata (Kirtland) Hornyhead chub-eastern Kansas

29. Hybopsis amblops (Rafinesque) Bigeye chub-Spring and Neosho Rivers

30. Hybopsis storeriana (Kirtland) Silver chub-eastern Kansas

31. Hybopsis x-punctata Hubbs and Crowe Gravel chub-Neosho and Spring Rivers

32. Phenacobius mirabilis (Girard) Suckermouth minnow-all of Kansas

X 33. Notropis percobromus (Cope) Plains shiner-most of Kansas

34. Notropis rubellus (Agassiz) Rosyface shiner-eastern Kansas

35. Notropis umbratilis (Girard) Redfin shiner-eastern Kansas — scales deep - smooth

36. Notropis chrysocephalus (Rafinesque) (cornutus) Common shiner-Spring R.

37. Notropis pilsbryi Fowler Spring River; eastern tributaries of Neosho R.

38. Notropis boops Gilbert Bigeye shiner-southeastern Kansas — cold, fast water - specific preference

39. Notropis camurus (Jordan and Meek) bluntface shiner-southeastern Kansas

40. Notropis spilopterus (Cope) Spotfin shiner-Neosho and Spring Rivers

41. Notropis lutrensis (Baird and Girard) Red shiner-all of Kansas — usually 20-30 cm. deep. still water

X 42. Notropis volucellus (Cope) Mimic shiner-southeastern Kansas

43. Notropis buchanani Meek Ghost shiner-eastern Kansas

44. Notropis topeka Gilbert Topeka shiner-eastern Kansas

45. Notropis stramineus (Cope) Spring and Neosho Rivers

46. Hybognathus placita Girard Plains minnow-Spring and Neosho Rivers — usually moderately heavily pigmented → 8-10 cm distinct separation of pigment on lat. line.

47. Dionda nubila (Forbes) Ozark minnow-Spring River and Shoal Creek — resembles P. notatus in center, V-shaped caudal spot.

48. Pimephales tenellus (Girard) Slim minnow-southeastern Kansas

49. Pimephales vigilax (Baird and Girard) Bullhead minnow-southeastern Kansas

50. Pimephales notatus (Rafinesque) Bluntnose minnow-eastern Kansas — No. 3 O.W. 3-11-06

51. Pimephales promelas Rafinesque Fathead minnow-most of Kansas

52. Campostoma anomalum (Rafinesque) Stoneroller (rotgut) minnow-Kansas — small scales, very smooth skin.

53. Ictalurus punctatus (Rafinesque) Channel catfish-all of Kansas — MAX. 30 lbs (APPROX.)

54. Ictalurus furcatus (LeSueur) Blue catfish-Neosho and Spring Rivers — HARD TO DISTING. hump on back of head, BIG!

55. Ictalurus natalis (LeSueur) Yellow bullhead-all of Kansas

56. Ictalurus melas (Rafinesque) Black bullhead-all of Kansas

Ictalurus - prominant adipose fin
dual ray - Bullheads A. 25+
others Ictalurids A. 19 or fewer

DORSAL
VENTRAL

flesh in Bullheads remain red after skinning.

69. Roccus chrysops - requires sandy bottom - depth 6-20 ft. must be on some kind of pennyfish.
strictly predatory.

57. Ictalurus nebulosus (LeSueur) Brown bullhead-Introduced; uncommon in Shoal Creek and in Lake Farlington — mottled

58. Pylodictis olivaris (Rafinesque) Flathead catfish-widely distributed — 10 lb/hr — "APALOOSA" — non migrating — head & chip — larger bodies of water

59. Noturus flavus Rafinesque Stonecat-all of Kansas — "YELLOW CAT"

60. Noturus nocturnus Jordan and Gilbert Freckled madtom-southeastern Kansas — 6 known poison toxins on spines.

61. Noturus exilis Nelson Slender madtom-Spring and Neosho River drainages — #3 Drywood 3-11-66

62. Noturus miurus Jordan Brindled madtom-Neosho and Spring Rivers

63. Anguilla rostrata (LeSueur) Neosho, Spring and Verdigris Rivers — American eel — SPAWN AT SARGASSO SEA, BERMUDA.

64. Fundulus catenatus (Storer) Northern studfish-Shoal Creek, south of Joplin Mo.; ~~not yet~~ taken from Kansas Drywood #3, 1965 — WIDE HABITAT RANGE

