

Children Receive Hands-On Learning At Moyer Farm

LOU ANN GOOD Lancaster Farming Staff FRYSTOWN (Lebanon Co.) — One hundred and forty thirdgraders showed up at Jessica Moyer's farm recently. Nine-year-old Jessica, who is also a third grader, generously shared her cat Pumpkin

with the visitors. But the children did not come to the Lebanon County farm merely to play. They came to learn about soil, plants, animals, water, natural resources, and even possible career opportunities.

Students planted a garden after a short lesson about plants needing sun, water, food, clean air, and soil in which to grow.

"Call this soil. It is not dirt. Dirt is what your mother sweeps off the kuchen floor. Soil is what we grow plants in," said John Falter, Berks County extension agent, who taught a class on plants.

He talked about the different ways that plants can be grown in the garden such as planting seeds, bulbs, and starter plants.

Falter then gave each child a piece of sprouted potatoes. "These are not rotten," he said when some children complained of the wrinkling potato skin and the long, straggly sprouts on them.

Falter showed the children how to stretch a string from end to end in the garden as a guide to dig a straight row. Each child planted at least two potatoes in one of the groups. Some of the other groups planted peas, beans, or onions.

The students planted tiny petunia seeds in a flower pot. They took the containers back to the classroom where they will watch the plants germinate (sprout through the soil) — hopefully.

"The problem is that too many people plant the seeds too deeply. They complain that it was bad seed, but actually it wasn't," Falter said. Only a sprinkling of dirt should be scattered on the seeds for cover.

"Run your fingers through the soil and see what you can find," Jed Vail told a group of children when boxes of soil were placed in front of them.

"Ugh, I found a worm!" someone yelled.

"Ugh, ugh — here is a piece of a worm," another one said.

Worms, roots, and organisms help keep soil healthy so plants can

soil. The soil is made up of three

parts — sand, silt, and clay. Jed showed the children how water runs through these. When he

poured water on a jarful of sand, the water ran straight through it and the sand collapsed. That's because sand holds very little moisture. The water moved slower when poured on the silt, and with the water stayed setting in the clay because clay holds all the water.

"We need the right amount of each of these — sand, silt, and clay — in the soil to hold the right amount of moisture so the plants do not dry out," Jed said.

Amy Phillips taught the children how to do a sediment test. Each student received a small jar, which they partially filled with soil. After warm water was poured in the jar, the students screwed on the cap and shook the jar. The jars were left set for awhile. When the students checked the jars later, the clay had settled on the bottom with parts of plants floating on the top.

A demonstration on soil erosion showed how soil that is sloped washes to the bottom when it rains. That's why plants, trees, flowers, should be grown in the soil to keep it from washing away. Farmers also plow hilly land horizontally to keep it from washing away.

The children were divided into groups that rotated between seven different 40 minute workshops.

To one group gathered in front of the barn for the Caretaker of Animal workshop, Ralph Moyer asked, "Why is every one holding their noses?"

The odor from the 240-head dairy herd was a bit unusual for many of the children, but Moyer assured them that if they came to the farm everyday, they wouldn't even think about the smell anymore.

"Cows probably eat better than you or I," Moyer told the students. "We often eat what we like, not what is good for us."

Cows, he said, are fed nutritious feed that has been carefully analyzed at a lab to make sure that it contains adequate amounts of minerals, vitamins, and all the things cows need to remain healthy.

People like to eat each of their foods separately, but cows need it grinded and mixed together; other-

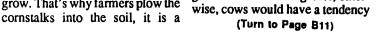


One hundred forty students from Tulpehocken Area School District helped plant a garden at Ralph and Crystal Moyers' farm in Bernville.



Nine-year-old Jessica Moyer shows off her cat Pumpkin to classmates.







Students from the plant physiology class show how erosion washes away top soll.

Soil is made up of sand, silt, and clay. This experiment shows how the combination of all three composites are needed for the soil to hold the right amount of moisture for plants to grow.