PEDON DESCRIPTION -- NEON Site SCBI

Print Date: Nov 5 2017
Description Date: Oct 20 2015
Describer: Skip Bell
NEON Plot ID: SCBI_002
Site ID: S2015VA187002

Pedon ID: S2015VA187002

Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 16N0561
Soil Name as Described/Sampled: Thurmont
Classification: Fine-loamy, mixed, active, mesic Oxyaquic Hapludults

Soil Name as Correlated:

Classification:
Pedon Type:
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section: Blue Ridge province, northern section
State Physiographic Area:

Local Physiographic Area: Blue Ridge
Geomorphic Setting: on footslope of side slope of None Assigned
Upslope Shape: linear
Cross Slope Shape: concave
Particle Size Control Section:
Description origin: NASIS
Diagnostic Features: ? to ? cm.

Country:
State: Virginia
County: Warren
MLRA: 130A -- Northern Blue Ridge
Soil Survey Area: VA187 -- Warren County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 22E -- Lew loam, 25 to 65 percent slopes, very stony
Pit Location: Orientation in relation to NEON plot NEON sampling site second site on 19OCT15 middle third sideslope Pit is 298degrees and 6.42meters from south-west 20 corner post of NEON site
Quad Name:
Std Latitude: 38.8950833
Std Longitude: -78.1429167

Latitude: 38 degrees 53 minutes 42.30 seconds north
Longitude: 78 degrees 8 minutes 34.50 seconds west
Datum: WGS84
UTM Zone:
UTM Easting:
UTM Northing:

Primary Earth Cover: Tree cover
Secondary Earth Cover:
Existing Vegetation:
Parent Material: colluvium derived from metamorphic rock
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2015VA187002 **Pedon ID:** S2015VA187002

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
16.0	321.0	244						moderately well		

A--0 to 11 centimeters (0.0 to 4.3 inches); dark reddish brown (5YR 3/2) very gravelly loam; 20 percent clay; moderate very fine subangular blocky structure; very friable, nonsticky, slightly plastic; 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; 37 percent nonflat subrounded indurated 2 to 75-millimeter Greenstone fragments; neutral, pH 6.6, pH indicator solutions; clear smooth boundary. Lab sample # 16N02438

E--11 to 34 centimeters (4.3 to 13.4 inches); reddish brown (5YR 5/3) gravelly loam; 24 percent clay; moderate fine subangular blocky, and moderate medium subangular blocky structure; very friable, slightly sticky, slightly plastic; few very fine roots throughout and few very coarse roots throughout and common medium roots throughout and common fine roots throughout and common coarse roots throughout; 23 percent nonflat subrounded indurated 2 to 75-millimeter Greenstone fragments; strongly acid, pH 5.2, pH indicator solutions; clear smooth boundary. Lab sample # 16N02439

Bt1--34 to 56 centimeters (13.4 to 22.0 inches); 45 percent reddish gray (5YR 5/2) and 35 percent yellowish red (5YR 4/6) and 20 percent reddish brown (5YR 4/3) gravelly clay loam; 27 percent clay; moderate fine subangular blocky, and moderate medium subangular blocky structure; friable, slightly sticky, slightly plastic; very few very fine roots throughout and common medium roots throughout and few fine roots throughout; 5 percent distinct clay films on all faces of peds and 10 percent distinct clay films on surfaces along pores; 15 percent fine prominent iron-manganese concretions with sharp boundaries On faces of peds; 20 percent nonflat subrounded indurated 2 to 75-millimeter Greenstone fragments; moderately acid, pH 5.8, pH indicator solutions; gradual wavy boundary. Lab sample # 16N02440

Bt2--56 to 100 centimeters (22.0 to 39.4 inches); 50 percent red (2.5YR 4/6) and 35 percent reddish brown (5YR 4/4) and 10 percent yellowish red (5YR 5/6) and 5 percent reddish brown (5YR 5/3) very gravelly clay loam; 30 percent clay; moderate fine subangular blocky structure; friable, slightly sticky, moderately plastic; common medium roots throughout and very few fine roots throughout and common coarse roots throughout; 20 percent distinct clay films on all faces of peds and 20 percent distinct clay films on surfaces along pores; 10 percent fine prominent iron-manganese concretions with sharp boundaries On faces of peds; 45 percent nonflat subangular indurated 2 to 75-millimeter Greenstone fragments; moderately acid, pH 5.8, pH indicator solutions. Lab sample # 16N02441

PEDON DESCRIPTION -- NEON Site SCBI

Print Date: Nov 5 2017
Description Date: Oct 19 2015
Describer: Jeff Thomas
NEON Plot ID: SCBI_004
Site ID: S2015VA187004

Pedon ID: S2015VA187004

Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 16N0562
Soil Name as Described/Sampled: Montalto
Classification: Fine, mixed, semiactive, mesic Ultic Hapludalfs

Soil Name as Correlated:

Classification:
Pedon Type:
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section: Blue Ridge province, northern section
State Physiographic Area:
Local Physiographic Area: Blue Ridge
Geomorphic Setting: on backslope of side slope of None Assigned
Upslope Shape: concave
Cross Slope Shape: convex
Particle Size Control Section:
Description origin: NASIS
Diagnostic Features: ? to ? cm.

Country:
State: Virginia
County: Warren
MLRA: 130A -- Northern Blue Ridge
Soil Survey Area: VA187 -- Warren County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 32E -- Myersville and Montalto soils, 25 to 65 percent slopes, very stony
Pit Location: Orientation in relation to NEON plot NEON sampling site second site on 19OCT15 middle third sideslope Pit is 305degrees and 6.1meters from south-east 40 corner post of NEON site
Quad Name:
Std Latitude: 38.8968333
Std Longitude: -78.1463611

Latitude: 38 degrees 53 minutes 48.60 seconds north
Longitude: 78 degrees 8 minutes 46.90 seconds west
Datum: WGS84
UTM Zone:
UTM Easting:
UTM Northing:

Primary Earth Cover: Tree cover
Secondary Earth Cover:
Existing Vegetation:
Parent Material: residuum weathered from gabbro
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2015VA187004 **Pedon ID:** S2015VA187004

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
22.0	318.0	278						well		

A--0 to 14 centimeters (0.0 to 5.5 inches); dark brown (7.5YR 3/3) channery silt loam; 15 percent clay; moderate medium subangular blocky structure; very friable, nonsticky, nonplastic; common very fine roots throughout and common fine roots throughout; 32 percent flat subangular indurated 2 to 150-millimeter Greenstone fragments; slightly acid, pH 6.4, pH indicator solutions; clear wavy boundary. Lab sample # 16N02442

AB--14 to 25 centimeters (5.5 to 9.8 inches); dark brown (7.5YR 3/4) channery silt loam; 20 percent clay; moderate medium subangular blocky structure; very friable, slightly sticky, slightly plastic; common very fine roots throughout and common fine roots throughout; 20 percent flat subangular indurated 2 to 150-millimeter Greenstone fragments; moderately acid, pH 5.6, pH indicator solutions; clear smooth boundary. Lab sample # 16N02443

Bt1--25 to 48 centimeters (9.8 to 18.9 inches); brown (7.5YR 4/4) clay; 45 percent clay; moderate medium subangular blocky structure; friable, slightly sticky, moderately plastic; common very fine roots throughout and common very coarse roots throughout; 15 percent distinct clay films on all faces of peds; 7 percent flat subangular indurated 2 to 150-millimeter Greenstone fragments; moderately acid, pH 5.6, pH indicator solutions; gradual wavy boundary. Lab sample # 16N02444

Bt2--48 to 100 centimeters (18.9 to 39.4 inches); red (2.5YR 4/6) silty clay; 42 percent clay; strong medium subangular blocky structure; friable, slightly sticky, moderately plastic; common very fine roots throughout and common very coarse roots throughout; 25 percent distinct clay films on all faces of peds; 1 percent flat subangular indurated 2 to 150-millimeter Greenstone fragments; moderately acid, pH 5.6, pH indicator solutions. Lab sample # 16N02445

PEDON DESCRIPTION -- NEON Site SCBI

Print Date: Nov 5 2017
Description Date: Oct 20 2015
Describer: Rob Pate
NEON Plot ID: SCBI_005
Site ID: S2015VA187005

Pedon ID: S2015VA187005

Site Note:

Pedon Note: Upon drying colors became too light to classify as mollic.
Lab Source ID: KSSL
Lab Pedon #:
Soil Name as Described/Sampled: Lew
Classification: Loamy-skeletal, mixed, active, mesic Ultic Hapludalfs
Soil Name as Correlated:
Classification:
Pedon Type:
Pedon Purpose: laboratory sampling site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section: Blue Ridge province, northern section
State Physiographic Area:

Local Physiographic Area: Blue Ridge
Geomorphic Setting: on toeslope of base slope of mountains
on toeslope of base slope of hill
Upslope Shape: concave
Cross Slope Shape: concave
Particle Size Control Section: 76 to 100 cm.
Description origin: Spreadsheet
Diagnostic Features: ochric epipedon 4 to 20 cm.
argillic horizon 76 to 100 cm.

