PEDON DESCRIPTION -- NEON Site UNDE

Print Date: Mar 20 2018
Description Date: Apr 27 2016
Describer: Ryan Bevernitz
NEON Plot ID: UNDE_001

Site ID: S2016MI053001

Pedon ID: S2016MI053001

Site Note: This pedon is for the NEON sampling project at the UNDERC site. 10.5 meters and 80 degrees from the SW 40m X 40m corner to the center of the soil pit.

Pedon Note: Roots stop abruptly above the Bx-horizon at 47 cm; water seeping into pit at 92 cm
Lab Source ID: KSSL
Lab Pedon #: 16N0972
Soil Name as Described/Sampled: Schweitzer
Classification: Coarse-loamy, mixed, superactive, frigid Fragic Haplorthods

Soil Name as Correlated:
Classification:
Pedon Type: undefined observation
Pedon Purpose: research site
Taxon Kind: taxadjunct
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section:
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on backslope of nose slope of disintegration moraine on till 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 9 cm.
albic horizon 3 to 9 cm.
spodic horizon 9 to 47 cm.
fragic soil properties 47 to 66 cm.
densic contact 66 to 66 cm.

Country:
State: Michigan
County: Gogebic
MLRA: 93B -- Superior Stony and Rocky Loamy Plains and Hills, Eastern Part
Soil Survey Area: MI053 -- Gogebic County, Michigan
10-RHI -- Rhinelander, Wisconsin
Map Unit: 44C -- Karlin-Keweenaw-Sarona, dense substratum, complex, 6 to 25 percent slopes
Pit Location: This pedon is for the NEON sampling project at the UNDERC site. 10.5 meters and 80 degrees from the SW 40m X 40m corner to the center of the soil pit.
Quad Name: Tenderfoot Lake, Wisconsin
Std Latitude: 46.2344900
Std Longitude: 89.5608900

Latitude: 46 degrees 14 minutes 4.16 seconds north
Longitude: 89 degrees 33 minutes 39.20 seconds west
Datum: WGS84
UTM Zone:
UTM Easting:
UTM Northing:

Primary Earth Cover: Tree cover
Secondary Earth Cover: Hardwoods
Existing Vegetation:
Parent Material: loamy glaciofluvial deposits over dense loamy till
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

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Oa--0 to 3 centimeters (0.0 to 1.2 inches); black (10YR 2/1) highly decomposed plant material; very friable; very fine roots throughout and fine roots throughout; 1 percent nonflat subrounded indurated 75 to 250-millimeter Mixed rock fragments and 5 percent nonflat subrounded indurated 2 to 75-millimeter Mixed rock fragments; clear smooth boundary. Lab sample # 16N04326

E--3 to 9 centimeters (1.2 to 3.5 inches); brown (7.5YR 5/2) fine sandy loam, pinkish gray (7.5YR 7/2), dry; weak medium subangular blocky parts to weak medium platy structure; very friable; very fine roots throughout and medium roots throughout and fine roots throughout; 1 percent nonflat subrounded indurated 75 to 250-millimeter Mixed rock fragments and 5 percent nonflat subrounded indurated 2 to 75-millimeter Mixed rock fragments; abrupt irregular boundary. Lab sample # 16N04327

Bhs--9 to 16 centimeters (3.5 to 6.3 inches); dark reddish brown (5YR 3/3) fine sandy loam; weak medium subangular blocky structure; very friable; very fine roots throughout and medium roots throughout and fine roots throughout; 1 percent nonflat subrounded indurated 75 to 250-millimeter Mixed rock fragments and 5 percent nonflat subrounded indurated 2 to 75-millimeter Mixed rock fragments; clear smooth boundary. Lab sample # 16N04328

Bs1--16 to 30 centimeters (6.3 to 11.8 inches); 50 percent dark reddish brown (5YR 3/4) and 50 percent reddish brown (5YR 4/4) fine sandy loam; weak medium subangular blocky, and weak coarse subangular blocky structure; very friable; very fine roots throughout and medium roots throughout and fine roots throughout; 1 percent nonflat subrounded indurated 75 to 250-millimeter Mixed rock fragments and 5 percent nonflat subrounded indurated 2 to 75-millimeter Mixed rock fragments; gradual smooth boundary. Lab sample # 16N04329

Bs2--30 to 47 centimeters (11.8 to 18.5 inches); dark brown (7.5YR 3/4) fine sandy loam; moderate medium subangular blocky structure; very friable; very fine roots throughout and medium roots throughout and fine roots throughout; 1 percent nonflat subrounded indurated 75 to 250-millimeter Mixed rock fragments and 5 percent nonflat subrounded indurated 2 to 75-millimeter Mixed rock fragments; gradual smooth boundary. Lab sample # 16N04330

2Bx--47 to 66 centimeters (18.5 to 26.0 inches); reddish brown (5YR 4/3) gravelly sandy loam; strong medium platy parts to moderate medium subangular blocky, and strong thin platy parts to moderate medium subangular blocky structure; firm; fine roots top of horizon; very fine vesicular pores; 5 percent nonflat subangular indurated 75 to 250-millimeter Mixed rock fragments and 15 percent nonflat subangular indurated 2 to 75-millimeter Mixed rock fragments; clear smooth boundary. Lab sample # 16N04331. Material is brittle

2BCd--66 to 167 centimeters (26.0 to 65.7 inches); reddish brown (5YR 5/3) gravelly sandy loam; moderate medium platy structure; firm; 2 percent nonflat subangular indurated 75 to 250-millimeter Mixed rock fragments and 15 percent nonflat subangular indurated 2 to 75-millimeter Mixed rock fragments. Lab sample # 16N04332
PEDON DESCRIPTION -- NEON Site UNDE

Print Date: Mar 20 2018  
Description Date: Apr 27 2016  
Describer: Roger Risley  
NEON Plot ID: UNDE_002

Site ID: S2016MI053002  
Pedon ID: S2016MI053002

Site Note: This pedon is for the NEON sampling project at the UNDERC site. 2.5 meters and 45 degrees from the SW 40m X 40m corner to the center of the soil pit.

