# I N D E X

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mission Statement of the Tree Advisory Committee</td>
<td>4</td>
</tr>
<tr>
<td>Caring for Your Shade Tree</td>
<td>5</td>
</tr>
<tr>
<td>Seasonal and urban stresses</td>
<td>5</td>
</tr>
<tr>
<td>Protecting trees during construction</td>
<td>6</td>
</tr>
<tr>
<td>Proper planting</td>
<td>7</td>
</tr>
<tr>
<td>Benefits of mulching</td>
<td>9</td>
</tr>
<tr>
<td>Pruning trees</td>
<td>10</td>
</tr>
<tr>
<td>Pruning which harms trees</td>
<td>10</td>
</tr>
<tr>
<td>When to prune</td>
<td>10</td>
</tr>
<tr>
<td>Pruning cuts</td>
<td>11</td>
</tr>
<tr>
<td>Natural target pruning</td>
<td>12</td>
</tr>
<tr>
<td>Properly pruned branch</td>
<td>13</td>
</tr>
<tr>
<td>Rodent and rabbit injury</td>
<td>13</td>
</tr>
<tr>
<td>Oak Wilt in Shawano</td>
<td>14</td>
</tr>
<tr>
<td>Introduction</td>
<td>14</td>
</tr>
<tr>
<td>What species of trees get Oak Wilt?</td>
<td>14</td>
</tr>
<tr>
<td>How is Oak Wilt spread?</td>
<td>15</td>
</tr>
<tr>
<td>Symptoms</td>
<td>15</td>
</tr>
<tr>
<td>How does Oak Wilt kill trees?</td>
<td>15</td>
</tr>
<tr>
<td>Control the spread of Oak Wilt</td>
<td>16</td>
</tr>
<tr>
<td>Why test for Oak Wilt?</td>
<td>16</td>
</tr>
<tr>
<td>Permits and permit procedures</td>
<td>17</td>
</tr>
<tr>
<td>Recommended Trees for Terrace Plantings (Small Trees) and Medium Planting Spaces</td>
<td>18</td>
</tr>
<tr>
<td>Recommended Trees for Shade Tree Planting</td>
<td>20</td>
</tr>
<tr>
<td>Trees suitable for large planting spaces</td>
<td>20</td>
</tr>
<tr>
<td>Trees with potential problems</td>
<td>21</td>
</tr>
<tr>
<td>Hardiness Zones for Wisconsin</td>
<td>21</td>
</tr>
<tr>
<td>Selection</td>
<td>22</td>
</tr>
<tr>
<td>City of Shawano Municipal Code</td>
<td>23</td>
</tr>
<tr>
<td>Section 9.06 Trees &amp; Shrubs</td>
<td>23</td>
</tr>
<tr>
<td>Sources for Further Information</td>
<td>29</td>
</tr>
<tr>
<td>Addendum A – Oak Wilt &amp; Dutch Elm Prevention Permit</td>
<td>30</td>
</tr>
</tbody>
</table>
City of Shawano
Tree Advisory Committee

MISSION STATEMENT

The mission of the City of Shawano Tree Advisory Committee is to promote through education, the value, beauty, protection and health of the public and private trees and shrubs.
CARING FOR YOUR SHADE TREE

Trees are planted to beautify a home or business, but trees provide many more benefits than just aesthetics. Trees improve air quality, reduce storm water runoff, reduce heating and cooling costs, increase property values, and prolongs the life of our roads. You can help to prevent a loss of tree benefits by providing the necessary care at planting and with regular maintenance.

Trees growing in urban landscapes lack many of the natural benefits that the forest provides. Extra care and maintenance is necessary.

SEASONAL AND URBAN STRESSES:

It is important to recognize the potential sources of injury/stress and to take steps to reduce the chances for tree damage.

- Insects/Diseases
- Lawn mowers
- Lack of moisture
- Improper planting
- Weed whacklers
- Damage from animals
- Salt damage
- Soil compaction
- Improper pruning
- Improper mulching
- Over fertilization
PROTECTING TREES DURING CONSTRUCTION:

Urban trees are subjected to many forms of injury or stress, but construction damage is a major cause of tree loss. The effects of construction damage can be immediate, such as, broken branches and bark damage, or require several years to develop. Excess soil added over the root zone or compaction may take several years for symptoms to develop.

Steps for tree protection during construction:

1. Determine what trees are to be protected and if the trees are in good health.

2. Ensure the trees to be protected have received adequate water and maintenance months prior to construction.

3. Establish a Tree Protection Zone by installing a barrier (fence or immovable objects) at the drip line around the tree or as large of protection area as possible.

4. Boring or tunneling under a tree is preferred to trenching or digging near the tree.

5. If possible put down several inches of woodchips over the tree roots to lessen compaction.

6. Limit or prohibit the addition or removal of soil from around the trees.

7. Monitor the Tree Protection Zones and barriers for the duration of construction.

8. Remove excess mulch and inspect trees after construction.
PROPER PLANTING:

Improper planting ➖:

Proper planting ➖:

HOW TO PLANT TREE PROPERLY:

1. Planning: Identify the desired tree characteristics for the planting site – Does the tree drop acorns or fruit? What is the height and spread of the tree when mature? Is the tree hardy for your region? Is the tree susceptible to insects/diseases? Always remember “Right Tree, Right Place.”
2. Locate underground utilities and overhead utilities. Call Digger’s Hotline.

