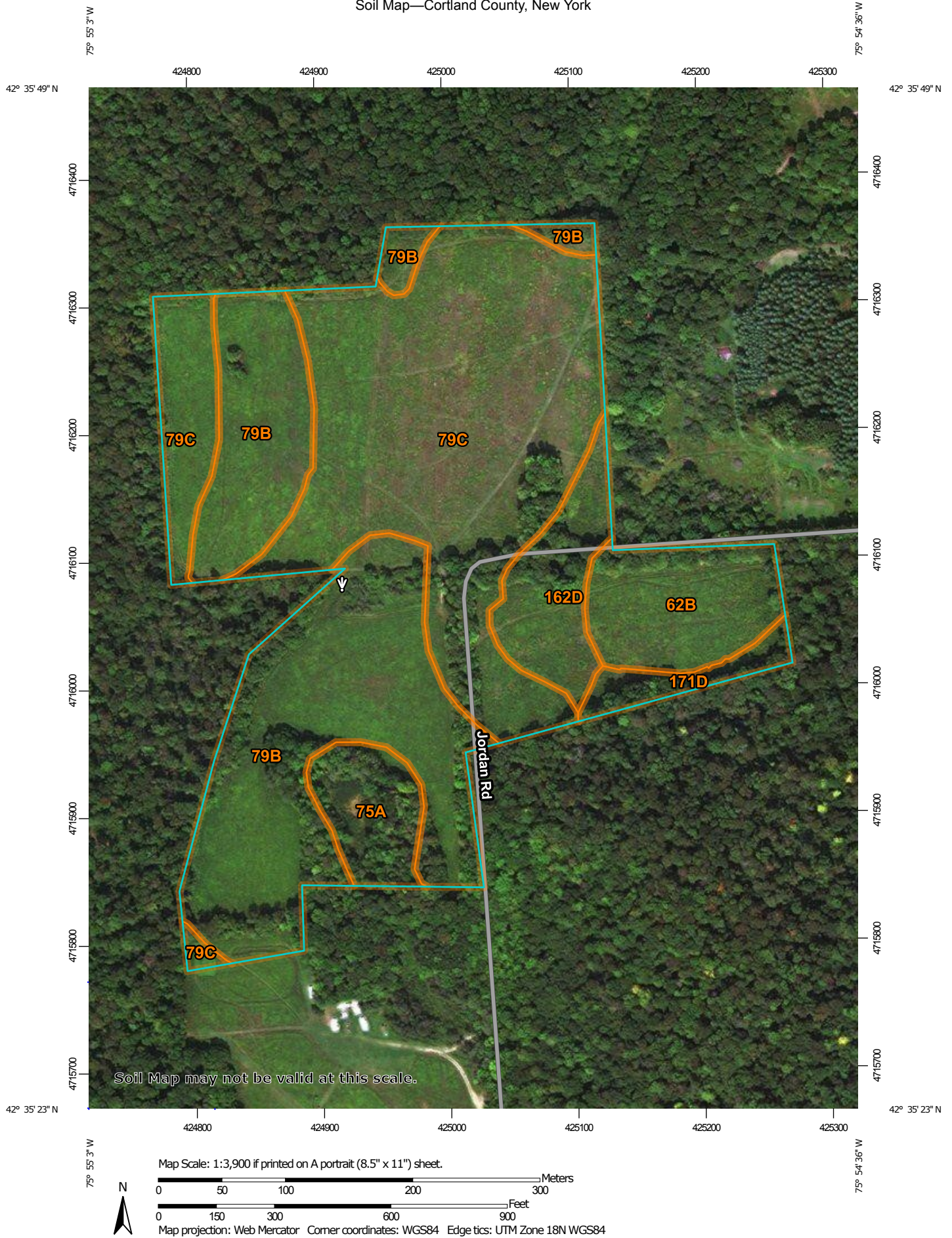


Soil Map—Cortland County, New York



Cortland County, New York

62B—Mardin channery silt loam, 2 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2rwbx

