

INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

U·M·I

University Microfilms International
A Bell & Howell Information Company
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
313/761-4700 800/521-0600

Order Number 1358972

**Error assessment of the revised universal soil loss equation using
natural runoff plot data**

Rapp, John Francis, M.S.

The University of Arizona, 1994

U·M·I
300 N. Zeeb Rd.
Ann Arbor, MI 48106

ERROR ASSESSMENT OF THE REVISED UNIVERSAL SOIL LOSS EQUATION
USING NATURAL RUNOFF PLOT DATA

by

John Francis Rapp

A Thesis Submitted to the Faculty of the
SCHOOL OF RENEWABLE NATURAL RESOURCES
In Partial Fulfillment of the Requirements
For the Degree of
MASTER OF SCIENCE
WITH A MAJOR IN RENEWABLE NATURAL RESOURCES STUDIES
In the Graduate College
THE UNIVERSITY OF ARIZONA

1 9 9 4

STATEMENT BY AUTHOR

This thesis has been submitted in partial fulfillment of the requirements for an advanced degree at The University of Arizona and is deposited in the University Library to be made available to borrowers under the rules of the Library.

Brief quotations from this thesis are allowable without special permission, provided that accurate acknowledgement of source is made. Requests for permission for extended quotation from or reproduction of this manuscript in whole or in part may be granted by the head of the major department or the Dean of the Graduate College when in his or her judgement the proposed use of the material is in the interests of scholarship. In all other instances, however, permission must be obtained from the author.

SIGNED: John Kapp

APPROVAL BY THESIS DIRECTORS

This thesis has been approved on the date shown below:

Vicente L. Lopes
 Dr. Vicente L. Lopes
 Professor of Watershed Management

8-23-94
 Date

D. Phillip Guertin
 Dr. D. Phillip Guertin
 Professor of Watershed Management

8/23/94
 Date

Kenneth G. Renard
 Dr. Ken G. Renard
 Research Hydraulic Engineer

8/23/94
 Date

ACKNOWLEDGMENTS

I would like to express my sincere gratitude to Dr. Ken Renard (USDA-ARS) for allowing me a chance to work with the RUSLE model and furnishing the data set that made my work possible. Thanks to his patience and help I accomplished my goals.

I am very grateful to my academic advisor, Dr. Vicente L. Lopes, for his expertise and guidance in completing this study. Also, I thank Dr. Phillip Guertin for introducing me to the concepts of watershed management and giving me direction in finding a topic for my thesis. Because of this study I have developed a sound understanding of water erosion research.

I thank my family for their unwavering support and love in my endeavor. I thank my friends, especially Svenje Mehlert for her love and guidance, and also the NBS and NPS gang at Sequoia\Kings Canyon National Park for their support throughout my final year of graduate studies.

DEDICATION

This is dedicated to my parents for their endless love and support.

TABLE OF CONTENTS

LIST OF FIGURES.....	6
LIST OF TABLES	7
ABSTRACT	8
INTRODUCTION	9
Problem Statement	9
Objectives	10
Approach	10
Benefits	11
LITERATURE REVIEW	13
Predicting Soil Loss	13
USLE	14
RUSLE	15
Model Validation	24
Model Applications	27
Predicting farmland soil loss	27
Further uses of RUSLE	28
METHODOLOGY	30
The RUSLE Computer Program	30
Data Inputs	35
Data Outputs	37
RESULTS AND DISCUSSION	39
CONCLUSIONS	54
APPENDIX A: RUSLE Data outputs	55
LITERATURE CITED	88

LIST OF FIGURES

FIGURE 1, Plot of RUSLE and measured average annual values	45
FIGURE 2, Plot of RUSLE and measured annual values	46
FIGURE 3, Histogram of absolute error distribution	48
FIGURE 4, 95% confidence intervals for RUSLE predictions	52

LIST OF TABLES

TABLE 1, List of natural runoff plots used in study	40
TABLE 2, Summary statistics for regression analysis for both annual and average annual values	44
TABLE 3, Statistics from regression analysis of pre-1960 and post-1960 plots	49
TABLE 4, Realtive importance of model parameters	51

ABSTRACT

The error associated with the Revised Universal Soil Loss Equation (RUSLE) was determined by utilizing data from 21 U.S. sites representing 1704 years of measurements from 206 plots. RUSLE estimates were compared to the measured values for each year and the average value for each plot duration. The model efficiency coefficient on an annual basis was (.58) and on an average annual basis was (.73). The RUSLE was consistent with a previous study of the USLE which tended to over predict on plots with low erosion rates and under predict on plots with high erosion rates. Also the Cover and Management Factor (C) value had the most influence on model efficiency. The basis for this study was to compare the RUSLE with the USLE and to compare RUSLE simulations with observed data that was not a part of its critical development.

INTRODUCTION

Problem Statement

Soil erosion is a natural process resulting from interacting factors of which flowing water, rain drop impact and winds are the most prevalent. However, this process can be accelerated by human activities such as farming and livestock grazing.

Accelerated soil erosion creates complications for human populations by degrading the fundamental resource base that supports them. A disturbed soil surface becomes vulnerable to nutrient loss through the actions of flowing water. Nutrients can be leached from upper soil layers, carried away by surface runoff, absorbed to eroded soil particles or suspended in the flowing water. Therefore soil loss reduces the soil's productivity, affects down stream water quality, reduces the life of lakes and reservoirs through increased sedimentation and can cause the eutrophication of water bodies by nutrient enrichment.

In the last century there has been an increase in available farm land and its use for food production to meet worldwide demands thus making soil erosion a threat to global food security. Since 1985 the U.S. has succeeded in reducing its soil losses by one fifth (USDA, ERS, 1989). This environmental threat has led to research to develop ways to predict and mitigate soil loss from fields under specific land use conditions. Soil scientists have developed empirical equations that utilize specific site factors such as soil characteristics, land use and climate. One well-known example of such an empirical equation is the Universal Soil Loss Equation (USLE) developed by Wischmeier and Smith (1978). USLE has been subjected to many improvements over the last three decades and with

the addition of new data is now recognized as the Revised Universal Soil Loss Equation (RUSLE).

Due to the rapid advancements in the processing speeds of personal computers it has been possible to develop graphical interfaces that allow users to easily input, update and store the necessary data for appraising soil loss rates. The RUSLE computer based program was designed for this purpose. It increases the consistency of RUSLE factor evaluation when used by different users for a variety of site conditions (Renard and Ferreira, 1993).

While several decades have demonstrated the reliability of its use, there has been little done in the way of testing its accuracy (Risse et al., 1992). The purpose of this study is to test the accuracy of RUSLE by using data, not used in its calibration, from different sites representing various conditions and comparing its predictions with the measured values and predictions made by USLE for each plot year and the average for each plot duration.

Objectives

The objectives of this study are:

1. To evaluate the overall performance of RUSLE in predicting soil loss from individual plots, where data are available for specific conditions.
2. To compare the results from RUSLE to those from a previous study using USLE.

