Physical and Chemical Properties of the Soils

(Entries under "Erosion factors--T" apply to the entire profile. Entries under "Wind erodibility group" and "Wind erodibility index" apply only to the surface layer. Absence of an entry indicates that data were not available or were not estimated)

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conduc- tivity	Available water capacity	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Linear extensi- bility	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Wind erodi- bility group	Wind erodi- bility index
	In	Pct	g/cc	um/sec	In/in	meq/100g	meq/100g	pH	Pct	Pct					
10A:															
Sturges------	0-9	15-27	1.35-1.45	4.00-14.00	0.19-0.22	14-20	---	5.1-7.3	3.0-5.9	1.0-4.0	.55	.55	3	6	48
	9-12	15-27	1.35-1.45	4.00-14.00	0.19-0.21	14-20	---	5.1-7.3	3.0-5.9	0.5-3.0	.55	.55			
	12-20	45-60	1.30-1.45	0.42-1.40	0.14-0.17	28-42	---	5.1-7.3	9.0-25.0	0.5-3.0	.24	.24			
	20-30	27-50	1.30-1.45	0.42-1.40	0.15-0.17	28-42	---	5.1-7.3	9.0-15.0	0.5-1.0	.32	.32			
	30-61	27-40	1.35-1.50	1.40-4.00	0.19-0.21	20-30	---	5.6-7.3	6.0-8.9	0.0-0.5	.43	.43			
	61-80	27-40	1.35-1.50	1.40-4.00	0.19-0.21	20-30	---	6.1-7.3	6.0-8.9	0.0-0.5	.49	.49			
12A:															
Crestmeade---	0-4	15-27	1.35-1.50	4.00-14.00	0.19-0.21	10-18	---	5.6-7.3	0.0-2.9	2.0-4.0	.49	.49	3	6	48
	4-14	15-27	1.30-1.50	4.00-14.00	0.19-0.21	10-18	---	5.1-7.3	0.0-2.9	1.0-2.0	.55	.55			
	14-26	13-30	1.30-1.45	1.40-4.00	0.19-0.21	10-18	---	5.1-6.5	3.0-5.9	1.0-4.0	.64	.64			
	26-52	40-60	1.30-1.45	0.42-1.40	0.15-0.17	20-30	---	5.1-7.3	6.0-8.9	1.0-2.0	.32	.32			
	52-70	27-42	1.35-1.50	1.40-4.00	0.19-0.21	15-30	---	5.1-7.3	3.0-5.9	1.0-2.0	.37	.37			
14B:															
Grundy-------	0-13	12-27	1.35-1.50	4.00-14.00	0.19-0.22	8-24	---	5.6-7.3	3.0-5.9	2.0-4.0	.37	.37	3	6	48
	13-18	32-45	1.35-1.45	1.40-4.00	0.16-0.19	16-28	---	5.1-6.5	6.0-8.9	0.5-2.3	.32	.32			
	18-36	40-50	1.30-1.40	0.42-1.40	0.11-0.16	20-34	---	5.1-7.3	6.0-8.9	0.0-0.9	.32	.32			
	36-70	28-57	1.35-1.40	0.42-1.40	0.17-0.20	14-28	---	5.6-7.3	6.0-8.9	0.0-0.4	.43	.43			
20F:															
Locksprings--	0-7	20-40	1.10-1.30	4.00-14.00	0.17-0.19	18-30	---	5.6-7.3	3.0-5.9	2.0-5.0	.24	.28	2	6	---
	7-28	40-60	1.30-1.50	0.42-1.40	0.05-0.10	20-40	---	5.6-7.3	6.0-8.9	0.5-2.0	.05	.20			
