

## Soil Survey of Knox County, TN- US Dept Agriculture/ Natural Resources Conservation Service

“Information from this publication can be useful in planning the use and management of small areas.”

According to the map of the property - soil types on the 88-acre property are:

### 1. AmF-Apison-Montevallo complex- 35-75% slope

Landscape Position- shoulders, side slopes, and backslopes

Major use- most areas are in woodland consisting of mainly of mixed hardwoods

#### Use and Management:

1. **Cropland- unsuited** due to severe hazard of erosion and equipment use limitation because of the slope
2. **Pasture/Hay- poorly suited to unsuited-** equipment use limitation on steep slopes
3. **Development- poorly suited-** due to slopes and limited depth to bedrock, severity of limitations

causes considerable expense designing structures that function properly

Permeability-moderate

Available water capacity- low to very low

Depth to Bedrock- Apison- 20-40 inches Montevallo 7-20 inches

**Land capability classification**- 7s (Class 7 soils - **very severe limitations make them unsuitable for cultivation restrict the use mainly to grazing, forestland, or wildlife habitat. The “s” means soil is limited because it is shallow, droughty, or stony**)

### 2. AmD- Apison-Montevallo complex- 12-25% slope

Landscape positions- ridgetops, shoulders, and lower side slopes

Major use- most areas are in woodland consisting of mainly of mixed hardwoods

#### Use and Management:

1. **Cropland- poorly suited-** due to severe hazard of erosion when cultivated crops are grown
2. **Pasture/Hay- poorly suited-** due to slope and limited water capacity
3. **Development- poorly suited-** due to slopes and limited depth to bedrock, severity of limitations

causes considerable expense designing structures that function properly

Permeability-moderate

Available water capacity- low to very low

Depth to Bedrock- Apison- 20-40 inches Montevallo 7-20 inches

**Land capability classification** -6e (Class 6 soils have **severe limitations that make them generally unsuitable for cultivation restricting their use mainly to pasture, forestland, or wildlife habitat. The “e” means the main hazard is the risk of erosion unless close-growing plant cover is maintained**)

### 3. NnD3- Nonaburg channery silt loam- 12-25% slopes, severely eroded, rocky

Landscape Position- shoulders and side slopes

Major use- most areas are cleared and used as pasture or they are idle

#### Use and Management:

1. **Cropland- unsuited** due to hazard of erosion and very low water capacity and shallow root zone
2. **Pasture/Hay- poorly suited** – due to slope, very low available water capacity, and shallow root zone
3. **Development- poorly suited**- the main limitations affecting urban uses are the shallow depth to bedrock and rock outcrops

Permeability – Moderately slow

Available water capacity- very low

Depth to bedrock- 10-20 inches

**Land capability classification - 6e** (Class 6 soils have **severe limitations that make them generally unsuitable for cultivation restricting their use mainly to pasture, forestland, wildlife habitat. The “e” means the main hazard is the risk of erosion unless close-growing plant cover is maintained**)

### 4. SwB- Swafford silt loam- 2-5% slope

Landscape positions- low stream terraces, toe slopes, and foot slopes

Major use- most areas are cleared and used for pasture, hay, or cropland

#### Use and Management:

1. **Cropland- well suited** -hazard of erosion is moderate when cultivated crops are grown, using contour farming, terraces, and cover crops to control erosion, increase infiltration rates, and prevent sediment in runoff water from entering streams
2. **Pasture/Hay- well suited** – this soil has few limitations affecting pasture and hay
3. **Development- moderately suited**- wetness from a perched water table is the limitation affecting most urban uses.

Permeability- moderately slow

Available water capacity- low

Depth to bedrock- more than 60 inches

**Land capability classification- 2e** (Class 2 soils have **moderate limitations that restrict the choice of plants or that require moderate conservation practices. The “e” means the main hazard is the risk of erosion unless close-growing plant cover is maintained**)

