

MARYLAND FOREST SERVICE Annual Report



2020



MARYLAND FOREST SERVICE ANNUAL REPORT 2020



Larry Hogan, Governor
Jeannie Haddaway-Riccio, Secretary
Philip R. Hager, Assistant Secretary, Land Resources
Kenneth Jolly, 2020 Acting Director/State Forester

Maryland Forest Service
Tawes State Office Building, E-1
580 Taylor Avenue
Annapolis, MD 21401
410-260-8531
dnr.maryland.gov/forests

Additional Telephone Contact Information:
Toll free in Maryland: 877-620-8531
Out of state call: 410-260-8531
Text Telephone (TTY) users call via the Maryland Relay

*The facilities and services of the Maryland Department of Natural Resources are available to all without regard to race, color, religion, sex, sexual orientation, age, national origin, or physical or mental disability.
This document is available in alternative format upon request.*

DNR 02-071921-284
July 2021

Front photos:

Top: Tree-Mendous Maryland Coordinator Anne Gilbert, Secretary Jeannie Haddaway-Riccio, Acting State Forester Kenneth Jolly, First Lady Yumi Hogan, and Urban and Community Forestry Supervisor Marian Honecny with the winning 2020 Arbor Day poster.

Bottom: Tree planting in Allegany County

Introductory Message

2020 was a unique and challenging year! The COVID-19 pandemic created unrepresented challenges and required constant attention and flexibility to deal with the situation. As the pandemic expanded, Forest Service employees were designated as Intermittent Emergency Essential staff to carry out our agency's responsibility in emergency wildfire response, and to conduct roadside tree care evaluation to ensure public safety on Maryland's state highways. In addition, Forest Service staff performed critical functions supporting forest industry, designated an Essential Industry during the pandemic. Staff quickly adjusted to the "new normal" and carried on work functions via both telework and field work in compliance with pandemic safety protocols and ensuring public safety was paramount.

In other words, the many accomplishments highlighted in this report were achieved under very unusual circumstances, to say the least! Through it all, Forest Service staff worked with skill and determination to ensure Maryland's citizens received the best customer service possible, and the tree and woodland resources of the state were conserved and protected. Although it was a challenging year, progress continued, and much good work was achieved.



A handwritten signature in black ink that reads "Kenneth W. Jolly".

Kenneth Jolly
2020 Acting Director/
State Forester

Acknowledgements

Report edited by Francis Smith, Forest Planner; graphic design by Annalise Kenney, Publications and Design Manager. Special thanks to the Forest Service Leadership Team who contributed to the development of this report: Matt Hurd, David Gailey, Rob Feldt, George Eberling, Jack Perdue, Anne Hairston-Strang, Marian Honeczy, Dan Rider, Chris Robertson, and Shenika Dyson. The report also would not have been possible without the contributions of the many Maryland Forest Service staff members who provided photos and whose work is highlighted in the report!



Potomac-Garrett State Forest, Garrett County

Table of Contents

Forest Health	3
Landowner Assistance	4
Stewardship	6
Urban and Community Forestry	9
Forestry Boards	11
Wildland Fire	13
Partnerships	15
Outreach and Education	17
Forest Service Awards	18

2020 Overview

22,062 seedlings given away
for Backyard Buffers

814 roadside tree
permits issued due to
utility work, development,
and roadwork

1,422 acres of
wildfires suppressed
in Maryland

More than \$3M generated in timber harvest revenue

29,560 acres now covered by
Forest Stewardship Plans

500+ acres of forest harvest operation
reviews completed



IN REMEMBRANCE: TERI BATCHELOR

Forty-one years ago, none of Maryland's Department of Natural Resources Foresters were women. That all changed on June 13, 1979, when the Maryland Forest Service hired Margaret Teresa "Teri" Batchelor.

Raised in Kent County on the Eastern Shore, Teri always enjoyed the outdoors and decided early in life to pursue a career in forestry. She was undeterred by the fact that in the 1970s, forestry was almost exclusively a male-dominated profession. In high school, she was already breaking new ground when she applied to attend the DNR Forestry Career Camp and became the first female attendee.

After high school she entered the "pre-forestry" program at the University of Maryland, and after two years transferred to West Virginia University, where she earned her bachelor's degree in forestry in 1978.

Her first position with the Maryland Forest Service was managing the Baltimore County Forestry Project, supervising a staff of five Forest Rangers. After successfully working there for more than two years, Teri transferred to the Kent and Queen Anne's County Forestry Project in 1981. The transfer presented new opportunities to grow in her career, and in 1992, Teri became the Upper Shore Project Manager, expanding the geographic area under her supervision to include Caroline and Talbot counties. As Project Manager, she oversaw delivery of all Forest Service programs across this wide swath of the Eastern Shore. "Teri was outstanding at everything she did," Eastern Regional Forester Matt Hurd said.

Through her career, she planted more than 3,000 acres of new forests—1.3 million tree seedlings. In addition to that, Teri helped hundreds of private woodland owners each year achieve

their woodland management goals, whether for improving wildlife habitat or growing forest products. In total, she gave professional forestry recommendations covering over 36,000 acres of woodland in her career.

Sharing her love of forestry with all age groups and interest levels came naturally to Teri. Through local presentations and hands-on workshops she spread the knowledge that trees do more than just provide shade on a hot day, that they clean our air, protect the Chesapeake Bay and prevent soil erosion.

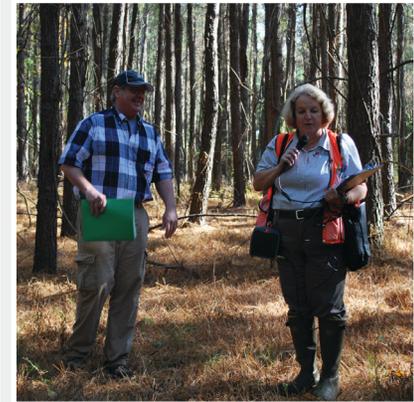
Teri made sure every Arbor Day in the Upper Shore Project felt like a holiday to school-age children, complete with a poster contest and Smokey Bear appearances. Her outreach even caught the attention of the International Society of Arboriculture, earning Teri the prestigious Gold Leaf Award for Outstanding Arbor Day Activities.

