

Soils of Virginia

Did you know that Virginia has a state soil? It is Pamunkey soil, found primarily in the Piedmont and coastal plains. Soils of the Pamunkey series are very deep and well drained. They are on nearly level to sloping stream terraces.

In selecting a state soil, Virginia faced dilemmas that many other states did not have. Virginia covers some 450 miles along its southern boundary, five physiographic provinces and nine major land resource areas. With this kind of diversity, it is difficult to select a soil that represents the state as a whole. (A physiographic province is a geographic region in which climate and geology have given rise to an array of landforms different from those of surrounding regions.)

Fortunately, Virginia is also blessed with rivers whose watersheds cover each physiographic province as well as a history that is older than the United States. The James River crosses the entire state and brings sediments from each of the areas it flows through. These sediments are deposited on flood plains and on deltas along its course to later form Pamunkey soils on low stream terraces.

This soil, originally mapped as Wickham soil series, was first recognized in Hanover County. Chemical laboratory data revealed that the natural fertility was greater in these soils than is allowed in the Wickham series. The soil was named Pamunkey, the name chosen for a nearby river, which in turn was named for the Pamunkey Indian Nation that lives along the river.

The Pamunkey soils were first used to sustain the Pamunkey Indians, and many other tribes, and later to grow crops by the settlers at Jamestown. The high natural fertility and high crop yields associated with these soils may be one reason that the Jamestown settlement survived.

Pamunkey soils are prime agriculture soils in Virginia. Extensive areas of Pamunkey soils have been mapped in Hanover, Chesterfield, New Kent, Charles City, Surry, Henrico, James City, York and other Tidewater counties.

For a list of soil types per city or county in Virginia, see
<https://www.nrcs.usda.gov/wps/portal/nrcs/surveylist/soils/survey/state/?stateId=VA>.