

ROCKS

The rocks at Lepreau Falls belong to the Mabou Group (CMA) and are likely Early Carboniferous age, about 325 to 315 million years old. The rocks are red to purple sandstone, shale and conglomerate. Very few fossils are found in these rocks and their age has been difficult to determine. In the 1970s geologists thought the rocks were from the Triassic Period (251 to 199 million years ago). The fossils found here were described as Triassic age. They are now known to be much older.

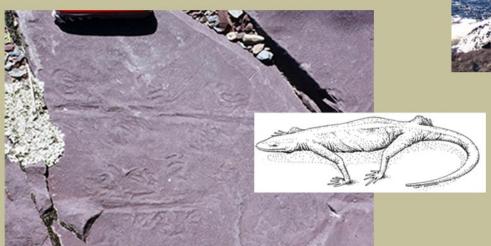


FOSSILS

Fossils are usually the buried remains of animals and plants, preserved as petrified body remains, a cast or a mould. Fossils can also be traces made by organisms, such as footprint trackways left by animals walking across the mud. Trace fossils provide scientific information about behaviour. How fast did the animal walk? Did it travel alone or in a herd?

A rare occurrence of a tetrapod trackway was discovered at Lepreau Falls in 1974. A tetrapod is a four-legged animal. The footprints were likely made by a reptile.

At least two sets of footprints were found, with a groove down the middle made by the tail, as animal walked across a wet surface. Geological information at the time indicated the rocks here were from the Triassic Period (251 to 199 million years ago). They are now believed to be Early Carboniferous age rocks (325 to 315 million years ago). The footprints were probably left by some of the oldest reptiles on Earth.



FOSSILS ARE PROTECTED BY LAW IN NEW BRUNSWICK A PERMIT IS REQUIRED TO COLLECT FOSSILS

If you find a fossil, note its location, photograph it and send the information to the New Brunswick Museum (www.nbm-mnb.ca).



LEPREAU FALLS PROVINCIAL PARK

Location: south of Hwy 1, west of Saint John, NB.

GPS: 45°10.2' N; 66°27.66' W

Access: open all year, dawn until dusk, free

Geological Age: Early Carboniferous 325 to 315 million years old

Features: picnic tables, boardwalk, waterfall,

rare fossils of tetrapod trackways





EROSION

Rocks are eroded by the action of water slowly breaking down the layers into smaller and smaller pieces. During the winter, ice and frost will also break down the rock. As the rocks are slowly worn down the sand and mud will be washed out into the Bay of Fundy. They will eventually become sedimentary rocks again as part of the recycling of the Earth's crust.

The red sedimentary rocks at Lepreau Falls were once deposited in water along a river or shoreline. The footprints trackways found here tell us the water was often shallow.