3. Identify the root collar or trunk flare – it is the area of the trunk that transitions from trunk into roots. The root collar should be at the soil level or slightly above the soil grade. Bare-root trees allow easier root collar identification. The burlap on balled and burlapped (B&B) might have to be partially removed to view the root collar.

4. Dig a shallow and wide hole. The tree’s longevity depends on planting at the correct height. The tree’s lifespan will be drastically shortened if planted too deep.

5. Soil amendment/replacement is not necessary unless soil has buried debris or large rocks. Fertilizer is not necessary unless a deficiency is identified from a soil test.

6. Place tree in planting hole and remove all containers, burlap, or wire baskets. If possible, orient roots in a radial pattern. Ensure the tree is at the proper height.

7. Ensure that the tree is straight and all twine is removed. Backfill the planting hole and completely saturate the soil to ensure root/soil contact.

8. Only stake the tree if the soil is unstable or to protect the tree from vandalism, windy conditions, or lawn mowers. Use a wide flexible webbing around the lower half of the tree. Staking should not be left in place for more than one year.

9. Create a large mulch ring with coarse wood chips.

10. Water on a weekly basis, unless rain provides adequate moisture, and more frequently during dry weather. Continue watering until the ground freezes.

(www.treesaregood.com/treecare/tree_planting)
BENEFITS OF MULCHING:

In cities, where leaves and grass clippings are raked, nutrients are not readily returned to the soil. Trees compete with grass for water and nutrients.

A layer of course woodchips over the rootzone of trees helps in several ways:

- Conserves moisture and controls weeds.
- Moderates the soil temperature.
- Reduces trunk damage from lawn mowers.
- Prevents soil compaction.

Place course wood chips or shredded bark 2 to 3 inches deep over the root zone; pull wood chips an inch or two away from the trunk. Avoid mulch volcanoes around the trunk as excess mulch can cause additional problems for the tree. Use woodchips that have been composted for at least a year when possible. (www.treesaregood.com/trecare/mulching)
PRUNING TREES

PRUNING WHICH HARMS TREES:

Topping (the practice of pruning all the branches on the top of the tree) and; Tipping (the practice of pruning all the branches on one side of the tree) are both practices which damage tree structure, and should be avoided.

Improper pruning cuts such as flush cutting, stub cutting, and bark ripping also produce damage to trees which can cause decay in the trees.

All pruning should follow the American National Standards Institute’s Standard Practices for Tree Care Operations-Pruning (ANSI A 300 (Part 1))

Many cuts between nodes are made when trees are rounded over or shaped.

WHEN TO PRUNE:

A.) Conifers: may be pruned at any time of the year, but pruning during the dormant season may minimize sap and resin flow.

B.) Hardwood trees: prune in the dormant season to easily visualize the structure of the tree, and to reduce the chance of transmitting disease. Usually, the best time to prune is in the late fall and winter. Oak trees in the City of Shawano may not be pruned or trimmed between April 1 and October 1!
C.) Flowering trees: prune during the dormant season. To preserve the current year’s flower crop, prune immediately after flowering (flower buds arise the year before they flush, and will form on the new growth).

D.) Dead branches: can be removed any time of the year, except for dead oak branches, which can only be removed from Oct. 2 – March 30.

PRUNING CUTS:

Pruning cuts should be made so that only branch tissue is removed and the stem is not damaged. If the stem is damaged, the tree is more subject to insects and decay. To find the proper place to cut a branch, identify the branch collar which grows from the stem tissue to the underside of the base of the branch. Also identify (on the upper surface), the branch bark ridge which runs more or less parallel to the branch angle, along the stem of the tree. A proper cut begins just outside the branch bark ridge and angles down and away from the stem of the tree, avoiding injury to the branch collar.

Make the cut as close as possible to the stem in the branch base, but outside the branch bark ridge, so that the stem tissue is not injured. If the cut is too far from the stem, leaving a long branch stub, the branch tissue usually dies, and woundwood forms from the stem tissue. If the cut is made too close to the stem, there will be pronounced development of woundwood on the sides of the pruning cut with very little woundwood on the top or bottom of the cut.

This is an example of an improper stub cut. The final cut should have been at the red line.
NATURAL TARGET PRUNING:

Cut as close as possible to the branch collar. Do not injure or remove the collar. Injury or removal of the collar destroys a major defense system of the tree, and also leads to excessive sprouting. Do not leave stubs. Stubs are entry courts for rot-causing fungi. Do not paint the pruning cuts. Wound dressings do not stop rot.

If a branch is large, make a three-step pruning cut to prevent the bark from being ripped open. The first cut is a shallow notch made on the underside the branch. This cut will prevent the falling branch from tearing the main stem when it falls down. The second cut should be outside the first cut, all the way through the branch leaving a short stub. The final cut is then cut just outside the branch bark ridge/branch collar, completing the operation.

Prune dead branches the same way as live branches. Making the correct cut is usually easy because the branch collar and the branch bark ridge can be distinguished from the dead branch.