	28-80	---	---	---	---	---	---	---	---	---	---	---			
21B:															
Weller-------	0-11	16-27	1.35-1.45	4.00-14.00	0.19-0.22	---	15-20	4.5-6.0	0.0-2.9	2.0-3.0	.37	.37	3	6	48
	11-40	28-48	1.35-1.50	0.42-1.40	0.12-0.18	---	30-35	4.5-6.0	6.0-8.9	0.0-0.5	.43	.43			
	40-80	27-40	1.40-1.55	1.40-4.00	0.18-0.20	25-30	---	5.1-6.0	6.0-8.9	0.0-0.5	.43	.43			
22C:															
Weller-------	0-10	16-27	1.35-1.45	4.00-14.00	0.19-0.22	---	15-20	4.5-6.0	0.0-2.9	2.0-3.0	.37	.37	3	6	48
	10-35	28-48	1.35-1.50	0.42-1.40	0.12-0.18	---	30-35	4.5-6.0	6.0-8.9	0.0-0.5	.43	.43			
	35-60	27-40	1.40-1.55	1.40-4.00	0.18-0.20	25-30	---	5.1-6.0	6.0-8.9	0.0-0.5	.43	.43			
26C2:															
Chillicothe--	0-10	22-30	1.10-1.40	4.00-14.00	0.19-0.21	---	---	6.1-6.5	0.0-2.9	2.0-5.0	.37	.37	5	6	48
	10-19	27-45	1.20-1.40	1.40-4.00	0.15-0.17	---	---	5.6-6.0	3.0-5.9	1.0-2.0	.32	.32			
	19-50	34-42	1.20-1.40	4.00-14.00	0.19-0.21	---	---	5.1-5.5	6.0-8.9	0.5-1.0	.37	.37			
	50-70	35-50	1.40-1.60	1.40-4.00	0.15-0.17	---	---	5.6-6.0	3.0-5.9	0.0-1.0	.32	.32			
	70-80	---	---	---	---	---	---	---	---	---	---	---			

Physical and Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conduc- tivity	Available water capacity	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In	Pct	g/cc	um/sec	In/in	meq/100g	meq/100g	pH	Pct	Pct					
28C:															
Greenton-----	0-13	27-40	1.30-1.45	1.40-4.00	0.19-0.21	14-18	---	5.6-6.5	3.0-5.9	1.0-3.0	.37	.37	3	7	38
	13-26	35-50	1.35-1.50	0.42-1.40	0.15-0.17	18-25	---	5.6-7.3	6.0-8.9	0.0-1.0	.37	.37			
	26-60	40-50	1.35-1.50	0.42-1.40	0.13-0.16	20-25	---	6.6-7.8	6.0-8.9	0.0-0.5	.24	.28			
28D2:															
Greenton-----	0-6	27-40	1.30-1.45	1.40-4.00	0.19-0.21	14-30	---	5.6-7.3	3.0-5.9	1.0-4.0	.24	.24	3	7	38
	6-25	35-50	1.35-1.50	0.42-1.40	0.15-0.17	18-36	---	5.6-7.3	6.0-8.9	0.0-1.0	.28	.28			
	25-50	40-50	1.35-1.50	0.42-1.40	0.11-0.15	20-35	---	6.6-8.0	6.0-8.9	0.0-0.5	.24	.32			
	50-60	---	---	---	---	---	---	---	---	---	---	---			
30B:															
Sampsel------	0-15	27-35	1.35-1.50	1.40-4.00	0.19-0.22	---	---	5.6-7.3	3.0-5.9	3.0-4.5	.32	.32	2	7	38
	15-60	35-60	1.40-1.60	0.42-1.40	0.19-0.21	---	---	5.6-7.8	6.0-8.9	0.5-1.0	.37	.37			
34B2:															
Lagonda------	0-9	27-32	1.35-1.50	1.40-4.00	0.19-0.21	8-25	---	5.6-7.8	3.0-5.9	2.0-4.0	.37	.37	3	6	48
