

West, T.O., and W.M. Post. 2002. [Soil Organic Carbon Sequestration by Tillage and Crop Rotation: A Global Data Analysis](http://cdiac.ornl.gov/programs/CSEQ/terrestrial/westpost2002/westpost2002.html) (<http://cdiac.ornl.gov/programs/CSEQ/terrestrial/westpost2002/westpost2002.html>). Carbon Dioxide Information Analysis Center, U.S. Department of Energy, Oak Ridge National Laboratory, Oak Ridge, Tennessee, U.S.A.

Summary of agricultural experiments used in this study.

Location	*Crop or Tillage	Prior history	Duration (yr)	**Treatment	Depth (cm)	*** Δ SOC (g m^{-2})
Ås, Norway	N/A (low N)	N/A	31	3 yr cereal-3 yr row crop vs. cereal	20	-199
Ås, Norway	N/A (low N)	N/A	31	2 yr ley-4 yr row crop vs. 3 yr cereal-3 yr row crop	20	199
Ås, Norway	N/A (low N)	N/A	31	4 yr ley-2 yr row crop vs. 3 yr cereal-3 yr row crop	20	881
Ås, Norway	N/A (medium N)	N/A	31	3 yr cereal-3 yr row crop vs. cereal	20	-171
Ås, Norway	N/A (medium N)	N/A	31	2 yr ley-4 yr row crop vs. 3 yr cereal-3 yr row crop	20	711
Ås, Norway	N/A (medium N)	N/A	31	4 yr ley-2 yr row crop vs. 3 yr cereal-3 yr row crop	20	597
Athens, Georgia, USA	Summer grain-winter rye	Old field, 10 years	16	NT vs. CT	20	158
Auburn, Alabama, USA	CT	N/A	100	Cn-C vs. Cn	10	37
Auburn, Alabama, USA	CT	N/A	100	Cn-C-S vs. Cn	10	701
Balcarce, Argentina	CT (no fert.)	Pasture, 4 yr	11	S-Sf vs. S	17	798
Balcarce, Argentina	CT (no fert.)	Pasture, 4 yr	11	W-S vs. S	17	1393
Balcarce, Argentina	CT (no fert.)	Pasture, 4 yr	11	C-Sf vs. C	17	-45
Balcarce, Argentina	CT (no fert.)	Pasture, 4 yr	11	C-S vs. C	17	-663
Balcarce, Argentina	CT (no fert.)	Pasture, 4 yr	11	W-C vs. C	17	101
Balcarce,	CT (N fert.)	Pasture, 4 yr	11	S-Sf vs. S	17	1404

Argentina						
Balcarce, Argentina	CT (N fert.)	Pasture, 4 yr	11	S-C vs. S	17	1921
Balcarce, Argentina	CT (N fert.)	Pasture, 4 yr	11	C-Sf vs. C	17	-101
Balcarce, Argentina	CT (N fert.)	Pasture, 4 yr	11	W-C vs. C	17	112
Balcarce, Argentina	CT (N fert.)	Pasture, 4 yr	11	C-S vs. C	17	-393
Balcarce, Argentina	CT (no fert.)	Pasture, 4 yr	11	W-S (avg. seq.) vs. W	17	112
Balcarce, Argentina	CT (no fert.)	Pasture, 4 yr	11	W-Sf (avg. seq.) vs. W	17	595
Balcarce, Argentina	CT (N fert.)	Pasture, 4 yr	11	W-S (avg. seq.) vs. W	17	168
Balcarce, Argentina	CT (N fert.)	Pasture, 4 yr	11	W-Sf (avg. seq.) vs. W	17	483
Balcarce, Argentina	CT (N fert.)	Pasture, 4 yr	11	W-C (avg. seq.) vs. W	17	651
Buenos Aires, Argentina	N/A (no fert.)	N/A	15	W-G vs. W	21	310
Buenos Aires, Argentina	N/A (fert.)	N/A	15	W-G vs. W	21	180
Buenos Aires, Argentina	N/A (no fert.)	N/A	15	W-G/legume vs. W	21	390
Buenos Aires, Argentina	N/A (fert.)	N/A	15	W-G/legume vs. W	21	760
Bushland, Texas, USA	RT	CT, W or W-F, ~30 yr	10	Sm vs. W-Sm-F	20	100
Bushland, Texas, USA	RT	CT, W or W-F, ~30 yr	10	W vs. W-Sm-F	20	20
Bushland, Texas, USA	RT	CT, W or W-F, ~30 yr	10	W vs. W-F	20	100
Bushland, Texas, USA	NT	CT, W or W-F, ~30 yr	10	Sm vs. W-Sm-F	20	80
Bushland, Texas, USA	NT	CT, W or W-F, ~30 yr	10	W vs. W-Sm-F	20	280
Bushland, Texas, USA	NT	CT, W or W-F, ~30 yr	10	W vs. W-F	20	420

