

Island Lake Conservation Area Master Plan - Stakeholder Advisory Committee Meeting # 3: Notes

Date: Wednesday May 26th, 2016 **Time:** 6:00 p.m. – 9:00 p.m. **Location:** Island Lake Conservation Area – Education Centre

Meeting Attendees:

Organization	Committee Member
Caledon Hills Bruce Trail Club	Carol Sheppard
Credit Valley Conservation	Bill Lidster
Dufferin County, Dufferin County Forest	Caroline Mach
Friends of Island Lake	Wayne White
Headwaters Streams Committee	Dave Dyce
Ministry of Tourism, Culture & Sport	Carol Oitment
Orangeville Arts & Culture Committee, Orangeville Business Improvement Area	Alison Scheel
Orangeville Lions Club	Mike Walker
Rotary Club of Orangeville Highlands	Jeff Bathurst
Theatre Orangeville	Marsha Grant
Town of Orangeville	Charles Cosgrove
Town of Orangeville	Ray Osmond
Upper Grand District School Board	Lynn Picard
Credit Valley Conservation	Dave Wells (tour spokesperson)
Credit Valley Conservation	Victoria Edwards (tour spokesperson)
Credit Valley Conservation	Heather Marcks (tour spokesperson)
Credit Valley Conservation	Mark Thompson
Credit Valley Conservation	Eric Baldin
Credit Valley Conservation	Kate Burgess (meeting lead)
Credit Valley Conservation	Laura Rundle (minutes)

Regrets:

Councillor Gail Campbell (Access Orangeville, CVC Board of Directors), Richard Reid (Island Lake Rowing Club), Shirley Bennett (Mono Heritage Advisory Committee), Jillian Van Niekerk (Ontario Parks), Chris Broom (Headwaters Community in Action), Michelle Harris (Hills of Headwaters Tourism Association), Jeff Andersen (Nottawasaga Valley Conservation Authority), Mark Whitcombe (Orangeville Sustainability Action Team), Charles McCabe (Rotary Club of Orangeville), Kim Perryman (Town of Mono), Ron Jasiuk (Upper Credit Field Naturalists)

Meeting Agenda:

1. Review of Meeting #2 and Action Items
2. ILCA Tour

Appendices:

- A. Meeting Agenda
- B. ILCA Map
- C. Local Cultural History Overview
- D. Vicki Barron Lakeside Trail – Accessibility Monitoring and Recommendations
- E. List of Species Identified at ILCA

The presentation is posted to the SAC’s webpage: <http://www.creditvalleyca.ca/enjoy-the-outdoors/conservation-areas/island-lake-conservation-area/island-lake-management-plan/stakeholder-advisory-committee/>

Agenda Items:

Topic	Discussion	Actions
Meeting #2 Review	<p>A short review of the two previous ILCA SAC meetings took place. Action items from Meeting #2 were also discussed:</p> <ul style="list-style-type: none"> ○ At our second meeting the SAC members noted that First Nations representation was missing. While Aboriginal organizations that may be impacted by the study were contacted, local groups were not. The Dufferin County Resource Circle has since been contacted and invited to join the SAC. CVC is waiting to hear back regarding future representation. ○ The SAC also requested that CVC look more deeply into some of the local families that may have lived in what is now ILCA. CVC contacted Laura Camilleri from the Dufferin County Museum and Archives for more information. Laura was able to provide us with supplemental information on the Ketchum and Hannahson families (Appendix C). CVC staff will be gathering additional information on the Island Family over the coming weeks. 	
Site Overview – Areas and Features not covered in the Tour	<p>A brief overview of some of the features and areas that the tour did not cover were given. Please see the presentation for more information.</p> <p><u>Vicki Barron Lakeside Trail</u></p> <ul style="list-style-type: none"> ○ While the Vicki Barron Lakeside Trail was discussed on the tour, we were unable to access Bob’s Bridges or any of the other crossings. ○ Images and a description of the trail system was provided in the presentation <p><u>Sensitive Natural Areas</u></p>	

- The eastern arm of ILCA contains regionally rare vegetation as well as Species at Risk – in 2014 a Least Bittern was heard calling from this area for the first time.
- This area also contains a “floating fen” made up of floating mats of sphagnum moss. It is believed that this is part of a remnant bog or fen that was present prior to the flooding of the reservoir

Sugar Shack and Education Out-buildings

- “E.M.’s Lab” is located in the sugar bush area and is actually an old train station that was previously moved from the Elora-Cataract Trailway (another CVC conservation area). It is now used by the education programming..
- The sugar shack and its associated features (wood shed, pipeline collection system, etc.) are also located in ILCA’s sugar bush and are leased to the Upper Grand District School Board.

Commercial Lot

- ILCA’s commercial lot is a 4 acre site suitable for development that is located off of Highway 10. It is designated as ‘service commercial’ in the Town of Orangeville’s Official Plan. Part of the Vicki Barron Lakeside Trail now traverses over the back portion of this site.
- Through the late 1990’s and early 2000’s several conversations between CVC, the Town of Orangeville and the Town of Mono took place in regards to the possibility of selling or leasing out the land. It was ultimately decided that the land would neither be leased or sold at the time.
- Opportunities for the commercial lot will be explored as part of the master planning process for ILCA, however it is very unlikely that CVC would sell the property.

Questions/Discussion

- *Who was Vicki Barron (who was the trail named after)?*
- A: Vicki Barron worked at CVC from 1980 until 2001 and was the General Manager and Secretary Treasurer from 1986 to 2001. She is widely renowned as a leader in conservation in Ontario and now works for the Waterfront Regeneration Trust where she is the Director of Administration and Regeneration Initiatives.
- *There is concern over how and where people are parking to access the Vicki Barron Lakeside Trail. The Home Hardware parking lot is usually at capacity and people are unsure of the other options for accessing the trail.*
- Potential solutions include: highlighting parking opportunities (main gate, Hockley Road, Hurontario St N, 4th Avenue at Home Hardware, etc.) and encouraging active transportation. The Town of Orangeville is currently working on creating another pedestrian trail access at 5th Avenue, which will hopefully alleviate some of the parking concerns.
- *Can we see the trail counter data from the May long weekend? The trail was really busy here.*
- Yes – we will circulate the data as soon as it becomes available. Trail counter data is collected on a

CVC staff to bring this forward to Communications staff to post on website/social media

CVC to circulate May Long-weekend trail count data to the SAC

	three-week schedule, so we will send it out to the SAC in a separate email in June.	when it becomes available in June
Site Tour	<p>Attendees participated in a tour of Island Lake Conservation Area. Key points, questions and comments are outlined below. The map in Appendix B highlights the 'tour stops' where the conversations with the corresponding numbers (below) took place.</p> <p><u>1. Education Centre</u></p> <ul style="list-style-type: none"> ○ The education centre was built by CVC in 1976 at a time when ILCA was largely non-operational. The building was largely used for the annual Maple Syrup Festival (we had almost 7,000 attendees in 1976!). ○ The centre has been leased out to the Upper Grand District School Board (UGDSB) for education programs since 1987. ○ Lynn Picard, Outdoor Education Teacher at the UGDSB, provided an overview of the programs offered through the education centre: <ul style="list-style-type: none"> • School programs are run daily and occur throughout the year; approximately 4,000 students participate in outdoor education programs at ILCA annually • Lynn has been teaching outdoor education programs for the last eight years at ILCA; she is supported by an Outdoor Education Assistant • Programs are varied and focus on a range of conservation-based topics including: Maple Syrup Programs, Earth Keepers, the Fur Trade, Water Quality and 'Instinct for Survival'. Programs in which outdoor education staff go out to schools to provide programs on school grounds have also been recently developed. <p><u>2. Administrative Offices</u></p> <ul style="list-style-type: none"> ○ North zone operations staff manage thirty (30) properties located in the northern half of the Credit River watershed, including two operational conservation areas (ILCA and Ken Whillans Resource Management Area). They are situated in the administrative trailers when they are not in the field. ○ The administrative offices are small, and considered a constraint. New, permanent offices will be explored through the master plan process. ○ Six (6) full-time staff work out of ILCA year-round and fifteen (15) casual staff are employed during the busy operational seasons. <p><u>3. Main Picnic/Activity Area</u></p> <ul style="list-style-type: none"> ○ Large open space that currently contains picnic tables, picnic pavilion, washroom facilities, volleyball court, etc. Currently suitable for large group activities and picnics. Also used by education programs as an extension of the indoor classroom. ○ In 2014 CVC's Land Monitoring Program conducted an observational analysis on this area to 	

determine usage patterns. While most users congregate along the Lakeside Trail, this area receives the highest intensity of use, and visitors tend to spend 3-5 hours picnicking and playing sports in this area.

- This area will be reconsidered through the Master Plan – the function of this area could change, including what activities are offered and how this space is used.
- Q: *Is camping being considered for this area?*
- A: At this point all activities are still on the table, but given the space and infrastructure requirements for camping, it is likely not a good fit for ILCA.

4. Dods & McNair Memorial Forest

- CVC and Dods and McNair Funeral Home have a twenty-year partnership in which trees are planted in memory of a loved one who has passed away. Over 10,000 trees have been planted.
- Planting opportunities in the Memorial Forest have reached capacity; new opportunities for tree planting are being sought, including expanding the existing Memorial Forest.
- Art installations are a new element of the Memorial Forest; the dry-stone wall constructed by Eric Landman for his wife, Kerry, is an example.
- In 1979 a pilot project was undertaken in this area in conjunction with the Society of Ontario Nut Growers (SONG) in an attempt to establish edible nut trees in a more northern and cooler climate. Approximately 60 varieties of nuts were planted, including Chestnuts, Black Walnuts, Butternut and Filberts. SONG has recently contacted CVC to look into the success and genetics of the 1979 plantings.

5. Canoe/Kayak Storage and Parking Lot Expansion

- A new canoe/kayak storage area will be built here over the course of 2016. The current storage area is located at the rental centre and has reached capacity. The new structure will be built to accommodate 256 units.
- The parking lot in this area will double (approximately) in size to permit better access to the future canoe/kayak storage area and to accommodate more vehicles closer to the amphitheatre.
- Q: *This parking lot gets very muddy. Will it be fixed during the construction of a new lot?*
- A: Yes, problematic areas will also be regraded.
- C: *A Great Horned Owl has been observed nesting in this area.*
- Noted: This will be taken into consideration while the new parking lot is designed and constructed.
- Q: *What is the cost to store a canoe/kayak here?*
- A: The cost is \$110 annually.
- Q: *The education program has trails through this area (in the proximity of the parking lot expansion),*

CVC to identify if/how education trails may be impacted by parking lot construction and what mitigation needs to occur

how will this impact the trails?

- CVC staff to identify if/how education trails may be impacted in this area.

6. Vicki Baron Lakeside Trail

- The vision for a perimeter trail around the Island Lake reservoir was identified in the 1997 Management Plan for ILCA.
- The trail took several years to complete (2001 – 2015). The approximate cost for its completion was \$2,300,000.
- Funding came from a variety of sources including various grants and donations. The Friends of Island Lake were instrumental in getting the trail complete; securing grants and donations, hosting fundraisers and providing in-kind labour and materials.
- The entire trail is approximately 8km in length.
- ILCA has been the focus of ongoing monitoring conducted by CVC's Lands Monitoring Program over recent years, including trail count data and visitor surveys.
- Visitor surveys have indicated that there are three main types of visitors to ILCA:
 - Winter day-use visitors: Generally males (90%) who travel alone or with one other person to participate in ice-fishing; come from throughout the GTA.
 - Summer day-use visitors: Visitors that come in pairs, alone or with families and friends to participate in fishing, hiking and water-based activities. Largely travel from Orangeville, Brampton and Mississauga.
 - Routine year-round visitors: Local residents (Orangeville and Mono) who use the trail for hiking, exercising and dog walking on a regular basis. This type of visitor has continued to increase as the different sections of the trail were completed.
- Over the course of 2015, Lands Monitoring staff also evaluated ILCA's trail system to determine if it met Accessibility for Ontarians with Disabilities Act (AODA) requirements for an accessible trail. Twenty-one project areas were identified (Appendix D); CVC will be working on updating these areas so that the trail can be formally recognized as an accessible trail.

