ATLAS

To Accompany a Report on the

Fishes of Illinois

S. A. FORBES  R. E. RICHARDSON
Maps
Showing Distribution of Illinois Fishes
to Accompany a Report on the
Fishes of Illinois

BY

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LIST OF MAPS

The general map of the distribution of collections (Map IV.) shows, by the location of the red spots, all the localities from which collections of fishes have been made by us in the work of the Natural History Survey. The distribution maps for the various species indicate in the same way all the localities from which representatives of the species have been taken. For an accurate idea of the significance of these species maps, each should be compared with Map IV.

The following numbered list of the counties of the state corresponds to the figures on these maps.

1. Jo Daviess 35. Hancock 69. Madison
2. Stephenson 36. McDonough 70. Bond
3. Winnebago 37. Fulton 71. Fayette
7. Cook 41. Vermilion 75. Lawrence
8. Du Page 42. Champaign 76. Richland
9. Kane 43. Piatt 77. Clay
10. DeKalb 44. Dewitt 78. Marion
11. Ogle 45. Logan 79. Clinton
14. Whiteside 48. Schuyler 82. Randolph
18. Bureau 52. Scott 86. Wayne
20. La Salle 54. Sangamon 88. Wabash
22. Grundy 56. Macon 90. Hamilton
23. Will 57. Moultrie 91. Franklin
26. Ford 60. Clark 94. Saline
27. Livingston 61. Coles 95. Gallatin
29. Woodford 63. Shelby 97. Pope
30. Stark 64. Montgomery 98. Johnson
32. Knox * 66. Greene 100. Alexander
34. Henderson 68. Jersey 102. Massac

I. & II. The three sections of Illinois, northern, central, and southern, and the ten stream systems of the state: I., the Galena District, II., the Rock River System, III., the Illinois River System, IV., the Lake Michigan drainage, V., the Mississippi River drainage, VI., the Kaskaskia River System, VII., the Wabash System, VIII., the Big Muddy River System, IX., the Saline River System, and X., the Cairo District.

III. Glacial geology of Illinois.

IV. Localities from which collections were made.

V.—CII. Distribution of species.

CIII. Northern species (●) and southern species (▲) in Illinois.
| V. | Lepisosteus osseus |
| VI. | L. platostomus |
| VII. | Amia calva |
| VIII. | Dorosoma cepedianum |
| IX. | Ictiobus cyprinella |
| X. | I.urus |
| XI. | I. bubalus |
| XII. | Carpiodes carpio |
| XIII. | C. difformis |
| XIV. | C. velifer |
| XV. | C. thompsoni |
| XVI. | Erimyzon oblongus |
| XVII. | Minytrema melanops |
| XVIII. | Catostomus commersonii |
| XIX. | C. nigricans |
| XX. | Moxostoma anisurum |
| XXI. | M. aureolum |
| XXII. | M. breviceps |
| XXIII. | Carpiodes carpio |
| XXIV. | C. difformis |
| XXV. | C. velifer |
| XXVI. | C. thompsoni |
| XXVII. | L. nubila |
| XXVIII. | Pimephales promelas |
| XXIX. | P. notatus |
| XXX. | Semotilus atromaculatus |
| XXXI. | Ossorhinchus emilieae |
| XXXII. | Abramis crysoleucas |
| XXXIII. | Cliona vigilax |
| XXXIV. | Notropis cayuga |
| XXXV. | N. heterodon |
| XXXVI. | N. blennius |
| XXXVII. | N. gilberti |
| XXXVIII. | N. illecebrosum |
| XXXIX. | N. hudsonius |
| XL. | L. nebulosus |
| XLI. | L. melas |
| XLII. | Laptops olivaris |
| XLIII. | Noturus flavus |
| XLIV. | S. gyninus |
| XLV. | E. miurus |
| XLVI. | Umbra limi |
| XLVII. | Esox vermiculatus |
| XLVIII. | E. lucius |
| XLIX. | Fundulus diaphanus |
| L. | menona |
| LI. | P. dispar |
| LII. | P. notatus |
| LIII. | Gambusia affinis |
| LIV. | Percopsis guttatus |
| LV. | Labidesthes sicculus |
| LX. | Aphredoderus sayanus |
| LXI. | Pomoxis annularis |
| LXII. | P. sparoides |
| LXIII. | Centrarchus macropterus |
| LXIV. | Ambloplites rupestris |
| LXV. | Chenoptyrus gulosus |
| LXVI. | Lepomis miniatus |
| LXVII. | L. megalotis |
| LXVIII. | L. humilis |
| LXIX. | L. pallidus |
| LXX. | Eupomotis gibbosus |
| LXXI. | Micropterus dolomieu |
| LXXII. | M. salmoides |
| LXXIII. | Stizostedion vitreum |
| LXXIV. | S. canadense griseum |
| LXXV. | Perca flavescens |
| LXXVI. | Percina caprodes |
| LXXVII. | Hadropterus phoxocephalus |
| LXXVIII. | H. aspro |
| LXXIX. | Cottogaster shumardi |
| LXXX. | Diplession blennioides |
| LXXXI. | Bolesoma nigrum |
| LXXXII. | B. camurum |
| LXXXIII. | Ammocrypta pellucida |
| LXXXIV. | Ethoestoma zonale |
| LXXXV. | E. jessiae |
| LXXXVI. | E. coerulum |
| LXXXVII. | E. squamiceps |
| LXXXVIII. | E. flabellare |
| CXC. | Boleichthys fusiformis |
| CXCI. | Microperca punctulata |
| CXCII. | Roccus chrysops |
| CCC. | Morone interrupta |
| CCCI. | Aplodinotus grunniens |