Elevation: 330 to 2,460 feet

Mean annual precipitation: 31 to 70 inches

Mean annual air temperature: 39 to 52 degrees F

Frost-free period: 105 to 180 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Mardin and similar soils: 88 percent

Minor components: 12 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mardin

Setting

Landform: Till plains

Landform position (two-dimensional): Summit, backslope

Landform position (three-dimensional): Crest, side slope

Down-slope shape: Linear

Across-slope shape: Convex, linear

Parent material: Loamy basal till

Typical profile

Ap - 0 to 10 inches: channery silt loam

Bw - 10 to 17 inches: channery silt loam

E - 17 to 20 inches: channery silt loam

Bx1 - 20 to 49 inches: very flaggy silt loam

Bx2 - 49 to 65 inches: very channery silt loam

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: 14 to 26 inches to fragipan

Natural drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)

Depth to water table: About 12 to 19 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 3.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2w

Hydrologic Soil Group: D

Hydric soil rating: No

Minor Components

Volusia

Percent of map unit: 5 percent

Landform: Hills

Landform position (two-dimensional): Footslope, summit

Landform position (three-dimensional): Base slope, side slope

Down-slope shape: Concave

Across-slope shape: Linear

Hydric soil rating: No

Bath

Percent of map unit: 5 percent

Landform: Drumlinoid ridges, hills, till plains

Landform position (two-dimensional): Shoulder

Landform position (three-dimensional): Crest, side slope

Down-slope shape: Convex, concave

Across-slope shape: Convex, linear

Hydric soil rating: No

Lordstown

Percent of map unit: 2 percent

Landform: Ridges

Landform position (two-dimensional): Summit, shoulder

Landform position (three-dimensional): Side slope

Down-slope shape: Convex, concave

Across-slope shape: Linear

Hydric soil rating: No

Data Source Information

Soil Survey Area: Cortland County, New York

Survey Area Data: Version 17, Sep 2, 2018

Cortland County, New York

75A—Alden silt loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2rw9s

Elevation: 160 to 2,460 feet

Mean annual precipitation: 31 to 70 inches

Mean annual air temperature: 39 to 52 degrees F

Frost-free period: 105 to 180 days

Farmland classification: Not prime farmland

Map Unit Composition

Alden and similar soils: 90 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Alden

Setting

Landform: Depressions

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Base slope

Down-slope shape: Concave

Across-slope shape: Concave

Parent material: A silty mantle of local deposition overlying loamy till

Typical profile

Oe - 0 to 2 inches: moderately decomposed plant material

A - 2 to 8 inches: silt loam

Bg1 - 8 to 14 inches: silt loam

Bg2 - 14 to 32 inches: channery silt loam

C - 32 to 60 inches: channery loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Very poorly drained

Capacity of the most limiting layer to transmit water (Ksat):

Moderately low to moderately high (0.06 to 0.60 in/hr)

Depth to water table: About 0 inches

Frequency of flooding: None

Frequency of ponding: Frequent

Calcium carbonate, maximum in profile: 3 percent

Available water storage in profile: Moderate (about 9.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 5w

Hydrologic Soil Group: C/D

Hydric soil rating: Yes

Minor Components

Chippewa

Percent of map unit: 5 percent

Landform: Depressions

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Base slope

Down-slope shape: Concave

Across-slope shape: Concave

Hydric soil rating: Yes

Canandaigua

Percent of map unit: 5 percent

Landform: Depressions

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Tread, dip

Down-slope shape: Concave

Across-slope shape: Concave, linear

Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Cortland County, New York

Survey Area Data: Version 17, Sep 2, 2018

Cortland County, New York

79B—Mongaup-Hawksnest complex, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2rwb7

Elevation: 1,390 to 3,610 feet

Mean annual precipitation: 32 to 70 inches

Mean annual air temperature: 39 to 48 degrees F

Frost-free period: 110 to 155 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Mongaup and similar soils: 50 percent

Hawksnest and similar soils: 35 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mongaup

