



**NORTH CAROLINA
DEPARTMENT OF AGRICULTURE
AND CONSUMER SERVICES
NORTH CAROLINA FOREST SERVICE**



**DuPONT STATE RECREATIONAL FOREST
ANNUAL LEGISLATIVE REPORT**

Oct. 1, 2022

Steve Troxler, Commissioner
Scott Bissette, Assistant Commissioner
David Lane, State Forester

Pursuant to G.S. 106-887 (i), the North Carolina Forest Service, a division of the North Carolina Department of Agriculture and Consumer Services, respectfully submits this annual report on DuPont State Recreational Forest for fiscal year 2021-2022.

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STATUTORY REQUIREMENT

No later than Oct. 1 of each year, the Department shall report to the Joint Legislative Commission on Governmental Operations, the House and Senate Appropriations Subcommittees on Natural and Economic Resources, the Fiscal Research Division, and the Environmental Review Commission on the Department's management activities at DuPont State Recreational Forest during the preceding fiscal year and plans for management of DuPont State Recreational Forest for the upcoming fiscal year (2011-145, s. 13.25(o)).

OVERVIEW OF DuPONT STATE RECREATIONAL FOREST

DuPont State Recreational Forest (DSRF) encompasses more than 12,400 acres in Transylvania and Henderson counties. The forest is managed for natural resource conservation, scenic enjoyment and recreational purposes including horseback riding, hiking, bicycling, hunting, fishing and other activities that are sustainable within the context of natural resource protection. DSRF strives to provide an exemplary model of scientifically sound, ecologically based natural resource management for the social and economic benefits of a diverse community of users. DSRF is also required to protect and restore natural areas to meet the intent of a grant agreement that designates most of the forest as a dedicated nature preserve.

DSRF has more than 40 miles of multiuse roads and nearly 60 miles of multiuse trails supporting the forest's recreational opportunities. In addition, DSRF features four waterfalls on the Little River, two waterfalls in the Grassy Creek watershed, six mountain lakes, and unique low elevation granitic domes and slickrock formations.

DSRF's popularity stems from many sources. There are three waterfalls located within 3.5 miles of the visitor center and the forest's topography is not quite as steep or technical as other nearby public lands, making the forest accessible to a wider variety of visitors. The forest also has a unique limited mobility vehicle permit program that increases the diversity of visitors by enabling individuals with disabilities to drive into view one of the larger waterfalls. In addition, DSRF receives heavy visitation from local, regional, national and international guests who come to enjoy the forest's trails and experience the natural features that have been featured in a variety of publications, movies, websites and social media outlets.

Nineteen full-time employees and four temporary employees work together to manage the DSRF work unit. Fiscal year 2021-2022 staff included:

- Jason Guidry, DuPont State Recreational Forest supervisor
- Michael Santucci, assistant forest supervisor
- Kimberly Watson, office manager
- Greg Hall, administrative associate
- Jordan Luff, management forester
- Jeremy Waldrop, forestry technician
- Jane Dauster, recreational specialist
- Eric Folk, recreation technician
- Jimmy Patterson, firefighting equipment operator
- Nathan Sweat, facility maintenance supervisor
- Sammy Breeden, maintenance technician
- Gary Lykins, vehicle and equipment repair technician
- Bob Twomey, maintenance technician (temporary)
- Mary Ann Hamilton, housekeeper (temporary)
- Joseph Grant, housekeeper (temporary)

- Katelyn Keller, education and outreach coordinator
- Kirsten McDonald, information and education supervisor
- Geoff Saltarelli, visitor center coordinator (temporary)
- Susan Fay, Holmes Educational State Forest supervisor
- EJ Dwigans, educational ranger
- Andy Norman, law enforcement agent
- Daniel Britt, law enforcement agent
- Josh Kujawa, law enforcement agent

The DSRF forest supervisor also supports the operation of Holmes Educational State Forest (HESF), located in Henderson County, and its employees. The DSRF forest supervisor reports to the Mountain Division Director Greg Smith, who is based in the N.C. Forest Service (NCFS) regional office in Asheville.

THE ALEEN STEINBERG VISITOR CENTER

The visitor center is one the most important stops for a guest to DSRF. Visitors drop by to acquire important information about:

- updated trail maps and map reading;
- safety and outdoor preparedness;
- DSRF rules and regulations;
- directions to waterfalls;
- recreational opportunities within the forest;
- multiuse trail etiquette;
- educational offerings;
- general area information;
- permits for vehicles for disabled visitors; and
- picnic shelter reservations.

More than a million visitors have come to the visitor center since its opening in 2013. In fiscal year 2021-2022 approximately 114,000 visitors used this facility as shown in Figure 1.

Visitor Center Counts	
Fiscal Year 2021-2022	
<i>Month</i>	<i>Visitors</i>
July 2021	19,236
August 2021	9,747
September 2021	9,547
October 2021	13,091
November 2021	7,703
December 2021	5,583
January 2022	2,334
February 2022	4,416
March 2022	8,438
April 2022	10,346
May 2022	10,441
June 2022	13,130
Total	114,012

Figure 1: Visits to the visitor center by month for fiscal year 2021-2022

The visitor center’s classroom serves as a meeting place for various community groups, educational programs, staff meetings, field trips, and programs for volunteers. To comply with COVID-19 health protocols and the N.C. Forest Service’s agency-wide safety recommendations, the visitor center also provided forest and local information through an outside self-service information station, an outdoor information desk staffed with volunteers, and a volunteer-staffed indoor information desk with limited visitor capacity and barriers to promote social distancing.

During fiscal year 2021-2022, the visitor center was managed by:

- a visitor center coordinator (temporary) – Geoff Saltarelli
- a maintenance construction technician (temporary) -- Bob Twomey
- housekeepers (temporary) – Joseph Grant and Mary Ann Hamilton
- a DSRF education and outreach coordinator – Katelyn Keller
- a DSRF information and education supervisor – Kirsten McDonald

In addition to these staff members, the visitor center coordinator and DSRF education and outreach coordinator recruited, trained and provided support for a core group of 35 volunteers to greet visitors, answer questions, provide safety information and help relay important communications.

PUBLIC USE OF THE FOREST:

Operations during the continuation of the COVID-19 pandemic

COVID-19 precautions and procedures impacted all DSRF operations intermittently during fiscal year 2021-2022. For most of the year, restrictions on inside gatherings were in effect, and the use of masks for indoor and outdoor settings was recommended when social distancing was not possible. DSRF also maintained the previously installed, temporary fencing along Staton Road to help spread out visitors among the forest's access points.

During fiscal year 2021-2022, more than a million people visited DSRF. This level of visitation was slightly lower than that of the previous year, but the trend paralleled similar statistics from public lands throughout Western North Carolina. Most industry experts estimate that the decrease in visitation reflects unusually high gasoline prices and the late-pandemic availability of non-outdoor venues such as movie theaters, concert halls and restaurants with indoor dining.