Approach

RUSLE is still under development with new experimental data being added to reflect new technologies and expanded databases (Agricultural

Handbook No. 703, 1994). The program version swcs1.01 was tested in this study.

Matching conditions between the site data and the files that make up the three RUSLE databases (CITY, CROP, and OPERATION) required making assumptions concerning the effects of certain tillage operations and tools. Many of the sites have records from 25 to 50 yrs ago and crop specifics such as tillage operations and tools were approximated with the aid of ARS Scientists. Also important factors related to grazing intensities and post crop residue management were not available which added a certain degree of error to the model inputs.

A particular operation and how it disturbs the soil surface is dependent on where it occurs temporally relative to a particular location's EI distribution. A period with a high measured EI value when there is a lack of crop cover and an operation has exposed a large percentage of top soil will be a significant soil loss event. Therefore the timing of a particular operation in terms of the EI distribution becomes more important than solely which type of operation is used. This type of association is important when calculating the C factor values.

The study is an attempt to apply RUSLE to various situations and associated conditions to show where the model performs well and where it fails. Following the standard of a previous study (Risse et al., 1992) results were compared to observed values on an annual basis as well as the average for the duration of each plot.

Benefits

In 1993 the Soil Conservation Service (SCS) adopted RUSLE as the primary tool for erosion prediction. Implementing RUSLE as a computer program that would be available to a diverse group of users worldwide

continues. The development of RUSLE was mainly a role of the United States Department of Agriculture - Agriculture Research Service (USDA-ARS) and through a Cooperative Research And Development Agreement (CRADA) with the Soil and Water Conservation Society (SWCS). ARS has given the SWCS the right to copyright and transfer the technology to potential users (Agricultural Handbook No. 703, 1994).

RUSLE is considered a mature technology and with the introduction of process-based models such as the Water Erosion Prediction Project (WEPP) will essentially be a secondary use model. Yet its empirically derived factors can be an important part of these more recent complex models (Agricultural Handbook No. 703, 1994).

The determination of how users learn to understand RUSLE will be based on constant tests to validate its accuracy and usefulness. The sensitivity of individual factors to input variations allows the user to recognize how field conditions are interpreted in the model and thus gives the user better insight into how to match his particular conditions to the model's requirements (Tiscareño-Lopez, 1991).

The importance of this study lies in the value of concise planning for water management and soil conservation that is invariably linked to each of the factors involved in RUSLE. With constant evaluation, the calculations found in RUSLE are made more sensitive to various conditions thereby increasing its accuracy for future applications.

LITERATURE REVIEW

Predicting Soil Loss

With the increasing amount of land devoted to agriculture in the last century, erosion research has been conducted to predict and mitigate soil loss from runoff. Small-scale plot studies have been conducted in order to better understand the factors related to erosion.

Efforts to estimate soil losses by flowing water go back a half century. The development of erosion-prediction technology began with efforts to identify the major variables that affect soil erosion. Cook (1936) listed three major factors: the susceptibility of soil to erosion, potential erosivity of rainfall and ensuing runoff, and soil protection given by plant cover (Hudson, 1981).

Initially Midwestern agricultural lands were the focuses in applying the equation developed by Zingg who determined soil loss based on plot length and slope dimensions (Zingg, 1949).

Using basic concepts of slope steepness and slope length, equations were added to account for crop rotations, conservation practices, soil erodibility and management factors (Smith, 1941; Browning et al., 1947). The idea of a tolerant soil loss amount was developed and utilized in the resulting equations to develop a graphic technique for selecting conservation practices for certain soil conditions in the Midwestern United States (Smith, 1941).

Continued attention from government agencies and universities refined the calculation of factors for climate and crop management. A "rational" equation emerged that applied dimension free multipliers for slope length and conservation practice to the value of C, the cropping

system (Smith and Whitt, 1947). Reevaluation of these factors and inclusions of a regional rainfall intensity term resulted in what is referred to as The Musgrave Equation (Musgrave, 1947).

Graphs to solve the Musgrave Equation were prepared by Lloyd and Eley (1952). Tabulating values for many major conditions in the Northeastern U.S. Van Doren and Bartelli (1956) proposed an equation for Illinois soils and cropping conditions that was based on nine factors. One factor was soil loss as measured on experimental plots. Soil loss was adjusted to site conditions by several factors employed by previous researchers and also factors for prior erosion and management levels.

These state and regional erosion-prediction equations were limited to local, regional applications. As a consequence, government officials recommended the development of an equation for use on a national level.

USLE

With the establishment of the ARS National Runoff and Soil Loss Data Center at Purdue in 1954 and the convening of soil conservation conferences, the USLE was developed. USLE was conceived as a simple method for soil conservationists to estimate annual soil loss for specific geographical locations and conditions.

Some of the USLE's more important features include: representing factors by single numbers; predicting factors based on local meteorological and soil data; its use was not limited to specific geographical locations (Renard, 1992). After use in the field and further refinements, the USLE was presented in Agricultural Handbook No. 282 (Wischmeier and Smith, 1965) and finally an updated version in Agriculture Handbook No. 537 (Wischmeier and Smith, 1978). Since then, the equation has been widely used to predict long term soil loss both in the U.S. and

internationally.

According to Wischmeier and Smith (1978), soil losses computed with the USLE are most accurate for medium-textured soils, slope lengths of less than 400ft, gradients of 3 to 18 percent, and consistent management techniques that have been measured in past erosion studies. Exceeding these limitations creates potential error in the final computations. The accuracy will depend on how well the physical characteristics and management conditions of a particular site are described by the parameter values selected. This is a point that is especially important when using the RUSLE computer software.

In a previous study that analyzed the error associated with USLE when applied to natural runoff type plots, (Risse et al., 1992) showed an average error of -0.28 and -0.34 kg/m² for plot averages and individual annual predictions respectively. The linear regression for the two data sets showed that the model tended to over estimate soil loss. The frequency distribution of the error term showed that the absolute error was uniformly distributed about zero (95 plots under estimated and 113 over estimated) but of the plots which had an average annual measured soil loss less than 0.9 kg/m², 80% were over estimated while on those plots with measured values greater than 2.0 kg/m² less than 22% were over estimated.

As with most models there is always a continued effort to add new expressions or routines in order to make the model capture the natural systems behavior as much as possible. Since 1978 the USLE has continued to evolve resulting in the Revised USLE (RUSLE).

RUSLE

The amount of erosion that takes place on a particular landscape profile is not necessarily equal to sediment yield. Sediment yield is the

soil that has been actually eroded from all possible sources (slopes, channels, etc.) minus the amount deposited (e.g. that material leaving an area of finite size).

