

INSTITUTE FOR FISHERIES RESEARCH
UNIVERSITY MUSEUMS
UNIVERSITY OF MICHIGAN
ANN ARBOR, MICHIGAN

Report 279

April 3, 1935

LIST OF THE FISHES OF MICHIGAN¹

Family PETROMYZONIDAE

1. Ichthyomyzon castaneus Girard

Western lamprey

Fairly common in the Great Lakes, less common in the larger streams of both peninsulas; rare in small streams; adults parasitic.

2. Ichthyomyzon fossor Reighard & Cummins

Michigan lamprey

Generally distributed throughout the lower peninsula; rare in the upper peninsula; usually in the smaller streams; has not been recorded from lakes; adults non-parasitic.

3. Petromyzon marinus Linnaeus

Sea lamprey

Very rare; recorded only from Lake Erie.

4. Entosphenus appendix (DeKay)

American brook lamprey

Generally distributed throughout the lower peninsula; rather rare in the upper peninsula though records well scattered; usually occurs in the smaller streams.

Family POLYDONTIDAE²

5. Polyodon spathula (Walbaum)

Paddlefish

One record, Lake Erie off Monroe.

Family ACIPENSERIDAE³

6. Acipenser fulvescens Rafinesque

Lake sturgeon

All of the Great Lakes; formerly occurring in great numbers at certain seasons in the larger rivers, now very rare at all times in these rivers.

¹ This list is not entirely complete as several subspecies of fish have purposely been left out such as the many forms of Leucichthys artedi, the lake herring. It is, however, complete enough for most practical purposes.

Family LEPISOSTEIDAE ⁴

7. Lepisosteus platostomus Rafinesque

Shortnose gar

Lower two tiers of counties in the southern peninsula; usually occurs in lakes, though occasionally in the larger rivers.

and present Lake St. Clair

8. Lepisosteus osseus (Linnaeus)

Longnose gar

Locally abundant in some lakes and larger rivers of the lower peninsula; no records for the upper peninsula; present in small numbers in Lakes Erie, St. Clair, Huron and Michigan, common in Saginaw Bay.

Family AMIIDAE ⁵

9. Amia calva Linnaeus

Dogfish

Locally abundant in some of the weedy lakes and larger, more sluggish streams of the lower peninsula, present also in Lakes Erie and St. Clair, and the lower half of Lakes Michigan and Huron including Saginaw Bay; apparently absent in the upper peninsula and Lake Superior.

Family HIODONTIDAE ⁶

10. Hiodon tergisus Le Sueur

Mooneye

Lakes Erie and St. Clair.

Family CLUPEIDAE ⁷

11. Dorosoma cepedianum (Le Sueur)

Gizzard shad

Lakes Erie and St. Clair; southern half of Lake Huron up to Saginaw Bay; probably in the southern end of Lake Michigan; ascends the larger rivers of southeastern Michigan for short distances.

12. Osmerus mordax (Mitchell)

American smelt

Lake Huron and tributaries in vicinity of Saginaw and Thunder bays; northern half of Lake Michigan and Green Bay and certain of their tributaries; a few lakes and streams in the Huron Mountains of the upper peninsula—introduced.

Family COREGONIDAE ⁶

13. Leucichthys artedi (Le Sueur)

Lake herring (and its many subspecies)

All the Great Lakes; many of the deeper inland lakes of both peninsulas; apparently represented in inland waters by several subspecies.

14. Leucichthys reighardi reighardi Koelz

Reighard cisco

Open waters of Lake Michigan.

15. Leucichthys reighardi dymondi Koelz

Dymond cisco

Open waters of Lake Superior.

16. Leucichthys zenithicus Jordan and Evermann

Shortjaw cisco

Open waters of Lakes Huron, Michigan and Superior.

17. Leucichthys alpenae Koelz

Longjaw cisco

Open waters of Lakes Huron and Michigan.

18. Leucichthys hoyi (Gill)

Bloater

Open waters of Lakes Huron, Michigan and Superior.

19. Leucichthys johannae (Wagner)

Deepwater cisco

Open waters of Lakes Huron and Michigan.

20. Leucichthys kiyi kiyi Koelz

Michigan kiyi

Open waters of Lakes Huron, Michigan and Superior.

21. Leucichthys nigripinnis nigripinnis (Gill)

Michigan blackfin

Open waters of Lakes Huron and Michigan.

22. Leucichthys nigripinnis cyanopterus Jordan and Evermann

Bluefin

Open waters of Lake Superior.

23. Coregonus clupeaformis Mitchill

Whitefish

There are several subspecies or local races of whitefish, the two most important of which are: C. c. clupeaformis, occurring in all the Great Lakes (except Erie) and in the deeper inland lakes such as Torch Lake; and C. c. latus Koelz, occurring in Lake Erie.

24. Prosopium quadrilaterale quadrilaterale (Richardson)

Menominee whitefish

Open waters of Lakes Huron, Michigan and Superior; a few of the larger inland lakes and some of the larger rivers in the northern half of the lower peninsula, and in the upper peninsula.

Family THYMALLIDAE ⁹

25. Thymallus tricolor Cope

Michigan grayling

Formerly not uncommon in some of the streams of the northern half of the lower peninsula and in some of the streams of the upper peninsula; now apparently present only in the Otter River; on verge of extinction.

Family SALMONIDAE ¹⁰

26. Salmo salar sebago Girard

Landlocked salmon

Repeatedly stocked in many Michigan lakes; a few records of capture of this species in northern Michigan; introduced.