Figure 2: Visitors to DuPont State Recreational Forest per fiscal year since 2012

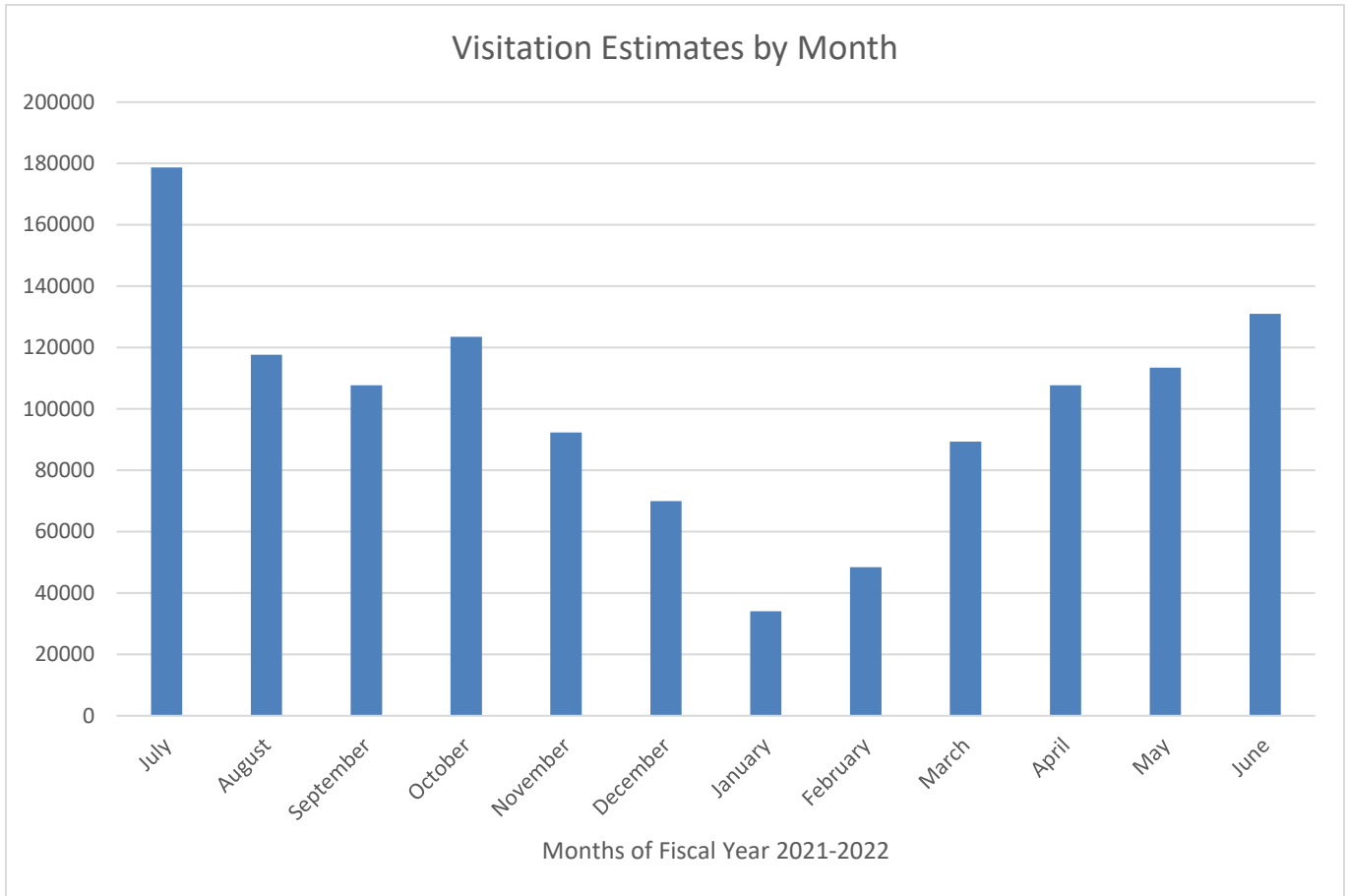


Figure 3: Visitors by month for fiscal year 2021-2022

Public Safety Enhancement: Fewer Emergency Incidents

DSRF staff and county emergency personnel are dispatched to a variety of emergency incidents in the forest throughout the year. These incidents may involve trauma, illness, search and rescue, property damage or medical emergency evacuation. In general, emergencies are linked to visitors engaging in risky behaviors such as entering restricted areas, climbing on rocks, sliding on or jumping off waterfalls and using intoxicating substances. Despite high visitation numbers, incidents at DSRF decreased again during the 2021-2022 fiscal year. This trend reflects the effectiveness of spreading out visitors through limited roadside parking and increasing safety and rule signage. Figure 4 shows this recent trend in incident rates.

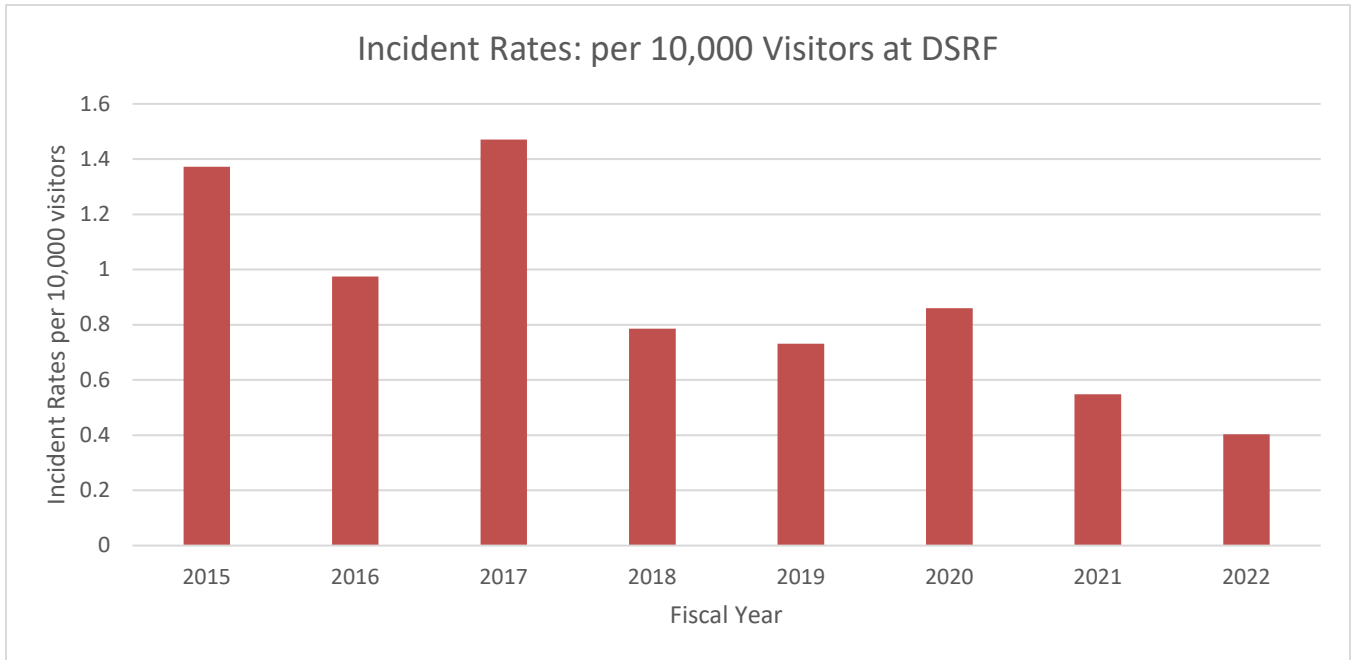


Figure 4: Visitor incident rates per fiscal year since 2015

DSRF law enforcement agents and forest rangers provide routine patrols of the forest during normal operating hours and enforce forest rules when actionable violations are observed. Enforcement actions included issuing citations, written and/or verbal warnings, and expulsions from the forest. Most of these actions occurred at High Falls, Triple Falls, Fawn Lake and Hooker Falls and primarily consisted of verbal warnings that resulted in visitor compliance. The ability for the staff at DSRF to intervene and gain compliance with rules has been made possible by having the forest fully staffed and trained to respond quickly. Figure 5 depicts the prevalence of each forest rule violation during fiscal year 2021-2022.

