

# DELAWARE FOREST SERVICE ANNUAL REPORT



2021

OUR BRANCHES ARE HERE FOR YOU



DELAWARE DEPARTMENT OF  
**AGRICULTURE**

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July 1, 2021

Michael T. Scuse, Secretary  
Delaware Department of Agriculture  
2320 South DuPont Highway  
Dover, DE 19901

Dear Secretary Scuse:

The Delaware Forest Service completed a very significant task in early FY21. As amended by the 2008 Farm Bill, the Cooperative Forestry Assistance Act requires each State forestry agency to develop a "Statewide Assessment and Strategies for Forest Resources," collectively referred to as the State Forest Action Plan (SFAP). For eligibility to receive funds under the authorities of the Act, an approved SFAP must be on file with the U.S. Forest Service. I am pleased to report that Delaware's 2020 SFAP was approved on May 5, 2021. Two documents that make up the plan will help guide us and our like-minded partners over the next decade as we seek to conserve and protect this precious natural resource: Delaware Forest Resource Assessment and the Delaware Statewide Forest Strategy.

The attached Annual Report for FY21 summarizes the successes we have had with our core forestry programs—forest health, forest stewardship, urban and community forestry, and wildland fire. The details and highlights contained in this report provide many examples showing the dedication and enthusiasm of the Delaware Forest Service staff. Our goals revolve around protecting trees and forests and educating the general public on the importance of this widespread and invaluable natural resource.

The ongoing support we receive from the Carney Administration, Delaware General Assembly, and the U.S. Forest Service helps us perform those tasks that ensure success in achieving our mission to conserve, protect, and enhance Delaware's forests through education, management, and professional assistance.

Sincerely,

Michael A. Valenti  
Forestry Administrator

**The Delaware  
Forest Service completed  
its Forest Action Plan in FY 2021.**  
[de.gov/forestactionplan](https://de.gov/forestactionplan)



# CONTENTS

TABLE OF CONTENTS	1
ADVISORY COUNCILS	2
EXECUTIVE SUMMARY	3
FOREST CONSERVATION	5
• Urban and Community Forestry	
• Landowner Assistance	
FOREST PROTECTION	16
• Wildland Fire Program	
• Forest Health Program	
• Watershed Protection	
FORESTRY EDUCATION	27
• Delaware State Forests	
• Information and Education	
FY 2021 BUDGET SUMMARY	33



# ADVISORY COUNCILS



## COMMUNITY FORESTRY COUNCIL

Jay Ashby, <b>Chair</b>	Cypress Tree Care
Mike Krzyzanowski, <b>Vice-Chair</b>	Delmarva Power
Marcia Fox, <b>Immediate Past Chair</b>	DNREC
Kesha Braunskill	U&CF Program Director
Valann Budischak	DNLA
Taryn Davidson	Urban Forester
Kyle Hoyd	Asst. State Forester
Kerin Hume	Kent Conservation District
Carol Larson	Village of Arden
Blake Moore	Univ. of Delaware Extension
Megan Pleasanton	Delaware State Univ. Extension
Richard Pratt	Governor's Council on Forestry
Elain Schmerling	Ardentown
Mardi Thompson	City of Lewes *
Michael Valenti	State Forester
Herb White	City of Wilmington *

## GOVERNOR'S COUNCIL ON FORESTRY

Peter Martin, <b>Chair</b>	Georgetown
Richard Pratt, <b>Vice-Chair</b>	Clayton
Dot Abbott	Wyoming
William Jester	Harrington
Daniel Tartt, Jr.	Harrington
Rachel Egolf	Delmar
Michael A. Valenti	State Forester

# EXECUTIVE SUMMARY

Forests and community trees are essential in maintaining a healthy environment that is enjoyed by all residents of Delaware. Trees are a critical part of the state's natural infrastructure. In addition to providing the public with many healthful recreational opportunities, forests give us clean water, clean air, critical wildlife habitat, soil protection, forest products, and carbon storage. Delaware forests are a critical resource that must be protected from loss and harm.

The Delaware Forest Service staff and conservation partners encourage all forest landowners to practice sound management. Our foresters continuously monitor forests statewide for health threats and seek ways to improve public awareness of the importance of Delaware's trees and forests and the services available to them. These strategies are implemented in three main areas: **conservation, protection, and education.**



**Michael Valenti**  
State Forester

## FOREST CONSERVATION

### Urban and Community Forestry Program

The Urban and Community Forestry program provides technical assistance to cities, towns, communities, developers, and local governments. Staff members help develop community forest management plans and street tree inventories. Annual community forestry grants are awarded to organizations for tree planting or tree management projects on public lands. In FY21, the Delaware Forest Service provided \$131,693 for 35 projects in the First State.

### Landowner Assistance

Professional foresters help landowners improve the quality of their forestlands. This technical assistance includes management activities such as reforestation, timber harvesting, timber stand improvement, and the development of forest management plans. In FY21, the Delaware Forest Service supervised the planting of 28,100 seedlings on 65 acres of private land and prepared 13 stewardship plans on 2,649 acres.



## FOREST PROTECTION

### Wildland Fire Program

Delaware Forest Service personnel help protect the First State's natural resources through the wildland fire program. Foresters and conservation techs assist volunteer fire companies with wildland fire suppression and provide wildland fire training. In FY21, the Delaware Forest Service assisted 70 percent of Delaware's volunteer fire companies (42/60) with wildfire suppression, loaning of equipment, and/or training. The Delaware Forest Service responded to nine wildfires on nearly 62 acres and was on standby for over 310 outdoor fires. The Delaware Forest Service continued its successful prescribed burning program in FY21, completing burns on a total of 637 acres on state, federal, or private lands. Delaware wildland firefighters also contributed 594 person-days to the national effort. Staff also provided Smokey Bear school supply bags to 281 students.



## Forest Health Program

During the past year, foresters provided 81 forest insect and disease diagnoses for landowners and homeowners. Our staff keep a close eye on forest pest activity statewide. Early detection is the key to successful eradication and high-value specimen tree protection in an infested area.

## Watershed Protection

Foresters review all commercial forest management operations and activities in the state to ensure compliance with the Forestry Practices Erosion and Sedimentation (E&S) law. In FY21, the Delaware Forest Service issued 79 permits on 3,244 acres and conducted 81 site inspections. Foresters provide technical assistance to forestry operators to safeguard water quality during harvesting operations.

# FORESTRY EDUCATION

## Information and Education

The Delaware Forest Service emphasizes education in all forestry program areas. Our goal is to inform and educate citizens on the importance of Delaware's forest resources. In FY21, staff members provided 85 forestry educational programs to 3,801 participants on a variety of topics in schools, clubs, civic groups, and communities.

## State Forest Management

The Delaware Forest Service manages 21,290 acres of mostly forested land at Redden (13,936), Blackbird (6,031), and Taber (1,323) State Forests. Multiple use management objectives include wildlife habitat enhancement, recreation, forest products, natural resource education, and water quality protection. In FY21, an estimated 36,477 visitors logged 23,461 user-days with popular activities such as hunting, wildlife observation, hiking, and equestrian events.

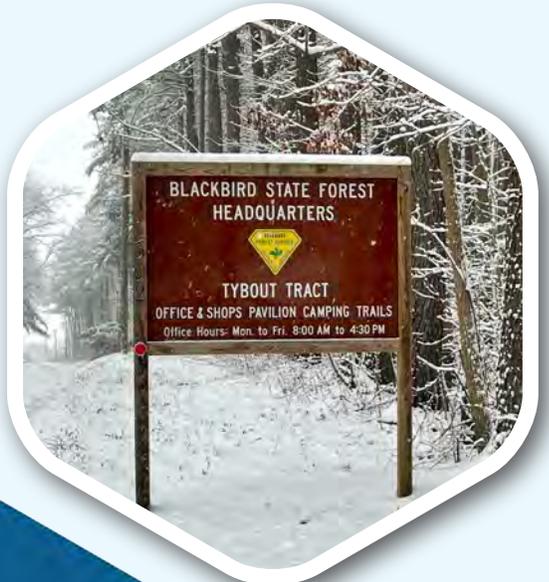
I hope you find this summary report informative, as it outlines our major accomplishments for FY21. We continue to fulfill our mission to conserve, protect, and enhance Delaware's forests through education, management, and professional assistance. Please contact our offices or visit [de.gov/forestry](http://de.gov/forestry) if you need any type of forestry or shade tree assistance or to learn more about the Delaware Forest Service.