Teri worked with local officials to participate in national community tree management programs such as Tree City USA. She also served as Executive Secretary of the Kent and Queen Anne's County Forestry Boards.

"Teri was a fixture—her experience was unmatched," Kent County Forest Board Chair Andy Simmons said.

Teri's influence spread beyond the Maryland Forest Service. She was active in a number of professional forestry organizations, including serving as a Governor-appointed member of the Maryland State Board of Forester Licensing for 15 years, including 5 years as vice chair. She also served on the Maryland Forests Association Board of Governors for six years as a professional forester representative.

Teri was also a leader in the Society of American Foresters, the primary national organization

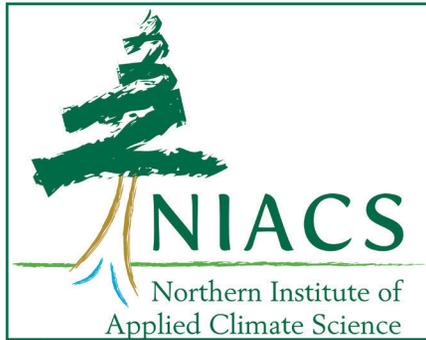


of Professional Foresters in the United States. In 1982, she was first elected to serve on the Maryland-Delaware Executive Committee and continued to serve on the Executive Committee in various leadership positions for the next 38 years. For this career of service, Teri received an honor that very few achieve when she was named a Fellow of the Society of American Foresters in June 2020. Teri is the first and only woman to ever receive this honor in Maryland.

For these amazing contributions, Teri Batchelor has forever made her mark as Maryland's "First Woman of Forestry."

Forest Health: PROTECTING OUR NATURAL RESOURCES

The list of threats to our forests is long: invasive plants, wildfires, exotic insect pests, increasing development, and the impervious surfaces and nutrient runoff that come with it. On the front lines, our dedicated staff strive to keep our forests healthy while protecting Maryland's natural resources. Some of the programs and achievements that are part of this effort are highlighted below.



90 attendees at climate change adaptation workshop

The Maryland Forest Service and the Northern Institute for Applied Climate Science hosted a climate-adapted silviculture workshop in January of 2020.

This free 2-day workshop was offered to land managers from state and local agencies, land trusts and other groups.



Deer Repellent Research Trial

White-tailed deer are a major source of wildlife damage to Maryland's forests. The Forest Service conducted a research trial with a deer scent repellent to test its effectiveness. Pairing with Frederick County on county property and a private landowner in St. Mary's County, a perimeter spray and a direct spray were applied to seedlings. More than 500 seedlings were individually inspected on a biweekly period for the entire winter season. The perimeter spray showed promise with less than a few percent browse, but further research is needed to investigate cost effectiveness.

NEWS AND NUMBERS

4,173 acres surveyed across Loch Raven and Prettyboy Reservoir
Our agency has been working together with the City of Baltimore to better prepare the city's drinking water reservoirs for a changing climate and landscape. In order to plan how to manage the future of the forests, we needed to assess what we had. The city and Forest Service worked together to collect forest inventory data on Prettyboy and Loch Raven Reservoirs. Crews surveyed and measured trees, while assessing damage from invasive plants, forest insect pests and presence of disease. This data will be analyzed and used to write a forest stewardship plan.

Disease Hunters



Disease diagnosis was a big component of forest health in 2020, with multiple landowner calls and concerns about declining oak trees. From St. Mary's County to Harford County to Kent County, staff stayed masked and distanced while informing property owners about what was impacting their oaks and providing other expert contacts. Anne Arundel County was a hotspot for oak decline, and other pest and disease diagnosis, with staff working with the Maryland Department of Environment and Anne Arundel Department of Public Works to address resident concerns. The Maryland Park Service and forestry personnel linked together on Sandy Point State Park's Oak Restoration Project, and also conducted tree disease diagnosis at the park and closer to home, at the DNR Headquarters' Tawes Garden.

Landowner Assistance: SUPPORTING OUR LAND STEWARDS

The Maryland Forest Service is an advocate for landowners and their forests, working alongside our landowner partners while educating them on how best to realize the potential of their land. No better resource exists to identify the many objectives needed to manage woodlands than the breadth of knowledge and field expertise found within the Maryland Forest Service.

560 stewardship plans written for landowners

42 new Tree Farms enrolled

NEWS AND NUMBERS

500+ acres of timber stand improvements

20,000+ acres of Tree Farms (200 farms) inspected

575 woodland assistance property tax inspections conducted over 17,344 acres

Sharing the Financial Burden of Good Land Practices

The Forest Service's landowner assistance programs include a quartet of cost-sharing and tax-abatement offerings that benefit private property owners throughout the state.

Forest Conservation Management Agreement

Thanks to legislation drafted more than 60 years ago that created the Forest Conservation and Management Program, any Maryland resident who owns more than 5 contiguous forested acres can get a forest management plan drawn up by a DNR forester while qualifying for a property tax incentive for at least 15 years.

Staff conducted 91 Forest Conservation Management Agreement inspections in 2020, totaling 432 acres.

Conservation Reserve Enhancement Program

This cooperative program involves the state and the U.S. Department of Agriculture in restoring wetlands, waterways and highly erodible land on agricultural parcels. Farmers can get paid to maximize the benefits of their land by planting poorly productive field edges and borders in an approved practice under the program to restore/protect water quality and wildlife while continuing to farm or graze "the best of the rest." **More than 140 acres of work were completed in 2020 under CREP.**

Environmental Quality Incentive Program

The Forest Service is a technical service provider in helping the Natural Resources Conservation Service implement EQIP. Farm and forestry producers are guided in improving agricultural and woodland practices while restoring their landscape and gaining environmental benefits like improved wildlife habitat.

Use of the EQIP program has increased due to National Fish and Wildlife Fund technical/financial assistance for cerulean warbler habitat restoration.

Woodland Incentive Program (WIP)

Private, non-industrial woodland owners who manage their land may apply for financial assistance through WIP. Landowners of 5 to 1,000 acres of woodland who agree to maintain forestry cost-share practices, e.g. timber stand improvement, for 15 years are eligible to apply through the Maryland Forest Service.



