



TUCKER PARK

Location: Kennebecasis Drive, North end of Saint John, NB
GPS: 45°18.67' N; 66°05.60' W

Access: accessible dawn until dusk, free

Geological Age: Devonian 370 million years old

Features: beach, trail



ROCKS

The rocks at Tucker Park are part of a distinctive formation in the Saint John area. They comprise the Kennebecasis Formation (Cx), named for the river where they are seen in outcrop. These are the oldest 'cover rocks' in the park, meaning they lie on top of the older geological terranes that amalgamated by the process of plate tectonics. The red Devonian age rocks are about 370 million years old.



RIVERS OF ROCK

Kennebecasis Formation rocks might be described as 'Rivers of Rock' since they are layers of sediment that accumulated in riverbeds. The sand, mud and boulders were once sweeping down fast flowing rivers, eroding the mountains that had been created as the older terranes collided. Spectacular examples of these Devonian rocks can be seen around the north end of Saint John in Millidgeville and near UNBSJ. The Memramcook Formation seen further east near Hampton is a related formation and formed in a similar environment.

THE AGE OF FISHES

The Devonian Period of geologic time is often called 'The Age of Fishes'. During this Period many of the groups of fish we now know flourished. Some of the dominant fish of the Devonian also became extinct. Bony fish and sharks evolved rapidly during this time and are still here today. Acanthodians, placoderms, cephalaspids, thelodonts and others are gone. The Devonian is also the time that animals called tetrapods evolved. A tetrapod is an animal with four legs (or two legs and two arms in our case). A fossil fish often found with Devonian tetrapod fossils is the lobefin fish *Holoptychius*. Recently a fossil of this fish was found in the Kennebecasis Formation not far from Tucker Park. The scales and jaw are distinctive and indicate that these rocks are most likely Devonian age, and support the idea these are freshwater, or non-marine sediments.



jaw -- *Holoptychius* sp. -- scales



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).