

## Echinoid burrow *Bichordites monastiriensis* from the Oligocene of NE Italy

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Several specimens of trace fossil *Bichordites monastiriensis* were discovered in two shallow water Oligocene sandstone beds from Valsugana (Trentino, NE Italy) representing the oldest documented occurrence for this ichnospecies. They are grazing–crawling (pascichnion–repichnion) structures and are occasionally associated with enlarged structures that can be interpreted as resting traces (cubichnia) and assigned to the ichnogenus *Cardioichnus*. The resulting *Bichordites*–*Cardioichnus* compound trace fossil is here described for the first time. In the basal part of some specimens, skeletal remains of *Eupatagus ornatus* were found in life position. This finding enables to widen the spectrum of known *Bichordites* tracemakers. Exceptional conditions of preservation of one specimen extending in two beds recording different environmental conditions gave an opportunity to document the effects of various taphonomical histories on the preservation of this traces.

**Key words:** Trace fossils, *Bichordites*, echinoid burrows, *Upogebia*, foredeep, Oligocene, Italy.

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