7. Amphitheatre

- The amphitheatre is located in the former beach area. For a long time, a major concern for the beach was water quality, which resulted in the beach being closed for swimming for much of the summer.
- Theatre Orangeville was instrumental in getting the stage constructed, providing both financial and in-kind support for the stage itself, as well as the future canopy.
- The amphitheatre will be open and available for the summer of 2016. Events could include concerts, weddings, award ceremonies, etc.

- Q: *Is there electricity going out to the amphitheatre?*
- A: No – items that require electricity will be run off of generators.

Heather Marcks, CVC's Acting Conservation Lands Ecologist provided an overview of ILCA's natural environment:

- Approximately one third of ILCA is comprised of forests and plantations, 12% is comprised of meadow habitat, and the rest is aquatic habitat, with the largest area being the reservoir itself. Other aquatic communities include marsh habitat along shore lines and Monora Creek, Credit River and two other small tributaries.
- There is a remnant portion of a rare fen community in the eastern arm of the reservoir which is considered significant
- Significant Wildlife Habitat includes: raptor nesting habitat (i.e. Osprey, Broad-winged Hawk, Great Horned Owl); amphibian breeding habitat; turtle nesting habitat; and habitat for migratory waterfowl.
- The following wildlife species have been recorded at ILCA (including a number of rare and at risk species)¹:
 - 130 bird species (plus 7 historical records)
 - 28 fish species in the reservoir (plus additional 4 additional species found in Monora Creek, Credit River and other tributaries)
 - 25 butterfly species
 - 25 dragonfly species
 - 10 damselfly species
 - 10 mammal species
 - 9 amphibian species
 - 5 reptile species
- Main opportunities to enhance ILCA's ecosystems include: forest management opportunities include planting to enhance ecological health and to increase connectivity; plantation thinning to improve growth rate and health of plantations; invasive species management will continue to occur (e.g. Garlic mustard, Common Reed, Purple Loosestrife, Common Carp)

8. Waterfront Zone/Aquatic Recreation Area

- The waterfront zone has three main functions:
 - Public access to the reservoir for water based activities (e.g. boat launch)
 - Customer service: the rental shop is the key site for staff-customer interaction, and the only location where equipment rentals and other goods (snacks, bait, tackler, etc.) can be

¹ Please see Appendix E for a complete list of species that have been identified at ILCA

	<p>purchased</p> <ul style="list-style-type: none"> • North zone operations including maintenance and storage space, staff parking, etc. <ul style="list-style-type: none"> ○ Several buildings are also located in this area, including the rental shop, operations building, storage shed and washroom building. ○ This area is arguably the most important from a day-use visitor perspective. Opportunities include enhancing the visitor experience through a larger building that could also provide educational and interpretative experiences for all visitors. <p><u>General Discussion/Questions/Comments:</u></p> <ul style="list-style-type: none"> ○ <i>What are ILCA's operating hours?</i> ○ In the summer, ILCA is open from 9am – 9pm during the week and 6am – 9pm on weekends and holidays. In the winter, ILCA is open from 8am – 6pm. Hours also change seasonally in the spring and late summer. More information is available here: http://www.creditvalleyca.ca/enjoy-the-outdoors/conservation-areas/island-lake-conservation-area/ ○ <i>What is the cost of a membership to ILCA?</i> ○ Two types of memberships are available, one that permits access to CVC conservation areas (Family: \$100; Individual: \$55) and one that permits access to CVC and TRCA conservation areas (Family: \$135; Individual: \$75). More information on memberships is available here: http://www.creditvalleyca.ca/enjoy-the-outdoors/become-a-member/ 	
<p>Final Notes and Next Steps</p>	<p><u>Our Next Meeting:</u></p> <ul style="list-style-type: none"> ➤ Unfortunately we were unable to re-schedule the make-up session for the meeting that was cancelled on March 23rd (SWOT Analysis) for June (there wasn't a date that the majority of people were available). ➤ The possibility of re-scheduling a July meeting date was discussed with those that attended the SAC meeting, however July didn't work for the majority of representatives present. ➤ The next SAC meeting will be held on Wednesday, September 28th from 6pm – 9pm, location TBD. A meeting invitation will be sent out following these minutes. This meeting will focus on a SWOT (strengths, weaknesses, opportunities, threats) analysis. <p><u>Until We Meet Again:</u></p> <ul style="list-style-type: none"> ➤ Please stay tuned over the next few months as we circulate materials and information to you. This will include the Trail Counter update requested at our May meeting, as well as the full Background Report for Island Lake Conservation Area. ➤ Have a safe and fun summer everyone! <p>Lastly, a special thank you to Wayne White (Friends of Island Lake) and Doug Roome (Orangeville Recreation Committee), who will be stepping down from the SAC. Thank you for all of the time and effort that you have put into the SAC to date. We hope that you continue to be involved in the ILCA Master Plan and share your ideas through future public consultation initiatives.</p>	

Appendix A: ILCA SAC Agenda – Meeting #3

Island Lake Conservation Area Management Plan - Stakeholder Advisory Committee Meeting # 3

Date: Wednesday May 25, 2016

Time: 6:00pm – 9:00pm

Location: Island Lake Conservation Area, 673067 Hurontario St, Orangeville, ON L9W 2Y9.

<https://www.google.ca/maps/place/Island+Lake+Conservation+Area/@43.9354672,-80.082171,17z/data=!4m5!3m4!1s0x882b0066ca27c577:0x24dcf8277886af73!8m2!3d43.9354634!4d-80.0799823>

We will begin our meeting at the Island Lake Education Centre. When you enter the main entrance to Island Lake Conservation Area and approach the gatehouse, turn right at the stop sign. The Island Lake Education Centre is located on your left. Parking is available near Activity Area 5 (see map attached) however; if you need parking closer to the Education Centre, limited parking is available near Activity Area 1.

Agenda:

Time	Topic	Lead
6:00pm – 6:05pm	Arrivals and Refreshments	LR
6:05pm	Seating and Welcome	LR
6:05pm – 6:15pm	Review of Previous Meeting Minutes: Updates and Actions	LR
6:15 – 6:45 pm	Site Overview	LR
6:50pm – 8:15pm	Island Lake Conservation Area Site Tour <ul style="list-style-type: none"> • 6:50 - 7:00 -> 1. Education Programs • 7:00 - 7:05 -> 2. Staff Offices • 7:05 - 7:15 -> 3. Picnic/Activity Area • 7:15 - 7:25 -> 4. Memorial Forest • 7:30 – 7:40 -> 5. Waterfront Zone, Rental Shop • 7:40 – 7:50 -> 6. Amphitheatre • 7:50 – 8:00 -> 7. Vicki Barron Lakeside Trail • 8:00 – 8:10 -> 8. Canoe/Kayak Storage 	KB
8:15pm – 9:00pm	Group Discussion	All
9:00pm	Meeting Close	

*CVC staff will be available for one-on-one discussions until 9:30pm

Appendix B: Map of Features



Appendix C: Local Historic Families – Additional Information

Laura Camilleri from the Dufferin County Museum and Archives was kind enough to supply us with the following information about the Ketchum and Hannahson families. This information will be summarized and included in the Background Report for the ILCA Master Plan.

1.0. SENECA KETCHUM

Seneca Ketchum was a tanner, Anglican lay preacher, and philanthropist. Born on 17 Aug. 1772 at Spencertown, N.Y. he was the eldest son of Jesse Ketchum and Mary (Mollie) Robbins.

Seneca Ketchum is said to have arrived in Kingston in 1792 as part of a wave of United Empire Loyalists relocating to Upper Canada following the American Revolution. He arrived in York no later 1797 residing on Yonge Street. He and his younger brother Jesse Ketchum II established a tanning and shoemaking business that also involved much general trade. Other members of his family, including his father, joined them in York around 1802. He began to buy up land, his holdings eventually embracing what are now the Bedford Park and Teddington Park areas of north Toronto.

It is said that Ketchum suffered a mental breakdown in 1803, possibly due to the loss of his sweetheart to his brother. Despite this setback, he married a neighbour, Anne Mercer, and bought land from his father-in-law in Hogg's Hollow to build the school that could also hold church services. He also bought the lot directly across the street from his. A devout Anglican, he helped to purchase a site for St John's Church, York Mills, and contributed much of the labour for the erection of the first building in 1817. He soon extended the range of his activities, organizing Sunday school classes and conducting informal services in outlying settlements.

In 1820 Ketchum secured a land grant in Mono Township, near the present Orangeville, and over the years he added considerably to his holdings there. He was still living on Yonge St in 1830, when he signed a petition to incorporate a turnpike company, and in 1831 was still buying land there. Becoming an Anglican missionary, Seneca moved his family, and others, to Orangeville in the 1830s when he was approaching 60 years old. When they left North Toronto, Seneca and Anne Ketchum left their Yonge Street property to the British Crown so that the proceeds of the sales could be used to build Toronto's first mental asylum.

Seneca came to Mono as a lay missionary by Archdeacon (later Bishop) John Strachan. It was an unpaid, quasi-official position that gave Seneca some status, but it is easy to believe Strachan saw it as a way to entice Seneca to leave York where they regularly locked horns. In any case, the new lay missionary was eager for challenge and his arrival in Mono was marked by a flurry of activity.

Like all first-in pioneers, he built a family home and then helped build more homes on his several tracts of land for the families he'd persuaded to come to Mono with him. Over subsequent years he built bridges and roads and was regularly celebrated for providing food to the township's pioneer families.

But all this effort was secondary to his lay missionary work. He spread the word, freely handing out Bibles and the Book of Common Prayer. He taught catechism (and literacy), and held services everywhere at every opportunity. These hills were still the domain of the saddlebag preachers in the 1830s, and because Seneca's home became a regular way station for them, his role continued to expand. In 1835, however, Anglican missionary Adam Elliot* found him at Mono, noting that he had already "formed several Sunday Schools, and instructed above a hundred persons in the Church catechism."

In 1837 he built a log church on his own land (it was behind the Toyota dealership now located on Highway 9) that was the precursor of St Mark's, Orangeville, and local tradition credits him with the foundation of at

Appendix C: Local Historic Families – Additional Information

least half a dozen Anglican churches in the area. He also made several large gifts of land to the church, for purposes ranging from the support of theological students to the foundation of a “Sailors’ Home.”

Seneca was loved by the settlers and soon became a leader in the community with everyone coming to him for help and advice, both religious and business. His generosity in helping with municipal matters, such as road building, was well known. As well, he ran a children’s library for the young residents of Mono and the Gore of Garafraxa (the south west portion of modern Orangeville).

Ketchum’s zeal eventually led him into conflict with Bishop Strachan. During his last few years he was so strong and loud in his claim that Mono Mills should be the residence of a permanent minister that Bishop John Strachan* had to warn others against his exuberance. Having given so much to the church, Ketchum bitterly accused Strachan of ingratitude. He offered 100 acres on what is now Purple Hill to be held in trust for the maintenance of divinity students. He also offered to donate 300 acres to the Diocese to promote a scheme that he had of having a township settled entirely by men of the Church of England and their families. This seems very familiar to what he had already done when originally settling in Mono, convincing other families to relocate with him.

In the midst of the controversy he died while staying with his nephew by marriage, Presbyterian clergyman James Harris, and was buried with Anglican rites at St John’s on 4 June 1850.