Country:
State: Virginia
County: Warren
MLRA: 130A -- Northern Blue Ridge
Soil Survey Area: VA187 -- Warren County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 31D -- Myersville-Catoctin silt loams, 15 to 25 percent slopes, very stony
Pit Location: Orientation in relation to NEON plot: 11.8m and 350 degrees from SW 20m x 20m corner. The soil was mapped Myersville-Catoctin but it's local alluvium over colluvium. The site is heavily invaded with microstigeum vimineum (Japanese stiltgrass). Ash trees are dead or dying. This pedon is for the NEON sampling project at the Smithsonian Conservation Biology Institute in Front Royal VA.
Quad Name:
Std Latitude: 38.9005900
Std Longitude: -78.1621300

Latitude:
Longitude:
Datum: WGS84
UTM Zone:
UTM Easting:
UTM Northing:

Primary Earth Cover: Tree cover
Secondary Earth Cover: Hardwoods
Existing Vegetation:
Parent Material: alluvium and/or colluvium derived from greenstone
Bedrock Kind: Greenstone
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA06_Morgantown

Cont. Site ID: S2015VA187005 **Pedon ID:** S2015VA187005

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
9.0	268.0	30						well		

Oi--0 to 4 centimeters (0.0 to 1.6 inches); slightly decomposed plant material; clear smooth boundary. Lab sample # 16N02446

A--4 to 20 centimeters (1.6 to 7.9 inches); dark reddish brown (5YR 3/2) gravelly silt loam; 15 percent clay; moderate fine granular structure; very friable, slightly sticky, slightly plastic; medium roots throughout and fine roots throughout; 5 percent nonflat subangular 2 to 75-millimeter Greenstone fragments and 11 percent nonflat subangular 2 to 75-millimeter Greenstone fragments; g/cc; percent; um/s; neutral, pH 7.0, pH indicator solutions; clear wavy boundary. Lab sample # 16N02447

Bw--20 to 46 centimeters (7.9 to 18.1 inches); dark reddish brown (5YR 3/3) gravelly loam; 15 percent clay; moderate medium subangular blocky structure; friable, slightly sticky, moderately plastic; medium roots throughout and fine roots throughout; 5 percent nonflat subangular 2 to 75-millimeter Greenstone fragments and 20 percent nonflat subangular 2 to 75-millimeter Greenstone fragments; g/cc; percent; um/s; neutral, pH 6.8, pH indicator solutions; clear wavy boundary. Lab sample # 16N02448

BC--46 to 76 centimeters (18.1 to 29.9 inches); dark reddish brown (5YR 3/3) extremely stony silt loam; 23 percent clay; weak medium subangular blocky structure; friable, slightly sticky, moderately plastic; fine roots throughout; 10 percent silt coats on surfaces along pores; 10 percent nonflat subangular 2 to 75-millimeter Greenstone fragments and 65 percent nonflat subangular 250 to 600-millimeter Greenstone fragments; g/cc; percent; um/s; neutral, pH 6.8, pH indicator solutions; clear wavy boundary. Lab sample # 16N02449

2Bt--76 to 100 centimeters (29.9 to 39.4 inches); reddish brown (5YR 4/4) very gravelly silty clay loam; 38 percent clay; moderate medium subangular blocky structure; firm, moderately sticky, moderately plastic; coarse roots throughout; 15 percent clay films on all faces of peds; 15 percent nonflat subangular 2 to 75-millimeter Greenstone fragments and 35 percent nonflat subangular 2 to 75-millimeter Greenstone fragments; g/cc; percent; um/s; neutral, pH 6.8, pH indicator solutions. Lab sample # 16N02450

PEDON DESCRIPTION -- NEON Site SCBI

Print Date: Nov 5 2017
Description Date: Oct 9 2015
Describer: Yuri Plowden
NEON Plot ID: SCBI_006
Site ID: S2015VA187006

Pedon ID: S2015VA187006

Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 16N0564
Soil Name as Described/Sampled: Myersville
Classification: Fine-loamy, mixed, active, mesic Ultic Hapludalfs
Soil Name as Correlated:
Classification:
Pedon Type:
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section: Blue Ridge province, northern section
State Physiographic Area:

Local Physiographic Area: Blue Ridge
Geomorphic Setting: on summit of nose slope of mountains
on summit of nose slope of hill
Upslope Shape: convex
Cross Slope Shape: convex
Particle Size Control Section: 32 to 82 cm.
Description origin: Spreadsheet
Diagnostic Features: argillic horizon 32 to 82 cm.

Country:
State: Virginia
County: Warren
MLRA: 130A -- Northern Blue Ridge
Soil Survey Area: VA187 -- Warren County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 30D -- Myersville silt loam, 15 to 25 percent slopes
Pit Location: Orientation in relation to NEON plot: 9.0m and 220 degrees from SW 20m x 20m quad corner. Fits the concept of Myersville soils. Rock Fragments near 100cm were mostly parachanners and were weakly cemented. This pedon is for the NEON sampling project at the Smithsonian Conservation Biology Institute in Front Royal VA.
Quad Name:
Std Latitude: 38.8974600
Std Longitude: -78.1522100

Latitude:
Longitude:
Datum: WGS84
UTM Zone:
UTM Easting:
UTM Northing:

Primary Earth Cover:
Secondary Earth Cover:
Existing Vegetation:
Parent Material: residuum weathered from greenstone
Bedrock Kind: Greenstone
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2015VA187006 **Pedon ID:** S2015VA187006

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
13.0	298.0	171						well		

Ap--0 to 20 centimeters (0.0 to 7.9 inches); dark reddish brown (5YR 3/2) silt loam; 18 percent clay; moderate fine granular structure; very friable, nonsticky, nonplastic; very fine roots throughout and fine roots throughout and coarse roots throughout; 5 percent nonflat subangular 2 to 75-millimeter Greenstone fragments and 5 percent nonflat subangular 2 to 75-millimeter Greenstone fragments; g/cc; percent; um/s; neutral, pH 7.0, pH indicator solutions; clear smooth boundary. Lab sample # 16N02451

BA--20 to 32 centimeters (7.9 to 12.6 inches); reddish brown (5YR 4/3) silt loam; 24 percent clay; moderate medium subangular blocky structure; very friable, slightly sticky, slightly plastic; fine roots throughout and coarse roots throughout; 10 percent clay films on all faces of peds; 3 percent nonflat subangular 2 to 75-millimeter Greenstone fragments and 5 percent nonflat subangular 2 to 75-millimeter Greenstone fragments; g/cc; percent; um/s; slightly acid, pH 6.5, pH indicator solutions; clear wavy boundary. Lab sample # 16N02452

Bt--32 to 58 centimeters (12.6 to 22.8 inches); reddish brown (5YR 4/4) silty clay loam; 35 percent clay; weak coarse subangular blocky structure; friable, moderately sticky, moderately plastic; very fine roots throughout; 15 percent 5YR 4/3) clay films on all faces of peds and 20 percent clay films on surfaces along pores; 2 percent nonflat subangular 2 to 75-millimeter Greenstone fragments and 3 percent nonflat subangular 2 to 75-millimeter Greenstone fragments; g/cc; percent; um/s; moderately acid, pH 6.0, pH indicator solutions; clear wavy boundary. Lab sample # 16N02453

BCt1--58 to 77 centimeters (22.8 to 30.3 inches); reddish brown (5YR 4/4) and very dark gray (5YR 3/1) clay loam; 32 percent clay; weak medium subangular blocky structure; friable, nonsticky, slightly plastic; very fine roots throughout; 20 percent clay films on all faces of peds and 20 percent clay films on surfaces along pores; 1 percent nonflat subangular 2 to 75-millimeter Greenstone fragments and 4 percent nonflat subangular 2 to 75-millimeter Greenstone fragments; g/cc; percent; um/s; slightly acid, pH 6.5, pH indicator solutions; clear wavy boundary. Lab sample # 16N02454

BCt2--77 to 100 centimeters (30.3 to 39.4 inches); yellowish red (5YR 5/6) and red (2.5YR 5/8) and strong brown (7.5YR 5/6) clay loam; 30 percent clay; weak coarse subangular blocky structure; friable, nonsticky, slightly plastic; very fine roots throughout; 10 percent clay films on all faces of peds; 1 percent nonflat subangular weakly cemented 2 to 75-millimeter Greenstone fragments and 4 percent nonflat subangular weakly cemented 2 to 75-millimeter Greenstone fragments; g/cc; percent; um/s; slightly acid, pH 6.2, pH indicator solutions. Lab sample # 16N02455

PEDON DESCRIPTION -- NEON Site SCBI

Print Date: Nov 5 2017
Description Date: Oct 7 2015
Describer: Rob Pate
NEON Plot ID: SCBI_007
Site ID: S2015VA187007

Pedon ID: S2015VA187007

Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #:
Soil Name as Described/Sampled: Lew
Classification: Loamy-skeletal, mixed, active, mesic Ultic Hapludalfs
Soil Name as Correlated:
Classification:
Pedon Type:
Pedon Purpose: laboratory sampling site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section: Blue Ridge province, northern section
State Physiographic Area:

Local Physiographic Area: Blue Ridge
Geomorphic Setting: on backslope of head slope of mountains
on backslope of head slope of hill
Upslope Shape: convex
Cross Slope Shape: linear
Particle Size Control Section: 28 to 78 cm.

Description origin: Spreadsheet
Diagnostic Features: ochric epipedon 5 to 28 cm.
argillic horizon 28 to 100 cm.

Country:
State: Virginia
County: Warren
MLRA: 130A -- Northern Blue Ridge
Soil Survey Area: VA187 -- Warren County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 19B -- Hawksbill cobbly loam, 2 to 7 percent slopes, occasionally flooded
Pit Location: Orientation in relation to NEON plot: 9.7m and 222 degrees from SW 20m x 20m quad corner. Site is located on lower third of the sideslope. Somewhat of a headslope area. Colluvium. This is on edge of Lew and Hawksbill mapunits. The pedon fits Lew. Pit was dug out of an existing tree throw. This pedon is for the NEON sampling project at the Smithsonian Conservation Biology Institute in Front Royal VA.
Quad Name:
Std Latitude: 38.8847800
Std Longitude: -78.1304500

Latitude:
Longitude:
Datum: WGS84
UTM Zone:
UTM Easting:
UTM Northing:

Primary Earth Cover: Tree cover
Secondary Earth Cover: Hardwoods
Existing Vegetation:
Parent Material: colluvium derived from greenstone
Bedrock Kind: Greenstone
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments: 50.0 percent flat 151- to 380-millimeter Greenstone fragments
Description database: MLRA06_Morgantown

Cont. Site ID: S2015VA187007 **Pedon ID:** S2015VA187007

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
36.0	411.0	334						well		

Oi--0 to 5 centimeters (0.0 to 2.0 inches); slightly decomposed plant material; very friable; Greenstone fragments; clear smooth boundary. Lab sample # 16N02456

A--5 to 11 centimeters (2.0 to 4.3 inches); very dark brown (10YR 2/2) channery silt loam; 7 percent clay; moderate fine granular structure; very friable, nonsticky, nonplastic; medium roots throughout and fine roots throughout; 20 percent flat subangular 2 to 150-millimeter Greenstone fragments; g/cc; percent; um/s; moderately acid, pH 6.0, pH indicator solutions; clear smooth boundary. Lab sample # 16N02457

BE--11 to 28 centimeters (4.3 to 11.0 inches); dark brown (10YR 3/3) flaggy silt loam; 11 percent clay; weak medium subangular blocky structure; friable, nonsticky, nonplastic; medium roots throughout and coarse roots throughout; 10 percent nonflat subangular 2 to 75-millimeter Greenstone fragments and 15 percent flat subangular 151 to 380-millimeter Greenstone fragments; g/cc; percent; um/s; strongly acid, pH 5.5, pH indicator solutions; clear wavy boundary. Lab sample # 16N02458