27. Salmo fario Linnaeus

Brown trout

Locally abundant in many streams of the northern half of the lower peninsula; rare to uncommon in most of the southern half of the lower peninsula and in the upper peninsula; introduced.

28. Salmo gairdnerii irideus Gibbons

Rainbow or Steelhead trout

Occurs in most of the streams of the northern 2-thirds of the lower peninsula; occurs sparingly in some of the streams of the western part of the southern one-third of the lower peninsula; widely distributed in the streams of the

upper peninsula; rather abundant in Lake Michigan; not uncommon in Lakes Huron and Superior; common about Isle Royal; introduced.

29. Cristivomer namaycush namaycush (Walbaum)

Lake trout

Common to abundant in Lakes Huron, Michigan and Superior; rare in Lake Erie; not uncommon in some of the larger inland lakes of the upper half of the lower peninsula and ~~in~~ ^{of} the upper peninsula; as a whole more abundant northward.

30. Cristivomer namaycush siscowet (Agassiz)

Siscowet

A doubtful subspecies of lake trout said to occur in Lake Superior and intergrading there with the nominal subspecies.

31. Salvelinus fontinalis fontinalis (Mitchill)

Brook trout

Common to abundant in the northern half of the lower peninsula; uncommon to rare in the southern half of the lower peninsula; well distributed over the upper peninsula; occurs in some inland lakes and in Lake Superior; introduced. ?
Another subspecies S. f. hudsonius (Suckley) has been introduced in some of the trout waters of the state.

Family CATOSTOMIDAE "

32. Ietiobus niger (Rafinesque)

Black buffalo

Southern Lake Michigan, and about mouth of larger rivers as far north as Black Lake in Ottawa County.

33. Carpionodes cyprinus (Le Sueur)

Quillback

Lakes Erie and St. Clair; southern Lake Huron north to Saginaw Bay; southern Lake Michigan north to mouth of the Muskegon River; inland Michigan in lower peninsula only and then north only to Townline 20.

34. Catostomus commersonnii commersonnii (Lacépède)

White sucker

General and usually abundant in the lakes and streams of both upper and lower peninsulas and Isle Royal; common to abundant in all the Great Lakes.

35. Catostomus catostomus (Forster)

Sturgeon sucker

Rare in Lakes Erie and St. Clair; rare in southern halves of Lakes Huron and Michigan; uncommon to common in northern halves of Lakes Huron and Michigan, and in Lake Superior; present in some of the larger rivers and

inland lakes of the lower peninsula north of Townline 20; present in rivers and some of the lakes of the upper peninsula.

36. Hypentelium nigricans (Le Sueur)

Hog molly

Locally abundant throughout the lower peninsula; rare to absent in the upper peninsula, except for Menominee and Dickinson counties where it is locally common; occasionally specimens are taken in the Great Lakes, especially Lake Erie; its preferred habitat is moderate-sized warm, sandy streams.

37. Erimyzon sucetta kennerlyi (Girard)

Lake chubsucker

Lakes and occasionally streams of southern portion of lower peninsula north to Townline 20; occasionally taken in Lakes Erie and St. Clair; and the southern halves of Lakes Huron and Michigan; also Saginaw Bay.

38. Erimyzon oblongus claviformis (Girard)

Creek chubsucker

Smaller streams of the southern tier of counties in the lower peninsula.

39. Minytrema melanops (Rafinesque)

Spotted sucker

Occasionally taken in Lake Erie and southern part of Lake Michigan; occurs sparingly in the larger streams of southeastern Michigan; possibly in larger streams of southwestern Michigan.

40. Moxostoma duquesnii (Le Sueur)

Black mullet

Found sparingly in larger creeks and rivers of southern part of lower peninsula, north to Townline 20.

41. Moxostoma rubreques Hubbs

Large redbhorse

Rather generally common in the larger streams of the southern part of the lower peninsula north to Townline 20; locally common above Townline 20 in lower peninsula; rather rare in the streams of the upper peninsula; occasionally taken in portions of the Great Lakes, especially Saginaw Bay.

42. Moxostoma erythrurum (Rafinesque)

Golden mullet

Well distributed and common in most of the streams and rivers of the southern part of the lower peninsula north to Townline 20; locally common north of Townline 20 in lower peninsula; fairly rare in Menominee County in the upper peninsula, rare to absent elsewhere in the upper peninsula; occasional specimens taken from the southern halves of Lakes Huron and Michigan and from Lakes Erie and St. Clair; essentially a stream species.

43. Moxostoma anisurum (Rafinesque)

Silver mullet

Present though uncommon in the larger streams and rivers of the lower peninsula; occasionally taken in Lakes Erie and St. Clair; southern Lake Huron north to Thunder Bay; southern Lake Michigan north at least to mouth of Muskegon River.

44. Moxostoma aureolum (Le Sueur)

Northern redhorse

Uncommon to rare in the inland lakes and larger streams of both Michigan peninsulas; occurs in all the Great Lakes, and is especially abundant in Lakes Erie and St. Clair.

Family CYPRINIDAE

45. Cyprinus carpio Linnaeus

Carp

Locally common to abundant in many streams and lakes of the lower peninsula; rare to absent in most of the upper peninsula; common to abundant in the shallower portions of the southern halves of Lakes Huron and Michigan; very abundant in shallow waters of Lakes Erie and St. Clair.

46. Carassius auratus (Linnaeus)

Goldfish

Locally common in some lakes and streams of southern and southeastern Michigan; common in shallower waters of Lake St. Clair; abundant in shallower waters of Lake Erie.

