PEDON DESCRIPTION -- NEON Site DELA

Print Date: Sep 3 2017

Description Date: Sep 28 2015

Describer: C.Hatcher, J.Velazquez, G.Reynolds

NEON Plot ID: DELA_003

Site ID: S2015AL063001

Pedon ID: S2015AL063001

Site Note: This site has been used as a representative pedon for a NEON project in Dead-Lake; Greene County; AL. It's been utilized for full characterization and sampling. USER SITE/PEDON ID: S2015AL063001(DELA_003)

Pedon Note: This site has been used as a representative pedon for a NEON project in Dead-Lake, Greene County, AL. It's been utilized for full characterization and sampling. USER SITE/PEDON ID: S2015AL063001(DELA_003)

Lab Source ID:

Lab Pedon #:

Soil Name as Described/Sampled: Angie

Classification: Fine, mixed, semiactive, thermic Aquic Paleudults

Soil Name as Correlated:

Classification:

Pedon Type: confirmation description

Pedon Purpose: research site

Taxon Kind: series

Associated Soils: angie, leaf

Physiographic Division:

Physiographic Province:

Physiographic Section:

State Physiographic Area:

Local Physiographic Area: Black Warrior River Alluvial Valley

Geomorphic Setting: on tread of alluvial plain
on tread of stream terrace

Upslope Shape: linear

Cross Slope Shape: convex

Particle Size Control Section: 6 to 56 cm.

Description origin: NASIS

Diagnostic Features: ochric epipedon 0 to 6 cm.
argillic horizon 6 to 90 cm.

Country: United States

State: Alabama

County: Greene

MLRA: 133A -- Southern Coastal Plain

Soil Survey Area: AL063 -- Greene County, Alabama
7-TUP -- Tupelo, Mississippi

Map Unit: AS -- Angie-Leaf association

Pit Location: Site was sampled one meter north (360 degrees) and one meter east (90 degrees)of the southwest(225 degrees) corner. Samples were collected on the north (360 degrees) face of the one meter by one meter by one meter pit.

Quad Name: Center Hill, Alabama

Std Latitude: 32.5347694

Std Longitude: -87.8153000

Latitude: 32 degrees 32 minutes 5.17 seconds north

Longitude: 87 degrees 48 minutes 55.08 seconds west

Datum: WGS84

UTM Zone: 16

UTM Easting: 423440 meters

UTM Northing: 3600006 meters

Primary Earth Cover: Tree cover

Secondary Earth Cover: Hardwoods

Existing Vegetation:

Parent Material: silty and clayey alluvium

Bedrock Kind:

Bedrock Depth:

Bedrock Hardness:

Bedrock Fracture Interval:

Surface Fragments:

Description database: MLRA07_Auburn

Cont. Site ID: S2015AL063001 **Pedon ID:** S2015AL063001

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
0.5	84.0		17.2	27.5	9.5	1,410	231	well	100	100.0

A--0 to 6 centimeters (0.0 to 2.4 inches); dark yellowish brown (10YR 3/4) silty clay loam; moderate fine granular, and moderate medium granular structure; friable, slightly sticky, slightly plastic; nonfluid; many very fine roots throughout and many medium roots throughout and many fine roots throughout and common coarse roots throughout; abrupt smooth boundary.

Bt--6 to 36 centimeters (2.4 to 14.2 inches); dark yellowish brown (10YR 3/4) clay; strong medium subangular blocky, and strong coarse subangular blocky structure; firm, moderately sticky, moderately plastic; nonfluid; many very fine roots throughout and many medium roots throughout and many fine roots throughout and many coarse roots throughout; 15 percent faint clay films on all faces of peds; gradual wavy boundary.

2Bt1--36 to 70 centimeters (14.2 to 27.6 inches); dark brown (7.5YR 3/4) clay loam; moderate fine subangular blocky, and moderate medium subangular blocky structure; firm, slightly sticky, slightly plastic; nonfluid; few very fine roots between peds and common medium roots between peds and common fine roots between peds; 15 percent faint clay films on all faces of peds; 30 percent medium faint irregular 7.5YR 5/4), moist, masses of oxidized iron with clear boundaries In matrix; gradual wavy boundary.

2Bt2--70 to 90 centimeters (27.6 to 35.4 inches); yellowish red (5YR 4/6) clay loam; strong fine subangular blocky, and strong medium subangular blocky structure; firm, slightly sticky, slightly plastic; nonfluid; few fine roots between peds and few coarse roots between peds; 15 percent faint clay films on all faces of peds; 1 percent medium faint irregular 7.5YR 4/6), moist, masses of oxidized iron with clear boundaries In matrix and 15 percent medium prominent irregular 2.5Y 5/4), moist, masses of oxidized iron with clear boundaries In matrix.

PEDON DESCRIPTION -- NEON Site DELA

Print Date: Sep 3 2017
Description Date: Sep 30 2015
Describer: Hatcher, Velazquez, Reynolds
NEON Plot ID: DELA_009
Site ID: S2015AL063002

Pedon ID: S2015AL063002
Site Note:

Pedon Note:
Lab Source ID:
Lab Pedon #:
Soil Name as Described/Sampled: Annemaine
Classification: Fine, mixed, semiactive, thermic Aquic Hapludults

Soil Name as Correlated:

Classification:
Pedon Type: correlates to named soil
Pedon Purpose: research site
Taxon Kind: series
Associated Soils: Angie, Annemaine, Leaf
Physiographic Division:
Physiographic Province:

Physiographic Section:
State Physiographic Area:
Local Physiographic Area: Black Warrior River Alluvial Valley
Geomorphic Setting: on tread of alluvial plain
on tread of stream terrace
Upslope Shape: linear
Cross Slope Shape: convex
Particle Size Control Section: 14 to 64 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 14 cm.
argillic horizon 14 to 90 cm.

Country: United States
State: Alabama
County: Greene
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area: AL063 -- Greene County, Alabama
7-TUP -- Tupelo, Mississippi
Map Unit: AS -- Angie-Leaf association
Pit Location: Site was sampled one meter north (360 degrees) and one meter east (90 degrees)of the southwest(225 degrees) corner. Samples were collected on the north (360 degrees) face of the one meter by one meter by one meter pit.
Quad Name: Center Hill, Alabama
Std Latitude: 32.5341667
Std Longitude: -87.8172222

Latitude: 32 degrees 32 minutes 3.00 seconds north
Longitude: 87 degrees 49 minutes 2.00 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 423259 meters
UTM Northing: 3599941 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Intermixed conifers and hardwoods
Existing Vegetation:
Parent Material: silty and clayey alluvium
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA07_Auburn

Cont. Site ID: S2015AL063002 **Pedon ID:** S2015AL063002

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
2.0	77.0	155	17.2	27.5	9.5	1,410	231	moderately well	100	100.0

A--0 to 14 centimeters (0.0 to 5.5 inches); dark brown (10YR 3/3) loam; weak fine granular, and weak medium granular structure; friable, nonsticky, nonplastic; nonfluid; high excavation difficulty; common very fine roots throughout and common very coarse roots throughout and common medium roots throughout and common fine roots throughout and common coarse roots throughout; abrupt smooth boundary.

Bt1--14 to 55 centimeters (5.5 to 21.7 inches); brown (10YR 4/3) exterior and very dark grayish brown (10YR 3/2) interior clay; strong medium subangular blocky, and strong coarse subangular blocky structure; firm, moderately sticky, moderately plastic; nonfluid; high excavation difficulty; common very fine roots throughout and common very coarse roots throughout and common medium roots throughout and common fine roots throughout and common coarse roots throughout; 40 percent faint clay films on all faces of peds; 10 percent fine faint irregular 7.5YR 5/8), moist, masses of oxidized iron with sharp boundaries Throughout and 10 percent fine faint irregular 10YR 5/2), moist, masses of reduced iron with sharp boundaries Throughout; clear wavy boundary.

Bt2--55 to 80 centimeters (21.7 to 31.5 inches); brown (7.5YR 4/4) clay loam; moderate medium subangular blocky structure; firm, moderately sticky, moderately plastic; nonfluid; high excavation difficulty; few very fine roots throughout and common medium roots throughout and common fine roots throughout and few coarse roots throughout; 35 percent faint clay films on all faces of peds; 1 percent prominent irregular 10YR 2/1), moist, iron-manganese concretions with clear boundaries Throughout and 25 percent fine faint irregular 10YR 5/3), moist, masses of oxidized iron with sharp boundaries Throughout and 25 percent fine faint irregular 10YR 5/2), moist, masses of reduced iron with sharp boundaries Throughout; gradual wavy boundary.

Bt3--80 to 100 centimeters (31.5 to 39.4 inches); yellowish brown (10YR 5/6) loam; moderate medium subangular blocky structure; firm, slightly sticky, slightly plastic; nonfluid; high excavation difficulty; common medium roots throughout and few fine roots throughout; 20 percent faint clay films on all faces of peds; 1 percent prominent irregular 10YR 2/1), moist, iron-manganese concretions with clear boundaries Throughout and 21 percent fine distinct irregular 10YR 5/2), moist, masses of oxidized iron with sharp boundaries Throughout and 22 percent fine distinct irregular 7.5YR 5/6), moist, masses of oxidized iron with sharp boundaries Throughout.

PEDON DESCRIPTION -- NEON Site DELA

Print Date: Sep 3 2017

Description Date: Sep 30 2015

Describer: C.Hatcher, J.Velazquez, G.Reynolds

NEON Plot ID: DELA_008

Site ID: S2015AL063003

Pedon ID: S2015AL063003

Site Note: This site has been used as a representative pedon for a NEON project in Dead-Lake; Greene County; AL. It's been utilized for full characterization and sampling. USER SITE/PEDON ID: S2015AL063003(DELA_008)

Pedon Note: This site has been used as a representative pedon for a NEON project in Dead-Lake, Greene County, AL. It's been utilized for full characterization and sampling. USER SITE/PEDON ID: S2015AL063003(DELA_008)

Lab Source ID:

Lab Pedon #:

Soil Name as Described/Sampled: Bethera

Classification: Fine, mixed, semiactive, thermic Typic Paleaquults

Soil Name as Correlated:

Classification:

Pedon Type: confirmation description

Pedon Purpose: research site

Taxon Kind: series

Associated Soils: Angie, Atmore, Leaf, Mashulaville

Physiographic Division:

Physiographic Province:

Physiographic Section:

State Physiographic Area:

Local Physiographic Area: Black Warrior River Alluvial Valley

Geomorphic Setting: on tread of alluvial plain
on tread of stream terrace

Upslope Shape: linear

Cross Slope Shape: concave

Particle Size Control Section: 11 to 61 cm.

