

July 29, 2024

Audrey Bélanger (President)
Hunt Club Community Association
3320 Paul Anka Drive
Ottawa, Ontario K1V 0J9

Dear Audrey Bélanger:

RE: Riverwood Park Trees

Introduction

The Hunt Club Community Association (HCCA) has retained CBCL Limited (CBCL) to provide Butternut Health Assessor services assessment of two Butternut (*Juglans cinerea*) trees in Riverwood Park of Ottawa, Ontario due to future development of a paved multi-use pathway. The Butternut Health Assessor was also retained to confirm the species identification of two large trees, provide a summary of observations of Black Ash (*Fraxinus nigra*) in the park, and provide a summary of observations of notable trees along an alternate pathway route in the proposed pathway footprint. These observations and assessments are intended to be used as supplemental information during meetings and discussions with the City of Ottawa regarding the proposed pathway.

The purpose of this memo is to provide a summary of the observations and assessments made by CBCL during the July 26, 2024, field investigation under pre-construction conditions.

Field Investigation

Erik Pohanka from CBCL conducted a Butternut Health Assessment (BHA) of two Butternut trees identified within the proposed pathway on July 26, 2024. Identification of two large trees was conducted during the BHA. Additional observations of the conditions of a low-lying swamp containing Black Ash and a forested alternate pathway were also recorded on the same date by the same assessor. Erik Pohanka has successfully been certified as a Butternut Health Assessor (Butternut Health Assessor ID # 739) and has 10 years of experience with biological surveys which includes BHA submitted to the Ministry of Environment, Conservation and Parks (MECP). The BHA Data Forms and Hybridism Data Form are included in **Attachment A**. Photographs were taken in the field and included in **Attachment B**. The following observations were recorded during the field investigation.

Butternut Health Assessments

The following section provides an overview of the BHA conducted on the two Butternut trees identified within the proposed pathway.

Butternut 001

Butternut 001 is a large specimen situated on the edge of a forested slope within Riverwood Park along an existing cut pathway. The specimen is a large, healthy individual with vigorous crown growth. Most dieback of twigs and branches were localized to shaded limbs with very little of the crown that was observed to be dead (approximately 85% live crown). Due to the large size of the tree and the timing of the assessment (after flowering and fruiting), examination of traits for hybridism were limited and a conclusion was not able to be determined. However, no signs of hybridism were apparent during the assessment except for the vigorous, healthy live crown. Large cankers caused by the Butternut Canker (*Ophiognomonia clavignenti-juglandacearum*) fungus were observed within the first 2 metres (m) of the trunk; however, very few cankers were observed above this point. The BHA calculated this individual to be a Category 2. Based on the definitions in Ontario Regulation (O. Reg.) 830/21: Exemptions – Barn Swallow, Bobolink, Eastern Meadowlark and Butternut under the *Endangered Species Act, 2007*, Category 2 Butternuts are “... *not affected by Butternut Canker or the Butternut tree is affected by Butternut Canker but the degree to which it is affected is not as advanced as a Category 1 Butternut tree and retaining the tree could support the protection or recovery of Butternut trees in the area in which the tree is located.*”

Butternut 002

Butternut 002 is a tall specimen situated on the edge of pathway within the forested area of Riverwood Park. The specimen is approximately 25 m tall and healthy with vigorous crown growth. Dieback of twigs and branches were localized to shaded limbs as no dead crown was observed (100% live crown). Due to the tall height of the tree and the timing of the assessment (after flowering and fruiting), examination of traits for hybridism were limited and a conclusion was not able to be determined. However, the only signs of hybridism that were apparent during the assessment was the pinkish colour of the fissures in the bark and vigorous, healthy live crown. Abundant cankers caused by the Butternut Canker fungus were observed in the root flare and within the first 2 m of the trunk. Few cankers were observed above 2 m of the trunk. The BHA calculated this individual to be a Category 1. Based on the definitions in O. Reg. 830/21: Exemptions – Barn Swallow, Bobolink, Eastern Meadowlark and Butternut under the *Endangered Species Act, 2007*, Category 1 Butternuts are “... *affected by Butternut Canker to such an advanced degree that retaining the tree would not support the protection or recovery of Butternut trees in the area in which the tree is located.*”

