

Bashkirian rugose corals from the Carboniferous Mattson Formation in the Liard Basin, northwest Canada—stratigraphic and paleobiogeographic implications

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Colonies of the rugose corals *Nemistium liardense* sp. nov. and *Heritschioides simplex* sp. nov. were collected from limestone in the upper member of the Mattson Formation in the Liard Range in the Northwest Territories and are the only known identifiable coral species from the Mattson Fm. The Mattson Fm., deposited in the Liard Basin west of the syndepositional Bovie reverse fault, comprises sandstone with subordinate shale and carbonates deposited during several delta cycles. The close morphological similarity and identical mode of offsetting in *N. liardense* colonies from the Mattson Fm. and the allochthonous Stikine Terrane of British Columbia indicate they belong in the same species. This and the morphological similarity between *H. simplex* and the late Serpukhovian to early Bashkirian *H. columbicum* allow assignment of the coral-bearing part of the upper Mattson Fm. to Bashkirian Foraminiferal Biozone 20. Widespread occurrence of the genus *Nemistium* confirms open communication between the Liard Basin region and the western European and northern African seas.


Key words: Rugosa, Stauriida, taxonomy, paleogeography, Carboniferous, Pennsylvanian, Canada.

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