

Appendix 2 – Site Descriptions for 94 High Conservation Value Eastern Hemlock Forests in Ontario within 50 km of Lakes Erie and Ontario



Values Definitions:

OG - Old-growth forest

MF - Mature forest / entering old-growth stage

CF - Contiguous forest tracts or connected to natural heritage network

SRE - High scenic, recreational, or educational value

UF - Urban forest

REP - Representation value: ANSI, Nature Reserve, candidate reserve

IBA - Important birding area (IBA)

ESA - Recognized environmentally significant area, heritage woodland, signature site

RW - Riparian, waterfront or wetland forest

SL - Slope stabilization

RS - Rare species

Name	Lat	Long	Ha	Land Use Designation	Values	Public Access 1=best 4=worst	References	Description
Altona Forest	43.8286	-79.1379	53	TRCA land	MF,UF, ESA	1	Wake 1997	This is a mature woodland, including communities dominated by white cedar and sugar maple-hemlock communities.
Balls Falls Gorge (Twenty Valley)	43.1340	-79.3810	20	Conservation Area	OG,SRE, RW,SL, RS	1	Bert Miller Nature Club 2003, Kershner 2004	Hemlock-northern hardwood forest, with inspiring pristine forest in a spectacular gorge. Kershner (2004) reports ring counts of hemlocks up to 330 years. Red mulberry occurs.
Beamers Falls Gorge	43.1866	-79.5702	<1	Conservation Area	OG,SRE, IBA,RW, SL	2-3	Bert Miller Nature Club 2003, Kershner 2004	Only a small pocket of old-growth forest remains in the gorge due to aggressive logging in the early 1900s. This and the old-growth hardwood forest above it at Grimsby Point, complement cliff-face ancient cedars, and spectacular views, making this one of Ontario's premier scenic treasures
Beattie Pinery	44.123	-79.860	80	Provincial Nature Reserve	MF,REP, ESA		Larson et al. 1999	The most mature, least disturbed woodland remaining in the Alliston Sand Plain. Trees reach 100+ years. Hemlocks are mostly small-mid diameter.
Big Creek Floodplain	42.6413	-80.5406	455	ANSI, Carolinian Canada Signature Site	MF,CF, REP,ESA, RW,SL	4	Lindsay 1981, Carolinian Canada 2017	The north-facing valley slopes and tributary ravines support mixed forests of hemlock with white pine, yellow birch, red maple and beech in good condition. The south and east-facing slopes are wooded with sugar maple and some beech and hemlock.

Big Otter Creek	42.8333	-80.7447	647	ANSI	MF,CF, REP,RW ,SL,RS	4	Lindsay 1981, IBA Canada 2017	A large, relatively intact, natural corridor follows the deeply incised, meandering valley of Big Otter Creek for about 7 km south from Tillsonburg. The east and north-facing slopes and tributary ravines tend to be dominated by hemlock with some yellow birch and red maple. The valleys of two tributaries South Creek and Moore's Creek-are included. Hemlock slopes which contain some sugar maple, beech and yellow birch; mixed deciduous-hemlock forests, and sycamore-willow-aspen floodplains are examples of the vegetation. It is estimated that more than 20 pairs of Louisiana waterthrush (nationally vulnerable) are nesting in the upper Big Otter Creek valley, from just south of Tillsonburg upstream to Otterville.
Bolton resource management Tract (Humber Valley)	43.8855	-79.7878	973	TRCA Land	OG,CF, SRE,RW ,SL	1	Henry and Quinby 2019	Several pockets of old-growth hemlock occur within and adjacent to the Bolton Resource Management Tract, along the Humber Valley Heritage Trail. Visual characteristics suggest the hemlocks are commonly 130-200 years old, but some have characteristics of older trees, one is estimated at 250-300 years old.
Boyd Conservation Area And Adjacent Lands	43.8188	-79.5823	57	Life Science ANSI, Provincial	MF,UF, REP,RW ,SL	3-4	NHIC 2016, TRCA 2012	This site includes the northeast corner of Boyd Conservation Area and the uplands immediately adjacent to its east side. It is characterized by flat uplands flanking a steep-sided flat bottomland valley. Dense, semi-mature to mature hemlock forests occurs (NHIC). Fresh-Moist Hemlock Coniferous Forest (FOC3-1) occurs on the northeast aspect of the East Humber River Valley, at 43.806, -79.584, while Fresh Moist Hemlock – Hardwood Mixed Forest (FOM6-2) occurs on floodplain terraces south of Langstaff Rd (43.802, -79.582 and 43.798, -79.580). TRCA 2012
Boye's Explosive's - Fenwick Forests	43.0364	-79.3757	120	Mostly private	OG,ESA, RW	4	NPCA 2010	Mixed Swamp habitat in this study area is characterized by a species rich hemlock (<i>Tsuga canadensis</i>) - Yellow birch (<i>Betula alleghaniensis</i>) community which grades into Red Maple (<i>Acer rubrum</i>) swamp on some upland edges.
Bridgeview Valley	43.3009	-79.8952	67	Life Science site, ESA	MF,UF, ESA,RW ,SL	4	NHIC 2016, Halton Region and North-South Environment al 2005	Bridgview Valley is a deep, narrow, steep-sided ravine which runs south from the Escarpment, and contains a tributary to Grindstone Creek. The east bank supports a good quality maturing forest of maple, oak and hickory in the south and hemlock to the north

