

White Fir

(*Abies concolor*)

A popular ornamental conifer in Colorado valued for its soft blue-green needles and strong resistance to many pests. While generally hardy, White Fir is susceptible to **bark beetles**, **twig beetles**, **needle cast diseases**, and **root stress in compacted or poorly drained soils**.



Seasonal Pest & Disease Calendar

Icons:  Spring |  Summer |  Fall |  Winter

<u>Problem</u>	<u>Type</u>	<u>Active Season</u>	<u>Icons</u>
Fir engraver beetle (<i>Scolytus ventralis</i>)	Insect/borer	Spring–Summer	 
Fir twig beetle	Insect/borer	Spring–Fall	  
Adelgids (balsam woolly adelgid, cooley spruce gall adelgid)	Insect	Spring–Summer	 
Needle cast diseases (various)	Fungus	Spring infection; symptoms Summer–Fall	  

<u>Problem</u>	<u>Type</u>	<u>Active Season</u>	<u>Icons</u>
Cytospora canker	Fungus	Year-round, visible mostly Spring–Fall	  
Root stress / drought decline	Abiotic	Summer–Fall	 

Pest & Disease Guide (Homeowner-Friendly)

<u>Problem</u>	<u>Common Symptoms</u>	<u>Treatment & Management</u>
Fir Engraver Beetle	<ul style="list-style-type: none"> • Top-down dieback • Boring dust in bark crevices • Pitch tubes on trunk • Rapid decline in drought years 	<ul style="list-style-type: none"> • Preventive trunk sprays (pros only) • Deep/infrequent watering during summer • Remove severely infested trees promptly
Fir Twig Beetle	<ul style="list-style-type: none"> • Tip dieback on scattered branches • Small entrance/exit holes • Sparse foliage over time 	<ul style="list-style-type: none"> • Reduce stress with watering & mulch • Prune out dead tips • Preventive sprays in high-pressure areas
Adelgids (Woolly or Gall Forming)	<ul style="list-style-type: none"> • Cottony white masses on needles or bark • Stunted or distorted new growth • Yellowing patches in canopy 	<ul style="list-style-type: none"> • Treat in Spring with horticultural oil or systemic products (pros for large trees) • Improve airflow; avoid overcrowding • Often cosmetic when populations are low
Needle Cast (various fungal species)	<ul style="list-style-type: none"> • Yellowing needles turning brown • Interior thinning first • Small fruiting dots on needles 	<ul style="list-style-type: none"> • Fungicide in spring for high-value trees (pros) • Increase airflow by pruning nearby vegetation • Avoid overhead irrigation
Cytospora Canker	<ul style="list-style-type: none"> • Resin bleeding from branches • Entire branches die back • Often begins on lower limbs 	<ul style="list-style-type: none"> • Prune out infected branches back to the collar

<u>Problem</u>	<u>Common Symptoms</u>	<u>Treatment & Management</u>
Root Stress / Drought Decline	<ul style="list-style-type: none"> • Needle tip browning • Thinning canopy • Premature needle shed 	<ul style="list-style-type: none"> • Sanitize pruning tools • Improve overall vigor; no chemical cure • Deep water every 3–4 weeks in summer • Maintain 2–4" mulch ring • Avoid compacting soil or changing grade

When to Worry vs. When It's Cosmetic

● When to Worry (action recommended)

- Rapid top-down dieback (possible engraver beetles)
- Resin bleeding from multiple limbs
- Widespread yellowing of new growth
- Boring dust or visible exit holes
- Branches dying across entire canopy

These signs indicate **serious beetle attack or root decline** requiring professional evaluation.

● Mostly Cosmetic (monitor only)

- Light adelgid presence without dieback
- Small patches of needle cast in wet years
- Minor interior needle drop (normal for firs)
- Mild tip browning during heat waves

Often improves with **proper watering and less soil compaction**.