47. Couesius plumbeus (Agassiz)

Lake chub

Essentially inhabiting the shores, mouths of streams and adjacent waters of Lake Superior and the shores of the northern halves of Lakes Huron and Michigan and adjacent mouths of streams; most numerous northward.

48. Nocomis biguttatus (Kirtland)

Hornyhead chub

Common throughout the upland rather weedy streams of the lower peninsula; uncommon to absent in the upper peninsula though locally common in Menominee County.

49. Nocomis micropogon (Cope)

River chub

Locally common in the lower peninsula, most numerous in the larger streams of the eastern or southeastern part; rarely occurs in inland lakes.

50. Hybopsis storerianus (Kirtland)

see books check list page 32

Silver chub

Apparently found only in Lake Erie where it is common.

51. Hybopsis amblops (Rafinesque)

- same, - see books.

Bigeye chub

Creeks and streams of southeastern Michigan; locally common.

52. Rhinichthys atronasmus meleagris Agassiz

Western blacknose dace

Generally distributed throughout Michigan, especially abundant in the smaller, colder streams; is one of the dominant fishes in trout streams, uncommon to absent in inland lakes; does not occur in the open waters of the Great Lakes.

53. Rhinichthys cataractae (Cuvier & Valenciennes)

Longnose dace

Occurs in the colder streams of the northern half of the lower peninsula; streams of the upper peninsula; along the shores of Lake Superior and the shores of the northern halves of Lakes Huron and Michigan; an inhabitant of trout waters, sometimes replacing Rhinichthys atronasmus meleagris in the colder trout streams.

54. Semotilus atromaculatus atromaculatus (Mitchill)

Northern creek chub

Common to abundant in most of the creeks and streams of the entire state; occasional individuals found in inland lakes; has a decided preference for the smaller creeks; one of the common minnows.

55. Margariscus margarita nachtriebi (Cox)

Northern dace

Common locally in the colder streams of the northern two-thirds of the lower peninsula; common locally in the streams of the upper peninsula; abundant on Isle Royal; occasional individuals found in the northern inland lakes and along the shores of Lake Superior and the shores of the northern halves of Lakes Huron and Michigan.

56. Pfritte neogaeus (Cope)

Finescale dace

A northern bog stream and inland lake species, locally common in the northern two-thirds of the lower peninsula; common in the bog streams and lakes of the upper peninsula; common on Isle Royal.

57. Clinostomus elongatus (Kirtland)

Redside dace

Present in a few small streams of southeastern Michigan; rare.

58. Opsopoeodus emiliae Hay

Pugnose minnow

Present in a few streams in southeastern Michigan; rare.

59. Notropis heterodon (Cope)

Blackchin shiner

Locally common to abundant in the inland lakes, less common in the weedy streams, of the lower peninsula; present in lakes and weedy streams of the upper peninsula though records of this fish's occurrence there are widely scattered.

60. Notropis nux richardsoni Hubbs & Greene

Richardson shiner.

Inhabits a few of the larger streams of southwestern Michigan.

61. Notropis anogenus Forbes

Pugnose shiner

A rare species; recorded from a few widely separated localities in the lower peninsula; not recorded from the upper peninsula; a small shiner, living in very weedy lakes and sluggish, weedy streams.

62. Notropis heterolepis heterolepis Eigenmann & Eigenmann

Northern blacknose shiner

Well distributed over the entire state including Isle Royal, most numerous in somewhat weedy lakes and sluggish or weedy sections of streams; taken occasionally in the weedy shallows of the Great Lakes.

63. Notropis volucellus volucellus (Cope)

Mimic shiner

Well distributed over the entire state including Isle Royal,—becoming increasingly scarce northward; also present in some of the shallow waters of the Great Lakes; inhabits lakes and sluggish streams and shows a decided preference for quiet waters, a mud or silt bottom and little or no aquatic vegetation.

64. Notropis deliciosus stramineus (Cope)

Northern sand shiner

Widely scattered and locally common in the streams and larger inland lakes of the lower peninsula; a few widely scattered records for the upper peninsula; not known from Isle Royal; present in some of the shallowwaters of the Great Lakes; decidedly prefers sandy bottoms, and currents in streams or wind swept beaches in lakes.

65. Notropis dorsalis dorsalis (Agassiz)

Bigmouth shiner

Some of the stream systems of the central and western parts of the lower peninsula; a few streams of the northwestern part of the upper peninsula; prefers sandy portions of streams.

66. Notropis hudsonius hudsonius (Clinton)

Great Lakes spottail shiner

This subspecies is abundant in Lakes Erie, St. Clair, Huron and Michigan; records for the interior portion of the state are rather few though widely scattered; when present in the interior, it occurs usually in the larger rivers and the larger inland lakes.

67. Notropis hudsonius selene (Jordan)

Northwestern spottail shiner

This subspecies occurs in Lake Superior where it is common to abundant.

68. Notropis whipplii spilopterus (Cope)

Northern steel-colored shiner

Common only in the extreme southern part of the lower peninsula though occurring sparingly north to Townline 20; found most frequently in weedless pools of rather sluggish streams; occasionally a few are found in an inland lake.

69. Notropis atherinoides Rafinesque

Lake shiner

Extremely abundant in all the Great Lakes, except possibly Lake Superior where it is at least common; occurs inland only in the larger waters adjacent to the Great Lakes; a most important forage fish and one of the principal foods of the adults of our most prized, commercial fishes.

70. Notropis photogenis (Cope)

Silver shiner

Present in the riffles of only a few of the larger streams of southeastern Michigan.

