

Ponderosa Pine

(Pinus ponderosa)











Large native pine common across Colorado’s foothills and dry landscapes. Very drought-adapted but vulnerable to **mountain pine beetle**, **pine sawfly**, **needle cast**, and **environmental stress** in urban settings.



Seasonal Pest & Disease Calendar

Icons: 🌸 Spring | ☀️ Summer | 🍂 Fall | ❄️ Winter

Problem	Type	Active Season	Icons
Mountain pine beetle (MPB)	Insect/borer	Summer	☀️
Ips (engraver) beetles	Insect/borer	Spring–Fall	🌸☀️🍂

<u>Problem</u>	<u>Type</u>	<u>Active Season</u>	<u>Icons</u>
Pine sawfly	Insect/defoliator	Spring	
Pine needle scale	Insect/scale	Spring hatch; visible year-round	 
Dothistroma needle blight	Fungus	Spring infection; visible Summer–Fall	  
Lophodermella needle cast	Fungus	Spring infection; symptoms Summer	 
Environmental drought stress	Abiotic	Summer–Fall	 

Pest & Disease Guide (Homeowner-Friendly)

<u>Problem</u>	<u>Common Symptoms</u>	<u>Treatment & Management</u>
Mountain Pine Beetle (MPB)	<ul style="list-style-type: none"> • Entire tree turns reddish-brown within months • Boring dust at bark crevices • Pitch tubes (resin globs) 	<ul style="list-style-type: none"> • Preventive trunk sprays (pros only) • Remove infested trees immediately • Maintain watering to reduce stress—MPB targets weakened trees
Ips (Engraver) Beetles	<ul style="list-style-type: none"> • Top-down dieback • Fine boring dust • Small, round exit holes 	<ul style="list-style-type: none"> • Preventive trunk sprays during active season • Avoid pruning April–Sept to reduce attraction • Deep watering during drought

<u>Problem</u>	<u>Common Symptoms</u>	<u>Treatment & Management</u>
Pine Sawfly	<ul style="list-style-type: none"> • Clusters of caterpillar-like larvae • Needles stripped to the base • Defoliation on lower branches first 	<ul style="list-style-type: none"> • Remove larvae by hand when feasible • Professional spray if heavily infested • Encourage natural predators
Pine Needle Scale	<ul style="list-style-type: none"> • White, oval scale layers on needles • Yellowing and thinning foliage • Reduced vigor over time 	<ul style="list-style-type: none"> • Horticultural oil in late winter/early spring • Target crawler stage in spring (pros) • Improve tree vigor through watering/mulching
Dothistroma Needle Blight	<ul style="list-style-type: none"> • Brown bands with yellow halos on needles • Lower branches thin first • Red/brown needle tips 	<ul style="list-style-type: none"> • Fungicide in spring (pros) • Increase spacing/airflow • Avoid overhead irrigation • Rake and remove infected needles
Lophodermella Needle Cast	<ul style="list-style-type: none"> • Needles turn reddish-brown • Uniform shedding of previous-year needles • More common at higher elevations 	<ul style="list-style-type: none"> • Often cosmetic • Fungicide rarely needed except in severe cases • Improve airflow and water during drought
Environmental Drought Stress	<ul style="list-style-type: none"> • Needle tip browning • Thinning crown • Premature needle drop in late summer 	<ul style="list-style-type: none"> • Deep water every 3–4 weeks in summer • Maintain 2–4" mulch ring • Protect root zone from compaction

When to Worry vs. When It's Cosmetic

● When to Worry (action recommended)

- Entire tree crown turns red or brown
- Boring dust, pitch tubes, or visible exit holes
- Rapid dieback from the top downward
- Several branches die in a single season

- Heavy defoliation by sawflies

These signs suggest **ips beetles, MPB, or serious root stress**.

● **Mostly Cosmetic (monitor only)**

- Shedding of older, inner needles in fall (normal)
- Light needle cast without branch dieback
- Minor scale presence on a few branches
- Small patches of tip browning in drought

These typically resolve with improved watering and normal seasonal cycling.