
**Tracking late-Holocene environmental change
at Long Lake, New Brunswick-Nova Scotia
border region, Canada**

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The Missaguash Bog and Amherst Marsh represent an area with a long history of anthropogenic influence, situated along the border of Nova Scotia and New Brunswick at the head of the Bay of Fundy. Long Lake is a small, shallow lake in the middle of this marsh system affected by a number of human-induced changes including water control structures to keep saltwater out of the Amherst Marsh, dredging of channels to drain the Amherst Marsh for farmland, construction of an impoundment for waterfowl, and increased use through recreation, construction, and forestry. The impact of this activity on Long Lake can be resolved using paleolimnological methods to link changes in organic content, metals concentrations, and other proxies observed in sediment cores to the known history of the lake basin, leading to a better understanding of how small shallow lakes react to anthropogenic influence. The importance of the Missaguash and greater Tantramar Marshes as an iconic Canadian landscape and important waterfowl habitat also lends importance to understanding environmental change in a shallow lake/marsh ecosystem.