



# **Tiadaghton State Forest**

## **2023 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 <a href="State Forest Resource Management Plan">State Forest Resource Management Plan</a> (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.

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 implement the SFRMP on Tiadaghton State Forest. For questions, comments or more information about this plan, please contact:

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#### **RECREATION**

#### **Recreation Projects**

- Hiking Trail Tread Surface Work DCNR employees, along with volunteer organizations will improve eroded trails on Huntley Mountain, namely the Tiadaghton and Gleason Trails. Similar work will also be done on the Tiadaghton Trail between Waterville and Ramsey Village, along with other highly used trails in the district that might require similar work.
- Bog Bridge Construction on the Black Forest Trail the Keystone Trails
   Association (KTA) will work with the recreation forester to complete bog bridges,
   or puncheons, along the Black Forest Trail near the headwaters of Little Slate
   Run.
- Bridge Construction in Gamble Run The PA Outdoor Corps will work with the recreation forester to construct bridges over some of the larger stream crossing of Gamble Run on the Gamble Run Trail.
- Abandoned Trail Rehabilitation The PA Outdoor Corps will work with the recreation forester to re-establish trails abandoned due to gas fragmentation/timber sales.
- Trail Rehabilitation with Skid Steer with Mulching Head District staff will use a
  rented skid steer with a mulching head to re-establish overgrown trail corridors
  and abandoned trails. This will include widening primary ski trails.
- Pine Creek Rail Trail Resurfacing We will be continuing with the final stage of resurfacing the existing AASHTO #10 trail surface with Trail Surface Aggregate (TSA) formulated by Penn State's Center for Dirt and Gravel Roads. TSA provides a more sustainable running surface and reduces the constant rill erosion issues noticed with the AASHTO #10 product. The trail section from the Venture Inn restaurant, south to Jersey Shore Access will receive TSA aggregate. Hopefully this work will be completed in May of 2022 but could happen anytime in the summer depending on the timeliness of the bidding process.
- DEP General Permits for Bridges in Gamble Run A series of bridges would improve trails in Gamble Run. Two frequently used trails, the PA Mid State Trail and the Gamble Run Trail, need bridges. Permitting will be a collaborative project with the PA DEP to construct timber bridges in the future.



### **BUREAU OF FORESTRY**

- Rebuild Bridge over Dam Run on the Mid State Trail The existing bridge over Dam Run, a foot-travel-only bridge, is rotting. A new bridge will be constructed with the assistance of the Mid State Trail Association that meets the preapproved engineering specifications for foot travel only bridges.
- State Forest Trail Tread Surface Rehabilitation The PA Outdoor Corps will be used to rehabilitate eroded trails surfaces and repair switchbacks, water diversion features, and address other trail concerns as needed on the Golden Eagle and Black Forest Trails.
- Vista Work numerous vistas along district roads and trails will be cleared to improve recreational viewing and for field observation during wildfires.

#### **Trail Work**

- Haneyville ATV Trail –Work on the trail will include adding reassurance blazes, Class I and Class II signs, and clearing the trail at least three times of down trees on the trail corridors.
- ATV Trail Regional Connector Pilot Work District staff will continue working to connect the Haneyville ATV trail to ATV pilot routes already open in northern districts. Work will include armoring the Harrowed Trail between Manor Fork Rd and Route 44, as well as armoring another 1.0 mile of snowmobile trail just north of Haneyville. This connection should be completed by May 25, 2023.
- Black Forest Trail The 42-mile loop will be cleared at least twice during the
  year. Additional work will be conducted by volunteers and DCNR personnel to
  clear encroaching vegetation and to rehabilitate eroded tread surfaces. KTA will
  be working on the trail in May under the supervision of the recreation forester.
  Portions of the trail will be reblazed.
- Golden Eagle Trail The 9.2-mile trail will be cleared at least three times
  throughout the year. Additional work will also include maintaining vistas and
  replacing trail signs. KTA will be working on the trail in May under the
  supervision of the recreation forester. Portions of the trail will be reblazed. A
  significant amount of tread surface will be repaired by increasing the width and
  slope of the tread surface.