In summary, remember to prune first for safety, next for tree health, then finally for aesthetics. Never prune trees which are touching or near utility lines, instead, contact Shawano Municipal Utilities at (715)526-3131. Finally, do not paint tree cuts (wound dressings do not stop rot).
PROPERLY PRUNED BRANCH:

Application of tree wound dressing is no longer recommended, except on oak trees. Oaks injured from April 1 to October 1 should have wound dressing immediately applied to reduce the potential of oak wilt infections from insects.

RODENT AND RABBIT INJURY:

During the winter rodents, rabbits and deer may feed on and damage the tender bark and twigs of trees.

- Permanently disfigure.
- Completely girdle and kill tree.
- Young and thinned barked trees are most vulnerable.

A properly placed cylinder of hardware cloth provides good defense against rabbits and rodents.

- Extend below the soil line without damaging trunk or root.
- 18 to 24 inches above the snow line.
- Leave on year around, allowing room for growth.
- For areas with frequent deer damage, a fenced area around the trees may be necessary.

Repellents... just make plant undesirable through taste or smell and can have limited success.
OAK WILT IN SHAWANO

Picture of unsprayed stump:

Picture of sprayed stump:

INTRODUCTION:

Oak Wilt kills thousands of valuable Oaks every year in Wisconsin, especially Red, Black and Northern Pin Oaks. Even though there are fungicide treatments, there is no cure. However, proper care of Oaks and control methods can reduce the chances of this disease spreading through fresh wounds or through root graft connections.

WHAT SPECIES OF TREES GET OAK WILT?

- All species of Oak.
- Red, Black and Northern Pin Oaks die within a few months.
- White and Bur Oaks may live for several years after becoming infected. White Oaks can be injected to protect un-infected part of tree.
HOW IS OAK WILT SPREAD?

Oak Wilt is spread in two ways: from infected trees to neighboring healthy trees through grafted or common root systems; or by insects. The most common are sap-feeding insects that, while feeding, can pick up the reproductive fungal spores from infected trees and carry them to healthy Oaks with fresh wounds, infecting them with Oak Wilt.

SYMPTOMS:

In Red, Black and Northern Pin Oaks:

- Leaves at or near the top typically wilt first.
- Slight curling and dull paling of leaves appear at tips and edges.
- Leaves gradually turn brown with dramatic leaf drop over a 2-3 week period.
- Distinct line between the green and brown portions of the leaf.
- Lower branches are affected last.
- Red, Black and Northern Pin Oaks can be preventively treated with a fungicide to provide protection from Oak Wilt. Trees must be treated every other year to maintain protection.

In White and Bur Oaks:

- Wilted and bronzed leaves appear only on scattered branches.
- May live for several years and some may compartmentalize the fungus.
- More branches dying each year.
- After becoming infected with Oak Wilt, White Oaks can be therapeutically treated (injected) with a fungicide and prolong the life of an infected tree.

HOW DOES OAK WILT KILL TREES?

Oak Wilt is a fungus that attacks the water conducting system of the tree (located just beneath the bark). To block the fungus, the tree produces gums and resins, which plug the water conducting vessels. Unable to contain the faster growing fungus, the tree ultimately cuts off its water and nutrient supply between roots and crown. The tree wilts and dies.
CONTROL THE SPREAD OF OAK WILT:
There is no cure for Oak Wilt. Control consists of preventing the disease from spreading.

Prevent Oak Wilt from entering a previously uninfected area:

- Do not prune Oak trees during the sap-feeding beetle’s active season – April 1 through October 1.
- Treat any bark injury with pruning paint from April 1 through October 1.
- Do NOT transport infected firewood or logs.

What to do in areas where some Oaks are already infected:

- Sever root graft by either mechanical or chemical methods.
- Just cutting down the tree will not stop root graft infections.
- Replant with different species.

WHY TEST FOR OAK WILT?
Oak trees can show Oak Wilt-like symptoms that may be caused by some other agents. Oaks are damaged by:

- Frost
- Drought
- Lighting
- Insects
- Construction that damages the tree or roots
- Removing soil around the tree
- Adding soil around the tree

Testing for Oak Wilt will determine if Oak Wilt control methods are needed to stop the disease from spreading.

For more information on testing for Oak Wilt, contact the Shawano City Forester Mike Harris (715)526-9807 or email www.wescott_forester@frontiernet.net or call Shawano City Hall at (715)526-6138.
PERMITS AND PERMIT PROCEDURE:

A permit from the City of Shawano is required if trimming, cutting, pruning, or if injury is made to any Oak tree or Elm tree during the period of April 1 – October 1 of each year. A permit is also required between April 1 – October 1 of each year if transporting any wood or bark infected with fungus into or within the City of Shawano. This includes the transporting of infected wood to a site designated by the City for disposal.

Anyone seeking a permit from the City Clerk must submit a written statement from the City Forester stating the intended work (i.e. trimming, cutting, pruning, etc.) on an Oak or Elm tree not infected with fungus or in close proximity to infected trees. This written statement is to be dated within fifteen (15) days of the application for the permit. The work described above must be completed within twenty (20) days from the date the permit is issued. The individual must comply with the conditions set forth by the City Forester. (See Addendum A on page 26.)

