

POLK SOIL & WATER CONSERVATION Quarterly

Spring 2023 Volume 3 Issue 2

UTILIZE YOUR LOCAL AGRICULTURAL RESOURCES

By Rafael Bravo, Local Sheep Producer and Farmer



This lamb was only two hours old when this April photo was taken on the farm in Columbus Township.

In 2012, when my wife Mary and I were getting ready to retire, we searched for places that were farmer friendly. We chose Western North Carolina. After seven years of farming here, we can definitely say that Western North Carolina was the right choice. A big part of our relatively easy transition has been the great number of highly trained individuals who have guided us each step of the way from the beginning through the present day.

Before we started farming, we consulted with the local Cooperative Extension Office and with Natural Resources Conservation Service (NRCS). Mistakes in agriculture tend to be expensive and time consuming to mend, and so it just makes plain sense to first consult with people who know what works and what doesn't in our region. By helping us make the right decisions from the outset, these two organizations have saved us considerable time and money. What follows are a few examples that illustrate how we have benefited from their support and guidance.

Rotational Grazing

The benefits of rotational grazing are many including increasing quality forage production, increasing soil fertility, minimizing over grazing, reducing parasite pressures. When we mentioned our intention to use rotational grazing to the NRCS, they knew exactly what to do. After a couple of visits to our farm, they gave us a detailed grazing plan. We expect to rely on their plan as long as we graze sheep.

Subdividing Our Paddocks

To implement the rotational grazing plan that NRCS prepared for us, we needed to subdivide our 10 acres of pastures into paddocks. For help with this, we turned to the Polk County Geographic Information System (GIS) office. A few days after we met with the GIS staff, they produced a detailed map of the paddocks. We changed our minds and decided smaller paddocks would be a better fit for our operation. We went back to the GIS office and again they quickly produced a new map. We subdivided our pasture as GIS proposed and we are very happy with the end result.

Soil Fertilization Plan

Following the advice of the Cooperative Extension Office, we test the soils in our pastures every 3 years (soil samples tests are free between April 1st and November 30). After we receive the test results, we meet with the Agriculture Extension Agent and agree on a fertilization plan (what, when and how much). In addition, the agent periodically walks the pastures with us to discuss a reseeding plan. Thanks to this expert advice, our soils and pastures are healthy, and our animals are thriving.

Location Of Our Garden and the Crops We Grow

When we were deciding where to locate our garden, we were primarily thinking about how it would affect the layout of our paddocks. Fortunately, we consulted with the Cooperative Extension Office, and they helped us see that the garden would be more successful in a different location. We also discussed growing grapes with the Agricultural Agent. We wanted to grow them without using pesticides or herbicides. After some thought the Agricultural Extension Agent



Local farmer Rafael Bravo relocated 11 years ago to start their family farm in Polk County,

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CONSERVATION PLANTS – Sweet Shrub



Blooming Native Sweet Shrub

Photos are courtesy of the JC Raulston Arboretum at NC State University.

The native Sweet Shrub (*Calycanthus floridus*) is known for its fragrant, brown to reddish-brown flowers that possess a spicy smell that is reminiscent of nutmeg. The plants are deciduous shrubs that reach a height of 6 to 9 feet and a width of 6 to 12 feet. The bloom time varies from year to year but typically they flower from mid-April through May.

Depending on where you live, Sweet Shrub is also called Carolina Allspice or Sweet Bubby. It is a dense, rounded shrub with a suckering habit. The glossy foliage of dark green oval shaped leaves change to an attractive golden yellow in autumn.

Sweet Shrub is an underrated conservation plant and should be utilized more frequently. Its suckering habit would make it a good erosion control plant. This shrub is the perfect choice for naturalized areas. It will grow in full sun or partial shade. The native tolerates a wide range of soil types and thrives in average and medium soil moisture.



'Athens' Sweet Shrub In Flower

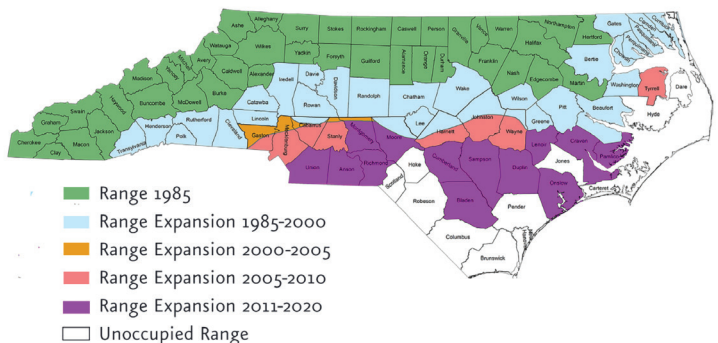
There are several named varieties, 'Michael Lindsey', 'Burgundy Spice' (burgundy colored foliage), 'Athens' (yellow flowers) and 'Simply Scentsational'.

