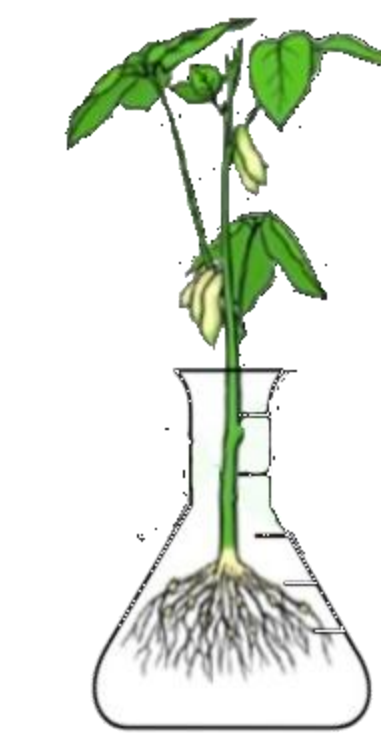


Illinois State University



Digging Deep: The Truth Beneath Our Feet

Agriculture Science Club



Abstract

As ambassadors of soil science and soil conservation, the Illinois State Agricultural Science Club designed and facilitated a Conservation Day for the entire third grade of Cedar Ridge Elementary School located in Bloomington, Illinois. The conservation day consisted of three simultaneous presentations designed to educate 73 youth about soil science. The first "Soil Sammies," allowed students to actively plant seed, learn the difference between dirt and soil, and gain an understanding of the world's arable land. The second was titled "Soil Horizons and Formation," where students created soil profiles and horizons using cereal. The third presentation, "Soil Conservation," exposed the students to an enviroscape that demonstrated soil erosion, agrochemical runoff, and the importance of proper management practices to conserve our environment. At the end of the program during our review students were able to name soil horizons, agriculture pollution sources, proper management practices, and they understood how soil helped plants to grow. The students received giveaways that consisted of "Soil: Dig it" bookmarks, "I Love Soil" stickers, Soil Ag Mags, and Eastern White Pine trees donated by the McLean County Extension. The teachers of the third grade classrooms were very willing to have college students in the classrooms, especially since the students have been learning about soil and agriculture. As a result of a successful conservation day, the Illinois State University Research and Teaching Farm has become a field trip destination for Cedar Ridge Elementary third grade classes. The supplies for the presentation were purchased by the Agricultural Science Club, the local McLean County Extension Office, the NRCS-USDA, and Ag in the classroom program. The Agricultural Science Club members were grateful to have been influential in educating the students about the value of soil in their environment and were rewarded by the student's reactions to what they were learning!



Objectives

Promote the vast importance of soils and soil science to third grade students by:

- Describing the limited amount of arable land on earth
- Showing the importance of conservation and preservation of the soil
- Explaining the different soil horizons and how they are formed
- Illustrating proper seed to soil contact



Discussion

- The arable land demonstration left youth in awe by the limited amount of land capable of food production
- With the use of the enviroscape, students recognized where contaminants were coming from and the importance of soil conservation
- Students made soil profiles with cereal, they learned there are different soil horizons, their different characteristics and formation
- By actively planting seed, youth grasped the difference between dirt and soil, and the importance of proper seed to soil contact



Methods & Materials

- Contacted and received contributions from the McLean County Extension Office, the NRCS-USDA, and the Ag in the classroom program

Taught through the methods of:

Arable Land

- Through the division of an apple as the world, 1/32 was left representing the productive farmland.

Soil Sammies

- In decorated cups, youth placed stockings filled with soil and grass seed, planting their very own chia pet

Enviroscape

- With strategically placed Kool-Aid, after misting the "contaminates" relocated and were deposited

Cereal Cups

- Layering of three different cereal types, and infiltrating with milk

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Acknowledgements

The McLean County Extension Office, the NRCS-USDA, the Ag in the classroom program, and Cedar Ridge Elementary School



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Conclusion

- Educated 73 youth in soil science
- Throughout the review, students could recite soil horizons, agriculture pollution sources, proper management practices, and how soil is the source of vegetative growth
- Donated "Soil: Dig it" bookmarks, "I Love Soil" stickers, Soil Ag Mags, and Eastern White Pine trees
- Received positive responses from the youth and educators with an invitation to return in subsequent years.