*Michael A. Valenti*

Michael A. Valenti  
Forestry Administrator



**In FY21, DFS staff provided 85 educational programs to 3,801 participants in schools, clubs, civic groups, and communities.**



# FOREST CONSERVATION

A major issue facing forests is poor management. Many of Delaware's rural forests are managed for timber production, but it can take 40 years to grow a mature crop of timber. Many landowners might only harvest timber once in their lifetime and not be aware of management techniques to help them fully achieve their forestry objectives. The Delaware Forest Service offers assistance to help these landowners. Many communities also suffer because they lack management plans for their street trees, a complete inventory of their trees, or the expertise to manage them. Therefore, many urban forests do not provide their full range of benefits such as energy savings, reduced storm water runoff, and temperature moderation.

## URBAN AND COMMUNITY FORESTRY

### Urban and Community Forestry Program

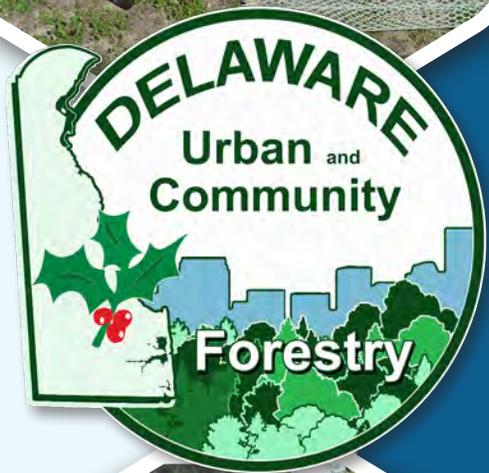
The Urban and Community Forestry (U&CF) Program provides technical assistance to cities, towns, communities, developers, and local governments to advise communities on management plans and street tree inventories. Urban foresters also review proposed developments to conserve and protect urban forest resources. In addition, annual community forestry grants are offered to various groups for tree management and tree planting projects on public lands. The program also provides educational training through public presentations to schools, universities, municipal groups, and regional tree workshops.

**\$131,693  
GRANTS**

**Provided to 35 organizations for  
tree planting projects on public  
land and community open space.**

### Urban and Community Grant Program

The Delaware Forest Service U&CF Program offers grants to municipalities, schools, non-profit organizations and government agencies for tree planting and management projects on public lands. Program goals are to increase tree canopy, beautify community spaces, and promote the many benefits of trees. Grants are made possible by the U.S. Forest Service and state funds. Recipients must provide a 50-50 cost share match that can be met through volunteer labor, donated materials and services, or cash. The program is open to any city, town, community group, homeowner association, or certified non-profit organization in the State of Delaware. Awards range from \$500 to a maximum of \$5,000 in one of two project categories, tree planting or tree management, and all projects must take place on public lands. Priority is given to first-time applicants, Tree Friendly Communities, and municipalities with urban tree canopy resolutions.



The U&CF Program worked with over 20 volunteers from the “Gathering of the Saints” Book Club and Wilmington’s urban forestry staff to plant 16 trees in Haynes Park.



### Urban and Community Forestry Grants

In FY21, the Delaware Urban and Community Forestry Program awarded \$131,693 for 35 tree projects throughout the First State as part of its annual grant program.\* Over the past 15 years, the program has given more than \$1.85 million to help communities increase tree canopy and promote the natural benefits of trees: cleaner air and water, increased property values and civic pride, and reduced storm water runoff and flooding.



\* Grant requests are not final until project completion. All requirements must be met, including cost-share match, and approval granted by the U&CF Program.

### URBAN AND COMMUNITY GRANTS

Community	County	Request
Alapocas	New Castle	\$5,000
City of Newark	New Castle	\$5,000
Edenridge Civic Association	New Castle	\$5,000
Pigeon Run Cemetery	New Castle	\$5,000
Sharpley Civic Association	New Castle	\$5,000
Westover Hills C	New Castle	\$850
Town of Wyoming	Kent	\$4,000
Bay Pointe	Sussex	\$847
Villas at Bay Crossing	Sussex	\$2,998
Whartons Bluff B Condo Association	Sussex	\$1,925
Williams Pond Park - Seaford	Sussex	\$4,000
	<b>Total</b>	<b>\$39,620</b>

## Wilmington Haynes Park Tree Planting



### Climate, Coastal and Energy Projects

The U&CF Program partnered with the Climate, Coastal and Energy division of DNREC to provide funding for tree planting projects in 11 communities this year. The Climate, Coastal and Energy program has goals that focus on carbon sequestration and trees meet this objective by providing long-term carbon storage. Each tree planted through the grant program will have its carbon values calculated and help contribute to the goals in the state's climate action plan.

Delaware is part of the Regional Greenhouse Gas Initiative (RGGI), a multi-state carbon dioxide cap-and-trade program developed as a cooperative effort among the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, Vermont and Virginia to cap and reduce carbon dioxide (CO<sub>2</sub>) emissions from the power sector. Money raised through the initiative is returned to participating states to invest in energy efficiency, renewable energy and other consumer benefit programs. In Delaware, the RGGI program is administered by the Department of Natural Resources and Environmental Control (DNREC).

## CLIMATE, COASTAL AND ENERGY PROJECTS

Community	County	Request
City of New Castle	New Castle	\$5,000
Fairthorne	New Castle	\$2,231
Legacy at Odessa National	New Castle	\$1,970
Lutheran Church of the Good Shepherd	New Castle	\$5,000
Piedmont Baseball - Swift Park	New Castle	\$5,000
Shipley Heights	New Castle	\$5,000
Unitarian Church of Mill Creek	New Castle	\$1,500
Town of Smyrna	Kent	\$2,000
Forest Landing	Sussex	\$3,937
Long Neck Shores	Sussex	\$4,883
Showfield	Sussex	\$5,000
	<b>Total</b>	<b>\$41,521</b>

## CLIMATE ACTION PLAN

Tree planting projects can help offset carbon emissions and mitigate climate change.



## CHESAPEAKE BAY GRANTS

Community	County	Request
Changing Fates Equine	Sussex	\$5,000
Trap Pond State Park	Sussex	\$5,005
<b>Total</b>		<b>\$10,005</b>

## NONPOINT SOURCE GRANTS

Community	County	Request
City of Dover	Kent	\$2,356
City of Lewes	Sussex	\$3,309
Plantation Lakes	Sussex	\$4,930
Seasons Community	Sussex	\$4,486
The Glade	Sussex	\$4,925
Village of Five Points	Sussex	\$5,000
<b>Total</b>		<b>\$25,006</b>

### Chesapeake Bay Grants

The USDA Forest Service provides funding to plant trees within the Chesapeake Bay Watershed. The trees planted help towards meeting goals outlined in the Watershed Implementation Plans (WIPs), which include detailed, specific steps each of the seven Bay watershed jurisdictions will take to meet the pollution reduction goals of the Chesapeake Bay Total Maximum Daily Load (TMDL) by 2025. These plans consider such things as ecological restoration and sustainability while allowing for greater transparency and accountability for improved performance. In FY21, the U&CF Program funded two projects for \$10,005.

### Nonpoint Source Grants

The U&CF Program partnered with the Nonpoint Source Program (NPS) of DNREC to plant trees in EPA priority watersheds in Delaware. The program aims to address the issue of NPS pollution as it affects Delaware's numerous waterbodies. Efforts include grant funding, education, outreach, and partnerships with other organizations. Reductions in NPS pollution can be achieved through the incorporation or installation of specific best management practices (BMPs) addressing agriculture, silviculture, construction, septic systems, and hydromodification activities. Tree plantings are a BMP that can help intercept stormwater and nutrient runoff, reduce sedimentation and erosion, and filter pollutants. In FY21, \$25,006 was provided to six community groups to fund tree projects that address NPS pollution.



# Town of Milton Rails to Trails Planting

## Focus Funding Projects

The U&CF Program provides annual funding for projects that meet program goals to reach milestones from Delaware's Forest Action Plan. Each of the projects funded this year provided trees that were planted in areas to help prevent storm damage, mitigate heat island effects, increase tree canopy and foster appreciation for our urban forests.

Delaware's urban and community forestry program and its new "Tree Stewards" program led over 50 volunteers and town officials to plant 160 trees in Milton on Saturday, April 24. The trees will enhance part of the Sussex County "Rails to Trails" project.