WILDLIFE PROFILES – Groundhog

The common Groundhog can be found in all areas of Western North Carolina and in 89 of the state's 100 counties. In many areas of the country they are referred to as Woodchucks and in much of WNC people know them as Whistlepigs. Groundhogs have slightly curved claws which help them dig burrows and underground dens.

Groundhogs are heavy-bodied rodents weighing anywhere from 5 to 12 pounds. Most people typically see them by the roadside in spring or early summer. This mammal will live in a variety of habitats including pastures, brushy areas, open woods and along streambanks. Groundhogs are well adapted to human activities such as agricultural areas and even urban developments. Most people who have them see Groundhogs as a nuisance pest because they forage on crop land and in home gardens.

The life expectancy of a Groundhog is only one to two years in the wild. They hibernate during the winter from November to February. Groundhogs prefer to seek cover in their underground burrows but they are good swimmers and when threatened will climb trees.



Information from the NC Wildlife Resources Commission. Photo by Susan Sam.

SLATER RECOGNIZED FOR 25 YEARS OF SERVICE



David Slater was recognized by Conservation District Chairman Richard Smith for his 25-years of service to the Polk Soil & Water Conservation District.

In January the North Carolina Division of Soil and Water Conservation recognized District Board members for their notable years of service and their contributions to their local agricultural communities. This year's annual meeting was held in Cherokee, NC. Polk Conservation District Board member David Slater was recognized for contributing twenty-five years of service.

Polk Conservation District Chairman Richard Smith praised the work by Slater. "No one was more dedicated to the county's conservation efforts than David Slater," said Chairman Smith. "We are going to miss him. His special skills complemented the strengths of the other board members." Slater served as treasurer for the local board for most of his nearly three decades of involvement. Prior to his retirement from farming, the Slater Family placed an agricultural easement on their commercial sod farm

During the March Conservation District regular meeting David Slater expressed his intention to retire from the board. Slater and his wife Patty now have eight grandchildren. They plan to stay busy visiting two sets of grandkids in North Carolina and a third set in Colorado.

Thank You David. Your involvement made a difference!

FFA POULTRY JUDGING TEAM EARNS 4th PLACE

The PCHS FFA Poultry Judging Team has performed well during the academic spring semester. During the month of February the team participated in regional competition at the Cleveland Community College and was awarded 4th place. At the North Carolina FFA State Poultry Judging in Raleigh they were 4th place of 99 teams that competed. This was the highest level any Polk County FFA Poultry Judging Team had ever achieved.

Team members include Jamilett Ramirez Chavez, Lily Gosnell, Brooklyn Lewis and Jocelynn Ramirez Chavez. The Chavez twins are seniors but they had never competed in any FFA Career Development Events before. Gosnell and Lewis are 10th graders and will be eligible to compete again next school year.

According to Agriculture Teacher and FFA Advisor Ashley Gilbert these young ladies put in a tremendous amount of effort studying and preparing for this competition. "Their dedication was like no-other that I had seen with students before," added Gilbert. The team was sponsored by Tim Edwards Farm & Landscaping Supplies in Mill Spring.



MEET THE STAFF – Polk Soil & Water District

STUART WALKER -- Stuart Walker has been a fixture of the Polk Soil & Water Conservation District since 1989. His role in the department is that of Ag Technician. Walker manages the state cost share program for the county. He makes on-farm visits and helps advise the board as to which projects fit the criteria. swalker@polknc.org



KELLY GAY -- Kelly Gay is the program administrator for the Polk Soil & Water Conservation District. She has been a key staff member since 2017. Gay has a wide array of tasks in her role as administrator. In any given week she could be working with young people on the Soil & Water Envirothon, talking to county landowners about stream bank restoration or working on educational programs for the community at large. kgay@polknc.org

