

Pittsburg



Fishes in the Kansas State
College Ichthyology Museum

116

For

Advanced Topics in Biology 602

By
Joe D. Little

Dr. J. Carl Buss, Instructor
Fall, 1970

Fishes Met classified in Vertebrates of the
United States in phylogenetic order

Clupeiformes

Clupeidae

Dorosoma smithi

No.

Size
in
mm

1

54

Fishes in the Kansas State College Ichthyology Museum

Introduction

The systematic classification and cataloging of fishes at Kansas State College was ~~first~~ initiated by Dr. Branley A. Branson in 1961. ~~Several~~ ^{Several} collections by other workers were present at the college previous to 1961, but official records and shelving was not started until 1961. ~~Dr. Branson collected~~ ~~extensively~~ in southeast Kansas and many other states in this area ~~plus~~. Extensive collections by Dr. Branson and his associates ~~the~~ ~~presented~~ established the Ichthyology Museum as a working museum of some reputation. In 1965, Dr. J. Carl Bass assumed directorship of the Ichthyology Museum and is presently in charge of the museum. Dr. Bass also collected in this area of Kansas and added substantial numbers of fish to the museum.

Several students have also contributed specimens to the museum ^{in addition} ~~as well~~ ~~to those~~ ^{as} aiding ~~Dr.~~ Drs. Branson and Bass in their collections. In particular, James R. Tripplett and William T. Waller ⁽¹⁹⁶⁾ conducted a stream survey of Drywood Creek and placed ^{the} specimens from this survey in the museum, and Donald T. Totaben ⁽¹⁹⁶⁾ conducted a stream survey of Five Mile Creek, also placing the specimens in the museum.

~~Intato~~

Intato the Ichthyology Museum contains a good representation of fishes in southeast Kansas ~~and~~ streams, ~~plus~~ ~~collections~~ collections from many other states.

In addition to presenting a brief history of the museum, the purpose of this project is to present in phylogenetic order the fishes present in the Kansas State College Ichthyology, ~~and~~ to enumerate each species and provide standard length ranges for each species.

(Division)

Presentation of taxa and

Authorities used (reverse)

Berg (1947), Bailey and Allum (1952), Sterba (1962), and Jordan (1963) were used occasionally to validate species names and probable phylogeny of individual species. These sources were only used when a specific name could not be found in either Moore (et al, 1957) or Common and Scientific Names of Fishes From the United States and Canada (1960).

The ^{phylogenetic} listing of fish taxa used in this paper follows ~~SA~~ that ~~was~~ ^{used} by Moore, and if a certain species of fish was not recognized by Moore, but was recognized in Common + Scientific Names of Fishes From the United States and Canada, it was ~~included~~ ^{in a section following the principal listing} included ~~in the phylogenetic listing~~.

Fishes of the Kansas State College Ichthyology Museum.

Introduction

The systematic classification and cataloging of fishes at Kansas State College was first undertaken by Dr. Bramley A. Branson in 1961. Extensive collections from in southeast Kansas and other states were subsequently placed in the Ichthyology Museum ~~and~~ ~~and as a result~~ and constitute ~~much of the~~ the majority of the fishes present in the museum at this time.

outline

Introduction

The

2

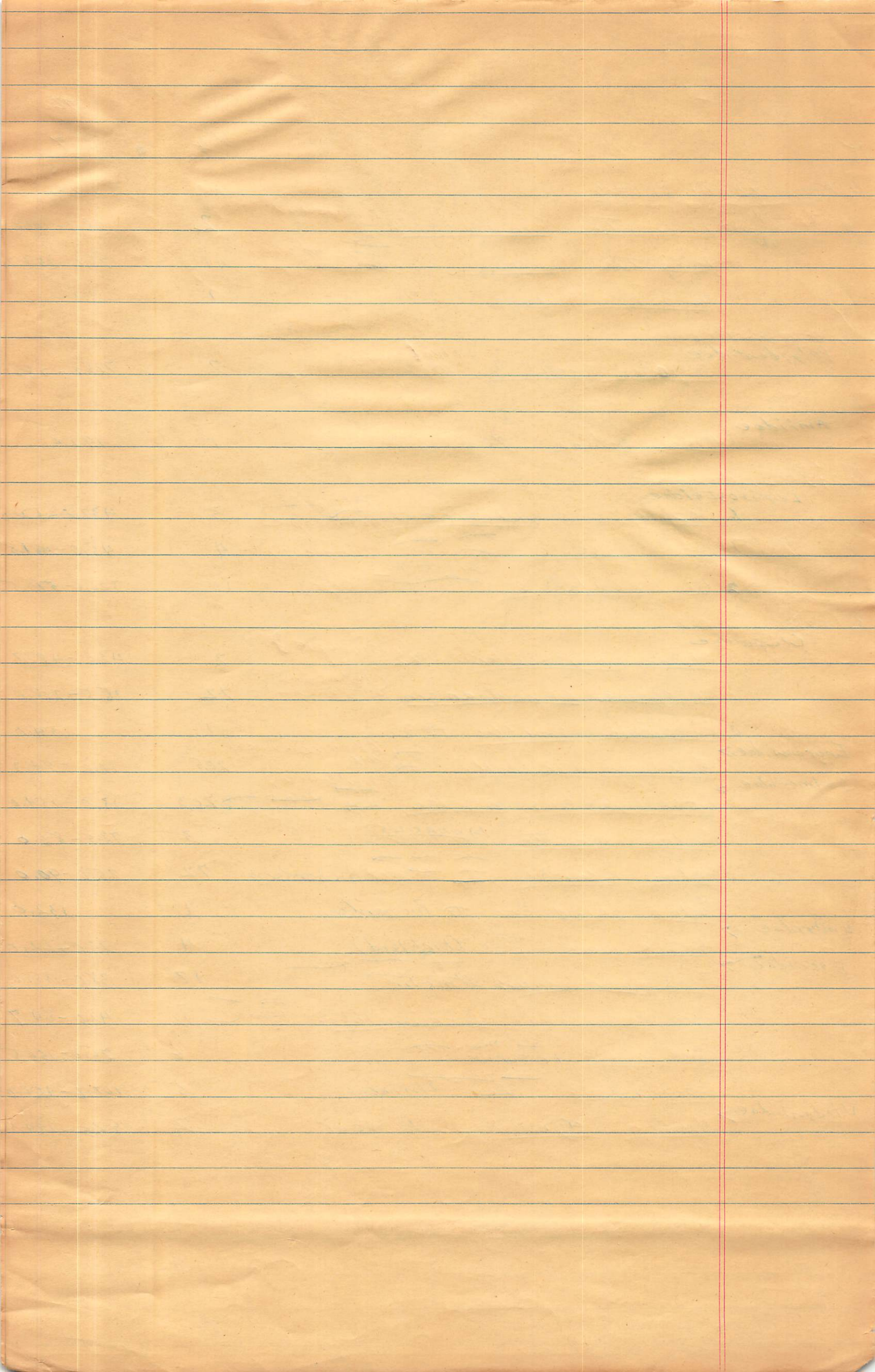
Also included in this second section is any other scientific name not found in any of the publications aforementioned and can be distinguished from those found in Common & Scientific Names by the absence of an authority following the name.

The following lists are arranged in phylogenetic order according to phylogeny of order, Family, Genus and species epithet.

~~the fishes~~
a separate phylogenetic listing (when known)
of the fishes present in the museum
with a scientific name
mentioned in publications follows the principal
listing of museum fishes.