## FOCUS FUNDING PROJECTS

Community	County	Request
Bonsall Park	New Castle	\$1,853
Haynes Park	New Castle	\$755
Talley Day Park	New Castle	\$3,096
Town of Milton Rails to Trails	Sussex	\$9,417
Villages of Herring Creek	Sussex	\$420
<b>Total</b>		<b>\$15,541</b>





There are 21 neighborhoods and homeowner groups certified as Delaware "Tree Friendly Communities."



### Tree Friendly Community Program

Delaware's "Tree Friendly Community Program" honors communities and HOAs that protect and enhance urban forests. Bronze, Silver, Gold, and Platinum levels correspond to their length of participation. A total of 21 communities earned the honor by achieving at least three of the following:

1. Annual ceremony to promote community forests,
2. Tree project to enhance urban forests,
3. Community forestry management plan,
4. Community ordinance to protect trees
5. Tree commission or tree board, or
6. Tree budget of \$1 per household.

TREE FRIENDLY COMMUNITY PROGRAM		
Community	County	Level
Alapocas	New Castle	Silver
Beech Hill	New Castle	Bronze
Carrcroft	New Castle	Platinum
Fairthorne	New Castle	Silver
Tavistock	New Castle	Platinum
Westover Hills A	New Castle	Platinum
Westover Hills C	New Castle	Platinum
Champions Club	Kent	Silver
Spring Meadows	Kent	Bronze
Bayside - Fenwick Island	Sussex	Bronze
Forest Landing	Sussex	Bronze
Meadows at Villages of Old Landing	Sussex	Silver
The Overlook - Selbyville	Sussex	Bronze
Village of Cinderberry	Sussex	Bronze
<i>Tunnell Communities</i>		
- Bayside	Sussex	Gold
- Baywood	Sussex	Gold
- Creekside	Sussex	Gold
- Coveside	Sussex	Gold
- Dockside	Sussex	Gold
- Lakeside	Sussex	Gold
- Seaside	Sussex	Gold

# Lewes Celebrates 20 Years as a Tree City USA



**\$8.98**

average per capita

**19.41%**

OF STATE  
LIVES IN A TREE CITY  
USA COMMUNITY

Taking part in a City of Lewes Arbor Day event are: (from left) Sen. Ernie Lopez, R-Lewes; Lewes Mayor Ted Becker; Lewes Chamber of Commerce Executive Director Betsy Reamer; Lewes tree commissioner Mardi Thompson; Lewes in Bloom member Marilyn Vai; and Lewes Parks and Marina Administrator Janet Reeves.



**TREE CITY USA®**

## TREE CITY USA®

Community	County	Years
New Castle	New Castle	9
Ardentown	New Castle	12
Arden	New Castle	14
Newark	New Castle	20
Wilmington	New Castle	28
Smyrna	Kent	16
Dover AFB	Kent	29
Dover	Kent	32
Henlopen Acres	Sussex	5
Georgetown	Sussex	7
Ocean View	Sussex	13
Bethany Beach	Sussex	15
Milford	Sussex	17
Lewes	Sussex	20
Rehoboth Beach	Sussex	30

### Tree City USA Program

With help from the urban and community forestry program, 15 towns and cities in Delaware achieved Tree City USA status from the National Arbor Day Foundation. Tree City USA is a community improvement program honoring cities and towns that promote and enhance their forests by meeting four standards:

1. Establish a tree board to develop and administer a public tree management program,
2. Create a community tree ordinance that designates the tree board which has responsibility for writing and implementing an annual community forestry work plan,
3. Spend at least \$2 per resident per year on community forestry activities, and
4. Celebrate Arbor Day with a ceremony that includes a proclamation from the mayor and council.



REPORTED NUMBER OF  
**TREES PLANTED 545**

Delmarva Power is a Tree Line USA® that sponsors annual Arbor Day events and tree plantings throughout Delaware.



Delmarva Power's Michael Krzyzanowski (left) accepted the Tree Line USA award from Milton Mayor Ted Kanakos.



### Tree Line USA

Communities across America depend on safe, reliable electrical service to power homes and businesses, while protecting and enhancing the urban forest. The TreeLine USA® program recognizes best practices in public and private utility arboriculture to show how trees and utilities can co-exist for everyone's benefit. The Arbor Day Foundation and the National Association of State Foresters partner on the initiative, which honors utilities for meeting five core standards in quality tree care, annual worker training, tree planting and public education, tree-based energy conservation program, and annual Arbor Day celebrations.

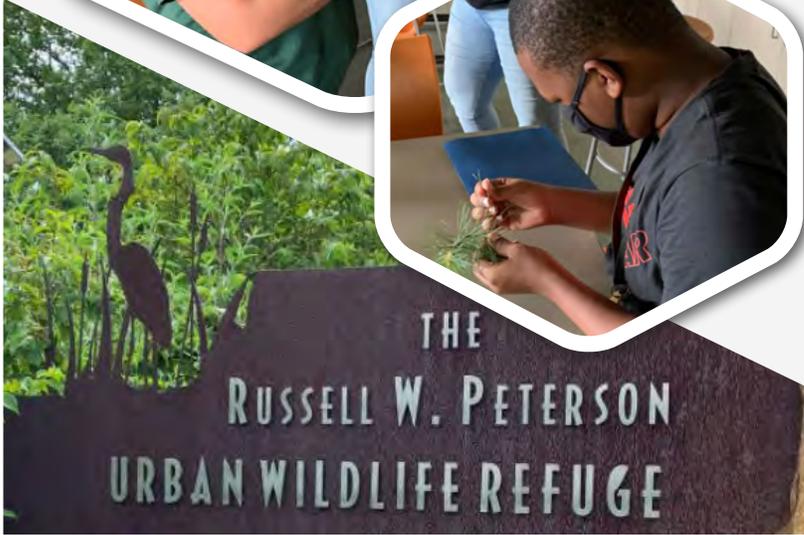
### Tree Campus USA

Delaware State University is the only Tree Campus USA in the First State, an honor it has held for 10 consecutive years. The award recognizes institutions that have implemented a tree care plan supported by funding allocations, a campus advisory committee, educational outreach, and an annual Arbor Day celebration. DSU is one of the few Historically Black College or Universities (HBCU) in the U.S. to earn this designation. Its main campus features an arboretum with trees representing over 130 species.



### Educational Programs

The U&CF program provides ongoing education to the public, including an Annual Arborist Seminar for tree care professionals and a Community Trees Symposium for citizens who want to gain more information on how to care for their trees. In July 2020, Delaware's urban forestry program coordinator Kesha Braunskill and urban forester Taryn Davidson provided an educational program for the Trail Ambassadors group at the Delaware Nature Society's DuPont Environmental Education Center in Wilmington. The event was geared towards 8th- to 12th-graders interested in pursuing careers in forestry and related fields.



## Delaware Tree Stewards Program

The U&CF Program launched Delaware Tree Stewards in the fall of 2020 as a way to connect people to their landscapes through the act of planting and caring for trees and forests, which are essential in protecting the lands and waters of the First State. By training and empowering citizens locally, the goal is to ensure Delaware has a greener future. Whether they are young or old, trees benefit from knowledge and care. The Delaware Tree Stewards is designed to help citizens take an active role in caring for trees, supporting local ecosystems as well as the communities that depend on them. By completing training and networking with other stewards, graduates will recognize opportunities and coordinate tree projects where they are needed most.

## Join. Learn. Plant. Trees need stewards.



### Tree Stewards Training

Workshops provide the knowledge and conversation that comprise the central part of the tree stewards training program. Spread over four sessions, the curriculum is completed once a tree steward finishes the sessions and participates in a Delaware Forest Service or partner-organized planting event. Topics covered include: how trees work, tree planting, care, and procurement, as well as organization, advocacy, and fundraising.



The U&CF Program and Delaware Tree Stewards planted over 100 trees at Bonsall Park and Talley Day Park in New Castle County.



DELAWARE TREE  
— STEWARDS —

## Braunskill Joins 1t.org's U.S. Stakeholder Council

In FY21, Delaware's urban forestry program director Kesha Braunskill was named to the U.S. Stakeholder Council of 1t.org, the group's first regional chapter. The stakeholder council is a bipartisan group of senior representatives from the public and private sectors that guide the strategic direction of the initiative. Braunskill joins leaders from Fortune 500 companies, members of the U.S. Congress, and major nonprofits including American Forest Foundation and Arbor Day Foundation. Organizations such as Bank of America, Mastercard, Microsoft, National Association of State Foresters, National Forest Foundation, Salesforce, and cities such as Detroit and Dallas have all pledged to invest in healthy forests, both within the U.S. and internationally, a significant step toward the trillion trees goal. Trees pledged will cover 2.8 million acres.