| XL. | Lepisosteus osseus |
| LX. | Leptosus olivarvis |
| LXX. | Noturus flavus |
| LXXX. | Schilbeodes gyninus |
| CCCC. | S. miurus |
| CCCCII. | Umbra limi |
| CCCCIII. | Esox vermiculatus |
| CCCCIV. | E. lucius |
| CCCCV. | Fundulus diaphanus |
| CCCCVI. | menona |
| CCCCVII. | P. dispar |
| CCCCVIII. | P. notatus |
| CCCCIX. | Gamentia affinis |
| CCCCX. | Percopsis guttatus |
| CCCCXI. | Labidesthes sicculus |
| CCCCXII. | Aphredoderus sayanus |
| CCCCXIII. | Pomoxis annularis |
| CCCCXIV. | P. sparoides |
| CCCCXV. | Centrarchus macropterus |
| CCCCXVI. | Ambloplites rupestris |
| CCCCXVII. | Chenoptyrus gulosus |
| CCCCXVIII. | Lepomis miniatus |
| CCCCXIX. | L. megalotis |
| CCCCLX. | L. humilis |
| CCCCLII. | L. pallidus |
| CCCCLIII. | Eupomotis gibbosus |
| CCCCLIV. | Micropterus dolomieu |
| CCCCLV. | M. salmoides |
| CCCCLVI. | Stizostedion vitreum |
| CCCCLVII. | S. canadense griseum |
| CCCCLVIII. | Perca flavescens |
| CCCCLIX. | Percina caprodes |
| CCCCLX. | Hadropterus phoxocephalus |
| CCCCLXI. | H. aspro |
| CCCCLXII. | Cottogaster shumardi |
| CCCCLXIII. | Diplession blennioides |
| CCCCLXIV. | Bolesoma nigrum |
| CCCCLXV. | B. camurum |
| CCCCLXVI. | Ammocrypta pellucida |
| CCCCLXVII. | Ethoestoma zonale |
| CCCCLXVIII. | E. jessiae |
| CCCCLXIX. | E. coerulum |
| CCCCLXX. | E. squamiceps |
| CCCCLXXI. | E. flabellare |
| CCCCLXXII. | Boleichthys fusiformis |
| CCCCLXXIII. | Microperca punctulata |
| CCCCLXXIV. | Roccus chrysops |
| CCCCLXXV. | Morone interrupta |
| CCCCLXXVI. | Aplodinotus grunniens |
I & II
Stream systems
and
Sections of
Illinois

III. and Mich. Canal
III. and Miss. Canal
Drainage Canal
County Seat
III
Map of the
Glacial Geology
of Illinois
IV
Water Courses and Distribution of Collections

- Illinois and Michigan Canal
- Illinois and Mississippi Canal
- Drainage Canal
- County Seat
V

Distribution of

Lepisosteus osseus

---. Ill. and Mich. Canal
---. Ill. and Miss. Canal
---. Drainage Canal
* County Seat
VI
Distribution
of
Lepisosteus
platostomus

III. and Mich. Canal
111. and Miss. Canal
Drainage Canal
County Seat
VII
Distribution
of
Amia
calva

Ill. and Mich. Canal
Ill. and Miss. Canal
Drainage Canal
County Seat
VIII. Distribution of Dorosoma cepedianum
IX
Distribution
of
Ictiobus
cyprinella

Ill. and Mich. Canal
Ill. and Miss. Canal
Drainage Canal
County Seat
III. and Mich. Canal
III. and Miss. Canal
Drainage Canal
 County Seat
XII
Distribution
of
Carpiodes
carpio
XIV
Distribution
of
Carpiodes
velifer

--- Ill. and Mich. Canal
--- Ill. and Miss. Canal
--- Drainage Canal
* County Seat
XVI
Distribution of
Erimyzon
sucetta
oblongus
XVII
Distribution
of
Minytrema
melanops
111. and Mich. Canal
..., Ill. and Miss. Canal
Drainage Canal
. County Seal