DSRF Law Enforcement Actions by Category in Fiscal Year 2021-2022

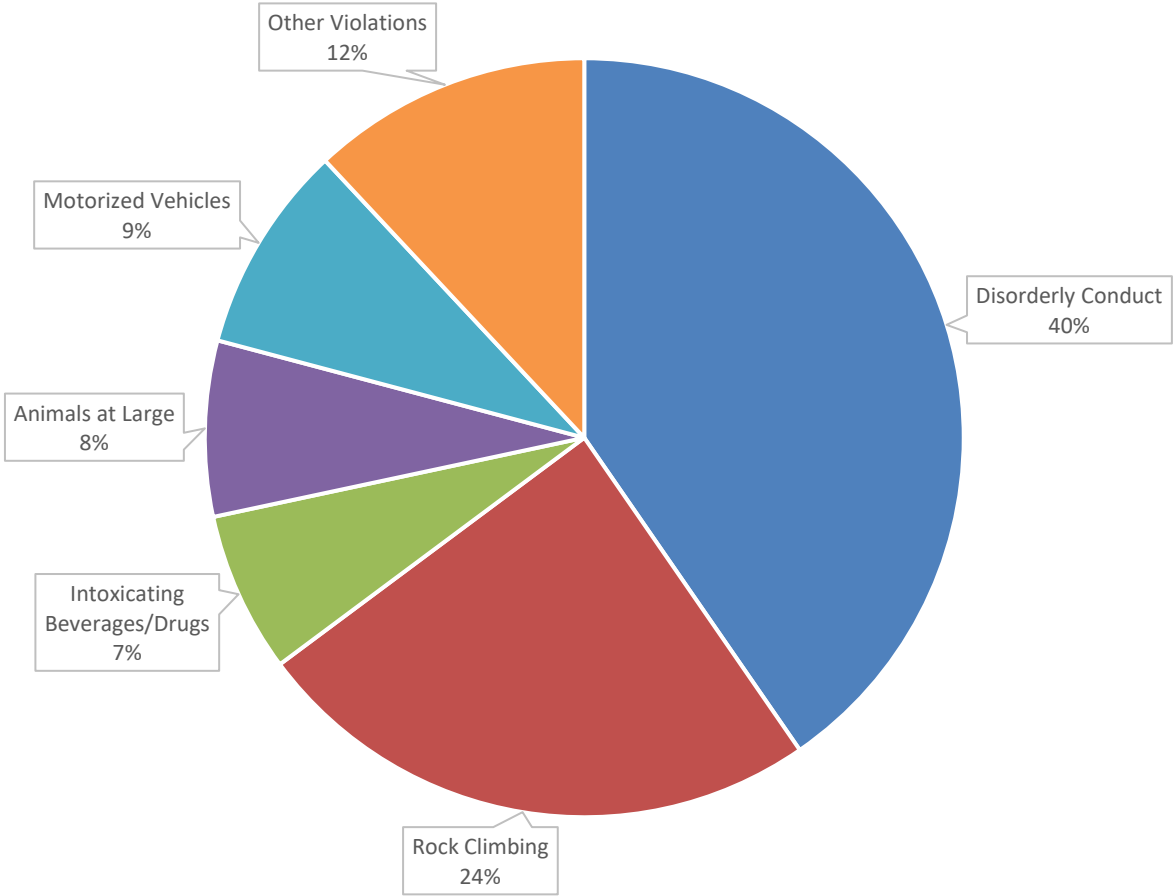


Figure 5: Categories of forest rule violations in fiscal year 2021-2022

Permit Programs: Managing Public Use of DSRF

Staff at DSRF use permits to manage uses that are prohibited by Administrative Rules (02 NCAC 60B .1001-.1036). Each permit request is evaluated by a DSRF ranger to determine impacts to the forest’s natural resources, road and trail system and the overall visitor experience. Figure 6 compares the type and number of permits issued during fiscal years 2020-2021 and 2021-2022, and Figure 7 illustrates recent reimbursement revenue.

Permit Type	Permit Use	Permits in Fiscal Year 2020-2021	Permits in Fiscal Year 2021-2022	% Change
After hours	Recreational trail use after 10 p.m. and before 5 a.m.	12	11	-8%
Commercial Use	Youth camps and businesses using DSRF as part of commercial enterprises	91	90	-1%
Film/Videography	Filming/videography for use in TV, internet, and feature length films	0	5	500%
Limited Mobility Anglers and Hunters	Vehicle access to select areas of DSRF for limited mobility anglers and hunters	20	27	35%
Limited Mobility Visitors	Provides vehicular access to High Falls and the Covered Bridge	0	9	900%
Picnic Shelter	Picnic shelters at High Falls, Triple Falls, Lake Dense, Lake Imaging and Guion Farm	0	14	1,400%
Special Use	Foot race events, equestrian facility rentals, firewood, research permits, etc.	7	36	414%
	Total	130	192	48%

Figure 6: Permits issued in fiscal years 2020-2021 and 2021-2022

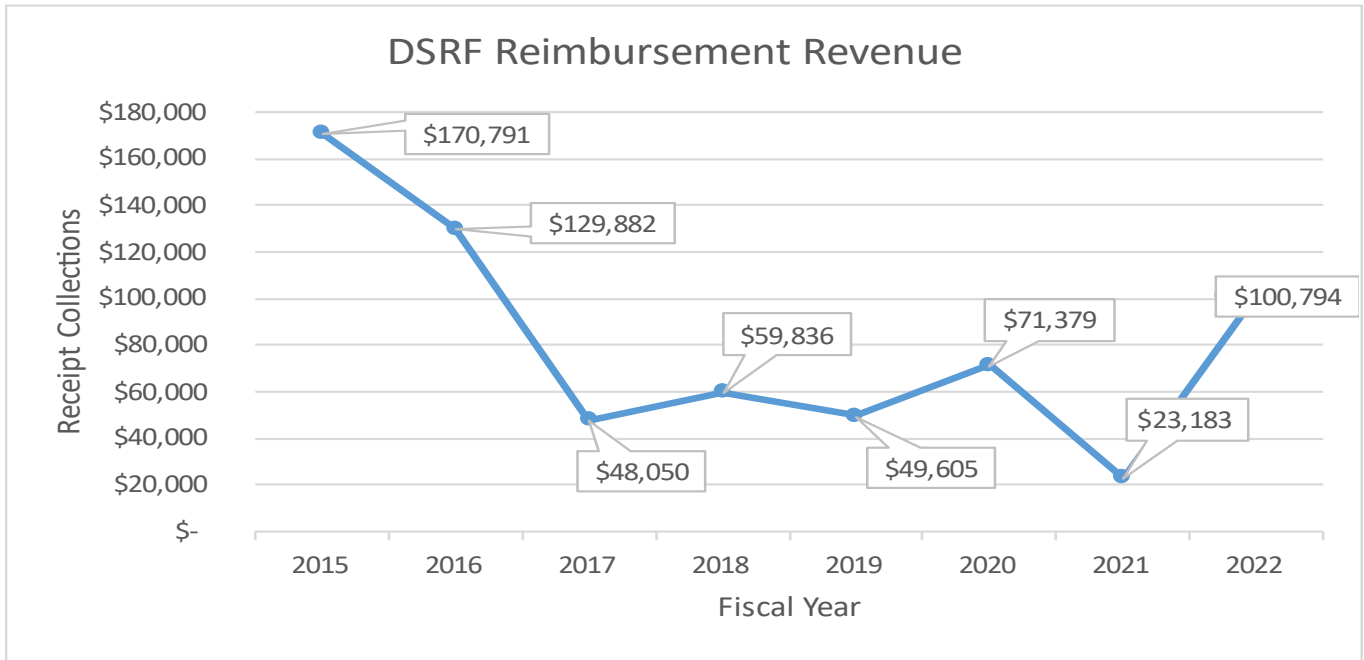


Figure 7: Reimbursement revenue generated through DSRF programs since fiscal year 2015