Bushland, Texas, USA	Sm	CT, W or W-F, ~30 yr	10	NT vs. RT	20	280
Bushland, Texas, USA	W	CT, W or W-F, ~30 yr	10	NT vs. RT	20	560
Bushland, Texas, USA	W-Sm-F (avg. seq.)	CT, W or W-F, ~30 yr	10	NT vs. RT	20	300
Bushland, Texas, USA	W-F (avg. seq.)	CT, W or W-F, ~30 yr	10	NT vs. RT	20	240
Canterbury, New Zealand	W-B-peas	W-B-peas, >10 yr	9	NT vs. CT	15	2607
Canterbury, New Zealand	W-peas-B-white clover	Ryegrass-white clover, ~5 yr	10	NT vs. CT	15	640
Cantuar, Saskatchewan, Canada	W	Cereal-fallow, 70-80 yr	15	NT vs. CT	15	192
Cantuar, Saskatchewan, Canada	W-F	Cereal-fallow, 70-80 yr	15	NT vs. RT	15	59
Cantuar, Saskatchewan, Canada	NT	Cereal-fallow, 70-80 yr	15	W vs. W-F	15	-6
Columbia, Missouri, USA	C	Grassland	100	NT vs. CT	20	853
Columbia, Missouri, USA	CT (fert.)	Grassland	100	C-W-CI vs. C	20	1112
Columbia, Missouri, USA	CT (0 fert.)	Grassland	100	C-W-CI vs. C	20	1655
Columbia, Missouri, USA	CT (fert.)	Grassland	100	C-W-CI vs. W	20	1112
Columbia, Missouri, USA	CT (0 fert.)	Grassland	100	C-W-CI vs. W	20	1520
Condobolin, Australia	W	Cultivated, > 50 yr	14	NT vs. RT	10	227
Cordoba, Argentina	S	Crop-meadow rotation	15	NT vs. CT	15	834

Cordoba, Argentina	S	Crop-meadow rotation	15	NT vs. RT	15	675
Cordoba, Argentina	S	Crop-meadow rotation	15	RT vs. CT	15	159
Corpus Christi, Texas, USA	4 yr [C]-4 yr Cn	CT, many yr	12	NT vs. CT	20	560
Corpus Christi, Texas, USA	4 yr [C]-4 yr Cn	CT, many yr	12	NT vs. RT	20	200
Corpus Christi, Texas, USA	4 yr [C]-4 yr Cn	CT, many yr	12	RT vs. CT	20	360
Corpus Christi, Texas, USA	4 yr C-4 yr [Cn]	CT, many yr	12	NT vs. CT	20	340
Corpus Christi, Texas, USA	4 yr C-4 yr [Cn]	CT, many yr	12	NT vs. RT	20	230
Corpus Christi, Texas, USA	4 yr C-4 yr [Cn]	CT, many yr	12	RT vs. CT	20	110
Crossville, Alabama, USA	S	CT, row crop, >50 yr	10	NT vs. CT	20	1006
Crossville, Alabama, USA	C	CT, row crop, >50 yr	10	NT vs. CT	20	1603
Crossville, Alabama, USA	C-S	CT, row crop, >50 yr	10	NT vs. CT	20	1191
Crossville, Alabama, USA	CT	CT, row crop, >50 yr	10	C-S vs. S	20	-122
Crossville, Alabama, USA	NT	CT, row crop, >50 yr	10	C-S vs. S	20	64
Crossville, Alabama, USA	CT	CT, row crop, >50 yr	10	C-S vs. C	20	-259
Crossville, Alabama, USA	NT	CT, row crop, >50 yr	10	C-S vs. C	20	-671
Culbertson, Montana, USA	W	Cropped, 4 yr	9	NT vs. CT	15	55
Culbertson, Montana, USA	W	Cropped, 4 yr	9	NT vs. RT	15	-248
Culbertson, Montana, USA	W	Cropped, 4 yr	9	RT vs. CT	15	303
Culbertson, Montana, USA	CT	Cropped, 4 yr	9	W-B vs. W	15	33
Dawson Creek,	B	N/A	10	NT vs. CT	7.5	901