71. Notropis rubellus (Agassiz)

Rosy shiner

Widely distributed over the lower peninsula, common locally; rather rare in the upper peninsula though records widely scattered; an inhabitant of the faster waters of clean streams that are not too cold.

72. Notropis cornutus chrysocephalus (Rafinesque)

Mississippi common shiner

The two subspecies of N. cornutus, together with their intergrades, make this one of the most abundant shiners in Michigan. The present subspecies is found in typical form only in portions of the most southern 3 tiers of counties, and in the counties of the thumb district; occurs most commonly in the smaller streams though present in the larger ones and in some inland lakes.

73. Notropis cornutus frontalis (Agassiz)

Northern common shiner

Occurs in more or less typical form from Towlne 20 northward, including the upper peninsula; also present in fairly typical form in the coldest streams of the lower half of Michigan south of Towlne 20; an inhabitant of the smaller streams where it is usually very common, present in smaller numbers in the larger rivers and in some inland lakes; occasionally taken in the shallow waters of the Great Lakes.

74. Notropis umbratilis cyanocephalus (Copeland)

Northern redbelly shiner

Records of this fish's occurrence are widely scattered in the lower peninsula, common only in the extreme southeast portion; absent in the upper peninsula; occurs primarily in the more sluggish portions of the larger streams.

75. Ericymba buccata Cope

Silverjaw minnow

Present in the sandy portions of a few streams of extreme southern Michigan in the Lake Erie drainage.

76. Notemigonus crysoleucas auratus (Rafinesque)

Rather generally distributed over the entire state; most abundant in weedy quiet, portions of lakes and inland streams; present in numbers in the weedy shallows of the Great Lakes.

77. Hybognathus hankinsoni Hubbs

Brassy minnow

Occurs in widely separated areas throughout the northern two-thirds of the lower peninsula; widely distributed and locally common in the upper peninsula; a minnow of upland, medium-sized streams.

78. Chrosomus erythrogaster Rafinesque

Southern redbelly dace

Confined to a few of the smaller streams of southeastern Michigan.

79. Chrosomus eos Cope

Northern redbelly dace

In the smaller bog streams and small lakes throughout both peninsulas; most abundant in the northern sections of the state; sometimes an abundant minnow in beaver ponds.

80. Hyborhynchus notatus (Rafinesque)

Bluntnose minnow

Probably the most abundant and universal minnow in the state, occurring throughout the whole of both peninsulas; though not on Isle Royal; also found in some numbers in the protected shallows of the Great Lakes; occurs in all sizes of streams and lakes but shows a slight preference for medium-sized streams and the smaller lakes.

81. Pimephales promelas promelas Rafinesque

Northern fathead minnow

Well distributed though widely scattered throughout both peninsulas and Isle Royal; prefers medium to small sized streams; occasionally found in shallows of Lake Erie.

82. Campostoma anomalum pullum (Agassiz)

Mississippi stoneroller minnow

In Michigan occurs only south of Townline 20 in the lower peninsula; numerous only in extreme southern Michigan; inhabits medium to small streams; occurs rarely in lakes.

Family AMEIURIDAE ¹³

83. Ictalurus punctatus (Rafinesque)

Channel catfish

Widely distributed and fairly general in the larger streams and rivers of the southern two-thirds of the lower peninsula; present in a few of the larger inland lakes; very common in Lakes Erie and St. Clair; fairly common in the southern halves of Lake Huron and Michigan.

84. Villarius lacustris (Walbaum)

Northern catfish

All the Great Lakes except Lake Superior; sometimes ascending the larger streams a short distance from their mouths; apparently a rare and little known species.

85. Ameiurus melas melas (Rafinesque)

Northern black bullhead

Ranges throughout the whole of the lower peninsula, though common only in the southern half; present in a few widely separated localities in the upper peninsula; inhabits sluggish warm, streams, rivers and lakes; rather abundant in Lakes Erie and St. Clair; common in the southern halves of Lakes Huron and Michigan, less common in the northern halves.

86. Ameiurus nebulosus nebulosus (Le Sueur)

Northern brown bullhead

Ranges throughout the whole of the lower peninsula, though more common in the southern half; is rather rare in the upper peninsula; an inhabitant of sluggish and rather deep streams and lakes; more abundant and widespread in inland Michigan than is the preceding; fairly abundant in the lower Great Lakes and especially Lake Erie.

87. Ameiurus natalis natalis (Le Sueur)

Northern yellow bullhead

Generally distributed and rather common throughout most of the lower peninsula; fairly uncommon in the upper peninsula, as a whole, though it is rather common in Menominee County; an inhabitant of clear streams and lakes; prefers some aquatic vegetation; the most common of the three species of bullheads; occurs in some numbers in the lower Great Lakes, especially Lake Erie and southern Lake Michigan.

88. Pilodictis olivaris (Rafinesque)

Shovelhead catfish

Very rare; records of the capture of a few specimens in the larger rivers of southwestern Michigan.

89. Noturus flavus Rafinesque

Yellow stonecat

Widely distributed over the southern two-thirds of the lower peninsula, principally occurs in the larger streams; very numerous in Lake Erie, less so in Lake St. Clair and the southern halves of Lakes Huron and Michigan.

90. Schilbeodes gyrinus (Mitchill)

Tadpole madtom

Widely though sparingly distributed throughout the lower peninsula, rare or absent in most of the upper peninsula, except in Menominee County where it is locally numerous; occurs sparingly in the very shallow weedy waters of the southern half of the Great Lakes, an inhabitant of mud bottomed and weedy lakes and sluggish, weedy portions of streams.

