

# MARYLAND FOREST SERVICE Annual Report



Top: Maryland Conservation Corps treating hemlock trees for hemlock wooly adelgid in Spring 2019; bottom: Forest Warden Training graduates, 2019

# MARYLAND FOREST SERVICE ANNUAL REPORT 2019



Larry Hogan, Governor  
Jeannie Haddaway-Riccio, Secretary  
Philip R. Hager, Assistant Secretary, Land Resources  
Kenneth Jolly, 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](http://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

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# Introductory Message

It is a privilege for me to have the opportunity to share this 2019 Annual Report highlighting accomplishments of the Maryland Department of Natural Resources Forest Service. The mission of the Forest Service is to be an advocate for the forests and trees of the state, and to manage Maryland's woodlands in a way that provides opportunities for citizens to enjoy and benefit from our woodland resources. The management and conservation of our forests, in both urban and rural settings, provides us with clean air and water, multiple recreational opportunities, and wood products used by everyone in the state each and every day. In short, forests are vital for all of us to enjoy a better life in Maryland.

Within this report are brief descriptions of projects Forest Service staff have accomplished over the past year, working cooperatively with the citizens of the state who care deeply about conserving our woodlands and trees. While it is not possible to capture every accomplishment in such a brief report, we hope this report helps to inform readers of the amazing work done by the Forest Service to manage, restore, and protect Maryland's essential forest and tree resources.



  
Kenneth Jolly  
Acting Director/State Forester

## Acknowledgements

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Graphic design by Annalise Kenney, Publications and Design Manager

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*Chesapeake Forest, Worcester County*

# Table of Contents

<b>Forest Health</b> .....	<b>3</b>
<b>Landowner Assistance</b> .....	<b>5</b>
<b>Stewardship</b> .....	<b>7</b>
<b>Urban and Community Forestry</b> .....	<b>9</b>
<b>Wildland Fire</b> .....	<b>11</b>
<b>Partnerships</b> .....	<b>13</b>
<b>State Forests</b> .....	<b>15</b>

## 2019 Overview

**3,462 acres** conserved through Forest Conservation Act long-term protection, contributing to stable green infrastructure in developing communities.

**1,615** roadside tree permits issued due to utility work, development, and roadwork.

**138** wildfires suppressed (totaling 1,493 acres of land).



**2.2 million** seedlings planted.

**345 acres** reforested for mitigation through the Forest Conservation Act.

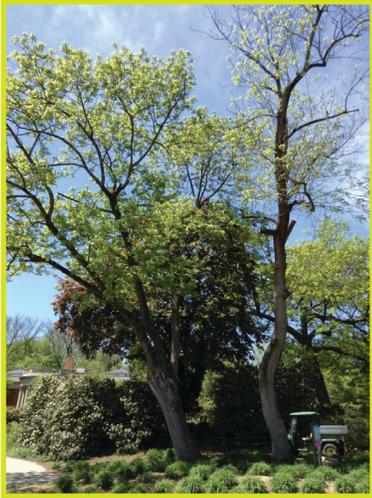
**482** Integrated Forest/Wildlife Stewardship Plans completed. 24,781 acres are now covered by Forest Stewardship Plans, with 29,175 total acres implementing management practices.

### Planning for the Future

A major collaborative project to strengthen the long-term economic viability of Maryland's forest products industry was successfully initiated with the Western Maryland Resource Conservation and Development Council. A \$160,000 federal grant from the U.S. Department of Commerce Economic Development Administration will fund the development and implementation of a comprehensive Economic Adjustment Strategy to sustain and grow the forest products industry in Maryland.

# Forest Health: PROTECTING OUR NATURAL RESOURCES

The list of threats to our forests is long: invasive plants, wildfires, exotic insect pests, increasing urban 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, aided by grant funding from the U.S. Department of Agriculture Forest Service, that are part of this effort are highlighted below.



**8** Maryland communities given cost-share and technical assistance to combat the highly destructive emerald ash borer and protect our ash trees.