Description origin: NASIS

Diagnostic Features: ochric epipedon 0 to 11 cm.
reduced matrix 0 to 97 cm.
argillic horizon 11 to 97 cm.

Country: United States

State: Alabama

County: Greene

MLRA: 133A -- Southern Coastal Plain

Soil Survey Area: AL063 -- Greene County, Alabama
7-TUP -- Tupelo, Mississippi

Map Unit: Le -- Leaf silt loam

Pit Location: Site was sampled one meter north (360 degrees) and one meter east (90 degrees)of the southwest(225 degrees) corner. Samples were collected on the north (360 degrees) face of the one meter by one meter by one meter pit.

Quad Name: Center Hill, Alabama

Std Latitude: 32.5394444

Std Longitude: -87.8144444

Latitude: 32 degrees 32 minutes 22.00 seconds north

Longitude: 87 degrees 48 minutes 52.00 seconds west

Datum: WGS84

UTM Zone: 16

UTM Easting: 423524 meters

UTM Northing: 3600524 meters

Primary Earth Cover: Tree cover

Secondary Earth Cover: Hardwoods

Existing Vegetation:

Parent Material: silty and clayey alluvium

Bedrock Kind:

Bedrock Depth:

Bedrock Hardness:

Bedrock Fracture Interval:

Surface Fragments:

Description database: MLRA07_Auburn

Cont. Site ID: S2015AL063003 **Pedon ID:** S2015AL063003

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
0.5	80.0		17.2	27.5	9.5	1,410	231	poorly	80	80.0

Ag--0 to 11 centimeters (0.0 to 4.3 inches); light olive brown (2.5Y 5/4) silty clay; weak fine granular, and weak medium granular structure; friable, nonsticky, nonplastic; nonfluid; many very fine roots throughout and many very fine roots throughout and many very fine roots throughout and many very fine roots throughout and many very fine roots throughout; 5 percent fine distinct irregular 10YR 5/8), moist, masses of oxidized iron with clear boundaries In matrix and 5 percent medium distinct irregular 10YR 5/8), moist, masses of oxidized iron with clear boundaries In matrix and 5 percent medium distinct irregular 10YR 5/8), moist, masses of oxidized iron with clear boundaries In matrix and 6 percent coarse prominent irregular 7.5YR 5/8), moist, masses of oxidized iron with clear boundaries In matrix and 7 percent fine prominent irregular 7.5YR 5/8), moist, masses of oxidized iron with clear boundaries In matrix and 7 percent medium prominent irregular 7.5YR 5/8), moist, masses of oxidized iron with clear boundaries In matrix; abrupt smooth boundary.

Btg1--11 to 33 centimeters (4.3 to 13.0 inches); grayish brown (10YR 5/2) silty clay; moderate fine subangular blocky, and moderate medium subangular blocky, and moderate coarse subangular blocky structure; firm, slightly sticky, slightly plastic; nonfluid; few very coarse roots throughout and common very coarse roots throughout and many medium roots throughout and many fine roots throughout and few coarse roots throughout; 10 percent distinct clay films on surfaces along root channels; 2 percent medium faint irregular 10YR 5/4), moist, masses of oxidized iron with clear boundaries In matrix and 3 percent fine faint irregular 10YR 5/4), moist, masses of oxidized iron with clear boundaries In matrix and 13 percent medium prominent irregular 2.5YR 4/8), moist, masses of oxidized iron with clear boundaries In matrix and 13 percent medium prominent irregular 2.5YR 4/8), moist, masses of oxidized iron with clear boundaries In matrix and 14 percent fine prominent irregular 2.5YR 4/8), moist, masses of oxidized iron with clear boundaries In matrix; clear smooth boundary.

Btg2--33 to 97 centimeters (13.0 to 38.2 inches); gray (2.5Y 6/1) clay; strong medium subangular blocky, and strong coarse subangular blocky structure; firm, slightly sticky, slightly plastic; nonfluid; few fine roots throughout; 10 percent distinct clay films on surfaces along root channels; 6 percent coarse prominent irregular 10YR 5/8), moist, masses of oxidized iron with clear boundaries In matrix and 6 percent coarse prominent irregular 7.5YR 5/6), moist, masses of oxidized iron with clear boundaries In matrix and 7 percent fine prominent irregular 7.5YR 5/6), moist, masses of oxidized iron with clear boundaries In matrix and 7 percent medium prominent irregular 10YR 5/8), moist, masses of oxidized iron with clear boundaries In matrix and 7 percent fine prominent irregular 10YR 5/8), moist, masses of oxidized iron with clear boundaries In matrix and 7 percent medium prominent irregular 7.5YR 5/6), moist, masses of oxidized iron with clear boundaries In matrix.

PEDON DESCRIPTION -- NEON Site DELA

Print Date: Sep 3 2017
Description Date: Sep 30 2015
Describer: Hatcher, Velazquez, Reynolds
NEON Plot ID: DELA_023
Site ID: S2015AL063004

Pedon ID: S2015AL063004

Site Note:

Pedon Note:
Lab Source ID:
Lab Pedon #:
Soil Name as Described/Sampled: Angie
Classification: Fine, mixed, semiactive, thermic Aquic Paleudults

Soil Name as Correlated:

Classification:
Pedon Type: correlates to named soil
Pedon Purpose: research site
Taxon Kind: series
Associated Soils: Angie, Annemaine, Leaf
Physiographic Division:
Physiographic Province:

Physiographic Section:
State Physiographic Area:
Local Physiographic Area: Black Warrior River Alluvial Valley
Geomorphic Setting: on tread of alluvial plain
on tread of stream terrace
Upslope Shape: linear
Cross Slope Shape: convex
Particle Size Control Section: 12 to 62 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 12 cm.
argillic horizon 12 to 90 cm.

Country: United States
State: Alabama
County: Greene
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area: AL063 -- Greene County, Alabama
7-TUP -- Tupelo, Mississippi
Map Unit: LF -- Leaf-Angie association
Le -- Leaf silt loam

Pit Location: Site was sampled one meter north (360 degrees) and one meter east (90 degrees)of the southwest(225 degrees) corner. Samples were collected on the north (360 degrees) face of the one meter by one meter by one meter pit.

Quad Name: Center Hill, Alabama
Std Latitude: 32.5413889
Std Longitude: -87.8127778

Latitude: 32 degrees 32 minutes 29.00 seconds north
Longitude: 87 degrees 48 minutes 46.00 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 423682 meters
UTM Northing: 3600738 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Intermixed conifers and hardwoods
Existing Vegetation:
Parent Material: silty and clayey alluvium
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA07_Auburn

Cont. Site ID: S2015AL063004 **Pedon ID:** S2015AL063004

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
0.5	78.0	120	17.2	27.5	9.5	1,410	231	well	100	100.0

A--0 to 12 centimeters (0.0 to 4.7 inches); very dark grayish brown (10YR 3/2) loam; weak medium subangular blocky, and weak fine subangular blocky structure; friable, nonsticky, nonplastic; nonfluid; low excavation difficulty; common very fine roots throughout and common very coarse roots throughout and common fine roots throughout and common coarse roots throughout; clear smooth boundary.

Bt1--12 to 33 centimeters (4.7 to 13.0 inches); dark yellowish brown (10YR 3/4) clay loam; moderate medium subangular blocky, and moderate coarse subangular blocky structure; firm, slightly sticky, slightly plastic; nonfluid; moderate excavation difficulty; few very fine roots throughout and common medium roots throughout and common fine roots throughout; 40 percent faint clay films on all faces of peds; 10 percent fine faint irregular 10YR 4/4), moist, masses of oxidized iron with sharp boundaries Throughout and 10 percent coarse faint irregular 10YR 4/4), moist, masses of oxidized iron with sharp boundaries Throughout and 10 percent fine faint irregular 10YR 4/4), moist, masses of oxidized iron with sharp boundaries Throughout; gradual wavy boundary.

Bt2--33 to 90 centimeters (13.0 to 35.4 inches); strong brown (7.5YR 4/6) clay loam; moderate medium subangular blocky, and moderate coarse subangular blocky structure; firm, slightly sticky, slightly plastic; nonfluid; high excavation difficulty; few fine roots throughout; 30 percent faint clay films on all faces of peds; 15 percent fine faint irregular 10YR 5/4), moist, masses of oxidized iron with sharp boundaries Throughout; gradual wavy boundary.

PEDON DESCRIPTION -- NEON Site DELA

Print Date: Sep 3 2017
Description Date: Sep 28 2015
Describer: Burns/Hopkins/Nichols
NEON Plot ID: DELA_016
Site ID: S2015AL063005

Pedon ID: S2015AL063005
Site Note:

Pedon Note:
Lab Source ID:
Lab Pedon #:
Soil Name as Described/Sampled:
Classification:

Soil Name as Correlated: Angie

Classification: Fine, mixed, semiactive, thermic Aquic Paleudults
Pedon Type: confirmation description
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:

Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on talf coastal plain
on talf flood plain
Upslope Shape: linear
Cross Slope Shape: linear
Particle Size Control Section: 32 to 82 cm.
Description origin: NASIS

Diagnostic Features: ochric epipedon 0 to 12 cm.
redox concentrations 0 to 100 cm.
redox depletions with chroma 2 or less 12 to 100 cm.
argillic horizon 32 to 100 cm.
reduced matrix 47 to 100 cm.