Large Tree Species Identification

Peachleaf Willow

A large tree within the proposed pathway was identified as a Peachleaf Willow (*Salix amygdaloides*). This was confirmed during the July 26, 2024, field investigation. The individual had large, deep furrows of tan-coloured bark and a diameter at breast height (DBH) of 70 cm. The approximate height of the tree (although not confirmed) was 25 m. The leaves of the tree had attenuate (very elongated and tapering) tips, typical of Peachleaf Willow, and were not falcate (sickle-shaped) which would be characteristic of Black Willow (*Salix nigra*). The underside of the leaf was glaucous, typical of Peachleaf willow, and not shiny as would be characteristic of Shining Willow (*Salix lucida*). The base of the leaves were rounded and uneven, typical of Peachleaf Willow rather than the tapered bases found on leaves of Crack Willow (*Salix fragilis*). The leaves and new growth also did not have any stipules; this separates the tree from White Willow (*Salix alba*) and its hybrids which contain prominent stipules. Most other willow species similar in appearance to Peachleaf Willow do not grow to full tree size and remain as shrubs in the Ottawa region. It was determined that this individual was a Peachleaf Willow.

Yellow Birch

A large tree within the proposed pathway was identified as a Yellow Birch (*Betula alleghaniensis*). This was confirmed during the July 26, 2024, field investigation. The individual had a wide trunk near the base and a DBH of 92 cm. The bark of the main trunk was gray and split into large plates with ragged edges. This bark type was present on most of the trunk and only upper branches transitioned into typical Yellow Birch bark characteristics such as shiny, bronze bark with tightly-curling peels. This bark differentiates the individual from Black Cherry (*Prunus serotina*) as the latter species has square-shaped scales with curves throughout the tree and abundant lenticels. The leaves of the tree were round, had serrations, and each vein ended in a point between serrations and were not incurved. The base of the leaves were rounded and indented. No glands on the leaf base or rust-coloured hairs at the base of the midvein on the underside of the leaf were observed. These characteristics also differentiate this individual from Black Cherry which has a lance-shaped leaf with incurved serrations, glands at the base of the leaf, rusty-coloured hair at the base of the midvein on the underside of the leaf and long-tapered point and base. Most other birches in the Ottawa region have white-coloured bark. It was determined that this individual was a Yellow Birch.

Black Ash Observations

A low-lying swamp situated west of the existing pathway and directly adjacent to the Rideau River was traversed to record observations of Black Ash. A total of 60 Black Ashes were recorded within this area. The majority of these individuals were saplings and very few approached 8 cm DBH. These individuals were characterized by light brown to tan coloured bark with soft, corky ridges,

compound leaves with sessile leaflets, dark brown to chocolate-coloured buds, and large, rounded leaf scars. The majority of these individuals appeared healthy and were too small to be impacted by the invasive Emerald Ash Borer (EAB) (*Agilus planipennis*); however, some individuals did exhibit crown dieback that may have been the result of EAB damage. Other ash species such as White Ash (*Fraxinus americana*) were observed growing among the Black Ash within the swamp. Any Black Ash that is healthy and 8 cm DBH or higher as defined under O. Reg. 6/24 of the *Endangered Species Act, 2007* is afforded protection. The habitat protection provisions under O. Reg. 832/21 of the ESA would apply to an area of 30 m around each of the individuals that meet the above criteria.