There is a cost of $35.00 for this Permit. There is also a penalty of $177.00 (first offense) ($303.00 2nd offense within one year) for not complying with this City of Shawano Tree Ordinance. Each tree in violation is a separate offense.
RECOMMENDED TREES FOR TERRACE PLANTINGS (SMALL TREES) AND MEDIUM PLANTING SPACES

RECOMMENDED TREE LIST: (For Terrace Plantings)

Proper selection of a tree before planting is important. A properly selected tree becomes a growing asset. An improperly selected tree can become a nuisance or liability. Selecting a tree that is suited for the available planting space not only benefits the tree but could save thousands of dollars in maintenance costs.

The following trees are recommended because of their size, shape, resistance to insect and disease attach, general ability to tolerate terrace planting, and reduced maintenance costs. They are divided into three groups, which correlate to the available planting space.

If you wish to plant between the road and sidewalk, you must contact the City Forester.

Trees Suitable for Small Planting Spaces:

<table>
<thead>
<tr>
<th>Tree Species</th>
<th>Approx. Mature Ht.</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Hornbean (<em>Carpinus caroliniana</em>)</td>
<td>30’ – 40’</td>
<td>orange to red fall color</td>
</tr>
<tr>
<td>Chokecherry (<em>Prunus virginiana</em>)</td>
<td>20’ – 30’</td>
<td>white flowers</td>
</tr>
<tr>
<td>Downy Serviceberry (<em>Amelanchier arbor</em>)</td>
<td>20’ – 25’</td>
<td>white flowers, yellow to red fall color</td>
</tr>
<tr>
<td>Ironwood (hophornbean) (<em>Ostrya virginiana</em>)</td>
<td>25’ – 35’</td>
<td>elm-like leaves, yellow fall color</td>
</tr>
<tr>
<td>Peking lilac (<em>Syringa pekinensis</em>)</td>
<td>15’ – 25’</td>
<td>Large flowers</td>
</tr>
<tr>
<td>Tree Species</td>
<td>Approx. Mature Ht.</td>
<td>Remarks</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>--------------------</td>
<td>----------------------------------------------</td>
</tr>
<tr>
<td>Japanese tree lilac (<em>Syringa reticulate</em>)</td>
<td>15’ – 25’</td>
<td>Large white flowers</td>
</tr>
<tr>
<td>Washington Hawthorn (<em>Crataegus phaenopyrum</em>)</td>
<td>25’ – 30’</td>
<td>fruit, orange color</td>
</tr>
<tr>
<td>Flowering Crabapple (<em>Malus centurian</em>)</td>
<td>25’ – 30’</td>
<td>rose red flowers, persistent cherry-red fruit</td>
</tr>
</tbody>
</table>

(Other Flowering Crabapples and Hawthorns may be used if they have upright form and are fruitless, or have small persistent fruits; should also be resistant to leaf scab disease.)

Trees Suitable for **Medium** Planting Spaces:

<table>
<thead>
<tr>
<th>Tree Species</th>
<th>Approx. Mature Ht.</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Little Leaf Linden (<em>Tilia cordata</em>)</td>
<td>45’ – 55’</td>
<td>fragrant flowers, becoming over planted</td>
</tr>
<tr>
<td>Honey Locust (<em>Gleditsia triacanthos</em>)</td>
<td>40’ – 50’</td>
<td>golden fall color</td>
</tr>
<tr>
<td>Serviceberry (<em>Amelanchier spp.</em>)</td>
<td>20’ – 30’</td>
<td>fall color yellow to red, early winter flowers</td>
</tr>
<tr>
<td>(“Autumn Brilliance”, “Princess Diana”, “Cumulus”)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Remember right tree in the right place*

*Plant at the correct depth*

*Place coarse woodchips around tree*

*Ensure trees and shrubs are not invasive species*
# RECOMMENDED TREES FOR SHADE TREE PLANTING

