

Site No. 33 -- Meadow Creek

75-ID-0570

General Site Characteristics

Location -- Benewah County, Idaho, 13 miles north of Harvard, Idaho, along Meadow Creek, in the NW 1/4, Sec. 29, T. 43 N., R. 3 W.; described -- June 1975 by Harold Brown; physiography -- lower 1/3 of a steep (50% slope) secondary ridge; aspect -- south; elevation -- 3000 feet (914 meters); parent material -- volcanic ash and loess over siltites of the Libby Formation; climate (est.) -- mean annual temperature = 44 - 46° F (6.7 - 7.8° C), mean annual precipitation = 30 - 35 inches (76 - 89 cm); Drainage -- well-drained; vegetation -- Thuja plicata/Pachistima myrsinites (habitat type); classification -- Entic Dystrandept, medial over loamy, mixed, mesic.

Pedon Description

0 --- 1.5 inches to 0 (4 cm to 0). Fresh and partially decomposed, needles, leaves, cones, twigs, and pieces of wood; abrupt, wavy boundary.

B21ir --- 0 to 5 inches (0 to 13 cm). Yellowish brown (10YR 5.4/4) gravelly silt loam, dark yellowish brown (10YR 4/4) moist; weak medium subangular blocky breaking to weak fine granular structure; soft, very friable, slightly sticky and slightly plastic; few coarse, plentiful medium, abundant fine and very fine roots; common fine, many very fine and micro tubular and interstitial pores; clear, wavy boundary.

B22ir --- 5 to 15 inches (13 to 38 cm). Light yellowish brown (10YR 5.6/4) gravelly silt loam, dark yellowish brown (10YR 4/4) moist; weak medium subangular blocky breaking to weak fine granular structure; slightly hard, very friable slightly sticky and slightly plastic; few coarse, plentiful medium, abundant fine and very fine roots; common fine, many very fine and micro tubular and interstitial pores; clear, wavy boundary.

IIA'1 --- 15 to 18 inches (38 to 46 cm). Light yellowish brown (10YR 6/4) gravelly silt loam, dark yellowish brown (10YR 4/4) moist; moderate medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; plentiful medium, abundant fine and very fine roots; few medium, many fine and very fine pores; clear, wavy boundary.

IIB'2t -- 18 to 39 inches (46 to 99 cm). Light yellowish brown (10YR 6.2/4) gravelly silt loam, dark yellowish brown (10YR 4/4) moist; moderate, coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; plentiful medium, fine and very fine roots; common medium, many fine and very fine pores; few thin clay films in pores and on ped faces.

Chemical and physical analysis of soil profile #33.

Date 6/75

Sample	Horizon	Depth (cm)	pH	Exchangeable ions me/100 gms					CEC me/100 gms	Base Sat. %	Percent		C:N	Phos. (ppm)
				Ca	Mg	Na	K	H			O.M.	N		
330	0	4 - 0	-	-	-	-	-	-	-	-	-	-	-	
331	B21ir	0 - 13	6.3	4.19	0.53	0.05	0.46	11.53	13.05	40.08	1.87	0.08	1.45	14.17
332	B22ir	15 - 38	6.3	2.74	0.41	0.06	0.31	12.67	11.37	30.96	1.48	-	-	10.30
333	IIA'1	38 - 46	5.7	2.95	0.48	0.07	0.21	6.15	7.77	47.75	0.45	0.02	10.67	4.89
334	IIB'2t	46 - 99	5.9	3.20	0.41	0.10	0.17	4.50	5.93	65.43	0.19	-	-	7.14

Sample	Texture	Percent			% Moisture			Bulk Density	Soil:Rx Ratio	Cit.-Dith. Extr.			Phosphorus Isotherms	
		Sand	Silt	Clay	W.P.	F.C.	Avail.			% Fe	% Al	% Mn	Intercept	Slope
330	-	-	-	-	-	-	-	-	-	-	-	-	-	-
331	gsil	26	56	18	6.65	35.22	28.57	0.88	0.78	1.06	0.28	0.041	613.07	405.80
332	gsil	54	52	14	8.43	28.58	19.95	0.94	0.84	-	-	-	770.50	444.56
333	gsil	20	62	18	3.91	21.06	17.15	1.55	0.83	0.78	0.06	0.015	208.72	124.85
334	gsil	22	60	18	2.81	17.04	14.23	1.75	0.76	-	-	-	165.21	96.91

REMARKS: Rock ratio accounted for when calculating Ca, Mg, Na, K, H, C.E.C., O.M., N, Phos., and percent moisture. P sorption isotherms were calculated from this formula: $y = a + b(\log x)$ where, $y = P$ sorbed (ug/g), $a =$ intercept, $b =$ slope, $x =$ solution P level (ppm).

Analysis by: Harold Brown