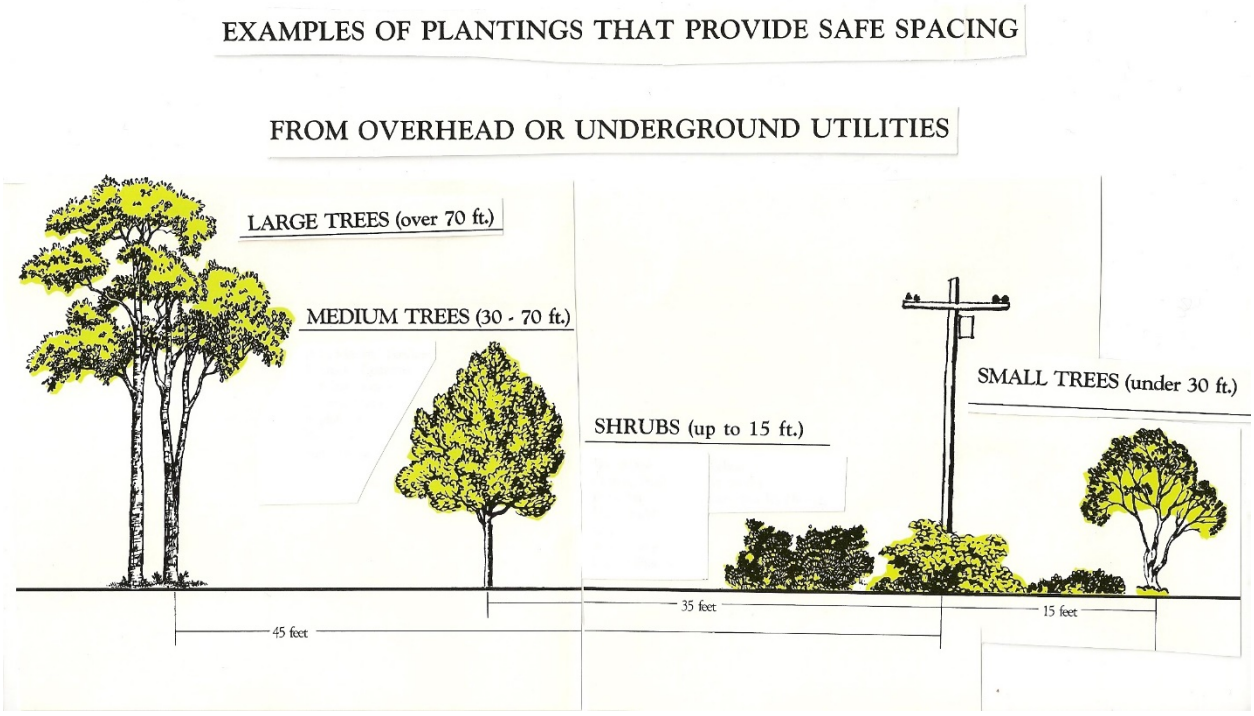
Archive for April, 2011

Avoiding Utility Line Conflicts
Saturday, April 2nd, 2011

One of the major reasons for planting the right tree in the right place is to avoid future interference with electric transmission lines; both overhead and underground. It should be obvious that the best way to avoid future conflicts between trees and utility lines is to plant the tree an appropriate distance from the line so it can grow and reach its normal height and spread without one having to worry about it getting into the "wires." After every storm, when electrical service goes out , downed trees and broken limbs are significant members of the several culprits that cause the damage to power lines. Planting new trees in the right places will help alleviate some of this aggravation.

Presented below is a stylized drawing with general guide lines for spacing of trees, based on their expected size at maturity.



The next illustration provides additional guidance on spacing recommendations in table format, including spacing in relation to buildings and for mass plantings for noise shields, privacy, etc.

SIZES

Any tree or shrub requires adequate space to grow and develop into a mature, attractive plant.

LARGE TREES

Over 70 feet at maturity
Don't plant within 45 feet of overhead lines.

Best for:

- Shading large areas
- Park and open space settings
- Background and framing of multi-story buildings

MEDIUM TREES

30 - 70 feet at maturity
Avoid locations under or within 35 feet of overhead lines.

Best for:

- Shade
- Windbreak
- Streetside, park and business district locations
- Background and framing of one-story buildings

LARGE SHRUBS

15 feet or less at maturity
May be planted under utility lines.

