

Pine Needle Scale

Spring is a unique time in Montana. We have nice sunny days, with brown grass. Before long, we will have lush green growing grass and trees leafing out. On the other hand, we have conifers that stay green all year. Many in the county are afflicted by pine needle scale. These very small insects are quite a nuisance on conifers. We primarily see them on spruces and pines around Teton County.

Pine needle scale (*Chioaspis pinifoliae*) are very small insects that live on the needles of conifers. Most of the time, it looks like someone took a paint can of white paint and randomly sprayed areas of your tree. These insects form a small scale of 1/8" length on the needles. These scales are a protective barrier they form over themselves to protect against other insects, birds, and inclement weather. By covering up the needles, they are reducing or eliminating the tree's ability to produce energy. These insects usually travel by wind, which we usually have in spades.

I rarely see pine needle scale kill a tree. It is usually a combination of drought, soil conditions, other insects, and some pine needle scale. This insect is very common on most conifers to some degree. When they get thick, you can harm a tree. Damaged needles will turn brown and drop from the tree. Do not confuse this with winterburn which we are also seeing. Winterburn needles will be brown on one part and green on another. Pine needle scales are the classic white "spots".

Control for this insect is usually very basic. There are several options for chemical control of this insect. While many horticultural oils, tree oils, or insecticidal soap exist, one common household chemical is Sevin SL or Sevin XLR – the same thing we've been using for Mountain Pine Beetles. If you are using dormant oils or tree oils, these need to be applied now, before the spring green up.

Pine needle scales need to be sprayed directly, on the scales. Treatment needs to be done in the spring when crawlers are starting to hatch out of the scales. Since it seems that each spring is very different, I usually use lilacs as my guide. When they are blooming, I am spraying for pine needle scale. This ends up being in May. One way to test your trees and see if crawlers are out is to take a white sheet of paper, hold it under the affected branches, and shake the limb. The crawlers are very small reddish purple in color. Crawlers will transition to nymphs and later to insecticide resistant adults within a short timeframe, so the treatment windows can be short.

Every little bit counts when we are trying to save out trees. With bigger and badder insect cousins out there like Mountain Pine Beetle, anything we do to improve our tree health will benefit them. Remember also to provide good, deep water weekly for your trees

to increase their odds. We love our trees and want to see them stick around. Feel free to contact me with any questions and good luck!~