



**Meet Your Urban Trees  
Part 2  
Site Requirements,  
Tolerances, & Attributes**

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**Font Colors**

NATIVE – to Newark Area

HYBRID or CULTIVAR

NON-NATIVE – to Newark Area

**INVASIVE SPECIES**  
(BOTH Non-native AND causes harm or has potential to cause harm, environmental, economic, or to human health)

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**Common Invasive Trees  
In Urban Areas**

<p><b>PREVIOUSLY or CURRENTLY PLANTED &amp; SPREADS</b></p> <ul style="list-style-type: none"> <li>• Norway Maple – <i>Acer platanoides</i></li> <li>• Toringo crab apple – <i>Malus toringo</i></li> <li>• Bradford pear – <i>Pyrus calleryana</i></li> <li>• Japanese Tree Lilac – <i>Syringa reticulata</i></li> <li>• Japanese Zelkova – <i>Zelkova serrata</i></li> </ul>	<p><b>NOT COMMONLY PLANTED, BUT STILL SPREADS</b></p> <ul style="list-style-type: none"> <li>• Tree of Heaven – <i>Ailanthus altissima</i></li> <li>• Princess tree – <i>Paulownia tomentosa</i></li> <li>• White mulberry – <i>Morus alba</i></li> <li>• Black locust – <i>Robinia pseudoacacia</i></li> <li>• Mimosa – <i>Albizia julibrissin</i></li> </ul>
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There are many more species that we now know to avoid planting.  
These few mentioned are only ones we mentioned yesterday in Tree ID

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### Structural defects in some invasive trees


– Another reason not to plant

**Norway Maple**  
*Acer platanoides*




Epiphany 2018

**Braford Pear**  
*Pyrus calleryana*



https://midvalley.com/2022/03/03/well-o-tree-fell-from-facel/

**Zelkova serrata 'Green Vase'**



Epiphany 2018

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### Red Maple - *Acer rubrum*



2019/10/20/2021



**SITE REQUIREMENTS:**

LIGHT: sun, part sh, shade

SOIL TYPE: various textures

SOIL pH: 4.5-6.5, 6.5-7.4

MOISTURE: Moist - wet

**URBAN TOLERANCES:**

COMPACTION: High

ROAD SALT: Low/Poor

AIR POLLUTION: Moderate

FLOODING: High

DROUGHT: High

**ATTRIBUTES:**

- Brilliant red fall foliage
- Late winter flowers
- Supports pollinators
- Larval host
- Habitat provision
- Dense shade
- Not "messy"
- **Many surface roots**
- Canopy Tree
- Cultivars often planted in streets, natives sometimes
- Natives, common in woodlots and forests across NJ

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### London Planetree – *Platanus x hispanica*

*A.K.A. Platanus x acerifolia*  
Hybrid of (*P. occidentalis* x *P. orientalis*)



2019/10/20/2021

**SITE REQUIREMENTS**

LIGHT: sun, part shade

SOIL TYPE: various textures

SOIL pH: 5-6, 6-7.5, 7.5-80

MOISTURE: Moist - wet

**URBAN TOLERANCES**

COMPACTION: High

ROAD SALT: Moderate

AIR POLLUTION: High

FLOODING: High

DROUGHT: High

**ATTRIBUTES**

- Interesting Bark
- Dense shade
- Highly Adaptable
- **"Messy"**
- **Many surface roots**
- Canopy Tree
- Often planted in streets

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### Swamp White Oak - *Quercus bicolor*



**SITE REQUIREMENTS**  
 LIGHT: sun, **part sh.**, shade  
 SOIL TYPE: **various textures**  
 SOIL pH: 4.6- **5.5-5.7**, 7.0  
 MOISTURE: **Moist** - wet

**URBAN TOLERANCES**  
 COMPACTION: **High**  
 ROAD SALT: **Moderate**  
 AIR POLLUTION: **Moderate**  
 FLOODING: **High**  
 DROUGHT: **High**