Setting

Landform: Ridges

Landform position (two-dimensional): Summit, shoulder

Landform position (three-dimensional): Crest, side slope

Down-slope shape: Convex, concave

Across-slope shape: Linear

Parent material: Loamy till derived from sandstone and siltstone

Typical profile

Oe - 0 to 1 inches: moderately decomposed plant material

A - 1 to 3 inches: channery silt loam

Bw - 3 to 10 inches: very channery silt loam

BC - 10 to 21 inches: very channery silt loam

2C - 21 to 31 inches: very channery loam

2R - 31 to 41 inches: bedrock

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 1.42 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 3.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: B

Hydric soil rating: No

Description of Hawksnest

Setting

Landform: Hills, ridges, benches

Landform position (two-dimensional): Summit, shoulder

Landform position (three-dimensional): Crest, side slope

Down-slope shape: Convex, concave

Across-slope shape: Convex, linear

Parent material: Loamy till derived mainly from acid sandstone, siltstone, and shale

Typical profile

Oe - 0 to 1 inches: moderately decomposed plant material

A - 1 to 2 inches: silt loam

BE - 2 to 5 inches: silt loam

Bw1 - 5 to 10 inches: silt loam

Bw2 - 10 to 18 inches: channery silt loam

2R - 18 to 28 inches: bedrock

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 1.42 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 3.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2s

Hydrologic Soil Group: D

Hydric soil rating: No

Minor Components

Willdin

Percent of map unit: 10 percent

Landform: Hills

Landform position (two-dimensional): Summit, backslope

Landform position (three-dimensional): Crest, side slope

Down-slope shape: Linear

Across-slope shape: Convex, linear

Hydric soil rating: No

Tuller, cool

Percent of map unit: 5 percent

Landform: Hills, ridges, benches

Landform position (two-dimensional): Footslope, summit

Landform position (three-dimensional): Base slope, side slope

Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Data Source Information

Soil Survey Area: Cortland County, New York
Survey Area Data: Version 17, Sep 2, 2018

Cortland County, New York

79C—Mongaup channery silt loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2rwb9

Elevation: 1,390 to 3,610 feet

Mean annual precipitation: 32 to 70 inches

Mean annual air temperature: 39 to 48 degrees F

Frost-free period: 110 to 155 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Mongaup and similar soils: 90 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mongaup

Setting

Landform: Ridges

Landform position (two-dimensional): Summit, shoulder

Landform position (three-dimensional): Crest, side slope

Down-slope shape: Linear, concave

Across-slope shape: Linear

Parent material: Loamy till derived from sandstone and siltstone

Typical profile

Oe - 0 to 1 inches: moderately decomposed plant material

A - 1 to 3 inches: channery silt loam

Bw - 3 to 10 inches: very channery silt loam

BC - 10 to 21 inches: very channery silt loam

2C - 21 to 31 inches: very channery loam

2R - 31 to 41 inches: bedrock

Properties and qualities

Slope: 8 to 15 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 1.42 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 3.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: B

Hydric soil rating: No

Minor Components

Willdin

Percent of map unit: 5 percent

Landform: Hills

Landform position (two-dimensional): Summit, backslope

Landform position (three-dimensional): Crest, side slope

Down-slope shape: Linear

Across-slope shape: Convex, linear

Hydric soil rating: No

Hawksnest

Percent of map unit: 5 percent

Landform: Benches, hills, ridges

Landform position (two-dimensional): Summit, shoulder

Landform position (three-dimensional): Crest, side slope

Down-slope shape: Convex, concave

Across-slope shape: Convex, linear

Hydric soil rating: No

Data Source Information

Soil Survey Area: Cortland County, New York

Survey Area Data: Version 17, Sep 2, 2018

Cortland County, New York

162D—Willdin channery silt loam, 15 to 25 percent slopes

Map Unit Setting

National map unit symbol: 2wblt

Elevation: 1,390 to 3,610 feet

Mean annual precipitation: 32 to 70 inches

Mean annual air temperature: 39 to 48 degrees F

Frost-free period: 110 to 155 days

Farmland classification: Not prime farmland

Map Unit Composition

Willdin and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Willdin

Setting

Landform: Hills, mountains

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Mountainflank, side slope, head slope

