

# YARD & GARDEN REPORT

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## Dead or alive?

Our landscapes are recovering from the harsh winter. Most trees survived but some have yet to show any signs of life. You may be wondering: Is this tree ever going to wake up? Or to be blunt: Is the tree alive?

Scratch it.

Use your thumbnail or a knife to scratch a small spot of the trunk or branch (Fig. 1). Look for moist, green tissue just beneath the bark.

If you see green tissue, the plant has life in it. This green tissue is the cambium layer, where new rings and future growth is initiated.

In this case, be patient. Let's wait to see if a late flush of buds will open (Fig. 3). Maybe the tree will wake up, maybe it won't.

If you see brown tissue only, the branch is dead. Dead wood is generally dry and brittle, too. Trim out the dead wood.



Fig. 1. Two poplars with buds. The branch at left is dead. The bark is becoming dry and brittle. The branch at right has moist, living green tissue under the bark. This branch has hope.

Sometimes the buds in trees will open in spring, but then shrivel and die within a couple weeks. In this case, the tree had enough food in reserve to open the bud, but the

veins of the tree were destroyed over winter. The damaged veins could no longer bring new nutrients or water to the buds, which then collapse and die.

It reminds me of when a chicken gets its head chopped off. This headless chicken runs around the farmyard and appears to have life in it, but does not. It collapses and dies.



Fig. 2. Some trees are slow to bud out.



Fig. 3. A late flush of buds.

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## Camp Caterpillar

Caterpillars are setting up silken tents all across the state (Fig. 4). These are the nests of tent caterpillars (*Malacosoma* spp.) (Figs. 5–7). The tents are most often found in chokecherry, apple, crabapple, cherry and plum trees, but may be found in almost any leafy tree.

The caterpillars are predominantly dark in color. They have white line(s) running down the center of the body, flanked by blue markings along the sides.

The caterpillars leave the nest during sunny days and will defoliate branches. Severe defoliation will weaken trees, especially young trees.

The tents can be removed using a forked stick. Choose a cool, rainy day when the caterpillars will be inside the tent.

The caterpillars can be controlled with insecticides. *Bacillus thuringiensis* (Dipel, Thuricide) will cause stomach poisoning of young caterpillars. Spray the leaves near the tent. The caterpillars will ingest the bacteria and die in a few days. This bacterial spray will only kill caterpillars; it is harmless to people, honeybees and wildlife.

Chemical insecticides such as carbaryl (Sevin), acephate (Orthene) and malathion will kill the caterpillars immediately. Spray the caterpillars, tents and surrounding two feet of area around the tents. This option is more effective than bacterial sprays once the caterpillars reach their full size (2.0 inches).

Some gardeners enjoy using propane torches to incinerate the pests inside the tents. This is not recommended since it will scorch the tree, in many cases causing more harm to the tree than the caterpillars. Likewise, pruning the tent-covered



Fig. 4. Tent caterpillars defoliating a tree branch.



Fig. 5–7. Tent caterpillars of North Dakota. Left: prairie tent caterpillars (*M. californicum* ssp. *lutescens*); top right: Eastern tent caterpillar (*M. americanum*) and forest tent caterpillar (*M. disstria*).

branches may cause more harm and defoliation than the pests would.

Left alone, the caterpillars will stop eating after a few weeks and

then rest inside a yellowish cocoon on tree trunks, fences or other support structures. The adults will emerge later this summer and lay eggs for next spring's hatch.



## Birch borers emerging

Bronze birch borers (*Agrilus anxius*) are active. The beetles are emerging out of trees, looking to mate and then lay eggs into stressed trees.

The larvae from these eggs will tunnel inside the tree, destroying its veins. This damage will prevent water from getting to the branch tips, causing dieback starting from the top of the tree (Fig. 10).

A close inspection of the tree can detect D-shaped holes which the adults create when they burrow out of the tree (Fig. 8). The trunks of infested birch trees develop "muscles," which are ridges created by the tunneling larvae (Fig. 9).

Borers are attracted to trees under heat and drought stress. Select a heat-resistant variety such as 'Whitespire' or 'Prairie Dream'. Plant the tree in a cool location (a north or east facing location is ideal). Place shredded bark mulch around the tree to conserve moisture. Understory plantings can also promote a cool environment for the tree. Irrigate your birch during dry spells.

Trees can be saved if treated early. If at least two-thirds of the tree is healthy, it has a viable enough vascular system to move insecticides throughout the tree. A soil drench of imidacloprid is used.



## Ash blight alert

Here we go again. Another cool, wet spring is leading to an outbreak of ash anthracnose.

The disease usually starts as brown blotches along leaf margins (Fig. 11). Lesions often expand to the midrib. Leaves curl and may drop over summer.

The shaded, inner portions of the canopy are most severely affected. The top of the tree is healthiest since it gets more sun and less humidity.

Anthrachnose will not kill a tree the first year of its infection, but trees defoliated for several consecutive years can be severely weakened. This makes them more susceptible to death from other factors (borers, winter, flooding or drought).

Monitor your trees for the first signs of the disease. Young trees can be protected with sprays of chlorothalonil (Daconil, Bravo) or copper sulfate.

