

Tuckerman Series

The Tuckerman series consists of poorly drained, nearly level soils on stream terraces. These soils formed in alluvial sediment. A seasonal high water table is at or near the surface.

In typical profile, the surface layer is dark-gray and gray fine sandy loam about 17 inches thick. The subsoil is about 19 inches thick and is dominantly gray, friable sandy clay loam and fine sandy loam mottled with brownish yellow. Below the subsoil and extending to depth of about 72 inches is gray loamy sand and coarse sand.

Natural fertility and the content of organic matter are low and available water capacity is medium. Permeability and shrink-swell potential are moderate. In areas that have not received lime, reaction is slightly acid to medium acid.

The Tuckerman soils of Pitt County are of only minor importance for farming. The seasonal high water table and infrequent flooding for brief periods are the major limitations to their use. Most of the acreage is in forest, and the rest is chiefly in cultivated crops or pasture. In areas that are farmed, crops respond well to recommended applications of fertilizer and lime.

Representative profile of Tuckerman fine sandy loam, 1 mile east Greenville, 150 feet north of State Highway No. 30, and 30 feet east of field path:

- Ap – 0 to 10 inches, dark-gray (10YR 4/1) fine sandy loam; weak, fine granular structure; very friable; many small and few medium roots; slightly acid; clear, smooth boundary.
- A2g – 10 to 17 inches, gray (10YR 5/1) fine sandy loam, weak, fine granular structure; very friable; few small and medium roots; medium acid; clear, wavy boundary.
- B1g – 17 to 20 inches, light brownish-gray (10YR 6/2) fine sandy loam; few, medium, distinct, yellow (2.5Y 7/6) mottles; weak, medium, subangular blocky structure; friable, few medium roots and root channels; medium acid, gradual, irregular boundary.
- B2tg – 20 to 30 inches, gray (10YR 5/1) sandy clay loam; few, fine and medium distinct, brownish-yellow (10YR 6/6) mottles; weak, medium, subangular blocky structure; friable, slightly sticky and slightly plastic; few medium root channels; few thin clay films on faces of peds; medium acid, gradual, wavy boundary.
- B3tg – 30 to 36 inches, gray (10YR 5/1) fine sandy loam; weak, medium, subangular blocky structure; friable; few fine fragments of quartz gravel; few fine mica flakes; medium acid; gradual, wavy boundary.
- IIC1g – 36 to 48 inches, gray (10YR 6/1) loamy sand; single grain; loose; few fine fragments of quartz gravel; few fine mica flakes; medium acid; gradual, wavy boundary.
- IIC2g – 48 to 72 inches, gray (10YR 6/1) coarse sand; single grain; loose; many fine fragments of quartz gravel; few fine mica flakes, slightly acid; gradual, wavy boundary.

Thickness of the solum is 40 inches or less. Thickness of the A horizon is 8 to 20 inches. The Ap or A1 horizon is dark gray to grayish brown, and the A2 horizon is gray to grayish brown. The B horizon is light brownish-gray to gray fine sandy loam or sandy clay loam and is 15 to 32 inches thick. A few yellow and brownish-yellow mottles are in the B horizon. The C horizon is grayish loamy sand to coarse sand. It contains few to many fine fragments of gravel.

Tuckerman fine sandy loam (Tu). This is a poorly drained soil on broad flats in slight depressions on stream terraces. It occurs in areas of irregular shape that are 3 to 21 acres in size. Slopes are 0 to 1 percent. The surface layer is dark-gray and gray fine sandy loam about 17 inches thick. The subsoil is about 19 inches thick and is dominantly gray, friable sandy clay loam and fine sandy loam mottled with brownish yellow.

Included with this soil in mapping were a few areas of soils that have a similar profile but that have a surface layer of sandy loam or loamy fine sand. Also included were small areas of Altavista, Portsmouth, Olustee, and Osier soils.

Infiltration is moderate. Runoff is slow or ponded.

This soil is easy to keep in good tilth and can be satisfactorily worked throughout a fairly wide range of moisture content. Most of the acreage is in forest, and the rest is chiefly in cultivated crops or pasture. Wetness is a very severe limitation, and infrequent flooding occurs for brief

periods. For most uses a system of surface drains or drains are needed in some places. If properly drained, this soil is fairly well suited to a few of the locally grown crops. Areas that are farmed are used mainly for corn, soybeans, small grain, and pasture. Capability unit IVw-4; woodland suitability group 2w9.