

Where Have All the Needles Gone?

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pruce needle drop (SNEED) is a recently recognized disease of spruces. It can affect Colorado blue, Norway, and white spruces in both forest and landscape settings.

Symptoms of the disease include needles turning a purplish color, or yellowing, and progressive loss of the previous year's needles from the branches of spruce. Whole branches may develop a purplish cast. As the needles drop, the crown thins, and eventually, entire branches become bare. Bare branches can occur without any pattern in the tree's crown. **This loss of needles results in reduced growth and a weakened tree.**

In the springtime, black fruiting bodies of the fungus *Setomelanomma holmii* can be found on the twigs. It is not certain if this fungus is the cause of the disease, but it is typically found in association with spruces suffering from SNEED. Because there is no conclusive proof that this fungus is causing the disease, **fungicide sprays are not registered for control.**

Trees that are under stress, particularly water stress, are more subject to getting this disease. **Control of SNEED is focused on stress reduction and improving the tree's overall health.** The last three to four years have been very dry, with less than average rainfall. This has resulted in water stress to trees and root loss. If nature does not cooperate, **provide one inch of water per week.** Use a soaker or drip hose to avoid getting the needles wet. Mulch underneath the trees to retain moisture. Grass competes very well and can actually contribute to water stress on trees.

Fertilization, root stimulants, and mycorrhizae treatments may all be prescribed by your Wachtel Tree Science and Service Certified Arborist to **rebuild root systems and energy reserves within the tree.**

Pruning out affected parts can be helpful for control and improving appearance. Obviously diseased/dead areas should be cut off four to six inches below the affected area. Do not leave the branches on site. Burn or bury them. **Pruning tools should be sterilized between cuts** to prevent accidental spread during pruning. Spray disinfectants that are about 70% alcohol are convenient and work well to sterilize tools.

There are other spruce diseases that could be confused with SNEED. The key is a proper diagnosis. It is also possible that more than one issue may be affecting your spruce. Call Wachtel Tree Science and Service for professional assessment of your spruces and their care.