Ketchum has been described as “an earnest-minded but not very sane individual.” No one ever doubted his loyalty to the church, his special concern for young people, or his generosity to his neighbours, however, and his ecumenical spirit was demonstrated by his willingness to operate an undenominational Sunday school out of a Methodist meeting house or to use a Presbyterian catechism where it seemed appropriate. “Very few had as much of the milk of the human kindness as he had, and few had less tears shed over his grave,” was the pithy if ungrammatical comment of his nephew Jesse Ketchum III, who proceeded to contest his will.

Although Seneca never escaped his reputation as an eccentric there can be no doubt about his significant contribution to the development and growth of Upper Canada. In the early history of Mono Township especially, there are few pioneers to match him for energy, achievement and profile. It was he who cut through the Credit Flats (swamp) at East Broadway at his own expense and built 785 meters of causeway, complete with seven bridges, to create an easier access into Orangeville. He also opened two roads, one from Mono Mills and one down to Caledon. He also spent his own money to clear off the market square, fence it and have it sown for mowing.

Land Holdings of Seneca Ketchum (as related to Island Lake) majority surround the Island property

1. E ½ Lot 1 Con 1 WHS Mono – purchased 1823 from Allan Robinet (surveyor for Mono Township) – sold to the Diocese of Toronto in 1845 (for use by the church and there was a burying ground at this location)
2. E ½ Lot 1 Con 2 WHS Mono – Crown Grant to Seneca Ketchum 1823 – sold to the Diocese of Toronto in 1845
3. Lot 1 Con 1 EHS Mono – Thomas Tiffin to Seneca Ketchum in 1822 – sold to Robert Huston W ½ (100 acres) in 1849 – retained ownership of E ½
4. Lot 1 Con 2 EHS Mono – Crown Grant to Seneca Ketchum in 1823 – there was a “Lien of Release” to his brother-in-law Samuel Mercer but the property was seized by the Sheriff of the County of Simcoe for back taxes.
5. W ½ Lot 2 Con 2 EHS – James McMaster to Seneca Ketchum in 1836 – Sheriff’s deed in 1851
6. E ½ Lot 3 Con 2 – Canada Company to Seneca Ketchum in 1839 – sold off pieces beginning in 1844

Sources:

Appendix C: Local Historic Families – Additional Information

1. <http://www.inthehills.ca/2015/03/departments/seneca-ketchum/>
2. History of Orangeville by Wayne Townsend
3. Dictionary of Canadian Biography http://www.biographi.ca/en/bio/ketchum_seneca_7E.html
4. Ketchum Family History File
5. Land Title Books – Orangeville and Mono Township

2.0. GEORGE HANNAHSON

The early history of Orangeville and surrounding area is relatively sparse regarding Black History or Black Settlement as there is only one known family - the Hannahson's, and they were a mixed race family. The family was tied to the Ketchum family, a prominent family in the history of Orangeville, in that they were always close to the Ketchum's, no matter where they may have been living (eg. Toronto, Buffalo, Orangeville). When Seneca Ketchum moved up to the Orangeville area the Hannahsons were not far behind.

The reason for this connection has been passed down through family lore. George Hannahson was the illegitimate son of Hannah Ketchum and an unknown black father therefore the child was of mixed race and his birth would have been quite a scandal. George was given the last name of "Hannahson", as in "Hannah's son" as the family did not want the boy to bear the name of "Ketchum" (NOTE – there is no archival evidence eg. a birth registration, etc. to support this connection available anywhere). Hannah and George lived with Hannah's brother, Jesse Ketchum II and his family, in Toronto. Shortly after the Rebellion of 1837, Jesse relocated his tannery to Buffalo, New York, although he continued to live in Toronto. In 1845, Jesse moved to Buffalo, leaving his property in Toronto to his children from his first wife. It appears that Hannah and her son George Hannahson moved with Jesse to Buffalo. It was in the U.S. that George met his wife, a Swiss woman named Mary (Graydon) Sanders and they married between 1846 and 1847. Their first child, Elizabeth, was born in the United States between 1848 and 1849 (discrepancies among the various census).

George and family moved up to Mono Township in 1849 and settled on the W ½ of Lot 2, Con 2 EHS, a property owned by Seneca Ketchum, Hannah Ketchum's other brother and George Hannahson's uncle. The Land records for this Lot show us that in March 1850, three months before Seneca's death, Seneca sold the property to "George Hannahson of Mono" which proves George was living on that Lot at that time. However, through a variety of circumstances it seems that George was not able to own the property – the transaction wasn't registered until one month after Seneca's death and the Will was contested by the heirs at law.

The Lot was seized for back taxes and sold by the Sheriff of the County of Simcoe to Alexander McGlashan in 1851 and then sold to "Jesse Ketchum of York" in 1855. Jesse was Seneca's nephew and cousin to George Hannahson. By 1857 Jesse had moved up to Mono Township and sold the property to George Hannahson. Seven years later George finally owned the property that Seneca had intended for him, instead of being a tenant upon it.

Appendix C: Local Historic Families – Additional Information

The 1861 census for Mono Township indicates George constructed the only stone house in the area, was working the full 100 acres and self-identified on the census as “Coloured Person or Mulato”. He was living on the farm with his wife Mary, and their children – David Sanders (17 years), Francis H Sanders (16 years) – both children from Mary’s first marriage, Elizabeth Hannahson (13 years), Mary A Hannahson (11 years), George Hannahson (9 years), Catherine Hannahson (6 years), Emma Hannahson (4 years) and John Hannahson (2 years). Only the five Hannahson children identified as “Coloured or Mulato”. They would later have one more child: Alfred Edward Hannahson.

George and his family ran a very successful farm. By 1871 they had cleared 75 acres with six acres as pasture, one acre for orchard, 33 acres for wheat, nine acres for hay and smaller amounts scattered amongst oats, peas, and potatoes. The family had a fairly large stock of animals as well: two horses, two fillies, three cows, six horned cattle, 18 sheep, 12 swine and four hives of bees. In that year they had slaughtered and sold three cattle, nine sheep and eight swine. The family was able to make and sell 150 lbs of butter, 20 lbs of honey, 54 lbs of wool and 60 yards of homemade cloth (or possibly flannel). The farm itself had a stone house and two barns.

George ran the farm right up until his death in 1865 of Catarrh (a disease of the mucous membrane of the nasal passages that can progress to consumption). Family lore states that George Hannahson was buried in the “Hannahson Burying Ground” located at the NW corner of the Hannahson farm. Family have come to visit the site for generations. Local lore also says that some of the Ketchum family members were also buried at this site. The original St. Mark’s Church, built by Seneca Ketchum, had been on the SW corner of the farm but the congregation moved to a new stone church that was built following Seneca’s death in 1850, on First Ave in Orangeville (constructed in 1854).

However, the St. Mark’s Parish Burial Register records that George was buried in the “English Church Burying Ground” which was located on East Broadway in Orangeville. When the cemetery was closed the bodies were relocated to Forest Lawn Cemetery in 1890. Thus, George Hannahson was moved there as well. Although there were bodies located at the farm lot site recently during an excavation of the site there is no way to prove who these people were. Is it possible that the Parish Burial Register is incorrect? We may never be able to solve this riddle.

Following George’s death his Will stipulated that the farm was to be broken into thirds – John received the north third, Alfred received the north third and George Albert received the middle third, as well as a building lot in Orangeville (Lot 16, Block 5 of the Ketchum Survey) where he was to build a brick or gravel house to be given to Emily Hannahson when she reached 21 years old. As the two other brothers had other plans they eventually signed over the land to George. Emily remained in Toronto and signed off her interest in the building lot. George Albert ran the 100 acre farm and raised his children there until his death in 1927. The farm was then sold out of the Hannahson family. Another brother, John Hannahson, lived on and operated another of the Hannahson farms on Lot 3, Con 2 EHS Mono but later would become a teacher and then a well-known Presbyterian Minister. He died young of consumption on the family farm. Alfred Edward Hannahson also became a Minister, at first in the Territories and then in London, ON and then in Lambton near Sarnia.

Appendix C: Local Historic Families – Additional Information

The Hannahson girls fared a little differently. Catherine Hannahson, who was one of Ontario's first female telegraph operators, was in charge of the office of the Great Northwestern Telegraph Co. at Mono Mills. Elizabeth and Mary Ann Hannahson remained spinsters and lived together in a house in Mono Mills working as dressmakers in the area. Mary Ann died of typhoid fever at the age of 42. Elizabeth died of consumption at the age of 45. Following George's death in 1865 Mary Hannahson would marry her neighbor to the north, Hugh Duffy, and together they would have one child - Marcella Duffy. Marcella married well to Charles Peter Brown, a Crown Lands Agent living in Toronto. Her half-sister, Emily Hannahson, would move in with Marcella and her family and continue to live with them after Marcella's death ca. 1915. She remained a spinster. Interestingly, the Hannahson girls, once they reached marriageable age and moved out of the house, no longer referred to themselves on a census as "African". They all seemed to prefer to be known as "Irish". This was likely in response to better fitting in when living in Toronto and "making a good marriage".



Island Lake Conservation Area seeking endorsement

Vicki Barron Lakeside Trail – Accessibility Project Areas

In 2005 the Government of Ontario passed the Accessibility for Ontarians with Disabilities Act (AODA). The Act creates and enforces accessibility standards to be phased in overtime. The Design of Public Spaces Standard sets out the technical requirements when creating new and re-developing existing recreational trails, and includes both consultation – and signage requirements.

In 2015, CVC staff underwent a trail assessment process to collect data about trail conditions and features on CVC's conservation areas. The process used is called the High Efficiency Trails Assessment Process (HETAP) which objectively documents actual conditions of trails in outdoor, natural environments. To complete the assessments CVC staff used an all-terrain buggy and computer to collect detailed data on trail lengths, running and cross slope, surface material, surface firmness, and trail width.

In addition to informing trail conditions and signage, trail assessments also provide detailed data about specific points on the trail where conditions are determined to be *less* accessible due to higher running and cross slope ratios. While CVC does not currently have guidelines for developing accessible trails, industry best practices use a maximum average slope of 5% with a few exceptions for defined periods of time. Recommendations for retrofitting the Vicki Barron Lakeside Trail are based on approved technical requirements from the [Accessibility Design Guidelines for York Regional Forest Trails](#)¹. Please see the document for more information.

In total, CVC identified twenty-one (21) project areas throughout the Vicki Barron Lakeside Trail as having greater than 5% running slope and cross slope exceeding the distance requirements set out in the York Regional Forest Guidelines. Recommendations for these areas include re-grading the trail to lower the slope ratios as best as possible, and/or adding rest areas at specified intervals to provide spaces for visitors to rest before continuing with their trip.

One area along the trail may require an exemption due to very steep terrains that may not be avoided (Project Area 16); for this location the public would be made aware of the obstacle and the length of steep slope to ensure they are properly informed before they reach this portion on the trail. Please see

¹ York Region (2013) Accessibility Design Guidelines for York Regional Forest Trails. Retrieved from <https://www.york.ca/wps/wcm/connect/yorkpublic/e3f0c19e-974d-4720-8071-2b8ee854e410/nov+20+buchanan.pdf?MOD=AJPERES>



Figure 1 below for a map of all 21 project areas and Table 1 for a summary of the project areas including the details on the grade and cross slope and the recommended action items.

