

Michaux State Forest

2022 MANAGEMENT ACTIVITIES

The mission of DCNR Bureau of Forestry is to conserve the long-term health, viability, and productivity of the Commonwealth's forest and to conserve native wild plants. One of the ways the bureau carries out this mission is through the [State Forest Resource Management Plan](#) (SFRMP), a document that guides the management of the 2.2 million-acre state forest system. The SFRMP is updated approximately every 5 years and includes an extensive public engagement process.

The SFRMP is implemented at the local level by district-specific resource management plans that aim to balance many uses and values of the forest, while maintaining ecosystem health and the wild character of the forest. In 2018, a draft Michaux District Management Plan was created to identify critical forest management priorities on the Michaux and in the surrounding communities serviced by District operations. This plan received public input and review through 2018 and 19 with final draft completed in 2020.

The purpose of this Management Activities document is to communicate to the public about upcoming management activities, projects and events that will be conducted to advance state and district level forest management goals. For questions, comments or more information about this plan, please contact:

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RECREATION

Volunteer Workdays:

- The annual Keep PA Beautiful roadside cleanup. Exact site TBD.
- Trail maintenance and monitoring.
- Seed collection.
- Installation and painting of signs.
- Graffiti removal.
- Volunteer opportunities will be announced throughout 2022. Persons interested in participating and receiving notifications must first register as a DCNR Conservation Volunteer by visiting DCNR's webpage.

Snowmobile Trails: Brushing, blazing and sign maintenance on several snowmobile trails will take place throughout the year.

Grading and resurfacing of sections of Green Ridge Trail will start during the summer.

Teaberry Parking Area has been resurfaced with shale.

ATV Trails: Replace and update ATV trailhead signage. The trail system will receive spot maintenance and aggregate as needed. Brushing of overgrown trails and routine maintenance will take place throughout the year.

Piney Mountain Parking Area will be re-surfaced with shale.

An ATV outreach day will be planned during the summer months and will be coordinated with our forest rangers.

The Grave Ridge area of the ATV trail system will remain closed for 2022.

A restoration and construction project on the ATV trail system is in the design and bidding stages. This is a multi-year project that once completed would connect Grave Ridge to Log Sled Trail and improve trail surfaces in other locations.

Designated Campsites: An evaluation of the designated campsites has been done. Picnic tables and fire rings will be placed at the campsites that will remain in use and the other campsites will be relocated. New signage will be placed at each campsite.

Visitor Use Monitoring: The Michaux will continue collecting visitor use information via data recorders. Data collected will be used for future site planning.

Trail Maintenance & Construction:

- The trail system recently acquired at Strawberry Hill will be evaluated and inventoried.
- Hearth Tender Trail will begin to break ground this summer. The trail will be a stacked loop hiker/biker trail system located near the popular Pole Steeple rock outcrop.
- The Mountain Creek Trail project is in the planning and design stage. We are striving to have a management plan by the end of year.

Friends of Michaux State Forest: Continue expanding the stewardship program for our trails, roads and campsites. Friends of Michaux in conjunction with DCNR, have identified a list of roads, trails, campsites, parking areas, and other resources in the Michaux State Forest that are a high priority for stewardship activities. For more information on the Friends of Michaux, please visit <https://friendsofmichaux.org/>

White Rocks Climbing Site: Plans for a new parking area and trail located on state forest land to access the popular recreational site have been finalized. The goal is for construction to take place in spring 2022.

Long Pine Run Reservoir Parking Area: The trees around the parking area perimeter have already been removed and improvements to the parking area and new CXT bathroom installation will commence fall/winter of 2022.

Hunting: Select gated roads will continue to be opened for the 2022 season for hunters to gain better access to public land. Please refer to the DCNR [interactive mapping portal](#) for the list of roads and the dates they will be open.

2022 Organized Events: The following is a list of the large events we anticipate hosting in the forest throughout 2022. There are also several other smaller organized events not listed that are set to take place in the forest. These activities have all applied for and receive activity agreements permitting their event to be held on state forest lands. If you would like more information regarding organized events occurring at a specific time or location, please contact the district office.

