



The City of Kingston Ash Tree Removal Strategy & Adherence to the Migratory Bird Convention Act

Summary

This document is intended to be a working guide for the adherence to the Migratory Bird Convention Act in conjunction with the existing Emerald Ash Borer Impact Cost Mitigation Plan. The assessment protocols within will be used to help minimize the extent of impact to nesting migratory birds in urban environments while managing the eventual removal of all ash trees that are facing varying degrees of infestation of Emerald Ash Borer (EAB) within the City. Field assessments will analyze the efficacy of treatment, and establish a baseline for infestation levels on an annual basis. In addition, specific steps have been identified below for pre-work planning which is intended to eliminate the potential for ‘incidental take’, which is defined as the “*inadvertent harming, killing, disturbance or destruction of migratory birds, nests and eggs*” (Environment Canada). Annual field assessment is critical for the proactive management of all municipally owned ash trees.

Methodology:

The City of Kingston is estimated to remove 400 ash trees in 2015 (Appendix 1 shows maps and information with the locations of ash trees to be removed). Before ash trees are to be removed, the City of Kingston will conduct an inspection of each tree. The purpose of this inspection is to review the overall condition of the tree, verify the efficacy of treatment, and to validate the proposed action plan (removal versus treatment). In addition, the inspection is intended to verify the presence or absence of migratory bird nesting sites.

The Overall Condition of the tree will be determined by a Certified Forest Technician who will assess the physiological and structural condition of the tree with a rating of good, fair, poor, or dead, based on visible root, trunk, scaffold branch, twig and foliage conditions at the time of inspection.

The condition rating must be determined using the guidelines from the table below.

Regarding nesting locations, the Certified Forestry Technician will use an approach below which was developed by NestWatch Nest Monitoring Manual, to evaluate each tree before removal.



Condition Ratings:

Condition	Part of Tree	Observations
Good – 80	Trunk Crown Structure Crown Vigour Location	-minor branch cuts with minor decay -medium but natural shape -minor dead wood – up to 10% secondary branches only -trees on spacious front lawns, normal maintenance requirements and park trees, single or in groups average boulevard location in turf or other soft treatment with average tree maintenance
Fair – 60	Trunk Crown Structure Crown Vigour Location	-decay, frost cracks, swellings, cankers partial sections or side missing – cut for wires – deep V -large dead wood – 11 % -35% secondary branches mostly -average boulevard location in turf or other soft treatment with average tree maintenance container trees, in-ground tree pits, raised planting beds
Poor – 40	Trunk Crown Structure Crown Vigour Location	-large decay, frost cracks, swellings, cankers, visible girdling root, leaning more than 30° extensive decay or hollows, dead or cut anchor roots, leaning more than 45° -major section missing – major leader storm damage pollarded, cut down to 50% or more, extensive main crotch decay major deadwood – over 35% primary limbs, small leaves dwarfed -dying, mortality within 1 year, very chlorotic, small leaves browning, wilts, symptom of DED -unsatisfactory location with conflicts (other than structures already in place) very poor location at foundation or other very unsuitable spots
Dead/Dying -0	dying, mortality within one year, very chlorotic, small leaves browning, wilts, symptoms of DED, EAB, ALHB	

Upon completion of the condition rating update, the Certified Forest Technician will assess for the presence or absence of EAB by utilizing the Canadian Forest Service’s “Visual Guide to Detecting Emerald Ash Borer Damage when looking for signs of EAB” (Appendix 2).



The final stage will be to look for signs of Migratory Birds at or near the site of removal. Under the Migratory Bird Regulations (MBR) it is required that Migratory Birds not be disturbed. It is the City of Kingston's responsibility to meet the requirements of the MBR while conducting necessary work on ash trees and as such a Certified Forest Technician with knowledge of the Migratory Bird Act will conduct a survey of the work area as outlined below before removing any ash trees. These steps will help ensure that no Migratory Birds are disrupted during the process:

1. Bird behavior is very species specific and as a result each species has a different nesting cycle. It is the Forest Technicians responsibility to familiarize themselves with the nesting cycle for the City of Kingston. Appendix 3 provides a brief and general overview about avian nesting cycles in the Kingston Area.
2. When feasible, the City should conduct a site visit 3-4 days prior to work being conducted on site as well as the day of to look for the presence of bird nests. Should the Certified Forest Technician find a nest they should record its location.
3. A visual inspection of the tree and surrounding area will be conducted by the Certified Forest Technician to ensure there are no nests within the work zone.
4. When visual inspection is limited due to dense foliage the Certified Forest Technician should search carefully by moving slowly through the dense foliage. When approaching an area that has the potential for nests the Certified Forest Technician should rustle branches and make noise to alert nesting birds of their presence. Be cautious of potential ground nest sites.
5. If a nest is found the Certified Forest Technician will, when feasible, avoid leaving tracks that can direct predators to nests. The Certified Forest Technician should also be mindful of predators such as crows, jays and cats and that they are not following you. Minimize damaging or trampling vegetation that could expose nests.
6. (a) disturb, destroy or take a nest, egg, nest shelter, eider duck shelter or duck box of a migratory bird, or
(b) have in his possession a live migratory bird, or a carcass, skin, nest or egg of a migratory bird except under authority of a permit therefor.

Processes adapted from: Martin, J.M., R. Bailey, T. Phillips, C. Cooper, J. Dickson, J. Lowe, R. Rietsma, K. Gifford and R. Bonney. 2013. NestWatch Nest Monitoring Manual, Ithaca, N.Y.: Cornell Lab of Ornithology



If the Certified Forest Technician positively identifies the presence of a migratory bird nest, the location will be recorded and inputted into the existing GIS optimized tree inventory database. Upon completion of all field assessments by the Forestry Technician, a summary database will be compiled that indicates any potential ash removal sites with the presence of migratory birds. These trees will be removed after the designated nesting period as prescribed by the Migratory Bird Convention Act (seen in Appendix 3). However, it should be noted the Nesting Calendar shown in Appendix 3 is a planning guide only. **Any time** nests containing eggs or young are encountered, the immediate area should be avoided until the young have naturally left the vicinity of the nest. The website may be updated periodically as new information becomes available. It is the contractor's responsibility to check the Environment Canada website regularly and update this appendix as needed.

Conclusion:

The City of Kingston is committed to enhancing its urban forest through the effective management of its existing tree species, including their ash population currently being infested by Emerald Ash Borer. The swift management of this invasive pest is critical to maintaining public safety based on the unpredictability of failure after infestation occurs. The Emerald Ash Borer Management Strategy that has been developed defines a comprehensive approach to the mitigating these potential risks over the next several years.

While the City of Kingston recognizes the importance of migratory birds and the Migratory Bird Convention Act, arboricultural operations will still need to occur within the nesting times on an annual basis based on the aforementioned removal of ash trees. This strategy has been developed in an effort to maintain human safety through tree removal, while minimizing the risk of incidental take.



Appendix 1 – Removal maps for 2015



Appendix 2 – A Visual Guide to Detecting Emerald Ash Borer Damage



Appendix 3. Nesting Times for Migratory Birds, City of Kingston, Ontario.



Source: Environment Canada. <https://www.ec.gc.ca/paom-itmb/default.asp?lang=En&n=4F39A78F-1>



Appendix 4 – Kingston Tree Removal Form