

A glimpse into ancient food storage: Sequestrichnia and associated nucleocave *Chondrites* from Eocene deep-sea deposits

Jaroslav Šamánek, Lothar H. Vallon, Radek Mikuláš, and Michal Vachek

Acta Palaeontologica Polonica 67 (3), 2022: 767-779 doi:<https://doi.org/10.4202/app.00965.2021>

The old brickyard Velká nad Veličkou in the Czech Republic offers a unique insight into an Eocene deep-sea ichnoassemblage that is dominated by sequestrichnia. Secondary use of such food-stowing was made by the tracemaker of *Chondrites intricatus* as evidenced by its frequent penetration of the trace fossil *Zoophycos brianteus* and its occurrence preferentially on the surface of *Zoophycos* spreiten. Here, the *Chondrites* tracemaker presumably exploited the nutrient-enriched micro-environment (nucleocave). This close interrelations between *Chondrites* and *Zoophycos* support the hypothesis of a sequestrichnial behaviour of the *Zoophycos* producer. The studied locality also yields *Helminthopsis tenuis*, *Tubulichnum mediterranensis*, *Scolicia strozzii*, ?*Dactyloidites* isp., *Megagrapton irregulare*, and *Planolites* isp.

Key words: *Zoophycos*, trace fossils, deep-marine, flysch, Bílé Karpaty Unit, Outer Western Carpathians, Czech Republic.

Jaroslav Šamánek [samanek.j@mail.muni.cz], Department of Geological Sciences, Faculty of Science, Masaryk University, Kotlářská 267/2, 611 37 Brno, Czech Republic. Lothar H. Vallon [kv@oesm.dk], Geomuseum Faxe, Østsjællands Museum, Rådhusvej 2, DK-4640 Faxe, Denmark. Radek Mikuláš [mikulas@gli.cas.cz], Institute of Geology of the Czech Academy of Sciences, Rozvojová 269, 165 02 Praha 6, Czech Republic. Michal Vachek [michal.vachek66@gmail.com], State Land Office, Bratislavská 1/6, 695 01 Hodonín, Czech Republic.

 [Full text \(1,411.7 kB\)](#)