Bt1--28 to 51 centimeters (11.0 to 20.1 inches); brown (7.5YR 4/4) very flaggy silty clay loam; 29 percent clay; moderate medium subangular blocky structure; friable, moderately sticky, moderately plastic; medium roots throughout; 5 percent 7.5YR 4/4) clay films on surfaces along pores; 20 percent flat subangular 2 to 150-millimeter Greenstone fragments and 25 percent flat subangular 151 to 380-millimeter Greenstone fragments; g/cc; percent; um/s; very strongly acid, pH 5.0, pH indicator solutions; abrupt wavy boundary. Lab sample # 16N02459

2Bt2--51 to 100 centimeters (20.1 to 39.4 inches); reddish brown (5YR 4/4) extremely flaggy silty clay loam; 39 percent clay; moderate medium subangular blocky structure; friable, moderately sticky, moderately plastic; medium roots around fragments; 5 percent 5YR 4/4) clay films on surfaces along pores; 40 percent flat subangular 2 to 150-millimeter unspecified fragments and 45 percent flat subangular 151 to 380-millimeter Greenstone fragments; g/cc; percent; um/s; very strongly acid, pH 4.8, pH indicator solutions. Lab sample # 16N02460

PEDON DESCRIPTION -- NEON Site SCBI

Print Date: Nov 5 2017
Description Date: Oct 8 2015
Describer: Mike Jones
NEON Plot ID: SCBI_008
Site ID: S2015VA187008

Pedon ID: S2015VA187008

Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 16N0566
Soil Name as Described/Sampled: Lew
Classification: Loamy-skeletal, mixed, active, mesic Ultic Hapludalfs
Soil Name as Correlated:
Classification:
Pedon Type:
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section: Blue Ridge province, northern section
State Physiographic Area:

Local Physiographic Area: Blue Ridge
Geomorphic Setting: on backslope of side slope of mountains on backslope of side slope of hill
Upslope Shape: linear
Cross Slope Shape: linear
Particle Size Control Section: 30 to 80 cm.

Description origin: Spreadsheet
Diagnostic Features: argillic horizon 30 to 80 cm.

Country:
State: Virginia
County: Warren
MLRA: 130A -- Northern Blue Ridge
Soil Survey Area: VA187 -- Warren County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 22E -- Lew loam, 25 to 65 percent slopes, very stony
Pit Location: Orientation in relation to NEON plot: 2.2m and 294 degrees from SW 20m x 20m corner. Site is located on lower third of the sideslope. Residuum. This pedon is for the NEON sampling project at the Smithsonian Conservation Biology Institute in Front Royal VA. We took azimuth from SW 20m x 20m pvc pipe. We could not find the metal benchmark.
Quad Name:
Std Latitude: 38.8877000
Std Longitude: -78.1473000

Latitude:
Longitude:
Datum: WGS84
UTM Zone:
UTM Easting:
UTM Northing:

Primary Earth Cover:
Secondary Earth Cover:
Existing Vegetation:
Parent Material: residuum weathered from greenstone
Bedrock Kind: Greenstone
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments: 50.0 percent nonflat 250- to 600-millimeter Greenstone fragments

Description database: KSSL

Cont. Site ID: S2015VA187008 **Pedon ID:** S2015VA187008

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
27.0	336.0	10						well		

A--0 to 12 centimeters (0.0 to 4.7 inches); dark reddish brown (5YR 3/3) gravelly silt loam; 14 percent clay; moderate fine granular structure; very friable, nonsticky, nonplastic; very fine roots throughout and medium roots throughout; 7 percent nonflat subangular 2 to 75-millimeter Greenstone fragments and 10 percent nonflat subangular 2 to 75-millimeter Greenstone fragments; g/cc; percent; um/s; neutral, pH 7.2, pH indicator solutions; clear smooth boundary. Lab sample # 16N02461

BA--12 to 30 centimeters (4.7 to 11.8 inches); brown (7.5YR 4/4) cobbly silt loam; 17 percent clay; moderate medium subangular blocky structure; friable, slightly sticky, slightly plastic; medium roots throughout and coarse roots throughout; 5 percent nonflat subangular 2 to 75-millimeter Greenstone fragments and 15 percent nonflat subangular 75 to 250-millimeter Greenstone fragments and 15 percent nonflat subangular 2 to 75-millimeter Greenstone fragments; g/cc; percent; um/s; neutral, pH 7.2, pH indicator solutions; clear smooth boundary. Lab sample # 16N02462

Bt1--30 to 49 centimeters (11.8 to 19.3 inches); brown (7.5YR 5/4) very cobbly silt loam; 19 percent clay; moderate medium subangular blocky structure; friable, slightly sticky, slightly plastic; very fine roots throughout and medium roots throughout; 20 percent clay films on surfaces along pores; 5 percent nonflat subangular 2 to 75-millimeter unspecified fragments and 20 percent nonflat subangular 2 to 75-millimeter Greenstone fragments and 30 percent nonflat subangular 75 to 250-millimeter Greenstone fragments; g/cc; percent; um/s; slightly acid, pH 6.2, pH indicator solutions; clear smooth boundary. Lab sample # 16N02463

Bt2--49 to 93 centimeters (19.3 to 36.6 inches); brown (7.5YR 5/4) very gravelly silt loam; 29 percent clay; weak medium subangular blocky structure; friable, moderately sticky, moderately plastic; fine roots throughout; 40 percent clay films on surfaces along pores; 16 percent nonflat subangular 2 to 75-millimeter Greenstone fragments and 20 percent nonflat subangular 2 to 75-millimeter Greenstone fragments; g/cc; percent; um/s; slightly acid, pH 6.2, pH indicator solutions; clear smooth boundary. Lab sample # 16N02464

2C--93 to 100 centimeters (36.6 to 39.4 inches); brown (7.5YR 5/3) and yellowish brown (10YR 5/4) and strong brown (7.5YR 5/8) extremely flaggy silty clay loam; 35 percent clay; massive; firm, moderately sticky, moderately plastic; 95 percent flat subangular 2 to 150-millimeter Greenstone fragments; g/cc; percent; um/s. Lab sample # 16N02465

PEDON DESCRIPTION -- NEON Site SCBI

Print Date: Nov 5 2017
Description Date: Oct 7 2015
Describer: David Kingsbury
NEON Plot ID: SCBI_010
Site ID: S2015VA187010

Pedon ID: S2015VA187010

Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 16N0567
Soil Name as Described/Sampled: Lew
Classification: Loamy-skeletal, mixed, active, mesic Ultic Hapludalfs
Soil Name as Correlated:
Classification:
Pedon Type:
Pedon Purpose: laboratory sampling site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section: Blue Ridge province, northern section
State Physiographic Area:

Local Physiographic Area: Blue Ridge
Geomorphic Setting: on backslope of side slope of mountains on backslope of side slope of hill
Upslope Shape: linear
Cross Slope Shape: linear
Particle Size Control Section: 24 to 74 cm.

Description origin: Spreadsheet
Diagnostic Features: ochric epipedon 0 to 13 cm.
argillic horizon 24 to 100 cm.

Country:
State: Virginia
County: Warren
MLRA: 130A -- Northern Blue Ridge
Soil Survey Area: VA187 -- Warren County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 22E -- Lew loam, 25 to 65 percent slopes, very stony
Pit Location: Orientation in relation to NEON plot: 7.3m and 53 degrees from NW 20m x 20m quad corner. This pedon is for the NEON sampling project at the Smithsonian Conservation Biology Institute in Front Royal VA.
Quad Name:
Std Latitude: 38.8848600
Std Longitude: -78.1254100

Latitude:
Longitude:
Datum: WGS84
UTM Zone:
UTM Easting:
UTM Northing:

Primary Earth Cover: Tree cover
Secondary Earth Cover: Hardwoods
Existing Vegetation:
Parent Material: colluvium derived from greenstone
Bedrock Kind: Greenstone
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments: 2.0 percent flat 151- to 380-millimeter Greenstone fragments and 10.0 percent nonflat 250- to 600-millimeter Greenstone fragments and 1.0 percent nonflat 600- to 3000-millimeter Greenstone fragments

Description database: MLRA06_Morgantown

Cont. Site ID: S2015VA187010 **Pedon ID:** S2015VA187010

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
27.0	488.0	270						well		

A1--0 to 6 centimeters (0.0 to 2.4 inches); black (7.5YR 2.5/1) cobbly silt loam; 18 percent clay; moderate fine granular structure; nonsticky, nonplastic; very coarse roots throughout and medium roots throughout and fine roots throughout; very fine vesicular pores; 5 percent nonflat subangular 2 to 75-millimeter Greenstone fragments and 10 percent nonflat subangular 75 to 250-millimeter Greenstone fragments; g/cc; percent; um/s; neutral, pH 7.0, pH indicator solutions; clear smooth boundary. Lab sample # 16N02466

A2--6 to 13 centimeters (2.4 to 5.1 inches); dark brown (7.5YR 3/2) cobbly silt loam; 18 percent clay; moderate medium granular structure; nonsticky, nonplastic; medium roots throughout and fine roots throughout and coarse roots throughout; very fine vesicular pores; 5 percent nonflat subangular 2 to 75-millimeter Greenstone fragments and 5 percent nonflat subangular 75 to 250-millimeter Greenstone fragments and 10 percent flat subangular 151 to 380-millimeter Greenstone fragments; g/cc; percent; um/s; neutral, pH 6.8, pH indicator solutions; abrupt smooth boundary. Lab sample # 16N02467

BA--13 to 24 centimeters (5.1 to 9.4 inches); dark brown (7.5YR 3/4) very stony silt loam; 20 percent clay; moderate very coarse granular structure; nonsticky, nonplastic; very fine roots throughout and very coarse roots throughout and medium roots throughout; very fine vesicular pores; 10 percent nonflat subangular 2 to 75-millimeter Greenstone fragments and 10 percent nonflat subangular 75 to 250-millimeter unspecified fragments and 15 percent nonflat subangular 250 to 600-millimeter Greenstone fragments; g/cc; percent; um/s; slightly acid, pH 6.5, pH indicator solutions; clear wavy boundary. Lab sample # 16N02468

Bt1--24 to 51 centimeters (9.4 to 20.1 inches); brown (7.5YR 4/3) very stony silt loam; 23 percent clay; moderate medium subangular blocky structure; slightly sticky, slightly plastic; very fine roots throughout and very coarse roots throughout and fine roots throughout; very fine vesicular pores; 2 percent faint clay films on all faces of peds; 10 percent nonflat subangular 2 to 75-millimeter Greenstone fragments and 10 percent nonflat subangular 75 to 250-millimeter Greenstone fragments and 15 percent nonflat subangular 250 to 600-millimeter Greenstone fragments; g/cc; percent; um/s; moderately acid, pH 5.8, pH indicator solutions; clear wavy boundary. Lab sample # 16N02469