RUSLE and its predecessor's do not estimate sediment yield but rather long term soil loss averages from field slopes that are under specific cropping and management systems. This type of calculation allows land use managers to implement cropping procedures that hold soil loss within acceptable limits. This limit is recognized as the maximum amount of soil that can be lost and still permit continued crop productivity (Blakely et al., 1957). RUSLE is expressed by the following equation:

$$A = R * K * LS * C * P \quad (1)$$

where:

A = estimated soil loss per unit area (tons/acre/year)

R = rainfall and runoff factor (ton*ft*in/ac*hr/yr)

K = soil erodibility factor (ton*ac*h[hundreds of acre feet*tonf*in]⁻¹)

LS = topographic factor (dimensionless)

C = cover and management factor (dimensionless)

P = the support practice factor (dimensionless)

The six factors presented in the RUSLE have been modified since Agricultural Handbook No. 537 where the previous version of USLE is defined at length. These changes and additions to USLE that culminated in the revised edition are best examined by individual factor as follows.

Rainfall and Runoff Factor (R): The R factor describes the effect of rainfall and ensuing runoff on the overall soil loss process. Data demonstrate that when all other factors are held constant, soil losses from hill slopes are proportional to a specific set of rainfall conditions. In this case the parameter is the total storm kinetic energy

represented by (E) times the maximum 30 minute intensity (I_{30}) (Wischmeier and Smith, 1978).

EI values were computed by following established sampling criteria for the U.S. from 22 year station records for each storm event. From these values isoerodent maps were produced (Wischmeier and Smith, 1965) using intensity frequency data (U.S. Weather Bureau, 1958) and topographic maps. Because of a lack of rainfall data it wasn't until Agriculture Handbook No. 537 that maps were extended to the western U.S.

The original equation defining the relationship of rainfall energy to rainfall intensity is of the form:

$$e = 916 + 331(\log_{10} I); \text{ for } I \leq 3 \quad (2)$$

$$e = 1074; \text{ for } I \geq 3 \quad (3)$$

The following equation has been recommended for future calculations of EI_{30} (Brown and Foster, 1987; Renard, 1992):

$$e = 1099[1 - 0.72\exp(-1.27i)] \quad (4)$$

The R factor of both the USLE and RUSLE are based on the same calculations. However, with RUSLE, small changes were made to reflect new data and further experimental analysis. Values for the western U.S. are based on data collected from more weather stations thereby increasing the accuracy for any given location. Another addition is a correction factor that considers the effect of raindrop impact striking flat slopes where water has ponded. Ponded water acts a buffer, absorbing the energy from the impact of rainfall (Renard et al., 1994).

The EI distribution is required in the calculations for the soil erodibility factor (K) and the seasonal annual cover management factor

(C). To account for how both factors are influenced by the variation of EI with time, the distribution of EI is divided into 24 periods with 12 of the intervals always starting on the first of each month (Agricultural Handbook No. 537, 1978).

Soil Erodibility Factor (K): The amount of soil loss from the impact of rain while a function of the rain intensity as mentioned, is also a function of how susceptible a particular soil is to that impact. The K factor expresses the soil's properties that determine how rainfall, runoff and infiltration will affect the rate of erosion.

For a particular soil, K is defined as the rate of soil loss per EI unit as measured on a "unit" plot. A unit plot is 72.6 feet long with a uniform slope of 9 percent, in continuous fallow condition with up and downslope tillage. On a unit plot, all values are 1.0 except for K and EI (Wischmeier and Smith, 1965).

K values were experimentally evaluated using USLE plot data for 23 benchmark soils by Wischmeier and Smith (1965). Sixteen of the 24 different soils used in the study were listed in tables (Wischmeier and Smith, 1978) with the K values being chosen from this data. Other sources of experimentally derived K values were published reports and personal communication. In the case of conflicting K values the values of Wischmeier and Smith (1978) were always used.

Names of soils have also changed but these changes can usually be traced back through the literature. On the three remaining soils (Egan, Grantsberg, and Caribou), K values were calculated using the nomograph and equations developed by Wischmeier et al. (1971) and listed in Wischmeier and Smith (1978). The use of the nomograph required inputs of percent organic matter, soil structure code, permeability class, and percent sand, silt, and very fine sand. Such information was acquired from SCS soils database and plot data literature.

Wischmeier and Smith (1978) state that measured values of K ranging from .03 to .69 compared to calculated values, differed by .04 units 95 percent of the time. Among the 21 sites certain practices such as rock removal and the removal of the surface horizon changed the value of K for a given soil. On three plots at Presque Isle, ME and one at Ithaca, NY, all rocks greater than 1.5 inches were taken from the soil surface following tillage. For the one plot at Presque Isle, rock removal resulted in a slight increase of K from .23 to .24. At Ithaca the result was also an increase of K from .02 to .05 for a Bath flaggy silt loam.

On plots at Clarinda, IA and Lacrosse, WI, organic matter was added to study its effect on the value of K. At Clarinda, 12 inches of surface soil was removed from ten plots and various amounts of sweet clover were added. Inputs from the second soil horizon (10-18 inches) showed that removing the surface horizon raised the K value from .33 to .39. At Lacrosse there was the addition of organic matter, however, soil surfaces were not disturbed so K remained the same (Risse et al., 1992).

Soil erodibility changes through time as freeze thaw cycles loosen soil particles, and by reconsolidation due to the uptake of moisture during the growing season. The temporal K-value expresses the increased runoff during spring when soil moisture is highest. These changes are included in RUSLE, however the temporal K correction is not utilized in areas west of 105° latitude (Renard et al., 1994).

Topographic factor (LS): The LS factor computes a value that reflects the slope length and steepness of the land. It is commonly defined as the expected ratio of soil loss per unit area from a particular slope length and steepness to that from a unit plot under identical conditions. The effect of topography on soil loss is dependent on whether the erosion is primarily interrill erosion, rill erosion or a mixture of both. This relationship and the problem of using USLE on steep slopes have been

corrected in the RUSLE. These corrections now allow for using RUSLE on slope lengths of less than 15 feet. Also an additional topographic equation was added to be used in the northwestern wheat and range region for areas experiencing rill erosion on thaw-weakened soil. The equation developed by Smith and Wischmeier (1959) given below is used to calculate the LS factor for slope with essentially uniform gradients:

$$LS = (\lambda/72.6)^m * (65.41\sin^2\theta + 4.56\sin\theta + 0.065) \quad (5)$$

where:

λ = slope length in feet

θ = angle of the slope

m = 0.5 for slopes \geq 5%

m = 0.4 for slopes 3.5 to 5.0%

m = 0.3 for slopes 1.0 to 3.5%

m = 0.2 for slopes < 1%

This relationship was derived from data obtained on croplands, under natural rainfall, with slopes ranging from 3 to 18 percent and 30 to 300 feet in length. Slope length is defined as where the slope decreases enough that deposition occurs or where runoff begins to flow within the confines of a channel. The limit of 400 feet is usually considered maximum slope length although slope lengths of about 1,000ft have been used. It is recommended that in using RUSLE such long slope lengths be avoided unless ridges or furrows have been developed to manage flow (Wischmeier, 1976). The common ways of measuring the individual values for L (slope length) are by pacing or running a tape and for S (slope steepness) using an inclinometer or hand level.