*Treated (l) and untreated (r) ash trees in Hagerstown City Park*



*Left to right: healthy hemlock stand, Japanese stiltgrass creeping into hemlock stand, stiltgrass invasion*

**50+** acres of invasive plants/vines removed by contractors and volunteers at Broad Creek Memorial Scout Reservation in Harford County. An early sighting of spotted lanternfly was discovered at the site.

**1,690+** acres at Broad Creek now have an invasive species management plan protecting important hemlock stands and serpentine soils.

**20** acres of rare species habitat surveyed and protected with an invasive plant management approach at **Pocomoke State Forest**.

## PRISM

The Lower Eastern Shore Partnership for Regional Invasive Species Management. Staff assisted Wicomico County and the Lower Shore Land Trust in establishing the partnership and planning the implementation of a pilot project: removal of invasive vine wisteria at Pemberton Park in Wicomico County.



*Spotted lanternfly with egg mass (Kenneth R. Law, USDA APHIS PPQ, Bugwood.org, image cropped under CC by 3.0)*

## Spotted Lanternfly: Newest Invader on the Block

Egg masses have been found on automobiles, lawn equipment, and a range of goods moving around states.

✓ **HARFORD AND CECIL COUNTIES** under quarantine for any businesses moving through or out of these counties.

✓ **PENN STATE UNIVERSITY** training and permitting processes completed by staff to inspect vehicles and equipment to ensure we are not spreading spotted lanternfly through agency operations.

## CLOSER LOOK: BATTLING BORERS AND EMERGING INVASIVE THREATS

With a seemingly never-ending wave of non-native invasive insects and plants colonizing our landscape, forest health is of paramount and increasing concern to the Maryland Forest Service. We have been actively engaged in providing technical assistance and training for communities to manage many invasive plants and insects, including the emerald ash borer, hemlock woolly adelgid, and spotted lanternfly. Management of these threats improves public safety, protects important ecological areas, and uses the most economically efficient approaches.

The Forest Service coordinates with partner agencies at the local, state, and federal level to improve response capacity to multiple invasive threats. One of our cooperative projects this year featured teaming up with the Maryland Park Service and youth volunteers from the Maryland Conservation Corps, with guidance from the Maryland Department of Agriculture to survey, map, mark, and treat eastern hemlock trees in Swallow Falls State Park, Garrett County.



Left to right: evidence of invasive pest species, hemlock woolly adelgid (Connecticut Agriculture Experiment Station), emerald ash borer (U.S. Department of Agriculture), spotted lanternfly (Pennsylvania Department of Agriculture)

Using soil drench and stem injection methods, any viable hemlocks were treated to protect them from the hemlock woolly adelgid. The eastern hemlock is a keystone species among the wooded streams of Garrett County, which a large portion of Maryland's native brook trout call home. Without hemlock roots holding soil in place and stabilizing streambanks, while providing habitat and supporting insects that are food for wildlife, about half of our state's fly fishing habitat would be lost.

### *Project Spotlight!*

In 2019, partnerships between the Maryland Department of Agriculture, Maryland Forest Service, U.S. Department of Agriculture Forest Service, U.S. Fish and Wildlife Service, and The Nature Conservancy treated ash trees in forest corridors along lower Eastern Shore waterways to prevent the spread of emerald ash borer, protect rare species and important habitat, and improve climate resiliency.

Forest Health staff were knee-deep in Eastern Shore wetlands while they conducted surveys of forest stands for threatened ash and protected treatable trees with a stem injection of insecticide to ward off emerald ash borer beetles burrowing beneath the bark and killing our native ash.

**From Fall 2018 to Spring 2019, more than 11,000 trees were treated across Maryland in the battle against invasive forest pests.**



Left: Scouting and treating ash along Marshyhope Creek (Karen Felton, U.S. Forest Service)  
Right: treating eastern hemlock trees for hemlock woolly adelgid in Garrett County

# 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.

**100+** acres of trees planted in non-buffer rural areas through cost-share programs.

## NEWS AND NUMBERS

**29,000+** total acres of forest management practices implemented.

**24,000+** total acres covered by 2019 stewardship plans.

## Sharing the Financial Burden of Good Land Practices

**482** integrated forest/wildlife stewardship plans completed by staff statewide.

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. In 2019, 331 landowners were referred to private foresters.