By Wikimedia Commons User Mdf



The sign says it all. Water. Wildlife. Recreation. Wood. The four sides of the Tree Farm sign tell the story of sustainable forestry: a thriving forestland that has clean water, healthy wildlife habitat, a multitude of recreational opportunities, and valuable resources.

19 million acres of privately owned U.S. forestland in the American Tree Farm System

73,000 family forest owners are Tree Farmers

With nearly 110,00 acres and 974 Tree Farmers enrolled, Maryland is a proud participant in the American Tree Farm System. ATFS is a national program of the American Forest Foundation, committed to sustaining forests, watersheds and healthy habitats through collaboration with private landowners, our front-line stewards. Each and every one of these tree farmers shares a unique commitment to protect wildlife habitat and watersheds, to conserve soil and to provide recreation for their communities while producing wood for America and the world.

How to Participate

To qualify, a landowner must own 10 or more acres of forested land and have a written and implemented forest management plan. This plan accounts for forest products production, water quality, wildlife habitat, soil conservation, biodiversity, and recreational opportunities. There are also Standards of Sustainability the Tree Farm must adhere to, which would then lead to certification of the property. The only requirement after that is meeting with an ATFS certified volunteer tree farm inspector on a five-year cycle.

The best part of this program for all our qualifying landowners is there is absolutely no cost for being a member, and no cost for consulting with a certified professional forester on how to best manage your property.

To see if you could participate in the program, visit the Maryland Forest Service web site or contact your local Forest Service office.



Staff assisted American Forest Foundation staff and the Maryland Tree Farm Committee with hosting the AFF American Tree Farm System National Leadership Conference in Baltimore in February 2020. Acting State Forester Kenneth Jolly and Maryland Tree Farm Chair Richard Abend provided a “Welcome to Maryland” introduction.

Stewardship: PRESERVING FORESTS FOR FUTURE GENERATIONS

Whether it is the 200,000-plus acres of Maryland state forests we manage or the 1,400-plus miles of forest buffers planted by forestry staff for the past two and a half decades, the Maryland Forest Service continues to advocate and exemplify good land stewardship to the benefit of our residents and our land. These numbers can only briefly touch on the incredible impact each of our staff has had as stewards of our woodlands, and in the years ahead we only hope to add to all of these efforts.

210+ acres of riparian forest buffers planted

140+ forest harvest site inspections

NEWS AND NUMBERS

384 acres reforested/afforested on the Eastern Shore

130+ acres of Healthy Forests Healthy Waters plantings, an Alliance for the Chesapeake Bay program

6 Critical Area timber harvest plans reviewed

PARTNER SPOTLIGHT

Western Maryland Resource Conservation Development

From good forest stewardship comes the benefits of forest resources to utilize. Thanks to WMRC&D being awarded grant funding from the Dept. of Commerce, our agency recently collaborated with the nonprofit on an in-depth report focused on the economic contributions of forest products.

Working with the Forest Service, Department of Commerce, Maryland Forests Association, and many others, WMRC&D hired consulting firm ACDS LLC to develop the Maryland Forest Products Sector Economic Adjustment Strategy (EAS). Putting a figure on the products Maryland forests provide can only help illuminate the importance of properly managing our woodlands to ensure a sustainable, resilient, regenerative natural resource that benefits generations to come.

Economic Adjustment Strategy project grant funds were also used to work with the Eastern Shore Regional GIS Cooperative to develop the MD Forest Industry Resource Viewer. This online interactive tool helps to identify potential forests for harvesting. Access the viewer on WMRC&D's website.

141 acres planted, including 16,000+ linear feet of riparian buffer and 24 acres reclaimed mine land, through WMRC&D planting projects



State forests offer a wide variety of recreational opportunities, including hiking, camping, hunting, fishing, wildlife viewing, and Off-road Vehicle (ORV) trail riding. They're also ecologically beneficial, supporting water quality, old-growth forest, and rare species habitat. In addition, the harvest and sale of timber from our woodlands benefits wildlife habitat and rural economies.

A Closer Look

STATE FORESTS

200,000 acres of state forests sustainably managed according to Sustainable Forestry Initiative and Forest Stewardship Council certification programs

2.14 million board feet of sustainable timber harvest on Green Ridge, Savage River and Potomac-Garrett State Forests, generating \$833,000 in revenue and supporting local economy and workforce



2.64 million+ in total revenues from timber harvest across Eastern Shore and Green Ridge, Savage River and Potomac-Garrett State Forests

93 geocachers visited Kindness Demonstration Forest Trail during 2020 Cache Across MD event

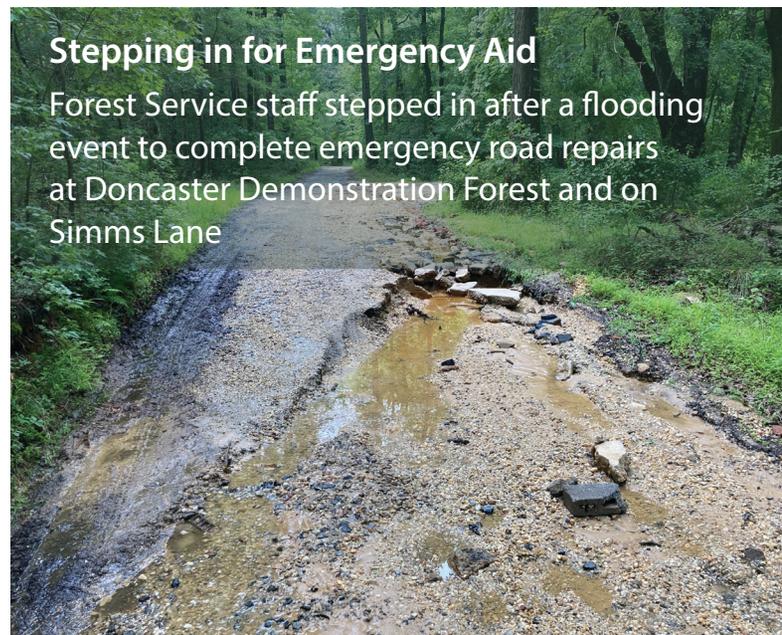
512 work hours invested into rifle range repairs at Elk Neck State Forest

