

# Michaux State Forest

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## 2024 MANAGEMENT ACTIVITIES

The mission of DCNR Bureau of Forestry is to conserve the long-term health, viability, and productivity of the Commonwealth's forests 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:** Volunteer opportunities will be announced throughout 2024. Persons interested in participating and receiving notifications must first register as a DCNR Conservation Volunteer by visiting the DCNR's webpage. Some opportunities that happen annually are listed below.

- The annual Keep PA Beautiful roadside cleanup. usually in April.
- Trail maintenance, and monitoring.
- Seed collection.
- Installation and painting of signs.
- Graffiti removal.
- Hearth Tender Trail system works day will be April 20, May 18, July 13, August 17 & September 28, from 9am-12pm.

### **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 this spring.

### **ATV Trails:**

Replace and update ATV 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.

An ATV outreach day will be planned during the summer and will be coordinated with our Forest Rangers.

The Grave Ridge area of the ATV trail system will remain closed for 2024.

A restoration and construction project in the Grave Ridge area of 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. It will also turn some of our more difficult trails to easy designated trails. Construction could start in 2024.

### **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.

Piney Mountain Campsites will be enhanced with fire rings, picnic tables and parking pads. A new road to the campsites will be constructed to set the direction of travel and help delineate the campsites.

### **Visitor Use Monitoring:**

The Michaux will continue collecting visitor use information via TrafX counters at all major parking areas and some informal trails. Data collected will be used for future site planning and to be able to evaluate year to year visitor use trends.

**Trail Maintenance & Construction:**

- Hearth Tender Trail broke ground in the fall of 2022. Trail construction will continue throughout 2024. The trail will be a stacked loop, easy designated hiker/biker trail system located near the popular Pole Steeple rock outcrop. The first loop is complete, and we are hoping to finish the second loop and start the third in 2024.
- The trail system acquired at Strawberry Hill will be evaluated and inventoried. An assessment of all the stream crossing has already been done.
- Designated trails will receive maintenance as needed throughout the year.

**Mountain Creek Trail Assessment, Plan and Design:**

The Michaux has partnered with the Center for Land Use and Sustainability (CLUS) and Applied Trails Research (ATR) to assess, plan and design an optimized shared use trail system in the northern part of the forest. A trail assessment of the present trails has already been done and public input has been collected by meetings with stakeholder groups and through a platform called Social Pinpoint. The next steps that will take place in 2024 are more public input and a trail design.

**Southern Michaux Trails Assessment:**

A trails assessment for areas of the Michaux south of route 30 will be conducted in 2024 by Shippensburg University's Center for Land-use Sustainability. Funded through a grant from the South Mountain Partnership, this assessment will provide District managers and forest stakeholders with recommendations for trail system priorities in the southern Michaux similar to what the 2015 assessment done by Applied Trails Research produced for areas north of route 30. This project will involve both existing trail inventory and public engagement work through survey and key informant stakeholder meetings.

**White Rocks climbing site:**

A new parking lot and trail have been created to access White Rocks Climbing Area. A signage plan for the site is being created to better inform the public of the use of the climbing site and the adjoining Meeting of the Pines Natural Area. Trails to the top of the rock vista and to the Meeting of the Pines Natural Area are going to be evaluated and start to be designed.

**Long Pine Run Reservoir Parking Area:**

The Long Pine Run Reservoir Parking Area improvements and installation of a CXT primitive restroom have been completed and are open to the public. A signage plan for this site will be created to better inform the public on how to properly use the area and tell the story of the reservoir. Signs have already been designed and will start to be installed this spring.