### 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 181 Forest Conservation Management Agreement inspections in 2019.**

### 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 350 acres of work were completed in 2019 under CREP.**

### Environmental Quality Incentive Program

The Forest Service is a technical service provider in helping the Natural Resources Conservation Service implement the 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.

### Woodland Incentive Program (WIP)

Private, non-industrial woodland owners who manage their land may apply for financial assistance through the 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. **More than 300 acres of WIP properties were inspected in 2019.**

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



Caleb Putnam

## CLOSER LOOK: SEEDLINGS, PLANTINGS, AND MORE



*From acorns to walnuts to elderberries, the John S. Ayton State Forest Tree Nursery collects seed from a range of tree and shrub species*

Maryland's state forest tree nursery was established in College Park in 1914 by Maryland's first state forester, Fred W. Besley. This tract of land was donated by the University of Maryland, although the nursery has changed locations many times since its founding. Opened in 1996, the John S. Ayton State Forest Tree Nursery in Preston grows and supplies bare-root seedlings for the Maryland Forest Service, contractors, and Maryland residents. From reforestation plantings across the state and into Delaware, to bundles of seedlings lined up for our county foresters and the Backyard Buffer giveaway program, the work of growing trees and shrubs to restore our landscape never ceases.

One of the most direct ways the Forest Service benefits our great state is by putting seedlings grown at the nursery into the hands of Marylanders. These one- and two-year-old trees and shrubs are distributed from one end of the state to the other thanks to the tireless work of our nursery manager, supervisor, and seasonal staff. The nursery also collects thousands of pounds of acorns, walnuts, and other seeds from orchards and wild sources. Part of this seed collection effort includes truckloads of walnuts delivered from the western region of the state every year.

All of this work requires vigorous attention to nature's schedule. It begins with the harvesting of seed in late summer and fall, followed by planting fall and spring. Seedlings are harvested and shipped from late February to early May. Located in the shipping building are two enormous coolers that can each hold up to 4 million seedlings! Throughout the spring and summer, there is watering, fertilizing, weeding...it's a neverending cycle of renewal that results in healthy, vigorous seedlings being planted across the state.

### *Project Spotlight: Three Decades of Planting and Still Going Strong*

In Garrett County, both the Woodland Incentive Program and the Environmental Quality Incentive Program have been valuable funding tools in the ongoing restoration and management of a 350-acre tree farm. The landowner has had this property under a written forest management plan since 1986, and continues to work closely with our staff to this day!

Over the last 30 years, more than 134 acres of tree plantings have been facilitated on this property because of the amazing partnership between a tree farm operator and Forest Service personnel. With nearly all of this land under easement, the landowner has focused on turning the land into an environmental educational site, offering visits to local colleges such as Allegany College, promoting land and wildlife stewardship, and protecting a stretch of the Savage River on his land to provide brook trout habitat.



*Tree farm plantings in Garrett County*



*College student checking tree tube*

# 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.

**145** acres of riparian forest buffers were planted.

**345** permitting actions on timber harvests, involving almost 13,000 acres, assisted by foresters.

## NEWS AND NUMBERS

**400+** acres of non-commercial timber stand improvement were coordinated on more than 60 projects.

**40,000+** acres of cumulative watershed acreage are under ongoing reservoir watershed planning through U.S. Forest Service funded landscape-scale grant projects and local government partnerships.

## Honoring Good Stewards: Forestry Awards

2019 was the first year in the history of the Tree Farm Program that Maryland won both the Northeast Regional Inspector of the Year and the Tree Farmer of the Year!

