

Castlewood Park

Lexington, Kentucky

234 trees
48 species



201 Castlewood Dr, Lexington, KY 40505

- Paved sidewalks
- Bus stops for #7, #9, & #59 within 0.5 miles of the park
- Nearby bike route
- Seedleaf community orchard

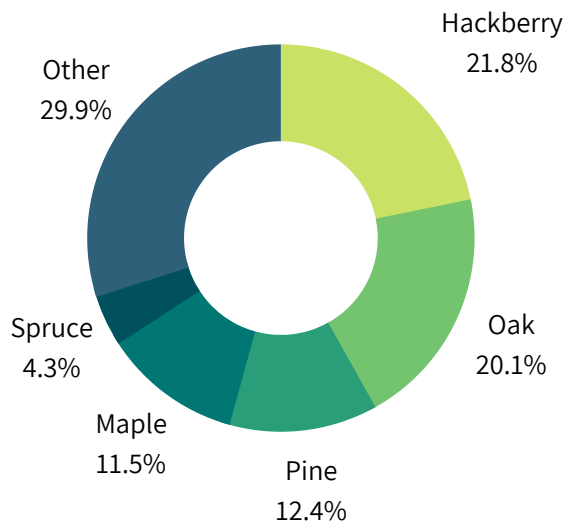
Background

In June 2022, the University of Kentucky Urban Forest Initiative (UFI) team and community volunteers mapped trees in Castlewood Park as part of our Climate Adaptation Project. This is a summary of our findings.

About the Trees

Castlewood Park is a large park in the Castlewood neighborhood, featuring many large, old trees. The most common trees in the park are hackberry, oak, and pine. The tree canopy is in fair overall health, and would benefit from new plantings of underrepresented species.

Castlewood Park Top 5 Tree Genera



Why Trees?

Urban forests are vital resources for **climate change mitigation** (the slowing down of climate change through carbon capture, emissions reduction, etc.) and **adaptation** (the ability of our cities to withstand the impacts of climate change). Castlewood Park provides **32.7 acres of trees and greenspace** for the residents of Lexington's **1st District**. As such, it is an important part of Lexington's urban forest, providing numerous **ecosystem services** to the city and helping to prepare Lexington for climate change.

Overall Health
Fair

Species Diversity
Fair

Size Diversity
Poor

Climate Resilience
Fair

Annual tree benefits ... and growing!

179,817
gallons of stormwater captured

6,053
ounces of pollution removed

7,694
pounds of carbon sequestered

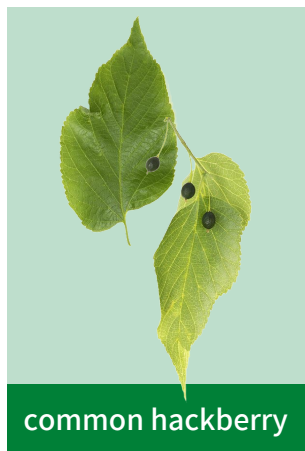
\$2,849
annual monetary benefits

Learn more about trees in your local park and what they do for you!

Most Common Species in Castlewood Park * *based on 234 trees inventoried in 2022.



white pine



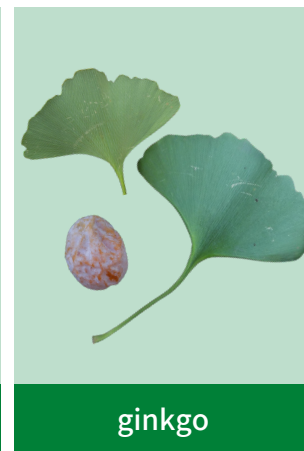
common hackberry



silver maple



bur oak



ginkgo

Need help identifying trees? Try reaching out to your local extension agent! Many great resources can also be found at https://forestry.ca.uky.edu/tree_id. Photos courtesy of Janet James and missouribotanicalgarden.org.



Considerations for Castlewood Park

- Castlewood Park trees are in **fair health**, providing many tree benefits to the community such as shade, cooling, and carbon sequestration. The **most common health issue** was **invasive species** on the trees.
- With white pine representing more than 20% of the trees in the park, Castlewood Park has **fair species diversity**, and could use **more diverse species** to **protect the canopy** from species-specific pathogens and other threats.
- Castlewood Park has **poor size diversity**, and could benefit from **more small trees**, especially young trees of species capable of growing into larger sizes.
- As the **climate changes**, some tree species may no longer thrive here in Kentucky, including **40% of trees in Castlewood Park**. Most of the park's trees, such as common hackberry, are not vulnerable to these changes, but many, such as white pine, are more sensitive to changing climate, making the park **mildly vulnerable**.
- Note that trees in the Bring Back the Bluegrass sites were not inventoried.



Managing for Climate Resilience in Castlewood Park

- Continue to practice proper **tree care**, including **watering**, **pruning**, and **mulching** regularly. Visit this website to learn more about good tree care practices and resources: <https://tree-health.ca.uky.edu/tree-care>
- Plant **diverse tree species that can grow to large tree sizes** to improve tree canopy **regeneration** and **resilience**. As older trees in the park inevitably die, younger trees will grow up to take their place.
- Plant **climate resilient tree species** in appropriate sites that can **meet the needs of that species** to build a tree canopy capable of **withstanding changing climate**. Check out the climate resilience of trees you are interested in planting using this website: <https://www.fs.usda.gov/ccrc/tool/climate-change-tree-atlas>

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