	9-17	32-50	1.30-1.40	0.42-1.40	0.15-0.17	16-40	---	5.6-7.3	6.0-8.9	0.5-2.0	.28	.28			
	17-35	35-45	1.30-1.40	0.42-1.40	0.19-0.21	16-30	---	5.6-7.3	6.0-8.9	0.5-1.0	.43	.43			
	35-47	20-45	1.30-1.40	0.42-1.40	0.19-0.21	14-23	---	6.6-7.8	6.0-8.9	0.0-0.5	.49	.49			
	47-60	28-45	1.30-1.40	0.42-1.40	0.19-0.21	14-23	---	6.6-7.8	6.0-8.9	0.0-0.5	.37	.43			
34C2:															
Lagonda------	0-8	27-32	1.35-1.50	1.40-4.00	0.19-0.21	---	---	5.6-7.3	3.0-5.9	1.0-3.0	.37	.37	2	7	38
	8-20	32-50	1.30-1.40	0.42-1.40	0.19-0.21	---	---	5.6-7.3	6.0-8.9	0.5-2.0	.37	.37			
	20-53	32-50	1.30-1.40	0.42-1.40	0.19-0.21	---	---	6.1-7.8	6.0-8.9	0.5-2.0	.37	.37			
	53-60	28-45	1.30-1.40	0.42-1.40	0.19-0.21	---	---	6.6-7.8	6.0-8.9	0.0-0.5	.37	.37			
36D2:															
Lamoni-------	0-7	21-27	1.40-1.45	1.40-4.00	0.16-0.18	19-30	---	5.1-7.3	3.0-5.9	2.0-3.5	.32	.32	3	7	38
	7-37	38-50	1.55-1.65	0.01-0.42	0.14-0.16	29-50	---	5.1-6.5	6.0-8.9	0.5-2.0	.24	.24			
	37-60	32-40	1.60-1.70	0.42-1.40	0.18-0.21	25-30	---	5.6-7.3	6.0-8.9	0.0-0.5	.28	.28			
62D2:															
Caleb--------	0-3	14-30	1.45-1.50	4.00-14.00	0.19-0.21	---	---	5.6-7.3	0.0-2.9	1.6-3.0	.64	.64	5	6	48
	3-8	11-30	1.45-1.65	4.00-14.00	0.13-0.15	---	---	5.1-6.0	0.0-2.9	0.0-1.4	.32	.32			
	8-13	19-30	1.45-1.65	4.00-14.00	0.16-0.18	---	---	4.5-6.0	0.0-2.9	0.0-1.2	.32	.32			
	13-47	20-35	1.45-1.65	4.00-14.00	0.19-0.21	---	---	4.5-6.0	3.0-5.9	0.0-1.0	.28	.28			
	47-80	5-30	1.55-1.75	4.00-42.00	0.11-0.13	---	---	4.5-6.0	0.0-2.9	0.0-0.5	.17	.17			
70C2:															
Dawn---------	0-11	8-20	1.30-1.50	14.00-42.00	0.16-0.18	---	---	5.6-7.3	0.0-2.9	1.0-3.0	.32	.32	4	3	86
	11-16	8-18	1.30-1.55	4.00-14.00	0.16-0.18	---	---	5.6-7.8	0.0-2.9	0.5-1.5	.49	.49			
	16-24	10-18	1.35-1.55	4.00-14.00	0.11-0.13	---	---	4.5-7.8	0.0-2.9	0.0-1.0	.37	.43			
	24-37	1-15	1.50-1.70	42.00-141.0	0.12-0.14	---	---	4.5-8.4	0.0-2.9	0.0-1.0	.32	.43			
	37-60	---	---	---	---	---	---	---	---	---	---	---			

Physical and Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conduc- tivity	Available water capacity	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In	Pct	g/cc	um/sec	In/in	meq/100g	meq/100g	pH	Pct	Pct					
72F:															
Gosport------	0-6	18-27	1.30-1.40	1.40-4.00	0.19-0.21	---	---	5.1-7.3	3.0-5.9	---	.37	.37	3	7	38
	6-9	18-27	1.30-1.40	1.40-4.00	0.19-0.21	---	---	3.6-5.5	3.0-5.9	---	.49	.49			