Pedon Note:  
Lab Source ID: KSSL  
Lab Pedon #: 16N0973  
Soil Name as Described/Sampled: Greenwood  
Classification: Dysic, frigid Typic Haplohemists

Soil Name as Correlated:  
Classification:  
Pedon Type: undefined observation  
Pedon Purpose: research site  
Taxon Kind: series  
Associated Soils:  
Physiographic Division:  
Physiographic Province:  
Physiographic Section:  
State Physiographic Area:  
Local Physiographic Area:  
Geomorphic Setting: on toeslope of dip depression on till plain  
Upslope Shape: linear  
Cross Slope Shape: linear  
Particle Size Control Section:  
Description origin: NASIS  
Diagrammatically:  
Diagnostic Features: fibric soil materials 0 to 10 cm.  
                        hemic soil materials 10 to 135 cm.  
                        sapric soil materials 135 to 200 cm.

Country:  
State: Michigan  
County: Gogebic  
MLRA: 93B -- Superior Stony and Rocky Loamy Plains and Hills, Eastern Part  
Soil Survey Area: MI053 -- Gogebic County, Michigan  
10-RHI -- Rhinelander, Wisconsin  
Map Unit: 41 -- Lupton-Pleine-Cathro complex, 0 to 1 percent slopes  
Pit Location: This pedon is for the NEON sampling project at the UNDERC site. 2.5 meters and 45 degrees from the SW 40m X 40m corner to the center of the soil pit.  
Quad Name: Tenderfoot Lake, Wisconsin

Std Latitude: 46.2428900  
Std Longitude: 89.5451000

Latitude: 46 degrees 14 minutes 34.50 seconds north  
Longitude: 89 degrees 32 minutes 42.29 seconds west  
Datum: WGS84  
UTM Zone:  
UTM Easting:  
UTM Northing:  

Primary Earth Cover: Tree cover  
Secondary Earth Cover: Swamp  
Existing Vegetation:  
Parent Material: mossy organic material over woody organic material  
Bedrock Kind:  
Bedrock Depth:  
Bedrock Hardness:  
Bedrock Fracture Interval:  
Surface Fragments:  
Description database: KSSL
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Oi--0 to 10 centimeters (0.0 to 3.9 inches); very dark brown (7.5YR 2.5/2) peat; very strongly acid, pH 4.5, pH indicator strip. Lab sample # 16N04333

Oe--10 to 135 centimeters (3.9 to 53.1 inches); reddish gray (5YR 5/2) mucky peat; very strongly acid, pH 4.5, pH indicator strip. Lab sample # 16N04334

Oa--135 to 200 centimeters (53.1 to 78.7 inches); black (10YR 2/1) muck; very strongly acid, pH 5.0, pH indicator strip. Lab sample # 16N04335
PEDON DESCRIPTION -- NEON Site UNDE

Print Date: Mar 20 2018  
Description Date: Apr 26 2016  
Describer: Roger Risley  
NEON Plot ID: UNDE_006

Site ID: S2016MI053004  
Pedon ID: S2016MI053004

Site Note: This pedon is for the NEON sampling project at the UNDERC site. 5.7 meters and 72 degrees from the SW 40m X 40m corner to the center of the soil pit and 313 degrees from the center of pit to the pit face.

Pedon Note:  
Lab Source ID: KSSL  
Lab Pedon #: 16N0974  
Soil Name as Described/Sampled: Newot  
Classification: Coarse-loamy, mixed, superactive, frigid Alfis Haplorthods

Soil Name as Correlated:

Classification:  
Pedon Type: undefined observation  
Pedon Purpose: research site  
Taxon Kind: series  
Associated Soils:  
Physiographic Division:  
Physiographic Province:  
Physiographic Section:  
State Physiographic Area:  

Local Physiographic Area:  
Geomorphic Setting: on shoulder of side slope of disintegration moraine on till plain  
Upslope Shape: convex  
Cross Slope Shape: linear  
Particle Size Control Section: 25 to 100 cm.  
Description origin: NASIS  
Diagnostic Features: ochric epipedon 0 to 11 cm.  
albic horizon 11 to 17 cm.  
spodic horizon 17 to 31 cm.  
glossic horizon 31 to 46 cm.  
argillic horizon 46 to 61 cm.  
densic contact 61 to 61 cm.

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Country:  
State: Michigan  
County: Gogebic  
MLRA: 93B -- Superior Stony and Rocky Loamy Plains and Hills, Eastern Part  
Soil Survey Area: MI053 -- Gogebic County, Michigan  
10-RHI -- Rhinelander, Wisconsin

Map Unit: 44D -- Karlin-Keweenaw-Sarona, dense substratum, complex, 25 to 50 percent slopes

Pit Location: This pedon is for the NEON sampling project at the UNDERC site. 5.7 meters and 72 degrees from the SW 40m X 40m corner to the center of the soil pit and 313 degrees from the center of pit to the pit face.

Quad Name: Tenderfoot Lake, Wisconsin  
Std Latitude: 46.2545400  
Std Longitude: 89.5128600

Latitude: 46 degrees 15 minutes 15.95 seconds north  
Longitude: 89 degrees 30 minutes 46.51 seconds west  
Datum: WGS84  
UTM Zone:  
UTM Easting:  
UTM Northing:

Primary Earth Cover: Tree cover  
Secondary Earth Cover: Hardwoods  
Existing Vegetation:  
Parent Material: loamy glaciofluvial deposits and/or local loess over dense loamy till  
Bedrock Kind:  
Bedrock Depth:  
Bedrock Hardness:  
Bedrock Fracture Interval:  
Surface Fragments:

Description database: KSSL
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A--0 to 11 centimeters (0.0 to 4.3 inches); dark brown (7.5YR 3/3) fine sandy loam; weak medium granular structure; very friable; very fine roots and medium roots and fine roots and coarse roots; 1 percent nonflat subrounded indurated 75 to 250-millimeter Mixed rock fragments and 5 percent nonflat subrounded indurated 2 to 75-millimeter Mixed rock fragments; diffuse wavy boundary. Lab sample # 16N04336

E--11 to 17 centimeters (4.3 to 6.7 inches); brown (7.5YR 4/2) fine sandy loam; moderate medium platy structure; very friable; very fine roots and medium roots and fine roots and coarse roots; 1 percent nonflat subrounded indurated 75 to 250-millimeter Mixed rock fragments and 5 percent nonflat subrounded indurated 2 to 75-millimeter Mixed rock fragments; diffuse wavy boundary. Lab sample # 16N04337

Bs--17 to 31 centimeters (6.7 to 12.2 inches); reddish brown (5YR 4/4) fine sandy loam; moderate medium subangular blocky, and moderate coarse subangular blocky structure; very friable; medium roots and fine roots and coarse roots; 1 percent nonflat subrounded indurated 75 to 250-millimeter Mixed rock fragments and 5 percent nonflat subrounded indurated 2 to 75-millimeter Mixed rock fragments; clear smooth boundary. Lab sample # 16N04338