905 acres added to Stoney Demonstration Forest in Harford County, which is now known as Greys Run Tract

\$581,451 earned in hunt club revenue on Chesapeake Forest lands

Stepping in for Emergency Aid

Forest Service staff stepped in after a flooding event to complete emergency road repairs at Doncaster Demonstration Forest and on Simms Lane



Elk Neck State Park Salvage Harvest planning assistance:

After a tornado touched down, forestry staff assistance and logger was needed for timber salvage

Work in the Watershed

Our work in Maryland's watersheds is a multi-layered effort with benefits spread from water and land to wildlife, our citizens, and the economy. Being an advocate and steward for our forest is dependent on tying all of this together, showing how our healthy woodlands are the foundation for a resilient environment and ecosystem, and a diverse economy.

Combining a timber harvest with hiking trail maintenance and invasive species removal to restore native landscape, staff was quite busy in the Emmitsburg watershed. A 75 acre harvest was followed by reorientation of trails through the forest post harvest. Removing invasives and generating revenue through a harvest to regenerate and bring the benefits of young forests all aid the town with sustainable watershed management.

The Forest Service had another productive year in the Frederick City watershed. Invasives control, hazardous tree removal, land stabilization around a historic Civilian Conservation Corps house and abandoned fire tower site, and data collection for developing a new Forest Stewardship Plan were all part of this work. A prescribed burn for restoring conifers was another management approach incorporated into this array of activity.



Bringing Back a Lost Species



From fire to wildlife habitat, The Nature Conservancy is on the frontlines of the forest addressing an endless list of issues facing our woodlands. One part of its restoration work in the past year: restoring red spruce in Western Maryland and the Central Appalachians.

The Forest Service, with Allegany College forestry students, paired with TNC to plant seedlings at Finzel Swamp Preserve. Aggressive-growing black locust was treated with herbicide to lessen competition for red spruce. The spruce restoration project was sponsored by the Wildlife Conservation Society's Climate Adaptation Fund.

Applying herbicide to black locust at Finzel Swamp (TNC), red spruce seedling

Urban and Community Forestry: BEAUTIFYING COMMUNITIES

Our Urban and Community Forestry division has been beautifying communities for decades through tree and shrub planting efforts statewide. From schoolyards to backyards, the shovels never stop come growing season. The Forest Service's work in urban and community forestry keeps our staff connected to countless Maryland citizens who want to plant and build their own canopy in their yard, park, or community, and allows us to share our knowledge and guidance with students of all ages.



1,865 native trees and shrubs sold by Tree-Mendous

4,035 native trees and shrubs purchased by citizens through Marylanders Plant Trees

Above: Planting by Southern Maryland Sierra Club

Left: These trees were donated by Gift of Trees Program through Tree-Mendous Maryland.



NEWS AND NUMBERS

\$18,332 donated by citizens through Gift of Trees, equaling 458 trees

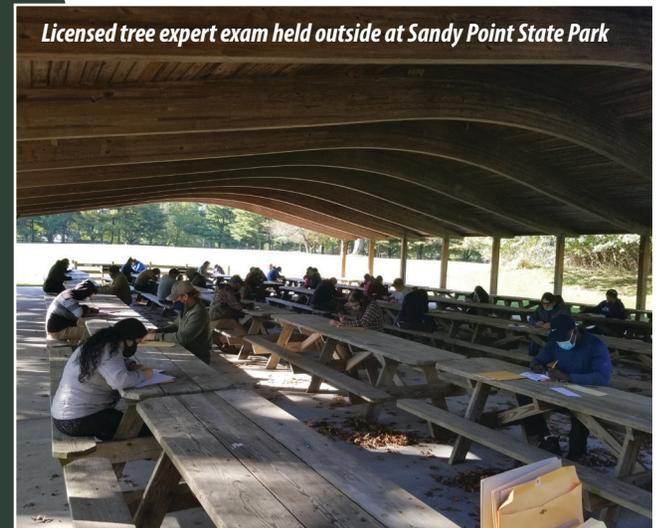
91 Maryland Community People Loving and Nurturing Trees (PLANT) awards given for work in 2020

Adapting Online and Outdoors

In the midst of a pandemic, it has been about adapting on the fly for the Forest Service. Adjusting to a year of social distancing and lockdowns, urban/community forestry staff worked with the DNR Gift Shop to run a limited "Cyber-Week Sale" for Gift of Tree donations. A total of 44 orders for 164 trees were donated! All donors will receive a certificate suitable for framing, and the trees will be planted next season in the most environmentally beneficial locations, including parks, playgrounds and along streams.

Going back to pencil and paper, our licensed tree expert exam was held outdoors at Sandy Point State Park to maximize social distancing and keep applicants and staff safe. For licensed experts seeking continuing education credits typically held in classrooms, webinars played a huge role in keeping them on schedule with their licenses. 600 were trained through the Urban Wood webinar! Staff were always available to guide applicants through the entire testing and continuing ed process during a difficult, confusing time for all.

Licensed tree expert exam held outside at Sandy Point State Park



Arbor Day is an incredibly important day to all of us here at the Forest Service, and is the one day a year when trees are the star of the show across the state.