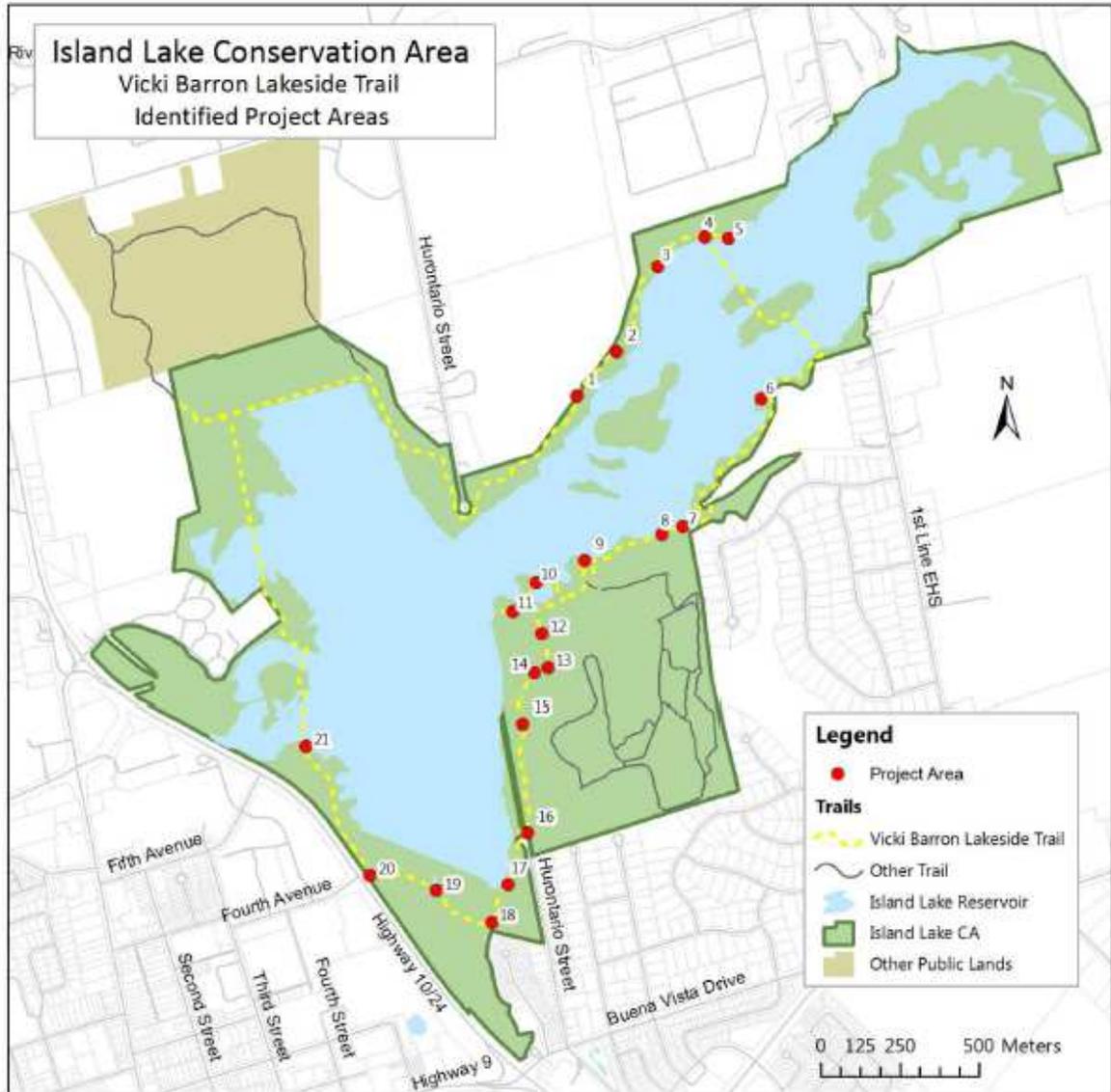


Figure 1 - Accessibility Project Areas

Appendix D: Vicki Barron Lakeside Trail – Accessibility Monitoring and Recommendations



Table 1- Accessibility Project Area Summary

Project Area	Identified Issues	Recommendations and Next Steps
1	Running Slope <ul style="list-style-type: none"> • 5%-10% (44.40 meters) • >10% (14.23 meters) 	<ul style="list-style-type: none"> • No slope should be greater than 10% • If 10% is levelled to 8%-10% will require 3.3 rest areas (1 every 9 meters)
	Cross Slope <ul style="list-style-type: none"> • >10% (10.86 meters) 	
2	Running Slope <ul style="list-style-type: none"> • 5%-10% (90.71 meters) 	Slopes are in two sections <ul style="list-style-type: none"> • Section 1: <ul style="list-style-type: none"> ○ Re-grade to less than 5%, otherwise will require 2 rest areas • Section 2: <ul style="list-style-type: none"> ○ Slope is currently 8.1%; re-grade to less than 8% and will not require rest areas
	Cross Slope <ul style="list-style-type: none"> • 5%-10% (27.35 meters) 	
3	Cross Slope <ul style="list-style-type: none"> • 5%-10% (27.13 meters) 	<ul style="list-style-type: none"> • Cross slope should less than 5% where possible
4	Running Slope <ul style="list-style-type: none"> • 5%-10% (16.03 meters) • >10% (6.96 meters) 	<ul style="list-style-type: none"> • No slope should be greater than 10% • If 10% is levelled to 8%-10% will require 2 rest areas (1 every 9 meters) • Trail intersection will suffice as rest area depending on dimensions (at least 1.5 meters long and at least as wide as the trail leading into it).
	Cross Slope <ul style="list-style-type: none"> • 5%-10% (18.26 meters) 	
5	Running Slope <ul style="list-style-type: none"> • 5%-10% (2.3 meters) • >10% (18.39 meters) 	Slopes are in two sections <ul style="list-style-type: none"> • Section 1: <ul style="list-style-type: none"> ○ No slope greater than 10% ○ If 10% is levelled to 8%-10% will require 1 rest area (1 every 9 meters) • Section 2: <ul style="list-style-type: none"> ○ No slope greater than 10% ○ If 10% is levelled to 8%-10% will require 1 rest area (1 every 9 meters)
	Cross Slope <ul style="list-style-type: none"> • 5%-10% (23.26 meters) 	
6	Cross Slope <ul style="list-style-type: none"> • 5%-10% (23.26 meters) 	<ul style="list-style-type: none"> • Cross slope should less than 5% where possible
7	Running Slope <ul style="list-style-type: none"> • >10% (4.15 meters) 	Slopes are in two sections <ul style="list-style-type: none"> • Section 1:

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		<ul style="list-style-type: none"> ○ No slope greater than 10% • Section 2: <ul style="list-style-type: none"> ○ No slope greater than 10%
8	Cross Slope <ul style="list-style-type: none"> • 5%-10% (18.6 meters) 	<ul style="list-style-type: none"> • Cross slope should less than 5% where possible
9	Cross Slope <ul style="list-style-type: none"> • 5%-10% (26.72 meters) • >10% (0.77 meters) 	<ul style="list-style-type: none"> • Cross slope should less than 5% where possible
10	Running Slope <ul style="list-style-type: none"> • 5%-10% (52.03 meters) • >10% (18.84 meters) 	Slopes are three sections <ul style="list-style-type: none"> • Section 1: <ul style="list-style-type: none"> ○ No slope should be greater than 10% ○ If 10% is levelled to 5%-8% will require 1 rest area ○ If left as is, will require 2 rest areas • Section 2: <ul style="list-style-type: none"> ○ No slope should be greater than 10% • Section 3: <ul style="list-style-type: none"> ○ No slope should be greater than 10%
	Cross Slope <ul style="list-style-type: none"> • 5%-10% (27.01 meters) • >10% (28.22 meters) 	<ul style="list-style-type: none"> • No slope should be greater than 10% • Cross slope should be addressed with running slope to less than 5% where possible
11	Running Slope <ul style="list-style-type: none"> • 5%-10% (19.43 meters) • >10% (10.61 meters) 	<ul style="list-style-type: none"> • This section not officially part of the Vicki Barron Lakeside Trail but is used to access the washroom. • No slope should be greater than 10% • Add rest area near the washroom
12	Running Slope <ul style="list-style-type: none"> • 5%-10% (54.24 meters) 	<ul style="list-style-type: none"> • Re-grade entire slope to less than 8% otherwise will require 3 rest areas • Trail intersection near washroom/loop will suffice as rest area, depending on dimensions (at least 1.5 meters long and at least as wide as the trail leading into it).
13	Running Slope <ul style="list-style-type: none"> • 5%-10% (49.03 meters) 	Slopes are in two sections <ul style="list-style-type: none"> • Section 1: <ul style="list-style-type: none"> ○ Re-grade entire slope to less than 5% • Section 2: <ul style="list-style-type: none"> ○ Re-grade entire slope to less than 5% otherwise will require 1 rest area. If left as is will require 2 rest areas (1 every 9 meters)
14	Running Slope <ul style="list-style-type: none"> • 5%-10% (43.09 meters) 	<ul style="list-style-type: none"> • Re-grade to less than 8% otherwise will require 3 rest areas (1 every 9 meters)
	Cross Slope	<ul style="list-style-type: none"> • No slope should be greater than 10%

Appendix D: Vicki Barron Lakeside Trail – Accessibility Monitoring and Recommendations



	>10% (5.05 meters)	<ul style="list-style-type: none"> • Cross slope should be addressed with running slope to less than 5% where possible
15	Running Slope <ul style="list-style-type: none"> • 5%-10% (77.59 meters) • >10% (10.81 meters) 	<ul style="list-style-type: none"> • No slope should be greater than 10% • Re-grade to less than 8% otherwise will require 3 rest areas (1 every 9 meters)
	Cross Slope <ul style="list-style-type: none"> • 5%-10% (45.19 meters) • >10% (5.28 meters) 	<ul style="list-style-type: none"> • No slope should be greater than 10% • Cross slope should be addressed with running slope to less than 5% where possible
16	Running Slope <ul style="list-style-type: none"> • 5%-10% (9.79 meters) • >10% (110.04 meters) 	Slopes are in two sections <ul style="list-style-type: none"> • Section 1: <ul style="list-style-type: none"> ○ No slope should be greater than 10% ○ Re-grade to less than 10% and add 6 rest areas (1 every 9 meters) or ○ Re-route trail adjacent to roadway if possible or ○ Make non-accessible portion of trail • Section 2: <ul style="list-style-type: none"> ○ No slope should be greater than 10% ○ Re-grade to less than 10% and add 6.2 rest areas (1 every 9 meters) or ○ Re-route trail adjacent to roadway if possible or ○ Make non-accessible portion of trail
	Cross Slope <ul style="list-style-type: none"> • >10% (42.42 meters) 	<ul style="list-style-type: none"> • No slope should be greater than 10% • Cross slope should be addressed with running slope to less than 5% where possible
17	Running Slope <ul style="list-style-type: none"> • 5%-10% (21.96 meters) 	<ul style="list-style-type: none"> • Add rest area
	Cross Slope <ul style="list-style-type: none"> • >10% (11.61 meters) 	<ul style="list-style-type: none"> • No slope should be greater than 10% • Cross slope should be addressed with running slope to less than 5% where possible
18	Running Slope <ul style="list-style-type: none"> • >10% (27.51 meters) 	<ul style="list-style-type: none"> • No slope should be greater than 10% • Re-grade to less than 10% and add 3 rest areas (1 every 9 meters) • If re-graded to 5-8% no rest area is required
19	Cross Slope <ul style="list-style-type: none"> • >10% (2.92 meters) 	<ul style="list-style-type: none"> • No slope should be greater than 10% • Cross slope should less than 5% where possible • Small section of boardwalk is sinking and needs to be levelled with entire boardwalk
20	Cross Slope <ul style="list-style-type: none"> • 5%-10% (14.6 meters) 	<ul style="list-style-type: none"> • Cross slope should less than 5% where possible
21	Cross Slope <ul style="list-style-type: none"> • 5%-10% (29.23 meters) • >10% (6.36 meters) 	<ul style="list-style-type: none"> • No slope should be greater than 10% • Cross slope should less than 5% where possible

Appendix D: Vicki Barron Lakeside Trail – Accessibility Monitoring and Recommendations

CVC is currently moving forward with seeking feedback and endorsement from Access Orangeville and Dufferin County's Accessibility Advisory Committee in order to retrofit and update portions of the Vicki Barron Lakeside Trail to better comply with industry best practices regarding accessible running and cross slopes. Site specific planning will take place over the summer of 2016 with hopes of making a fully compliant eight kilometer accessible trail at Island Lake Conservation Area.

