

MORE INFORMATION

RAIN FALL SIMULATOR

In today's demonstration our trays had soil samples demonstrating the following Iowa Landscapes; an perennial vegetation/cover crop, cover crop residue/ no till, conservation tillage, conventional tillage, and urban environment,

Surface runoff generated mostly by rainstorms can easily carry sediment and other pollutants into Iowa's waterways, in fact, it is the number one source of pollution.

Across the state of Iowa, we lose over five tons of topsoil per acre each year. At this current rate, we are losing one inch of topsoil every 15 years, while it takes 500-1000 years for one inch of new soil to form.

Plant residue, like corn stalks and bean stubble, from previous year's harvest, plus things like cover crops, help protect the soil from erosion, help the soil retain moisture, and they help build up organic matter.

The level of tillage in a field greatly impacts soil health and water quality. Intense tillage causes the soil to be vulnerable to higher levels of erosion and compaction. However, conservation tillage practices like no-till and strip-till help to reduce erosion, help build organic matter, improve soil structure, and help the soil retain moisture.

Implementing practices that help reduce soil erosion also help to decrease nitrogen and phosphorus runoff from fields and lawns. Agricultural fertilizers, lawn chemicals, livestock, wildlife, and pets are all sources of phosphorus and nitrogen. These chemicals can travel downstream and cause excessive algae growth, hypoxic zones, and water quality issues.

In summary, implementing conservation practices, like the ones exhibited today, can help decrease soil loss, improve water quality, and help improve the overall health of our soil and waterways.

If you have any questions, or would like to learn more, please contact East Pottawattamie SWCD at (712) 482-6408, swcdeducation@gmail.com, or visit our website at soilwaterconservationia.com

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