Urban forestry director Kesha Braunskill is on 1t.org's U.S. Stakeholder Council.



## Forest Service Pledge to 1t.org Global Initiative

1t.org is an international effort that aims to conserve, restore and grow one trillion trees globally by 2030. The World Economic Forum launched 1t.org at its 2020 Annual Meeting in Davos, Switzerland. Its goal is to accelerate global restoration of degraded ecosystems, fight the climate crisis, enhance food security, provide clean water, and protect biodiversity.

The Delaware Department of Agriculture's Forest Service was the first state agency in the United States to make a pledge towards the 1t.org global goal to conserve, restore, and grow one trillion trees by 2030. DFS will work with its partners to secure resources to meet the goal of conserving, restoring, and growing one million trees by 2030. DFS plans to use best management practices for forest protection and restoration, conservation of soil and water resources, and increasing the urban tree canopy. Healthy forests are a critical nature-based solution to climate change. Forests in the United States and forest products currently capture almost 15 percent of the nation's carbon dioxide emissions from burning fossil fuels.

The U&CF Program funded this tree planting project at a park in Delmar in FY21 (below).



The Delaware Department of Agriculture's Forest Service was the first state agency in the U.S. to make a pledge towards the 1t.org global goal.





This year, foresters prepared 13 stewardship plans that contained management goals and prescriptions for 2,649 acres of land.

## LANDOWNER ASSISTANCE

### Private Land Management

The Delaware Forest Service assists private landowners in all aspects of forest management, ranging from tree planting and timber stand improvement to long-term management plans. In FY21, the Delaware Forest Service supervised the planting of 28,100 seedlings on a total of five sites for 65 acres of private land. Two sites (2.6 acres) were hardwood afforestation and three sites (62.4 acres) were pine reforestation. Seedlings are acquired from the Maryland Forest Service nursery in Preston and planted under the direction of DFS staff by private contractors. In FY21, the combination of COVID-19 restrictions and wet weather negatively affected the annual planting season.

### Forest Stewardship Program

The Delaware Forest Stewardship Program introduces landowners to innovative land management techniques. Any resident who owns up to 1,000 acres of forested land, or land that can be converted to forestland, is eligible for assistance. Delaware's Forest Stewardship Program began in June 1992 in cooperation with the U.S. Forest Service State & Private Forestry Program. The Forest Stewardship Committee, which consists of landowners, foresters, and natural resource managers, helps guide and promote the program. The Delaware Forest Service assists landowners on stewardship planning, offers advice on tree species, tree planting, and timber stand improvement. This year, state service foresters prepared 13 stewardship plans for properties in New Castle, Kent, and Sussex Counties that included management goals and prescriptions for 2,649 acres of land. No pre-commercial thinning was conducted in FY21 due to COVID-19.

### CREP Program

In FY21, the Delaware Forest Service continued its partnership with the USDA Natural Resources and Conservation Service's Conservation Reserve Enhancement Program (CREP) to further its forested buffer goals and monitor existing CREP sites for compliance. The DFS is currently exploring options to expand its role in CREP to match an expected increase in funding from the CRP program.

### State-Funded Cost Share Program

In FY06, the General Assembly established a state-funded forestry cost share program totaling \$75,000, which is generated from cropland leases and timber sale revenues. The program supports the forest industry on the Delmarva Peninsula and benefits Delaware's communities and private landowners. The funding is divided between cost-share assistance to landowners (reimbursing 50 percent of actual costs) for forest management and community grants for tree planting and tree management projects on public land.



# FOREST PROTECTION



Another major challenge for Delaware's forests is their long-term health. Every year, hundreds of acres of forest are affected by wildfire, exotic species, or pests such as the gypsy moth, dogwood anthracnose, or southern pine beetle. Improperly conducted timber harvests and other forest management activities can also adversely impact forests and important resources such as water quality.

## WILDLAND FIRE PROGRAM

The Delaware Forest Service maintains a cooperative agreement with the U.S. Forest Service to assist local volunteer fire companies with wildfire suppression and prevention on Delaware's one million acres of undeveloped land, which includes 359,000 forested acres.



The DFS provides annual training to federal, state, local government employees, and casual hires (public volunteers who serve on our wildland crew). This year, DFS could not host many training sessions due to the COVID-19 restrictions. DFS provided training for 19 state, three federal, and 44 casual-hire firefighters.

The DFS maintains two fire equipment supply caches, one at Blackbird State Forest and one at Redden State Forest, with equipment to help with fire suppression needs: three fire plows to establish firebreaks, two Type 6 wildland fire engines, four UTVs equipped with 75 gallons tanks and ignition equipment, and wildland fire suppression tools such as fire rakes, hose, and collapsible backpack water tanks that can be utilized when needed. Equipment is available 24 hours a day by request.



The Delaware Forest Service responded to nine wildfires on nearly 62 acres and was on standby for over 310 outdoor fires throughout New Castle, Kent, and Sussex Counties. The past several years have been considered below normal for wildfire behavior due to moisture, temperatures, and fuels. However, Delaware's topography and fuel layers help to keep wildfires to a minimum.

### Volunteer Fire Assistance

In FY21, the Delaware Forest Service assisted 70 percent of Delaware's volunteer fire companies (42/60) with wildfire suppression, loaning of equipment, and/or training. Delaware's volunteer fire companies are vital to wildland fire response and suppression because they contribute the majority of manpower and resources for suppression efforts in the state.

**70  
PERCENT**

The DFS assisted 70 percent (42/60) of Delaware's volunteer fire companies with suppression, equipment, or training.



## VOLUNTEER FIRE ASSISTANCE GRANTS

Volunteer Fire Company	County	Award
Delaware City Fire Company	New Castle	\$4,500
Hockessin Fire Company	New Castle	\$2,113
Volunteer Hose Co. of Middletown	New Castle	\$411
Goodwill Fire Company	New Castle	\$253
Camden-Wyoming Fire Department	Kent	\$4,257
Robbins Hose Company No. 1	Kent	\$4,149
Marydel Fire Company	Kent	\$3,410
Delmar Fire Department	Sussex	\$4,500
Blades Volunteer Fire Company	Sussex	\$4,500
Indian River Volunteer Fire Co.	Sussex	\$4,500
Ellendale Volunteer Fire Co.	Sussex	\$2,461
Dagsboro Volunteer Fire Department	Sussex	\$2,206
Milton Volunteer Fire Department	Sussex	\$2,113
Laurel Fire Department	Sussex	\$750
<b>Total</b>		<b>\$40,123</b>

### Volunteer Fire Assistance Grants

The Delaware Forest Service's VFA Grant program is open to all Delaware volunteer fire departments and provides up to \$4,500 in matching grants to acquire pumps, hoses, and equipment to respond to and suppress wildfires. Since the program's inception, the Delaware Forest Service has awarded more than \$400,000 to enhance wildfire response and readiness in the First State. In FY21, a total of \$40,123 in matching grants was awarded to 14 volunteer fire companies to provide tools and equipment to fight wildfires throughout the First State. Priority was given to those companies that have not received grants in the past three years, had members attend this year's wildland fire classes and those with members who participated in the Delaware Forest Service's 2021 annual Fire Camp.



Volunteers from the Felton Fire Company assisted on the controlled burn in the City of Lewes on April 23.



## VFA GRANT PRESENTATIONS

From left, Dover Fire Chief David Carey, Firefighter Michael Morris, and Assistant Chief Sierra Brown accept a ceremonial check from the Delaware Forest Service's volunteer fire assistance grant program.

From left, Indian River Fire Prevention Co-Chairs Robert Marmor and Roxanne Bammer join Chief Hayden Klingler in accepting a ceremonial check of \$4,500 for its VFA grant from the Delaware Forest Service's Sam Topper.



From left, Blades Volunteer Fire Company Chief Jason Hudson, Assistant Chief Jason Tharp, President Ray Hastings, Capt. Lance Fleetwood, Assistant Chief Trey Jewell, Lt. Ernie Melson, and Chief Engineer Earl Chaffinch, Jr. accept a ceremonial \$4,500 check from the Delaware Forest Service's John Petersen.



