

**Discovery and Significance of Lower Permian Vertebrate Trace Fossils  
In the Red Beds of Southwestern Prince Edward Island**

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In Megacyclic Sequence II red beds at Prim Point in southwestern Prince Edward Island, vertebrate trace fossils occur as casts of tetrapod trackways belonging to three distinct ichnospecies. The living tetrapods were associated with a rich invertebrate fauna in an area of sparse vegetation and occupied out-of-channel river sediments, most likely crevasse splay deposits.

The ichnospecies *Crenipes abrectus*, previously reported only from the Lodeve region of southern France is well represented at Prim Point. *Crenipes abrectus*, here interpreted as the track of a cotylosaur, together with an ichnogenus closely resembling *Gilmoreichnus-kablikae*, a captorhinomorph (possi-

bly a juvenile pelycosaur), facilitates the strict stratigraphic assignment of an upper Lower Permian (Autun) age to the strata. The third set of footprints, those of a small herbivorous pelycosaur, resemble *Ichniotherium willsi*.

The pelycosaur-cotylosaur community recognized by footprints in Prince Edward Island red beds occurs in sediments time-stratigraphically equivalent to those hosting similar ichnofauna in the English Midlands and central Europe. This community occupied piedmont valley-flat red beds within the molasse facies of Variscan uplands.