**DAN LEWIS** was the Northeast Regional Outstanding Tree Farm Inspector of the Year.

**BILL AND TINA BUCKEL** were honored as the 2019 Northeast Region Outstanding Tree Farmer of the Year.

*Dan Lewis with Tom Martin, President and CEO of the American Forest Foundation*



*Bill and Tina Buckel*



**25,198** cords of timber harvested from state forests

**187** miles of hiking trails are available in state forests

**8,500+** reservations for state forest campsites were made in 2019

Spanning the different regions and growth zones of Maryland, our state forest system highlights the diversity of the state's landscapes. The state forest system manages more than 216,000 acres of land, all of which has been certified as sustainably managed by Sustainable Forestry Initiative and Forest Stewardship Council since 2003! See page 15 for more information about state forest management.

**765** permits issued to harvest firewood from state forests

## CLOSER LOOK: WOODS AND WATER QUALITY

A large part of our Chesapeake Bay stewardship involves the use of streamside forests, or riparian forest buffers, to control erosion and nutrient runoff and restore the bay's massive watershed—one acre at a time. Without private landowners, contractors, and partner agencies, none of this work would happen and all of our great accomplishments in the past year would not have been doable.



Letting the public know about the benefits of buffers is just as important as getting our native trees and shrubs into the ground. Multiple presentations and outreach events were held in 2019 to inform residents about streamside forests and all the work they do for us, our land and waters. Staff gave their time to talk all things buffers to groups like the Carroll County Forestry Board (left) as well as the Baltimore County Master Gardeners through the University of Maryland Extension Service.

***Since 1996, over 1,400 miles of the bay watershed have been restored through forest buffer plantings all over Maryland.***

An article highlighting 15 years of monitoring data from riparian forest buffers planted by the Maryland Forest Service was featured in the Maryland Department of Natural Resources' magazine in May 2019. The data chronicled in that article was gathered by several teams of forestry staff over the years and featured stream measurements, canopy closure, survival and health of planted trees, natural regeneration, invasive plants, aquatic insects, and stream temperatures.

### *Project Spotlight: Buffers and Brookies*

Streamside plantings play an important ecological role by providing shade for streams. As maturing trees leaf out and develop a canopy, they block the sun and reduce erratic spikes in water temperatures. Temperature is an important part of water quality, especially for Maryland's only native trout, the brook trout, which cannot reproduce in temperatures over 68 degrees. The Forest Service's partnerships with DNR Fishing and Boating Services, Trout Unlimited, Farm Service Agency, Alliance For The Chesapeake Bay, local Soil Conservation Districts, and the Natural Resources Conservation Service have documented brook trout populations within Maryland streams.

An exciting discovery was made in the Upper Monocacy River watershed in Carroll County this year, in one of the focus areas of the ongoing EPA-funded Chesapeake Bay Implementation Grant. A landowner planted 30 acres of trees using the Conservation Reserve Enhancement Program; this property's restored pastureland eventually became home to several age classes of brook trout throughout the one mile stretch of stream. Stream health is improving as the forest canopy emerges and cools waters, thanks to the partnerships of multiple agencies with conservation-minded landowners.



*Brook trout*

# 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—our future foresters and natural resource professionals.



**2,553** native trees and shrubs sold by Tree-Mendous.

**4,502** native trees and shrubs purchased by citizens through Marylanders Plant Trees.

**18,000+** tree and shrub seedlings given away through Backyard Buffers program.

## NEWS AND NUMBERS

**\$18,565** donated by citizens through Gift of Trees, equaling 464 trees!

**100** Maryland Community People Loving and Nurturing Trees (PLANT) awards given for work in 2019.

**450** urban/community trees planted by Western Region staff and volunteers.

## "A Day for the Trees"

Both Maryland and national Arbor Days are important celebrations to all of us here at the Forest Service. One particularly special Arbor Day event is our annual Maryland Arbor Day Poster Contest, which encourages emerging artists in fifth grade classrooms around the state to make their best artistic efforts in a celebration of trees. This would not be possible without our long partnership with the Maryland Forest Conservancy District Boards.