Overall, DSRF issued 62 more permits than in the previous fiscal year. This 48 percent increase resulted in a total reimbursement revenue of \$100,794 for the year, which was a 335 percent increase in reimbursement revenue. Timber receipts, commercial use permits, and reimbursement for filming activities (including Netflix) were the main sources of reimbursement revenue during fiscal year 2021-2022.

PROMOTING FOREST RESOURCES:

Changes in Educational Opportunities

COVID-19 continued to impact programming at DSRF and at HESF. However, as government agencies and local school districts loosened restrictions on group activities, both forests saw a substantial increase in programming for the year. This was also made possible through full staffing (four full-time permanent and one part-time temporary staff members) of the Information and Education Branch, which includes both DSRF and HESF. Programming was also increased due to the return of the Friends of DuPont Forest Festival. Forest management staff emphasized education and community outreach during the 2021-2022 fiscal year and hosted an off-site presentation and 12 field tours of DSRF forest management units for various local and regional colleges, universities, and state, national, and international forestry professionals. The numbers do not include programming offered at DSRF or HESF by other outdoor and environmental education organizations, or NCFS programming at the WNC Mountain State Fair.

In August 2021, Hurricane Fred damaged the Pisgah Center for Wildlife Education that's operated by the N.C. Wildlife Resources Commission (NCWRC). DSRF contacted staff at the education center and they relocated several of their programs to DSRF, thereby increasing the programming offered at DSRF by the NCWRC. Figure 9 illustrates the increase in programs and participants for each since last fiscal year.

Presenter	Educational Programs 2020-2021	Educational Programs 2021-2022	Change	Participants 2020-2021	Participants 2021-2022	Change
HESF staff	7	61	771%	166	2,208	1,230%
DSRF staff	10	32	220%	610	1,683	176%
N.C. Wildlife Resources Commission	2	42	2,000%	7	280	3,900%
Friends of DuPont Forest	10	48	380%	159	964	506%
Total	29	183	531%	942	5,135	445%

Figure 8: Educational offerings provided by the DSRF/HESF work unit in fiscal years 2020-2021 and 2021-2022



A DSRF ranger educates visitors about topographical maps.



A DSRF ranger explains how to identify trees before taking participants on a tree identification hike.



A DSRF ranger informs graduate students about the role timbering plays in forests management.



A DSRF ranger assists visitors with the MicroEye© to easily view microscopic details of leaves and flowers during an outreach event held at a local library.

MANAGING FOREST RESOURCES:

Wildlife Habitat Improvements

The DSRF Forest Management Program is guided by the forest's Land and Resource Management Plan, a document developed by a multidisciplinary group of natural resource agencies and citizen stakeholder groups. Protection and promotion of the long-term integrity of the natural communities, in balance with outdoor recreation and aesthetic considerations, drive the forest management decisions on DSRF. Because of this foundational planning, DSRF has developed a renowned program of forest management demonstrations firmly rooted in the concepts of multiple use and sustainability. DuPont's Forest Management Program actively manages natural resources using mechanical (harvesting), biological (prescribed fire), and chemical (pesticide application) methods that have proven to be effective by generations of forestry research. The primary objectives of the program are to increase species and structural diversity, maintain or improve forest health, protect water quality, and enhance terrestrial and aquatic habitats. Figure 9 highlights the forestry practices across DSRF since 2011 that have created more than 450 acres of multi-age forest and returned more than 1,500 acres of natural fire disturbance to the forest communities.