III. and Mich. Canal
III. and Miss. Canal
Drainage Canal
+ County Seat
XVIII

Distribution
of
Catostomus
commersonii

111. and Mich. Canal
111. and Miss. Canal
Drainage Canal
County Seat
XIX
Distribution
of
Catostomus
nigricans
OL and Mich. Canal
111. and Miss. Canal
Drainage Canal
.County Seat
XXI
Distribution
of
Moxostoma
aureolum

Ill. and Mich. Canal
Ill. and Miss. Canal
Drainage Canal
County Seat
XXII
Distribution
of
Moxostoma
breviceps

III. and Mich. Canal
III. and Miss. Canal
Drainage Canal
County Seat
XXIV
Distribution of Chrosomus erythrogaster

III. and Mich. Canal
Miss. Canal
Drainage Canal
County Seat
XXV
Distribution of
Hybognathus nuchalis
XXVII
Distribution
of
Pimephales
promelas

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III. and Miss. Canal
Drainage Canal
County Seat
XXVIII
Distribution
of
Pimephales
notatus
XXIX
Distribution
of
Semotilus
atromaculatus

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Ill. and Mich. Canal
Ill. and Miss. Canal
Drainage Canal
County Seat
Distribution of Opsopoeodus emiliae

Ill. and Mich. Canal
Ill. and Miss. Canal
Drainage Canal
County Seat
XXXI
Distribution of Abramis crysoleucas

Distribution of Abramis crysoleucas DL and Miss. Canal Drainage Canal. County Seat
XXXII
Distribution
of
Cliola
vigilax
XXXIII
Distribution
of
Notropis
cayuga
and Mich. Canal
and Miss. Canal
Drainage Canal
County Seat
XXXIV
Distribution of Notropis heterodon

Ill. and Mich. Canal
Ill. and Miss. Canal
Drainage Canal
County Seat
XXXV
Distribution of Notropis blennius

Ill. and Mich. Canal
Ill. and Miss. Canal
Drainage Canal
County Seat
XXXVI
Distribution
of
Notropis gilberti

--- Ill. and Mich. Canal
--- Ill. and Miss. Canal
..... Drainage Canal
. County Seat
XXXVII
Distribution
of
Notropis
illecebrosus
XXXVIII
Distribution of Notropis hudsonius

III. and Mich. Canal
Ill. and Miss. Canal
...Drainage Canal
County Seat
XXXIX
Distribution
of
Notropis lutrensis
Distribution of Notropis whipplii

III. and Mich. Canal
III. and Miss. Canal
Drainage Canal
County Seat
XLI
Distribution of Notropis cornutus

--- Ill. and Mich. Canal
--- Ill. and Miss. Canal
..... Drainage Canal
. County Seat
XLII
Distribution
of
Notropis jejunos
XLIII
Distribution
of
Notropis atherinoides

Ill. and Mich. Canal
Ill. and Miss. Canal
Drainage Canal
County Seat
XLIV
Distribution
of
Notropis
rubrifrons

III. and Mich. Canal
III. and Miss. Canal
Drainage Canal
County Seat
Distribution of Notropis umbratilis atripes
XLVII
Distribution
of
Phenacobius
mirabilis
HI. and Mich. Canal
Ill and Miss. Canal
Drainage Canal
County Seat
XLVIII
Distribution of
Hybopsis dissimilis

--- Ill. and Mich. Canal
--- Ill. and Miss. Canal
----- Drainage Canal
* County Seat
Distribution of Hybopsis storerianus

Ill. and Mich. Canal
Ill. and Miss. Canal
Drainage Canal
County Seat
Distribution of Hybopsis kentuckiensis

III and Mich. Canal
III and Miss. Canal
Drainage Canal
County Seat
LII
Distribution of Ictalurus punctatus

Ill. and Mich. Canal
Ill. and Miss. Canal
Drainage Canal
County Seat
Distribution of Ameiurus natalis

Ill. and Mich. Canal
Ill. and Miss. Canal
Drainage Canal
County Seat
LIV
Distribution
of
Ameiurus nebulosus
LV
Distribution of Ameiurus melas

Ill. and Mich. Canal
Ill. and Miss. Canal
Drainage Canal
County Seat
LVI
Distribution
of
Leptops
olivaris

III. and Mich. Canal
III. and Miss. Canal
Drainage Canal
County Seat
LVII

Distribution

of

Noturus flavus
LVIII
Distribution
of
Schilbeodes
gyrinus
LIX
Distribution of Schilbeodes miurus

III. and Mich. Canal
III. and Miss. Canal
Drainage Canal
County Seat
LXI
Distribution
of
Esox
vermiculatus

County Seat
LXIII
Distribution of Fundulus diaphanus menona III. and Mich. Canal III. and Miss. Canal Drainage Canal County Seat