65. Fundulus sciadicus (Cope) Plains topminnow-Shoal Creek east of state line; not taken from Kansas

66. Fundulus notatus (Rafinesque) Blackstripe topminnow-eastern Kansas — 3 Dry W. 3-11-66

67. Gambusia affinis (Baird and Girard) Mosquitofish-eastern and southern Kansas not in strip pits. — widespread Genus

68. Labidesthes sicculus (Cope) Brook silverside-all of southern Kansas #3. D.W 3-11-66

69. Roccus chrysops (Rafinesque) White bass-Spring and Neosho Rivers

70. Micropterus dolomieui Lacepede Smallmouth bass-Spring and Neosho River systems

71. Micropterus punctulatus (Rafinesque) Spotted bass-southern Kansas

72. Micropterus salmoides (Lacepede) Largemouth bass-all of Kansas

73. Chaenobryttus gulosus (Cuvier) Warmouth sunfish-eastern Kansas

74. Lepomis cyanellus Rafinesque Green sunfish-all of Kansas

75. Lepomis microlophus (Gunther) Redear sunfish-introduced; Shoal Creek some strip pits and probably Lake Farlington

76. Lepomis megalotis (Rafinesque) Long-ear sunfish-eastern Kansas — #3. Dry Wood 3-11-66

77. Lepomis humilis (Girard) Orange-spot sunfish-all of Kansas

78. Lepomis macrochirus Rafinesque Bluegill sunfish-all of Kansas

79. Ambloplites rupestris Rafinesque Rockbass-Spring and Neosho Rivers — East Cow Creek

80. Pomoxis nigromaculatus (LeSueur) Black crappie-all of Kansas

81. Pomoxis annularis Rafinesque White crappie-all of Kansas

82. Stizostedion canadense (Smith) Sauger-Neosho and Spring River drainages

83. Percina phoxocephala (Nelson) Slenderhead darter-southeastern Kansas

84. Percina caprodes (Rafinesque) Logperch-eastern Kansas #3 Dry Wood Mar. 11, 1966

PERCIDAE — no swim bladder: require high O_2 level. 6-8 ppm D.O_2.

L. siculus ends at start of brackish water (salinity).

Menidia audens -

highly saline waters
snout is shorter -

85. Percina shumardi (Girard) River darter-Neosho and Spring River systems

86. Percina copelandi (Jordan) Channel darter-southeastern Kansas

ETHEOSTOMA - Regulem lateral line system

87. Etheostoma stigmaeum (Jordan) Speckled darter-Spring and Neosho Rivers

leaf beds in winter.

88. Etheostoma nigrum Rafinesque Johnny darter-Spring River, Shoal and Drywood Creeks (subsp.)

#3 D.W. 3-11-66

89. Etheostoma chlorosomum (Hay) Bluntnose darter-Neosho and Spring Rivers

90. Etheostoma zonale (Cope) Banded darter-Spring and Neosho Rivers

91. Etheostoma blennioides Rafinesque Spring River and Shoal Creek (subsp.)

92. Etheostoma whipplii (Girard) Redfin darter-southeastern Kansas

Dorsal fin.

93. Etheostoma punctulatum (Agassiz) Stippled darter-Spring River and Shoal Creek

94. Etheostoma cragini Gilbert Arkansas darter- southeastern Kansas

95. Etheostoma spectabile (Agassiz) Orangethroat darter-most of Kansas

#3 D.W. MAR. 11, 1966

96. Etheostoma flabellare Rafinesque Fantail darter-Spring and Neosho Rivers Drywood Creek

97. Etheostoma gracile (Girard) Slough darter-Spring River drainage

98. Etheostoma microperca Jordan and Gilbert Shoal Creek, immediately east of state line

99. Aplodinotus grunniens Rafinesque Freshwater drum-most of Kansas

100. Cottus carolinae (Gill) Banded sculpin-Spring and Neosho Rivers + SHOAL CREEK.

Branley A. Branson 1963

$D.O_2 = \frac{1}{T.}$

J. Carl Bass
KSCP - 1966

BIOLOGY 333
ICHTHYOLOGY

Blair, F. W., A. P. Blair, P. Brodkorb, F. R.Cagle and G. A. Moore
VERTEBRATES OF THE UNITED STATES 1957; McGraw-Hill Co., New York.

Classification structure relating to fishes of North America and specifically to Southeast Kansas:

Phylum CHORDATA
Subphylum CRANIATA (VERTEBRATA)
Superclass AGNATHA
ClassPetromyzontes p. 37
Order Petromyzontiformes p. 37
Family Petromyzontidae
Ichthyomyzon castaneus chestnut lamprey p. 42

Superclass GNATHOSTOMATA
Class Teleostomi
Order Acipenseriformes p 51
Family Polydontidae paddlefish
Acipenseridae sturgeon
Order Amiiformes p. 53
Family Amiidae bowfin
Order Lepisosteiformes p. 54
Family Lepisosteidae gar-fishes
Order Clupeiformes p. 56
Family Elopidae tarpon
Clupeidae herrings and shad
Engraulidae anchovies
Salmonidae salmon, trout, char
Coregonidae whitefish
Thymallidae grayling
Osmeridae smelt
Umbridae mudminnow
Esocidae pickerel, pike, muskellunge
Hiodontidae mooneye
Order Cypriniformes p. 74
Family Catostomidae suckers
Cyprinidae minnows (p. 93)
Ictaluridae catfishes (p. 139)
Order Anguilliformes p. 145
Family Anguillidae eels
Order Beloniformes needlefish (coastal) p. 146
Family Belonidae needlefish
Order Gadiformes p. 146
Family Gadidae burbot
Order Gasterosteiformes p. 146
Family Gasterosteidae stickleback
Order Syngnathiformes p. 147
Family Syngnathidae pipefishes
Order Cyprinodontiformes p. 148
Family Amblyopsidae blindfishes
Cyprinodontidae killifish
Poeciliidae livebearers
Order Percopsiformes p. 159
Family Percopsidae troutperch
Aphredoderidae pirateperch
Order Mugiliformes p. 161
Family Atherinidae silversides
Mugilidae mullet

Order Perdiformes p. 162
- Family Centropomidae snook (coastal)
  - Serranidae basses
  - Centrarchidae sunfishes
  - Percidae perch, darters
  - Sciaenidae drum
  - Sparidae porgy, sheephead
  - Cichlidae cichlids (Rio Grande perch)
  - Embiotocidae surfperch
  - Eleotridae sleeper (coastal)
  - Gobiidae goby
  - Cottidae sculpins