~~Results and Discussion~~

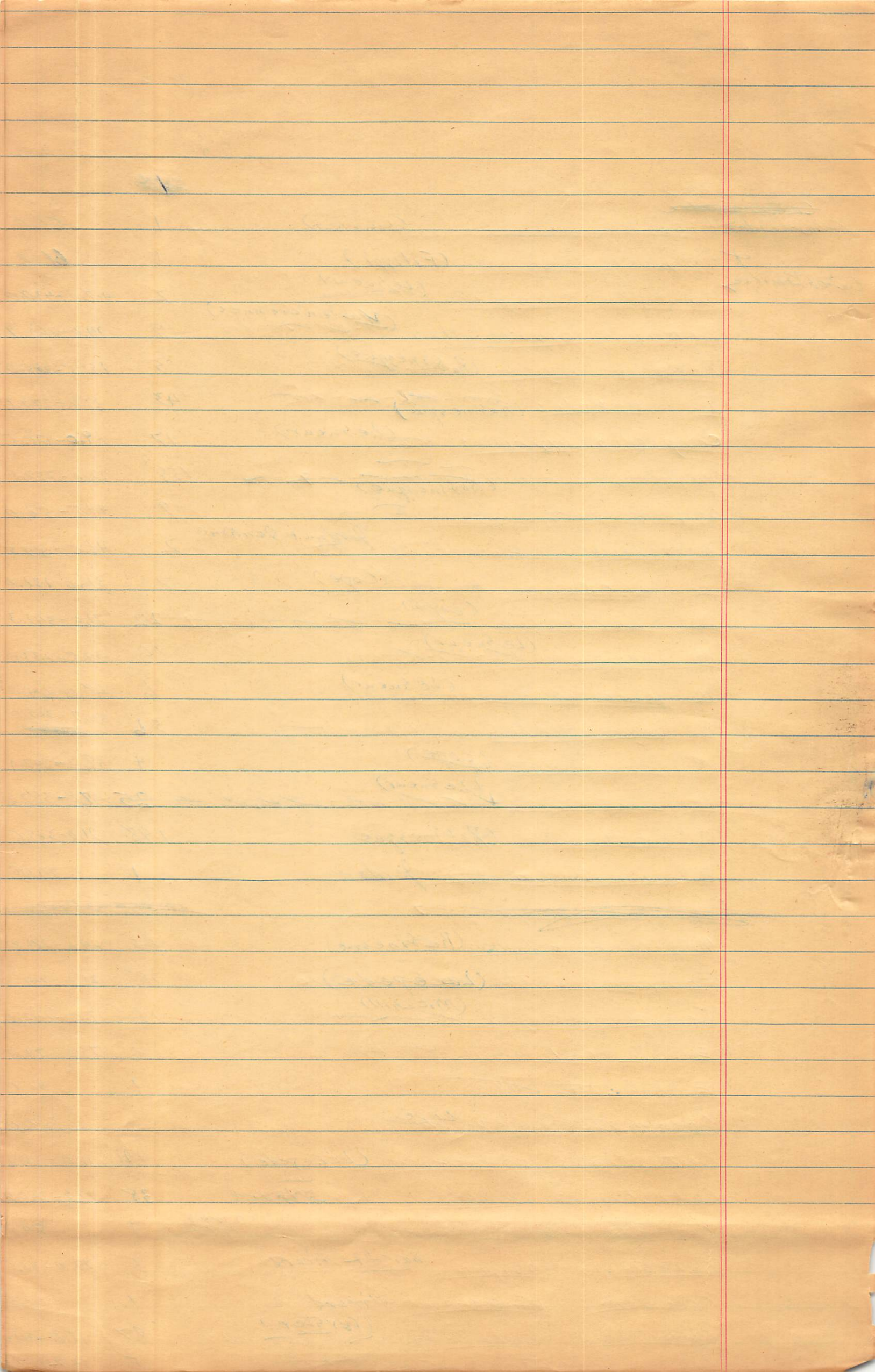
15			64	791	92 cent
			630 4	37	68 7
Petromyzontiformes			NO.		5.20
19 Petromyzontidae	23 OK	Lamprologa fluvialilis (Linnaeus)	459	2	28.6-106.0
	OK	Lamprologa planeri	459	41	25.0-153.2
	OK	Lamprologa fluvialilis larva	474	1	45.5-
Amiiformes					
Polyodontidae					
OK		Polyodon spathula (Walbaum)	695	2	765.0-780.0
Amiidae					
OK		Aminoculva Linnaeus	770	1	192.0
Lepisosteiformes					
Lepisosteidae					
OK		Lepisosteus platostomus Rafinesque	210 163	3	432.0-520.0
OK	3	L. nasus	210 200 218	4	45.0-481.8
OK	2	L. oculatus	210 200 218	19	326.5-570.5
Clupeiformes					
Clupeidae					
OK		Allosa chrysochloris Rafinesque	122	2	43.0-48.7
OK		Dorosoma cepedianum (Lesueur)	21-25-27	72	18.5-208.0
check		Dorosoma smithi	729	1	54.0
Engraulidae					
		Anchoa mitchilli (Valenciennes)	205		10.0-54.2
Salmonidae					
OK		Oncorhynchus nerka (Walbaum)	203		13.0-154.0
OK		Salmo trutta Linnaeus	3		72.5-86.0
OK		Salmo clarki Richardson	72		25.0-90.0
OK		Salmo gairdneri Richardson	1		132.0
Umbridae					
OK		Umbra limi (Kirtland)	4		20.0-62.0
Esoxidae					
OK		Esox americanus (Melin)	17		38.0-135.0
OK		Esox americanus variegatus	10		42.0-84.7
OK		Esox niger Lesueur	6		75.0-150.5
OK		Esox lucius Linnaeus	5		107.6-400.0
Hiodontidae					
OK		Hiodon tergisus Lesueur	2		92.5-194.5



NO

Size

Cypriniformes			
Cyprinodontidae			
Characidae	<i>Astyanax fasciatus</i> 108 (Cuvier)	1	50.0
	<i>Astyanax mexicanus</i> (Filippi)	1	61.0
Catostomidae	<i>Cyclopterus elongatus</i> (Lesueur) 204	2	417.0-430.0
	<i>Petropus cyprinellus</i> (Walenciennes) 719	9	14.0-263.7
	<i>Petropus niger</i> (Rafinesque) 753	3	132.5-285.0
	<i>P. dubalus</i> (Rafinesque) 700-712	43	62.0-277.0
	<i>Carpiodes cyprinus</i> (Lesueur)	17	69.0-120.5
	<i>Carpiodes carpio</i> (Rafinesque) 712	158	12.0-257.0
	<i>Carpiodes carpio carpio</i> 8	9	44.5-56.0
	<i>Maxostomus rubicartus</i> Jordan + Jenkins	2	46.0-89.5
	<i>M. cervinum</i> (Cope)	2	31.0-131.0
	<i>M. carinatum</i> (Cope)	22	21.0-341.3
	<i>M. aureolum</i> (Lesueur) 612	10	34.5-233.0
	<i>M. macrolepidotum</i> (Lesueur)	6	48.0-64.0
	<i>M. macrolepidotum griseolum</i>	36	84.7-369.0
	<i>M. brevirostris</i> (Cope)	4	39.2-242.1
	<i>M. dugesii</i> (Lesueur) 1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-31-32-33-34-35-36-37-38-39-40-41-42-43-44-45-46-47-48-49-50-51-52-53-54-55-56-57-58-59-60-61-62-63-64-65-66-67-68-69-70-71-72-73-74-75-76-77-78-79-80-81-82-83-84-85-86-87-88-89-90-91-92-93-94-95-96-97-98-99-100	25	57.0-382.0
	<i>M. erythrum</i> (Rafinesque)	198	21.0-369.0
	<i>M. popularum</i> 183 Jordan	1	243.0
	<i>M. ...</i>	29	25.0-65.0
	<i>Minytrema melanops</i> (Rafinesque)	65	24.0-271.0
	<i>Erimyzon caerulea</i> (Lacepede) 70	18	28.0-148.0
	<i>Erimyzon oblongus</i> (Mitchill) 770	16	17.0-142.0
	<i>E. d. californis</i> 487-488	2	73.0-74.0
	<i>E. quectes</i> 189	1	30.5
	<i>Chasmistes cujus</i> Cope	1	387.0
	<i>Catostomus commersoni</i> (Lacepede)	141	16.0-368.0
	<i>Catostomus macrocheilus</i> Girard 438-40-58	38	12.2-330.7
	<i>Catostomus occidentalis</i> occidentalis Agnes	1	74.0
	<i>Catostomus insignis</i> Baird + Girard	5	29.0-36.5
	<i>Catostomus berrardini</i> Girard	1	61.5
	<i>Catostomus catostomus</i> (Forster) 469	97	18.0-244.0
	<i>Cat. catostomus griseus</i> 177	5	54.7-157.0

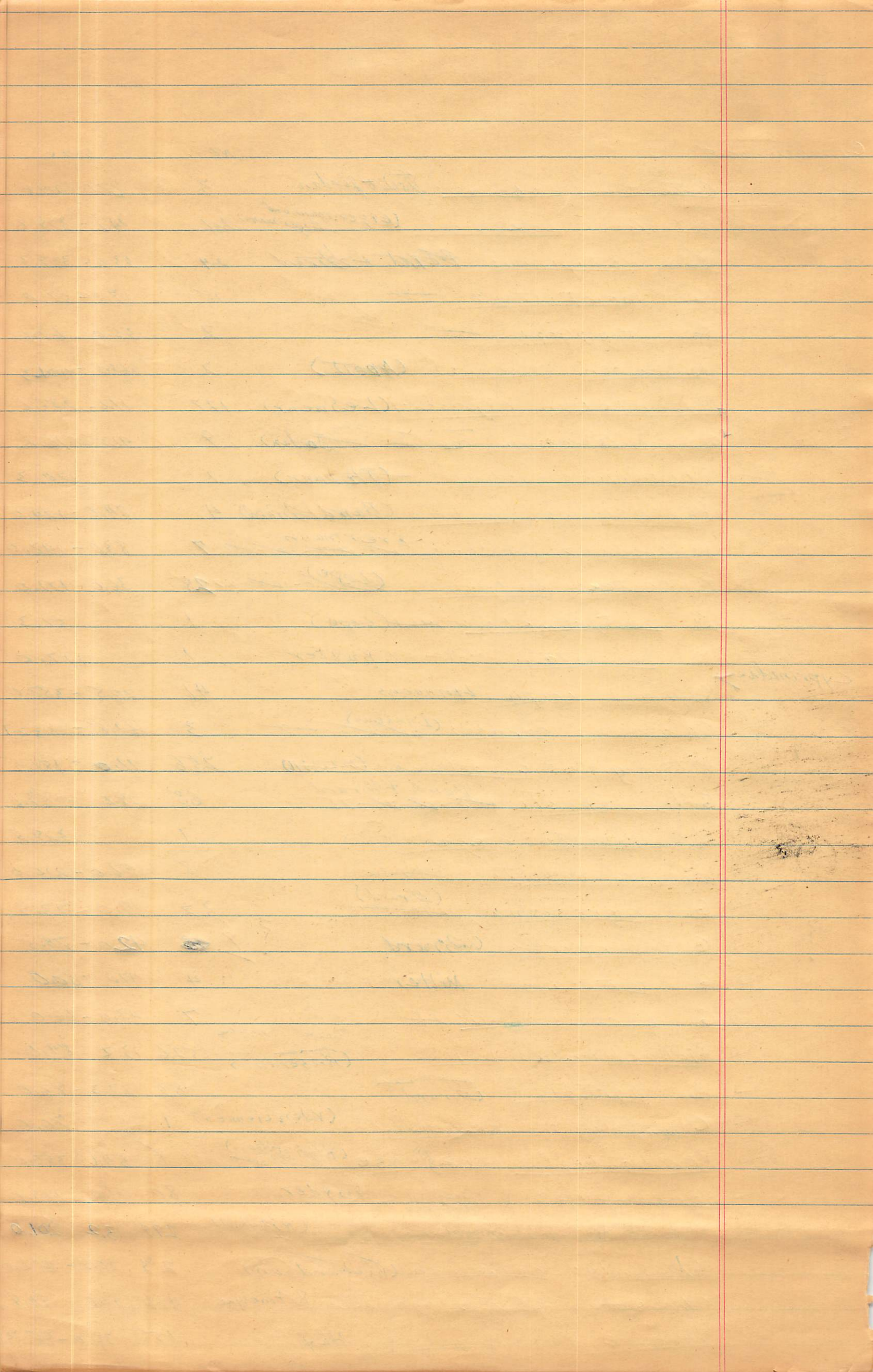


Cypriniformes (cont)