The theme for this educational outreach in 2019 was "Trees Are Terrific...And Forests Are Too!" As a special treat for the second year in a row, Maryland's First Lady Yumi Hogan was a guest judge. Three winning student artists received trees for planting at their schools.



Secretary Jeannie Haddaway-Riccio, First Lady Yumi Hogan, and DNR staff with the winning Arbor Day posters

**17** urban/community planting projects participated in by Southern Region staff.

**39** years celebrated in the Tree City USA program by City of Frederick.

**150** Cub Scouts trained in forestry over 3 days by Central Region staff.

# CLOSER LOOK: SETTING ROOTS IN OUR LOCAL COMMUNITIES

## Tree-Mendous: Planting for the Public

To date, the Tree-Mendous program has assisted more than 3,000 towns and communities, parks, and schools planting trees and shrubs to help clean the water, clean the air, and keep our towns and cities inviting and environmentally viable places to live. As part of this community planting program, we offer free regional delivery to help communities plant at a reduced cost. Check out our [redesigned website](#) to get planting next growing season!

## Marylanders Plant Trees: Get the Coupon!

To encourage citizens and organizations to plant new trees, Marylanders Plant Trees is a coupon program giving residents \$25 off the purchase of a native tree at participating nurseries. Find the coupon to print, as well as other helpful resources, [on our website](#).

## Gift of Trees: Honor Others and Improve Your Community

To celebrate or honor those you care for, Tree-Mendous Maryland will arrange for a tree to be planted for a donation of \$40. Donating a grove of 10 trees at \$400 lets you decide where you would like to have the trees planted. [Learn more here](#).

## Backyard Buffers: Helping Citizen Stewards

This program provides a free “buffer in a bag” to help get homeowners started in buffering their streamside. The bag includes 20-30 native tree and shrub bare-root seedlings, approximately 1 to 2 feet in height. A mix of various species, the seedlings are well suited to streamside conditions. [Get your free buffer in a bag!](#)

## *Every Leaf Counts in Our Urban Canopy*

Our partners at the Arbor Day Foundation are shoulder-to-shoulder with us in our quest to increase urban tree canopy throughout the state. The foundation’s Tree City USA program is in its 43<sup>rd</sup> year, with 84 communities across the country applying for and receiving Tree City USA recognition for the first time this year. With more trees in our towns and cities, we can lower temperatures and energy bills, provide natural filters for our air and water, and give people pride in their forest stewardship.

College campuses that are good stewards of leafy campus inhabitants are also being recognized by the foundation. Seven Maryland colleges were awarded the distinction of being a Tree Campus USA in 2019. In its 11<sup>th</sup> year, the program recognized 386 colleges and universities overall, with a combined enrollment of nearly 4.6 million students at Tree Campus USA schools.



*Tree-Mendous tree planting in Harford County in 2019*

## *Maryland Colleges Recognized as Tree Campus USA in 2019*

Allegany College of Maryland  
Frostburg State University  
Loyola University of Maryland  
Salisbury University  
St. Mary’s College of Maryland  
Towson University  
University of Maryland

# Wildland Fire: FIGHTING ON THE FRONT LINES

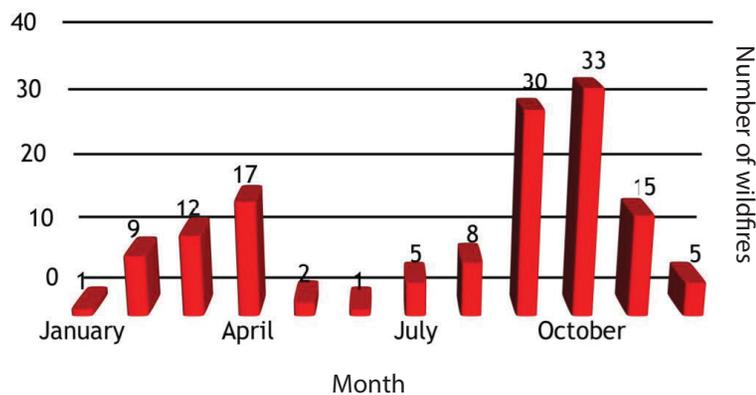
The Wildland Fire program seeks to protect our natural resources through wildland fire response, prevention, education, training and partnering with local fire departments and the federal government. This coordinated approach encompasses all the aspects needed to protect our natural resources and engage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