**Public Engagement:**

In August of 2022 the Michaux hired our first Environmental Education Specialist (EES). The EES position is to help us better communicate with the Public that enjoys using the forest. Work areas will include working on updating brochures, website, Facebook page, and developing or connecting forest users to online resources and educational materials. This EES position will also develop signage plans for parking areas, trailheads, and recreation management zones and work to foster forest visitor stewardship engagement with the forest ecological and trail systems through interpretation, educational programming, and citizen science projects. A second EES position was filled in the District in February 2023 to assist with Rural and Community Forestry outreach in the four-county area covered by Michaux State forest district. This position will coordinate outreach and education efforts with County conservation districts and USDA service centers, County planning offices, private landowners, and local land conservancies. A priority project this EES position will assist getting off the ground in 2023 is the development of two demonstration woodlots within the Camp Michaux Learning Landscapes initiative and to work in partnership with South Central Region of the Pennsylvania Game Commission in hunter outreach, education, recruitment, and private lands habitat management in the District and WMU 5A. Both EES positions will play key liaison roles between the District and the South Mountain Partnership and the Friends of Michaux.

**Hunting:**

Select gated roads will continue to be opened for the 2023 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.

**2024 Organized Events:**

The following is a listing of the large events we anticipate hosting in the forest throughout 2024. 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 activities 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:**

- Buck Ridge Burn (running)
- South Mountain Rangers (equestrian)
- Outward Bound (hiking, camping, rock climbing)

**May:**

- South Mountain Rangers (equestrian)
- Outward Bound (hiking, camping, rock climbing)

**June:**

- KTA Trail Love Event (trail training)
- South Mountain Rangers (equestrian)
- Sacred Rides (cycling)



# pennsylvania

DEPARTMENT OF CONSERVATION  
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## BUREAU OF FORESTRY

- Iron Run (running)
- Pioneer Trek
- Outward Bound (hiking, camping, rock climbing)
- Dual Sport (motorcycle)
- Epic Race (mountain bike race)

### July:

- FCC Gravel Rides (cycling)
- Pioneer treks
- Outward Bound (hiking, camping, rock climbing)

### August:

- South Mountain Rangers (equestrian)
- FCC Gravel Rides (cycling)
- Wharton Adventures (orienteering)
- Outward Bound (hiking, camping, rock climbing)

### September:

- South Penn Enduro Riders Michaux Enduro (motorcycle)
- Iron Master's Challenge (running)
- Michaux Gravel Ride (cycling)
- Outward Bound (hiking, camping, rock climbing)

Other smaller events that take place throughout the summer are:

- Camp Michaux Walking Tours
- Group camping
- Outdoor learning camps

### **Friends of Michaux State Forest:**

Continue expanding the stewardship program for our trails, roads, campsites, and high value educational and high use sites. Friends of Michaux in conjunction with DCNR, have identified a listing 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/>

## ROAD AND BRIDGE PROJECTS

### 2023 COMPLETED PROJECTS:

- District Road: Spread and compacted 1600 tons of shale on cobbly sections of road.
- Created a parking area on White Rocks Road.
- Stillhouse Hollow Road: Replacement of culvert pipes and road base work.
- Mowed the seed orchard.
- Roadside spraying of the culvert head and tails.
- Regular maintenance and sanitizing of restroom facilities.
- Paint boundary line in map section 1.
- Repaired the pavilion at Old Forge Picnic Area.



- Sacon blocks delivered and set on the rifle range.
- Grading roads, mowing roadsides, blowing ditches and cleaning culverts.
- Install road signs/ stop signs.
- Piney Mountain Parking Area: Resurface the parking area with limestone aggregate.
- Paint gates in Map section 2.
- Annual maintenance and grading to the ATV & Snowmobile trails
- Resurface sections of Green Ridge Trail with shale.
- Stillhouse Hollow Road: Replacement of culvert pipes and road base work.
- Closed and rehabilitated mud holes on Carbaugh Run Road, Oak Road & District Road.

**PROJECTS PLANNED FOR 2024:**

- District Road: 1300 tons of shale to cover some cobbly sections of road.
- Stillhouse Hollow Road: Replacement of culvert pipes and road base work to happen this spring.
- Resurface sections of Green Ridge Trail with shale.
- Improve road to the Hearth Tender Trail System.
- Annual maintenance and grading to the ATV & Snowmobile trails.,
- Replace decking on the shared use bridge near Old Forge Road.
- Long Pine Run Reservoir parking lot- construct concrete walkway around CXT bathroom and install signage.
- Paint gates in Map section 3.
- Install road signs/ stop signs.
- 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.
- Repair guiderails and resurface parking area at the old Birch Run Reservoir.
- Regular maintenance and sanitizing of restroom facilities.
- 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:**

- Birch Run Road- a box culvert will replace a squashed pipe near the intersection of Fegely Road in the spring of 2024.
- Woodrow Road- 2 bottomless arches will replace squashed pipes close to the bridge at the PA route 233 end of the road. This replacement could start by the end of 2024.

