

The Root of the Matter

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### Abstract

There are many reasons why we need healthy soil in our environment. It allows for organisms and plants to grow, as well as help filter out drinking water. For these reasons it is necessary to prevent soil erosion. How effective are trees in preventing soil erosion? This experiment utilized different Lego pieces that served as a hill and trees. This experiment proved to prevent the soil from eroding and going down stream, trees should be planted. After my experiment of comparing two hillsides, one with trees and one without, I found that trees and barriers in place do provide a significant amount of difference in soil runoff rates. In the hillside with no trees there was a difference of starting soil to ending soil of 25.9 grams. In the second hillside, with trees, the difference was much smaller, it was only 4.3 grams. Therefore my research and experiment proved that trees and barriers do in fact help prevent large amounts of soil erosion. The Lego table without “trees” had a percentage runoff of 75.8%. The Lego table with the “trees” in place had a runoff rate of only 12.6% soil loss.