91. Schilbeodes exilis (Nelson)

Slender madtom

Very rare in this state; one record, Tiffin River, Lenawee County.

92. Schilbeodes eleutherus (Jordan)

Longnose madtom

Occurs only in the riffles of a few streams of extreme southeastern Michigan.

93. Schilbeodes miurus (Jordan)

Brindled madtom

Occurs only in the riffles of a few streams of southeastern Michigan north to Saginaw Bay.

Family UMBRIDAE

94. Umbra limi (Kirtland)

Western Mudminnow

Widely and generally distributed over the entire state, except possibly Isle Royal: an inhabitant of springs, small cool creeks and small streams and lakes which have a muddy bottom and with or without aquatic vegetation; a trout stream species; rarely taken in the shallow waters adjacent to the Great Lakes.

95. Esox vermiculatus Le Sueur *(with picture)*

Western mud pickerel

Present only in the southern half of the lower peninsula and is abundant only in the extreme lower tiers of counties; an inhabitant of weedy, muddy sluggish streams and lakes; occurs sparingly in the weedy lagoons and shallow waters of Lakes Erie and St. Clair.

96. Esox lucius Linnaeus

Northern pike

Widespread and general throughout both peninsulas and Isle Royal; common to abundant in many inland lakes and the larger streams; especially those having extensive weed beds; occasionally taken in the shallows or more open waters of all the Great Lakes.

97. Esox masquinongy masquinongy Mitchill

Great Lakes muskallunge

With few exceptions, such as Gull Lake, this species is absent in interior Michigan; occurs sparingly in the adjacent and open waters of all the Great Lakes; is locally common at certain seasons in portions of the St. Marys River; on the whole an uncommon species and one that is apparently on the decrease.

Family ANGUILLIDAE

98. Anguilla bostoniensis (Le Sueur)

American eel

Introduced years ago in many localities in the lower peninsula. At present very rare.

Family CYPRINODONTIDAE

99. Fundulus diaphanus menona Jordan & Copeland

Menona Killifish

Widely distributed throughout the lower peninsula; rare in the upper peninsula as it is at present only recorded from Menominee County; is entirely absent from the Lake Superior drainage, occurs in fair numbers in the shallow, protected waters of all the Great Lakes except Superior, more numerous southward; an inhabitant of fairly warm, weedy lakes and sluggish, weedy streams.

100. Fundulus dispar (Agassiz)

Starhead topminnow

Found only in a few lakes in Hillsdale and Branch counties.

101. Fundulus notatus (Rafinesque)

Blackband topminnow

Recorded only from a few lakes and sluggish streams in the southern fourth of the lower peninsula.

Family PERCOPSIDAE ¹⁷

102. Percopsis omiscomaycus (Walbaum)

Trout-perch

Practically absent from interior Michigan; common to abundant in the waters immediately adjacent to the Great Lakes and in the Great Lakes themselves.

Family APHREDODERIDAE ¹⁸

103. Aphredoderus sayanus (Gilliams)

Pirate perch

Occur sparingly in a few widely separated localities in the lower peninsula south of Townline 20.

Family SERRANIDAE ¹⁹

104. Lepibema chrysops (Rafinesque)

White bass

Present in a few inland lakes in the southern half of the lower peninsula; chiefly confined to the adjacent and open waters of Lakes Erie and St. Clair and the southern two-thirds of Lakes Huron and Michigan; abundant only in Lake Erie.

Family PERCIDAE ²⁰

105. Perca flavescens (Mitchill)

Yellow Perch

Widely and generally distributed throughout both peninsulas and Isle Royal; and an abundant species in most inland lakes, much less common in streams and rivers; an abundant species in all the Great Lakes waters, though preferring the shallows and less deep portions of these lakes.

106. Stizostedion canadense canadense (Smith)

Sauger

Present though rather rare in the larger rivers of the lower peninsula; abundant in Lake Erie, less so in Lake St. Clair; fairly common in the southern half of Lake Huron and in Saginaw Bay; occurs sparingly in southern Lake Michigan.

107. Stizostedion vitreum (Mitchill)

Yellow pike-perch

Wide spread and generally common in the larger inland lakes and large rivers of both peninsulas; generally common in the Great Lakes and one of the important commercial species, especially in Lakes Erie, Huron and Michigan.

108. Stizostedion glaucum Hubbs

Blue pike-perch

Only from Lake Erie.

109. Hadropterus maculatus (Girard)

Blackside darter

Widespread and quite generally distributed in the lower peninsula; absent in the Lake Superior drainage; rare in the Lake Michigan drainage of the upper peninsula, except locally in Dickinson and Menominee counties; an inhabitant of medium to large streams.

110. Percina caprodes semifasciata (De Kay)

Northern logperch

Widespread throughout both peninsulas though not evenly distributed; present on Isle Royale; an inhabitant of the larger rivers and larger inland lakes, also an inhabitant of the shallow, more protected waters of the Great Lakes.

111. Cottogaster copelandi (Jordan)

Channel darter

Found sparingly along the shores of Lake Erie and in Lake Huron north to Saginaw Bay.

112. Imostoma shumardi (Girard)

River darter

At present known only from Saginaw Bay and the lower reaches of the Au Sable River.

113. Ammocrypta pellucida (Baird)

Sand darter

Present in only a few streams of extreme southeastern Michigan.

114. Boleosoma nigrum nigrum (Rafinesque)

Western johnny darter

The most generally distributed and abundant of all the darters, being present in all sizes of streams and most of the lakes of both peninsulas; also present in small numbers in the more sheltered shallows of the Great Lakes; more abundant southward.