**138** Maryland wildfires fought by Forest Service staff.

**1,493** acres burned by wildfire.

Region	Number of wildfires	Acres burned
Western	18	41.5
Southern	27	39.7
Central	20	26.9
Eastern	73	1383.1
<b>Totals</b>	<b>138</b>	<b>1,493.1</b>

**Wildfires in 2019 by Month**



## 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.

**68** prescribed burns. **2,332** acres burned.

## Prevention and Education

The Maryland Forest Service is committed to providing prevention and education materials through the Firewise Maryland Program and Smokey Bear appearances.



The Firewise Maryland Program centers on educating homeowners about the importance of defensible space and gives tips on how to live “Firewise” and be prepared for a wildfire. Outreach events use Smokey Bear’s iconic presence as a great tool for educating the public and schoolchildren.

***Our friend Smokey Bear attended 65 events this year! 2019 was the 75<sup>th</sup> anniversary of Smokey’s introduction as a wildfire prevention icon.***

# CLOSER LOOK: WILDLAND FIRE TRAINING AND ASSIGNMENTS

Annually, the Maryland Forest Service holds the Basic Wildland Fire Courses for volunteer and career fire services, federal and state agencies, and private land groups. This year it was held in La Plata and had 18 students. The Mid-Atlantic Wildfire Academy is held at Garrett College in McHenry and draws students from the entire Mid-Atlantic region and nationwide. The academy offers a mix of entry-level and intermediate wildland fire and incident command related courses over a week. For more information, check out the [Mid-Atlantic Compact website](#).

We administered the annual Work Capacity Test or “Pack Test” to wildland firefighters across the state in 2019. These firefighters were certified to serve on wildland fire crews and engines for nationwide response.



*In 2019, 28 students and 11 instructors from Maryland participated in the Mid-Atlantic Wildfire Academy.*

**140+ wildland firefighters took the Work Capacity Test, aka “Pack Test”**



The Forest Service provided Forest Warden Training to 30 employees. The training was held at Wor-Wic Community College in Wicomico County from September 30 – October 3 and provided the employees with the required skills and knowledge to function as a Maryland Forest Warden.

## Fire Assistance

The Maryland Forest Service had a slower than average summer supporting other states and agencies on wildfires. Maryland dispatched one 20-person Type 2IA fire crew to California, one Type 6 Engine with crew to Kentucky, one Type 2 Fire Dozer to work with the Texas Forest Service, and six Single Resources to incidents in Alaska, Oregon, and Ohio.

The Forest Service announced the 2019 Volunteer Fire Assistance grant award winners, which encompass 13 Maryland counties. The grant assists volunteer fire companies in enhancing wildland fire protection. The Maryland Forest Service awarded grant funds to 42 fire departments for \$105,693 in match funding to complete \$258,393 in total project cost. The maximum grant awarded was \$3,000 per department. The USDA Forest Service provides the federal grant funds.

The Maryland Forest Service works with the federal government to provide excess federal equipment to it and volunteer fire departments across the state. **More than 7,000 items were acquired through federal excess equipment for fire departments statewide, more than \$2.8 million in value!**



*Maryland wildland firefighters battling wildfires in Northern California in Fall 2019.*

# Partnerships: WORKING TOGETHER FOR THE TREES

The Maryland Forest Service has had many great collaborations and partnerships in our duties serving the public in 2019. There truly aren't enough pages in this report to highlight all of them! Our work would not happen without these committed nonprofits, educational institutions, private citizen groups, and county, state, and federal level agencies.

**54,120** trees planted throughout Maryland through the Healthy Forests Healthy Waters program.

**13** Arbor Day events participated in by Southern Region staff.

**NFWF** National Fish and Wildlife Fund provided financial assistance for data collection on buffer plantings in every county.

