

PEDON 20

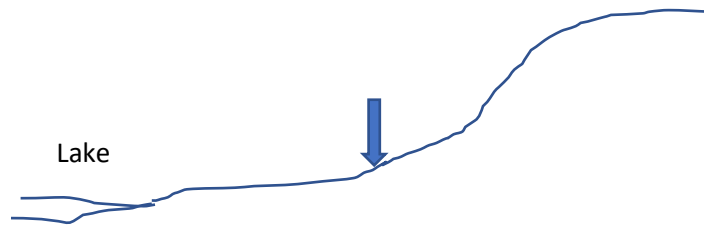
SITE INFORMATION

Elevation about 1590 ft. Native vegetation is dominantly balsam fir and red spruce, with scattered white birch, beech, and aspen.

LANDFORM

4.8% sloping to the S-SE on loess-covered glacial moraine.

HILLSLOPE POSITION



SOIL TEMPERATURE AND MOISTURE REGIME

Soil temperature regime is frigid. Soil moisture regime is udic.

SOIL PIT INFORMATION

The upland soil formed in glacial till (ablation till) with a loess cap. Clay content is very low in all the soils of the region. Bedrock is phyllite, a fine-textured felsic metamorphic rock. Soils of the area are very strongly to excessively acid. There is no evidence of clay illuviation. The 3rd horizon sand grains have 25% cracked coatings, and it is 90% continuously cemented, and the 4th horizon has 15% cracked coatings. No other horizon has more than a trace. The 6th horizon is a transitional horizon. The 6th horizon separates into thick platy units that are not pedogenic. They formed by unloading following glacial meltback. Sands are mostly very fine. There are no roots in 6th horizon, but the gravels are subrounded.

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CHARACTERIZATION DATA

Horizon	OC %	Base Sat %	pH (water)	Fe by ammonium oxalate (NH ₄ OAc)	Al + Fe by ammonium oxalate (NH ₄ OAc)	ODOE
1	4.27	25	3.5	Tr	0.15	0.11
2	0.43	20	3.9	Tr	0.25	0.12
3	10.06	18	5.5	0.09	0.52	0.27
4	5.99	12	5.5	0.12	0.50	0.26
5	1.61	22	5.4	0.03	0.18	0.25
6	0.12	29	5.8	Tr	Tr	0.10

SITE IMAGE



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PROFILE IMAGE



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SCORECARD

SCORECARD VIRTUAL NATIONAL SOIL JUDGING CONTEST APRIL 5-16, 2021

1.	_____
2.	_____
3.	_____
4.	_____
5.	_____
Total	_____

Contestant: _____
 School: _____
 Pedon Number: PRACTICE 20

Horizonation			Boundary		Texture				Color			Structure		Cons.	Soil Features		Score			
Master Pre. (5)	Sub. Let. (5)	No. (5)	Dep. (cm)	Dist.	Sand (%)	Silt (%)	Clay (%) (5)	CF (%)	CF mod. (5)	Class (5)	Hue	Value	Chr.	Grade	Shape	Moist Strength	Redox		Eft	(35)
																	Depth	Conc.		
			6	C	24	67		0			10YR	2	1	2	GR	VFR	-	-	-	
			28	C	25	67		0			10YR	6	3	1	PL	VFR	-	-	-	
			38	C	27	61		0			7.5YR	2.5	1	0	MA	F1	-	-	-	
			50	G	25	64		0			7.5YR	3	4	1	SRK	FR	-	-	-	
			80	G	26	64		0			7.5YR	5	4	1	SRK	VFR	-	-	-	
			110+	-	55	27		15			10YR	4	3	1	SRK PL	FR	Y	Y	-	

Score:

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2. Soil Profile Characteristics

Score:

Hydraulic Conductivity (10)	Loading Rate at 75 cm (5)	Effective Soil Depth (5)	Water Retention Difference (5)	Soil Wetness Class (5)
Surface (5) <input type="checkbox"/> High <input type="checkbox"/> Mod. <input type="checkbox"/> Low Limiting Layer (5) <input type="checkbox"/> High <input type="checkbox"/> Mod. <input type="checkbox"/> Low	_____ gpd/ft ² (3) Ref. (2) _____	<input type="checkbox"/> V. shallow (<25 cm) <input type="checkbox"/> Shallow (25 to 49 cm) <input type="checkbox"/> Mod. deep (50 to 99 cm) <input type="checkbox"/> Deep (100 to 149 cm) <input type="checkbox"/> Very deep (≥150 cm)	<input type="checkbox"/> Very low (< 7.5 cm) <input type="checkbox"/> Low (7.5 to < 15 cm) <input type="checkbox"/> Mod. (15 to < 22.5 cm) <input type="checkbox"/> High (≥ 22.5 cm)	<input type="checkbox"/> (> 150 cm) <input type="checkbox"/> (100 to 150 cm) <input type="checkbox"/> (50 to 99 cm) <input type="checkbox"/> (25 to 49 cm) <input type="checkbox"/> (< 25 cm)

3. Site Characteristics

Score:

Parent Material (GIVEN)	Landform (GIVEN)	Slope (GIVEN)	Slope Profile (5)	Surface Runoff (5)	Eros. Pot. (5)
LOESS ABLATION TILL	UPLAND	4.87	<input type="checkbox"/> Summit <input type="checkbox"/> Shoulder <input type="checkbox"/> Backslope <input type="checkbox"/> Footslope <input type="checkbox"/> Toeslope <input type="checkbox"/> None	<input type="checkbox"/> Ponded <input type="checkbox"/> Very slow <input type="checkbox"/> Slow <input type="checkbox"/> Medium <input type="checkbox"/> Rapid <input type="checkbox"/> Very rapid	<input type="checkbox"/> Very Low <input type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High <input type="checkbox"/> Very High

4. Soil Classification

Score:

Epipedon (5)	Subsurface horizons and/or diagnostic features (5 each)	Order (10)	Suborder (10)	Great Group (10)

5. Interpretations

Score:

Houses with Basements (3)	Septic Tank Abs. Fields (3)	Local Roads and Streets (3)	Corn (3)	Hopyards (3)	Created Wetlands (3)
<input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Severe Reason # (2): _____	<input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Severe Reason # (2): _____	<input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Severe Reason (2): _____	<input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Severe Reason (2): _____	<input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Severe Reason (2): _____	<input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Severe Reason (2): _____