



Backyard Wisdom • March 2017

by: *Gilbert A Smith, ISA Master Arborist*

Evergreen Trees Blown Down

This month we had strong winds that blew several large evergreen trees down, like Fir, Douglasfir, and Spruce. Why did these trees stand for many years and then suddenly blow over? Our clients asked, "Why can't the roots hold them up?" The answer is this: it is not a problem with the roots, it is a problem with the soil.

Northeast Illinois soils are the most fertile soils in the world for corn, soybeans or prairie. They are poorly drained, alkaline, heavy, clay soils. However, they are NO good for evergreen trees, which like well drained, acid, loose, humus rich soils such as you find east of Lake Michigan. In fact, there were no native evergreen trees in NE Illinois before European settlement. (Roughly 1830)



Douglasfir blown over in Highland Park, IL, also a good demonstration of how close roots are to the surface of the soil. photos by Lesley Bruce Smith

If we are listening to the trees, we should be hearing that they don't like it here. When we plant them, as I love to do, we have to remember that they are immigrants from a foreign land brought here against their will. If you don't believe me, take a look around your evergreens for any seedlings taking root. You won't find any, because the seeds know what's good for them. So, those evergreen trees need special attention, they are under stress and they are shorter lived than our native Oaks for instance.

The Fir and Spruce blew over because the heavy clay soil was soggy, and because their roots can only survive close to the surface, drowning the anchoring roots. When we don't pay enough attention to the soil in which we plant our evergreens, we can end up with catastrophic failure. I hate to admit it, but even the Master Arborist has had a few blow overs of evergreens because I planted them in soils that were not compatible.

So how can we keep our evergreens in their normal upright position? Cables, stakes, support beams? No, a tree's strength is in its flexibility. If you use guy wires for more than a few months the tree will weaken, just as if you left a cast on your own limb for too long, it atrophies.

Here's what we suggest:

- 1.- Don't be so anxious to use evergreens as a screen when shrubs or deciduous plants will fit the bill.
- 2.- Enjoy evergreens and give them light and space to grow. Don't pack them in there for immediate effect.
- 3.- Do not put evergreens in wet areas, because it prevents healthy root growth.
- 4.- Ask your Arborsmiths before you plant, and ask for our simple planting abstract with diagrams showing proper planting.
- 5.- Arborsmith works with many Landscape Architects to help get the right tree in the right place.