Country: United States
State: Alabama
County: Greene
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area: AL063 -- Greene County, Alabama
Map Unit:
Pit Location: Site was sampled one meter north (360 degrees) and one meter east (90 degrees)of the southwest(225 degrees) corner. Samples were collected on the north (360 degrees) face of the one meter by one meter by one meter pit.
Quad Name: Demopolis, Alabama
Std Latitude: 32.5356222
Std Longitude: -87.8082556

Latitude: 32 degrees 32 minutes 8.24 seconds north
Longitude: 87 degrees 48 minutes 29.72 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 424102 meters
UTM Northing: 3600096 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Intermixed conifers and hardwoods
Existing Vegetation:
Parent Material: alluvium
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA07_Auburn

Cont. Site ID: S2015AL063005 **Pedon ID:** S2015AL063005

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
1.0	25.6	38	17.2	27.5	9.5	1,410	231	somewhat poorly		

A--0 to 12 centimeters (0.0 to 4.7 inches); dark brown (10YR 3/3) clay loam; moderate fine subangular blocky structure; friable, slightly sticky, slightly plastic; many very fine roots and common medium roots and common coarse roots; many very fine dendritic tubular and few fine vesicular pores; 1 percent fine faint 7.5YR 4/6) masses of oxidized iron and 10 percent fine distinct manganese masses and 10 percent fine distinct 10YR 4/4) masses of oxidized iron; clear smooth boundary.

Ab--12 to 32 centimeters (4.7 to 12.6 inches); very dark grayish brown (10YR 3/2) clay loam; moderate medium subangular blocky structure; firm, slightly sticky, slightly plastic; common medium roots and common fine roots; many very fine dendritic tubular and few fine vesicular pores; 1 percent fine distinct iron depletions and 10 percent fine distinct 10YR 4/4) masses of oxidized iron and 12 percent fine distinct manganese masses; abrupt smooth boundary.

Bt--32 to 47 centimeters (12.6 to 18.5 inches); brown (10YR 5/3) clay loam; weak very fine prismatic, and moderate medium angular blocky structure; firm, moderately sticky, moderately plastic; few medium roots and few fine roots; few medium vesicular and few fine vesicular pores; 15 percent faint clay films on all faces of peds; 5 percent fine faint manganese masses and 10 percent fine distinct 10YR 6/2) iron depletions and 12 percent fine distinct 7.5YR 4/6) masses of oxidized iron; clear smooth boundary.

Btg1--47 to 67 centimeters (18.5 to 26.4 inches); clay loam; weak medium prismatic, and moderate medium angular blocky structure; firm, moderately sticky, moderately plastic; few medium roots and few fine roots; few medium vesicular and few fine vesicular pores; 10 percent faint clay films on all faces of peds; 3 percent fine faint manganese masses; Areas of yellowish brown and strong brown are redox concentrations and areas of light brownish gray are redox depletions.; clear smooth boundary.

Btg2--67 to 100 centimeters (26.4 to 39.4 inches); 70 percent gray (10YR 6/1) clay loam; weak medium subangular blocky structure; friable, slightly sticky, slightly plastic; few medium roots and few fine roots; few medium vesicular and few fine vesicular and irregular pores; 7 percent faint clay films on all faces of peds; 1 percent fine faint manganese masses; Areas of yellowish brown are redox concentrations and areas of gray are redox depletions.

PEDON DESCRIPTION -- NEON Site DELA

Print Date: Sep 3 2017
Description Date: Sep 29 2015
Describer: John Burns
NEON Plot ID: DELA_025
Site ID: S2015AL063006

Pedon ID: S2015AL063006
Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 16N0546
Soil Name as Described/Sampled: Angie-like
Classification: Fine, mixed, semiactive, thermic Aquic Paleudults

Soil Name as Correlated:

Classification:
Pedon Type: confirmation description
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:

Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: flood plain on coastal plain
Upslope Shape: convex
Cross Slope Shape: linear
Particle Size Control Section: 33 to 83 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 17 cm.
argillic horizon 33 to 100 cm.
reduced matrix 55 to 100 cm.

Country: United States
State: Alabama
County: Greene
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area: AL063 -- Greene County, Alabama
Map Unit:
Pit Location: Site was sampled one meter north (360 degrees) and one meter east (90 degrees)of the southwest(225 degrees) corner. Samples were collected on the north (360 degrees) face of the one meter by one meter by one meter pit.
Quad Name: Demopolis, Alabama
Std Latitude: 32.5353500
Std Longitude: -87.8101000

Latitude: 32 degrees 32 minutes 7.26 seconds north
Longitude: 87 degrees 48 minutes 36.36 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 423929 meters
UTM Northing: 3600067 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Intermixed conifers and hardwoods
Existing Vegetation:
Parent Material: clayey alluvium
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2015AL063006 **Pedon ID:** S2015AL063006

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
1.0	25.9		17.2	27.5	9.5	1,410	231	moderately well		

A--0 to 17 centimeters (0.0 to 6.7 inches); dark brown (10YR 3/3) clay loam; 28 percent clay; moderate medium subangular blocky structure; friable; common medium roots and common fine roots and common coarse roots; 10 percent fine distinct 10YR 5/6) masses of reduced iron and 10 percent coarse manganese masses and 10 percent fine faint iron-manganese masses; clear smooth boundary. Lab sample # 16N02379

AB--17 to 33 centimeters (6.7 to 13.0 inches); dark grayish brown (10YR 4/2) clay loam; 33 percent clay; weak very fine prismatic, and moderate medium subangular blocky structure; firm; common medium roots and common fine roots; 10 percent fine distinct 10YR 5/6) masses of reduced iron; gradual wavy boundary. Lab sample # 16N02380

Bt--33 to 55 centimeters (13.0 to 21.7 inches); light yellowish brown (10YR 6/4) clay loam; 36 percent clay; moderate medium subangular blocky structure; firm; common medium roots and common fine roots and common coarse roots; 10 percent fine distinct 10YR 7/1) and 10YR 6/2) and 10YR 5/8) masses of reduced iron and 10 percent coarse manganese masses; gradual smooth boundary. Lab sample # 16N02381

Btg--55 to 100 centimeters (21.7 to 39.4 inches); 70 percent light gray (10YR 7/2) and 15 percent strong brown (7.5YR 4/6) and 15 percent yellowish brown (10YR 5/8) clay loam; 32 percent clay; moderate medium subangular blocky structure; firm; common medium roots and common fine roots; 10 percent coarse manganese masses. Lab sample # 16N02382

PEDON DESCRIPTION -- NEON Site DELA

Print Date: Sep 3 2017
Description Date: Sep 29 2015
Describer: Burns/Hopkins/Jobe/Nichols
NEON Plot ID: DELA_028
Site ID: S2015AL063007
Pedon ID: S2015AL063007
Site Note:

Pedon Note:
Lab Source ID:
Lab Pedon #:
Soil Name as Described/Sampled:
Classification:

Soil Name as Correlated: Angie

Classification: Fine, mixed, semiactive, thermic Aquic Paleudults
Pedon Type: confirmation description
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:

Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on dip coastal plain
on dip flood plain
Upslope Shape: concave
Cross Slope Shape: linear
Particle Size Control Section: 32 to 82 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 12 cm.
redox depletions with chroma 2 or less 0 to 100 cm.
redox concentrations 0 to 100 cm.
argillic horizon 32 to 100 cm.
reduced matrix 51 to 100 cm.

Country: United States
State: Alabama
County: Greene
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area: 7-TUS -- Tuskegee, Alabama
Map Unit:
Pit Location: Site was sampled one meter north (360 degrees) and one meter east (90 degrees)of the southwest(225 degrees) corner. Samples were collected on the north (360 degrees) face of the one meter by one meter by one meter pit.
Quad Name: Demopolis, Alabama
Std Latitude: 32.5353750
Std Longitude: -87.8117306

Latitude: 32 degrees 32 minutes 7.35 seconds north
Longitude: 87 degrees 48 minutes 42.23 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 423775 meters
UTM Northing: 3600071 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Intermixed conifers and hardwoods
Existing Vegetation:
Parent Material: alluvium
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA07_Auburn

Cont. Site ID: S2015AL063007 **Pedon ID:** S2015AL063007

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
1.0	25.5		17.2	27.5	9.5	1,410	231	poorly		

A--0 to 12 centimeters (0.0 to 4.7 inches); dark brown (10YR 3/3); 30 percent clay; weak fine subangular blocky, and weak medium subangular blocky structure; friable, slightly sticky, slightly plastic; common medium roots and common fine roots and common coarse roots; few very fine vesicular and common fine dendritic tubular pores; 1 percent fine distinct 10YR 5/6) masses of oxidized iron and 1 percent fine faint 10YR 4/2) iron depletions and 5 percent fine faint manganese masses; clear smooth boundary.

Oi--0 to 2 centimeters (0.0 to 0.8 inches); .

Ab--12 to 32 centimeters (4.7 to 12.6 inches); dark grayish brown (10YR 4/2); 32 percent clay; weak very fine prismatic, and strong medium subangular blocky structure; firm, slightly sticky, moderately plastic; common medium roots and common fine roots and few coarse roots; few very fine vesicular and common fine dendritic tubular pores; 5 percent fine faint 10YR 5/8) masses of oxidized iron and 8 percent fine faint manganese masses and 12 percent fine distinct 10YR 7/1) and 10YR 6/2) iron depletions; clear smooth boundary.

Bt--32 to 51 centimeters (12.6 to 20.1 inches); light yellowish brown (10YR 6/4); 32 percent clay; strong medium angular blocky structure; friable, moderately sticky, moderately plastic; few medium roots and common fine roots and few coarse roots; few fine vesicular and common fine irregular pores; 15 percent faint clay films on surfaces along root channels; 8 percent fine distinct manganese masses and 10 percent fine distinct 10YR 5/8) masses of oxidized iron and 15 percent fine distinct 10YR 7/2) iron depletions; 10% OM Stains on all ped faces; clear smooth boundary.

Btg--51 to 100 centimeters (20.1 to 39.4 inches); 60 percent light gray (10YR 7/2); 36 percent clay; moderate medium angular blocky structure; friable, slightly sticky, moderately plastic; few medium roots and few fine roots; few fine vesicular and few fine irregular pores; 15 percent faint clay films on surfaces along root channels; 10% OM Stains on all ped faces; Areas of light gray are redox depletions and areas of strong brown and yellowish brown are Iron accumulations.

