

Protect Your Trees from Bark Beetles

by The Arizona Bark Beetle Taskforce 

Bark beetles are native and play an important ecological role, therefore eradicating these insects is not the desired outcome. We understand that you value your trees and that protecting them from bark beetles is important.



Photo credit: USDA Forest Service

There are several steps that you can take to protect your high-value trees, and it starts with understanding what signs to look for:



Photo credit: Colorado State University Extension

← Boring dust (looks like rust-colored sawdust) may appear in bark crevices or at the base of the tree.

Pitch tubes are ½–1 inch yellow or pinkish blobs of sap-like substance. →

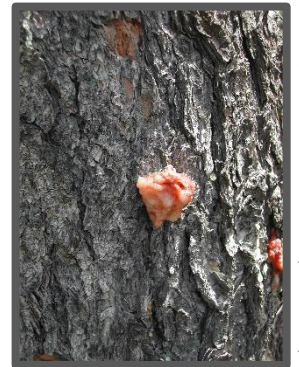


Photo credit: USDA Forest Service



Photo credit: firewise.org

← Fading needles, often starting at the top of larger trees, may be the first evidence that is observed. Needles will change from a dark green to pale yellow and finally to a rusty red color.

Note

Clear-colored sap running down a pine tree is NOT from a bark beetle infestation.

Protection Measures – What You Can Do

Inspect your trees

Periodically inspect your trees in order to detect decline early. Take note of any signs of drought stress, bark beetles, heavy dwarf mistletoe, construction damage, or other damaging agents. This information will be extremely helpful when reaching out to any of the Arizona Bark Beetle Task Force members.

Water

Watering individual trees can help increase the natural resin defense system of pitching out attacking beetles. Deep-water to at least 2 feet deep at the dripline (below the outer edge of tree branches) once each month, especially in May, June, and October. Due to changing weather patterns, watering may be needed any month of the year. See [UA Extension brochure AZ1298-2017](#) for more information on watering techniques.

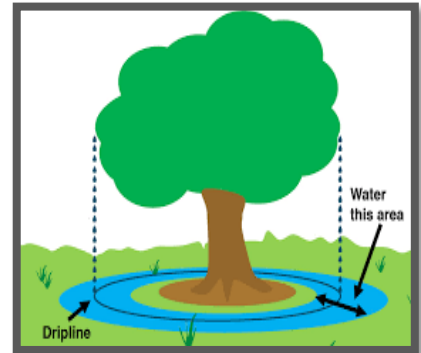


Image credit: U of Idaho Extension

Apply insecticides

Annual applications of preventative insecticides can be applied by a professional. Sprays with Carbaryl-, bifenthrin- and permethrin-based insecticides registered for bark beetles are the only products demonstrated by research to be effective against bark beetles in Arizona. The combination of injectable emamectin benzoate and propiconazole is effective when the soil surrounding the tree is moist and this may be enhanced through irrigation. These insecticides are preventative and NOT effective on trees already colonized by bark beetles, and should be applied in the early spring before beetles start to fly. Because verbenone pheromone packets have not been adequately tested in Arizona, their use is not currently recommended to protect ponderosa pine trees. See [UA Extension brochure AZ1380-2011](#) for more information on the use of insecticides.

Remove trees

Selectively remove trees on your property to increase vigor and overall health of remaining trees. Tree removals and selective thinning is best done when the beetles are inactive, which generally occurs in the Fall (about October to December).

Remove debris

Immediately and properly remove fresh pine debris (slash) and chipped material to eliminate the attraction and spread of bark beetle activity.