The two variables are combined into a single factor and with the use of the computer program, the appropriate value can be calculated for the

specific dimensions. One of four tables is selected depending on how susceptible the soil is to rill erosion defined as a ratio of rill to interrill erosion rates. In RUSLE, the exponent m in the slope length is made proportional to the susceptibility for rill to interrill erosion. Tables 1 through 3 are used successively, starting with table 1, for soils that exhibit increasing ratios of rill to interrill erosion. Table 4 is used for soils experiencing processes of freeze thaw, runoff due to snowmelt and rain on frozen soil or snow (McCool et al., 1976.).

Cover and Management Factor (C): The C factor is used to express the effects of different crops and associated management practices on erosion rates. By quantifying the characteristics that determine canopy cover, random roughness, root density and residue additions, C factor values are the most sensitive of these RUSLE subfactors.

RUSLE calculates soil loss for twenty four bi-monthly periods for each year. The year long rotation is subjected to that years EI distribution making the occurrence of a disturbed soil surface and high EI the probable maximum soil loss event.

C factor values are based on a group of subfactors that consider; prior land use (PLU), canopy cover (CC), surface cover (SC), surface roughness (SR) and soil moisture (SM) expressed as:

$$C = (PLU) (CC) (SC) (SR) (SM) \quad (6)$$

The subfactor values PLU and SR representing the within soil effect are calculated from the amount of biomass that accumulates in the soil from roots and incorporation of crop residue (Agricultural Handbook No. 703, 1994).

Another addition in the model is the estimation of soil loss changes throughout the year with respect to surface and near surface residue and

the effects of climate on residue decomposition rates. RUSLE computes biomass decomposition on and in the soil using a residue decomposition model (Renard and Ferreira, 1993).

Surface ground cover effects on erosion have been observed to vary greatly in research studies. The surface cover factor (SC) is computed with a negative exponential coefficient multiplied by the percentage of ground cover. The coefficient increases with the tendency of rill erosion to dominate over interrill erosion (Renard and Ferreira, 1993).

Crop canopy (CC) accounts for the role of a crop canopy in catching and absorbing the energy of raindrops, reforming the drops and adding them to the soil surface as crown drip.

As soil moisture increases so does the potential for erosion. The soil moisture subfactor (SM) reflects the role of soil moisture on infiltration that affects rainfall excess and soil erosion. Its development and use is restricted to small grain farming areas of the Pacific Northwest.

The approach of using subfactors allows the user to create Soil Loss Ratios (SLR) values when data is unavailable in previous research analyses. Values can be determined from basic crop/tillage measurements. This would be data that give canopy and residue characteristics, and root mass in the upper 4 inches (100mm) of the soil profile. Tillage measurements would include the percentage of soil disturbed, random roughness and the amount of residue incorporated (Agricultural Handbook No. 703, 1994).

The subfactors allow for a finer division of data and a new soil loss ratio can be calculated whenever a tillage operation changes one the subfactors.

The C factor is the most complex in terms of the programs routines utilizing all three databases and requiring accurate inputs of tillage

operation sequences. The user must be aware that the program can handle only the current crop and in special situations like strip cropping, separate values must be calculated for each individual strip and the C factors are weighted according to the percentage of area each strip covers (Agricultural Handbook No. 703, 1994).

Support Practice Factor (P): P factor values were originally developed in a joint ARS and SCS workshop in 1956 and are presented in Table 13 of Wischmeier and Smith (1978). Recent advancements in soil particle detachment and transport theory as devised in CREAMS (Knisel, 1980; Foster and Lane, 1987) have greatly improved estimation of P factor values (Renard and Ferreira, 1993).

The P factor is intended to express the effects of certain conservation practices on runoff. Practices such as contour farming, strip cropping and terraces influence flow paths and flow hydraulics which influence deposition patterns (Hudson, 1981).

Buffer strips and various strip cropping conditions are accounted for by P requiring the user to determine infiltration changes between strips as well as changes in time.

Studies have shown that practices of tillage and planting on the contour reduce erosion by affecting the slope steepness and slope length of the land. However, when natural runoff style plots are used in simulation studies the effects of these techniques may cause unnatural results if the plots are too narrow (Risse et al., 1992).

Conservation practice values have been developed for rangeland conditions to account for reconsolidation following disturbance and the way infiltration changes in relation to surface cover and roughness (Simanton et al., 1980). Like the C factor, the P factor requires a significant amount of data input accuracy in order to develop an adequate value for tillage management. P factor values tend to be the most

unreliable because the scarcity of experimental data for all the possible conditions that may be encountered on field simulations. Taken together the two factors have the most need for future research regarding factor sensitivity in the RUSLE (Agricultural Handbook No. 703, 1994).

Model Validation

The success of a model is based on how well it meets the objective of predicting the specific natural phenomenon. The accuracy of RUSLE and other models depends on whether it is being used for the purpose it was intended. RUSLE estimates average annual soil loss and does not perform well when used to estimate storm-based erosion events. Measuring a model's success also means questioning not only the accuracy of outputs but the overall integrity of the data inputs.

The accuracy of model predictions is tested by comparing predicted with measured values and assessing the goodness-of-fit and expressing this either graphically or statistically (by measuring goodness of fit or hypothesis testing).

For graphic representation, a least squares regression line can be fitted to the data and tested against the ideal conditions of the slope line being equal to 1.0 and the intercept value being zero.

These tests assume that a given level of error is equally important for the full range of values, however for many situations, a large difference between predicted and measured is acceptable when dealing with very low levels of soil loss. For instance, a predicted value of .02 kg/m² compared to a measured value of .002 kg/m² is allowable because neither represents a soil erosion hazard. However in the case of 20 kg/m² compared to 2 kg/m² would not be acceptable since that would give a faulty impression that a severe problem exists. This is essentially true when

modelling pollution.

The use of a least squares fit line assumes that there will be some error in the model prediction but not in the recorded value or if error does exist, it is much smaller than that of the predicted. This assumption may not always be correct and the use of a reduced major axis line is suggested (Nash and Sutcliffe, 1970).

A less complicated method for assessing the goodness of fit is to calculate a ratio of the predicted to observed values and check whether it falls within some acceptable predetermined range. Without the use of absolute values it may be enough for a model to estimate relative percentage differences between different strategies.

One of the commonly ways of comparing model results to recorded values was defined by Nash and Sutcliffe (1970). A dimensionless coefficient (R^2) was proposed to measure model efficiency and is represented by the following equation:

$$R^2 = 1 - \frac{\left[\sum_{i=1}^n (Q_{mi} - Q_{ci})^2 \right]}{\left[\sum_{i=1}^n (Q_{mi} - \bar{Q}_m)^2 \right]} \quad (7)$$

where:

R^2 = the efficiency of the model

Q_{mi} = the measured value of event i

Q_{ci} = the computed value of event i

\bar{Q}_m = the mean of the measured values

The R^2 coefficient has received wide acceptance and seems a

reasonable choice for a dimensionless measure of fit which is preferred to dimensional measure for general studies. An appealing aspect of this coefficient lies in its simplicity, its value increasing toward unity as the fit of the simulated variable progressively improves (Green and Stephenson, 1986).

