

Synopsis of the Mexican and Central-American Species *.

- I. Snout more than twice as long as the rest of the head ; no series of enlarged teeth on the palatines in the adult 1. *osseus*.
- II. Snout not more than once and a half as long as the rest of the head ; a series of enlarged teeth on the palatines in the adult, as well as in the young.
- 58 to 60 scales in a longitudinal series ; length of head 3 to $3\frac{1}{3}$ in the length of the fish (in specimens of 300 to 500 mm.) 2. *tristoechus*.
- 51 to 54 scales in a longitudinal series ; length of head $3\frac{2}{3}$ to $3\frac{3}{4}$ in the length of the fish (in specimens of 450 to 500 mm.) 3. *tropicus*.

1. *Lepidosteus osseus*.

Esox osseus, Linn. Syst. Nat. p. 313 (1758) ¹.

Lepidosteus osseus, Günth. Cat. Fish. viii. p. 330 (1870) ²; Jord. & Everm. Bull. U.S. Nat. Mus. xlvii. 1896, p. 109 ³; Meek, Publ. Columbian Mus., Zool. v. 1904, p. 5 ⁴.

Snout about $2\frac{1}{2}$ times as long as the rest of the head. Dorsal 7-8. Anal 8-9. 58 to 62 scales in a longitudinal series.

Hab. United States from the Great Lakes to the Rio Grande ^{2 3}; North-eastern Mexico ⁴.

In Mexico recorded by Meek from San Juan in Nuevo Leon, Forlon in Tamaulipas, and Valles in San Luis Potosi.

Total length 1500 mm.

2. *Lepidosteus tristoechus*.

Esox tristoechus, Schneid. Bloch's Syst. Ichth. p. 395 (1801) ¹.

Lepidosteus viridis (non Gmelin), Günth. Cat. Fish. viii. p. 329 (1870) ².

* The three species here recognised comprise the subgenera *Lepidosteus* (*L. osseus*) and *Atractosteus* (*L. tristoechus* and *L. tropicus*). There is a third subgenus, *Cylindrosteus*, with the dentition of *Lepidosteus*, but with the snout shorter and broader than in *L. osseus*, only a little longer than the rest of the head. This subgenus is usually considered to include a single species, *L. platystomus*, Rafin., which is said to range from the Great Lakes to Texas. Examination of the specimens in the British Museum leaves no doubt that 3 or 4 distinct species belong to this section ; some of these may extend into North-eastern Mexico.

L. productus, Cope, seems to be different from *L. platystomus* or any of the species which I have seen. Specimens of *L. platystomus* from Illinois and Louisiana have 60 to 62 scales in a longitudinal series and the width of the snout, at the level of the angles of the mouth, not more than $\frac{1}{3}$ the length of the upper jaw. A fish from St. Louis, received from the Museum of Comparative Zoology, closely resembles *L. platystomus*, and may not be specifically distinct, but has larger scales (55 or 56 in a longitudinal series) and corresponds in every way to *L. agassizii*, Dum., also described from a St. Louis specimen from the Museum of Comparative Zoology. The type of *L. grayi*, Agass. (600 mm. long), and a much larger specimen, also from Louisiana, differ from *L. platystomus* in having a much broader snout (width at the angles of the mouth $2\frac{1}{3}$ in the length of the upper jaw). *L. zadocki*, Dum., is evidently the same as *L. grayi*.