**ATTRIBUTES**

- Supports pollinators
- Larval host
- Habitat provision
- Dense shade
- Not "Messy" -yet
- Surface roots not usually problematic
- Canopy Tree
- Becoming very popular to plant in streets & urban sites
- Species of lowland-flatwood wetland forests

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### Black Cherry - *Prunus serotina*



**SITE REQUIREMENTS**  
 LIGHT: **sun**, part shade  
 SOIL TYPE: **well-drained**, sands, loams  
 SOIL pH: **5.0-6.5** -7.5  
 MOISTURE: Dry - **Moist**

**URBAN TOLERANCES**  
 COMPACTION: **Low**  
 ROAD SALT: **Moderate**  
 AIR POLLUTION: **Low to Mod.**  
 FLOODING: **Low**  
 DROUGHT: **High**

**ATTRIBUTES**

- Supports pollinators
- Larval host
- Habitat provision
- Showy flowers late-spring
- **Can have messy fruit, depends on year**
- Surface roots not usually problematic
- Canopy Tree
- Up-and-coming in streets (on Newark approved list)
- Most common native tree in NYC Parks
- Common in woodlots, edge spaces, open natural areas, upland forests, and coastal dune systems

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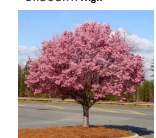
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### Okame Cherry *Prunus 'Okame'*

**URBAN TOLERANCES**  
 COMPACTION: **Mod. to High**  
 ROAD SALT: **Low to Mod.**  
 AIR POLLUTION: **High**  
 FLOODING: **Moderate**  
 DROUGHT: **High**




### Sargent's Cherry *Prunus sargentii*

**SITE REQUIREMENTS**  
 LIGHT: **sun**, part shade  
 SOIL TYPE: **well-drained**, adaptable to various soils  
 SOIL pH: 5.0- **6.0-7.0** -8.0  
 MOISTURE: Dry - **Moist**

**URBAN TOLERANCES**  
 COMPACTION: **Low to Mod.**  
 ROAD SALT: **Moderate**  
 AIR POLLUTION: **Moderate**  
 FLOODING: **Moderate**  
 DROUGHT: **Mod. to High**

**ATTRIBUTES**

- Small, underwire trees
- Showy flowers
- Surface roots not usually a problem
- **Structural pruning when young to avoid included bark**



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### Southern Crab Apple

*Malus angustifolia*

**URBAN TOLERANCES**  
 COMPACTION: **Mod. to High**  
 ROAD SALT: **Low**  
 AIR POLLUTION: **Low to Mod.**  
 FLOODING: **Moderate**  
 DROUGHT: **Mod. to High**



### Washington Hawthorn


*Crataegus phaenopyrum*

**SITE REQUIREMENTS**  
 LIGHT: **sun**, part shade  
 SOIL TYPE: **well-drained**, adaptable to various soils  
 SOIL pH: **5.0-6.0, 7.5** | 5.0-~~6.0~~**7.0, 8.0**→  
 MOISTURE: Dry - **Moist**

**URBAN TOLERANCES**  
 COMPACTION: **High**  
 ROAD SALT: **Low to Mod.**  
 AIR POLLUTION: **High**  
 FLOODING: **Mod. to High**  
 DROUGHT: **Mod. to High**

**ATTRIBUTES**

- Small trees 20-30ft
- Showy flowers & fruit
- Surface roots not usually a problem
- **Structural pruning when young to avoid included bark**



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**Forest Pansy Red Bud - *Cercis canadensis* 'Forest Pansy'**

**SITE REQUIREMENTS**  
 LIGHT: sun, **part shade**  
 SOIL TYPE: **well-drained**, sands, loams, silts, clays  
 SOIL pH: 5.0- **6.5-8.0**  
 MOISTURE: Dry - **Moist**

