

Major Land Resource Area 085B

Arbuckle Uplift

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Ecological site keys

Arbuckle Uplift and Arbuckle Mountains

- I. Soils forming in residuum, slope alluvium, colluvium, or Pleistocene-age alluvium
 - A. Soils forming in parent material derived mostly from limestone, dolostone, or limestone conglomerate
 - 1 Slope gradient is greater than 20 percent and soil is shallow to bedrock ... R085BY026OK – Edgerock 38-42 PZ
 - 2 Slope gradient is less than 20 percent
 - i. Depth to bedrock is less than 50 cm (shallow)
 - a. Soil has an argillic horizon ... R085BY056OK – Loamy Upland 38-42 PZ
 - b. Soil does not have an argillic horizon
 - 1) Rock fragment content is less than 20 percent by volume ... R085BY098OK – Very Shallow 38-42 PZ
 - 2) Rock fragment content is greater than 20 percent by volume
 - a) Bedrock with greater than 20 degrees of dip and site is physiographically located in Arbuckle Mountains ... R085BY026OK – Edgerock 38-42 PZ
 - b) Limestone conglomerate bedrock with less than 20 degrees of dip ... R085BY083OK – Shallow Upland 38-42 PZ
 - ii. Depth to bedrock is greater than 50 cm ... R085BY056OK – Loamy Upland 38-42 PZ
 - B. Soils forming in parent material derived mostly from granite, rhyolite, sandstone, conglomerate (noncalcareous), or shale
 - 1 Depth to bedrock is less than 50 cm (shallow)
 - i. Ochric epipedon (light colored surface horizon)
 - a. Rock fragment content is less than 20 percent by volume; lithic contact with tilted sandstone ... R085BY083OK – Shallow Upland 38-42 PZ
 - b. Rock fragment content is greater than 20 percent by volume; lithic contact with indurated Missippian-age sandstone ... R085BY098OK – Very Shallow 38-42 PZ
 - ii. Mollic epipedon (dark colored surface horizon)
 - a. Shallow to tilted rhyolite bedrock ... R085BY028OK – Rhyolite Hills 38-42 PZ
 - b. Shallow to tilted platy shale and siltstone ... R085BY088OK – Shallow Savannah 38-42 PZ
 - 2 Depth to bedrock is greater than 50 cm
 - i. Loamy surface texture
 - a. Less than 100 cm to bedrock
 - 1) Rock or pararock fragment content is greater than 20 percent by volume ... R085BY076OK – Savannah 38-42 PZ
 - 2) Rock or pararock fragment content is less than 20 percent by volume
 - a) Parent material is red shale with limestone cobbles ... R085BY083OK – Shallow Upland 38-42 PZ
 - b) Parent material is shale or sandstone without limestone cobbles

(1) Subsoil is clayey with slickensides; Pennsylvanian shale and sandstone bedrock ... R085BY056OK – Loamy Upland 38-42 PZ

(2) Subsoil is loamy; tilted indurated sandstone bedrock ... R085BY076OK – Savannah 38-42 PZ

b. Greater than 100 cm to bedrock

1) Underlain by granite bedrock

a) Mollic epipedon; loamy argillic horizon ... R085BY056OK – Loamy Upland 38-42 PZ

b) Ochric epipedon; clayey argillic horizon ... R085BY010OK – Claypan 38-42 PZ

2) Not underlain by granite bedrock

a) Mollic epipedon (dark colored surface horizon)

(1) Rock fragment content greater than 15 percent by volume in the surface horizon ... R085BY076OK – Savannah 38-42 PZ

(2) Rock fragment content less than 15 percent by volume in surface horizon

(a) Red shale (hue of 5YR or redder) within 200 cm ... R085BY010OK – Claypan 38-42 PZ

(b) Lower solum has yellow colors (hue of 7.5YR or yellower) ... R085BY056OK – Loamy Upland 38-42 PZ

b) Ochric epipedon (light colored surface horizon)

(1) Parent material is colluvium ... R085BY076OK – Savannah 38-42 PZ

(2) Parent material is residuum, slope alluvium, or alluvium

(a) Subsoil has slickensides and gleyed colors within 20 cm ... R085BY010OK – Claypan 38-42 PZ

(b) Subsoil does not slickensides or gleyed colors within 20 cm ... R085BY076OK – Savannah 38-42 PZ

ii. Clayey surface texture with slickensides in subsoil ... R085BY002OK – Clay Upland 38-42 PZ

II. Soils forming in Holocene and late-Pleistocene-age alluvium on a flood plain, flood-plain step, or proximal stream terrace.

A. Landform is a flood plain or flood-plain step with active channel cut and fill.

1 Surface horizon is sandy ... R080AY068OK

2 Surface horizon is loamy or clayey

i. Subsoil is loamy ... R085BY050OK – Loamy Bottomland 38-42 PZ

ii. Subsoil is clayey ... R080AY045OK

B. Landform is a stream terrace

1 Mollic epipedon ... R085BY056OK – Loamy Upland 38-42 PZ

2 Ochric epipedon

i. Sandy surface greater than 100 cm ... R084AY018OK

ii. Sandy surface less than 100 cm ... R085BY076OK – Savannah 38-42 PZ