	No.	Size
<i>Catostomus tabacensis</i> ¹⁵⁹ Killam & Jordan	3	27.0 - 119.0
<i>Catostomus columbianus</i> (Eigenmann und Eigenmann) ²⁰¹	201	14.6 - 379.0
<i>C. latipinnis</i> Baird & Girard	24	55.0 - 369.5
<i>C. mniotiltus</i> ¹⁴⁰	18	27.0 - 57.0
<i>C. wigginsi</i> ¹³⁵	2	55.0 - 67.0
<i>Xyrapetichthys texanus</i> (Abbott)	2	365.5 - 421.3
<i>Hypentelium nigricans</i> (Lesueur)	127	11.0 - 285.0
<i>H. otawanum</i> ¹²⁶ 126 (Jordan)	9	41.5 - 116.6
<i>Thoburnia rothoea</i> (Thoburn)	1	120.3
<i>Pantostomus platinus</i> (Baird & Girard)	4	24.0 - 124.0
<i>Pantostomus jordani</i> ^{Eigenmann} 127-128-129-130	7	83.0 - 142.0
<i>Pantostomus delphinus</i> (Lowe) ¹²⁰⁻¹²¹⁻¹²²⁻¹²³	28	36.0 - 171.0
<i>P. platyrhynchus</i> ¹⁴¹ (Lowe)	1	51.3
<i>P. lateralis</i> ¹⁷⁸⁻¹⁸⁶ Rutter	1	112.0
<i>Cyprinus carpio</i> Linnaeus	41	20.8 - 382.0
<i>Carassius auratus</i> (Linnaeus) ¹²⁰⁻¹²¹	3	61.8 - 332.7
<i>Notemigonus crysoleucas</i> (Mitchell)	256	11.0 - 181.5
<i>Gila robusta</i> ^{Baird & Girard} 120-121-122-123	68	29.0 - 83.6
<i>Gila robusta elegans</i> ⁵⁸³	1	329.5
<i>G. r. robusta</i> ⁵⁸²	8	96.0 - 210.0
<i>G. nigrescens</i> (Girard) ¹²²⁻¹²³⁻¹²⁴	37	19.0 - 73.2
<i>G. purpurea</i> (Girard)	9	42.0 - 78.5
<i>G. ditaeia</i> Miller	4	42.5 - 80.0
<i>G. purpureascens</i> ¹²⁶	7	43.0 - 66.0
<i>Richardsonius balteatus</i> ⁴⁷⁸⁻⁴⁷⁹ (Richardson)	526	13.2 - 84.0
<i>R. egregius</i> ⁴⁷⁷⁻⁴⁷⁸ (Girard)	83	27.3 - 92.0
<i>Clinostomus vandoisulus</i> (Valenciennes)	1	70.0
<i>Ptychocheilus oregonense</i> (Richardson) ⁴⁷⁸⁻⁴⁷⁹	8	54.6 - 350.0
<i>Ptychocheilus umppuensis</i> Snyder	80	16.0 - 109.0
<i>Semotilus atromaculatus</i> (Mitchell)	179	13.2 - 204.0
<i>Mylocheilus caurinus</i> (Richardson) ⁴⁷⁸⁻⁴⁷⁹	23	20.8 - 200.0
<i>Chrosomus erythrogaster</i> Rafinesque	466	12.0 - 80.8
<i>Opsopoeodus emiliae</i> Hay	15	30.0 - 55.3

Cyprinidae

?



Cypriniformes (cont)

		Agassiz + Picturing	No.	Size
	✓	<u>Acrossocheilus alutaceum</u> 442 454, 57	45	23.0 - 60.5
	✓	<u>Hybopsis plumbea</u> (Agassiz) 442	1	48.5
	✓	<u>Nocomis biguttatus</u> (Kirtland)	495	17.1 - 342.8
	✓	<u>Hybopsis micropogon</u> 446 - 46-92-222 (Cope)	31	22.5 - 92.7
	✓	<u>H. leptoleptala</u> (Birard) 455	3	54.0 - 100.5
	✓	<u>H. bellica</u> 132-145 (Birard)	3	49.5 - 95.0
	✓	<u>H. amblops</u> ♂ (Rafinesque)	360	25.0 - 65.0
	✓	<u>H. rubrifrons</u> 436 (Jordan)	11	37.0 - 59.0
	✓	<u>H. hypsinota</u> 448 156 (Cope)	3	39.0 - 58.5
	✓	<u>H. storeriana</u> 480 345 576 (Kirtland)	101	12.0 - 89.0
	✓	<u>H. barberi</u> 447 151 (Fowler)	38	22.3 - 57.0
	✓	<u>H. dissimilis</u> 433 (Kirtland)	12	69.5 - 93.0
102	✓	<u>H. punctatus</u> ♂ Hubbs + Crowe	105	17.5 - 82.8
	✓	<u>H. insignis</u> 446 - 450 Hubbs + Crowe	2	45.0 - 62.5
	✓	<u>H. aestivalis</u> 458, 466, 480, 344 (Birard)	378	12.0 - 51.0
	✓	<u>H. gelida</u> 280 (Birard)	7	21.5 - 38.5
	✓	<u>Rhinichthys atratulus</u> 445 107 (Hermann)	13	33.7 - 56.0
	✓	<u>R. osculus</u> 452-476 (Birard)	131	9.0 - 50.8
	✓	<u>R. cataractae</u> ♂ (Valenciennes)	252	21.2 - 98.0
	✓	<u>Agosia chrysogaster</u> 449 Birard	4	52.0 - 71.0
		<u>Phenacobius mirabilis</u> (Birard)	139	26.0 - 82.2
1	✓	<u>Notropis percobromus</u> 446 ^{romus} (Cope) 447 ^{artibeus} 448 ^{noles}	220	18.0 - 75.8
44	✓	<u>N. potteri</u> 447 Hubbs + Bonham	1	70.5
45	✓	<u>N. dorsalis</u> 448 - 457 (Agassiz)	20	12.5 - 26.5
5	✓	<u>N. amabilis</u> 449 106 (Birard)	238	30.0 - 57.0
2	✓	<u>N. oxyrinchus</u> 449 103 + Bonham ^{Hubbs + Bonham}	13	15.6 - 21.2
3	✓	<u>N. photogenis</u> 448 (Cope)	1	69.0
4	✓	<u>N. rubellus</u> ^{rubellus} (Agassiz)	1873	9.5 - 60.0
8480	✓	<u>N. scepticus</u> 449 (Jordan + Milbert)	2	49.3 - 51.5
6	✓	<u>N. matutinus</u> 446 (Cope)	5	22.0 - 60.2
7	✓	<u>N. umbratilis</u> ♂ (Cope) (Birard)	906	14.7 - 69.0
8	✓	<u>N. bellus</u> 436 Hay	6	41.0 - 46.2
9	✓	<u>N. fumens</u> 449 450 Evermann	13	40.0 - 42.0
10				

			No.	Size
11	✓	11 <i>Notropis zonistius</i> (Jordan) 170	2	72.7-84.0
12	✓	12 <i>N. coccygenis</i> (Cope) 135-140-150-172	58	25.8-88.0
13	✓	13 <i>N. cornutus</i> (Mitchill) 136-141-145-148-160	50	33.0-158.0
	✓	43 <i>N. chrysocephalus</i> 177, 26	5	70.0-87.5
14	✓	1264 <i>N. cerasinus</i> (Cope) 146-147	9	23.0-52.0
19	✓	127 <i>N. pilosus</i> (Hubbs)	1576	14.5-93.8
15	✓	126 <i>N. zonatus</i> 170-175-170-121 <i>zonatus</i> 41	41	20.0-28.3
16	✓	126 <i>N. brazosensis</i> Hubbs + Bonham	80	18.0-46.5
17	✓	124 <i>N. boops</i> Hilbert	466	17.2-64.5
18	✓	127 <i>N. orioninus</i> (Cope) 170-175	12	37.0-59.0
19	✓	127 <i>N. ortemburgeri</i> Hubbs old name for pilosus	2	40.0-50.0
20	✓	12 <i>N. xanurus</i> 136 (Jordan)	13	33.0-69.0
21	✓	127 <i>N. camurus</i> (Jordan + Meek)	616	29.0-105.5
	✓	<i>N. c. spilopterus</i> 46	3	31.0-37.0
22	✓	127 <i>N. analostanus</i> 144-148 (Mirard) 157-171	118	15.0-21.5
23	✓	128 <i>N. galacturus</i> (Cope) 170-175-170	26	26.0-73.0
25	✓	125 <i>N. callistius</i> 136-151 (Jordan)	2	60.5-79.5
24	✓	138 <i>N. nixens</i> 122 (Cope)	8	23.0-47.0
26	✓	128 <i>N. leedsii</i> Fowler 122	12	37.5-66.2
27	✓	129 <i>N. whipplei</i> 362-408 (Mirard)	58	23.5-78.0
28	✓	129 <i>N. spilopterus</i> 8 (Cope)	70	19.0-52.3
29	✓	129 <i>N. trichostictus</i> 134-141 (Jordan and Gilbert)	19	33.2-78.0
30	✓	129 <i>N. lutrensis</i> (Mirard and Mirard)	2130	13.1-68.5
31	✓	129 <i>N. venustus</i> 27 (Mirard)	17	30.0-57.0
32	✓	130 <i>N. hypselepterus</i> 144-149 (Lunther)	21	29.5-44.0
33	✓	130 <i>N. signipinnis</i> 151 (Bailey and Suttles)	1	65.5-
34	✓	130 <i>N. chrosomus</i> 136 (Jordan)	7	47.0-50.0
35	✓	130 <i>N. lutipinnis</i> 145 (Jordan and Brayton)	1	61.3
36	✓	131 <i>N. cummingsae</i> 136 Myers	1	62.0
37	✓	131 <i>N. chalybaeus</i> 145-155 (Cope)	3	30.8-37.5
38	✓	131 <i>N. chiliticus</i> 148-151 (Cope)	18	15.5-61.5
39	✓	131 <i>N. texanus</i> 144 (Mirard)	6	50.0-52.3
40	✓	131 <i>N. xaniceps</i> 132-151 (Jordan)	18	28.3-51.5