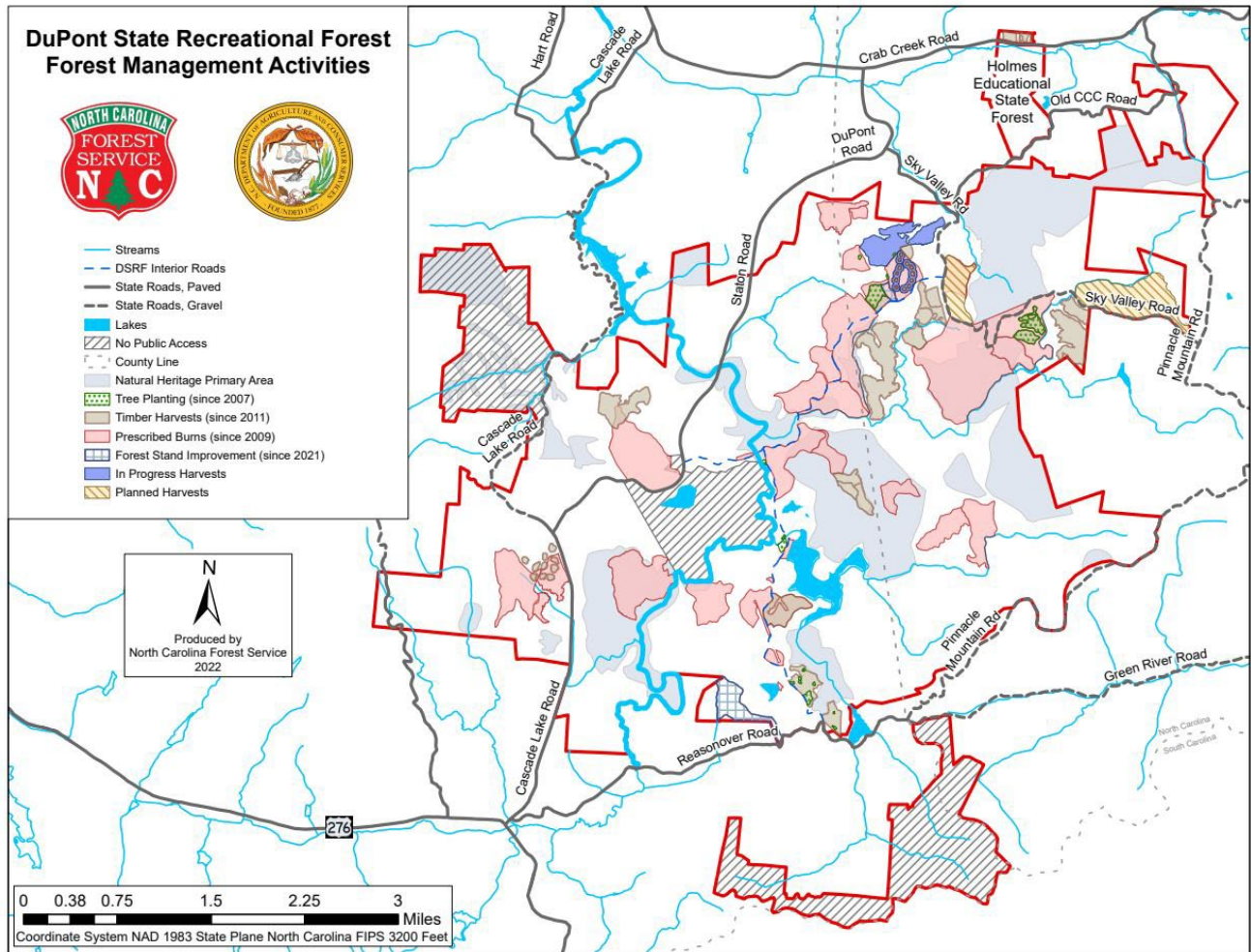


Figure 9: Forest management activities from 2011 to fiscal year 2021-2022

Timber Harvests and Tree Planting

In December 2021, the second timbering of the “femelschlag”, also known as an expanding gap harvest, began near Hickory Mountain Road. This forest unit was initially harvested with small gaps in 2012 and it’s the first stand on the forest to undergo a second harvest. When complete, the gap expansions will remove approximately 19 acres of white pine overstory and thin an additional adjacent 67 acres. These treatments are meant to convert poor quality, or overmature white pine plantations to naturally occurring mixed hardwood-pine forest communities, and thereby enhance wildlife food sources and habitats. Figure 10 illustrates the general locations of these forest management projects.

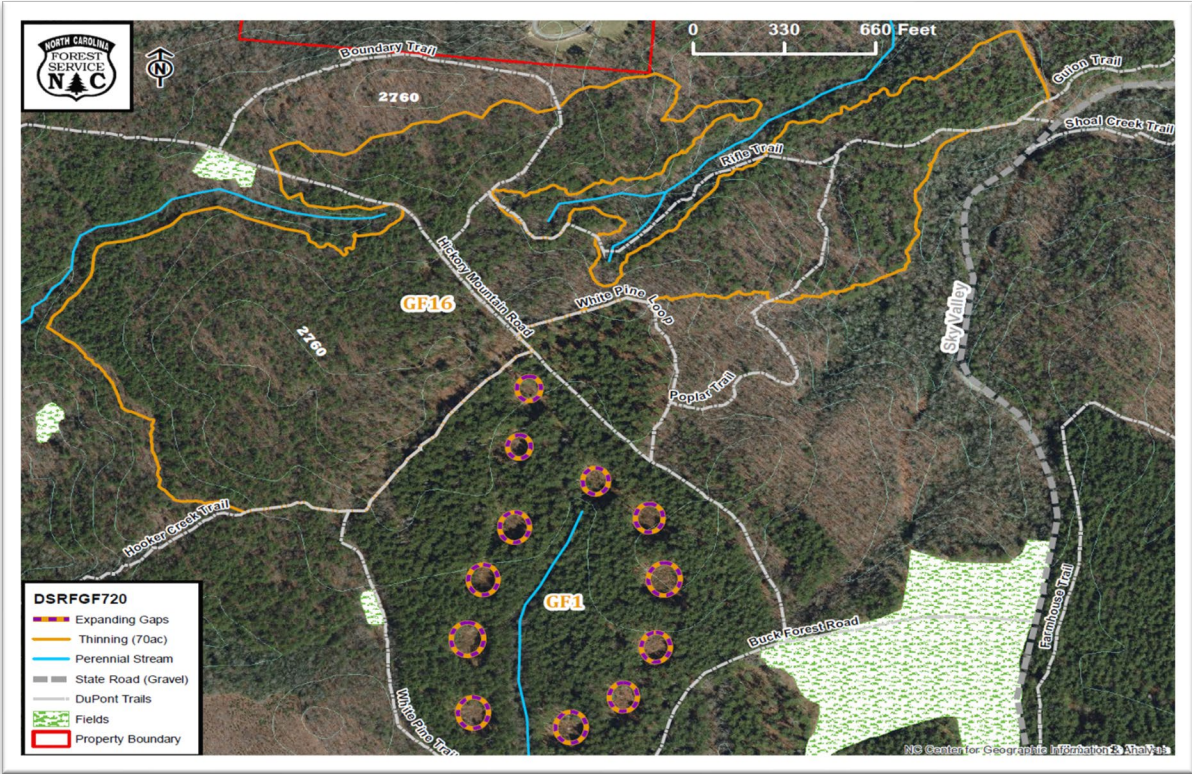


Figure 10: The 86-acre timber harvests near the Guion Farm Access Area



Before timber activity in the “femelschlag” (the expanding gap harvest).



After timber activity in the “femelschlag”.



Harvester working in the "femelschlag"



Logs from the 2021-2022 timber activity waiting to be loaded onto trucks.

In addition to timbering activity, the forest management branch mechanically prepared and hand planted two old fields comprising one acre. The shortleaf pine seedlings that were planted were donated by the Nature Conservancy and an additional two acres were cluster-planted in the "femelschlag". These enrichment plantings are part of an ongoing effort to reintroduce shortleaf pine in mixed pine-hardwood stands across the forest.



DSRF staff plant shortleaf pine seedlings donated by the Nature Conservancy.

Prescribed Burning

One of the main goals of the Forest Management Program is to reintroduce fire into fire-dependent forest communities. In the fall of 2021, DSRF staff burned two forest units totaling 72 acres. The 45-acre Locust Trail burn unit and the 27-acre Isaac Heath Trail burn unit (adjacent stands off Buck Forest Road in Transylvania County) were treated within two weeks of each other in mid-November 2021. The Nature Conservancy's Southern Blue Ridge Burn Crew assisted with both events as part of ongoing collaboration with DSRF. These prescribed burns marked the first time in recent history that any forest unit had been burned for a third time, which is a major accomplishment in modern fire ecology applications.

Spring 2022 weather patterns did not allow for a prescribed burn within a timeframe that would permit the activity to benefit the forest and the wildlife living there. Prescribed burns during spring months must be carefully timed in conjunction with leaf output on trees and reproduction cycles of wildlife.



A DSRF ranger and a volunteer with the Nature Conservancy monitor the fall 2021 prescribed burn.



A DSRF ranger uses a drip torch to ignite leaf litter at the fall 2021 prescribed burn.



The flames reach a containment line during the fall 2021 prescribed burn.

Trail Planning and Maintenance

During fiscal year 2021-2022, the recreation branch at DSRF renovated, repaired, and maintained 35.2 miles of forest trails, which is approximately one third of DSRF's trails. Much of this work happened through collaboration with DSRF maintenance and forest management branches and with volunteers from area organizations such as Friends of DuPont Forest, Pisgah Trailblazers, and the Transylvania Always Committee. Volunteers contributed a total of 1,518 hours of work towards repairs to Corn Mill Shoals Trail, Three Lakes Trail, Turkey Knob Trail, Triple Falls Trail, Hickory Mountain Trail, White Pine Loop, Rocky Ridge Trail, Poplar Trail, Shoal Creek Trail, and Reasonover Creek Trail. The hand and machine work applied to these trails focused on repairs and improvements designed to direct water off the trail surface, reduce erosion, and improve trail sustainability.

