

Soils – From the plant’s perspective

WAMO – borrowed from School Garden Project of Lane County Water, Air, Minerals and Organic Matter

1) Start by asking the group why soil is important? What do plants need to get from the soil? Then talk about the parts of soil with the acronym WAMO (water, air, minerals, organic matter – the students learn about humus in class which is the same thing as organic matter). Have each student pick up about 1 tablespoon of soil from a bed and hold in the palm of their hand. (Demonstrate 1st – don’t disturb the plants, don’t collect from the pathway). Have each student look closely at the soil and look for different parts. Can they see water, air, minerals or organic matter? Then ask them to each deposit their soil into a jar for testing in the next segment – nitty gritty.

Have 4 cups, each with one of these things in it: nothing (representing air), water, rocks/minerals, leaves/sticks (organic matter). Ask students to recall what is in soil? Give the student that answers (water, air, mineral or organic matter) one of the cups.

Bring out your “magic” soil making jar. One at a time go over each part of WAMO. Go to the student with that part and have them dump it in the jar (even the air). When everything has been added shake up the jar dramatically and then show the students the jar. Ask them if you now have soil. Explain that you don’t. There’s one last step before these things will become soil they need to break down or decompose. The missing ingredient is? Time! Explain that it can take a long time to make new soil, which is why we need to take care of the soil we have.