

NINE-MILE PRAIRIE
SITE AND PEDON DESCRIPTIONS
AND ANALYTICAL DATA
for

PAWNEE
ridgetop pit

BURCHARD
sideslope pit

LOCATED ON THE EASTERN RIDGE
IN NINE-MILE PRAIRIE

SCS - SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

NARRATIVE PEDON DESCRIPTION

WSSL Pedon Number: 88P0894
Print Date: 03/30/98

Pedon: Pawnee
Soil Survey Number S88-NE-109-001A
Location: Lancaster County, Nebraska
950 ft S and 2440 ft E of NW corner of Sec. 1, T.10N., R.5E.
Physiography: Upland slope in glaciated uplands
Geomorphic Position: summit crested hills
Microrelief:

Slope: 5% plane south facing
Precipitation: 80 cm - Udic Moisture Regime.
Water Table Depth: 75
Air Temperature: Ann: Summ: 21 WIn: 27
Drainage: Moderately well drained
Stoniness: Erosion or Deposition:
Particle Size Control Section: 31 to 81 cm
Parent Material: glacial till
Classification: Fine, montmorillonitic, mesic Aquic Argiudoll
Diagnostic Horizons: 0 to 31 cm Mollic, 31 to 86 cm Argillic
Described By: Arnold, Huscher, Brown

Elevation: m MSL
Permeability: Slow
Land Use: Rangeland not grazed
Runoff:

Sample Date: 08/88

A1 -- 0 to 8 cm; black (10YR 2/1) moist loam; very dark gray (10YR 3/1) dry; strong fine granular structure; slightly hard; many fine roots throughout; clear smooth boundary.
88P4818

A2 -- 8 to 21 cm; black (10YR 2/1) moist clay loam; very dark gray (10YR 3/1) dry; moderate medium subangular blocky structure parting to moderate fine granular; hard; common fine roots throughout; gradual wavy boundary.
88P4819

AB -- 21 to 31 cm; very dark brown (10YR 2/2) moist clay loam; very dark grayish brown (10YR 3/2) dry; moderate medium subangular blocky structure; hard; common fine roots throughout; clear smooth boundary.
88P4820

Bt1 -- 31 to 64 cm; dark brown (7.5YR 3/4) moist clay; brown to dark brown (7.5YR 4/4) dry; moderate medium prismatic structure parting to strong coarse angular blocky; very hard; common fine roots in cracks; gradual smooth boundary.
88P4821

Bt2 -- 64 to 86 cm; brown to dark brown (10YR 4/3) moist clay; brown (10YR 5/3) dry; moderate medium subangular blocky structure; hard; few fine roots in cracks.
88P4822

SAMPLED AS : PAWNEE

REVISED TO :

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA 68508-3866

NSSL - PROJECT 88P 157, NINE MILE PRAIRIE

- PEDON 88P 894, SAMPLES 88P4818-4822

- GENERAL METHODS 1B1A, 2A1, 2B

SAMPLE NO.	DEPTH (CM)	HORIZON	(- - - - -) (- - - - -	
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DEPTH (CM)	ORGN C	TOTAL N	EXTR P	TOTAL S	DITH-CIT - - -)				(RATIO/CLAY)				(ATTERBERG)				(- BULK DENSITY -)				COLE (- - - WATER CONTENT - -)				WRD WHOLE SOIL 4C1 CM/CM
					FE AL	CEC MM	6R3A 6D2A	6C2B 6D2A	LL PI	BAR PI	15 BAR	CEC 8D1	FIELD MOIST	1/3 BAR	OVEN DRY	SOIL 4A1H	4D1	4B4	4B1C	4B1C	4B2a	1/3 BAR	15 BAR		
0- 8	2.99	6A1C	6S3	6R3A	6C2B	6G7A	6D2A	4F1	4F	4A3A	4A1D	4A1H	4D1	4B4	4B1C	4B1C	4B2a	4C1	4C1	4C1					
8- 21	2.10	PCT	PPM	PERCENT	OF	<2MM	-->	PCT	<0.4MM	<--	G/CC	-->	CM/CM	<--	PCT OF	<2MM	-->	CM/CM	<--	PCT OF	<2MM				
21- 31	1.71																								
31- 64	0.91																								
64- 86	0.47																								

AVERAGES, DEPTH 31- 81: PCT CLAY 41 PCT .1-75MM 18

*** PRIMARY CHARACTERIZATION DATA ***

S88NE-109-001 : PAVNEE ; FINE, MONTMORILLONITIC, MESIC AQUIC ARGILLUDOLL PRINT DATE 03/30/90
 SAMPLED AS ; PEDON 88P 894, SAMPLE 88P4818-4822
 NATIONAL SOIL SURVEY LABORATORY

