

SOIL TUNNEL

This fiscal year a new educational display was debuted by the district at area schools. Known as a soil tunnel, it was built by district staff with funds provided by Three Rivers RC&D Council, Incorporated. The tunnel's design was conceived by employee Candice Tritt. After reviewing a variety of other tunnel styles, she formulated a unique design tailored to Santa Rosa County.

The construction phase involved building a four foot by eight foot rectangular plywood box, held together with heavy duty hinges for quick assembling and

disassembling. The entire box was then painted in colors that reflect an actual local soil type, known as Lucy, and its soil profile. The top of the box was designed to fit eight, two foot by two foot, foam board panels, painted dark brown to represent the topsoil. The interior walls also had animal burrows and call outs with microscopic



“A MULTI-SENSORY LEARNING TOOL DESIGNED TO TEACH STUDENTS ABOUT SOILS AND THEIR CHEMICAL, PHYSICAL, AND BIOLOGICAL PROPERTIES.”



views of mycorrhizal fungi, soil protozoa, and soil bacteria painted on them.

Besides promoting soils and soil formation, Candice wanted the soil tunnel to also reflect the role soils play in their ecosystem and in the web of life. This was accomplished by focusing on the local longleaf pine ecosystem; simulating flora and fauna from this particular environment. Paper mache, artificial, and real life props such as a cut-over longleaf pine stump, longleaf pine straw and cones, ferns, a black racer snake, and several



SOIL TUNNEL



kinds of insects were added to the top. Roots, worms, a mole, and a gopher tortoise were placed within the tunnel to represent the life forms typically found underground in these ecosystems. One corner of the tunnel also mimics a lowland wet area with saturated gray soils, the beginnings of a pond, and a crayfish in its preferred habitat.

used at a couple of school career days. District staff first give a fifteen minute talk on the science of soils, hoping to generate some curiosity. Afterwards, the students crawl through the tunnel and get the unique opportunity to explore the complex world beneath their feet. This interactive, visually stimulating, program was a big hit with the kids. The soil tunnel seems to help students retain more by attaching the scientific facts to their associated imagery.

“ONE CUP OF SOIL
MAY HOLD AS MANY
BACTERIA AS THERE
ARE PEOPLE ON
EARTH.”



Since its completion, the soil tunnel has been set up and