Order Pleuronectiformes p. 205
- Family Pleuronectidae flounder (coastal)
  - Achiridae sole (coastal)

COLLECTION DATA

ICHTHYOLOGY 333, Spring, 1966

Area Second Cow Creek Station No. 1 Date Feb. 24, 1966

Location Sec. 9, T. 30 S., R. 23 E., Crawford Co., Kansas

Water Temp.(F.) 39° Air Temp.(F.) 48° Turbidity(ft.) 5-6

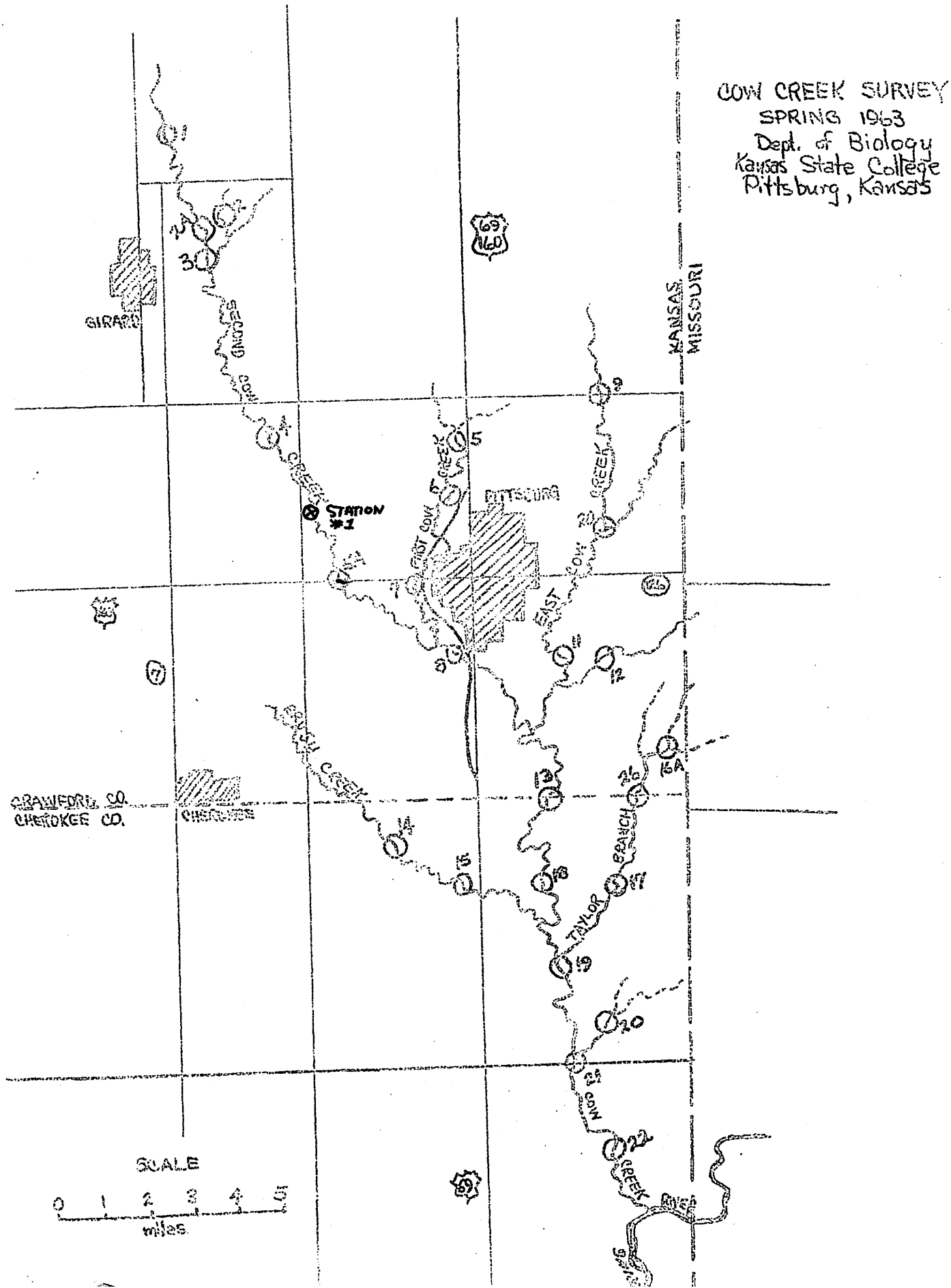
Rate of Flow(cu. ft./min.) 3-4 Type of Drainage grassland, some trees

Habitat rock bottom, heavy leaf cover, little aquatic plant growth

Specimens Taken

ORDER	FAMILY	Species	Remarks
CYPRINIFORMES	Cyprinidae	Phenacobius mirabilis Notropis umbratilis Pimephales notatus	
CYPRINODONTIFORMES	Cyprinodontidae Poecilidae	Fundulus notatus Gambusia affinis	
MUGILIFORMES	Atherinidae	Labidesthes sicculus	
PERCIFORMES	Centrarchidae	Lepomis cyanellus	

S. GASH


COW CREEK SURVEY
SPRING 1963
Dept. of Biology
Kansas State College
Pittsburg, Kansas
GIRARD
SECOND COW CREEK
STATION #1
PITTSBURG
FIRST COW CREEK
EAST COW CREEK
KANSAS
MISSOURI
CRAWFORD CO.
CHEROKEE CO.
CHEROKEE
GRAVEL CREEK
TAYLOR BRANCH
COW CREEK
SCALE
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miles

COLLECTION DATA

ICHTHYOLOGY 333, Spring, 1966

Area Dry Wood Creek Station No. 1 Date Mar. 3, 1966

Location Sec. 7, T. 28 S., R. 23 E., Crawford Co., Kansas

Water Temp.(F.) 48 Air Temp.(F.) 58 Turbidity(ft.) 4 ft.