Last year, the DSRF recreation branch also worked with the Friends of DuPont Forest and the Transylvania Always Committee to secure grant funding for detailed trail assessments from technical trail building experts. These trail assessments provided insight for long-term planning for the Triple Falls Trail in addition to a reroute for Hooker Creek Trail. Trail improvements during the 2021-2022 fiscal year also included a trail consolidation effort. Guion Trail, White Pine Loop, White Pine Trail, Poplar Trail, and part of Rifle Trail received machine work and were consolidated into one trail: Ruffed Grouse Trail. This trail consolidation project simplifies the DSRF trail map, aids in visitor navigation, reduces maintenance on trail signs and improves trail sustainability.

During the 2021-2022 fiscal year, the DSRF recreation branch also performed a detailed assessment and inventory of approximately seven miles of heavily used single track trail. This assessment and inventory allowed forest staff to develop a scope of work and to award a contract for trail work for completion during fiscal year 2022-2023. The recreation branch also assessed and inventoried an additional 36 miles of single track trails for overall condition, erosion, safety, environmental degradation, water quality, and user experience. Improvements to the trail assessment process were made through the development of an app that is integrated with geographic information systems. The app can be used in the field to monitor, document, and quantify trail conditions, evaluate thresholds of change, and evaluate efficacy of actions to inform a dynamic trail management process.

Lastly, the recreation branch coordinated with the Friends of DuPont Forest, along with a sustainable trails expert to plan the first sustainable trails management workshop. The actual training sessions and hands-on work will take place during the 2022-2023 fiscal year. The workshop will increase awareness, skillset, and understanding of hand work on single track trails for crew volunteers and some NCFS staff.



DSRF ranger reworks a section of Corn Mill Shoals Trail



Friends of DuPont trail crew volunteers hard at work



Volunteers use rock to reinforce a section of a trail.



Ruffed Grouse Trail was created through the consolidation of several short trails and trail segments.

Collaborating with Others

In accordance with the agency value of teamwork and collaboration, DSRF staff came together with a variety of government and private agencies ranging from the NCFS Linville River Nursery to Clemson University.

During fiscal year 2021-2022, forest staff worked with the NCFS Linville River Nursery to facilitate the harvest of hemlock cones from trees at DSRF. Staff from DSRF and HESF also rotated days at the Linville River Nursery in Avery County to assist with the annual spring tasks such as lifting seedlings, pulling plugs, bagging seedlings, and additional duties. The combined work unit contributed more than 100 hours of assistance to the nursery.



A forester from Linville River Nursery picking hemlock cones at DSRF

During fiscal year 2021-2022, DSRF entered a collaborative partnership with the staff at Headwaters State Forest and The Nature Conservancy. The partnership will foster fire-dependent natural communities in both state forests. The partnership's first project at DSRF was a 50-acre forest stand improvement designed to promote regeneration of oak and hickory in the understory. This project was contracted out to a private forestry contractor.

DSRF staff also collaborated with state, regional and local resources to help control and eliminate two major wildfires in North Carolina. Forest Supervisor for DSRF served on the incident management team for the Grindstone Fire Complex, which burned 1,050 acres in Surry County during November of 2021. At the same time, one member of the DSRF staff served as the public information officer for the Huntsville Mountain Fire in McDowell County, while four other staff members from DSRF and HESF served as a hand crew for the 350-acre fire.



DSRF ranger serving as the PIO for the Huntsville Mountain Fire

In cooperation with the North Carolina Wildlife Resources Commission Game Lands Program, DSRF maintained wildlife food plots, assisted with wildlife law enforcement, supported the trout stocking of Little River, and provided important hunting and fishing opportunities across the forest. Personnel with the NCWRC also offered water quality and fishing educational programming at DuPont after their facility at Pisgah Forest was severely damaged by Hurricane Fred. Lastly, the NCWRC oversaw seasonal hunting permits at DSRF through a lottery system for various game species, while forest staff provided limited mobility vehicle permits to assist disabled hunters and anglers with access to the forest's interior.



Stocking DSRF's Little River with brook, brown, and rainbow trout in collaboration with the NCWRC

Figure 11 reveals deer harvests were lower during fiscal year 2021-2022 than the two previous fiscal years. A variety of factors influence annual deer harvests such as weather, community interest in hunting, food and gas prices, and skill level of hunters. While these factors are beyond DSRF's control, deer and other wildlife populations typically thrive in managed forest settings where the plant communities vary in structure and age. This diversity is a keystone objective in the management of DSRF per its Land and Resource Management Plan and the planning recommendations in the NCWRC's Wildlife Action Plan.

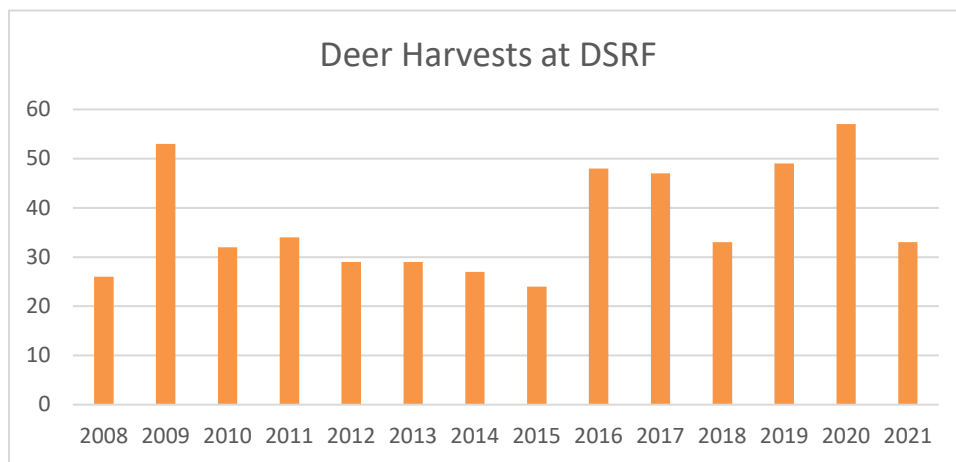


Figure 11: Deer harvest levels at DSRF since 2008

Invasive plant species are a major threat to the natural forest communities found at DSRF, and the management of these invasive pests required a major collaborative effort. Several large infestations of invasive plants were treated this past year including three acres of kudzu, a major Bradford pear infestation on the former DuPont Corporation manufacturing site near the center of the forest that was spreading across the forest, and several roadside and open area outbreaks of shrubby lespedeza, multiflora rose and Chinese silvergrass among others. Through collaboration between the DSRF staff, Friends of DuPont Forest and MountainTrue, approximately 100 acres of forest and edge habitat were treated for invasive plant species. This collaborative relationship was initiated during the past year and will bring volunteers to DSRF twice a month to treat invasive species in access areas and in other locations where outbreaks have been observed.



Volunteers with Friends of DuPont use tools and materials supplied by MountainTrue to eliminate invasive species.

DSRF also partnered with the Hemlock Restoration Initiative and the NCFS Forest Health Branch to continue the Hemlock Woolly Adelgid Mitigation program. A total of 1,233 hemlock trees representing 8,862 inches of diameter were treated across 158 acres, including 90 acres of previously untreated hemlocks on the Cascade tract located on the northwestern boundary of DSRF. Figure 13 shows the areas that have been treated for either invasive species or hemlock wooly adelgid.

