



BMP Newsletter

Best Management Practices for Water Quality & Soil Conservation

BMP education and outreach guest lecture at N.C. A&T University



PC: Minnesota Wildflowers, 2022

Tis the season for a festive fun fact. Often found along stream banks, the Christmas fern, Polystichum acrostchoides, got its name because it remains green through the holiday season. Additionally, the pointed frond pinnae resemble a hanging Christmas stocking. This native plant prefers cool, moist soil and grows in dense clumps. This clump, with the accumulated detritus of past fronds, helps stabilize soil and lessen the effects of erosion on stream banks where it grows.

[Maryland biodiversity Project, 2017](#)
[Lady Bird Johnson Wildflower Center, 2013](#)

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M. Van Voorhis sharing how to read topographic maps to students at N.C. A&T University.

In October 2024, the N.C. Forest Service (NCFS) Water Resources Branch had an opportunity to give a lecture at N.C. A&T University. Moriah Van Voorhis, forest water quality senior specialist, shared with students some influences water has on the environment, highlighting the necessity of nonpoint source pollution prevention practices in maintaining healthy watersheds. Students discussed the importance of sustainable practices in forestry and



Discussion between NCFS staff and student about lecture material and career opportunities.

watershed management. The event helped students gain a deeper understanding of the material while asking questions about the practical applications of what they've learned in the classroom. Additionally, the lecture provided an opportunity to share how NCFS is achieving its mission to protect, manage and promote forest resources for present and future generations. Following the lecture, students stayed after to continue discussions.

This lecture served as an important bridge between authentic practice and academic learning. The NCFS Water Resources Branch would like to thank N.C. A&T University for the wonderful opportunity!

Technical assistance success story



Here is one example of a clearcut harvest with an adjoining property downslope and a recreational fish pond near the harvest boundary.

The NCFS provides technical assistance to landowners harvesting their timber and the loggers hired to do the work. In some cases, we also assist adjoining landowners who may have questions about the harvest and the potential of stormwater flow impacts. Several BMPs were applied such as sediment catch pits below the logging deck and a long trench beside a skid trail near the property line to minimize the potential for sediment to impact the fish pond. The pond was fed from a spring on the adjoining property, therefore, no buffers or streamside management zones were applicable to the harvest. We assisted the adjoining landowner by describing what BMPs were in place to mitigate the steep slopes of the skid trails and the effort to establish ground cover in a timely manner. This tract also included the use of a silt fence along the property line to act as extra defense from sediment moving offsite. Without BMPs in place, sediment movement would have been increased during the high impact rain events of 2024.



BMPs being implemented on a timber tract in Western North Carolina. Left: trench along a skid trail to direct run off to a stable outlet. Right: sediment catch pit.

Congratulations to Russell Choate!

Russell Choate, NCFS assistant county ranger in Alleghany County, was the recipient of the Moreland Gueth Water Quality Award. This award is presented annually to a NCFS employee or team of employees who demonstrate creativity and dedication toward the protection of North Carolina’s water resources. Russell has been the primary contact for loggers in the Alleghany County since 2009. Alleghany County Ranger Brandon Keener says, “Loggers really don’t hide from Russell because they know he’ll eventually be coming around for a visit.” Keener complimented Russell’s dedication to seeing that FPGs are being followed and his outgoing working relationship with loggers. Established in 2010, the Moreland Gueth Water Quality Award pays tribute to its namesake, who served as the NCFS’s water quality and wetlands staff forester from 1995 to 2004. Thank you for your dedication to the NCFS Water Resources program and keeping working forests working

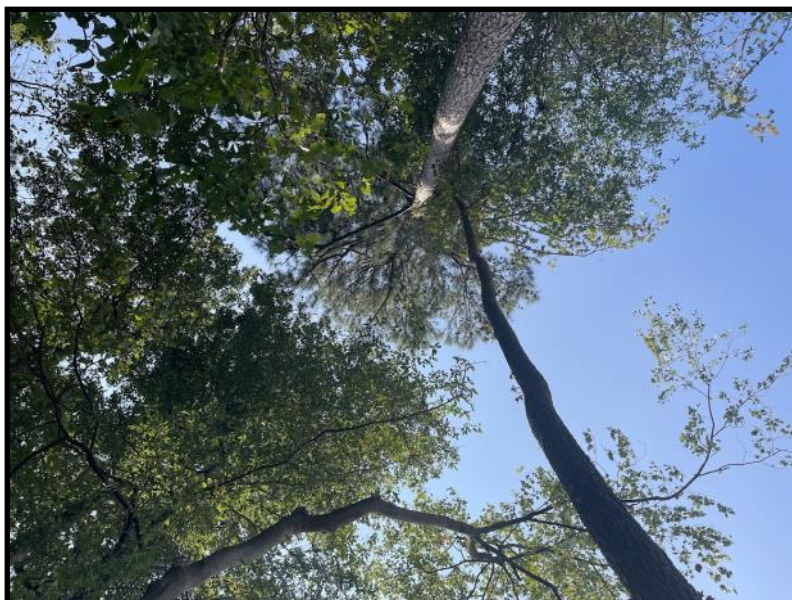


Russel Choate presented with the 2024 Moreland Gueth Water Quality Award.

Tree top canopy and temperatures in the SMZ

Streamside Management Zones (SMZs) not only benefit streams by reducing runoff and pollution, they also help control the sunlight intensity and temperature of the water.

Tree canopies in SMZs, like this example from Forsyth County, can intercept sunlight and create a cooling effect on the stream water. Now that is one “cool” BMP!



Treetop canopy over a buffered SMZ in Forsyth County.

Did you know?

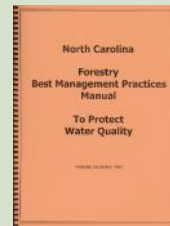
Soil isn't just for growing trees! The quality of soil plays a key role in land productivity. Forest soils help regulate water and nutrient movement, influence the atmosphere by absorbing and releasing gasses and provide a habitat for soil organisms that enable crucial chemical exchanges. There is an old farmer saying, "you want your soil as rich as you want your chocolate cake!"



Photo credit: The Spruce / Cori Sears

For recorded and live webinars related to forestry and/or erosion control, check out:

- [The Forestry & Natural Resources Webinar Portal](#)
- [How The River Flows Podcast](#)
- [N.C. Forest Service BMP Videos](#)



Contact your local [N.C. Forest Service county office](#) for a copy of the 2021 updated BMP manual!

N.C. Forest Service - Water Quality

<https://www.ncagr.gov/divisions/nc-forest-service/water-quality>

Healthy trees, healthy lives

www.healthytreeshealthy lives.org

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