April:

- American Odyssey Relay (running)
- Buck Ridge Burn (running)
- South Mountain Rangers (equestrian)

May:

- South Mountain Rangers (equestrian)

June:

- South Mountain Rangers (equestrian)
- Dual Sport (motorbiking)



July:

FCC Gravel Rides (cycling)

August:

South Mountain Rangers (equestrian)

FCC Gravel Rides (cycling)

September:

South Penn Enduro Riders Michaux Enduro (motorbiking)

Iron Master's Challenge (running)

Michaux Gravel Ride (cycling)

ROAD AND BRIDGE PROJECTS

2021 COMPLETED PROJECTS:

- Oak Road: Spread 1600 tons of shale on cobbly sections of road.
- Thompson Hollow Road: Topped the base work done in 2020 with DSA.
- Birch Run Road: Top coated road with DSA from Big Flat Parking Area to the powerline crossing.
- Ridge Road: Resurface Ridge Road from PA Route 233 north to Hammonds Rocks with shale.
- Paint boundary line in map section 5.
- ATV trail maintenance.
- Updated the office with new cabinets, desks, and fresh paint.
- Installed 911 address signs at parking areas.
- Expanded and updated the maintenance office in the back garage.
- Installed new campsite #9 on Ridge Road.
- Repaired the pavilion at Old Forge Picnic Area.
- Sacon blocks delivered and set on the pistol range.
- Grading roads, mowing roadsides, blowing ditches, and cleaning culverts.

PROJECTS PLANNED FOR 2022:

- Ridge Road: Replace culvert pipes and resurface with 2RC from Pa Route 233 to Hammonds Rocks.
- District Road: Place 1600 tons of shale to cover some cobbly sections of road.
- Stillhouse Hollow Road: Replacement of culvert pipes and road base work to happen late summer and into the fall. DSA to be done in 2023.
- Teaberry Parking Area: Resurface with shale.
- Piney Mountain Parking Area: Resurface the parking area with shale.
- Resurface sections of Green Ridge Trail with shale.

PROJECTS PLANNED FOR 2022(CONTINUED):

- Annual maintenance and grading to the ATV & Snowmobile trails
- Build parking area for White Rocks Climbing Site.
- Replace decking on the shared use bridge near Old Forge Road.
- Paint gates in map section 1.
- Install road signs/ stop signs in map sections 5 & 1.
- Repair guide rails in parking areas at the district office.
- Install fire rings and picnic table at select campsites.
- Grading roads; mowing roadsides; blowing ditches; and cleaning and replacing culverts to keep our roads in good condition for public use.
- Continue to maintain our building infrastructure including repairs and painting. Routing, staining, and installing new signage at various road intersections, parking lots, and trailheads.
- Miscellaneous projects as they occur.

BRIDGES:

- Dead Women’s Hollow-A bridge replacement will take place on Dead Women’s Hollow Road near Route 233.
- Birch Run Road- a box culvert will replace a squashed pipe near the intersection of Fegley Road.

TIMBER MANAGEMENT

ACTIVE TIMBER SALES: Timber sale are conducted in a sound manner using adaptive management strategies and focusing on ecosystem management objectives for each specific landscape management units’ objectives using the state forest resource management plan as an overarching document that local level forest managers use to guide local level decisions that occur on the state forest. The goal of the timber management program is to balance forest age classes and sustain ecosystem functions and habitat conditions that support game and non-game wildlife species while providing high quality and sustainably managed forest based recreational opportunities.

Timber harvest can consist of different silvicultural treatments including but not limited in shelterwood harvest, improvement harvest and overstory removal harvest. Shelterwood harvests are designed to encourage the growth of new seedlings in the forest floor by harvesting approximately half of the overstory to provide light for the seedlings to become more established or competitive. Improvement harvests are where the objective is trying to improve stand level conditions by typically removing the shade tolerant mid story trees. Overstory removal harvests are when the overstory trees are harvested in a sound manner to release the new cohort of established seedlings that will become the new replacement of trees for the next generation of forest. The state forest is currently a dual certified forest from FSC and SFI. Timber sale contracts are normally executed with at least a two-year timeframe to complete the harvest.



The following state forest timber sales will most likely be in operation during 2022:

- Buzzard Peak Sale – 70-acre sale is located west of Chimney Rocks Vista on Snowy Mountain.
- Fern Ridge Sale – 52-acre sale is located north of Rt. 233 between Michaux Road and Old Shippensburg Road.
- Tobacco Patch Sale – 170-acre sale is located west side of Big Pond Road from Hairy Springs to the Tobacco Patch haul road system.
- Ridge Runner Sale – 698-acre sale is located east, northeast of Hogshead Road that starts approximately ½ mile from Ridge Road and extends for approximately 2.75 miles.
- Fern Flat Sale – 60-acre sale is located at the corner of Ridge Road and Michaux Road and extends towards Jerry’s Flat.

