



Urban Forest Health – Oak Wilt



Planning & Environment Committee
February 19, 2019



What is Oak Wilt



- Vascular disease of oak trees, caused by the fungus *Bretziella fagacearum*
- Fungus creates blockages in the tree's vascular system, killing it as water and nutrients cannot move throughout the tree
- Regulated pest under the Plant Health Act and Plant Protection Regulations enforced by the Canadian Food Inspection Agency (CFIA)
- There is no "cure" for Oak Wilt
- No confirmed cases in Canada



Where is Oak Wilt



- Oak wilt has spread throughout the Eastern United States.
- Origin unknown but confirmed in Wisconsin in 1942
- Thought to be present much earlier through historical records 1890's



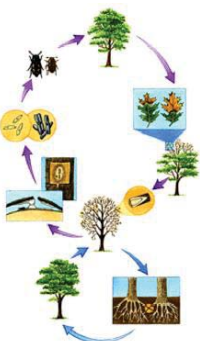
Where is Oak Wilt



- In 2016 Oak Wilt was confirmed on Belle Isle, Michigan
- 579 m from the Canadian Border
- 150 km from London



How Does Oak Wilt Spread



Above Ground

Beetles carry fungus spores from "spore mats" on infected trees to wounds on healthy trees during feeding or breeding.



Below Ground

Fungus travels from infected roots to healthy tree roots.

Oak Wilt Life Cycle (USDA Forest Service)



What Does it Look Like



FAST! Wilting and bronzing of foliage starting at top of the tree and moving downwards



What Does it Look Like



- Leaves turn dull green, brown or yellow
- Discolouration of leaves progressing from the edge of the leaf to the middle
- Premature leaf fall (including green leaves)



What Does it Look Like



- White, grey or black fungal mats just under bark that emit a fruity smell
- Vertical black cracks in the trunk and large branches
- Fungal spore mats (also referred to as pressure pads) exerting outward pressure on the bark



What is the City Doing?

Communicate and Educate – Early Detection


- Bringing Oak Wilt to the attention of Municipal leaders
- Maintaining regional partnerships with the Canadian Food Inspection Agency & The Invasive Species Centre on emerging research and information on Oak Wilt
- Planning a regional Oak Wilt workshop for industry leaders; municipalities, conservation authorities and/or golf courses
- “Oak Wilt Awareness” campaign
 - Spring to coincide with camping season highlight the risks with moving fire wood.
 - Creation of videos for social media
 - Plan to host local educational sessions for residents



What is the City Doing?

Home / Residents / Environment / Trees and Forests

Oak Wilt



The image above shows symptoms of Oak Wilt killing an oak. Photo by Steven Katsenich.

Where is Oak Wilt?
Oak Wilt has never been detected in Canada before, but the disease is widespread less than 400km from Windsor, Ontario, on Belle Isle, Michigan. That's only five football stadiums away! London is strategically located along the corridor where Oak Wilt could make its way into Ontario. Having an educated and engaged community aware of this disease that can help with early detection is especially important.

What is Oak Wilt?

Related Content

- Oak Wilt Fact Sheet
- Oak Wilt Description
- Ontario's Invasive Species Program
- Canadian Food Inspection Agency

How Do I...

- Report Oak Wilt to City of London
- Report Oak Wilt to CFIA
- Help Track Oak Wilt

Contact Us

Urban Forestry
7:30 a.m. - 5:00 p.m., Mon-Fri
Phone: 519-661-5783 Choose Option 2
E-mail: treeprotection@london.ca



What is the City Doing?

Staff Training and Best Management Practices

- Staying current with industry research attending workshops
- Participating in the regional efforts; co hosting event
- Internal training of City Staff (Forestry, Parks)
- Oak Wilt Qualification designation
- Upper Thames River Conservation Authority staff staying current on the pest
- Forestry Operations Best Management Practices
- Reducing the number of red oak trees planted under the current tree planting contract; white oak species still permitted.
- Updating tree inventory to ensure accurate information



What is the City Doing?

Continue to Encourage Communities to Plant Trees





What Can Londoners Do

Early Detection - Awareness

- Attend a public information session or research online
- Learn how to identify oak trees and signs of Oak Wilt

Follow best practices:

- Do not prune oak trees from April - August
- Paint pruning wounds
- Dispose properly of debris; grind stumps
- Keep trees healthy
- Be on the look out! Monitor your oak trees for sudden leaf drop or leaf colour in the summer
- Contact and arborist



What Can Londoners Do

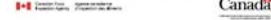


A single piece of firewood can **DESTROY** millions of trees.

DON'T MOVE FIREWOOD

Buy it locally. Burn it on site. Never bring it back home.

For more information call 1-800-447-2342 or visit www.inspection.gc.ca



What Can Londoners Do

IF OAK WILT IS SUSPECTED, CONTACT:

Canadian Food Inspection Agency (CFIA)

www.inspection.gc.ca/pest

The City of London Urban Forestry Section

treeprotection@london.ca



Information

City of London's Website

www.london.ca/residents/Environment/Trees-Forests/Pages/Oak-Wilt

Canadian Food Inspection Agency (CFIA)

www.inspection.gc.ca/plants/plant-pests-invasive-species/diseases/oak-wilt

Invasive Species Centre

www.invasivespeciescentre.ca

Forest Invasives

www.forestinvasives.ca

Ontario's Invading Species Awareness Program

www.invadingspecies.com/oak-wilt