Bt2--51 to 72 centimeters (20.1 to 28.3 inches); strong brown (7.5YR 4/6) very stony silt loam; 25 percent clay; moderate coarse subangular blocky structure; slightly sticky, slightly plastic; medium roots throughout; 5 percent faint clay films on all faces of peds; 10 percent nonflat subangular 250 to 600-millimeter Greenstone fragments and 10 percent nonflat subangular 2 to 75-millimeter Greenstone fragments and 20 percent nonflat subangular 75 to 250-millimeter Greenstone fragments; g/cc; percent; um/s; moderately acid, pH 6.0, pH indicator solutions; gradual wavy boundary. Lab sample # 16N02470

Bt3--72 to 100 centimeters (28.3 to 39.4 inches); dark yellowish brown (10YR 4/6) stony silt loam; 24 percent clay; weak coarse subangular blocky structure; slightly sticky, slightly plastic; medium roots throughout; 10 percent distinct clay films on all faces of peds; 10 percent nonflat subangular 250 to 600-millimeter Greenstone fragments and 10 percent nonflat subangular 2 to 75-millimeter Greenstone fragments and 10 percent nonflat subangular 75 to 250-millimeter Greenstone fragments; g/cc; percent; um/s; strongly acid, pH 5.3, pH indicator solutions; gradual wavy boundary. Lab sample # 16N02471

PEDON DESCRIPTION -- NEON Site SCBI

Print Date: Nov 5 2017
Description Date: Oct 19 2015
Describer: Rob Pate
NEON Plot ID: SCBI_011
Site ID: S2015VA187011

Pedon ID: S2015VA187011

Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 16N0568
Soil Name as Described/Sampled: Myersville
Classification: Fine-loamy, mixed, active, mesic Ultic Hapludalfs
Soil Name as Correlated:
Classification:
Pedon Type:
Pedon Purpose: laboratory sampling site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section: Blue Ridge province, northern section
State Physiographic Area:

Local Physiographic Area: Blue Ridge
Geomorphic Setting: on backslope of side slope of None Assigned
Upslope Shape: convex
Cross Slope Shape: convex
Particle Size Control Section: 30 to 80 cm.

Description origin: NASIS

Diagnostic Features: ochric epipedon 4 to 13 cm.
argillic horizon 30 to 100 cm.

Country:
State: Virginia
County: Warren
MLRA: 130A -- Northern Blue Ridge
Soil Survey Area: VA187 -- Warren County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 32D -- Myersville and Montalto soils, 15 to 25 percent slopes, very stony
Pit Location: Orientation in relation to NEON plot Site was selected for NEON sampling at SCBI VA. Soil pit location within plot: 7.5m and 4 degrees from SE 20x20 corner
Quad Name:
Std Latitude: 38.8797400
Std Longitude: -78.1398000

Latitude:
Longitude:
Datum: WGS84
UTM Zone:
UTM Easting:
UTM Northing:

Primary Earth Cover: Tree cover
Secondary Earth Cover: Hardwoods
Existing Vegetation:
Parent Material: residuum weather from metabasalt
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments: 30.0 percent flat subangular very strongly cemented 380- to 600-millimeter Greenstone fragments

Description database: MLRA06_Morgantown

Cont. Site ID: S2015VA187011 **Pedon ID:** S2015VA187011

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
30.0	370.0	192						well		

Oi--0 to 4 centimeters (0.0 to 1.6 inches); slightly decomposed plant material; clear wavy boundary. Lab sample # 16N02472

A--4 to 13 centimeters (1.6 to 5.1 inches); dark reddish brown (5YR 3/3) channery silt loam; 16 percent clay; moderate fine granular structure; very friable, slightly sticky, slightly plastic; very fine roots throughout and coarse roots throughout; 20 percent flat subangular very strongly cemented 2 to 150-millimeter Greenstone fragments; neutral, pH 7.0, pH indicator solutions; clear wavy boundary. Lab sample # 16N02473

BE--13 to 30 centimeters (5.1 to 11.8 inches); reddish brown (5YR 4/4) channery silt loam; 23 percent clay; moderate medium subangular blocky structure; friable, moderately sticky, slightly plastic; very coarse roots throughout and medium roots throughout and fine roots throughout; 4 percent flat subangular very strongly cemented 150 to 380-millimeter Greenstone fragments and 25 percent flat subangular very strongly cemented 2 to 150-millimeter Greenstone fragments; neutral, pH 7.0, pH indicator solutions; clear wavy boundary. Lab sample # 16N02474

Bt1--30 to 41 centimeters (11.8 to 16.1 inches); red (2.5YR 4/6) very gravelly silty clay loam; 32 percent clay; weak coarse subangular blocky structure; friable, moderately sticky, moderately plastic; medium roots throughout; 20 percent faint clay films on all faces of peds; 5 percent fine manganese coatings; 5 percent flat subangular very strongly cemented 150 to 380-millimeter Greenstone fragments and 20 percent flat subangular very strongly cemented 2 to 150-millimeter Greenstone fragments and 20 percent nonflat subangular very strongly cemented 2 to 75-millimeter Greenstone fragments; slightly acid, pH 6.5, pH indicator solutions; clear wavy boundary. Lab sample # 16N02475

Bt2--41 to 100 centimeters (16.1 to 39.4 inches); yellowish red (5YR 4/6) silty clay loam; 35 percent clay; weak coarse subangular blocky structure; friable, moderately sticky, moderately plastic; medium roots throughout; 15 percent faint clay films on all faces of peds; 3 percent fine manganese coatings; 1 percent flat subangular very strongly cemented 2 to 75-millimeter Greenstone fragments; slightly acid, pH 6.5, pH indicator solutions. Lab sample # 16N02476

PEDON DESCRIPTION -- NEON Site SCBI

Print Date: Nov 5 2017
Description Date: Oct 20 2015
Describer: Jeff Thomas
NEON Plot ID: SCBI_013
Site ID: S2015VA187013

Pedon ID: S2015VA187013

Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 16N0569
Soil Name as Described/Sampled: Myersville
Classification: Fine-loamy, mixed, active, mesic Ultic Hapludalfs

Soil Name as Correlated:

Classification:
Pedon Type:
Pedon Purpose: laboratory sampling site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section: Blue Ridge province, northern section
State Physiographic Area:

Local Physiographic Area: Blue Ridge
Geomorphic Setting: on backslope of head slope of None Assigned
Upslope Shape: linear
Cross Slope Shape: convex
Particle Size Control Section: 20 to 70 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 4 cm.
argillic horizon 20 to 100 cm.

Country:
State: Virginia
County: Warren
MLRA: 130A -- Northern Blue Ridge
Soil Survey Area: VA187 -- Warren County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 32E -- Myersville and Montalto soils, 25 to 65 percent slopes, very stony
Pit Location: Orientation in relation to NEON plot NEON sampling site second site on 20OCT15 head of drainageway Pit is 11.8 meters and 290 degrees from the NE 20x20 corner
Quad Name:
Std Latitude: 38.8745000
Std Longitude: -78.1646111

Latitude: 38 degrees 52 minutes 28.20 seconds north
Longitude: 78 degrees 9 minutes 52.60 seconds west
Datum: WGS84
UTM Zone:
UTM Easting:
UTM Northing:

Primary Earth Cover: Tree cover
Secondary Earth Cover: Hardwoods
Existing Vegetation:
Parent Material: residuum weathered from greenstone
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA06_Morgantown

Cont. Site ID: S2015VA187013 **Pedon ID:** S2015VA187013

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
38.0	336.0	274						well		

A--0 to 4 centimeters (0.0 to 1.6 inches); dark reddish brown (5YR 3/2) channery silt loam; 10 percent clay; moderate fine granular, and moderate very fine granular structure; very friable, nonsticky, nonplastic; common very fine roots throughout; 5 percent nonflat subangular indurated 2 to 75-millimeter Greenstone fragments and 10 percent flat subangular indurated 2 to 150-millimeter Greenstone fragments; slightly acid, pH 6.2, pH indicator solutions; abrupt smooth boundary. Lab sample # 16N02477

BA--4 to 20 centimeters (1.6 to 7.9 inches); reddish brown (2.5YR 4/4) silty clay loam; 28 percent clay; weak fine subangular blocky, and weak medium subangular blocky structure; friable, nonsticky, moderately plastic; common medium roots throughout and common fine roots throughout and common coarse roots throughout; 2 percent nonflat subangular indurated 75 to 250-millimeter Greenstone fragments and 5 percent nonflat subangular indurated 2 to 75-millimeter Greenstone fragments and 5 percent flat subangular indurated 2 to 150-millimeter Greenstone fragments; strongly acid, pH 5.2, pH indicator solutions; clear wavy boundary. Lab sample # 16N02478

Bt1--20 to 45 centimeters (7.9 to 17.7 inches); red (2.5YR 4/6) silty clay loam; 34 percent clay; moderate medium subangular blocky, and moderate fine subangular blocky structure; friable, moderately sticky, very plastic; common medium roots throughout; 15 percent distinct clay films on all faces of peds; 5 percent flat subangular indurated 2 to 150-millimeter Greenstone fragments and 5 percent nonflat subangular indurated 2 to 75-millimeter Greenstone fragments; strongly acid, pH 5.2, pH indicator solutions; gradual wavy boundary. Lab sample # 16N02479

Bt2--45 to 100 centimeters (17.7 to 39.4 inches); reddish brown (2.5YR 4/4) channery silty clay loam; 30 percent clay; moderate coarse subangular blocky, and moderate medium subangular blocky structure; friable, slightly sticky, moderately plastic; common fine roots throughout and common coarse roots throughout; 15 percent distinct clay films on all faces of peds; 5 percent flat subangular indurated 2 to 150-millimeter Greenstone fragments and 5 percent nonflat subangular indurated 75 to 250-millimeter Greenstone fragments and 10 percent nonflat subangular indurated 2 to 75-millimeter Greenstone fragments; very strongly acid, pH 5.0, pH indicator solutions. Lab sample # 16N02480

PEDON DESCRIPTION -- NEON Site SCBI

Print Date: Nov 5 2017
Description Date: Oct 8 2015
Describer: Jeff Thomas
NEON Plot ID: SCBI_014
Site ID: S2015VA187014

Pedon ID: S2015VA187014

Site Note:

Pedon Note: This soil is a taxajunct of the Myersville series. Myersville is a fine-loamy; mixed; active; mesic Ultic Hapludalfs this soil is a Loamy-skeletal; mixed; active; mesic Ultic Hapludalfs.