Alternate Pathway

An alternate pathway in Riverwood Park was marked by orange flagging tape. This pathway was traversed to determine conditions of the area. The large Yellow Birch individual mentioned above was situated within this alternate pathway. The pathway was situated in a sloped forested area with moist to wet soil dominated by deciduous trees such as Yellow Birch, Basswood (*Tilia americana*), and Sugar Maple (*Acer saccharum*). Some areas of the forest were open with little ground cover while others contained abundant native ground cover. At least three natural flowing drainages (not fish habitat) crossed the alternate pathway which is where the soils became wet and the ground cover was abundant. The alternate pathway ended at the existing cut pathway within the forest. Several Sugar Maples, Basswoods, White Ashes, and Yellow Birches were noted within the general alternate pathway which would be subject to protection under the City of Ottawa's Tree Protection By-Law (2020-340). The northern half of the alternate pathway is situated within an Urban Natural Area as defined on Schedule C-11 of the City of Ottawa's *Official Plan* (2021). A permit to exempt protection of any trees in the Urban Natural Area must be obtained if injury is to occur to trees or their critical root zones (CRZ). Additionally, no plants are to be injured or destroyed within the Urban Natural Area without a permit. The southern half of the alternate pathway is situated on private property that is greater than 1 ha in size. Therefore, under By-Law 2020-340, any tree that is 10 cm DBH or greater, is afforded protection from harm unless a permit to exempt the protection of those tree is obtained.

Closure

This memo has been prepared for the sole benefit of HCCA. This report may not be relied upon by any other person or entity without the express written consent of CBCL Limited and HCCA.

Any use which a third party makes of this report and any reliance on decisions made based on it, are the responsibility of such third parties. CBCL Limited accepts no responsibility for damages, if any, suffered by any third party because of decisions or actions made based on this report.

Audrey Bélanger
July 29, 2024

This information represents the best judgement of the assessors based on the existing site conditions at the time of the assessment. Due to the nature of the investigation, the assessors, and CBCL, cannot warrant against undiscovered environmental conditions or liabilities.

Should additional information become available, CBCL Limited requests that this information be brought to our attention so that we may re-assess the conclusions presented herein.

Please feel free to contact us with any questions or should you require any further information.

Yours very truly,

CBCL Limited



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cc. Andrei Grushman (grushman@rogers.com)

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Attachment A

Butternut Health Assessment Data Forms



Butternut (*Juglans cinerea*) is listed as an endangered species in Schedule 2 of Ontario Regulation 230/08 “the Species at Risk in Ontario List”. As an endangered species, the *Endangered Species Act, 2007* (ESA) prohibits adversely impacting Butternut and its habitat. A permit or agreement under the ESA is required before engaging in an activity that is otherwise prohibited under the ESA. The activity may be eligible for the Butternut conditional exemption in Part V of Ontario Regulation 830/21, provided the requirements of the regulation are met. For more information please refer to the following links:

- [Endangered Species Act, 2007](#)
- [Ontario Regulation 830/21 \(Exemptions – Species Subject to Species Conservation Charges\)](#)
- [Ontario Regulation 230/08 \(Species at Risk in Ontario List\)](#)
- [Ontario Regulation 242/08 \(General Regulation\)](#)
- [Information about ESA permits and authorizations](#)
- [Butternut Assessment Guidelines: Assessment of Butternut Tree Health for the Purposes of the Endangered Species Act, 2007](#)

A Butternut Health Expert’s Report (BHE Report) completed by a “Butternut Health Expert” (BHE) as defined in section 21 of Ontario Regulation 830/21 is typically required as part of an application to the Ministry of the Environment, Conservation and Parks (MECP) for a permit or agreement under the ESA and is required in respect of the conditions of the Butternut conditional exemption in Part V of O. Reg. 830/21. **This Butternut Data Collection Form must be completed by the BHE and included in their BHE Report.**

This form should not be relied upon to determine your legal obligations. To determine your legal obligations, consult the *Endangered Species Act, 2007* and the relevant regulations made thereunder. These may be found at www.ontario.ca/laws. If legal advice is required, consult a legal professional. In the event of an error on this form or a conflict between this form and any applicable law, the law prevails.

