

A PRELIMINARY LIST OF THE FISHES OF ELEVEN OKLAHOMA LAKES

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This list of fishes is based upon collections made from eleven Oklahoma lakes during the summer of 1948 by a survey crew of 4 men, sponsored by the Oklahoma Game and Fish Department. The samples were taken with 20 foot minnow seines of $\frac{1}{4}$ inch square mesh and 10 foot fry seines. Gill net and hook and line catches were not included. Since a taxonomic study was not the primary objective of the survey, this list is not complete in some instances. It includes rather the smaller individuals commonly occurring in the shallow areas of the lakes and headwater tributaries.

The average time spent on each lake was three days and nights for the smaller lakes and one to two weeks on the larger impoundments. During a portion of the day small seines were used in the shallow waters to supplement the gill net catches. The young of game and rough fish as well as forage species were obtained by this method. Samples from each seine haul were preserved on the spot in 10% formalin; all collections from each lake were placed together and saved for future identification. Since the results of the gill net collections will be reported elsewhere, the purpose of this paper is to report on those species taken with seines from the eleven lakes.

The size and location of the lakes considered in this report are recorded in Table 1.

TABLE I
Size and Location of Oklahoma Lakes Studied
Summer of 1948

DATE OF COLLECTION	LAKE	COUNTY	SIZE (SURFACE ACRES)
May 20	Sand Springs Park Lake	Tulsa	Under 50
June 5-22	Grand Lake	Mayes, Delaware and Ottawa	55,000
June 30-Jul. 2	Clinton Lake	Custer	335
July 6-9	Comanche Lake	Stephens	250
July 14-16	Shawnee City Lake	Pottawatomie	1,320
July 19-20	Okmulgee City Lake	Okmulgee	643
July 26-28	Pawhuska Lake	Pawhuska	95
July 30-Aug. 1	Cleveland City Lake	Pawnee	205
Aug. 9-11	Lake Hefner	Oklahoma	3,800
Aug. 12-14	Lake Overholser	Canadian	1,700
Sept. 9	Fairfax Lake	Osage	110

LEPISOSTEIDAE — GAR FAMILY

1. *Lepisosteus productus* Cope. Spotted gar.
Grand Lake (Hickory Point Cove, Horse Creek, Carey Bay and Cayuga) uncommon.
2. *Lepisosteus osseus oxyurus* Rafinesque. Northern longnose gar.
Grand Lake (Hickory Point Cover, Horse Creek, Carey Bay and Cayuga) —common.

CLUPEIDAE — HERRING FAMILY

3. *Dorosoma cepedianum* Le Seuer. Gizzard shad.
Shawnee City Lake; Okmulgee City Lake; Cleveland City Lake; Lake Hefner; Lake Overholser; Grand Lake (Council Hollow, Cayuga, Carey Bay, Horse Creek) — each place abundant.

CATOSTOMIDAE — SUCKER FAMILY

4. *Megastomatobus cyprinella** (Valenciennes). Bigmouth buffalo.
Grand Lake (Council Hollow, Carey Bay) — young very common.
5. *Ictiobus niger* (Rafinesque). Black buffalo.
Grand Lake (Carey Bay) — uncommon.
6. *Ictiobus bubalus* (Rafinesque). Smallmouth buffalo.
Grand Lake (Carey Bay) — common.
7. *Carpiodes carpio carpio* (Rafinesque). Northern carsucker.
Sand Springs Park Lake; Grand Lake (Carey Bay) — uncommon.
8. *Cycleptus elongatus* (Le Seuer). Blue sucker.
Grand Lake (Carey Bay) — uncommon. Two small specimens collected here were reported by Moore and Cross (6).
9. *Moxostoma aureolum* (Le Seuer). Northern redhorse.
Grand Lake — 1 large specimen. Reported by Moore and Cross (6).

