

## New insight into the distribution and palaeobiology of the pycnodont fish *Gyrodus*

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The pycnodont fish *Gyrodus* is reported for the first time from the Lower Cretaceous of Germany based on two lower jaw elements from the Hauterivian and Barremian. The stratigraphic and geographic distribution of *Gyrodus* is summarized. *Gyrodus* ranges from the Middle Jurassic to the Early Cretaceous making it one of the longest living pycnodonts. Unambiguous Late Cretaceous records of *Gyrodus* are still missing. *Gyrodus* displays its widest distribution and greatest taxonomic diversity in the Late Jurassic. The distribution of *Gyrodus* implies not only near-coastal mode of life but also a pelagic lifestyle conversely to most other pycnodonts. External body features and function of the unpaired fins support this interpretation.

**Key words:** Neopterygii, Pycnodontiformes, *Gyrodus*, Cretaceous, palaeobiogeography, Germany.

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