PEDON DESCRIPTION -- NEON Site DELA

Print Date: Sep 3 2017
Description Date: Oct 1 2015
Describer: Burns/Jobe/Nichols
NEON Plot ID: DELA_010
Site ID: S2015AL063008

Pedon ID: S2015AL063008
Site Note:

Pedon Note:
Lab Source ID:
Lab Pedon #:
Soil Name as Described/Sampled:
Classification:

Soil Name as Correlated: Cahaba-like

Classification: Fine-loamy, siliceous, semiactive, thermic Typic Hapludults
Pedon Type: confirmation description
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:

Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: flood plain on coastal plain
Upslope Shape: convex
Cross Slope Shape: convex
Particle Size Control Section: 44 to 94 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 23 cm.
argillic horizon 44 to 100 cm.

Country: United States
State: Alabama
County: Greene
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area: AL063 -- Greene County, Alabama
Map Unit:
Pit Location: Site was sampled one meter north (360 degrees) and one meter east (90 degrees)of the southwest(225 degrees) corner. Samples were collected on the north (360 degrees) face of the one meter by one meter by one meter pit.
Quad Name: Demopolis, Alabama
Std Latitude: 32.5402778
Std Longitude: -87.8003028

Latitude: 32 degrees 32 minutes 25.00 seconds north
Longitude: 87 degrees 48 minutes 1.09 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 424853 meters
UTM Northing: 3600606 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Intermixed conifers and hardwoods
Existing Vegetation:
Parent Material:
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA07_Auburn

Cont. Site ID: S2015AL063008 **Pedon ID:** S2015AL063008

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
4.0	24.4		17.2	27.5	9.5	1,410	231	well		

A--0 to 23 centimeters (0.0 to 9.1 inches); 70 percent dark brown (10YR 3/3) and 25 percent yellowish brown (10YR 5/4) and 5 percent very pale brown (10YR 7/4) loam; 25 percent clay; moderate fine subangular blocky structure; friable; common medium roots and very few fine roots and common coarse roots; gradual wavy boundary. area of yellowish brown and very pale brown are iron accumulation. DSH

Ab--23 to 44 centimeters (9.1 to 17.3 inches); 60 percent dark brown (10YR 3/3) and 40 percent light yellowish brown (10YR 6/4) clay loam; 34 percent clay; moderate fine, and moderate fine subangular blocky structure; friable; common medium roots and very few fine roots and very few coarse roots; clear wavy boundary. areas of yellowish brown is iron accumulation. DSH

Bt1--44 to 79 centimeters (17.3 to 31.1 inches); 80 percent brown (7.5YR 4/4) and 20 percent light brown (7.5YR 6/4) clay loam; 30 percent clay; moderate medium subangular blocky structure; friable; very few medium roots and common fine roots and very few coarse roots; clear smooth boundary.

Bt2--72 to 100 centimeters (28.3 to 39.4 inches); 80 percent strong brown (7.5YR 4/6) and 15 percent light yellowish brown (10YR 6/4) and 5 percent light gray (10YR 7/2) clay loam; 28 percent clay; moderate medium subangular blocky structure; friable; very few medium roots and very few fine roots and very few coarse roots; . areas of light yellowish brown is iron accumulation and light gray are iron depletions. DSH

PEDON DESCRIPTION -- NEON Site DELA

Print Date: Sep 3 2017
Description Date: Oct 1 2015
Describer: Burns, Hatcher, Nichols
NEON Plot ID: DELA_020
Site ID: S2015AL063009
Pedon ID: S2015AL063009
Site Note:

Pedon Note:
Lab Source ID:
Lab Pedon #:
Soil Name as Described/Sampled:
Classification:

Soil Name as Correlated: Cahaba

Classification: Fine-loamy, siliceous, semiactive, thermic Typic Hapludults
Pedon Type: correlates to named soil
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:

Physiographic Section:
State Physiographic Area:
Local Physiographic Area: Dead Lake
Geomorphic Setting: on riser of flood plain on coastal plain
Upslope Shape: convex
Cross Slope Shape: linear
Particle Size Control Section: 24 to 74 cm.
Description origin: NASIS

Diagnostic Features: ochric epipedon 0 to 9 cm.
argillic horizon 9 to 100 cm.

Country:
State: Alabama
County: Greene
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area:
Map Unit:
Pit Location: Site was sampled one meter north (360 degrees) and one meter east (90 degrees)of the southwest(225 degrees) corner. Samples were collected on the north (360 degrees) face of the one meter by one meter by one meter pit.

Quad Name: Demopolis, Alabama
Std Latitude: 32.5386389
Std Longitude: -87.8015556

Latitude: 32 degrees 32 minutes 19.10 seconds north
Longitude: 87 degrees 48 minutes 5.60 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 424734 meters
UTM Northing: 3600426 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Intermixed conifers and hardwoods
Existing Vegetation:
Parent Material: fine-loamy alluvium
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA07_Auburn

Cont. Site ID: S2015AL063009 **Pedon ID:** S2015AL063009

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
2.0	25.0		17.2			1,410	231	well		

A--0 to 9 centimeters (0.0 to 3.5 inches); 80 percent dark brown (10YR 3/3) exterior and 20 percent very dark grayish brown (10YR 3/2) interior clay loam; 27 percent clay; weak fine subangular blocky structure; friable, slightly sticky, slightly plastic; many very fine roots between peds and very few coarse roots between peds; abrupt smooth boundary.

Atb--9 to 24 centimeters (3.5 to 9.4 inches); 60 percent very dark grayish brown (10YR 3/2) interior and 40 percent dark grayish brown (10YR 4/2) exterior silty clay loam; 38 percent clay; strong medium subangular blocky structure; firm, moderately sticky, moderately plastic; very few medium roots between peds and common fine roots between peds and very few coarse roots between peds; 20 percent distinct clay films on all faces of peds; gradual wavy boundary.

Bt1--24 to 48 centimeters (9.4 to 18.9 inches); strong brown (7.5YR 4/6) exterior clay loam; 33 percent clay; moderate medium subangular blocky structure; friable, slightly sticky, slightly plastic; very few medium roots between peds and very few fine roots between peds and very few coarse roots between peds; 10 percent distinct clay films on all faces of peds; 10 percent medium distinct 7.5YR 6/6), moist, masses of oxidized iron Between peds; clear smooth boundary.

Bt2--48 to 100 centimeters (18.9 to 39.4 inches); strong brown (7.5YR 5/6) exterior clay loam; 31 percent clay; moderate medium subangular blocky structure; friable, slightly sticky, slightly plastic; very few fine roots between peds; 10 percent distinct clay films on all faces of peds; 10 percent medium distinct 7.5YR 6/6), moist, masses of oxidized iron Between peds.

PEDON DESCRIPTION -- NEON Site DELA

Print Date: Sep 3 2017
Description Date: Sep 30 2015
Describer: Burns, Hopkins, Nichols
NEON Plot ID: DELA_029
Site ID: S2015AL063010
Pedon ID: S2015AL063010
Site Note:

Pedon Note:
Lab Source ID:
Lab Pedon #:
Soil Name as Described/Sampled:
Classification:

Soil Name as Correlated: Cahaba

Classification: Fine-loamy, siliceous, semiactive, thermic Typic Hapludults
Pedon Type: confirmation description
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:

Physiographic Section:
State Physiographic Area:
Local Physiographic Area: Dead Lake
Geomorphic Setting: on riser of flood plain on coastal plain
Upslope Shape: convex
Cross Slope Shape: linear
Particle Size Control Section: 50 to 100 cm.
Description origin: NASIS

Diagnostic Features: ochric epipedon 0 to 22 cm.
argillic horizon 22 to 100 cm.

Country:
State: Alabama
County: Greene
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area:
Map Unit: Oc -- Ochlockonee fine sandy loam
Pit Location: Site was sampled one meter north (360 degrees) and one meter east (90 degrees)of the southwest(225 degrees) corner. Samples were collected on the north (360 degrees) face of the one meter by one meter by one meter pit.

Quad Name: Demopolis, Alabama
Std Latitude: 32.5296611
Std Longitude: -87.8107306

Latitude: 32 degrees 31 minutes 46.78 seconds north
Longitude: 87 degrees 48 minutes 38.63 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 423865 meters
UTM Northing: 3599437 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Intermixed conifers and hardwoods
Existing Vegetation:
Parent Material: alluvium
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA07_Auburn

Cont. Site ID: S2015AL063010 **Pedon ID:** S2015AL063010

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
1.0	24.0		17.2	27.5	9.5	1,410	231	well		

A--0 to 15 centimeters (0.0 to 5.9 inches); 60 percent very dark grayish brown (10YR 3/2) broken face and 40 percent dark yellowish brown (10YR 4/4) broken face loam; 26 percent clay; moderate fine subangular blocky structure; friable, slightly sticky, slightly plastic; many very fine roots between peds and many medium roots between peds and many fine roots between peds and common coarse roots between peds; clear smooth boundary.

E--15 to 22 centimeters (5.9 to 8.7 inches); yellowish brown (10YR 5/8) crushed very fine sand; weak fine granular structure; very friable, nonsticky, nonplastic; many medium roots between peds and many fine roots between peds and common coarse roots between peds; clear smooth boundary.

Atb--22 to 50 centimeters (8.7 to 19.7 inches); dark brown (10YR 3/3) broken face and yellowish brown (10YR 5/8) exterior clay loam; 30 percent clay; moderate medium subangular blocky structure; friable, slightly sticky, slightly plastic; many medium roots between peds and many fine roots between peds and common coarse roots between peds; 15 percent distinct clay films on vertical faces of peds; gradual wavy boundary.

Bt--50 to 75 centimeters (19.7 to 29.5 inches); 75 percent yellowish brown (10YR 5/6) interior and 25 percent brown (10YR 4/3) exterior clay loam; 31 percent clay; moderate medium subangular blocky structure; friable, slightly sticky, slightly plastic; common medium roots between peds and common fine roots between peds and common coarse roots between peds; 15 percent distinct clay films on vertical faces of peds; clear smooth boundary.

BCt--75 to 100 centimeters (29.5 to 39.4 inches); strong brown (7.5YR 4/6) exterior clay loam; 31 percent clay; weak medium subangular blocky structure; friable, slightly sticky, slightly plastic; common fine roots between peds; 1 percent faint clay films on vertical faces of peds.