Lab Source ID: KSSL
Lab Pedon #: 16N0570
Soil Name as Described/Sampled: Myersville
Classification: Loamy-skeletal, mixed, active, mesic Ultic Hapludalfs
Soil Name as Correlated:
Classification:
Pedon Type: taxadjunct to the series
Pedon Purpose: research site
Taxon Kind: taxadjunct
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section: Blue Ridge province, northern section
State Physiographic Area:

Local Physiographic Area: Blue Ridge
Geomorphic Setting: on shoulder of nose slope of mountains
on shoulder of nose slope of hill
Upslope Shape: linear
Cross Slope Shape: convex
Particle Size Control Section: 15 to 30 cm.

Description origin: Spreadsheet
Diagnostic Features: argillic horizon 15 to 30 cm.

Country:
State: Virginia
County: Warren
MLRA: 130A -- Northern Blue Ridge
Soil Survey Area: VA187 -- Warren County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 30D -- Myersville silt loam, 15 to 25 percent slopes
Pit Location: Orientation in relation to NEON plot: 8.2m and 274 degrees from SW 20m x 20m quad corner. 9.5m and 21.5 degrees from SW 40m x 40m to pit. Refusal at 65cm due to stones and boulders. This pedon is for the NEON sampling project at the Smithsonian Conservation Biology Institute in Front Royal VA.

Quad Name:

Std Latitude: 38.8669400
Std Longitude: -78.1637200

Latitude:
Longitude:
Datum: WGS84
UTM Zone:
UTM Easting:
UTM Northing:

Primary Earth Cover:
Secondary Earth Cover:
Existing Vegetation:
Parent Material: residuum weathered from greenstone
Bedrock Kind: Greenstone
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments: 10.0 percent flat 2- to 150-millimeter Greenstone fragments

Description database: KSSL

Cont. Site ID: S2015VA187014 **Pedon ID:** S2015VA187014

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
20.0	383.0	80						well		

A--0 to 5 centimeters (0.0 to 2.0 inches); dark brown (7.5YR 3/2) gravelly silt loam; 18 percent clay; moderate fine granular structure; very friable, nonsticky, nonplastic; very fine roots throughout and medium roots throughout; medium vesicular pores; 5 percent flat angular 2 to 150-millimeter unspecified fragments and 10 percent nonflat angular 2 to 75-millimeter Greenstone fragments; g/cc; percent; um/s; abrupt smooth boundary. Lab sample # 16N02481

BA--5 to 15 centimeters (2.0 to 5.9 inches); dark brown (7.5YR 3/3) stony silt loam; 20 percent clay; moderate coarse granular structure; friable, nonsticky, nonplastic; very fine roots throughout and medium roots throughout; very fine vesicular pores; 5 percent nonflat angular 75 to 250-millimeter Greenstone fragments and 10 percent nonflat subangular 250 to 600-millimeter Greenstone fragments and 10 percent nonflat subangular 2 to 75-millimeter Greenstone fragments; g/cc; percent; um/s; clear wavy boundary. Lab sample # 16N02482

Bt--15 to 30 centimeters (5.9 to 11.8 inches); dark brown (7.5YR 3/4) stony silt loam; 23 percent clay; moderate medium subangular blocky structure; friable, slightly sticky, slightly plastic; medium roots throughout and fine roots throughout; very fine vesicular pores; 10 percent faint clay films on all faces of peds; 10 percent nonflat angular 2 to 75-millimeter Greenstone fragments and 15 percent nonflat angular 75 to 250-millimeter Greenstone fragments and 20 percent nonflat subangular 250 to 600-millimeter Greenstone fragments; g/cc; percent; um/s; abrupt wavy boundary. Lab sample # 16N02483

BC--30 to 65 centimeters (11.8 to 25.6 inches); brown (7.5YR 4/3) stony silt loam; 25 percent clay; weak medium subangular blocky structure; friable, slightly sticky, slightly plastic; fine vesicular pores; 2 percent faint clay films on all faces of peds; 5 percent flat angular 2 to 150-millimeter Greenstone fragments and 10 percent nonflat angular 75 to 250-millimeter Greenstone fragments and 55 percent nonflat subangular 250 to 600-millimeter Greenstone fragments; g/cc; percent; um/s; moderately acid, pH 5.7, pH indicator solutions. Lab sample # 16N02484

PEDON DESCRIPTION -- NEON Site SCBI

Print Date: Nov 5 2017
Description Date: Oct 7 2015
Describer: Rob Pate
NEON Plot ID: SCBI_017
Site ID: S2015VA187017

Pedon ID: S2015VA187017

Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #:
Soil Name as Described/Sampled: Myersville
Classification: Fine-loamy, mixed, active, mesic Ultic Hapludalfs
Soil Name as Correlated:
Classification:
Pedon Type:
Pedon Purpose: laboratory sampling site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section: Blue Ridge province, northern section
State Physiographic Area:

Local Physiographic Area: Blue Ridge
Geomorphic Setting: on summit of nose slope of mountains on summit of nose slope of hill
Upslope Shape: convex
Cross Slope Shape: convex
Particle Size Control Section: 22 to 65 cm.
Description origin: Spreadsheet
Diagnostic Features: argillic horizon 22 to 65 cm.

Country:
State: Virginia
County: Warren
MLRA: 130A -- Northern Blue Ridge
Soil Survey Area: VA187 -- Warren County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 32C -- Myersville and Montalto soils, 7 to 15 percent slopes, very stony
Pit Location: Orientation in relation to NEON plot: 16.2 m and 45 degrees from NE 20x20 corner. Upper edge of noseslope and upper third of side slope. This pedon is for the NEON sampling project at the Smithsonian Conservation Biology Institute in Front Royal VA.
Quad Name:
Std Latitude: 38.8795000
Std Longitude: -78.1354100

Latitude:
Longitude:
Datum: WGS84
UTM Zone:
UTM Easting:
UTM Northing:

Primary Earth Cover: Tree cover
Secondary Earth Cover: Hardwoods
Existing Vegetation:
Parent Material: residuum weathered from greenstone
Bedrock Kind: Greenstone
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA06_Morgantown

Cont. Site ID: S2015VA187017 **Pedon ID:** S2015VA187017

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
9.0	385.0	50						well		

Ap--0 to 6 centimeters (0.0 to 2.4 inches); dark reddish brown (5YR 3/3) silt loam; 15 percent clay; moderate fine granular structure; very friable, slightly sticky, slightly plastic; very fine roots throughout and medium roots throughout; coarse interstitial pores; 5 percent nonflat subangular 2 to 75-millimeter Greenstone fragments; g/cc; percent; um/s; slightly acid, pH 6.2, pH indicator solutions; clear smooth boundary. Lab sample # 16N02485

BA--6 to 22 centimeters (2.4 to 8.7 inches); reddish brown (5YR 4/4) very channery silt loam; 20 percent clay; moderate medium subangular blocky structure; friable, slightly sticky, slightly plastic; very fine roots throughout and medium roots throughout; coarse interstitial pores; 15 percent nonflat subangular 2 to 75-millimeter Greenstone fragments and 25 percent flat subangular 2 to 150-millimeter Greenstone fragments; g/cc; percent; um/s; slightly acid, pH 6.2, pH indicator solutions; clear smooth boundary. Lab sample # 16N02486

Bt--22 to 65 centimeters (8.7 to 25.6 inches); yellowish red (5YR 4/6) silt loam; 27 percent clay; moderate medium subangular blocky structure; friable, slightly sticky, slightly plastic; very fine roots throughout and medium roots throughout; 5 percent 5YR 4/6) clay films on surfaces along pores; 10 percent nonflat subangular 2 to 75-millimeter Greenstone fragments; g/cc; percent; um/s; moderately acid, pH 5.8, pH indicator solutions; clear smooth boundary. Lab sample # 16N02487

BC--65 to 100 centimeters (25.6 to 39.4 inches); dark yellowish brown (10YR 4/4) silty clay loam; 30 percent clay; weak medium subangular blocky structure; friable, moderately sticky, moderately plastic; very fine roots throughout; coarse interstitial pores; 2 percent 10YR 4/4) clay films on surfaces along pores; very strongly acid, pH 5.0, pH indicator solutions. Lab sample # 16N02488

PEDON DESCRIPTION -- NEON Site SCBI

Print Date: Nov 5 2017
Description Date: Oct 20 2015
Describer: Rob Pate
NEON Plot ID: SCBI_019
Site ID: S2015VA187019

Pedon ID: S2015VA187019

Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 16N0572
Soil Name as Described/Sampled: Myersville
Classification: Fine-loamy, mixed, active, mesic Ultic Hapludalfs
Soil Name as Correlated:
Classification:
Pedon Type:
Pedon Purpose: laboratory sampling site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section: Blue Ridge province, northern section
State Physiographic Area:

Local Physiographic Area: Blue Ridge
Geomorphic Setting: on backslope of side slope of mountains on backslope of side slope of hill
Upslope Shape: concave
Cross Slope Shape: concave
Particle Size Control Section: 31 to 81 cm.
Description origin: Spreadsheet
Diagnostic Features: ochric epipedon 0 to 13 cm.
argillic horizon 31 to 92 cm.