E/B--31 to 46 centimeters (12.2 to 18.1 inches); 80 percent reddish brown (5YR 4/3) and 20 percent reddish brown (5YR 4/4) sandy loam; moderate medium subangular blocky, and moderate coarse subangular blocky structure; very friable; medium roots and fine roots; 1 percent nonflat subrounded indurated 75 to 250-millimeter Mixed rock fragments and 5 percent nonflat subrounded indurated 2 to 75-millimeter Mixed rock fragments; clear smooth boundary. Lab sample # 16N04339

2Bt--46 to 61 centimeters (18.1 to 24.0 inches); reddish brown (5YR 4/4) sandy loam; moderate medium subangular blocky, and moderate coarse subangular blocky structure; friable; medium roots and fine roots; very fine vesicular pores; 2 percent faint 5YR 3/3), moist, clay films on all faces of peds; 2 percent nonflat subangular indurated 75 to 250-millimeter Mixed rock fragments and 10 percent nonflat subangular indurated 2 to 75-millimeterMixed rock fragments; gradual smooth boundary. Lab sample # 16N04340

2Cd--61 to 112 centimeters (24.0 to 44.1 inches); dark reddish brown (2.5YR 3/4) gravelly sandy loam; structureless massive; firm; 5 percent nonflat subangular indurated 75 to 250-millimeter Mixed rock fragments and 15 percent nonflat subangular indurated 2 to 75-millimeter Mixed rock fragments. Lab sample # 16N04341. very platy - geogenic
PEDON DESCRIPTION -- NEON Site UNDE

Print Date: Mar 20 2018
Description Date: Apr 28 2016
Describer: Mike England
NEON Plot ID: UNDE_010

Site ID: S2016MI053007

Pedon ID: S2016MI053007

Country: Michigan
State: Gogebic
County: Gogebic
MLRA: 93B -- Superior Stony and Rocky Loamy Plains and Hills, Eastern Part
Soil Survey Area: MI053 -- Gogebic County, Michigan
10-RHI -- Rhinelander, Wisconsin
Map Unit: 28 -- Dawson, Greenwood, and Loxley soils, 0 to 1 percent slopes
Pit Location: This pedon is for the NEON sampling project at the UNDERC site. 2.5 meters and 20 degrees from the SW 40m X 40m corner to the center of the soil pit.
Quad Name: Tenderfoot Lake, Wisconsin

Lab Source ID: KSSL
Lab Pedon #: 16N0975
Soil Name as Described/Sampled: Cathro
Classification: Loamy, mixed, euic, frigid Terric Haplosaprists

Soil Name as Correlated:
Classification:
Pedon Type: undefined observation
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section:
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on toeslope of nutrient poor fen on till plain
Upslope Shape: linear
Cross Slope Shape: linear
Particle Size Control Section: 30 to 90 cm.
Description origin: NASIS

Diagnostic Features: fibric soil materials 0 to 10 cm.
                           hemic soil materials 10 to 24 cm.
                           sapric soil materials 24 to 102 cm.
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<td></td>
<td></td>
<td></td>
<td>very poorly</td>
<td></td>
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Oi--0 to 10 centimeters (0.0 to 3.9 inches); dark brown (7.5YR 3/2) peat; Lab sample # 16N04342

Oe--10 to 24 centimeters (3.9 to 9.4 inches); very dark brown (10YR 2/2) mucky peat; Lab sample # 16N04343

Oa1--24 to 66 centimeters (9.4 to 26.0 inches); black (10YR 2/1) muck; Lab sample # 16N04344

Oa2--66 to 102 centimeters (26.0 to 40.2 inches); very dark brown (10YR 2/2) muck; 5 percent Wood fragments. Lab sample # 16N04345

Cg--102 to 108 centimeters (40.2 to 42.5 inches); dark olive brown (2.5Y 3/3) fine sandy loam; structureless massive;
PEDON DESCRIPTION -- NEON Site UNDE

Print Date: Mar 20 2018
Description Date: Apr 26 2016
Describer: Mike Rokus
NEON Plot ID: UNDE_012

Site ID: S2016MI053009

Pedon ID: S2016MI053009

Site Note: This pedon is for the NEON sampling project at the UNDERC site. 13.1 meters and 70 degrees from the SW 40m X 40m corner to the center of the soil pit.

Pedon Note: water seeping in pit at 62 cm
Lab Source ID: KSSL
Lab Pedon #: 16N0976
Soil Name as Described/Sampled: Schweitzer
Classification: Coarse-loamy, mixed, superactive, frigid Alfic Fragiorthods

Soil Name as Correlated:

Classification:
Pedon Type: undefined observation
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:

Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on backslope of side slope of disintegration moraine on till plain
Upslope Shape: linear
Cross Slope Shape: linear
Particle Size Control Section: 25 to 100 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 4 cm.
spodic horizon 14 to 60 cm.
fragipan 60 to 100 cm.

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<th>Top Depth (cm)</th>
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Country:
State: Michigan
County: Gogebic
MLRA: 93B -- Superior Stony and Rocky Loamy Plains and Hills, Eastern Part
Soil Survey Area: MI053 -- Gogebic County, Michigan
10-RHI -- Rhinelander, Wisconsin
Map Unit: 44C -- Karlin-Keweenaw-Sarona, dense substratum, complex, 6 to 25 percent slopes

Pit Location: This pedon is for the NEON sampling project at the UNDERC site. 13.1 meters and 70 degrees from the SW 40m X 40m corner to the center of the soil pit.