PEDON DESCRIPTION -- NEON Site DELA

Print Date: Sep 3 2017
Description Date: Oct 1 2015
Describer: Paige/Jobe/Nichols/Burns
NEON Plot ID: DELA_037
Site ID: S2015AL063011

Pedon ID: S2015AL063011
Site Note:

Pedon Note:
Lab Source ID:
Lab Pedon #:
Soil Name as Described/Sampled:
Classification:

Soil Name as Correlated: Wehadkee

Classification: Fine-loamy, mixed, active, nonacid, thermic Fluvaquentic Endoaquepts
Pedon Type: representative pedon for component
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:

Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on talf coastal plain
on talf flood plain
Upslope Shape: linear
Cross Slope Shape: convex
Particle Size Control Section: 25 to 100 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 48 cm.
redox concentrations 0 to 100 cm.
redox depletions with chroma 2 or less 0 to 100 cm.
reduced matrix 48 to 100 cm.
cambic horizon 48 to 100 cm.

Country: United States
State: Alabama
County: Greene
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area: AL063 -- Greene County, Alabama
7-TUS -- Tuskegee, Alabama
Map Unit:
Pit Location: Site was sampled one meter north (360 degrees) and one meter east (90 degrees)of the southwest(225 degrees) corner. Samples were collected on the north (360 degrees) face of the one meter by one meter by one meter pit.
Quad Name: Demopolis, Alabama
Std Latitude: 32.5394500
Std Longitude: -87.8022139

Latitude: 32 degrees 32 minutes 22.02 seconds north
Longitude: 87 degrees 48 minutes 7.97 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 424673 meters
UTM Northing: 3600516 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Intermixed conifers and hardwoods
Existing Vegetation:
Parent Material: and/or alluvium
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA07_Auburn

Cont. Site ID: S2015AL063011 **Pedon ID:** S2015AL063011

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
1.0	34.0		17.2			1,410	231	poorly		

A1--0 to 16 centimeters (0.0 to 6.3 inches); brown (10YR 4/3) clay loam; strong medium subangular blocky, and strong coarse subangular blocky structure; friable, slightly sticky, slightly plastic; many very fine roots and common medium roots and common fine roots; 5 percent very fine iron-manganese masses and 7 percent medium distinct 7.5YR 5/8) masses of oxidized iron and 10 percent medium distinct 10YR 6/2) iron depletions; clear wavy boundary.

A2--16 to 48 centimeters (6.3 to 18.9 inches); dark yellowish brown (10YR 3/4) loam; moderate medium subangular blocky structure; friable, slightly sticky, slightly plastic; few medium roots and common fine roots; 5 percent fine distinct 7.5YR 5/8) masses of oxidized iron and 10 percent fine distinct iron depletions; clear smooth boundary.

Bg--48 to 100 centimeters (18.9 to 39.4 inches); 60 percent light gray (10YR 7/2) clay loam; moderate medium subangular blocky structure; friable, slightly sticky, slightly plastic; few fine roots; Areas of light gray are Iron Depletions, and areas of yellowish brown are reduced Iron. Areas of strong brown are Iron accumulations. .

PEDON DESCRIPTION -- NEON Site DELA

Print Date: Sep 3 2017
Description Date: Oct 1 2015
Describer: Paige/Jobe/Nichols/Burns/Tan
NEON Plot ID: DELA_038
Site ID: S2015AL063012
Pedon ID: S2015AL063012
Site Note:

Pedon Note:
Lab Source ID:
Lab Pedon #:
Soil Name as Described/Sampled:
Classification:

Soil Name as Correlated: Leaf

Classification: Fine, mixed, active, thermic Typic Albaquults
Pedon Type: confirmation description
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:

Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on rise coastal plain
on rise flood plain
Upslope Shape: convex
Cross Slope Shape: convex
Particle Size Control Section: 8 to 58 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 8 cm.
argillic horizon 8 to 100 cm.
redox depletions with chroma 2 or less 8 to 100 cm.
redox concentrations 48 to 100 cm.

Country: United States
State: Alabama
County: Greene
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area:
Map Unit:
Pit Location: Site was sampled one meter north (360 degrees) and one meter east (90 degrees)of the southwest(225 degrees) corner. Samples were collected on the north (360 degrees) face of the one meter by one meter by one meter pit.

Quad Name: Demopolis, Alabama
Std Latitude: 32.5420722
Std Longitude: -87.8072000

Latitude: 32 degrees 32 minutes 31.46 seconds north
Longitude: 87 degrees 48 minutes 25.92 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 424207 meters
UTM Northing: 3600810 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Intermixed conifers and hardwoods
Existing Vegetation:
Parent Material: alluvium
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA07_Auburn

Cont. Site ID: S2015AL063012 **Pedon ID:** S2015AL063012

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
1.0	25.0		17.2			1,410	231	poorly		

A--0 to 8 centimeters (0.0 to 3.1 inches); dark brown (10YR 3/3); strong fine subangular blocky, and strong medium subangular blocky structure; friable, slightly sticky, moderately plastic; common medium roots and common fine roots; 2% OM Stains on all Ped Faces; clear wavy boundary.

Bt1--8 to 48 centimeters (3.1 to 18.9 inches); dark yellowish brown (10YR 4/6); 32 percent clay; moderate medium subangular blocky structure; friable, slightly sticky, slightly plastic; few medium roots and common fine roots; 10 percent distinct clay films on all faces of peds; 10 percent fine distinct 10YR 6/2) iron depletions; 2% OM Stains on all Ped Faces; clear wavy boundary.

Bt2--48 to 100 centimeters (18.9 to 39.4 inches); strong brown (7.5YR 4/6); 38 percent clay; moderate medium subangular blocky structure; friable, slightly sticky, slightly plastic; few medium roots and few fine roots; 15 percent distinct clay films on all faces of peds; 5 percent fine distinct 7.5YR 5/8), moist, masses of oxidized iron and 5 percent fine distinct 5YR 5/6) masses of oxidized iron and 10 percent medium distinct 10YR 6/2) iron depletions; 2% OM Stains on all Ped Faces.

PEDON DESCRIPTION -- NEON Site DELA

Print Date: Sep 3 2017
Description Date: Oct 1 2015
Describer: Page; Sandy
NEON Plot ID: DELA_040
Site ID: S2015AL063013

Pedon ID: S2015AL063013
Site Note:

Pedon Note:
Lab Source ID:
Lab Pedon #:
Soil Name as Described/Sampled: Tawcaw
Classification: Fine, kaolinitic, thermic Fluvaquentic Dystrudepts

Soil Name as Correlated:

Classification:
Pedon Type: confirmation description
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:

Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: flood plain on coastal plain
Upslope Shape:
Cross Slope Shape:
Particle Size Control Section: 25 to 100 cm.
Description origin: NASIS
Diagnostic Features: ? to ? cm.

Country: United States
State: Alabama
County: Greene
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area: AL063 -- Greene County, Alabama
Map Unit:
Pit Location: Site was sampled one meter north (360 degrees) and one meter east (90 degrees)of the southwest(225 degrees) corner. Samples were collected on the north (360 degrees) face of the one meter by one meter by one meter pit.
Quad Name:
Std Latitude: 32.5386310
Std Longitude: -87.8047420

Latitude: 32 degrees 32 minutes 19.07 seconds north
Longitude: 87 degrees 48 minutes 17.07 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 424435 meters
UTM Northing: 3600427 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Intermixed conifers and hardwoods
Existing Vegetation:
Parent Material: alluvium
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA07_Auburn

Cont. Site ID: S2015AL063013 **Pedon ID:** S2015AL063013

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
1.0			17.2			1,409	231			

A--0 to 3 centimeters (0.0 to 1.2 inches); clay loam, silty clay loam; weak fine subangular blocky structure; clear smooth boundary.

Bt--3 to 23 centimeters (1.2 to 9.1 inches); dark yellowish brown (10YR 4/4) silty clay; medium, and weak fine subangular blocky structure; very firm, moderately sticky; 3 percent fine manganese masses; clear smooth boundary.

A--23 to 35 centimeters (9.1 to 13.8 inches); dark yellowish brown (10YR 3/4) silty clay; moderate fine subangular blocky, and medium structure; firm, slightly sticky; 3 percent fine manganese masses.

B't1--35 to 51 centimeters (13.8 to 20.1 inches); 60 percent dark yellowish brown (10YR 4/6) and 40 percent dark yellowish brown (10YR 3/6) silty clay; moderate medium subangular blocky structure; very firm, moderately sticky; 3 percent coarse prominent 10YR 6/2) reduced matrix and 3 percent fine manganese masses.

B't2--51 to 101 centimeters (20.1 to 39.8 inches); 55 percent yellowish brown (10YR 5/4) and 45 percent yellowish brown (10YR 5/8) clay loam; moderate fine subangular blocky, and medium structure; firm, slightly sticky; 3 percent fine manganese masses and 12 percent coarse prominent 10YR 6/2) reduced matrix.

PEDON DESCRIPTION -- NEON Site DELA

Print Date: Sep 3 2017
Description Date: Oct 1 2015
Describer: Page, Sandy
NEON Plot ID: DELA_041
Site ID: S2015AL063014

Pedon ID: S2015AL063014
Site Note:

Pedon Note:
Lab Source ID:
Lab Pedon #:
Soil Name as Described/Sampled:
Classification:

Soil Name as Correlated: Leaf

Classification: Fine, mixed, active, thermic Typic Albaquults
Pedon Type: confirmation description
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:

Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: flood plain on coastal plain
Upslope Shape: concave
Cross Slope Shape: concave
Particle Size Control Section: 35 to 85 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 3 cm.
argillic horizon 35 to 101 cm.

Country: United States
State: Alabama
County: Greene
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area: AL063 -- Greene County, Alabama
Map Unit:
Pit Location: Site was sampled one meter north (360 degrees) and one meter east (90 degrees)of the southwest(225 degrees) corner. Samples were collected on the north (360 degrees) face of the one meter by one meter by one meter pit.

