

Recommended Smaller Parkway Trees  
City of Waupaca, Wisconsin

**(Appropriate for Planting Under Powerlines)**

**Serviceberry** (Amelanchier) – classic multiseason interest tree – spring flowers, edible summer fruits, fall color. Native. Some problems with leaf spots, poor drainage. ‘Cole’s Select’, ‘Ballerina’, ‘Princess Diana’, and ‘Autumn Brilliance’ are all good varieties.

**Standing Ovation™ Serviceberry** (A. alnifolia ‘Obelisk’) – very upright, tight and compact

**Musclewood, aka Blue Beech, aka American Hornbeam.** (Carpinus caroliniana) The “JN Strain” seed strain developed at Johnson’s Nursery, has improved plant vigor and fall color, and is now available from some Oregon nurseries, as are his cultivars Firespire™ and Ball O’Fire™.

**Chionanthus**, aka Fringe Tree (Chionanthus virginiana) – slow, won’t outgrow its space. Good shade tolerance, adaptable to many soils, air pollution tolerant.

**Heptacodium aka Seven Son Flower** (Heptacodium miconoides)

- usually a multistem shrub/tree to 15-20 high, somewhat irregular growth habit
- white September flowers, red calyxes in October, attractive “shredding” bark
- pest resistant – good all season leaf quality
- adaptable to many soils, tolerant of drought and high pH. At least Zone 5 hardy
- fast grower, but often needs some pruning to look its best

**Yellow Magnolias** (Magnolia ‘Elizabeth’, ‘Yellow Bird’, ‘Butterflies’, ‘Solar Flair’). All are hardy, large (>25’) and ornamental. I have not yet seen a yellow Magnolia I didn’t like. Some problems with verticillium wilt, scale.

**Hophornbeam, aka Ironwood** (Ostrya virginiana) – native, often grows just uphill (drier) from Hornbeam (Carpinus) in forests. Upright rounded form, fairly fine texture, bark flakes in a fine, even pattern. Yellow fall color. Shows promise as a smaller street tree.

**Chanticleer Ornamental Pear** (*Pyrus calleryana* 'Chanticleer') – also known as 'Cleveland Select'. Upright, tight habit, generally hardy for Wisconsin, sometimes very good fall color.

**Autumn Blaze Ornamental Pear** (*Pyrus calleryana* 'Autumn Blaze') – rounded form, hardier than other Callery Pears, reliable, long lasting fall color. Like all Pears, brittle wooded.

**Jack™ Ornamental Pear** (*Pyrus calleryana* 'Jackzam') Zone 5

- Pyrus is tolerant of varying pH, poor drainage, drought – moderate salt tolerance
- tight, upright habit like 'Chanticleer', but only half as big (20' x 10' at maturity).

**Korean Sun™ Ornamental Pear** (*Pyrus faurei* 'Westwood')

- at 12-15', much smaller than most other ornamental pears.
- very good red – orange fall color
- good as a single stem, probably better as a multistem clump (brittle wood, suckering)

**Japanese Tree Lilac** (*Syringa reticulata*) – upright rounded habit, creamy white flowers after the other lilacs, good environmental tolerances – salt, poor soils – does not like poor drainage. 'Ivory Silk' is the best known cultivar. Good urban tolerances. Few disease problems, but sometimes bacterial blight (or verticillium?) will take out even established trees.

**China Snow™ Tree Lilac** (*Syringa pekinensis* 'Morton')

- same good environmental tolerances as Japanese Tree Lilac ('Ivory Silk')
- finer textured, more dense branching than Jap Tree Lilac
- very showy, shiny, peeling bark reminiscent of Paperbark Maple

Recommended Street Parkway Trees  
City of Waupaca, Wisconsin

**(Not Appropriate for Planting Under Powerlines)**

**Linden; aka Basswood** (*Tilia americana*, *cordata*, and hybrids) – typically an uniform, upright, even habit, good environmental tolerances. Some problems with branching angles and bark inclusions, some foliage diseases, strangulating roots. Japanese beetle favorite. Needs proper pruning when young. Often overplanted

**Yellow Buckeye**

**Ohio Buckeye**

**‘Baumannii’ Horsechestnut** (seedless) (*Aesculus hippocastanae*)

**Hybrids – ‘Homestead’ and ‘Sunset’**

All of these have upright to rounded habits with stout, often low branched trunks, beautiful flowers, and bold foliage texture. Yellow buckeye and the hybrids have less problems with summer leaf scorch (a common problem) and decent fall color.

**Eastern Catalpa** (*Catalpa speciosa*) – tough, coarse textured tree of irregular habit. Beautiful white late spring flowers, long woody fruits (“cigars”), both can be a minor litter problem.

**Katsuratree** (*Cercidiphyllum japonica*) - pyramidal upright when young, spreading with age. Beautiful foliage turning apricot orange in fall. Good grower if it gets even moisture.

**Hackberry** (*Celtis occidentalis*)

-Wisconsin native

-good grower, but can be a bit “squirrely” in its branching

-pH adaptable and drought tolerant, but not tolerant of salt spray

**Yellowwood** (*Cladastris kentuckia*) – medium sized tree with a rounded crown and yellow spring flowers. Fairly tough, but may have some hardiness issues when young in colder microclimates.