For more information on accessibility of public spaces at CVC, the High Efficiency Trails Assessment Process or the data provided in this report please contact:

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Appendix E: Island Lake Conservation Area – Lists of Identified Species

BIRD SPECIES OBSERVED AT ILCA	
SCIENTIFIC NAME	COMMON NAME
<i>Empidonax alnorum</i>	Alder Flycatcher
<i>Anas rubripes</i>	American Black Duck
<i>Fulica americana</i>	American Coot
<i>Corvus brachyrhynchos</i>	American Crow
<i>Carduelis tristis</i>	American Goldfinch
<i>Setophaga ruticilla</i>	American Redstart
<i>Turdus migratorius</i>	American Robin
<i>Anas americana</i>	American Wigeon
<i>Scolopax minor</i>	American Woodcock
<i>Haliaeetus leucocephalus</i>	Bald Eagle
<i>Icterus galbula</i>	Baltimore Oriole
<i>Riparia riparia</i>	Bank Swallow
<i>Hirundo rustica</i>	Barn Swallow
<i>Megaceryle alcyon</i>	Belted Kingfisher
<i>Mniotilta varia</i>	Black-and-white Warbler
<i>Coccyzus erythrophthalmus</i>	Black-billed Cuckoo
<i>Poecile atricapillus</i>	Black-capped Chickadee
<i>Nycticorax nycticorax</i>	Black-crowned Night-heron
<i>Dendroica striata</i>	Blackpoll Warbler
<i>Dendroica virens</i>	Black-throated Green Warbler
<i>Cyanocitta cristata</i>	Blue Jay
<i>Anas discors</i>	Blue-winged Teal
<i>Dolichonyx oryzivorus</i> *	Bobolink*
<i>Larus philadelphia</i>	Bonaparte's Gull
<i>Buteo platypterus</i>	Broad-winged Hawk
<i>Certhia americana</i> *	Brown Creeper*
<i>Molothrus ater</i>	Brown-headed Cowbird
<i>Bucephala albeola</i>	Bufflehead
<i>Branta canadensis</i>	Canada Goose
<i>Hydroprogne caspia</i>	Caspian Tern
<i>Bombycilla cedrorum</i>	Cedar Waxwing
<i>Spizella passerina</i>	Chipping Sparrow
<i>Petrochelidon pyrrhonota</i>	Cliff Swallow
<i>Bucephala clangula</i>	Common Goldeneye
<i>Quiscalus quiscula</i>	Common Grackle
<i>Gavia immer</i>	Common Loon
<i>Mergus merganser</i>	Common Merganser
<i>Corvus corax</i>	Common Raven
<i>Sterna hirundo</i> *	Common Tern*
<i>Geothlypis trichas</i>	Common Yellowthroat
<i>Junco hyemalis</i>	Dark-eyed Junco
<i>Phalacrocorax auritus</i>	Double-crested Cormorant

Appendix E: Island Lake Conservation Area – Lists of Identified Species

BIRD SPECIES OBSERVED AT ILCA	
SCIENTIFIC NAME	COMMON NAME
<i>Picoides pubescens</i>	Downy Woodpecker
<i>Podiceps nigricollis</i>	Eared Grebe
<i>Tyrannus tyrannus</i>	Eastern Kingbird
<i>Sturnella magna</i>	Eastern Meadowlark
<i>Sayornis phoebe</i>	Eastern Phoebe
<i>Contopus virens</i>	Eastern Wood-pewee
<i>Sturnus vulgaris</i>	European Starling
<i>Spizella pusilla</i>	Field Sparrow
<i>Anas strepera</i>	Gadwall
<i>Regulus satrapa</i>	Golden-crowned Kinglet
<i>Dumetella carolinensis</i>	Gray Catbird
<i>Ardea herodias</i>	Great Blue Heron
<i>Myiarchus crinitus</i>	Great Crested Flycatcher
<i>Ardea alba</i>	Great Egret
<i>Bubo virginianus</i>	Great Horned Owl
<i>Aythya marila</i> *	Greater Scaup*
<i>Tringa melanoleuca</i>	Greater Yellowlegs
<i>Butorides virescens</i>	Green Heron
<i>Anas crecca</i>	Green-winged Teal
<i>Picoides villosus</i>	Hairy Woodpecker
<i>Larus argentatus</i>	Herring Gull
<i>Lophodytes cucullatus</i>	Hooded Merganser
<i>Podiceps auritus</i>	Horned Grebe
<i>Eremophila alpestris</i>	Horned Lark
<i>Carpodacus mexicanus</i>	House Finch
<i>Passer domesticus</i> *	House Sparrow*
<i>Troglodytes aedon</i>	House Wren
<i>Passerina cyanea</i>	Indigo Bunting
<i>Charadrius vociferus</i>	Killdeer
<i>Ixobrychus exilis</i>	Least Bittern
<i>Empidonax minimus</i>	Least Flycatcher
<i>Calidris minutilla</i>	Least Sandpiper
<i>Aythya affinis</i>	Lesser Scaup
<i>Tringa flavipes</i>	Lesser Yellowlegs
<i>Anas platyrhynchos</i>	Mallard
<i>Cistothorus palustris</i>	Marsh Wren
<i>Falco columbarius</i>	Merlin
<i>Zenaida macroura</i>	Mourning Dove
<i>Oporornis philadelphia</i>	Mourning Warbler
<i>Cygnus olor</i>	Mute Swan
<i>Vermivora ruficapilla</i>	Nashville Warbler
<i>Cardinalis cardinalis</i>	Northern Cardinal

Appendix E: Island Lake Conservation Area – Lists of Identified Species

BIRD SPECIES OBSERVED AT ILCA	
SCIENTIFIC NAME	COMMON NAME
<i>Colaptes auratus</i>	Northern Flicker
<i>Circus cyaneus</i>	Northern Harrier
<i>Anas acuta</i>	Northern Pintail
<i>Stelgidopteryx serripennis</i>	Northern Rough-winged Swallow
<i>Anas clypeata</i>	Northern Shoveler
<i>Seiurus noveboracensis</i>	Northern Waterthrush
<i>Pandion haliaetus</i>	Osprey
<i>Seiurus aurocapilla</i>	Ovenbird
<i>Calidris melanotos</i>	Pectoral Sandpiper
<i>Podilymbus podiceps</i>	Pied-billed Grebe
<i>Dryocopus pileatus</i>	Pileated Woodpecker
<i>Carduelis pinus</i>	Pine Siskin
<i>Dendroica pinus</i>	Pine Warbler
<i>Carpodacus purpureus</i>	Purple Finch
<i>Mergus serrator</i>	Red-breasted Merganser
<i>Sitta canadensis</i>	Red-breasted Nuthatch
<i>Vireo olivaceus</i>	Red-eyed Vireo
<i>Aythya americana</i>	Redhead
<i>Podiceps grisegena</i>	Red-necked Grebe
<i>Buteo jamaicensis</i>	Red-tailed Hawk
<i>Agelaius phoeniceus</i>	Red-winged Blackbird
<i>Larus delawarensis</i>	Ring-billed Gull
<i>Aythya collaris</i>	Ring-necked Duck
<i>Columba livia</i>	Rock Pigeon
<i>Pheucticus ludovicianus</i>	Rose-breasted Grosbeak
<i>Regulus calendula</i>	Ruby-crowned Kinglet
<i>Archilochus colubris</i>	Ruby-throated Hummingbird
<i>Oxyura jamaicensis</i>	Ruddy Duck
<i>Bonasa umbellus*</i>	Ruffed Grouse*
<i>Passerculus sandwichensis</i>	Savannah Sparrow
<i>Calidris pusilla</i>	Semipalmated Sandpiper
<i>Accipiter striatus</i>	Sharp-shinned Hawk
<i>Tringa solitaria</i>	Solitary Sandpiper
<i>Melospiza melodia</i>	Song Sparrow
<i>Porzana carolina</i>	Sora
<i>Actitis macularius</i>	Spotted Sandpiper
<i>Melospiza georgiana</i>	Swamp Sparrow
<i>Tachycineta bicolor</i>	Tree Swallow
<i>Cygnus buccinator</i>	Trumpeter Swan
<i>Cathartes aura</i>	Turkey Vulture
<i>Catharus fuscescens</i>	Veery
<i>Rallus limicola</i>	Virginia Rail

Appendix E: Island Lake Conservation Area – Lists of Identified Species

BIRD SPECIES OBSERVED AT ILCA	
SCIENTIFIC NAME	COMMON NAME
<i>Vireo gilvus</i>	Warbling Vireo
<i>Aechmophorus occidentalis</i>	Western Grebe
<i>Sitta carolinensis</i>	White-breasted Nuthatch
<i>Zonotrichia leucophrys</i> *	White-crowned Sparrow*
<i>Calidris fuscicollis</i>	White-rumped Sandpiper
<i>Zonotrichia albicollis</i>	White-throated Sparrow
<i>Meleagris gallopavo</i>	Wild Turkey
<i>Troglodytes troglodytes</i>	Winter Wren
<i>Aix sponsa</i>	Wood Duck
<i>Dendroica petechia</i>	Yellow Warbler
<i>Dendroica coronata</i>	Yellow-rumped Warbler

* Historical bird record from 1994 Island Lake CA Inventory

MAMMAL SPECIES OBSERVED AT ILCA	
SCIENTIFIC NAME	COMMON NAME
<i>Castor canadensis</i>	Beaver
<i>Mephitis mephitis</i>	Striped Skunk
<i>Mustela vison</i>	American Mink
<i>Odocoileus virginianus</i>	White-tailed Deer
<i>Ondatra zibethicus</i>	Muskrat
<i>Peromyscus leucopus</i>	White-footed Mouse
<i>Procyon lotor</i>	Northern Raccoon
<i>Sciurus carolinensis</i>	Eastern Gray Squirrel
<i>Tamias striatus</i>	Eastern Chipmunk
<i>Tamiasciurus hudsonicus</i>	Red Squirrel

Appendix E: Island Lake Conservation Area – Lists of Identified Species

AMPHIBIANS AND REPTILES OBSERVED AT ILCA	
SCIENTIFIC NAME	COMMON NAME
<i>Anaxyrus americanus</i>	American Toad
<i>Chelydra serpentina</i>	Eastern Snapping Turtle
<i>Chrysemys picta marginata</i>	Midland Painted Turtle
<i>Hyla versicolor</i>	Gray Treefrog
<i>Lampropeltis triangulum triangulum</i>	Eastern Milksnake
<i>Lithobates clamitans</i>	Green Frog
<i>Lithobates palustris</i>	Pickerel Frog
<i>Lithobates pipiens</i>	Northern Leopard Frog
<i>Lithobates sylvaticus</i>	Wood Frog
<i>Plethodon cinereus</i>	Eastern Red-backed Salamander
<i>Pseudacris crucifer</i>	Spring Peeper
<i>Pseudacris triseriata</i>	Western Chorus Frog
<i>Storeria dekayi dekayi</i>	Northern Brownsnake
<i>Thamnophis sirtalis sirtalis</i>	Eastern Gartersnake

