

The Mobile Soils Classroom Project

The Mobile Soils Classroom is a project of the NC Association of Soil and Water Conservation Districts (Association). Project partners include the NC Foundation for Soil and Water Conservation, NC State University's Soil Science Department, and the NC Department of Agriculture and Consumer Services Division of Soil and Water Conservation. The goal is to create regional [Mobile Soils Classrooms](#) for local soil and water conservation districts' (District) use at outreach events. The Mobile Soils Classrooms are part of the Foundation's [Soil Health Educational Initiative](#). *Below is a project brief, we invite your organization to consider a contribution in support of this initiative.*



What is a Mobile Soils Classroom?

A Mobile Soils Classroom consists of a 7'x14' trailer with a graphic wrap. The trailer is filled with the educational resources needed to conduct a variety of soil demonstrations.

- ✓ *Determining Soil Properties and Structure* – testing for soil particle sizes, analyze color standards, moisture content analysis, and analyze soil chemistry
- ✓ *Understanding Common NC Soil Profiles* – analysis of Soil Monoliths for common state soil types
- ✓ *Understanding Soil and Water Interactions* – analysis of how soil structure impacts water movement, groundwater retention, and sheetflow
- ✓ *Understanding Soil Erosion* – review of surface types like bare verses vegetated areas and the impacts of water and wind
- ✓ *Understanding Soils as a Biosphere* – analysis of soil at the micro level (bacteria, fungi, protozoa, nematodes)

Why the need for Soil Health education?

Districts are strong advocate for environmental education. The first District was formed in Anson County in 1937. Dr. Hugh Hammond Bennett, an NC native, persuaded the Roosevelt administration to create the Soil Conservation Service and authorizing legislation for Districts to help combat the effects of the Dust Bowl. In the words of Franklin D. Roosevelt, "A nation that destroys its soils destroys itself". Over the years, some of the lessons learned during the Dust Bowl fell to the wayside.

Soil has been a neglected natural resource with very few people promoting the understanding of this complex ecosystem, a living breathing entity. National soil degradation is directly linked to conventional agricultural practices of excessive tillage and leaving fields bare between plantings of cash crops. As the world faces a rising population growth, the agricultural community is considering all methods of increasing food production. Soil health improvements are vital to enhancing the ability to grow more food for the rapidly increasing world population while minimizing impacts to natural resources. We all have a role to play in protecting and enhancing our greatest national resource, the soils beneath our feet. In the words of Ray Archuleta, a Conservation Agronomist with the USDA Natural Resources Conservation Service East National Technology Center "The soil is naked, hungry, thirsty and running a fever". To help

promote awareness, [USDA is promoting a soil health awareness campaign](#), supported by the [United Nations declaring 2015 the International Year of Soils](#).

What communities will be impacted by the Mobile Soils Classrooms?

North Carolina is comprised of 96 Districts, with every county a part of a District. The potential exists for all communities across the state to be impacted. The Mobile Soils Classrooms will allow Districts to have a one-stop shop for a variety of soil educational demonstrations. Districts will use the Mobile Soils Classrooms on school campuses during field day events, saving the school the cost of transporting children offsite. The Mobile Soils Classrooms will be used for continuing adult education and utilized at a host of other conservation partnership events such as producer outreach events, county fairs, Envirothon competitions, teacher workshops and many other events. The first Mobile Soils Classroom was highlighted at the Association’s NC State Fair booth in 2014 with lots of interest shown by the public.

What is the projected cost of the project?

The Mobile Soils Classroom projected budget is \$20,000 per trailer. Four Mobile Soils Classroom trailers have been purchased, soil demonstrations are being developed and basic soils training was offered to partners in 2016. Rainfall Simulators are being added to the education demonstrations.

How will Donors be recognized?

The following Donor Recognition Levels were adopted by the Association’s Executive Committee; current donor names are included.

Mobile Soils Classroom Project Donors as of 1.1.17

Donor Level	Funding Amount	Contributors	Recognition
Hugh Hammond Bennett Legacy	\$5,000 or greater	Duke Energy Foundation NC Agriculture Development and Farmland Preservation Trust Fund NC Tobacco Trust Fund Commission Smithfield Foods Hog Production Division Farm Credit Associations of NC Bayer CropScience Monsanto	Trailer Logo, signage at events, website and education literature
State Soil – Cecil	\$1,000 to \$4,999	Soil Science Society of NC	Signage at events, website and education literature
Go for the Goldsboro	\$500 to \$999	2013 Association Executive Committee	Website and education literature
Wynott Donate	Up to \$499	Central Carolina Soil Consulting PLLC	Education literature