This measure of efficiency is much like the correlation coefficient (r^2) from linear regression although it compares the measured values to the one line of measured equals predicted rather than to the best fit regression line. Therefore it not only considers the linearity of the data but also the relative differences between the measured and predicted values.

In most mathematical methods available for comparing the goodness-of-fit of two sets of data, the comparison is based on an analysis of the errors or residuals where:

$$(\text{residual}) = (\text{observed value}) - (\text{computed value}) \quad (8)$$

This type of analysis will generally be purely objective although semi-objective analyses of residuals have been proposed. An example of this is a scatter diagram where every observation is represented by a point whose ordinate is the residual and whose abscissa is the computed value (Anscombe and Tukey, 1963).

A sensitivity analysis is also a useful method of testing the changes of factor values based on predetermined incremental changes of model inputs. This information allows the user to understand how variable value changes affect program results (Tiscareño-Lopez, 1991). It is recommended that the user perform a simple sensitivity analysis for their particular set of site specific variables. This will help in determining which parameters require special attention (Renard and Ferriera, 1993).

Model Applications

RUSLE is a predictive tool that is used for supplying guidelines relative to specific erosion control practices mainly on farm fields and at construction sites. It is also useful for estimating the contribution of upland erosion to reservoir sedimentation and stream sediment transport discharge. For complex watersheds, the RUSLE factors are more difficult to evaluate and the use of more complex models may be required (Agricultural Handbook No. 703, 1994).

Predicting Farmland Soil Losses

RUSLE is designed to predict long-term average soil loss for specific conditions. This may be the average for the rotation, for a particular crop year or cropstage period in the rotation. The manipulation of management practices and crop combinations plays a large role in erosion and sediment control planning.

It is not recommended that the RUSLE be applied to specific soil loss events. If it is applied using the EI for R and the current cropstage for that period, it will estimate the average soil loss for a number of storms of varying size occurring on that field and in that crop stage period. However, the actual value for any of the single events may vary greatly from the average due to variables that fluctuate randomly over time such as infiltration rates that change with a storm duration.

Additional information can be obtained by computing the average annual soil loss for each cropstage period. The calculated cropstage soil losses gives an idea as to when certain conservation practices would be most beneficial. Also they furnish information on the possible seasonal distribution of sediment yields from the field which is valuable information for determining sediment transport in streams and rivers.

This in turn provides information that is used to estimate the rate of sedimentation in lakes and reservoirs (Hudson, 1981).

Further Uses of RUSLE

The soil loss prediction procedure offers land use managers with a tool to assist them to decide the land use and management combination which will provide the desired level of erosion control.

By affecting primarily the C or P factors, soil erosion can be controlled. The resulting unit of soil loss is replaced with a predetermined soil loss tolerance (T). Solving for C and P permits an analysis of the maximum values allowable to meet the limits set by T for the management and conservation factors. By trying various land use scenarios, it is possible to control soil losses and still maintain the economic viability of crop production. Control of nutrient and pesticides in runoff might also be considered in selecting certain practices.

Methods and data that have been developed for predicting soil losses from farm lands under specific conditions can be applied to conditions on highway, residential, and commercial areas (Wischmeier et al., 1971). RUSLE allows the developer to plan which development alternative may produce the least sediment and give estimations of how much sediment to trap in sediment basins to prevent excessive sediment accumulations in streams and reservoirs. As with the situation of crop land, the six factors can be analyzed in terms of the various development options available.

The Federal Water Pollution Control Act Amendments of 1972, Public Law 92-500 and subsequent amendments, increased the importance of predicting watershed sediment yields. It included identifying the major sediment sources, causes and potentials of sediment, nutrient, and pesticide losses from cropland and measures that may be necessary to

control these pollutants (Foster and Lane, 1987).

Estimates show that about one-fourth of the amount of sediment moved by flowing water in the United States annually reaches major streams. RUSLE is applicable for average sheet and rill erosion. However, deposition and channel type erosion must be estimated by other prediction models (Agricultural Handbook No. 703, 1994).

There is currently a model being developed by ARS to account for other types of erosion produced with concentrated flow or chemical based erosion. The Water Erosion Prediction Project (WEPP) was developed to incorporate far more complex technology than was ever intended by RUSLE. However, WEPP requires larger databases and more advanced computer hardware such as storage media, memory and processor speed (Renard et al., 1994). In many situations simplicity has its place and the user will always be the discerning judge of a particular model application and the ease at which it can be used. Presently the release of WEPP is not planned until March of 1995. Much of the time, the choice between using either model will be based on the ease of implementation, availability of databases, intended application and/or financial reasons. It may be only in extreme situations that a process-based model like WEPP will out perform the empirically based RUSLE. Such a situation would be the calculation of sediment yield from a complex watershed.

An important point concerning the future of RUSLE is the continuing support it may receive from government agencies like the SCS and ARS or commercial vendors. ARS scientists don't see a large continuing investment in RUSLE by the research community. However, its usefulness will undoubtedly persist and most importantly, the technology it is based on will be combined and used with other more process-based technologies (Renard et al., 1994).

METHODOLOGY

The RUSLE Computer Program

The development of the RUSLE was instigated partly due to the increase in computer processing power as well as the addition of new research data.

The RUSLE computer code is written in C language and therefore the program can run on a wide variety of machines. Initially tested on a IBM-compatible with the standard 640 kilobytes of RAM using MS-DOS (version 2 or later), it has been used on larger systems that utilize the UNIX system and on the ATT 6386 under both DOS and UNIX.

The RUSLE executable program is large and does not use expanded memory. The result is an "out of memory" error message when the program is run with Terminate and Stay Resident utilities such as shell programs.

Once the program has been loaded on the hard drive begin operation by typing RUSLE or to get a list of all commands and functions consult the RUSLE user guide found in Agriculture Handbook No. 703 (1994).

The program will make calculations regardless of what is entered as data and will offer error and option messages if data are entered out of range or inconsistent with program data sets. The user either answers some type of question by filling in a blank with text or issues a command that initiates a program function.

The program is divided into five user interface components. These are the main screen, function line, header line, suggestion line and the command line. The main screen is the area in the center of the screen which contains a list of questions and comments. This is where inputs are entered and results displayed. The function line is where the user

controls the programs utility functions (e.g. saving and deleting files). The header line presents the program version's title. The suggestion line directs the user to the next logical step in making calculations and the command line allows the user to manipulate the data inputs (e.g. calculate factor values).

RUSLE accesses, uses and saves information for each equation factor value. It can get that information from one of three sources: values that the user enters directly; data that the user has stored in RUSLE Databases; or information that the user entered at a previous time and stored.

RUSLE maintains a record of all responses to the program questions in a list called the Current Input List. This is updated every time the user responds by entering data or selecting an option or item. This allows the user to build an equation for a particular site and without completing all calculations, save it to the disk in order to work on it at a later time.

