

Order ACIPENSERIFORMES

Paddlefishes

Family **POLYODONTIDAE**

Bonaparte 1835

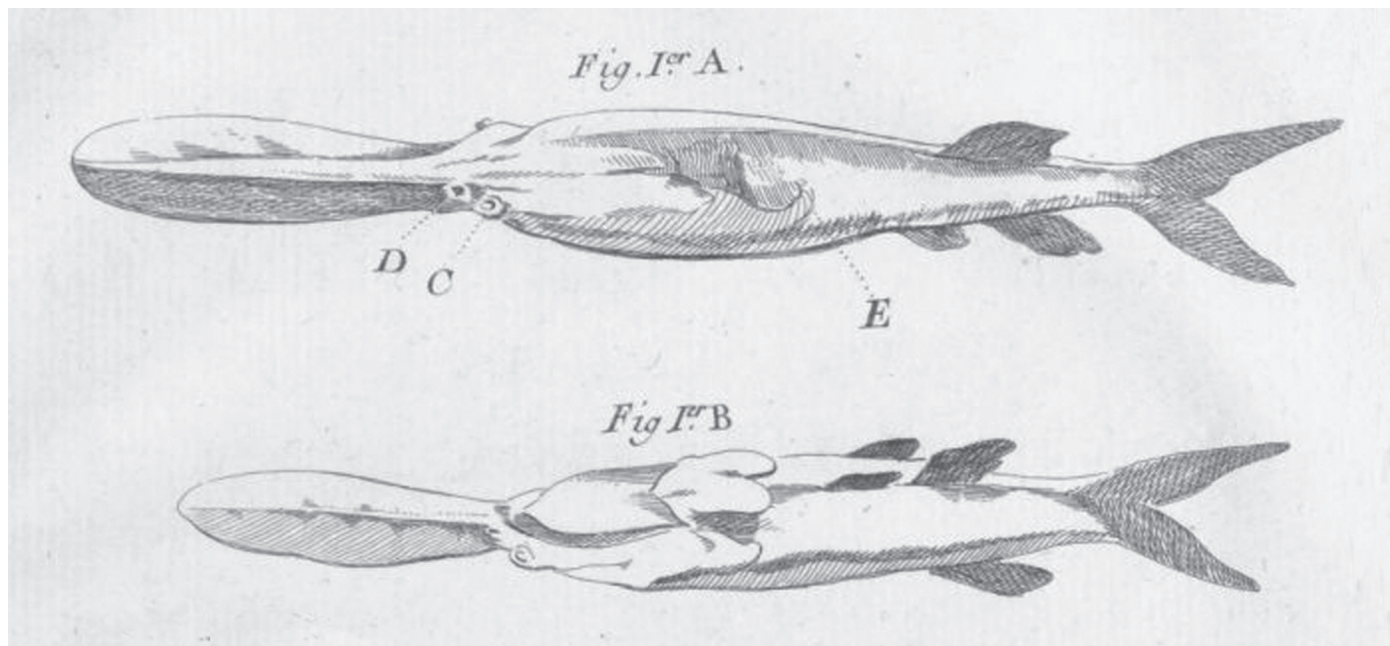


Illustration from which Walbaum based his account of *Polyodon spathula*. From: Mauduit, M. 1774. Sur quelques objets du Regne animal, apportés de la Louisiane. Observations sur la physique, sur l'histoire naturelle et sur les arts 4 (11): 384–397, pl II.

Polyodon

Lacepède 1797

polý (Gr. πολύ), many; *odon*, Latinized and grammatically adjusted from the Greek nominative ὀδούς (*odoús*), tooth, referring to many teeth compared to no teeth in sturgeons (*Acipenser*) [note: name does not allude to numerous gill rakers as reported by many authors; Lacepède based his description on young specimens, which possess teeth, whereas adult paddlefish do not]

***Polyodon spathula* (Walbaum 1792)** *spatula* (L.), paddle, spoon or broad blade used for stirring, from *spáthē* (Gr. σπάθη), referring to its paddle-shaped rostrum

Psephurus

Günther 1873

psêphos (Gr. ψῆφος), pebble; *ourá* (Gr. οὐρά), tail, allusion not explained, possibly referring to heavy dorsal caudal fulcra in adults

***Psephurus gladius* (Martens 1862)** Latin for sword, referring to long sword-like rostrum [extinct due to overfishing and habitat loss, last seen alive in 2003]



Possibly first-published image of *Psephurus gladius*. From: Günther, A. 1880. An introduction to the study of fishes. Adam and Charles Black, Edinburgh. 720 pp.

A toothless fish named for its teeth?

Many references explain that *Polyodon*, meaning “many tooth,” refers to the numerous gill rakers that the fish uses to filter zooplankton from the water. But Lacepède did not mention gill rakers in his description. He mentioned teeth: “It is close ... [to] *Acipenser* (sturgeon), but it is distinguished by the presence of many teeth in the paddlefish, and zero in *Acipenser*” (translation).

Most references will also explain that adult *Polyodon* do not have teeth. Juveniles, however, do. According to David Starr Jordan (1882)¹, Lacepède’s description was made up from numerous young specimens preserved in the Muséum National d’Histoire Naturelle.

Some proposed changing the name to *Spatularia* (referring to its spatulate rostrum) on the grounds that *Polyodon* was inappropriate name since adults are toothless. In fact, adult paddlefish were once described as a different, toothless species, *Polyodon edentula*. As Jordan concluded:

“There is, however, no good ground for setting aside *Polyodon*, even if *Spatularia* seems a more pleasing name. The fish does have many teeth, even if they ultimately fall out, and *Polyodon* it must remain.”

¹Jordan, D. S. 1882. Report on the fishes of Ohio. Report of the Geological Survey of Ohio v. 4 (pt 1, sect 4): 735–1002.