

## Gambel Oak

(*Quercus gambelii* — also called Scrub Oak or Rocky Mountain Oak)

A hardy, drought-tolerant native oak found throughout Colorado's foothills and mountains. Gambel Oak commonly grows in **clonal thickets** and is extremely resilient, but it can experience issues with **oak leaf blister**, **leaf spot**, **gall wasps**, **Kermes scale**, **borers**, and **dieback** from drought or fire suppression changes.



### Seasonal Pest & Disease Calendar

Icons:  Spring |  Summer |  Fall |  Winter

<u>Problem</u>	<u>Type</u>	<u>Active Season</u>	<u>Icons</u>
Gall wasps	Insect	Spring–Summer	 
Kermes scale	Insect/scale	Spring crawlers; visible year-round	 
Leaf miners	Insect	Summer	

<u>Problem</u>	<u>Type</u>	<u>Active Season</u>	<u>Icons</u>
<b>Two-lined chestnut borer (rare)</b>	Insect/borer	Summer	
<b>Oak leaf blaster</b>	Fungus	Spring	
<b>Anthracnose / leaf spot</b>	Fungus	Spring–Summer	 
<b>Drought stress / root decline</b>	Abiotic	Summer–Fall	 

### **Pest & Disease Guide (Homeowner-Friendly)**

<u>Problem</u>	<u>Common Symptoms</u>	<u>Treatment &amp; Management</u>
<b>Gall Wasps</b>	<ul style="list-style-type: none"> <li>• Round, spiny, or irregular galls on leaves &amp; stems</li> <li>• Cosmetic leaf distortion</li> <li>• Early leaf drop in heavy years</li> </ul>	<ul style="list-style-type: none"> <li>• No treatment needed in most cases</li> <li>• Rake and remove fallen leaves</li> <li>• Maintain vigor with occasional deep watering</li> </ul>
<b>Kermes Scale</b>	<ul style="list-style-type: none"> <li>• Sticky honeydew &amp; sooty mold</li> <li>• Round brown bumps on twigs</li> <li>• Tip dieback if severe</li> </ul>	<ul style="list-style-type: none"> <li>• Treat crawler stage in late spring (pros)</li> <li>• Horticultural oil in late winter</li> <li>• Prune heavily infested twigs</li> </ul>
<b>Leaf Miners</b>	<ul style="list-style-type: none"> <li>• Tunnels or blotches in leaves</li> <li>• Browning patches</li> <li>• Leaves may look papery</li> </ul>	<ul style="list-style-type: none"> <li>• Usually cosmetic</li> <li>• Remove infested leaves</li> <li>• Improve tree vigor</li> </ul>

<u>Problem</u>	<u>Common Symptoms</u>	<u>Treatment &amp; Management</u>
<b>Two-Lined Chestnut Borer (Rare on Gambel)</b>	<ul style="list-style-type: none"> <li>• Canopy thinning from upper crown</li> <li>• D-shaped exit holes</li> <li>• Progressive dieback</li> </ul>	<ul style="list-style-type: none"> <li>• Deep water during drought</li> <li>• Reduce stress (borers target weakened trees)</li> <li>• Preventive bark sprays if confirmed nearby</li> </ul>
<b>Oak Leaf Blister</b>	<ul style="list-style-type: none"> <li>• Raised, bubble-like blisters</li> <li>• Distorted leaves in spring</li> <li>• Early leaf drop possible</li> </ul>	<ul style="list-style-type: none"> <li>• Typically cosmetic</li> <li>• Improve airflow</li> <li>• Fungicide only in severe, repeated years</li> </ul>
<b>Anthracnose / Leaf Spot</b>	<ul style="list-style-type: none"> <li>• Brown/black blotches</li> <li>• Early defoliation in wet springs</li> <li>• Twigs may die back slightly</li> </ul>	<ul style="list-style-type: none"> <li>• Rake leaves</li> <li>• Improve airflow; avoid overhead irrigation</li> <li>• Fungicide rarely needed</li> </ul>
<b>Drought Stress / Root Decline</b>	<ul style="list-style-type: none"> <li>• Leaf scorch</li> <li>• Sparse canopy</li> <li>• Thinning or dieback during dry years</li> </ul>	<ul style="list-style-type: none"> <li>• Deep water every 3–4 weeks in summer</li> <li>• Maintain mulch ring</li> <li>• Avoid soil compaction and grading changes</li> </ul>

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## When to Worry vs. When It's Cosmetic

### ● When to Worry (action recommended)

- Entire stems or sections of thicket dying back
- Heavy scale buildup with sooty mold and twig death
- Significant top-down dieback (possible borers)

- Rapid thinning during prolonged drought
- Structural instability in older single-stem specimens

Most serious issues arise from **drought stress**, which weakens Gambel Oak and allows pests to take hold.

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 **Mostly Cosmetic (monitor only)**

- Galls on leaves or twigs (very common)
- Light leaf miner tunneling
- Minor leaf blister in wet springs
- Early leaf color change in hot/dry years
- Occasional tip dieback

Gambel Oak naturally sheds and regenerates foliage vigorously; most symptoms resolve with **seasonal cycles and basic watering**.