

Bark Damage on Swamp White and Bur Oaks in Northeastern Illinois

A Report on a New Plant Health Issue

Since February 2024, there have been several reports of unusual bark damage (Figure 1 and 2) on swamp white (*Quercus bicolor*) and bur oaks (*Q. macrocarpa*) in Northeastern Illinois. To date, it has been reported in Arlington Heights, Berwyn, Chicago, Riverside, Skokie, Westmont, and Wheaton on trees between 2-8 inches in diameter.

Symptoms: The outer bark of the trees has been pulled up in strips or pulled off of the tree. This bark peeling does not extend into the cork cambium layer. In the areas where the bark was peeled and removed, there are pits in the cork cambium layer (Figure 3). The pits look like someone took a tiny melon-baller and scooped out part of the cork cambium. Inside the holes are clean, they are not discolored, and no fungi are associated with them.



Figure 2. Bark damage on swamp white oak.
Photo credit: Jeff Brink



Figure 1. Bark damage on swamp white oak. Photo credit: Jeff Brink

Small amounts of beetle activity have been observed associated with the bark damage. The beetle holes and galleries are 1-1.2 mm in diameter and do not go into the xylem (wood).

The damage has been observed from the soil line through the canopy until branches are smaller than ½ inch in diameter (Figure 4).

Currently, the affected trees have not shown symptoms of decline and dieback. We will continue to give reports on these trees as the season progresses.

New information:

Ornithologists suspect that the bark damage and pitting are related to bird activity, but were unsure of the bird or beetle species. There are also suspicions that the damage is caused by wasps or other insects.

Next steps:

The next phase of this investigation will include identifying associated insects and birds using netting and potentially wildlife cameras.



Figure 3. Pits found under bark damage at 6.6x magnification.
Photo credit: Stephanie Adams

Reporting:

To report finding symptoms, email Fredric Miller (fmento84@gmail.com), Stephanie Adams (sadams@mortonarb.org), or The Morton Arboretum Plant Clinic (plantclinic@mortonarb.org)



Figure 4. Bark damage on swamp white oak. Photo credit: Jeff Brink

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March 19, 2024