### RIIRFAII OF FORFSTRY

- Bob Webber Trail This trail will be cleared of trees multiple times. Huckleberry and mountain laurel will be mowed back near the top of the trail.
- Mid-State Trail Every summer the Mid-State Trail Association spends one
  weekend improving the trail. Additional work will involve digging-out areas
  where the trail has eroded, and the tread surface is now non-existent. Sections
  of the trail will be mowed with a DR Mower or brushed back with weed
  whackers from Game Lands 75 to Big Springs Road, and from Sand Spring Road
  to Mohn Mill Road.
- Sentiero Di Shay Ski Trail DCNR staff will mow and clear approximately 13 miles of this trail corridor as routine maintenance. Bridges will be constructed where culvert pipes have washed out along historic railroad grades.
- Francis Kennedy Ski Trail DCNR staff will mow and clear approximately six miles
  of this trail corridor as routine maintenance. The tread surface will be dug on
  portions of the eastern portion of the loop.
- Pine Bog Ski Trail DCNR staff will mow and clear approximately two miles of this trail corridor as routine maintenance.
- George Will Ski Trail DCNR staff will mow and clear approximately six miles of this trail corridor as routine maintenance.
- **Ruth Will Ski Trail** DCNR staff will mow and clear approximately three miles of this trail corridor as routine maintenance.
- Baldwin Point Ski Trail DCNR staff will mow and clear approximately three miles of this trail corridor as routine maintenance.
- **Pitch Pine Loop Ski Trail** DCNR staff will mow and clear approximately three miles of this trail corridor as routine maintenance.
- Bear Claw Ski Trail DCNR maintenance staff will mow and clear approximately four miles of this trail corridor as routine maintenance. This trail needs reblazed, especially along Sand Springs Road.
- Broken Tip Ski Trail DCNR maintenance staff will mow and clear approximately three and a half miles of this trail corridor as routine maintenance. Reblaze trail.



### RIIRFAII OF FORFSTRY

- **Switchback/Tower Trail** this trail connecting Skyline Drive to the Broken Tip Trail is likely to be blazed for shared use.
- Middle Hill Trail Trail will be cleared of down trees and blazed for shared use.
- Quarry Mountain/Dragon's Back Trail This trail will be cleared from PA414 to the Golden Eagle Trail. A new trail sign will be placed where it intersects the Golden Eagle Trail.
- **Naval Run Trail** This five-mile trail will be cleared of down trees, and portions of the trail will likely be brushed back.
- Coudersport Pike Trail The snowmobile Trail/shared use trail will be mowed by the Jersey Mills and Waterville Maintenance Division to remove woody vegetation and thick grass growing on the trail.
- Gleason Trail The Gleason Trail will be cleared of downed trees.
- Old Wagon Road This trail will be cleared and mowed by volunteers and DCNR staff.
- **Pesto Trail** This will be cleared of trees and weed-whacked by volunteers to its intersection with the Mid State Trail.
- **Panther Run Trail** This trail will be cleared of blowdowns, parts of it will be weed-whacked, and trees pruned back along its corridor.
- Algerine Trail This trail will be cleared of blowdowns and weed-whacked by DCNR and volunteers. Trail blazes will be painted yellow.
- **Cut Off Trail** This trail will be cleared of blowdowns and DCNR staff will cut back encroaching huckleberry, mountain laurel, black birch, etc.
- **Plantation Trail** This trail will be cleared of blowdowns from route 44 to the Haneyville ATV Trail.
- Jack Martin Trail This trail will be cleared from route 414 to the Haneyville ATV Trail. The bottom will be weed-whacked where tall grass and other herbaceous plants grow tall and obscure the view of PA414.



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- Brown's Run Trail This trail will be cleared of trees from PA44 down to PA414.
- Ott Fork Trail The Ott Fork Trail will be cleared of downed trees and trees will be pruned back along its corridor.
- **Pine Hollow Trail** This trail will be cleared of blowdowns and mowed from Middle Hill Road to the Ott Fork Trail.
- **Pine/Riffle Trail** These trails will be cleared of downed trees. A new sign will be placed where Riffle Run intersects with the Pine Trail.
- Half Dome This extremely steep trail will be cleared of downed trees.
- **Camp Ridge Trail** This trail will be re-established/cleared following timber harvest over the winter months.
- **Callahan Trail** This trail will be cleared of blowdowns. A new sign will be placed where it intersects with the Pine Trail.
- Houselander Trail –This trail will be cleared by volunteers and DCNR staff.
- **Torbert Trail** This trail will be cleared of blowdowns. Approximately one and a half miles of this trail will be moved near Okome Road.
- Tiadaghton Trail DCNR maintenance staff and volunteers will mow, weedwhack, and clear approximately 10 miles of this trail corridor as routine maintenance.
- Shared Use Trail on Chestnut Ridge A section of shared use trail along
   Chestnut Ridge that was abandoned will be re-established by cutting brush and reblazing the trail.
- Stone Cutter Trail The section of the Stone Cutter Trail will be re-established in Bonnell Run. This work will be assigned to the PA Outdoor Corps and the Jersey Shore Outdoor Club if possible.
- Sam Carson Trail This trail is badly overgrown and the sign at the trailhead was stolen. A new sign for the trail will be made and brush will be cut back to reestablish the trail.