Appendix E: Island Lake Conservation Area – Lists of Identified Species

BUTTERFLIES OBSERVED AT ILCA	
SCIENTIFIC NAME	COMMON NAME
<i>Ancyloxypha numitor</i>	Least Skipper
<i>Celastrina ladon</i>	Spring Azure
<i>Celastrina neglecta</i>	Summer Azure
<i>Cercyonis pegala</i>	Common Wood-Nymph
<i>Coenonympha tullia</i>	Common Ringlet
<i>Colias eurytheme</i>	Orange Sulphur
<i>Colias philodice</i>	Clouded Sulphur
<i>Danaus plexippus</i>	Monarch
<i>Enodia anthedon</i>	Northern Pearly-Eye
<i>Limenitis archippus</i>	Viceroy
<i>Limenitis arthemis</i>	White Admiral
<i>Limenitis arthemis astyanax</i>	Red-spotted Purple
<i>Megisto cymela</i>	Little Wood-Satyr
<i>Nymphalis antiopa</i>	Mourning Cloak
<i>Papilio canadensis</i>	Canadian Tiger Swallowtail
<i>Papilio cresphontes</i>	Giant Swallowtail
<i>Phyciodes cocyta</i>	Northern Crescent
<i>Pieris rapae</i>	Cabbage White
<i>Poanes hobomok</i>	Hobomok Skipper
<i>Polites peckius</i>	Peck's Skipper
<i>Polites themistocles</i>	Tawny-edged Skipper
<i>Polygonia comma</i>	Eastern Comma
<i>Pyrrharctia isabella</i>	Isabella Tiger Moth
<i>Thymelicus lineola</i>	European Skipper
<i>Vanessa atalanta</i>	Red Admiral

Appendix E: Island Lake Conservation Area – Lists of Identified Species

DAMSELFLIES & DRAGONFLIES OBSERVED AT ILCA	
SCIENTIFIC NAME	COMMON NAME
<i>Aeshna canadensis</i>	Canada Darner
<i>Aeshna eremita</i>	Lake Darner
<i>Aeshna umbrosa</i>	Shadow Darner
<i>Anax junius</i>	Common Green Darner
<i>Argia fumipennis violacea</i>	Violet Dancer
<i>Calopteryx maculata</i>	Ebony Jewelwing
<i>Celithemis elisa</i>	Calico Pennant
<i>Celithemis eponina</i>	Halloween Pennant
<i>Enallagma carunculatum</i>	Tule Bluet
<i>Enallagma civile</i>	Familiar Bluet
<i>Enallagma signatum</i>	Orange Bluet

DAMSELFLIES & DRAGONFLIES OBSERVED AT ILCA	
SCIENTIFIC NAME	COMMON NAME
<i>Enallagma vesperum</i>	Vesper Bluet
<i>Epitheca cynosura</i>	Common Baskettail
<i>Epitheca princeps</i>	Prince Baskettail
<i>Epitheca spinigera</i>	Spiny Baskettail
<i>Erythemis simplicicollis</i>	Eastern Pondhawk
<i>Gomphus spicatus</i>	Dusky Clubtail
<i>Ischnura verticalis</i>	Eastern Forktail
<i>Ladona julia</i>	Chalk-fronted Corporal
<i>Lestes rectangularis</i>	Slender Spreadwing
<i>Lestes vigilax</i>	Swamp Spreadwing
<i>Leucorrhinia hudsonica</i>	Hudsonian Whiteface
<i>Leucorrhinia intacta</i>	Dot-tailed Whiteface
<i>Libellula luctuosa</i>	Widow Skimmer
<i>Libellula pulchella</i>	Twelve-spotted Skimmer
<i>Libellula quadrimaculata</i>	Four-spotted Skimmer
<i>Nehalennia irene</i>	Sedge Sprite
<i>Pachydiplax longipennis</i>	Blue Dasher
<i>Perithemis tenera</i>	Eastern Amberwing
<i>Plathemis lydia</i>	Common Whitetail
<i>Somatochlora walshii</i>	Brush-tipped Emerald
<i>Sympetrum obtrusum</i>	White-faced Meadowhawk
<i>Sympetrum semicinctum</i>	Band-winged Meadowhawk
<i>Sympetrum vicinum</i>	Yellow-legged Meadowhawk
<i>Tamea lacerata</i>	Black Saddlebags

Appendix E: Island Lake Conservation Area – Lists of Identified Species

FISH SPECIES OBSERVED AT ILCA RESERVOIR		
Common Name	Scientific Name	Most Recent Record Date
Black Crappie	<i>Pomoxis nigromaculatus</i>	2011
Blacknose Shiner	<i>Notropis heterolepis</i>	1971
Bluegill	<i>Lepomis macrochirus</i>	2015
Bluntnose Minnow	<i>Pimephales notatus</i>	1973
Brook Stickleback	<i>Culaea inconstans</i>	1973
Brook Trout	<i>Salvelinus fontinalis</i>	2011
Brown Bullhead	<i>Ameiurus nebulosus</i>	2011
Central Mudminnow	<i>Umbra limi</i>	2005
Common Shiner	<i>Luxilus cornutus</i>	1988
Common Carp	<i>Cyprinus carpio</i>	2015
Creek Chub	<i>Semotilus atromaculatus</i>	1971
Fantail Darter*	<i>Etheostoma flabellare</i>	1973
Fathead Minnow	<i>Pimephales promelas</i>	1973
Finescale Dace	<i>Chrosomus neogaeus</i>	1973
Golden Shiner	<i>Notemigonus crysoleucas</i>	2011
Goldfish	<i>Carassius auratus</i>	1973
Hornyhead Chub	<i>Nocomis biguttatus</i>	2006
Iowa Darter	<i>Etheostoma exile</i>	2005
Largemouth Bass	<i>Micropterus salmoides</i>	2011
Longnose Sucker*	<i>Catostomus catostomus</i>	1971
Northern Pike	<i>Esox lucius</i>	2014
Northern Redbelly Dace	<i>Chrosomus eos</i>	1973
Pumpkinseed	<i>Lepomis gibbosus</i>	2011
Rainbow Trout	<i>Oncorhynchus mykiss</i>	1988
River Chub	<i>Nocomis micropogon</i>	2009
Rock Bass	<i>Ambloplites rupestris</i>	2011
White Sucker	<i>Catostomus commersonii</i>	1988
Yellow Perch	<i>Perca flavescens</i>	2011

*Not found in this part of the watershed. Likely misidentification.

**Appendix E: Island Lake Conservation Area – Lists of Identified Species
Vegetation Observed at ILCA**

SCIENTIFIC NAME	COMMON NAME
<i>Abies balsamea</i>	Balsam Fir
<i>Acer ginnala</i>	Amur Maple
<i>Acer negundo</i>	Manitoba Maple
<i>Acer platanoides</i>	Norway Maple
<i>Acer rubrum</i>	Red Maple
<i>Acer saccharinum</i>	Silver Maple
<i>Acer saccharum</i> var. <i>saccharum</i>	Sugar Maple
<i>Acer spicatum</i>	Mountain Maple
<i>Acer x freemanii</i>	Hybrid Maple
<i>Achillea millefolium</i> ssp. <i>millefolium</i>	Common Yarrow
<i>Actaea pachypoda</i>	White Baneberry
<i>Actaea rubra</i>	Red Baneberry
<i>Aegopodium podagraria</i>	Goutweed
<i>Agrimonia gryposepala</i>	Tall Hairy Groovebur
<i>Agrostis gigantea</i>	Redtop
<i>Alisma plantago-aquatica</i>	American Water-plantain
<i>Alliaria petiolata</i>	Garlic Mustard
<i>Allium tricoccum</i>	Wild Leek
<i>Alnus incana</i> ssp. <i>rugosa</i>	Speckled Alder
<i>Ambrosia artemisiifolia</i>	Annual Ragweed
<i>Amelanchier arborea</i>	Downy Serviceberry
<i>Amelanchier laevis</i>	Smooth Serviceberry
<i>Anaphalis margaritacea</i>	Pearly Everlasting
<i>Anemone canadensis</i>	Canada Anemone
<i>Anemone cylindrica</i>	Long-fruited Anemone
<i>Antennaria neglecta</i>	Field Pussytoes
<i>Apocynum androsaemifolium</i> ssp. <i>androsaemifolium</i>	Spreading Dogbane
<i>Apocynum cannabinum</i>	Clasping-leaf Dogbane
<i>Aquilegia canadensis</i>	Wild Columbine
<i>Aralia nudicaulis</i>	Wild Sarsaparilla
<i>Arctium minus</i> ssp. <i>minus</i>	Common Burdock
<i>Arisaema triphyllum</i> ssp. <i>triphyllum</i>	Jack-in-the-pulpit
<i>Asarum canadense</i>	Canada Wild-ginger
<i>Asclepias incarnata</i> ssp. <i>incarnata</i>	Swamp Milkweed
<i>Asclepias syriaca</i>	Common Milkweed
<i>Athyrium angustum</i>	Northeastern Lady Fern
<i>Berberis thunbergii</i>	Japanese Barberry
<i>Berberis vulgaris</i>	European Barberry
<i>Betula alleghaniensis</i>	Yellow Birch
<i>Betula papyrifera</i>	Paper Birch
<i>Bidens cernua</i>	Nodding Beggarticks
<i>Bidens frondosa</i>	Devil's Beggarticks
<i>Boehmeria cylindrica</i>	False Nettle

**Appendix E: Island Lake Conservation Area – Lists of Identified Species
Vegetation Observed at ILCA**

SCIENTIFIC NAME	COMMON NAME
<i>Bromus ciliatus</i>	Fringed Brome
<i>Bromus inermis</i>	Smooth Brome
<i>Calamagrostis canadensis</i>	Bluejoint Reedgrass
<i>Calla palustris</i>	Wild Calla
<i>Caltha palustris</i>	Marsh Marigold
<i>Campanula aparinoides</i>	Marsh Bellflower
<i>Campanula rapunculoides</i>	Creeping Bellflower
<i>Cardamine diphylla</i>	Two-leaf Toothwort
<i>Carex albursina</i>	White Bear Sedge
<i>Carex alopecoidea</i>	Foxtail Sedge
<i>Carex aquatilis</i>	Water Sedge
<i>Carex arctata</i>	Black Sedge
<i>Carex aurea</i>	Golden-fruited Sedge
<i>Carex blanda</i>	Woodland Sedge
<i>Carex cephaloidea</i>	Thinleaf Sedge
<i>Carex communis</i>	Fibrous-root Sedge
<i>Carex comosa</i>	Bristly Sedge
<i>Carex cristatella</i>	Crested Sedge
<i>Carex deweyana</i>	Short-scale Sedge
<i>Carex flava</i>	Yellow Sedge
<i>Carex gracillima</i>	Graceful Sedge
<i>Carex granularis</i>	Meadow Sedge
<i>Carex hystericina</i>	Porcupine Sedge
<i>Carex interior</i>	Inland Sedge
<i>Carex intumescens</i>	Bladder Sedge
<i>Carex lacustris</i>	Lake-bank Sedge
<i>Carex lasiocarpa</i>	Slender Sedge
<i>Carex leptalea ssp. leptalea</i>	Bristly-stalk Sedge
<i>Carex leptonevia</i>	Finely-nerved Sedge
<i>Carex lupulina</i>	Hop Sedge
<i>Carex pedunculata</i>	Longstalk Sedge
<i>Carex pensylvanica</i>	Pennsylvania Sedge
<i>Carex plantaginea</i>	Plantain-leaved Sedge
<i>Carex platyphylla</i>	Broad-leaved Sedge
<i>Carex projecta</i>	Necklace Sedge
<i>Carex pseudocyperus</i>	Cyperus-like Sedge
<i>Carex radiata</i>	Stellate Sedge
<i>Carex retrorsa</i>	Retrorse Sedge
<i>Carex rosea</i>	Rosy Sedge
<i>Carex scabrata</i>	Rough Sedge
<i>Carex sparganioides</i>	Burreed Sedge
<i>Carex sprengeii</i>	Longbeak Sedge
<i>Carex stipata</i>	Stalk-grain Sedge

