

The first record of the mosasaur *Clidastes* from Europe and its palaeogeographical implications

Johan Lindgren and Mikael Siverson

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Remains of the mosasaur *Clidastes propython* in marine strata of latest early Campanian age from the Kristianstad Basin, southern Sweden, represent the first record of *Clidastes* outside of North America. The material consists of shed marginal and pterygoid tooth-crowns, and vertebrae (including eleven associated cervicals and dorsals from a juvenile). The majority of the teeth and skeletal elements can be referred to juveniles (mostly in the estimated 2-3 m total body length range), but large, presumably adult individuals (up to an estimated total length of 6 m) are also represented. Available data indicate that the Kristianstad Basin population of *C. propython* represents a short-lived migration, most likely from the Mississippi Embayment in North America. The local extinction of *Clidastes* in southern Sweden, tentatively placed at the early/late Campanian boundary (*sensu germanico*), may coincide with that in the Western Interior Seaway and Gulf Coast of North America. Within the Kristianstad Basin area, *Clidastes* occurs in high-energy, shallow water deposits, where it is the most common mosasaur. This finding is in stark contrast to recent publications suggesting that *Clidastes* inhabited mainly off-shore, deeper waters.


Key words: Reptilia, Mosasauridae, *Clidastes*, teeth, vertebrae, Cretaceous, Campanian, Sweden.

Johan Lindgren [johan.lindgren@geol.lu.se], Department of Geology,

GeoBiosphere Science Centre, Lund University, Sölvegatan 12, SE-223 62

Lund, Sweden; Mikael Siverson [cardabiodon@inet.net.au], 9 Portsea Rise, Mosmon Park, 6012 WA, Australia.

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