British Columbia, Canada						
Edinburgh, Scotland	B	N/A	24	NT vs. CT	30	2898
Edinburgh, Scotland	B	N/A	24	NT vs. CT	30	2735
Eldorado do Sul, Brazil	O-C	CT, 15 yr	9	NT vs. CT	30	460
Eldorado do Sul, Brazil	O/V-C/Cp	CT, 15 yr	9	NT vs. CT	30	640
Eldorado do Sul, Brazil	CT	CT, 15 yr	9	O/V-C/Cp vs. O-C	30	560
Eldorado do Sul, Brazil	NT	CT, 15 yr	9	O/V-C/Cp vs. O-C	30	740
El Reno, Oklahoma, USA	W-F	CT, W, 9 yr	11	NT vs. CT	20	1270
Elwood, Illinois, USA	C-S	N/A	6	NT vs. CT	30	592
Essone, France, USA	C	CT, W, ~10 yr	15	NT vs. CT	30	721
Fargo, North Dakota, USA	S-B-Sf-B	N/A	10	NT vs. CT	30	2285
Fargo, North Dakota, USA	S-B-Sf-B	N/A	10	NT vs. RT	30	2107
Fargo, North Dakota, USA	S-B-Sf-B	N/A	10	RT vs. CT	30	179
Florence, South Carolina, USA	C	N/A	7	NT vs. RT	15	452
Giessen, Germany	C-C-beet	N/A	17	NT vs. CT	25	107
Hoytville, Ohio, USA	C	CT, C-O, 6 yr	18	NT vs. CT	30	2397
Hoytville, Ohio, USA	C-S	CT, C-O, 6 yr	18	NT vs. CT	30	1538
Hoytville, Ohio, USA	C-O-G	CT, C-O, 6 yr	18	NT vs. CT	30	2187
Hoytville, Ohio, USA	NT	CT, C-O, 6 yr	19	C-S vs. C	30	-1722
Hoytville, Ohio, USA	CT	CT, C-O, 6 yr	19	C-S vs. C	30	-863

Hoytville, Ohio, USA	NT	CT, C-O, 6 yr	19	C-O-G vs. C	30	-14
Hoytville, Ohio, USA	CT	CT, C-O, 6 yr	19	C-O-G vs. C	30	224
Indiana, USA	C	N/A	7	NT vs. CT	10	307
Indiana, USA	C-S	N/A	7	NT vs. CT	7.5	653
Indian Head, Saskatchewan, Canada	CT (0 fert.)	CT, F-W	15	W vs. W-F	40	-111
Indian Head, Saskatchewan, Canada	CT (fert.)	CT, F-W	15	W vs. W-F	40	162
Indian Head, Saskatchewan, Canada	CT (0 fert.)	CT, F-W	15	W vs. W-W-F	40	368
Indian Head, Saskatchewan, Canada	CT (fert.)	CT, F-W	15	W vs. W-W-F	40	-106
Kanawha, Iowa	CT	N/A	36	C-S vs. C	15	-234
Kanawha, Iowa	CT	N/A	36	C-C-O-G vs. C	15	527
Kanawha, Iowa	CT	N/A	36	C-A-G-G vs. C	15	566
Lethbridge, Alberta, Canada	N/A	Cultivated for ~ 3 yr	78	W vs. W-F	15	230
Lethbridge, Alberta, Canada	N/A	Cultivated for ~ 3 yr	78	W vs. W-W-F	15	147
Lethbridge, Alberta, Canada	N/A	Cultivated for ~ 44 yr	41	W vs. W-F	30	112
Lethbridge, Alberta, Canada	N/A	Cultivated for ~ 44 yr	41	W vs. W-W-F	30	244
Lethbridge, Alberta, Canada	Fert. with manure	Cultivated for ~ 44 yr	41	W vs. W-W-F	30	-255
Lethbridge, Alberta, Canada	N/A	Cultivated for ~ 44 yr	41	W vs. F-W-W-H-H-H	30	-360
Lethbridge, Alberta, Canada	W-F	Cultivated for ~61 yr	24	NT vs. CT	20	-320
Lexington, Kentucky, USA	C (0 N)	Bluegrass, 50 yr	20	NT vs. CT	30	788
Lexington, Kentucky, USA	C (84 N)	Bluegrass, 50 yr	20	NT vs. CT	30	383