Quad Name: Tenderfoot Lake, Wisconsin
Std Latitude: 46.2368900
Std Longitude: 89.5045000

Latitude: 46 degrees 14 minutes 12.44 seconds north
Longitude: 89 degrees 30 minutes 16.99 seconds west
Datum: WGS84
UTM Zone:
UTM Easting:
UTM Northing:

Primary Earth Cover: Tree cover
Secondary Earth Cover: Intermixed conifers and hardwoods
Existing Vegetation:
Parent Material: Superior Lobe till
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL
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<th>Drainage Class</th>
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A--0 to 14 centimeters (0.0 to 5.5 inches); dark brown (7.5YR 3/2) cobbly fine sandy loam; weak fine subangular blocky, and weak medium granular structure; friable; medium roots and fine roots and coarse roots; 5 percent nonflat subangular indurated 2 to 75-millimeter Mixed rock fragments and 5 percent nonflat subangular indurated 75 to 250-millimeter Mixed rock fragments; clear smooth boundary. Lab sample # 16N04346. many worms

Bhs--14 to 25 centimeters (5.5 to 9.8 inches); dark reddish brown (5YR 3/3) fine sandy loam; weak fine subangular blocky structure; friable; medium roots and fine roots; 5 percent nonflat subangular indurated 2 to 75-millimeter Mixed rock fragments and 5 percent nonflat subangular indurated 75 to 250-millimeter Mixed rock fragments; clear smooth boundary. Lab sample # 16N04347

Bs1--25 to 46 centimeters (9.8 to 18.1 inches); reddish brown (5YR 4/4) fine sandy loam; moderate medium angular blocky parts to moderate fine angular blocky structure; friable; medium roots and fine roots; 5 percent nonflat subangular indurated 2 to 75-millimeter Mixed rock fragments and 5 percent nonflat subangular indurated 75 to 250-millimeter Mixed rock fragments; clear smooth boundary. Lab sample # 16N04348

Bs2--46 to 60 centimeters (18.1 to 23.6 inches); reddish brown (5YR 4/4) gravelly sandy loam; moderate medium angular blocky parts to moderate fine angular blocky structure; friable; fine roots; 10 percent fine 5YR 4/6), moist, masses of oxidized iron; 5 percent nonflat subangular indurated 2 to 75-millimeter Mixed rock fragments and 15 percent nonflat subangular indurated 2 to 75-millimeter Mixed rock fragments; gradual smooth boundary. Lab sample # 16N04349

Bx--60 to 100 centimeters (23.6 to 39.4 inches); reddish brown (5YR 4/4) gravelly sandy loam; moderate medium angular blocky parts to moderate fine angular blocky, and moderate medium angular blocky parts to weak medium platy structure; firm; 5 percent medium 2.5YR 4/6), moist, masses of oxidized iron; 5 percent nonflat subangular indurated 75 to 250-millimeter Mixed rock fragments and 15 percent nonflat subangular indurated 2 to 75-millimeter Mixed rock fragments. Lab sample # 16N04350. 5% 7.5YR 4/3 E material
PEDON DESCRIPTION -- NEON Site UNDE

Print Date: Mar 20 2018
Description Date: Apr 25 2016
Describer: Ryan Bevernitz
NEON Plot ID: UNDE_013

Site ID: S2016MI053010

Pedon ID: S2016MI053010

Country: Michigan
State: Michigan
County: Gogebic
MLRA: 93B -- Superior Stony and Rocky Loamy Plains and Hills, Eastern Part
Soil Survey Area: MI053 -- Gogebic County, Michigan
10-RHI -- Rhinelander, Wisconsin
Map Unit: 5172C -- Gogebic, sandy substratum-Pence-Cathro complex, 0 to 18 percent slopes

Site Note: This pedon is for the NEON sampling project at the UNDERC site. 10.01 meters and 62 degrees from the SW 40m X 40m corner to the center of the soil pit.

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 16N0977
Soil Name as Described/Sampled: McMillan
Classification: Sandy, mixed, frigid Lamellic Haplorthods

Soil Name as Correlated:

Classification:
Pedon Type: undefined observation
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section:
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on backslope of side slope of None Assigned
Upslope Shape: linear
Cross Slope Shape: linear
Particle Size Control Section: 25 to 100 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 9 cm.
spodic horizon 9 to 64 cm.
lamellae 64 to 125 cm.

Latitude: 46 degrees 13 minutes 39.71 seconds north
Longitude: 89 degrees 32 minutes 14.55 seconds west
Datum: WGS84
UTM Zone:
UTM Northing:

Primary Earth Cover: Tree cover
Secondary Earth Cover: Hardwoods
Existing Vegetation:
Parent Material: loamy glaciofluvial deposits over sandy and gravelly outwash
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL
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<th>Frost-Free Days</th>
<th>Drainage Class</th>
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A--0 to 9 centimeters (0.0 to 3.5 inches); very dark brown (10YR 2/2) sandy loam; weak medium granular structure; very friable; very fine roots throughout and fine roots throughout; 2 percent nonflat subrounded indurated 2 to 75-millimeter Mixed rock fragments; clear wavy boundary. Lab sample # 16N04351. 10 percent uncoated sand grains. 10YR6/2

Bhs--9 to 18 centimeters (3.5 to 7.1 inches); dark brown (7.5YR 3/3) sandy loam; weak fine subangular blocky structure; very friable; very fine roots throughout and medium roots throughout and fine roots throughout; 5 percent nonflat subrounded indurated 2 to 75-millimeter Mixed rock fragments; gradual smooth boundary. Lab sample # 16N04352

Bs1--18 to 28 centimeters (7.1 to 11.0 inches); brown (7.5YR 4/3) sandy loam; weak medium subangular blocky structure; very friable; very fine roots throughout and medium roots throughout and fine roots throughout and coarse roots throughout; 5 percent nonflat subrounded indurated 2 to 75-millimeter Mixed rock fragments; gradual smooth boundary. Lab sample # 16N04353

Bs2--28 to 64 centimeters (11.0 to 25.2 inches); brown (7.5YR 4/4) loamy sand; weak medium subangular blocky, and weak coarse subangular blocky structure; very friable; very fine roots throughout and medium roots throughout and fine roots throughout and coarse roots throughout; 1 percent nonflat subangular indurated 75 to 250-millimeter Mixed rock fragments and 5 percent nonflat subrounded indurated 2 to 75-millimeter Mixed rock fragments; clear smooth boundary. Lab sample # 16N04354

E and Bt--64 to 125 centimeters (25.2 to 49.2 inches); brown (7.5YR 5/4) sand; single grain; loose; medium roots throughout and fine roots throughout; 5 percent nonflat subrounded indurated 2 to 75-millimeter Mixed rock fragments; 1 percent lamellae (volume percent); gradual smooth boundary. Lab sample # 16N04355. 4 millimeters thickness total. thin lamellae. cobble observed with lamellae over top of it.

