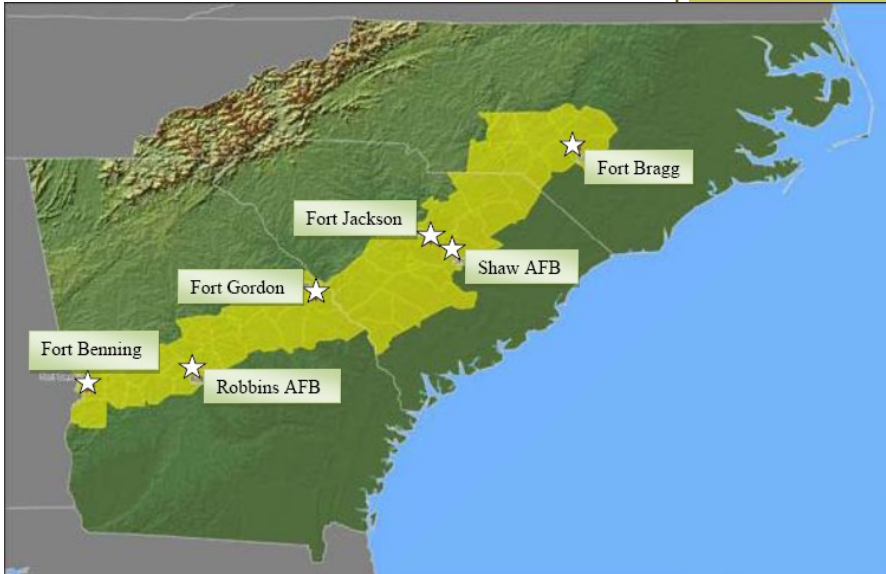


## Sand Hills Region And DoD Installations

The Sand Hills of the Carolinas and Georgia are the remnants of the Eocene era shoreline sand dunes and mark the transition from the Coastal Plain to the Piedmont. As the name suggests, the region is noted by rolling sandy hills or dunes.

The Sand Hills overlap the Fall Line or Fall Zone, which separates the Piedmont from the Coastal Plain. Erosion of the softer Coastal Plain rock created a drop in elevation, as well as rock outcrops and rapids in rivers and streams. These features marked the head of navigation for ocean-going



shipping. The Fall Line thus influenced settlement and the growth of a number of cities by providing landings and port facilities, as well as falls and water-power for historic mills. The soils of the Sand Hills are porous and well drained and, as a result, subsistence farms characterized the nineteenth-century settlement of the area rather than plantations. In addition, because the soils are conducive

for the growth of long leaf and loblolly pines, the timber and naval stores industries were also important to the economic development of the region.

While geographically small, totaling 8,715 square miles in area in these three states, the Sand Hills region is home to a number of DoD installations: Fort Benning, Warner Robins Air Force Base, and Fort Gordon in Georgia; Fort Jackson and Shaw Air Force Base in South Carolina; and Fort Bragg in North Carolina.

### Historic Contexts

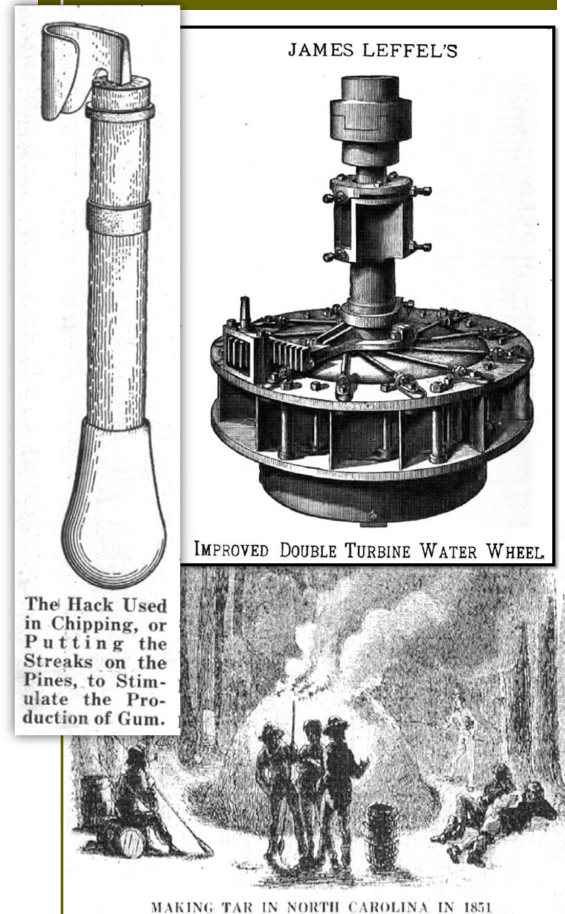
Historic Contexts guide the documentation and National Register of Historic Places evaluation of archaeological and historic sites. Contexts identify the historic themes, events, locations, individuals, property types, and attributes associated with a particular class of resources and region. They also allow cultural resource managers to accurately identify and evaluate resources. The Legacy-funded Sand Hills Rural Industry Context draws on a substantial body of work completed at six DoD installations in the region. It provides a comprehensive overview and evaluation of the locations, characteristics, research perspectives, and management considerations.

