



Ancient Forest Exploration & Research

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SITE VISIT REPORT #5

An Old-growth Forest Assessment for

Stewart's Woods, an Otonabee Region Conservation Authority Property

Peterborough County, Ontario

Written June 7, 2019 and revised November 12, 2019 and March 5, 2020 by Carling Dewar

Site information

Date of visit:	Thursday, May 30, 2019				
Property name, location, and size:	Stewart's Woods, Peterborough, ON K9J 6Y3 44.201033, -78.343471 27 hectares (Larson et al. 1999)				
Attendees:	Dr. Peter Quinby (AFER) and Carling Dewar (AFER)				
Start time:	11:30am	End time:	2:00pm	Duration:	2.5 hrs
Purpose of visit:	Ground-truth Larson et al. (1999) chapter noting that Stewart's Woods is an old-growth forest.				
Weather and terrain conditions:	Sunny, 23°C, with little wind.				
Notes:	<p>A locked gate makes access tricky, but visitors can go around the north side of the gate (there is a small gap at this end). Watch for poison ivy, rusty fences, and electric fences. There are no trails/trail markers in this forest.</p> <p>A 650m walk is required along an old access road (now overgrown with tall grass and some trees, figure 1) to reach the northeast arm of the woods. Once you reach the woods, continue along the north boundary for 400m to reach the northeast corner of the main core. We did not make it to this area but found many impressive trees in the northeast arm.</p>				

Site description:

Along the old access road, there is a very large black cherry tree (85.5cm DBH; east side of trail, opposite pines near farm home) and several large basswood and oak trees. In the woods, there are several large hemlocks, supercanopy white pines, and sugar maples in the northeast arm. Moving toward the core, there are many towering hardwood trees (black cherry, maple spp., red oak) and abundant logs. Snags can be found throughout, some of which have numerous pileated woodpecker holes and cavities.

Several bird species at risk were noted along the old access road, including Bobolinks (at least two), one Eastern Meadowlark, and Chimney Swifts. A pileated woodpecker was observed on the edge of the core forest and signs of other animal life were found throughout (deer tracks, tree frog calling, raccoon skull).

Mike Henry and a neighboring farmer mentioned a windstorm that fell several large white pines in the core forest approximately three years ago. We did not have time to find the blow-down site during our visit.

Map

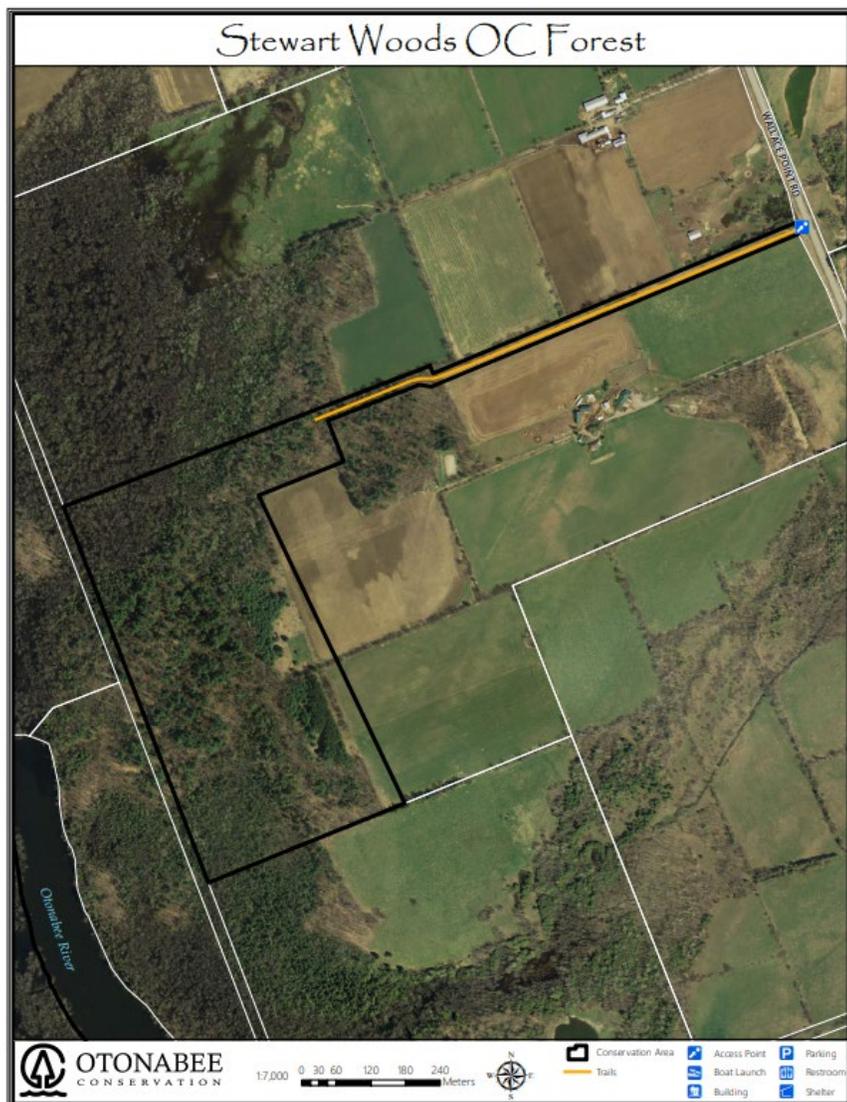


Figure 1. Map of Stewart's Woods. (ORCA, n.d.)

