Archives

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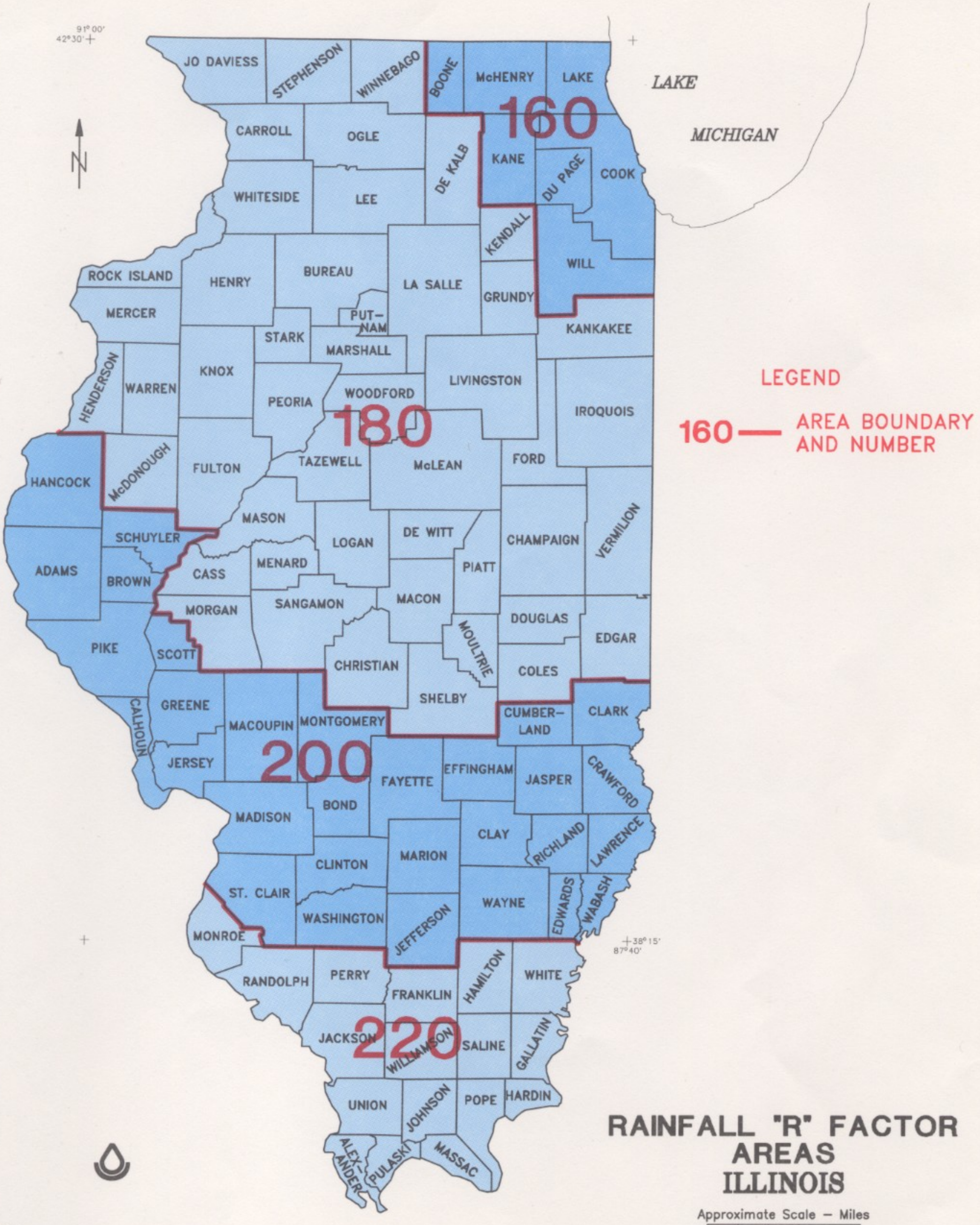

RAINFALL "R" FACTOR AREAS ILLINOIS

SOURCE:
DATA PROVIDED BY SCS NATIONAL HEADQUARTERS.
MAP PREPARED USING AUTOMATED MAP CONSTRUCTION.
NATIONAL CARTOGRAPHIC CENTER, FORT WORTH, TEXAS 1992.

DECEMBER 1991 1006898

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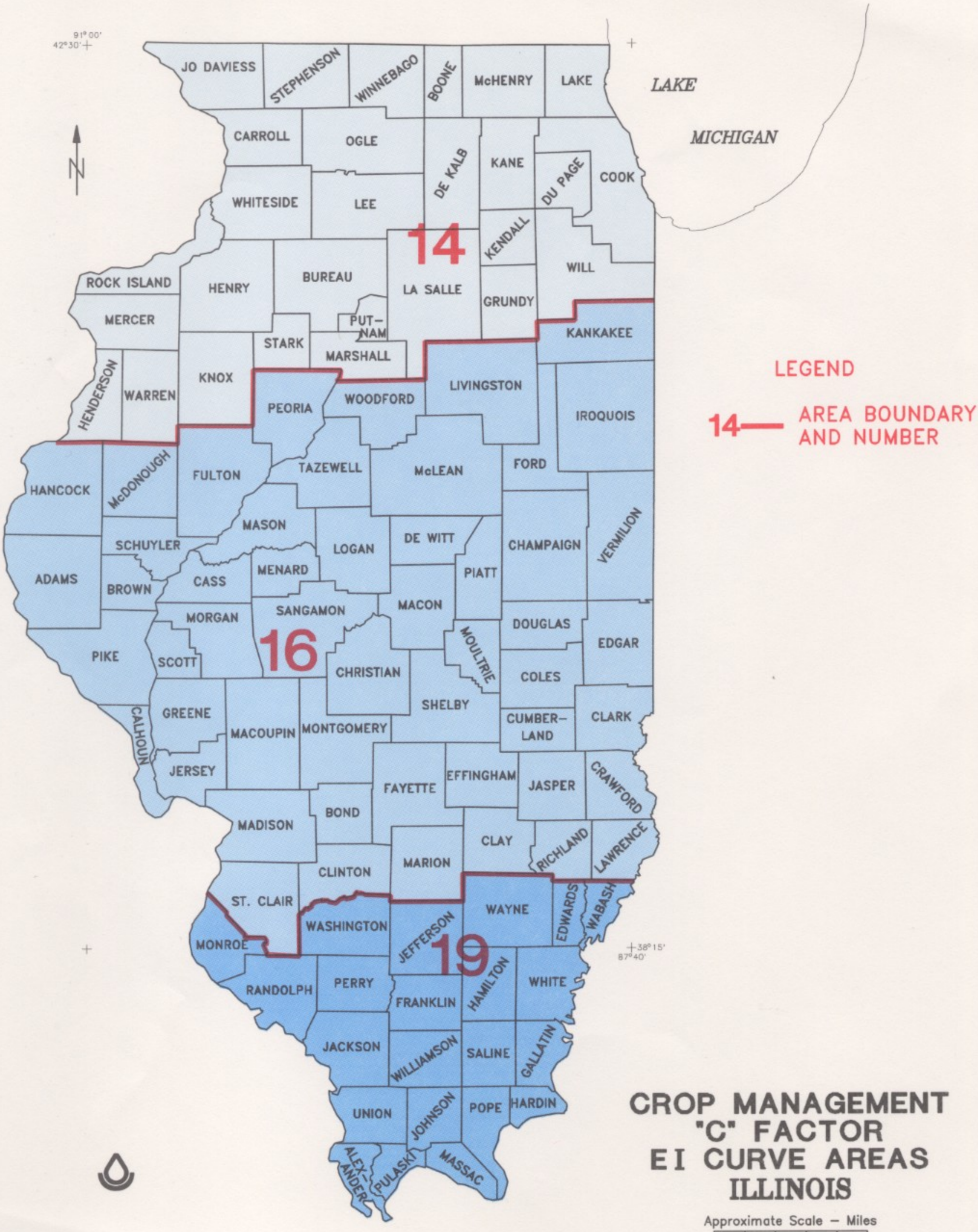

CROP MANAGEMENT "C" FACTOR EI CURVE AREAS ILLINOIS

Approximate Scale — Miles

0 10 20 30 40 50

SOURCE:
DATA PROVIDED BY SCS NATIONAL HEADQUARTERS.
MAP PREPARED USING AUTOMATED MAP CONSTRUCTION.
NATIONAL CARTOGRAPHIC CENTER, FORT WORTH, TEXAS 1992.

DECEMBER 1991 1006902

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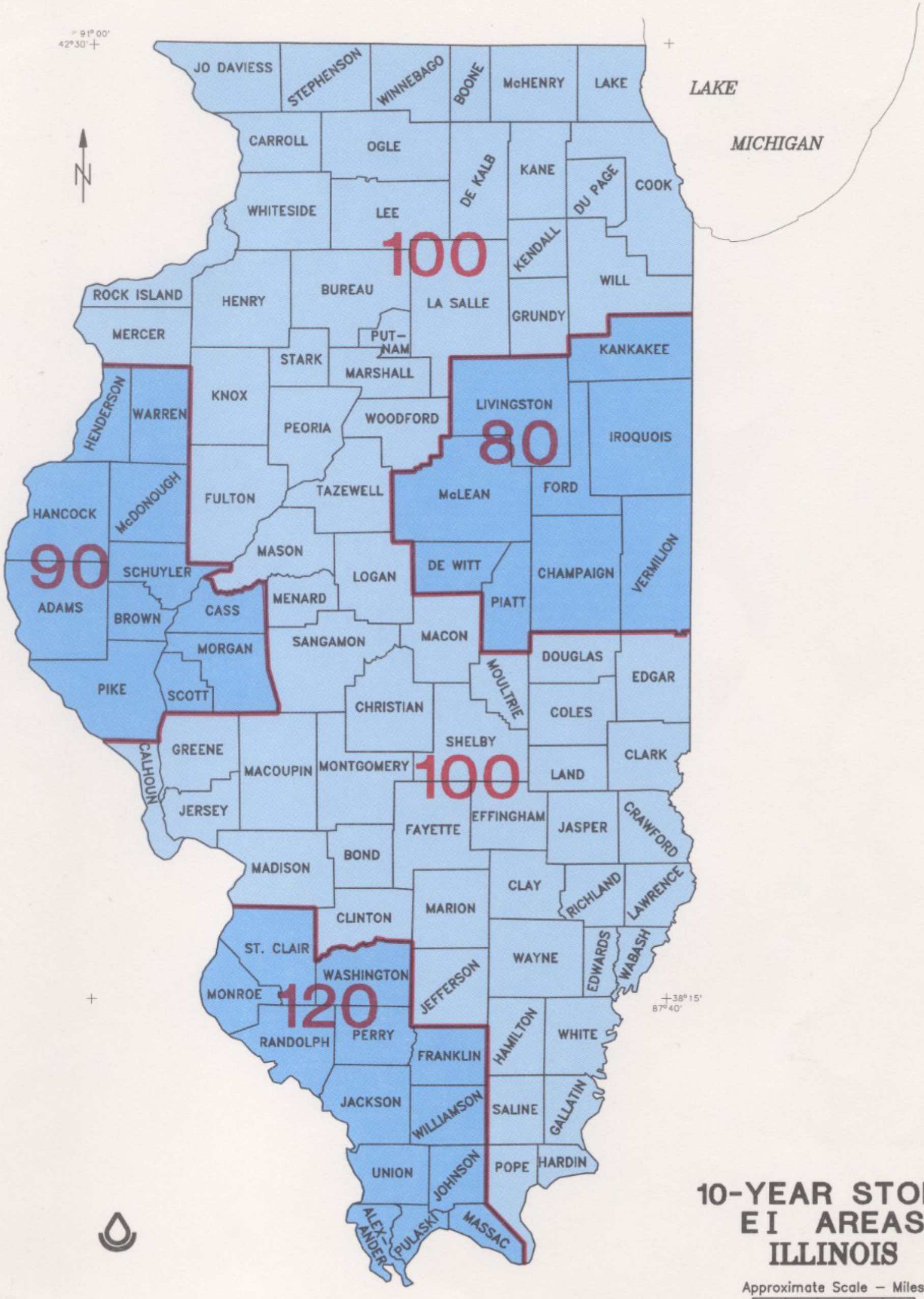

10-YEAR STORM EI AREAS ILLINOIS

Approximate Scale — Miles

0 10 20 30 40 50

SOURCE:
DATA PROVIDED BY SCS NATIONAL HEADQUARTERS.
MAP PREPARED USING AUTOMATED MAP CONSTRUCTION.
NATIONAL CARTOGRAPHIC CENTER, FORT WORTH, TEXAS 1992.

DECEMBER 1991 1006881

USDA-SCS-NATIONAL CARTOGRAPHIC CENTER, FT. WORTH, TX.-1992

Introduction
Section I - Soil Erosion Prediction

This section describes use of the Universal Soil Loss Equation (USLE) for estimating sheet and rill erosion from rainfall in Illinois. The USLE is a management tool used to estimate soil losses by sheet and rill erosion on cropland, pastureland, woodland, idle land and in some instances urban areas. The equation quantifies the effects of natural factors and cultural management and cropping practices in soil loss.

The USLE predicts average annual soil loss from specific field areas based on specified long term cropping and management systems. Because of unpredictable short-time fluctuations in the values of influential variables, the USLE is less accurate in predicting specific events than for predicting average soil losses over the entire cropping sequence.

The effectiveness of a particular land treatment alternative can be evaluated when the predicted soil loss for that treatment is compared with the soil loss tolerance "T" for the specific soil. Soil loss tolerances denote the maximum level of soil erosion that allow high levels of sustainable economic crop productivity. By using the USLE, numerous crop and tillage alternatives can be developed for a particular field or farm. These alternatives can be compared on the basis of predicted soil loss and they can also be evaluated for effectiveness using "T". This allows the operator to select his or her system based on the effectiveness to reduce soil loss, feasibility and economics.

The USLE may be used in determining the need for cropland terraces and diversions when these practices are needed to reduce the slope length as defined in the USLE.

The USLE is an important tool in developing conservation plans which keep soil losses to acceptable levels when considering long term soil productivity.

UNIVERSAL SOIL LOSS EQUATION (USLE)

THE UNIVERSAL SOIL LOSS EQUATION is:

$A = RKLSCP$

A = estimated average annual soil loss in tons/acre/year.

R = rainfall/runoff factor which quantifies the effect of the raindrop impact as well as the amount and rate of runoff associated with the rain (based on long term rainfall records).

See "R" map for appropriate county rainfall factors.

K = soil erodibility factor is based in the combined effects of all soil properties that significantly influences erosion rates. The K factor is expressed as tons of soil lost per until of R with continuous fallow.

Section II, FOTG, for appropriate factors for Illinois soils.

L = slope length factor is determined by field measurement.