One particularly special Arbor Day event is our annual Maryland Arbor Day Poster Contest where all of the emerging environmental artists in fifth grade classrooms around the state get to make their best artistic efforts to draw up a celebration of trees. This would not be possible without our long partnership with the Maryland Forest Conservancy District Boards. The theme in 2020 was "Trees Are Terrific...in All Four Seasons!" And as a special treat for the third year in a row, our First Lady Yumi Hogan was a guest judge. Our top three winners are shown below:

- First place: Lola Lugard, Carroll County**
- Second place: Angela Webb, Talbot County**
- Third place: Annelie Kolbe, Washington County**

Posters were first judged on a county level and the winners from each county were submitted to the Maryland Urban and Community Forestry Committee to compete at the statewide level. Winners receive the following prizes:

- 1st place prize- tree planting at their school with 15 trees**
- 2nd place prize- tree planting at their school with 10 trees**
- 3rd place prize- tree planting at their school with five trees**



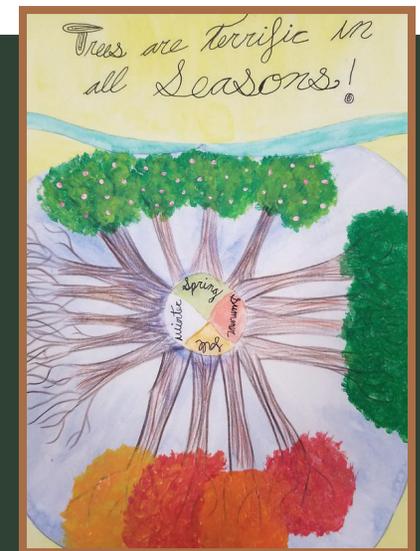
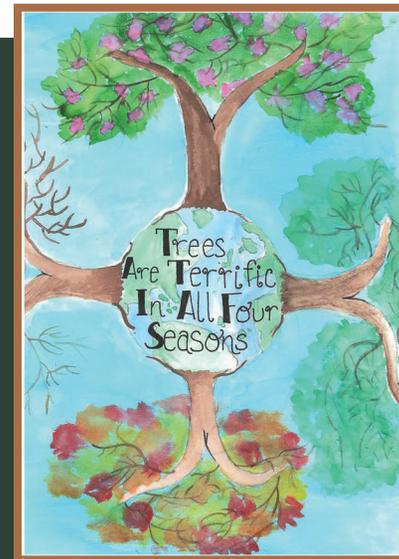
Guest Judge Yumi Hogan evaluating posters at the Arbor Day Poster Contest

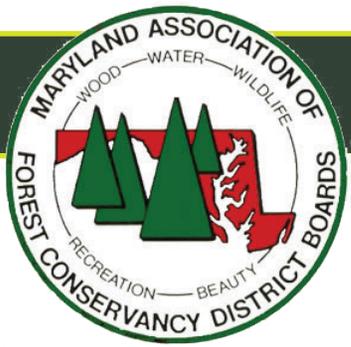


Left: First place by Lola Lugard of Carroll County

Right: second place by Angela Webb of Talbot County and third place by Annelie Kolbe of Washington County

Arbor Day
Artists
on Display





All Hands on Board: FORESTRY BOARDS

The Maryland Forest Service realizes we are not the only experts in the field and that community collaboration is vital, exemplified by our teaming with county forestry boards on public outreach events and plantings in 2020.

Pairing with the Frederick County Forestry Board, staff developed two Tree Walks for Frederick City at Hood College and Baker Park. On the trails, visitors can scan interactive QR codes and mapping at each tree location. We can never do enough public outreach, and this opportunity with the board could not be passed up. Information on the show-cased trees and self-guided walks are available at frederick.forestryboard.org/tree-walks.

Board outreach and education efforts didn't just happen in Frederick. In conjunction with the Garrett County Forestry Board, the Forest Service set up monthly window displays at the Oakland Library. Educational topics included Chain-saw Safety/Uses, Why Leaves Change Color and the Natural Resources Career Camp.

Beyond education and outreach, our board partners were active participants in getting more trees in the ground with our staff. The St. Mary's and Charles County Forestry Boards oversaw a grant in each respective county that was awarded to the Southern Maryland Sierra Club through the Maryland Association of Forest Conservancy District Boards and Maryland Urban and Community Forestry Committee.

The grant in St. Mary's provided trees, mulch and water drip bags through the Forest Service's Tree-Mendous program with Sierra Club labor to plant trees at several county parks. The Charles County grant provided the same materials for a tree planting project at the Village Green Park in Indian Head.

For additional information about Forestry Boards, please visit dnr.maryland.gov/centennial/Pages/Centennial-Notes/ForestryBoards.aspx

Maryland Forest Board History

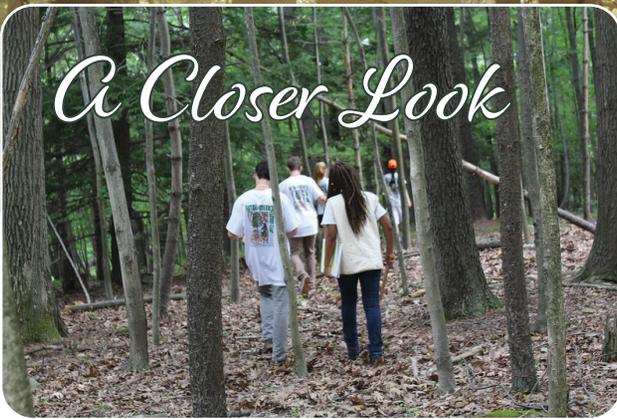
Commonly referred to as Forestry Boards, Forest Conservancy District Boards were first established in 1943 to assist the Department of State Forests and Parks, as the Maryland Forest Service and Maryland Park Service were organized then, with the promotion of rural forest management on privately owned woodlands. Their original goal was to help assure a supply of wood fiber products through scientific forest management.

Since that time, the goals have shifted to restoring the Chesapeake Bay, improving the environment in urban and suburban areas, and educating the general public about a range of forest benefits makes up their new to-do agenda. Forestry Boards function in all 23 Maryland counties and in Baltimore City. There are over 200 active board members throughout the state.



Garrett County Forestry Board display

A Closer Look



Natural Resources Career Camp

One highly rewarding program offered in coordination with our Forestry Board partners is the Natural Resources Career Camp.

The Natural Resources Career Camp gives high school students a chance to learn about the natural resources around them and possible career opportunities in the field. Everything from wood products to wildland fire suppression is covered in this camp coordinated by Allegany College, Maryland Forestry Foundation, Maryland Association of Forest Conservancy District Boards, and the Maryland Forest Service.

Due to COVID-19, NRCC was not held this past year, but is currently back on track for 2021!

