

Some Significant Tree Diseases of the Powell Area – Part 2

Oystershell Scale

One of the most common and most damaging insects in the Powell area is oystershell scale. It develops on the bark and trunks of a wide variety of deciduous tree species growing in this area. Aspen, ash, cottonwood, poplars, willows and lilacs are trees and shrubs it likes to attack.

Over winter the egg stage is spent under cover of the mother scale. The white eggs hatch on warm, calm days in late May or early June. The newborns, known as crawlers, are pale yellow in color and move along the bark looking for feeding sites. They feed by sucking the fluids of cells underlying the bark, often killing the cells. In large populations the scales may cause tree limbs to dieback and eventually can weaken the plant to where it becomes more susceptible to plant pathogens and other insects. As they feed their size increases and by midsummer they are fully grown. The cycle is repeated when eggs are laid in late summer and early fall. The mother dies at the end of the season. One generation of the insect is produced annually. Eggs produced in late summer remain under a protective waxy cover throughout the winter.

Timing is critical to the control of this insect. Once it has begun to feed it molts and develops a waxy protective cover. The small crawlers can be detected by careful examination or by shaking off an infested limb onto a sheet of paper. Start to look for the crawlers around mid-May. On smaller trees and shrubs scale coverings and eggs can be destroyed by scrubbing the bark or trunk with a soft plastic pad. Heavy infestations on branches may need to be pruned off. The use of horticultural oils, available at many home and garden centers, can be sprayed onto the overwintering eggs. Although caution should be used since it may not kill all of them if it doesn't penetrate the adult waxy covering. Repeated seasonal observation for the eggs, crawlers, and adults is necessary.

There are several insecticides that can be sprayed to control the insect. The most effectively used contain the active ingredient *bifenthrin*, *cyfluthrin*, *cyhalothrin*, or *permethrin*. Some other effective insecticide controls contain *acetamiprid*, *carbaryl*, and *malathion*. Always follow the label on the product. If you are unsure if the insect is present, check with a professional. A master gardener or certified arborist can help you. Once you have begun to control the insect take note that the old scales can remain in place for several years after they have died. Once you have determined that the scales are dying or you use a plastic pad or high pressure water, remove as much of the fallen scales as you can so any reinfestation can be detected. If you don't have oystershell scale on any of your trees and shrubs consider yourself fortunate. If your neighbor has trees or shrubs nearby you may want to watch for signs of the insect on those trees.

