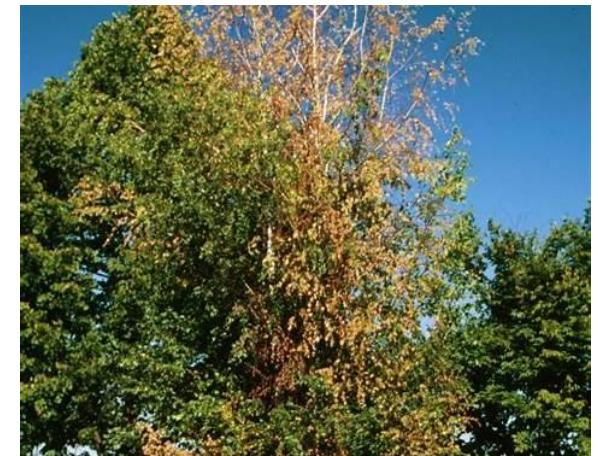


White Birch

(*Betula pendula* — European White Birch / Silver Birch; also applies to other white-bark birches)

White Birch is valued for its elegant white bark and fine-textured leaves, but it **struggles in Colorado's hot, dry, alkaline conditions**. It is highly susceptible to **bronze birch borer**, **leaf miners**, **chlorosis**, and **drought stress**. Of all birches, White Birch is **one of the least adapted** to the Front Range climate.



Seasonal Pest & Disease Calendar

Icons:  Spring |  Summer |  Fall |  Winter

| <u>Problem</u> | <u>Type</u> | <u>Active Season</u> | <u>Icons</u> |
|---|--------------|----------------------|---|
| Bronze birch borer (major issue) | Insect/borer | Summer |  |
| Birch leaf miner | Insect | Spring–Summer |   |
| Aphids | Insect | Spring–Fall |    |

| <u>Problem</u> | <u>Type</u> | <u>Active Season</u> | <u>Icons</u> |
|----------------------------------|-------------|----------------------|---|
| Chlorosis (alkaline soil) | Abiotic | Spring–Summer |   |
| Drought/heat stress | Abiotic | Summer–Fall |   |
| Canker diseases | Fungus | Spring–Fall |    |
| Spider mites | Mite | Summer (hot/dry) |  |

Pest & Disease Guide (Homeowner-Friendly)

| <u>Problem</u> | <u>Common Symptoms</u> | <u>Treatment & Management</u> |
|---|---|---|
| Bronze Birch Borer (Most Serious Threat) | <ul style="list-style-type: none"> • Thinning canopy starting at top • D-shaped exit holes in bark • Dieback progressing downward • Bark splits or ridges | <ul style="list-style-type: none"> • Professional trunk sprays in early summer • Deep, consistent watering (critical!) • Remove heavily infested trees—borer spreads quickly |
| Birch Leaf Miner | <ul style="list-style-type: none"> • Brown blotches inside leaves • Papery, translucent leaf spots • Early leaf drop | <ul style="list-style-type: none"> • Usually cosmetic • Rake leaves to reduce next year's population • Pro systemic treatment if severe |
| Aphids | <ul style="list-style-type: none"> • Sticky honeydew • Sooty mold on leaves and surfaces • Leaf curling | <ul style="list-style-type: none"> • Hose-rinse foliage • Encourage lady beetles • Systemic treatments if infestations are heavy |

| <u>Problem</u> | <u>Common Symptoms</u> | <u>Treatment & Management</u> |
|--------------------------------------|--|--|
| Chlorosis (Very Common in CO) | <ul style="list-style-type: none"> Yellow foliage with green veins Poor growth & twig dieback Worsens in alkaline soils | <ul style="list-style-type: none"> Iron injections (most effective) Soil acidifying amendments Reduce overwatering & improve aeration |
| Drought / Heat Stress | <ul style="list-style-type: none"> Leaf scorch Early yellowing and leaf drop Progressive dieback | <ul style="list-style-type: none"> Deep watering every 1–2 weeks Maintain mulch ring Avoid planting in full sun, reflected heat, or dry sites |
| Canker Diseases | <ul style="list-style-type: none"> Sunken bark patches Branch dieback Oozing sap | <ul style="list-style-type: none"> Prune infected limbs Sanitize tools Improve tree vigor—no chemical cure |
| Spider Mites | <ul style="list-style-type: none"> Stippled or bronzed leaves Fine webbing Dry, dusty leaf surface | <ul style="list-style-type: none"> Hose-rinse foliage Increase watering frequency Miticide if severe |

When to Worry vs. When It's Cosmetic

● When to Worry (action recommended)

- Top-down canopy thinning (classic **bronze birch borer**)
- D-shaped exit holes along trunk or branches
- Severe chlorosis leading to dieback
- Major twig dieback each season
- Repeated mite outbreaks causing bronzing
- Canker lesions expanding along trunk

White Birch decline is very common in Colorado—many trees fail due to **heat, alkaline soils, and drought stress**.

● **Mostly Cosmetic (monitor only)**

- Light leaf miner blotches
- Small amounts of honeydew from aphids
- Minor scorch during hot spells
- Early fall color in dry years
- Occasional leaf spotting

These typically improve with **proper watering and seasonal recovery**.