Slope length is defined as the distance from the point of origin of overland flow (near but not necessarily at the top of the slope) to the point where sediment deposition begins or sheet flow enters a defined channel (concentrated flows, not necessarily at the bottom of the field slope). A change of vegetation or field boundary does not "necessarily" begin a new slope. Slope lengths may be shortened by using cropland terraces or diversions as appropriate, however, most diversions and cropland terraces will be needed to handle concentrated flows rather than to reduce sheet and rill erosion. Generally, as slopes become steeper, slope lengths will decrease. Infrequently, where slopes are very uniform, their lengths may exceed 400 feet.

S = slope gradient factor is determined by measuring the percent slope over the slope length. In some instances, where slopes are complex, slope gradients and lengths may need to be segmented.

See Table LS for determining the appropriate LS value.

THE L AND S FACTORS ARE THE MOST DIFFICULT DETERMINATIONS THE PLANNER MUST MAKE. THEY HAVE A SIGNIFICANT IMPACT ON THE PREDICTED SOIL LOSS. THEREFORE, THE PLANNER MUST CAREFULLY DETERMINE L AND S FACTORS "IN THE FIELD" THAT BEST REPRESENT FIELD CONDITIONS. ANY ONE USING THE USLE INDEPENDENTLY SHOULD HAVE FIELD TRAINING IN DETERMINING L AND S FACTORS.

C = cover and management factor which is the soil loss ratio of a specified crop management system to that of continuous fallow (bare ground). Factors affecting the value of C include: crop sequence, residue management including surface cover, canopy effects and tillage.

In determining a C factor for a given rotation, C values for each specific crop for each year in the rotation are added and then divided by the number of years in the rotation. It should be noted for double cropping, an average C value for that year includes both crops and that even through two crops are grown, they represent only 1 year of the rotation. The USLE should **NOT** be used for predicting a single-year soil loss for a given crop.

See Crop Management "C" Factor Map for EI Curve Areas.

Percent ground cover of pastures may vary during the year depending on seasonal growth patterns and management. The percent ground cover used should be most representative of the year.

P = P is the contour P factor. This factor incorporates the influence of row grade and surface roughness or oriented roughness on soil loss. Soil surface roughness, created by tillage, planting, cultivation and other mechanical methods, oriented along the contour ensures maximum water storage and infiltration, and minimum runoff and erosion. The more the roughness orientation is off the contour, the less effective it is.

TABLE 1 - CROP MANAGEMENT "C" FACTOR VALUES FOR RAINFALL "E.I." DISTRIBUTION CURVE #14 1/

CROP SEQUENCE		FALL PLOW	SPRING PLOW	CHISEL - DISK - RIDGE 2/ % Cover After Plant 20%	30%	40%	50%	NO-Till % Cover After Plant 60%	70%	80%	90%
CORN after Soybeans		.40	.36	.34	.29	.24	---	20% .24	30% .19	40% .14	3/ --
CORN after Corn		.34	.29	.21	.18	.15	.12	.08	.06	.04	.03
CORN after Small Grain		.36	.30	.22	.20	.17	.15	.11	.08	.05	.03
CORN after Meadow 4/		.17	.13	.12	.11	.09	.07	.03	.02	.01	.01
CORN 2nd yr. after Meadow 4/		.30	.24	.19	.16	.13	.10	.06	.05	.04	.03
SOYBEANS after Soybeans 5/	Wide Row	.44	.39	.36	.32	---	---	20% .25	30% .20	40% .16	3/ ---
	Drill	.36	.32	.31	.29	---	---	.21	.18	.15	---
SOYBEANS after Corn 5/	Wide Row	.35	.30	.22	.19	.16	.14	.11	.08	.06	.04
	Drill	.27	.24	.19	.16	.13	.12	.10	.08	.06	.04
SOYBEANS after Sm. Grain 5/	Wide Row	.37	.32	.24	.20	.17	.14	.12	.08	.06	.04
	Drill	.29	.24	.21	.17	.14	.12	.11	.08	.06	.04
SOYBEANS after Meadow 4,5/	Wide Row	.17	.13	.12	.08	.07	.06	.03	.02	.01	.01
	Drill	.14	.10	.09	.08	.06	.05	.03	.02	.01	.01
SOYBEANS after Corn 2nd year after meadow 5/	Wide Row	.31	.25	.18	.15	.12	.11	.09	.07	.05	.03
	Drill	.25	.20	.16	.13	.11	.10	.09	.07	.05	.03
SMALL GRAIN after Corn (Grain) 6/		.10	.09	.08	.07	.06	.05	.06	.05	.04	.03
SMALL GRAIN after Corn (Silage) 7/		.14	---	.14	---	---	---	.12	---	---	---
SMALL GRAIN after Soybeans 6/		.11	.14	.09	.08	.07	.06	20% .07	30% .06	40% .05	3/ ---

WHEAT/SOYBEANS (Double Crop)

		Tillage for Soybeans Plow	Disk	No-Till
Tillage	Plow	.26	.15	.10
for	Disk	.22	.10	.05
Wheat	No-Till	.20	.09	.04

Meadow (Full year-Established)

Grass-Legume	.004
Legume only	.02

Footnotes for "C" Factor Tables

1. Values in this table are based on high level management with yields equal to or exceeding the following: corn - 100 bu/ac; soybeans - 40 bu/ac; wheat - 45 bu/ac; oats - 60 bu/ac; meadow - 3 tons/ac. For medium level management multiply factors by 1.2.

2. Values for chisel and disk systems are for fall primary tillage. For primary tillage in the spring and ridge planting up and down hill multiply values by the appropriate factor: E.I. Curve 14-.9; E.I. Curve 16- .8; E.I. Curve 19- .7. For ridge planting on the contour, multiply values by the appropriate factor: E.I Curve 14- .7; E.I. Curve 16- .6; E.I. Curve 19- .5. (These factors are in addition to the appropriate "p" factor.) Ridge planting is applicable only for row crops following row crops.

3. Percentages apply only to crops following soybeans.

4. Values are based on sod or a grass-legume mixture consisting of at least 50% grass and has been established at least one full growing season. If meadow stand is primarily legume, multiply factor by 1.2.

5. Use wide row factors for row widths greater than 20 inches and drill factors for 20 inches and less.

6. The same factors are applicable for both small grain with and without meadow seedings.

7. Factors for Disk and No-till are for the tillage system with no residue on surface after planting.

TABLE 2 - CROP MANAGEMENT "C" FACTOR VALUES FOR RAINFALL "E.I." DISTRIBUTION CURVE #16 1/

CROP SEQUENCE		FALL PLOW	SPRING PLOW	CHISEL - DISK - RIDGE 2/ % Cover After Plant 20%	30%	40%	50%	NO-Till % Cover After Plant 60%	70%	80%	90%
CORN after Soybeans		.42	.36	.36	.30	.25	---	20% .25	30% .19	40% .14	3/ --
CORN after Corn		.36	.29	.21	.18	.15	.12	.09	.06	.05	.03
CORN after Small Grain		.37	.30	.23	.20	.16	.13	.09	.06	.05	.03
CORN after Meadow 4/		.17	.13	.12	.10	.09	.08	---	.02	.02	.01
CORN 2nd yr. after Meadow 4/		.32	.24	.19	.16	.15	.14	.06	.05	.04	.03
SOYBEANS after Soybeans 5/	Wide Row	.48	.41	.37	.35	---	---	20% .26	30% .20	40% .16	3/
	Drill	.38	.30	.31	.30	---	---	.20	.16	.13	
SOYBEANS after Corn 5/	Wide Row	.40	.33	.20	.17	.14	.12	.10	.07	.05	.03
	Drill	.30	.25	.18	.15	.13	.10	.08	.06	.04	.03
SOYBEANS after Sm. Grain 5/	Wide Row	.42	.30	.24	.20	.17	.14	.09	.06	.04	.03
	Drill	.32	.23	.19	.16	.14	.12	.08	.06	.04	.03
SOYBEANS after Meadow 4,5/	Wide Row	.20	.15	.12	.10	.09	.08	.03	.02	.01	.01
	Drill	.15	.12	.11	.09	.08	.08	.03	.02	.01	.01
SOYBEANS after Corn 2nd year after meadow 5/	Wide Row	.36	.27	.18	.15	.12	.10	.08	.06	.04	.03
	Drill	.27	.22	.15	.13	.11	.10	.08	.06	.04	.03
SMALL GRAIN after Corn (Grain) 6/		.12	.11	.09	.08	.07	.06	.08	.06	.04	.03
SMALL GRAIN after Corn (Silage) 7/		.17	---	.17	---	---	---	.13	---	---	---
SMALL GRAIN after Soybeans 6/		.13	.12	.10	.09	.08	.07	20% .09	30% .07	40% .05	3/ ---

WHEAT/SOYBEANS (Double Crop)

		Tillage for Soybeans Plow	Disk	No-Till
Tillage	Plow	.28	.16	.13
for	Disk	.23	.10	.07
Wheat	No-Till	.20	.08	.04

Meadow (Full year-Established)

Grass-Legume	.004
Legume only	.02

SCS-IL, September, 1992

Footnotes for "C" Factor Tables

1. Values in this table are based on high level management with yields equal to or exceeding the following: corn - 100 bu/ac; soybeans - 40 bu/ac; wheat - 45 bu/ac; oats - 60 bu/ac; meadow - 3 tons/ac. For medium level management multiply factors by 1.2.

2. Values for chisel and disk systems are for fall primary tillage. For primary tillage in the spring and ridge planting up and down hill multiply values by the appropriate factor: E.I. Curve 14-.9; E.I. Curve 16- .8; E.I. Curve 19- .7. For ridge planting on the contour, multiply values by the appropriate factor: E.I Curve 14- .7; E.I. Curve 16- .6; E.I. Curve 19- .5. (These factors are in addition to the appropriate "p" factor.) Ridge planting is applicable only for row crops following row crops.

3. Percentages apply only to crops following soybeans.

4. Values are based on sod or a grass-legume mixture consisting of at least 50% grass and has been established at least one full growing season. If meadow stand is primarily legume, multiply factor by 1.2.

5. Use wide row factors for row widths greater than 20 inches and drill factors for 20 inches and less.

6. The same factors are applicable for both small grain with and without meadow seedings.

7. Factors for Disk and No-till are for the tillage system with no residue on surface after planting.

TABLE 3 - CROP MANAGEMENT "C" FACTOR VALUES FOR RAINFALL "E.I." DISTRIBUTION CURVE #19 1/

CROP SEQUENCE		FALL PLOW	SPRING PLOW	CHISEL - DISK - RIDGE 2/ % Cover After Plant 20%	30%	40%	50%	NO-Till % Cover After Plant 60%	70%	80%	90%
CORN after Soybeans		.43	.30	.35	.32	.27	---	20% .20	30% .16	40% .12	3/
CORN after Corn		.38	.25	.20	.18	.15	.13	.07	.05	.04	.03
CORN after Small Grain		.39	.25	.21	.18	.16	.14	.07	.05	.04	.03
CORN after Meadow 4/		.17	.11	.11	.09	.08	.07	.03	.02	.01	.01
CORN 2nd yr. after Meadow 4/		.33	.21	.18	.16	.14	.12	.06	.05	.04	.03
SOYBEANS after Soybeans 5/	Wide Row	.48	.37	.37	.36	---	---	20% .22	30% .17	40% .13	3/ ---
	Drill	.42	.29	.34	.33	---	---	.19	.14	.10	
SOYBEANS after Corn 5/	Wide Row	.40	.31	.19	.16	.14	.12	.08	.06	.04	.03
	Drill	.34	.25	.17	.15	.13	.11	.07	.06	.04	.03
SOYBEANS after Sm. Grain 5/	Wide Row	.45	.27	.22	.19	.17	.15	.08	.07	.04	.03
	Drill	.38	.22	.18	.16	.14	.12	.08	.07	.04	.03
SOYBEANS after Meadow 4,5/	Wide Row	.19	.14	.09	.07	.06	.05	.03	.02	.01	.01
	Drill	.16	.11	.08	.07	.06	.05	.03	.02	.01	.01
SOYBEANS after Corn 2nd year after meadow 5/	Wide Row	.35	.26	.16	.14	.12	.11	.08	.06	.04	.03
	Drill	.30	.21	.15	.13	.11	.10	.07	.06	.04	.03
SMALL GRAIN after Corn (Grain) 6/		.16	.14	.11	.10	.09	.08	.06	.05	.04	.03
SMALL GRAIN after Corn (Silage) 7/		.22	---	.22	---	---	---	.16	---	---	---
SMALL GRAIN after Soybeans 6/		.17	.15	.13	.12	---	---	20% .10	30% .09	40% .08	3/

WHEAT/SOYBEANS (Double Crop)

		Tillage for Soybeans Plow	Disk	No-Till
Tillage	Plow	.32	.20	.16
for	Disk	.24	.12	.08
Wheat	No-Till	.20	.08	.04

Meadow (Full year-Established)

Grass-Legume	.004
Legume only	.02

Footnotes for "C" Factor Tables

1. Values in this table are based on high level management with yields equal to or exceeding the following: corn - 100 bu/ac; soybeans - 40 bu/ac; wheat - 45 bu/ac; oats - 60 bu/ac; meadow - 3 tons/ac. For medium level management multiply factors by 1.2.

2. Values for chisel and disk systems are for fall primary tillage. For primary tillage in the spring and ridge planting up and down hill multiply values by the appropriate factor: E.I. Curve 14-.9; E.I. Curve 16- .8; E.I. Curve 19- .7. For ridge planting on the contour, multiply values by the appropriate factor: E.I Curve 14- .7; E.I. Curve 16- .6; E.I. Curve 19- .5. (These factors are in addition to the appropriate "p" factor.) Ridge planting is applicable only for row crops following row crops.

3. Percentages apply only to crops following soybeans.

4. Values are based on sod or a grass-legume mixture consisting of at least 50% grass and has been established at least one full growing season. If meadow stand is primarily legume, multiply factor by 1.2.

5. Use wide row factors for row widths greater than 20 inches and drill factors for 20 inches and less.

6. The same factors are applicable for both small grain with and without meadow seedings.

7. Factors for Disk and No-till are for the tillage system with no residue on surface after planting.

Example to Figure C Factor:

Given: EI Curve #16, crop rotation of corn, drilled soybeans, wheat, meadow (legume only).

Rotation	Crop	Tillage System	Percent Residue	C
Year 1	Corn	chisel/disk meadow	30%	.12 1/
Year 2	Soybeans	no-till soybeans	70%	.06
Year 3	Wheat	no-till wheat	80%	.05
Year 4	Meadow			.02
				.25 ÷ 4
				yrs. = .0625
				round to .06

Thus the "C" factor for this rotation and tillage system is 0.06.

1/ Table 2, See footnote #4; factor multiplied by 1.2 because legume only.

