

Forest Disease Management Notes

Red Ring Rot

Red ring rot, caused by the fungus *Phellinus (Fomes) pini*, is the most common stem decay of conifers in the Pacific Northwest. Enormous volumes of wood are decayed by this fungus. It is most common in old growth stands. In addition to causing stem decay, it can form sunken cankers on true firs, especially in southern Oregon.

Hosts: Douglas-fir, pines, larch, hemlocks, and true firs.

Recognition: Hoof-shaped to bracket-like perennial conks on stems, often issuing from knots or branch stubs; upper surface of conk is rough, dull gray to brownish black with concentric furrows paralleling the lighter colored margin; lower surface is a rich brown color with small circular to large sinuous tube openings; context is a distinctive cinnamon color and is punky; on true firs, conks appear on sunken areas around the main stem. Early decay appears as a red to purple discoloration of the heartwood; advanced decay appears as numerous small pockets (1 mm x 2 mm) containing white mycelium (this kind of rot is commonly called “white speck”) decay often occurs in concentric bands or rings; “punk knots” are an indication of infection on some trees.

Disease Spread: The disease is spread by wind-carried spores that germinate on wounds and branch stubs.

Management: Salvage infected trees before excessive merchantability is lost; increasing amounts of decay in trees are indicated by larger size and number of conks and wider spacing between them; maintain young, vigorous stands; avoid scarring trees; in recreation areas, check all trees with conks and remove those with amounts of rot sufficient to render them hazardous.

May be Confused With: Brown crumbly rot (*F. pinicola*).



“Punk knot” caused by *Phellinus pini*



Phellinus pini rot on fir



Phellinus pini
var. *cancriformans* conks
on white fir



Phellinus pini conks