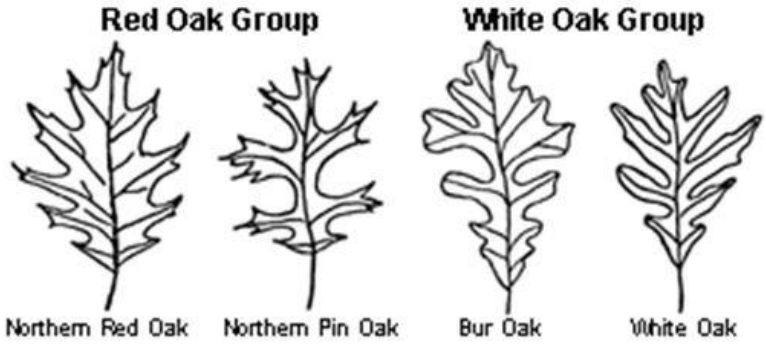
Oak Wilt Management Guide

Provided by the City of Lakeville

Oak wilt (OW) is a fungal disease that infects and kills oak trees. When caught early and managed effectively, a good management plan can save you money in the long run. There is no one-size-fits-all solution to managing OW, but this document goes over the steps to getting started and some commonly used strategies. We recommend consulting with a private tree contractor (see pg. 2) or City Forestry Staff to help build a management plan that will fit your goals and budget.

WHY YOU SHOULD BE CONCERNED ABOUT OW

- Lakeville has an ordinance requiring the removal of infected red oaks (**City Code Title 4, Chapter 4, "Shade Tree Pest Control"**).
- OW can kill red oaks in less than 1 year and white oaks in 5-20 years.



- OW will continue to spread quickly in areas where no management takes place.
- Standing dead oaks reduce property value and become a hazard for property owners.
- Oaks are a keystone species and support many native pollinators.
- Canopy space left open by dead oaks allow pest species, like buckthorn, to invade.


Unmanaged oak wilt in a forested setting.


A red oak dying from oak wilt.


Oak leaves displaying oak wilt symptoms.

TREE CONTRACTOR INFORMATION

A professional tree contractor with an ISA Certified Arborist or MN Tree Inspector on staff can be hired to help create your management plan and perform any work decided upon in the plan. The City of Lakeville recommends using a professional tree contractor for all removal and treatment work. Keep in mind that you may use multiple contractors for the tree work needed on your property. Here are some quick tips for hiring a contractor once a management plan is created:

- Always get 2-3 written price quotes before choosing a company. Ask to see proof of liability insurance and **DO NOT** pay the company until the work is done.
- Be wary of people that go door-to-door soliciting business, even if they did good work for your neighbor.
- Before hiring a company, make sure they understand what you are expecting with tree removals or treatments you would like to take place.

Find more of our tips for hiring a contractor at **lakevillemn.gov/945/How-to-Hire-a-Tree-Contractor**.

Oak Management Services Contractors May Offer:

- ☐ Oak Tree Inventory Creation
  - ☐ Map locations of healthy and infected oaks on property
  - ☐ Identification of control area on property map
- ☐ Oak Tree Removal
  - ☐ Debris disposal
  - ☐ Stump debarking or grinding
- ☐ Fungicide Injection
- ☐ Vibratory Plow or Trenching

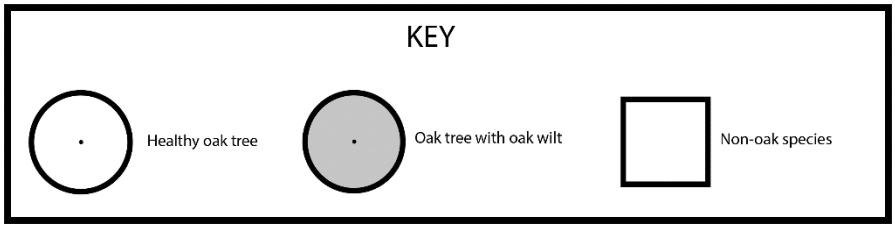
MANAGEMENT TECHNIQUES

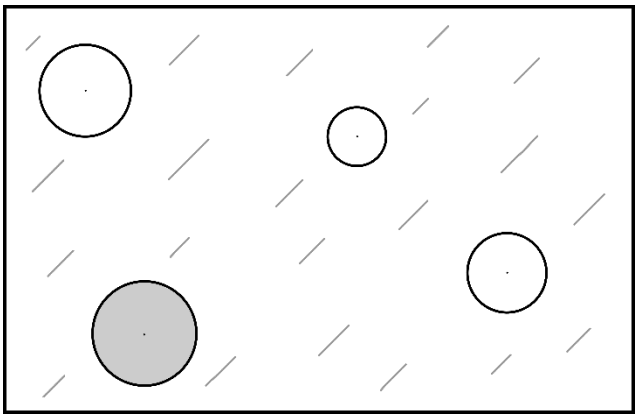
- **Removal:** Removals should ideally be conducted from **November 1st to March 31st**, before the infected tree produces a fungal spore mat the following year.
  - Dispose of all debris at approved wood utilization sites. **DO NOT** move recently infected wood as firewood.
  - Cut stumps as low to the ground as possible and debark any stumps left higher than 3" above the ground (stump grinding is not required).
  - Perform any trenching or injecting on healthy oaks **before** the removal of infected trees.
- **Injection:** Fungicide trunk injections (ex. propiconazole) are recommended as a preventative injection after OW has been confirmed in the area. They can be applied by a MN licensed pesticide applicator during the growing season (June-September). Trees should be re-treated every two years.
- **Trenching:** A vibratory plow can be used to severe roots that are shared (grafted) between "like-species" oaks, creating an underground buffer between healthy and infected oaks. For trenching, always use a professional arborist and call 811/Gopher State One Call prior to any work.