Country:
State: Virginia
County: Warren
MLRA: 130A -- Northern Blue Ridge
Soil Survey Area: VA187 -- Warren County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 30C -- Myersville silt loam, 7 to 15 percent slopes
Pit Location: Orientation in relation to NEON plot: 1.5m and 8 degrees from NE 20x20 corner. 40cm and 120 degrees from the orange stake in center of pit to the pit face. Soil is a moderately well drained Myersville. The site is heavily invaded with microstigeum vimineum (Japanese stiltgrass). This pedon is for the NEON sampling project at the Smithsonian Conservation Biology Institute in Front Royal VA.
Quad Name:
Std Latitude: 38.9008400
Std Longitude: -78.1756300

Latitude:
Longitude:
Datum: WGS84
UTM Zone:
UTM Easting:
UTM Northing:

Primary Earth Cover: Tree cover
Secondary Earth Cover: Hardwoods
Existing Vegetation:
Parent Material: residuum weathered from greenstone
Bedrock Kind: Greenstone
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA06_Morgantown

Cont. Site ID: S2015VA187019 **Pedon ID:** S2015VA187019

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
19.0	318.0	278						moderately well		

Ap--0 to 13 centimeters (0.0 to 5.1 inches); dark reddish brown (5YR 3/3) cobbly silt loam; 17 percent clay; moderate fine granular structure; friable, slightly sticky, slightly plastic; fine roots throughout; 10 percent nonflat subangular 75 to 250-millimeter Greenstone fragments and 20 percent flat subangular 151 to 380-millimeter Greenstone fragments; g/cc; percent; um/s; slightly acid, pH 6.5, pH indicator solutions; clear wavy boundary. Lab sample # 16N02489

BE--13 to 31 centimeters (5.1 to 12.2 inches); brown (7.5YR 4/2) silt loam; 20 percent clay; moderate medium subangular blocky structure; friable, slightly sticky, slightly plastic; very fine roots throughout and fine roots throughout; 10 percent silt coats on all faces of peds; 2 percent nonflat subangular 2 to 75-millimeter Greenstone fragments and 3 percent flat subangular 2 to 150-millimeter Greenstone fragments; g/cc; percent; um/s; slightly acid, pH 6.2, pH indicator solutions; clear wavy boundary. Lab sample # 16N02490

Bt1--31 to 71 centimeters (12.2 to 28.0 inches); reddish brown (5YR 4/4) silty clay loam; 29 percent clay; moderate medium subangular blocky, and moderate fine subangular blocky structure; friable, slightly sticky, moderately plastic; medium roots throughout; 10 percent clay films on all faces of peds; 3 percent nonflat subangular 2 to 75-millimeter Greenstone fragments and 7 percent flat subangular 2 to 150-millimeter Greenstone fragments; g/cc; percent; um/s; slightly acid, pH 6.2, pH indicator solutions; gradual wavy boundary. Lab sample # 16N02491

Bt2--71 to 92 centimeters (28.0 to 36.2 inches); dark reddish gray (5YR 4/2) silty clay loam; 39 percent clay; weak medium prismatic, and weak medium subangular blocky structure; friable, moderately sticky, moderately plastic; medium roots throughout; 20 percent clay films on all faces of peds; 20 percent 5YR 5/8) masses of oxidized iron In matrix and 40 percent 5YR 5/1) iron depletions In matrix; 3 percent nonflat subangular 2 to 75-millimeter Greenstone fragments and 7 percent flat subangular 2 to 150-millimeter Greenstone fragments; g/cc; percent; um/s; slightly acid, pH 6.2, pH indicator solutions; gradual wavy boundary. Lab sample # 16N02492

C--92 to 100 centimeters (36.2 to 39.4 inches); brown (7.5YR 4/4) silty clay loam; 39 percent clay; massive; friable, moderately sticky, moderately plastic; coarse roots top of horizon; 10 percent N 2/) manganese coatings and 30 percent 5YR 6/2) iron depletions and 30 percent 5YR 4/6) masses of oxidized iron; 3 percent nonflat subangular 2 to 75-millimeter Greenstone fragments and 7 percent flat subangular 2 to 150-millimeter Greenstone fragments; g/cc; percent; um/s; slightly acid, pH 6.2, pH indicator solutions. Lab sample # 16N02493

PEDON DESCRIPTION -- NEON Site SCBI

Print Date: Nov 5 2017
Description Date: Oct 9 2015
Describer: Dave Kingsbury
NEON Plot ID: SCBI_021
Site ID: S2015VA187021

Pedon ID: S2015VA187021

Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 16N0573
Soil Name as Described/Sampled: Myersville
Classification: Fine-loamy, mixed, active, mesic Ultic Hapludalfs

Soil Name as Correlated:

Classification:
Pedon Type:
Pedon Purpose: laboratory sampling site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section: Blue Ridge province, northern section
State Physiographic Area:

Local Physiographic Area: Blue Ridge
Geomorphic Setting: on backslope of nose slope of None Assigned
Upslope Shape: linear
Cross Slope Shape: concave
Particle Size Control Section: 63 to 94 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 19 cm.
argillic horizon 35 to 94 cm.

Country:
State: Virginia
County: Warren
MLRA: 130A -- Northern Blue Ridge
Soil Survey Area: VA187 -- Warren County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 32D -- Myersville and Montalto soils, 15 to 25 percent slopes, very stony
Pit Location: Orientation in relation to NEON plot: pit face is 9.3 meters and 46 degrees from SW 40m x 40m quad corner.
Quad Name:
Std Latitude: 38.9007500
Std Longitude: -78.1530833

Latitude: 38 degrees 54 minutes 2.70 seconds north
Longitude: 78 degrees 9 minutes 11.10 seconds west
Datum: WGS84
UTM Zone:
UTM Easting:
UTM Northing:

Primary Earth Cover: Tree cover
Secondary Earth Cover: Hardwoods
Existing Vegetation:
Parent Material: residuum weather from metabasalt
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA06_Morgantown

Cont. Site ID: S2015VA187021 **Pedon ID:** S2015VA187021

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
22.0	319.0	8						well		

Ap1--0 to 10 centimeters (0.0 to 3.9 inches); dark brown (7.5YR 3/2) silt loam; 18 percent clay; moderate fine granular, and moderate medium granular structure; nonsticky, nonplastic; common fine roots throughout and common coarse roots throughout; common very fine vesicular pores; 10 percent nonflat subangular very strongly cemented 2 to 75-millimeter Greenstone fragments; slightly alkaline, pH 7.5, pH indicator solutions. Lab sample # 16N02494

Ap2--10 to 19 centimeters (3.9 to 7.5 inches); dark brown (7.5YR 3/2) silt loam; 19 percent clay; moderate coarse granular, and moderate very coarse granular structure; nonsticky, nonplastic; common fine roots throughout and common coarse roots throughout; common fine vesicular and common coarse tubular pores; 10 percent nonflat subangular very strongly cemented 2 to 75-millimeter Greenstone fragments; slightly alkaline, pH 7.5, pH indicator solutions. Lab sample # 16N02495

BA--19 to 35 centimeters (7.5 to 13.8 inches); brown (7.5YR 4/3) silt loam; 20 percent clay; weak medium subangular blocky structure; nonsticky, nonplastic; common medium roots throughout and common fine roots throughout; common very fine vesicular and common coarse tubular pores; 2 percent faint clay films on all faces of peds; 5 percent nonflat subangular very strongly cemented 2 to 75-millimeter Greenstone fragments; slightly alkaline, pH 7.5, pH indicator solutions. Lab sample # 16N02496

Bt1--35 to 63 centimeters (13.8 to 24.8 inches); brown (7.5YR 4/3) silt loam; 24 percent clay; moderate coarse subangular blocky structure; slightly sticky, slightly plastic; common medium roots throughout; common medium tubular and common fine tubular pores; 10 percent distinct clay films on all faces of peds; 1 percent 10YR 2/1) manganese coatings; 5 percent nonflat subangular very strongly cemented 2 to 75-millimeter Greenstone fragments; slightly alkaline, pH 7.5, pH indicator solutions. Lab sample # 16N02497

Bt2--63 to 94 centimeters (24.8 to 37.0 inches); strong brown (7.5YR 4/6) silt loam; 25 percent clay; moderate fine subangular blocky, and moderate medium subangular blocky structure; slightly sticky, slightly plastic; common fine tubular pores; 20 percent distinct clay films on all faces of peds; 1 percent 10YR 2/1) manganese coatings; 5 percent nonflat subangular very strongly cemented 2 to 75-millimeter Greenstone fragments; slightly alkaline, pH 7.5, pH indicator solutions. Lab sample # 16N02498

BC--94 to 100 centimeters (37.0 to 39.4 inches); brown (7.5YR 4/4) gravelly silt loam; 22 percent clay; 5 percent medium (2.5Y 4/2) and 10 percent coarse (5YR 5/8) mottles; strong coarse subangular blocky, and strong very coarse subangular blocky structure; 3 percent 10YR 2/1) manganese coatings; 10 percent nonflat subangular very strongly cemented 2 to 75-millimeter Greenstone fragments and 10 percent flat subangular very strongly cemented 2 to 150-millimeter Greenstone fragments; neutral, pH 6.8, pH indicator solutions. Lab sample # 16N02499

PEDON DESCRIPTION -- NEON Site SCBI

Print Date: Nov 5 2017
Description Date: Oct 19 2015
Describer: Dave Kingsbury
NEON Plot ID: SCBI_022
Site ID: S2015VA187022

Pedon ID: S2015VA187022

Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 16N0574
Soil Name as Described/Sampled: Myersville
Classification: Fine-loamy, mixed, active, mesic Ultic Hapludalfs

Soil Name as Correlated:

Classification:
Pedon Type:
Pedon Purpose: laboratory sampling site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section: Blue Ridge province, northern section
State Physiographic Area:

Local Physiographic Area: Blue Ridge
Geomorphic Setting: on footslope of base slope of footslope mountains
Upslope Shape: linear
Cross Slope Shape: linear
Particle Size Control Section: 19 to 69 cm.

Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 19 cm.
argillic horizon 19 to 100 cm.