Bronte Creek Provincial Park Nature Reserve Zone	43.4111	-79.7585	196	Life Science ANSI, Provincial, Provincial Park	OG,CF, SRE,UF, REP,ESA ,RW,SL	2	NHIC 2016, Halton Region and North-South Environmental 2005	A narrow deep winding gorge cut through shale and till plain characterizes Bronte Creek area. The parks 30 m high steep slopes are vegetated with hemlock-white birch-white cedar, sugar maple and yellow oak-red oak-white oak.
Brookbanks Ravine	43.751	-79.330	17	ESA, Municipal Park	MF,SRE, UF,ESA, RW	2	North-South Environmental 2012; AFER 2016	Deciduous forest dominated by sugar maple, American beech and hemlock along the steep slopes of a ravine, to a bottomland dominated by lowland forest. Access is via Deerlick Creek Trail. Much of the hemlock is off-trail (but accessed by commonly used informal trails). Ring counts of cut tree gives a minimum age of 140.
Cavan Creek Headwaters	44.1926	-78.5347	1601	Candidate Life Science ANSI, Regional	CF,RW	3-4	NHIC 2016	Primary headwaters (714 ha (1765 acres)) of Cavan Creek. Open pond, cattail-alder-grasses marsh, alder-willow-cedar scrub swamp, cedar-hemlock-white birch-trembling aspen-cedar-white pine upland woodland. Good coldwater trout stream (brown trout).
Charleston Lake Provincial Park	44.5066	-76.028		Provincial Park	MF,CF, SRE,RW	1	AFER 2017, Friends of Charleston Lake Park 2017	Sugar maple, beech, paper birch, hemlock, red oak and white pine are the most abundant tree species in the park. The Hemlock Ridge Trail leads through rock crevices, and dense hemlock and white pine forest with views over wetlands and hemlock trees up to 120 years old.
Collins Lake	44.3584	-76.4515	70	Private. Life Science ANSI, Provincial	OG,CF, REP,RW	3	White 1990, NHIC 2016, Lindsay, 1986	"This is the least disturbed old forest stand seen in Eastern Region in this study or in the author's previous field experience of nearly 20 years. Its large size, location along an undisturbed marshy shoreline of Collins Lake, and range of moisture and composition, add to its representative value." White, 1990. A mature example of maple-beech -hemlock upland forest on a mesic, sandy loam site. Other vegetation and site types present. [Lindsay, 1986]
Crawford Lake - Rattlesnake Point Escarpment Woods	43.471	-79.927	664	Private / public - HRCA Conservation Area	CF, ESA, REP, RS, SRE, MF, OG	1-2	Halton Region and North-South Environmental 2005	The Escarpment forests in this area are mature hardwoods and hemlock, situated on shallow loam soils overlying fissured dolomite bedrock. Ancient cedar forests occur on the escarpment. Includes a provincially significant Life Science ANSI, Crawford Lake - Milton Outlier Valley.
Credit River At Erindale	43.5532	-79.6618	248	Life Science ANSI, Regional,	MF,CF, UF,REP, RW	1	NHIC, Wake 1997	Steep, wooded river valley and floodplain stretching 6 km in length, south of Streetsville. River floodplain Manitoba maple-willow-black maple, valley slope sugar maple-hemlock-beech and sugar maple-red oak-black cherry and

				Municipal Park				tableland white oak-white pine. Eastern hemlock and white cedar occurs on the east-facing slopes
Decew Falls and Gorge	43.109	-79.264	11	Privately owned? But a priority for acquisition to add to Short Hills Provincial Park	OG,SRE, IBA,RW, SL,RS	3	Cheskey 2003, Kershner 2004	Decew Falls and Gorge "includes one kilometre of spectacular gorge that cuts north through the escarpment. At times the gorge walls are over 40 metres in depth. To the south, above the 20 metre waterfall, are the Fonthill Kame uplands and valleys. The slopes are heavily forested with hemlock, maple, and oak" (Cheskey 2003). Kershner (2004) aged a variety of trees including hemlock to over 260 years.
Delaware Woodlot	42.9038	-81.4164	35	Life Science ANSI, Regional. Private land?	REP,ESA ,RW,RS	2	NHIC 2016	Fifty ha of steep ridges adjacent to Thames River floodplain. Hardwood uplands dominated by beech-sugar maple-ash and red oak-white oak-basswood-witch hazel with black walnut-black maple-blue beech. Flowering dogwood and blue ash occur here. Hemlock-yellow birch forest occurs. Area can be access via Thames Valley Trail (access at Pleasant St turnaround)
Delhi Big Creek Valley	42.815	-80.507	259	ANSI, Carolinian Canada Signature site. Largely private	MF,CF, REP,RW ,RS	4	Eagles & Beechey 1985, Ambrose and Kirk 2010	Eastern hemlock grows on the drier slopes. The best example of this type of forest occurs on the west side of the river where a large spring-fed creek flows into the main river by a small waterfall. It is unclear if this area includes old-growth forest, but it seems likely. Cucumber tree occurs and is regenerating.
Delhi Wetland Nature Reserve	42.858	-80.494	5	Private Nature Reserve	MF,CF, RW,SL	3	LPBLT 2016	Nestled in a deep valley alongside Big Creek north of Delhi, the property is as diverse ecologically as it is varied topographically. Despite its relatively small size (12 acres), the property includes a diversity of habitat types, including: mature hemlock and hardwood forests on the ravine slopes and uplands; a small stream flowing through the narrow valley; a perched grass and sedge wetland; and, a cedar-fringed ox-bow pond at the property's lowest elevations. Access by permission only
Dundas Valley	43.2385	-79.9919	2698	Mixed land use	OG,MF, CF,SRE, UF,REP, IBA,ESA ,RW,SL, RS	1	IBA Canada 2017, Carolinian Canada 2017, Eagles & Beechey 1985	Hemlock often dominates, along with Sugar maple, on valley slopes with a northerly aspect. The Dundas Valley contains a nationally significant community of forest birds, with breeding evidence for at least five nationally vulnerable, threatened or endangered species. Notably, Louisiana waterthrush has two to four breeding pairs annually that could be threatened by loss of hemlock.