		No.	Size
41	✓ ¹³¹ <i>Notropis petersoni</i> ^{125 169} ¹⁴¹ 176 ^{Fowler} 22 32.5-60.0		
42	✓ ¹³¹ <i>N. asperifrons</i> ¹⁴⁴ 1748 ^{Guttkus & Peney} 2 41.3-42.5		
43	✓ ¹³² <i>N. ^{hudsonius} hudsonius</i> ¹⁵² 481 ^(Clinton) 3 22.0-54.0		
44	✓ ¹³² <i>N. atrocaudalis</i> 226-230 ^{Evermann} 41 12.5-59.0		
47	✓ ¹³² <i>N. bifrenatus</i> 714 ^(Cope) 3 35.8-40.0		
48	✓ ¹³³ <i>N. procer</i> 192 ^(Cope) 2 46.7-48.0		
49	✓ ¹³³ <i>N. volucellus</i> ⁺ ^(Cope) 61 20.8-51.2		
50	✓ ¹³³ <i>N. ^{buchannani} buchannani</i> ⁺ ^{Meek} 147 21.0-41.6		
51	✓ ¹³⁷ <i>N. maculatus</i> ²⁴³ 152 ^(Hay) 22 29.0-38.5		
52	✓ ¹³³ <i>N. ^{heterolepis} heterolepis</i> 479 452 ^{Eigenmann & Eigenmann} 16 40.0-56.7		
53	✓ ¹³³ <i>N. ozarcus</i> ³³⁴ 365 ^{Meek} 77 35.0-46.0		
54	✓ ¹³⁴ <i>N. girardi</i> 17.97.432 ^{Hubbs & Jordan} ^{Ontenburger} 15 26.0-36.3		
55	✓ ¹³⁴ <i>N. ^{stramineus} stramineus</i> ⁺ ^(Cope) 594 11.5-59.0		
56	✓ ¹³⁴ <i>N. traxtoni</i> 206 ^{Jordan and Evermann} 77 36.0-52.0		
check	✓ <i>N. isolepis</i> ²²⁶ ³³¹ 373 84 35.3-89.5		
	✓ <i>Ericymba puccata</i> 722 ^{Cope} 12 40.0-57.0		
	✓ <i>Hypognathus placida</i> 47 ¹⁸⁰ 40 17.5-42.2		
16,104	✓ <i>H. nuchalis</i> 648 ^{Agassiz} 2 65.0		
	✓ <i>Dianda nabilia</i> ⁺ ^(Forbes) 1255 17.8-66.0		
	✓ <i>Pimephales tenuellus</i> ⁺ ^(Birard) 135 21.9-69.5		
	✓ <i>Pimephales vigilax</i> ⁺ ^(Parr & Baird) 104 18.6-70.0		
	✓ <i>Pimephales notatus</i> ⁺ ^{Rafinesque} 2729 15.3-76.5		
	✓ <i>Pimephales promelas</i> ⁺ ^{Rafinesque} 184 11.0-60.0		
	✓ <i>Camptostoma anomalum</i> ⁺ ^(Rafinesque) 1207 13.0-139.0		
Ship 2	✓ <i>C. a. anomalum</i> 411.525 84 29.5-77.0		
	✓ <i>C. a. pullum</i> ^{2, 40, 56, 182, 147, 215} 39 22.0-99.0		
Ictaluridae	✓ <i>Ictalurus punctatus</i> ^(Rafinesque) 71 18.0-304.0		
	✓ <i>I. catus</i> 292 ^(Linnaeus) 1 36.0		
	✓ <i>I. furcatus</i> 383 ^(Le Sueur) 1 126.2		
	✓ <i>I. platycephalus</i> 743 ^(Birard) 3 37.0-42.0		
	✓ <i>I. natalis</i> ⁺ ^(Le Sueur) 47 20.0-239.0		
	✓ <i>I. melas</i> ⁺ ^(Rafinesque) 82 14.0-217.0		
	✓ <i>I. melas catulus</i> 1874 3 89.2-131.0		

Note *Noturus eleutherus* 1, 372. Jordan
(681) ?

pg 7

✓	<i>Ictalurus nebulosus</i>	45 1874 126 713 (Le Sueur)	9	41.0-193.5	
✓	<i>I. nebulosus marmoratus</i>	114	4	28.2-43.2	
✓	<i>Pylodictis olivaris</i>	(Reisinger) 241-247 248 249 251	17	18.0-235.0	
✓	<i>Noturus flavus</i>	+ Rubineque	21	30.5-146.0	
✓	<i>N. exilis</i>	(Nelson)	446	13.0-92.0	
check	✓ <i>N. placidus</i>	433 214 188 881	12	24.6-47.0	
✓	<i>N. miurus</i>	(Jordan)	89	25.0-61.0	
	<i>N. leptacanthus</i>	741 (Jordan)	1	38.8	
	<i>N. nocturnus</i>	408 355 212 710 (Jordan + Gilbert)	12	40.5-84.0	
	<i>N. gyrinus</i>	51 114 115 770 88 113-4, 476 (Mitchell)	33	12.0-84.2	
	<i>N. tildebrandi</i>	211 Bailey and Taylor	1	30.5	
check	✓ <i>N. stigmosus</i>	213	2	26.5-31.0	
check	✓ <i>N. albatour</i>	6-343	5	32.0-61.0	

Anguilliformes

<i>Anguillidae</i>	<i>Anguilla rostrata</i>	(Le Sueur) 91 92 46 127 220	9	43.0-356.0	
--------------------	--------------------------	-----------------------------------	---	------------	--

Belontiiformes

<i>Belontiidae</i>	<i>Strongylura</i>	'marine' (Walbaum) 93 96	11	59.0-245.0	
--------------------	--------------------	-----------------------------	----	------------	--

Gasterosteiformes

<i>Gasterosteidae</i>	<i>Apeltes quadracus</i>	(Mitchell) 92 96	10	20.5-30.0	
	<i>Eucalia inconstans</i>	478 (Kirtland) 482	7	16.0-43.0	
	<i>Gasterosteus aculeatus</i>	448 465 464 (Linnaeus)	47	8.0-55.0	

Syngnathiformes

<i>Syngnathidae</i>	<i>Syngnathus scovelli</i>	414 (Evermann & Kendall) 416	2	62.0-73.0	
	<i>Syngnathus fuscus</i>	60 85 42-44 131 Storer	14	49.0-147.0	

Cyprinodontiformes

<i>Amblyopsidae</i>	<i>Chologaster cornuta</i>	Agassiz 114	7	17.8-25.0	
<i>Amblyopsidae</i>	<i>Amblyopsis rosae</i>	138 (Eigenmann)	1	33.0	
22,803 <i>Cyprinodontidae</i>	<i>Fundulus heteroclitus</i>	60 96 (Linnaeus) 92	11	49.5-66.5	
	<i>F. grandis</i>	820 92 414 Baird and Girard	13	17.0-94.5	
	<i>F. diaphanus</i>	92-478 (Le Sueur)	13	39.0-52.0	
✓	<i>F. catenatus</i>	(Storer)	67	19.2-118.0	
	<i>F. jenkinsi</i>	116 (Evermann)	1	24.0	

	No.	Size
✓ <u>Fundulus kansae</u> 181 462 ^{39 77 628} Barman ^{65 218 650} Cope	73	9.4-61.5
✓ <u>F. sciadicus</u> 15 143 402 432	84	10.0-57.5
✓ <u>F. chrysotus</u> 142 348 407 ^{402 432} Holbrook	264	12.0-61.8
✓ <u>F. notti</u> 9 <u>Argassiz</u>	53	21.0-50.0
✓ <u>F. notatus</u> 4 <u>(Rafinesque)</u>	652	11.5-69.0
✓ <u>F. olivaceus</u> 115 364 382 404 ^{39 376 378 392} (Storer)	87	15.5-69.0
✓ <u>F. majalis</u> 96 <u>(Walbaum)</u>	11	20.0-78.0

✓ <i>Lucania parva</i> 92 ^(Baird and Girard) 1 35.2
✓ <i>Leptolucania ommata</i> 117 142 ^(Jordan) 45 12.0-19.6
✓ <i>Chirocentrus goodei</i> 141 ^(Jordan) 2 23.0-22.5
✓ <i>Cyprinodon variegatus</i> 64 414 ^(Lacepede) 6 25.0-43.5
✓ <i>C. macularius</i> 4 ^(Baird and Girard) 21 37.0-47.5
✓ <i>C. species</i> ^{hacepede} 112 682 32.5-252.2

Poeciliidae	✓ <i>Gambusia affinis</i> 4 ^(Baird and Girard) 375 11.0-40.7
	✓ <i>G. A. affinis</i> 191 11.0-42.5
Chenit	✓ <i>G. marshi</i> 112 2 23.5-25.0
	✓ <i>G. geiser</i> 7-35 ^{Hubbs & Hubbs} 8 26.1-34.0

✓ <i>Mollienesia latipinna</i> 99 ^{Le Sueur} 3 40.5-42.5
✓ <i>Heterandria formosa</i> 131 141 ^{Argassiz} 4 17.0-20.5
(New) <i>Poeciliopsis occidentalis</i> 3, 3, 4, 16 ^(Baird & Baird) 45 12.2-41.5

Percopsiformes

Percopidae	<i>Percopsis omiscomaycus</i> 50 ^(Walbaum) 7 69.0-76.0
Aphredoderidae	<i>Aphredoderus sayanus</i> 117 144 404 ^(Albans) 9 18.5-74.0

