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UPPER ORDOVICIAN EURYPTERIDS FROM THE RIVIÈRE DES HURONS, SOUTHERN QUÉBEC

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Rocks of the Upper Ordovician Nicolet River Formation crop out at several discrete places along the lower part of the Rivière des Hurons, about 25 kilometres east of Montréal, in southern Québec. Fragmentary eurypterid remains were first collected there by Dr. T.H. Clark in the early 1940s, while doing geological mapping work for the Government of Québec. These fossils came from an exposure near the mouth of the river that is no longer accessible to researchers. In 1994, a partial, articulated eurypterid limb was collected by a local amateur paleontologist at an outcrop situated a few hundred metres upstream from Clark's site, and located stratigraphically higher in the section. The new fossil, found in a loose block of shale, comes from a thin (~2 metres) sequence of kaolinic shales interbedded with lenses of fine sandstone. It is nearly identical in morphology to the third prosomal appendage of the large eurypterid *Megalograptus*, found in Upper Ordovician deposits of Indiana, Ohio, and Virginia, U.S.A. The specimen, preserved as a dorso-ventrally compressed carbonaceous cast, shows the distal half of the fourth podomere, the succeeding podomeres up to the terminal spine, and numerous spines increasing in length distally on each podomere. The distal half of the third podomere, with the bases of the long, robust spines characteristic of *Megalograptus*, and the proximal half of the fourth podomere are also visible as a natural mold in the rock.

This is the first record of this highly distinctive eurypterid outside of the United States, and as such it significantly extends the known geographic range of the genus. More recently, additional eurypterid fossils have been recovered from the same exposures. Some of these appear to be isolated, partial abdominal segments, and almost certainly belong to the same taxon as the articulated limb.

The eurypterid remains are part of a typical Cincinnatian faunal assemblage that is dominated by shelly benthic forms such as pelecypods and gastropods. Among the pelecypods, *Ambonychia*, *Nuculites*, *Deceptrix*, *Pholadomorpha* and *Modiolopsis* are some of the more frequently encountered taxa. The trilobites *Flexicalymene* and *Isotelus* are also common elements of the fauna; an unidentified proetid is represented by a few, very rare specimens. The exposures have also yielded crinoids, trepostomate bryozoans, brachiopods, orthoconic cephalopods and, notably, scolecodonts. The presence of a *Megalograptus*-like eurypterid, the pelecypod *Pholadomorpha pholadiformis*, and the gastropod *Cyclonema bilix* is suggestive of a Richmondian age for the assemblage, but precise correlation of the sequence is thus far hampered by the apparent absence of graptolites or other biostratigraphically useful fossils.