

Ancient Forest Exploration & Research

Powassan Office: 3492 Memorial Park Dr., RR#4, POH 1Z0 Peterborough Office: The Mount, 1545 Monaghan Rd., K9J 5N3 (705) 312-AFER (2337) | info@ancientforest.org | charitable number: 89288 2762 RR0001

SITE VISIT REPORT #11

An Old-growth Forest Assessment for Northwest Peterborough County Crown Forests Peterborough County, Ontario Prepared February 10, 2020 by Carling Dewar

Site information

Property name and location:	 Northwest Peterborough County Crown Forests 1. Access Road Forest #1: <u>44.706861, -78.423064</u> 2. Fire Access Road Forest #2: <u>44.704730, -78.446707</u> (could not access) 3. De Gaulle Lake Forest: <u>44.658867, -78.493486</u> (could not access) 		
Date visited:	Tuesday August 20, 2019 for reconnaissance and iNaturalist project ¹ testing		
Surveyors:	AFER staff: Carling Dewar, Laura Collings, and Hayley McGregor		
Land designation:	Crown land		

Summary

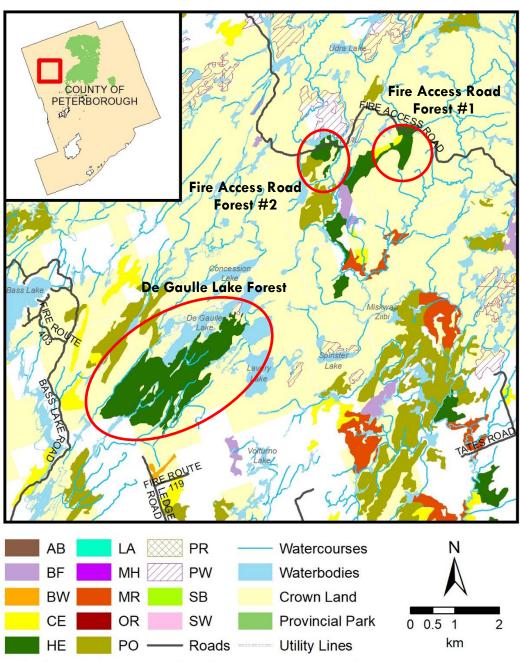
Three different forests were visited to search for old-growth eastern hemlock stands. We could only access one on Fire Access Road (off County Road 507). While we found some large eastern hemlock, white pine, and red maples in this area, there has been recent logging that has removed a large portion of trees in this area. Prior to logging it may have been an old-growth forest, but with this disturbance, it cannot be considered as such.

Site Description

Areas visited during this trip were chosen based on 1987-2003 Forest Resources Inventory (FRI) data from the Ministry of Natural Resources and Forestry (MNRF; Figure 1). We successfully visited one eastern hemlock-dominant forest in this area that we named Fire Access Road (FAR) Forest #1 and attempted to visit two other areas that we found to be inaccessible (Figure 1). The areas we did not visit include the smaller eastern hemlock-dominant forest to the west of FAR Forest #1 that we named Fire Access Road (FAR) Forest #2 and the eastern hemlock-dominant forest south of De Gaulle Lake that we named De Gaulle Lake Forest. FAR Forest #2 could not be accessed due to road conditions; De Gaulle Lake Forest could not be accessed because of the development of a private road to a quarry just south of the forest. Other roads to the De Gaulle Lake Forest likely exist, as there are cottages on this lake.

When we arrived at FAR Forest #1, we travelled approximately 150m from the road, measuring trees along the way. Where we started there was a large clearing adjacent to the road (likely created during a recent logging operation) and further into the forest (~50m) there was another clearing where it was clear that harvesting recently occurred (see Photos). We cored one tree during this trip, a 54.6cm DBH eastern hemlock that we aged to be at least 132 years old. We observed several other impressive eastern hemlock, white pine, and red maple trees, as well as a couple of large snags. Observations can be found on our iNaturalist project: https://www.inaturalist.org/observations/31177832 (AFER 2019).

¹ <u>Peterborough Old-Growth Forest Project – Protocol Level 1</u> (AFER 2019).



Northwest Peterborough County Old-Growth Forest Stands based on 1987-2003 FRI Data

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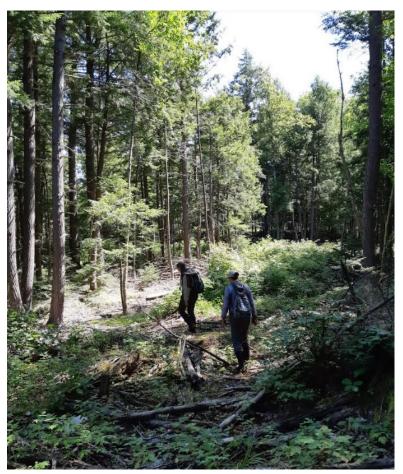
Figure 1. Map of old-growth forest stands in northwest Peterborough County based on 1987-2003 FRI data, including areas visited. See Appendix A for acronyms.

Old-growth Features

- 1. Tree ages: Eastern hemlock (54.6cm DBH): 132 years
- 2. Tree species present: Eastern hemlock, red maple, white pine, sugar maple, red oak
- 3. Coarse woody debris (none, uncommon, common, abundant): Common
- 4. Snags (none, uncommon, common, abundant): Common
- 5. Super-canopy trees present? Yes
- 6. Pit and mound topography present? Not noted.
- 7. Evidence of human disturbance? Yes recent logging has occurred here.
- 8. Wildlife observations: Bear scat observed

Photos

Fire Access Road Forest #1



AFER team members walk across a recently harvested portion of the forest.



Left: An AFER team member measures a 54.6cm DBH eastern hemlock estimated to be 132 years old (observation on iNaturalist: <u>https://www.inaturalist.org/observations/31299763</u>). Right: One of several stumps found at the site (observation on iNaturalist: <u>https://www.inaturalist.org/observations/31178671</u>).

Forest Designation(s) ²			
⊠ Young	🛛 Mature	□ Old	□ Old-growth

Notes: Despite several trees exceeding our old-growth size criteria (Quinby 2020), harvesting in this area has severely fragmented the forest.

References

- Ancient Forest Exploration & Research (AFER). 2019. <u>Peterborough Old-Growth Forest Project Level 1</u>: <u>https://www.inaturalist.org/observations/31177832</u>. Accessed January 14, 2020.
- Quinby, P. 2020. Minimum Diameters for Old-growth Trees in Ontario's Northern Temperate Forests. *Forest Landscape Baselines No. 36*, Ancient Forest Exploration & Research. Powassan & Peterborough, Ontario. (<u>https://14b54489-f611-4cf7-9e23-</u> <u>d1b121227c63.filesusr.com/ugd/1eacbf_d0fad9641f2a464986ae5d9b7478ed6a.pdf</u>)

² Definitions for designations are in progress.

Appendix A: Acronyms

AB: black ash BF: balsam fir BW: white birch CE: white cedar HE: eastern hemlock LA: larch/tamarack MH: sugar maple (aka hard maple) MR: red maple OR: red oak PO: poplar species PR: red pine PW: white pine SB: black spruce SW: white spruce