

HYDROPONICS, CAMPBELL COUNTY, TENNESSEE

Until 1979, a one-acre lot in Campbell County, Tennessee was a strip mine site managed by the Diamond Mine Company. It was one of several strip mines in Campbell County over the years. After the mine's closure, local community members saw potential in the land as a worthwhile redevelopment investment. The Woodland Community Land Trust hired local contractors and built a home on the land. Unfortunately, the home burned down shortly after being built. After the fire, the site was left vacant and abandoned again and became over-grown with invasive plant species and was a haven for illegal trash dumping.

With the help of the Clearfork Community Institute, the Woodland Community, and Environmental Protection Agency (EPA) funding, the community was able to redevelop the land. In 2017, Environmental Site Assessments were completed on the property through Campbell County's EPA 104(k) brownfields assessment grant. The Environmental Phase II Assessment determined that arsenic concentrations in the soil were below background levels in East Tennessee, so no cleanup was needed. Project and community leaders decided to use the land for the production of several crops (broccoli, kale, hot-peppers, and asparagus rhizomes) with the goal to become a competitive producer in the Appalachian region.

The University of Tennessee in Knoxville helped to install and monitor a new field hydroponic system in 2018. This hydroponic system provided a sustainable and environmentally friendly setting where plants grow in ideal growing conditions. Private donations from individuals and organizations (such as the Mountain Women's Exchange) totaling \$4,800 provided initial startup costs to foster the first harvest. This initiative provides a form of economic self-sustainability for this rural Appalachian County in upper east Tennessee.



Before, the land was an abandoned mining site before its transformation.



Today the abandoned mining site is home to crops and a field hydroponic system.