Lexington, Kentucky, USA	C (168 N)	Bluegrass, 50 yr	20	NT vs. CT	30	392
Lexington, Kentucky, USA	C (336 N)	Bluegrass, 50 yr	20	NT vs. CT	30	696
Lincoln, Nebraska, USA	Sm-S	N/A	10	NT vs. CT	8	-160
Lincoln, Nebraska, USA	Sm-S	N/A	10	RT vs. CT	8	633
Lincoln, Nebraska, USA	Sm-S	N/A	10	NT vs. RT	8	-793
Lincoln, Nebraska, USA	Sm-S	N/A	10	NT vs. CT	8	301
Lincoln, Nebraska, USA	Sm-S	N/A	10	RT vs. CT	8	688
Lincoln, Nebraska, USA	Sm-S	N/A	10	NT vs. RT	8	-388
Mandan, North Dakota, USA	W-F (0 N)	N/A	7	NT vs. CT	30	-109
Mandan, North Dakota, USA	W-F (0 N)	N/A	7	NT vs. RT	30	419
Mandan, North Dakota, USA	W-F (0 N)	N/A	7	RT vs. CT	30	-528
Mandan, North Dakota, USA	W-F (20 N)	N/A	7	NT vs. CT	30	-634
Mandan, North Dakota, USA	W-F (20 N)	N/A	7	NT vs. RT	30	-423
Mandan, North Dakota, USA	W-F (20 N)	N/A	7	RT vs. CT	30	-211
Mandan, North Dakota, USA	W-F (40 N)	N/A	7	NT vs. CT	30	-1074
Mandan, North Dakota, USA	W-F (40 N)	N/A	7	NT vs. RT	30	-332
Mandan, North Dakota, USA	W-F (40 N)	N/A	7	RT vs. CT	30	-741
Mandan, North Dakota, USA	W-W-Sf (34 N)	N/A	7	NT vs. CT	30	892
Mandan, North Dakota, USA	W-W-Sf (34 N)	N/A	7	NT vs. RT	30	890
Mandan, North Dakota, USA	W-W-Sf (34 N)	N/A	7	RT vs. CT	30	2

