Additional Resources



USFS Climate Change Pressures in the 21st Century: http://tinyurl.com/2r5zxpf4

USFS Climate Change Tree and Bird Atlas: https://www.fs.usda.gov/nrs/atlas/



UMD Climate Analogues:

https://fitzlab.shinyapps.io/cityapp/

University of Maryland
CENTER FOR ENVIRONMENTAL SCIENCE

5th National US Climate Assessment:

https://nca2023.globalchange.gov/chapter/front-matter/

u.s. Global Change Research Program
National Climate



CLIMATE CHANGE
RESPONSE FRAMEWORK

Climate Change Response Framework:

https://forestadaptation.org/



Helping Your Woodland Adapt:

https://extension.umd.edu/resource /helping-your-woodland-adaptchanging-climate/

Maryland Climate Change Program and Plan:

https://mde.maryland.gov/programs/air/ClimateChange/Pages/index

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14038 Blairs Valley Road, Clear Spring, MD 21722



Assessment



Wes Moore, Governor Josh Kurtz, Secretary

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individual with disability.

While you pick up your trees on April 6th, come out to the

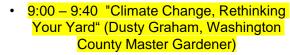
"Climate Change Adaptation" workshop at the Washington County Agricultural Education Center

(7313 Sharpsburg Pike, Keedysville, MD) 9am-12pm

Presented by the Maryland Forest Service in partnership with:

Antietam- Conococheague Watershed Alliance

Agenda includes:



- 9:45 10:35 "Climate Change and Ecological Resiliency in Appalachian Streams" (Dr. Nathaniel Hitt, USGS)
- 10:40 11:20 "Insect Pests in a Changing Climate" (Kenton Sumpter, Entomologist for Maryland Department of Agriculture)
 - 11:25 12 TBD

Workshop participants will receive:

- · BYB bag of 30 seedlings
- Reused tree shelters (limited number)
 - Expert advice on tree planting



Registration ends

April 1, 2024 Pickup April 6

https://tinyurl.com/wy8tjg5

Two ways to register!

- 1.Scan the QR code or type the URL to access the online registration form.
- 2. Email Robert Schwartz, BYB coordinator, at robertr.schwartz@maryland.gov



Maryland Forest Service Backyard Buffers Program 14038 Blairs Valley Road Clear Spring, MD 21722





Climate Change Adaptation



Creating a Landscape
That Will Make
a Difference



What are buffers? How are they affected by climate change?

In short, buffers are trees, shrubs, wildflowers, and grasses along streams and wetlands. Their roots stabilize streambanks, reduce erosion, and help slow floodwaters after a storm. The shade provided by trees cools water temperatures for coldwater species like trout to thrive. The cover and food that trees produce creates wildlife habitat and migration corridors that are becoming more important as climate change stressors increase. Climate change has exacerbated forest health threats and stressors and will continue to do so for some time. While all forests face these issues, buffer forests are particularly impacted. Increased precipitation overall but with fewer, heavier storm events will cause more flooding and sedimentation. Increased temperatures help pests overwinter. The potential effects go on.



What's in the Bag?

- A "buffer in a bag," 30 tree/shrub seedlings suited to streamsides and wet areas
- Planting guides, information on climate change, and ways to do more

A future resilience boon!

Why buffers for resilience?

Buffer forests are naturally somewhat wild places, where forest and wetland meet and mingle, providing critical wildlife habitat and water quality benefits in otherwise suburban or urban areas. Wet buffer forests are a type of riparian wetland and provide opportunities to look out at your suburban backyard and see deer, songbirds, butterflies, and more.

The climate has already started changing and it will only continue. Buffer forests are on the frontline of that change but could also be a cornerstone of resilience. We can foster that resilience on our landscapes and in our own yards. By planting native plants and restoring buffer forests you can provide resources to pollinators, fruits for humans and wildlife, clean the air and water, and help human and wildlife populations thrive; together and connected, whatever comes next.

Plant Profiles



Cherrybark Oak (Quercus pagoda)
May beight 100'

Max height: 100'

Light: Part shade to full sun

A large fast growing shade tree in the red oak family. Grows best in moist well-drained soil. The acorns are a good food source for wildlife.

Spicebusi

(Lindera benzoin)

Max height: 8'
Light: Shade to full sun

Dense growth provides excellent cover and soil
stabilization. Browsed by deer. Berries have
exceptional nutritional value for deer and most
game birds. As a spice, they are tasty to humans



Maryland DNR Nursery

Redbud

(Cercis canadensis)
Max height: 30'
Light: Full sun to light shade
Delightful pink blossoms in spring
attract pollinators while the seeds feed
chickadees and bobwhite quail. Flowers
are edible and taste like peas.



(Liquidambar stryaciflua)
Max height: 100"
Light: Full sun to light shade
An excellent streambank stabilizer with 5point star leaves. Excellent fall color.
'Gumball' seeds attract a number of bird
species.



Maryland DNR Nursery

Indigobush

(Amorpha fruticosa)
Max height: 12-18'
Light: Full sun to part shade
Excellent food and cover for quail, birds, and other wildlife. Fragrant flowers are a pollinator favorite. Fixes nitrogen into the soil.

Loblolly-Pitch Pine Hybrid

(Pinus rigida x taeda)
Mas height: 60'
Light: Full to part sun
A hybrid of the classic coastal plain wetlandedge pine. Good moisture and cold
tolerance. Provides great thermal cover.