Table 4. "C" Factors for Permanent Pasture, Rangeland, Idle Land, and Grazed Woodland 1/

STATEWIDE

Vegetal Canopy		Cover That Contacts The Surface						
Type and Height of Raised Canopy 2/	Canopy Cover 3/ %	Type 4/	Percent Ground Cover 0	20	40	60	80	95-100
No appreciable canopy		G	.45	.20	.10	.042	.013	.003
		W	.45	.24	.15	.090	.043	.011
Canopy of tall weeds or short brush (0.5 m fall ht.)	25	G	.36	.17	.09	.038	.012	.003
		W	.36	.20	.13	.082	.041	.011
	50	G	.26	.13	.07	.035	.012	.003
		W	.26	.16	.11	.075	.039	.011
	75	G	.17	.10	.06	.031	.011	.003
		W	.17	.12	.09	.067	.038	.011
Appreciable brush or brushes (2 m fall ht.)	25	G	.40	.18	.09	.040	.013	.003
		W	.40	.22	.14	.085	.042	.011
	50	G	.34	.16	.085	.038	.012	.003
		W	.34	.19	.13	.081	.041	.011
	75	G	.28	.14	.08	.036	.012	.003
		W	.28	.17	.12	.077	.040	.011
Trees but no appreciable low brush (4 m fall ht.)	25	G	.42	.19	.10	.041	.013	.003
		W	.42	.23	.14	.087	.042	.011
	50	G	.39	.18	.09	.040	.013	.003
		W	.39	.21	.14	.085	.042	.011
	75	G	.36	.17	.09	.039	.012	.003
		W	.36	.20	.13	.083	.041	.011

1/ All values shown assume: (1) random distribution of mulch or vegetation, and (2) mulch of appreciable depth where it exists. Idle land refers to land with undisturbed profiles for at least a period of three consecutive years. Also to be used for burned forest land and forest land that has been harvested less than three years ago.

2/ Average fall height of waterdrops from canopy to soil surface: m = meters.

3/ Portion of total area surface that would be hidden from view by canopy in a vertical projection (a bird's eye view).

4/ G: Cover at surface is grass, grasslike plants, decaying compacted duff, or litter at least 2 inches deep.
W: Cover at surface is mostly broadleaf herbaceous plants (as, weeds with little lateral-root network near the surface), and/or undecayed residue.

Example to Figure C Factor:

Given: EI Curve #16, crop rotation of corn, drilled soybeans, wheat, meadow (legume only).

Rotation	Crop	Tillage System	Percent Residue	C
Year 1	Corn	chisel/disk meadow	30%	.12 1/
Year 2	Soybeans	no-till soybeans	70%	.06
Year 3	Wheat	no-till wheat	80%	.05
Year 4	Meadow			.02
				.25 ÷ 4
				yrs. = .0625
				round to .06

Thus the "C" factor for this rotation and tillage system is 0.06.

1/ See footnote #4; factor multiplied by 1.2 because legume only.

TABLE 6 - TOPOGRAPHIC FACTORS (LS) VALUE FOR COMBINATIONS OF LENGTH OF SLOPE AND STEEPNESS

SLOPE %	SLOPE LENGTH (FEET) 25	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	450	500	550	600
0.2	0.06	0.07	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.11
0.5	0.07	0.08	0.09	0.10	0.10	0.10	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.13	0.13	0.13	0.13	0.14	0.14
0.8	0.09	0.09	0.11	0.11	0.12	0.12	0.13	0.13	0.13	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.15	0.16	0.16	0.16
1	0.09	0.11	0.12	0.13	0.14	0.15	0.15	0.16	0.17	0.17	0.18	0.18	0.18	0.19	0.20	0.20	0.20	0.21	0.22	0.22
2	0.13	0.16	0.19	0.20	0.21	0.23	0.24	0.25	0.26	0.26	0.27	0.28	0.29	0.29	0.30	0.31	0.32	0.33	0.34	0.34
3	0.19	0.23	0.26	0.29	0.31	0.33	0.34	0.35	0.37	0.38	0.39	0.40	0.41	0.42	0.43	0.44	0.45	0.47	0.48	0.49
4	0.23	0.30	0.36	0.40	0.43	0.47	0.50	0.53	0.55	0.57	0.60	0.62	0.64	0.66	0.68	0.70	0.73	0.76	0.79	0.82
5	0.27	0.38	0.46	0.54	0.60	0.66	0.71	0.76	0.80	0.84	0.89	0.93	0.96	1.00	1.04	1.07	1.14	1.20	1.25	1.31
6	0.34	0.48	0.58	0.67	0.75	0.82	0.89	0.95	1.01	1.06	1.12	1.17	1.22	1.26	1.30	1.35	1.43	1.50	1.58	1.65
7	0.41	0.58	0.71	0.82	0.92	1.01	1.09	1.17	1.24	1.30	1.37	1.43	1.49	1.54	1.60	1.65	1.75	1.84	1.93	2.02
8	0.50	0.70	0.86	0.99	1.10	1.21	1.31	1.41	1.49	1.56	1.64	1.72	1.79	1.85	1.92	1.98	2.10	2.22	2.32	2.43
9	0.59	0.83	1.02	1.17	1.31	1.44	1.55	1.66	1.76	1.85	1.94	2.03	2.11	2.19	2.27	2.36	2.49	2.62	2.75	2.87
10	0.69	0.97	1.19	1.37	1.53	1.68	1.81	1.94	2.05	2.16	2.27	2.37	2.47	2.56	2.65	2.74	2.90	3.06	3.21	3.35
11	0.79	1.12	1.37	1.58	1.77	1.93	2.09	2.23	2.37	2.50	2.62	2.74	2.85	2.95	3.06	3.16	3.35	3.53	3.70	3.87
12	0.90	1.28	1.56	1.80	2.02	2.21	2.39	2.55	2.71	2.85	2.99	3.13	3.25	3.37	3.49	3.61	3.83	4.04	4.23	4.42
13	1.02	1.44	1.77	2.04	2.28	2.50	2.70	2.89	3.06	3.23	3.39	3.54	3.68	3.82	3.95	4.08	4.33	4.57	4.79	5.00
14	1.15	1.62	1.99	2.30	2.56	2.81	3.03	3.25	3.44	3.63	3.80	3.97	4.14	4.29	4.44	4.59	4.87	5.13	5.38	5.62
15	1.28	1.81	2.22	2.56	2.86	3.13	3.39	3.62	3.84	4.05	4.24	4.43	4.61	4.79	4.96	5.12	5.43	5.72	6.00	6.27
16	1.42	2.01	2.46	2.84	3.17	3.48	3.75	4.01	4.26	4.49	4.71	4.92	5.12	5.31	5.50	5.68	5.85	6.35	6.65	6.95
20	2.04	2.88	3.53	4.08	4.62	5.00	5.38	5.77	5.98	6.19	6.63	7.07	7.35	7.63	7.90	8.16	8.64	9.12	9.56	10.0

Table 7. P Values for Contouring
10-Year Storm EI = 80

Table 7A: Contour P Factor Values — Low (1-2.9") Ridge or oriented roughness height
10 Year EI = 80

downhill slope	Row Grade (%) 0.00	0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	5.00	6.00	7.00	8.00	9.00	10.00	11.00	12.00
0	1.00																
2	0.85	0.90	0.95	0.95	1.00												
4	0.75	0.85	0.90	0.90	0.95	0.95	0.95	1.00									
6	0.70	0.80	0.85	0.85	0.90	0.90	0.90	0.95	0.95	0.95	1.00						
8	0.70	0.80	0.80	0.85	0.85	0.85	0.90	0.90	0.90	0.95	0.95	1.00					
10	0.75	0.80	0.80	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.95	0.95	0.95	1.00			
12	0.80	0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	1.00		
14	0.85	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.00		
16	1.00																

Table 7B: Contour P Factor Values — Moderate (3-5.9") Ridge or oriented roughtness height
10 Year EI = 80

downhill slope	Row Grade (%) 0.00	0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	5.00	6.00	7.00	8.00	9.00	10.00	12.00	14.00	18.00
0	1.00																	
2	0.50	0.75	0.85	0.95	1.00													
4	0.40	0.60	0.70	0.75	0.80	0.85	0.90	0.95	1.00									
6	0.40	0.55	0.65	0.70	0.75	0.80	0.80	0.85	0.90	0.95	1.00							
8	0.45	0.60	0.65	0.70	0.70	0.75	0.80	0.80	0.85	0.90	0.90	0.95	1.00					
10	0.50	0.60	0.65	0.70	0.70	0.75	0.75	0.80	0.80	0.85	0.90	0.90	0.95	0.95	1.00			
12	0.50	0.60	0.65	0.70	0.70	0.75	0.75	0.75	0.80	0.80	0.85	0.90	0.90	0.95	0.95	1.00		
14	0.55	0.65	0.65	0.70	0.70	0.75	0.75	0.75	0.80	0.80	0.85	0.85	0.90	0.90	0.90	0.95	1.00	
16	0.60	0.65	0.70	0.70	0.75	0.75	0.75	0.75	0.80	0.80	0.85	0.85	0.85	0.90	0.90	0.95	0.95	1.00
18	0.65	0.70	0.75	0.75	0.75	0.80	0.80	0.80	0.80	0.85	0.85	0.85	0.90	0.90	0.90	0.95	0.95	1.00
20	0.75	0.80	0.80	0.80	0.85	0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	1.00
22	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.00
24	1.00																	

Table 7C: Contour P Factor Values — Ridge Systems with ridge height >= 6"
10 Year EI = 80

downhill slope	Row Grade (%) 0.00	0.50	1.00	1.50	2.00	2.50	3.00	4.00	5.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	24.00
0	1.00																	
2	0.40	0.70	0.80	0.90	1.00													
4	0.20	0.50	0.60	0.70	0.75	0.85	0.90	1.00										
6	0.15	0.40	0.50	0.60	0.65	0.70	0.75	0.85	0.90	1.00								
8	0.15	0.35	0.45	0.50	0.60	0.65	0.65	0.75	0.80	0.90	1.00							
10	0.20	0.35	0.45	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.90	1.00						
12	0.20	0.35	0.40	0.50	0.50	0.55	0.60	0.65	0.70	0.75	0.85	0.95	1.00					
14	0.20	0.35	0.40	0.45	0.50	0.55	0.55	0.65	0.70	0.70	0.80	0.85	0.95	1.00				
16	0.25	0.35	0.45	0.45	0.50	0.55	0.55	0.60	0.65	0.70	0.75	0.85	0.90	0.95	1.00			
18	0.30	0.40	0.45	0.50	0.50	0.55	0.60	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95	1.00		
20	0.35	0.45	0.50	0.55	0.55	0.60	0.60	0.65	0.65	0.70	0.75	0.80	0.85	0.90	0.95	0.95	1.00	
22	0.45	0.50	0.55	0.60	0.60	0.60	0.65	0.65	0.70	0.75	0.75	0.80	0.85	0.90	0.90	0.95	0.95	1.00
24	0.55	0.60	0.60	0.65	0.65	0.70	0.70	0.70	0.75	0.75	0.80	0.85	0.85	0.90	0.90	0.95	0.95	1.00
30	0.80	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95
33	1.00																	

Table 7. P Values for Contouring
10-Year Storm EI = 90

Table 7A: Contour P Factor Values — Low (1-2.9") Ridge or oriented roughness height
10 Year EI = 90

downhill slope	Row Grade (%) 0.00	0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	5.00	6.00	7.00	8.00	9.00	10.00	11.00	12.00
0	1.00																
2	0.85	0.95	0.95	1.00													
4	0.80	0.85	0.90	0.90	0.95	0.95	0.95	1.00									
6	0.75	0.85	0.85	0.90	0.90	0.90	0.95	0.95	0.95	0.95	1.00						
8	0.75	0.80	0.85	0.85	0.90	0.90	0.90	0.90	0.95	0.95	0.95	1.00					
10	0.80	0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	1.00			
12	0.80	0.85	0.85	0.90	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	1.00		
14	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.00			
16	1.00																

Table 7B: Contour P Factor Values — Moderate (3-5.9") Ridge or oriented roughtness height
10 Year EI = 90

downhill slope	Row Grade (%) 0.00	0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	5.00	6.00	7.00	8.00	9.00	10.00	12.00	14.00	18.00
0	1.00																	
2	0.55	0.75	0.85	0.95	1.00													
4	0.45	0.65	0.70	0.80	0.85	0.90	0.90	0.95	1.00									
6	0.45	0.60	0.65	0.70	0.75	0.80	0.85	0.85	0.90	0.95	1.00							
8	0.50	0.60	0.65	0.70	0.75	0.75	0.80	0.80	0.85	0.90	0.95	0.95	1.00					
10	0.50	0.65	0.65	0.70	0.75	0.75	0.80	0.80	0.80	0.85	0.90	0.90	0.95	0.95	1.00			
12	0.55	0.65	0.70	0.70	0.75	0.75	0.80	0.80	0.80	0.85	0.85	0.90	0.90	0.95	0.95	1.00		
14	0.60	0.65	0.70	0.70	0.75	0.75	0.75	0.80	0.80	0.85	0.85	0.85	0.90	0.90	0.95	0.95	1.00	
16	0.60	0.70	0.70	0.75	0.75	0.75	0.80	0.80	0.80	0.85	0.85	0.85	0.90	0.90	0.90	0.95	0.95	1.00
18	0.70	0.75	0.75	0.80	0.80	0.80	0.80	0.80	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.95	0.95	1.00
20	0.80	0.85	0.85	0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	1.00
22	0.90	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.00		
24	1.00																	

Table 7C: Contour P Factor Values — Ridge Systems with ridge height >= 6"
10 Year EI = 90

downhill slope	Row Grade (%) 0.00	0.50	1.00	1.50	2.00	2.50	3.00	4.00	5.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	24.00
0	1.00																	
2	0.40	0.70	0.85	0.90	1.00													
4	0.25	0.50	0.60	0.70	0.75	0.85	0.90	1.00										
6	0.20	0.40	0.50	0.60	0.65	0.70	0.75	0.85	0.90	1.00								
8	0.20	0.40	0.45	0.55	0.60	0.65	0.70	0.75	0.80	0.90	1.00							
10	0.20	0.40	0.45	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.90	1.00						
12	0.20	0.35	0.45	0.50	0.55	0.55	0.60	0.65	0.70	0.75	0.85	0.95	1.00					
14	0.25	0.40	0.45	0.50	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.90	0.95	1.00				
16	0.25	0.40	0.45	0.50	0.50	0.55	0.60	0.65	0.65	0.70	0.80	0.85	0.90	0.95	1.00			
18	0.30	0.45	0.50	0.50	0.55	0.55	0.60	0.65	0.65	0.70	0.75	0.80	0.85	0.90	0.95	1.00		
20	0.40	0.50	0.50	0.55	0.60	0.60	0.60	0.65	0.70	0.70	0.75	0.80	0.85	0.90	0.95	0.95	1.00	
22	0.45	0.55	0.60	0.65	0.65	0.65	0.70	0.70	0.75	0.80	0.85	0.90	0.	0.90	0.90	0.95	0.95	1.00
24	0.55	0.65	0.65	0.70	0.70	0.70	0.70	0.75	0.75	0.80	0.80	0.85	0.85	0.90	0.90	0.95	0.95	1.00
30	0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	0.95	1.00
33	1.00																	