From left: Delmar Volunteer Fire Department Chief Joe Morris and President Andrew Rementer accept a ceremonial \$4,500 check for its VFA grant from the Forest Service's John Petersen.

**\$40,123  
GRANTS**

Provided to 14 volunteer fire companies to enhance wildfire response in the First State.

## Controlled Burn to Reduce Fire Risk and Control Invasive Species in Lewes

### Prescribed Fire Program

The Delaware Forest Service continued its successful prescribed burning program in FY21, completing burns on a total of 637 acres on state, federal, or private lands.

Prescribed burning, also known as Rx burning, is an important part of land management that helps control unwanted vegetation, releases native plants, and reduces fuel loading in coastal areas. Rx burns are “prescribed” when site conditions meet pre-identified parameters to maximize safety and reduce smoke impacts. Factors include temperature, fuel moisture, wind speed, direction, relative humidity, and proximity to structures and populations. Many program partners rely on the DFS to help or run these Rx burns because our staff is NWCG (National Wildfire Coordination Group) certified in suppression and prescribed fire.

The main highlight of this year’s prescribed fire season was the City of Lewes burn. DFS handled the operations and logistics of this complex burn working with the city’s VFC, police department, and town council along with outside resources from other state agencies. The City of Lewes burn was a 48-acre site, primarily coastal marsh with phragmites and other vegetation. The purpose of the burn was to reduce hazardous fuel buildup and restore native marsh habitat. The area was last burned in 2008. The area has been treated several times over the past ten years to control phragmites, *Phragmites australis*, which outcompetes native vegetation and lowers the local plant biodiversity.



## Wildfire Training

The Delaware Forest Service hosted its basic suite of classes for 11 rookie wildland firefighters online due to COVID-19 restrictions. This number is about one-eighth of what the DFS would typically train in a given year. However, all 11 rookies completed the classes virtually and were eligible to attend fire camp.

The annual wildland “Fire Camp” event was moved to late May, which allowed it to be held in-person because COVID-19 restrictions were eased. Fire Camp was required for all rookie and veteran fire fighters looking to be eligible (red card status) for the 2021 fire season. A total of 47 rookie and veteran fire fighters completed the one-day training that was offered two times to help reduce overcrowding. In addition to these classes, six firefighters also completed advanced-level wildland fire classes to enhance their qualifications and provide more assistance to communities and states in need.

The DFS supported the Mid-Atlantic Fire Academy by supplying personnel to assist with logistical operations. The academy was held at Garrett College and over 175 firefighters signed up for training. In addition to the help DFS supplied, nine state firefighters completed both in-person and virtual training sessions.



## 2021 Delaware Fire Camp



Above, Bradley Melson of Milford (left) and Eddie Boyer of Frederica completed the “Saws 212” training session at the Mid-Atlantic Fire Academy at Garrett College.

Firefighters completed pack tests and shelter deployment training for NWCG certification.

Delaware's crew visited Granite Mountain Hotshots Memorial State Park in Arizona to pay tribute to the fallen firefighters.

## Delaware's Wildfire Crew Battled Blazes in Arizona and California



### Wildfire Crew Assignment

The Delaware Forest Service dispatched a Type 2 IA crew to fight wildfires in Arizona and California. The 21-person team mobilized at Blackbird State Forest in Smyrna and was assigned to the Griffin Fire, a blaze that covered more than 61,000 acres in Arizona's Tonto National Forest. The next assignment was the Rockhouse Fire, which consumed more than 19,000 acres on Bureau of Indian Affairs land near San Carlos, Arizona. The crew's last assignment was the Valley Fire in southern California, which burned 16,390 acres.

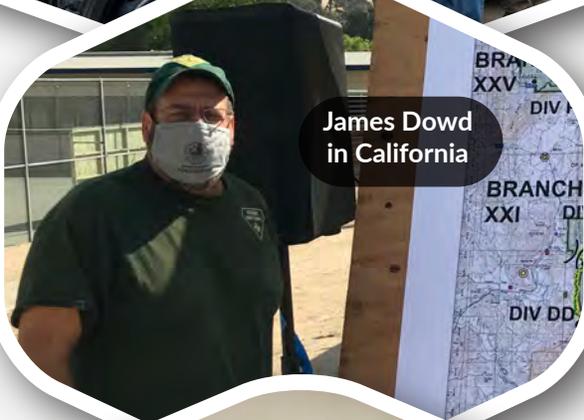


Due to the terrain, Delaware's crew reached the Valley Fire by helicopter.

Below, from left, Tyler Thompson, Todd Gsell, and Ryan Capron mobilized Delaware's Type 6 engine to California's August Complex Fire.



Delaware's Type 6 engine crew with (from left) Adam Kever, Bradley Melson and Sam Topper fought fires in Colorado and California in June and July of 2021.



James Dowd in California



John Petersen in Milwaukee



Engine Crew in Colorado

### Engine Crews and Single Resources

The Delaware Forest Service also dispatched its Type 6 engine and three single resources to incidents throughout the country:

- Todd Gsell (ENGB), Tyler Thompson (ENGBt), and Ryan Capron (FFT2) served on Delaware's Type 6 engine mobilized to the August Complex in California in September of 2020. At the time of dispatch, this was California's largest fire for the 2020 season.
- James Dowd served as a GSUL on the Castle Fire in California's Sequoia National Forest in September of 2020.
- John Petersen served as an INTS at Eastern Area Coordination Center in Milwaukee, Wisconsin in September/October of 2020 and also in June of 2021.
- Tyler Thompson (AD Casual Hire) served as an ICT5 (Squad Boss) on a first-ever Mid-Atlantic Interagency Fire Crew. The crew was made up of seven states and three federal agencies and was dispatched to the Mullen Fire in Colorado in September 2020.
- Sam Topper (ENGB), Adam Kever (ENGBt), and Bradley Melson (FFT2) served on Delaware's Type 6 engine mobilized to the Oil Springs Fire in Colorado in June of 2021. They were then dispatched to southern California's Angeles National Forest to conduct initial attack operations with four other Type 6 engines.

## FOREST HEALTH PROGRAM

The Delaware Forest Service works with landowners, state and federal agencies, and educational institutions to conduct forest pest surveys, provide technical assistance, and forest health education. Foresters emphasize a range of prevention strategies to minimize the destructive effects of serious forest pests. The DFS also uses aerial and ground surveys along with permanent forested plots to monitor the health of our forests annually.

### Technical Assistance

In FY21, the DFS conducted 71 insect and disease diagnosis visits to landowners and homeowners. Our forest health specialist provided four insect, disease, and educational programs to 77 students on “virtual” formats such as Zoom, Chime, and Webex due to COVID-19.

### Southern Pine Beetle (SPB)

Southern pine beetle (SPB) is a native pest that can occasionally build up to destructive population levels in Delaware’s pine forests. In the spring of 2021 Delaware continued to participate in the Southwide Southern Pine Beetle Pheromone study with five traps at permanent locations in Sussex County loblolly pine stands. The five southwide traps collected only three SPBs over a six-week period. The Cypress Swamp SPB trap was the source of all three adult beetles captured this year. This number indicates a low or declining SPB population.

### Asian Longhorned Beetle (ALB)

Asian longhorned beetle (ALB), *Anoplophora glabripennis*, is an invasive pest that has killed street trees in New York, New Jersey, Massachusetts, Ohio, and Chicago, Illinois. A new infestation was discovered in the port city of Charleston, South Carolina in May of 2020. This potentially harmful insect is native to Japan, Korea, and southern China. Unlike other longhorned beetles that attack stressed, diseased, and dying trees, ALB attacks and kills healthy trees. Consequently, there is concern that this exotic insect will become a major pest in North America. Asian longhorned beetles attack maple (*Acer*) trees, including Norway, red, sugar, and silver maple, and boxelder, as well as horse-chestnut (*Aesculus*), willow (*Salix*), and 10 other genera.



The DFS continued to monitor for ALB in 2021 with nine large panel traps placed throughout the state, focusing on industrial areas in the northern half of the state. The DFS has also installed “sentinel” maple plantings in six New Castle County parks to help foresters and the public get an early alert of ALB if they move into the area. To date, no ALB has been found.

Delaware staff joined the U.S. Forest Service (USFS) forest health team to survey for spotted lanternfly at First State National Historical Park.