Rate of Flow(cu. ft./min.) 24 Type of Drainage grassy-wooded area

Habitat rock bottom, much aquatic vegetation, especially Spirogyra; some organic debree in riffles, i.e., stickes, etc.

Specimens Taken

ORDER	FAMILY	Species	Remarks
CYPRINIFORMES	Cyprinidae	Notemigonus Crysoleucus	
		Notropis lutrensis	
(Siluroidei)	Ictaluridae	Ictaluris melas	
CYPRINODONTIFORMES	Cyprinodontidae	Fundulus notatus	
MUGILIFORMES	Poecilidae	Labidesthes sicculus	
PERCIFORMES	Centrarchidae	Micropterus salmoides	
		Lepomis cyanellus	
		Lepomis megalotis	
		Lepomis macrochirus	
	Percidae	Percina caprodes	
		Etheostoma spectabile	

COLLECTION DATA

ICHTHYOLOGY 333, Spring, 1966

Area Dry Wood Creek Station No. 2 Date March 3, 1966

Location Sec. 32, T. 27 S., R. 23 E., Crawford Co. Kansas

Water Temp.(F.) 47° Air Temp.(F.) 59° Turbidity(ft.) 4-5 ft.

Rate of Flow(cu. ft./min.) 30 Type of Drainage forest-grassland

Habitat rock bottom, rapid current, few aquqtic plants

Specimens Taken

ORDER	FAMILY	Species	Remarks
CYPRINIFORMES	Cyprinidae	Semotilus atromaculatus Notropis umbratilus Pimephales notatus Campostoma anomalum	
CYPRINODONTIFORMES	Cyprinodontidae Poeciliidae	Fundulus notatus Gambusia affinis	
PERCIFORMES	Centrarchidae Percidae	Micropterus salmoides Etheostoma nigrum Etheostoma spectabile Etheostoma flabellare	

COLLECTION DATA

ICHTHYOLOGY 333, Spring, 1966

Area Dry Wood Creek Station No. 3 Date March 10, 1966

Location Sec. 32, T. 27 S., R. 23 E., Crawford Co., Kansas

Water Temp.(F.) 59° Air Temp.(F.) 65° Turbidity(ft.) 4

Rate of Flow(cu. ft./min.) 40 (apporx.) Type of Drainage farmed grassland, some timber in area

Habitat mud bottom, few rocks; oak overhang provides leaf covering of bottom in some spots

Specimens Taken

ORDER	FAMILY	Species	Remarks
CLUPEIFORMES	Clupeidae	Dorsoma cepedianum	
CYPRINIFORMES	Catostomidae	Ictiobus bubalus	
		Catostomus commersonnii	
	Cyprimidae	Cyprinus carpio	
		Notemigonus crysoleucas	
		Notropis umbratilis	
		Notropis lutrensis	
		Pimephales notatus	
		Campostoma anomalum	
	Ictaluridae	Ictaluris natalis	
		Ictaluris melas	
		Noturis exilis	
CYPRINODONTIFORMES	Cyprinodontidae	Fundulus notatus	
MUGILIFORMES	Atherinidae	Labidesthes sicculus	
PERCIFORMES	Centrarchidae	Micropterus salmoides	
		Lepomis cyanellus	
		Lepomis megalotus	
		Lepomis humilis	
		Lepomis macrochirus	
		Pomoxis nigromaculatus	
		Pomoxis annularis	
	Percidae	Percina caprodes	
		Etheostoma nigrum	
		Etheostoma spectabile	
		Etheostoma flabelare	

COLLECTION DATA

ICHTHYOLOGY 333, Spring, 1966

Area Dry Wood Creek Station No. 5A Date March 15, 1966

Location Sec. 30, T. 27 S., R. 24 E., Crawford Co., Kansas

Water Temp.(F.) 70° Air Temp.(F.) 58° Turbidity(ft.) 3

Rate of Flow(cu. ft./min.) ? - swift Type of Drainage wooded hils- typical Ozarkian area

Habitat limestone bottom, heavy filamentous algae growth

Specimens Taken

ORDER	FAMILY	Species	Remarks
CYPRINIFORMES	Ictaluridae	*Ictaluris melas*	taken by R. Streeter

	Ictaluridae	Ictalurus melas	taken by R. Strecker

COLLECTION DATA

ICHTHYOLOGY 333, Spring, 1966

Area Kansas State Quail Farm Station No. - Date March 16, 1966

Location Sec. 23, T. 30 S., R. 24 E., Crawford Co., Kansas

Water Temp.(F.) 55° Air Temp.(F.) 73° Turbidity(ft.) 2-3

Rate of Flow(cu. ft./min.) 0 Type of Drainage strip mine lake

Habitat shale bottom and bank, moderate vegetation in water; little overhang by trees in area, rapidly descending banks

Specimens Taken

ORDER	FAMILY	Species	Remarks
PERCIFORMES	Centrarchidae	Micropterus salmoides	SL: 87 mm, wt.: 12.7g hit 1" top-water plug time: 2-3: P.M. wind: 0-5 mph NNW partly cloudly
		Chaenobryttus gluosus	April 7, 1966