Quad Name:
Std Latitude: 32.5345361
Std Longitude: -87.8013222

Latitude: 32 degrees 32 minutes 4.33 seconds north
Longitude: 87 degrees 48 minutes 4.76 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 424752 meters
UTM Northing: 3599971 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Intermixed conifers and hardwoods
Existing Vegetation:
Parent Material: alluvium
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA07_Auburn

Cont. Site ID: S2015AL063014 **Pedon ID:** S2015AL063014

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
	17.1		17.2	27.5	9.5	1,410	231	somewhat poorly		

A--0 to 7 centimeters (0.0 to 2.8 inches); dark grayish brown (10YR 4/2) silty clay; moderate medium granular, and strong medium subangular blocky structure; friable, slightly sticky, moderately plastic; 30 percent prominent 10YR 2/1), moist, organic stains on all faces of peds; clear smooth boundary.

Bw1--7 to 20 centimeters (2.8 to 7.9 inches); 55 percent grayish brown (10YR 5/2) and 35 percent pale brown (10YR 6/3) silty clay loam; moderate medium subangular blocky structure; friable, slightly sticky, moderately plastic; 10 percent medium prominent 10YR 5/8), moist, masses of oxidized iron; clear smooth boundary.

Bw2--20 to 61 centimeters (7.9 to 24.0 inches); 50 percent dark yellowish brown (10YR 4/6) silty clay loam; weak medium subangular blocky structure; friable, moderately sticky, moderately plastic; 5 percent prominent 10YR 2/1), moist, organic stains on surfaces along root channels; 10 percent medium prominent 5YR 5/8), moist, masses of oxidized iron and 10 percent medium distinct iron depletions.

Bw3--61 to 100 centimeters (24.0 to 39.4 inches); 50 percent dark yellowish brown (10YR 4/6) and 30 percent light brownish gray (10YR 6/2) and 15 percent yellowish brown (10YR 5/6) clay; moderate medium subangular blocky structure; firm, slightly sticky, moderately plastic; 5 percent prominent 10YR 2/1), moist, organic stains on surfaces along root channels; 5 percent medium prominent 2.5YR 4/8), moist, masses of oxidized iron.

PEDON DESCRIPTION -- NEON Site DELA

Print Date: Sep 3 2017

Description Date: Oct 1 2015

Describer: C.Hatcher, J.Velazquez, G.Reynolds

NEON Plot ID: DELA_014

Site ID: S2015AL063015

Pedon ID: S2015AL063015

Site Note: This site has been used as a representative pedon for a NEON project in Dead-Lake; Greene County; AL. It's been utilized for full characterization and sampling. USER SITE/PEDON ID: S2015AL063015(DELA_014) This pedon has been classified in the field as a Fine; mixed; semiactive; thermic Aquic Hapludults

Pedon Note: This site has been used as a representative pedon for a NEON project in Dead-Lake, Greene County, AL. It's been utilized for full characterization and sampling. USER SITE/PEDON ID: S2015AL063015(DELA_014) This pedon has been classified in the field as a Fine, mixed, semiactive, thermic Aquic Hapludults

Lab Source ID:

Lab Pedon #:

Soil Name as Described/Sampled: Lenoir

Classification: Fine, mixed, semiactive, thermic Aeric Paleaquults

Soil Name as Correlated:

Classification:

Pedon Type: confirmation description

Pedon Purpose: research site

Taxon Kind: series

Associated Soils: Cahaba, Iuka, Mantachie, Ochlockonee

Physiographic Division:

Physiographic Province:

Physiographic Section:

State Physiographic Area:

Local Physiographic Area: Black Warrior River Alluvial Valley

Geomorphic Setting: on tread of alluvial plain
on tread of stream terrace

Upslope Shape: linear

Cross Slope Shape: linear

Particle Size Control Section: 7 to 57 cm.

Description origin: NASIS

Diagnostic Features: reduced matrix 7 to 29 cm.
argillic horizon 7 to 90 cm.

Country: United States

State: Alabama

County: Greene

MLRA: 133A -- Southern Coastal Plain

Soil Survey Area: AL063 -- Greene County, Alabama
7-TUP -- Tupelo, Mississippi

Map Unit: Oc -- Ochlockonee fine sandy loam

Pit Location: Site was sampled one meter north (360 degrees) and one meter east (90 degrees)of the southwest(225 degrees) corner. Samples were collected on the north (360 degrees) face of the one meter by one meter by one meter pit.

Quad Name: Center Hill, Alabama

Std Latitude: 32.5297222

Std Longitude: -87.8180556

Latitude: 32 degrees 31 minutes 47.00 seconds north

Longitude: 87 degrees 49 minutes 5.00 seconds west

Datum: WGS84

UTM Zone: 16

UTM Easting: 423177 meters

UTM Northing: 3599449 meters

Primary Earth Cover: Tree cover

Secondary Earth Cover: Conifers

Existing Vegetation:

Parent Material: silty and clayey alluvium

Bedrock Kind:

Bedrock Depth:

Bedrock Hardness:

Bedrock Fracture Interval:

Surface Fragments:

Description database: MLRA07_Auburn

Cont. Site ID: S2015AL063015 **Pedon ID:** S2015AL063015

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
0.5	70.0		17.2	27.5	9.5	1,410	231	somewhat poorly	500	500.0

A--0 to 7 centimeters (0.0 to 2.8 inches); brown (10YR 4/3) silty clay; moderate medium subangular blocky, and moderate fine subangular blocky structure; friable, slightly sticky, slightly plastic; nonfluid; common fine roots throughout; 8 percent fine faint irregular 10YR 4/2), moist, iron depletions with clear boundaries In matrix and 8 percent medium faint irregular 10YR 4/2), moist, iron depletions with clear boundaries In matrix and 8 percent coarse faint irregular 10YR 4/2), moist, iron depletions with clear boundaries In matrix; clear smooth boundary.

Btg--7 to 29 centimeters (2.8 to 11.4 inches); dark grayish brown (10YR 4/2) clay; strong medium subangular blocky, and strong coarse subangular blocky, and strong very coarse subangular blocky structure; firm, moderately sticky, moderately plastic; nonfluid; common medium roots throughout and common fine roots throughout and common coarse roots throughout; 65 percent faint clay films on all faces of peds; 8 percent fine faint irregular 10YR 4/3), moist, masses of oxidized iron with clear boundaries In matrix and 8 percent medium faint irregular 10YR 4/3), moist, masses of oxidized iron with clear boundaries In matrix and 8 percent coarse faint irregular 10YR 4/3), moist, masses of oxidized iron with clear boundaries In matrix; clear smooth boundary.

Bt1--29 to 53 centimeters (11.4 to 20.9 inches); brown (7.5YR 4/4) silty clay; moderate fine subangular blocky, and moderate medium subangular blocky structure; firm, moderately sticky, moderately plastic; nonfluid; common fine roots throughout and common coarse roots throughout; 35 percent faint clay films on all faces of peds; 15 percent medium faint irregular 7.5YR 4/3), moist, masses of oxidized iron with clear boundaries In matrix and 15 percent medium faint irregular 10YR 4/2), moist, iron depletions with clear boundaries In matrix; clear wavy boundary.

Bt2--53 to 90 centimeters (20.9 to 35.4 inches); brown (7.5YR 4/4) silty clay; moderate fine subangular blocky, and moderate medium subangular blocky structure; firm, moderately sticky, moderately plastic; nonfluid; common fine roots throughout; 35 percent faint clay films on all faces of peds; 15 percent fine faint irregular 7.5YR 4/3), moist, masses of oxidized iron with clear boundaries In matrix.

PEDON DESCRIPTION -- NEON Site DELA

Print Date: Sep 3 2017
Description Date: Sep 28 2015
Describer: Depew, Steglich, Curry, Tan
NEON Plot ID: DELA_005
Site ID: S2015AL063016

Pedon ID: S2015AL063016
Site Note: This site has been used as a representative pedon for a NEON project in Dead-Lake; Greene County; AL. It's been utilized for full characterization and sampling. USER SITE/PEDON ID: S2015AL063001(DELA_005)

Pedon Note:
Lab Source ID:
Lab Pedon #:
Soil Name as Described/Sampled: Chenneby
Classification: Fine-silty, mixed, active, thermic Fluvaquentic Dystrudepts

Soil Name as Correlated:

Classification:
Pedon Type: confirmation description
Pedon Purpose: research site
Taxon Kind: series
Associated Soils: Bibb, Cahaba
Physiographic Division:
Physiographic Province:

Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: flood plain on coastal plain
Upslope Shape:
Cross Slope Shape:
Particle Size Control Section: 25 to 100 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 6 cm.
cambic horizon 6 to 68 cm.

Country: United States
State: Alabama
County: Greene
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area: AL063 -- Greene County, Alabama
7-TUP -- Tupelo, Mississippi
Map Unit: AS -- Angie-Leaf association
Pit Location: Site was sampled one meter north (360 degrees) and one meter east (90 degrees)of the southwest(225 degrees) corner. Samples were collected on the north (360 degrees) face of the one meter by one meter by one meter pit.
Quad Name: Demopolis, Alabama
Std Latitude: 32.5230556
Std Longitude: -87.8147222

Latitude: 32 degrees 31 minutes 23.00 seconds north
Longitude: 87 degrees 48 minutes 53.00 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 423484 meters
UTM Northing: 3598707 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Intermixed conifers and hardwoods
Existing Vegetation:
Parent Material: silty alluvium
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA07_Auburn

Cont. Site ID: S2015AL063016 **Pedon ID:** S2015AL063016

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
0.5			17.2	27.5	9.5	1,410	231	well		

A--0 to 6 centimeters (0.0 to 2.4 inches); very dark grayish brown (10YR 3/2) broken face silt loam; weak fine granular, and weak very fine granular structure; friable, slightly sticky, slightly plastic; low excavation difficulty; clear smooth boundary.

Bw1--6 to 22 centimeters (2.4 to 8.7 inches); dark yellowish brown (10YR 4/4) broken face loam; moderate medium subangular blocky, and moderate fine subangular blocky structure; friable, slightly sticky, slightly plastic; moderate excavation difficulty; distinct 10YR 6/4), moist, silt coats on all faces of peds; 2 percent very fine distinct dendritic masses of oxidized iron Between peds; clear wavy boundary.

Bw2--22 to 68 centimeters (8.7 to 26.8 inches); dark yellowish brown (10YR 4/4) broken face stratified fine sandy loam to silt loam; moderate fine subangular blocky structure; friable, nonsticky, nonplastic; low excavation difficulty; distinct 10YR 6/4), moist, silt coats on all faces of peds; 1 percent very fine distinct masses of oxidized iron On faces of peds; clear wavy boundary.