CYPRINIDAE — MINNOW FAMILY

10. *Cyprinus carpio* Linnaeus. Carp.
Lake Hefner (one abnormal specimen with caudal fin completely gone); Grand Lake (Cayuga, Carey Bay, Drowning Creek, Horse Creek, Hickory Point Cove) — very common.
11. *Notemigonus crysoleucas* (Mitchell). Golden shiner.
Comanche Lake; Shawnee City Lake; Cleveland City Lake — nowhere common.
12. *Notropis percobromus* (Cope). Plains shiner.
Lake Overholser; Cleveland City Lake (Ranch Creek) — uncommon.
13. *Notropis zonatus pilsbryi* Fowler. Arkansas striped shiner.
Grand Lake (Drowning Creek, Hickory Point Cove) — uncommon.
14. *Notropis bienniis** (Girard). River shiner.
Cleveland City Lake (Ranch Creek) — uncommon.
15. *Notropis venustus venustus* (Girard). Texas blacktail shiner.
Comanche Lake — very common.
16. *Notropis lutrensis lutrensis* (Baird and Girard). Plains red shiner. Clinton Lake; Comanche Lake; Shawnee City Lake; Pawhuska Lake; Cleveland City Lake; Lake Hefner (50% infected with tapeworm, *Ligula intestinalis*): Lake Overholser; Grand Lake (Council Hollow, Drowning Creek, Horse Creek, Whitewater, Honey Creek, Carey Bay) — everywhere very common.
17. *Notropis deliciosus missouriensis** (Cope). Plains sand shiner.
Cleveland City Lake (Ranch Creek) — uncommon.
18. *Phenacobius mirabilis* (Girard). Suckermouth minnow.
Cleveland City Lake (Ranch Creek) — uncommon.
19. *Dionda nubilata* (Forbes). Ozark minnow.
Grand Lake (Council Hollow, Carey Bay) — uncommon.
20. *Pimephales promelas confertus* (Girard). Southern fathead minnow.
Lake Hefner — very common.
21. *Ceratichthys perspicuus** (Girard). Bullhead minnow.
Shawnee City Lake; Cleveland City Lake; Lake Hefner; Grand Lake (Carey Bay, Honey Creek, Horse Creek) — fairly common.
22. *Ceratichthys vigilax** Baird and Girard. Parrot minnow.
Clinton Lake — uncommon.
23. *Hyborhynchus notatus* (Rafinesque). Bluntnose minnow.
Pawhuska Lake; Fairfax Lake — common.
24. *Campostoma anomalum pullum* (Agassiz). Central stoneroller.
Lake Hefner — uncommon; Grand Lake (Council Hollow, Drowning Creek, Whitewater, Honey Creek, Hickory Point Cove) — everywhere common.

AMEIURIDAE — CATFISH FAMILY

25. *Ictalurus lacustris punctatus* (Rafinesque). Southern channel catfish.
Comanche Lake; Grand Lake (Cayuga) — uncommon.
26. *Ameiurus melas catulus* (Girard). Southwestern black bullhead.
Lake Hefner — uncommon.