--- III. and Mich. Canal
--- III. and Miss. Canal
--- Drainage Canal
• County Seat
LXIV
Distribution
of
Fundulus
dispar

...Ill. and Mich. Canal
...Ill. and Miss. Canal
...Drainage Canal
...County Seat
LXV
Distribution of Fundulus notatus

...Ill. and Mich. Canal
...Ill. and Miss. Canal
...Drainage Canal
. County Seat
Distribution of Gambusia affinis
LXVII

Distribution of Percopsis guttatus

Ill. and Mich. Canal
Ill. and Miss. Canal
Drainage Canal
County Seat
LXVIII
Distribution
of
Labidesthes
sicculus
LXIX
Distribution
of
Aphredoderus sayanus
III. and Mich. Canal
III. and Miss. Canal
Drainage Canal
. County Seat
Distribution of Pomoxis annularis

III. and Mich. Canal
UL and Miss. Canal
Drainage Canal
County Seat
LXXI
Distribution of Pomoxis sparoides

Ill. and Mich. Canal
Ill. and Miss. Canal
Drainage Canal
County Seat
LXXII
Distribution of Centrarchus macropterus

III. and Mich. Canal
III. and Miss. Canal
Drainage Canal
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LXXIII
Distribution
of
Ambloplites rupestris.
County Seat
Distribution of Chaenobryttus gulosus
LXXV
Distribution of Lepomis miniatus
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Ill. and Miss. Canal
Drainage Canal
County Seat
LXXVI
Distribution of Lepomis megalotis

--- Ill. and Mich. Canal
--- Ill. and Miss. Canal
--- Drainage Canal

County Seat
LXXVII
Distribution of
Lepomis humilis

... Ill. and Mich. Canal
... Ill. and Miss. Canal
... Drainage Canal
* County Seat
LXXVIII
Distribution
of
Lepomis pallidus

--- Ill. and Mich. Canal
--- Ill. and Miss. Canal
----- Drainage Canal
* County Seat
LXXIX.
Distribution
of
Eupomotis gibbosus

Ill and Mich. Canal
Ill and Miss. Canal
Drainage Canal
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Distribution of Micropterus dolomieu and Mich. Canal III. and Miss. Canal Drainage Canal County Seat
LXXXI
Distribution
of
Micropterus
salmoides
LXXXII
Distribution
of
Stizostedion
vitreum

Ill. and Mich. Canal
Ill. and Miss. Canal
Drainage Canal
County Seat
LXXXIII
Distribution
of
Stizostedion
canadense
griseum

III. and Mich. Canal
III. and Miss. Canal
Drainage Canal
County Seat
LXXXIV
Distribution of Perca flavescens

III. and Mich. Canal
III. and Miss. Canal
Drainage Canal
County Seat
LXXXV
Distribution
of
Percina
caprodes

Ill. and Mich. Canal
Ill. and Miss. Canal
Drainage Canal
County Seat
LXXXVI

Distribution of

Hadropterus phoxocephalus

Ill. and Mich. Canal
Ill. and Miss. Canal
Drainage Canal
County Seat
LXXXVII
Distribution
of
Hadropterus
aspro

Ill. and Mich. Canal
Ill. and Miss. Canal
Drainage Canal
County Seat
LXXXVIII
Distribution
of
Cottogaster
shumardi
LXXXIX

Distribution of Diplesion blennioides
Distribution of Boleosoma nigrum
XCI
Distribution
of
Boleosoma
camurum
XCII

Distribution of Ammocrypta pellucida

....Ill. and Mich. Canal
....Ill. and Miss. Canal
....Drainage Canal
. County Seat
XCIII
Distribution of
Etheostoma zonale

III. and Mich. Canal
Ill. and Miss. Canal
Drainage Canal
County Seat
XCIV
Distribution of Etheostoma jessiae

III. and Mich. Canal
III. and Miss. Canal
Drainage Canal
County Seat
XCV
Distribution of
Etneostoma coeruleum

Ill. and Mich. Canal
Ill. and Miss. Canal
Drainage Canal
County Seat
XCVI
Distribution of Etheostoma squamiceps

Ill. and Mich. Canal
Ill. and Miss. Canal
Drainage Canal
County Seat
XCVII
Distribution of
Etheostoma flabellare

111. and Miss. Canal Drainage Canal
County Seat
XCVIII
Distribution
of
Boleichthys
fusiformis

[Map showing distribution of Boleichthys fusiformis]
Distribution of Roccus chrysops
CI Distribution of Morone interrupta
CII
Distribution
of
Aplodinotus
grunniens
Northern species (○) and Southern species (▲) in Illinois.
Maps showing distribution of Illinois fishes.