**Appendix E: Island Lake Conservation Area – Lists of Identified Species
Vegetation Observed at ILCA**

SCIENTIFIC NAME	COMMON NAME
<i>Carex stricta</i>	Tussock Sedge
<i>Carex tenera</i>	Slender Sedge
<i>Carex utriculata</i>	Bladder Sedge
<i>Carex vulpinoidea</i>	Fox Sedge
<i>Carya ovata</i>	Shagbark Hickory
<i>Castanea dentata</i>	American Chestnut
<i>Caulophyllum giganteum</i>	Giant Blue Cohosh
<i>Caulophyllum thalictroides</i>	Blue Cohosh
<i>Centaurea stoebe ssp. micranthos</i>	Spotted Knapweed
<i>Ceratophyllum demersum</i>	Common Hornwort
<i>Chamaedaphne calyculata</i>	Leatherleaf
<i>Chelone glabra</i>	White Turtlehead
<i>Chenopodium album var. album</i>	White Goosefoot
<i>Cichorium intybus</i>	Chicory
<i>Cicuta bulbifera</i>	Bulb-bearing Water-hemlock
<i>Circaea alpina</i>	Small Enchanter's Nightshade
<i>Circaea canadensis</i>	Broad-leaved Enchanter's Nightshade
<i>Cirsium arvense</i>	Canada Thistle
<i>Cirsium vulgare</i>	Bull Thistle
<i>Claytonia caroliniana</i>	Carolina Spring Beauty
<i>Clematis virginiana</i>	Virginia Virgin's-bower
<i>Climopodium vulgare</i>	Field Basil
<i>Comarum palustre</i>	Marsh Cinquefoil
<i>Convallaria majalis</i>	European Lily-of-the-valley
<i>Convolvulus arvensis</i>	Field Bindweed
<i>Conyza canadensis</i>	Canada Horseweed
<i>Coptis trifolia</i>	Goldthread
<i>Cornus alternifolia</i>	Alternate-leaf Dogwood
<i>Cornus sericea</i>	Red-osier Dogwood
<i>Corylus cornuta</i>	Beaked Hazelnut
<i>Crataegus monogyna</i>	English Hawthorn
<i>Cynanchum rossicum</i>	Dog-strangling Vine
<i>Cynoglossum officinale</i>	Common Hound's-tongue
<i>Cystopteris bulbifera</i>	Bulblet Fern
<i>Cystopteris tenuis</i>	Mackay's Brittle Fern
<i>Dactylis glomerata</i>	Orchard Grass
<i>Daucus carota</i>	Wild Carrot
<i>Dendrolycopodium obscurum</i>	Flat-branched Tree-clubmoss
<i>Dicentra canadensis</i>	Squirrel-corn
<i>Dicentra cucullaria</i>	Dutchman's Breeches
<i>Dichanthelium acuminatum var. fasciculatum</i>	Western Panic Grass
<i>Diervilla lonicera</i>	Northern Bush-honeysuckle
<i>Dirca palustris</i>	Eastern Leatherwood

**Appendix E: Island Lake Conservation Area – Lists of Identified Species
Vegetation Observed at ILCA**

SCIENTIFIC NAME	COMMON NAME
<i>Dryopteris carthusiana</i>	Spinulose Wood Fern
<i>Dryopteris cristata</i>	Crested Wood Fern
<i>Dryopteris intermedia</i>	Evergreen Wood Fern
<i>Dryopteris marginalis</i>	Marginal Wood Fern
<i>Echinocystis lobata</i>	Wild Mock-cucumber
<i>Echinum vulgare</i>	Common Viper's-bugloss
<i>Elaeagnus angustifolia</i>	Russian Olive
<i>Elaeagnus umbellata</i>	Autumn Olive
<i>Eleocharis erythropoda</i>	Red-stemmed Spike-rush
<i>Eleocharis palustris</i>	Creeping Spike-rush
<i>Elodea canadensis</i>	Broad Waterweed
<i>Elymus repens</i>	Creeping Wildrye
<i>Elymus riparius</i>	Eastern Riverbank Wildrye
<i>Elymus virginicus</i> var. <i>virginicus</i>	Virginia Wildrye
<i>Epifagus virginiana</i>	Beechdrops
<i>Epilobium ciliatum</i> ssp. <i>ciliatum</i>	Hairy Willow-herb
<i>Epilobium hirsutum</i>	Great-hairy Willow-herb
<i>Epilobium leptophyllum</i>	Linear-leaved Willow-herb
<i>Epilobium parviflorum</i>	Small-flower Willow-herb
<i>Epipactis helleborine</i>	Eastern Helleborine
<i>Equisetum arvense</i>	Field Horsetail
<i>Equisetum fluviatile</i>	Water Horsetail
<i>Equisetum hyemale</i> ssp. <i>affine</i>	Common Scouring-rush
<i>Equisetum palustre</i>	Marsh Horsetail
<i>Equisetum scirpoides</i>	Dwarf Scouring-rush
<i>Equisetum sylvaticum</i>	Woodland Horsetail
<i>Equisetum variegatum</i> var. <i>variegatum</i>	Variegated Scouring Rush
<i>Erigeron annuus</i>	Annual Fleabane
<i>Erigeron philadelphicus</i> var. <i>philadelphicus</i>	Philadelphia Fleabane
<i>Erythronium americanum</i> ssp. <i>americanum</i>	Yellow Trout-lily
<i>Eupatorium maculatum</i> ssp. <i>maculatum</i>	Spotted Joe-pye Weed
<i>Eupatorium perfoliatum</i>	Common Boneset
<i>Euphorbia cyparissias</i>	Cypress Spurge
<i>Eurybia macrophylla</i>	Large-leaved Aster
<i>Euthamia graminifolia</i>	Grass-leaved Goldenrod
<i>Fagus grandifolia</i>	American Beech
<i>Fallopia convolvulus</i>	Black Bindweed
<i>Fragaria vesca</i> ssp. <i>americana</i>	Woodland Strawberry
<i>Fragaria virginiana</i> ssp. <i>virginiana</i>	Wild Strawberry
<i>Frangula alnus</i>	Glossy Buckthorn
<i>Fraxinus americana</i>	White Ash
<i>Fraxinus nigra</i>	Black Ash
<i>Fraxinus pennsylvanica</i>	Green or Red Ash

Appendix E: Island Lake Conservation Area – Lists of Identified Species
Vegetation Observed at ILCA

SCIENTIFIC NAME	COMMON NAME
<i>Galeopsis tetrahit</i>	Common Hempnettle
<i>Galium asprellum</i>	Rough Bedstraw
<i>Galium odoratum</i>	Sweet Bedstraw
<i>Galium palustre</i>	Marsh Bedstraw
<i>Galium trifidum ssp. trifidum</i>	Small Bedstraw
<i>Galium triflorum</i>	Sweet-scent Bedstraw
<i>Geranium robertianum</i>	Herb-robert
<i>Geum aleppicum</i>	Yellow Avens
<i>Geum fragarioides</i>	Barren Strawberry
<i>Glechoma hederacea</i>	Ground Ivy
<i>Glyceria borealis</i>	Boreal Mannagrass
<i>Glyceria grandis</i>	Tall Mannagrass
<i>Glyceria septentrionalis</i>	Floating Manna-grass
<i>Glyceria striata</i>	Fowl Mannagrass
<i>Gymnocarpium dryopteris</i>	Common Oak Fern
<i>Hackelia virginiana</i>	Virginia Stickseed
<i>Hemerocallis fulva</i>	Orange Daylily
<i>Hesperis matronalis</i>	Dame's Rocket
<i>Hydrocotyle americana</i>	American Water-pennywort
<i>Hydrophyllum virginianum</i>	Virginia Waterleaf
<i>Hypericum ascyron</i>	Great St. John's-wort
<i>Hypericum perforatum</i>	Common St. John's-wort
<i>Hypopitys monotropa</i>	American Pinesap
<i>Impatiens capensis</i>	Spotted Jewelweed
<i>Inula helenium</i>	Elecampane Flower
<i>Iris versicolor</i>	Blueflag
<i>Juglans cinerea</i>	Butternut
<i>Juglans nigra</i>	Black Walnut
<i>Juncus articulatus</i>	Jointed Rush
<i>Juncus dudleyi</i>	Dudley's Rush
<i>Juncus effusus var. solutus</i>	Lamp Rush
<i>Juncus tenuis</i>	Path Rush
<i>Juniperus communis var. depressa</i>	Dwarf Juniper
<i>Juniperus virginiana</i>	Eastern Red Cedar
<i>Lactuca biennis</i>	Tall Blue Lettuce
<i>Laportea canadensis</i>	Wood Nettle
<i>Lapsana communis</i>	Common Nipplewort
<i>Larix laricina</i>	Tamarack
<i>Leersia oryzoides</i>	Rice Cutgrass
<i>Lemna minor</i>	Lesser Duckweed
<i>Leomurus cardiaca ssp. cardiaca</i>	Common Motherwort
<i>Leucanthemum vulgare</i>	Oxeye Daisy
<i>Linaria vulgaris</i>	Butter-and-eggs

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SCIENTIFIC NAME	COMMON NAME
<i>Lithospermum officinale</i>	European Gromwell
<i>Lobelia siphilitica</i>	Great Blue Lobelia
<i>Lonicera dioica</i>	Mountain Honeysuckle
<i>Lonicera hirsuta</i>	Hairy Honeysuckle
<i>Lonicera oblongifolia</i>	Swamp Fly-honeysuckle
<i>Lonicera tatarica</i>	Tartarian Honeysuckle
<i>Lotus corniculatus</i>	Birds-foot Trefoil
<i>Ludwigia palustris</i>	Marsh Seedbox
<i>Lycopus americanus</i>	American Bugleweed
<i>Lycopus europaeus</i>	European Bugleweed
<i>Lycopus uniflorus</i>	Northern Bugleweed
<i>Lysimachia ciliata</i>	Fringed Loosestrife
<i>Lysimachia thyrsoiflora</i>	Water Loosestrife
<i>Lythrum salicaria</i>	Purple Loosestrife
<i>Maianthemum canadense</i>	Wild-lily-of-the-valley
<i>Maianthemum racemosum ssp. racemosum</i>	False Solomon's-seal
<i>Malus pumila</i>	Common Apple
<i>Matteuccia struthiopteris var. pennsylvanica</i>	Ostrich Fern
<i>Medicago lupulina</i>	Black Medic
<i>Medicago sativa</i>	Alfalfa
<i>Melilotus albus</i>	White Sweet Clover
<i>Mentha arvensis</i>	Corn Mint
<i>Menyanthes trifoliata</i>	Bog Buckbean
<i>Mimulus ringens</i>	Square-stem Monkeyflower
<i>Mitchella repens</i>	Partridge-berry
<i>Monotropa uniflora</i>	Indian-pipe
<i>Moss sp.</i>	Moss species
<i>Muhlenbergia mexicana var. mexicana</i>	Mexican Muhly
<i>Myosotis laxa</i>	Small Forget-me-not
<i>Myosotis scorpioides</i>	True Forget-me-not
<i>Myriophyllum sibiricum</i>	Common Water-milfoil
<i>Myriophyllum sp.</i>	Water-milfoil species
<i>Najas flexilis</i>	Slender Naiad
<i>Nasturtium microphyllum</i>	Small-leaved Watercress
<i>Nasturtium officinale</i>	Watercress
<i>Nepeta cataria</i>	Catnip
<i>Nuphar variegata</i>	Yellow Cowlily
<i>Nymphaea odorata ssp. odorata</i>	White Water-lily
<i>Oclemena nemoralis</i>	Bog Aster
<i>Oenothera biennis</i>	Common Evening-primrose
<i>Onoclea sensibilis</i>	Sensitive Fern
<i>Ostrya virginiana</i>	Ironwood
<i>Oxalis stricta</i>	Upright Yellow Wood-sorrel