Spotlight: Maryland Urban and Community Forest Committee

A sub-committee of the Maryland Association of Forest Conservancy District Boards, the Maryland Urban and Community Forest Committee consists of a volunteer group of citizens, professionals, and government officials united to protect and enhance Maryland's forest ecosystems. This work is done through grant funding and promoting and coordinating the Maryland Community People Loving and Nurturing Trees (PLANT) Award Program, started in 1991 by the Maryland Forest Service and the Maryland Community Forest Council. PLANT awards recognize our smaller, unincorporated communities who are planting and caring for trees and building an urban tree canopy. **Read more on our website.**

Another way the Maryland Urban and Community Forest Committee awards excellent stewardship of our trees and enhancing urban forest canopy is administering grants to schools and communities through local forestry boards that promote planting and care of trees. More than \$12,000 in grant funding was awarded through MUCFC grants in 2020. These projects included a tree planting at Catonsville Middle School involving Environmental Club students, volunteers, and Patapsco Heritage Greenway school staff members; and signage for a new food forest at Todd Park created by Havre de Grace Green Team.

FORESTRY BOARD PROGRAMS

Maryland Big Tree Program

What started in 1925 in Maryland as the Maryland Big Tree program has blossomed into a nationwide program for the past 71 years. Using measurement techniques introduced by our state's first forester, Fred Besley, program volunteers size up trees nominated by the public as the largest of a certain species. Biannual nominations are presented to the organizer, American Forests, as potential National Champions. Maryland ranks tree species at state and county level as well.

The public gets to take pride in finding or being home to one of the state's many beautiful trees, and forestry advocates get to further spread appreciation and awareness of Maryland's tree species diversity. The Maryland Association of Forest Conservancy District Boards sponsors the all volunteer-based program. For more info, and to find out how many Champion Trees Maryland has, visit www.mdbigtrees.info.



Wildland Fire: FIGHTING ON THE FRONT LINES

The Wildland Fire program seeks to protect our natural resources through wildland fire response, prevention, education, training, and partnering with local fire departments and the federal government. This coordinated approach encompasses all the aspects needed to protect our natural resources and engage the public about the benefits of prescribed fire and the dangers of wildland fire.

76 Maryland wildfires fought by Forest Service staff

Region	Number of wildfires	Acres burned
Western	16	36.5
Southern	15	66.6
Central	21	50.7
Eastern	24	1267.7
Totals	76	1421.5

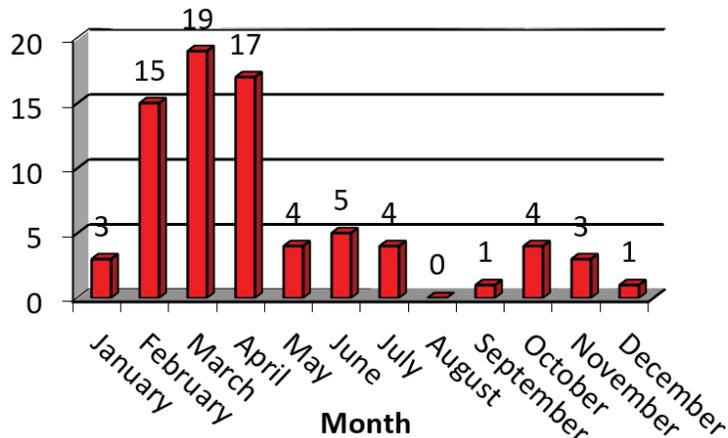
NEWS AND NUMBERS

Prescribed fire is a proactive forest management tool used to reduce the load of fuel (dead wood) built up in a forest stand and limit the chances of a fire igniting. Controlled burns are also implemented to combat aggressive invasive species spreading across the land and encourage growth of our native species. Other benefits include recycling nutrients back to the soil, improving habitat for threatened species, and lessening the spread of pest insects and disease.

26 prescribed burns

448 acres burned

2020 Wildfire Starts



From the field: dozer training in 2020

Always Staying Prepared

Even during a pandemic, training continues for the Maryland Forest Service. 16 employees were provided dozer and tractor plow training during the month of October. The hands-on training provided skills in the safe and effective use of heavy equipment in wildfire operations.

Maryland's wildland firefighters, including 30 of the Forest Service's dedicated staff, were honored in a virtual recognition event by Governor Larry Hogan and Maryland Department of Natural Resources Secretary Jeannie Haddaway-Riccio. Governor Hogan addressed the firefighters with a recorded greeting and Secretary Haddaway-Riccio presented them with a departmental citation for serving on interagency crews nationwide through the busy and challenging 2020 wildfire season.

65 Maryland fire crew members participated in 103 assignments, working on 28 different incidents in 11 states. The 2020 Interagency Wildfire Season began early in the year, with new protocols developed to mobilize firefighters in the midst of the pandemic. Crews also served an exceptionally long season, serving in deployments as late as November.

During the 2020 wildfire season, Maryland interagency team members were deployed to Arizona, California, Colorado, New Mexico, Nevada, Oregon, Pennsylvania, Texas, Utah, West Virginia, and Wyoming.



Interagency Wildland Firefighters are mobilized through the state's interagency agreement with the U.S. Forest Service, in which multiple states' personnel and resources deploy to wildfire incidents across the country as needed. In 2020 they included the Maryland Forest Service fire management team, a mobilization/demobilization team, firefighter modules and crews, engine and dozer operators, and single resources, who are individuals with specific skills who serve in both overhead and support functions.

As the Maryland Department of Natural Resources begins preparing for the 2021 wildfire season, they are also being called upon to assist with the nation's response to COVID and the need to expedite vaccinations. For 2021, Maryland's interagency team received its first mobilization request from the U.S. Forest Service, and sent two EMT-certified individuals to Delaware to support a COVID vaccination center at Dover International Speedway.

Assisting Local Partners in Fighting Fire

The Forest Service announced the 2020 Volunteer Fire Assistance grant award winners, which encompass 17 Maryland counties and assist volunteer fire companies to enhance wildland fire protection. The Maryland Forest Service awarded grant funds to 50 fire departments for \$107,876 in match funding. The USDA Forest Service provides the federal grant funds.

Our agency works with the federal government to provide excess federal equipment to it and volunteer fire departments across the state. Federal excess programs acquired roughly 2,000 items with an initial value of over \$1.1 M.



