

Description of post-glacial echinoderm fossils from marine deposits in New Brunswick

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Invertebrates commonly occur in post-glacial marine sediments that skirt the shoreline of New Brunswick. In addition to the more plentiful remains of clams, snails and barnacles, at least two species of echinoderm have been described, although neither have been well documented. The brittlestar *Ophiura sarsii* Lutken and the common green sea urchin *Strongylocentrotus droebachiensis* Muller are found in marine clays near Saint John. Sea urchin remains have also been described from deposits near Bathurst and Shippegan. In spite of a number of references, only two specimens of sea urchin from the Saint John area can be located, in addition to the recent description from Shippegan. Brittlestar fossils are more numerous, especially from the Sheldon Point deposit in Saint John.

A comprehensive list of Quaternary invertebrates from the Saint John region was published in 1865 by Charles Hartt and other papers have subsequently noted the presence of both *O. sarsii* and *S. droebachiensis*. However, very little has been done to document the occurrence and paleoecology of specimens in any detail. Even though both echinoderms are widely distributed boreal species, they can provide information about the trophic structure of post-glacial communities and with more careful collecting, they have the potential to supply more detailed information concerning water depth and temperature. In modern environments, for example, the disk diameter of *O. sarsii* can be correlated with water depth. Improved documentation of fossil remains of both species is a first step toward enhancing their value in paleoecology.