2C--125 to 152 centimeters (49.2 to 59.8 inches); brown (7.5YR 5/4) stratified sand to gravely coarse sand; single grain; loose; 5 percent nonflat subrounded indurated 2 to 75-millimeter Mixed rock fragments. Lab sample # 16N04356. HORIZON WAS STRATIFIED FOR BOTH TEXTURE AND GRAVEL. GRAVEL LAYERS WHERE COS WITH UP TO 25% CF’S. OTHER LAYERS WERE MEDIUM SAND WITH 1% GRAVELS.
Site Note: This pedon is for the NEON sampling project at the UNDERC site. 5.82 meters and 40 degrees from the SW 40m X 40m corner to the center of the soil pit.

Pedon Note: Depth to water table = 7cm

Soil Name as Described/Sampled: Greenwood

Classification: Dysic, frigid Typic Haplorthods

Soil Name as Correlated:

Classification:

Pedon Type: undefined observation
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section:

State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on toeslope of dip bog on till plain
Upslope Shape: linear
Cross Slope Shape: linear
Particle Size Control Section:
Description origin: NASIS
Diagnostic Features: fibric soil materials 0 to 16 cm. hemic soil materials 16 to 175 cm.
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Oi--0 to 16 centimeters (0.0 to 6.3 inches); reddish brown (2.5YR 5/4) peat; Lab sample # 16N04357

Oe1--16 to 75 centimeters (6.3 to 29.5 inches); black (10YR 2/1) mucky peat; Lab sample # 16N04358

Oe2--75 to 175 centimeters (29.5 to 68.9 inches); very dark brown (10YR 2/2) mucky peat; Lab sample # 16N04359
Print Date: Mar 20 2018
Description Date: Apr 28 2016
Describer: Roger Risley
NEON Plot ID: UNDE_019

Site ID: S2016MI053016

Pedon ID: S2016MI053016

Site Note: This pedon is for the NEON sampling project at the UNDERC site. 9.5 meters and 60 degrees from the SW 40m X 40m corner to the center of the soil pit.

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 16N0984
Soil Name as Described/Sampled: Schweitzer
Classification: Loamy-skeletal, mixed, frigid Alfic Haplorthods

Soil Name as Correlated:
Classification:
Pedon Type: undefined observation
Pedon Purpose: research site
Taxon Kind: taxadjunct
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section:
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on summit of interfluve of disintegration moraine on till plain
Upslope Shape: linear
Cross Slope Shape: linear
Particle Size Control Section: 25 to 100 cm.
Description origin: NASIS

Diagnostic Features: ochric epipedon 0 to 14 cm.
spodic horizon 14 to 63 cm.
glossic horizon 63 to 88 cm.
argillic horizon 63 to 88 cm.

Country: Michigan
State: Michigan
County: Gogebic
MLRA: 93B -- Superior Stony and Rocky Loamy Plains and Hills, Eastern Part
Soil Survey Area: MI053 -- Gogebic County, Michigan
10-RHI -- Rhinelander, Wisconsin
Map Unit: 39C -- Gogebic silt loam, sandy substratum, 6 to 18 percent slopes, stony

Pit Location: This pedon is for the NEON sampling project at the UNDERC site. 9.5 meters and 60 degrees from the SW 40m X 40m corner to the center of the soil pit.
Quad Name: Tenderfoot Lake, Wisconsin
Std Latitude: 46.2581400
Std Longitude: 89.5435100
Latitude: 46 degrees 15 minutes 29.04 seconds north
Longitude: 89 degrees 32 minutes 37.81 seconds west
Datum: WGS84
UTM Zone:
UTM Northing:

Primary Earth Cover: Tree cover
Secondary Earth Cover: Hardwoods
Existing Vegetation:
Parent Material: loamy glaciofluvial deposits and/or loamy eolian deposits over loamy till over sandy and gravelly till
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL
AE--0 to 14 centimeters (0.0 to 5.5 inches); 90 percent very dark brown (10YR 2/2) and 10 percent brown (7.5YR 5/2) fine sandy loam; weak medium subangular blocky, and weak medium granular structure; very friable; 1 percent nonflat subrounded indurated 75 to 250-millimeter Mixed rock fragments and 10 percent nonflat subrounded indurated 2 to 75-millimeter Mixed rock fragments; abrupt wavy boundary. Lab sample # 16N04389

Bhs--14 to 27 centimeters (5.5 to 10.6 inches); very dusky red (2.5YR 2/2) fine sandy loam; moderate medium subangular blocky structure; very friable; 1 percent nonflat subrounded indurated 75 to 250-millimeter Mixed rock fragments and 10 percent nonflat subrounded indurated 2 to 75-millimeter Mixed rock fragments; clear wavy boundary. Lab sample # 16N04390

Bs1--27 to 44 centimeters (10.6 to 17.3 inches); dark reddish brown (5YR 3/4) very gravelly fine sandy loam; moderate medium subangular blocky structure; very friable; 5 percent nonflat subrounded indurated 75 to 250-millimeter Mixed rock fragments and 45 percent nonflat subrounded indurated 2 to 75-millimeter Mixed rock fragments; diffuse wavy boundary. Lab sample # 16N04391

Bs2--44 to 63 centimeters (17.3 to 24.8 inches); dark reddish brown (5YR 3/4) extremely gravelly fine sandy loam; weak fine subangular blocky structure; very friable; 5 percent nonflat subrounded indurated 75 to 250-millimeter Mixed rock fragments and 55 percent nonflat subrounded indurated 2 to 75-millimeter Mixed rock fragments; abrupt irregular boundary. Lab sample # 16N04392

2E/B--63 to 88 centimeters (24.8 to 34.6 inches); 60 percent weak red (2.5YR 5/2) and 60 percent pinkish gray (5YR 7/2) and 40 percent reddish brown (2.5YR 4/3) gravelly sandy loam, gravelly loam; 24 percent clay; strong coarse subangular blocky structure; friable; many fine vesicular pores; 10 percent faint 2.5YR 4/3), moist, clay films on all faces of peds; 20 percent nonflat subangular indurated 2 to 75-millimeter Mixed rock fragments; abrupt irregular boundary. Lab sample # 16N04393

3BC--88 to 100 centimeters (34.6 to 39.4 inches); reddish brown (2.5YR 4/3) very gravelly sand; structureless single grain; loose; 50 percent nonflat subangular indurated 2 to 75-millimeter Mixed rock fragments. Lab sample # 16N04394
PEDON DESCRIPTION -- NEON Site UNDE

Print Date: Mar 20 2018
Description Date: Apr 26 2016
Describer: Larissa Hindman
NEON Plot ID: UNDE_030

Site ID: S2016MI053026

Pedon ID: S2016MI053026

Site Note: This pedon is for the NEON sampling project at the UNDERC site. 1.53 meters and 60 degrees from the SW 40m X 40m corner to the center of the soil pit.