## NEWS AND NUMBERS

**MDOT** Howard and Montgomery county staff assisted the Maryland Department of Transportation with road cleanup after storm events.

### Forests for Wildlife

Sometimes our partnerships begin within our own department. Forestry personnel joined with the Department of Natural Resources Wildlife and Heritage Service this past year to work on delineating a new 1,200 acre Ecological Significant Area to protect a rare plant and forest community in Cecil County at Elk Neck State Forest. A prescribed burn will be conducted by staff to restore habitat.

### Project Profile: Growing Agritourism

Our Southern Region has found great success in implementing Healthy Forests Healthy Waters and program interest shows no signs of slowing down. Signing up one Southern Maryland landowner for Healthy Forests Healthy Waters has built a bond with a local family whose deep farming roots are now trying to tap into the world of agritourism. 20+ acres have been planted on the farm since 2015 and we are still planting!

The rolling fields that were once a tobacco farm are now filled with rows of black walnut, persimmon, beach plum, hazelnut, crabapple, and chokeberry, all planted to produce fruit and nut crops as part of an agroforestry enterprise. The woods bordering these planted fields are lined with paw-paw trees.

### Partner Profile

Alliance for the Chesapeake Bay and the Maryland Forestry Foundation are two special partners that help us get trees in the ground and improve our watershed. Working with the Alliance and the Forestry Foundation to sign landowners up for the Chesapeake Bay Trust-funded Healthy Forests Healthy Waters program has resulted in rising numbers of enrolled acreage across the state.

Healthy Forests Healthy Waters provides participating landowners with a free tree planting project of an acre or more on open land they want to convert into a forest, with supplies, labor, and at least three years of maintenance and technical advice for free! The only requirement of the landowner is to maintain this newly planted forest for a minimum of 10 years under the program.



Presenting agritourism planting concepts during a farm tour.

## CLOSER LOOK: THE IMPORTANCE OF OUTREACH AND PARTNERSHIPS

### *Spreading the Word of the Woodlands*

Both the Allegany College Forest Technology Department and the Garrett College Natural Resources and Wildlife Technology Program tapped our staff's expertise this year for assistance on curriculum development, program goals, student capstone projects, and job preparation. The Forest Service also provided **instructional lessons** for students under Project Learning Tree at Frostburg State University. In addition, the Forest Service supported the University of Maryland Extension Service Woodland Stewards and Master Gardeners Training by presenting workshops on forest landowner services, riparian forest buffers and their impact, demonstration of timber harvests, cost-share practices and tree planting sites.

Communicating the importance of our forests did not stop in university halls. Working with Allegany County and the Maryland State Tourism Office, forestry staff pitched in on developing local **tourism promotion videos** for Green Ridge State Forest by offering site locations and logistics support. Along similar lines, we assisted London-based Windfall Films with travel and filming logistics in their project to film various tracts of Savage River State Forest as part of a documentary entitled "Northern Hardwood Forests" for PBS Nova.

**Intergovernmental outreach** was another part of our forestry advocacy in 2019. The Forest Service was fortunate enough to present to the Maryland Outdoor Recreation Economic Commission, established by Governor Larry Hogan, about the recreational and heritage tourism opportunities provided by our western state forests. Our Southern Region staff also introduced the Maryland Office of the Attorney General to the world of forestry with a **field tour** of a timber harvest site and a young forest buffer planting.

### *Project Spotlight: Bringing Back the Chestnut*

Working with the American Chestnut Foundation and West Virginia University, our staff and state forests are part of an initiative to reintroduce the American chestnut to our landscape. The Maryland Forest Service hosted the U.S. Department of Agriculture Animal & Plant Health Inspection Service in their **recent inspection and compliance review** of a trial orchard at Savage River State Forest.

