Chemical Properties of the Soils

(Absence of an entry indicates that the data were not estimated.)

Winnebago County, Iowa

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation-exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	Pct
6:					
Okoboji---------	0-9	6.6-7.4	9.0-12	41-41	0-15
	9-38	6.6-7.8	7.0-10	41-45	0-15
	38-60	6.6-8.4	3.0-4.0	36-41	0-30
28B:					
Dickman---------	0-12	6.1-7.3	1.5-2.5	15-20	0
	12-47	5.6-7.3	0.5-1.5	5.0-10	0
	47-60	5.1-7.8	0.0-0.5	1.0-4.0	0
55:					
Nicollet--------	0-19	6.1-7.3	5.0-6.0	20-25	0
	19-47	5.6-7.8	0.5-4.0	15-25	0-15
	47-60	7.4-8.4	0.0-0.5	10-20	5-30
62C2:					
Storden---------	0-8	7.4-8.4	1.7-2.7	15-20	5-30
	8-60	7.4-8.4	0.0-0.5	7.0-18	5-30
62D2:					
Storden---------	0-8	7.4-8.4	1.7-2.7	15-20	5-30
	8-60	7.4-8.4	0.0-0.5	7.0-18	5-30
62E2:					
Storden---------	0-8	7.4-8.4	1.7-2.7	15-20	5-30
	8-60	7.4-8.4	0.0-0.5	7.0-18	5-30
73B:					
Salida----------	0-9	6.1-8.4	1.5-2.5	10-15	0-30
	9-13	7.4-8.4	0.0-0.5	1.0-5.0	5-30
	13-60	7.4-8.4	0.0-0.5	1.0-3.0	5-30
73E:					
Salida----------	0-9	6.1-8.4	1.5-2.5	10-15	0-30
	9-13	7.4-8.4	0.0-0.5	1.0-5.0	5-30
	13-60	7.4-8.4	0.0-0.5	1.0-3.0	5-30
90:					
Okoboji---------	0-17	6.6-7.4	12-18	41-41	0-15
	17-44	6.6-7.8	7.0-10	41-45	0-15
	44-60	6.6-8.4	3.0-4.0	36-41	0-30
95:					
Harps----------	0-16	7.9-8.4	4.5-5.5	36-41	20-30
	16-40	7.9-8.4	2.0-3.0	25-30	20-30
	40-60	7.4-8.4	0.0-1.0	20-25	20-30
107:					
Webster---------	0-23	6.6-7.3	6.0-7.0	36-41	0
	23-46	6.6-7.8	2.0-4.0	35-41	5-10
	46-60	7.4-8.4	1.0-2.0	30-35	5-30
135:					
Coland----------	0-9	6.1-7.3	5.0-7.0	30-36	0
	9-48	6.1-7.3	3.0-5.0	30-36	0

Chemical Properties of the Soils

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Winnebago County, Iowa

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation-exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	Pct
	48-60	6.1-7.8	0.0-2.0	20-30	0-20
135B:					
Coland----------	0-36	6.1-7.3	5.0-7.0	30-36	0
	36-60	6.1-7.3	3.0-5.0	30-36	0
138B:					
Clarion---------	0-17	5.6-7.3	3.0-4.0	20-25	0
	17-30	5.6-7.8	0.5-1.0	20-25	0-15
	30-60	7.4-8.4	0.0-0.5	20-25	5-30
138C:					
Clarion---------	0-17	5.6-7.3	3.0-4.0	20-25	0
	17-30	5.6-7.8	0.5-1.0	20-25	0-15
	30-60	7.4-8.4	0.0-0.5	20-25	5-30
138C2:					
Clarion---------	0-7	5.6-7.3	2.2-3.2	20-25	0
	7-17	5.6-7.3	1.0-2.0	20-25	0
	17-30	5.6-7.8	0.5-1.0	20-25	0-15
	30-60	7.4-8.4	0.0-0.5	20-25	5-30
138D2:					
Clarion---------	0-7	5.6-7.3	2.2-3.2	20-25	0
	7-17	5.6-7.3	1.0-2.0	20-25	0
	17-30	5.6-7.8	0.5-1.0	20-25	0-15
	30-60	7.4-8.4	0.0-0.5	20-25	5-30
150:					
Hanska----------	0-17	6.1-7.8	3.9-5.5	15-20	0
	17-38	6.1-7.3	1.0-3.9	10-15	0
	38-60	6.1-7.8	0.0-1.0	5.0-10	0
168B:					
Hayden----------	0-8	5.6-7.3	2.0-3.0	15-20	0
	8-45	5.1-7.3	0.5-2.0	10-15	0
	45-60	7.4-8.4	0.0-0.5	5.0-10	0
168C:					
Hayden----------	0-8	5.6-7.3	2.0-3.0	15-20	0
	8-45	5.1-7.3	0.5-2.0	10-15	0
	45-60	7.4-8.4	0.0-0.5	5.0-10	0
168D2:					
Hayden----------	0-8	5.6-7.3	1.5-2.5	15-20	0
	8-45	5.1-7.3	0.5-1.5	10-15	0
	45-60	7.4-8.4	0.0-0.5	5.0-10	0
168E:					
Hayden----------	0-8	5.6-7.3	2.0-3.0	15-20	0
	8-45	5.1-7.3	0.5-2.0	10-15	0
	45-60	7.4-8.4	0.0-0.5	5.0-10	0
175B:					
Dickinson-------	0-15	5.6-7.3	1.5-2.5	15-20	0