Dakota, USA	N)					
Mandan, North Dakota, USA	W-W-Sf (67 N)	N/A	7	NT vs. CT	30	1246
Mandan, North Dakota, USA	W-W-Sf (67 N)	N/A	7	NT vs. RT	30	55
Mandan, North Dakota, USA	W-W-Sf (67 N)	N/A	7	RT vs. CT	30	1191
Mandan, North Dakota, USA	W-W-Sf (101 N)	N/A	7	NT vs. CT	30	1690
Mandan, North Dakota, USA	W-W-Sf (101 N)	N/A	7	NT vs. RT	30	914
Mandan, North Dakota, USA	W-W-Sf (101 N)	N/A	7	RT vs. CT	30	777
Mandan, North Dakota, USA	CT (low N)	N/A	7	W-W-Sf vs. W-F	30	562
Mandan, North Dakota, USA	CT (medium N)	N/A	7	W-W-Sf vs. W-F	30	-234
Mandan, North Dakota, USA	CT (high N)	N/A	7	W-W-Sf vs. W-F	30	-425
Mandan, North Dakota, USA	NT (low N)	N/A	7	W-W-Sf vs. W-F	30	1563
Mandan, North Dakota, USA	NT (medium N)	N/A	7	W-W-Sf vs. W-F	30	1646
Mandan, North Dakota, USA	NT (high N)	N/A	7	W-W-Sf vs. W-F	30	2339
Manhattan, Kansas, USA	S	N/A	11	NT vs. CT	30	307
Manhattan, Kansas, USA	Sm-S	N/A	11	NT vs. CT	30	399
Manhattan, Kansas, USA	Sm	N/A	11	NT vs. CT	30	54
Manhattan, Kansas, USA	S	N/A	12	NT vs. CT	30	-57
Manhattan, Kansas, USA	Sm-S	N/A	12	NT vs. CT	30	468
Manhattan, Kansas, USA	Sm	N/A	12	NT vs. CT	30	578
Manhattan, Kansas, USA	CT	N/A	11	S-Sm vs. S	30	344

Manhattan, Kansas, USA	NT	N/A	11	S-Sm vs. S	30	436
Manhattan, Kansas, USA	CT	N/A	11	Sm-S vs. Sm	30	-384
Manhattan, Kansas, USA	NT	N/A	11	Sm-S vs. Sm	30	-39
Manhattan, Kansas, USA	CT	N/A	12	S-Sm vs. S	30	-933
Manhattan, Kansas, USA	NT	N/A	12	S-Sm vs. S	30	-408
Manhattan, Kansas, USA	CT	N/A	12	Sm-S vs. Sm	30	-1050
Manhattan, Kansas, USA	NT	N/A	12	Sm-S vs. Sm	30	-1159
Manhattan, Kansas, USA	CT (0 N)	N/A	8	C-S vs. S	30	69
Manhattan, Kansas, USA	CT (252 N)	N/A	8	C-S vs. S	30	293
Manhattan, Kansas, USA	CT (0 N)	N/A	8	C-S vs. C	30	-263
Manhattan, Kansas, USA	CT (252 N)	N/A	8	C-S vs. C	30	-266
Mead, Nebraska, USA	CT (0 N)	N/A	10	C-S vs. C	30	248
Mead, Nebraska, USA	CT (0 N)	N/A	10	Sm-S vs. S	30	-553
Mead, Nebraska, USA	CT (0 N)	N/A	10	C-S vs. S	30	-160
Mead, Nebraska, USA	CT (0 N)	N/A	10	Sm-S vs. Sm	30	-428
Mead, Nebraska, USA	CT (0 N)	N/A	10	C-O-Sm-S vs. C	30	645
Mead, Nebraska, USA	CT (0 N)	N/A	10	C-O-Sm-S vs. S	30	237
Mead, Nebraska, USA	CT (0 N)	N/A	10	C-O-Sm-S vs. Sm	30	362
Mead, Nebraska, USA	CT (0 N)	N/A	10	C-S-Sm-O vs. C	30	92
Mead, Nebraska, USA	CT (0 N)	N/A	10	C-S-Sm-O vs. S	30	-316