C--68 to 100 centimeters (26.8 to 39.4 inches); dark yellowish brown (10YR 3/4) broken face silty clay loam; structureless massive; firm, slightly sticky, slightly plastic; low excavation difficulty; .

PEDON DESCRIPTION -- NEON Site DELA

Print Date: Sep 3 2017
Description Date: Sep 28 2015
Describer: Depew, Steglich, Curry, Tan
NEON Plot ID: DELA_011
Site ID: S2015AL063017

Pedon ID: S2015AL063017
Site Note: This site has been used as a representative pedon for a NEON project in Dead-Lake; Greene County; AL. It's been utilized for full characterization and sampling. USER SITE/PEDON ID: S2015AL063017(DELA_011)

Pedon Note:
Lab Source ID:
Lab Pedon #:
Soil Name as Described/Sampled: Ochlockonee-fine-silty
Classification: Fine-silty, thermic Typic Udifluvents

Soil Name as Correlated:

Classification:
Pedon Type: confirmation description
Pedon Purpose: research site
Taxon Kind: taxon above family
Associated Soils:
Physiographic Division:
Physiographic Province:

Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: flood plain on coastal plain
Upslope Shape: convex
Cross Slope Shape: convex
Particle Size Control Section: 25 to 100 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 34 cm.

Country: United States
State: Alabama
County: Greene
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area: AL063 -- Greene County, Alabama
7-TUP -- Tupelo, Mississippi
Map Unit: AS -- Angie-Leaf association
Pit Location: Site was sampled one meter north (360 degrees) and one meter east (90 degrees)of the southwest(225 degrees) corner. Samples were collected on the north (360 degrees) face of the one meter by one meter by one meter pit.
Quad Name: Demopolis, Alabama
Std Latitude: 32.5202778
Std Longitude: -87.8172222

Latitude: 32 degrees 31 minutes 13.00 seconds north
Longitude: 87 degrees 49 minutes 2.00 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 423247 meters
UTM Northing: 3598401 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Intermixed conifers and hardwoods
Existing Vegetation:
Parent Material: silty alluvium
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA07_Auburn

Cont. Site ID: S2015AL063017 **Pedon ID:** S2015AL063017

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
0.0		90	17.2	27.5	9.5	1,410	231	well		

A--0 to 11 centimeters (0.0 to 4.3 inches); silty clay loam; moderate medium granular, and moderate fine granular structure; friable, slightly sticky, slightly plastic; abrupt wavy boundary.

Ab--11 to 34 centimeters (4.3 to 13.4 inches); silty clay loam; weak coarse granular, and weak medium granular, and weak fine granular structure; friable, moderately sticky, moderately plastic; clear wavy boundary.

C1--34 to 58 centimeters (13.4 to 22.8 inches); silty clay loam; structureless massive; friable, moderately sticky, moderately plastic; gradual wavy boundary.

C2--58 to 100 centimeters (22.8 to 39.4 inches); loam; structureless massive; friable, slightly sticky, slightly plastic; 1 percent fine faint masses of oxidized iron Between peds and 1 percent fine faint iron depletions Between peds.

PEDON DESCRIPTION -- NEON Site DELA

Print Date: Sep 3 2017
Description Date: Sep 28 2015
Describer: Depew, Steglich, Curry, Tan
NEON Plot ID: DELA_015
Site ID: S2015AL063018

Pedon ID: S2015AL063018
Site Note: This site has been used as a representative pedon for a NEON project in Dead-Lake; Greene County; AL. It's been utilized for full characterization and sampling. USER SITE/PEDON ID: S2015AL063018(DELA_015)

Pedon Note:
Lab Source ID:
Lab Pedon #:
Soil Name as Described/Sampled: Angie
Classification: Fine, mixed, semiactive, thermic Aquic Paleudults

Soil Name as Correlated:

Classification:
Pedon Type: confirmation description
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:

Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: flood plain on coastal plain
Upslope Shape: convex
Cross Slope Shape: convex
Particle Size Control Section: 20 to 70 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 7 cm.
argillic horizon 20 to 100 cm.

Country: United States
State: Alabama
County: Greene
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area: AL063 -- Greene County, Alabama
7-TUP -- Tupelo, Mississippi
Map Unit: AS -- Angie-Leaf association
Pit Location: Site was sampled one meter north (360 degrees) and one meter east (90 degrees)of the southwest(225 degrees) corner. Samples were collected on the north (360 degrees) face of the one meter by one meter by one meter pit.
Quad Name: Demopolis, Alabama
Std Latitude: 32.5286611
Std Longitude: -87.8133861

Latitude: 32 degrees 31 minutes 43.18 seconds north
Longitude: 87 degrees 48 minutes 48.19 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 423614 meters
UTM Northing: 3599328 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Intermixed conifers and hardwoods
Existing Vegetation:
Parent Material: clayey alluvium
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA07_Auburn

Cont. Site ID: S2015AL063018 **Pedon ID:** S2015AL063018

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
0.5	38.3	90	17.2	27.5	9.5	1,410	231	well		

A--0 to 7 centimeters (0.0 to 2.8 inches); dark grayish brown (10YR 4/2) silt loam; 26 percent clay; moderate fine subangular blocky structure; friable, nonsticky, slightly plastic; many very fine roots and common medium roots and common coarse roots; many very fine dendritic tubular and few fine vesicular pores; 2 percent fine distinct cylindrical weakly cemented iron-manganese concretions with clear boundaries In matrix; abrupt smooth boundary.

Bw--7 to 20 centimeters (2.8 to 7.9 inches); dark grayish brown (10YR 4/2) clay loam; 34 percent clay; moderate medium subangular blocky structure; firm, slightly sticky, very plastic; common medium roots and common fine roots; many very fine dendritic tubular and few fine vesicular pores; 2 percent medium distinct irregular strongly cemented iron-manganese concretions with clear boundaries In matrix and 3 percent medium distinct irregular weakly cemented 10YR 4/4) iron-manganese concretions with clear boundaries In matrix; clear wavy boundary.

Bt--20 to 33 centimeters (7.9 to 13.0 inches); dark grayish brown (10YR 4/2) clay; 44 percent clay; weak very fine prismatic, and moderate medium angular blocky structure; firm, moderately sticky, very plastic; few medium roots and few fine roots; few medium vesicular and few fine vesicular pores; 15 percent faint clay films on all faces of peds; 5 percent fine distinct spherical weakly cemented 10YR 6/2) iron-manganese concretions with clear boundaries In matrix and 5 percent fine distinct irregular 7.5YR 4/6) manganese masses with clear boundaries In matrix; clear wavy boundary.

Btg--33 to 100 centimeters (13.0 to 39.4 inches); clay; 44 percent clay; weak medium prismatic, and moderate medium angular blocky structure; firm, moderately sticky, very plastic; few medium roots and few fine roots; few medium vesicular and few fine vesicular pores; 10 percent faint clay films on all faces of peds; 5 percent fine distinct irregular 7.5YR 4/6) manganese masses with clear boundaries In matrix and 10 percent fine distinct spherical weakly cemented 10YR 6/2) iron-manganese concretions with clear boundaries In matrix; Areas of yellowish brown and strong brown are redox concentrations and areas of light brownish gray are redox depletions.

PEDON DESCRIPTION -- NEON Site DELA

Print Date: Sep 3 2017
Description Date: Sep 28 2015
Describer: Depew, Steglich, Curry, Tan
NEON Plot ID: DELA_021
Site ID: S2015AL063019

Pedon ID: S2015AL063019
Site Note: This site has been used as a representative pedon for a NEON project in Dead-Lake; Greene County; AL. It's been utilized for full characterization and sampling. USER SITE/PEDON ID: S2015AL063019(DELA_021)

Pedon Note:
Lab Source ID:
Lab Pedon #:
Soil Name as Described/Sampled: Cahaba
Classification: Fine-loamy, siliceous, semiactive, thermic Typic Hapludults

Soil Name as Correlated:

Classification:
Pedon Type: confirmation description
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:

Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: flood plain on coastal plain
Upslope Shape: convex
Cross Slope Shape: linear
Particle Size Control Section: 48 to 98 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 33 cm.
argillic horizon 48 to 100 cm.

Country: United States
State: Alabama
County: Greene
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area: AL063 -- Greene County, Alabama
7-TUP -- Tupelo, Mississippi
Map Unit: AS -- Angie-Leaf association
Pit Location: Site was sampled one meter north (360 degrees) and one meter east (90 degrees)of the southwest(225 degrees) corner. Samples were collected on the north (360 degrees) face of the one meter by one meter by one meter pit.
Quad Name: Demopolis, Alabama
Std Latitude: 32.5270222
Std Longitude: -87.8192000

Latitude: 32 degrees 31 minutes 37.28 seconds north
Longitude: 87 degrees 49 minutes 9.12 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 423067 meters
UTM Northing: 3599150 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Intermixed conifers and hardwoods
Existing Vegetation:
Parent Material: clayey alluvium
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA07_Auburn

Cont. Site ID: S2015AL063019 **Pedon ID:** S2015AL063019

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
0.5	34.0	90	17.2	27.5	9.5	1,410	231	moderately well		

A--0 to 15 centimeters (0.0 to 5.9 inches); dark grayish brown (10YR 4/2) broken face silty clay loam; 35 percent clay; strong medium granular structure; firm, slightly sticky, slightly plastic; moderate excavation difficulty; 5 percent very fine distinct irregular masses of oxidized iron with clear boundaries In matrix and 10 percent fine distinct irregular weakly cemented iron-manganese concretions with clear boundaries In matrix; abrupt smooth boundary.

AB--15 to 33 centimeters (5.9 to 13.0 inches); dark grayish brown (10YR 4/2) broken face silty clay loam; 36 percent clay; strong coarse subangular blocky structure; firm, very sticky, very plastic; high excavation difficulty; 2 percent very fine distinct irregular masses of oxidized iron with clear boundaries In matrix and 10 percent fine distinct irregular weakly cemented iron-manganese concretions with clear boundaries In matrix; abrupt wavy boundary.