- **Gas Line Trail** This trail off Naval Run Road is badly overgrown with sweet birch. The birch will be pulled or cut to re-establish the trail corridor.
- **English Flat Trail** This abandoned trail will be re-established off Sinking Springs Road and new signs will mark the trailhead.
- **Little Morris Trail** The Little Morris Trail will be mowed during cold weather months to improve this section of shared use trail.
- **Dugan Log Trail** This trail will be blazed to assist users traversing the log roads in this area.
- Catamount and Turkey Vulture Trails These trails will be cleared of down trees multiple times throughout the year.
- Central Mountains Shared Use Trail This trail system will be cleared of trees, brush cut back, and trees are to be reblazed. Signs also will be replaced for some of the individual trails.
- **T-Squared Trail** this trail gets mowed and cleared of trees from the Benson Road to the Black Forest Trail each summer.

#### **Recreation Events**

- **Eastern States 100** In August, the Eastern States 100 will be held at Little Pine State Park. This elite foot race will utilize about 70 miles of hiking trails in the Tiadaghton State Forest.
- **Black Forest Ultramarathon** This October, a 100-kilometer race will be had on the Black Forest Trail and T-Squared Trail.
- Call of the Wilds Mountain Marathon In October, the Call of the Wilds 25/50K will be held at Little Pine State Park. This course features about 45 miles of hiking trails in the Tiadaghton State Forest.
- **Slate Run 25K** In June, this trail running event will feature approximate 15 miles of the Black Forest and connecting trails.



### **BUREAU OF FORESTRY**

- Mile Run Challenge This annual half-marathon is held in the southern portion
  of the Tiadaghton State Forest and the northern portion of the Bald Eagle State
  Forest each spring.
- **Tiadaghton Trail Challenge** This event will be held in November and consists of two simultaneous trail running events, a 10K and a half marathon. The trails for the event are almost entirely on Huntley Mountain.
- YMCA Ride for the Y The annual Ride for the Y will be held on the Pine Creek Rail Trail in late September and feature approximate 29 miles of the trail.
- **Keystone Gravel** This cyclocross bicycle event is held in mid-September and utilizes about 60 miles of trails and roads in the district.
- **Keystone Off-Road** This mountain bike event is planned for May and features nearly 50 miles of trail and dirt roads in the district.
- **Hyner Hang Gliding Club** The Hyner Hang Gliding Club launches from the vista at Auganbaugh Gap several times per year.
- **Jersey Shore Lions Club Family Fun Walk/Run** In April the Lions Club of Jersey Shore will host a 5k run/walk on the Pine Creek Rail Trail starting in Jersey Shore.
- Durty Dabbers Enduro In June the Durty Dabbers host an endure-style
  motorcycle event that incorporates state forest roads in multiple forest districts.
  In the Tiadaghton State Forest, the Dabbers used roads solely in the southern
  portion of the district.
- Slate Run Ramble In late spring and early autumn a public hike is led on trails near the village of Slate Run. The route may include portions of the Black Forest Trail, Golden Eagle Trail, Dragon's Back, Quarry Mountain, Half-Dome, or other trails in the vicinity. The length of the course varies for each hike but is typically 9-12 miles.
- Iron Cross This year an organized bicycle event will be held starting in South
  Williamsport and extend into the southern part of the Tiadaghton State Forest
  and the northern part of Bald Eagle State Forest. The event features mostly
  gravel roads except for two shared use trails.



- Princeton Outdoor Action Each year Princeton University brings large groups
  of freshmen students on a backpacking trip on the Black Forest Trail-roughly 150
  students attend each September.
- AYSO 5K A local youth soccer league will host a 5k run on the Pine Creek Rail Trail.