	9-33	36-60	1.50-1.60	0.01-0.42	0.14-0.17	---	---	3.6-5.5	6.0-8.9	---	.37	.37			
	33-39	18-27	1.30-1.40	1.40-4.00	0.17-0.19	---	---	3.6-5.5	3.0-5.9	---	.55	.55			
	39-60	---	---	---	---	---	---	---	---	---	---	---			
73:															
Sandover-----	0-7	2-10	1.40-1.60	42.00-141.0	0.13-0.16	2-8	---	4.5-6.5	0.0-2.9	0.5-2.0	.20	.20	---	---	---
	7-46	1-5	1.40-1.60	42.00-141.0	0.06-0.08	2-5	---	4.5-6.5	0.0-2.9	0.0-0.5	.10	.10			
	46-60	2-27	1.20-1.50	4.00-14.00	0.08-0.19	3-15	---	4.5-6.5	3.0-5.9	0.0-0.5	.15	.15			
74:															
Dockery------	0-5	15-27	1.35-1.45	4.00-14.00	0.19-0.22	8-18	---	5.6-7.3	0.0-2.9	2.0-4.0	.49	.49	5	6	48
	5-28	18-30	1.35-1.45	4.00-14.00	0.19-0.21	8-14	---	5.6-7.8	3.0-5.9	0.5-2.0	.49	.49			
	28-60	15-27	1.35-1.45	4.00-14.00	0.19-0.21	8-14	---	5.6-7.3	3.0-5.9	0.5-1.0	.64	.64			
78:															
Colo---------	0-4	15-30	1.25-1.30	4.00-14.00	0.19-0.21	25-30	---	5.6-7.3	3.0-5.9	3.0-5.0	.37	.37	5	6	48
	4-22	15-30	1.25-1.30	4.00-14.00	0.19-0.21	25-30	---	5.6-7.3	3.0-5.9	2.0-5.0	.43	.43			
	22-44	20-35	1.25-1.35	4.00-14.00	0.19-0.21	36-41	---	5.6-7.3	3.0-5.9	1.0-2.0	.37	.37			
	44-60	25-35	1.25-1.35	4.00-14.00	0.19-0.21	36-41	---	6.1-7.3	3.0-5.9	1.0-2.0	.28	.28			
80:															
Tice---------	0-5	14-27	1.25-1.45	4.00-14.00	0.19-0.22	10-22	---	6.1-7.8	3.0-5.9	1.0-3.0	.64	.64	5	6	48
	5-22	24-35	1.25-1.45	4.00-14.00	0.19-0.22	16-23	---	5.6-7.8	3.0-5.9	1.0-2.0	.43	.43			
	22-54	15-30	1.30-1.50	4.00-14.00	0.19-0.21	9-20	---	5.6-7.8	3.0-5.9	0.0-1.0	.64	.64			
	54-75	15-30	1.30-1.50	4.00-14.00	0.19-0.21	9-20	---	5.6-7.8	3.0-5.9	0.0-1.0	.55	.55			
81:															
Tice---------	0-4	40-50	1.25-1.45	1.40-4.00	0.15-0.17	30-35	---	6.1-7.8	6.0-8.9	2.0-3.0	.20	.20	5	7	38
	4-16	22-35	1.30-1.50	4.00-14.00	0.19-0.22	20-27	---	5.6-7.8	3.0-5.9	1.0-3.0	.37	.37			
	16-60	15-30	1.40-1.60	4.00-14.00	0.19-0.21	15-23	---	5.1-7.8	3.0-5.9	0.0-1.0	.55	.55			
82A:															
Triplett-----	0-8	15-27	1.35-1.50	4.00-14.00	0.19-0.22	10-15	---	5.1-7.3	0.0-2.9	1.0-4.0	.37	.37	3	6	48
	8-16	15-30	1.30-1.45	1.40-4.00	0.18-0.21	10-18	---	4.5-7.3	3.0-5.9	0.5-1.0	.43	.43			
	16-29	42-52	1.30-1.45	0.42-1.40	0.14-0.17	35-45	---	4.5-6.5	6.0-8.9	1.0-2.0	.32	.32			
	29-45	28-45	1.30-1.45	1.40-4.00	0.15-0.18	30-40	---	4.5-6.5	6.0-8.9	0.5-1.0	.32	.32			