Spencer Gorge (Dundas Valley)	43.2746	-79.9799	56	Conservation area, ANSI, IBA	OG,CF, SRE,UF, REP,IBA ,RW,SL, RS	3	Eagles & Beechey 1985, AFER 2017	Old growth begins upstream of the fork with Logie's Creek. A ring count of a typical hemlock in the gorge yielded 180 rings, for an approximate age of 200. Visual characteristics of old sugar maples near the creek suggest ages of 300+ (M. Henry unpublished field notes).
Spring Creek (Dundas Valley)	43.2460	-79.9953		Conservation area	MF,CF, SRE,IBA ,RW	1	AFER 2017	Groves of hemlock occur along the trail
Earl Bales Park	43.7481	-79.4229	51	Municipal Park	SRE,UF, ESA,RW	1	City of Toronto 2016	The upper slopes of this section of the West Don River valley have good examples of Mixed Forests of sugar maple, eastern white pine, American beech, red oak and eastern hemlock.
East Branch Of Don River	43.7846	-79.378	104	Candidate Life Science ANSI, Provincial	CF,UF, REP,RW	3	NHIC 2016	This site along the east branch of the Don River, south of Finch Avenue contains: cedar swamp; alder swale with open sedge meadows and scattered clumps of tamarack; a hemlock-yellow birch seepage slope and cattail-burreed marsh.
Finch Avenue Meander Scar	43.8269	-79.1965	2	Life Science site	CF,UF, REP,RW		NHIC 2016	Floodplain, ravine and slope terraces along meander scar of Rouge River north of Metro Zoo in Toronto. Upland forest of red oak-sugar maple-hemlock-white birch. Provincially rare sycamore; regionally rare black maple. [Hanna 1984]
George G. Newton Nature Reserve	43.6595	81.6613	32	Private nature reserve	MF,CF, RW	1	Wake 1997, Ontario Nature 2017	The river valley and slopes are mostly covered with a native stand of white cedar and mature forest of maple, beech, hemlock, elm, ash, butternut and other hardwoods. Abundance of hemlock may be limited.
Georgetown Credit Valley	43.6555	-79.8775	267	Life Science ANSI, Regional. 90% private, 10% public (CVC)	MF,CF, UF,REP, ESA,RW ,RS		NHIC 2016, Credit River Watershed and Region of Peel Natural Areas Inventory Project 2011	A large wooded valley of Credit River. The slopes are covered in forests of white cedar and sugar maple-eastern hemlock-beech-red Oak. Other communities include red oak-sugar maple forest, white cedar-Ash swamp, sugar maple-Manitoba maple-poplar-basswood. Hemlock communities cover 12.6 ha (about 5% of the area), mostly adjacent to the river. Fresh-moist sugar maple-hemlock mixed forest is regionally rare.
Gillies Grove	45.4430	-76.3620	25	Private nature reserve	OG,SRE, UF,ESA	1	Larson et al. 1999	Hemlock to 70+ cm. An impressive, relatively undisturbed old-growth forest. Minimum age is 250 years.
Glen Major Forests	44.005	-79.0789	300	Life Science site	MF,CF, SRE,REP		NHIC 2016	A variety of vegetation types are found at this (ca. 300 ha) site on strongly dissected moraine: maple-beech uplands, hemlock slopes, old fields with natural regeneration, swamp

								cedar lowlands (headwaters for Duffin Creek) and some coniferous plantation.
Glenville Hills	44.0270	-79.5192	345	Conservation area	MF,CF,REP,SL		Wake 1997	Old-growth forests of sugar maple, beech on mid-slopes; sugar maple-eastern hemlock on cooler slopes; white cedar-eastern hemlock-yellow birch on extensive seepage slopes near the slope bases.
Goodrich-Loomis Conservation Area	44.1167	-77.8379	179	Conservation Area	MF,SRE,RW	2	LTCA 2019	The conservation area includes short-grass prairie, one of Ontario's largest eskers, and wet hemlock forest along Cold Creek.
Grimsby Point	43.1878	-79.5717	4	Conservation area, IBA	OG,SRE,IBA	1	Kershner 2004	Identified by Kershner 2004 as an old growth Carolinian forest. Some hemlock occurs with ages reported up to 275 years.
Hague Park	43.7496	-79.2384	9.3	Municipal Park, ESA	MF,CF,SRE,UF,ESA,RW,SL	1	City of Toronto 2016	The Hague Park ESA (#76) is located south of Lawrence Avenue East between McCowan Road and Bellamy Road North. The ESA at this site includes mature mixed forest on the ravine slopes that features sugar maple, American beech, eastern hemlock, eastern white cedar, white birch, and basswood. Especially relevant is a healthy stand of trees dominated by black cherry, a typical Carolinian species. Also present is the regionally rare American hazelnut.
Happy Valley Forest	43.9631	-79.6100	648	Life science ANSI, Provincial. Private nature reserve (NCC)	CF,SRE,REP	1	Larson et al. 1999	Forest is dominated by sugar maple and beech, but hemlocks under 30 cm occur, and abundant hemlock regeneration was recorded found by Larson et al. 1999.
Harold Mitchell Nature Reserve	42.888	-79.4246	19	Non-Government Organization - Natural Heritage Property	MF,RW	2	NHIC 2016	The area is comprised of a mature woodlot dominated by Hemlock, with Maple, Beech and Yellow birch. The area has a slough-ridge terrain with many ponds and open marshes. This woodlot contains the last remaining stand of hemlock on the Lake Erie shoreline
Hemlock Valley	43.0858	-79.2804	5	Provincial Park, IBA	OG,SRE,IBA,SL	2	Kershner 2003	Hemlock and hardwood forest clings to steep ravine slopes, the hemlocks were aged by Bruce Kershner in 2003 as being 280 years-old.
Highland Creek Swamp	43.7819	-79.1979	201	Candidate Life Science	MF,CF,UF,REP,ESA,RW	3	NHIC 2016	A relatively large natural area remains along Highland Creek in Scarborough. It includes cedar-tamarack swamp, hemlock-cedar-bottomland forests, sedge-graminoid marsh and sugar