Table 7. P Values for Contouring
10-Year Storm EI = 100

Table 7A: Contour P Factor Values — Low (1-2.9") Ridge or oriented roughness height
10 Year EI = 100

downhill slope	Row Grade (%) 0.00	0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	5.00	6.00	7.00	8.00	9.00	10.00	11.00	12.00
0	1.00																
2	0.90	0.95	0.95	1.00													
4	0.85	0.90	0.90	0.95	0.95	0.95	0.95	1.00									
6	0.80	0.85	0.90	0.90	0.90	0.90	0.95	0.95	0.95	1.00							
8	0.80	0.85	0.85	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	1.00					
10	0.80	0.85	0.85	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	1.00				
12	0.85	0.90	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	0.95	1.00			
14	0.90	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.00				
16	1.00																

Table 7B: Contour P Factor Values — Moderate (3-5.9") Ridge or oriented roughtness height
10 Year EI = 100

downhill slope	Row Grade (%) 0.00	0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	5.00	6.00	7.00	8.00	9.00	10.00	12.00	14.00	18.00
0	1.00																	
2	0.60	0.80	0.90	0.95	1.00													
4	0.45	0.65	0.75	0.80	0.85	0.90	0.90	0.95	1.00									
6	0.45	0.60	0.70	0.75	0.75	0.80	0.85	0.85	0.90	0.95	1.00							
8	0.50	0.65	0.70	0.70	0.75	0.80	0.80	0.85	0.85	0.90	0.95	0.95	1.00					
10	0.55	0.65	0.70	0.75	0.75	0.80	0.80	0.80	0.85	0.85	0.90	0.90	0.95	0.95	1.00			
12	0.60	0.70	0.70	0.75	0.75	0.80	0.80	0.80	0.85	0.85	0.90	0.90	0.90	0.95	0.95	1.00		
14	0.60	0.70	0.70	0.75	0.75	0.80	0.80	0.80	0.80	0.85	0.85	0.90	0.90	0.90	0.95	0.95	1.00	
16	0.65	0.70	0.75	0.75	0.80	0.80	0.80	0.80	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.95	0.95	1.00
18	0.75	0.75	0.80	0.80	0.80	0.85	0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.95	0.95	0.95	1.00
20	0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	0.95	1.00
22	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.00			
24	1.00																	

Table 7C: Contour P Factor Values — Ridge Systems with ridge height >= 6"
10 Year EI = 100

downhill slope	Row Grade (%) 0.00	0.50	1.00	1.50	2.00	2.50	3.00	4.00	5.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	24.00
0	1.00																	
2	0.45	0.75	0.85	0.90	1.00													
4	0.25	0.50	0.60	0.70	0.80	0.85	0.90	1.00										
6	0.20	0.45	0.50	0.60	0.65	0.70	0.75	0.85	0.95	1.00								
8	0.20	0.40	0.50	0.55	0.60	0.65	0.70	0.75	0.85	0.90	1.00							
10	0.20	0.40	0.45	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.90	1.00						
12	0.25	0.40	0.45	0.50	0.55	0.60	0.60	0.65	0.75	0.75	0.85	0.95	1.00					
14	0.25	0.40	0.45	0.50	0.55	0.55	0.60	0.65	0.70	0.75	0.80	0.90	0.95	1.00				
16	0.30	0.40	0.45	0.50	0.55	0.55	0.60	0.65	0.70	0.70	0.80	0.85	0.90	0.95	1.00			
18	0.35	0.45	0.50	0.55	0.55	0.60	0.60	0.65	0.70	0.70	0.80	0.85	0.90	0.90	0.95	1.00		
20	0.40	0.50	0.55	0.60	0.60	0.60	0.65	0.70	0.70	0.75	0.80	0.85	0.85	0.90	0.95	0.95	1.00	
22	0.50	0.60	0.60	0.65	0.65	0.65	0.70	0.70	0.75	0.75	0.80	0.85	0.85	0.90	0.90	0.95	0.95	1.00
24	0.60	0.65	0.70	0.70	0.70	0.75	0.75	0.75	0.80	0.80	0.85	0.85	0.90	0.90	0.90	0.95	0.95	1.00
30	0.85	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.00
33	1.00																	

Table 7. P Values for Contouring
10-Year Storm EI = 120

Table 7A: Contour P Factor Values — Low (1-2.9") Ridge or oriented roughness height
10 Year EI = 120

downhill slope	Row Grade (%) 0.00	0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	5.00	6.00	7.00	8.00	9.00	10.00	11.00	12.00
0	1.00																
2	0.95	0.95	1.00														
4	0.90	0.90	0.95	0.95	0.95	0.95	1.00										
6	0.85	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	1.00							
8	0.85	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	1.00						
10	0.85	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.00				
12	0.90	0.90	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.00				
14	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.00							
16	1.00																

Table 7B: Contour P Factor Values — Moderate (3-5.9") Ridge or oriented roughtness height
10 Year EI = 120

downhill slope	Row Grade (%) 0.00	0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	5.00	6.00	7.00	8.00	9.00	10.00	12.00	14.00	18.00
0	1.00																	
2	0.65	0.85	0.90	0.95	1.00													
4	0.55	0.70	0.75	0.80	0.85	0.90	0.95	0.95	1.00									
6	0.55	0.65	0.70	0.75	0.80	0.85	0.85	0.90	0.90	0.95	1.00							
8	0.60	0.70	0.75	0.75	0.80	0.80	0.85	0.85	0.85	0.90	0.95	0.95	1.00					
10	0.65	0.70	0.75	0.75	0.80	0.80	0.85	0.85	0.85	0.90	0.90	0.95	0.95	1.00				
12	0.65	0.75	0.75	0.80	0.80	0.80	0.85	0.85	0.85	0.90	0.90	0.90	0.95	0.95	0.95	1.00		
14	0.70	0.75	0.75	0.80	0.80	0.80	0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.95	0.95	0.95	1.00	
16	0.75	0.75	0.80	0.80	0.80	0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.95	0.95	0.95	1.00	
18	0.80	0.80	0.85	0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	1.00
20	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.00	
22	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.00										
24	1.00																	

Table 7C: Contour P Factor Values — Ridge Systems with ridge height >= 6"
10 Year EI = 120

downhill slope	Row Grade (%) 0.00	0.50	1.00	1.50	2.00	2.50	3.00	4.00	5.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	24.00
0	1.00																	
2	0.50	0.75	0.85	0.95	1.00													
4	0.30	0.55	0.65	0.70	0.80	0.85	0.90	1.00										
6	0.25	0.45	0.55	0.60	0.65	0.70	0.75	0.85	0.95	1.00								
8	0.25	0.40	0.50	0.55	0.60	0.65	0.70	0.75	0.85	0.90	1.00							
10	0.25	0.40	0.50	0.55	0.60	0.65	0.65	0.70	0.80	0.85	0.90	1.00						
12	0.30	0.40	0.50	0.55	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.95	1.00					
14	0.30	0.45	0.50	0.55	0.55	0.60	0.60	0.65	0.70	0.75	0.85	0.90	0.95	1.00				
16	0.35	0.45	0.50	0.55	0.55	0.60	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95	1.00			
18	0.40	0.50	0.55	0.55	0.60	0.60	0.65	0.70	0.70	0.75	0.80	0.85	0.90	0.90	0.95	1.00		
20	0.50	0.55	0.60	0.60	0.65	0.65	0.70	0.70	0.75	0.75	0.80	0.85	0.90	0.90	0.95	0.95	1.00	
22	0.60	0.65	0.65	0.70	0.70	0.70	0.75	0.75	0.80	0.80	0.85	0.85	0.90	0.90	0.95	0.95	1.00	
24	0.70	0.70	0.75	0.75	0.75	0.80	0.80	0.80	0.80	0.85	0.85	0.90	0.90	0.90	0.95	0.95	0.95	1.00
30	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.00		
33	1.00																	

CONTOUR P FACTOR VALUES
DIRECTIONS FOR USE

To obtain Contour P Factor values, determine the appropriate 10-YEAR STORM EI VALUE for the county from the map in this section.

Select the Contour P Factor values from Table 7 having the 10-year storm EI for the county.

Select the appropriate table (Table 7A, B or C) corresponding to the ridge height [1/] or oriented roughness height [2/], for the appropriate tillage and management system being evaluated.

Contour P Factors for Meadow Crops and No-Till

Whenever farming implements are operated on the contour or crossslope, some P Factor benefit may be considered. For example, during the establishment year of meadow crops and with no-till planting systems, credit may be given for roughness created by secondary tillage, planting, anhydrous ammonia application, wheel tracts, etc. NO P factor value HIGHER than that obtained from Table 7A should be used for cropping systems such as first-year meadow and no-till. P factors are not used for established meadow.

Contour P Factor Values for Low Ridge Heights

Use Table 7A for tillage and cropping systems that typically have a low ridge (or oriented roughness) height of about 1 - 3 inches.

Example:

Given: Small grain crop. 2 inch ridge height. 10-year storm EI of 100, 10% slope (S), 2% row grade.

Solution: From Table 7A, 10-year storm EI of 100, at the intersection of 10% downhill slope and 2% row grade, read a Contour P Factor value = 0.90.

1/ Ridge height refers to the height of ridges created by planting or cultivating operations.

2/ Oriented roughness height refers to ridging or surface roughness resulting from tillage operations.

Contour P Factor Values for Moderate Ridge Heights:

Use Table 7B for tillage and cropping systems that typically have a moderate ridge (or oriented roughness) height of about 3 - 5 inches.

Example:

Given: Row crop. 4 inch ridge height.
10-year storm EI of 100, 10% downhill slope, 2% row grade

Solution: From Table 7B, 10-year storm EI of 100, at the intersection of 10% downhill slope and 2% row grade, read a Contour P Factor value of 0.75

Contour P Factor Values for Ridge Systems

Use Table 7C for ridge systems such as ridge-till, hipping and bedding. Because the values in the table represent the average annual Contour P Factor for this system, they do not account for any seasonal variability in ridge height. To account for the times in which the ridges are partially or completely destroyed, a weighted average must be developed. For the time period in which the ridges are built up, the value of the contour P Factor from Table 7C is multiplied by the %EI for that time. Depending on the height of the ridges or oriented roughness, the value from either Table 7A or 7B is weighted by the %EI occurring during the remainder of the year. These weighted values are added together to give a yearly Contour P Factor.

Example:

Given: Ridge System (corn, ridge-till)
10-year EI = 100, 10% downhill slope, 2% row (furrow) grade
Annual EI distribution curve 16 (Fig. 4)
Corn planted May 1,removing 2" from ridge leaving a 4" ridge height.
Re-ridged at cultivation on June 15, creating a 6" ridge height.

Solution:

Dates	Downhill Slope	Row Grade	Ridge Height	Seasonal P	Percent Ann. EI 1/	P X EI
5/1 - 6/15	10	2	4"	0.75 2/	20 4/	0.15
6/15 - 5/1	10	2	6"	0.55 3/	80 4/	0.44
				Average Annual Contour P Factor Value	=	0.59
				Rounded	=	0.60

Footnotes:
1/ The total of this column should always be 100
2/ Value obtained from Table 7B, 10-year EI = 100
3/ Value obtained from Table 7C, 10-year EI = 100
4/ Values obtained from Figure 4,EI Curve No. 16

This same procedure may be used when a chisel plow or similar tool is used that leaves the soil surface ridged or roughened during part of the year but is destroyed before planting.

Contour P Factor Values for Crop Rotations:

For crop rotations, obtain yearly values for individual crops. Calculate an average annual Contour P Factor value for each year in the rotation. This value is multiplied times the annual C factor for each crop to determine an annual CP factor and a CP factor for the rotation.

Example:

Given: Crop rotation of corn, soybeans, wheat, meadow, meadow, using fall moldboard plow for all crops. Ten year storm EI = 100; Downhill slope = 10%; row grade = 2%.

Solution:

Rotation	Crop	C	P	CP
Year 1	Corn	0.17	0.75	0.1275
Year 2	Soybeans	0.40	0.75	0.3000
Year 3	Wheat	0.13	0.90	0.1170
Year 4	Meadow	0.02	1.00	0.0200
Year 5	Meadow	0.02	1.00	0.0200
				0.5845 ÷ 5 yrs = 0.1169

Thus the "CP" for the rotation is 0.12 (rounded)

Figure 4. Percentage of average annual EI from January 1 and dates indicated.

EI Curve No.	JAN 1	JAN 15	FEB 1	FEB 15	MAR 1	MAR 15	APR 1	APR 15	MAY 1	MAY 15	JUNE 1	JUNE 15	JULY 1	JULY 15	AUGUST 1	AUGUST 15	SEPT 1	SEPT 15	OCT 1	OCT 15	NOV 1	NOV 15	DEC 1	DEC 15
14	0	0	0	1	2	3	4	6	9	14	20	28	39	52	63	72	80	87	91	94	97	98	99	100
16	0	1	2	3	4	6	8	10	14	18	25	34	45	56	64	72	79	84	89	92	96	98	99	100
19	0	1	3	6	9	12	16	21	26	31	37	43	50	57	64	71	77	81	85	88	91	93	95	97

Table 8

TERRACES P Values

The following P factors are to be used only when terraces are constructed so farming operations will be done to meet the contouring specifications. These P values may be used in addition to the contouring or contour stripcropping values.

Horizontal Interval (ft)	Closed Outlets 1/	Open outlets with percent grade of 2/ 0.1-0.3	0.4-0.7	0
Less than 110	0.5	0.6	0.7	1.0
110 - 140	0.6	0.7	0.8	1.0
140 - 180	0.7	0.8	0.9	1.0
180 - 225	0.8	0.8	1.0	1.0
225 - 300	0.9	0.9	1.0	1.0
300 up	1.0	1.0	1.0	1.0

1/ "P" factors for closed outlet terraces also apply to terraces with underground outlets and to level terraces with open outlets.

2/ The channel grade is measured in the 300 feet of terrace channel closest to the outlet.

T and K Values for Illinois Soils

Selected soil properties used in calculating soil loss. Surface texture is abbreviated using standard USDA soil texture terms; T is the tolerable soil loss (where dual values occur, e.g. 5-4, the second value is for severely eroded phases of the soil series); K is the erosion factor. This is a state listing of the soil series that are used in naming mapping units in Illinois.

