

LETTER: White's Woods has diversity of tree species

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The White's Woods Nature Center has 28 different tree species. Biologist/forest ecologist Dr. Marion Holmes presented her Fall 2022 Tree Species Inventory at a Friends of White's Woods webinar on May 25. Dr. Holmes reported that the White's Woods forest reflects the tree species diversity that would be typical, or expected, in a forest of this age and in this location (in the Allegheny Plateau).

Tree species diversity is also affected by topographical variables: Ridge tops, valleys and steep slopes each host different tree communities — and White's Woods has all three.

Further, slope characteristics, including the direction the slope is facing, also have an impact on the tree species that are likely to thrive there. White's Woods has slopes that face in every direction.

Dr. Holmes studied the woods in a variety of ways, including review of 80-year-old aerial photographs and on-the-ground plot surveys. The oldest section of the woods, near the Stephenson Trail, she reported, seems to have escaped, or largely escaped, logging.

Some areas of White's Woods were once cleared for agriculture, but are now covered by 80-year-old second-growth forest.

Tulip poplar and black cherry tend to "colonize" agricultural land that is left to return to forest, and that is one reason that tulip poplars would be expected to be well-represented in White's Woods.

Tulip poplars live 200-400 years, with some individual trees surviving up to 600 years. These trees, again as expected, comprise about 25 percent of the total canopy in White's Woods (though the percent varies by location, of course).

Some uncommon tree species that Dr. Holmes found in White's Woods included scarlet oak, white oak, silver maple, and big-tooth aspen.

Tree species diversity in all Pennsylvania forests is being affected by a number of variables, including soil acidity, climate change, suppression of regular wildfires, and deer-browse pressure. It is increasingly common that red maples dominate the sapling layer, or forest mid-story, all across our state, though sometimes steps can be taken to address at least some of these variables.

To listen to this webinar, go to “Events” at friendsofwhiteswoods.org.

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