**TIMBER MANAGEMENT**

**ACTIVE TIMBER SALES:** Timber sales are conducted in a sound manner using adaptive management strategies and focusing on ecosystem management objectives for each specific landscape management units' objectives. Annual sale priorities are driven by forest conditions while using the

state forest resource management plan and local district level habitat and conservation goals to drive our forestry management team’s decisions on an annual basis. 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.

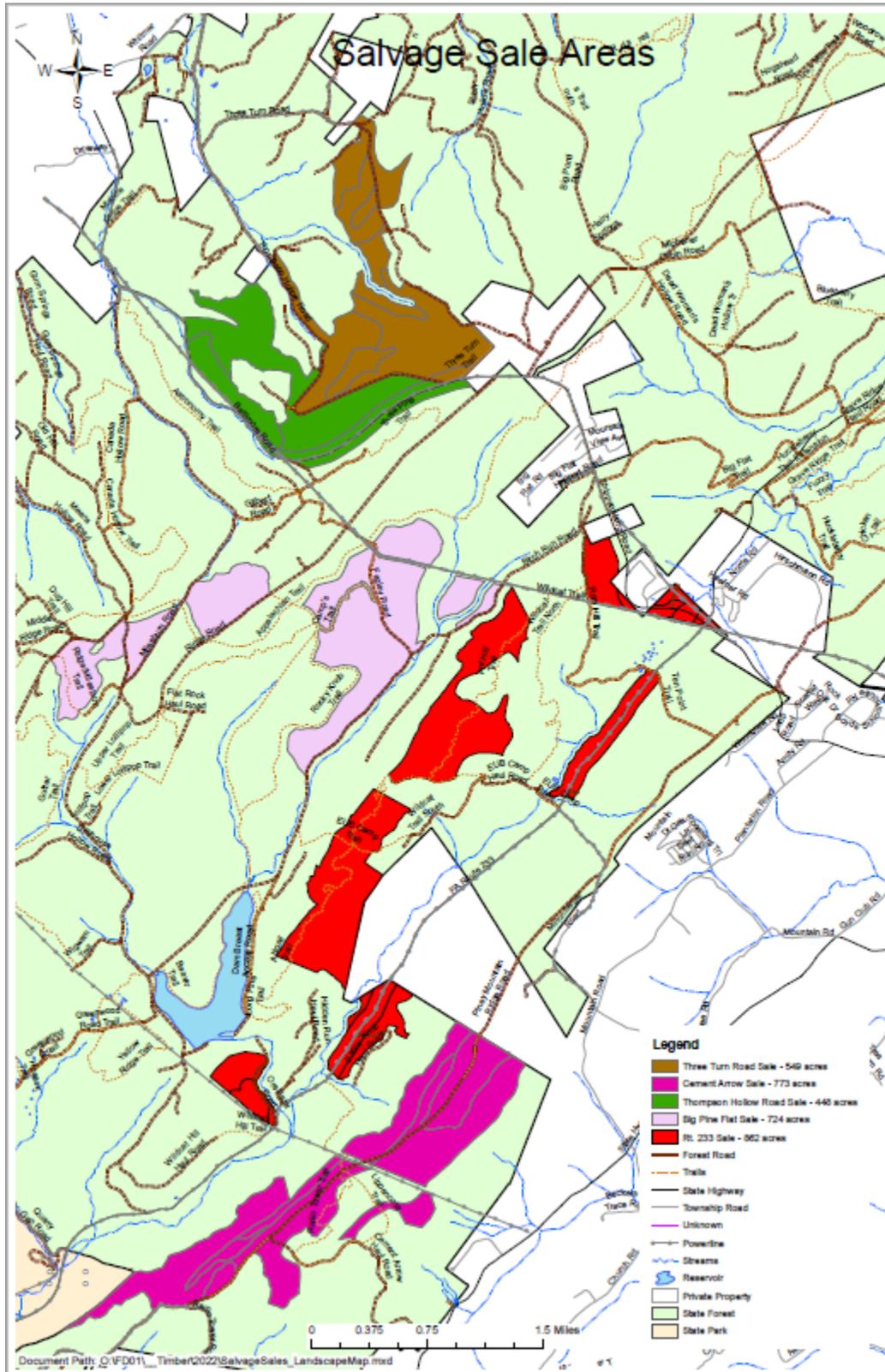
Timber harvest can consist of different silvicultural treatments including but not limited in shelterwood harvest, improvement harvest and overstory removal harvest. Shelterwood harvests are designed to encourage the growth of new seedlings in the forest floor by harvesting approximately half of the overstory to provide light for the seedlings to become more established or competitive. Improvement harvests is where the objective is trying to improve stand level conditions by typically removing the shade tolerant mid story trees. Overstory removal harvest is 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 2024:

- Rusty Tricycle – 36-acre sale is located west of Oak Road near Mont Alto Campus.
- Staley Raod Sale – 77-acre sale area is between Sand Road and Shriners Haul Road on Staley Road.
- Rt. 233 Sale – 931-acre sale is located along Rt. 233 from Orebank Road to Shippensburg Road and extends around the Flat Rock Trail System near Birch Run.
- Ridge Runner Sale – 698-acre sale area that is east, northeast of Hogshead Road that starts approximately ½ mile from Ridge Road and extends for approximately 2.75 miles.

**APPROVED TIMBER SALES:**

- Strohms Hollow Removal – Is located off Strohms Hollow Road and was a previous shelterwood treatment that has currently died due to environmental factors and is approximately 189 acres.
- Thompson Hollow Salvage Sale – Is located along Shippensburg Road from Thompson Hollow to Milesburn Road. This area has currently sustained high tree mortality due to environmental factors and is approximately 448 acres. (see attached map of the salvage timber harvest areas)



**TENTATIVE TIMBER SALES:**

- Three Turn - Sale area is 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 2024.
- Dead Woman's Hollow Removal – Sale area that has significant amount of desirable regeneration present and will help further landscape level goals through implementation of an overstory removal. Due to tree mortality that occurred from *lymantria dispar* ("spongy" moth) in the spring of 2021 the forester will be including more acres to this area. The extent of the mortality is now known, so layout will begin during the summer/fall making sure to capture as much mortality as possible, to include in the sale area. Stand level analysis will be conducted fall of 2023 with the proposal to follow afterwards. Timber marking of the sale is estimated to begin 2025.
- Big Pine Flat Removal – Sale area that has some desirable regeneration present and will help further landscape level goals through implementation of a salvage overstory removal. Due to tree mortality that occurred from *lymantria dispar* (formally known as gypsy moth) in the spring of 2021. The extent of the mortality is now known, so layout will begin during the summer/fall making sure to capture as much mortality as possible, to include in the sale area. Stand level analysis will be conducted fall of 2023 with the proposal to follow afterwards. Timber marking of the sale is estimated to begin 2025. The timber sale area is going to be approximately 724-acres in size.
- Cement Arrow Removal – Sale area is roughly 773-acres in size and has "patches" desirable regeneration present and will help further landscape level goals through implementation of different types of silvicultural treatments. Due to tree mortality that occurred from *lymantria dispar* (formally known as gypsy moth) in the spring of 2021. The extent of the mortality is now known, so layout will begin during the summer/fall making sure to capture as much mortality as possible, to include in the sale area. Stand level analysis will be conducted fall of 2023 with the proposal to follow afterwards. Timber marking of the sale is estimated to begin 2025.
- Deer Lick Removal – Sale area is roughly 120 acres within the Rattlesnake Run Road area. Part of the sale area is within a deer enclosure that was harvested 5 years ago. There will be a salvage area within the road buffer of Rattlesnake Run Road that's approximately 20 acres.
- Means Hollow Salvage Area – This sale area runs from the intersection of Ridge Road and Means Hollow Roads and runs the entire length of Mean Hollow Road. There is a large salvage area near Dug Hill Trail that will be included with this sale. The mortality occurred from a last frost on the white oak that killed most of the overstory.