Country:
State: Virginia
County: Warren
MLRA: 130A -- Northern Blue Ridge
Soil Survey Area: VA187 -- Warren County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 21D -- Lew channery loam, 7 to 25 percent slopes
Pit Location: Orientation in relation to NEON plot: 4.1 meters and 56 degrees from SW 40m x 40m quad corner.
Quad Name:
Std Latitude: 38.8823889
Std Longitude: -78.1233889

Latitude: 38 degrees 52 minutes 56.60 seconds north
Longitude: 78 degrees 7 minutes 24.20 seconds west
Datum: WGS84
UTM Zone:
UTM Easting:
UTM Northing:

Primary Earth Cover: Tree cover
Secondary Earth Cover: Hardwoods
Existing Vegetation:
Parent Material: colluvium derived from greenstone
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments: 7.0 percent flat subangular indurated 150- to 380-millimeter Greenstone fragments and 7.0 percent flat subangular indurated 380- to 600-millimeter Greenstone fragments and 1.0 percent flat subangular indurated 600- to 1000-millimeter Greenstone fragments

Description database: MLRA06_Morgantown

Cont. Site ID: S2015VA187022 **Pedon ID:** S2015VA187022

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
12.0	502.0	250						well		

A--0 to 8 centimeters (0.0 to 3.1 inches); dark brown (7.5YR 3/2) channery silt loam; 18 percent clay; moderate fine granular, and moderate medium granular structure; very friable, slightly sticky, slightly plastic; common very fine roots throughout and common fine roots throughout; 5 percent nonflat angular very strongly cemented 2 to 75-millimeter Greenstone fragments and 10 percent flat angular very strongly cemented 2 to 150-millimeter Greenstone fragments; neutral, pH 7.0, pH indicator solutions; clear smooth boundary. Lab sample # 16N02501, 16N02500

AB--8 to 19 centimeters (3.1 to 7.5 inches); dark brown (7.5YR 3/4) channery silt loam; 19 percent clay; moderate fine granular, and moderate coarse granular structure; very friable, slightly sticky, slightly plastic; common medium roots throughout and common fine roots throughout; 5 percent nonflat angular very strongly cemented 2 to 75-millimeter Greenstone fragments and 10 percent flat angular very strongly cemented 2 to 150-millimeter Greenstone fragments; slightly acid, pH 6.5, pH indicator solutions; clear smooth boundary. Lab sample # 16N02502

Bt1--19 to 32 centimeters (7.5 to 12.6 inches); weak red (7.5R 4/4) very stony silt loam; 21 percent clay; weak fine subangular blocky, and weak medium subangular blocky structure; friable, slightly sticky, slightly plastic; common fine roots throughout; 2 percent faint clay films on all faces of peds; 5 percent nonflat subangular very strongly cemented 2 to 75-millimeter Greenstone fragments and 10 percent flat angular very strongly cemented 2 to 150-millimeter Greenstone fragments and 25 percent flat subangular very strongly cemented 380 to 600-millimeter Greenstone fragments; neutral, pH 6.8, pH indicator solutions; clear wavy boundary. Lab sample # 16N02503

Bt2--32 to 62 centimeters (12.6 to 24.4 inches); strong brown (7.5YR 4/6) very stony silt loam; 25 percent clay; weak medium subangular blocky, and weak coarse subangular blocky structure; friable, moderately sticky, slightly plastic; common very fine roots throughout; 10 percent faint clay films on all faces of peds; 5 percent nonflat subangular very strongly cemented 2 to 75-millimeter Greenstone fragments and 10 percent flat angular very strongly cemented 2 to 150-millimeter Greenstone fragments and 25 percent flat subangular very strongly cemented 380 to 600-millimeter Greenstone fragments; strongly acid, pH 5.2, pH indicator solutions; clear wavy boundary. Lab sample # 16N02504

Bt3--62 to 100 centimeters (24.4 to 39.4 inches); strong brown (7.5YR 4/6) extremely stony silt loam; 25 percent clay; weak medium subangular blocky structure; friable, moderately sticky, slightly plastic; 5 percent faint clay bridges on all faces of peds; 5 percent nonflat subangular very strongly cemented 75 to 250-millimeter Greenstone fragments and 10 percent nonflat subangular very strongly cemented 2 to 75-millimeter Greenstone fragments and 10 percent flat angular very strongly cemented 2 to 150-millimeter Greenstone fragments and 40 percent flat subangular very strongly cemented 380 to 600-millimeter Greenstone fragments. Lab sample # 16N02505

PEDON DESCRIPTION -- NEON Site SCBI

Print Date: Nov 5 2017
Description Date: Oct 6 2015
Describer: Jeff Thomas
NEON Plot ID: SCBI_034
Site ID: S2015VA187034

Pedon ID: S2015VA187034

Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 16N0575
Soil Name as Described/Sampled: Myersville
Classification: Fine-loamy, mixed, active, mesic Ultic Hapludalfs
Soil Name as Correlated:
Classification:
Pedon Type:
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section: Blue Ridge province, northern section
State Physiographic Area:

Local Physiographic Area: Blue Ridge
Geomorphic Setting: on backslope of side slope of mountains on backslope of side slope of hill
Upslope Shape: convex
Cross Slope Shape: convex
Particle Size Control Section: 33 to 77 cm.
Description origin: Spreadsheet
Diagnostic Features: argillic horizon 33 to 77 cm.

Country:
State: Virginia
County: Warren
MLRA: 130A -- Northern Blue Ridge
Soil Survey Area: VA187 -- Warren County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 32D -- Myersville and Montalto soils, 15 to 25 percent slopes, very stony
Pit Location: Orientation in relation to NEON plot: 11.7m and 338 degrees from SW 20m x 20m quad corner. 16.10m and 270 degrees from centroid. Landform is a slightly convex bench on a sideslope. This pedon is for the NEON sampling project at the Smithsonian Conservation Biology Institute in Front Royal VA.
Quad Name:
Std Latitude: 38.8910900
Std Longitude: -78.1607100

Latitude:
Longitude:
Datum: WGS84
UTM Zone:
UTM Easting:
UTM Northing:

Primary Earth Cover:
Secondary Earth Cover:
Existing Vegetation:
Parent Material: residuum weathered from greenstone
Bedrock Kind: Greenstone
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2015VA187034 **Pedon ID:** S2015VA187034

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
12.0	339.0	130						well		

Ap1--0 to 17 centimeters (0.0 to 6.7 inches); brown (7.5YR 4/4) silt loam; 18 percent clay; moderate fine granular structure; very friable, nonsticky, nonplastic; very fine roots throughout and medium roots throughout and fine roots throughout; very fine interstitial pores; 10 percent nonflat angular 2 to 75-millimeter Greenstone fragments; g/cc; percent; um/s; neutral, pH 7.0, pH indicator solutions; clear smooth boundary. Lab sample # 16N02506

Ap2--17 to 33 centimeters (6.7 to 13.0 inches); brown (7.5YR 4/3) channery silt loam; 20 percent clay; moderate medium subangular blocky, and moderate fine subangular blocky structure; very friable, slightly sticky, slightly plastic; very fine roots throughout; very fine interstitial pores; 10 percent nonflat subangular 2 to 75-millimeter Greenstone fragments and 10 percent flat subangular 2 to 150-millimeter Greenstone fragments; g/cc; percent; um/s; neutral, pH 6.7, pH indicator solutions; clear smooth boundary. Lab sample # 16N02507

Bt1--33 to 57 centimeters (13.0 to 22.4 inches); brown (7.5YR 5/4) silt loam; 24 percent clay; moderate medium subangular blocky structure; friable, slightly sticky, slightly plastic; very fine roots throughout; coarse interstitial pores; 10 percent distinct 10YR 5/4) clay films on all faces of peds; strongly acid, pH 5.5, pH indicator solutions; gradual wavy boundary. Lab sample # 16N02508

Bt2--57 to 77 centimeters (22.4 to 30.3 inches); strong brown (7.5YR 5/6) silt loam; 26 percent clay; weak medium subangular blocky structure; friable, slightly sticky, slightly plastic; very fine roots throughout; coarse interstitial pores; 5 percent 7.5YR 5/4) clay films on all faces of peds; 5 percent manganese coatings On faces of peds; moderately acid, pH 5.6, pH indicator solutions; gradual wavy boundary. Lab sample # 16N02509

BC--77 to 100 centimeters (30.3 to 39.4 inches); yellowish brown (10YR 5/4) and strong brown (7.5YR 4/6) and brown (7.5YR 5/3) silt loam; 23 percent clay; weak coarse subangular blocky structure; firm, slightly sticky, slightly plastic; coarse interstitial pores; 5 percent manganese coatings On faces of peds; slightly acid, pH 6.4, pH indicator solutions; clear smooth boundary. Lab sample # 16N02510

PEDON DESCRIPTION -- NEON Site SCBI

Print Date: Nov 5 2017
Description Date: Oct 6 2015
Describer: Jeff Thomas
NEON Plot ID: SCBI_035
Site ID: S2015VA187035

Pedon ID: S2015VA187035

Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #:
Soil Name as Described/Sampled: Myersville
Classification: Fine-loamy, mixed, active, mesic Ultic Hapludalfs
Soil Name as Correlated:
Classification:
Pedon Type:
Pedon Purpose: laboratory sampling site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:

Physiographic Section: Blue Ridge province, northern section
State Physiographic Area:

Local Physiographic Area: Blue Ridge
Geomorphic Setting: on backslope of side slope of mountains on backslope of side slope of hill
Upslope Shape: convex
Cross Slope Shape: convex
Particle Size Control Section: 18 to 64 cm.
Description origin: Spreadsheet
Diagnostic Features: ochric epipedon 0 to 18 cm.
argillic horizon 18 to 64 cm.

Country:
State: Virginia
County: Warren
MLRA: 130A -- Northern Blue Ridge
Soil Survey Area: VA187 -- Warren County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 32E -- Myersville and Montalto soils, 25 to 65 percent slopes, very stony
Pit Location: Orientation in relation to NEON plot: 10.7meters and 256 degrees from NW 20m x 20m quad corner. Surface is nonstony but there are widely scattered angular greenstone cobbles. This pedon is for the NEON sampling project at the Smithsonian Conservation Biology Institute in Front Royal VA.
Quad Name:
Std Latitude: 38.8829100
Std Longitude: -78.1690200

Latitude:
Longitude:
Datum: WGS84
UTM Zone:
UTM Easting:
UTM Northing:

Primary Earth Cover: Grass/herbaceous cover
Secondary Earth Cover: Other grass/herbaceous cover
Existing Vegetation:
Parent Material: residuum weathered from greenstone
Bedrock Kind: Greenstone
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA06_Morgantown

Cont. Site ID: S2015VA187035 **Pedon ID:** S2015VA187035

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
15.0	305.0	80						well		

Ap--0 to 18 centimeters (0.0 to 7.1 inches); dark brown (7.5YR 3/2) gravelly silt loam; 18 percent clay; moderate fine granular structure; slightly hard, friable; medium roots throughout and fine roots throughout; very fine irregular and fine irregular pores; 20 percent nonflat subangular 2 to 75-millimeter Greenstone fragments; g/cc; percent; um/s; slightly acid, pH 6.5, pH indicator solutions; abrupt smooth boundary. Lab sample # 16N02511

Bt1--18 to 35 centimeters (7.1 to 13.8 inches); strong brown (7.5YR 4/6) silt loam; 24 percent clay; moderate medium subangular blocky, and moderate fine subangular blocky structure; slightly hard, friable, slightly sticky, slightly plastic; very fine roots throughout and medium roots throughout and fine roots throughout; very fine irregular pores; 10 percent faint clay films on all faces of peds; 5 percent nonflat subangular 2 to 75-millimeter Greenstone fragments; g/cc; percent; um/s; neutral, pH 7.0, pH indicator solutions; clear wavy boundary. Lab sample # 16N02512

