

sampled to ensure that it has not been deposited or washed in a glaciolacustrine environment. Similarly, the presence of mineralized boulders on till surfaces found below the maximum elevation of the ice-marginal lakes level may be unrelated to ice flow, having been deposited by ice rafting.

The paleogeography of glacial lake Shanadithit in the Red Indian Lake Basin, Newfoundland

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Central Newfoundland has potential for the formation of ice-marginal lakes due to its topography and diachronous pattern of deglaciation. The spatial distribution and elevation of features such as deltas and shorelines, along with the presence of fine-grained sediments, enable the delineation of ice-marginal lakes, the largest of which was glacial lake Shanadithit, which occupied over 116 km of the Red Indian Lake Basin at its greatest extent. The location of topographic lows and the pattern of glacial retreat suggest that glacial lake Shanadithit experienced four phases of ice-marginal lake development. These were: the Lloyds River Phase at 310–330 m above sea level (asl); the Star Lake Phase at 310 m asl; the Hinds Lake Phase at 302 m asl, and the Joe Glodes Pond Phase at 195 m asl.

Delevelled shoreline features and corresponding outlets indicate that the basin has undergone a minimum isostatic tilt of 0.22 m km⁻¹. This indicates that the Newfoundland Ice Cap influenced the amount glacio-isostasy on the island of Newfoundland, and was not overshadowed by crustal depression associated with the Laurentide Ice Sheet, as previously suggested.

The development of ice-marginal lakes within the Red Indian Lake Basin suggests that drift prospecting programs should pay close attention to the material being