

## A new *Beneziphius* beaked whale from the ocean floor off Galicia, Spain and biostratigraphic reassessment of the type species

Ismael Miján, Stephen Louwye, and Olivier Lambert

*Acta Palaeontologica Polonica* 62 (1), 2017: 211–220 doi:<https://doi.org/10.4202/app.00309.2016>

Although the fossil record of beaked whales (Cetacea, Odontoceti, Ziphiidae) is continuously improving, the geological age of new taxa is often poorly constrained. Based on a partial cranium from deep seafloor deposits off Galicia, Spain, we describe a new species of the stem beaked whale genus *Beneziphius*, *B. cetariensis* sp. nov. The latter differs from the type species *B. brevirostris* in the larger size, the rostrum being proportionally longer, the premaxillae being longer than the maxillae at the apex of the rostrum, the left premaxillary sac fossa being transversely concave, and the ascending process of the premaxilla reaching the vertical. Considering that the stratigraphic context of deep-sea deposits off the Iberian Peninsula is not precisely known, we provisionally propose an extended, middle Miocene to early Pliocene interval for the geological age of *B. cetariensis*. Nonetheless, the palynological analysis of sediment sampled from cavities in the cranium of the holotype of *B. brevirostris*, discovered during the second part of the nineteenth century in inland deposits of Antwerp (north of Belgium), yield an early to mid-Serravallian age (13.2–12.8 Ma, late middle Miocene). *B. brevirostris* is thus the oldest described species of the “*Messapicetus* clade”, a large clade of stem ziphiids in which most species are dated from the late Miocene. The description of the Galician species *B. cetariensis* broadens the biogeographic distribution of *Beneziphius* and confirms the strong ziphiid faunal affinities between the eastern coast of the North Atlantic and the southern margin of the North Sea Basin.

**Key words:** Mammalia, Cetacea, Ziphiidae, Miocene, North Atlantic, North Sea, Iberian Peninsula.

Ismael Miján [[ismaelmijan@gmail.com](mailto:ismaelmijan@gmail.com)], Sociedade Galega de Historia Natural, Praza de Canido s/n, E-15401 Ferrol, Spain. Stephen Louwye [[stephen.louwye@ugent.be](mailto:stephen.louwye@ugent.be)], Research Unit Palaeontology, Department Geology and Soil Science, Ghent University, 281 Krijgslaan S8, B-9000 Ghent, Belgium. Olivier Lambert [[olivier.lambert@naturalsciences.be](mailto:olivier.lambert@naturalsciences.be)] (corresponding author), Institut royal des Sciences naturelles de Belgique, D.O. Terre et Histoire de la Vie, rue Vautier 29, B-1000 Brussels, Belgium.

This is an open-access article distributed under the terms of the Creative Commons Attribution License (for details please see [creativecommons.org](https://creativecommons.org)), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

 [Full text \(448.9 kB\)](#)