Mugiliformes

Atherinidae	✓ <i>Menidia audeus</i> 127 740 ^{Hay} 36 48.0-99.0
"	✓ <i>Menidia menidia</i> 92 96 ^(Linnaeus) 39 28.5-95.0
Mugilidae	✓ <i>Mugil cephalus</i> 391 414 516 426 26 ^{Linnaeus} 97 25.5-235.0
Atherinidae	✓ <i>Labidesthes sicculus</i> 520 ^(Cope) 520 18.5-82.0

Perciformes

Serranidae	<i>Roccus chrysops</i> 686 691 ^(Rafinesque) 21 52.5-186.8
	✓ <i>Roccus americanus</i> 82 ^(Lamelin) 2 89.0-92.0
	↑ Morone luteo as <i>Roccus americanus</i>

Perciformes

Centrare hida
26,414 \rightarrow Mi

	No.	Size
<i>Micropterus dolomieu</i> & Lacépède	66	35.5 - 292.0
<i>M. notius</i> 46 134 Bailey & Hutton	2	46.0 - 89.5
<i>M. punctulatus</i> & Rafinesque	106	9.8 - 774.0
<i>M. treculi</i> ? (Vaillant and Bo court)	3	66.0 - 76.5
<i>M. coosae</i> 734 Hutton and Bailey	1	28.0
<i>M. salmoides</i> & (Lacépède)	116	12.0 - 233.0
<i>Chaenobrytus gulosus</i> & (Bartram)	34	22.0 - 228.0
<i>Lepomis cyanellus</i> + Rafinesque	420	13.5 - 168.2
<i>L. symmetricus</i> 774 480 444 444 Forbes	40	16.0 - 48.0
<i>L. punctatus</i> 7117 131-375 Valenciennes	1	13.0 - 93.0
<i>L. gibbosus</i> 82-148 (Linnaeus)	16	14.0 - 112.0
<i>L. microlophus</i> & (Günther)	35	10.2 - 135.0
<i>L. auritus</i> 4 117 144 444 771 157 770 772 (Linnaeus)	17	32.3 - 119.0
<i>L. marginatus</i> 164 400 401 412 (Holbrook)	12	35.0 - 63.0
<i>L. megalotis nuchalis</i> 82A+B 3734	12	55.0 - 92.0
<i>L. megalotis</i> & (Rafinesque)	588	16.2 - 114.0
<i>L. humilis</i> & (Mirard)	230	20.0 - 43.1
<i>L. macrochirus</i> & Rafinesque	336	19.7 - 151.2
<i>L. m. macrochirus</i> &	81	20.0 - 105.0
<i>L. ganeyanus</i> 487	8	28.5 - 63.0
<i>L. macrochirus</i> x <i>L. cyanellus</i> hybrid 684	1	-140.0
<i>Enneacanthus obesus</i> 46 102 152 (Mirard)	8	27.0 - 61.5
<i>Enneacanthus</i> 46 102 152 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 <i>gloriosus</i> 32 (Holbrook)	32	17.0 - 77.0
<i>Esogonistius</i> <i>E. chaetodon</i> (Baird) 126-167	4	17.0 - 48.0
<i>Ambloplites rupestris</i> (Rafinesque)	44	17.5 - 134.0
<i>Acanthodes pomotis</i> 490 (Baird)	1	129.5
<i>Pomoxis nigromaculatus</i> 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 <i>Lesueur</i> 8	29	29.5 - 128.6
<i>Pomoxis annularis</i> + Rafinesque	56	12.0 - 194.3
<i>Centrarchus macropterus</i> 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 <i>Lacépède</i> 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000	54	18.0 - 89.0
<i>Archoplites interruptus</i> 78 (Mirard)	2	51.8 - 65.6
<i>Elassoma</i> sp. 377 385 (404, 631, 377) Jordan	113	10.7 - 320.0
<i>Elassoma zonatum</i> 644 152 400 741 Jordan	13	11.9 - 23.0
<i>Elassoma evergladei</i> 700 144 146 148 126 Jordan	43	11.0 - 25.2

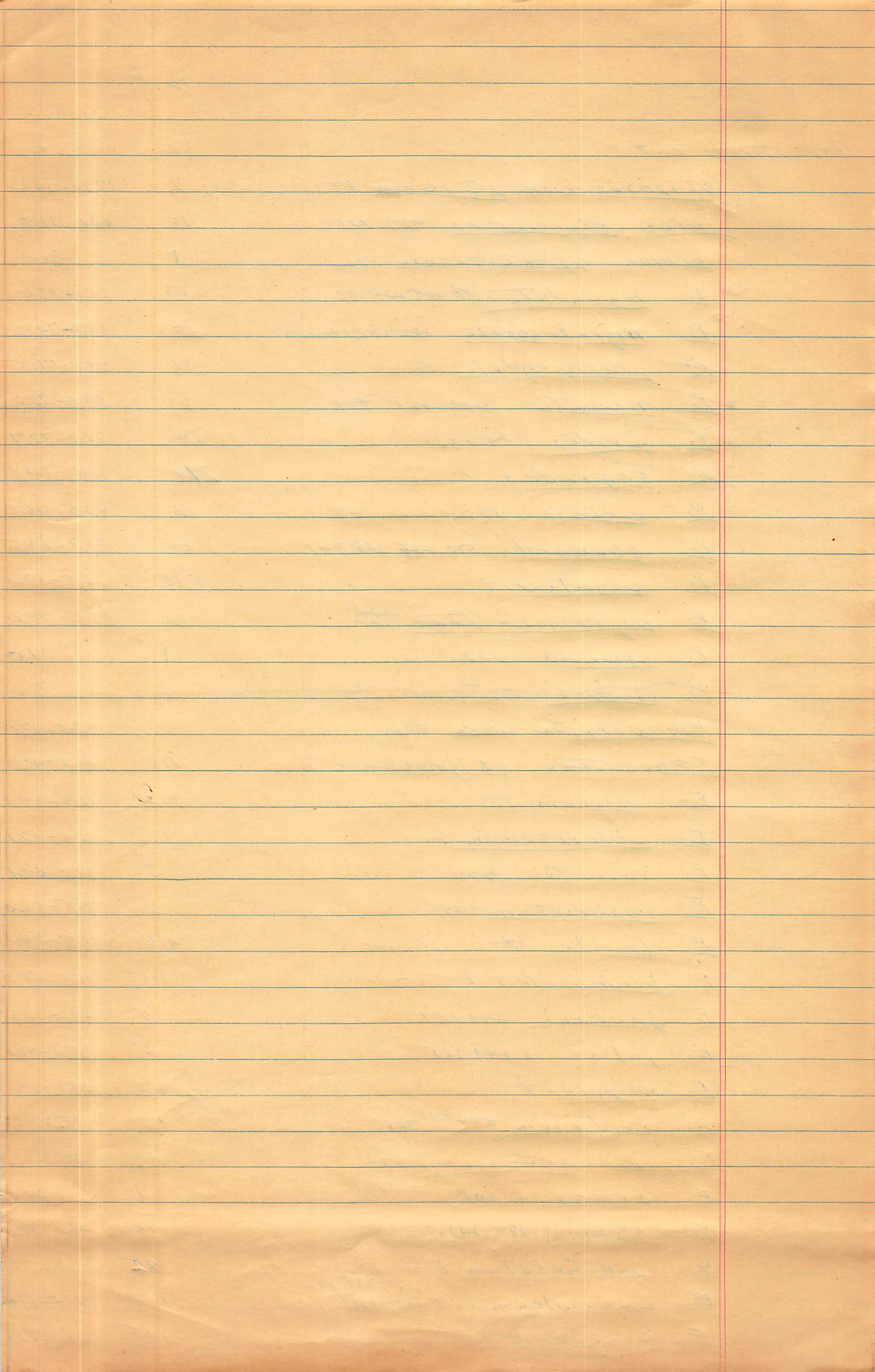
Perciformes cont

Percidae

		No.	Size
<u>Stizostedion vitreum</u>	¹²² 83 (Mitchill)	2	227.0-244.2
<u>Perca flavescens</u>	483 221 (Mitchill)	15	62.0-111.0
<u>Percina cymatotaenia</u>	772 (Gilbert & Meek)	1	41.0
<u>P. maculata</u>	80, 408, 475, 586 (Birard)	13	25.0-71.0
<u>P. nigrofasciata</u>	^(Agassiz) 132, 137, 140-1, 151	16	38.0-74.2
<u>P. phoxocephala</u>	♀ (Nelson)	131	29.0-71.5
<u>P. nasuta</u>	343, 365, 408 (Bailey)	5	52.0-70.0
<u>P. erides</u>	140, 361 (Jordan and Cope)	24	50.0-72.7
<u>P. caprodes</u>	+ (Rafinesque)	274	32.0-124.0
<u>P. crassa</u>	192 (Jordan & Brayton)	2	42.5-46.0
<u>P. shumardi</u>	470, 585, 688, 747 (Birard)	25	43.3-63.5
<u>P. copei</u>	+ (Jordan)	530	26.5-52.0
<u>P. nigromaculatus</u>	¹²⁴ 120	22	18.5-79.0
<u>P. species</u>	122	1	21.0
<u>P. sciura</u>	35 (Swain)	1	78.6
<u>Ammocrypta clara</u>	584 Jordan & Meek	2	43.0-47.0
<u>Etheostoma stigmaeum</u>	♀ (Jordan)	195	21.0-47.5
<u>E. nigrum</u>	+ Rafinesque	557	16.5-54.2
<u>E. chlorogomum</u>	+ (Hay)	112	19.0-47.1
<u>E. varium</u>	772 Hirtland	3	34.0-64.1
<u>E. inscriptum</u>	145 (Jordan and Brayton)	2	33.5-53.0
<u>E. zonale</u>	♀ (Cope)	410	18.0-54.5
<u>E. blennioides</u>	♀ Rafinesque	215	16.5-88.0
<u>E. jordani</u>	134, 151 Gilbert	5	23.2-36.5
<u>E. juliae</u>	634, 365 Meek	5	35.0-46.0
<u>E. whipplei</u>	♀ (Birard)	62	20.5-64.5
<u>E. radiosum</u>	224 225 385 (Hubbs & Black)	49	15.3-53.5
<u>E. r. artemesia</u>	231	30	20.1-46.5
<u>E. fricksium</u>	146 Hildebrand	1	20.0
<u>E. swaini</u>	131, 141 (Jordan)	15	23.0-37.0
<u>E. punctulatum</u>	♀ (Agassiz)	182	10.5-79.5
<u>E. caeruleum</u>	6, 110, 121, 365 Storer	109	21.5-61.0
<u>E. cragini</u>	+ Gilbert	145	23.0-52.5