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 16N0979
Soil Name as Described/Sampled: Sarona
Classification: Coarse-loamy, mixed, superactive, frigid Alfic Haplorthods

Soil Name as Correlated:
Classification:
Pedon Type: undefined observation
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:

Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on backslope of side slope of disintegration moraine on till plain
Upslope Shape: linear
Cross Slope Shape: linear
Particle Size Control Section: 25 to 100 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 17 cm.
albic horizon 9 to 17 cm.
spodic materials 17 to 56 cm.
albic materials 56 to 110 cm.
argillic horizon 110 to 151 cm.

Country: Michigan
State: Michigan
County: Gogebic
MLRA: 93B -- Superior Stony and Rocky Loamy Plains and Hills, Eastern Part
Soil Survey Area: MI053 -- Gogebic County, Michigan
10-RHI -- Rhinelander, Wisconsin
Map Unit: 38C -- Gogebic fine sandy loam, sandy substratum, 6 to 18 percent slopes, stony
Pit Location: This pedon is for the NEON sampling project at the UNDERC site. 1.53 meters and 60 degrees from the SW 40m X 40m corner to the center of the soil pit.
Quad Name: Tenderfoot Lake, Wisconsin
Std Latitude: 46.2344200
Std Longitude: 89.5190400

Latitude: 46 degrees 14 minutes 3.53 seconds north
Longitude: 89 degrees 31 minutes 8.41 seconds west
Datum: WGS84
UTM Zone: 
UTM Easting: 
UTM Northing: 

Primary Earth Cover: Tree cover
Secondary Earth Cover: Intermixed conifers and hardwoods
Existing Vegetation:
Parent Material: loamy till
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL
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Oe--0 to 9 centimeters (0.0 to 3.5 inches); moderately decomposed plant material; very fine roots and very coarse roots and medium roots and fine roots and coarse roots; Lab sample # 16N04360

E--9 to 17 centimeters (3.5 to 6.7 inches); fine sandy loam; moderate medium subangular blocky structure; friable; medium roots and fine roots and coarse roots; 5 percent nonflat subrounded indurated 2 to 75-millimeter Mixed rock fragments. Lab sample # 16N04361

Bs1--17 to 28 centimeters (6.7 to 11.0 inches); sandy loam; weak fine subangular blocky structure; very friable; medium roots and fine roots; 1 percent nonflat subrounded indurated 75 to 250-millimeter Mixed rock fragments and 8 percent nonflat subrounded indurated 2 to 75-millimeter Mixed rock fragments. Lab sample # 16N04362

Bs2--28 to 56 centimeters (11.0 to 22.0 inches); sandy loam; weak fine subangular blocky structure; very friable; medium roots and fine roots; 1 percent nonflat subrounded indurated 75 to 250-millimeter Mixed rock fragments and 10 percent nonflat subrounded indurated 2 to 75-millimeter Mixed rock fragments. Lab sample # 16N04363

E'--56 to 110 centimeters (22.0 to 43.3 inches); stony loamy fine sand; weak medium subangular blocky structure; very friable; 2 percent fine distinct 5YR 4/6), moist, masses of oxidized iron; 5 percent nonflat subangular indurated 2 to 75-millimeter Mixed rock fragments and 8 percent nonflat subangular indurated 75 to 250-millimeter Mixed rock fragments and 10 percent nonflat subangular indurated 250 to 600-millimeter Mixed rock fragments. Lab sample # 16N04364

2Bt--110 to 151 centimeters (43.3 to 59.4 inches); sandy loam; weak medium subangular blocky structure; friable; 10 percent nonflat subrounded indurated 2 to 75-millimeter Mixed rock fragments. Lab sample # 16N04365
PEDON DESCRIPTION -- NEON Site UNDE

Print Date: Mar 20 2018
Description Date: Apr 27 2016
Describer: Pete Weikle
NEON Plot ID: UNDE_037

Site ID: S2016MI053031

Pedon ID: S2016MI053031

Site Note: This pedon is for the NEON sampling project at the UNDERC site. 5.34 meters and 55 degrees from the SW 40m X 40m corner to the center of the soil auger hole.

Pedon Note: Depth to Water Table = 103 cm
Lab Source ID: KSSL
Lab Pedon #: 16N0980
Soil Name as Described/Sampled: Sarona
Classification: Coarse-loamy, mixed, superactive, frigid Alfic Haplorthods

Soil Name as Correlated:

Classification:
Pedon Type: undefined observation
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:

Physiographic Section:

State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on backslope of side slope of disintegration moraine on till plain
Upslope Shape: linear
Cross Slope Shape: linear
Particle Size Control Section: 25 to 100 cm.
Description origin: NASIS

Diagnostic Features: ochric epipedon 0 to 25 cm.
ableic horizon 13 to 25 cm.
spodic horizon 25 to 46 cm.
glossic horizon 46 to 128 cm.
argillic horizon 68 to 128 cm.

Country:
State: Michigan
County: Gogebic
MLRA: 93B -- Superior Stony and Rocky Loamy Plains and Hills, Eastern Part
Soil Survey Area: MI053 -- Gogebic County, Michigan
10-RHI -- Rhinelander, Wisconsin
Map Unit: 36 -- Gay-Pleine complex, 0 to 1 percent slopes, stony

Pit Location: This pedon is for the NEON sampling project at the UNDERC site. 5.34 meters and 55 degrees from the SW 40m X 40m corner to the center of the soil auger hole.