	45-70	18-35	1.30-1.50	1.40-4.00	0.19-0.21	15-30	---	5.1-6.5	3.0-5.9	0.0-0.5	.43	.43			
84:															
Vesser-------	0-14	18-26	1.30-1.35	4.00-14.00	0.20-0.22	15-30	---	5.6-7.3	3.0-5.9	2.0-3.0	.43	.43	5	6	48
	14-33	18-24	1.35-1.40	4.00-14.00	0.18-0.22	16-25	---	5.1-6.0	3.0-5.9	1.0-2.0	.55	.55			
	33-60	30-36	1.40-1.45	4.00-14.00	0.17-0.21	25-30	---	5.1-6.5	3.0-5.9	0.0-1.0	.37	.37			

Physical and Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Saturated hydraulic conduc- tivity	Available water capacity	Cation- exchange capacity	Effective cation- exchange capacity	Soil reaction	Linear extensi- bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi- bility group	Wind erodi- bility index
	In	Pct	g/cc	um/sec	In/in	meq/100g	meq/100g	pH	Pct	Pct					
92:															
Carlow-------	0-11	40-50	1.30-1.40	0.42-1.40	0.15-0.17	---	---	5.1-7.3	6.0-8.9	2.0-4.0	.28	.28	5	4	86
	11-17	35-50	1.35-1.50	1.40-4.00	0.19-0.21	---	---	4.5-6.0	3.0-5.9	2.0-4.0	.32	.32			
	17-60	45-60	1.25-1.35	0.01-0.42	0.14-0.16	---	---	4.5-6.0	6.0-8.9	0.5-2.0	.28	.28			
	60-80	35-60	1.35-1.50	1.40-4.00	0.19-0.21	---	---	4.5-6.5	3.0-5.9	0.5-1.0	.28	.28			
94:															
Zook---------	0-4	35-40	1.30-1.35	1.40-4.00	0.19-0.22	27-41	---	5.6-7.3	6.0-8.9	1.2-6.0	.37	.37	5	7	38
	4-46	36-47	1.30-1.45	0.42-1.40	0.11-0.16	34-41	---	5.6-7.8	6.0-8.9	2.0-4.0	.28	.28			
	46-60	20-45	1.30-1.45	0.42-1.40	0.11-0.22	27-36	---	5.5-7.8	6.0-8.9	0.0-2.0	.37	.37			
98:															
Wabash-------	0-26	40-52	1.25-1.45	0.01-0.42	0.12-0.14	30-40	---	5.1-7.3	9.0-25.0	2.0-4.0	.28	.28	5	4	86
	26-80	40-60	1.20-1.45	0.01-0.42	0.08-0.12	28-42	---	5.1-7.8	9.0-25.0	1.0-2.0	.28	.28			
99F:															
Putco--------	0-4	27-50	1.10-1.30	0.42-1.40	0.08-0.16	25-30	---	6.6-8.4	3.0-5.9	0.5-1.0	.28	---	5	4	86
	4-80	40-60	1.40-1.60	0.42-1.40	0.04-0.13	25-30	---	7.4-8.4	6.0-8.9	0.0-0.5	.24	---			
Pits---------	0-60	---	---	---	---	---	---	---	---	---	---	---	---	8	---
Dumps.															
99002:															
Orthents-----	0-60	18-35	1.45-1.65	0.00-14.00	0.12-0.18	---	---	---	3.0-5.9	---	.32	---	5	6	48
	60-80	---	---	0.00-14.00	---	---	---	---	---	---	---	---			
99005:															
Orthents.															
M-W:															
Miscellaneous water.															
W:															
Water.															