

## SOME NEW RECORDS OF PADDLEFISH AND STURGEON FOR OKLAHOMA<sup>1</sup>

CARL D. RIGGS, University of Oklahoma, Norman  
and GEORGE A. MOORE, Oklahoma A&M College, Stillwater

Ichthyological literature pertaining to Oklahoma contains but few records of paddlefish and sturgeons. A thorough search revealed only the following reports: Ortenburger and Hubbs (6) and Hubbs and Ortenburger (4) reported the paddlefish *Polyodon spathula* (Walbaum) from the Kiamichi and Poteau rivers; Girard (2) reported *Scaphirhynchus platyrhynchus* Bd. (sic.), from near the mouth of the Poteau River; Jordan and Gilbert (5) took the shovelnose sturgeon *S. platyrhynchus* Rafinesque (sic.) from the Red River at Fulton, Arkansas; Hubbs (3) lists both the paddlefish and the shovelnose sturgeon for Oklahoma. The above records are presumed to be the basis of Hubbs' inclusion of *S. platyrhynchus* (Rafinesque).

In recent years the several reliable records presented here have come to our attention. (When referring to museum specimens or museums, the following abbreviations are used: U.O.M.Z. — University of Oklahoma Museum of Zoology, O.A.M. — Oklahoma A&M College Museum of Zoology, U.M.M.Z. — University of Michigan Museum of Zoology.)

*Polyodon spathula*. A partly decayed specimen about three feet long was seen by Moore in 1939 near the confluence of Spring and Grand (Neosho)

<sup>1</sup>Contribution of the Department of Zoological Sciences, University of Oklahoma, and contribution No. 100 of the Department of Zoology and the Research Foundation, Oklahoma Agricultural and Mechanical College. The writers are indebted to Drs. Carl L. Hubbs and Reeve M. Bailey for aid in the study of *Scaphirhynchus*.

rivers, in Ottawa County. It had apparently been discarded by a fisherman in spite of its excellence as a food fish.

A fishery survey crew of the Oklahoma Fisheries Experiment Station directed by W. H. Thompson took two 17-inch male paddlefish (U.O.M.Z. 26001, 26002) by means of rotenone from a shallow cove at the mouth of Bee Creek in Grand Lake in August, 1949. They were the only paddlefish taken during an extensive poisoning program at Grand Lake.

A specimen over three feet long was caught in the spring of 1939 by Bud Carruth of Blackburn, Oklahoma, in Black Bear Creek about  $\frac{1}{4}$  mile from its mouth in the Arkansas River. This fish was mounted and is in Mr. Carruth's possession.

Mr. Delbert Taber, a fisheries student at Oklahoma A&M College, saw a specimen taken by means of grapple hooks below Great Salt Plains Dam in April, 1947. Further authentication of the presence of this species in the Salt Fork of the Arkansas River, Alfalfa County, was furnished by the *Daily Oklahoman* in a 1948 article reporting two specimens of nine and eight pounds from Great Salt Plains Reservoir. The June, 1949, issue of the *Oklahoma Game and Fish News* contained a photograph of an 18 $\frac{1}{4}$  pound paddlefish also taken at Great Salt Plains Reservoir.

During an ichthyological survey of the Illinois River in August, 1946, a paddle from a specimen said to have been caught near Watts in the Illinois River, was seen in a store at Watts. Merchants in Tahlequah attest that *Polyodon* is fairly common in the Illinois River, and Mr. Burt Tarkington, a commercial fisherman, presented the survey party with a paddle (O.A.M. 561) which he cut from an Illinois River paddlefish.

According to Gordon E. Hall, graduate student in Fishery Biology at the University of Oklahoma, in the spring of 1949 a commercial fisherman took many paddlefish in gill nets in the Poteau River below Wister Dam and in the Arkansas River near the mouth of the Poteau.

Mr. Milton Curd, an Oklahoma A&M student, saw a specimen taken in a trammel net from Grand River, below Grand Lake, in July, 1947.