• **DEER FENCES:**

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

**Installs:**

- One fence approximately 77-acres in total are to be installed at Corl's Ridge (south of District Road and alongside Corl's Ridge Haul Road) where previous timber sale 01-2021BC07 (Corl's Ridge) sale was conducted. Objectives of the fence are to reduce impact from deer browse. Another fence was installed along the gas line on Old Forge Road.

**Removals:**

- 1 fence totaling 20-acres between Oak Road and Wirt Road Hill haul road will be removed by volunteers.
- 1 fence totaling 58-acres alongside Middle Ridge Road and Dug Hill Trail will be removed by a contractor.

**HERBICIDE PROJECTS.**

- Kepner Knob - A 103-acre basal bark treatment along Kepner Knob haul road will be treated to control Japanese Angelica. Projected Summer of 2024.
- Bunker Hill – A --- acre pre-emergent and basal treatment will occur within the Bunker Hill Conceptual Landscape area. Species targeted will be Japanese stilgrass and Oriental Bittersweet.
- Leager Farm – A --- acre foliar spray will be conducted to treat Japanese barberry on Leaper Farm Road near Buck Ridge Trail for control of Lyme disease.

*Other sales or projects could potentially occur in 2024, 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 wider 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. This project will also benefit turkey, grouse and other game and non-game wildlife species by enhancing 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, forbes, 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 were planted in spring of 2022 with native warm season grasses and wildflowers that provide year-round food and cover for moths, butterflies, and other pollinators that attract game and non-game wildlife species. Large seedlings will be planted within the one area of this project area. A total of 161 native trees will be planted and protected with fencing during the spring of 2023. A variety of tree species were picked for wildlife needs and to help restore desirable species declining due to recent mortality events on the landscape.
- **Special Wildlife Management Areas (SWMAs)** –During the early 90’s, a severe decline in the wild turkey population was prevalent on the Michaux State Forest. Research into the decline conducted by the Pennsylvania Game Commission (PGC) and the Department of Conservation and



Natural Resources (DCNR) Bureau of Forestry determined ideal brood-rearing habitat 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 diverse mix of native grass, wildflower, shrub, and tree species that provide year around food and cover for game and non-game species. SWMA #31 (Buck Ridge) will be planted with 2022 with native warm season grasses and wildflowers that provide year-round food and cover for game and non-game species.

**SWMA South of Route 30** will be mowed/pruned within 2024 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 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. Blocks 2, 4, 6, 8 and 10 will be harvested by district staff to create a block mosaic pattern of early successional habitat. The marking and cutting of trees will be during the fall/winter of 2023.
- **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 umbellate*), 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" 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. 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. The overall goal is to develop a site-based narrative around the cultural and environmental factors that have shaped habitat conditions on this landscape overtime. Developing human understanding, values, skills, and behaviors that enable us to work towards and sustain desired future landscape conditions is a desired outcome of engaging forest visitors with this long-term landscape level habitat restoration project.

- During the spring of 2024 district staff and volunteers will be planting roughly 5,400 herbaceous plugs within the restoration project area. There will be a variety of plug species to create diversity a diverse savannah community of native warm season grasses, wildflowers, shrubs, and other plants to provide year-round food and cover for pollinators, songbirds, turkey, woodcock, and other game and non-game species.
- **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 and Management Area** – The Michaux is working with ecoservices and other partners to introduce and increase beaver populations in areas of the forest. 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. Hydrologically, they can create more resilient base flow conditions during low base flow conditions and may help neutralize acidity in poorly buffered stream segments through increasing the level of dissolved weak organic acids.
- **Shortleaf Pine Introduction** – The Michaux is working with ecoservices to restore shortleaf pine into the South Mountain Landscape. A total of 900 seedlings from 2 southern states within the district's seed providence zone will be planted; 450 will be planted near Big Pine Flat and the other 450 will be planted within the Tobacco Patch sale area near Hairy Springs. The introduction of shortleaf pine is critical in increasing biodiversity and plays an important role in the ecosystem.
- **National Fish and Wildlife Foundation Grant** – The district received a matching grant of \$750,000 from the National Fish and Wildlife Foundation that will be administered by the American Bird Conservancy. This project targets habitat restoration of species of conservation concern through creation and enhancement of a climate resilient habitat mosaic in artificially homogenized upper tributary forest systems on the Michaux State Forest. The goal is to improve habitat conditions within two upper tributary watersheds encompassing approximately 1,400 acres on Michaux State Forest between Big Pond and Hogshead Roads. The project will stabilize and build resiliency in several populations of species of conservation concern, including eastern brook trout, timber rattlesnake and ruffed grouse. Project will