				ANSI, Provincial				maple-red oak-beech slopes. Twelve regionally rare plants are reported.
High Park	43.648	-79.460	160	Municipal Park, ANSI, ESA	OG,SRE, UF,REP, ESA,RW ,SL	2	Varga 1989	Included in High Park are regionally rare examples of moist red oak and hemlock forests . Mixed forests in High Park are confined to three small stands along the eastern slopes of Spring Road Ravine. The tree layer is dominated by hemlock, with such strong secondary species as red oak, black oak, red maple and white pine.
Hungry Hollow Ravine	43.6408	-79.8768	193	Majority private, and Municipal Park	OG,ESA, RW,SRE ,SL	2	Halton Region and North-South Environment al 2005	The valley walls support a mature mixed forest of sugar maple, beech, eastern hemlock and white cedar. The wooded areas of the Hungry Hollow Ravine are of very high quality. There are excellent examples of mature sugar maple forests and mixed forests.
Huttonville Valley	43.6474	-79.7909	20	Life Science ANSI, Regional	?	?	NHIC 2016	Terrace sugar maple-beech-hemlock woods and floodplain willow-Manitoba maple-basswood totalling 20 h in size, east of Huttonville and Credit River. Relatively undisturbed; surrounded mainly by agricultural lands. Several rare plant species. [Hanna 1984]
Jackson Creek old-growth forest	44.313	-78.342	5	Municipal park	OG,CF, SRE,UF, RW,SL	1	Henry et al. 2016	The north-east facing slopes and valley bottom create ecological conditions that favour White cedar and Eastern hemlock, and historically discouraged land clearing and development; which has allowed an old-growth forest to persist here on the hilltop, slopes, and valley bottom. Tall white pines, predominantly found on the hilltop and slopes, reach 168 years old. White cedar reaches 256 years, and hemlock 204+ years old.
Jones Creek Trails	44.495	-75.828	n/a	Thousand Islands National Park	MF,CF, SRE,RW .	1	Parks Canada 2017	A picturesque trail through hemlock forest and past rare pitch pine trees to a rocky outcrop 14 metres above the Mud and Jones Creek wetlands. Difficulty: Easy to moderate Trail length: 1.0 km Loop hiking time: 25 minutes
Kilworth Valleylands	42.9642	-81.3984	50	Life Science ANSI, Regional	REP,RW ,SL	3	NHIC 2016	Small section along Oxbow Creek near its outlet into Thames River with uplands, slope forests, and floodplains. Upland of red oak-white oak-sugar maple-witch hazel. Hemlock-cedar slope. Basswood-cedar-hemlock-black maple-blue beech
Kleinberg Woodlots	43.832	-79.5791	53	Life Science ANSI, Regional	CF,UF,		NHIC 2016	Four woodlots totalling 50 h situated parallel to one another, 3 km southeast of Kleinburg. Surrounded by farmland and adjacent to concession road. Young to semi-mature upland mesic sugar maple-ash-hemlock-white pine and lowland ash-red maple-dogwood. A

Lake Medad and Medad Valley	43.361	-79.893	261	Private (includes ANSI)	ESA, REP, RW		Halton Region and North-South Environmental 2005	A large variety of flora and fauna is found in this heavily forested valley which has been identified as one of the top botanical sites within the Region. A provincially significant wetland complex extends into Hamilton Wentworth Region. This site is a provincially significant Life Science ANSI. The west uplands support deciduous forests of maple, oak, beech and cherry, while the valley floor is a mixed swamp of eastern white cedar, white birch, tamarack, maple and hemlock. Along the north margin of the lake is a cattail marsh which extends northward into the valley basin.
Lambton Woods	43.6645	-79.5143	19	Municipal Park, ESA	MF,SRE, UF,ESA	2	City of Toronto 2016	“The upland Mixed Forests of sugar maple, eastern hemlock and white birch on the steep slopes in Lambton Woods grade into lowland forests of balsam poplar, tamarack and yellow birch in the floodplains in the southern part of the park” Hemlock is not a major component of the park as a whole.
Lasalle Park	43.3026	-79.8438	20	Municipal Park	SRE,UF	1	Wake, 1997	Forests of sugar maple, red oak, white pine and hemlock.
Limehouse Conservation Area	43.637	-79.969		Conservation Area	ESA,MF, SRE	1-3	Krick and Forsyth 2012	Undisturbed sections of the property include a mature mixed hemlock forest on the north side of Black Creek
Little Jerry Creek	42.7722	-80.8480	130	Private	MF,CF, RW,SL	4	Lindsay 1981	Immediately north of Bayham, this area features about 130 ha of a river valley habitats with natural vegetation intact. Little Jerry Creek empties in Big Otter Creek near Bayham. Mixed woods of sugar maple, basswood, ironwood, blue beech, black maple, hemlock, hawthorn and red oak cover the steep valley slopes and adjacent uplands. Floodplains support willow, black walnut, oak and aspen
Little Otter Creek	42.758	-80.796	900	IBA	MF,CF, IBA,RW, SL,RS	4	IBA Canada 2017	The Little Otter Creek Complex is comprised of three closely linked forests known as Howays Woods, as well as a ten kilometre stretch of the creek and its ravines, centred roughly on these forests. The site is located fifteen kilometres south of Tillsonburg, near the town of Straffordville. Highway 19 cuts across the midpoint of the site, which extends five kilometres up and down the Little Otter Creek. The woods are mainly deciduous with an obvious element of White Pine on the uplands, and Eastern hemlock on the cooler slopes. It is not known how many Louisiana Waterthrushes are present in the section of Little Otter Creek within this site, perhaps 10 pairs, but this site

