

The Crinoidea of Anticosti Island, Quebec (Late Ordovician to Early Silurian)
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Abstract

The diverse Katian (Late Ordovician) through Llandovery (Early Silurian) crinoid fauna from Anticosti Island is described. Previously, six described species were known; with one now a *nomen dubium* and two others placed in open nomenclature, herein. In contrast, Katian through Llandovery Anticosti crinoids are now recognized with 49 named species and 18 new genera. Including all taxa left in open nomenclature, crinoid species-level richness is more than 60.

The Anticosti Island crinoid fauna is highly endemic with 46 percent of genera only known from Anticosti Island and only three species known from elsewhere. This undoubtedly results because the temporal and geographic interval represented on Anticosti Island is extremely poorly known from elsewhere, especially in shallow-water facies with shelly faunas. The Anticosti fauna is very significant for understanding the macroevolutionary transition from the early to the middle Paleozoic Crinoid Evolutionary Faunas, which was mediated, in part, by end-Ordovician mass extinctions.

Late Katian crinoid faunas from Anticosti Island are similar in composition to contemporaneous faunas elsewhere. "Silurian aspect" faunal elements are common in Anticosti Hirnantian faunas. The Rhuddanian, immediately following the end-Ordovician extinctions, contains the least diverse crinoid fauna on Anticosti Island, and this earliest Silurian fauna still retains some "Ordovician aspect" faunal elements. By the Telychian, the fauna is characteristically Silurian in composition.