115. Poecilichthys coeruleus (Storer)

Rainbow darter

Occurs throughout the lower peninsula though with few exceptions, common only in the southern one-third; usually found in the riffles of moderate-sized streams; rarely found in lakes.

116. Poecilichthys spectabilis Agassiz

Orangethroat darter

Found sparingly in the two most southern tiers of counties in the lower peninsula; less common than the preceding; usually an inhabitant of small creeks, rarely lakes.

117. Poecilichthys exilis (Girard)

Iowa darter

Widely distributed and locally abundant throughout both peninsulas and Isle Royal; an inhabitant of weedy, mud-bottomed lakes and weedy sluggish streams; a few occur in the more sheltered, weedy and shallow portions of the Great Lakes.

118. Catnotus flabellaris flabellaris (Rafinesque)

Barred fantail darter

Local populations in widely scattered localities in the southern two-thirds of the lower peninsula; an inhabitant of small, rather warm streams.

119. Catnotus flabellaris lineolatus Agassiz

Striped fantail darter

Apparently confined to the western half of the Lake Michigan drainage in the upper peninsula; an inhabitant of the smaller streams.

120. Microperca punctulata Putnam

Northern least darter

Local populations in widely scattered localities in both peninsulas; more numerous in the lower peninsula; an inhabitant of sluggish, somewhat weedy and rather cold small streams and weedy lakes.

121. Etheostoma blennioides blennioides Rafinesque

Northern greenside darter

Southern one-fourth of the lower peninsula; occurs in riffles of creeks and streams.

Family CENTRARCHIDAE

122. Micropterus dolomieu Lacépède

Smallmouth bass

Widely distributed and generally common throughout the lower peninsula; less well distributed and less common in the upper peninsula; common in the shallower waters of Lakes Erie, St. Clair, Huron and Michigan, less common in Lake Superior; an inhabitant of the warmer streams and especially those having considerable gravel and rock bottom; also inhabits the clearer, rocky and gravelly lakes.

123. Aplites salmoides (Lacépède)

Largemouth bass

Widely distributed and common to abundant in the lower peninsula; much less common and less well distributed through the upper peninsula; common in the shallow, weedy waters of the lower Great Lakes and their adjacent bayous and lakes; an inhabitant of the warmer and more sluggish streams and weedy areas of lakes.

124. Chaenobryttus gulosus (Cuvier & Valenciennes)

Warmouth bass

Widely distributed though not general in the southern half of the lower peninsula; common only in a few lakes of the lower two tiers of counties; an inhabitant of warm, weedy lakes and weedy, sluggish, warm streams.

125. Apomotis cyanellus (Rafinesque)

Green sunfish

Widely though not uniformly distributed in the lower peninsula and abundant only in a few lakes in the extreme southern part; absent or else extremely rare in the upper peninsula excepting in Menominee County where it occurs in a few lakes; an inhabitant of small streams and sheltered portions of lakes.

126. Helioperca macrochira (Rafinesque)

Bluegill

Widely distributed and generally abundant throughout the lower peninsula, and especially the southern half; much less common in the upper peninsula, in fact it apparently is not native to the Lake Superior watershed; chiefly an inhabitant of lakes though occasionally found in some numbers in the quiet portions of streams and rivers; congregated about weed beds though living in waters where such beds are absent; also found in the shallow waters of Lakes Erie and St. Clair and the southern halves of Lakes Huron and Michigan.

127. Xenotis megalotis peltastes (Cope)

Northern longear sunfish

Widely distributed though not generally common throughout the lower peninsula, locally abundant only in the extreme southern part of the lower peninsula; absent in the upper peninsula; an inhabitant of the shallows in lakes and in small and not too swiftly flowing creeks and streams.

128. Eupomotis gibbosus (Linnaeus)

Pumpkinseed (also called common sunfish)

Widely distributed and generally abundant throughout the lower peninsula, especially in the inland lake regions of the southern half; much less abundant and less well distributed in the upper peninsula; chiefly an inhabitant of lakes though occurring sparingly in the most quiet and weedy portions of streams; usually found near or in weed beds, showing a greater preference for aquatic vegetation than does the bluegill; also found in the shallow, more weedy waters of Lakes Erie and St. Clair and the southern halves of Lakes Huron and Michigan.

129. Ambloplites rupestris (Rafinesque)

Rock bass

Well distributed and quite generally abundant throughout the lower peninsula; less well distributed and less abundant in the upper peninsula; fairly common in the shallow and less open waters of the lower portions of the Great Lakes; occurs in streams having a fair to rapid flow and a hard clean bottom of gravel, bedrock or sand; also occurs in those portions of lakes where there are fairly hard, clean bottoms.

130. Pomoxis annularis Rafinesque

White crappie

A comparatively rare species being noted only from a few widely separated localities in the southern third of the lower peninsula, common only in Lake Erie and immediately adjacent waters and there only locally; usually occurs in sluggish, or quiet, and rather turbid water over a silt or mud bottom.

131. Pomoxis sparoides (Lacépède)

Black crappie

Widely distributed though only locally common throughout the lower peninsula; much rarer in the upper peninsula where it is largely confined to the western half; also not uncommon in the shallower waters of all the Great Lakes except possibly Lake Superior; inhabits lakes and the quietest portions of streams and rivers, and prefers a clean bottom and clear water; while not definitely requiring weed beds it is often found among them.

Family ATHERINIDAE >^

132. Labidesthes sicculus sicculus (Cope)

Northern silversides

Locally common only in the southern fourth of the lower peninsula though occurring sparingly throughout that peninsula; fairly common in portions of Lakes Erie and St. Clair and the southern halves of Lakes Huron and Michigan; not recorded for the upper peninsula; most numerous in lakes though sometimes present in small numbers in streams.