								certainly covers some of the prime Louisiana Waterthrush habitat in Canada.
Little Rouge River (Woodland Trail)	43.843	-79.1864	50	Provincial park	MF,CF, SRE,UF, ESA,RW	2	M. Henry unpublished field notes	Small groves of mature hemlock occur near the Little Rouge River, along with scattered trees showing signs of advanced age (hemlock, sugar maple, cedar). Access is via Woodland Trail, and informal trails that continue along the river. Some of the oldest hemlocks appear to be south of the parking area, near Reesor Rd (43.8469,-79.1983) (M. Henry unpublished field notes). Other groves are likely to occur in nearby areas.
Long Sault Conservation Area	44.0583	-78.7490	286	Conservation area	MF,CF, SRE	1	Wake 1997	White cedar-eastern hemlock swamp occurs here. There are groves of hemlock in the north-central part of the conservation area.
Lowville-Bronte Creek Escarpment Valley	43.428	-79.914	373	Private	ESA, REP, RW, RS, SRE	1-3	Halton Region and North-South Environmental 2005	The valley walls are densely vegetated with good quality broadleaf and mixed forests, and the area has been designated a provincially significant life science ANSI (Bronte Creek Escarpment Valley) by the OMNR. A second provincially significant life science ANSI has also been designated within the ESA (Bronte Creek Escarpment Valley). Includes hemlock swamp and hemlock-mixed hardwood forest. Rare species include Louisiana waterthrush. Access via Bruce Trail / River and Ruin Side Trail.
Maple Uplands & Kettles / McGill ESA / Maple Nature Reserve	43.9032	-79.4931	588	Candidate Life Science ANSI, Provincial	OG,CF, SRE,UF, REP,ESA ,RW		NHIC 2016, TRCA 2009	Upland forests, scattered kettle wetlands, old fields with shrub thickets and the headwaters of the Little Don comprise this ca. 250 ha site. The woodlots are younger, cut-over, maple-beech-birch-hemlock and white pine. Dry-Fresh Hardwood-Hemlock Mixed Forest (FOM3-1) is largely within the McGill ESA. The McGill Area Environmentally Significant Area - ESA covers most of the same area as the Maple Uplands and Kettles ANSI and Maple Spur ANSI (TRCA 2009). The adjacent / overlapping Maple Nature reserve has hemlocks reaching over 173 years old based on ring counts (Henry, unpublished field notes 2018)
Marcy's Woods (Point Albino)	42.859	-79.112	285	Private land, ANSI, IBA	OG,REP, IBA,ESA ,RW,SL	3	Larson et al. 1999 Kershner 2004,2005	An old-growth hemlock stand occurs here, and hemlock is a minor understory tree more generally (Larson et al. 1999). Rare example of eastern hemlock growing on sand dunes (Kershner 2005). Moist intraridge basins support deciduous forests of silver maple, yellow birch, red maple and others, or coniferous groves of eastern hemlock and Canada Yew.

							Eagles & Beechey 1985	Nowhere else in the region are the sand hill landforms and associated community patterns better developed. Access is granted by request.
Mark S. Burnham Provincial Park	44.3001	-78.2664	40	Provincial Park - Recreational Class	OG,SRE, RW	1	NHIC 2016, Henry and Quinby 2010,	Majestic stands of maple, beech, elm and hemlock - among the oldest in Ontario. In the middle of the Peterborough Drumlin Field, which contains more than 3,000 of these glacial remnants (Ontario Parks website, June 2015). Numerous very old trees have been cored in this forest, including an eastern hemlock with a 439-year ring count, and a sugar maple with a 330-year ring count.
Meadowvale Woodlot A	43.847	-79.187	4.2	City of Toronto ESA	MF,ESA	3	North-South Environmental 2012	Mature hemlock-sugar maple forest woodlot on the east facing slope of a valley.
Morningside Park	43.7824	-79.1901	240	Municipal Park, ESA, ANSI	MF,CF, SRE,UF, ESA,RW ,SL	2	City of Toronto 2016	North of the main entrance, along Morningside Avenue there is an excellent example of a white cedar swamp with one of the few stands of tamarack in the city. East of Morningside, the cedar swamp grades into a stand of eastern hemlock and balsam fir with a shrub layer of Canada yew.
Morningside Tributary Ravine (Rouge Park)	43.8106	-79.1908	10	Life Science site	OG,CF, UF,REP, ESA,RW ,SL	3	NHIC 2016	Sharply incised, heavily wooded 10 ha ravine south of Rouge River in Toronto. Cedar-hemlock slopes, immature maple, seasonal swamp, white birch woods and remnant white pine stand approximately RSO-120 years old (Hanna 1984) – now 140+ years old. Hemlock on the slopes appear to be 250+ years-old. Access to the site is only via an informal (but well used) trail.
Mount Salem Forest	42.7199	-80.9144	421	Life Science ANSI, Regional	REP,RW ,RS	4	NHIC 2016	North and east of Mount Salem is a ca. 240 ha block of forest on gently undulating sand plain. Sugar maple, beech, hemlock and yellow birch grow on the low ridges. Linear-shaped swamps of silver maple with some ash and elm lie between the ridges. This is the only location known in Canada for the small whorled pogonia (<i>Isotria medeoloides</i>), one of Ontario's endangered species.
Niagara Gorge First Growth Steep Slope Forest	43.115	-79.065	16	Regional Park, Slope of Niagara Gorge	OG,CF, RW,SL	4	Bert Miller Nature Club 2003, Kershner 2004	Very steep, unstable slopes of Niagara Gorge were inaccessible and never logged but still deceptively contain young "First-growth" woods of Manitoba and Norway maple, paper birch, white ash, and cottonwood, because of collapsing soil, landslides, and tree toppling. Still, old-growth hemlock, white cedar, and hop hornbeam survive. Kershner reported that he cored one hemlock in the Niagara Gorge,