This orchard of American chestnut has been genetically crossed with the Chinese variety to create a blight-resistant species that would eventually be reintroduced to the Appalachians. The University of Maryland and the Chestnut Foundation were valuable team members in getting these experimental seedlings in the ground at Savage River. Across the state, the Forest Service has established multiple trial plots working with private landowners and the Maryland branch of the American Chestnut Foundation.

### *Project Spotlight: Wings in the Woods*

Restoring lost or declining species is a common cause among partner agencies. The U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) has been a longtime partner in cost-share initiatives like the Environmental Quality Incentive Program.

In particular, use of the Environmental Quality Incentive Program has increased in the region due to the Maryland Forest Service, the NRCS, and the National Fish and Wildlife Fund providing **technical and financial assistance** for golden-winged warbler habitat restoration. This is part of the National Fish and Wildlife Fund's Central Appalachia Habitat Stewardship Program, aimed toward restoring and sustaining healthy forests, rivers and streams that provide habitat for diverse native bird and aquatic populations.

Through our teaming with the NRCS, foresters in the western stretches of the state have worked with landowners to improve golden-winged warbler habitat via crop tree release to promote desirable species and control invasives in the understory to encourage regeneration, to name a few habitat restoration approaches.

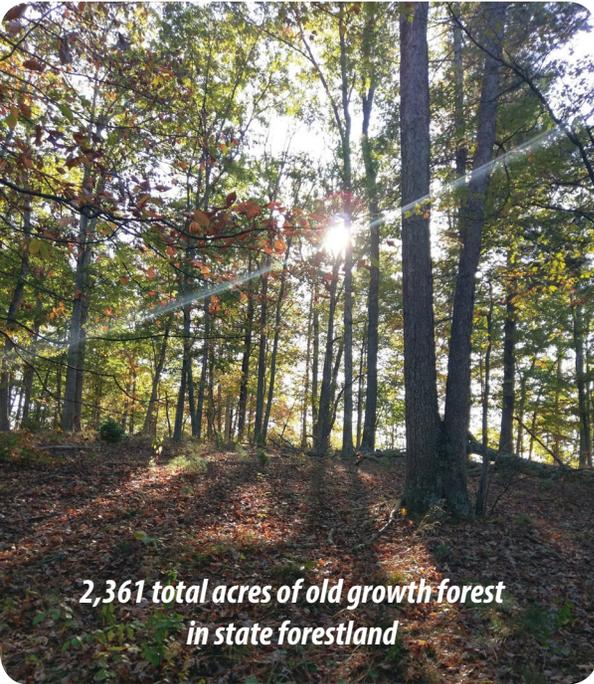
**The Maryland Forest Service manages more than 216,000 acres of state forestland that are dual-certified by the Sustainable Forestry Initiative (SFI) and the Forest Stewardship Council (FSC) as sustainably managed forests:**

**Green Ridge State Forest (48,839 acres) • Savage River State Forest (55,180)  
Potomac-Garrett State Forest (19,228) • Chesapeake Forest Lands (75,224)  
Pocomoke State Forest (18,281)**

Of these lands, **144,000 acres** are available for timber harvest. **\$948,000** in revenue was earned from timber harvest in FY 2019.

## CLOSER LOOK: STATE FORESTS

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.



**2,361 total acres of old growth forest in state forestland**

*Clockwise from left: Green Ridge, Elk Neck, and Pocomoke state forests; timber harvest on state forest*



**ERIC AND BUTCH GLOTFELTY** of Glotfelty Lumber, our primary forest products operator on the Garrett County state forests, were honored as the Forest Resources Association's 2019 Appalachian Logger of the Year.



## STATE FOREST INFRASTRUCTURE

- 61 miles of ORV trails
- 676 miles of forest roads
- 852 culverts
- 16 bridges
- 1,766 miles of forest boundaries

## PUBLIC ACCESS

- 8,891 camping registrations
- 11 scenic overlooks
- 40 non-ORV trails (187 miles)
- 765 firewood permits issued

## STATE FOREST EMPLOYMENT

- 19 permanent employees
- 8 contractual and 19 seasonal employees