Chemical Properties of the Soils

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Winnebago County, Iowa

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation-exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	Pct
	15-32	5.1-6.5	0.5-1.0	15-20	0
	32-60	5.1-6.5	0.0-0.5	5.0-10	0
221:					
Palms----------	0-29	5.1-7.4	20-50	65-100	0
	29-50	5.1-7.8	20-50	150-200	0
	50-60	6.1-8.4	1.0-3.0	2.0-14	0-20
224:					
Linder----------	0-13	5.6-7.8	3.5-4.5	15-20	0-15
	13-27	6.1-7.8	0.0-0.5	10-15	0-15
	27-60	7.4-8.4	0.0-0.5	5.0-10	5-30
236B:					
Lester----------	0-7	5.6-7.3	2.5-3.5	20-25	0
	7-21	5.1-7.3	0.5-1.0	10-23	0
	21-60	7.4-8.4	0.0-0.5	8.0-18	5-30
236C2:					
Lester----------	0-7	5.6-7.3	2.0-3.0	20-25	0
	7-21	5.1-7.3	0.5-1.0	10-23	0
	21-60	7.4-8.4	0.0-0.5	8.0-18	5-30
236D2:					
Lester----------	0-7	5.6-7.3	2.0-3.0	20-25	0
	7-21	5.1-7.3	0.5-1.0	10-23	0
	21-60	7.4-8.4	0.0-0.5	8.0-18	5-30
236E2:					
Lester----------	0-7	5.6-7.3	2.0-3.0	20-25	0
	7-21	5.1-7.3	0.5-1.0	10-23	0
	21-60	7.4-8.4	0.0-0.5	8.0-18	5-30
236F:					
Lester----------	0-7	5.6-7.3	2.5-3.5	20-25	0
	7-21	5.1-7.3	0.5-1.0	10-23	0
	21-60	7.4-8.4	0.0-0.5	8.0-18	5-30
307:					
Dundas----------	0-22	5.6-7.3	3.5-4.5	25-30	0
	22-45	5.1-7.3	0.5-3.4	10-20	0
	45-60	7.4-8.4	0.0-0.5	1.0-5.0	0
321:					
Boots----------	0-7	5.6-7.3	20-50	65-100	0
	7-60	5.6-7.3	20-50	150-190	0
325:					
Le Sueur--------	0-14	5.6-7.3	3.0-4.0	20-25	0
	14-35	5.1-7.3	0.5-2.0	11-25	0
	35-60	7.4-8.4	0.0-0.5	8.0-18	5-30
349:					
Darfur----------	0-18	6.1-7.3	4.5-5.5	20-25	0
	18-28	6.6-7.8	1.0-4.5	10-20	0