implement stewardship on at least 1,030 acres of upland and riparian forest, plant 79,560 trees, restore 6.6 miles of instream habitat, engage 160 volunteers in tree and shrub planting and trail blazing and signage work, and improve public access to non-motorized shared use trail opportunities within and near the project area through conversion of a redundant motorized road segment closely paralleling a stream, into a non-motorized trunk trail and trail head access points.

## **PRESCRIBED FIRE PROJECTS**

- **Dead Woman’s Hollow Prescribed Burn:** This prescribed burn is located off Ridge Rd., between Dead Woman’s Hollow Haul Rd, 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 is ongoing in the one block burned in 2015, as well as unburned blocks. Both remaining blocks are high priorities for both spring and fall 2024 windows.
- **Canada Hollow Prescribed Burn:** This prescribed burn is located between Middle Ridge Rd. and Milesburn Rd. This project consists of approximately 228 acres, which is broken into separate burn units ranging from about 60 acres up to 125 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 providing foraging/bedding habitat for whitetail deer. 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.
- **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, forbes, and pollinator species. Fuelwood harvests were conducted in

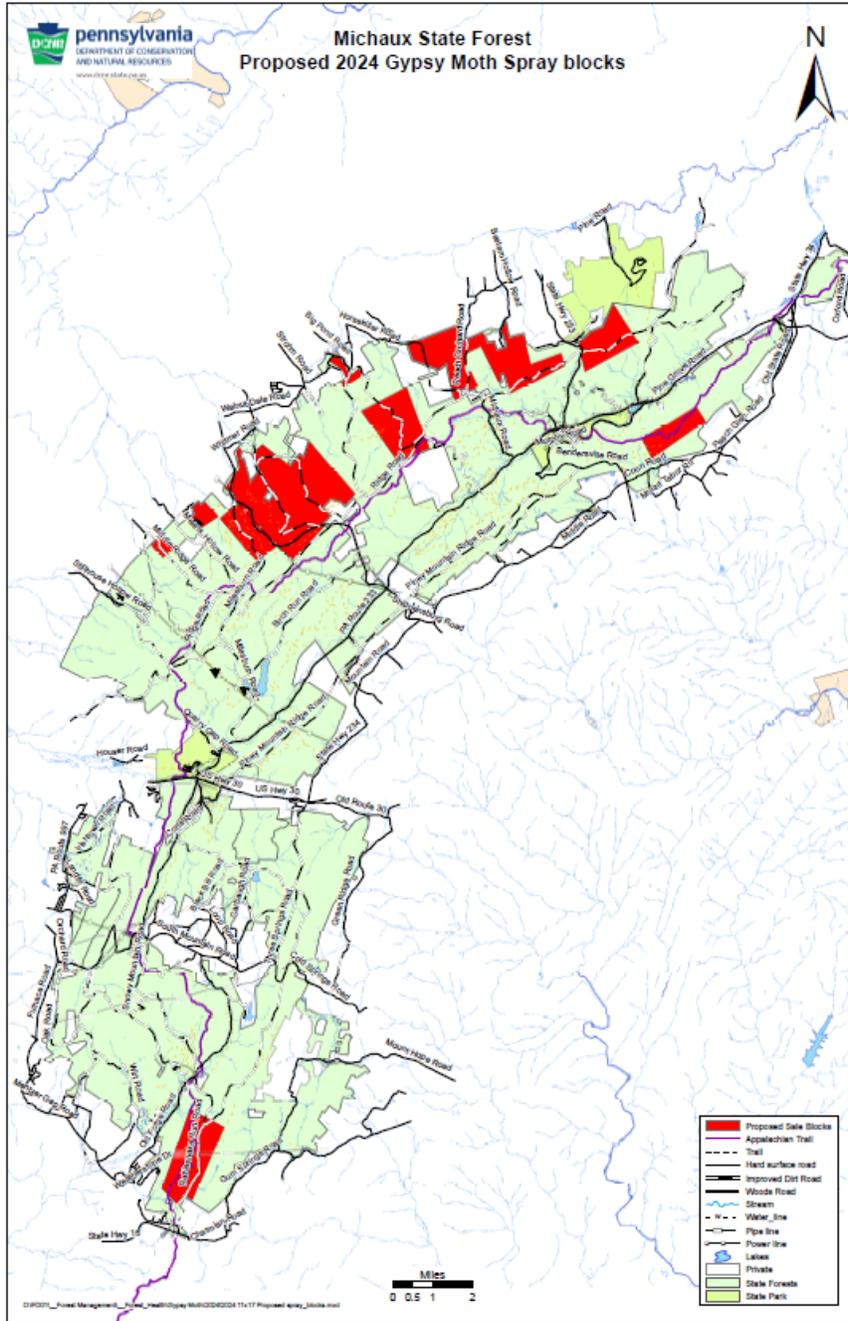
these selected sites in 2020 to allow more of the overstory trees to be removed to create the opening. These openings were planted in spring of 2022 with native warm season grasses, pollinators, and forbes that provide year-round food and cover for game and non-game species. Prescribed fire will reduce vegetation growing in these openings helping prepare the sites for seeding. These burns may occur between mid-April – November. Currently ongoing, Spring 2024-Fall 2024.