#### **Recreation Projects Completed in 2022**

- Motorized Camping Data Collection All campsites/campgrounds accessible by motor vehicle were mapped, measured, and data was collected and later organized, entered, and submitted to the Recreation Section to be incorporated into a new online reservation system.
- ATV Monitoring Data Collection Sensitive areas and areas of concern were mapped and data was collected for monitoring of ATV impacts to State Forest Land along the new ATV Pilot corridor. Data was initially collected in the spring and re-assessed in the autumn.
- Houselander Trail Rehabilitation Keystone Trails Association (KTA) in conjunction with the recreation forester and technician re-established, painted trail blazes, and signed portions of the Houselander Trail that were abandoned/fragmented after gas development several years ago.
- Bog Bridge Construction on Black Forest Trail KTA in conjunction with DCNR staff began building bog bridges along the Black Forest Trail near the headwaters of Little Slate Run due to trail braiding and extremely unfavorable trail conditions due to standing water on the trail corridor.
- Tiadagthon Trail Storm Damage Cleanup and Trail Reconstruction Due to a
  microburst wind event in Bush Run along the Tiadagthon Trail, most of the trees
  for approximately 650 yards were blown down and numerous parts of the trail
  were destroyed by uprooted trees. A few DCNR employees cleared all trees and
  debris off the trail over the course of a month. The PA Outdoor Corps was then
  utilized to rebuild the trail and create water diversions to prevent further
  erosion.
- Lower Pine Trail The PA Outdoor Corps improved the tread surface on a trail that encircles the district office and is used for interpretive walks for the district's



#### Environmental Educator.

- Trail Rehabilitation with Skid Steer and Mulching Head During the months of September and early October, a skid steer with a mulching head was rented and used to rehabilitate trails overgrown with brush due to trail abandonment/timber sales. Almost the entire Camp Ridge Trail was reestablished; Pipeline Haul Road; portions of the Sentiero Di Shay Trail connecting to the Camp Ridge Trail; the switchbacks on the upper portion of the Naval Run Trail; portions of the Bill John, Number 4 Hollow, Number 3 Hollow, Number 2 Hollow, and George Campbell trails off Big Trail Road; the Old Mountain Trail; and a portion of the Old Black Forest Trail.
- Camp Ridge Trail Tread Surface Rehabilitation Following the use of the skid steer and mulching head on the Camp Ridge Trail, the PA Outdoor Corp raked debris and improved the tread surface of the Camp Ridge Trail to re-establish a hiking-only trail width clear of debris.
- ATV Trail Regional Connector Pilot Work Contractors and district staff completed 2 more phases of this initiative. Work included resurfacing of 8.8 miles of snowmobile trail with 4-minus aggregate. District staff also constructed 1.0 miles of new trail by upgrading an old woods road between Zinck Fork and Browns Run Rds. This also required permitting and installation of a 20' squashed metal culvert and construction of stone inlet and outlet walls.
- Pine Creek Rail Trail Resurfacing Staff from the Jersey Mills maintenance division, along with contractors, completed phase 5 of resurfacing the trail with paver placed Trail Surface Aggregate (TSA). The section of trail from Ramsey Village south to Whitetail Access was completed late spring.
- Pine Creek Rail Trail Pruning The Jersey Mills maintenance division staff conducted thorough pruning of the trail corridor from Torbert Village south to Jersey Shore Access. They also were able to conduct spot pruning from Jersey Mills north to Slate Run to reduce hazards and improve safety.
- Pikes Peak Loop Rehabilitation The Jersey Shore Outdoor Club and the PA
   Outdoor Corps worked with the recreation forester to rebuild portions of the
   Pikes Peak Trail that were lost to erosion. The groups also removed a substantial
   amount of vegetation growing on the trail surface and in the trail corridor.



### RIIRFAII OF FORFSTRY

- **Trail Maintenance** Numerous trails were cleared of blowdown and debris to improve and maintain trail infrastructure. Mowable sections of trail were mowed with brush mowers when time permitted.
- **Ski Trail Work** Nearly all mowable sections of ski trails were mowed prior to winter. All ski trails were cleared of down trees, and brush was cut back and/or mowed on tens of miles of trails. The majority of this work was completed by Bureau of Forestry staff and individual Conservation Volunteers.

