NRCS Natural Resources Conservation Service

WIND EROSION CALCULATION WORKSHEET

Student: _____

Wind erosion can be a big problem for farmers. It "blows away" the productive top layer of soil. Conservationists help farmers use science, research and technology to keep soil in place and make soil healthier to grow crops. During wind erosion, the wind physically lifts soil particles and moves them. The amount of soil moved by wind during a severe wind storm is difficult to understand. On a large scale, soil scientists can calculate how much soil is lost from wind erosion.

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Wind Erosion Experiment

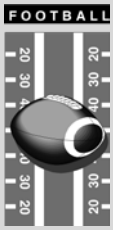
1. Weigh the mass of the soil sample in the cup that represents your miniature field(s).
2. Record your data for each system of farming before and after the wind event.
3. What is causing the erosion to happen? _____
4. In the experiment, how much soil was lost to wind erosion?
   Cup one: Field that has **soil without cover**: _____
   Cup two: Field that has **soil with cover**: _____
5. Which farming practice is better for the soil resource? _____

Did you know...

Plants find the **most nutrients** in the top few inches of soil.

The **loss of one ton of soil** would be approximately the thickness of a dime over a whole acre.

An **acre** is about the size of a football field.



A typical bull weighs about **one ton**.

Calculating Wind Erosion	1800s method of farming (Soil that is not covered)	Conservation farming (no-till) (Soil that is covered)
Initial mass (g) Subtract the final mass (g)		
Amount of soil lost (g) *This next step calculates the difference between a cup of soil and an acre of soil.* Multiply the soil loss by 1.5		
Soil loss tons per acre		
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