Notice of Collection and Use

Personal information on this form is collected under the authority of Section 53 of the ESA and section 38 of the *Freedom of Information and Protection of Privacy Act*. Forms that have been submitted to MECP may be used by MECP staff to contact the property owner (or person acting on their behalf) to request permission to access the assessed trees for the purpose of examining the trees or to contact the BHE who prepared the BHE Report. Questions about the use of your personal information should be directed to the Species at Risk Branch, Ministry of the Environment, Conservation and Parks, 300 Water Street, Peterborough Ontario, K9J 3C7 at speciesatriskregistry@ontario.ca.

Fields marked with an asterisk (*) are mandatory.

Butternut Health Expert’s Report Number* 739	Start Date of Butternut Health Assessment (yyyy/mm/dd)* 2024/07/26	End Date of Butternut Health Assessment (yyyy/mm/dd)* 2024/07/26
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Butternut Health Expert (BHE) Contact Information

Last Name* Pohanka	First Name* Erik
Telephone Number* 226-750-6484	Email Address* epohanka@cbcl.ca

Summary of Qualifications as a Butternut Health Expert*
MNRF BHA training, official BHA designation, 10 years experience in biological services

Property Owner Contact Information

Last Name*	Ottawa	First Name*	City of
Company Name			

Mailing Address*

Unit Number	Street Number	Street Name	PO Box
	110	Laurier Avenue	
Lot Number	Concession	Township	Rural Route
City/Town	Province	Postal Code	
Ottawa	Ontario	K1P 1J1	
Telephone Number *	Alternate Telephone Number	Email Address	
613-580-2401			

Butternut Tree(s) Location Information

Address*	<input type="checkbox"/> Select if location of Butternut is the same as the property owner's mailing address		
Unit Number	Street Number	Street Name	PO Box
	22	Kimberwick Crescent	
Lot Number	Concession	Township	Rural Route
4/5	2 Rideau Front	Gloucester	
City/Town	Province	Postal Code	
Ottawa	Ontario	K1V 0W6	

General description of area containing Butternut (select one)

Natural Rural Urban - Suburban Industry / Resource Extraction Area

Soil drainage (select one)

Well Drained Moderately Drained Poorly Drained Unknown

Have any of the Butternut at this site produced seeds?

Yes No Unknown

General Comments

Butternuts are in the margins of a natural forested corridor along the Rideau River, bordered by suburban developments and city infrastructure.

Butternut Tree Data 1

Tree Identification Number* 001 Date of Assessment (yyyy/mm/dd)* 2024/07/26

UTM Zone* 18T

Northing* 5020720

Easting* 445493

Is this tree a Butternut tree or a putative hybrid? * Butternut Putative Hybrid

Is the stem of this tree shorter than 1.37 m? * Yes No

Is this a single or multi-stemmed tree? * Single Stem Multiple Stems

Live Crown %* 85

Tree Stem Diameter (cm)* 63

Number of sooty cankers* At or below 2m (the lower stem) 7 Above 2m 2 At the root (root flares) 0

Number of open cankers* At or below 2m (the lower stem) 3 Above 2m 0 At the root (root flares) 0

Metres from badly cankered tree* 40 metres or less Greater than 40 metres None found

Crown Class

Dominant, full sun Co-dominant, two sides in the sun
 Intermediate, sun only from above Suppressed, shaded crown

Signs of Stress

Twig dieback Branch dieback Defoliation Discolouration

Seed Signs

Mature stamens or pollen Receptive pistils Seed set None Unknown

Below Crown

Number of stems 1 Main stem length (m) below crown 3

Number of epic-live 0 Number of epic-dead 0 Number of callused wounds 8

Bark type: Deep furrows/Narrow ridges Shallow furrows/Wide ridges

Tree Origin

Naturally-occurring Planted (cultivated) Unknown

Is this tree located in an area that is upland, wetland, or riparian?