**Turkish Filbert** (*Corylus colurna*)

- upright, even, pyramidal habit, nice looking leaves and bark
- adaptable - excellent drought, pH tolerances (not salt, though)
- doesn't always transplant well, takes some time to establish

**European Beech** (*Fagus sylvatica*) – ‘*Asplenifolia*’, ‘*Riversii*’, ‘*Red Obelisk*’, etc

Tight, even habit, both upright and spreading varieties with both purple and green leaves, low crowned with dense shade. High quality tree that need large root run.

**Ginkgo** - all Ginkgos have great urban tolerances, but are slow starters. Just about all named varieties are seedless male clones.

**Autumn Gold Ginkgo** (*Ginkgo biloba* ‘Autumn Gold’)

- wider, pyramidal form that crowns well at a young age

**Magyar Ginkgo** (*Ginkgo biloba* ‘Magyar’)

- upright, somewhat stiffly held branching habit

**Princeton Sentry® Ginkgo** (*Ginkgo biloba* ‘PNI 2720’)

- similar but a little more upright than ‘Magyar’

Many other male clones out there – ‘**Chi Chi**’ (smaller, finer textured), Samurai™, ‘Saratoga’ (both wider crowned – similar to ‘Autumn Gold’) are some other good ones

**Thornless Honeylocust** (*Gleditsia tricanthos inermis*) – Open, airy crown with very fine texture. Tough, native tree with great environmental tolerances, but overplanted in our urban landscapes. Problems with honeylocust plant bug, nectria canker. ‘Skyline’ probably the most popular cultivar.

**Kentucky Coffeetree** (*Gymnocladus dioica*)

- Wisconsin native
- tougher than nails (salt, dry/wet, infertile soils), but needs a little room – gets big
- not much curb appeal when young but rugged good looks – great winter character
- non pod-bearing male clones becoming popular ('Prairie Titan', 'Espresso', etc)

**Exclamation!™ London Planetree** (*Plantanus x acerifolia* 'Morton Circle')

- very good urban tolerances - drought /wet, low oxygen soils, salt tolerant
- upright, uniform growth habit, showy peeling bark - fast grower – gets big
- good anthracnose (leaf blight) resistance, resistant to frost cracking
- Ovation™ is a sibling – similar, but wider, more rounded

**Swamp White Oak** (*Quercus bicolor*)

- Wisconsin native
- transplants and establishes well, but can have chlorosis problems in high pH
- both drought and wet tolerant - will take poorly oxygenated soils better than other oaks

**Bur Oak** (*Quercus macrocarpa*)

- Wisconsin native
- good urban tolerances - very good salt tolerance
- establishes fairly well – not as well as Swamp White, better than Chinkapin

**Swamp Bur Oak** (*Quercus x schuetti* (*bicolor* x *macrocarpa*))

- Wisconsin native - naturally occurring hybrid
- intermediate between its parents, in both looks and adaptability – good urban grower

**Chinkapin Oak** (*Quercus muehlenbergii*)

- Wisconsin native
- grows well in high pH soils – native to drier, limestone based soils

**Regal Prince™ Oak** (*Quercus bicolor* x *robur* 'Fastigiata' – 'Long')

- wide columnar form to 45' x 18' - great leaf quality – powdery mildew resistant
- nicer habit, better vigor and leaf quality than '**Q. Crimson Spire™**
- Kindred Spirit™ Oak (*Quercus* 'Nadler') is a more slender sibling

**Heritage® Oak** (*Quercus macrocarpa* x *robur* 'Clemons')

- pyramidal to upright rounded habit
- outstanding vigor and leaf quality

**Chicago Blues™ Black Locust** (*Robinia pseudoacacia* 'Benjamin')

- it's surprising, what you can find at O'Hare Airport
- basically thornless, great blue green foliage and good form - very fast grower
- remarkable tolerance of poor, high pH soils – a natural for tree pits in problem sites. Some issues with branch breakage (locust borer, brittle wood), but tolerates borer well

**Baldcypress** (*Taxodium disticum* 'Mickelson')

- deciduous conifer with a fairly narrow, even habit – darker green than straight species
- very good wet (low oxygen) soil tolerances, but also drought tolerant when established
- Both **Shawnee Brave™** and the species are surprisingly good street trees

**Elms**

As a group, the elms are fast to very fast growing trees. They have excellent urban tolerances, including drought, compacted and low oxygen soils, and salt. The American elms have good tolerance of wet soils, the hybrid elms tend to have moderate wet soil tolerance.

**American elm** (*Ulmus americana*) – possesses the classic form that most of the hybrid elms lack. Most American elms are susceptible to Dutch elm disease, but several resistant trees have been selected and then released as cultivars, with varying levels of DED resistance. Other cultural problems are elm yellows, verticillium wilt, slime flux, and insect leaf feeding.