#### TIMBER MANAGEMENT

#### Marked and sold, potentially active

- Sawyer's Last Stand Timber Sale 128 acres of overstory removal along the Gamble Run and Reynold's Spring roads. Sold. *Currently being harvested*
- Big Trail 236 acres 2-age overstory removal along Big Trail Road currently being harvested.
- New Blood 427 acres of overstory removal/shelterwood along Bull Run road and Spur One. Sold. Waiting to be harvested.
- So Far So Good 160 acres of overstory removal inside fences off Gamble Run Road.
   Currently being harvested.
- Route 44 Eyesore- 268 acres of shelterwood and 2-age removal at the end of Bull Run Road. Sold. Waiting to be harvested.
- **Super Bad** 59 acres of overstory removal inside a fence at McMurrin Run at of Sand Spring Road. Waiting to be harvested.
- **Falling Springs-** 94-acre overstory removal cut along Falling Springs Road. Sold. Waiting to be harvested.
- **Brandon Trail-** 260-acre combination shelterwood/overstory removal along Brandon TrailRoad. Sold. Currently waiting to be harvested.
- Jamison Trail- 167-acre overstory removal along Jamison Trail. Currently waiting to be harvested.
- Rumberger Road- 322-acre overstory removal along the Rumberger Road. Currently being harvested.
- **Lebo Road-** 230-acre shelterwood waiting to be harvested.
- **Limbaugh Road-** 145-acre shelterwood sale waiting to be harvested.



Other sales could potentially begin in 2023 but forecasting that activity at this time is difficult due to a variety of reasons that may inhibit them coming to fruition. We will periodically update this document throughout the year to better inform our constituents to the Tiadaghton State Forest.

#### **Regeneration projects**

- Deer Fence Dismantle Projects The district is planning 5 deer fence dismantles for 2023. The fences included are 2 silver branch fences along the Silver Springs Road, 1 fence on Hacketts Road, the old fire fence along Okome Road and one of the Lonely Well Fences along PA Rt 44 near Potter County. \*\* Currently the district is backlogged on fence dismantles due to funding. Fences may take more than one year to dismantle due to these constraints. \*\*
- Herbicide The district plans to contract out herbicide work for approximately 250 acres of hay-scented fern in the Tin Can Road, Hacketts Fork and Augenbaugh Road areas.

#### PRESCRIBED FIRE

- Finish the remaining unit at the end of Big Trail Road.
- Look at re-entering unit 1 of the Big Trail Rx.
- Continue the rotation of food plot maintenance burning stated in 2022. Top priorities for 2023 will be Ross Run, Bonnell Flats, Cooney and the portion of Paucke that was not treaterd in 2022.
- Finish permanent plots and obtain approval for an RX fire in a portion of a shelterwood treatment between Mckees and Limbaugh Roads.
- Write burn plans as foresters find areas they wish to burn.

#### 2022 Accomplished

- <u>Hamilton Bottom (PA</u>-RX-BOF12202101) 2.35 acres warm season grass conducted on 4/13/2022.
- Paucke (PA-RX-BOF12202101) 5.29 acres warm season grass conducted on 4/20/2022.
- Bonell Flats (PA-RX-12202101) Approximately 2 acres warm season grass conducted on 4/22/2022.
- <u>Big Trail Rx (PA-RX-12202103)</u> 95.63 acres of mountain laurel and huckleberry understory conducted on 5/11/2022.



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• Firefighters and overhead from the district assisted multiple other districts with prescribed fire activities.

#### **WILDFIRE**

- Continue to modernize our equipment and response to wildfires within the district.
- Continue to support other districts by providing equipment and manpower as needed.
- Schedule training as needed / requested.
  - o S-130/S-190. Possibly at Waterville Fire Company. Spring 2023.
  - o Fire Warden & Fire Department Training. Fall 2023.
  - o RT-130 & WCT as needed.
- Continue to support the Wildland Fire Crew by sending employees out of state on wildfires.