check

300



		No.	Size
	<u>Etheostoma spectabile</u> t (Agassiz)	2694	12.5-94.0
	<u>E. exile</u> 484 586 (Birard)	14	33.5-42.0
	<u>E. flabellare</u> t Rafinesque	758	14.5-56.5
	<u>E. flabellare flabellare</u> 380	38	28.0-44.5
	<u>E. f. lincolatum</u> 40 113 199	17	20.0-39.5
	<u>E. serriferum</u> 970 (Hubbs + Cannon)	3	38.7-44.0
	<u>E. gracile</u> 12 380 385 44 546 68 57 112 84 65 (Birard)	37	11.6-40.0
	<u>E. barretti</u> 402 (Holbrook)	2	20.5-21.0
	<u>E. fusiforme</u> 119 376 (Birard)	4	17.0-26.0
	<u>E. f. barretti</u> 114 125 169 113 152	25	23.5-43.0
	<u>E. proeliare</u> 223 385 387 (Hay)	13	18.0-32.5
	<u>E. microperca</u> t Jordan + Wilbert	84	22.0-33.1
	<u>E. fonticola</u> 35 (Jordan + Wilbert)	2	20.1-30.6
check	<u>E. bairdi</u> 387	1	34.5
check	<u>E. pallid dorsum</u> 225	3	22.1-29.5
Sciaenidae	<u>Aplodinotus grunniens</u> 22 250 547 55 585 Rafinesque	8	25.0-202.0
Cichlidae	<u>Cichlasoma cyanoguttatum</u> (Baird and Girard)	17	17.5-152.2
check	<u>Cichlasoma beani</u> 129	1	58.5
Cottidae	<u>Leptocottus armatus</u> 786 (Birard)	2	119.5-123.0
	<u>Cottus aleuticus</u> 445 459 464 467 72 (Wilbert)	115	12.0-89.5
	<u>C. asper</u> 445 465 464 467 Richardson	24	11.0-88.0
	<u>C. rhotheus</u> 459 464 477 (Bosa Smith)	10	11.0-94.0
	<u>C. bairdi</u> 107 121 482 (Birard)	28	9.7-53.0
	<u>C. b. punctulatum</u> 468	14	35.0-87.0
	<u>C. greeni</u> 443 453 (Wilbert and Culver)	8	14.0-24.0
	<u>C. carolinae</u> 47 (Will)	141	15.1-112.5
	<u>C. confusus</u> 47 (Norwood)		
	<u>Cottus</u> 388 Linnaeus	9	12.5-53.0
Pleuronectiformes			
Achinidae	<u>Trinectes maculatus</u> 416 (Block + Schneider)	5	56.0-86.0

Fishes present in Ichthyology Museum but not classified in Vertebrates of the United States. (Listing in phylogenetic order when known, ~~otherwise~~ unknown listed last)

Clupeiformes

		No.	Size (mm)
Clupeidae	<u>Dorosoma smithi</u>	1	54
	<u>Bravoortia gunteri</u> Hildebrand	20	28-42
Cyprinodontidae	<u>Bravoortia</u> ^{<u>tyrannus</u>} gunteri (Latrobe)	1	47
	<u>Sardinops caerulea</u>	4	210-219

Cypriniformes

Characidae

Astyanax mexicanus (Filippi) 1 61

Catostomidae

<u>Carpionotus</u>	<u>carpio carpio</u>	9	45-56
<u>Moxostoma</u>	<u>macrolepidotum psolabrum</u>	36	39-242
<u>Erimyzon</u>	<u>oblongus californis</u>	2	73-74
<u>Erimyzon</u>	<u>eucetta</u>	1	31
<u>Catostomus</u>	<u>catostomus griseus</u>	5	55-157
<u>catostomus</u>	<u>mniothluthus</u>	18	27-57
<u>Catostomus</u>	<u>wigginisi</u>	2	55-67
<u>Bila</u>	<u>robusta elegans</u>	1	330
<u>Bila</u>	<u>robusta robusta</u>	8	96-210
<u>Bila</u>	<u>purpurescens</u>	7	43-66
<u>Notropis</u>	<u>chrysocephalus</u>	5	70-86
<u>Notropis</u>	<u>chrysocephalus spilopterus</u>	3 35	31-37 35-90
<u>Notropis</u>	<u>isolepis</u>	84	35-90 35-90
<u>Campostom</u>	<u>anomalum anomalum</u>	84	30-77 29-77
<u>Campostom</u>	<u>anomalum pullum</u>	39	22-99

Itturaluridae

<u>Ittalarus</u>	<u>melas catulus</u>	3	89-151
<u>Ittalarus</u>	<u>nebulosus marmora</u>	4	28-45
<u>Noturus</u>	<u>placidus</u>	12	25-47

<i>Noturus stigmosus</i>	2	27-31
<i>Noturus albatron</i>	5	37-61

Myctophiformes

Synodontidae

<u>Trachinocephalus myops</u> (Forester)	73	35-91
--	----	-------

Syngnathiformes

Syngnathidae

<u>Syngnathus fuscus</u> Storer	14	49-147
---------------------------------	----	--------

Cyprinodontidae

<u>Fundulus majalis</u> (Walbaum)	11	20-78
-----------------------------------	----	-------

<u>Oryzias latipes</u> (Schlegel)	13	27-35
-----------------------------------	----	-------

Poeciliidae

<i>Gambusia affinis affinis</i>	191	11-43
---------------------------------	-----	-------

<i>Gambusia marshi</i>	2	24-25
------------------------	---	-------

<i>Gambusia geiser</i> Hubbs & Hubbs	8	26-34
--------------------------------------	---	-------

Perciformes

Centrarhidae

<i>Lepomis megalotis nuchalis</i>	12	35-63
-----------------------------------	----	-------

<i>Lepomis macrochirus macrochirus</i>	81	20-105
--	----	--------

<i>Lepomis ganellus</i>	8	29-63
-------------------------	---	-------

<i>Lepomis macrochirus</i> x <i>L. cyanellus</i> (hybrid)	1	140
---	---	-----

Percidae

<i>Percina nigromaculatus</i>	22	19-79
-------------------------------	----	-------

<i>Etheostoma flabellare flabellare</i>	38	28-45
---	----	-------

<i>Etheostoma flabellare lincolatum</i>	17	20-40
---	----	-------

<i>Etheostoma fusiforme berratti</i>	25	24-43
--------------------------------------	----	-------

<i>Etheostoma bairdi</i>	1	35
--------------------------	---	----

<i>Etheostoma pallidum dorsum</i>	3	22-30
-----------------------------------	---	-------

Sciaenidae

<u>Bairdiella</u> <u>chrysura</u> (Lacepede)	2	30-45
<u>Cynoscion</u> <u>nebulosis</u> (Cuvier)	1	26
<u>Leiostomus</u> <u>xanthurus</u> Lacpede	66	22-57
<u>Microgobius</u> <u>undulatus</u> (Linnaeus)	8	15-28
<u>Pogonias</u> <u>cromis</u> (Linnaeus)	3	20-83
<u>Roncador</u> <u>stearnsi</u> (Steindachner)	1	157

Cichlidae

<u>Cichlasoma</u> <u>beanii</u>	1	59
---------------------------------	---	----

Cottidae

<u>Cottus</u> <u>bairdi punctulatum</u>	14	35-87
---	----	-------

Blennidae

<u>Chasmodes</u> <u>basquianus</u> (Lacepede)	6	45-70
---	---	-------

Ephippidae

<u>Chaetodipterus</u> <u>faber</u> Broussonet	2	167-197
---	---	---------

Embiotocidae

<u>Cymatogaster</u> <u>aggregata</u> Gibbons	1	125
<u>Embiotoca</u> <u>lateralis</u> Agassiz	1	80

Gobiidae

<u>Gobionellus</u> <u>shufeldti</u> (Jordan + Everman)	66	18-38
<u>Gobiosoma</u> <u>basii</u> (Lacepede)		531-35
<u>Gobiosoma</u> <u>ginsburgi</u> Hildebrand + Schroeder	4	31-42

Sparidae

<u>Lagodon</u> <u>rhomboides</u> (Linnaeus)	4	60-107
---	---	--------

Zoaridae

<u>Lycodopsis</u> <u>pacifica</u> (Collett)	2	150-170
<u>Lycodes</u> <u>diapterus</u> Gilbert	2	90-106

Atherinidae

<u>Membras</u> <u>martinica</u> (Valenciennes)	103	18-84
--	-----	-------

Stromateidae

<u>Palometa</u> <u>simillima</u> (Ayres)	1	121
--	---	-----

Triglidae

<u>Prionotus</u> <u>tribulus</u> Cuvier	1	58
<u>Prionotus</u> sp	1	245

Scorpaenidae

No. Size

Scorpaena guttata Girard 2 166-174

Carangidae

Trachinotus carolinus (Linnaeus) 10 11-36

Trachurus symmetricus (Ayres) 2 217-230

Trichiuridae

Trichiurus nitens Barman 1 253

Pleuronectiformes

Bothidae

Litharichthys spilopterus Duncker 35 22-116

Paralichthys dentatus (Linnaeus) 9 34-64

Paralichthys lethostigma Jordan + Gilbert 27 78-113

Pleuronectidae

Lycopsetta exilis (Jordan + Gilbert) 3 83-161

Achinidae

~~Achirus~~ maculatus (probably Trinectes) 2 45-58maculatus (Bloch + Schneider)

Gobiesociformes

Gobiesocidae

Gobiesox strumosus Cope 17 13-43

Batrachoidiformes

Batrachoididae

Opsanus tau (Linnaeus) 4 37-193

Porichthys myriaster Hutton + Schwartz 23 259-324

Porichthys porosissimus (Cuvier) 4 110-161

Echeneiformes

Echeneidae

Remora remora (Linnaeus) 1 101

Tetraodontiformes

Balistidae Balistis sp. 2 124-236

Tetraodontidae sphaeroides marmoratus 1 14

~~Order~~ + Family not determined

<i>Cyclotriton</i>	<i>schoepfi</i>	1	99
<i>Holorthinus</i>	<i>californicus</i>	1	—
<i>Urobatris</i>	<i>sp.</i>	2	260-275

Not classified in Vertebrates of the U.S.

