

## *Goldsboro Series*

The Goldsboro series consists of moderately well drained, nearly level and gently sloping soils on uplands. These soils formed in Coastal Plain sediment. A seasonal high water is at a depth of about 2 ½ feet. Gray mottles are within the zone affected by the high water table.

In a typical profile, the surface layer is dark-gray and light yellowish-brown sandy loam about 17 inches thick. The subsoil is about 48 inches thick and is friable sandy clay loam. The upper part of the subsoil is dominantly brownish yellow and is mottled with strong brown and gray. The lower part is gray and is mottled with brownish yellow and red. A layer of light-gray sandy clay loam mottled with gray is below the subsoil and extends to a depth of about 75 inches.

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

The Goldsboro soils in Pitt County are important for farming. Most of the acreage is cultivated or in pasture, and the rest is chiefly in forest and in housing developments or other nonfarm uses. Major limitations to use of these soils are the seasonal high water table and slope. In areas used for crops, response is good to recommended applications of fertilizer and lime.

Representative profile of Goldsboro sandy loam, 0 to 1 percent slopes, 1 mile east of Piney Grove Church, 1 mile south of Frog Level, 450 feet north of State Road No. 1128, and 20 feet east of a field path:

- Ap-0 to 7 inches, dark gray (10YR 4/1) sandy loam; weak, fine, granular structure; very friable; many small roots; medium acid; clear, smooth boundary.
- A2- 7 to 17 inches, light yellowish-brown (2.5 Y 6/4) sandy loam; weak, medium, granular structure; very friable; many small and few medium roots; few medium root channels; dark gray material in old root channels; medium acid; gradual, wavy boundary.
- B1t-17 to 20 inches, olive yellow (2.5Y 6/6) sandy clay loam; weak, medium, subangular blocky structure; friable, slightly sticky and slightly plastic; few medium roots and root channels; few, thin, patchy clay films on faces of peds; very strongly acid; gradual, wavy boundary.
- B21t-20 to 27 inches, brownish-yellow (10YR 6/6) sandy clay loam; few, medium, distinct, strong-brown (7.5YR 5/8) mottles; weak, medium, subangular blocky structure; friable, slightly sticky and slightly plastic; few medium roots and root channels; thin, patchy clay films on faces of peds; very strongly acid; gradual, wavy boundary.
- B22t-27 to 49 inches, brownish-yellow (10YR 6/6) sandy clay loam; common, medium, distinct, gray (10YR 5/1) mottles and few, fine, distinct, strong-brown mottles; weak, medium, subangular blocky structure; friable, slightly sticky and slightly plastic; thin, patchy clay films on faces of peds; very strongly acid; gradual, wavy boundary.
- B3tg-49 to 65 inches, gray (10Yr 6/1) sandy clay loam; common, medium, distinct, brownish-yellow (10YR 6/8) mottles and few, fine, prominent, red mottles; weak, medium, subangular blocky structure; friable, slightly sticky and slightly plastic; few, thin, patchy clay films on faces of peds; very strongly acid; gradual, wavy boundary.
- Cg-65 to 75 inches, light-gray (10YR 7/1) sandy clay loam; common, medium, faint, gray (10YR 5/1) mottles; massive; friable, slightly sticky and slightly plastic; very strongly acid.

The solum is 60 inches or more thick. The A horizon is 9 to 20 inches thick. The Ap or A1 horizon is dark gray to grayish brown, and the A2 horizon is light yellowish brown to pale brown. The B horizon is olive yellow to brownish yellow in the upper part and is gray in the lower part. It is sandy clay loam to sandy loam and is 40 to more than 51 inches thick. Gray mottles are at depths within 30 inches of the surface. The C horizon is commonly light gray or gray. Its texture ranges from sand to clay, but it is dominantly sandy clay loam.

**Goldsboro sandy loam, 0 to 1 percent slopes (GoA).** – This is a moderately well drained soil on broad, smooth divides in the uplands. It occurs in areas of irregular shape that are 4 to 15 acres in size. The profile is the one described as representative of the Goldsboro series. The surface layer is dark-gray and light yellowish-brown sandy loam about 17 inches thick. The subsoil is about 48 inches thick and is friable sandy clay loam. The upper part of the subsoil is

dominantly brownish yellow and is mottled with strong brown and gray. The lower part is gray and is mottled with brownish yellow and red.

Included with this soil in mapping were a few areas of soils that have a similar profile but that have slopes of more than 1 percent; a few areas of soils that have a surface layer of loamy fine sand of fine sandy loam; and small areas of Norfolk, Lynchburg, and Rains soils.

Infiltration is moderate. Runoff is slow.

This soil is easy to keep in good tilth and can be satisfactorily worked throughout a wide range of moisture content. Most of the acreage is in cultivated crops of pasture. The rest is chiefly in forest and in housing developments or other nonfarm uses. This soil is well suited to all the locally grown crops, but wetness is a moderate limitation. In places artificial drainage is needed for optimum returns from tobacco and other crops that require good drainage. Capability unit IIw-1; woodland suitability group 2w8.

**Goldsboro sandy loam, 1 to 6 percent slopes (GoB).** - This is a moderately well drained soil on smooth side slopes in the uplands. It occurs in areas of irregular shape that are less than 4 acres to as much as 14 acres in size. The surface layer is grayish-brown sandy loam 9 to 20 inches thick. The subsoil is olive-yellow to brownish-yellow, friable sandy clay loam and is 40 to more than 51 inches thick. The lower part of the subsoil is commonly gray. Gray mottles are within 30 inches of the surface.

Included with this soil in mapping were a few areas of soils that have a similar profile but that have slopes of less than 1 percent or of more than 6 percent. Also included were small moderately eroded areas and a few areas of soils that have a surface layer of loamy fine sand or fine sandy loam. Other inclusions consist of small areas of Norfolk, Aycock, and Exum soils.

Infiltration is moderate. Runoff is medium

This soil is easy to keep in good tilth and can be satisfactorily worked throughout a wide range of moisture content. Most of the acreage is in cultivated crops and pasture. The rest is chiefly in forest and in housing developments or other nonfarm uses. This soil is well suited to all locally grown crops, but erosion is a moderate hazard. Where cultivated crops are grown practices that effectively control runoff and that reduces erosion are needed. Capability unit IIe-2; woodland suitability group 2w8.