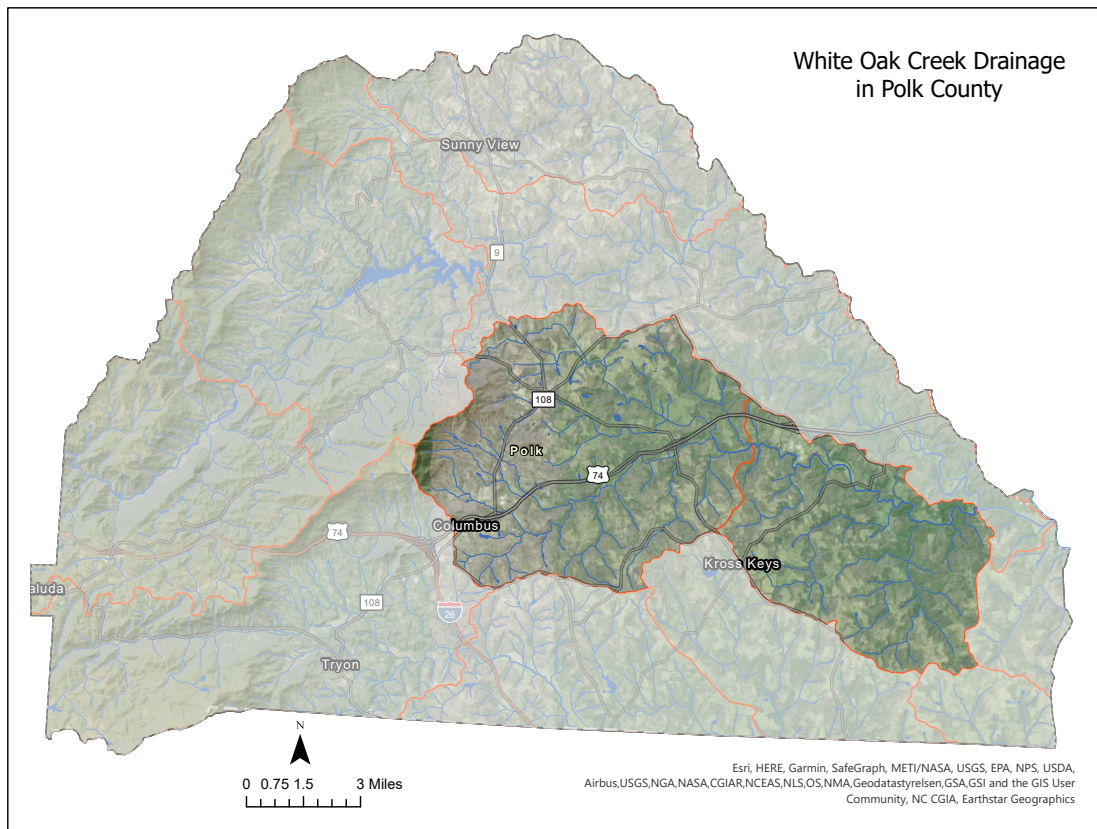
Contact: 828.894.8550

The Soil & Water Conservation District Office is located inside the former Mill Spring School on 156 School Road in Mill Spring, NC.

WHAT IS A WATERSHED?

A watershed is the land area from which surface water drains into a common stream, pond, lake or other body of water. It is the area of land that collects, stores and transports water. Every inch of Polk County is part of a watershed. Not all precipitation that falls on a watershed flows out as surface water. Some rainfall seeps into the ground. It goes into underground reservoirs called aquifers. In the modern world some precipitation ends up on hard surfaces such as roads and parking lots, from which the rain enters storm drains that feed into rivers and streams.

Watersheds can vary in size. A watershed for a tiny mountain creek might be as small as 5 to 10 acres. Some watersheds are huge. The Mississippi River watershed is the biggest watershed in the United States, draining more than one million square miles of land. Thirty-one US states and two Canadian provinces fall within the Mississippi River watershed.



MAP OF POLK COUNTY

This graphic indicates the area of Polk County that is drained by White Oak Creek and its tributaries.