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SCIENTIFIC NAME	COMMON NAME
<i>Panicum acuminatum</i> var. <i>acuminatum</i>	Tapered Rosette Grass
<i>Panicum capillare</i>	Old Witch Panic Grass
<i>Parathelypteris noveboracensis</i>	New York Fern
<i>Parthenocissus inserta</i>	Virginia Creeper
<i>Persicaria amphibia</i>	Water Smartweed
<i>Persicaria maculosa</i>	Lady's Thumb
<i>Persicaria pensylvanica</i>	Pennsylvania Smartweed
<i>Phalaris arundinacea</i>	Reed Canary Grass
<i>Phleum pratense</i>	Meadow Timothy
<i>Photinia melanocarpa</i>	Black Chokeberry
<i>Phragmites australis</i>	Common Reed
<i>Physocarpus opulifolius</i>	Eastern Ninebark
<i>Picea abies</i>	Norway Spruce
<i>Picea glauca</i>	White Spruce
<i>Picea pungens</i>	Blue Spruce
<i>Pilosella aurantiaca</i>	Orange Hawkweed
<i>Pinus resinosa</i>	Red Pine
<i>Pinus strobus</i>	Eastern White Pine
<i>Pinus sylvestris</i>	Scotch Pine
<i>Plantago lanceolata</i>	English Plantain
<i>Plantago major</i>	Common Plantain
<i>Plantago rugelii</i>	Black-seed Plantain
<i>Poa compressa</i>	Canada Bluegrass
<i>Poa nemoralis</i>	Woods Bluegrass
<i>Poa palustris</i>	Fowl Bluegrass
<i>Poa pratensis</i> ssp. <i>pratensis</i>	Kentucky Bluegrass
<i>Polygaloides paucifolia</i>	Gay-wing Milkwort
<i>Polygonatum pubescens</i>	Downy Solomon's-seal
<i>Populus alba</i>	White Poplar
<i>Populus balsamifera</i> ssp. <i>balsamifera</i>	Balsam Poplar
<i>Populus grandidentata</i>	Large-tooth Aspen
<i>Populus tremuloides</i>	Trembling Aspen
<i>Potamogeton crispus</i>	Curly Pondweed
<i>Potamogeton foliosus</i>	Leafy Pondweed
<i>Potamogeton natans</i>	Floating Pondweed
<i>Potamogeton pusillus</i> ssp. <i>pusillus</i>	Slender Pondweed
<i>Potamogeton richardsonii</i>	Richardson's Pondweed
<i>Potamogeton zosteriformis</i>	Flatstem Pondweed
<i>Potentilla norvegica</i> ssp. <i>norvegica</i>	Norwegian Cinquefoil
<i>Potentilla recta</i>	Sulphur Cinquefoil
<i>Potentilla simplex</i>	Old-field Cinquefoil
<i>Prunella vulgaris</i>	Self-heal
<i>Prunus pensylvanica</i>	Pin Cherry

**Appendix E: Island Lake Conservation Area – Lists of Identified Species
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SCIENTIFIC NAME	COMMON NAME
<i>Prunus serotina</i>	Wild Black Cherry
<i>Prunus virginiana</i> var. <i>virginiana</i>	Chokecherry
<i>Pteridium aquilinum</i> var. <i>latiusculum</i>	Bracken Fern
<i>Pyrola elliptica</i>	Shinleaf
<i>Pyrus communis</i>	Common Pear
<i>Quercus rubra</i>	Northern Red Oak
<i>Ranunculus abortivus</i>	Kidney-leaved Buttercup
<i>Ranunculus acris</i>	Tall Butter-cup
<i>Ranunculus aquatilis</i>	White Water Buttercup
<i>Ranunculus hispidus</i> var. <i>caricetorum</i>	Swamp Buttercup
<i>Ranunculus recurvatus</i> var. <i>recurvatus</i>	Hooked Crowfoot variety
<i>Rhamnus alnifolia</i>	Alderleaf Buckthorn
<i>Rhamnus cathartica</i>	Common Buckthorn
<i>Rhus typhina</i>	Staghorn Sumac
<i>Ribes americanum</i>	Wild Black Currant
<i>Ribes cynosbati</i>	Prickly Gooseberry
<i>Ribes glandulosum</i>	Skunk Currant
<i>Ribes hirtellum</i>	Smooth Gooseberry
<i>Robinia pseudoacacia</i>	Black Locust
<i>Rubus allegheniensis</i>	Allegheny Blackberry
<i>Rubus idaeus</i>	Common Red Raspberry
<i>Rubus idaeus</i> ssp. <i>strigosus</i>	Wild Red Raspberry
<i>Rubus occidentalis</i>	Black Raspberry
<i>Rubus odoratus</i>	Purple Flowering Raspberry
<i>Rubus pubescens</i>	Dwarf Raspberry
<i>Rudbeckia hirta</i>	Black-eyed Susan
<i>Rumex crispus</i>	Curly Dock
<i>Rumex obtusifolius</i>	Bitter Dock
<i>Rumex orbiculatus</i>	Water Dock
<i>Sagittaria latifolia</i>	Broadleaf Arrowhead
<i>Salix alba</i>	White Willow
<i>Salix bebbiana</i>	Bebb's Willow
<i>Salix discolor</i>	Pussy Willow
<i>Salix eriocephala</i>	Heart-leaved Willow
<i>Salix exigua</i>	Sandbar Willow
<i>Salix lucida</i>	Shining Willow
<i>Salix petiolaris</i>	Meadow Willow
<i>Salix purpurea</i>	Basket Willow
<i>Salix serissima</i>	Autumn Willow
<i>Sambucus canadensis</i>	Common Elderberry
<i>Sambucus racemosa</i> ssp. <i>pubens</i>	Red Elderberry
<i>Sanguinaria canadensis</i>	Bloodroot
<i>Schedonorus arundinaceus</i>	Tall Fescue

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SCIENTIFIC NAME	COMMON NAME
<i>Schedonorus pratensis</i>	Meadow Fescue
<i>Schizachne purpurascens ssp. purpurascens</i>	False Melic Grass
<i>Schoenoplectus acutus</i>	Hard-stem Bulrush
<i>Schoenoplectus tabernaemontani</i>	Soft-stem Club-rush
<i>Scirpus atrovirens</i>	Dark-green Bulrush
<i>Scirpus cyperinus</i>	Cottongrass Bulrush
<i>Scutellaria galericulata</i>	Hooded Skullcap
<i>Scutellaria lateriflora</i>	Mad Dog Skullcap
<i>Securigera varia</i>	Common Crown-vetch
<i>Silene vulgaris</i>	Maiden's Tears
<i>Sinapis arvensis</i>	Corn Mustard
<i>Stium suave</i>	Hemlock Water-parsnip
<i>Smilax herbacea</i>	Herbaceous Carrionflower
<i>Solanum dulcamara</i>	Climbing Nightshade
<i>Solidago altissima</i>	Tall Goldenrod
<i>Solidago altissima var. altissima</i>	Late Goldenrod
<i>Solidago caesia</i>	Bluestem Goldenrod
<i>Solidago canadensis var. canadensis</i>	Canada Goldenrod
<i>Solidago gigantea</i>	Smooth Goldenrod
<i>Solidago nemoralis var. nemoralis</i>	Gray Goldenrod
<i>Solidago rugosa ssp. rugosa</i>	Wrinkleleaf Goldenrod
<i>Solidago uliginosa</i>	Bog Goldenrod
<i>Sonchus arvensis ssp. arvensis</i>	Field Sow-thistle
<i>Sonchus asper ssp. asper</i>	Spiny Sowthistle
<i>Sorbus aucuparia</i>	European Mountain-ash
<i>Sparganium emersum</i>	Green-fruited Burreed
<i>Sparganium eurycarpum</i>	Broad-fruited Burreed
<i>Spiraea alba</i>	Narrow-leaved Meadow-sweet
<i>Spiranthes cernua</i>	Nodding Ladies'-tresses
<i>Spiranthes lucida</i>	Shining Ladies'-tresses
<i>Spiranthes romanzoffiana</i>	Hooded Ladies'-tresses
<i>Spirodela polyrrhiza</i>	Great Duckweed
<i>Streptopus lanceolatus</i>	Rose Twisted-stalk
<i>Stuckenia pectinata</i>	Sago Pondweed
<i>Symphotrichum ericoides var. ericoides</i>	White Heath Aster
<i>Symphotrichum lanceolatum ssp. lanceolatum</i>	Panicled Aster
<i>Symphotrichum lateriflorum var. lateriflorum</i>	Small White Aster
<i>Symphotrichum novae-angliae</i>	New England Aster
<i>Symphotrichum puniceum</i>	Swamp Aster
<i>Syringa vulgaris</i>	Common Lilac
<i>Taraxacum officinale</i>	Common Dandelion
<i>Taxus canadensis</i>	Canadian Yew
<i>Thalictrum dioicum</i>	Early Meadowrue

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SCIENTIFIC NAME	COMMON NAME
<i>Thalictrum pubescens</i>	Tall Meadow-rue
<i>Thelypteris palustris var. pubescens</i>	Eastern Marsh Fern
<i>Thuja occidentalis</i>	Eastern White Cedar
<i>Tilia americana</i>	American Basswood
<i>Toxicodendron rydbergii</i>	Rydberg's Poison Ivy
<i>Tragopogon dubius</i>	Yellow Goat's-beard
<i>Tragopogon pratensis ssp. pratensis</i>	Jack go to bed at noon
<i>Triadenum fraseri</i>	Fraser's St. John's-wort
<i>Trientalis borealis ssp. borealis</i>	Starflower
<i>Trifolium pratense</i>	Red Clover
<i>Trifolium repens</i>	White Clover
<i>Trillium erectum</i>	Red Trillium
<i>Trillium grandiflorum</i>	White Trillium
<i>Tsuga canadensis</i>	Eastern Hemlock
<i>Tussilago farfara</i>	Colt's Foot
<i>Typha angustifolia</i>	Narrow-leaved Cattail
<i>Typha latifolia</i>	Broad-leaf Cattail
<i>Typha x glauca</i>	White Cattail
<i>Ulmus americana</i>	American Elm
<i>Ulmus thomasii</i>	Rock Elm
<i>Urtica dioica ssp. dioica</i>	European Stinging Nettle
<i>Urtica dioica ssp. gracilis</i>	Slender Stinging Nettle
<i>Utricularia vulgaris</i>	Greater Bladderwort
<i>Uvularia grandiflora</i>	Large-flowered Bellwort
<i>Vallisneria americana</i>	Eel-grass
<i>Verbascum thapsus</i>	Great Mullein
<i>Verbena hastata</i>	Blue Vervain
<i>Verbena urticifolia</i>	White Vervain
<i>Veronica anagallis-aquatica</i>	Brook-pimpernell
<i>Veronica officinalis</i>	Gypsy-weed
<i>Veronica serpyllifolia ssp. serpyllifolia</i>	Thyme-leaved Speedwell
<i>Viburnum acerifolium</i>	Maple-leaf Viburnum
<i>Viburnum lantanoides</i>	Hobblebush
<i>Viburnum lentago</i>	Nannyberry
<i>Viburnum opulus</i>	Cranberry Viburnum
<i>Viburnum opulus var. americanum</i>	Highbush Cranberry
<i>Vicia cracca</i>	Tufted Vetch
<i>Vinca minor</i>	Periwinkle
<i>Viola canadensis</i>	Canada Violet
<i>Viola conspersa</i>	American Dog Violet
<i>Viola pubescens</i>	Yellow Violet
<i>Vitis riparia</i>	Riverbank Grape