

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

Johan Lindgren and Mikael Siverson


*Acta Palaeontologica Polonica* 49 (2), 2004: 219-234

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](mailto: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](mailto:cardabiodon@inet.net.au)], 9 Portsea Rise, Mosmon Park, 6012 WA,  
Australia.

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

 [Full text \(1,134.0 kB\)](#)