## TREES SUITABLE FOR LARGE PLANTING SPACES:

<table>
<thead>
<tr>
<th>Tree Species</th>
<th>Approx. Mature Ht.</th>
<th>Remarks</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Beech (Fagus grandifolia)</td>
<td>60’ – 70’</td>
<td>Slow growing, unique bark</td>
<td>Spreading</td>
</tr>
<tr>
<td>Basswood/American Linden (Tilia americana)</td>
<td>60’ – 80’</td>
<td>General disease &amp; insect free</td>
<td>Oval</td>
</tr>
<tr>
<td>Bur Oak (Quercus macrocarpa)</td>
<td>70’ – 80’</td>
<td>Very large tree</td>
<td>Spreading</td>
</tr>
<tr>
<td>Common Hackberry (Celtis occidentalis)</td>
<td>40’ – 50’</td>
<td>Good drought tolerance, rapid growing</td>
<td>Vase</td>
</tr>
<tr>
<td>Freeman Maple (Acer x freemanji)</td>
<td>50’ – 70’</td>
<td>Cross between red and silver maples</td>
<td>Dependent</td>
</tr>
<tr>
<td>Gingko (Gingko biloba)</td>
<td>60’</td>
<td>Plant male only</td>
<td>Oval</td>
</tr>
<tr>
<td>Honeylocust (Gleditsia tricanthos)</td>
<td>40’ – 70’</td>
<td>Grass will grow under canopy</td>
<td>Spreading</td>
</tr>
<tr>
<td>Horsechestnut (Aesculus hippocastanum)</td>
<td>45’ – 55’</td>
<td>Tolerant of urban conditions</td>
<td>Ovate</td>
</tr>
<tr>
<td>Kentucky Coffee Tree (Gymnocladus dioicus)</td>
<td>60’</td>
<td>Unique branch structure</td>
<td>Dependent</td>
</tr>
<tr>
<td>Red Maple (Acer rubrum)</td>
<td>75’ - 80’</td>
<td>Several varieties</td>
<td>Oval</td>
</tr>
<tr>
<td>Redmond Linden (Tilia x euchlora)</td>
<td>50’</td>
<td>Suited for urban planting</td>
<td>Vase</td>
</tr>
<tr>
<td>River Birch (Betula nigra)</td>
<td>30’ - 40’</td>
<td>Resistant to bronze birch borer</td>
<td>Oval</td>
</tr>
<tr>
<td>Silver Linden (Tilia tomentosa)</td>
<td>50’ – 70’</td>
<td>Tolerates heat and drought</td>
<td>Oval</td>
</tr>
<tr>
<td>Tree Species</td>
<td>Approx. Mature Ht.</td>
<td>Remarks</td>
<td>Form</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-------------------</td>
<td>--------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>State Street Miyabe Maple</td>
<td>30’ – 40’</td>
<td>Corky bark</td>
<td>Oval</td>
</tr>
<tr>
<td>(Acer miyabei ‘Morton’)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sugar Maple (Acer saccharum)</td>
<td>60’ - 80’</td>
<td>Slow growing</td>
<td>Oval</td>
</tr>
<tr>
<td>Swamp White Oak (Quercus bicolor)</td>
<td>50’ – 60’</td>
<td>Large and wide tree</td>
<td>Spreading</td>
</tr>
<tr>
<td>Turkish Filbert (Corylus colurna)</td>
<td>40’ – 60’</td>
<td>Tolerant of adverse conditions</td>
<td>Pyrmidal</td>
</tr>
<tr>
<td>White Oak (Quercus alba)</td>
<td>60’ – 80’</td>
<td>Acorns for wildlife</td>
<td>Spreading</td>
</tr>
<tr>
<td>Yellow Birch (Betula letea)</td>
<td>40’ – 50’</td>
<td>Distinctive bark</td>
<td>Oval</td>
</tr>
</tbody>
</table>

(For smaller area plantings, see page 16 on Terrace Plantings.)

Other trees best suited for yard planting because of fruit production: Bitternut Hickory (Carya cordifamis), Shagbark Hickory (Carya ovata), Northern Catalpa (Catalpa speciosa), American Beech (Fagus grandifolia), and Black Walnut (Juglans nigra).

**TREES WITH POTENTIAL PROBLEMS:**

<table>
<thead>
<tr>
<th>Species</th>
<th>Subject to Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ash</td>
<td>Emerald Ash borers</td>
</tr>
<tr>
<td>Black Locust</td>
<td>Subject to wood borers</td>
</tr>
<tr>
<td>Boxelder</td>
<td>Weak limbs, box elder bugs</td>
</tr>
<tr>
<td>Catalpa</td>
<td>Litter of flowers, fruits and leaves</td>
</tr>
<tr>
<td>Elms</td>
<td>Subject to Dutch Elm Disease resistant varieties</td>
</tr>
<tr>
<td>Gingko female</td>
<td>Fruit has pungent odor</td>
</tr>
<tr>
<td>Norway Maple</td>
<td>Can invade natural areas</td>
</tr>
<tr>
<td>Nut bearing trees</td>
<td>Litter of nuts</td>
</tr>
<tr>
<td>Poplar or Aspen</td>
<td>Short lived species</td>
</tr>
<tr>
<td>Red Oak</td>
<td>Oak Wilt</td>
</tr>
<tr>
<td>Silver Maple</td>
<td>Weak wood</td>
</tr>
<tr>
<td>Willows</td>
<td>Weak wood</td>
</tr>
</tbody>
</table>

**HARDINESS ZONES FOR SHAWANO:**

When purchasing trees and plants check that the tree will survive in our area. Shawano is in zones 4-5, depending on site location. Hardiness zone maps show general temperature trends, but not exact temperature variations. Site conditions can influence the survivability of plants and trees. Urban tree size and growth rate vary considerably and are strongly controlled by site conditions.
**SELECTION:**

- Zone hardiness, site of planting and soil conditions should be taken into consideration.

- **Diversity is encouraged** (City has 70% maple trees, try other species) within the City. Also, the right tree in the right place enhances the property value, saves costs on cooling and heating and reduces maintenance.

- Properly planted and maintained native species are adapted to our climate, insects, diseases and ensure tree diversity.

- Look up and around **BEFORE** planting.

- Call Digger’s Hotline.
§ 9.06. Trees and shrubs. [Amended by Ord. No. 1191A]
(1) Purpose. The policy of the City is to regulate and control the planting, transplanting, removal, maintenance and protection of public and private trees and shrubs in the City in order to eliminate and guard against dangerous conditions which may result in injury to persons using the streets, alleys, sidewalks or property of the city; to promote the beauty and general welfare of the city; to protect trees and shrubs located in the public areas from undesirable and unsafe planting, removal, treatment and maintenance practices; and to control the spread of tree diseases, and insect infestations. [Amended 12-10-2008 by Ord. No. 1732]

(2) City Forester.
   (a) There is hereby created the office of City Forester. The Forester shall be appointed by the Public Works Field Committee of the city, with the approval of the Council.

