

Spruce Trees Issues, Think Twice About Planting

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I receive many questions about spruce trees. I seem to be asked why is a spruce tree dying or what is the best spruce to plant. With so many spruce diseases and dieback, one might wonder why so many continue to be planted.

When asked what type of spruce tree to plant, I admit I encourage the person to consider another type of evergreen if possible. And I don't only pick on spruce. When I'm asked about a tree I know is overplanted in our community, I suggest other options and I share the reason why.

Diversity in community forests, whether in town or rural windbreaks, is important to having sustainable tree plantings better able to withstand pest infestations and environmental stresses.

Spruce trees are susceptible to a number of diseases as well as insects like bagworm and spruce mites. In recent years, I've become aware of at least three newer diseases infecting spruce.

The increase in disease is likely due to overplanting spruce trees, as well as weather extremes causing environmental stress and poor planting or care practices that further stress trees, making them more susceptible to infection.

As we move into tree planting season, think twice about planting spruce and consider other options like concolor and balsam fir, ponderosa pine, southwestern white pine, or Douglas-fir. These may not be perfect trees for your site either, so check them out further before planting.

And since no tree is perfect, mix it up and plant more than one type of evergreen if you are planting a windbreak or a number of trees in a landscape.

If you have spruce, here are some diseases to watch for. Needle cast causes older needles on the lower half of trees to turn brown or purplish and eventually drop off. *Rhizosphaera* and *Stigmina* are two needle cast diseases found.

After needle cast is confirmed, fungicides can be applied in May when new needles are between one-half to two inches long and repeated four weeks later. Two years of applications is effective for *Rhizosphaera* but *Stigmina* is proving harder to control.

Two canker diseases are *Cytospora* and *Phomopsis*. These infect branches through wounds, such as from hail, causing cankers that kill branches. On *Cytospora*, dead branches may be scattered throughout the tree. *Phomopsis* tends to start near the bottom. There are no fungicide controls for canker diseases. Prune out dead branches to reduce spread.

Sirococcus shoot blight infects new branch tips causing them to droop and turn brown. Frost damage or death of young shoots from high winds or heat can cause identical symptoms. If *Sirococcus* is present, black specks can be seen on infected twigs. Follow the same timing of fungicides as for needle cast.

And then there's SNEED or Sudden Needle Drop. Symptoms are yellowing and eventual browning of older needles. Affected branches may be scattered through the tree. By fall, all of the needles on affected branches can drop off except the newest needles on branch tips. Black specks can be found on twigs. Eventually the tree canopy thins, sometimes leaving bare branches.

Although much is still unknown or undecided about SNEED, applying fungicides as you would for needle cast disease seems to help.