Georgeville Soils: Cotton to Pines

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The Georgeville soil series (clayey, kaolinitic, thermic Typic Hapludults) is one of the more common upland soils in Wilkes County, Georgia. The greatest percentage of Georgeville soils are located south of Washington where fine-grained rocks dominate the local geology. Other areas of Georgeville soils have been mapped north of Tignall and southeast of Jones Chapel. Georgeville soils may be found throughout the county wherever fine-grained rocks approach the surface. The soil was named in 1910 in North Carolina where these soils also occur.

The topsoil is a yellowish brown silt loam in uneroded areas. When rubbed between the fingers no large sand grains should be felt and a wet soil will have a floury feel. Because of the high silt content these soils erode easily. Georgeville soils are especially productive for cotton (Gossypium hirsutum L.) and many fortunes have been literally built on these soils. But as the topsoil eroded away, the boll weevil (Anthonomus grandis grandis Boheman) invaded the county, and cotton prices fell during the Great Depression, these soils were abandoned to pasture and eventually woods. Therefore, loblolly pines (Pinus taeda L.) which do well on these soils, even the eroded ones, have become the backbone of the local economy.

The subsoil is a yellowish red or red clay or silty clay. Once again no sand grains should be felt. The subsoil has so little sand that if placed between the teeth no grit should be felt. Perhaps this is the clay that was eaten during hard times when no food could be found. (I do not have any recipes.) The clayey subsoil ranges from 2 to 4 ft thick. Some brown or yellow mottles may be found in the lower part of the subsoil.

The underlying bedrock color ranges from black to white. The rotten bedrock has a loamy texture. Carolina slates are fine grained and have angular breaks with somewhat flat sides at near right angles.

Natural fertility is medium and organic matter content is low. Georgeville soils are strongly acid throughout and need to be limed for certain crops. Permeability is moderate and available water content is medium. Tilth is good in uneroded soils. The root zone is deep.

Where the soil is gently sloping, the soil has good potential for crops and pasture. Tilth can be maintained by returning crop residue to the soil. Erosion is always a hazard where crops, overgrazed pastures, or recent logging operations are found. Minimum tillage and the use of cover crops, including grasses and legumes, in the cropping system help to reduce runoff and control erosion.

Georgeville soils present no severe restrictions for residential development unless they are on steep slopes.

Georgeville soils have played a large role in the history of Wilkes County. If managed well, the county will continue to benefit from these soils.

Editor's comment: This article is an example of an appropriate technique to inform the public about soils and soil survey. This is published to encourage soil scientists to write similar articles for their local newspapers.


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