APPROVED TIMBER SALES:

- Wirt Road Removal Sale – Sale is located on Wirt Road approximately ¼ miles west of Wirt/Oak Road intersections. This sale is approximately 114 acres.
- Eagle Feather Removal – Is located off Sand Road and was a previous shelterwood treatment that has recently died due to environmental factors and is approximately 36 acres.

TENTATIVE TIMBER SALES:

- Three Turn/Thompson Hollow - Sale area is located between Three Turn Road and Thompson Hollow Road and is approximately 900-acres in size. Currently stand analysis is being conducted and timber marking could happen shortly after in 2023.
- Rusty Tricycle Sale – Sale is along Oak Road near Mont Alto. Sale proposal should be submitted in 2022.
- Staley Road – This sale was a previous timber harvest and is approximately 77-acres. Sale is being conducted due to severe dead and dying overstory trees. Stand analysis occurred fall of 2021 and proposal will be submitted 2022 with timber marking proposed shortly after approval.
- Dead Woman’s Hollow Removal – Sale area that has significant amount of desirable regeneration present and will help further landscape level goals though implementation of an overstory removal. Due to tree mortality that occurred from *Lymantria dispar* (formally known as gypsy moth) in the spring of 2021 the forester will be including more acres to this area. The extent of the mortality is not yet known, so layout will begin during the summer making sure to capture as much mortality as possible, to include in the sale area. Stand level analysis will be conducted fall of 2022 with the proposal to follow afterwards. Timber marking of the sale is estimated to begin 2023.
- Strohm’s Hollow Removal – This was a previous timber harvest area and is approximately 189-acres in size and is along Strohm’s Hollow Road. Sale area has a significant amount of desirable regeneration present and will help further landscape level goals though implementation of an overstory removal.
- Hayes Run – Sale was a previous timber harvest and is approximately 46-acres in size. This area had a deer enclosure installed in 2009. There was a prescribed burn that took place within the sale area and then a foliar herbicide application. Current conditions show lack of regeneration with the overstory showing severe die-back. Once the harvest is conducted, this area will be supplementary planted with desirable seedling throughout the entire sale area.

- Corl's Ridge Road – Sale was a previous timber harvested area. A second entry shelterwood was conducted in 2016 to help new oak become more established. Analysis was conducted in the fall of 2021 and showed a good cohort of competitive and established oak seedlings present throughout the sale area. After completion, the administrating forester will be watching closely the impact the deer have within this area. There's a possibility of this area needing a deer enclosure depending on what the respective deer numbers are during that time.

DEER FENCES: Fewer fences have been required recently, partly due to reduced deer impact on tree regeneration.

Installs:

- One fence approximately 15-acres in total are to be installed at Grub Hill (Old Forge Road gas line) where previous timber sale 01-2016BC03 (Grub Hill) sale was conducted. Objectives of the fences are to reduce impact from deer browse.

Removals:

- One fence totaling 58 acres off Dug Hill Haul Road approximately 1/2 mile west on Middle Ridge Road and Ridge Road intersection will be removed.

TREE PLANTING: These areas will be planted by contractors in the spring of 2022:

- Fern Ridge Sale – 13 acres off Old Shippensburg Rd will be planted with 4,550 eastern white pine and 1,550 chestnut oak seedlings.
- Devil Alex Sale – 32 acres off Stillhouse Hollow Road will be planted with 4,650 eastern white pine, 4,650 pitch pine, and 4,650 chestnut oak seedlings.
- Feathered Edge Sale – 12 acres west of Chimney Rocks Haul Road, alongside gas line ROW will be planted with 350 white pine, 300 pitch pine, 350 white spruce, 150 black cherry and 300 scrub oak seedlings.
- Teaberry Sale – 13 acres west of Chimney Rocks Haul Road, alongside gas line ROW will be planted with 1,700 white spruce, 1,700 bigtooth aspen and 1,500 scrub oak seedlings.
- Old Forge Blowdown Sale – 11 acres at the south end of Peggy's Hill on Old Forge Road alongside the stream will be planted with 1,900 bigtooth aspen and 5,650 white pine seedlings.
- Canada Hollow Sale – 70 acres east of Milesburn Road on Canada Hollow Haul Road will be planted with 21,500 pitch pine seedlings.
- Oak Road Sale – 18 acres at the intersection of Oak and Wirt Road will be planted with 3,950 eastern white pine and 3,925 pitch pine seedlings.
- Strawberry Hill Vista – 11-acre area that was cleared by Strawberry Hill environmental center will be planted with 6,100 Norway spruce and 1,350 pitch x lobolly pine seedlings.

