

N.C. Cooperative Extension Benefits from B.W. Wells Stewardship Grant

Submitted by Phyllis Smith, Natural Resources and Environmental Systems Agent

N.C. Cooperative Extension, Forsyth County Center

November 16, 2022

On October 1, 2021 The N.C. Native Plant Society awarded a \$400 B.W. Wells Stewardship Grant to Natural Resources and Environmental Systems Agent Phyllis B. Smith of N.C. Cooperative Extension, Forsyth County Center. Funds were used to purchase tools for the workshop “Integrated Pest Management (IPM) for Invasive Plants of Piedmont North Carolina” (see brochure). During the pandemic, the workshop was offered virtually, without the opportunity for students to practice what they were learning. Post-pandemic, the workshop was offered in-person with both classroom and hands-on activities, but invasive plant eradication efforts were stymied by the lack of appropriate tools. Grant funds were used to purchase high quality Fiskar hand tools, a “heavy-duty” [Uprooter](#) root wrench, and collapsible hard-shell bottom garden bags for the collection and disposal of plant waste. The tools were subsequently used by workshop participants for the removal of invasive plants on Extension Center grounds, and for field days for the removal of non-native invasive plants at two additional locations. A spreadsheet of purchases is shown below.

Product	#	Vendor	Subtotal	Purchased
Uprooter (root wrench)	1	Uprooter.com	249	10.21.2021
Live stake bundles (50 per bundle)	2	Joe Mickey	47	
Garden Bag	2	Duluth Trading	59.9	10.21.2021
Fiskar Lopper	1	Lowes	29.98	10.21.2021
Fiskar hand pruner	1	Lowes	13.97	10.21.2021
Total			399.85	

After acquiring the tools, remaining funds were used to purchase native livestakes (dormant woody cuttings from live plants) from a local vendor and donated to the Wake Forest University Office of Sustainability and the Town of Bethania. On the campus of Wake Forest, fifty livestakes were planted along the banks of a stream that runs through the Tohi Garden Trail. In the Town of Bethania, fifty livestakes were planted in the Muddy Creek riparian buffer zone along Black Walnut Bottoms Trail. In addition, one invasive plant removal field day was scheduled for the Town of Bethania Visitor’s Center, and five field days were scheduled for the Tohi Garden Trail, with volunteer assistance from graduate students in the sustainability program.

On the advice of a fellow agent, the IPM for Invasive Plants workshop was entered into the N.C. Association of County Agricultural Agents annual Search for Excellence Awards. The program was awarded first place on the state level in the Environmental Quality, Forestry, and Natural resources category at the state conference on June 14, 2022. The program was subsequently entered into national competition, becoming one

of three national finalist. A National Finalist certificate was presented on July 19, 2022 at the National Association of County Agricultural Agents in West Palm Beach, Florida.

In June of 2022, the spotted lanternfly (SLF), a non-native insect pest, was detected in North Carolina for the first time in Forsyth County. In addition to impacting orchard trees, hops, and vineyards, this destructive sap-sucker feeds on over 70 native trees. Spotted lanternfly programs were developed for homeowners and professionals, with continued emphasis on the removal of the non-native tree of heaven (TOH), a favored host plant during a stage in the development of the SLF. On Sept. 28, 2022, fourteen attendees received professional development credits for pesticide applicator, certified landscaper, or certified arborist. Participants viewed a PowerPoint presentation about the association between SLF and TOH and the potential impact of SLF on native trees during the first part of the workshop. This was followed by mechanical removal of TOH using tools purchased through the B.W. Wells Scholarship grant.

On November 5, 2022, it was my pleasure to co-lead a themed hike for members of the Triad Chapter of the N.C. Native Plant Society on the topic of The Use of Trees by Native Americans. Thirteen participants met at the Tanglewood Park Arboretum and walked the park's Nature Trail through a Piedmont hardwood forest, stopping along the way to discuss a variety of native trees and some of their uses as food resources, medicines, plant fibers, construction materials, tools, and more. It was a beautiful day for a hike and participants enjoyed balmy weather and the remnant colors of a stunning fall season.

On behalf of N.C. Cooperative Extension, Forsyth County Center, I would like to express my sincere appreciation for the grant. The tools will be used for years to come to continue the efforts of invasive plant eradication through future workshops, field days, and through our Tool Lending Program. The native livestakes will continue to establish deep roots as they grow and flourish, holding precious soil in place to prevent sediment pollution of our streams and rivers.

I look forward to continued collaboration with the North Carolina Native Plant Society!



Fig. 1. N.C. Forest Service Forester
Bentley uses the root wrench to uproot
of heaven. Attribution: Phyllis B. Smith

Fig. 2. Wake Forest Graduate Student Katie
Bullock uses the root wrench to uproot
silverthorn. Attribution: Phyllis B. Smith



Fig. 3. English Ivy collected along Tohi Garden Trail. Attribution: Phyllis B. Smith

and Chapter of the NC at Tanglewood Park
tribution: Sarah Flore