Quad Name: Tenderfoot Lake, Wisconsin
Std Latitude: 46.2311400
Std Longitude: 89.5421500

Latitude: 46 degrees 13 minutes 51.96 seconds north
Longitude: 89 degrees 32 minutes 31.92 seconds west
Datum: WGS84
UTM Zone:
UTM Easting:
UTM Northing:

Primary Earth Cover: Tree cover
Secondary Earth Cover: Intermixed conifers and hardwoods
Existing Vegetation: balsam fir, beaked hazelnut, bunchberry dogwood, quaking aspen, red maple
Parent Material: loamy till
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL
Cont. Site ID: S2016MI053031  Pedon ID: S2016MI053031

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Oe--0 to 13 centimeters (0.0 to 5.1 inches); black (10YR 2/1) moderately decomposed plant material; Lab sample # 16N04366

E--13 to 25 centimeters (5.1 to 9.8 inches); brown (7.5YR 4/2) gravelly sandy loam; 10 percent nonflat subangular indurated 2 to 75-millimeter Mixed rock fragments and 15 percent nonflat subangular indurated 75 to 250-millimeter Mixed rock fragments. Lab sample # 16N04367

Bs--25 to 46 centimeters (9.8 to 18.1 inches); dark reddish brown (5YR 3/4) sandy loam; 8 percent nonflat subangular indurated 2 to 75-millimeter Mixed rock fragments. Lab sample # 16N04368

E/B--46 to 68 centimeters (18.1 to 26.8 inches); 70 percent reddish brown (5YR 5/3) and 30 percent reddish brown (5YR 4/4) loamy fine sand, fine sandy loam; 5 percent nonflat subangular indurated 2 to 75-millimeter Mixed rock fragments. Lab sample # 16N04369

B/E1--68 to 87 centimeters (26.8 to 34.3 inches); 70 percent reddish brown (5YR 4/4) and 30 percent reddish brown (5YR 5/3) loamy fine sand, fine sandy loam; 5 percent nonflat subangular indurated 2 to 75-millimeter Mixed rock fragments. Lab sample # 16N04370

B/E2--87 to 106 centimeters (34.3 to 41.7 inches); 85 percent reddish brown (2.5YR 4/4) and 15 percent reddish brown (2.5YR 5/3) fine sandy loam, loam; 5 percent nonflat subangular indurated 2 to 75-millimeter Mixed rock fragments. Lab sample # 16N04371

B/E3--106 to 128 centimeters (41.7 to 50.4 inches); 85 percent reddish brown (2.5YR 4/4) and 15 percent reddish brown (2.5YR 5/3) gravelly fine sandy loam, gravelly clay loam; 25 percent nonflat subangular indurated 2 to 75-millimeter Mixed rock fragments.

2C--128 to 136 centimeters (50.4 to 53.5 inches); reddish brown (5YR 4/3) stratified very gravelly loamy coarse sand to very fine sandy loam; 50 percent nonflat subangular indurated 2 to 75-millimeter Mixed rock fragments.
PEDON DESCRIPTION -- NEON Site UNDE

Print Date: Mar 20 2018
Description Date: Apr 28 2016
Describer: Mike England
NEON Plot ID: UNDE_038

Country: Michigan
County: Gogebic
MLRA: 93B -- Superior Stony and Rocky Loamy Plains and Hills, Eastern Part
Soil Survey Area: MI053 -- Gogebic County, Michigan
10-RHI -- Rhinelander, Wisconsin
Map Unit: 41 -- Lupton-Pleine-Cathro complex, 0 to 1 percent slopes

Site ID: S2016MI053032
Pedon ID: S2016MI053032

Pit Location: This pedon is for the NEON sampling project at the UNDERC site. 3.95 meters and 20 degrees from the SW 40m X 40m corner to the center of the soil auger hole.

Pedon Note: Depth to Water Table = 3cm
Lab Source ID: KSSL
Lab Pedon #: 16N0981
Soil Name as Described/Sampled: Cathro
Classification: Loamy, mixed, euic, frigid Terric Haplosaprists

Soil Name as Correlated:

Classification:
Pedon Type: undefined observation
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section:

State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on toeslope of dip poor fen on till plain
Upslope Shape: linear
Cross Slope Shape: linear
Particle Size Control Section:
Description origin: NASIS

Diagnostic Features: fibric soil materials 0 to 8 cm.
                        hemic soil materials 8 to 27 cm.
                        sapric soil materials 27 to 76 cm.

Latitude: 46 degrees 13 minutes 55.47 seconds north
Longitude: 89 degrees 32 minutes 5.47 seconds west
Datum: WGS84
UTM Zone:
UTM Easting:
UTM Northing:

Primary Earth Cover: Tree cover
Secondary Earth Cover: Swamp
Existing Vegetation: arborvitae, black spruce, brackenfern, Labrador tea, paper birch, red maple, sphagnum
Parent Material: organic material over loamy alluvium
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL
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Oi--0 to 8 centimeters (0.0 to 3.1 inches); olive brown (2.5Y 4/3) peat; Lab sample # 16N04372

Oe--8 to 27 centimeters (3.1 to 10.6 inches); very dark brown (10YR 2/2) mucky peat; Lab sample # 16N04373

Oa--27 to 76 centimeters (10.6 to 29.9 inches); black (10YR 2/1) muck; Lab sample # 16N04374

A--76 to 96 centimeters (29.9 to 37.8 inches); black (10YR 2/1) mucky silt loam; 2 percent fine prominent 2.5YR 3/6), moist, masses of oxidized iron. Lab sample # 16N04375

C--96 to 113 centimeters (37.8 to 44.5 inches); light olive brown (2.5Y 5/3) silt loam; 25 percent distinct 10YR 3/2), moist, organic stains on all faces of peds; 10 percent medium faint 2.5YR 5/4), moist, masses of oxidized iron. Lab sample # 16N04376
PEDON DESCRIPTION -- NEON Site UNDE

Print Date: Mar 20 2018
Description Date: Apr 26 2016
Describer: Roger Risley
NEON Plot ID: UNDE_043

Site ID: S2016MI053033

Pedon ID: S2016MI053033

Site Note: This pedon is for the NEON sampling project at the UNDERC site. 18.0 meters and 31 degrees from the SW 40m X 40m corner to the center of the soil auger hole.

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 16N0982
Soil Name as Described/Sampled: Sarona
Classification: Coarse-loamy, mixed, superactive, frigid Entic Haplorthods

Soil Name as Correlated:

Classification:
Pedon Type: undefined observation
Pedon Purpose: research site
Taxon Kind: taxadjunct
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section:
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on backslope of side slope of disintegration moraine on till 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 10 cm.
spodic horizon 10 to 38 cm.