		No.	Size
Pleuronectiformes			
?	<i>Aschirus maculatus</i> 131/41 ^{probably faintly maculatus}	2	45.0-57.5
Trichodontidae	<i>Astroscoptes</i> sp 450	2	180.2-181.6
Clariidae	<i>Bairdiiella chrysurus</i> 415 ^(unexposed)	2	30.0-145.0
Stenodontaformes			
Halistidae	<i>Balistes</i> sp 452	2	123.7-236.0
Clupeidae	2 <i>Bravoortia tyrannus</i> 42 ^(Lutrobs)	1	47.0
	1 <i>Bravoortia gunteri</i> 414 ^{Hildebrand 416 344}	20	28.0-42.0
Perciformes			
Ephippidae	<i>Chaetodipterus faber</i> 418-9 ^(Boussonet)	2	167.0-197.0
Perciformes			
Blenniidae	<i>Chasmodes bosquianus</i> 92-96 ^(unexposed)	6	44.5-70.0
Pleuronectiformes			
Bothidae	<i>Githarichthys spilophorus</i> 414/416 ^{Rumrort}	35	22.0-116.0
?	<i>Cyclichthys schaepti</i> 415	1	99.0
Perciformes			
Embiotocidae	<i>Cymatogaster aggregata</i> 419 ^{Hibbens}	1	125.0
Perciformes			
Sciaenidae	<i>Cynoscion nebulosus</i> 417 ^(Cuvier)	1	26.0
Embiotocidae	<i>Embiotoca lateralis</i> 418 ^{Hyatt 419}	1	80.2
Gobiesociformes			
Gobiesocidae	<i>Gobiosax strumosus</i> Cope	17	134-42.5
Perciformes			
Gobiidae	<i>Gobionellus shufeldti</i> 417 ^(Jordan + Evermann)	66	12.5-38.0
Perciformes			
Gobiidae	<i>Gobiosoma bosci</i> 418-92 ^(unexposed)	5	31.0-34.5
Perciformes			
Gobiidae	<i>Gobiosoma ginsburgi</i> 42-96 ^{Hildebrand + Schroeder}	4	31.0-42.0
?	<i>Holothirius californicus</i> 83	1	—
Perciformes			
Sparidae	<i>Lagodon rhomboides</i> 414/416 ^(Linnaeus)	4	59.5-106.7
Perciformes			
Sciaenidae	<i>Leiostomus xanthurus</i> 414-416 ^(unexposed)	66	22.0-57.0
Perciformes			
Zoarcidae	<i>Lycodopsis pacifica</i> 449 ^(Collette)	2	150.0-169.6
Zeacidae	<i>Lycodes dipterus</i> 409 ^{Hilbert}	2	89.7-106.0
Pleuronectiformes			
Pleuronectidae	<i>Lycopsetta exilis</i> 449 ^(Jordan and Hilbert)	3	83.2-101.0
Perciformes			
Atherinidae	<i>Membras martinica</i> 413 415 416 ^(Valenciennes)	103	17.5-84.0
Perciformes			
Sciaenidae	<i>Micropogon undulatus</i> 414-5 ^(Linnaeus)	8	14.5-28.0
Batrachoidiformes			
Batrachoididae	<i>Opsanus tau</i> 42 ^(Linnaeus)	4	32.0-193.0
?	<i>Oryzias latipes</i> 765 ^{check other paper}	13	27.0-34.8
Perciformes?			
Stromateidae	<i>Palometa simillima</i> 417 ^(Agassiz)	1	121.0
Pleuronectiformes			
Bothidae	<i>Paralichthys dentatus</i> 4092 ^(Linnaeus)	9	34.0-63.5
Bothidae	<i>Paralichthys lethostigma</i> 414/416 ^(Jordan and Hilbert)	27	19.0-113.0
Perciformes			
Sciaenidae	<i>Pogonias cromis</i> 414 ^(Linnaeus)	3	20.0-83.0
Batrachoidiformes			
Batrachoididae	<i>Porichthys myriaster</i> 158 ^{Hubb + Schultze}	3	259.0-323.5
"	<i>Porichthys porosissimus</i> 417 ^(Cuvier)	4	110.0-161.0

		No.	Size
Verruciformes	<u>Priorotus</u> sp 4570	1	248.0
Triglididae	<u>Priorotus</u> <u>tribulus</u> 414 Cuvier	1	58.0
Echeneiformes	<u>Remora</u> <u>remora</u> (Linnaeus) 457	1	100.7
Perciformes	<u>Roncador</u> <u>stearnsi</u> (Steindachner) 134	1	156.6
Suidae	<u>Sardinops</u> <u>caerulea</u> 193	4	210.0-219.3
Scorpaenidae	<u>Scorpaena</u> <u>guttata</u> Richard	2	166.0-173.7
Serranidae	<u>Sphaeroides</u> <u>marmoratus</u> 417	1	14.0
Tetraodontiformes	<u>Trachinocephalus</u> <u>mxops</u> (Forster) 413 14	73	35.0-91.0
Myxtophiiformes	<u>Trachinotus</u> <u>carolinus</u> (Linnaeus) 415 413	10	10.6-36.0
Perciformes	<u>Trachurus</u> <u>symmetricus</u> (Agres) 134	2	216.5-228.5
Carangidae	<u>Trichiurus</u> <u>nitens</u> Richard	1	253.0
Verruciformes	<u>Urobatris</u> sp 4570	2	260.0-274.5
Trichiuridae			

44

570-675

Class Agnatha

species

Number

Standard
length
Range (mm)

1. Order Petromyzontiformes

Family Petromyzontidae



Lampetra fluviatilis	(Linnaeus)	2	28.6 - 101.0
Lampetra planeri	(Bloch)	41	25.0 - 153.2
Lampetra	sp. larva	1	45.5

Class Teleostomi
Class Osteichthyes

Order. Aulipenseriformes

need to check on the following

Pleuronectiformes
Soleidae
Cichlidae

Achirus

A. sepius maculatus pink Trinestes maculatus (Black & Schmitt)

Cylichthys schaeppi

Holorkinus ^{III} californicus

Cyprinodontidae Oryzias latipes (Zebragel)