Federal excess property for Vienna VFC in Dorchester County.

Partnerships: WORKING TOGETHER FOR THE TREES

The Maryland Forest Service has had many great collaborations and partnerships in our duties serving the public in 2020. Our work would not happen without these committed nonprofits, educational institutions, private citizen groups, and county, state, and federal level agencies. We highlight a few partner projects here.

NEWS AND NUMBERS

1700 trees planted with Chesapeake Bay Foundation and 56 volunteers in Taneytown
224 volunteer hours recorded!

Partnerships: A Closer Look

A Tale of Timber: Tree Farms and Forest Products

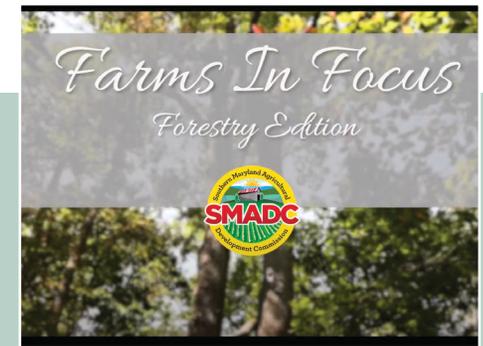
Teaming with the **Southern Maryland Agricultural Development Commission (SMADC)**, the Forest Service assisted the commission on a Forestry edition of SMADC's Farms in Focus video series, highlighting our many great landowners and loggers who make sustainable timber harvesting happen.

In the video, local tree farm owners and forestry product operators speak to the synergy between private landowners, Maryland timber businesses, and our agency while giving viewers an up-close look at one of the many facets of forestry. Without these connections on the land and their environmental and economic benefits, the Forest Service's work could not exist. This illuminating video, funded in part by a Rural MD Council grant, shows the connection between managing forests for products and maintaining healthy woodlands. Check out the link below to watch for yourself!

smadc.com/farms-in-focus-series (scroll down to Forestry)



*Above: Chesapeake Bay Foundation and volunteers planted trees in Taneytown
Below: scenes of timber harvest sites and Farms in Focus video*



Taking the Lead on Logging Reviews

Coordinating with the **Maryland Department of Environment, local county inspection agencies, soil conservation districts, and the forestry industry**, the Maryland Forest Service became the lead review agency for forest harvest sites on active logging operations in October 2020.

DNR foresters will provide expert and time-sensitive technical assistance to forest product operators to help ensure timber harvests are conducted in compliance with the approved Erosion and Sediment Control plan and utilize the most effective and appropriate Best Management Practices. Priority sites will be water crossings, streamside management zones, and steep slopes.

As part of our new role, the Maryland Forest Service developed a Forest Harvest Operations Site Review Form and Google Doc database. Staff completed online technical training for Sediment and Erosion Control standards for Forest Harvest Operations/Green Card Training Program.

Seven field training sessions were held across the state to implement this change, and cross-agency collaboration between MDE, county inspection agencies, soil conservation districts and forest industry made it all possible. This partnership will be ongoing with an interagency agreement to meet and review outcomes annually and cross-agency training once or more per year.

Our increased presence on logging jobs and close communication with the forest industry will allow all of us to do our jobs better, resulting in healthier landscapes and waterways and creating better coordination between forestry staff, forest product operators, and landowners.

Maryland Department of Environment or the county with delegated authority will retain the enforcement authority at any harvest site where noncompliance issues are observed. Counties with delegated enforcement authority from MDE will still need to be contacted prior to starting timber harvest operations.



Logging BMPs: from left to right, logging mat, temporary bridge, and water bar

Outreach and Education: **INFORMING AND ADVOCATING**

From communications to species surveys, forestry staff continued to be active advocates for our forests as well as working with academia to further advance research on our woodlands and wildlife habitat.

2020 Achievements

- We took the woods to the web, uploading **eight different forest stewardship videos** to YouTube in partnership with Wildlife & Heritage Service.
- Our **State Forests webpage was redesigned** to promote activities at the state forests, which will be incorporated into a smart phone friendly interface on the DNR app.
- Another webpage, **Educational Outreach Activities**, was created to assist teachers and parents with virtual learning activities and lesson plans about trees and forests. Our staff also helped with a pilot handbook project for the Project Learning Tree State Coordinator and assisted with drafting the Maryland Conservation Careers Guide.
- The Forest Service provided **video interviews and tours** of Tree Farms for the Maryland Association for Environmental and Outdoor Education (MAEOE) via grant funding from State Tree Farm Committee.
- Staff developed and shared weekly tree profiles as a part of the department's online **Fall Foliage Reports**.
- Continued support was provided to **Appalachian Crossroads**, an association based in Oakland that helps young adults with disabilities.
- We helped a Loyola University adventure sports group with logistics and a **field session overview** of Savage River navigation and survival.
- Staff members served on Allegany College Forest Technology Department's Program Advisory Committee, while assisting with curriculum development and training sessions. We also assisted Western Kentucky University Department of Biology and the National Zoo & Conservation Biology Institute in their respective research projects involving salamanders and stoneflies.

670 chestnut seedlings planted by landowners and residents across the state as part of American Chestnut Foundation trials

2400 landowners received four informational newsletters written by staff for Kent County Soil Conservation District

TGCC The Greater Cumberland Committee was given a forestry tour, in partnership with Maryland Forests Association, to highlight importance of sustainable forest management

Chesapeake Tree Stewards A new six-week program that offers virtual tree planting and maintenance training to the public one night a week to highlight importance of sustainable forest management

NEWS AND NUMBERS

120 Attendees at Urban Tree Canopy Summit, designed to advance the Chesapeake Bay Program Forestry Work Group's tree canopy work across the watershed



PARTNERS IN EDUCATION

Mapping Opportunities

Using high resolution land cover data from Chesapeake Conservancy, one of our many valuable data collection partners in improving our landscape and watershed, the Forest Service was able to map out tree planting opportunities throughout the state in 2020. This effort was spurred by 2019's SB729 legislation, which requested data on tree canopy layers in the state. The Forest Service coordinated with the Conservancy to use land cover and land use data/mapping to target areas for canopy expansion.