Paddlefish are frequently reported from the Red River below Denison Dam, Lake Texoma, and Riggs saw several specimens there in the spring and summer of 1949.

W. H. Thompson, Director, Oklahoma Fisheries Experiment Station, has informed us that paddlefish have been common below Spavinaw Dam, Mayes County, and that they were being giggered there by fishermen in 1927.

*Scaphirhynchus platorhynchus*. A specimen (O.A.M. 3039) 20 inches in total length was caught on a trotline in the Arkansas River, near Spiro, LeFlore County, April 1, 1949, and presented to Oklahoma A&M College by Miss Paula Robinson, a Spiro school teacher.

Two records of *Scaphirhynchus* were furnished U.O.M.Z. by Mr. S. E. Hallinen, of Cooperton, Oklahoma, who obtained the specimens from fishermen. One specimen (U.O.M.Z. 26009) was taken from the Red River "due west of Roosevelt" in July, 1921. The other (unavailable) was caught "in the north fork of Red River practically directly west of Cooperton".

Although neither specimen (U.O.M.Z. 26009, O.A.M. 3039) is in perfect agreement with the description of either *S. platorhynchus* or *Parascaphirhynchus albus* of Forbes and Richardson (1), we found both specimens to be much closer to *S. platorhynchus* than to *P. albus*.<sup>2</sup> Dr. R. M. Bailey, Curator of Fishes, U.M.M.Z., has confirmed the identification and has made comparison with material in U.M.M.Z.

<sup>2</sup>The neuter form, *album*, must be used since the Greek word from which — *rhynchus* is derived is neuter.

On both Oklahoma specimens the longer inner barbels and lateral plates, the presence of small plates posteriad and ventrad to the dorsal plates, and of small centers of ossification in the belly skin, are characteristic of *S. platyrhynchus*.

Dr. H. I. Featherly of Oklahoma A&M College reports that he has seen sturgeons (species uncertain) in the possession of fishermen below the Denison Dam. Occurrence of sturgeon at this location is verified by Riggs.

From the authentic distribution records discussed above, it is obvious that the paddlefish *Polyodon spathula*, and the shovelnose sturgeon *Scaphirhynchus platyrhynchus* are more abundant and more widely distributed in Oklahoma than is indicated by reports in scientific literature. Further extensive collecting throughout the year, but especially in the spring, should extend the known state distributions to many more of the tributaries of the Red and Arkansas rivers. A greater abundance of both of these species than is now suspected should also be shown.

#### LITERATURE CITED

1. FORBES, STEPHEN A., and ROBERT E. RICHARDSON. 1920. The fishes of Illinois. (Second edit.) Illinois Nat. Hist. Surv., 3:1-cxxi, 1-357.
  2. GIRARD, CHARLES. 1858. Fishes. [In "General Report upon the Zoology of the Several Pacific Railroad Routes", U.S. Pac. R.R. Surv., 10 (4):i-xiv, 1-400].
  3. HUBBS, CARL L. 1946. List of the fishes of Oklahoma. [in A. D. Aldrich, "Fish Management Guide for Oklahoma". (Fifth edit.):36-39. Publ. Okla. Game and Fish Comm.].
  4. HUBBS, CARL L., and A. I. ORTENBURGER. 1929. Fishes collected in Oklahoma and Arkansas in 1927. Publ. Univ. of Oklahoma Biol. Surv., 1(3):47-112.
  5. JORDAN, DAVID S., and CHARLES H. GILBERT. 1886. List of the fishes collected in Arkansas, Indian Territory and Texas in September, 1884 with notes and descriptions. Proc. U. S. Nat. Mus., 9:1-25.
  6. ORTENBURGER, A. I., and CARL L. HUBBS. 1926. A report on the fishes of Oklahoma, with descriptions of new genera and species. Proc. Oklahoma Acad. Sci., 6:123-141.
-