Chemical Properties of the Soils

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Winnebago County, Iowa

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation-exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	Pct
	28-60	6.6-8.4	0.0-1.0	5.0-10	0
384:					
Collinwood------	0-19	5.6-7.3	5.0-6.0	41-41	0
	19-40	5.6-7.3	1.0-5.0	25-35	0
	40-60	7.4-8.4	0.0-1.0	15-25	0
384B:					
Collinwood------	0-19	5.6-7.3	4.5-5.5	41-41	0
	19-40	5.6-7.3	1.0-4.5	25-35	0
	40-60	7.4-8.4	0.0-1.0	15-25	0
386:					
Cordova---------	0-21	6.1-7.3	5.5-6.5	36-41	0
	21-39	5.1-6.5	1.0-4.0	25-35	0
	39-60	7.4-8.4	0.0-1.0	15-25	0
390:					
Waldorf---------	0-19	6.1-7.3	6.0-7.0	41-41	0
	19-44	6.6-7.8	0.5-1.0	25-46	0-15
	44-60	7.4-8.4	0.0-0.5	14-37	15-30
485B:					
Spillville------	0-42	5.6-7.3	3.5-4.5	20-25	0
	42-60	5.6-7.3	2.0-3.0	20-25	0
507:					
Canisteo--------	0-14	7.4-8.4	6.0-7.0	36-41	5-15
	14-46	7.4-8.4	2.0-4.0	12-29	12-18
	46-60	7.4-8.4	0.0-0.5	9.0-20	10-15
511:					
Blue Earth------	0-8	7.4-8.4	15-15	41-41	5-20
	8-60	7.4-8.4	10-25	36-44	5-40
583:					
Minnetonka------	0-12	5.6-7.3	6.0-7.0	40-45	0
	12-55	5.6-7.3	1.0-4.0	25-35	0
	55-60	6.6-7.8	0.0-1.0	15-25	0
585B:					
Coland----------	0-9	5.6-7.3	4.0-7.0	20-36	0
	9-48	6.1-7.3	3.0-5.0	30-36	0
	48-60	6.1-7.8	0.0-2.0	20-30	0-20
Spillville------	0-42	5.6-7.3	4.0-7.0	20-36	0
	42-60	5.6-7.3	2.0-3.0	20-25	0
621:					
Houghton--------	0-30	4.5-7.8	20-50	65-100	0
	30-60	4.5-7.8	20-50	100-200	0
638B2:					
Clarion---------	0-7	5.6-8.4	1.8-3.2	15-25	0
	7-17	5.6-7.3	1.0-2.0	20-25	0

Chemical Properties of the Soils

(Absence of an entry indicates that the data were not estimated.)

Winnebago County, Iowa

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation-exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	Pct
	17-30	5.6-7.8	0.5-1.0	20-25	0-15
	30-60	7.4-8.4	0.0-0.5	20-25	5-30
Storden---------	0-8	5.6-8.4	1.8-3.2	15-25	5-30
	8-60	7.4-8.4	0.0-0.5	7.0-18	5-30
638C2:					
Clarion---------	0-7	5.6-8.4	1.8-3.2	15-25	0
	7-17	5.6-7.3	1.0-2.0	20-25	0
	17-30	5.6-7.8	0.5-1.0	20-25	0-15
	30-60	7.4-8.4	0.0-0.5	20-25	5-30
Storden---------	0-8	5.6-8.4	1.8-3.2	15-25	5-30
	8-60	7.4-8.4	0.0-0.5	7.0-18	5-30
638D2:					
Clarion---------	0-7	5.6-8.4	1.8-3.2	15-25	0
	7-17	5.6-7.3	1.0-2.0	20-25	0
	17-30	5.6-7.8	0.5-1.0	20-25	0-15
	30-60	7.4-8.4	0.0-0.5	20-25	5-30
Storden---------	0-8	5.6-8.4	1.8-3.2	15-25	5-30
	8-60	7.4-8.4	0.0-0.5	7.0-18	5-30
638E2:					
Clarion---------	0-7	5.6-8.4	1.8-3.2	15-25	0
	7-17	5.6-7.3	1.0-2.0	20-25	0
	17-30	5.6-7.8	0.5-1.0	20-25	0-15
	30-60	7.4-8.4	0.0-0.5	20-25	5-30
Storden---------	0-8	5.6-8.4	1.8-3.2	15-25	5-30
	8-60	7.4-8.4	0.0-0.5	7.0-18	5-30
655:					
Crippin---------	0-20	6.6-8.4	5.0-6.0	20-25	0-25
	20-34	7.4-8.4	3.0-4.0	20-25	5-30
	34-60	7.9-8.4	1.0-2.0	20-25	15-30
658:					
Mayer----------	0-15	7.4-8.4	4.0-6.0	20-25	5-30
	15-25	7.4-8.4	2.0-6.0	15-20	5-30
	25-60	7.4-8.4	1.0-4.0	5.0-10	5-30
777:					
Wapsie----------	0-8	5.6-7.3	3.0-4.0	20-25	0
	8-30	5.1-6.0	0.0-1.0	15-20	0
	30-60	5.1-7.3	0.0-0.5	5.0-10	0
777B:					
Wapsie----------	0-8	5.6-7.3	2.5-3.5	20-25	0
	8-30	5.1-6.0	0.0-1.0	15-20	0
	30-60	5.1-7.3	0.0-0.5	5.0-10	0
777C:					
Wapsie----------	0-8	5.6-7.3	2.5-3.5	20-25	0

