

# Reclaiming the earth

By RHETT MORGAN World Staff Writer  
5/2/2008

## Oologah students learn how to stop erosion in its tracks

NEW ALLUWE -- Kelsea Kallio, a freshman at Oologah High School, walked as far as three-quarters of a mile between lectures Thursday, getting caked in dust pushed by gale-force gusts.

But she ended up being blown away by more than the wind.

"I've learned a lot," said Kallio, who participated in a student outreach program in surface mining reclamation at the Kelly Ranch Coal Mine.

"We were planting trees and now we're learning about erosion. I think that's really cool."



STEPHEN PINGRY / TULSA WORLD

Oologah High School freshman Kelsea Kallio plants a tree Thursday at the Kelly Ranch Coal Mine near New Alluwe as part of a student outreach program in surface mining reclamation.



Students in Matt Sweeney's science class ended up planting between 350 and 400 trees during the daylong project. The program focused on reforestation of lands at the Kelly Mine, an active surface mine in Craig and Nowata counties, about 48 miles northeast of Tulsa.

Partners in the project were the Phoenix Coal Co. of Vinita, the Oklahoma Department of Mines, the Oklahoma Department of Forestry and the U.S. Office of Surface Mining.

Created in 1977 when Congress enacted the Surface Mining Control and Reclamation Act, the Office of Surface Mining works to ensure that land is restored to beneficial use when mining is finished. It does that by promoting initiatives such as planting more trees and establishing wildlife habitat.

"Because it's so hands-on, the kids really get into it," said Jeff Zingo, a regulatory program specialist for the Office of Surface Mining. "And they learn something. We try to keep it light but still teach them."

About 51 percent of the electricity produced in the United States is fueled by coal. The state of Oklahoma produced 1.66 million tons of the more than 417 million tons of coal mined in the country in 2007, Zingo said. The bituminous coals extracted from the 1,331-acre Kelly Mine are used mostly in cement production, he said.

Students made the rounds Thursday to six stations that exposed them to the natural sciences and the mechanics of coal mining and reclamation. They were briefed on topics such as revegetation with grasses and legumes, active mining/reclamation versus prelaw mining and seismograph and blasting. Kallio took part in a demonstration on erosion. She held a hose as it spurted water down a barren hill, leaving small gullies in the landscape.

Bret Sholar, an environmental analyst for the Oklahoma Department of Mines, said it takes 500 years for an inch of topsoil to replenish.

"People don't realize how important this is," Sholar said of reclamation. "If we didn't build this back up, we would have holes all over the earth."

American Chestnut seeds and nine other species of trees were planted Thursday. The American Chestnut once accounted for nearly 25 percent of all hardwoods within its natural range, but in the early 1900s, an Asian fungus nearly brought the species to extinction.

The American Chestnut Foundation has worked 25 years to develop a blight-resistant American Chestnut

that will be used to populate forests. This is the first year of a long-term effort to use mine sites as springboards for returning the American Chestnut to Eastern and Midwestern forests.

"It's teaching us a lot about the environment and how to protect it," Lori Hines, an Oologah High School ninth-grader, said after planting a tree. "It's been good."

---

**Rhett Morgan 581-8395**  
[rhett.morgan@tulsaworld.com](mailto:rhett.morgan@tulsaworld.com)

By RHETT MORGAN World Staff Writer

Copyright © 2008 , World Publishing Co. All rights reserved.

Originally published on Tulsaworld.com:

[http://www.tulsaworld.com/news/article.aspx?articleID=20080502\\_238\\_A13\\_hOolo54834](http://www.tulsaworld.com/news/article.aspx?articleID=20080502_238_A13_hOolo54834)