Family SCIAENIDAE ²³

133. Aplodinotus grunniens Rafinesque

Sheepshead

Primarily a lower Great Lakes species, occurring commonly in Lakes Erie and St. Clair, and the southern halves of Lakes Huron and Michigan; less commonly in the northern halves of Lakes Huron and Michigan; apparently absent in Lake Superior; does not occur inland except in those lakes immediately adjacent to the Great Lakes and in the mouths of the larger rivers.

Family COTTIDAE ²⁷

134. Trigloopsis thompsonii Girard

Deepwater sculpin

A deep water species found only in the Great Lakes. Several records for Lakes Huron, Michigan and Superior; no records for Lakes Erie and St. Clair.

135. Cottus bairdii bairdii Girard

Northern muddler

Widely distributed and generally common throughout most of the two peninsulas; primarily a fish of moderately cold springs, creeks and streams; occurs less commonly in the larger rivers and inland lakes; present in more or less typical form in Lake Erie.

136. Cottus bairdii kumlieni (Hoy)

Great Lakes muddler

This is the Great Lakes subspecies of Cottus bairdii, found in Lake Superior and on Isle Royal, and Lakes Huron and Michigan; not recorded from Lakes Erie and St. Clair.

137. Cottus cognatus Richardson

Slimy muddler

Typically a trout streams species, occurring in the northern half of the lower peninsula and throughout the upper peninsula and Isle Royal; occasionally found in the colder inland lakes.

138. Cottus ricei Nelson

Spoonhead muddler

Occurs principally in Lake Superior, lakes and streams of Isle Royal, and the northern halves of Lakes Huron and Michigan, though also in a few of the deepest inland lakes immediately adjacent to the Great Lakes; usually a deep water species.

Family GASTEROSTIDAE ³¹

139. Eucalia inconstans (Kirtland)

Brook stickleback

Widespread and generally distributed throughout both peninsulas and Isle Royal; an abundant inhabitant of the dense vegetation of cold springs, creeks, trout streams and bog lakes; not adverse to acid water; occurs sparingly in the dense vegetation in the shallows of the Great Lakes.

140. Pungitius pungitius (Linnaeus)

Nine-spined stickleback

Primarily confined to Lakes Huron, Michigan and Superior, though also present on Isle Royal and in a few of the larger inland lakes in the lower peninsula, such as Gull and Higgins lakes.

Family GADIDAE ^{2'}

141. Lota maculosa (Le Sueur)

American burbot

An abundant species in all the Great Lakes including Lake St. Clair; occurs sparingly in some of the larger rivers and lakes of the northern half of the lower peninsula, and sparingly in the larger rivers and lakes of the upper peninsula and Isle Royal.

INSTITUTE FOR FISHERIES RESEARCH

Milton B. Trautman

Milton B. Trautman
Assistant Director

INSTITUTE FOR FISHERIES RESEARCH
UNIVERSITY MUSEUMS
UNIVERSITY OF MICHIGAN
ANN ARBOR, MICHIGAN

April 17, 1935

Mr. Fred A. Westerman
Fish Division
Department of Conservation
Lansing, Michigan

Dear Mr. Westerman:

Your criticisms on the Michigan fish list in your letter of April 12, are most proper. However, I feel that I should make further comments on these particular points. The records of muskallunge are much appreciated by us.

Since being reminded of it by you, I now remember that Mr. Hinrichs showed me a shortnose gar from Black Lake, Ottawa County. I suggest that you incorporate in your copy of this list under the shortnose gar (p. 2, no. 7) "Also north in southwestern Michigan to Black Lake, Ottawa County".

Upon having my attention called to it, I now believe that in the brook trout (p. 5, no. 31) "introduced" without qualifications is misleading. It should read "largely introduced". I strongly suggest that the introduced part be left in for too many fishermen believe that the brook trout is native to all or most of the Michigan streams, ^{and} ~~also~~ that the Conservation Department is attempting to get credit it does not deserve by maintaining that it was their general stocking that gave the fish its present wide spread distribution. This ~~false~~ impression of fishermen should be corrected.

There is no doubt in my mind that the brook trout is native in some of the streams in the western part of the Upper Peninsula, but I personally am not so sure about the streams of the northern part of the Lower Peninsula. That brook trout were not in all the streams in the northern half of the Lower Peninsula is most strange. There is no doubt but that this species (which so closely followed the retreat of the glaciers) should have established itself throughout the upper half of the Lower Peninsula, for it surely had the opportunity to do so. If we find that we must accept the statement that they did occur in the northern half of the Lower Peninsula then we must find out why they were not abundant and widespread in that area. Surely the streams from a standpoint of water temperature, abundant food and cover were as favorable then as they have been since the white man's coming. Was this absence of brook trout in these potential trout streams due to competition by beaver in the head water streams (the principal habitat of the brook trout) and competition in the large streams by the grayling?

Concerning the muskallunge (p. 14, no. 97): I believe that my statement "with few exceptions, such as Gull Lake, this species is absent in interior Michigan" is correct and in fact agrees with your list of locations mentioned in your letter, for these localities are all (except Barry County one of the "few exceptions") "in the adjacent and open waters of all the Great Lakes".