HERBICIDE PROJECTS.

- Carbaugh Road - A 12-acre block along Carbaugh Road will be treated to control corktree. Projected Summer of 2022.

Other sales or projects could potentially occur in 2022, but forecasting all activity is difficult due to various reasons. We will periodically update this section throughout the year as additional timber management activities are confirmed as operational priorities.

RESTORATION AND HABITAT PROJECTS

- **Big Pine Flat “Oak-Savanna” Restoration Project:**
Prescribed Fire – The next phase of this ongoing project will be a prescribed burn treatment. A Royer treatment was conducted on approximately 475 acres of Scrub/shrub and pitch pine barrens in 2019. The mowing treatment removed all over and mid-story trees with a diameter of less than 9”, as well as the competing vegetation such as mountain-laurel. The mowing also increased sunlight and homogenized fuel loads to allow a widened prescribed burn window. A prescribed burn treatment is needed to restore this fire dependent habitat type by rejuvenating the pitch pine-scrub/Shrub barrens ecosystem that historically existed across this landscape. Furthermore, this project will also consist of special management geared towards creating critical turkey; grouse; and other game and non-game species breeding, nesting, and foraging habitat. Four herbaceous openings totaling 27 acres within the project area have been delineated as restoration sites for native warm season grasses, forbs, and pollinator species. Fuelwood harvesting was conducted in these selected sites in 2020 to allow more of the overstory trees to be removed to create the opening. These openings will be planted in spring of 2022 with native warm season grasses, pollinator species, and forbs that provide year-round food and cover for game and non-game species. Prescribed fire will reduce vegetation growing in these openings to prepare the sites for seeding. These burns may occur between mid-April - November. Currently ongoing, spring 2021-fall 2021
- **Special Wildlife Management Areas (SWMAs)** –During the early 90’s, a severe decline in the wild turkey population was very prevalent on the Michaux State Forest. Due to the population decline, the Pennsylvania Game Commission (PGC) and the Department of Conservation and Natural Resources (DCNR) Bureau of Forestry defined that ideal turkey habitat for brood-rearing was one of the reasons for the decline. In response, the Michaux State Forest, through funding provided by the National Wild Turkey Federation (NWTf), established and manages 43 herbaceous wildlife openings across the forest. Current efforts involve rejuvenating these areas to a diverse mix of native grass, wildflower, shrub, and tree species that provide year around food and cover for game and non-game species.
SWMAs South of Route 30 will be mowed fall 2022 to prevent woody vegetation establishment.
- **Glatfelter American Woodcock Habitat** - The American woodcock is listed as a species of greatest conservation need by the Pennsylvania State Wildlife Action Plan. Woodcock are dependent on early successional and shrubland/grassland habitats, which are in decline. The Glatfelter tract provides areas already being utilized by both resident and migratory woodcock. For the past two years, the district has been monitoring woodcock populations to establish a baseline from which to monitor the impact of habitat improvement efforts. In 2015 we began the first stages of habitat improvement with an herbicide treatment to address the Japanese honeysuckle and other invasive species that are outcompeting native scrub/shrub species. An adjacent 20-acre site will have a Royer treatment, where the primary goal is to create early successional habitat for the American woodcock.

