Mobile Soils Classroom Program

Lessons now being used
The 3 Soil Particles
Soil Shake Jars
Soil as Nature Filter
Soil Texture (texture triangle, texturing by feel)
Till vs No-Till
Soil Has a Charge
Hungry, Homeless, and Naked
Don’t Guess, Soil Test

Soil pH
Available Water Capacity
Measuring Slope
The Living Soil
Soil Color
Aggregate Stability – Slake Test
It’s Alive! Soil Macro Invertebrates

To Use the Mobile Soils Classroom Trailers, Rainfall Simulators, Ground Water Model or Remote Lesson Boxes
Each of the host districts (Martin, Chatham, Davey, Buncombe, Burke) will maintain a calendar for reservations of either the trailer, the rainfall simulator, Enviroscape, Remote Lesson Boxes, or the Ground Water Model.

Only North Carolina Soil and Water Conservation Districts, NC Division of Soil and Water Conservation, or the NCSU Department of Crop and Soil Science are eligible to check out any of the Mobile Soils Classroom project equipment. Any other organization or school must go through their local Soil and Water Conservation District to reserve a trailer or other MSC resource (rainfall simulator, Enviroscape, ground water model, Remote Lesson Boxes). That local district will take responsibility for the trailer during that outreach and for moving the trailer or resource from the host district site.

A half-ton pickup vehicle is of sufficient size to move one of the 14-foot tandem Mobile Soils Classroom trailers. However, the towing vehicle must be equipped with electric trailer brakes to haul the trailer legally.

Where Resources are hosted within local Soil & Water Conservation Districts

Mobile Soils Classroom Trailers & Enviroscape
Coastal – Martin SWCD
Piedmont – Chatham SWCD
Mountain #1 – Davey SWCD
Mountain #2 – Buncombe SWCD

Groundwater Simulator Model
Burke SWCD

Rainfall Simulator Models
Coastal – Martin SWCD
Piedmont – Chatham SWCD
Mountain – Buncombe SWCD

Remote Lesson Boxes
Burke SWCD

A brief history of the MSC Project
2013 – January – Soy Bean Auction at NCASWCD Annual Meeting raises $5,000 that is later designated to fund the Mobile Soils Classroom project.
2013 – September – NCASWCD Executive Committee raises $500 among its members to complete finances for first trailer.
2014 – Spring – Order for first trailer was submitted to manufacturer and web domain was obtained.
2014 – August – First trailer, Piedmont, was received; outfitted; and first training was given at the Conservation Employee Training in Greenville. It was housed in Raleigh with the Division of Soil and Water Conservation as its host.
2014 – October – Mobile Soils Classroom demonstrations at the State Fair booth preceded by a half day training for soil scientists. PDHs given.

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2015 – January – Mobile Soils Classroom trailer available for viewing at the NCASWCD Annual Meeting at the Koury Center, Greensboro
2015 – April – The Piedmont Mobile Soils Classroom is used in training at the soils station at the State Envirothon. This becomes an annual event.
2015 – June – This trailer and the Envirothon trailer were used in the exhibit hall at the FFA State Convention, Raleigh. This becomes an annual event.
2015 – July – The Piedmont Mobile Soils Classroom is used in training at the Envirothon School for Teachers and Advisors. This becomes an annual event.
2015 – August – Mobile Soils Classroom trailer training was given at the Conservation Employee Training in Hickory.
2015 – October – Mobile Soils Classroom demonstrations and training become a staple at the Soil and Water Conservation State Fair Booth manned by volunteer professional soil scientists and conservation district employees.
2015-2016 Winter – funding is obtained through the NC Foundation for Soil and Water Conservation for two additional trailers.

2016 – Spring – Coastal and Mountain #1 trailers are received and outfitting began.
2016 – June – The first in a series of Mobile Soils Classroom training workshops were held in Wilkesboro and Waynesville. The Mountain #1 MSC trailer was stationed in Morganton with Burke Soil and Water Conservation District as host.
2016 – July – Mobile Soils Classroom training workshops were held in Plymouth and Kinston. The Coastal MSC trailer was stationed in Greenville with Pitt Soil and Water Conservation District as host.
2016 – August – Mobile Soils Classroom training workshops were held in Hillsborough and Carthage.
2016 – September – Mobile Soils Classroom training workshop was held in Raleigh.
2016 – October – Mobile Soils Classroom demonstrations are once again a success at the State Fair booth.

2017 – November – Rainfall Simulator demonstration models are purchased for three of the trailers. Training was given on the Rainfall Simulator in Waynesville, Pittsboro, and Greenville. 2017 – Funding was received, and fourth trailer was purchased. A Ground Water Model was purchased as part of the Mobile Soils Classroom project and hosted in Pitt SWCD.

2018 – Spring – Fourth trailer, Mountain #2 Mobile Soils Classroom, is deployed to Buncombe as host district. Coastal MSC trailer is moved from Pitt to Martin as host district. The Piedmont MSC trailer is moved from the Division to Chatham as host district. The Rainfall Simulators are hosted in Buncombe, Pittsboro, and Williamston. Each of the four MSC trailers are equipped with an Enviroscape Model that can also be checked out. The Living Soil lesson is added to the four trailers. All the MSC trailers and the Remote Lesson Boxes are supplied with life-sized soil profile photos.

2019 – Winter – The Mountain #1 Mobile Soils Classroom trailer will be moved from Burke SWCD to Davey SWCD. A series of Remote MSC Lesson Boxes will be housed in Burke SWCD as host district. The Remote Lesson Boxes will be available to be checked out. Training is held on the Mobile Soils Classroom lessons at the Annual Meeting in RTP.

2020 – Winter – Groundwater Simulator Model housed in Burke SWCD as host district.
2020 – Winter – Grant awarded to outfit fifth trailer that will become Coastal #2 Mobile Soils Classroom. Plans are to host trailer somewhere in southern coastal plain.

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