- **Sand Road “Grouse” Restoration Project:** - District received a FECON mowing machine in the fall of 2023 and has been mowing undesirable species and creating early successional habitat since receiving the machinery. The district’s intentions for this area were to remove severe fuel loading to make the prescribed fire more manageable and create critical early successional habitat that is lacking within this landscape.
- **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 and wildflower 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 TREATMENT**

- Aerial 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 upswing particularly in the northern part of the forest along Ridge Road and Route 233 and suppression efforts are planned for spring of 2024. Suppression blocks are delineated for 2024 management effort and approximately 10,000 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. 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 2024, 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 2024: 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 2024. 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, southern pine beetle, wavyleaf basketgrass, and amur cork tree which are all currently found in southeastern PA. Wavyleaf basketgrass has been identified at two York County state parks (Codorus 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.



**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 2024.

## 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. Development of demonstration parcels and a participatory process for drafting initial management plan objectives and work plan for the two demonstration forests will be major objectives for 2024.

## 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 and community leaders from across our recreational user groups is enhancing our capacity to get meaningful work done on the forest that benefits everyone. If you love working on Michaux's trails, enjoy Michaux's wildlife, birds, wildflowers, or history; the Friends of Michaux maintains active Letters of Authorization with the forest district that will help put your passion for the forest to work in ways that align with its most critical stewardship needs. If you have critical organizational experience or leadership skills you'd like to contribute, the Friends board is also always looking for people with non-profit board experience to assist in development, evaluation and planning, and leadership training and development to help grow the functional capacity of this critical forest support partner. So become a member, get involved, run for the board of directors, or donate!
- **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](mailto: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. [South Mountain Partnership](#)
- **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 planted over 4,700 herbaceous plugs and 380 large seedlings and constructed 2 bird viewing decks.
- Transitioned campsite and firewood reservation system to Bureau of State Parks online reservation system.

## **RESEARCH**

- The Michaux coordinates works with various research entities conducting ongoing monitoring and research on Michaux species and habitats. Research is prioritized for funding and implementation through the Bureau of Forestry's internal research committee, or through collaboration with Pennsylvania Natural Heritage Partners, the South Mountain Science Summit, DCNR's Think Outside program, and through researcher requested agreements.