Best for:

- Visual screen and privacy barriers
- Windbreak
- Noise abatement
- Wildlife benefits

SMALL TREES

Under 30 feet at maturity
May be planted 15 feet or more from lines if adequate space is allowed for future growth.

Best for:

- Visual Screen
- Windbreak
- Noise abatement
- Wildlife benefits
- Streetside, park and business district locations

SPACING

The following table gives minimum spacing for planting trees and large shrubs:

Plant Size	Minimum from Corners (1 story bldg.)	Minimum from Walls (1 story bldg.)	Distance Apart (c) for Noise Shield or Mass Planting	Minimum from Overhead Lines
Large Shrub	—	—	1½ to 5 feet	—
Small Tree	8 feet (a)	12 feet (a)	6 to 12 feet	15 feet
Medium Tree	12 feet (a)	16 feet (a)	16 to 30 feet	35 feet
Large Tree	16 feet (b)	20 feet (a)	30 to 40 feet	45 feet

(a) Add 4 feet to minimum distance for multi-story buildings.
(b) Add 8 feet to minimum distance for multi-story buildings.
(c) A staggered spacing will increase density. Ideal spacing will depend on plant species or variety.

A final note about avoiding utility lines: DON'T FORGET UNDERGROUND LINES!!!! Do not plant over waterlines, gas lines, communication lines (TV, phone, etc.), or electric lines. Sometimes the conflict is not always up in the air. One must also pay attention down under the sod. Hard to remember, but important.

Species Tolerance
Saturday, April 16th, 2011

Tree species vary, sometimes widely, in their tolerance of growing conditions. For example, baldcypress (not a cypress at all, by the way) is found naturally as a major component of southern swamps and wetlands. However, it has also been found to do well when planted in upland areas; particularly in urban settings. Baldcypress has also been found to be fairly drought resistant, once it becomes well established on upland sites. Thus, it is classified as a broadly tolerant species.

Other species may be less broadly tolerant, and their site requirements must be carefully met, if they are to be the "right" tree for a proposed planting location. Presented below is a table that shows the tolerance of some recommended species to several special site conditions that are regularly encountered in Missouri and elsewhere.

TREE SPECIES SUITABLE FOR SPECIAL CONDITIONS

TOLERANT OF MOIST AND WET SITES

Alder, European
Baldcypress
Birch, river
Buckeye, Ohio
Magnolia, sweetbay
Maple, red
Oak, swamp chestnut
Oak, swamp white
Oak, water
Oak, willow
Planetree, London
Spruce, white

TOLERANT OF DRY CONDITIONS

Crabapple, flowering
Hawthorn
Honeylocust, thornless
Oak, chinkapin
Oak, post
Oak, scarlet
Oak, Southern red
Oak, swamp white
Oak, willow
Pine, Japanese black
Pine, limber
Redcedar, Eastern
Rubbertree, hardy
Sycamore, American

TOLERANT OF LIGHT SHADE

Alder, European
Basswood, American
Beech, American
Beech, European
Blackgum
Buckeye, Ohio
Buckeye, red
Dogwood, flowering
Fir, white
Hemlock, Canadian
Holly, American
Hophornbeam
Hornbeam, European
Magnolia, saucer
Magnolia, sweetbay
Maple, sugar
Redbud, Eastern
Serviceberry, downy
Silverbell
Sourwood
Spruce, Norway
Spruce, White
Yellowwood

MOST TOLERANT OF URBAN CONDITIONS

Baldcypress
Birch, river
Blackgum
Coffeetree, Kentucky
Corktree, Amur
Elm, American
Elm, Chinese
Ginkgo
Honeylocust, thornless
Hophornbeam
Juniper, Chinese
Katsura
Linden, littleleaf
Oak, Northern red
Oak, sawtooth
Oak, Shumard
Oak, swamp white
Oak, willow
Pagodatree, Japanese
Pine, Japanese black
Pine, limber
Redbud, Eastern
Redcedar, Eastern
Rubbertree, hardy
Zelkova, Japanese

SUITABLE FOR STREET PLANTING

Baldcypress
Beech, American
Beech, European
Birch, river
Blackgum
Corktree, Amur
Elm, American
Elm, Chinese
Ginkgo
Honeylocust, thornless
Hophornbeam
Hornbeam, European
Katsura
Linden, littleleaf
Maple, red
Oak, bur
Oak, English
Oak, Northern red
Oak, sawtooth
Oak, scarlet
Oak, Shumard
Oak, swamp white
Oak, willow
Pagodatree, Japanese
Redcedar, Eastern
Zelkova, Japanese