**URBAN TOLERANCES**  
 COMPACTION: **Moderate**  
 ROAD SALT: **Low/Poor**  
 AIR POLLUTION: **Mod. to High**  
 FLOODING: **Low**  
 DROUGHT: **Mod. to High**

**ATTRIBUTES**

- Supports pollinators
- Habitat provision
- Showy Flowers Mid-spring
- Showy purple leaves
- Fruit uncommon, highly sterile (straight species spreads aggressively)
- Surface roots not usually problematic
- Small tree 20-30ft
- Redbuds becoming very popular for urban sites,
- Deep shade
- Crown can get heavy, breakage occasional

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### Little Leaf Linden - *Tilia cordata* 'Greenspire'



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### Little Leaf Linden - *Tilia cordata* 'Greenspire'



**SITE REQUIREMENTS**

LIGHT: **sun**, part shade  
 SOIL TYPE: **well-drained**, adaptable, various soils  
 SOIL pH: 5.0- **6.0-7.5** -8.5  
 MOISTURE: Dry - **Moist**

**URBAN TOLERANCES**

COMPACTION: **High**  
 ROAD SALT: **Moderate**  
 AIR POLLUTION: **High**  
 FLOODING: **Low**  
 DROUGHT: **Moderate**

**ATTRIBUTES**

- Supports pollinators
- Formal shape
- Deep shade
- Dense crown
- **Strongly decurrent causing poor structure, leading to breakage & peeling.**
- Surface roots not usually problematic
- Medium-sized tree 40-60ft
- **Not suitable for underwire plantings – even though often placed there**

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### Basswood - *Tilia americana*

AKA American Linden



**SITE REQUIREMENTS**

LIGHT: **sun**, **part shade**, shade  
 SOIL TYPE: **well-drained, loamy**, adaptable to various  
 SOIL pH: 5.0- **6.5-7.5**  
 MOISTURE: Dry - **Moist**

**URBAN TOLERANCES**

COMPACTION: **Low**  
 ROAD SALT: **Low**  
 AIR POLLUTION: **Low**  
 FLOODING: **Moderate**  
 DROUGHT: **Moderate**

**ATTRIBUTES**

- Supports pollinators
- Larval host
- Habitat
- Dense shade
- Surface roots not usually problematic
- Can sprout from surface roots or base
- Canopy tree
- Strong significance for local indigenous peoples

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### American Elm - *Ulmus americana* 'Princeton'



**SITE REQUIREMENTS**

LIGHT: **sun**, part shade  
 SOIL TYPE: **Adaptable, various**  
 SOIL pH: 5.0- **6.0-7.7**, 8.0  
 MOISTURE: **Moist** - Wet

**URBAN TOLERANCES**

COMPACTION: **High**  
 ROAD SALT: **High**  
 AIR POLLUTION: **High**  
 FLOODING: **High**  
 DROUGHT: **Mod. to High**

**ATTRIBUTES**

- Habitat
- Dense shade
- Formal vase shape
- **Strongly decurrent, causing poor structure, break risk**
- **Frequent structural pruning important when young**
- Surface roots not usually problematic
- Canopy tree
- Resistant to Dutch elm disease

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### Common Hackberry - *Celtis occidentalis*



**SITE REQUIREMENTS**

LIGHT: sun, part sh, shade  
SOIL TYPE: **Adaptable to various**  
SOIL pH: 5.0- **6.5-8.0**  
MOISTURE: Dry - **Moist** - Wet

**URBAN TOLERANCES**

COMPACTION: **High**  
ROAD SALT: **Moderate**  
AIR POLLUTION: **High**  
FLOODING: **Moderate**  
DROUGHT: **High**

**ATTRIBUTES**

- Supports pollinators
- Larval host
- Habitat
- Dense shade
- Best with structural pruning when young to avoid poor form
- Surface roots not usually problematic
- Canopy tree
- **Can get cosmetic leaf damage by mites & insects i.e. nipple gall →**




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