1

COLLECTION DATA

ICHTHYOLOGY 333, Spring, 1966

Area Shoal Creek Station No. Schemerhorn Park Date March 17, 1966

Location Sec. 35, T. 34 S., R. 25 E., Cherokee Co., Kansas

Water Temp.(F.) 64° Air Temp.(F.) 75° Turbidity(ft.) 2-3

Rate of Flow(cu. ft./min.) very rapid Type of Drainage rocky wooded hill country

Habitat rock bottom, loose gravel-size particles; some large boulders

Specimens Taken

ORDER	FAMILY	Species	Remarks
CYYPRINIFORMES	Catostomidae	Moxostoma erythrum	
		Minytrema melanops	
	Cyprinidae	Semotilus atromaculatus	
		Hybopsis x-punctata	
		Notropis umbratilis	
		Notropis pilsbryi	
		Notropis lutrensis	
		Notropis boops	
		Pimephales notatus	
		Campostoma anomalum	
CYPRINODONTIFORMES	Cyprinodontidae	Fundulus notatus	
	Poecilidae	Gambusia affinis	
PERCIFORMES	Centrarchidae	Micropterus [redacted] punctulatus	
		Micropterus salmoides	
		Lepomis cyanellus	
		Lepomis megalotus	
		Lepomis humilis	
		Lepomis macrochirus	
	Percidae	Percina caprodes	
		Etheostoma nigrum	
		Etheostoma spectabile	

COLLECTION DATA

ICHTHYOLOGY 333, Spring, 1966

Area Shoal Creek (1 M. west of St. line) Station No. State Line Station Date March 19, 1966

Location Sec. 35, T. 34 S., R. 25 E., Cherokee Co., Kansas

Water Temp.(F.) 58° Air Temp.(F.) 75° Turbidity(ft.) 2-3

Rate of Flow(cu. ft./min.) swift Type of Drainage rock-oaken hills

Habitat limestone bottom, little vegetation in water

Specimens Taken

ORDER	FAMILY	Species	Remarks
CYPRINIFORMES	Cyprinidae	Semotilus atromacutatus Chrosomus erythrogaster Hybopsis x-punctata Notropis umbratilis Notropis pilsbryi Notropis lutrensis Campostoma anomalum	
CYPRINODONTIFORMES	Cyprinodontidae	Fundulus notatus	
PERCIFORMES	Percidae	Etheostoma flabellare	

COLLECTION DATA

ICHTHYOLOGY 333, Spring, 1966

Area Shoal Creek - Reddings Mill Station Station No. - Date March 19, 1966

Location Sec. 6, T. 35 S., R. 33 W., Newton Co., Missouri

Water Temp.(F.) 58° Air Temp.(F.) 75° Turbidity(ft.) 2-3

Rate of Flow(cu. ft./min.) swift Type of Drainage rocky, wooded hills

Habitat limestone bottom, little vegetation in water; much leaves on bottom

Specimens Taken

ORDER	FAMILY	Species	Remarks
CYPRINIFORMES	Catostomidae	Moxostoma erythrum	
	Cyprinidae	Notemigonus crysoleucas	
		Notropis umbratilis	
		Notropis lutrensis	
	Ictaluridae	Ictaluris melas	
PERCIFORMES	Centrarchidae	Lepomis megalotus	
		Lepomis humilis	
		Lepomis macrochirus	
		Pomoxis nigromaculatus	
		Pomoxis annularis	

COLLECTION DATA

ICHTHYOLOGY 333, Spring, 1966

Area Shoal Creek - Tipton Ford Station Station No. - Date March 19, 1966

Location Sec. 15, T. 26 N., R. 32 W., Newton Co., Missouri

Water Temp.(F.) 58° Air Temp.(F.) 75° Turbidity(ft.) 2-3

Rate of Flow(cu. ft./min.) swift Type of Drainage rocky-wooded hills

Habitat limestone bottom, little vegetation in water; a few leaves on bottom

Specimens Taken

ORDER	FAMILY	Species	Remarks
CYPRINIFORMES	Catostomidae	Hypentelium nigricans	
	Cyprinidae	Hybopsis biguttata	
		Notropis pilsbryi	
		Notropis cornutus	
		Notropis buchanani	
		Campostoma anomalum	
CYPRINODONTIFORMES	Poecilidae	Gambusia affinis	
PERCIFORMES	Centrarchidae	Micropterus dolomieui	
		Ambloplites rupestris	
	Percidae	Etheostoma nigrum	
		Etheostoma spectabile	
		Etheostoma flabellare	
Cottoidei			
	Cottidae	Cottus carolinae	

COLLECTION DATA

ICHTHYOLOGY 333, Spring, 1966

Area Shoal Creek - Low Water Bridge Station Station No. - Date March 22, 1966

Location Sec. 36, T. 34 S., R. 33 W., Newton Co., Missouri

Water Temp.(F.) 58° Air Temp.(F.) 75° Turbidity(ft.) 2-3

Rate of Flow(cu. ft./min.) swift Type of Drainage typical ozarkian

Habitat limestone bottom., much aquatic vegetation

Specimens Taken

ORDER	FAMILY	Species	Remarks
CYPRINIFORMES	Cyprinidae	Notropis boops Notropis camurus	
PERCIFORMES	Centrarchidae	Micropterus dolomieui Lepomis microlophus	
	Percidae	Etheostoma zonale Etheostoma blenniodes	

