Power Friendly Trees
Pam Louks, Community & Urban Forestry Coordinator

Don’t want THIS?
Then do THIS

Plant the Right Tree in the Right Place

Don’t plant trees with a mature height of over 25 ft. under or near power lines.

Mature tree pruned for line clearance

Tree topped for line clearance with sprouts that will become weakly attached branches

NIPSCO Tree Line USA Utility Arboretum in Middlebury

IPL, Tree Line USA, Trees and Power Lines Project

Read on for a list of Power Friendly Trees!
**Trees, power, people**

*A common sense strategy to keep our power on and to maintain the positive benefits of the urban forest.*

By Nate Mathews, Duke Energy, Mike Baldwin, IPL, and Mike Maskal, AEP (2004)

Electric utilities agree that trees are a very important asset to homeowners and communities. Trees:

- Contribute greatly to the beauty and value of property.
- Play a large role in regulating climatic conditions and absorbing certain air pollution elements.
- Enhance our local and global environment.

However, large and medium trees under and spreading into power lines cause problems!

The facts are:

- Trees are often the largest single cause of power loss.
- Electrocuton is one of the largest causes of deaths to people working in trees.

The same trees we value can become a source of real trouble when they come in contact with electric lines. When tree limbs grow into and come into contact with electric lines, they become hazardous and create recurring power outages. The lines must be cleared to minimize power outages.

Line clearing techniques are designed to obtain necessary clearances between tree limbs and electric wires to ensure safe and reliable power.

Some tips to remember:

- Homeowners should never trim trees near power lines or try to remove limbs that are touching power lines.
- Children should never climb trees near power lines.
- Contact your electric provider if trees are too close to power lines or if limbs are in the power lines. They will come out to check for an electrical hazard, and if one exists they will work with you to find a solution.
- Request that anyone who prunes your trees for utility clearance use appropriate pruning techniques which is called directional and/or target pruning. The tree won’t look the same with this type of pruning, but it will not be topped and will be a healthier tree if it is pruned to these guidelines.
- Think about simply having the tree that is impacting the utilities removed and an appropriate size species planted in its place.

**Plan before planting**

Since trees and landscaping are such a significant investment, property owners, developers, and municipalities can protect this investment by selecting plants that will not impact power lines with their height, width, or affect underground utilities.

- Consider the space available. Check with the local utility regarding any utility easements. Usually, most utilities prohibit planting in the easement area.
- If you can plant under the power lines, only select low growing trees and shrubs that will reach a mature height of less than 25 feet.
- Plants need room to grow. How high and how wide will the trees canopy and trunk get? What will they come in contact with as they grow?
- If there is a chance their spread will grow over into power lines, plant them further away, select another site, or choose a species that will fit the spot NOW and in the FUTURE.
- Plant trees that have the most resistance to insects, disease, and suckering issues. Plant trees that require the least maintenance.

- However, large and medium trees under and spreading into power lines cause problems!
Power Friendly Trees
< 25 feet in height

Please note that this is a general list and you should consult with your local utility, for the species they recommend and/or allow.

Consider the mature height and width of trees before purchase.

<table>
<thead>
<tr>
<th>Common name</th>
<th>Scientific name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choke Cherry;</td>
<td><em>Prunus virginiana</em></td>
</tr>
<tr>
<td>Cherry Hybrids;</td>
<td><em>Prunus hybrids</em>, Snow Goose</td>
</tr>
<tr>
<td>Cherry Oriental;</td>
<td><em>Prunus serrulata</em></td>
</tr>
<tr>
<td>Crabapple, Flowering;</td>
<td><em>Malus</em> species and hybrids-Choose low suckering, low maintenance, and disease resistant varieties</td>
</tr>
<tr>
<td>Dogwood, Gray;</td>
<td><em>Cornus racemosa</em></td>
</tr>
<tr>
<td>Dogwood, Kousa;</td>
<td><em>Cornus kousa</em></td>
</tr>
<tr>
<td>Dogwood, Kousa hybrids;</td>
<td><em>Cornus kousa x florida</em></td>
</tr>
<tr>
<td>Dogwood, Pagoda</td>
<td><em>Cornus alternifolia</em></td>
</tr>
<tr>
<td>Hawthorn, Cockspur; (N)</td>
<td><em>Crataegus crus-galli</em></td>
</tr>
<tr>
<td>Hawthorn, Dotted; (N)</td>
<td><em>Crataegus punctata</em></td>
</tr>
<tr>
<td>Hawthorn, English;</td>
<td><em>Crataegus laevigata</em></td>
</tr>
<tr>
<td>Hawthorn, Green;</td>
<td><em>Crataegus phaenopyrum</em></td>
</tr>
<tr>
<td>Lilac, Japanese Tree;</td>
<td><em>Syringa reticulata</em></td>
</tr>
<tr>
<td>Magnolia, hybrid;</td>
<td><em>Magnolia hybrids</em></td>
</tr>
<tr>
<td>Magnolia Star;</td>
<td><em>Magnolia stellata</em></td>
</tr>
<tr>
<td>Maple, Amur;</td>
<td><em>Acer ginnala</em></td>
</tr>
<tr>
<td>Maple, Paperbark;</td>
<td><em>Acer griseum</em></td>
</tr>
<tr>
<td>Maple, Tatarian;</td>
<td><em>Acer tataricum</em></td>
</tr>
<tr>
<td>Maple, Trident;</td>
<td><em>Acer buergeranum</em></td>
</tr>
<tr>
<td>Redbud, Eastern; (N)</td>
<td><em>Cercis canadensis</em></td>
</tr>
<tr>
<td>Serviceberry; (N)</td>
<td><em>Amelanchier species and hybrids</em></td>
</tr>
<tr>
<td>N=Native to Indiana</td>
<td></td>
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</tbody>
</table>

**Small evergreens for screens**

- *Thuja occidentalis*-cultivars that are 10-20’ ft. high
- *Juniperus chinensis*-cultivars that are 12-25’ ft. high
- *Juniperus scopulorum*-cultivars that are 15-20’ ft. high
- *Juniperus virginiana*-cultivars that are 15-25’ ft. high

Many of the species listed have cultivated varieties that are insect and disease resistant, low on maintenance, and can tolerate a variety of stresses. A good reference for selecting trees and finding cultivars is *Landscape Tree Factsheets, Including Evergreens for Screens*. It is available from Penn State University for $30.00. Phone: 814-865-3281; [http://pubs.cas.psu.edu/Pubs/agrs56.html](http://pubs.cas.psu.edu/Pubs/agrs56.html).
What’s up?

- Don’t plant trees with a mature height of 25 feet or more under power lines!

- Select species that will fit in their spot when they grow up...when they are mature.

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**Utility Websites**

Right Tree Right Place
(click to link to utility websites that have tree species lists and tips on right tree right place)

- AEP/Indiana Michigan Power
- Duke Energy
- Indianapolis Power & Light (IPL)
- NIPSCO/An NiSource Company
- Vectren

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For more information about urban forestry management or the CUF program:

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http://www.in.gov/dnr/forestry/

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