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**A putative *Arthropleura* body impression, Lower  
Pennsylvanian Tynemouth Creek Formation,  
New Brunswick, Canada**

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R.F. MILLER<sup>1</sup>, A.R. BASHFORTH<sup>2,3</sup>,  
H.J. FALCON-LANG<sup>4</sup>, AND M.R. GIBLING<sup>3</sup>  
1. *New Brunswick Museum, Department of Natural Science,  
Saint John, New Brunswick E2K 1E5, Canada, <randall.miller@  
nbm-mnb.ca>* ¶ 2. *Geological Museum, Natural History Museum  
of Denmark, University of Copenhagen, Øster Voldgade 5-7, 1350  
Copenhagen K, Denmark* ¶ 3. *Dalhousie University, Department*

of Earth Sciences, Halifax, Nova Scotia B3H 3J5, Canada ¶ 4. Royal Holloway, University of London, Department of Earth Sciences, Egham, Surrey TW20 0EX, UK

A possible body impression of the largest known terrestrial arthropod *Arthropleura* was recovered from the Lower Pennsylvanian (late Langsettian) Tynemouth Creek Formation of southern New Brunswick, Canada. It occurs at the base of half-metre thick sandstone that overlies a thin red mudstone. The trace (collected as NBMG 14624) in convex hyporelief, is interpreted as the head preserved as a rounded imprint, an area representing anterior tergites 1 to 3(?), and perhaps the distal end of legs. The enigmatic feature possesses dimensions suggestive of the dorsal surface of *Arthropleura* deposited upside down into a wet substrate. Numerous trackways of *Diplichnites cuithensis* in the Tynemouth Creek Formation are attributed to *Arthropleura* and suggest a body length of about 0.96 to 1.07 m consistent with the trace size.

The arthropleurid impression is in the midst of tetrapod footprints and 'drag' marks or groove casts. Features identified as tetrapod footprints probably represent a single trackway travelling around the front of the arthropleurid. Footprint identification is tentative, but in size and shape they resemble *Baropezia*, *Megapezia* and 'swimming tracks'. Footprints are highly variable due to extramorphological variation and a broad range of print morphology may be left by the same trackmaker on varying substrates. *Baropezia* tracks have been attributed to anthracosaurs. An adjacent block contains a small tetrapod jaw fragment (NBMG 14597). It consists of eight (?) teeth along a mandible. Teeth are about 7mm long, rounded, slightly angled, and separated by a small space. They resemble *Eogyrinus*, a possible predator on arthropleurids.