								midway between the Whirlpool and the Whirlpool Bridge, at 435 years (personal communication, Sept 16 2004), making it among the oldest in Ontario. Nevertheless hemlock is rare here.
Nickel Beach Woods	42.8769	-79.2350	197	Mostly private land	OG,SRE, RW,SL	2	NPCA 2010	A very rich sugar maple (<i>Acer saccharum</i> ssp. <i>saccharum</i>). Hemlock (<i>Tsuga canadensis</i>) forest covered cool, north facing slopes in parts of the study area. Also noted here were scattered old growth (balding bark) bitternut hickory (<i>Carya cordiformis</i>) trees with bladdernut (<i>Staphylea trifolia</i>) in understory layer. Occasional large diameter (in sheltered interdune valleys) or tortured, wind-swept (on dune ridges) old growth individual trees were recorded. Several large diameter but short wind-swept Red Oaks (1 m+ dbh) in the mature rich section were documented as well.
North Castor River/Pana Road South	45.2735	-75.428	3.5	Life Science site	MF,RW		NHIC 2016	This small natural area was not examined in the field, but data from the RMOC (Regional Municipality of Ottawa-Carleton) Geographic Information System database indicates that it is a 50-100 year old, hemlock dominated forest on non-acidic sand plain.
North Fenwick Foothill Forest	43.0407	-79.3573	12	Life Science ANSI, Regional	REP,RS	4	NHIC 2016, Ambrose and Kirk 2010	Private gently rolling sandplain slope; deciduous and hemlock wet mesic forests present; general disturbance of cutting, drainage and development; a sample station of P.F. Maycock. [Macdonald 1980]. Cucumber tree occurs here.
North Pickering / Seaton Hiking Trail	43.8898	-79.1648	250	Mixed	OG,MF, CF,SRE, UF,RW, SL	1	Wake 1997	Sugar maple and beech are reported by Wake (1997) to be 300-400 years old. A sugar maple dominated forest with a hemlock component is 180+ years old. Stands of hemlock and cedar in the valley reach at least 130 years-old (by ring count of cut logs). Seaton is a popular hiking trail.
Northwest Fenwick Forest	43.0358	-79.3735	RS8	Life Science ANSI, Regional	REP,RW ,RS	4	NHIC 2016, Ambrose and Kirk 2010	Broadly rolling sandy clay plain with broad slough landform development; deciduous and hemlock forests of sub-intermediate to young age present; several district significant flora present; increasing impact of cutting and agriculture. [Macdonald 1980]. Cucumber tree occurs and is regenerating well.
Oil Well Bog Little Tract	43.4559	-80.2459	453	Life Science ANSI, Regional	CF,REP, RW	2	NHIC 2016	A 336 ha late stage heath and black spruce bog supporting 4 bog forms (leatherleaf-sphagnum; spruce-tamarack), swamp (aspen-red maple-elm; willow thickets), upland woods (sugar maple-beech-hemlock), old fields, marsh and ponds. A network of walking/mountain biking trails allows access.

Osaca - Ganaraska River	44.020	-78.4535	396	Life Science ANSI, Regional PSW	CF,REP, RW	4	NHIC 2016	404 ha (999 acre) river valley complex consists of cedar with hemlock-crack willow floodplain forest. Patches of mesic, deciduous sugar maple-ironwood valley wall woods. Borders on town of Osaca. Surrounded by agricultural fields.
Peter's Woods Provincial Park	44.1230	-78.044	102	Provincial Park, ANSI	OG, CF, SRE,REP RW	1	OMNR 2009	Old-growth hemlock occurs at the east end of the Park
Phillipsville Cliff	44.6359	-76.1287	12	Candidate Life Science ANSI, Provincial	OG,REP, SL		NHIC 2016	This site is a striking west-facing cliff that supports a mixed forest of red and white oak, white birch, and old stunted cedar and hemlock. The gnarled and deformed cedar and hemlock trees of the cliff and boulder talus have probably never been cut.
Pinehurst Lake Complex; part of the Grand River Valley Forests	43.2807	-80.3395	676	Conservation Area, ANSI	MF,CF, SRE,REP ,RW	2	Eagles & Beechey 1985	A series of linear morainic ridges are the most notable features of this complex... Communities include Forest (oak-hickory; hard maple-red oak-beech; hard maple-oak-hickory-ash; pine-oak; hemlock-northern hardwoods; poplar-maple; floodplains. The two sphagnum bogs within the study area are unique in the county. A pure stand of hemlock near Spottiswood Lake is also unusual.
Pottageville Southeast Upland	43.9812	-79.6096	90	Life Science ANSI, Regional	MF,CF, REP,RW		NHIC 2016	A high quality, upland forest (maple-beech-hemlock) broken by several creek valleys holding tributaries of the Holland River. On north-facing slope of Oak Ridges Moraine. Just north of the Happy Valley Forests candidate nature reserve.
Ratray Marsh	43.5175	-79.6135	95	Conservation area	MF,SRE, UF,RW	1	AFER 2017	From the Meadow Wood entrance hike east through mature sugar maple, beech and oak forest. As you continue east the forest is increasingly dominated by hemlock and pine. Ring counts of fallen logs show that pine and hemlock reach at least 150 years old in this small but beautiful urban forest. After the trail crosses Sheridan Creek you will enter a floodplain forest and green ash swamp.
Rockway Falls Gorge	43.112	-79.3221	2.4	Conservation Authority	OG,CF, SRE,IBA ,RW,SL, RS	2	Bert Miller Nature Club 2003, Kershner 2004	Seven species of old-growth trees populate the gorge bottom including black walnut, basswood, hemlock, ash, sugar and red maple, white ash, and sycamore; ages up to 250 years. Includes hemlock to 240 years, and a mature butternut, estimated at 170 years!
Rouge Park	43.8205	-79.1666	7910	Provincial Park	OG,MF, CF,SRE, UF,REP,	1	Hanna 1984 in Eagles & Beechey, 1985	Rouge River Central Woodland Valley Complex: Typical vegetation types are willow-Manitoba maple- cedar bottomland, red oak-hemlock-white cedar slopes and hemlock-white pine-sugar maple-beech-black cherry-red oak