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Winnebago County, Iowa

Map symbol and soil name	Depth	Soil reaction	Organic matter	Cation-exchange capacity	Calcium carbonate
	In	pH	Pct	meq/100 g	Pct
	8-30	5.1-6.0	0.0-1.0	15-20	0
	30-60	5.1-7.3	0.0-0.5	5.0-10	0
787B:					
Vinje----------	0-17	5.6-7.3	3.5-4.5	36-41	0
	17-41	5.6-7.3	1.0-2.0	36-41	0
	41-60	6.6-8.4	0.0-0.5	25-30	0-30
787C2:					
Vinje----------	0-17	5.6-7.3	2.2-3.2	36-41	0
	17-41	5.6-7.3	0.5-1.0	36-41	0
	41-60	6.6-8.4	0.0-0.5	25-30	0-30
787D2:					
Vinje----------	0-17	5.6-7.3	2.2-3.2	36-41	0
	17-41	5.6-7.3	0.5-1.0	36-41	0
	41-60	6.6-8.4	0.0-0.5	25-30	0-30
811:					
Muskego---------	0-26	6.1-7.3	20-50	65-100	0
	26-60	6.6-8.4	20-50	10-45	60-80
823:					
Ridgeport-------	0-13	5.6-7.3	2.0-3.0	15-20	0
	13-38	5.6-7.3	0.0-1.0	15-20	0
	38-60	7.4-8.4	0.0-0.5	5.0-10	0-25
823B:					
Ridgeport-------	0-13	5.6-7.3	2.0-3.0	15-20	0
	13-38	5.6-7.3	0.0-1.0	15-20	0
	38-60	7.4-8.4	0.0-0.5	5.0-10	0-25
836B:					
Kilkenny--------	0-8	5.6-7.3	2.5-3.5	30-36	0
	8-57	4.5-6.5	0.5-2.5	20-30	0
	57-60	5.6-7.8	0.0-0.5	10-20	0
836C2:					
Kilkenny--------	0-8	5.6-7.3	2.0-3.0	30-36	0
	8-57	4.5-6.5	0.5-2.0	20-30	0
	57-60	5.6-7.8	0.0-0.5	10-20	0
836D2:					
Kilkenny--------	0-8	5.6-7.3	2.0-3.0	30-36	0
	8-57	4.5-6.5	0.5-2.0	20-30	0
	57-60	5.6-7.8	0.0-0.5	10-20	0
836E2:					
Kilkenny--------	0-8	5.6-7.3	2.0-3.0	30-36	0
	8-57	4.5-6.5	0.5-2.0	20-30	0
	57-60	5.6-7.8	0.0-0.5	10-20	0
836F:					
Kilkenny--------	0-8	5.6-7.3	2.5-3.5	30-36	0
	8-57	4.5-6.5	0.5-2.5	20-30	0

Chemical Properties of the Soils

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Winnebago County, Iowa

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	In	pH	Pct	meq/100 g	Pct
	57-60	5.6-7.8	0.0-0.5	10-20	0
855:					
Shorewood-------	0-15	5.6-7.3	5.5-6.5	41-41	0
	15-42	5.1-7.3	1.0-4.0	25-35	0
	42-60	6.6-7.8	0.0-1.0	15-25	0
1133:					
Colo----------	0-12	5.6-7.3	5.0-7.0	36-41	0
	12-47	5.6-7.3	3.0-4.0	36-41	0
	47-60	6.1-7.3	1.0-2.0	30-36	0
2811:					
Muskego---------	0-26	6.1-7.3	20-50	65-100	0
	26-60	6.6-8.4	20-50	10-45	60-80
5010:					
Pits----------	---	---	---	---	---
5040:					
Orthents--------	0-60	---	---	---	---
	60-80	---	---	---	---
W:					
Water----------	---	---	---	---	---