The databases in RUSLE are a useful feature that makes data entry less tedious. This is accomplished by associating a large amount of data with a single identifier. For instance by creating a single file with all of the required parameters for a particular crop (residue, number of plants per acre, etc.) and saving it under that crop's name allows the use of it simply by choosing it from the list of crops.

There are three databases that RUSLE utilizes. The CROP database contains all information on the growth and residue characteristics for various crop types, crop stages and other plant characteristics. The OPERATIONS database includes information from research studies for the effect that common tillage operations have on the soil, crop, and residue, and through those, the erosion rates. The CITY database contains all necessary meteorological data and associated EI distributions for specific

locations.

Functions keys allow the user to easily enter the databases and either edit or create new files depending on the particular situation. It is up to the user to enter data that is taken from valid sources. The print utility is used to print out entire lists from the databases either of the entire set found in the particular database or specific information for a single crop, operation or site. It is recommended that to improve the computers access time, extra files from these databases be deleted using the Delete Utility. For further information on the Delete, Edit, and Print Utilities, consult the (Agriculture Handbook No. 703, 1994) users section.

The values found in the default CROP and OPERATIONS Databases are supported by published literature cited in Chapter 5 of Agriculture Handbook No. 703 (1994). These values are basically for specific combinations of site location, crop type, potential yields, row spacing, planting density, tillage practices, equipment speed, soil conditions, etc., applied in the studies. The values should be handled as core data rather than as final numbers. In the case of this study, most of the CROP and OPERATION core file values were used due to the general nature of the data used in the study. However, database files were edited when site specific data (e.g. crop yields, grazing periods) were available.

Help is available in two different ways from the program using either the help command or the help function. The help command provides information on how the variable fits into the general manner of RUSLE computations and the range of the expected answer. The HELP function is more general information on the structure of RUSLE, how it works and program credits.

The main section of the RUSLE program is the Soil Loss Prediction Table. This screen contains ten lines of separate soil loss equations

with six columns, one for each of the six factors. This allows for displaying more than one equation for the same site with differing conditions, or, equations from different sites. Each separate line is referred to as an input file and can be saved under a specific name. The name can be a total of eight characters as with DOS files and should reflect the site, the date and the plot or site number.

Each factor represented in the Soil Loss Prediction Table can be compared to a starting point for each factor's calculation routines. RUSLE will mark each factor to let the user decide whether the information for the factor is current or if the sub-calculation for the factor is complete.

The user does not need to go through all calculations for each factor meaning a factor can be entered directly into the equation line. The program will mark these with a special symbol as such. This has allowed RUSLE to maintain the "paper form" of USLE, however this tends to create technical and computer problems and with the completion of version 2.0 this paper structure will no longer be incorporated (Renard et al., 1994).

The interaction between the Soil Loss Prediction Table, the Current Input List, and the Input Files, is complex and therefore RUSLE alerts the user to potential problems with the use of warning messages. These warnings occur in instances in which factor values no longer correspond to the numbers which reside in the Current Input List. This happens in three cases: the user has entered one of the factor's routines made changes but did not carry through the calculations; the user has entered a factor value directly from the keyboard; if changes were made to a database file within one factor and not updated in other factors that share that database information (e.g. CITY Code Identifier). Compared with the requirements of the C factor inputs, input requirements for all the other

factors are generally straightforward. The C factor requirements are a result of the complex relationship between plant canopy, and root mass and the soil surface conditions.

The C factor calculations are used to determine soil loss ratio (SLR) subfactors for half-month time periods. This is referred to as the time-varying option and describes how particular crops and associated operations change soil disturbance levels over the course of a year.

For pastureland and rangeland it is not necessary to calculate for 15 day periods, because conditions are unlikely to change appreciably over the course of the year. This is referred to as the time invariant option.

The time varying option is further divided into two more classifications. Single disturbance which assumes a single crop disturbance followed by a significant period of stabilization. This option is best suited for mine spoils, construction sites, and many mechanical rangeland improvement techniques.

The other type of time varying option is a rotation, where the field operations are repeated in a cycle through many years. For instance a corn-winter wheat-bromegrass rotation would only be two years long but this sequence would be expected to repeat itself every two years. The program handles this by calculating through the entire rotation twice and using the resulting values as the base for the third set of calculations, the ones actually used in evaluating soil loss.

In calculating C factors for successive crops it is important that the program is alerted to the current crop so it utilizes the appropriate data set for that crop. RUSLE can only keep track of one crop at a time. There are two ways to alert the program that a new crop has replaced the previous one. The first way is the use of a planting operation that instructs the program to install as the current crop the set listed at the top of the field operations screen. The other method is the use of an

operation that calls in a regrowth set which then becomes the set initialized as the current crop.

There are several outputs available for time-varying option. These are different in the degree of detail shown: The "rotation C" divides the results into the SLR and %EI associated with each crop; The "Operation C" breaks this down further into the SLR and %EI associated with each operation; The "Half-Month Subfactor" represents the smallest division showing the SLR subfactors for each calculation period.

More information on using the RUSLE program software with specific examples and question/answers can be found in the RUSLE reference manual Agriculture Handbook No. 703, (1994). This USDA-ARS publication describes the uses of all commands and functions employed by the RUSLE software as well as descriptions of the calculations from which each of the factors is derived.

Data Inputs

The data set for this study was supplied by the USDA-ARS Southwestern Watershed Research Center. It contains year by year information for individual plots for 21 sites. This information includes previously determined USLE factor values, crop types and yeilds, rotation sequences for each year and the dimensions of each plot. The number of plots and the number of years each plot represents differs for each site. The time frames and crop types range from 26 years of continuous fallow to 4 years of corn-wheat-ryegrass strip crops with an average of 7.9 years per plot for all 21 sites. Most all of the sites have duplication plots in order to account for the natural variability of the recorded soil loss values.

Factor Identification

From each site unique plots (all plots except duplicates) files were developed in the RUSLE program for each separate year to express the yearly differences and effects of EI distributions and management operations.

R factor: The R factor was determined using the supplied year by year EI values. This factor is dependent on the CITY database files for its computation. Only a few sites had CITY database files included in the program. Meteorological data for 30 yr periods was taken when available, from U.S. Weather Bureau longterm records to create the appropriate database files.

The EI distribution number was also required and taken from maps found in the Agriculture Handbook No. 703 (1994). Yearly EI values taken from data determined directly the value of each equations R factor value.

K Factor: The K factor or soil erodibility factor requires the input of an estimated K value for that site, the hydrological soil class, the computation of the LS factor and the meteorological data for the specific site taken from CITY database files. Once this is entered, the value for K can be accurately computed for that particular year.

LS Factor: The LS factor requires two parameters the slope length and slope steepness of the individual plot. These are entered in the appropriate blanks and the program calculates the correct factor. There are four tables for the ratio of rill to interrill erosion. In every case table 2 (Agricultural Handbook No. 703, 1994), for moderate rill to interrill erosion, was selected due to the fact that the plots were all on cropland. The plot dimensions were furnished with the data for each plot year.