27. *Schilbeodes insignis* (Richardson). Slender madtom.
Grand Lake (Whitewater) — uncommon.
- CYPRINODONTIDAE — TOPMINNOW FAMILY**
28. *Fundulus notatus* (Rafinesque). Blackband topminnow.
Okmulgee City Lake — common; Cleveland City Lake — uncommon.
29. *Fundulus olivaceus* (Storer). Black spotted topminnow.
Okmulgee City Lake — common; Grand Lake (Council Hollow) — uncommon.
30. *Plancterus kansae* (Garman). Plains killifish.
Lake Hefner — common; Grand Lake (Honey Creek) — uncommon.
- POECILIIDAE — LIVEBEARER FAMILY**
31. *Gambusia affinis affinis* (Baird and Girard). Mississippi mosquitofish.
Comanche Lake — common; Okmulgee City Lake — common; Cleveland City Lake — uncommon; Lake Hefner — uncommon.
- SERRANIDAE — BASS FAMILY**
32. *Lepibema chrysops* (Rafinesque). White bass.
Lake Overholser; Lake Hefner — common in each lake.
- PERCIDAE — PERCH FAMILY**
33. *Percina caprodes carbonaria* (Baird and Girard). Southwestern logperch.
Clinton Lake — not common; Grand Lake (Drowning Creek, Council Hollow) — uncommon.
34. *Poecilichthys spectabilis* Agassiz. Orangethroat darter.
Grand Lake (Drowning Creek) — one specimen.
- CENTRARCHIDAE — SUNFISH FAMILY**
35. *Micropterus punctulatus punctulatus* (Rafinesque). Northern spotted black bass.
Okmulgee City Lake — uncommon; Fairfax Lake—one specimen; Lake Hefner—one specimen; Grand Lake (Cayuga, Horse Creek, Drowning Creek, Honey Creek, Hickory Point Cove) — common all over Grand Lake.
36. *Micropterus salmoides* (Lacépède). Largemouth black bass.
Clinton Lake; Comanche Lake; Shawnee City Lake; Okmulgee City Lake; Pawhuska Lake; Cleveland City Lake; Fairfax Lake; Sand-springs Park Lake; Lake Hefner; Grand Lake (Council Hollow, Carey Bay, Cayuga, Horse Creek, Honey Creek, Duck Creek, Hickory Point Cove) — common in all lakes; very common in seine hauls from Comanche and Grand Lakes.
37. *Chaenobryttus coronarius* (Bartram). Warmouth.
Comanche Lake; Shawnee City Lake; Cleveland City Lake; — common in Cleveland City Lake, uncommon in the other two.
38. *Lepomis cyanellus* Rafinesque. Green sunfish.
Clinton Lake; Comanche Lake; Pawhuska Lake; Cleveland City Lake; Lake Hefner; Grand Lake (Drowning Creek)—common everywhere except Grand Lake.
39. *Lepomis humilis* (Girard). Orangespotted sunfish.
Clinton Lake — very common; Okmulgee City Lake — common; Cleveland City Lake — very common; Grand Lake (Drowning Creek, Whitewater, Hickory Point Cove) — uncommon.
40. *Lepomis megalotis breviceps* (Baird and Girard). Oklahoma longear sunfish.
Okmulgee City Lake; Pawhuska Lake; Cleveland City Lake; Sand-springs Park Lake; Lake Hefner; Grand Lake (Cayuga, Whitewater, Honey Creek, Duck Creek)—common in Grand Lake.
41. *Lepomis macrochirus macrochirus* Rafinesque. Common bluegill.
Clinton Lake; Comanche Lake; Pawhuska Lake; Grand Lake (Whitewater, Hickory Point Cove, Honey Creek) — uncommon except in Comanche Lake.
42. *Lepomis microlophus* (Gunther). Readear sunfish.
Clinton Lake; Fairfax Lake; Sand-springs Park Lake — nowhere common.
43. *Pomoxis annularis* Rafinesque. White crappie.

Clinton Lake; Shawnee City Lake; Pawhuska Lake; Cleveland City Lake; Grand Lake (Cayuga, Hickory Point Cove) — very common wherever found.

44. *Pomoxis nigro-maculatus* (LeSeuer). Black crappie.
Clinton Lake — common; Pawhuska Lake — common: Grand Lake (Council Hollow, Hickory Point Cove).

ATHERINIDAE — SILVERSIDE FAMILY

45. *Labidesthes sicculus* (Cope). Northern brook silversides.
Shawnee City Lake; Okmulgee City Lake; Cleveland City Lake; Sand Springs Park Lake — extremely large 5-8 inches; Lake Hefner; Grand Lake (Council Hollow, Whitewater, Honey Creek, Drowning Creek, Horse Creek) — very common everywhere.

SCIAENIDAE — DRUM FAMILY

46. *Aplodinotus grunniens* Rafinesque: freshwater drum.
Grand Lake (Carey Bay) — one small specimen.

COTTIDAE — SCULPIN FAMILY

47. *Cottus carolinae* Gill. Muddler.
Grand Lake (Drowning Creek) — one specimen.

RECAPITULATION

Forty-seven species were taken from the eleven lakes and headwater tributaries (Table II). Thirty-two of the forty-seven species were taken in Grand Lake, with the rest of the lakes averaging between four and seventeen species. As to frequency of occurrence of some of the species, largemouth bass were taken in every lake except one; red shiners were found in eight of the eleven lakes; and gizzard shad, brook silversides, and several sunfishes were taken in six lakes. Eleven species were taken only in Grand Lake. Most of the latter species were young of rough fishes. Collections were made in Grand Lake early in June when the young fish were probably still in the shallow water. Later collections at other lakes did not find these young fish in shallow water. From the standpoint of number of species in the collection, the minnow family was most abundantly represented, which is to be expected when collections are made with small seines along the shores of lakes. Fourteen of the 47 species collected were minnows; eleven of the remainder belonged to the sunfish family; six were suckers; and the rest were scattered among eight different families.

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*The terms common or uncommon, used in this list, refer only to relative numbers of fish taken in seine hauls and not to the relative abundance of the species in the lake.

*Identified by Dr. George A. Moore