**Princeton American Elm** (*Ulmus americana* 'Princeton') 1922 introduction.

- older variety with very good DED resistance in USDA tests
- symmetrical, finer textured vase shaped crown – doesn't want to set a single leader

**New Harmony American Elm** (U. americana 'New Harmony') USDA, 1995 intro.  
-ranked 2<sup>nd</sup> in DED resistance by USDA  
-better nursery grower than Valley Forge – less breakage, less pruning needed

**Jefferson American Elm** (U. americana 'Jefferson') USDA 2004 intro.  
-lower, wider habit than other U. americana cultivars  
-less insect feeding than other U. americana – better leaf quality?

**Valley Forge American Elm** (Ulmus americana 'Valley Forge') USDA, 1995 intro.-  
highest rated American Elm in DED resistance evaluation  
-some problems with limb breakage – needs pruning and training when young

**Hybrid Elms** – most are Asian and/or European hybrids (a few are Asian species, not hybrids). Good to excellent resistance to DED and elm yellows, varying resistance to leaf feeding insects. While often somewhat similar to American elm in form and habit, most lack the classic American elm “look”. Many are also somewhat finer textured and smaller leaved than a typical American elm. Any of the cultivars listed here are worth planting, but I consider first six cultivars listed more highly than the remainder of the hybrid elms, most often because of better leaf quality. Plant lots of different cultivars – Keep our urban forests diverse!

**Accolade Elm™** (Ulmus 'Morton') Morton Arboretum intro.  
-a good facsimile of the classic vase shaped American Elm habit  
-dark green leaves - good resistance to elm leaf beetle (ELB) and elm flea weevil

**Triumph Elm™** (Ulmus 'Morton Glossy') Morton Arboretum intro.  
- more uniform habit, more regular branching than Accolade – a little bit slower grower  
-dark, glossy leaves – very good resistance to elm leaf beetle and elm flea weevil

**New Horizon Elm** (Ulmus 'New Horizon') University of Wisconsin, 1994 intro.  
-upright oval habit with upright angled branching and a tight, attractive crown  
-a little slower to size up than most (40'+)

**Patriot Elm** (Ulmus 'Patriot') USDA 1993 intro.

- upright vase shaped, somewhat open habit – stiffly held
- good leaf quality – very good elm leaf beetle (ELB) resistance

**Prospector Elm** (Ulmus wilsoniana 'Prospector') USDA, 1990 intro.

- smaller (to 35'+), relatively broad vase shaped habit somewhat similar to American Elm
- moderate insect feeding damage – pretty good leaf quality

**Commendation Elm™** (Ulmus 'Morton Stalwart') Morton Arboretum intro.

- upright rounded habit, larger leaves than Accolade
- good leaf quality, some elm flea weevil damage

**Cathedral Elm** (Ulmus 'Cathedral') UW intro.

- vase shaped habit, somewhat similar to American Elm
- moderate to heavy insect leaf damage, somewhat light green foliage

**Vanguard™ Elm** (Ulmus 'Morton Plainsman') Morton Arboretum intro.

- doesn't branch as well as some others, supposed to do well in dry conditions

**Danada Charm™ Elm** (Ulmus 'Morton Red Tip') Morton Arboretum intro.

- upright pyramidal to rounded habit
- moderate insect leaf feeding damage

**Regal Elm** (Ulmus 'Regal') USDA 1983 intro.

- upright, almost columnar habit
- moderate (to severe) insect leaf feeding damage –

**Homestead Elm** (Ulmus 'Homestead') USDA 1984 intro.

- upright oval habit, good branching, listed as Zone 5
- moderate to severe elm leaf beetle (ELB) feeding damage – “see thru” crowns

**Pioneer Elm** (Ulmus 'Pioneer') USDA 1983 intro.

- rounded, globular habit, with large leaves - very fast growing
- zone 5 rated, I've seen in zone 4
- moderate to severe ELB – probably 2<sup>nd</sup> place to Homestead in the ELB Feeding Derby

## TREES WITH POTENTIAL PROBLEMS:

| <u>Species</u>            | <u>Reason</u>                               |
|---------------------------|---|
| Ash .....                 | Emerald Ash borers                          |
| Black Locust / Birch..... | Subject to wood borers                      |
| Box Elder .....           | Weak limbs, box elder bugs                  |
| Ginkgo female .....       | Fruit has pungent odor                      |
| Norway Maple .....        | Can invade natural areas                    |
| Nut bearing trees .....   | Litter of nuts                              |
| Poplar or Aspen .....     | Short lived species                         |
| Red Oak .....             | Oak Wilt                                    |
| Silver Maple .....        | Weak wood, root invasive to sewer lines     |
| Willows .....             | Weak wood                                   |
| Elm.....                  | Must only plant dutch elm disease resistant |

## HARDINESS ZONES FOR WAUPACA:

When purchasing trees and plants check that the tree will survive in our area. Waupaca 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.

This is not a complete list of trees that may be available for planting. A property owner with approval from the City Forester may plant other species & varieties.

- Remember plant the right tree in the right place
- Be careful of tree spacing
- Plant at the correct depth
- Place coarse woodchips around tree
- Ensure trees and shrubs are not invasive species
- Feed and water trees as directed