SIR Number	Soil Name	Surface Texture	T	K	T/K
IN0076	ADE	FS LFS LS	5	.17	29.4
MI0028	ADRIAN	MUCK SP	4		
MO0149 MO0154	AHOLT	C SIC	5	.28	17.9
IN0050	ALFORD	SICL	4	.37	10.8
IN0050 IN0265	ALFORD	SIL	5-4	.37	13.5-10.8
MI0123	ALGANSEE	LS LFS	5	.17	29.4
MI0123	ALGANSEE	S FS	5	.15	33.3
MI0123	ALGANSEE	SL FSL	5	.24	20.8
IL0157 IL0279	ALLISON	SICL SIL	5	.28	17.9
IL0090 IL0414	ALVIN	LS LFS	5	.17	29.4
IL0422 IL0090 IL0414	ALVIN	VFSL FSL SL	5	.24	20.8
IL0422	ALVIN	SIL	5	.37	13.5
IL0369 IL0103 IL0356	AMBRAW	CL L SCL	5	.28	17.9
IL0103 IL0356	AMBRAW	SICL	5	.32	15.6
IL0092	ANDRES	SICL SIL L	5	.28	17.9
IL0395	APPLERIVER	SIL	4	.37	10.8
IL0193	APTAKISIC	SIL	5	.37	13.5
NE0501	AQUENTS	VAR	5		
IL0170	ARGYLE	SICL	4	.32	12.5
IL0170	ARGYLE	SIL	5	.32	15.6
WI0087 WI0314	ARENZVILLE	SIL	5	.37	13.5
IN0057	ARMIESBURG	SICL SIL	5	.28	17.9
IN0244	ARMIESBURG	SICL SIL	5	.32	15.6
IL0163	ASHDALE	SICL	4	.32	12.5
IL0163	ASHDALE	SIL	5	.32	15.6

SIR Number	Soil Name	Surface Texture	T	K	T/K
IL0031	ASHKUM	SIC SICL SIL	5	.28	17.9
IL0204 IL0284	ASSUMPTION	SICL	4	.32	12.5
IL0204 IL0284	ASSUMPTION	SIL	5	.28	17.9
IA0068 IA0569	ATKINSON	L SIL	4	.24	16.7
IA0336	ATKINSON	L SIL	5	.28	17.9
IL0077	ATLAS	CL	2	.32	6.3
IL0077	ATLAS	SICL	2	.43	4.7
IL0077	ATLAS	SIL	3	.43	7.0
IL0045 IL0269	ATTERBERRY	SIL	5	.32	15.6
MI0219	AURELIUS	MUCK	1		
MI0471	AURELIUS	MUCK	2		
IL0057	AVA	SICL	3	.43	7.0
IL0057	AVA	SIL	4	.43	9.3
IN0075	AYR	LS LFS	5	.17	29.4
IA0069	BACKBONE	LS	4	.17	23.5
IA0069	BACKBONE	SL FSL	4	.20	20.0
IL0207	BANLIC	SI SIL	4	.43	9.3
IL0192 IL0307	BARRINGTON	SIL	5	.32	15.6
IL0437 IL0443	BARTELSO	SIL SICL	5		
IL0164 IL0258	BATAVIA	SIL	5	.32	15.6
KY0046	BAXTER	CR-SICL	5	.24	20.8
KY0046 KY0156	BAXTER	CR-SIL CB-SIL CBV-SIL	5	.28	17.9
KY0090	BAXTER	SICL	4	.32	12.5
KY0090	BAXTER	SIL	4	.37	10.8
IL0046	BAYLIS	SICL	3	.37	8.1
IL0046	BAYLIS	SIL	4	.37	10.8
IL0093	BEARDSTOWN	L SIL	5	.32	15.6
KY0036	BEASLEY	SICL SIC	3	.32	9.4
KY0036	BEASLEY	SIL	3	.43	7.0
IL0023	BEAUCOUP	SICL SIL	5	.32	15.6
MN0378	BEAVERCREEK	CB-FSL CB-SIL	3	.17	17.6
MN0378	BEAVERCREEK	CB-L FSL VFSL L SIL	3	.24	12.5

SIR Number	Soil Name	Surface Texture	T	K	T/K
IN0039	BEDFORD	SIL	4-3	.43	9.3-7.0
IL0094	BEECHER	SIL	3	.37	8.1
IL0004	BELKNAP	SIL	5	.37	13.5
PA0004	BERKS	CN-L CN-SIL CNV-L CNV-SIL	3	.17	17.6
IL0048	BILLETT	L	5	.28	17.9
IL0048	BILLETT	SL FSL	5	.20	25.0
IL0297 IL0359	BILLETT	FSL SL	4	.20	20.0
IL0415	BILLETT	FSL	4	.20	20.0
IL0415	BILLETT	L	4	.28	14.3
IL0319	BINGHAMPTON	L	4	.24	16.7
IL0319	BINGHAMPTON	SL	4	.20	20.0
IL0010	BIRDS	SIL	5	.43	11.6
IL0139	BIRKBECK	SICL	5-4	.37	13.5-10.8
IL0139	BIRKBECK	SIL	5	.37	13.5
MO0014	BLACKOAR	SIL	5	.28	17.9
IL0026	BLAIR	CL SICL	4	.37	10.8
IL0026	BLAIR	SIL L	5	.37	13.5
IA0172	BLAKE	SICL SIL	5	.32	15.6
IA0244	BLAKE	SICL	5	.28	17.9
IL0165	BLOOMFIELD	FS S LFS LS	5	.15	33.3
IL0014 IL0354	BLOUNT	SICL SIL L	3	.43	7.0
IL0003	BLUFORD	SIL	3	.43	7.0
IL0131	BOLD	SIL	5-4	.43	11.6-9.3
IL0032	BONFIELD	L SL	3	.24	12.5
IL0008 IL0365	BONNIE	SIL	5	.43	11.6
MO0064 MO0155	BOOKER	MK-C SIC C	5	.28	17.9
MO0155	BOOKER	SICL	5	.37	13.5
IL0302	BOONE	LFS	2	.15	13.3
WI0109	BOONE	FS S	4	.15	26.6
WI0109	BOONE	LFS LS	4	.17	23.5
WI0109	BOONE	FSL	4	.24	16.7
MS0055 MS0110	BOWDRE	SIC C SICL	3	.37	8.1

SIR Number	Soil Name	Surface Texture	T	K	T/K
IL0156	BOWES	SIL	5	.32	15.6
MI0283 MI0415	BOYER	LS	4	.17	23.5
MI0415	BOYER	LS	3	.17	17.6
MI0283 MI0415	BOYER	L SL FSL VFSL	4-3	.24	16.7-12.5
KY0009	BRANDON	SICL	2	.32	6.3
KY0009	BRANDON	SIL	3	.37	8.1
IL0104 IL0364	BRENTON	SIL	5	.28	17.9
IL0155	BROADWELL	SIL	5	.32	15.6
IL0105	BROOKLYN	SIL	3	.37	8.1
OH0030	BROOKSIDE	SICL SIL	5-4	.37	13.5-10.8
OH0279	BROOKSIDE	BY-SICL ST-SICL	5	.28	17.9
IL0095	BRYCE	SIC SICL	5	.28	17.9
IL0250	BRYCE	SICL	4	.28	14.3
WI0050	BRUKHARDT	SL	3	.20	15.0
WI0050	BURKHARDT	L	3	.24	12.5
WI0050	BURKHARDT	GR-FSL GR-SL	3	.15	20.0
IL0097	BURNSIDE	SIL L	3	.37	8.1
IL0141	CAIRO	SIC C	4	.28	14.3
IL0243	CAIRO	SIC C	5	.28	17.9
IL0248	CALAMINE	SIC	3	.28	10.7
WI0111	CALAMINE	L SIL SICL	4	.28	14.3
IA0075 IL0419	CALCO	SICL SIL	5	.28	17.9
IL0002 IL0288	CAMDEN	SICL	4	.37	10.8
IL0273 IL0288	CAMDEN	SIL	5	.37	13.5
IL0002 IL0006					
IL0299					
MN0059 MN0095	CANISTEO	CL SICL	5	.24	20.8
MN0059 MN0095	CANISTEO	SIL L	5	.32	15.6
MN0328	CANISTEO	ST-CL ST-L	5	.24	20.8
MN0417	CANISTEO	L SIL	5	.28	17.9
IL0129	CAPE	SICL	5	.32	15.6
IL0044	CARMI	L	4	.28	14.3
IL0044	CARMI	SL	4	.20	20.0

SIR Number	Soil Name	Surface Texture	T	K	T/K
WI0020	CASCO	CL L SCL	2	.32	6.2
WI0020	CASCO	GR-SL	2	.24	8.3
WI0074	CASCO	L SIL	3	.32	9.3
WI0074	CASCO	SL FSL	3	.24	12.5
WI0074	CASCO	GR-SL	3	.17	17.6
IL0145 IL0280	CATLIN	SIL SICL	5	.32	15.6
MI0015	CERESCO	L SIL	5	.24	20.8
MI0015	CERESCO	LS LFS	5	.17	29.4
MI0015	CERESCO	SL FSL	5	.20	25.0
IL0106	CHANNAHON	L SIL	1	.37	2.7
IL0142	CHATSWORTH	SIC C	3	.32	9.4
IL0142	CHATSWORTH	SICL SIL L	3	.43	7.0
IL0127	CHAUNCEY	SIL	4	.37	10.8
IA0119 IA0123	CHELSEA	FS S	5	.15	33.3
IA0119 IA0123	CHELSEA	LFS LS	5	.17	29.4
IL0438	CHENOA	SIL SICL	5	.28	17.9
IL0162	CHUTE	FS S	5	.15	33.3
IL0162	CHUTE	FSL	5	.20	25.0
IL0162	CHUTE	LFS	5	.17	29.4
IL0126	CISNE	SIL	3	.37	8.1
IL0290	CISNE	SIL	3	.32	9.4
IL0205	CLARENCE	SIC	3	.28	10.7
IL0205	CLARENCE	SICL SIL	3	.37	8.1
IL0049	CLARKSDALE	SIL	5	.37	13.5
MO0025	CLARKSVILLE	CR-SIL CR-L CRV-SIL CRV-L CRX-SIL CRX-L	3	.28	10.7
MO0204	CLARKSVILLE	ST-SIL ST-L	3	.28	10.7
IA0116 IA0243	CLINTON	SIL SICL	5	.37	13.5
IA0472 IA0546	CLINTON	SIL SICL	5-4	.43	11.6-9.3
IA0046	CLYDE	CL	5	.24	20.8
IA0046	CLYDE	SIL L SICL	5	.28	17.9
IL0050	COATSBURG	CL SICL	2	.37	5.4
IL0050	COATSBURG	SIL	3	.37	8.1
IL0177	COFFEEN	SIL	5	.32	15.6

SIR Number	Soil Name	Surface Texture	T	K	T/K
MI0040	COHOCTAH	FSL SL MK-VFSL	5	.24	20.8
MI0040	COHOCTAH	L SIL VFSL	5	.28	17.9
MI0040	COHOCTAH	LFS	5	.17	29.4
IA0071 IA0305	COLO	SICL SIL	5	.28	17.9
IA0291	COLO	SIL	5	.37	13.5
IA0305	COLO	LS	5	.17	29.4
WI0181	COLOMA				
IL0036	COLP	SICL	2	.43	4.7
IL0036	COLP	SIL	3	.43	7.0
MN0066 MN0437 MN0518	COMFREY	CL L SIL SICL	5	.28	17.9
IN0037 IN0425	CORWIN	CL L SIL	5	.28	17.9
IN0425	CORWIN	FSL	5	.20	25.0
IL0341	COULTERVILLE	SICL	2	.43	4.7
IL0341 IL0353	COULTERVILLE	SIL	3	.43	7.0
IL0025	COWDEN	SIL	3	.37	8.1
IL0161	COYNE	FSL L	5	.20	25.0
IL0161	COYNE	LS	5	.17	29.4
IN0210	CRAIGMILE	FSL SL	4	.20	20.0
IN0210	CRAIGMILE	MK-SIL	4	.37	10.8
IN0104 IN0285	CRANE	SIL L	5	.28	17.9
IN0466	CRAWLEYVILLE	FSL	5	.24	20.8
IN0466	CRAWLEYVILLE	L SIL	5	.32	15.6
IL0098	CREAL	SIL	5	.37	13.5
WI0196	DAKOTA	L	4	.24	16.7
IN0038	DANA	SICL	5	.37	13.5
IN0038 IN0155	DANA	SIL	5	.32	15.6
IL0110	DARMSTADT	SICL	2	.43	4.7
IL0110 IL0291	DARMSTADT	SIL	3	.43	7.0
IN0074	DARROCH	FSL	5	.20	25.0
IN0286 IN0423 IN0074 IN0143 IN0427 IN0445	DARROCH	SIL L	5	.28	17.9
IL0051 IL0252 IL0406	DARWIN	SIC C SICL SIL	5	.28	17.9

SIR Number	Soil Name	Surface Texture	T	K	T/K
IL0022 IL0264 IL0278	DEL REY	SICL SIL L	3	.43	7.0
IL0190	DENNY	SIL	3	.37	8.1
IL0079	DENROCK	SICL SIL	3	.37	8.1
IL0151	DERINDA	SICL	2	.43	4.7
IL0151 IL0416	DERINDA	SIL	3	.43	7.0
IA0078 IA0183 IA0214 IA0520	DICKINSON	FSL SL	4	.20	20.0
IA0078 IA0183 IA0520	DICKINSON	L	4	.28	14.3
IL0107	DISCO	SL FSL	4	.20	20.0
MO0017 MO0176	DOCKERY	SICL SIL	5	.37	13.5
WI0053	DODGE	SIL	5	.37	13.5
WI0184	DODGEVILLE	SIL SICL	4	.28	14.3
IA0095	DORCHESTER	SIL L SICL	5	.37	13.5
IL0237	DOUGLAS	SIL	5-4	.32	15.6-12.5
MI0006	DOWAGIAC	L SIL	4	.28	14.3
MI0006	DOWAGIAC	SL	4	.20	20.0
IA0117 IA0341	DOWNS	SICL SIL	5	.28	17.9
IA0303 IA0542	DOWNS	SICL SIL	5	.32	15.6
IL0013	DRESDEN	SIL L	4	.28	14.3
IL0013	DRESDEN	SL	4	.20	20.0
IL0108 IL0281 IL0357 IL0389	DRUMMER	SICL SIL	5	.28	17.9
IL0202	DRURY	SI SIL	5	.43	11.6
IL0206 IL0263 IL0391	DU PAGE	SIL L	5	.28	17.9
IA0098 IA0395 IA0573	DUBUQUE	SICL SIL	4	.37	10.8
IA0220	DUBUQUE	SICL SIL	4-3	.37	10.8-8.1
IA0485	DUBUQUE	SICL SIL	3	.37	8.1
WI0185	DUNBARTON	SIL	2	.37	5.4
IL0052	DUPO	SIL	4	.37	10.8