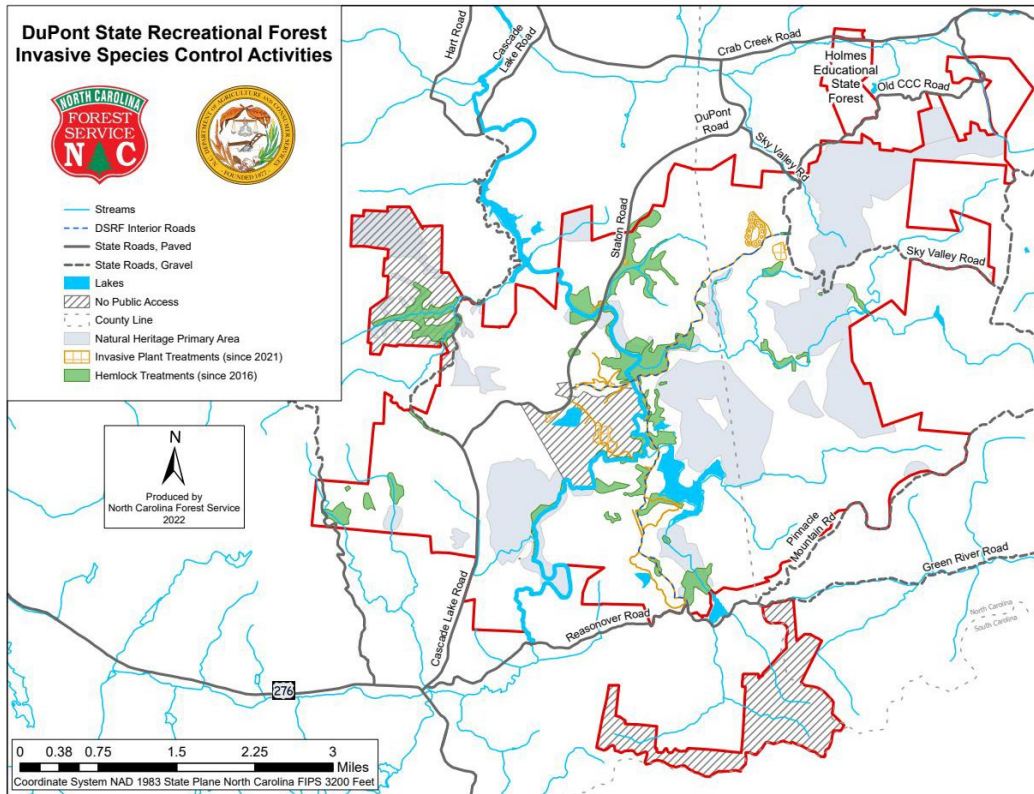


Figure 13: Areas that have been treated for either invasive species or hemlock wooly adelgid.

Lastly, DSRF hosted ten forest ecology and wildlife research projects during fiscal year 2021-2022. Four new studies were initiated by researchers, undergraduate students, and graduate students from UNC-Asheville, Clemson University, the N.C. Bird Atlas, and N.C. State University. Ongoing research continues to be facilitated for scientists from the N.C. Wildlife Resource Commission, Clemson University, and U.S. Forest Service Southern Research Station. All approved research projects on the forest assist with forest management decisions and support the DSRF mission.

IMPROVING FOREST INFRASTRUCTURE: Capital Projects N.C. Parks and Recreation Trust Fund (PARTF)

In 2017, the North Carolina General Assembly authorized DuPont State Recreational Forest (DSRF) to have access to the North Carolina Parks and Recreation Trust Fund for the purposes of capital improvements, repair and renovation of facilities, and land acquisition. Forest staff made progress on capital improvement projects supported by PARTF funds during fiscal year 2021-2022, expending \$505,875. Figure 14 provides a summary of expenditures.

Capital Project	Expenditures
Law Enforcement Office – repair and renovation	\$4,341
Ranger Headquarters at Lake Julia -- repair and renovation	\$501,534
Total	\$505,875

Figure 14: Summary of fiscal year 2021-2022 PARTF expenditures at DuPont State Recreational Forest

Law Enforcement Office – Repair and Renovation

During fiscal year 2021-2022, work on the law enforcement office was completed. This work included replacing the glass in the entry doors and installing new windows throughout the building. With renovations complete, the DSRF law enforcement team now has a safe area to work from and a secure area to store supplies, equipment and evidence from investigations.



New glass in the exterior doors and new windows at the law enforcement office.

Ranger Headquarters at Lake Julia - Repair and Renovation

The Lake Julia facility has served as the main office for forest ranger staff since the early 2000s. Before it became state property, the building served as the DuPont overnight lodge and as the infirmary for the Summit Camps for Boys and Girls. In 2019, mold contamination was detected in parts of the facility, making it a high priority for

renovation and structural improvements. PARTF funds were used to repair and renovate the facility, which included new electrical system layouts, updated heating and cooling systems, a new floorplan to support forest administrative and operational work, and the removal of mold sources throughout the structure. The expenditures in fiscal year 2021-2022 were for final design, construction management and implementation. All work on the facility was completed in December 2021.



The renovated exterior includes a covered ADA compliant ramped entry into the building.



Repairs to the Lake Julia office were completed and staff moved in during December 2021.



The remodeled interior of the Lake Julia office includes an area with a conference table.



The remodeled interior includes seven individual offices, a technology room, three storage rooms, two ADA accessible restrooms, a kitchen, and a combination conference-work area.

PLANS FOR FISCAL YEAR 2022-2023: Continuing Capital Improvements

New Restroom and Parking Facilities

A portion of the \$3 million in capital improvement appropriations from fiscal year 2017 will fund a construction project at the Guion Farm Access Area in Henderson County. This project will provide a new restroom facility and expanded parking area to better accommodate equestrians, mountain bikers and other trail users. This project went out for bid during the 2021-2022 fiscal year, and a contractor was selected. During the 2022-2023 fiscal year, the contract for the project will be finalized and work on both the parking area and the new restroom will begin. When completed, the expanded parking area will accommodate more than 40 cars as well as 15 oversized vehicles such as school busses and equestrian trailers.

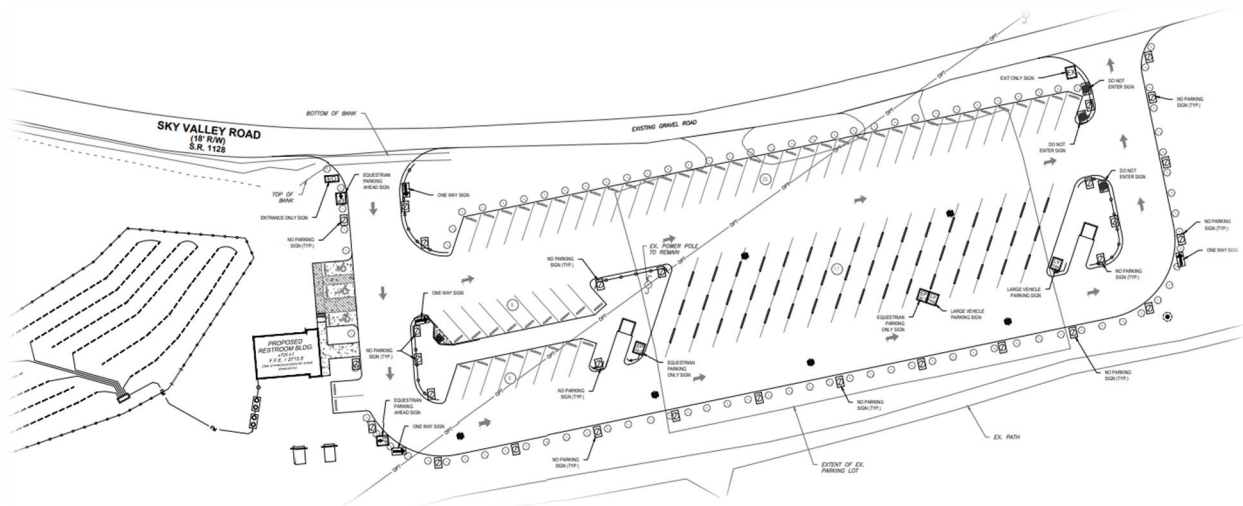


Figure 15: Site plan design drawing for the Guion Farm Access Area in Henderson County

Overflow Parking Area: New Construction

During fiscal year 2022-2023, DSRF will convert a spur road into an overflow parking area. This project will include grading the area, spreading gravel, installing fencing, and installing traffic and public signage. The new parking area will include 35 spaces for cars and approximately 5 spaces for oversized vehicle parking. The overflow parking area will be located near the visitor center and will help DSRF better accommodate its visitors, which exceeds one million each year.