COLLECTION DATA

ICHTHYOLOGY 333, Spring, 1966

Area Shoal Creek - Grand Falls Station Station No. - Date March 26, 1966

Location Sec. 35, T. 34 S., R. 34 W., Newton Co., Missouri

Water Temp.(F.) 58° Air Temp.(F.) 65° Turbidity(ft.) 2-3

Rate of Flow(cu. ft./min.) rapid to very swift Type of Drainage typical ozarkian

Habitat moderatly heavy aquatic vegetation, very rocky, rocks large; current over falls drops 6-10 feet, good darter habitat

Specimens Taken

ORDER	FAMILY	Species	Remarks
CYPRINIFORMES	Cyprinidae	Semotilus atromaculatus	
		Notropis pilsbryi	
		Notropis camurus	
		Notropis lutrensis	
		Campostoma anomalum	
PERCIFORMES	Centrarchidae	MICROPTERUS PUNCTULATUS	
		Lepomis macrochirus	
		Lepomis humilis	
	Percidae	Percina copelandi	
		Etheostoma stigmaeum	
		Etheostoma blenniodes	
		Etheostoma punctulatum	
PERCIFORMES	Centrarchidae	Chaenobryttus gluosus	April 6, 1966

COLLECTION DATA

ICHTHYOLOGY 333, Spring, 1966

Area Dry Wood Creek - Lone Star School Station No. 11 Date March 31, 1966

Location Sec. 29, T. ~~28 S.~~ 33N., R. ~~25 E.~~ 32W, Barton Co., Missouri

Water Temp.(F.) 63° Air Temp.(F.) 80° Turbidity(ft.) 1-2

Rate of Flow(cu. ft./min.) slow to moderatly fast Type of Drainage rocky, wooded hills

Habitat heavy leaf cover on botto m, (large) limestones on bottom; heavy sulfur compounds in water and salts on rocks on banks. probably poluted- no fresh water mollusks in area.

Specimens Taken

ORDER	FAMILY	Species	Remarks
CYPRINIFORMES	Catostomidae	Catostomus commersoni	
	Cyprinidae	Cyprinus carpio	
		Semotilus atromaculatus	
		Notropis umbratilis	
		Notropis boops	
		Notropis topeka	
		Campostoma anomalum	
	Ictaluridae	Noturis exilis	
MUGILIFORMES	Atherinidae	Labidesthes sicculus	
PERCIFORMES	Centrarchidae	Micropterus salmoides	
		Lepomis cyanellus	
		Lepomis megalotus	
		Lepomis humilis	
		Lepomis macrochirus	
		Pomoxis annularis	
	Percidae	Etheostoma spectabile	

COLLECTION DATA

ICHTHYOLOGY 333, Spring, 1966

Area Neosho River Station No. - Date April 10, 1966

Location low water bridge at south edge of Miami, Okla. city park

Water Temp.(F.) 58° Air Temp.(F.) 65° Turbidity(ft.) 1-2 Rate of Flow mod. swift

Type of Drainage populated area, flat, rocky drainage

Habitat river bed very rocky, some organic debree in water

Specimens Taken

ORDER	Family	Species	Remarks
PERCIFORMES	Serranidae	Roccus chrysops	taken on hook and line using minnow for bait male, not yet spawned.

		Serenidad	Serious deficiency	Taken or been and life water mining for said said, not re assumed.

COLLECTION DATA

ICHTHYOLOGY 333, Spring, 1966

Area Dry Wood Creek Station No. 12 & 13 Date April 14, 1966

Location Sec. 9, T. 33 N., T. 32 W., Barton Co., Missouri (#12=west, #13=east)

Water Temp.(F.) 50° Air Temp.(F.) 65° Turbidity(ft.) 1-2

Rate of Flow(cu. ft./min.) slow Type of Drainage rocky wooded hills and flat farm land on one side

Habitat bottom covered by flat sandstones and clay; much brush in water

Specimens Taken

ORDER	FAMILY	Species	Remarks
CYPRINIFORMES	Catostomidae	Catostomus commersoni	
	Cyprinidae	Notemigonus crysoleucas	
		Semotilus atromaculatus	
		Notropis umbratilis	
		Notropis lutrensis	
		Notropis topeka	
		Campostoma anomalum	
	Ictaluridae	Ictaluris melas	
		Noturis exilis	
CYPRINODONTIFORMES	Cyprinodontidae	Fundulus notatus	
MUGILIFORMES	Atherinidae	Labidesthes sicculus	
PERCIFORMES	Centrarchidae	Micropterus salmoides	
		Lepomis cyanellus	
		Lepomis megalotus	
		Lepomis humilis	
		Pomoxis annularis	
	Percidae	Etheostoma spectabile	

COLLECTION DATA

ICHTHYOLOGY 333, Spring, 1966

Area Neosho River Station No. - Date April 16, 1966

Location Sec. 29, T. 30 S., R. 20 E., Neosho Co., Kansas

Water Temp.(F.) 54° Air Temp.(F.) 65° Turbidity(ft.) 0-1 Rate of Flow swift

Type of Drainage slightly wooded hills and farm land

Habitat limestone bottom, some silt and debree on bottom and in water

Specimens Taken

ORDER	Family	Species	Remarks
CYPRINIFORMES	Cyprinidae	Notropis lutrensis Pimephales notatus Campostoma anomalum	
	Ictaluridae	Ictaluris punctatus	
PERCIFORMES	Centrarchidae	Lepomis humilis	
	Percidae	Percina phoxocephala	

Cyprinidae	Notropis lutrensis	
	Pimephales promelas	
	Campostoma anomalum	
Ictaluridae	Ictalurus melas	
Percopsidae	Percopsis omiscomaycus	
Percidae	Etheostoma nigrum	

COLLECTION DATA

ICHTHYOLOGY 333, Spring, 1966

Area Neosho River - John Redman Dam Station No. - Date April 24, 1966

Location 1¼ miles southwest of New Strawn, Coffey Co., Kansas

Water Temp.(F.) ? Air Temp.(F.) ? Turbidity(ft.) ? Rate of Flow ?