- **Brook Trout and wetlands restoration Mountain Creek** - Many streams on state forest land lack the large woody material component normally found within mature, forested landscapes. Large woody material can increase habitat diversity in a homogenous stream reach by creating scour and plunge pools, providing escape cover for trout, and providing substrate and food for aquatic invertebrates on which brook trout feed on. Large woody material will naturally fall into streams, given time for the trees in riparian buffers to mature, die or blow-over, and eventually fall into stream. Until then, large woody material can be added to streams where habitat diversity is lacking by directionally felling trees into the stream channel.
- **Bunker Hill Herbicide Restoration Project** - For many years, foresters on the Michaux have struggled to figure out how to deal with challenges posed by the mix of invasive species; mile-a-minute (*Persicaria perfoliate*), tree-of-heaven (*Ailanthus altissima*), garlic mustard (*Alliaria petiolate*), Canada thistle (*Cirsium arvense*), crown-vetch (*Coronilla varia*), Oriental bittersweet (*Celastrus orbiculatus*), Japanese honeysuckle (*Lonicera japonica*), Japanese barberry (*Berberis thunbergii*), Autumn olive (*Elaeagnus umbellata*), winged euonymus (*Euonymus alata*), Japanese privet (*Ligustrum japonicum*), multiflora rose (*Rosa multiflora*), Japanese spiraea (*Spiraea japonica*), Japanese stiltgrass (*Microstegium vimineum*), Johnson grass (*Sorghum halepense*), English ivy (*Hedera helix*), wineberry (*Rubus phoenicolasius*), common periwinkle (*Vinca minor*), Japanese wisteria (*Wisteria floribunda*) that has accumulated in and around these critical cultural sites. We will begin implementing a 5-year landscape level habitat enhancement and restoration project that we hope will be able to help us achieve numerous land management goals while also improving habitat for wild turkey and numerous other wildlife species. Sprays blocks have been delineated and assigned a year of completion for foliar and cut stump herbicide treatment. The year after a specific block is sprayed the Bureau of Forestry personnel will monitor the spray block and do any reapplications/spot treatments. During this time, monitoring efforts using the EDRR (early detection, rapid response) tactic will be implemented. Once all the treatment blocks are sprayed, the Bureau of Forestry will hire a contractor to mow all the dead vegetation that's 6" in diameter and under. Once that mowing is complete, we will then begin the "Recovery of Camp Michaux" phase. This process will be the most time/cost intensive part of the progression. The Michaux State Forest and Camp Michaux is a high traffic area for recreation, so there is an exposure aspect as far as marketing goes as well as an educational aspect for highlighting the habitat restoration process.

Throughout the process different types of habitat manipulation techniques will be utilized, and restoration may be expedited if the opportunity presents itself.

The overall goal is to develop a site-based narrative around the cultural resources and environmental factors that have interacted in shaping this landscape. Developing human understanding, values, skills, and behaviors on the part of the individuals and the groups that enable us to work towards and sustain desired future landscape conditions is a desired outcome of engaging forest visitors with this landscape sized habitat restoration project.

- **Other Habitat Projects** – The Michaux, in partnership with others within DCNR, Pennsylvania Game Commission, Pennsylvania Fish and Boat Commission, and other local conservation partners also conducts several ongoing monitoring and restoration habitat projects throughout the year. These include microsite habitat manipulation for species of special conservation concern such as timber rattlesnake, spotted turtle, Allegheny chinquapin, native eastern lupine as well as monitoring and seed collection for protection and propagation of representative and high value tree and shrub species representative of the Michaux’s forest habitat types.
- **Beaver Introduction** – The Michaux is working with ecoservices and other partners to introduce beavers onto the landscape. Beavers play an important role in the ecosystem. Their dams provide excellent and underrepresented wetland habitat that benefits wetland plants, turtles, wetland birds, amphibians, waterfowl, muskrat, mink, and the beaver themselves, resulting in increased biodiversity.