Bw--33 to 48 centimeters (13.0 to 18.9 inches); brown (10YR 4/3) broken face silty clay loam; 39 percent clay; strong medium angular blocky structure; friable, moderately sticky, very plastic; high excavation difficulty; 2 percent fine distinct irregular moderately cemented iron-manganese concretions with clear boundaries In matrix and 10 percent very fine distinct irregular masses of oxidized iron with clear boundaries In matrix and 15 percent fine distinct irregular masses of oxidized iron with clear boundaries In matrix; clear smooth boundary.

Bt--48 to 100 centimeters (18.9 to 39.4 inches); dark yellowish brown (10YR 4/6) broken face silty clay; 44 percent clay; moderate medium angular blocky parts to moderate fine subangular blocky structure; friable, moderately sticky, moderately plastic; high excavation difficulty; 25 percent fine distinct irregular weakly cemented iron-manganese concretions with clear boundaries In matrix and 25 percent very fine distinct irregular masses of oxidized iron with clear boundaries In matrix.

PEDON DESCRIPTION -- NEON Site DELA

Print Date: Sep 3 2017

Description Date: Sep 28 2015

Describer: Depew, Steglich, Curry, Tan

NEON Plot ID: DELA_024

Site ID: S2015AL063020

Pedon ID: S2015AL063020

Site Note: This site has been used as a representative pedon for a NEON project in Dead-Lake; Greene County; AL. It's been utilized for full characterization and sampling. USER SITE/PEDON ID: S2015AL063020(DELA_024)

Pedon Note:

Lab Source ID:

Lab Pedon #:

Soil Name as Described/Sampled: Angie

Classification: Fine, mixed, semiactive, thermic Aquic Paleudults

Soil Name as Correlated:

Classification:

Pedon Type: confirmation description

Pedon Purpose: research site

Taxon Kind: series

Associated Soils:

Physiographic Division:

Physiographic Province:

Physiographic Section:

State Physiographic Area:

Local Physiographic Area:

Geomorphic Setting: flood plain on coastal plain

Upslope Shape: convex

Cross Slope Shape: convex

Particle Size Control Section: 24 to 74 cm.

Description origin: NASIS

Diagnostic Features: ochric epipedon 0 to 11 cm.
argillic horizon 24 to 68 cm.

Country: United States

State: Alabama

County: Greene

MLRA: 133A -- Southern Coastal Plain

Soil Survey Area: AL063 -- Greene County, Alabama
7-TUP -- Tupelo, Mississippi

Map Unit: AS -- Angie-Leaf association

Pit Location: Site was sampled one meter north (360 degrees) and one meter east (90 degrees)of the southwest(225 degrees) corner. Samples were collected on the north (360 degrees) face of the one meter by one meter by one meter pit.

Quad Name: Demopolis, Alabama

Std Latitude: 32.5251250

Std Longitude: -87.8177556

Latitude: 32 degrees 31 minutes 30.45 seconds north

Longitude: 87 degrees 49 minutes 3.92 seconds west

Datum: WGS84

UTM Zone: 16

UTM Easting: 423201 meters

UTM Northing: 3598939 meters

Primary Earth Cover: Tree cover

Secondary Earth Cover: Intermixed conifers and hardwoods

Existing Vegetation:

Parent Material: silty alluvium

Bedrock Kind:

Bedrock Depth:

Bedrock Hardness:

Bedrock Fracture Interval:

Surface Fragments:

Description database: MLRA07_Auburn

Cont. Site ID: S2015AL063020 **Pedon ID:** S2015AL063020

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
1.0		45	17.2	27.5	9.5	1,410	231	poorly		

A--0 to 11 centimeters (0.0 to 4.3 inches); dark grayish brown (10YR 4/2) broken face silt loam; 20 percent clay; strong fine granular, and moderate coarse granular structure; firm, slightly sticky, moderately plastic; 15 percent fine distinct irregular iron depletions with clear boundaries In matrix and 38 percent fine prominent irregular weakly cemented iron-manganese concretions with clear boundaries In matrix; abrupt wavy boundary.

Bg--11 to 24 centimeters (4.3 to 9.4 inches); grayish brown (10YR 5/2) broken face silty clay loam; 37 percent clay; strong coarse subangular blocky, and strong medium subangular blocky structure; firm, moderately sticky, moderately plastic; 2 percent fine distinct irregular weakly cemented 5YR 4/6), moist, iron-manganese concretions with clear boundaries In matrix and 7 percent medium distinct irregular weakly cemented 10YR 4/6), moist, iron-manganese concretions with clear boundaries In matrix and 25 percent very fine prominent irregular weakly cemented 7.5YR 4/6), moist, iron-manganese concretions with clear boundaries In matrix; clear wavy boundary.

Btg--24 to 68 centimeters (9.4 to 26.8 inches); grayish brown (10YR 5/2) broken face silty clay loam; 39 percent clay; strong coarse subangular blocky structure; firm, moderately sticky, moderately plastic; 5 percent fine distinct irregular 10YR 2/1), moist, masses of oxidized iron with clear boundaries On surfaces along pores and 8 percent fine distinct irregular 7.5YR 3/4), moist, iron-manganese masses with clear boundaries In matrix and 15 percent fine prominent irregular 7.5YR 4/6), moist, masses of oxidized iron with clear boundaries In matrix; clear wavy boundary.

Cg--68 to 100 centimeters (26.8 to 39.4 inches); 10Y 6/ (10Y 6/), broken face silty clay loam; 32 percent clay; structureless massive; friable, slightly sticky, slightly plastic; 1 percent fine distinct irregular 10YR 2/1), moist, manganese masses with clear boundaries In matrix and 5 percent fine prominent irregular 2.5YR 3/6), moist, iron-manganese masses with clear boundaries In matrix and 30 percent fine distinct irregular 10YR 4/6), moist, iron depletions with clear boundaries In matrix.

PEDON DESCRIPTION -- NEON Site DELA

Print Date: Sep 3 2017
Description Date: Sep 30 2015
Describer: Chris Hatcher
NEON Plot ID: DELA_002
Site ID: S2015AL063021

Pedon ID: S2015AL063021
Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 16N0540
Soil Name as Described/Sampled: Annemaine
Classification: Fine, mixed, semiactive, thermic Aquic Hapludults

Soil Name as Correlated:

Classification:
Pedon Type: correlates to named soil
Pedon Purpose: research site
Taxon Kind: series
Associated Soils: Angie, Annemaine, Leaf
Physiographic Division:
Physiographic Province:

Physiographic Section:
State Physiographic Area:
Local Physiographic Area: Black Warrior River Alluvial Valley
Geomorphic Setting: on riser of alluvial plain
on riser of stream terrace
Upslope Shape: linear
Cross Slope Shape: concave
Particle Size Control Section: 9 to 59 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 9 cm.
argillic horizon 9 to 90 cm.

Country: United States
State: Alabama
County: Greene
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area: AL063 -- Greene County, Alabama
7-TUP -- Tupelo, Mississippi
Map Unit: AS -- Angie-Leaf association
Pit Location: Site was sampled one meter north (360 degrees) and one meter east (90 degrees)of the southwest(225 degrees) corner. Samples were collected on the north (360 degrees) face of the one meter by one meter by one meter pit.
Quad Name: Center Hill, Alabama
Std Latitude: 32.5322222
Std Longitude: -87.8180556

Latitude: 32 degrees 31 minutes 56.00 seconds north
Longitude: 87 degrees 49 minutes 5.00 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 423179 meters
UTM Northing: 3599726 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Intermixed conifers and hardwoods
Existing Vegetation:
Parent Material: silty and clayey alluvium
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2015AL063021 **Pedon ID:** S2015AL063021

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
1.5	75.0	155	17.2	27.2	9.5	1,410	231	moderately well	100	100.0

A--0 to 9 centimeters (0.0 to 3.5 inches); dark brown (10YR 3/3) loam; weak fine granular, and weak medium granular structure; friable, nonsticky, nonplastic; nonfluid; moderate excavation difficulty; common very fine roots throughout and common very coarse roots throughout and common medium roots throughout and common fine roots throughout and common coarse roots throughout; abrupt smooth boundary. Lab sample # 16N02356

Bt1--9 to 24 centimeters (3.5 to 9.4 inches); brown (10YR 4/3) clay loam; strong medium subangular blocky, and strong coarse subangular blocky structure; firm, moderately sticky, moderately plastic; nonfluid; high excavation difficulty; common very fine roots throughout and common very coarse roots throughout and common medium roots throughout and common fine roots throughout and common coarse roots throughout; 40 percent faint clay films on all faces of peds; 1 percent prominent irregular 10YR 2/1), moist, iron-manganese concretions with clear boundaries Throughout and 10 percent fine faint irregular 7.5YR 5/8), moist, masses of oxidized iron with sharp boundaries Throughout and 10 percent fine faint irregular 10YR 5/2), moist, masses of reduced iron with sharp boundaries Throughout; clear wavy boundary. Lab sample # 16N02357

Bt2--24 to 63 centimeters (9.4 to 24.8 inches); 35 percent grayish brown (10YR 5/2) reduced and 35 percent strong brown (7.5YR 5/6) oxidized and 30 percent brown (10YR 5/3) oxidized clay loam; moderate medium subangular blocky structure; firm, moderately sticky, moderately plastic; nonfluid; high excavation difficulty; common medium roots throughout and common fine roots throughout and few coarse roots throughout; 35 percent faint clay films on all faces of peds; 1 percent prominent irregular 10YR 2/1), moist, iron-manganese concretions with clear boundaries Throughout; gradual wavy boundary. Lab sample # 16N02358

Bt3--63 to 90 centimeters (24.8 to 35.4 inches); yellowish brown (10YR 5/6) loam; moderate medium subangular blocky structure; firm, nonsticky, nonplastic; nonfluid; high excavation difficulty; few very fine roots throughout and few fine roots throughout and few coarse roots throughout; 20 percent faint clay films on all faces of peds; 1 percent prominent irregular 10YR 2/1), moist, iron-manganese concretions with clear boundaries Throughout and 21 percent fine distinct irregular 10YR 6/2), moist, masses of oxidized iron with sharp boundaries Throughout and 22 percent fine distinct irregular 7.5YR 5/6), moist, masses of oxidized iron with sharp boundaries Throughout. Lab sample # 16N02359