

Exum Series

The Exum 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 table is at a depth of about 2 ½ feet. Gray mottles are within the zone affected by high water table.

In a typical profile, the surface layer is grayish-brown and light yellowish-brown fine sandy loam about 12 inches thick. The subsoil extends to a depth of about 72 inches. In the upper part, the subsoil is brownish-yellow, friable clay loam mottled with light yellowish-brown, light brownish gray, gray, and yellowish red. In the lower part, it is gray, friable sandy clay loam mottled with yellowish red and brownish yellow.

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

The Exum soils in Pitt County are important for farming. Most of the acreage is cultivated or in pasture. 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. Crops respond well to recommended applications of fertilizer and lime.

Representative profile of Exum fine sandy loam, 0 to 1 percent slopes, one-fourth mile northwest of Chicod, 65 feet southwest of State Highway No 43, and 15 feet southwest of telephone pole No 4:

- Ap-0 to 7 inches, grayish-brown (10YR 5/2) fine sandy loam; weak, medium, granular structure; very friable, many small and medium roots; medium acid; abrupt, smooth boundary.
- A2-7 to 12 inches, light yellowish-brown (2.5YR 6/4) fine sandy loam; weak, medium, granular structure; very friable, few medium roots; medium acid; clear, wavy boundary.
- B1t-12 to 15 inches, brownish yellow (10YR 6/6) clay loam; weak medium, subangular blocky structure; friable; medium roots and root channels; few, thin, patchy clay films on faces of peds; strongly acid; wavy boundary.
- B21t-15 to 26 inches, brownish-yellow (10YR 6/6) clay loam; few, weak, medium, distinct, light yellowish-brown (10YR 6/4) mottles; weak, medium, subangular blocky structure; friable; medium roots and root channels; patchy clay films on faces of peds; very strongly acid; gradual, wavy boundary.
- B22t-26 to 44 inches, brownish-yellow (10YR 6/6) clay loam; few, medium, distinct, light brownish-gray (10YR 6/2) mottles; weak, medium, subangular blocky structure; friable, sticky and plastic; patchy clay films on faces of peds; very strongly acid; gradual, wavy boundary.
- B23t-44 to 62 inches, brownish-yellow (10YR 6/6) clay loam; common, medium, distinct, gray (10YR 5/1) mottles and few, medium, prominent, yellowish-red (5YR 5/8) mottles; weak, medium, angular blocky structure; friable, sticky and plastic; patchy clay films on faces of peds; very strongly acid; gradual, wavy boundary.
- B3tg -62 to 72 inches, gray (10YR 6/1) sandy clay loam; common, medium, prominent, yellowish-red (5YR 5/8) mottles and few, medium, distinct, brownish-yellow (10YR 6/8) mottles; weak, medium, angular blocky and platy structure; friable; very strongly acid.

The solum is more than 60 inches thick. The A horizon is 7 to 20 inches thick. The A1 or Ap horizon is dark grayish brown or grayish brown, and the A2 horizon is light yellowish brown to pale yellow. The B horizon is 40 to more than 53 inches thick. It is mottled with yellowish red and yellowish brown and also has grayish mottles within 30 inches of the surface. The B2 horizon is brownish yellow to yellowish brown and is silty clay loam or clay loam. The B3 horizon is commonly gray sandy clay loam. The C horizon is gray loamy sand to clay.

Exum fine sandy loam, 0 to 1 percent slopes (ExA) – This is a moderately well drained soil on broad, smooth divides in the uplands. It occurs in areas of irregular shape that are 5 to 35 acres in size. The profile is the one described as representative of the Exum series. The surface layer is grayish-brown and light yellowish-brown fine sandy loam about 12 inches thick. The subsoil extends to a depth of about 72 inches. In the upper part, the subsoil is brownish-yellow, friable clay loam mottled with light yellowish brown, light brownish gray, gray and yellowish-

red. In the lower part, it is gray, friable sandy clay loam mottled with yellowish red and 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 silt loam, very fine sandy loam, sandy loam, or loam. Also included were small areas of Aycock, Norfolk, Goldsboro, and Nahunta soils.

Infiltration is moderate. Runoff is slow.

This soil is easy to keep in good tilth and can be satisfiably worked throughout a wide range of moisture content. Most of the acreage is cultivated or in 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, and it is especially well suited to tobacco, peanuts, and cotton. 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.

Exum fine sandy loam, 1 to 6 percent slopes (ExB) – This is a moderately well drained soil on smooth side slopes in the uplands. It occurs in areas that are long and narrow or irregular in shape and that are 3 to 12 acres in size. The surface layer is grayish-brown fine sandy loam about 7 to 20 inches thick. The subsoil is dominantly brownish-yellow, friable clay loam 40 to more than 53 inches thick. 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 a surface layer of silt loam, sandy loam or loam. Also included were small areas of soils that also have a similar profile but that are moderately to severely eroded in some spots. Other inclusions consist of small areas of Aycock, Norfolk and Craven 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 cultivated or in 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. Because of slopes and runoff, however, erosion is a moderate hazard. Where cultivated crops are grown, practices that effectively control runoff and that reduce erosion are needed. Capability unit IIe-2; woodland suitability group 2w8.