

Project aims to hone planting method for chestnuts on mine site

By [Fred Brown](#)

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HUNTSVILLE, Tenn. - Daniel A. Roling, CEO of National Coal Corp., led a diverse group of volunteers Friday in a day of planting American chestnut seeds on an active coal mine site in Campbell County.

More than 60 volunteers' braved rain and cold winds to help plant 500 of the brown, thickish seeds in mounds of sandstone rock spoil from National Coal's mining operations on Zeb Mountain.

Volunteers included retired Knoxville heart surgeon Hiroshi Toyohara; Earl Bandy, field office director of the U.S. Office of Surface Mining in Knoxville; Charles Kite, senior vice president and chief counsel of National Coal Corp.; state Rep. William Baird, R-Jacksboro; retirees and University of Tennessee students.

Foresters said it is doubtful any of the American chestnut seeds will survive, because they will likely succumb to the Chinese chestnut blight, a wind-blown fungus that arrived in the U.S. in the early half of the 20th century.

But tree scientists, biologists and foresters are trying to discover the best methods of planting the American chestnut for the day when an American hybrid becomes impervious to the chestnut blight.

Labeled "Operation Springboard" by the Appalachian Regional Reforestation Initiative and the American Chestnut Foundation, Friday's venture was part of a demonstration project among those two entities, the Office of Surface Mining, UT and the state of Tennessee.

The seeds were planted in measured plots using 10 different methods, employing various soil combinations and other criteria that will allow scientists to understand the best planting methods for the future.

National Coal's site was picked because the company agreed to cooperate in the reforestation project. The project uses the Forestry Reclamation Approach, which encourages the planting of tree seeds and seedlings in loose soil that has not been compacted by heavy equipment.

Roling said his company was eager to learn the results of this project in hopes that other mine companies across the coal fields will begin to rethink their approach to reclamation, which has largely consisted of the planting of grasses for the past 31 years since the Surface Mine Control and Reclamation Act of 1977.

Later, National Coal will come in behind the scientists and foresters to plant the same area in hardwoods and evergreen trees, which will start the rebuilding process of a successional forest.

Friday's planting is part of the effort by the Office of Surface Mining and other government agencies to return flattened mountains to forest lands interspersed with grasslands.

National Coal is mining Zeb Mountain using a technique called "cross-ridge mining," in which the top of the mountain is removed but the spoil must stay on the summit in roughly the original contours. Environmental groups have objected to the technique, which they consider a version of mountaintop removal. In mountaintop removal, mining companies dump the spoil into the valleys, leaving man-made plateaus.

About five acres were planted Friday in the National Coal test site.

"We are very excited about the reintroduction of the American chestnut," Roling said. "We just hope it is successful.

"This is an important first step and I hope it works."

He said the forestry reclamation idea just makes sense since it isn't hard to understand that seeds won't grow on compacted soil.

"Mother Nature never compacted soil, so it is only logical."

Roling said using Zeb Mountain as a test plot was UT's proposal, "and we're just open to the idea."

He said he did not think the reforestation plan would be more costly than what coal mine operations are doing now in reclaiming stripped mine lands.

Hill Craddock, a biology professor at UT-Chattanooga and a chestnut breeder for the American Chestnut Foundation, said he expects the organization to release an America-type hybrid chestnut that will be blight resistant soon.

Already, he said, some of those hybrids are being planted in Cherokee National Forest.

Once a blight-resistant seed is found, then members of Appalachian Regional Reforestation Initiative and the American Chestnut Foundation hope that the now-devastated mine lands, first by the blight and then by strip mining, can one day be returned to lush forests.