Forest Trails and Roads: Repair and Renovation

Forest trails and gravel roads at DSRF constitute one of the most extensive outdoor recreational systems in North Carolina. These natural surface pathways endure traffic from bicyclists, equestrians, hikers and forest ranger vehicles. In addition, these trails and roads are exposed to significant rainfall contributing to continuous erosion and sedimentation. Trail and road system maintenance is a year-round operation and requires a significant investment of materials and labor. During fiscal year 2022-2023, DSRF will use PARTF funds to purchase gravel, fencing and erosion control materials to repair and renovate sections of Conservation Road, Corn Mill Shoals Trail, and the access areas at Fawn Lake and Corn Mill Shoals.

Installation of Permanent Roadside Bollards

DSRF has installed temporary fencing to restrict roadside parking along Staton Road. The temporary fencing has proved to be an effective way to distribute forest visitors more evenly among the various access areas. The temporary fencing also increases visitor safety by limiting the number of visitors parking vehicles along a heavily traveled public roadside. In fiscal year 2022-2023, DSRF plans to replace the temporary fencing with permanent roadside bollards. The new bollards will ensure that the health and safety benefits derived from the temporary fencing become permanent features at DSRF. Figure 16 shows the area where a portion of these permanent roadside bollards will be installed.

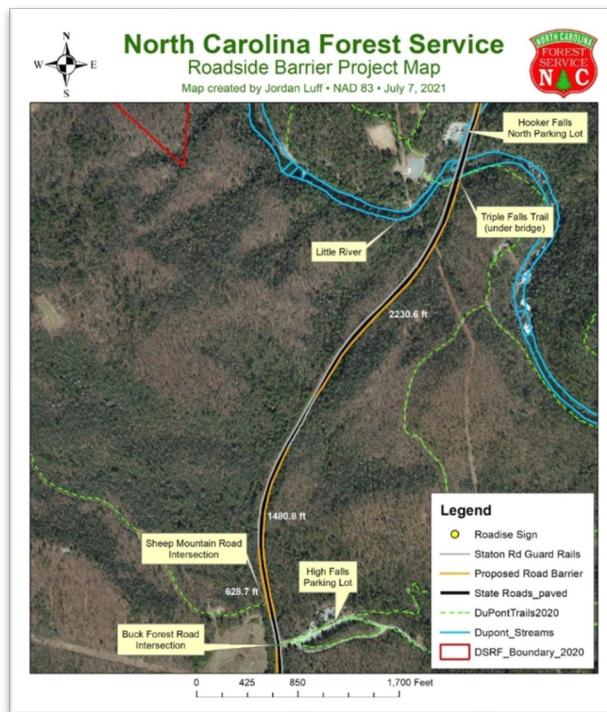


Figure 16: Map showing a portion of the area where permanent wooden roadside bollards will be installed.

Managing Forest Resources

During the 2022-2023 fiscal year, the DSRF forest management branch plans to focus on timber harvests, prescribed burns, and invasive species control.

The forest management branch is currently preparing two units for timber activity and both areas will be harvested using a combination of a patch cut-shelterwood system and thinning. The first unit includes approximately 56 acres of over-mature white pine plantation located adjacent to Farmhouse Trail and Flatwoods Trail. The principal goals of the Farmhouse-Flatwoods timber harvest will be to increase overstory species diversity, establish a growing stock of naturally regenerated white pine and develop more complex stand structure. The second unit slated for timbering consists of approximately 113 acres of mid-successional mixed hardwoods and planted white pines, which have suffered storm damage multiple times. This unit is located off Sky Valley Road near the intersection with Pinnacle Mountain Road. The principal goals for the Sky Valley timber harvest will be to decrease overall stand density, improve and maintain overall stand health and protect high-quality green salamander habitat.

During the coming fiscal year, the forest management branch also plans to meet the annual objective of burning at least 200 acres. Potential areas being prepared for prescribed burns include:

- Cedar Rock Trail, 113 acres (burned once)
- Twin Oaks Trail, 40 acres (burned twice)
- Briery Fork Trail, 55 acres (burned twice)
- Vista Trail, 25 acres (burned twice)
- Grassy Dam Trail, 34 acres (burned twice)
- Thomas Cemetery Road, 54 acres (burned once)

Because a variety of staffing, weather, and forest conditions determines the safety of prescribed burns, the forest management branch may consider additional or alternative areas for burning.

The forest management branch will continue making strides against forest invasive species in the coming fiscal year. In particular, the forest management branch will reapply treatment to several areas of hemlocks for woolly adelgids and evaluate two new areas for initial treatment. The forest management branch also plans to focus on combatting species of invasive plants such as multi-flora rose, kudzu and Japanese honeysuckle. A portion of this invasive species work will be done in collaboration with the Friends of DuPont Forest. The final major focus area for 2022-2023 will be monitoring for spotted lanternfly and educating forest visitors about this invasive pest that has recently been discovered in North Carolina.

Improving the Visitor Experience

Master Recreation Plan

In November 2021, the state budget allocated \$750,000 for the development and implementation of a master recreation plan for DSRF. Much of the scope of work for the plan was drafted during 2021-2022. During the coming fiscal year, the scope of work will be finalized and go out for bid. The master recreation plan will be developed with a focus on trail building and public land development for multiple user groups. The plan will assess the current use of DSRF's 80 miles of multiuse trails and will supplement this research with input from potential user groups. Based on the findings from the initial research, the deliverables will be a final master recreation plan and recommendations to implement it. The plan will aim to protect the forest while accommodating DSRF's more than one million visitors each year.

Trail Work Collaboration

During the 2022-2023 fiscal year, DSRF will continue to collaborate with Friends of DuPont, Pisgah Trail Blazers, and other area organizations to improve trail surfaces, repair drainage features, and reroute trails to make them more sustainable and improve water quality. In addition, DSRF staff members will participate with the Friends of DuPont trail crew in a sustainable trails management workshop. This inaugural workshop will provide volunteers and staff with the knowledge and skills to maintain the DSRF trail system in a more effective, efficient, and sustainable manner.

Increased Educational Opportunities

During fiscal year 2022-2023, work units from DSRF and HESF anticipate further growing their educational offerings. We will strive to increase area schools' knowledge of HESF and DSRF as potential field trip locations, and we will work to build up our repertoire of community focused programs. In addition, we will continue our collaboration with the NCWRC and with the Muddy Sneakers program, a statewide outdoor and environmental education organization.

CONTACT INFORMATION

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