That the muskallunge has greatly decreased in numbers in most local-

ities is beyond all doubt. For instance, in western Lake Erie this species 75 years ago was quite abundant. In the spring it came up the lake tributaries to spawn (both Michigan and Ohio) where it was captured in large numbers. Today it has decreased in numbers so that it is a rare to uncommon fish in Lake Erie. During the height of the spring commercial fishing season I have never seen more than 6 muskallunge come into the Sandusky fish houses in one day. The greatest number taken in a small locality in inland Ohio, was some 75 that were caught in one pool in 1932 in the Maumee River.

I am afraid that if something is not done, muskallunge fishing in Michigan and Ohio is doomed. We as yet know so little about the life history of this fish. Personally, I believe that there are two distinct races of muskallunge in Michigan but which one would be the best to increase or propagate I do not know. I had expected before this to have time to study muskallunge but as yet have found neither the time nor been able to obtain the necessary specimens.

Some fishermen call an extra large pike a muskallunge, not realizing that pike grow fully as large as do muskallunge.

Sincerely yours,

Milton B. Trautman

Milton B. Trautman
Assistant Director

MET:B

April 12, 1935

Institute for Fisheries Research
University Museums Bldg.
Ann Arbor, Michigan

Attention: Milton B. Trautman, Ass't Curator of Fishes

Dear Mr. Trautman:

Receipt is acknowledged of your letter of April 4th and report No. 279- "List of Fishes in Michigan", for which we thank you. This information is expected to be used by the Educational Division in the schools and by the field personnel probably in somewhat revised or extended form. You will undoubtedly have an opportunity for passing on it again before placed for distribution.

In hurriedly checking this report I have several suggestions of a minor nature in which you might be interested.

On page 2, number 7, carp seining operations on Black Lake in Ottawa County during the past winter reveal that almost one-half of the numerous gar taken at one particular seine haul were of the short nose variety. This of course is only slightly north of the counties you mention.

On page 5, number 31, brook trout, the statement "introduced" is questioned. You undoubtedly know that the brook trout is native to the streams of the upper peninsula and northern part of the lower peninsula,- overlapping somewhat into the native grayling territory. The range of the brook trout in the state was extended by planting into the grayling streams and also into the streams of the southern part of the state.

On page 14, number 97, muskellunge, I do not know whether your records indicate the range of this species within the state as evidenced by reports of catches from the following waters:

Antrim County - Lake Ballaire and Clan Lake
 Antrim & Grand Traverse - Elk Lake
 Antrim & Kalkaska - Torch Lake
 Barry County - Gun Lake and Thornapple Lake
 Benzie County - Platte Lake
 Cheboygan County - Black Lake, Burt Lake, Indian River, Mullet Lake.
 Chippewa County - St. Mary's River (Munuscong Bay & Duck Lake)
 Gogebic County - Lac Vieux Desert
 Leelanau County - Lake Leelanau
 Luce County - Muscalonge Lake
 Mackinac County - Brevort Lake
 Mason County - Hamlin Lake, Pere Marquette Lake
 Muskegon County - Bear Lake
 Oceana County - Pontwater Lake
 Ottawa County - Black Lake, Spring Lake
 St. Clair & Macomb Counties - Lake St. Clair

Some unusually fine specimens have been taken, especially in Big Platte, Hamlin, and Gun Lakes and Lake St. Clair during the past winter. It was recently reported that one individual speared fifteen muskellunge in one week's time on Lake St. Clair; another party took a considerable number on Gun Lake in Barry County. Although we cannot say that muskellunge are particularly abundant, being taken chiefly by means of a spear during the winter season and occasionally during the summer season when fishing for other species, we do not desire to minimize the importance of the muskellunge or its appeal to our resident and non-resident fishermen. The Department receives a large number of inquiries from outside the state each year pertaining to muskellunge fishing in Michigan. We do not wish to create the wrong impression but do desire to capitalize on that which we have.

Your cooperation in furnishing this report is appreciated.

Very truly yours,

DEPARTMENT OF CONSERVATION

MJD:er

F.A. Westerman
FISH DIVISION

INSTITUTE FOR FISHERIES RESEARCH
UNIVERSITY MUSEUMS
UNIVERSITY OF MICHIGAN
ANN ARBOR, MICHIGAN

April 4, 1935

Mr. Martin De Boer
Fish Division
Department of Conservation
Lansing, Michigan

Dear Mr. De Boer:

I am sorry to have been unable to give you the enclosed and long promised list of Michigan fishes before this. We not only did not have the time to prepare this list before this, but it took us a much longer time than we originally anticipated.

It was well worth the effort however, for it gave us information much needed by both the Institute and the Museum. It was something which should have been done long ago. The information on this list, while very brief, is quite dependable, and the conclusions made there have not been merely guessed at.

I was really much impressed with some facts which were brought forth by the research of getting this list together. For example:

Despite the fact that Michigan is larger in size and has more inland lakes and a greater expanse of Great Lakes than has any other state bordering it, Michigan apparently has the least total number of fish species (not individual fish). Leaving out some questionable subspecies of ciscoes and whitefishes, the Michigan list totals only 141 species, while Ohio has a list of 163, Indian and Illinois more than 155 and Wisconsin 148. There seem to be two reasons for this (1) that almost half of the area of each of the other states lies in the Mississippi drainage, which contains species of fish unknown to Great Lakes waters and (2) that these other states, though considerably behind Michigan in most lines of practical fisheries work, have through one state department or another, conducted or are conducting general systematic surveys of the fish distribution of their respective states—a thing which Michigan has done but little.

Hoping we have caused you no great inconvenience in not getting the list ready before this, I remain,

Sincerely yours,

INSTITUTE FOR FISHERIES RESEARCH

Milton B. Trautman

Milton B. Trautman
Assistant Curator of Fishes