Type of Drainage ?

Habitat ?

Specimens Taken

ORDER	Family	Species	Remarks
PERCIFORMES	Sciaenidae	Aplodinotus grunniens	

Name	Weight	Species	Remarks
[illegible]	[illegible]	[illegible]	

COLLECTION DATA

ICHTHYOLOGY 333, Spring, 1966

Area Spring River Station No. - Date May 5, 1966

Location Sec. 19, T. 34 S., R. 25 E., Cherokee Co., Kansas

Water Temp.(F.) 58° Air Temp.(F.) 75° Turbidity(ft.) 1-2 Rate of Flow moderately swift

Type of Drainage wooded hills; drainage somewhat rocky, flat bottom land

Habitat very rocky, with large boulders in water, quite a bit of aquatic debree in water

Specimens Taken

ORDER	Family	Species	Remarks
CYPRINIFORMES	Catostomidae*	Catostomus commersoni	
	Cyprinidae	Notropis rubellus	
		Notropis umbratilis	
		Notropis pilsbryi	
		Notropis boops	
		Notropis lutrensis	
		Notropis buchanani	
		Chrosomus erythrogaster	
		Pimephales notatus	
		Pimephales vigilax	
CYPRINODONTIFORMES	Cyprinodontidae	Fundulus notatus	
	Poeciliidae	Gambusia affinis	
MUGILIFORMES	Atherinidae	Labidesthes sicculus	
PERCIFORMES	Centrarchidae	Micropterus punctulatus	
		Micropterus salmoides	
		Lepomis cyanellus	
		Lepomis megalotus	
		Lepomis humilis	
		Lepomis macrochirus	
		Pomoxis annularis	
	Percidae	Percina caprodes	
		Percina copelandi	
		Etheostoma spectible	
			*(additions)
CYPRINIFORMES	Catostomidae	Ictiobus bubalus	
		Moxostoma erythrum	

COLLECTION DATA

ICHTHYOLOGY 333, Spring, 1966

Area Dry Wood Creek Station No. - Date May 12, 1966

Location Sec. 9, T. 34 N., R. ~~33~~ 32 W., Vernon Co., Missouri

Water Temp.(F.) 50° Air Temp.(F.) 52° Turbidity(ft.) 0 Rate of Flow mod. swift

Type of Drainage flat, sparcely wooded farm land; water backed up into roadside ditches, and reached a considerable depth

Habitat (hard to determine due to flood conditions) mostly mud and silt bottom with few rocks; much plant debree in water at this time;

Specimens Taken many land organisms in water due to (?) recent storm, especially Insecta and Arachnida,(mostly Fam. Lycosidae.)

ORDER	Family	Species	Remarks
CYPRINIFORMES	Cyprinidae	Notropis umbratilis Notropis lutrensis	
PERCIFORMES	Centrarchidae	Lepomis humilis Lepomis macrochirus Lepomis megalotus	

		Aerobic Anaerobic	Acceptable Unacceptable
		Aerobic Anaerobic Aerobic Anaerobic	Acceptable Unacceptable Acceptable Unacceptable

COLLECTION DATA

ICHTHYOLOGY 333, Spring, 1966

Area Crawford Co. St. Lake # 2 (Farlington) Station No. - Date August 10, 1966

Location Sec. 5, 6, & 7; T. 28 S., R 23 E., Crawford Co., Kansas

Water Temp.(F.) 81 Air Temp.(F.) 80 Turbidity(ft.) 3.75 Rate of Flow 0

Type of Drainage Wooded hills and flat lands, mostly wooded on perimiter of lake

Habitat Clear, man-made impoundment (1934-CCC); little vegatation except along shore-line

Collectors: Hartmann, Tripplett, and Gash

Specimens Taken

ORDER	Family	Species	Remarks
CYPRINIFORMES	Ictaluridae	Ictalurus nebulosis	Taken by electro-fishing Total no. taken: 9; SL ranges from _____ mm to _____ mm.

[illegible]

[illegible] Manufacturer Co., [illegible] S (Mexico [illegible]) [illegible] August 19, 1956

[illegible] Sec. 7, 8; 7; [illegible] 4, 27 [illegible] Manufacturer Co., Quanna [illegible]

[illegible] Sec. (1) [illegible] 1, 2 [illegible]

[illegible] Roofing and Flat Lands, mostly woods [illegible]

[illegible] Alamo, Hope-[illegible] [illegible] 27-[illegible]; Little Washington, [illegible] Hope-Lime [illegible]

Pollutants: Ammonia, Hydrogen, [illegible]

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Lodgment in	Intermittent [illegible]	[illegible] by [illegible] Health [illegible] No. [illegible]: 9; [illegible] [illegible] to [illegible]

COLLECTION DATA

ICHTHYOLOGY 333, Spring, 1966

Area Elk City Reservoir Station No. - Date August 16, 1966

Location

Water Temp.(F.) Air Temp.(F.) Turbidity(ft.) Rate of Flow

Type of Drainage

Habitat

Specimens Taken Collectors: Hartmann and Tripplet.