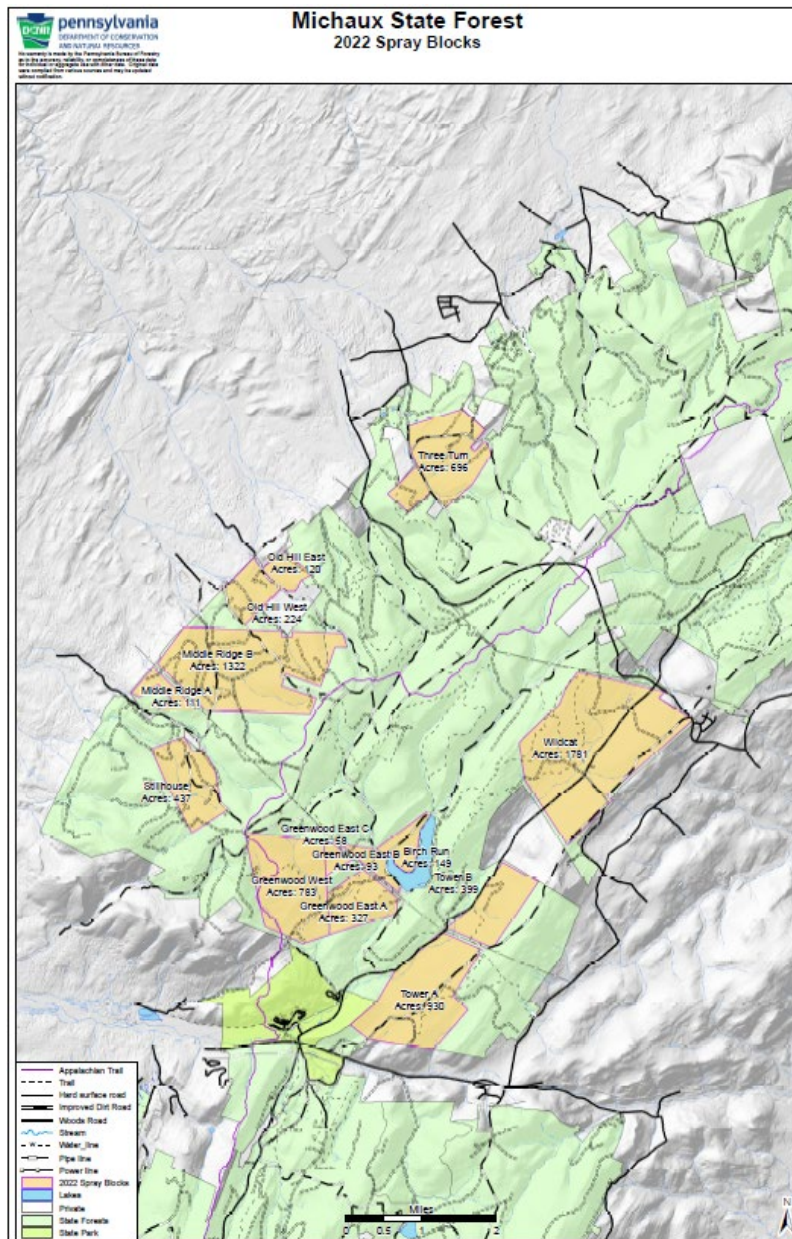
PRESCRIBED FIRE PROJECTS

- **Dead Woman’s Hollow Prescribed Burn:** This prescribed burn is located off Ridge Road., between Dead Woman’s Hollow Haul Road, and Tumbling Run Game Preserve. This project consists of approximately 440 acres, which is broken into separate burn units ranging from about 60 acres up to 258 acres burn units. This project is aimed at rejuvenating the pitch pine, scrub/shrub barrens ecosystem that historically existed across this landscape. Furthermore, this project will also consist of special management geared towards creating critical grouse and woodcock breeding, nesting, and foraging habitat. These burns may occur between mid-April – November. This area will continually have prescribed burns every 5 – 15 years to maintain the pitch pine, scrub/shrub forest type. Units prioritized for this year include a 60-acre block scheduled for a spring burn, and a 258-acre late summer burn in an area pre-treated with a commercial timber sale. Monitoring ongoing in the one block burned in 2015, as well as unburned blocks. Both remaining blocks are high priorities for both spring and fall 2022 windows.
Old Forge Prescribed Burn: This prescribed burn is located along Old Forge Road., right at the Old Forge State Forest Picnic Area. The burn is less than 1.0 acre in size. This burn was conducted in spring of 2018, however, will be re-burned this spring as well. The burn is being conducted to control unwanted growth of shrubs and invasive plants around remnants of a stone structure. The use of fire will be done to maintain this spot with native grasses and flowers. The burn will occur anytime between February and May as soon as weather conditions allow. First phase completed. Monitoring phase ongoing. Additional meadow species will be introduced through assisted colonization efforts in 2022.
- **Long Pine Reservoir Barberry Prescribed Burn:** This prescribed burn is located at the entrance to the Long Pine Reservoir Parking lot. The prescribed burn is 5.5 acres in size. The goal of this burn is to treat the barberry that is currently in the understory of the pine stands along the parking lot and access road. This is an experimental burn to monitor the effects of prescribed burning as a viable treatment option for invasive Japanese barberry. The burn will occur anytime between February and May as soon as weather conditions allow. One attempt was made without success due to lack of fire intensity. Monitoring in progress. Likely to transition to volunteer manual removal project in 2022 as part of improved parking and latrine facilities at the reservoir.