Country: Michigan
State: Michigan
County: Gogebic
MLRA: 93B -- Superior Stony and Rocky Loamy Plains and Hills, Eastern Part
Soil Survey Area: MI053 -- Gogebic County, Michigan
10-RHI -- Rhinelander, Wisconsin
Map Unit: 5172C -- Gogebic, sandy substratum-Pence-Cathro complex, 0 to 18 percent slopes
Pit Location: This pedon is for the NEON sampling project at the UNDERC site. 18.0 meters and 31 degrees from the SW 40m X 40m corner to the center of the soil auger hole.
Quad Name: Tenderfoot Lake, Wisconsin
Std Latitude: 46.2341600
Std Longitude: 89.5426300

Latitude: 46 degrees 14 minutes 2.61 seconds north
Longitude: 89 degrees 32 minutes 33.82 seconds west
Datum: WGS84
UTM Zone:
UTM Easting:
UTM Northing:

Primary Earth Cover: Tree cover
Secondary Earth Cover: Hardwoods
Existing Vegetation:
Parent Material: loamy glaciofluvial deposits and/or local loess over loamy till
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL
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A--0 to 10 centimeters (0.0 to 3.9 inches); very dark brown (7.5YR 2.5/2) silt loam; 1 percent nonflat subrounded indurated 2 to 75-millimeter Mixed rock fragments. Lab sample # 16N04377

Bs1--10 to 26 centimeters (3.9 to 10.2 inches); dark reddish brown (5YR 3/4) fine sandy loam; 1 percent nonflat subrounded indurated 2 to 75-millimeter Mixed rock fragments. Lab sample # 16N04378

Bs2--26 to 38 centimeters (10.2 to 15.0 inches); reddish brown (5YR 4/4) fine sandy loam; 1 percent nonflat subrounded indurated 2 to 75-millimeter Mixed rock fragments. Lab sample # 16N04379

Bw1--38 to 69 centimeters (15.0 to 27.2 inches); brown (7.5YR 4/4) loam; 5 percent nonflat subrounded indurated 2 to 75-millimeter Mixed rock fragments. Lab sample # 16N04380

2Bw2--69 to 111 centimeters (27.2 to 43.7 inches); brown (7.5YR 4/3) sandy loam; 10 percent nonflat subangular indurated 2 to 75-millimeter Mixed rock fragments. Lab sample # 16N04381

2BC--111 to 137 centimeters (43.7 to 53.9 inches); dark brown (7.5YR 3/4) gravelly sandy loam; 20 percent nonflat subangular indurated 2 to 75-millimeter Mixed rock fragments. Lab sample # 16N04382
PEDON DESCRIPTION -- NEON Site UNDE

Print Date: Mar 20 2018
Description Date: Apr 28 2016
Describer: Roger Risley
NEON Plot ID: UNDE_044

Site ID: S2016MI053034

Pedon ID: S2016MI053034

Site Note: This pedon is for the NEON sampling project at the UNDERC site. 9.0 meters and 45 degrees from the SW 40m X 40m corner to the center of the soil auger hole.

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 16N0983
Soil Name as Described/Sampled: Worcester
Classification: Coarse-loamy, mixed, superactive, frigid Typic Endoaquods

Soil Name as Correlated:
Classification:
Pedon Type: undefined observation
Pedon Purpose: research site
Taxon Kind: taxadjunct
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on footslope of base slope of disintegration moraine on till plain
Upslope Shape: linear
Cross Slope Shape: linear
Particle Size Control Section: 25 to 100 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 10 cm.
albic materials 0 to 10 cm.
spodic horizon 18 to 78 cm.

Country:
State: Michigan
County: Gogebic
MLRA: 93B -- Superior Stony and Rocky Loamy Plains and Hills, Eastern Part
Soil Survey Area: MI053 -- Gogebic County, Michigan
10-RHI -- Rhinelander, Wisconsin
Map Unit: 5172C -- Gogebic, sandy substratum-Pence-Cathro complex, 0 to 18 percent slopes
Pit Location: This pedon is for the NEON sampling project at the UNDERC site. 9.0 meters and 45 degrees from the SW 40m X 40m corner to the center of the soil auger hole.
Quad Name: Tenderfoot Lake, Wisconsin
Std Latitude: 46.2316300
Std Longitude: 89.5327900

Latitude: 46 degrees 13 minutes 53.68 seconds north
Longitude: 89 degrees 31 minutes 58.38 seconds west
Datum: WGS84
UTM Zone:
UTM Easting:
UTM Northing:

Primary Earth Cover: Tree cover
Secondary Earth Cover: Intermixed conifers and hardwoods
Existing Vegetation: balsam fir, black cherry, quaking aspen, red maple
Parent Material: loamy glaciofluvial deposits over stratified sandy outwash
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL
### Pedon Description

A/E--0 to 10 centimeters (0.0 to 3.9 inches); 70 percent black (7.5YR 2.5/1) and 30 percent brown (7.5YR 4/3) fine sandy loam; very friable; 2 percent nonflat subrounded indurated 2 to 75-millimeter Mixed rock fragments. Lab sample # 16N04383. E-horizon has broken boundary and is patchy in site.

Bhs--10 to 18 centimeters (3.9 to 7.1 inches); dark reddish brown (5YR 3/3) fine sandy loam; very friable; 2 percent nonflat subrounded indurated 2 to 75-millimeter Mixed rock fragments. Lab sample # 16N04384

Bs1--18 to 47 centimeters (7.1 to 18.5 inches); reddish brown (5YR 4/3) fine sandy loam; very friable; 2 percent nonflat subrounded indurated 2 to 75-millimeter Mixed rock fragments. Lab sample # 16N04385

Bs2--47 to 78 centimeters (18.5 to 30.7 inches); dark reddish brown (5YR 3/4) fine sandy loam; very friable; 10 percent medium faint 5YR 4/6), moist, masses of oxidized iron; 2 percent nonflat subrounded indurated 2 to 75-millimeter Mixed rock fragments. Lab sample # 16N04386

BC--78 to 110 centimeters (30.7 to 43.3 inches); reddish brown (5YR 4/4) loamy sand; loose; 10 percent medium faint 5YR 4/6), moist, masses of oxidized iron. Lab sample # 16N04387

2C--110 to 148 centimeters (43.3 to 58.3 inches); brown (7.5YR 4/4) stratified loamy sand to very fine sandy loam; loose; 1 percent fine distinct 5YR 5/6), moist, masses of oxidized iron and 20 percent coarse prominent 5YR 6/2), moist, iron depletions. Lab sample # 16N04388

<table>
<thead>
<tr>
<th>Slope (%)</th>
<th>Elevation (meters)</th>
<th>Aspect (deg)</th>
<th>MAAT (°C)</th>
<th>MSAT (°C)</th>
<th>MWAT (°C)</th>
<th>MAP (mm)</th>
<th>Frost-Free Days</th>
<th>Drainage Class</th>
<th>Slope Length (meters)</th>
<th>Upslope Length (meters)</th>
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<td>somewhat poorly</td>
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