Upland Wetland Riparian

Vegetation Community

Open Shrub thicket Savannah - Woodland Forest

If Savannah-Woodland or Forest selected, select one option from both groups:

Deciduous Coniferous Mixed

Climax Regenerating

Does this tree occupy edge habitat?

Yes No

If "Yes", select which edge habitat:

Road Trail Utility corridor

Fencerow Forest/woodlot edge Watercourse/waterbody

Competing Species

1. ACSACU

2. ACNEGU

3. BETPAPY

Comments about this tree

Very large, healthy individual on the edge of a forested slope with no root flare. Some large cankers are present below the crown, but very minimal above. Wide spreading, vigorous crown with most of the twig/branch dieback due to shading. Some insect damage to leaves. Branches are too high to closely examine hybrid traits.

Delete Tree 1

Butternut Tree Data 2

Tree Identification Number* 002 Date of Assessment (yyyy/mm/dd)* 2024/07/26 Select if Date is same as tree above

UTM Zone* 18T Northing* 5020952 Easting* 445500

Is this tree a Butternut tree or a putative hybrid? * Butternut Putative Hybrid

Is the stem of this tree shorter than 1.37 m? * Yes No

Is this a single or multi-stemmed tree? * Single Stem Multiple Stems

Live Crown %* 100 Tree Stem Diameter (cm)* 30

Number of sooty cankers* At or below 2m (the lower stem) 12 Above 2m 4 At the root (root flares) 7

Number of open cankers* At or below 2m (the lower stem) 3 Above 2m 1 At the root (root flares) 0

Metres from badly cankered tree* 40 metres or less Greater than 40 metres None found

Crown Class Dominant, full sun Co-dominant, two sides in the sun
 Intermediate, sun only from above Suppressed, shaded crown

Signs of Stress Twig dieback Branch dieback Defoliation Discolouration

Seed Signs Mature stamens or pollen Receptive pistils Seed set None Unknown

Below Crown Number of stems 1 Main stem length (m) below crown 6

Number of epic-live 0 Number of epic-dead 0 Number of callused wounds 12

Bark type: Deep furrows/Narrow ridges Shallow furrows/Wide ridges

Tree Origin Naturally-occurring Planted (cultivated) Unknown

Is this tree located in an area that is upland, wetland, or riparian? Upland Wetland Riparian

Vegetation Community Open Shrub thicket Savannah - Woodland Forest

If Savannah-Woodland or Forest selected, select one option from both groups:

Deciduous Coniferous Mixed

Climax Regenerating

Does this tree occupy edge habitat? Yes No

If "Yes", select which edge habitat:

Road Trail Utility corridor

Fencerow Forest/woodlot edge Watercourse/waterbody

Competing Species 1. SALALBA 2. POPDELT 3. TILAMER

Comments about this tree

Very vigorous with very healthy live crown, some insect damage to leaves. All twig/branch dieback is due to shading and very minimal. Branches are too high to closely examine hybrid traits. High concentrations of cankers on root flare and first 2 m of stem, then very minimal above.