To learn more about OW management techniques, visit **extension.umn.edu/plant-diseases/oak-wilt-minnesota#preventing-below-ground-spread-2352161**.

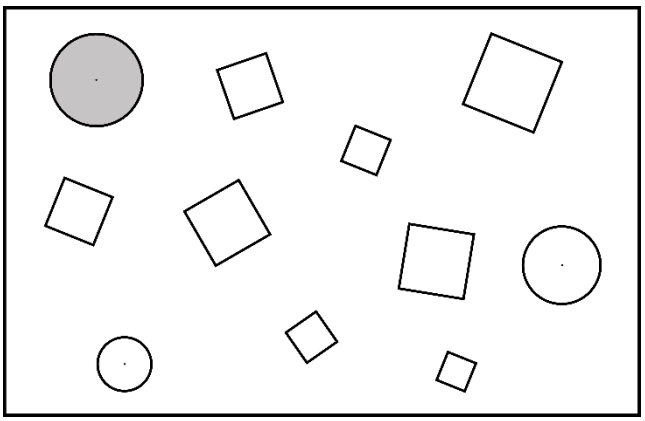
MANAGEMENT SCENARIOS

Oak wilt has many variables that impact how it can be managed, including the number of oaks present, the topography of the area, budget limitations, and more. Below are four common scenarios many property owners may encounter and suggested management strategies that you may consider employing.





Scenario 1. Singular oak with oak wilt in a mowed and maintained area with few or no oaks within root grafting range.

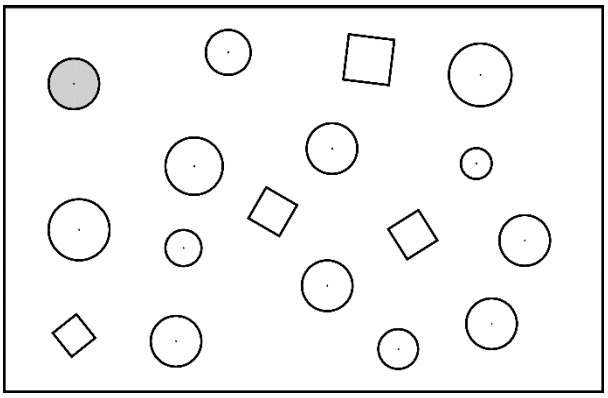


Scenario 2. Oak wilt is discovered in isolated trees in a forested setting with diverse species and no oaks within root grafting range.

If you have an oak with OW and no healthy oaks within root-grafting distance, you may be able to simply remove the infected tree. If there are healthy oaks you would like to save within root-grafting distance, then injections are recommended.

Suggested management strategies:

- Identify any "like-species" oaks within root-grafting distance of the infected tree and inject any high value trees.
- After injecting high value oaks, remove any infected oaks from November-March.
- In two years, re-treat any high value oaks and repeat for a total of three treatments (six years post infection).
- In the following years, monitor any oaks on your property for any more signs of oak wilt.

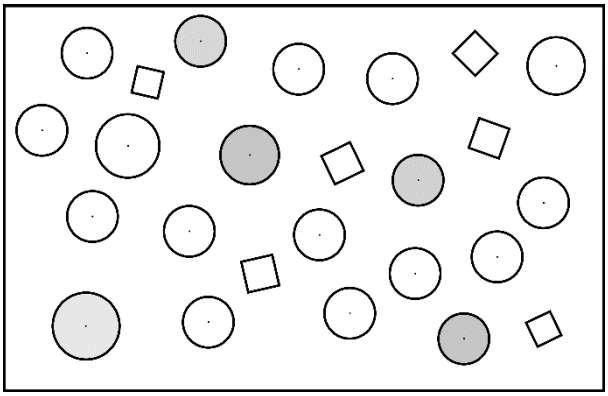


Scenario 3. OW is discovered in an isolated pocket in a forested, mostly oak setting.

If you have a singular isolated pocket of OW, this is an ideal time to use an aggressive combination of injections **AND** trenching to stop OW from spreading to the healthy oaks on the rest of your property.

Suggested management strategies:

- Identify any high value oak trees you would like to save. Perform injections before any other management work is done.
- While expensive, trenching can be used to the greatest effect in this scenario. Sever any connecting roots between "like-species" oaks to create a buffer between healthy and infected oaks.
- After injecting and trenching, remove any infected oaks from November-March.
- In two years, re-treat any high value oaks and repeat for a total of three treatments (six years post infection).
- In the following years, monitor any oaks on your property for any more signs of oak wilt.



Scenario 4: OW is in several pockets in a forested, mostly oak setting.

If OW is widespread throughout your property, the best steps to take are removals for risk and disease mitigation, and injection of any high value, healthy oaks.

Suggested management strategies:

- Identify any high value oak trees you would like to save. Perform injections before any other management work is done.
- If there is a significant portion of healthy oaks that do not have OW, consider trenching to create a buffer between the healthy and infected oak pockets.
- Prioritize removing any red oaks that have died within the year to mitigate disease risk.
- In two years, re-treat any high value oaks and repeat for a total of three treatments (six years post infection).
- In the following years, monitor any oaks on your property for any more signs of oak wilt.