



Mother Nature's Moment • July | August 2018

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Blue Spruce Blues

This year has been a tough one for the Blue Spruce (*Picea pungens* 'Glauca'). More accurately, this year appears to have been a tough one for Blue Spruce because we have been called into a lot of situations to evaluate Blue Spruces that are in terrible shape. The problems that they are exhibiting now began at a minimum of 15-18 months ago. Unfortunately, by the time the disease is noticed by a homeowner there has already been significant damage done. We see it most often on Spruces that are over 30 years of age and have been looking fine and then "all of a sudden" appear to be dying. What is going on?



Blue Spruce with severe *Rhizosphaera*
photos by Lesley Bruce Smith

Spruce trees are not native to northeast Illinois, their native habitat is often in an alpine setting where the soils are well drained and they get lots of sunshine and relatively consistent temperatures and moisture levels. But we love them and so we transplant them into our suburban landscapes in heavy clay soils where they need to withstand 130°F temperature swings, sometimes within a few months or even a few weeks time and often long periods of very hot dry weather, or more recently excessively wet spring and summer weather. Most of us have forgotten that just 5 years ago Chicago survived numerous summers of very hot droughty weather and even a few winters with very little snow cover. All these weather conditions tend to really stress non native plants and especially the Blue Spruces we love. Most of our clients are surprised to hear that excessive water is just like NO water because both create root death. Root death means stress on a tree, but the evergreens in our communities are especially sensitive to it. Those stresses actually cause physiological changes in the trees that can last for many years and even throughout its lifetime. Those stresses also cause the trees to be susceptible to a number of, newer to our area, fungal diseases that can be fatal.

So what to do? The key to helping our beloved Spruce trees survive is to be attentive before the trees begin to show symptoms. We can prevent a lot of stress related problems and diseases if we are proactive. If you own a Blue Spruce you should see if the soil under it is mulched, watered at least once every 3 weeks during droughty periods, and it should be on an annual program to spray it with a fungicide to prevent the infections of *Cytospora* and *Rhizosphaera* disease, both of which are potentially fatal. Ask for Arborsmith's Abstract on these two diseases. If your Spruces are younger or you are thinking about planting new ones you should insure that the planting site is well drained and well mulched to conserve moisture. If you are unsure, call us to come and look at your Spruces before it is too late to help them.