   (b) The Forester shall annually submit to the Public Works Field Committee his or her estimate of the amount of money required by the Forester for the succeeding year for salary and for removal, trimming and planting of trees and shrubs.

   (c) The Forester shall, subject to the supervision and control of the Director of Public Works, have jurisdiction and direction over all trees and shrubs planted or growing in or upon City-owned property and that part of every street, the grade of which has been established, lying between the lot line and the curb in the City, and the planting, removal, care, maintenance and protection thereof.

   (d) The Forester shall submit to the Director of Public Works an annual plan for the orderly planting, trimming and removal of public trees and shrubs in the City, and an annual written report of the work performed under his or her direction. The annual plan and any subsequent changes shall be submitted to appropriate City Committees/Commissions for review prior to submission to and approval by the Council.

   (e) The City Forester shall serve as advisor to the City Tree Advisory Committee.

(3) Definitions. As used in this section, the following terms shall have the meanings indicated:
   (a) BUSH or SHRUB: A low-spreading woody plant with several permanent stems.
(b) CITY FORESTER: The Forester or persons hired or authorized by him or her.

(c) PUBLIC TREES AND SHRUBS: All trees or shrubs planted or to be planted in any park or other property owned or controlled by the City or on any street, alley, sidewalk or highway within the public right-of-way, including terrace trees and shrubs, but excluding school sites.

(d) STREET TREES: Trees, shrubs, bushes and all other woody vegetation on land lying between property lines on either side of all streets, avenues or ways within the City.

(e) TREE: A woody perennial plant with one main stem or trunk which is capable of attaining a height in excess of 10 feet above the ground.

(4) Creation and establishment of a City Tree Advisory Committee.
(a) Membership. There is hereby created and established a City Tree Advisory Committee for the City which shall consist of five members, citizens and residents of the City who shall be appointed by the Mayor with the approval of the Council.

(b) Term of office. The terms of the five persons to be appointed by the Mayor shall be three years, except that the terms of two of the members appointed to the first Committee shall be for only one year, and the terms of two members of the first Committee shall be for two years. In the event that a vacancy shall occur during the term of any member, his or her successor shall be appointed for the unexpired portion of the term.

(c) Compensation. Members of the Committee shall be compensated as established by the City Council. [Amended 12-10-2008 by Ord. No. 1733]

(d) Duties and responsibilities. It shall be the responsibility of the Committee to study, investigate, counsel and develop and/or update annually and to submit a written plan in conjunction with the City Forester for the care, preservation, pruning, planting, replanting, removal or disposition of trees and shrubs in parks, along streets and in other public areas. Such plan shall be presented annually to the Public Works Field Committee and other appropriate committees/commissions and, upon their acceptance and Council approval, shall constitute the Official Comprehensive City Tree Plan. The Tree Advisory Committee, when requested by the Field Committee, shall consider, investigate, make findings, report and recommend upon any special matter or questions coming within the scope of its work.
(e) Operation. The Committee shall choose its own officers, make its own rules and regulations and keep a journal of its proceedings. A majority of the members shall be a quorum for the transaction of business.

(5) Tree planting regulations.

(a) Species.
1. The Tree Advisory Committee shall develop and maintain a list of desirable trees for planting along streets in three size classes based on mature height as follows:

<table>
<thead>
<tr>
<th>Class of Tree</th>
<th>Height (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small trees</td>
<td>Under 20</td>
</tr>
<tr>
<td>Medium trees</td>
<td>20 to 40</td>
</tr>
<tr>
<td>Large trees</td>
<td>Over 40</td>
</tr>
</tbody>
</table>

2. A list of trees not suitable for planting shall also be created by the Tree Advisory Committee. No person shall plant any street tree without a permit from the City Forester.

(b) Spacing. The spacing of street trees shall be in accordance with the three species size classes listed in Subsection (5)(a) above, and no trees may be planted closer together than the following except in special plantings designed or approved by the City Forester. No person shall plant any street tree without a permit from the City Forester.

<table>
<thead>
<tr>
<th>Class of Tree</th>
<th>Spacing (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small trees</td>
<td>30</td>
</tr>
<tr>
<td>Medium trees</td>
<td>40</td>
</tr>
<tr>
<td>Large trees</td>
<td>50</td>
</tr>
</tbody>
</table>

(c) Distance from curb and sidewalk. The distance trees may be planted from curbs or curblines and sidewalks shall be in accordance with the three species size classes listed in Subsection (5)(a) above, and no trees may be planted closer to any curb or sidewalk than the following unless approved by the City Forester:

<table>
<thead>
<tr>
<th>Class of Tree</th>
<th>Distance (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small trees</td>
<td>1-1/2</td>
</tr>
<tr>
<td>Medium trees</td>
<td>2</td>
</tr>
<tr>
<td>Large trees</td>
<td>4</td>
</tr>
</tbody>
</table>

(d) Distance from street corners and fire hydrants. No street tree shall be planted within 35 feet of any street corner, measured from the point of nearest intersecting curbs or curblines. No street tree shall be planted within 10 feet of any fire hydrant.
Utilities. No street tree other than those species listed as small trees in Subsection (5)(a) above may be planted under or within 10 feet of any overhead utility wire.

