

**ABUNDANCE AND DISTRIBUTION OF LICHENS FOUND IN THE RECLAIMED  
AREAS OF THE NICKEL AND COPPER MINING REGION OF SUDBURY, ONTARIO<sup>1</sup>**

by

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Abstract. The Sudbury Land Reclamation Program has been operating since 1978 and has treated about 25% of the heavily stressed land near the base mining and smelting complexes. Over 3 million trees have been planted into 4000 ha of land treated with limestone, fertilizer and a grass-legume mixture. In the subsequent years over 25 species of lichen has invaded the ground in the developing open woodland ecosystem. The most numerous lichens are members of the *Cladonia* ("Pixie Cup") group but Reindeer lichens (*Cladina* spp) also occur. The pattern of invasion has similarities to that observed in other disturbed ecosystems (cutting or burning in forests, or abandoned farmland). Lichens on reclaimed land show above normal amounts of nickel and copper but contain lesser amounts than lichens growing in adjacent unreclaimed areas.

Additional Key Words: metals, copper, nickel, biodiversity, succession

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