

Citizen science on a peninsula at Goldsmith Lake

Nina M. Newington^{1,2}, Lisa M. Proulx¹, Karen S. Achenbach¹ and Jonathan A. Riley¹

¹ *Citizen Scientists of Southwest Nova Scotia, Mount Hanley NS*

² *Save Our Old Forests Association, Hampton NS*

Ground-truthing is an essential contribution citizen scientists can make to conserving biodiversity. In alignment with the province's *Collaborative Protected Areas Strategy: An Action Plan for Achieving 20 Per Cent* (2023), Citizen Scientists of Southwest Nova Scotia made multiple visits between August 2023 and July 2025 to a peninsula that divides the two arms of Goldsmith Lake within the proposed 3900 hectare Goldsmith Lake Wilderness Area in the South Mountain ecodistrict of Annapolis County. This area of crown land, acquired from the Bowater Mersey Paper Company in 2012, was mapped as almost entirely managed forest that was clearcut in the early 1970s. The Provincial Landscape Viewer showed the development stage as Early Mature but observation and Lidar mapping suggested otherwise. Citizen scientists documented three stands of old hardwoods and hemlocks on the peninsula. Nineteen species at risk were identified, including three Black Ash/Wisqoq *Fraxinus nigra*. The 16 SAR lichens included the first observation of Black Foam lichen, *Anzia colpodes*, in the proposed Wilderness Area. Lichen species of conservation concern were also identified. The citizen scientists' work on the peninsula resulted in protective buffers being added to a proposed harvest plan. The stands of old-growth they identified have been added to Nova Scotia's Old Growth Forest Policy layer. Their work demonstrates that the area meets the criteria for permanent protection established by the *Collaborative Protected Areas Strategy*, notably, "areas rich in biodiversity as well as rare or unique landscapes, such as old-growth forests, salt marshes, and habitats that support species at risk."

Keywords: Citizen science; Goldsmith Lake; species at risk; old-growth forest; protected area

Oral presentation