SIR Number	Soil Name	Surface Texture	T	K	T/K
IL0261	DURAND	SIL	5-4	.32	15.6-12.5
IL0024	EBBERT	SICL SIL	5	.32	15.6
KY0053	EDEN	FL-SICL FL-SIC FL-C FL-SIL	3	.17	17.6
KY0130	EDEN	SICL SIC SIL	3	.43	7.0
IL0211	EDGINGTON	SIL	4	.32	12.5
IL0245	EDINBURG	SICL SIL	3	.37	8.1
WI0183	EDMUND	SIL	2	.28	7.1
MI0016	EDWARDS	SP MUCK	4		
IL0038 IL0327	EL DARA	L SIL	5-4	.32	15.6-12.5
IL0038 IL0327	EL DARA	SL FSL	5-4	.24	20.8-16.7
IL0136 IL0282	ELBURN	SIL	5	.28	17.9
IL0178 IL0426	ELCO	SICL	4	.37	10.8
IL0178 IL0426	ELCO	SIL	5	.37	13.5
IL0171	ELEROY	SICL	3	.37	8.1
IL0171	ELEROY	SIL	4	.37	10.8
IL0398	ELIZABETH	FL-SIL CNV-SIL	2	.20	10.0
IL0398	ELIZABETH	SICL CL SIL L	2	.32	6.3
IL0215 IL0361	ELKHART	SICL	4	.32	12.5
IL0215 IL0361	ELKHART	SIL	5	.32	15.6
IL0096	ELLIOTT	SICL SIL L	4	.28	14.3
IL0244 IL0346	ELSAH	SIL L	3	.37	8.1
IL0350	ELSAH	GR-SIL GR-L GRV-SIL GRV-L	3	.28	10.7
WI0054	ELVERS	SIL	5	.37	13.5
IL0236	EMMA	SICL	5-4	.37	13.5-10.8
IN0062 IN0546	EVANSVILLE	SICL SIL	5	.37	13.5
MN0082 MN0294	FAXON	CL L SIL SCL SICL	4	.28	14.3
IA0082 IA0376 IA0396	FAYETTE	SIL	5	.32	15.6
IA0328	FAYETTE	SICL SIL	4	.43	9.3
IA0342 IA0564	FAYETTE	SICL SIL	5	.32	15.6

SIR Number	Soil Name	Surface Texture	T	K	T/K
MN0011	FIELDON	FSL	4	.20	20.0
MN0011	FIELDON	L SCL	4	.28	14.3
IN0032 IN0132	FINCASTLE	SIL	5	.37	13.5
IL0053	FISHHOOK	SICL	3	.37	8.1
IL0053	FISHHOOK	SIL	4	.37	10.8
IL0186	FLAGG	SICL	4	.37	10.8
IL0186	FLAGG	SIL	5	.37	13.5
IA0207 IA0358	FLAGLER	SL FSL	4	.20	20.0
IL0137	FLANAGAN	SICL SIL	5	.28	17.9
WI0026 WI0438	FOX	SIL	4	.37	10.8
WI0026 WI0438	FOX	SL FSL	4	.24	16.7
WI0026 WI0438	FOX	CL SCL	3	.32	9.4
WI0459	FOX	GR-L	4	.28	14.3
IL0115	FRANKFORT	SIC	2	.37	5.4
IL0115	FRANKFORT	SICL SIL	3	.37	8.1
IA0109	FRANKVILLE	SIL	4	.32	12.5
IA0585	FRANKVILLE	SIL	4	.37	10.8
WI0055	FRIESLAND	FSL	5	.20	25.0
KY0047	FRONDORF	SICL	3	.32	9.4
KY0047	FRONDORF	SIL	3	.37	8.1
IL0305	FULTS	SIC SICL	5	.28	17.9
WI0174	GALE	SIL	3	.37	8.1
WI0234	GALE	SIL	4	.37	10.8
IL0436 IL0441	GEFF	SIL	5	.37	13.5
IN0045 IN0180	GENESEE	FSL SL	5	.24	20.8
IN0045 IN0180	GENESEE	SICL SIL L	5	.37	13.5
IN0300	GENESEE	GR-L	5	.24	20.8
IN0300	GENESEE	SIL L	5	.32	15.6
IN0003 IN0110 IN0147 IN0484	GILFORD	FSL SL L MK-SL MK-FSL	4	.20	20.0
IN0363	GILFORD	FSL	5	.20	25.0
IN0484	GILFORD	L	4	.28	14.3
IN0063 IN0547	GINAT	SIL L	4	.43	9.3
IL0027	GORHAM	SIC SICL SIL	4	.32	12.5

SIR Number	Soil Name	Surface Texture	T	K	T/K
IA0203 IA0566	GOSPORT	CL SICL SIL L	3	.43	7.0
IA0482	GOSPORT	CL SICL SIL L	2	.43	4.7
MO0013 MO0089 MO0256	GOSS	GR-SIL CR-SIL ST-SIL STV-SIL	2	.24	8.3
MO0013 MO0256	GOSS	CRV-SIL GRV-SIL	2	.10	20.0
MO0013 MO0256	GOSS	SIL L	2	.37	5.4
MI0029 MI0395	GRANBY	FSL SL	5	.20	25.0
MI0029 MI0395	GRANBY	LS LFS	5	.17	29.4
MI0029 MI0395	GRANBY	S FS	5	.15	33.3
IL0313	GRANTFORK	CL	5-4	.37	13.5-10.8
IL0313	GRANTFORK	L SIL	5	.37	13.5
IL0313	GRANTFORK	SICL	5-4	.37	13.5-10.8
IL0408	GRANTFORK	SIL	3	.43	7.0
IL0099	GRANTSBURG	SIL	4-3	.43	9.3-7.0
IL0440	GRAYMONT	SICL	4	.32	12.5
IL0440	GRAYMONT	SIL	5	.32	15.6
IL0148	GRAYS	SIL	5-4	.32	15.6-12.5
IL0271	GRAYS	SIL VFSL	5	.32	15.6
WI0057	GRELTON	FSL	5	.24	20.8
IL0087	GRISWOLD	L SIL	5-4	.32	15.6-12.5
IL0087	GRISWOLD	SL	5-4	.20	25.0-20.0
MO0015	HAMBURG	SIL SI VFSL	5	.43	11.6
IL0100	HARCO	SIL	5	.32	15.6
IL0147 IL0320 IL0348	HARPSTER	SICL SIL	5	.28	17.9
IL0239	HARRISON	SIL	5	.32	15.6
IL0201 IL0321	HARTSBURG	SICL SIL	5	.28	17.9
IL0185 IL0339	HARVARD	SIL	5	.32	15.6
MN0124 MN0430	HAYFIELD	L SIL	4	.32	12.5
IN0030	HAYMOND	SIL SI	5	.37	13.5
IA0170	HAYNIE	SIL VFSL FSL	5	.32	15.6
IA0241 IA0353	HAYNIE	SICL SIL VFSL	5	.37	13.5
IA0315	HAYNIE	LFS	5	.17	29.4
IA0315	HAYNIE	SIC	5	.28	17.9

SIR Number	Soil Name	Surface Texture	T	K	T/K
IL0135	HENNEPIN	GR-SL	3-2	.17	17.6-11.8
IL0135	HENNEPIN	L SIL CL	3-2	.32	9.4-6.3
IL0135	HENNEPIN	SL GR-SL	3-2	.24	12.5-8.3
IL0255	HENNEPIN	SIL L CL GR-SL	5-4	.32	15.6-12.5
IL0255	HENNEPIN	SL	5	.24	20.8
IN0458	HENSHAW	SIL	5	.37	13.5
KY0002	HENSHAW	SIL	4	.43	9.3
KY0191	HENSHAW	SIL	5	.43	11.6
IL0172	HERBERT	SIL	5	.32	15.6
IL0029	HERRICK	SIL	5	.28	17.9
IL0383	HESCH	SL	4	.20	20.0
IL0347 IL0425	HICKORY	CL SICL	4	.37	10.8
IL0019 IL0347 IL0425	HICKORY	L SIL	5	.37	13.5
IN0072	HIGH GAP	CL	3	.37	8.1
IN0072	HIGH GAP	SICL SIL L	4	.37	10.8
IL0216	HITT	SICL	3	.32	9.4
IL0216	HITT	SIL L	4	.32	12.5
IL0262	HITT	SL FSL	4	.20	20.0
OH0032	HOLLY	SICL SIL L	5	.28	17.9
IN0239	HOLTON	SIL L	5	.37	13.5
IN0041 IN0281	HOMER	L SIL	4	.37	10.8
IN0041	HOMER	SL FSL	4	.24	16.7
IL0242	HONONEGAH	LCOS LS	4	.17	23.5
IL0242	HONONEGAH	SL FSL	4	.20	20.0
IL0080	HOOPESTON	L	4	.28	14.3
IL0080 IL0358	HOOPESTON	SL FSL	4	.20	20.0
IN0054	HOSMER	SICL	3	.43	7.0
IN0054	HOSMER	SIL	4-3	.43	9.3-7.0
MI0024 MI0291 MI0383 MI0390	HOUGHTON	MPT MUCK PEAT SP	5		
IL0028 IL0312	HOYLETON	SIL	3	.32	9.4
IL0086	HUEY	SIL	3	.43	7.0
WV0005	HUNTINGTON	SIL	5	.28	17.9

SIR Number	Soil Name	Surface Texture	T	K	T/K
IL0054 IL0309	HUNTSVILLE	SIL	5	.28	17.9
IL0102	HURST	SICL	2	.43	4.7
IL0102 IL0203	HURST	SIL	3	.43	7.0
IN0070	IONA	SIL	5-4	.37	13.5-10.8
IL0055	IPAVA	SIL SICL	5	.28	17.9
IN0051	IVA	SIL	5	.43	11.6
IL0091 IL0251	JACOB	C SIC	5	.28	17.9
IN0078	JASPER	FSL	5	.20	25.0
IN0078 IN0154	JASPER	SIL L	5	.28	17.9
IN0154	JASPER	FSL	5-4	.20	25.0-20.0
IN0154	JASPER	SIL L	4	.28	14.3
IN0375	JASPER	SIL	5	.32	15.6
IL0153	JOLIET	CL L SIL SICL	2	.28	7.1
IL0160	JOSLIN	SIL L	5	.32	15.6
IL0056 IL0295	JOY	SIL	5	.28	17.9
IL0111 IL0209	JULES	SIL L	5	.37	13.5
WI0287	JUNEAU	SIL	5	.37	13.5
IL0217	KANE	SIL L	4	.28	14.3
IL0217	KANE	SL	4	.20	20.0
IL0033	KANKAKEE	CL L SCL	4	.28	14.3
IL0033	KANKAKEE	SL FSL	4	.20	20.0
IL0016 IL0254	KARNAK	SIC C SICL SIL	5	.32	15.6
IL0058	KELLER	SIL	4	.37	10.8
IL0183	KELTNER	SICL	3	.32	9.4
IL0183	KELTNER	SIL	4	.32	12.5
IL0296	KELTNER	SICL	4	.32	12.5
IL0296	KELTNER	SIL	5	.32	15.6
IL0154 IL0208 IL0315	KENDALL	SIL	5	.37	13.5
IA0016 IA0242	KEOMAH	SIL SICL	3	.37	8.1
IL0233	KERNAN	SIL	4	.37	10.8
WI0049	KIDDER	L SIL	5	.37	13.5

SIR Number	Soil Name	Surface Texture	T	K	T/K
IL0001	KNIGHT	SIL	5	.32	15.6
IL0189 IL0342	LA HOGUE	L SIL	5	.28	17.9
IL0189	LA HOGUE	SL	5	.20	25.0
IL0199	LA ROSE	CL SICL	4	.32	12.5
IL0199	LA ROSE	L SIL	5	.32	15.6
MN0379	LACRESCENT	CN-SIL FL-SIL CB-SICL CB-L MFL-L FLV-SIL	3	.20	15.0
MN0379	LACRESCENT	SIL L	3	.28	10.7
MN0351	LAMOILLE	SIL	3	.43	7.0
IA0080 IA0489	LAMONT	FSL SL VFSL	4	.24	16.7
IA0080 IA0489	LAMONT	L	5	.24	20.8
IA0580	LAMONT	L FSL SL VFSL	5	.24	20.8
IL0021 IL0265 IL0366	LANDES	FSL SL VFSL	4	.20	20.0
IL0021	LANDES	L SIL	4	.32	12.5
IL0021 IL0265	LANDES	LS LVFS LFS	4	.17	23.5
IL0265	LANDES	L SIL	4	.28	14.3
OH0133	LANIER	FSL SL	3	.20	15.0
OH0133	LANIER	GR-FSL GR-SL	3	.15	20.0
IA0051	LAWLER	CL L SIL	4	.24	16.7
IA0357	LAWLER	L SIL	4	.28	14.3
IL0166	LAWNDALE	SIL	5	.32	15.6
WI0044	LAWSON	SIL	5	.28	17.9
TN0094	LAX	SIL	3	.43	7.0
IL0123	LENA	SIL	5	.28	17.9
IL0123 IL0283	LENA	SP MUCK	5		
IL0316	LENZBURG	CL SICL SIL L	5	.37	13.5
IL0316 IL0396	LENZBURG	ST-L ST-SIL ST-SICL ST-CL GR-L GR-SICL GR-CL	5	.28	17.9
IL0343	LENZBURG	SICL SIL L	5	.37	13.5
IL0146 IL0385	LISBON	SIL	5	.28	17.9
IL0059	LITTLETON	SIL	5	.32	15.6
IL0375	LITTLETON	SIL	5	.28	17.9

SIR Number	Soil Name	Surface Texture	T	K	T/K
IL0218	LOMAX	L	5	.28	17.9
IL0218	LOMAX	SL	5	.20	25.0
IL0182	LORAN	SICL	3	.43	7.0
IL0182	LORAN	SIL	4	.28	14.3
IL0399	LORAN	SICL	5	.28	17.9
IL0020	LORENZO	CL	2	.28	7.1
IL0020	LORENZO	L SIL	3	.28	10.7
IL0020	LORENZO	SL	3	.20	15.0
IL0334	LUKIN	SIL	5	.37	13.5
IL0310	MARINE	SI	3	.43	7.0
IL0310	MARINE	SIL	3	.37	8.1
IL0219 IL0423	MARISSA	SIL	5	.37	13.5
IL0116 IL0275	MARKHAM	SICL	2	.37	5.4
IL0116 IL0275	MARKHAM	SIL	3	.37	8.1
IN0044 IN0549	MARKLAND	SICL	2	.43	4.7
IN0044 IN0549	MARKLAND	SIL	3	.43	7.0
IL0180 IL0326	MARSEILLES	CL SICL	3	.37	8.1
IL0180 IL0326	MARSEILLES	SIL	4	.37	10.8
MN0104 MN0324 MN0521	MARSHAN	CL SICL SIL L	4	.28	14.3
IN0018 IN0274 IN0528	MARTINSVILLE	FSL SL	5	.24	20.8
IN0018 IN0271 IN0274	MARTINSVILLE	L SIL	5	.37	13.5
IN0271	MARTINSVILLE	CL	4	.37	10.8
IN0315	MARTINSVILLE	L	5	.32	15.6
IN0455 IN0528	MARTINSVILLE	SIL	5	.37	13.5
IN0528	MARTINSVILLE	SCL	4	.32	12.5
IL0118	MARTINTON	SIL SICL	5	.28	17.9
IL0181	MASSBACH	SICL	3	.32	9.4
IL0181	MASSBACH	SIL	4	.32	12.5
MI0037 MI0239	MATHERTON	SIL L	4	.28	14.3
MI0037	MATHERTON	SIL	4	.32	12.5
MI0037 MI0239	MATHERTON	SL	4	.20	20.0
MI0440	MATHERTON	SIL	4	.37	10.8