C Factor: Information regarding tillage dates for each plot was supplied and entered as either rotations or single disturbances. Crops and

operation tools specified in the data were compared to CROP and OPERATION database files that were felt to accurately approximate the best match. New files were made from core crop files to reflect differing crop yields and/or grazing periods. Some crops required that a substitution be made, for instance, in the case of ryegrass, the bromegrass core CROP database file was used.

The calculations of C Factors on a year to year basis required that previous conditions were accurately represented. With plots that had more than 1 year in the crop rotation, preceding years were maintained in the specific years C factor calculation to account for residue incorporation and decomposition. In the cases where more than two previous years were incorporated in the calculated value as opposed to not accounting for previous years, there was a significant effect on the value of the C factor. Situations in which strip cropping was used, values were determined for each different type of strip and a weighted average was calculated based on information regarding the percentage of crop type or plant cover. Residue additions were, in the cases where data was unavailable, made with the consultation of ARS researchers. These type of situations included periods of grazing, residue shredding and/or.

P Factor: Due to the lack of information regarding the methods used to create supporting practices, the P factor was taken from the previous USLE calculation and entered directly into the Soil Loss Prediction Table. There were only a few plots with support practices in the data set.

Data Outputs

Once all site's specific data were accurately entered the calculations were performed by the program. Soil loss amounts for each year as well as all other equation factors were stored with the measured

values. As mentioned previously, many of the site's plot were duplicated or certain information was duplicated for specific factor inputs. This allowed researchers to alter individual parameter values, such as slope length or steepness, while the other factors varied according to conditions. In doing this the effect that certain factors have on both the computed results and actual measured values could be analyzed.

Data were entered into a spreadsheet and statistical package with all six factors, measured values and results from USLE calculations each occupying separate columns. This allowed for comparison of the computed and measured values.

RESULTS AND DISCUSSION

The RUSLE estimates were made for both a specific annual value and average annual basis and the results were compared with annual measured soil losses and average annual measured soil losses for the entire period represented by each individual plot. Individual plot conditions for all sites are found in Table 1. A summary of the statistics can be found in Table 2. These results demonstrate that RUSLE like USLE is more efficient at predicting soil loss on an average annual basis (Nash-Sutcliffe model efficiency = .73) than it is predicting for individual soil loss events (.58). This is also demonstrated by the difference in the absolute error magnitude of -0.91 kg/m^2 between annual and average annual values. This difference is likely due to the occurrence of single large events found in the entire data set of 1638 annual observations. This is consistent with literature stating that RUSLE parameters were developed to predict long-term average soil losses rather than individual-year soil losses (Smith and Wischmeier, 1978).

The average error (-0.34 and -0.35 for the annual and average annual values, respectively) and the graphical representation of the linearity between measured and observed values show that RUSLE tends to over predict soil loss for the plots used in this study. Figures 1 and 2 present the measured data plotted against the RUSLE estimated values. In both figures it is clear that there are many small values in which RUSLE overestimates and several large values that are underestimated. This is also demonstrated by the fact that the Nash-Sutcliffe efficiency term and the correlation coefficient are close to identical. This indicates that RUSLE is neither under- or over-predicting soil loss on a consistent basis for

Table 1. Revised Universal Soil Loss Equation validation sites with soil erodibility factors (K) for each soil.

Plot No.	Size m	Slope %	Tillage	Crop	Years
Bethany, MO, Shelby silt loam, K = 0.39					
1-7	1.83 by 22.13	8.0	U/D	Alfalfa	1931-1940
1-9	1.83 by 22.13	8.0	U/D	Fallow	1931-1940
Bethany, MO, Shelby silt loam, K = 0.41					
5-1,3,5	13.32 by 82.3	6.6	Strip	Meadow-wheat-corn strips	1937-1941
5-2,4,6	13.32 by 82.3	6.6	Con	Meadow-corn-wheat	1937-1941
Castana, IA, Monona silt loam, K = 0.33					
1-3,4	3.2 by 22.13	14.0	U/D	Fallow	1960-1969
1-7	3.2 by 22.13	14.0	Contour	Oat-meadow-meadow-corn	1960-1969
1-8	3.2 by 22.13	14.0	Contour	Corn-oat-meadow-meadow	1960-1969
Clarinda, IA, Marshall silt loam, K = 0.33					
1-1	1.83 by 11.06	9.0	U/D	Corn	1932-1943
1-2	1.83 by 44.26	9.0	U/D	Corn	1932-1943
1-3	1.83 by 22.13	9.0	U/D	Corn	1932-1943
1-4	1.83 by 22.13	9.0	U/D	Corn-oat-meadow	1932-1943
1-5	1.83 by 22.13	9.0	U/D	Oat-meadow-corn	1932-1943
1-6	1.83 by 22.13	9.0	U/D	Meadow-corn oat	1932-1943
1-7	1.83 by 22.13	9.0	BC	Alfalfa	1932-1943
1-8	1.83 by 22.13	9.0	BC	Bluegrass	1932-1943
2-1	3.20 by 22.13	9.0	U/D	Corn (residue added)	1933-1939
2-2	3.20 by 22.13	9.0	U/D	Corn (residue added)	1933-1939
2-3	3.20 by 22.13	9.0	U/D	Corn (residue added)	1933-1939
2-4	3.20 by 22.13	9.0	U/D	Corn (residue added)	1933-1939
2-5	3.20 by 22.13	9.0	U/D	Corn	1933-1939
2-6	3.20 by 22.13	9.0	U/D	Fallow(residue added)	1933-1939
2-7	3.20 by 22.13	9.0	U/D	Fallow(residue added)	1933-1939
2-8	3.20 by 22.13	9.0	U/D	Fallow(residue added)	1933-1939
2-9	3.20 by 22.13	9.0	U/D	Fallow(residue added)	1933-1939
2-10	3.20 by 22.13	9.0	U/D	Fallow	1933-1939
3-1	12.8 by 182	8.0	U/D	Corn(rye)	1933-1939
3-2	12.8 by 96	8.0	U/D	Corn(rye)	1933-1939
3-3	12.8 by 48	8.0	U/D	Corn(rye)	1933-1939
Clemson, SC, Cecil sandy loam, K = 0.25					
5-1,12	1.83 by 18.2	7.0	U/D	Fallow	1940-1942
Dixonsprings, IL, Grantsburg silt loam, K = 0.38					
11,15	12.8 by 10.67	5.4	Con	Wheat-meadow(grazed)-corn	1940-1945
12,17	12.8 by 21.34	5.2	Con	Wheat-meadow(grazed)-corn	1940-1945
13,18	12.8 by 42.67	5.5	Con	Wheat-meadow(grazed)-corn	1940-1945
14,19	12.8 by 64.01	4.9	Con	Wheat-meadow(grazed)-corn	1940-1945
21,26	12.8 by 10.67	10.1	Con	Wheat-meadow(grazed)-corn	1940-1945
22,27	12.8 by 21.34	9.5	Con	Wheat-meadow(grazed)-corn	1940-1945
23,28	12.8 by 42.67	10.0	Con	Wheat-meadow(grazed)-corn	1940-1945
24,29	12.8 by 64.01	9.7	Con	Wheat-meadow(grazed)-corn	1940-1945