Public tree care. The City shall have the right to plant, prune, maintain and remove trees, plants and shrubs within the lines of all streets, alleys, avenues, lanes, squares and public grounds as may be necessary to ensure public safety or to preserve or enhance the symmetry and beauty of such public grounds. The Tree Advisory Committee may remove or cause or order to be removed any tree or part thereof which is in an unsafe condition or which, by reason of its nature, is injurious to sewers, electric power lines, gas lines, water lines or other public improvements, or is affected with any injurious fungus, insect or other pest. No person or entity shall damage and/or remove or cause to be damaged and/or removed any tree, or root system thereof, from any public street, road, alley or terrace without written permission from the City Forester.

Tree topping. It shall be unlawful as a normal practice for any person, firm or City department to top any street tree, park tree or other tree on public property. "Topping" is defined as the severe cutting back of limbs to stubs larger than three inches in diameter within the tree's crown to such a degree so as to remove the normal canopy and disfigure the tree. Trees severely damaged by storms or other causes, or certain trees under utility wires or other obstructions where other pruning practices are impractical, may be exempted from this section at the determination of the Tree Advisory Committee or the City Forester.

Pruning, corner clearance. Every owner of any tree overhanging any street or right-of-way within the City shall prune the branches so that such branches shall not severely obstruct the light from any street lamp or obstruct the view of any street intersection so that there shall be a clear space of 14 feet above the street surface or eight feet above the sidewalk surface. Said owners shall remove all dead, diseased or dangerous trees or broken or decayed limbs which constitute a menace to the safety of the public. The City shall have the right to prune any tree or shrub on private property when it interferes with the proper spread of light along the street from a streetlight or interferes with visibility of any traffic control device or sign or sight triangle at intersections. Tree limbs that grow near high-voltage electrical conductors shall be maintained clear of such conductors by the electric utility company in compliance with any applicable franchise agreement. The utility company shall have the right to prune trees on public and private property in the event such tree is constituted a hazard to life and/or property. A utility tree trimming policy must be adopted by each utility company and the Tree
Advisory Committee and followed for any trimming by the utility company. [Amended 12-10-2008 by Ord. No. 1734]

(8) Dead or diseased tree removal on private property. [Amended 12-10-2008 by Ord. No. 1734]
   (a) The City shall have the right to cause the removal of any dead, hazardous or diseased trees on private property within the City when such trees constitute a hazard to life and/or property, including, but not limited to, utility lines, or harbor insects or disease which constitutes a potential threat to other trees within the City. The City Forester shall notify, in writing, the owners of such trees. The Forester shall also have the authority to issue citations as necessary. Removal shall be done by said owners at their own expense within 60 days after the date of service of notice. In the event of failure of owners to comply with such provisions, the City shall have the authority to remove such trees and charge the cost of removal on the owner's property tax notice. The Forester shall have the authority to enter upon private property at all reasonable times for the purpose of carrying out the provisions of this section.

   (b) The Tree Advisory Committee shall also have the authority to adopt policies on methods that shall be followed to deal with any insect infestation and tree disease.

(9) Removal of stumps. All stumps of street and park trees shall be removed below the surface of the ground so that the top of the stump shall not project above the surface of the ground.

(10) Interference with City Tree Advisory Committee. It shall be unlawful for any person to prevent, delay or interfere with the Tree Advisory Committee or any of its agents while engaging in and about the planting, cultivating, mulching, pruning, spraying or removing of any street trees, park trees or trees on private grounds, as authorized in this section.

(11) Review by Council. The Council shall have the right to review the conduct, acts and decisions of the Tree Advisory Committee. Any person may appeal from any ruling or order of the Committee to the Council who may hear the matter and make final decisions.

(12) Oak wilt and Dutch elm disease control. The purpose of this section is for the protection of public and private property to control the spread of oak wilt fungus, a/k/a Ceratocystis fagacearum, and Dutch elm disease, a/k/a Ceratostomella ulmi. [Added by Ord. No. 1231; amended by Ord. No. 1261]
   (a) Prohibition of trimming, cutting, pruning or injuring oak trees from April 1 to October 1 of each year. No person shall trim, cut, prune or
injure any oak or elm tree in the City between April 1 and October 1 of each year without obtaining a written permit from the Clerk-Treasurer, except a person may girdle and/or trench an infected tree to prevent the spread of the disease.

(b) Prohibition of transporting any infected wood or bark into or within the City. No person shall transport any wood or bark infected with fungus into or within the City limits from April 1 to October 1, except a person may transport infected wood to a site designated by the City for disposal upon a permit issued under this section for transportation of such wood, except this prohibition does not apply to anyone who transports such material through the City and who does not unload or leave such material in the City.

(c) Handling of infected wood or bark. Any infected tree that has been cut and the wood is to be used as fuel wood or to be salvaged for other purposes shall be debarked or completely enclosed with a plastic tarp or stored indoors in a closed building from April 1 to October 1.