SIR Number	Soil Name	Surface Texture	T	K	T/K
IN0012	MAUMEE	LFS LS S MK-LS MK-S MK-LFS	5	.17	29.4
IN0407	MAUMEE	FSL SL MK-FSL	5	.20	25.0
IN0407	MAUMEE	SIL	5	.28	17.9
WI0102	MAYVILLE	SIL	5	.37	8.1
IL0234	MCFAIN	SIC SICL SIL	5	.28	17.9
IN0052 IN0112	MCGARY	SICL SIL	3	.43	7.0
IL0191 IL0247	MCHENRY	SIL	5-4	.37	13.5-10.8
IL0430	MEADOWBANK	SIL	5	.28	17.9
WI0166	MEDARY	SIL	3	.37	8/1
OH0015	MEDWAY	CL	5	.24	20.8
OH0015	MEDWAY	SICL SIL L	5	.28	17.9
IN0016 IN0416	METEA	LS LFS	5	.17	29.4
IN0016 IN0416	METEA	S FS	5	.15	33.3
IN0013	MIAMI	CL SICL	3	.37	8.1
IN0013	MIAMI	FSL SL	4	.24	16.7
IN0013	MIAMI	SIL L	4	.37	10.8
IN0243	MIAMI	CL L SIL	5-4	.37	13.5-10.8
IN0243	MIAMI	FSL	5	.24	20.8
IL0167	MIDDLETOWN	SICL	4	.37	10.8
IL0167 IL0409	MIDDLETOWN	SIL	5	.37	13.5
IL0040 IL0303 IL0314 IL0317 IL0397 IL0418	MILFORD	SIC SICL CL SIL	5	.28	17.9
IL0324	MILFORD	SIC SICL	4	.28	14.3
IL0109 IL0377	MILLBROOK	SIL	5	.32	15.6
IL0222	MILLINGTON	L SIL SICL CL	5	.28	17.9
OH0018	MILLSDALE	CL	4	.24	16.7
OH0018	MILLSDALE	SICL	4	.28	14.3
OH0018	MILLSDALE	SIL L	4	.32	12.5
MN0288	MINNEISKA	L SIL VFSL	5	.28	17.9
MN0288	MINNEISKA	SL FSL	5	.20	25.0
IL0124	MOKENA	SICL SIL L	4	.28	14.3
IL0223	MONA	SCL SICL	3	.28	10.7
IL0223	MONA	SIL L CL	4-3	.28	14.3-10.7

SIR Number	Soil Name	Surface Texture	T	K	T/K
IL0277	MONEE	SICL SIL L	3	.37	8.1
IN0007 IN0548	MONTGOMERY	SIC SICL	5	.28	17.9
IN0007	MONTGOMERY	SIL	5	.32	15.6
IN0157	MONTGOMERY	SICL	5	.37	13.5
IN0098	MONTMORENCI	SIL L	4-3	.32	12.5-9.4
IL0017 IL0351	MORLEY	SICL	3	.37	8.1
IL0017	MORLEY	SIL L	4	.37	10.8
IL0270	MORLEY	SICL	4	.37	10.8
IL0270	MORLEY	CL	4	.32	12.5
IL0270	MORLEY	SIL L	4	.43	9.3
IL0329	MORLEY	SIL	5	.43	11.6
IL0017 IL0351	MORLEY	C CL	3	.32	9.4
IL0407	MORLEY	SL	3	.24	12.5
IN0079	MOROCCO	FS S	5	.15	33.3
IN0079	MOROCCO	LFS LS	5	.17	29.4
OH0172 OH0308	MORRISTOWN	GR-CL STV-SICL BY-SICL ST-L BY-SIL STV-CL CN-SICL ST-CL ST-SICL ST-SIL GR-SICL GR-L GR-SIL SH-SICL	5	.32	15.6
OH0183	MORRISTOWN	CL SICL SIL L	2	.43	4.7
MN0369 MN0370	MOUNDPRAIRIE	SICL SIL L	5	.32	15.6
IL0060 IL0338	MT. CARROLL	SIL	5-4	.32	15.6-12.5
IL0149	MUNDELEIN	SIL	5	.28	17.9
IN0049	MUREN	SICL	4	.37	10.8
IN0049	MUREN	SIL	5	.37	13.5
IA0052 IA0246	MUSCATINE	SIL SICL	5	.28	17.9
WI0056	MUSKEGO	SICL	5	.28	17.9
WI0056	MUSKEGO	SP	4		
WV0037	MUSKINGHAM	CN-SIL	3	.17	17.6
IL0179	MYRTLE	SICL	4	.43	9.3
IL0179	MYRTLE	SIL	5	.32	15.6
IL0289	NACHUSA	SIL L	5	.32	15.6
IL0306	NAMEOKI	SIC SICL	5	.28	17.9

SIR Number	Soil Name	Surface Texture	T	K	T/K
MI0014	NAPPANEE	CL L SIL	3	.37	8.1
MI0014	NAPPANEE	SICL	3	.43	7.0
IA0112 IA0595	NASSET	SIL	4	.28	14.3
OH0019 OH0100	NEGLEY	CL L SIL	5-4	.32	15.6-12.5
OH0019 OH0100	NEGLEY	GR-L	5-4	.24	20.8-16.7
OH0064	NEOTOMA	FL-SIL ST-SIL ST-L CN-SIL CN-L	4	.20	20.0
KY0003	NEWARK	SICL	5	.37	13.5
KY0003	NEWARK	SIL L	5	.43	11.6
OH0015	NEWART	SIL	5	.28	17.9
IL0112 IL0392	NEWBERRY	SIL	5	.37	13.5
WI0043	NEWGLARUS	SIL	4	.37	10.8
IL0427	NEWHAVEN	L SIL	5	.28	17.9
IL0081	NIOTA	SIL	3	.37	8.1
KY0017	NOLIN	L	5	.37	13.5
KY0017	NOLIN	SIL SICL	5	.43	11.6
IL0447	NORMAL	SIL	5	.32	15.6
MI0038 MI0119 MI0316 MI0323 MI0349	OAKVILLE	FS S	5	.15	33.3
MI0038 MI0119 MI0316 MI0323 MI0349	OAKVILLE	LS LFS	5	.17	29.4
IN0034 IN0270	OCKLEY	CL	4	.37	10.8
IN0034 IN0270 IN0329	OCKLEY	SIL L	5	.37	13.5
IN0368	OCKLEY	L	5	.32	15.6
IN0034 IN0368	OCKLEY	SL	5	.24	20.8
IL0035	OCONEE	SIL	3-2	.32	9.4-6.3
IN0097	OCTAGON	FSL	5	.20	25.0
IN0097	OCTAGON	SIL L	5	.28	17.9
IN0422	OCTAGON	CL	3	.28	10.7
IN0422	OCTAGON	L SIL	4	.28	14.3
IN0036	ODELL	SICL SIL L	4	.28	14.3
IN0424	ODELL	L	5	.28	17.9

SIR Number	Soil Name	Surface Texture	T	K	T/K
IL0144	OGLE	SIL	5	.28	17.9
IL0082	OKAW	SICL	2	.43	4.7
IL0082	OKAW	SIL	3	.43	7.0
IL0119 IL0401	ONARGA	FSL SL	4	.20	20.0
IL0266	ONARGA	FSL	5	.24	20.8
IL0404	ONARGA	FSL	5	.20	25.0
IL0224	ONECO	SICL	3	.32	9.4
IL0224	ONECO	SIL	4	.32	12.5
IL0039	ORIO	L SIL	5	.28	17.9
IL0039	ORIO	SL FSL	5	.20	25.0
WI0042	ORION	SIL	5	.37	13.5
IL8000	ORTHENTS	ST-L ST-SCL ST-CL	5	.35	14.3
IL8001 IL8004 IL8006	ORTHENTS	L SIL CL SICL	5	.43	11.6
IL8002 IL8003	ORTHENTS	STV-L STV-SCL STV-CL ST-L ST-SCL ST-CL	5	.37	13.5
IL8005	ORTHENTS	SC C SIC SCL SICL L STV-L STV-SCL STV-CL	5	.32	15.6
IL8007	ORTHENTS	C SIC	3	.32	9.4
NE0515	ORTHENTS	FSL L VFSL	5	.24	20.8
NE0515	ORTHENTS	SC C SIC SCL SICL CL	5	.32	15.6
IL0444	OSCEOLA	SIL	5	.28	17.9
IL0078 IL0360	OTTER	SIL L MK-SIL	5	.28	17.9
MI0023 MI0271 MI0388 MI0443 MI0448 MI0449 MI0463	PALMS	MPT MUCK PEAT SP	5		
MI0443	PALMS	SICL	5	.28	17.9
IL0062	PALSGROVE	SICL	3	.43	7.0
IL0062	PALSGROVE	SIL	4	.32	12.5
IL0225	PANA	GR-CL	4	.24	16.7
IL0225	PANA	SIL L	5	.32	15.6
IL0246	PAPINEAU	FSL SL	4	.20	20.0
IL0246	PAPINEAU	SCL	4	.28	14.3

SIR Number	Soil Name	Surface Texture	T	K	T/K
IN0048	PARKE	SICL	4	.37	10.8
IN0048	PARKE	SIL	5	.37	13.5
IN0413	PARKE	SICL SIL	5	.37	13.5
MO0037	PARKVILLE	C SIC SICL	5	.28	17.9
IN0035	PARR	CL	3	.32	9.4
IN0035	PARR	FSL	4	.20	20.0
IN0035 IN0426	PARR	SIL L CL	4	.32	12.5
IN0426	PARR	FSL	5	.20	25.0
IN0426	PARR	L SIL	5	.32	15.6
IL0018 IL0300 IL0304 IL0382	PATTON	SICL SIL	5	.28	17.9
KS0178 KS181	PAXICO	SIL VFSL	5	.37	13.5
IL0220	PECATONICA	SIL	5-4	.37	13.5-10.8
IL0130 IL0298 IL0366 IL0380	PELLA	CL SICL SIL MK-SICL	5	.28	17.9
IL0125 IL0387 IL0410	PEOTONE	MK-SIC MK-SICL SICL	5	.28	17.9
IL0009	PETROLIA	SICL SIL	5	.32	15.6
IL0134	PIASA	SIL	3	.37	8.1
IN0107	PIKE	SICL	4	.37	10.8
IN0107	PIKE	SIL	5-4	.37	13.5-10.8
IL0152	PILLOT	SICL	3	.32	9.4
IL0152	PILLOT	SIL	4	.32	12.5
IL0005	PIOPOLIS	SICL SIL	5	.43	11.6
IL0390	PLAINFIELD	S FS	5	.15	33.3
IL0088 IL0260	PLANO	SIL	5-4	.32	15.6-12.5
IL0158	PLATTVILLE	SIL L	5	.32	15.6
IL0442	PLUMFIELD	SICL SIL	2	.43	4.7
IL0063	PORT BYRON	SIL	5-4	.32	15.6-12.5
IL0301 IL0331	PORT BYRON	SIL	5	.32	15.6
IL0287	PRAIRIEVILLE	SIL L	5	.32	15.6
IN0046	PRINCETON	FSL SL L	5-4	.24	20.8-16.7

SIR Number	Soil Name	Surface Texture	T	K	T/K
IL0138	PROCTOR	SICL	5-4	.32	15.6-12.5
IL0138	PROCTOR	SIL	5	.32	15.6
IL0256 IL0368	PROCTOR	SIL SICL	5	.32	15.6
IL0370 IL0405	PROCTOR	SIL	5	.28	17.9
IL0195	PROPHETSTOWN	SIL	5	.28	17.9
NE0520	PSAMMENTS	COS GR-S FS S LCOS	5	.02	250.0
NE0520	PSAMMENTS	LFS LS VFS	5	.10	50.0
IL0047 IL0384	RACOON	SIL	3	.37	8.1
IL0061 IL0173	RADDLE	SIL	5	.32	15.6
IL0083	RADFORD	SIL	5	.28	17.9
IL0226	RANTOUL	SIC SICL	3	.28	10.7
IL0325	RAPATEE	SIL SICL	3	.37	8.1
IN0056	RAUB	SIL	5	.28	17.9
IL0007	REDDICK	CL L SICL	4	.28	14.3
IL0376	REDDICK	SICL	5	.28	17.9
OH0014	REESVILLE	SIL	5	.37	13.5
IL0235	RICHVIEW	SICL	4	.32	12.5
IL0235	RICHVIEW	SIL	5	.32	15.6
WI0113	RICHWOOD	SIL	5	.28	17.9
IL0120 IL0402	RIDGEVILLE	FSL SL	5	.20	25.0
IL0120	RIDGEVILLE	L	5	.28	17.9
IL0429	RIDGWAY	SIL	5	.37	13.5
IL0184 IL0374	RIDOTT	SIL SICL	4	.32	12.5
IL0064	RILEY	CL L SIL SICL	4	.28	14.3
IL0168	RINGWOOD	SIL	5	.28	17.9
WI0067	RIPON	SIL	4	.28	14.3
IL0015	RITCHEY	SIL L	2	.37	5.4
IL0159	ROBBS	SIL	4	.43	9.3