#### **2022 Accomplished**

- Reported 22 wildfires in 2022 with the largest being a 10.19-acre fire that occurred in Cummings Township, Lycoming County on state forest land.
- The district and its' cooperators conducted 12 prevention programs reaching approximately 1,200 people.
- Continued upgrade and replacement of PPE and equipment.
- Supported our federal and state partners by sending 9 (8 employees, 1 volunteer)
   people on crews, engines and as single resources to assist with wildfire suppression in multiple states.
- Distributed 6 backpack leaf blowers, 4 chainsaws, 3 backpack pumps, 2 compact 1-liter drip torches and 2 Kestrel weather meters to fire departments and the district support crew using VFA funds distributed by the Division of Forest Fire Protection. Hand tools and hose were also distributed as normal to cooperators that requested them.
- District provided 5 people and a type 5 engine to District 9 to assist with the Big Fill Fire in Centre County.
- Created a modernized backpack investigation kit for use on wildfire investigations.

#### **WILDLIFE**

- Mowing of fields in the Breining Tract to reduce invasive species encroachment.
- Submit grant application for establishment of native warm season grasses at selected herbaceous openings.
- Continue evaluating areas to improve wildlife habitat.



#### **2022 Accomplished**

- Began using fire as a maintenance tool for herbaceous openings.
- Mowed all herbaceous openings in the district that are not able to be burned, as well as fire breaks for those that can be.
- Treated another unit of the Big Trail wildlife project in the spring of 2022.

#### **ROAD AND BRIDGE PROJECTS**

- Robbins Road DSA- Summer 2023 Dirt & Gravel road project to finish resurfacing 1.85 miles of this road from near the intersection with Herman Road. Approximately 5000 tons of DSA will be delivered and paver placed by contractors. District staff will roll the material.
- Schoolhouse Hollow Rd 2A Summer 2023 Dirt & Gravel Road project to add approximately 5400 tons of 2A as a subbase to build this road back up in preparation for DSA placement in the future. Approximately 1.8 miles will receive stone from Little Pine Creek Rd up to Long Point Trail at the top of the ridge.
- Daugherty Rd NEW Entrance/Relocation Summer 2023 District staff will be rerouting the first ¼ mile of this state forest road to provide safer travel on and off of S.R. 44. It will be moved to a previously established timber sale haul road where district staff will add 500 tons of 4-minus aggregate base material and top with 1400 tons of 2A aggregate for the running surface. Several pipes will also be installed.

#### INSECT, DISEASE, AND INVASIVE PLANT TREATMENT

- Mile-a-minute is well distributed within the floodplain and surrounding open areas of Pine Creek. Current treatment tools: herbicide, biocontrols, etc. lack the efficacy needed to keep this invasive species in check. The district attempts to best control mile-a-minute in remote locations where populations aren't high.
- Significant effort was spent searching for and treating isolated patches and novel
  infestations of Japanese knotweed, poison hemlock, oriental bittersweet, swallow-wort
  species, Japanese angelica tree, and glossy buckthorn in 2022 and will continue through
  2023.
- Japanese knotweed treatments were completed in 2022 along Upper Pine Bottom Run.
   Hundreds of small populations exist along this drainage and will be treated until they



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are eliminated. New populations were discovered in Lower Pine Bottom Run, Krape Run near Rauchtown, on the edges of the Miller Run Natural Area (the result of gas development), and near the base of Houselander Mountain, which of which will be treated until they are eliminated in 2023 and beyond.

- Since 2019, attempts were made to eliminate Japanese knotweed from the Little Pine Creek watershed (as the stream has relatively few populations along its banks and tributaries). Cooperation with multiple private landowners may be needed to ensure full elimination of J. knotweed. This cooperative treatment will continue through 2023.
- Aggressive treatment of Ailanthus will continue in the Second Gap and Mile Run Areas
  (focusing on past and current timbersales in those areas). New Ailanthus populations
  were discovered near private lands just south of Cedar Run and will be treated in 2023.
- Verticillium wilt was discovered in stands of Ailanthus across the district starting in the spring of 2017. The spread of the fungus continues to be observed on state forest lands.
   While lethal, the fungus appears to not spread quickly to nearby and disjointed populations of Ailanthus.
- Strategic treatment of Japanese knotweed will continue throughout the district with a
  focus on isolated or newly discovered and manageable populations. Focus will be
  shifted towards new disturbance, areas where fill was dumped/moved, etc.
- New populations and novel invasive species continue to be discovered on the nearly 1,000 acres of disturbance associated with Marcellus shale development. Continued treatment of these invasives, where possible and deemed effective, will continue. The district will continue to rely on the shale gas monitoring crew as an extra set of eyes constantly looking for and reporting these invasive species associated with shale gas development. Many small populations of mile-a-minute were found on natural gas infrastructure. Pre-emergent herbicides and diligent follow up will be employed to ensure these ever-increasing populations of mile-a-minute won't invade the undisturbed forests surrounding the natural gas infrastructure.