DEPTH (CM)	-1--	-2--	-3--	-4--	-5--	-6--	-7--	-8--	-9--	-10--	-11--	-12--	-13--	-14--	-15--	-16--	-17--	-18--	-19--	-20--
	(- NH4OAC EXTRACTABLE BASES -) ACID- EXTR (- - -) AL -BASE SAT- CO3 AS RES.																			
	CA	MG	NA	K	SUM	ITY	AL	SUM	NH4-	CEC	- - -	-BASE	SAT-	CO3	AS	RES.	COND. (-	- -	-PH	- -)
	5B5A	5B5A	5B5A	5B5A	BASES	6H5A	6G9b	5A3A	5A8B	OAC	+ AL	SAT	SUM	NH4	CACO3	OHMS	MMHOS		CACL2	H2O
	6N2E	602D	6P2B	6Q2B	BASES	6H5A	6G9b	5A3A	5A8B	OAC	+ AL	5G1	5C3	OAC	<2MM	/CM	81		8C1F	8C1F
	<-	- - -	- - -	- - -	-MEQ /	100 G	- - -	- - -	- - -	- - -	- - -	<-	- - -	-PCT	- - -	- - -	- - -	- - -	1:2	1:1
0- 8	13.7	4.7	0.1	1.0	19.5	7.4		26.9	24.3				72	80					5.2	5.9
8- 21	12.8	4.9	0.2	0.6	18.5	7.3		25.8	22.4				72	83					5.4	6.1
21- 31	12.6	5.4	0.3	0.4	18.7	7.6		26.3	22.7				71	82					5.3	6.1
31- 64	15.2	8.3	0.8	0.4	24.7	3.0		27.7	29.6				89	83					5.3	6.4
64- 86	15.9	8.7	1.6	0.4	26.6	6.9		33.5	27.4				79	97					6.6	7.5

ANALYSES: S= ALL ON SIEVED <2MM BASIS

NARRATIVE PEDON DESCRIPTION

Pedon: Burchard
 Soil Survey Number S88-NE-109-002A
 Location: Lancaster County, Nebraska
 1203 ft S and 2250 ft E of NW corner of Sec. 1, T.10N., R.5E.
 Physiography: Upland slope in glaciated uplands
 Geomorphic Position: backslope sideslope
 Microrelief: on middle third of component
 Slope: 10% plane west facing
 Precipitation: 80 cm - Udic Moisture Regime.
 Water Table Depth: 0
 Drainage: Well drained
 Stoniness:
 Particle Size Control Section: Erosion or Deposition: 30 to 50 cm
 Parent Material: glacial till
 Classification: Fine-loamy, mixed, mesic Typic Argiudoll
 Diagnostic Horizons: 0 to 30 cm Mollic, 30 to 50 cm Argillic, 63 to 100 cm Calcic
 Described By: C. Bartles, T. Huscher, and L. Arnold

Elevation: m MSL
 Permeability: Moderately slow
 Land Use: Rangeland not grazed
 Runoff:

Sample Date: 08/88

A1 -- 0 to 10 cm; very dark gray (10YR 3/1) moist loam; dark gray (10YR 4/1) dry; moderate fine granular structure; slightly hard; many very fine roots throughout; clear smooth boundary.
 88P4824

A2 -- 10 to 20 cm; very dark brown (10YR 2/2) moist loam; very dark grayish brown (10YR 3/2) dry; moderate medium granular structure; slightly hard; many very fine roots throughout; clear smooth boundary.
 88P4825

AB -- 20 to 30 cm; very dark grayish brown (10YR 3/2) moist clay loam; dark grayish brown (10YR 4/2) dry; moderate fine subangular blocky structure; hard; many very fine roots throughout; gradual smooth boundary.
 88P4826

Bt -- 30 to 50 cm; brown to dark brown (10YR 4/3) moist clay loam; brown (10YR 5/3) dry; moderate coarse subangular blocky structure parting to moderate fine subangular blocky; very hard; many very fine roots throughout; clear smooth boundary.
 88P4827

Bk -- 50 to 63 cm; dark yellowish brown (10YR 4/4) moist clay loam; yellowish brown (10YR 5/4) dry; common fine faint strong brown (7.5YR 4/6) mottles; moderate medium subangular blocky structure; very hard; many very fine roots throughout; many fine and medium soft masses of carbonate; strongly effervescent; 1 percent cobbles igneous rocks; clear smooth boundary.
 88P4828

Bk2 -- 63 to 100 cm; 50% dark grayish brown (10YR 4/2) and 50% yellowish brown (10YR 5/6) moist clay loam; 50% light brownish gray (10YR 6/2) and 50% brownish yellow (10YR 6/6) dry; weak medium subangular blocky structure; hard; few very fine roots throughout; many fine and medium soft masses of carbonate; violently effervescent.
 88P4829

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S88NE-109-002
SAMPLED AS
: BURCHARD
NATIONAL SOIL
SURVEY LABORATORY

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ANALYSES: S= ALL ON SIEVED <

S88NE-109-002
SAMPLED AS
NATIONAL SOIL

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ANALYSES: S= ALL ON SIEVED