The greatest planting potential is in Baltimore County. Frederick and Washington counties also show great opportunity. Our staff have shared these data mapping layers with multiple partners, including county government and NGOs, to aid in their future tree planting efforts.

Sustainable Forestry Council

The Sustainable Forestry Council, formed by the Sustainable Forestry Act of 2009, advises the department on forest conservation issues and appropriate actions to help Maryland implement a no net loss of forest policy, building on existing programs and regulations including the recent development of Watershed Implementation Plans to meet the Total Maximum Daily Load requirements for the Chesapeake Bay, the Forest Conservation Act, and local planning and zoning requirements.

In 2020, the Council took part in was a biomass webinar series designed in conjunction with MD Forestry Foundation and MD Clean Energy Center. "Seeing the Forest for the Trees: Future Potential for Biomass Energy in Maryland" featured a series of webinars looking at economic and environmental opportunities for woody biomass, including how this form of energy could support forest conservation. Funding from the Maryland Agricultural Education and Rural Development Assistance Fund supported the webinar series.

Growing Agroforestry

With several demonstration planting sites in the ground and ongoing planning with academia and private landowners, the Forest Service is actively working to establish agroforestry in the state and offer it as a land management practice alternative for new and established landowners. Agroforestry, incorporating trees and shrubs into traditional agricultural practices as windbreaks, silvopasture, multifunctional forest buffers or forest farms, creates an interconnected system, from livestock to cropland to water.

Private landowners in Anne Arundel and Washington counties, as well as McDaniel, Hood, and Washington College, and University of Maryland, are working with forestry staff to develop agroforestry models and get plantings in the ground. Forestry staff also planted a research trial site in Monocacy NRMA.

We hope to use these demo sites to show landowners how to maximize productivity on their land in a sustainable, regenerative approach. Living examples of new niche crops to market or healthier livestock feed alternatives will help spread awareness.

Thanks to a Chesapeake Bay Trust grant, one example of a demo site is our 1.5 ac Edible Trail of berry and nut producing trees and shrubs at White Marsh Park in Centreville. Queen Anne's County Parks & Rec and our dedicated staff made this project happen, overcoming shifting time schedules at the outbreak of COVID-19 and hour restrictions for staff due to the pandemic. **Photo above: Following COVID-19 protocols, we hosted almost 50 visitors over 2-3 days for a tour and talk about this exciting new project!**

2020 Forest Service Awards: HONORING OUR OWN

Each year, the Maryland Forest Service issues awards to employees nominated by their fellow staff. The goal of our Annual Awards is to allow us to collectively recognize those staff who have done an outstanding job in performing their job duties and advancing the mission of the Forest Service. Award Nominations are submitted by Forest Service staff and the final selection of the Awards is made by a designated group of representatives from the Forest Service Leadership Team representing Operations, Programs, and Fiscal/Administrative Services.

2020 Employee of the Year: Dave Gailey

- Provided statewide leadership and coordination with multiple state agency and forest industry partners in implementing the new Best Management Practice Inspection Process for Forest Harvest Operations.
- Worked with Southern Maryland Agricultural Development Commission in developing a video promoting economic and environmental benefits of forestry in the region, highlighting farm owners and forest industry.
- Guided Southern Region staff in completing 5,930 acres of Forest Stewardship Plans, planting 60 acres of seedlings, and assisting woodland owners with forestry practices on 9,850 acres.



2020 Forester of the Year: Melissa Nash

- Provided professional forestry assistance to woodland owners in Garrett County through preparation of 43 Forest Stewardship Plans covering 2850 acres.
- Led project staff as they assisted woodland owners in implementing forest management activities on 3,720 acres, including 160 acres of invasive species treatments.
- Involved in review/development of 8 habitat creation projects for golden-winged and cerulean warbler.
- Took part in 31 acres of seedling plantings and 30 urban/community container trees.
- Supported training for Garrett County and statewide students in Envirothon, and was weekly contributor to Fall Foliage Report.



2020 Ranger of the Year: Katie Garst

- Provided leadership as Wildland Fire Crew Logistics Coordinator at Madonna Ranger Station while adhering to COVID-19 protocols under tight mobilization timelines; created database system to track fire equipment and personnel assignments as part of handling demobilization process.
- Assisted in basic wildland fire training logistics and instruction.
- Was key part of woodland data collection on 28 Forest Stewardship Plans, and provided roadside tree permit assistance across multiple counties to ensure Forest Service provided timely customer service.
- Teamed with local community groups to develop “right tree in the right place” species lists.



2020 Forest Service Awards: CONTINUED

Western Maryland Resource & Conservation Development Recognition: DAN RIDER

Another one of our own who was honored this past year was Dan Rider, who was the recipient of Western Maryland Resource Conservation & Development's annual G. Paul Edwards Conservation Award. This award highlighted his outstanding leadership of projects in support of economic development and sustainable forestry in Western Maryland and across the state. Dan has been a great supporter of WMRC&D and partnered with the council on several significant projects, including the U.S. Dept. of Commerce Economic Development Administration-funded Economic Adjustment Strategy for Maryland's forest products sector.



Tree Farm Inspector of the Year: ROB CLARKE

Rob Clarke, Project Forester in Worcester Co., was presented with his 2020 MD Tree Farm Inspector of the Year Senate Resolution through a personal visit by the Honorable State Senator Mary Beth Carozza. Typically, the presentation of the Inspector of the Year Resolution is presented in the Senate Chamber in the State House on Arbor Day, but the 2020 event was cancelled due to COVID restrictions. Despite this ongoing pandemic and limited public interactions, the work of the Maryland Forest Service never stops!



2020 Cooperator Award

BRUCE BARNES

Bruce Barnes of St. Mary's County was awarded the Maryland Logger of the Year and the Appalachian Region 2020 Outstanding Logger awards. A second-generation logger, Bruce has been in the specialty log business for more than 40 years. He is an active MD-DE Master Logger with Maryland Erosion and Sediment Control specifications for Forestry Harvest Operations and Maryland's Forest Products Operator's License.

Photo courtesy of Maryland Forests Association.