For more information about this project please contact:

Renee Lewis, CALIBRE/Fort Gordon  
ruth.renee.lewis@us.army.mil

Dr. J.W. Joseph, New South Associates  
jwjoseph@newsouthassoc.com

## Rural Industries of the Sand Hills, Georgia, South Carolina, and North Carolina



Legacy Project 09-436



# RURAL INDUSTRIES OF THE SAND HILLS

Geology, geography, and the natural and human environments combined to encourage the development of a number of rural industries in the Sand Hills region. The rural industries present in the region are Mills, including saw mills, grist mills, and textile mills; Timber Resources and Naval Stores, including tar and charcoal kiln, turpentine extraction, and lumber camps; Extractive Industries, such as mining; Potteries; Brick Factories; Blacksmith Shops; Distilleries; and Cotton Gins. Of these industry types, Saw and Grist Mills, Turpentine Extraction, and Tar and Charcoal Kilns are the most common rural industry site types recorded and documented at the Sand Hills military installations.

## Mill Dams in the Sand Hills

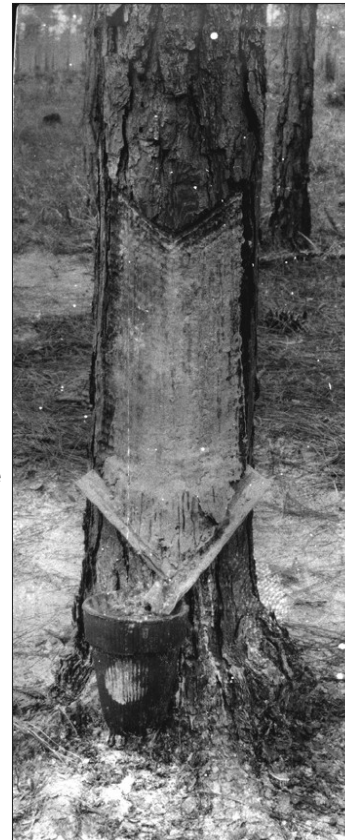
Earthen dams were typically used to create millponds and create reservoirs to power saw and gristmills in the Sand Hills. These dams were constructed using a variety of framed wooden cores that frequently become exposed when flooding erodes the earthen dam. This mortise and tenon frame hollow core dam was identified and recorded at Fort Jackson.



On Fort Gordon, twentieth-century millers used several combinations of concrete and earthen dams to help protect important power sources, like turbines, tub wheels, and water wheels, from damage during flooding.

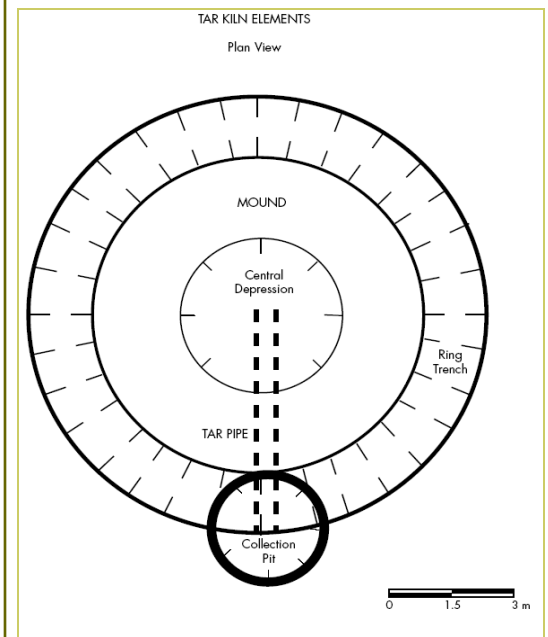
## Turpentine Distilling

Turpentine was made by distilling sap collected from pine trees. Cuts made in the tree bark funnelled sap into collection containers (such as clay Herty cups) or boxes cut into the lower part of the tree. Two styles of cutting were applied: Box Cuts and Cat Face Cuts. Foresters in Fort Bragg's Natural Resources Program have noted that turpented trees are well suited for use by Red Cockaded Woodpeckers, since the cores of these trees are dead. The Foresters have recorded standing trees with turpentine cuts on the installation, integrating Fort Bragg's Natural and Cultural Resource programs.



## Tar Kilns

Tar kilns were used to extract tar and pitch resin from dead pine trees. Kilns were formed by digging a circular or rectangular pit whose floor sloped in one direction. Earthen embankments



were placed around the pit, and a pipe or trough was placed at lowest end to funnel tar into barrels for collection. Dead wood was stacked inside the pit, ignited, and then covered with earth to allow the wood to slowly burn and release the tar onto the floor of the pit, where it ran to the collection point. Tar kilns took approximately two weeks to burn, and would produce 45-50 barrels of tar.