SIR Number	Soil Name	Surface Texture	T	K	T/K
IL0034 IL0412	ROBY	FSL SL	5	.20	25.0
IL0034	ROBY	L	5	.28	17.9
IL0034	ROBY	LFS	5	.17	29.4
IL0340	ROCHER	L SIL	5	.32	15.6
IL0340	ROCHER	VFSL FSL	5	.24	20.8
MN0121 MN0490	ROCKTON	FSL L SIL	4	.28	14.3
MN0505	ROCKTON	L SIL	4-3	.28	14.3-10.7
IN0006	RODMAN	GR-L	3	.20	15.0
IN0006	RODMAN	GR-S GR-LS	3	.10	30.0
IN0006	RODMAN	GR-SL	3	.15	20.0
IL0174	ROMEO	CL SICL SIL L	1	.37	2.7
IL0439	ROOKS	SICL SIL	5	.28	17.9
OH0012	ROSS	FSL SL	5	.24	20.8
OH0012	ROSS	SICL SIL L	5	.32	15.6
OH0245	ROSSBURG	SICL SIL L	5	.37	13.5
IL0308	ROWE	SIC SICL	5	.28	17.9
IL0065	ROZETTA	SICL	4	.37	10.8
IL0065	ROZETTA	SIL	5	.37	13.5
IL0400 IL0419	ROZETTA	SICL SIL	4	.43	9.3
IL0042 IL0421	RUARK	FSL SL L	5	.24	20.8
IL0042	RUARK	VFSL	5	.37	13.5
MN0101	RUNEBERG	STV-SL STV-FSL STV-L	4	.20	20.0
IN0028	RUSH	SIL	5	.37	13.5
IL0066	RUSHVILLE	SIL	3	.43	7.0
IN0033 IN0439	RUSSELL	SICL	4	.37	10.8
IN0033 IN0133 IN0439	RUSSELL	SIL	5	.37	13.5
IN0441	RUSSELL	SIL	3	.37	8.1
IL0175	RUTLAND	SICL SIL	5	.28	17.9
IL0198	SABINA	SIL	5	.37	13.5
IL0128 IL0272	SABLE	SICL SIL	5	.28	17.9

SIR Number	Soil Name	Surface Texture	T	K	T/K
IL0335	SARPY	LFS	5	.17	29.4
MO0016 MO0117 MO0118 MO0139	SARPY	LS LFS	5	.17	29.4
MO0016 MO0117 MO0118	SARPY	FSL L	5	.20	25.0
MO0016 MO0117 MO0118 MO0139	SARPY	S FS	5	.15	33.3
MO0139 MO0202	SARPY	SIC C	5	.28	17.9
MO0184	SARPY	VFSL FSL	5	.32	15.6
IA0063	SAUDE	L	4	.24	16.7
IL0084 IL0373	SAWMILL	SICL SIL	5	.28	17.9
IL0188 IL0257	SAYBROOK	SICL	4	.32	12.5
IL0188 IL0257 IL0388	SAYBROOK	SIL	5	.32	15.6
WI0300	SAYLESVILLE	SIL	5	.37	13.5
IL0228	SCHAPVILLE	SICL	4-3	.32	12.5-9.4
IL0228	SCHAPVILLE	SIL	4	.32	12.5
IL0417	SCHAPVILLE	SIL	3	.32	9.4
IL0330	SCHULINE	CL SICL SIL L	5	.37	13.5
OH0002	SCIOTOVILLE	SIL	4	.37	10.8
IL0067 IL0285 IL0286	SEATON	SIL SI	5	.37	13.5
IL0352	SEATON	SIL	5-4	.37	13.5-10.8
IL0133 IL0293 IL0311 IL0318	SELMA	CL L SIL SICL	5	.28	17.9
IL0403	SELMA	L	5	.24	20.8
IL0413	SELMA	FSL	5	.20	25.0
IL0113	SEXTON	SIL	3	.43	7.0
IL0424	SEXTON	SIL	5	.43	11.6
IN0083	SHADELAND	SIL L	4	.37	10.8
IA0236	SHAFFTON	CL SICL L SIL	5	.28	17.9
IL0085	SHARON	SIL	5	.37	13.5
IL0068 IL0393	SHILOH	SIC C SICL SIL	5	.28	17.9
IN0014 IN0179 IN0351	SHOALS	CL SICL SIL L	5	.37	13.5
MN0325	SHULLSBURG	SICL SIL	4	.32	12.5

SIR Number	Soil Name	Surface Texture	T	K	T/K
IN0121	SIDELL	SIL	5-4	.32	15.6-12.5
IN0440	SIDELL	SIL	5	.32	15.6
IN0462	SKELTON	FSL	5	.24	20.8
IN0462	SKELTON	L SIL	5	.32	15.6
KS0087	SOGN	CL SICL SIL L ST-SIL	1	.32	3.1
KS0087	SOGN	FL-L FL-SIL	1	.24	4.2
KS0106	SOGN	CL	1	.28	3.6
KS0106	SOGN	SICL SIL	1	.32	3.1
WI0407 WI0440	SPARTA	LFS LS S FS	5	.17	29.4
IL0428	SPRINGERTON	L	5	.28	17.9
IL0089 IL0249	ST. CHARLES	SICL	4	.37	10.8
IL0089	ST. CHARLES	SIL	5-4	.37	13.5-10.8
IL0212	ST. CHARLES	SICL SIL	5	.37	13.5
IL0212 IL0371	ST. CHARLES	SL	5	.20	25.0
IL0249	ST. CHARLES	SIL	5	.37	13.5
IL0371	ST. CHARLES	SICL SIL	5	.37	13.5
MI0010	ST. CLAIR	CL L SIL	3	.37	8.1
MI0010	ST. CLAIR	SICL	3	.43	7.0
IL0069 IL0367 IL0420	STARKS	SIL	5	.37	13.5
IL0030	STOCKLAND	GR-SL GR-L GRV-SL	4-3	.15	26.7-20.0
IL0030	STOCKLAND	L	4-3	.28	14.3-10.7
IL0030	STOCKLAND	SL	4-3	.20	20.0-15.0
OH0025	STONELICK	LFS	5	.17	29.4
OH0025 OH0340	STONELICK	SIL L	5	.32	15.6
OH0025	STONELICK	SL FSL	5	.24	20.8
IL0101	STOY	SICL	4	.43	9.3
IL0101	STOY	SIL	5	.43	11.6
IL0227 IL0337 IL0344 IL0345	STRAWN	SIL L	5	.37	13.5
IL0337 IL0345	STRAWN	CL SICL	4	.37	10.8
IL0229	STREATOR	SIC SICL	5	.28	17.9
IL0070	STRONGHURST	SIL	5	.37	13.5
IL0197	SUNBURY	SIL	5	.32	15.6
IL0332	SWANWICK	SICL SICL	5	.43	11.6

SIR Number	Soil Name	Surface Texture	T	K	T/K
IL0012	SWYGERT	SICL SIL	3	.37	8.1
IL0533	SWYGERT	L	3	.28	10.7
IL0132 IL0355 IL0362	SYLVAN	SIL	5	.37	13.5
IL0355 IL0362	SYLVAN	SICL	4	.37	10.8
IL0362	SYLVAN	SIL	5	.37	13.5
IL0122	SYMERTON	GR-L SICL SIL L	5	.32	15.6
IL0259	SYMERTON	L SIL	5	.24	20.8
IL0259	SYMERTON	SICL	5	.32	15.6
IL0200	TALLULA	SIL	5-4	.32	15.6-12.5
IA0049	TAMA	SICL SIL	5-4	.28	17.9-14.3
IA0245	TAMA	SICL	4	.28	14.3
IA0245 IA0302	TAMA	SIL	5	.28	17.9
IA0302	TAMA	SICL	5	.32	15.6
IA0457	TAMA	SICL	4	.43	9.3
IA0512	TAMA	SICL SIL	5	.32	15.6
IL0176	TAMALCO	SICL	2	.43	4.7
IL0176	TAMALCO	SIL	3	.43	7.0
WI0241	TELL	SIL	4	.37	10.8
IA0165 IA0224	TERRIL	CL L SIL	5	.24	20.8
IL0230	THEBES	SICL	3	.37	8.1
IL0230	THEBES	SIL	4	.37	10.8
IL0143 IL0294 IL0322	THORP	SIL	5	.37	13.5
IL0071 IL0253	TICE	SIC SICL SIL	5	.32	15.6
IL0072	TIMULA	SIL SI	5-4	.37	13.5-10.8
IL0073 IL0210	TITUS	SIC SICL	5	.32	15.6
IN0077	TORONTO	SIL	5	.32	15.6
IA0091	TRAER	SIL	3	.43	7.0
WI0282	TREMPEALEAU	SIL	4	.28	14.3
IL0041 IL0274	TROXEL	SICL SIL	5	.28	17.9
MI0009	TUSCOLA	FSL SL VFSL	5	.24	20.8
MI0009	TUSCOLA	LFS	5	.17	29.4
MI0009	TUSCOLA	SIL L	5	.32	15.6

SIR Number	Soil Name	Surface Texture	T	K	T/K
MO0049	TWOMILE	SIL	5	.43	11.6
IL0431	TYPIC HAPLUDALFS	FSL SL	5	.24	20.8
IL0431	TYPIC HAPLUDALFS	L SIL SICL	5	.32	15.6
NE0522	UDIFLUVENTS	FSL SL VFSL	5	.24	20.8
NE0522	UDIFLUVENTS	SC C SIC SCL SICL	5	.32	15.6
MN0073 MN0428 MN0429	UDOLPHO	L SIL FSL	4	.32	12.5
MN0232	UDOLPHO	SIL L	4	.32	12.5
MN0232	UDOLPHO	FSL	4	.20	20.0
NE0524	UDORTHENTS	FSL L VFSL	5	.24	20.8
NE0524	UDORTHENTS	SCL SICL CL	5	.32	15.6
KY0005	UNIONTOWN	SICL	3	.37	8.1
KY0005	UNIONTOWN	SIL	4	.43	9.3
KY0142	UNIONTOWN	SIL	5	.43	11.6
KY0190	UNIONTOWN	SIL	5	.37	13.5
IL0074	URSA	C CL SICL	2	.43	4.7
IL0074	URSA	SIL L	3	.43	7.0
IA0279	VANMETER	FL-SICL FL-SIL	2	.32	6.3
IA0279	VANMETER	SICL	2	.43	4.7
IA0279	VANMETER	SIL L	3	.37	8.1
IL0292	VANPETTEN	L SIL	4	.24	16.7
IL0117 IL0276	VARNA	SICL	4	.32	12.5
IL0117 IL0276	VARNA	SIL L	5	.28	17.9
IL0169 IL0328	VELMA	CL	4	.32	12.5
IL0169 IL0328	VELMA	SIL L	5	.32	15.6
IA0139	VESSER	SIL	5	.28	17.9
IL0075	VIRDEN	SICL SIL	5	.28	17.9
IL0187 IL0213	VIRGIL	SIL	5	.32	15.6
MO0011 MO0238	WABASH	SIC C SICL SIL	5	.28	17.9
IL0238	WAGNER	SIL	3	.28	10.7
IN0031	WAKELAND	SIL	5	.37	13.5

SIR Number	Soil Name	Surface Texture	T	K	T/K
NY0053	WALLKILL	GR-SIL GR-L GR-FSL	5	.24	20.8
NY0053 NY0275 NY0543 NY0556	WALLKILL	SICL SIL L FSL	5	.37	13.5
NY0323	WALLKILL	SICL	5	.24	20.8
NY0323	WALLKILL	SIL L	5	.37	13.5
NY0543	WALLKILL	SIL	5	.32	15.6
IL0196	WARE	FSL SL VFSL	4	.24	16.7
IL0196	WARE	L SIL	4	.32	12.5
IN0042	WARSAW	SIL L	4-3	.28	14.3-10.7
IN0042	WARSAW	SL	4	.20	20.0
IN0004	WASHTENAW	SIL L	5	.37	13.5
IN0411	WASHTENAW	L	5	.28	17.9
IL0121	WATSEKA	FS S LFS LS	5	.17	29.4
IL0194	WAUCONDA	SIL	5	.32	15.6
IA0058 IA0356	WAUKEE	L SIL	4	.24	16.7
MN0129 MN0307	WAUKEGAN	SIL L	4	.32	12.5
IL0011 IL0323	WAUPECAN	SIL	5	.32	15.6
IN0081	WEA	SIL L	5	.32	15.6
IN0415	WEA	SIL	5	.28	17.9
IN0067	WEINBACH	SIL L	4	.43	9.3
IL0114	WEIR	SIL	3	.43	7.0
OH0001	WELLSTON	SICL SIL	4	.37	10.8
OH0213 OH0304	WELLSTON	SICL SIL	4-3	.37	10.8-8.1
IL0231 IL0268	WENONA	SIC SICL	4	.32	12.5
IL0231 IL0268	WENONA	SIL	5	.32	15.6
IL0240	WESLEY	L.VFSL FSL SL	3	.24	12.5
IL0240	WESLEY	LFS	3	.17	17.6
IN0027 IN0308	WESTLAND	CL L SIL SICL	5	.28	17.9
IN0153 IN0288	WESTLAND	SICL SIL L	4	.28	14.3
IN0194	WESTLAND	SICL	5	.28	17.9
OH0036	WESTMORE	SICL SIL	4-3	.37	10.8-8.1
IL0221	WESTVILLE	CL	4	.37	10.8
IL0221	WESTVILLE	SIL L	5	.37	13.5
IL0221	WESTVILLE	SL	5	.24	20.8

SIR Number	Soil Name	Surface Texture	T	K	T/K
MN0112 MN0559	WHALAN	SIL L	4	.32	12.5
MN0112	WHALAN	SL	4	.24	16.7
WV0012	WHEELING	SIL	4	.37	10.8
IL0386	WHITAKER	L	5	.37	13.5
IN0010 IN0331	WHITAKER	L SIL	5	.37	13.5
IN0010 IN0367	WHITAKER	SL FSL	5	.24	20.8
IL0043	WHITSON	SIL	5	.43	11.6
IN0060	WILBUR	SIL	5	.37	13.5
IL0150	WILL	CL L SIL SICL	4	.28	14.3
IN0099	WINGATE	SIL	5	.32	15.6
IL0241	WINNEBAGO	CL	4	.32	12.5
IL0241	WINNEBAGO	SIL L	5	.32	15.6
IN0231 IN0232 IN0410	WIRT	SIL L	5	.37	13.5
IN0231 IN0232	WIRT	SL FSL VFSL	5	.24	20.8
IN0258	WIRT	L SIL	5	.32	15.6
IL0232	WOODBINE	SICL	3	.37	8.1
IL0232	WOODBINE	SIL L	4	.37	10.8
IL0076 IL0333	WORTHEN	SIL	5	.32	15.6
IL0037	WYNOOSE	SIL	3	.43	7.0
IN0053 IN0134	XENIA	SIL	5	.37	13.5
KY0001	ZANESVILLE	SICL	3	.37	8.1
KY0001	ZANESVILLE	SIL	3	.43	7.0
IN0055 IN0196	ZIPP	SIC SICL	5	.28	17.9
IN0055	ZIPP	SIL	5	.43	11.6
IN0196	ZIPP	SIL	5	.37	13.5
IA0073	ZOOK	SIC	5	.28	17.9
IA0073	ZOOK	SICL SIL	5	.37	13.5
IA0431	ZOOK	SICL	5	.28	17.9
MN0210	ZUMBRO	LS LFS SL FSL	5	.17	29.4
IL0140 IL0267	ZURICH	SIL	5-4	.37	13.5-10.8
IA0103	ZWINGLE	SICL SIL	3	.43	7.0