- Strategic treatment of poison hemlock, especially along Little Pine Creek Road and in the Little Pine State Park, will continue through 2023.
- Many invasives are discovered near or on old timbersale landings and haul roads. Old landings and timbersales were scouted during 2022 and any invasive species, especially those found in low and isolated populations, will be eliminated in 2023. Invasives near newly planned timbersales will also be strategically targeted (e.g. Autumn Olive located along a state forest road leading towards a newly planned timber sale entrance).
- A UTV-mounted sprayer will continue to be used, in cooperation with the shale gas monitoring crew, for the treatment of invasive plants. By some estimates, roadside invasive shrubs constitute the greatest number of isolated invasive shrubs in the Tiadaghton State Forest. Given the ease of treatment and the possible effectiveness of the treatment (e.g. eliminating the only Morrow's honeysuckle population for 10 square miles), this treatment method will be given priority during mid-summer, when other carefully timed and labor-intensive treatments (e.g. spring pre-emergent treatment or early fall basal spraying of root sprouting species) are not used. Effective and efficient use of the UTV was hampered in 2019, and future use will transition to placing the UTV-mounted sprayer in the back of a pickup truck.
- Phragmites (*Phragmites australis*) and Ravennagrass (*Tripidium ravennae*) continue to expand in Lycoming County. These species will be targeted and treated through 2023.

#### NATURAL GAS, OIL, AND OTHER GEOLOGIC RESOURCE DEVELOPMENT

- During 2022, both major gas operators on the Tiadaghton State Forest continued to dewater several freshwater impoundments to remove accumulated rainwater from the otherwise unused freshwater impoundments. Dewatering took place with the cooperation and monitoring of DEP staff. The staff of the Tiadaghton State Forest will continue to push for removal and reclamation of unneeded freshwater impoundments.
- During 2021, continued attempts were made to encourage natural gas operators to avoid mowing their rights-of-way and vegetated clearings associated with Marcellus infrastructure to encourage the growth of native warm-season grasses. As this pipeline network is used by snowmobiles, future efforts to mow the snowmobile trail will be



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limited to areas where woody shrubs would prevent proper grooming and travel on the trail. Otherwise, the warm season grasses will be pushed over by snowfall, snowmobile travel, and the first grooming of the season.

• Two natural gas well pads were reclaimed in the spring of 2022. These sites were fully constructed but never used for natural gas development.

#### **TOWER AND RIGHT-OF-WAY PROJECTS**

- Three disused tower sites were removed, and the sites reclaimed in 2022.
- During 2022, attempts were made to minimize tower lighting where possible. In addition, tower operators were discouraged from using external lights on buildings, etc. to avoid unnecessary light pollution.
- Oak wilt was discovered on many oak trees near Waterville in 2020. All the affected
  trees were recently trimmed for electric ROW maintenance. The spread of oak wilt was
  monitored in 2022, was observed to be spreading, and all attempts to stop or slow the
  spread of oak wilt will be undertaken through 2023.

#### **OPPORTUNITIES FOR PUBLIC ENGAGEMENT**

- Meet and greet opportunities on the weekends
- Family fishing days on Pine Creek in cooperation with the Pennsylvania Fish & Boat Commission
- Jersey Shore Area Middle School: watershed education field day, compass and map classes, and invasive plants classes
- Tree ID Trail hikes, kayak trips on Pine Creek and the Susquehanna River, History Hikes on the Log Slide Trail, and group rides on the Pine Creek Rail Trail
- Fun in the Sun Day at Brandon Park, Williamsport
- Woolrich Youth Day, Woolrich, PA
- Jersey Shore YMCA Healthy Living Fair
- Loyalsockville Elementary School 3<sup>rd</sup> grade Rail Trail ride
- Boy Scout and Cub Scout merit badge classes
- Schick Elementary School (Loyalsock District) Career Day
- Project Learning Tree and PA Songbird presentations



## **BUREAU OF FORESTRY**

- Charter School Field days at the TFRMC
- Tiadaghton Forest Resource Management Center presentations for gas infrastructure tours, advisory council meetings, and other state and national groups using the meeting space at the Center
- Counselor at DCNR's ECO-Camp.