From left, Sonja Werth of First State National Park, Karen Felton of USFS, forest health specialist Bill Seybold, Heather Smith of USFS, and forest health associate Brooke Cherry.  
(Photo by Rick Turcotte, USFS)

In FY21, the DFS conducted 71 insect and disease diagnosis visits for landowners and homeowners.



The Delaware Forest Service conducts an annual aerial survey of the entire state to assess the health of its forests.

Bacterial leaf scorch primarily affects trees in the red oak group. Sampling indicates it is prevalent in all three counties of Delaware.



Forest health specialist Bill Seybold inspects an ash for signs of EAB, such as “D”-shaped holes on the bark (below). EAB appears to be more heavy in the western parts of Kent and Sussex Counties.



### Bacterial Leaf Scorch (BLS)

Bacterial leaf scorch is caused by a bacteria (*Xylella fastidiosa*) that can only grow in the xylem of several species of plants (including, notably, most oaks in the red oak group) or in the gut of certain insect vectors such as leaf and treehoppers. During the late summer, infected trees show a distinctive marginal leaf scorch. Reduced water flow in the xylem of affected trees causes them to suffer from stress and eventual crown dieback, making them more susceptible to insects and diseases.

There is no known cure or effective treatment (other than reducing water stress with irrigation and mulching) to this disease and infected trees in landscape settings usually die within about 10 years. DFS tree sampling in the early 2000s showed the disease occurring throughout the state. Permanent plots set up at each of the three state forests (Blackbird, Taber, and Redden) showed the disease is also prevalent in natural oak forests (with a red oak component) in all three counties. Each year, the marked trees at the plots are revisited and effects of BLS on the leaves, canopy dieback, and survival rate are noted. It is theorized that BLS may be one contributing factor to the red oak decline noted by many forest health experts, at least from the mid-Atlantic area southward where BLS occurs. The most recent surveys for BLS occurred in September of 2020. Adequate to heavier than normal precipitation appears to have kept BLS symptoms and branch dieback at bay for the last two or three years.

### Emerald Ash Borer (EAB)

2021 is the first year in which this quickly spreading invasive pest of ash (*Fraxinus* spp.) has shown up across most of the state. The June aerial survey and follow-up ground checks showed that most of the green ash in the wetlands and floodplains are showing canopy die-back and tree mortality to some extent. White ash is mostly found in the uplands of the piedmont portion of the state. The aerial survey revealed that most of the ash across the state in the northern Piedmont are infested as well. The infestation appears most heavy in the western portions of Kent and Sussex Counties as of 2021. The DFS advises owners of high-value landscape ash trees to commence an insecticidal treatment plan with a certified arborist due to this threat.

### Gypsy Moth

This year’s aerial detection survey disclosed an area of approximately 25 acres of defoliation by gypsy moth larvae in a mixed hardwood stand on Bethel Road about one mile southeast of Gumboro. Last year’s infestation southeast of Frankford did not appear to have much defoliation from gypsy moth this year. Scattered hardwoods throughout southern Sussex County were found to have gypsy moth egg masses from last summer and from new egg laying that started in late June.



## Beech Bark Disease (BBD) and Beech Leaf Disease (BLD)

American beech (*Fagus grandifolia*) is a common tree easily recognized by its smooth gray bark. A stately forest tree, beech provides food for deer, squirrels, and, in much of its range, black bears. Unfortunately, a non-native disease complex called beech bark disease has killed millions of beech trees in the northeast.

Currently found from Canada to the Appalachians as far as West Virginia, BBD begins with infestation by a scale insect, followed by infection of a destructive fungus. Most of the beech trees in infested stands die within a few years. Four permanent natural beech forest plots in northern and central Delaware are surveyed annually for BBD. At each site, at least 20 beech trees are inspected. Fortunately, beech bark disease has not been detected in Delaware to date.

Beech leaf disease (BLD) is another health issue that affects beech. Discovered in Lake County, Ohio in 2012, BLD involves striping or banding of a thicker and darker than normal tissue between veins on beech leaves. Mature beech trees can die in about 6 to 10 years and smaller trees even quicker. The disease is associated with a foliar feeding nematode, *Litylenchus crenatae*. Because BLD is moving quickly through beech stands in Ohio, Pennsylvania, Connecticut, New York, and Ontario, the forest health program has begun surveying for BLD (and Beech Bark Disease) using a standard one-tenth acre plot system established by the USFS Forest Health Protection program for the Northeast. Seven of these plots were established in 2021. Permanent plots are now at Trap Pond State Park, Tidbury Park in Dover, Blackbird State Forest, and the Judge Morris Estate portion of White Clay Creek State Park. The visual surveys and lab tests of leaf samples from these plots has yet to detect BLD.

## Sirex Wood Wasp

An exotic wood wasp, *Sirex noctilio*, was first found in Oswego County, New York in 2004. It has since been detected in northern Pennsylvania, northern Ohio, Connecticut, Michigan, Vermont, as well as southern Ontario and Quebec. The wasp attacks pine trees and represents a serious potential threat to Delaware's loblolly pine resource. Adults can disperse 20 miles or more. Delaware began a survey program in 2006 using Lindgren funnel traps baited with chemical lures. From August to November of 2020, Sirex wood wasp monitoring continued with nine trap sites throughout Delaware. To date, *Sirex noctilio* has not been detected.



Sirex Wood Wasp  
(*Sirex Noctilio*)

Photo: David R. Lance  
USDA APHIS PPQ

## WATERSHED PROTECTION

### Forestry Practice Erosion and Sedimentation (E&S) Law

DFS foresters review E&S permits for all silvicultural operations over one acre and provide educational materials and programs to landowners and loggers. By using Best Management Practices, such as forested buffers along waterways, water quality is protected by minimizing erosion and sedimentation. The program stresses the importance of properly conducted activities on forestlands that contain or are near open water through presale inspections and educating loggers on the need to protect water quality.

In FY21, the Delaware Forest Service issued 79 permits on 3,244 acres and conducted 81 site inspections. The largest percentage of these activities was in Sussex County (49 of 79 projects), followed by Kent County (20), and New Castle County (10). One of the Forest Service's performance measures is to increase the percentage of timber harvests on nonindustrial private forestlands (NIPF) that follow a forest management plan. While all harvests must have an approved E&S permit, Delaware does not require a forest management plan for them. In FY21, 30 percent (547 of 1,831 acres) of NIPF harvests remaining forested had plans.

### Seed Tree Law

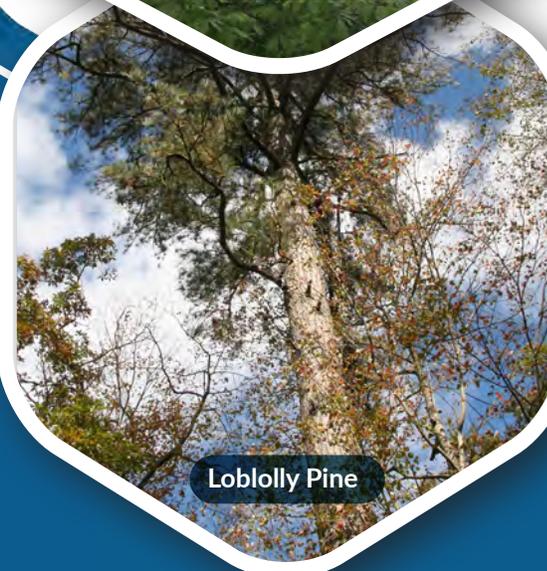
The DFS also administers the Delaware Seed Tree Law that applies to all forested tracts of 10 acres or more with a combination of at least 25 percent loblolly pine, shortleaf pine, pond pine, or yellow-poplar. Landowners with woodlands that meet these guidelines must provide for reforestation of these lands unless there are at least 400 healthy, well-distributed seedlings present on each acre following the harvest. In FY21, 31 harvests totaling 1,659 acres were approved under the Seed Tree Law. The Delaware Forest Service will continue to monitor these properties to ensure proper reforestation.



In FY21, the Delaware Forest Service issued 79 permits on 3,244 acres and conducted 81 site inspections.



Yellow-poplar



Loblolly Pine



# FORESTRY EDUCATION

The lack of public knowledge about the importance of our forests, and the professional services available to assist landowners and communities with forest management, is our third major challenge.

Many landowners and community leaders are unaware of the various Delaware Forest Service programs that can help them manage their forest resources. Many are also not aware of the educational and recreational opportunities at our State Forests.