Urebutis

✓ Dorosoma smithi

✓ Erimyzon aureus

✓ Catostomus commersoni

✓ Catostomus commersoni

✓ Notropis purpurascens Western U.S. minnow

✓ Notropis isolepis

✓ Noturus placidus

✓ Noturus stigmosus

✓ Noturus alba

✓ Ranunculus marshalli

✓ Lepomis ganellus

✓ Percina nigromaculatus

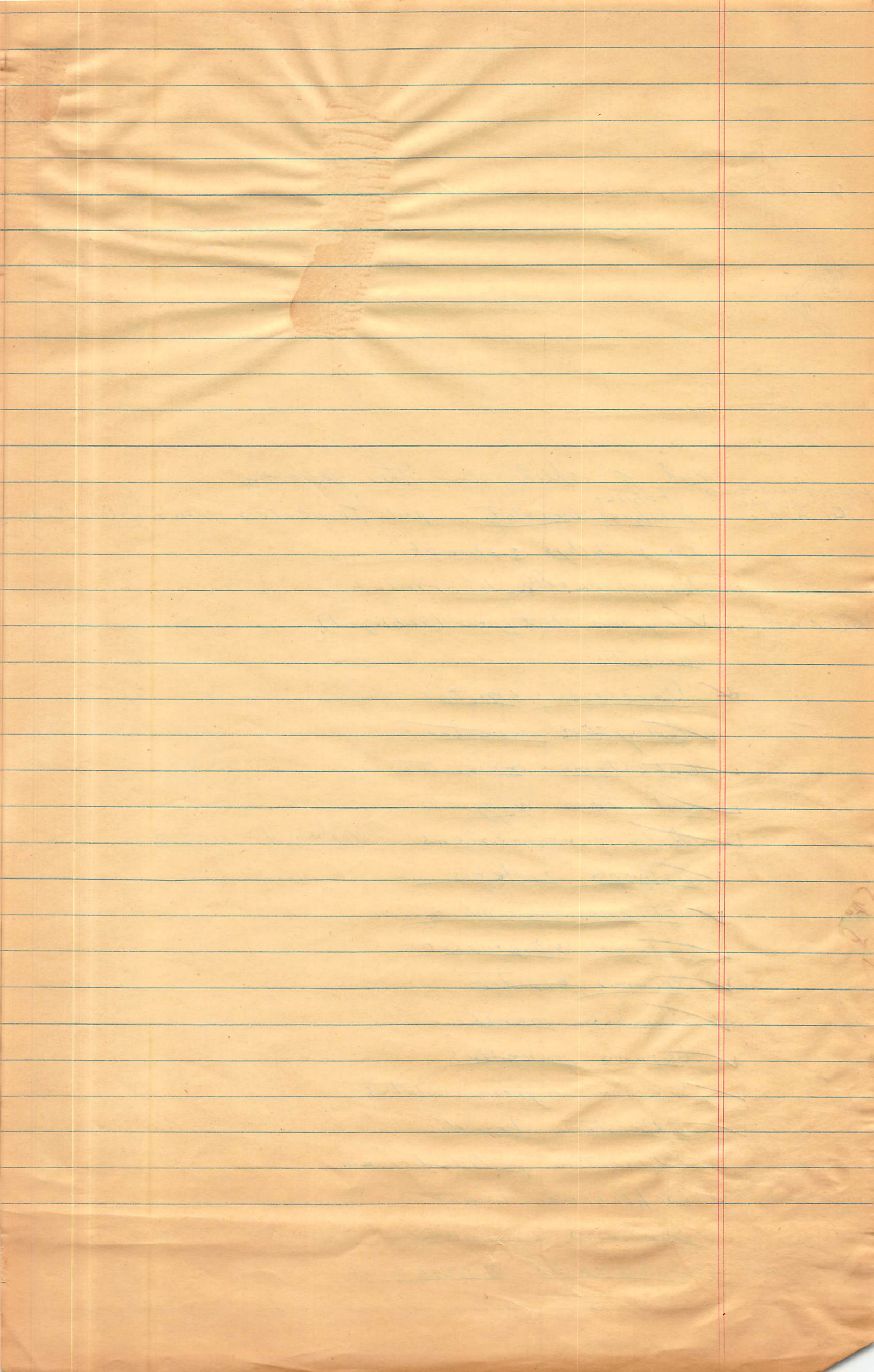
✓ Etheostoma bairdi

✓ Etheostoma pallidum dorsum

✓ Cichlasoma beanii

✓ Gardineria caerulea

✓ Sphaeroides marmoratus



Berg L.S. 1947 Classification of Fishes Bate
Recent & Fossil J.W. Edwards, Publisher Inc
Ann Arbor Mich.

Tetraodontiformes

Balistidae Balistes sp.

Tetraodontidae Sphaeroides marmoratus

Clupeiformes

Clupeidae Bravoortia gunteri Hildebrand
Bravoortia tyrannus (Latreille)
Sardinops caerulea

Pleuronectiformes

Bathidae Citharichthys spilopterus Gunther
Paralichthys dentatus (Linnaeus)
Paralichthys lethostigma Jordan & Gilbert

Pleuronectidae Lycoperetta exilis (Jordan & Gilbert)

Lobiosociformes

Lobiosocidae Lobiosox strumosus Cope

Batrachoidiformes

Batrachoididae Opsanus tau (Linnaeus)
Parichthys myriaster Hubbs & Schultz
P. porosissimus (Cuvier)

Echeneiformes

Echeneidae Remora remora (Linnaeus)

Not myriiformes?

Myctophiformes

Synodontidae Trachinocephalus myops (Forster)

orders and families not classified in Moore

Periformes

Sciaenidae Bairdiella chrysura (Lacepede)
Cynoscion nebulosus (Cuvier)
Leiostomus xanthurus Lacépède
Micropogon undulatus (Linnaeus)
Pogonias cromis (Linnaeus)
Ranclader stearnsi (Steindachner)

Blenniidae Chasmodes bosquianus (Lacepede)

Ephippidae Chaetodipterus faber Bronssonet

Embiotocidae Cymatogaster aggregata Gibbons
Embiotoca lateralis Argassiz

Gobiidae Gobionellus stuebeli (Jordan & Everman)
Gobiosoma boscii (Lacepede)
Gobiosoma ginsburgi Hildebrand & Schroeder

Sparidae Lagodon rhomboides (Linnaeus)

Zoaridae Lycodopsis pacifica (Gillett)
Lycodes diapterus Gilbert

Atherinidae Membras martinica (Valenciennes)

Stromateidae Palometa simillima (Ayres)

Triglidae Prionotus sp.
Prionotus tribulus Cuvier

Scorpaenidae Scorpaena guttata Girard

Carangidae Trachinotus carolinus (Linnaeus)
Trachurus symmetricus (Ayres)

Trichiuridae Trichiurus nitens Garman

1. Petromyzontiformes

Not listed in Moore

1. Petromyzontidae

2. Acipenseriformes

2. Polyodontidae

3. Amiiformes

3. Amiidae

4. Lepisosteiformes

4. Lepisosteidae

5. Clupeiformes

5. Clupeidae {Dorosoma smitzi 1 54

6. Engraulidae

7. Salmonidae

8. Umbridae

9. Esocidae

10. Hiodontidae

6. Cypriniformes

11. Characidae {Heteranx mexicanus (Filippi) 1 61

12. Catostomidae

Carpiodes carpio carpio 9 45-56

Macrostomus macrolepidotum psolabrum 36 38-242

Erimyzon oblongus californis 2 73-74

Erimyzon aucta 1 30.5

Catostomus catostomus griseus 5 55-57

Catostomus miniotilus 18 27-57

Catostomus wigginsi 2 55-67

Gila robusta elegans 1 33.5

Gila r. robusta 8 96-210

Gila purpurascens 7 43-66

Notropis chryscephalus 5 70-86

Notropis C. spilopterus 3 31-37

Notropis isalepis 84 35-90

Campostom a. anomalum 84 30-77

Campostom a. pullum 89 22-99

Ictalurus Ictalurus melas catulus 3 89-151

" Ictalurus nebulosus manmore (drew) 4 28-45

Noturus placidus
 Noturus stigmatosus
 Noturus albatore
~~Noturus placidus~~
 Noturus stigmatosus
 Noturus albatore

12 25-47
 2 27-31
 5 37-61
 2 27-31
 5 37-61

Syngnathiformes
 Syngnathidae
 Syngnathus fuscus Storer
 Cyprinodontidae
 Fundulus majalis (Walbaum)

14 48-147
 11 20-78

Poeciliidae

Gambusia A. affinis
 Gambusia marshi
 Gambusia geiser Hubbs & Hubbs

191 11-43
 2 24-28
 8 26-34

Perciformes

Centrarchidae

Lepomis microlophus
 Lepomis macrochirus macrochirus

12 35-63
 18 20-105

432-520	3	Lepisosteus platostomus Rafinesque	LEPISOSTEIFORMES
192	1	Amia calva Linnaeus	AMIIIFORMES Amiidae
765-780	2	Polyodon spathula (Walbaum)	ACIPENSIFORMES Polyodontidae
29-101 25-153 46	2 41 1	Lampetra planeri (Bloch) Lampetra fluviatilis (Linnaeus) Lampetra sp. larval form	PETROMYZONTIFORMES Petromyzontidae

Petromyzontiformes

Petromyzontidae

Lampetra fluviatilis (Linnaeus)

1000

29-101

Githidae
leucus bairdi punctulatum

14 35-82

Githidae
leucisoma beani

1 59

Etheostoma pallidum

3 22-30

Etheostoma

bairdi

1 35

Etheostoma

gusisforme

barratti

25 24-45

Etheostoma

flabellare lineatum

17 20-40

Etheostoma

flabellare flabellare

38 28-45

Etheostoma

radiosum ardens

30 20-42

Percine

nigromaculatus

22 19-79

Percidae

Lepomis macrochirus X *cyaneus* hybrid 190
Lepomis ganellus

8 29-63

Centrarchidae

forisformis

Lin, Yutang. 1938. The Wisdom of Confucius. The Modern Library,
New York.

Waley, Arthur. 1964. The Analects of Confucius. George Allen and
Unwin Ltd., London.

Wechsler, Henry. 1961. Community Growth, Depressive Disorders, and
Suicide. American J. Sociology. 67.

No. of intakes 772 entries

Year of Baas

~~Year of Triplett, and Waller publication not~~ SWAN

~~Voluptuous tells~~

Gila purpurea number 9

J. Carl Baas, James R. Triplett, and Wm T. Waller
Fishes in the Kansas Segment of the West
Fork of Drywood Creek. The Southwestern
Naturalist Vol 15, No. 1 June 1970 138-140

597,014

3246F

Jordan D. S. The Genera
of Fishes and A Classification of
Fishes Stanford University Press
Stanford California 1963 80p

597,014

T699g

93
37
56

102

A total of 36,421 fishes are represented in the preceding ~~lists~~ ^{lists} and ~~compiled~~ ^{members of} ~~the~~ ^{the} family composed of 20 orders, 52 families, 132 genera, and 370 species. Of this number, the family Cyprinidae were the most numerous in the museum, with 102 species, of which 56 species were of the genus Natropis.

~~On~~ On the basis of the difficulty encountered in finding many of the names listed in the card file of fishes ~~in~~ in published works, it is suggested that an attempt be made to reorganize the card file ~~and then practice~~ in an orderly fashion and to cite authority and taxonomic key used for each species of fish on the species cards.

① Literature Cited

Bailey, R. M. and M. O. Allum, 1952. Fishes of South Dakota, Museum of Zoology, Univ. of Michigan, No. 119, 132 p.

Bass, J. C., L. R. Triplett and Wm. T. Waller, 1970. Fishes in the Kansas segment of the West Fork of Drywood Creek, The Southwestern Naturalists, Vol. 15, No. 1, June, 1970 138-140 p.

Berg L. S., 1947. Classification of Fishes Both Recent and Fossil, J. W. Edwards, Pub. Inc., Ann Arbor, Michigan.

American Fisheries Society, 1960. A List of Common and Scientific Names of Fishes From the United States and Canada, Special Publication No. 2, Waverly Press, Inc. 102 p.

Jordan, D. S., 1963. The Genera of Fishes and a Classification of Fishes, Stanford Univ. Press, Stanford, Calif., 500 p.

Moore J. A. et al., 1957. Fishes, In Vertebrates of the United States, McGraw-Hill Book Co., New York, pp. 31-210.

Sterba R., 1962. Freshwater Fishes of the World, Vista Books, London, 878 p.

Totleben D. T., 1969. A Survey of Fishes in Five
m. to an. research project.

