

Learning Involving Nature & Kids—

Kids on the Land at the West Ranch

by Peggy Cole

Discovery was the connecting tissue of the first official gathering of passionate people interested in sharing their love of the natural world and Holistic Management with children in the “Kids On The Land” program at HMI’s David West Station for Holistic Management.

Six women from diverse fields came together in late April to begin a journey in creating curriculum for informal outdoor education for elementary school children led by Peggy Maddox as master teacher.

For the past four years Peggy Maddox has been creating activities to support general themes for the various grades she has invited out from Ozona schools as part of HMI’s educational outreach at the West Ranch. She began with the third grade and added the next grade each year. Word got around, and now Eldorado Public School wants to bring their third through sixth grades, and Ozona wants to bring the kindergarten class as well as their third through sixth grades. Peggy and HMI devised this training to generate the help she so badly needs for this important mission. To create the curriculum, HMI and the West Ranch hosted two seven-day workshops of training and implementing the school field days this spring.

Certified Educators **Kelly White** and **Christina Allday-Bondy**, as well as **Dr. Pat Richardson**, HRM of Texas Executive Director **Peggy Cole**, **Kathy Dickson**, and **Jeanne Rides-Alone** joined Peggy Maddox at the West Ranch’s newly upgraded learning quarters for this training and implementation.

We decided to call ourselves LINK (Learning Involving Nature & Kids), because we want to be links—part of the connections in all directions. To help us understand the importance of nature experiences, Peggy introduced the book *Last Child in the Woods—Saving Our Children from Nature-Deficit Disorder*, which discusses the need to reconnect children with nature for healthier, better-adjusted kids who care for our planet.



A fourth grader from Eldorado Public School examines a mealy blue sage.



Schoolchildren learn the different parts of plants and also the uses of those plants by livestock, wildlife, and humans.

When schoolchildren arrive at the West Ranch, each grade learns a different aspect of nature. For example, third graders learn about the wind and how it can help people. On their way to the ranch headquarters, they stop at one of the four West Ranch windmills. Peggy helps them discover the many ways wind can be used by people. Peggy tells them the parts of the windmill and the function of each part. Joe Maddox, the West Ranch Manager, demonstrates with real windmill parts such as how the check valves and leathers lift water up from the aquifer. The class divides into three groups of about 20 each. Each group accompanies two LINKS to experience: 1) hand pumping water with the actual windmill parts, 2) climbing up to look into the big water tank where the water went from the windmill, and 3) walking down to the livestock watering troughs to learn about floats and the uses of the water brought up by the windmill.

Back at the learning porch, Peggy discusses with the schoolchildren the history of their county and how the invention of the windmill made settlement in their area possible. Then she selects students one by one to come to the stage area and sets up a physical enactment of a windmill in action with each child playing a part of the windmill.

With the fourth grade, Peggy's focus is plants. She introduces the work of Carl Linnaeus, who created taxonomy, and demonstrates the types of classification by having all 45 children in the 4th grade stand up. She then begins separating them based on a combination of articles of clothing worn or physical traits such as hair color.

The LINKS take groups on the nature trail up the hill discussing the uses of plants for livestock, wildlife, and humans. From the coprolites (eight thousand year old fossilized poop full of prickly pear seeds) found in regional caves to the tasting of agarita, mesquite bean, or prickly pear jellies, the kids experience all the local landscape has to



One group of many schoolchildren who have learned about how nature functions through the outdoor education program at the West Ranch.

offer as they carry their naturalist clipboards and answer questions about what they see.

Back at the learning porch they rotate to the plant journal activity. A LINK teaches the parts of a plant, how plants work and what plants do for us and encourages them to study them in detail with the aid of field guide books. The students each receive a plant journal where they record their findings, draw and/or describe the parts of the plant, and write poetry or a story about it.

With the fifth grade class, Peggy focuses on water. She uses an apple to demonstrate the small amount of drinkable water available on Earth, followed by a discussion about the geologic features of the region (ancient sea and limestone formations), regional watershed, and water supply before the kids role play the water cycle.

Smaller groups are formed to: 1) watch the groundwater flow model where aquifers, wells, clean and polluted waters can be seen in action; 2) learn from the rainfall simulator how rain creates either runoff or groundwater, depending on the soil surface conditions and make a water cycle wheel; and 3) go fossil hunting.

The sixth grade day is Healthy Soil – Healthy

Land: Soil Critters and more. These kids are learning more and more complex concepts, so the opening large group discussion is on the formation of soil, including its parent materials and the different kinds of rock, components, life of healthy soil, the importance of covered soil, and the critters who live beneath the surface.

The LINKS take each of the three groups out on the ranch for land monitoring, where students judge percentages of bare ground and different classes of soil cover and take the soil's temperature.

The groups come together in the big barn for Dr. Pat Richardson's unique soil microorganism video—live action video of amazing soil mesofauna—then break into small groups again to play the soil food web game in which students wear an identification badge that says which soil critter they are and what they need to survive. Each student finds another who wears the badge of those needs, then connects to them by rainbow ribbons. In the end it is obvious to the students that all is connected under the soil surface as it is above.

After lunch the groups hear a story about the buffalo days and go out again on the ranch to experience in their new roles as grazing animals or predators how herd effect and animal impact changes the soil surface and how the effect has changed with the advent of fencing and the reduction in predators.

The tagline for this program is "LIFE... on the land, Get the connection." With Peggy Maddox, the West Ranch, and this new curriculum, these schoolchildren in West Texas will do just that. ♪

To learn more about the LINKS curriculum and HMI's educational outreach efforts at the West Ranch, contact Peggy Maddox, Director of Education and Public Relations at: westgift@earthblink.net or 325/226-3042.



Dr. Pat Richardson was one of several LINKS helping these students make the connection with nature.