## DELAWARE STATE FORESTS

### Blackbird State Forest

Blackbird State Forest, located northwest of Smyrna, covers 6,031 acres. The ten tracts of Blackbird State Forest are open to the public for nature walks, hiking, jogging, and horseback riding all year. It features a 1/2-mile, wheelchair-accessible wildlife and nature interpretation trail on the Tybout Tract and the Blackbird Education Center on the Meadows Tract. Long-range management plans for Blackbird State Forest include timber production, wildlife habitat, recreation, soil and water protection, wetland and endangered species protection, and public education.

### Blackbird State Forest Highlights

- Tybout Tract - Camping was reopened to the public and two new campsites added.
- Tybout Tract - New ¼-mile section of Blue Trail established and old section removed off boundary.
- Naudain Tract - 59 acres added to Naudain with purchase of the Grubb property.
- Meadows Tract - Pollinator habitat expanded to six acres.
- Hurd oak plantation - third year of maintenance.



Forest camping reopened in March, 2021.



## Taber State Forest

Taber State Forest is located west of Harrington on Burrsville Road and remains in its natural, primitive state. The 1,323-acre forest is open to the public for hiking, observing wildlife, and seasonal hunting.

### Taber State Forest Highlights

- In FY21, staff continued to add acreage into planted food plots for wildlife.
- Worked with Tall Timbers to develop a plan to reintroduce quail to Taber State Forest by increasing habitat and changing some possible forestry practices.
- Acquired more equipment to continue expansion of wildlife food plots.
- Opened waterfowl hunting opportunities.
- Started cleaning up early successional habitat around field edges.

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The DFS is working with partner agencies on plans to reintroduce quail to Taber State Forest.



## Redden State Forest

Redden State Forest, north of Georgetown, totals approximately 13,936 acres. The forest is managed on a multiple-use basis for timber production, wildlife habitat improvement, soil and water quality enhancement and protection, and recreational use. Redden State Forest and the historic Redden Lodge are popular sites for special events and meetings, however the Redden Lodge was closed during FY21 due to COVID-19.

### Redden State Forest Highlights

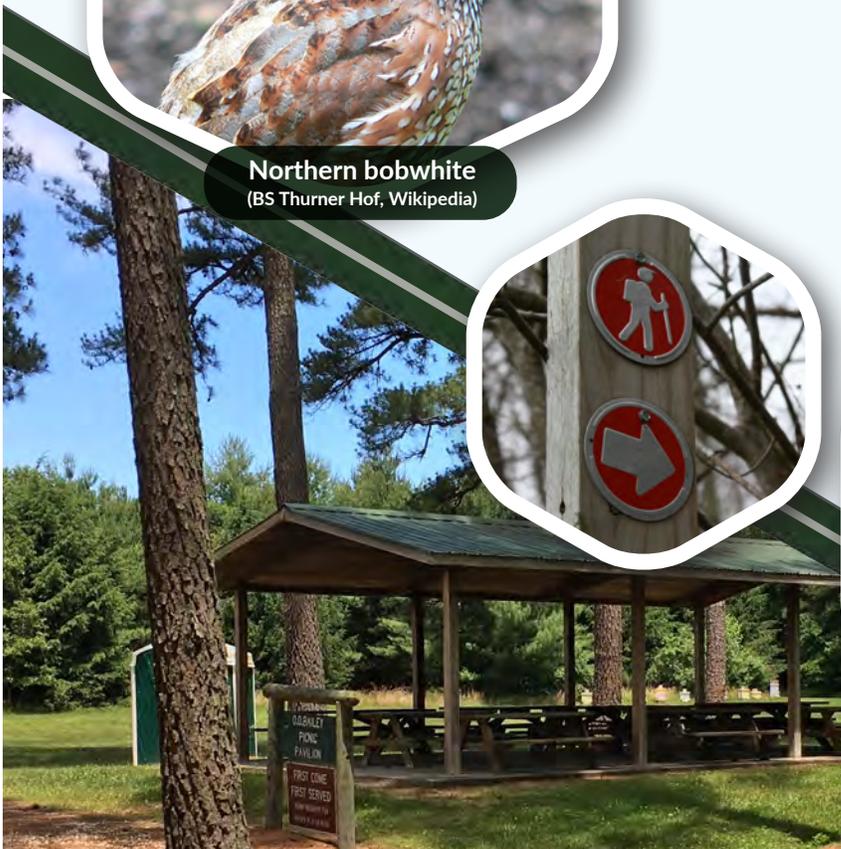
- Completed 32 acres of prescribed fire.
- The Delaware chapter of Whitetails Unlimited donated seed for game plots that allowed staff to plant over 40 acres to benefit wildlife and enhance habitat.
- Completed 462 acres of a 628-acre commercial thinning that began in FY19. This included stands on the Headquarters, Ellendale, Chesapeake, Jester, Collins Pond, and Deep Creek Tracts. The remainder of the harvest will be completed in FY22.



**Northern bobwhite**  
(BS Thurner Hof, Wikipedia)



**Prescribed Burning**  
Redden State Forest



## INFORMATION AND EDUCATION

The Information and Education Office coordinates all of the Delaware Forest Service's information and education activities. Staffed by a full-time Community Relations Officer and Trainer-Educator, it informs the public of the agency's services and provides quality environmental education programs.

### Education Centers

The Delaware Forest Service operates and manages education centers at Redden State Forest and Blackbird State Forest. Both feature interactive displays on Delaware's forests and their proper management, with comfortable work areas for students and teachers to participate in educational activities. Each has a classroom for indoor meetings and outdoor trails for a dynamic learning experience.

### Arbor Day Overview

The Delaware Forest Service sponsors annual Arbor Day activities including a poster contest and free seedling program and also presents Arbor Day and tree education programs in schools statewide in April.

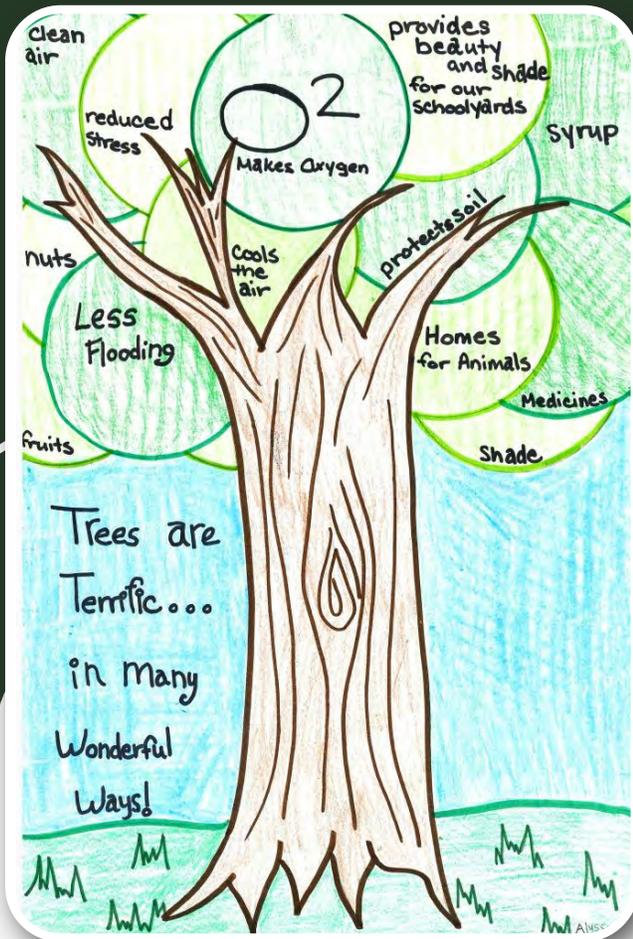
### Annual Free Seedling Program

Students in kindergarten to grade five received over 2,700 seedlings through the annual Free Seedling Program. Classes must participate in the Arbor Day Poster Contest to be eligible for free seedlings and tree programs. Delaware Forest Service staff delivered seedlings to public and private schools statewide. Students from Odessa High School in Townsend provided an invaluable service by separating, wrapping, and bagging each seedling, which are then delivered to classes to ensure survival. Staff also performed 10 Arbor Day ceremonies at elementary schools across the state, reaching 450 children.

Delaware Forest Service staff partnered with board members of Delaware's Association for Environmental Education (DAEE) to observe "Outdoor Classroom Day" at Allen Frear Elementary School in Magnolia.