USA						
Mead, Nebraska, USA	CT (0 N)	N/A	10	C-S-Sm-O vs. Sm	30	-191
Mead, Nebraska, USA	CT (90 N)	N/A	10	C-S vs. C	30	209
Mead, Nebraska, USA	CT (34 N)	N/A	10	C-S vs. S	30	-208
Mead, Nebraska, USA	CT (34 N)	N/A	10	Sm-S vs. S	30	-606
Mead, Nebraska, USA	CT (34 N)	N/A	10	Sm-S vs. Sm	30	-429
Mead, Nebraska, USA	CT (90 N)	N/A	10	C-O-Sm-S vs. C	30	479
Mead, Nebraska, USA	CT (34 N)	N/A	10	C-O-Sm-S vs. S	30	62
Mead, Nebraska, USA	CT (34 N)	N/A	10	C-O-Sm-S vs. Sm	30	240
Mead, Nebraska, USA	CT (90 N)	N/A	10	C-S-Sm-O vs. C	30	142
Mead, Nebraska, USA	CT (34 N)	N/A	10	C-S-Sm-O vs. S	30	-275
Mead, Nebraska, USA	CT (34 N)	N/A	10	C-S-Sm-O vs. Sm	30	-97
Mead, Nebraska, USA	CT (180 N)	N/A	10	C-S vs. C	30	-2
Mead, Nebraska, USA	CT (68 N)	N/A	10	C-S vs. S	30	-271
Mead, Nebraska, USA	CT (68 N)	N/A	10	Sm-S vs. S	30	-476
Mead, Nebraska, USA	CT (68 N)	N/A	10	Sm-S vs. Sm	30	-322
Mead, Nebraska, USA	CT (180 N)	N/A	10	C-O-Sm-S vs. C	30	443
Mead, Nebraska, USA	CT (68 N)	N/A	10	C-O-Sm-S vs. S	30	174
Mead, Nebraska, USA	CT (68 N)	N/A	10	C-O-Sm-S vs. Sm	30	328
Mead, Nebraska, USA	CT (180 N)	N/A	10	C-S-Sm-O vs. C	30	73

Mead, Nebraska, USA	CT (68 N)	N/A	10	C-S-Sm-O vs. S	30	-176
Mead, Nebraska, USA	CT (68 N)	N/A	10	C-S-Sm-O vs. Sm	30	-22
Mead, Nebraska, USA	RT (fert., herbicide)	N/A	16	C-S-C-O/CI vs. C	15	276
Melfort, Saskatchewan, Canada	CT (0 fert.)	CT, F-W	30	W vs. W-F	15	390
Melfort, Saskatchewan, Canada	CT (fert.)	CT, F-W	30	W vs. W-F	15	420
Melfort, Saskatchewan, Canada	CT (0 fert.)	CT, F-W	30	W vs. F-W-W-H-H-W	15	3
Melfort, Saskatchewan, Canada	CT (fert.)	CT, F-W	30	W vs. F-W-W-H-H-W	15	183
Nashua, Iowa	CT	N/A	12	C-S vs. C	15	164
Nashua, Iowa	CT	N/A	12	C-C-O-G vs. C	15	614
North Yorkshire, England	B	N/A	9	NT vs. CT	20	330
Palmerston North, New Zealand	C-O	N/A	10	NT vs. CT	20	549
Palmerston North, New Zealand	C-O	N/A	10	RT vs. CT	20	584
Palmerston North, New Zealand	C-O	N/A	10	NT vs. RT	20	-35
Pendleton, Oregon, USA	W-F (0 N)	N/A	44	RT vs. CT	30	324
Pendleton, Oregon, USA	W-F (90 N)	N/A	44	RT vs. CT	30	434
Pendleton, Oregon, USA	W-F (135 N)	N/A	44	RT vs. CT	30	579
Pendleton, Oregon, USA	W-F (180 N)	N/A	44	RT vs. CT	30	548
Quebec, Canada	C	Grass meadow, >20 yr	11	NT vs. CT	24	216
Quebec, Canada	C	Grass meadow, >20 yr	11	NT vs. RT	24	208