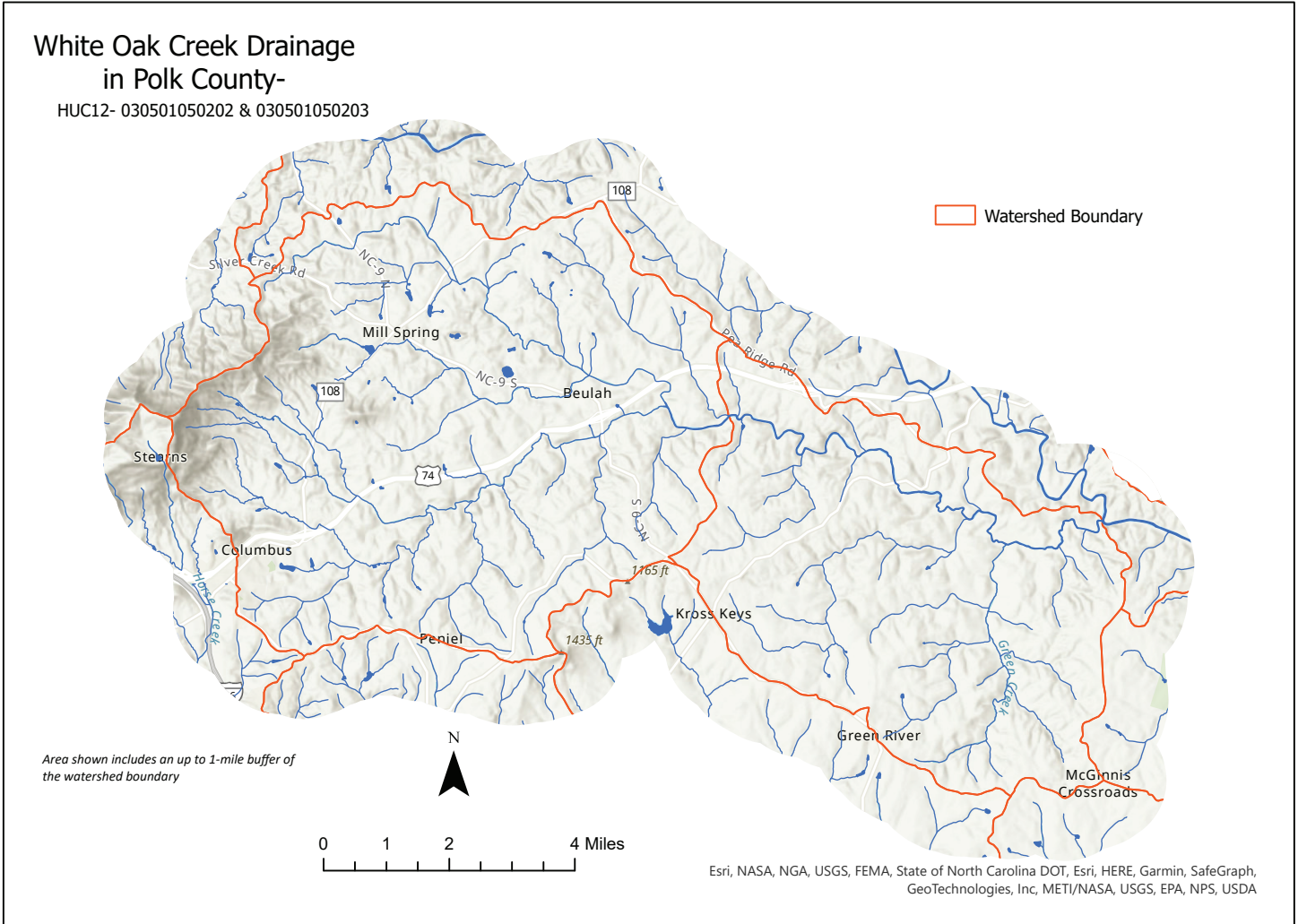
HUMAN ACTIVITIES CAN AFFECT OUR WATERSHEDS

Everything we do in a watershed affects our water quality. Without realizing it, many of your daily activities can pollute the watershed and reduce the amount of fresh water for everyone. Unfortunately pollutants can wash into the rivers such as salt (in winter) and oil from roadways and parking areas, sand and debris from construction sites and chemicals from our home lawns.

When humans clear land, we not only expose the watershed's soil to erosion, but cause changes to nature's water cycle. Impervious or hard surfaces keep the ground from absorbing water from rain or snow. Instead the water flows over the ground as runoff. Consequently less water is stored in the ground.

Unfortunately healthy watersheds are becoming less common. Everyone benefits from healthy watersheds in numerous ways. Healthy watersheds are necessary for nearly all high quality outdoor recreation sites involving the use of lakes, rivers and streams. In a few southern Appalachian areas, rainbow trout habitat has been lost due to an increase in water temps. If your town's drinking water comes from a surface water source, your city, town or county spends more money on treating drinking water from an unhealthy watershed.

WHITE OAK CREEK DRAINAGE AREA



The area of Polk County that White Oak Creek drains is shown in the map above. We are calling this section of the county a “drainage area” since it is not officially designated as a watershed. If you live in the shaded area care should be taken not to impact the waters of White Oak Creek and its tributaries.

White Oak Creek is the third largest stream in Polk County. It eventually empties into the Green River in the southeast corner of the county.

Thanks to Karyl Fuller at Triangle J Council of Governments for her help with these drainage maps.

MOUNTAIN VALLEYS RESOURCE CONSERVATION & DEVELOPMENT COUNCIL



Soil & Water Conservation Board Members Richard Smith and Sandra Reid pause for a photo with Jessica Hocz (center), Executive Director of the Mountain Valleys Resource Conservation & Development.