From left, DAEE board members David Pragoff of Delaware Nature Society, Todd Klawinski of Caesar Rodney School District, Ashley Melvin of the Delaware Forest Service, and Flavia Rutkosky of the U.S. Fish and Wildlife Service observed "Outdoor Classroom Day" at Allen Frear Elementary.



Alyssa DeLuca, a fifth-grader at Brandywine Springs Elementary in Wilmington, was the statewide winner of the Arbor Day Poster Contest.



Shannon Last of Heritage Elementary was the New Castle County winner for Grades 3 and 4 in the annual Arbor Day Poster Contest.

### Arbor Day Poster Contest

The Delaware Forest Service invites students in grades K-5 to participate in the Arbor Day Poster Contest. This year's poster theme was "Trees are Terrific... in Many Wonderful Ways!" Participating elementary schools organized preliminary contests and forwarded first, second, and third place entries to the Delaware Forest Service for final judging. Poster contest winners were selected for each county in the following categories: kindergarten, first and second grade, third and fourth grade, and fifth grade. Winners received an ornamental tree planting at their school and a \$25 dollar gift card.

Alyssa DeLuca of Brandywine Springs Elementary in Wilmington was the overall winner of the Arbor Day Poster Contest and received an additional \$25 dollar gift card. More than 73 classes from 29 private, public, and home schools, and youth groups participated in the FY21 contest.

### Fire Prevention

October is National Fire Prevention Month and the Delaware Forest Service provides fire prevention information packets (Smokey Bear Goody Bags) to first grade classrooms. In FY21, 281 students received Smokey Bear school supply bags featuring Smokey Bear and his timeless message. The Delaware Forest Service also offers fire prevention materials to children and families at community events, holiday parades, and fire company open houses.



Smokey Bear joined the Delaware Forest Service's Ashley Melvin for a wildfire prevention program at St. Anne's Episcopal School in Middletown.

# GOVERNOR CARNEY CELEBRATES ARBOR DAY IN REHOBOTH BEACH

## Arbor Day Celebration

Governor John C. Carney, Jr. proclaimed “Arbor Day in Delaware” on April 30 in a ceremony at Rehoboth Elementary School attended by fifth-grade students and staff, members of the General Assembly, and city and state officials. The event recognized Mayor Stan Mills and the City of Rehoboth Beach for its 30th year as a Tree City USA. Governor Carney also honored student winners in the Delaware Forest Service’s annual Arbor Day School Poster Contest. Two new oak trees were planted on the school campus for the event. Also attending were: Speaker of the House Peter Schwartzkopf, Senator Ernesto Lopez, State Auditor Kathleen McGuiness, DDA Secretary Michael T. Scuse, DNREC Secretary Shawn Garvin, State Forester Michael Valenti, and Nick Serratore of the Rehoboth Art League.

*At right, state officials joined Rehoboth Elementary students for a ceremonial watering of two new oaks.*

*Below, from left, DNREC Secretary Shawn Garvin, DDA Secretary Michael Scuse, Mayor Stan Mills and Governor Carney celebrate the City of Rehoboth Beach’s 30th Year as a Tree City USA in Delaware.*





### Community Events and Educational Programs

Throughout the year, the DFS offers special educational programs for students and training programs and presentations for community groups. In FY21, the DFS trainer-educator presented programs at six community events and to 600 students in grades pre-K to high school.

### Adult Programs

Forest Service staff perform workshops on such topics as grant writing, urban tree care, and GIS/GPS for attendees including state agencies, nature center managers, and community leaders. In FY21, the DFS trainer-educator presented five lectures on forestry topics to 100 people.

### Project Learning Tree

The Delaware Forest Service's trainer-educator works with partner organizations such as the Delaware Association for Environmental Education (DAEE) to promote a wide range of environmental literacy education opportunities for all ages throughout the First State. One private school was trained on Project Learning Tree in FY21.



**Agriculture Secretary Michael Scuse honored Mike Green, (at left) veteran conservation tech at Redden State Forest, who retired in June of 2021 after more than 20 years with the Delaware Forest Service. Thanks for the great work!**

## TRAINING AND DEVELOPMENT

### Personnel and Professional Development

- A Respectful Workplace
- ADA: Supervisors and the 'Interactive Process'
- ADA Made Simple
- Advanced Defensive Driving
- Americans with Disabilities Act (ADA) Policy
- DiSC Personal Profile/Behavioral Styles
- Diversity Made Simple
- Diversity Made Simple for Managers
- EEO Made Simple
- Fighting Unconscious Bias in the Workplace
- Focus on Ability
- Hidden Bias
- HIPAA Training for Members of HIPAA Workforce
- Anti-Discrimination, Harassment and Retaliation
- Positive Discipline
- Sexual Harassment Prevention Made Simple
- Unconscious Bias

### Fire

- IROC (Interagency Resource Ordering Capability) Basics
- RT-130, Wildland Fire Annual Refresher
- RX-410, Smoke Management Techniques

### Forest Management

- Accessing Urban FIA Data, U.S. Forest Service FIA
- Advanced Mapping with ArcGIS
- Arborist Short Course Series, PennState Extension
- Astra Campground Reservation Process
- Beech Leaf Disease Workshop, U.S. Forest Service
- Bark Beetles and Changing Climate
- EAB Program Deregulation and APHIS Bio-Control
- Emergency Planning and Community Right-to-Know Act
- Forest Carbon 101: Understanding the Science
- ForWarn II and USFS Satellite Imagery
- An Introduction to the American Chestnut (USFS)
- Invasive Woody Plant Management (EPA webinar)
- International Society of Arboriculture
- iTree Academy Training, U.S. Forest Service
- NRCS, Service Provider Network Workshop
- Partners in Community Forestry Conference
- PennDel Symposium, ISA PennDel Chapter
- Plant Defense and Biotic and Abiotic Stressors, IUFRO
- Spotted Lanternfly 101
- Tree City USA Virtual Conference
- UAS (drone) License Renewal
- Urban Forestry Biometrics, UMass/ISA
- Visual Ecology of Forest Beetles, IUFRO

## FISCAL YEAR 2021 BUDGET SUMMARY

General Funds	Amount
Salaries and Associated Costs (16.5 positions)	1,182,266
Contractual Services	17,100
Supplies and Materials	20,013
Energy	18,700
Travel	\$0
<b>General Funds Subtotal</b>	<b>\$1,238,079</b>

Appropriated Special Funds	Amount
Salaries and Associated Costs (2.5 positions)	197,935
Capital Outlay	116,686
Contractual Services	88,394
Supplies and Materials	90,177
Energy	4,513
Travel	37,246
Revenue Refund	0
<b>Appropriated Special Funds Subtotal</b>	<b>\$534,951</b>

### Federally Funded Cooperative Programs \*

\* includes funding for 3 positions

Forest Health Protection	Amount
Forest Health Management	60,000
Forest Health Monitoring	23,000

Cooperative Fire Protection	Amount
State Fire Assistance	115,448
Volunteer Fire Assistance	30,505

Cooperative Forestry	Amount
Urban and Community Forestry	200,000
Forest Stewardship	64,900
Forest Legacy Administration	0
Chesapeake Bay Watershed	20,000
Conservation Reserve Program Sign-up 52	18,750
<b>Federally Funded Programs Subtotal</b>	<b>\$532,603</b>

**Total Fiscal 2021 Budget \$2,305,633**





## STAFF DIRECTORY

TOLL FREE NUMBER	800-282-8685
Headquarters (Dover)	302-698-4500
Forestland Preservation	302-698-4548
Urban and Community	302-698-4578
Blackbird State Forest	302-653-6505
Redden State Forest	302-856-2893
Forest Health Specialist	302-698-4553
Educational Programs	302-698-4551
Wildfire Program	302-698-4548
Landowner Assistance	302-856-2893
Community Relations	302-698-4552



Bird's foot violet (*Viola pedata*) is a state rare plant species recently discovered at Blackbird State Forest.



**DelForestService**



**DelawareForests**



**DelawareForests**



**delawareforestservice**

The Delaware Forest Service is an Equal Opportunity Employer and Provider. The State of Delaware is an Equal Employment Opportunity (EEO) employer. The Delaware Department of Agriculture conducts all programs without discrimination based on gender, race, color, religion, national origin, age, disability, veterans or marital status, or sexual orientation. Persons with disabilities requiring alternative means for communication of program information should contact the Delaware Relay Service at 1-800-232-5460.

**OUR BRANCHES ARE HERE FOR YOU**