- **Big Pine Flat “Oak-Savanna” Restoration Project:**
Prescribed Fire – The next phase of this ongoing project will be a prescribed burn treatment. A Royer treatment was conducted on approximately 475 acres of scrub/shrub and pitch pine barrens in 2019. The mowing treatment removed all over and mid-story trees with a diameter of less than 9”, as well as the competing vegetation such as mountain-laurel. The mowing also increased sunlight and homogenized fuel loads to optimize potential prescribed burn windows. A prescribed burn treatment is needed to restore this fire dependent habitat type by rejuvenating the pitch pine, scrub/shrub barrens ecosystem that historically existed across this landscape. Furthermore, this project will also consist of special management geared towards creating critical turkey, grouse and other game and non-game species breeding, nesting, and foraging habitat. Four herbaceous openings totaling 27 acres within the project area have been delineated as restoration sites for native warm season grasses, forbs, and pollinator species. Fuelwood harvests were conducted in these selected sites in 2020 to allow more of the overstory trees to be removed to create the opening. These openings will be planted in spring of 2022 with native warm season grasses, pollinator species, and forbs that provide year-round food and cover for game and non-game species. Prescribed fire will reduce vegetation growing in these openings helping prepare the sites for seeding. These burns may occur between mid-April – November. Currently ongoing, Spring 2022- Fall 2022.
- **Special Wildlife Management Areas (SWMA’s):**
Openings; Map Sections 1, 2, 3, 4 & 5: These prescribed burns consist of burning small grass wildlife openings. The purpose of these prescribed burns is to reduce the thick thatch layer that is forming, remove woody vegetation from the openings, and help promote and rejuvenate the warm season grass components. The openings are scattered across the state forest, from the Long Pine Reservoir area, South to the town of South Mountain. These prescribed burns will occur between March and May.

INSECT, DISEASE, AND INVASIVE PLANT TREATMENTS

- Aerial defoliation survey flight(s) will be conducted in late June/early July to detect large scale insect and/or disease areas. *lymantria dispar* (formally known as gypsy moth) is most often the insect detected with the flights on the Michaux. *lymantria dispar* defoliation is expected to be a problem this year on the Michaux. There is evidence of population upswings particularly in the northern part of the forest along Ridge Road and Route 233 and suppression efforts are planned for spring of 2022. Suppression blocks delineated for 2022 management effort and approximately 8,000 acres are to be sprayed. (See map below)



- Hunters & CWD – With nearly the entire Michaux State Forest included in Disease Management Area #2, DCNR and Michaux staff continue to work with the Pennsylvania Game Commission to combat the spread of CWD. High risk cervid part dumpsters and head collection bins for testing will once again be placed throughout the forest. Select gated state forest roads will continue to be opened for hunter access, conditions permitting. PA Game Commission’s Deer Management Assistance Program (DMAP) allows the district to focus deer management efforts on the Michaux. This tool allows hunters more opportunities on the forest to help restore desired landscape conditions, promote regenerations levels, biodiversity, and hunter satisfaction. Michaux is going to continue with current management objectives with having 3 DMAP units being enrolled, DMAP Unit 94, DMAP Unit 543 and DMAP Unit 2830.
- Japanese barberry in the Pine Grove Furnace State Park will be sprayed again in spring 2022, as a continuation of the herbicide spray that began in spring 2015. Areas previously treated will be checked for skips and treated as needed. Glyphosate (Roundup) and Oust are the herbicides to be used. Blue dye may be added to aid in proper coverage of an area.
- Japanese barberry will be treated along roadsides on the following roads in early spring 2022: Milesburn Road from Route 233 to Long Pine Reservoir and Ridge Road from Shippensburg Road to Gilbert-Fegley Road.
- Control efforts for invasive plants will continue in 2022. Mile-a-minute is treated mostly in recent timber sale areas to control the plant until tree regeneration grows tall enough where the plants will no longer inhibit the seedlings. Weevils have been released in several locations to assist in controlling the mile-a-minute and are now spreading on their own throughout much of the district. Japanese knotweed treatments will continue in several small areas in the district. Japanese angelica is the most recent invasive that is a major concern. Areas in the southern Michaux are invaded most severely. Any Japanese angelica trees found to the north of the village of South Mountain will be targeted with herbicide.
- Invasives that could impact the Michaux in the near future are the spotted lanternfly, wavyleaf basketgrass, and amur corktree which are all currently found in southeastern PA. Wavyleaf basketgrass was found at two York County state parks (Codus and Gifford Pinchot) for several years and was located on private lands in 2019 and 2020. It was foliar sprayed both years on the private property. Corktree has been found to be prevalent near Green Ridge on private woodlands. These private landowners have been instructed by the service forester on how to treat them.
- Foresters have also been trained to monitor for the Southern pine beetle, a native pest found recently in SE Pennsylvania. Given the importance of hard pine forest types on the Michaux, advance warning of southern pine beetle in or near the Michaux is critical.