(d) Permit procedure. Any person seeking a permit from the Clerk-Treasurer to trim, cut or prune any oak or elm tree in the City limits or transport infected wood or bark within the City between April 1 and October 1 of each year shall submit a written statement from the City Forester stating that the oak or elm tree proposed to be trimmed, cut or pruned is not infected with fungus or in the proximity of any trees which are infected with fungus which would promote the spread of the disease. The written statement shall be dated within 15 days of application to the Clerk-Treasurer.

(e) Permit issuance. Upon application for a permit with proper written statement of the City Forester, the Clerk-Treasurer may issue a permit to trim, cut or prune and/or transport within the City. The permit shall allow trimming, cutting or pruning within 20 days of issuance of the permit. Any person trimming, cutting or pruning oak or elm trees shall comply with all conditions of the permit as required in the statement of the Forester. The cost of said permit shall be as set by Council resolution and shall be required each time a person desires to trim, cut or prune said trees. [Amended by Ord. No. 1262; 12-8-1999 by Ord. No. 1438]

§ 9.07 Penalties.
Any person who shall violate the provisions of this chapter shall, upon conviction, be subject to a forfeiture of not less than $100 nor more than $500 for each offense; provided, however, that such person shall not be subject to such forfeiture if such nuisance is abated in accordance with the provisions for same as set out in this chapter.
SOURCES FOR FURTHER INFORMATION

- Regional Urban Forestry Coordinator
  at 1125 N. Military Avenue
  PO Box 10448
  Green Bay, WI  54307
  Phone: (414)492-5950

- U.W. Extension Office
  Shawano County Courthouse
  311 N. Main Street
  Shawano, WI  54166

- Local Landscapers/Nurseries

- Tree Identification Books available at local Library or book stores.

- Websites:
  - [www.treesaregood.com](http://www.treesaregood.com)
    - tree care information
  - [www.isa-arbor.com](http://www.isa-arbor.com)
    - International Society of Arboriculture
  - [www.arborday.org](http://www.arborday.org)
    - Arbor Day Foundation
  - [www.waa-isa.org](http://www.waa-isa.org)
    - Wisconsin Arborist Association
  - [www.dnr.state.wi.us/forestry](http://www.dnr.state.wi.us/forestry)
    - Wisconsin Dept. of Natural Resources
  - [www.uwex.edu](http://www.uwex.edu)
    - University of Wisconsin-Extension
  - [www.diggershotline.com](http://www.diggershotline.com)
    - Digger’s Hotline or dial 811
  - [www.dontovefirewood.org](http://www.dontovefirewood.org)
    - how firewood spreads insects/diseases
  - [www.treebenefits.com](http://www.treebenefits.com)
    - calculates tree economic & ecological benefits
  - [www.gypsymoth.wi.gov](http://www.gypsymoth.wi.gov)
    - Wisconsin gypsy moth information
  - [www.pddc.wisc.edu](http://www.pddc.wisc.edu)
    - Wisconsin Plant Disease Diagnostics Clinic
  - [www.emeraldashborer.wi.gov](http://www.emeraldashborer.wi.gov)
    - Emerald Ash Borer information
  - [www.midwestlandscapeplants.org](http://www.midwestlandscapeplants.org)
    - pronunciation of scientific names
Addendum A

PROPERTY INSPECTION REPORT

Date: __________________
Name of permittee: ________________________________________________________________
Address: __________________________________________________________________________
Telephone No.: (_______)______________________
Property/Tree location: ________________________________
Inspection Report effective until: ______________________

******** F I N D I N G S ********

Is the oak wilt or dutch elm disease present? □ Yes □ No
Number of trees to be removed: ________________
Reason for activity: ___________________________________
Other findings: _______________________________________

Signed: ____________________________
City Forester

CITY OF SHAWANO OAK WILT & DUTCH ELM PREVENTION PERMIT

FEE $35.00

This permit is issued for: □ Cutting/trimming/pruning of oak trees between (check one) April 1 and October 1.
□ Transport of wood known to be infected with oak wilt.

Is permittee the property owner? □ Yes □ No □ If “No”, owner must ALSO sign below.

Dates during which this permit is in effect: ______________________________

1. All wounds made in any living oak trees as a result of the above-referenced cutting, trimming or pruning and any stumps left after cutting of oaks, shall be immediately covered with tree wound dressing.

2. If any trees on the above-described property, or any neighboring property, become infected with oak wilt as a result of the cutting, trimming or pruning activities described, the property owner shall be liable for abatement actions necessary to control the spread of oak wilt, as required under respective Oak Wilt Ordinances. The owner and permittee may also be liable to neighboring property owners for damages occurring as a result of the oak wilt infection, as allowed under Wisconsin Statutes.
3. Any person doing any cutting, trimming or pruning of oaks or transporting of oak wilt infected wood shall have a copy of this permit with him/her at all times and shall provide the permit for inspection upon demand of the City Forester or any official empowered to enforce the Oak Wilt Ordinance.

4. Any permittee who obtains a permit for transport of oak wilt infected wood must follow the City Ordinance (see page 19 of this booklet.)

5. Any wood remaining on the property is to be completely enclosed with a plastic tarp or stored indoors. All branches are to be disposed of by chipping, burning or burying. All stumps are to be chipped out, dug out or buried.

Signature of Permittee: ____________________________ Date: __________

Signature of Property Owner: ________________________ Date: __________

Signature of Authorized Permit Issuer: __________________ Date: __________