Down-slope shape: Concave

Across-slope shape: Linear

Parent material: Brownish loamy till derived from sandstone and siltstone

Typical profile

Ap - 0 to 8 inches: channery silt loam

Bw - 8 to 16 inches: channery silt loam

E - 16 to 20 inches: channery silt loam

Bx - 20 to 57 inches: channery loam

C - 57 to 72 inches: very channery silt loam

Properties and qualities

Slope: 15 to 25 percent

Percent of area covered with surface fragments: 0.0 percent

Depth to restrictive feature: 16 to 26 inches to fragipan

Natural drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)

Depth to water table: About 13 to 24 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 3.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Lewbath

Percent of map unit: 10 percent
Landform: Hills, mountains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, nose slope,
side slope
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Mongaup

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Ontusia

Percent of map unit: 5 percent
Landform: Hills, mountains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Mountainbase, side slope,
interfluvium
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Data Source Information

Soil Survey Area: Cortland County, New York
Survey Area Data: Version 17, Sep 2, 2018

Cortland County, New York

171D—Lordstown channery silt loam, 15 to 25 percent slopes, very stony

Map Unit Setting

National map unit symbol: 2wzm6

Elevation: 330 to 2,460 feet

Mean annual precipitation: 31 to 70 inches

Mean annual air temperature: 39 to 52 degrees F

Frost-free period: 105 to 180 days

Farmland classification: Not prime farmland

Map Unit Composition

Lordstown, very stony, and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lordstown, Very Stony

Setting

Landform: Mountains, hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Mountainflank, nose slope, side slope

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Loamy till derived from sandstone and siltstone

Typical profile

Oe - 0 to 1 inches: moderately decomposed plant material

A - 1 to 5 inches: channery highly organic silt loam

Bw1 - 5 to 17 inches: channery silt loam

Bw2 - 17 to 24 inches: very channery silt loam

C - 24 to 30 inches: extremely channery silt loam

2R - 30 to 40 inches: bedrock

Properties and qualities

Slope: 15 to 25 percent

Percent of area covered with surface fragments: 1.6 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat):

Moderately low to moderately high (0.14 to 1.42 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Salinity, maximum in profile: Nonsaline (0.0 to 1.9 mmhos/cm)

Available water storage in profile: Low (about 4.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: C

Hydric soil rating: No

Minor Components

Cadosia, very stony

Percent of map unit: 10 percent

Landform: Ridges

Landform position (two-dimensional): Backslope, footslope

Landform position (three-dimensional): Side slope

Down-slope shape: Concave

Across-slope shape: Linear

Hydric soil rating: No

Arnot, very stony

Percent of map unit: 5 percent

Landform: Mountains, hills

Landform position (two-dimensional): Shoulder, backslope, summit

Landform position (three-dimensional): Mountaintop,
mountainflank, crest, nose slope, interfluve

Down-slope shape: Convex

Across-slope shape: Linear, convex

Hydric soil rating: No

Bath, very stony

Percent of map unit: 5 percent

Landform: Mountains, hills

Landform position (two-dimensional): Backslope, summit, shoulder

Landform position (three-dimensional): Interfluve, side slope

Down-slope shape: Convex, concave

Across-slope shape: Convex, linear

Hydric soil rating: No

Data Source Information

Soil Survey Area: Cortland County, New York

Survey Area Data: Version 17, Sep 2, 2018

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Cortland County, New York

Survey Area Data: Version 17, Sep 2, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 29, 2012—Sep 27, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
62B	Mardin channery silt loam, 2 to 8 percent slopes	3.3	8.1%
75A	Alden silt loam, 0 to 3 percent slopes	1.9	4.7%
79B	Mongaup-Hawksnest complex, 3 to 8 percent slopes	14.9	36.0%
79C	Mongaup channery silt loam, 8 to 15 percent slopes	17.6	42.6%
162D	Willdin channery silt loam, 15 to 25 percent slopes	2.6	6.3%
171D	Lordstown channery silt loam, 15 to 25 percent slopes, very stony	1.0	2.4%
Totals for Area of Interest		41.3	100.0%