NATURAL GAS AND OIL DEVELOPMENT

- The Michaux does not have any natural gas projects. No pipeline right-of-way projects are known at this point for 2022.

SPECIAL PROJECTS

Camp Michaux Learning Landscape Initiative. On and adjacent to the Bunker Hill Habitat restoration project, this initiative involves a multi-year effort to develop scale-based forest management demonstration areas for private landowners and other audiences in the forest surrounding Camp Michaux. This will lay the groundwork for future management activities within a full-scale demonstration forest to showcase and interpret sustainable forestry activities at a scale that private landowners can utilize.

OPPORTUNITIES FOR PUBLIC ENGAGEMENT

- **Michaux State Forest Friends Group** <https://friendsofmichaux.org/> If you care about the Michaux and all it offers, there is no better way to show it than to get involved with or donate to the Friends of Michaux. From trail and habitat work volunteer days, to assisting in education and site stewardship efforts, this critical group of committed volunteers from across our recreational user groups is taking a lead role in enhancing our capacity to get meaningful work done on the forest that benefits everyone.
- **Comment Cards:** Are available at most large parking area picnic pavilions and at the target range.
- **Email us:** Comments are always welcome at FD01@pa.gov or by calling the office at 717-352-2211
- **Partner with our Partners:** Consider engaging with the Michaux by partnering with our partners. From national trail organizations like the **Appalachian Trail Conservancy** to local volunteer groups like the Camp Michaux POW Camp Trail Volunteers or Mountain Bikers of the Michaux, one of the best ways to engage with the Michaux is to find others who share your aspirations and stewardship values for this forest. And it doesn't have to all be about trails. The following is just a short list of other organizations that sustain critical engagement opportunities for those who care about this forest:
 - **Pennsylvania Parks and Forest Foundation's** Vista Stewardship Volunteers and Friends groups at Caledonia and Pine Grove Furnace State Parks and Kings Gap Environmental Learning Center.
 - **National Wild Turkey Federation:** Local NWTF chapters fund significant habitat work and volunteer projects annually on the Michaux.
 - **National Audubon Society:** Local chapters conduct birding tours, collect monitoring data, and host educational meetings annually on the Michaux and in the surrounding area.
 - **Trout Unlimited:** Sponsor's habitat work and volunteer and educational activities annually on the Michaux and throughout the region.



- **The South Mountain Partnership** provides access to a regional network of organizations and individuals committed to improving the quality of life through conservation and economic development throughout the South Mountain region.
- **Keep Pennsylvania Beautiful** provides trainings and educational resources for organizations, townships, law enforcement organizations and others interested in addressing littering, dumping, and graffiti issues through community engagement, volunteer organization, and strategic enforcement activities.

MAJOR ACCOMPLISHMENTS FROM PREVIOUS YEAR

- Third Phase Bunker Hill Habitat Restoration Project
- Managed huge influx of forest visitation and use while having to go to contactless provision of permits and services due to COVID
- Worked with BOF, Department, and local stakeholders to secure funding for significant infrastructure projects at Long Pine Reservoir, the ATV trail system, and a sustainable trail design project in the Mountain Creek watershed. Project planning will continue through 2022 and likely be implemented in 2023.

RESEARCH

- The Michaux coordinates habitat priorities and works with various research entities conducting ongoing monitoring and research on Michaux species and habitats. A short list of ongoing research on the Michaux with the potential to influence our management activities and priorities includes work being done on the following species or habitats: timber rattlesnake, northeastern bulrush, several pitch pine scrub oak barrens moth species, lupine, spotted turtle, shortleaf pine, spadefoot toad, eastern bog turtle, American woodcock, and wild turkey.
- Improving road and trail infrastructure on the Michaux is critical to reducing management and ecological costs while maintaining or enhancing visitor access and experience. Research efforts are underway to quantify investments and redesign priorities that optimize short and long-term social and ecological value of Michaux road and trail infrastructure.