A well-preserved tetrapod skeleton preserved from the Malagash Formation, Nova Scotia, Canada

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Nova Scotia is famous for its Late Carboniferous (e.g., Joggins Fossil Cliffs UNESCO World Heritage Site) and Permian (e.g., Brule) fossil sites. The Joggins Fossil Cliffs preserve large lycopod trees in which the world's oldest known reptiles have been found entombed at their bases. Brule has yielded a rare in situ, standing Walchia (primitive conifer) forest and a large array of tetrapod trackways that preserve the oldest evidence of herding behaviour in vertebrates.

A nearly complete skeleton from the Malagash Formation (Late Carboniferous – Early Permian) was recently discovered in the base of an ancient river channel along the Northumberland Shore in Nova Scotia. Much of the skeleton, including a nearly complete skull roof, entire rib cage, vertebral elements including elongated neural spines, scapulae, and humerus was discovered loose on the beach, while the mold was preserved in the cliff-face. Other fossils, such as an exquisitely-preserved partial dragonfly wing, plant fossils (e.g., Cordaites leaves), and invertebrate traces help to elucidate the paleoecology of the area.

A preliminary investigation of the skeleton indicates that it may be a temnospondyl amphibian, possibly a cacopine dissorophid, but further examination and laboratory preparation is required. The Malagash Formation has never before produced any known tetrapod specimens and age-dating of the formation has relied largely upon sparse palynological records. This recent discovery may provide valuable new insights into the geographic distribution and evolutionary history of this important group of terrestrial tetrapods that coexisted with reptiles during this early chapter of terrestrial vertebrate evolution.