

Hot for macrolichens: Kespukwitk/Southwest Nova Scotia yields several new species for Nova Scotia and Canada

James L. Churchill¹, R. Troy McMullin², Frances Anderson³, Chris Miller⁴, C. Sean Blaney⁵, Caitlin Porter⁶, Katrina Cruickshanks²

¹ *Lobaria Consulting, Kentville, Nova Scotia*

² *Canadian Museum of Nature, Ottawa, Ontario*

³ *Nova Scotia Museum, Halifax, Nova Scotia*

⁴ *Canadian Parks and Wilderness Society, Halifax, Nova Scotia*

⁵ *Atlantic Canada Conservation Data Centre, Sackville, New Brunswick*

⁶ *Unaffiliated, Halifax, Nova Scotia*

Nova Scotia hosts a remarkably rich and distinctive lichen flora, recognized across Canada for its diversity and conservation significance. The province's geographic position, its maritime climate and varied habitats, create ideal conditions for a wide diversity of lichen species. A high proportion of Nova Scotia's species are rare, range-restricted, and of conservation concern. Kespukwitk / Southwest Nova Scotia is an especially important region, supporting a large proportion of the populations of many of the province's at-risk lichens, one globally-endangered species and several species not known elsewhere in Nova Scotia. Our current understanding of this region's lichen diversity has been shaped largely by the dedicated work of a small, but mighty, group of observers over the past four decades. Yet recent surveys continue to reveal that much remains undiscovered. We report the discovery of nine new macrolichen species for Nova Scotia from Kespukwitk / Southwest Nova Scotia, most found within the past two years through collaborative research and monitoring projects. Of these, four species are new to northeastern North America, and four species are new to Canada. We share key identification features and habitat associations to help others recognize these lichens in the field and, thereby, improve understanding of their distribution and status in the province. Finally, we discuss the broader implications of these discoveries for biodiversity knowledge and lichen conservation in the region – *are any of these species candidate species at risk?*

Keywords: lichens, biodiversity, conservation, research, rare species, identification

Oral presentation