Unknown to many citizens there are ten non-profit organizations in North Carolina that promote the protection and conservation of land and water resources. Their primary function is to provide cost-share assistance for conservation projects. The projects in our region have a specific focus on three main categories, wildfire preparedness, water quality and renewable energy. The RC&D entity for Polk County is called the Mountain Valleys Resource Conservation & Development. In addition to Polk, there are seven other counties involved.

The conservation goals of the Mountain Valleys RC&D are achieved through bridging public and private partnerships to conserve natural resources. Some of the MVRC&D on-going efforts include the Shade Your Stream program, the Firewise initiative and the WNC Energy Conservation Assistance Program (EnergyCAP).

In late fall 2022 Jessica Hocz, MVRC&D Executive Director, attended the regular October meeting of the Polk Soil & Water Conservation District. She shared with the Board of Supervisors what work had been accomplished in 2022 and expressed her desire to better serve the property owners of Polk County.

“The Mountain Valleys RC&D is looking forward to 2023 being another productive year,” said Jessica Hocz with MVRC&D. “We will continue providing technical assistance and project management in our eight county area. This year we are planning to assist with a student led project at Laughter Pond in Mill Spring.”

Every North Carolina RC&D organization has a council of citizens from each of the counties they serve. The current Polk County volunteers are Richard Smith and John Vining. For more information on the Mountain Valleys RC&D, please visit www.mountainvalleysrcd.org to learn about current funding available for high tunnel plastic replacement, renewable energy projects on farms, planting native plant buffers along streams and any other RC&D projects.



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suggested growing muscadines. Muscadines are a southern species of grape that doesn't need chemicals. They are hardy, tasty, and extremely easy to grow. You can train them easily and muscadines make you feel like you know what you are doing. We could not have asked for a better recommendation.

Honeybees

We kept bees more than 30 years ago. When we decided to start with bees again, we reached out to the Western North Carolina State Bee Inspection office. They showed us how to keep bees in this region. We have followed their instructions and with their guidance our bee enterprise has steadily grown. Bees are a joy to work with. We are grateful to the WNC State Bee inspection office for their continued support and guidance.

In Summary

We could go on, but you get the idea. Working closely with NRCS, Cooperative Extension Office and others has made our transition easier and more rewarding. The support available to farmers is comprehensive and complete – for every farming activity there is a highly educated and experienced professional ready to offer practical advice for no additional cost. If we could offer some free advice, start early. Consult with the agricultural professionals when you are developing your farm plans. They are happy to provide unbiased recommendations and happy to help you correct your mistakes, but they are even happier to help you avoid making costly mistakes. Because in farming, you never stop learning. We plan to continue working with NRCS, the Cooperative Extension Office, Polk Soil & Water Conservation District and others in the future.

WALKER RECOGNIZED FOR 35 YEARS OF SERVICE

Tenure awards were presented at the annual meeting of the NC Division of Soil and Water Conservation held in Cherokee, NC. Polk Conservation District Ag Technician Stuart Walker was recognized for his work in the county for 35 years. Technician Stuart Walker was presented his tenure award at the Polk Soil & Water March meeting by Chairman Richard Smith.



NC Groundhog Fun Facts

- Groundhogs are herbivores and prefer tender plants like clover, alfalfa and grasses.
- Historically confined to the mountains and northern piedmont of North Carolina, Groundhogs have recently expanded their range into the southern piedmont and coastal plain. North Carolina is the southernmost area of the Groundhogs' native range.
- Groundhog dens can be hazardous. Livestock can be seriously injured from stepping into a Groundhog burrow.
- If they sense a threat, a Groundhog will give a sharp, high pitched whistle, hence the nickname "Whistlepig".
- Punxsutawney Phil is the most famous Groundhog. He emerges from hibernation on February 2nd each year looking for his shadow, predicting the end of winter (depending on what he sees).

Information from the NC Wildlife Resources Commission

POLK SOIL & WATER CONSERVATION OFFICE IN MILL SPRING



The Polk County Soil & Water Conservation Office is located inside the Mill Spring Agricultural Center just off of NC Hwy 9. The office is open Monday through Friday from 8:30am to 5pm. Because the local location is a field office, which means staff goes out and makes farm visits, frequently there is no one in the conservation office. Therefore call 894.8550 to determine if someone will be available at the time of your visit. Ask for Kelly or Stuart.

One can pick up information on programs offered, soil boxes for sampling and other ag related items. The street address is 156 School Road, Mill Spring.

This image shows the back entrance to the local conservation district office in Mill Spring.

Polk Soil & Water Conservation District

156 School Road, PO Box 455

Mill Spring, NC 28756