					ESA,RW,SL			tableland. The Lower Rouge River Nature Reserve Zones (Varga, 1984 in Eagles & Beechey, 1985): hemlock forests are essentially confined to northfacing slopes and adjacent tablelands, while beech prefers dependably moist southern aspects. An excessively drained but cool tributary valley supports a white pine-hemlock-white cedar forest, more typical of stands on the Canadian Shield.
Roy Ivors Woodlot	43.5432	-79.6720		Municipal Park	MF,UF,ESA,RW	1	Credit River Watershed and Region of Peel Natural Areas Inventory Project 2011	Hemlock occurs mixed with sugar maple along sawmill creek, and in a fairly pure grove west of the Collegeway. Forest is mature, possibly old-growth.
Scotsdale Farm	43.682	-79.990	215	Ontario Heritage Trust property	OG,CF,SRE,RW	1	Henry and Quinby 2019	The property has sugar maple forest which estimated to be 150-200+ years-old, old and a cedar-hemlock swamp with trees that are over 250 years old. The swamp is extensive, greater than 50 ha in size, and has trees with old age characteristics at numerous points. Since ages of 250+ were obtained with little effort, and trees in the swamp have little commercial value, maximum ages could be higher.
Seneca College King Campus	43.9581	-79.515	276	Private (Seneca College)	OG,CF,SRE,RW	1	Henry and Quinby 2019, TRCA 2012	Old hemlock forest occurs near the lake west of Eaton Hall, and can be accessed from the Woodland Passage Trailhead. The cedars and hemlocks in the wetland are often older than they look – though they are small they are likely 150-200 years old or more. As you continue onto the ridge again you'll walk through a grove of old hemlocks that are over 150 years old. Invasive species in the forest include goutweed and periwinkle.
Short Hills Wilderness Preserve	43.062	-79.329	12	Non-profit reserve	OG,CF,IBA	2	Bert Miller Nature Club 2003	Carolinian old-growth forest including sugar maple, tulip tree, oaks, beech, and hemlock with tree ages up to 275 years. Access by permission
Simeon Lakes	43.9692	-79.3855	137	Candidate Life Science ANSI, Regional	UF,REP,RW		NHIC 2016	Intermediate-aged forests of sugar maple with some beech, hemlock and white birch cover the rolling uplands of this ca. 100 ha site on the south slope of the Oak Ridges Moraine. Scattered small wetland pockets.
Silver Creek Valley	43.692	-79.965	501	Private / public	OG,ESA,REP,CF,RW,RS,SRE	1-2	Halton Region and North-South Environment	Contains hemlock-hardwood forest and white pine-hemlock forest. The Credit Valley Conservation Authority owns the Silver Creek Education Centre within the boundaries of this

							al 2005, CVC 2008	ESA, and the area is utilized by one of the local school boards as an outdoor education centre. Bruce Trail passes through.
Sixteen Mile Creek Valley	43.456	-79.728	1104	Mostly private and some public (HRCA)	ESA, REP, RW, CF, RS,SL, UF	1-3	Halton Region and North-South Environmental 2005	The valley floor contains good lowland and floodplain associations, while the valley walls contain patches of prairie species on the dry south-facing slopes and moist hemlock communities on adjacent north-facing slopes
Smeatons Ravine	43.1506	-79.0461	2	Regional Park, Rim of Niagara Gorge	OG,CF,SRE,ESA, RW,SL, RS	3	Bert Miller Nature Club 2003, Kershner 2004	Little known, hidden, dramatically deep gorge cut into the side of Niagara Gorge with 40 ft. falls; unusual mix of old-growth chinkapin oak, tulip tree, and basswood, and hemlock; includes cliff-hanging white cedars and hemlocks, also hemlocks in the gorge. Hemlocks estimated by Bruce Kershner to be 300+. Significantly, four tree-sized individuals of nationally rare red mulberry were discovered. The largest is a two-trunked, 8.5-inch diam. tree with a remarkable height of 42 feet.
Spooky Hollow	42.7257	-80.3150	67	Life Science ANSI, Mixed land use including private nature reserve (HNC)	MF,CF, REP,RW,RS	2	Lindsay 1980	Spooky Hollow was identified as a candidate nature reserve, and has been designated as a life science ANSI. Part of the tract (~67 ha) is a private nature reserve owned by the Hamilton Naturalists Club. Diverse habitats and rare and unusual species occur here, including the endangered American Chestnut. The valley bottom supports a wet mesic forest of hemlock, yellow birch, oak, maple and white pine. Other forest types include Carolinian forest, oak savannah, and a small tamarack-white pine swamp. Access by permission of Hamilton Naturalists Club.
Springwater Forest	42.7425	-81.0243	150	Life Science site	OG,CF, SRE,REP, IBA,ESA, RW, RS	1	NHIC 2016, IBA Canada 2017; AFER 2017	This site is a predominantly deciduous forest with pockets of eastern hemlock (<i>Tsuga canadensis</i>) and white pine (<i>Pinus strobus</i>) on an undulating sand plain. The site is dissected by a creek system. Springwater forest provides habitat for both acadian flycatchers (nationally endangered), and hooded warblers (nationally threatened). It is an exceptional example of old-growth Carolinian forest.
St. John's Conservation Area, East Ravines	43.0628	-79.2845	48	Conservation Area	OG,CF, SRE,IBA, RW,RS	1	Bert Miller Nature Club 2003, Kershner 2004, Cheskey 2003	Mature and some old-growth Carolinian forest. Hemlock is a minor component, but occurs in the older forest. the old growth extends to the east over two secluded sand ravines and ridges... the forest is notably tall, with tulip tree, hemlock, sugar maple, pignut and bitternut hickories, red oak, and beech.