Tree measurements

Table 1. List of old or large (>40cm DBH) trees on site (if tree is a snag or log, threshold is 30cm).

Tree ID	Tree spp.	DBH (cm)
1	Cb	85.5
2	Mh	82.5
3	Pw	71.6
4	He	60.5
5	He	64.6
6	Mh	79.6
7	Or	69.6
8	Mh	80.8

Photos



Figure 2. View of the forest from the abandoned access road.



Figure 3. One of the eastern hemlocks measured.



Figure 4. Area with abundant coarse woody debris.



Figure 5. Left: a snag with numerous pitted woodpecker holes. Centre: An uprooted tree that has created a pit. Right: A large patch of false Solomon's seal and trillium plants.

Old-growth features

1. **Species present and tree ages:** eastern hemlock, white pine, sugar maple, black cherry, red oak, and other hardwood species observed. Trees measured (table 1) are likely over 150 years old.
2. **Logs** (*none, uncommon, common, abundant*): Abundant near core
3. **Snags** (*none, uncommon, common, abundant*): Common
4. **Supercanopy trees present?** Yes
5. **Pit and mound topography present?** Yes
6. **Evidence of human disturbance?** Little disturbance observed as we approached core area. Some cut stumps observed in the northeast arm.
7. **Wildlife observations:**

Bird species	Other animals/animal signs	Understory plants/shrubs
<ul style="list-style-type: none">• Warbling vireo• House wren• Red-winged blackbird• Chimney swift (threatened in Ontario)• Song sparrow• Bobolink (threatened in Ontario)• Killdeer• American goldfinch• Pileated woodpecker• Blue jay• Turkey vulture• Eastern meadowlark (threatened in Ontario)• Eastern kingbird	<ul style="list-style-type: none">• Deer paths/tracks• Raccoon skull• Raptor feathers• Tree frog calling• Chipmunk	<ul style="list-style-type: none">• White trillium• Painted trillium• False soloman's seal• Starflower• Ostrich fern• Other fern spp.• Common buckthorn

Forest designation¹

Young

Mature

Old

Old-growth

References

Larson, B.M., Riley, J.L., Snell, E.A., and Godschalk, H.G. 1999. The Woodland Heritage of Southern Ontario: A Study of Ecological Change, Distribution, and Significance. Federation of Ontario Naturalists, Don Mills, Ontario, pp 179-181. Chapter obtained from Ministry of Natural Resources and Forestry library (300 Water Street, Peterborough, ON K9J 3C7).

Otonabee Region Conservation Authority (ORCA). N.d. Stewart's Woods OC Forest. Provided by ORCA.

Acknowledgements

I would like to thank Peter Quinby and Laura Collings for their assistance with this report, and to Peter Quinby for his assistance with reconnaissance. This work was funded through an Ontario Trillium Foundation Seed Grant.

¹ Definitions for designations are in progress.

Research permit:



Otonabee Region Conservation Authority
250 Milroy Drive, Peterborough, ON K9H 7M9
Tel: 705-745-5791 Fax: 705-745-7488
otonabeeca@otonabeeconservation.com

PERMIT FOR USE OF CONSERVATION AREA

Permit Holder Name(s): Ancient Forest Exploration & Research
Permit Holder Phone: 705-312-2337; 705-724-5858
Requested Date(s): May 1, 2019 to October 31, 2019
Permit number: 0 0 4 - 2 0 1 9

This permit allows the **Permit Holder(s)** to conduct the following activity(ies) in Stewart Woods, during the dates and times noted above, and only for the **Permitted Activity** as described.

Permitted Activity:

Hiking; field ecology education; biodiversity and habitat assessment; non-destructive vegetation sampling; tree coring to determine tree age

Activity(ies) NOT Permitted:

Notwithstanding the above Permitted Activity, this permit does **NOT** allow the following:

- ~~Leaving established trails~~
- Harvesting any plant material (living or dead)
- Harvesting any wildlife
- Establishing an open fire for any reason

Conditions:

For the duration of this permit the Permit Holder shall procure and at all times maintain a Commercial General Liability (GCL) Policy written on an occurrence basis with liability limit not less than five million dollars (\$5,000,000.00) in respect of any one accident or occurrence with Otonabee Conservation named on the policy as Additional Insured with subrogation. Further Otonabee Conservation does not accept any liability for incidents arising from this activity.

Ensure that all persons in your group follow the conditions of this permit. Failure to do so may result in fines under the Trespass to Property Act, R.S.O. 1990, Chapter T.21, Conservation Authorities Act, R.R.O. 1990, REGULATION 128, CONSERVATION AREAS — OTONABEE REGION and/or immediate eviction from the conservation area.

This permit must be in your possession the entire time while at Stewart Woods. Any questions or concerns regarding this permit can be addressed to Jessie James, Manager, Conservation Lands Program Monday to Friday between the hours of 8:30a.m. to 4:30p.m. at 705-745-5791 Ext.216.

In case of an emergency, dial 911

Permit Holder(s) Signature: Peter Quinby Date: April 25, 2019

Otonabee Conservation: Jessie James Date: May 13, 2019