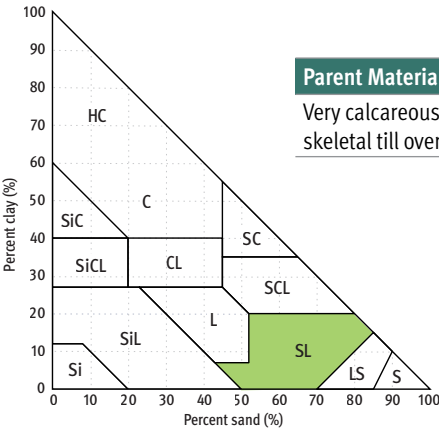


Tweed (TWE)

ORTHIC MELANIC BRUNISOL
Taxonomic Subgroup Classification

Ontario Soil Series
DESCRIPTION AND INTERPRETATION



Parent Material
Very calcareous, moderately coarse skeletal till over marble bedrock

Soil Properties

Drainage	Permeability	Available Moisture	Runoff
Very Rapid	Very Slow	Very Low	Very Fast
Rapid	Slow	Low	Fast
Well	Moderate	Moderate	Moderate
Moderately Well	Rapid	High	Slow
Imperfect	Very Rapid	Very High	Very Slow
Poor	—	—	—
Very Poor	—	—	—

Soil Profile



cm	Native Profile	Cultivated Profile
0	Ah	Ap
10	Bm1	
20		Bm1
30	Bm2	
40		Bm2
50	Bm3	
60		Bm2
70		
80	Ck	BC
90	R	C
100		

Management Challenges

Land Development Requirements		
Stone Removal	High	
Surface Drainage	Low	
Tile Drainage	Low	
Soil Fertility	High	
Irrigation	High	

Tile Drainage Risks		
Bank Erosion	Low	
Unearthing of Coarse Fragments	High	
Physical Clogging with Sediment	Moderate	
Iron Clogging	Moderate	

Land Management Risks		
Compaction	Low	
Loss of Organic Matter	High	
Acidification	Moderate	
Water Erosion Potential	Moderate	
Wind Erosion Potential	Moderate	
Tillage Erosion Potential	Moderate	

Example Landscape



CANADA LAND INVENTORY
RATING FOR AGRICULTURE

4

Find more information on
CLI and soil capability ratings
at [Soil Capability for Agriculture
in Ontario](#).

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Physical Analyses

Soil Layers	Horizon	Texture Class ¹	Coarse Fragments by Volume (%)	Sand Fractions (%)					Sand (%)	Silt (%)	Clay (%)	Bulk Density (g/cm ³)
				Very Coarse	Coarse	Medium	Fine	Very Fine				
Surface	Ap	SL	50	3	7	15	23	16	64	25	11	1.32
Subsurface	Bm	SL	50	3	8	15	23	15	63	23	14	1.39
Parent Material	C	S	50	2	6	13	23	17	61	27	12	1.61

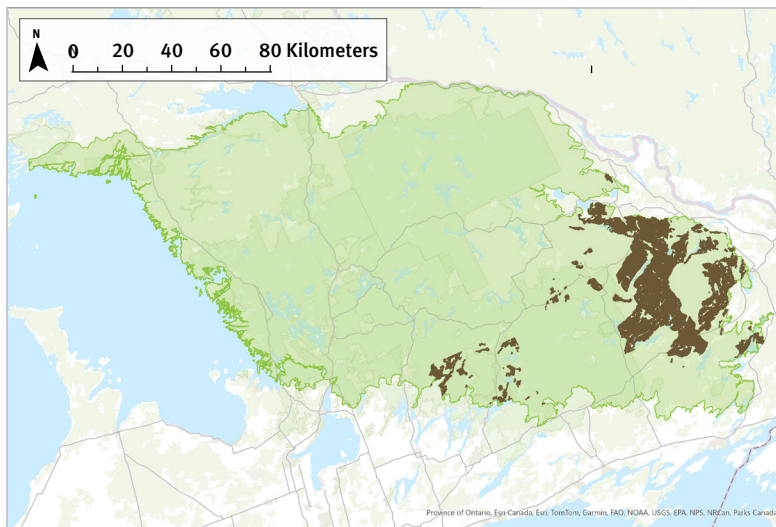
¹ Texture Class: SL = Sandy Loam, S = Sandy

Chemical Analyses

Soil Layers	Horizon	Horizon Thickness (cm)	pH (H ₂ O)	SOM (%)	CEC (meq/100 g)	Base Saturation (%)	CaCO ₃ (%)
Surface	Ap	20	6.9	2.6	20	93	0.3
Subsurface	Bm	55	7.2	0.3	15	95	0.3
Parent Material	C	20	7.5	0.1	13	98	0.8

Legend: SOM = Soil Organic Matter; CEC = Cation Exchange Capacity; CaCO₃ = Calcium Carbonate

Geographic Distribution



Map outlining the Soil Region (light green shading) and geographic distribution of the soil series (solid brown).

This factsheet is intended for informational purposes only. Producers are advised to consult their own certified crop advisor or other production specialist.

For more information on the soil profile series, refer to the [Ontario Soils GeoHub](#).



Soil Correlation

Soil Family	Tweed
Similar Series (province wide)	N/A
Soil Region	Algonquin
Catena Members (Drainage)	Tweed (R)
Areal Extent	325,548 ha (804,445 acres)

Agricultural Production

Tweed soils are marginal agricultural soils in Ontario. They are rapidly drained and have low natural fertility due to their sandy texture and shallow depth to bedrock. Based on crop information from 2021 to 2024, areas mapped as Tweed soils were predominantly in native vegetation (91%) and pasture and/or forage (4%).