Woodcrest Villa Nature Trail & Arboretum

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October 2024 Newsletter

Color PDF of Newsletter

Woodcrest Villa Arboretum is Dedicated To Those Recognized with Trees

October Is Fall Foliage Time - Some Leaves Are Turning Now



Top left: Green Ash (near Hummingbird) are showing a vibrant yellow. The color looks good and is about right on time.

Lower left: Red Maple (all over campus) are very spotty. Some single leaves are turning, some branches are turning. The color varies from muddy orange to muddy red. Top right: Honey Locust (tree with very small leaves that are turning a vibrant yellow). The good color is coming about on time.

Lower right: American Dogwood (in the hedge around Bluebird) are turning about a month early. The color looks like it will be more subdued this year, but it is highly variable.

How the Heat Wave and Drought Affect Fall Foliage

This summer we had several long heat waves with warm nights and prolonged periods of drought. In general, the most brilliant fall colors in Pennsylvania's hardwood forests occur when there is a warm wet spring, favorable summer weather, and warm sunny fall days with cool nights.

The severe summer droughts caused trees to start changing color earlier than normal, which led to

a shorter fall foliage season. In some cases, trees may skip color entirely and fall before changing color. The combination of drought and heat waves can affect fall foliage in a number of ways.

Warm fall temperatures can cause leaves to drop early, before the colors have had a chance to develop, which can decrease the intensity of fall colors. The vivid colors of autumn, such as bright reds, oranges, and yellows, are produced by various pigments. In drought conditions, trees may not produce as much of the pigments responsible for vibrant hues. Fall foliage colors appear when the green of chlorophyll fades and the red and purple of anthocyanin pigments and yellow and orange of carotenoid pigments produce the fall colors

Drought causes the green to fade early, and the reds and purples are more muted so the show is early but less impressive. However, heat waves in late summer and early fall can delay the process of trees relaxing chlorophyll production, which keeps leaves greener for longer. The timing of fall colors can also be affected by other factors, such as a warm period during fall, which can cause leaves to drop early.

Prolonged heat puts stress on trees, particularly when combined with reduced rainfall. Trees experiencing heat stress may react by shutting down growth earlier than usual and losing their leaves prematurely, which reduces the overall intensity of fall colors. Leaves may fall off before they have a chance to change color.

Heat waves accompanied by warm nights (like we had) reduce the amount of red and purple pigment. The yellows and oranges are more stable, but when accompanied by heat waves the yellows and oranges may become less prominent.

Drought can lead to uneven color patterns across the forest. Some trees may show bright colors, while others, stressed by drought, might drop their leaves early or display muted tones. The result is a patchier and less consistent fall landscape.

Different tree species react differently to drought. Oaks and hickories, which are more droughtresistant, may maintain their leaves and color for longer but with more muted colors, while maples, birches, and other moisture-sensitive species are more likely to experience early leaf drop and color reduction. Overall, summer heat waves and drought can diminish the beauty and duration of Pennsylvania's fall foliage season by stressing trees and causing early leaf drop, dulling the intensity of colors, and shortening the period of peak foliage. However, the extent of the impact depends on the severity of the heat waves and drought and the resilience of individual tree species.

In conclusion, the combination of drought and heat waves will change the fall foliage differently on different species and also make the fall foliage show more varied and less vivid.

Honor/Memory Trees

Honor/Memory Trees to be Planted in Fall Since 2019, 26 trees have been planted in the Arboretum. One tree, a Black Gum, is in the Arboretum expansion area. Four more trees will be planted in the expansion area in the fall: a River Birch, a Yellowwood, a Tulip Poplar and an Okame Cherry. Requests for trees is closed for 2024. More trees may be planted next fall.

For more information contact Steve Henning at 717-735-7116 or <u>acer103@earthlink.net</u>.

Thanks For Donations

Thanks to those who donated for the Trail Crew to buy supplies for the Nature Trail & Arboretum such as wood chips for the trail, service for the tractor and new projects.

Make donations out to:

Tandem Living

with the note:

WCV Nature Trail & Arboretum Send all donations to:

David Suh, Treasurer WCV Nature Trail & Arboretum 2001 Harrisburg Pike, PH 202 Lancaster, PA 17601

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