It is not practical nor is it necessary to spray a large tree. You cannot get thorough coverage on the foliage.

If a large tree suffers this year, focus on reducing the presence of



Fig. 11. Anthracnose causes leaves to curl and drop.

disease spores in future years. Rake fallen leaves and prune out unhealthy branches. While you are at it, prune the tree to get more air movement within the canopy.

A light fertilization can be helpful. Apply 1–3 pounds of actual nitrogen per 1000 square feet of area below the canopy. This would be comparable to 4–12 pounds of a lawn fertilizer. Lawns that are regularly fertilized already provide adequate nutrients to ash trees.

This pathogen will not attack other types of trees.



Figs. 8–10. Bronze birch borer adults are emerging out of trees. They will lay eggs that hatch into larvae that tunnel beneath the bark. This tunnelling destroys the tree's veins and causes trees to die.

## Mowing lawns

Our spring has been cool and moist—perfect conditions for your lawn. Let's mow the lawn properly so we can keep it healthy and growing well.

### **Cut your lawn TALL and let the grass clippings FALL.**

A tall turf will:

- shade the soil and protect it from the heat of summer;
- develop a deep root system; and
- reduce weed populations since the tall grass blades smother emerging weed seedlings.

Cut your lawn between 2.5 and 3.5 inches. Tall heights are especially beneficial during summer and for low-maintenance conditions.

Follow the “one-third rule.” **Avoid removing more than one-third of the grass blade at any time.** Cutting too much of the grass will slow its regrowth. It will expose the soil more, which leads to drought stress and the establishment of more weeds. Using this “one-third rule” as a guide, if you kept your lawn at 3 inches, you would cut it when it is no more than 4.5 inches tall.

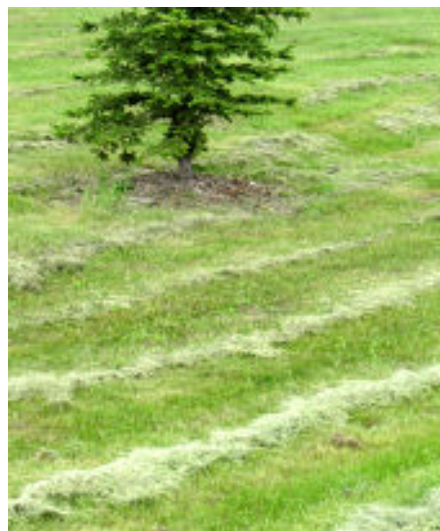
Thus, the timing for mowing your lawn is dependent on its rate of growth. You may need to mow every 5 days in spring, but every 5 weeks in summer.

**You don't need to collect clippings.** Your lawn wants those clippings. The clippings will shade the soil and conserve moisture. The clippings will recycle nutrients to the soil—it is like getting a free fertilization every year.

If you mow regularly, clippings will not create a thatch problem. Clippings are mainly water and they will quickly decompose.



*Fig. 12. Mowing is one of the most important factors in maintaining a healthy lawn.*



*Fig. 13. Mow frequently when the turf is actively growing. Clumps smother the lawn and contribute to thatch.*

The exception is when your lawn gets neglected and grows very tall. Excessively tall grass when mowed can gather in clumps on the lawn (Fig. 13). This can smother the turf. Tall blades can get more fibrous and become slower to decompose—this can lead to an accumulation of thatch. In these cases it is wise to collect these clippings.

**Mow when grass is dry.** This will reduce clumping and help to mulch the grass blades finer.



*Fig. 14. Dull mower blades shred the grass tips. This leads to water loss and greater susceptibility to disease.*

**Use a sharp mower blade.** A sharp blade will make a clean cut. Dull blades will tear the tips of leaf blades (Fig. 14). The damaged leaf blades will develop a brown tip. Frayed blades lose water more quickly and become more susceptible to diseases. Depending on how much turf you cut, you may need to sharpen or replace your blade every year.



## Review of problems addressed in previous issues

### TREES AND SHRUBS



#### F15. Winter kill on evergreens

Focus on branch tips. If new shoots are emerging (as shown), the plant can outgrow the problem. If not, the branch may be dead and need to be removed.

### VEGETABLES



#### F16. Cold soil; rotting seeds

Soil temps remain cooler than desired. Seeds of melon, cucumber, and supersweet corn are very sensitive. Be patient. Poor stands may occur.

### LAWNS



#### F17. Fertilizing lawns

If you did not fertilize earlier this spring, now is a great time. The turf is actively growing and we want it to be healthy going into summer.

### INSECTS



#### F18. Ants in the kitchen

Ants invade homes in spring since outdoor food sources are limited. Seal cracks along doors and windows. A 3-foot-swath of insecticide may be sprayed along the home's perimeter.



#### F19. Flying June beetles

June beetles are flying. They will mate and lay eggs that hatch into grubs that can damage lawns. June beetles are attracted to light. Reduce populations in your yard by turning off yard lights.

### WILDLIFE



#### F20. Woodpecker damage

Woodpeckers damage trees as they search for food and mark their territory in spring. Wrap damaged areas with burlap or hardware cloth to deter them. Pinwheels or pie tins may repel them.

### Credits

Sources:

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