Quebec, Canada	C	Grass meadow, >20 yr	11	RT vs. CT	24	8
Rycroft, Alberta, Canada	Canola-W-B-F	N/A	6	NT vs. CT	20	190
Rycroft, Alberta, Canada	Canola-W-B-F	N/A	6	NT vs. RT	20	13
Rycroft, Alberta, Canada	Canola-W-B-F	N/A	6	RT vs. CT	20	177
Senatobia, Mississippi, USA	C	Pasture	8	NT vs. CT	15.2	354
Senatobia, Mississippi, USA	CnS	Pasture	8	NT vs. CT	15.2	268
Senatobia, Mississippi, USA	S	Pasture	8	NT vs. CT	15.2	488
Sidney, Nebraska, USA	W	Native grassland	22	NT vs. CT	20	673
Sidney, Nebraska, USA	W	Native grassland	22	NT vs. RT	20	234
Sidney, Nebraska, USA	W	Native grassland	22	RT vs. CT	20	439
Sidney, Nebraska, USA	W	Native grassland	22	NT vs. CT	20	350
Sidney, Nebraska, USA	W	Native grassland	22	NT vs. RT	20	385
Sidney, Nebraska, USA	W	Native grassland	22	RT vs. CT	20	-35
Sidney, Nebraska, USA	W-F	Cultivated for ~47 yr	11	NT vs. CT	30	10
Sidney, Nebraska, USA	W-F	Cultivated for ~47 yr	11	RT vs. CT	30	-80
Sidney, Nebraska, USA	W-F	Cultivated for ~47 yr	11	NT vs. RT	30	90
South Charleston, Ohio, USA	C	CT, C-S	18	NT vs. CT	30	2392
South Charleston, Ohio, USA	C	CT, C-S	18	NT vs. RT	30	2623
South Charleston, Ohio, USA	C	CT, C-S	18	RT vs. CT	30	-231
Stewart Valley,	W	N/A	15	NT vs. CT	15	192

Saskatchewan, Canada						
Stewart Valley, Saskatchewan, Canada	W-F	N/A	15	NT vs. RT	15	404
Stewart Valley, Saskatchewan, Canada	NT	N/A	15	W vs. W-F	15	92
Sutherland, Iowa, USA	CT (200 N)	Cultivated for ~36 yr	34	C-S vs. C	15	95
Sutherland, Iowa, USA	CT (135 N)	Cultivated for ~36 yr	34	C-C-O-G vs. C	15	760
Sutherland, Iowa, USA	CT (135 N)	Cultivated for ~36 yr	34	C-A-G-G vs. C	15	892
Swift Current, Saskatchewan, Canada	RT (no N)	CT, F-W, ~ 60 yr	23	W vs. W-W-F	15	130
Swift Current, Saskatchewan, Canada	RT (N)	CT, F-W, ~ 60 yr	23	W vs. W-W-F	15	-120
Swift Current, Saskatchewan, Canada	NT	CT, F-W, ~70 yr	14	W vs. W-F	15	154
Swift Current, Saskatchewan, Canada	CT	CT, F-W, ~70 yr	14	W vs. W-F	15	-29
Swift Current, Saskatchewan, Canada	W-F	CT, F-W, ~70 yr	14	NT vs. CT	15	109
Swift Current, Saskatchewan, Canada	W	CT, F-W, ~70 yr	14	NT vs. CT	15	292
Temple, Texas, USA	[W]-Sm-C (28 N)	CT, many yr	10	NT vs. RT	20	140
Temple, Texas, USA	[W]-Sm-C (112 N)	CT, many yr	10	NT vs. RT	20	-110
Temple, Texas, USA	W-Sm-[C] (28 N)	CT, many yr	10	NT vs. RT	20	300
Temple, Texas, USA	W-Sm-[C] (112 N)	CT, many yr	10	NT vs. RT	20	290
Tune, Norway	B-O	Cultivated ~14 yr	13	RT vs. CT	20	191
Urbana, Illinois,	C-S	N/A	9	RT vs. CT	30	65

