Stabilization and Vegetation of Mine Tailings Site near Ducktown, Tennessee. (S11-walker152217-Poster)

Authors:

- F.R.Walker. University of Tennessee.
- T.J.Samples. *University of Tennessee*.
- A.Binford. Tennessee Dept. of Environment and Conservation.

Abstract:

A former tailings disposal area will be stabilized using spent mushroom compost and (chipped and shredded) green-tree wastes and different seed mixtures. The objective of the project is to improve the plant nutrient and water holding ability of the site, significantly reduce wind and water erosion and encourage the establishment of permanent, limitedmanagement vegetative cover that will be attractive to wildlife. Oats (Avena sativa L.) sown between late August and mid-October will provide temporary ground cover. Between late April and late June perennial, warm-season grasses and a warm-season legume will be seeded. A tall grass mixture (indiangrass, Sorghastrum nutans (L.) Nash.; little bluestem, Schizachyrium scoparium (Michx.) Nash.; and switchgrass, Panicum virgatum L.) will reduce wind erosion. A mixture containing shorter prairie grasses and a warm-season legume (little bluestem, Schizachyrium scoparium (Michx.) Nash.; sand bluestem, Andropogon hillii Hack.; sand dropseed, Sporobolus cryptandrus (Torr.); side-oats grama, Bouteloua curtipendula (michx.) Torr.; and purple prairie clover, Dalea lasiatheria Gray). will stabilize the soils between the tall-grass zones.

Corresponding Author Information:

Forbes Walker phone: 865 974 6402 University of Tennessee fax: 865 974 4514

2506 E. J. Chapman Drive e-mail: frwalker@utk.edu

Knoxville, TN 37996

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