

City of Pickering Oak Wilt Information Sheet

What is Oak Wilt?

Oak wilt (*Bretziella fagacearum*) is a vascular disease that affects all species of oak trees. It is caused by a fungus that restricts the flow of water and nutrients through the tree's vascular system, weakening and eventually killing the tree.

Oaks are divided into two groups: red oaks (pin, black and northern red), and white oaks (white, bur, swamp white). Red oaks are more susceptible than white oaks. Infected red oak trees can wilt and die within several weeks, while white oaks may survive for one or more years. There is no treatment and no cure for oak wilt infected trees.

Is Oak Wilt in Canada?

Oak wilt was first observed in the United States in 1942. In June of 2023, the first Canadian occurrence of Oak Wilt was found in Niagara Falls, Ontario, and another site has recently been confirmed in the township of Springwater, Ontario.

What are the signs and symptoms of Oak Wilt?

- Leaves turn dull green, brown or yellow.
- Discoloration of leaves progressing from the edge of the leaf to the middle.
- Wilting and bronzing of foliage starting at top of the tree and moving downwards.
- Premature leaf fall (including green leaves).
- White, grey or black fungal mats just under the bark that emit a fruity smell.
- Vertical bark cracks in the trunk and large branches as a result of the fungal spore mats (also referred to as pressure pads) exerting outward pressure on the bark.



Image 1: Dark fungal mat under the bark



Image 2: Vertical bark crack in the trunk



Image 3: Wilting and bronzing of foliage

How does Oak Wilt spread?

- Roots: the disease spreads from infected oak trees to uninfected oak trees through root-to-root contact.
- Insects: sap and bark-feeding beetles can move spores from infected oak trees to healthy oak trees.
- Humans: movement of wood products, such as firewood, can spread the pathogen over long distances.

How can residents help protect our oak trees?

- Do not prune oak trees during the growing season (from April 1 to October 31). If pruning must occur, or if a tree is injured, apply a thin layer of wound paint immediately.
- Do not move firewood from one area to another.
- Monitor your oak tree(s) for unusual changes. Oak trees should have all their leaves in July. Oak leaves on the ground in July is a common sign of oak wilt.

What is the City doing?

- Monitoring oak trees on public property for signs and symptoms of oak wilt during regular forestry operations.
- Pruning of street and park oak trees during November to March to reduce the risk of spreading oak wilt.
- Diversifying the planting list and reducing the number of oaks being planted to create a more resilient urban forest.

For more information, visit <https://www.invasivespeciescentre.ca/invasive-species/meet-the-species/invasive-pathogens/oak-wilt/>