Bt2--35 to 64 centimeters (13.8 to 25.2 inches); brown (7.5YR 4/4) silt loam; 27 percent clay; moderate medium subangular blocky, and moderate fine subangular blocky structure; slightly hard, friable, slightly sticky, slightly plastic; very fine roots throughout; medium irregular pores; 10 percent distinct clay films on all faces of peds; 5 percent nonflat subangular 2 to 75-millimeter Greenstone fragments and 5 percent nonflat subangular moderately cemented 2 to 75-millimeter Greenstone fragments; g/cc; percent; um/s; neutral, pH 6.8, pH indicator solutions; clear wavy boundary. Lab sample # 16N02513

BC--64 to 89 centimeters (25.2 to 35.0 inches); brown (10YR 4/3) and brown (7.5YR 4/4) and strong brown (7.5YR 5/8) paragravelly silt loam; 24 percent clay; weak fine subangular blocky structure; slightly hard, friable, slightly sticky, slightly plastic; fine roots throughout; very fine vesicular pores; 5 percent manganese masses In matrix and 5 percent manganese coatings On faces of peds; 5 percent nonflat subangular moderately cemented 2 to 75-millimeter Greenstone fragments and 10 percent nonflat subangular moderately cemented 2 to 75-millimeter Greenstone fragments; g/cc; percent; um/s; slightly acid, pH 6.5, pH indicator solutions; abrupt wavy boundary. Lab sample # 16N02514

C1--89 to 100 centimeters (35.0 to 39.4 inches); dark yellowish brown (10YR 4/4) and strong brown (7.5YR 5/8) and yellowish red (5YR 5/8) paragravelly silt loam; 23 percent clay; massive; slightly hard, friable, slightly sticky, nonplastic; 10 percent nonflat subangular moderately cemented 2 to 75-millimeter Greenstone fragments; g/cc; percent; um/s; slightly acid, pH 6.5, pH indicator solutions. Lab sample # 16N02515

PEDON DESCRIPTION -- NEON Site SCBI

Print Date: Nov 5 2017
Description Date: Oct 6 2015
Describer: Rob Pate
NEON Plot ID: SCBI_037
Site ID: S2015VA187037

Pedon ID: S2015VA187037

Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 16N0577
Soil Name as Described/Sampled: Montalto
Classification: Fine, mixed, semiactive, mesic Ultic Hapludalfs
Soil Name as Correlated:
Classification:
Pedon Type:
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section: Blue Ridge province, northern section
State Physiographic Area:
Local Physiographic Area: Blue Ridge
Geomorphic Setting: on shoulder of side slope of mountains on shoulder of side slope of hill
Upslope Shape: convex
Cross Slope Shape: convex
Particle Size Control Section: 39 to 89 cm.
Description origin: Spreadsheet
Diagnostic Features: argillic horizon 39 to 89 cm.

Country:
State: Virginia
County: Warren
MLRA: 130A -- Northern Blue Ridge
Soil Survey Area: VA187 -- Warren County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 29C -- Montalto loam, 7 to 15 percent slopes
Pit Location: Orientation in relation to NEON plot: 5m and 114 degrees from SW 20m x 20m marker. Topography is undulating. Looks like this has an overthickened Ap. Overall slope shape is convex; but microtopography causes this pedon to be in a somewhat depositional position. This pedon is for the NEON sampling project at the Smithsonian Conservation Biology Institute in Front Royal VA.
Quad Name:
Std Latitude: 38.8920900
Std Longitude: -78.1616400

Latitude:
Longitude:
Datum: WGS84
UTM Zone:
UTM Easting:
UTM Northing:

Primary Earth Cover:
Secondary Earth Cover:
Existing Vegetation:
Parent Material: residuum weathered from gabbro
Bedrock Kind: Greenstone
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2015VA187037 **Pedon ID:** S2015VA187037

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
17.0	361.0	152						well		

Ap--0 to 23 centimeters (0.0 to 9.1 inches); dark brown (10YR 3/3) silt loam; 15 percent clay; moderate fine granular structure; very friable, nonsticky, nonplastic; medium roots throughout and fine roots throughout; 2 percent nonflat subangular 2 to 75-millimeter Greenstone fragments; g/cc; percent; um/s; clear wavy boundary. Lab sample # 16N02516

BA--23 to 39 centimeters (9.1 to 15.4 inches); brown (10YR 4/3) silt loam; 17 percent clay; weak medium subangular blocky structure; very friable, nonsticky, nonplastic; very fine roots throughout and medium roots throughout; 10 percent flat subangular 2 to 150-millimeter Greenstone fragments; g/cc; percent; um/s; clear wavy boundary. Lab sample # 16N02517

Bt1--39 to 63 centimeters (15.4 to 24.8 inches); dark reddish brown (5YR 3/3) silty clay loam; 35 percent clay; moderate medium subangular blocky structure; friable, slightly sticky, slightly plastic; very fine roots throughout and medium roots throughout; 10 percent 5YR 3/2) clay films on surfaces along pores; 10 percent flat subangular 2 to 150-millimeter Greenstone fragments; g/cc; percent; um/s; clear wavy boundary. Lab sample # 16N02518

Bt2--63 to 84 centimeters (24.8 to 33.1 inches); reddish brown (2.5YR 4/4) channery clay; 43 percent clay; moderate coarse subangular blocky structure; firm, moderately sticky, moderately plastic; fine roots between peds; 50 percent 2.5YR 4/4) clay films on surfaces along pores; 15 percent nonflat subangular 2 to 75-millimeter Greenstone fragments; g/cc; percent; um/s. Lab sample # 16N02519

BCt--84 to 100 centimeters (33.1 to 39.4 inches); dark reddish brown (2.5YR 3/4) very cobbly clay; 50 percent clay; weak coarse subangular blocky structure; firm, moderately sticky, moderately plastic; 30 percent 2.5YR 4/6) clay films on surfaces along pores; 10 percent flat subangular 2 to 150-millimeter Greenstone fragments and 15 percent nonflat subangular 2 to 75-millimeter Greenstone fragments and 25 percent nonflat subangular 75 to 250-millimeter Greenstone fragments; g/cc; percent; um/s. Lab sample # 16N02520

PEDON DESCRIPTION -- NEON Site SCBI

Print Date: Nov 5 2017
Description Date: Oct 5 2015
Describer: mike jones
NEON Plot ID: SCBI_043
Site ID: S2015VA187043

Pedon ID: S2015VA187043

Site Note: Site is located on upper third of sideslope. Stones within pit difficult to dig. Fine-loamy material in between stones. Most likely soil is very deep. Profile fits Lew however Lew is colluvium and we believe this is residuum due to its proximity to the summit. Taxonomic classification is loamy-skeletal mesic Hapludalf. Lew soils are Ultic Hapludalfs which this might be. This pedon is for the NEON sampling project at the Smithsonian Conservation Biology Institute in Front Royal VA.

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 16N0578
Soil Name as Described/Sampled: Lew
Classification: Loamy-skeletal, mixed, active, mesic Ultic Hapludalfs
Soil Name as Correlated:
Classification:
Pedon Type:
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section: Blue Ridge province, northern section
State Physiographic Area:

Local Physiographic Area: Blue Ridge
Geomorphic Setting: on shoulder of nose slope of mountains
on shoulder of nose slope of hill
Upslope Shape: convex
Cross Slope Shape: convex
Particle Size Control Section: 25 to 75 cm.
Description origin: Spreadsheet
Diagnostic Features: argillic horizon 25 to 81 cm.

Country:
State: Virginia
County: Warren
MLRA: 130A -- Northern Blue Ridge
Soil Survey Area: VA187 -- Warren County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 22E -- Lew loam, 25 to 65 percent slopes, very stony

Pit Location: Orientation in relation to NEON plot: 5.2 m and 354 degrees from SW 20m x 20m marker. This pedon is for the NEON sampling project at the Smithsonian Conservation Biology Institute in Front Royal VA.

Quad Name:
Std Latitude: 38.8905100
Std Longitude: -78.1517500

Latitude:
Longitude:
Datum: WGS84
UTM Zone:
UTM Easting:
UTM Northing:

Primary Earth Cover:
Secondary Earth Cover:
Existing Vegetation:
Parent Material: residuum weathered from greenstone
Bedrock Kind: Greenstone
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2015VA187043 **Pedon ID:** S2015VA187043

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
18.0	371.0	64						well		

Ap--0 to 25 centimeters (0.0 to 9.8 inches); dark reddish brown (5YR 3/3) gravelly silt loam; 14 percent clay; moderate fine granular structure; very friable, slightly sticky, slightly plastic; very fine roots throughout and medium roots throughout; 5 percent nonflat subangular 75 to 250-millimeter Greenstone fragments and 20 percent nonflat subangular 2 to 75-millimeter Greenstone fragments; g/cc; percent; um/s; neutral, pH 7.0, pH indicator solutions; clear smooth boundary. Lab sample # 16N02521

Bt1--25 to 53 centimeters (9.8 to 20.9 inches); dark reddish brown (5YR 3/4) very stony silt loam; 17 percent clay; moderate medium subangular blocky structure; very friable, slightly sticky, slightly plastic; fine roots throughout; 20 percent clay films on surfaces along pores; 10 percent nonflat subangular 250 to 600-millimeter Greenstone fragments and 20 percent nonflat subangular 2 to 75-millimeter Greenstone fragments and 20 percent nonflat subangular 75 to 250-millimeter Greenstone fragments; g/cc; percent; um/s; neutral, pH 7.0, pH indicator solutions; clear smooth boundary. Lab sample # 16N02522

Bt2--53 to 81 centimeters (20.9 to 31.9 inches); yellowish red (5YR 4/6) very stony silty clay loam; 30 percent clay; moderate medium subangular blocky structure; firm, moderately sticky, moderately plastic; very fine roots throughout; 25 percent clay films on surfaces along pores; 10 percent nonflat subangular 2 to 75-millimeter Greenstone fragments and 20 percent nonflat subangular 75 to 250-millimeter Greenstone fragments; g/cc; percent; um/s; neutral, pH 7.0, pH indicator solutions; clear smooth boundary. Lab sample # 16N02523

BC--81 to 100 centimeters (31.9 to 39.4 inches); strong brown (7.5YR 4/6) very stony silty clay loam; 30 percent clay; weak coarse subangular blocky, and weak medium subangular blocky structure; friable, moderately sticky, moderately plastic; 10 percent clay films on surfaces along pores; 20 percent nonflat subangular 2 to 75-millimeter Greenstone fragments and 20 percent nonflat subangular 75 to 250-millimeter Greenstone fragments; g/cc; percent; um/s; neutral, pH 7.0, pH indicator solutions. Lab sample # 16N02524