Spotted Gar With Deformed Mandible

Jack D. Tyler
Cameron University, Lawton, Oklahoma 73505

Dawson (1) listed 1498 teratologies of fish, but only one deformity of the jaw of a member of the genus *Lepisosteus.* Kroger and Guthrie (2) described a longnose gar *(L. osseus)* with "a crooked lower jaw which had grown slower than the upper jaw" and speculated that an angler has mutilated this fish.

At 0335 on 8 May 1984, while bowfishing in shallow, well vegetated water at the north end of Lake Lawtonka 5.5 km east and 0.8 km south of Meers in Comanche County, southwestern Oklahoma, I shot a male spotted gar *(Lepisosteus oculatus*) that had a lower mandible that was rigidly fixed at a 90° angle downward from the upper mandible (Fig. 1). At the time it was collected, the gar was cruising leisurely in 22 °C water about 20 cm deep that was well shaded by erect smartweeds (*Polygonum* sp.). Its behavior was not erratic or atypical and its appearance, other than the jaw, was normal.

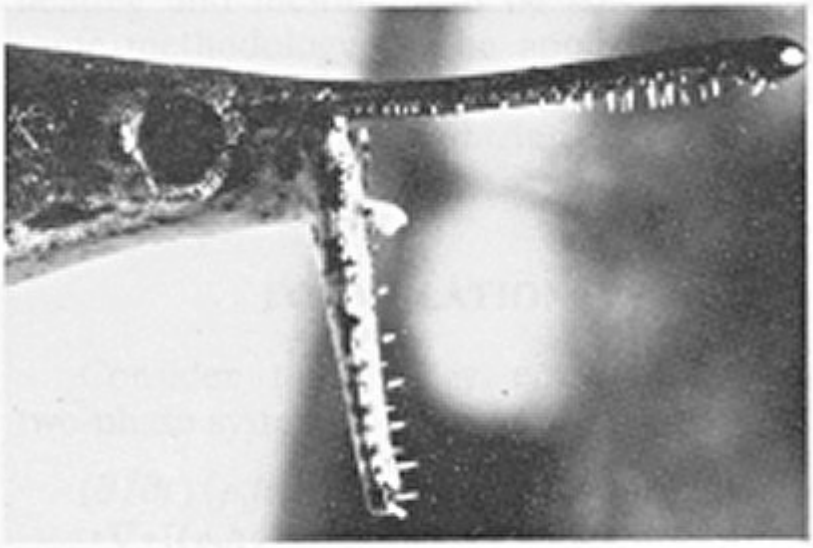

FIGURE 1. Spotted gar with deformed mandle (CUMZ 36).

The fish weighed 467 g and its total length was 545 mm. These values are near the average weight (472 g) and length (508 mm) of 118 male spotted gars collected from Lake Lawtonka between 1980 and 1982 (3). The specimen is deposited in the Cameron University Museum of Zoology (CUMZ 36) in Lawton, Oklahoma.

Although its stomach was empty, the gar did not appear to be starving. It swam well, was alert, and its length and weight were within normal limits. The lower jaw was firmly set in place, indicating that either (a) it had been broken (possibly by an angler) but completely healed, or (b) that the condition arose during development. The latter alternative seems most logical since radiographs showed no clear fracture line or extraneous calcification at the base of the mandible.

REFERENCES

1. C.E. Dawson, A bibliography of anomalies of fishes, Gulf Res. Repts. 1(6):1-399 (1964) and supplements in 1966, 1971, and 1976.

2. R.L. Kroger and J.F. Guthrie, Chesapeake Sci. 14(2):116 (1973).

3. J.D. Tyler and M.N. Granger, Proc. Oklahoma Acad. Sci. 64:8-10 (1984).