USA						
Urbana, Illinois, USA	C-S	N/A	9	NT vs. RT	30	-312
Urbana, Illinois, USA	C-S	N/A	9	RT vs. CT	30	377
Urbana, Illinois, USA	CT (0 N)	N/A	69	C-O-S vs. C	15	733
Urbana, Illinois, USA	CT (M, L, P)	N/A	69	C-O-S vs. C	15	534
Urbana, Illinois, USA	CT (0 N)	N/A	69	C-O-H vs. C	15	1267
Urbana, Illinois, USA	CT (M, L, P)	N/A	69	C-O-H vs. C	15	1959
Vienna, Illinois, USA	C-S	Tall fescue, >10 yr	7	NT vs. CT	15	617
Vienna, Illinois, USA	C-S	Tall fescue, >10 yr	7	RT vs. CT	15	-253
Vienna, Illinois, USA	C-S	Tall fescue, >10 yr	7	NT vs. RT	15	870
Wagga Wagga, Australia	W-lupin	Pasture, 2 yr	10	NT vs. CT	20	569
Wagga Wagga, Australia	W-lupin	Pasture, 2 yr	10	RT vs. CT	20	-62
Wagga Wagga, Australia	W-lupin	Pasture, 2 yr	10	NT vs. RT	20	631
Warra, Australia	W (0 N)	Cultivated, cereal, 50 yr	10	NT vs. CT	10	97
Warra, Australia	W (25 N)	Cultivated, cereal, 50 yr	10	NT vs. CT	10	190
Warra, Australia	W (75 N)	Cultivated, cereal, 50 yr	10	NT vs. CT	10	262
Warra, Australia	CT, W (0 N)	Cultivated, cereal, 50 yr	10	W-Legume vs. W	10	138
Warra, Australia	CT, W (0 N)	Cultivated, cereal, 50 yr	10	W-G/legume vs. W	10	234
Warwick, Australia	W-B	CT, 13 yr	20	NT vs. CT	10	413
Warwick, Australia	W-B	CT, 13 yr	20	NT vs. CT	10	433

Warwick, Australia	W-B	CT, 13 yr	20	NT vs. CT	10	374
Waseca, Minnesota, USA	C-A	N/A	11	NT vs. CT	15	650
Waseca, Minnesota, USA	C	N/A	6	NT vs. CT	30	-2
Woodslee, Ontario, Canada	CT (No N)	Maize, alfalfa, and red clover, >15 yr	35	C-O-A-A vs. C	70	1390
Woodslee, Ontario, Canada	CT (N)	Maize, alfalfa, and red clover, >15 yr	35	C-O-A-A vs. C	70	2450
Wooster, Ohio, USA	C	Grass meadow, 6 yr	19	NT vs. CT	30	1236
Wooster, Ohio, USA	C-S	Grass meadow, 6 yr	19	NT vs. CT	30	1568
Wooster, Ohio, USA	C-S	Grass meadow, 6 yr	19	NT vs. RT	30	1317
Wooster, Ohio, USA	C-S	Grass meadow, 6 yr	19	RT vs. CT	30	251
Wooster, Ohio, USA	C-O-G	Grass meadow, 6 yr	19	NT vs. CT	30	1603
Wooster, Ohio, USA	NT	Grass meadow, 6 yr	19	C-S vs. C	30	366
Wooster, Ohio, USA	CT	Grass meadow, 6 yr	19	C-S vs. C	30	33
Wooster, Ohio, USA	NT	Grass meadow, 6 yr	19	C-O-G vs. C	30	-45
Wooster, Ohio, USA	CT	Grass meadow, 6 yr	19	C-O-G vs. C	30	-412

*Values in parentheses represent nitrogen (N) application rate in kg ha⁻¹ y⁻¹. Brackets represent the crop during or after which the soil samples were taken. CT, RT, and NT refer to conventional tillage, reduced tillage, and no-till, respectively. Treatments with varying fertilizer application rates or crop sequences were averaged prior to analysis. Abbreviations:

- A, alfalfa (*Medicago sativa* L.)
- B, barley (*Hordeum vulgare* L.)
- C, corn or maize (*Zea mays* L.)
- Cl, clover (*Trifolium* sp.)
- Cn, cotton (*Gossypium hirsutum* L.)
- Cp, cowpea (*Vigna unguiculata* L.)
- F, fallow
- Fert., unspecified fertilizer rate
- G, grass
- H, hay
- L, lime

- M, manure
- O, oats (*Avena* spp.)
- Ps, pasture
- P, phosphorus
- S, soybean (*Glycine max* L.)
- Sf, sunflower (*Helianthus annuus* L.)
- Sm, sorghum (*Sorghum* spp.)
- V, vetch (*Vicia sativa* L.)
- W, wheat (*Triticum aestivum* L.)
- N/A is not available.

****Treatments are arranged as the management intended to sequester soil organic carbon versus the conventional management (e.g., NT vs. CT; soybean-sunflower vs. continuous soybean).**

*****Calculated using SOM to SOC conversion factor of 0.58 and estimates of soil bulk density where necessary (see full text for further explanation).**