Stephen's Gulch Conservation Area	43.9665	-78.6763	106	Conservation Area	MF,CF, SRE,RW	1	NHIC 2016, AFER 2017	This property offers a unique variety of settings from wet hemlock forest and groundwater springs to dry sandy ridges with butternut trees. Protecting a large area of deciduous forest and coniferous forest/swamp along the Soper Creek valley system. From the parking area, the right fork will lead you into the cedar swamp with hemlock becoming more abundant as you go. As you climb back into a more upland forest the ages of the trees increase, and despite some historical disturbance there is a fairly nice old-growth sugar maple and hemlock forest here. Ring counts of trees cut from the trail indicate the forest is 130-140 years old, with some trees possibly older.
Stewart's Woods	44.201	-78.344	27	Conservation authority land	OG,CF, ESA	3	Larson et al. 1999	Larson et al. (1999) reported that it is "one of the best conifer woodlands examined during this study." Hemlock occurs in all diameter classes up to 69 cm. White pine supercanopy and dense hemlock regeneration. The area suffered significant windthrow.
Stewarttown Woods	43.624	-79.936	32	Private	MF/OG, SL,RW, ESA		Halton Region and North-South Environmental 2005	The vegetation of Stewarttown Woods consists of several plant associations including young sugar maple - white ash - white birch, mature hemlock - beech - sugar maple, and a white cedar - hemlock - mountain maple swamp. Meadows and open floodplain areas are located along the creek within the ESA.
Sugar Loaf Hill	42.8731	-79.2801	2	Private	OG,RW, SL	2-3	Bert Miller Nature Club 2003, Kershner 2004,	Sugar Loaf Hill is one of only three Lake Erie coastal dunes known to be covered by Old Growth. The 100-foot tall sand peak is also one of its steepest and most cone-shaped dunes. Ancient Hemlocks grow on the protected north slope. It is extremely rare for this old- growth hemlock to be found on sand dunes. Trees are small for their age: hemlock with a diameter of 14 inches had an age range of 170 to over 200 years old.
Terra Cotta Woods	43.722	-79.967	336	Public	OG,CF, RS,SRE, SL	1-2	Halton Region and North-South Environmental 2005, CVC 2008	The valleys have slope forests of pine, hemlock and maple, and a deeply entrenched stream valley runs through the western end. The ESA contains a provincially significant Life Science ANSI, Terra Cotta Forests. The area is owned almost entirely by public agencies. Some forested communities in the Terra Cotta-Silver Creek complex are considered near-old growth, with fourteen areas of forest between 100 -125 years old, and two forest stands greater than 125 years old.

Terrace Creek Gorge	43.0950	-79.2775	2	Provincial Park, Short Hills	OG,CF, SRE,IBA ,RW,SL	1-2	Bert Miller Nature Club 2003	Narrow corridor of ancient sugar maple, hemlock, beech, red oak, basswood, red maple, hardwoods lining 75 ft.-deep gorge with 3 cascades
Thousand Islands	44.2965	-76.1928	n/a	Mix of private and crown land	MF,SRE, RW,SL	2	Frontenac Arch Biosphere Reserve 2017	Lake Fleet Islands: the rugged islands of wind-swept white pine and rich hemlock gullies are reminiscent of our northern forests. Admiralty Islands: hemlock is noted on Aubrey and Mermaid Islands. Kingston Isles: Milton Island (44.2449, -76.3987) hosts a mature mixed forest of white pine and red oak, interspersed with hemlock. Summer access by boat is good, but is limited in spring/late autumn.
Wesleyville Ravines	43.94	-78.4	138	Private (Ontario Hydro)	OG,CF, ESA,RW SL		Larson et al. 1999, AFER 2017	Hemlock is dominant in all diameter classes up to 69 cm. Hemlocks are at least 160 years old. This is reported to be the least disturbed forest in the site district, and it definitely feels old and undisturbed except for extensive ATV and dirt bike trails. The oldest trees are 160-212 years old; this is a significant old-growth area and should be managed as such.
White Rose West Forest	43.9745	-79.4414	80	Life Science site	?	?	NHIC 2016	*This ANSI was considerably reduced in size by residential development and a golf course and is no longer considered a regional ANSI (Varga and Mewa, 1998).Relatively mature, maple-beech-hemlock forests characterize this ca. 80 ha site.
Wilket Creek / Sunnybrook / Serena Gundy Parks	43.7250	-79.3512	44	Municipal park	OG,MF, CF,SRE, UF,RW	1	AFER 2017, TRCA 2017, TRCA 2010	With the Bata Trail running its entire length, Wilket Creek Park is known for its mature coniferous and deciduous forest communities. Depending on soil moisture, light and orientation of the ravine slopes, mature stands of Eastern hemlock, Sugar maple and American Beech thrive along the valley walls, as do several tall Black Cherry trees. The park includes 15 ha of Fresh - Moist Hemlock Mixed Forest (roughly one third of the park). Access to hemlock is primarily from Sunnybrook trails. Some of the hardwoods in particular have characteristics of trees 160-200 years old. Sunnybrook Park, Serena Gundy Park and Glendon Forest have nearly continuous hemlock forests with maximum ages commonly up to 160, and occasionally to 180 years old.
Winona Escarpment Slopes / Winona Conservation Area			36.5	ANSI, Conservation Area	OG,CF, REP,SL		Eagles & Beechey 1985	This area contains some of the most mature, best developed and most diverse representative vegetation patterns of the Niagara Section of the escarpment... on the western end of the area there is a very well developed terrace ridge and valley pattern consisting of dry mesic Quercus-Pinus-Acer forests on the narrow sand and shale ridges... and more common Tsuga dominated canopies in the valleys.

NOTE: Some other important areas were identified but were not included in the above table because they: 1) didn't meet the minimum criteria, 2) had little hemlock, or 3) lacked information. These areas should also be considered for management including the following: Lynde Shores Conservation Area, Crothers Woods, Uxbridge Pine-Maple Uplands ANSI, Warsaw Caves Conservation Area, Waterfall Woods, Fallingbrook Woods, Chatsworth Ravine ESA and Cedarvale Ravine.

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