Delete Tree 2

Add Tree

Print Form

Save Form

Clear Form

BHE Report Number 739			Start Date of Butternut Health Assessment (yyyy/mm/dd) 2024/07/26					End Date of Butternut Health Assessment (yyyy/mm/dd) 2024/07/26													
Total Number Butternut Trees in BHE Report 2			Butternut Health Expert's Name Pohanka, Erik																		
Property Owner/Client Name Ottawa, City of						Property Address 22 4/5 2 Rideau Front Kimberwick Crescent Ottawa Ontario K1V 0W6															
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	
Tree #	Live Crown %	Tree stem diameter (cm)	# bole cankers (BC)				# root flare cankers (RF)		40 m or less from tree stem diameter (Y or N)	Circ. (cm) = Pi * tree diameter	Total BC Width (cm) = (D * 2.5) + (E * 2.5) + (F * 5) + (G * 5)	Total RF Width (cm) = (H * 2.5) + (I * 5)	Total BC Width % of Circ. = L / K * 100	Total RF Width % of Circ. = M / K * 100	Total BC + RF Width % of 2 * Circ. = (N + O) / 2	Tree Categories: 1, 2, or 3					
			Sooty (S) (will be assigned 2.5 cm per canker) Open (O) (will be assigned 5 cm per canker)													cankered tree?	= Cat 2 if B >= 50 and N=0 else = Cat 1	= Cat 2 if B > 70 and P < 20 else = Cat 1	= Cat 2 if B > 70 and N < 20 else = Cat 1	Preliminary tree call = Cat 2 if Q= Cat 2 or R= Cat 2 or S= Cat 2 else = Cat 1	Final tree call = Cat 3 if T= Cat 2 and C > 19 and J='Y' else T
			S <= 2m	S > 2m	O <= 2m	O > 2m	S	O													
1	85	63	7	2	3	0	0	0	N	197.82	37.5	0.0	18.96	0	9.48	1	2	2	2	2	
2	100	30	12	4	3	1	7	0	N	94.2	60.0	17.5	63.69	18.58	41.13	1	1	1	1	1	

Table 4: Data Sheet for Field Identification of Butternut Hybrids

BHA name:	Erik Pohanka	Tree ID #:	Tree ID #:	Tree ID #:	Tree ID #:	Tree ID #:	Tree ID #:
BHA ID #:	739						
BHA Report #:	N/A	001	002				
Assessment Date(s):	July 26, 2024						
Tree location (site address):	22 Kimberwick Cr. Ottawa, ON K1V0V6						
Client name:	HCCA						
Traits (must evaluate at least five traits):	Score Assigned:	Score Assigned:	Score Assigned:	Score Assigned:	Score Assigned:	Score Assigned:	Score Assigned:
Leaf Retention	N/A	N/A					
Dormant Terminal Bud	0	0					
Dormant Twigs	N/A	N/A					
Lenticel Shape on New Twigs	0	N/A					
Pith Color of 1-Year Twig	N/A	N/A					
Leaf Scar	N/A	N/A					
Leaf Length	N/A	N/A					
Color of Bark Fissures on Mature Trees	0	2					
Green Hull Characteristics	N/A	N/A					
Nut Shape	N/A	N/A					
Catkin Length When Fully Extended and Shedding Pollen	N/A	N/A					
How to interpret total score: 0 to 3 = Butternut; 4 or greater = Hybrid	Total:	0*	2*				

* Inconclusive due to not meeting minimum of 5 traits examined.
Branches were too high to examine most traits and no flowers or fruit were present.

Attachment B

Field Investigation Photographs



Photolog



Photo 1: Butternut 001 trunk



Photo 2: Butternut 001 live crown



Photo 3: Butternut 001 leaves and twig



Photo 4: Butternut 002

Photolog



Photo 5: Butternut 002 live crown



Photo 6: Butternut 002 leaves and twig



Photo 7: Butternut 002 cankers on trunk



Photo 8: Peachleaf Willow crown

Photolog



Photo 9: Peachleaf Willow trunk and bark



Photo 10: Peachleaf Willow leaves and twigs



Photo 11: Peachleaf Willow leaf underside in hand



Photo 12: 33 Yellow Birch trunk

Photolog



Photo 13: Yellow Birch trunk and live crown



Photo 14: Yellow Birch plated bark of large lower trunk



Photo 15: Yellow Birch younger peeled bark in upper trunks



Photo 16: Yellow Birch leaves and twigs

Photolog



Photo 17: Yellow Birch leaf underside in hand



Photo 18: Black Ash trunk of sapling



Photo 19: Black Ash leaf



Photo 20: Black Ash live crown

Photolog



Photo 21: Black Ash dead crown with live branches below



Photo 22: Black Ash swamp habitat



Photo 23: Alternate pathway open forested area



Photo 24: Alternate pathway thick growth area associated with drainage areas