ORDER	Family	Species	Remarks
Lepisosteiformes	Lepisosteidae	Lepisosteus osseus	
Cypriniformes	Catostomidae	Ictiobus bubalus	
Perciformes	Percidae	Stizostedion vitreum	
	Cyprinidae	cyprinus carpio.	

COLLECTION DATA

ICHTHYOLOGY 333, Spring, 1966

Area Otter Creek Station No. 2 Date June 28, 1966

Location SW ¼ of NE ¼ of Sec. 16, T. 33 S., R. 8 E., Cowley Co., Kansas

Water Temp.(F.) - Air Temp.(F.) - Turbidity(ft.) - Rate of Flow -

Type of Drainage Flint hills (Chautauqua hills extention).

Habitat Clear, smooth rock bottom.

Specimens Taken

ORDER	Family	Species	Remarks
Cypriniformes	Ictaluridae	Noturus flavus Noturus nocturnus	SL: 74 mm SL: 57 mm

COLLECTION DATA

ICHTHYOLOGY 333, Spring, 1966

Area DRY WOOD CREEK Station No. _____ Date APR. 19, 1967

Location _____

Water Temp.(F.) 65 Air Temp.(F.) 60 Turbidity(ft.) 0 Rate of Flow very rapid flood cond.

Type of Drainage Wooded hills

Habitat mud bottom few rocks + vegetation

Specimens Taken

ORDER	Family	Species	Remarks
CYPRINIFORMES	ICTALURIDAE	Pylodictis divaris	1 of 2 taken

1967

COLLECTION DATA

ICHTHYOLOGY 333, Spring, 1966

Area "5 -MILE CREEK Station No. — Date AUG. 25, 1967

Location OTTOWA Co, OKLAHOMA

Water Temp.(F.) — Air Temp.(F.) — Turbidity(ft.) — Rate of Flow —

Type of Drainage —

Habitat Collected by C. OLIVER

Specimens Taken

ORDER	Family	Species	Remarks
CYPRINIFORMES	CATOSTOMIDAE	MINYTREMA MELANOPS	SL=120mm

COLLECTION DATA

ICHTHYOLOGY 333, Spring, 1966

Area Brazos River Station No. - Date Aug. 17, 1967

Location 15 miles west of Bryan, Texas Brazos County.

Water Temp.(F.) - Air Temp.(F.) - Turbidity(ft.) - Rate of Flow -

Type of Drainage

Habitat Rocky bottom, rate of flow only moderate; period of drought.

Specimens Taken

ORDER	Family	Species	No.	Remarks SL range
Cypriniformes	Cyprinidae	Hybopsis aestivalis	2	21-29 mm
		Pimephales vigilax	3	35-50 mm
		Notropis dorsalis ?	1	35 mm
		Notropis potteri	15	27-45 mm
		Notropis lutrensis	14	21-36 mm
	Ictaluridae	Ictalurus punctatus	2	161-236mm
		Ictalurus furcatus	2	174-196mm

Collection Note: Minnows were collected by seining a shallow (0.5 m) riffle; catfishes were collected by hook-and-line method.

COLLECTION DATA

ICHTHYOLOGY 333, Spring, 1966

Area Navasota River Bottom (slough) Station No. - Date Aug. 14, 1967

Location Robertson Co., Texas known locally as "Lake Wilburn".

Water Temp.(F.) - Air Temp.(F.) - Turbidity(ft.) - Rate of Flow -

Type of Drainage Extremely muddy isolated hole.

Habitat Pasture-land drainage, but periphery of lake with dead trees.

Specimens Taken

ORDER	Family	Species	Remarks
Amiiformes	Amiidae	Amia calva	1 taken SL ____ mm male, with conspicous dorsal spot on tail.
Collection Note:	Collected by seining.		
+ same trip -	Elassoma	zonale	

COLLECTION DATA

ICHTHYOLOGY 333, Spring, 1966

Area Susquehanna R. Station No. — Date 7 MAY, 1972

Location From Philadelphia Electric's Fish trap, below Conowingo R. Dam

Water Temp.(F.) 63 Air Temp.(F.) 50 Turbidity(ft.) — Rate of Flow 105,000 c.f.s.

Type of Drainage —

Habitat —

Specimens Taken

ORDER	Family	Species	Remarks
Anguilliformes	Anguillidae	Anguila rostrata	

1972

COLLECTION DATA

ICHTHYOLOGY 323, Spring, 1966

Area _____ Station No. _____ Date _____

Location _____

Water Temp.(°F.) _____ Air Temp.(°F.) _____ Turbidity(ft.) _____ Rate of Flow _____

Type of Drainage _____

Habitat _____

Specimens Taken

ORDER	Family	Species	Remarks

COLLECTION DATA

ICHTHYOLOGY 333, Spring, 1966

Area Stony Creek Station No. 6 Date 16 Apr. 1972

Location Dauphin Co., Pennsylvania

Water Temp.(F.) 52 Air Temp.(F.) 70 Turbidity(ft.) — Rate of Flow —

Type of Drainage —

Habitat —

Specimens Taken

ORDER	Family	Species	Remarks
Clupeiformes	Esocidae	Esox niger E. americanus	Caught by angler - signed Mar. 72.
Cypriniformes	Cyprinidae	Semotilus corporalis	- many in Stony Ck. collections.