Table 1. continued

Plot	Size m	Slope %	Tillage	Crop	Years
Geneva, NY, Ontario loam, K = 0.27					
1-2	1.83 by 22.13	8.0	Broadcast	Fallow(rye)	1937-1947
1-4	1.83 by 22.13	8.0	Broadcast	Soybean	1937-1947
1-5	1.83 by 22.13	8.0	U/D	Fallow	1937-1947
1-6	1.83 by 22.13	8.0	Broadcast	Meadow	1937-1947
1-2,4,5,6	1.83 by 22.13	8.0	U/D	Corn	1937-1947
Geneva, NY, Dunkirk silt loam, K = 0.69					
2-1	1.83 by 22.13	5.0	U/D	Fallow	1938-1946
Guthrie, OK, Stephenville fine sandy loam, K = 0.22					
1-1	1.83 by 11.06	7.7	U/D	Cotton	1930-1956
1-2	1.83 by 44.26	7.7	U/D	Cotton	1930-1956
1-3	1.83 by 22.13	7.7	U/D	Cotton	1930-1956
1-8	1.83 by 22.13	7.7	U/D	Fallow	1930-1956
3-1	39 by 103.6	4.5	Con	Cotton with alfalfa strips	1935-1939
3-2	39 by 103.6	4.0	Con	Cotton with oat strips	1935-1939
3-4	39 by 103.6	3.0	Con	Oat with cotton strips	1935-1939
5-1	18.53 by 103.6	4.5	Con	Cotton with grass strips	1942-1946
5-2	18.53 by 103.6	4.5	Con	Cotton	1942-1946
5-3	18.53 by 103.6	4.0	Con	Cotton	1942-1946
5-4	18.53 by 103.6	4.0	Con	Cotton with grass strips	1942-1946
5-5	18.53 by 103.6	3.5	Con	Cotton with grass strips	1942-1946
5-6	18.53 by 103.6	3.5	Con	Cotton	1942-1946
Hayes, KS, Colby silt loam, K = 0.32					
1-1	1.83 by 11.06	5.0	U/D	Wheat	1931-1946
1-2	1.83 by 44.26	5.0	U/D	Wheat	1931-1946
4-1,4	33.19 by 60.96	7.0		Meadow moderately grazed	1933-1938
4-2,3	33.19 by 60.96	7.0		Meadow heavily grazed	1933-1938
Hollysprings, MS, Grenada silt loam, K = 0.41					
3-1	4.05 by 22.13	5.0	U/D	Meadow-meadow-corn	1963-1968
3-2	4.05 by 22.13	5.0	U/D	Corn-meadow-meadow	1963-1968
3-5,7	4.05 by 22.13	5.0	U/D	Fallow	1963-1968
Arnot, NY(Ithaca), Bath flaggy silt loam, K = 0.02					
1-5	1.83 by 22.13	18.3	Con	Corn	1935-1945
1-7	1.83 by 22.13	18.9	Con	Corn, fallow	1935-1945
1-8	1.83 by 22.13	19.2	U/D	fallow	1935-1945
1-9	1.83 by 22.13	19.5	BC	Meadow	1935-1945
1-14	1.83 by 22.13	20.7	Con	Potatoes-scl	1935-1945

Table 1. continued

Plot	Size m	Slope %	Tillage	Crop	Years
LaCrosse, WI, Fayette silt loam, K = 0.38					
1-1	1.83 by 11.06	16.0	Con	Corn	1933-1938
1-2	1.83 by 44.26	16.0	Con	Corn	1933-1938
1-3	1.83 by 22.13	16.0	Con	Corn	1933-1938
1-8	1.83 by 22.13	16.0	U/D	Fallow	1933-1938
1-10	1.83 by 22.13	16.0	Con	Bluegrass(protected)	1933-1938
1-12	1.83 by 22.13	30.0	Con	Bluegrass(protected)	1933-1938
1-14	1.83 by 22.13	30.0	Con	Corn	1933-1938
2-1,9	4.27 by 22.13	16.0	Con	Hay-hay-corn-barley	1940-1951
2-2,6	4.27 by 22.13	16.0	Con	Hay-hay-corn-barley	1940-1951
2-4,10	4.27 by 22.13	16.0	Con	Hay-hay-corn-barley	1940-1951
3S1,2,3	4.27 by 11.06	3.0	U/D	Barley 3 yr, hay-corn-barley	1939-1946
3L1,2,3	4.27 by 22.13	3.0	U/D	Barley 3 yr, hay-corn-barley	1939-1946
8S1,2,3	4.27 by 11.06	8.0	U/D	Barley 3 yr, hay-corn-barley	1939-1946
8L1,2,3	4.27 by 22.13	8.0	U/D	Barley 3 yr, hay-corn-barley	1939-1946
13S1,2,3	4.27 by 11.06	13.0	U/D	Barley 3 yr, hay-corn-barley	1939-1946
13L1,2,3	4.27 by 22.13	13.0	U/D	Barley 3 yr, hay-corn-barley	1939-1946
18S1,2,3	4.27 by 11.06	18.0	U/D	Barley 3 yr, hay-corn-barley	1939-1946
18L1,2,3	4.27 by 22.13	18.0	U/D	Barley 3 yr, hay-corn-barley	1939-1946
Madison, SD, Egan silty clay loam, K = 0.22					
1-2,6,9	4.05 by 22.13	5.8	U/D	Corn(mulch tillage)	1962-1970
1-4,7,10	4.05 by 22.13	5.8	U/D	Corn(plowed)	1962-1970
1-5,12	4.05 by 22.13	5.8	U/D	Fallow	1962-1970
Marcellus, NY, Honeoye silt loam, K = 0.28					
A-1,4	6.40 by 22.13	18.9	BC	Meadow 3 yr-corn	1940-1943
A-2,3	6.40 by 22.13	18.4	U/D	Fallow 3 yr-corn	1940-1943
B-5	6.40 by 11.06	16.4	Con	Corn	1957-1963
B-2	6.40 by 22.13	16.8	Con	Corn	1957-1963
B-3	6.40 by 64.01	17.6	Con	Corn	1957-1963
C-9	6.40 by 11.06	4.5	Con	Corn	1957-1963
C-2	6.40 by 22.13	3.9	Con	Corn	1957-1963
C-7	6.40 by 64.01	5.0	Con	Corn	1957-1963
D-9	6.40 by 11.06	8.8	Con	Corn	1957-1963
D-2	6.40 by 22.13	9.4	Con	Corn	1957-1963
D-3	6.40 by 64.01	9.4	Con	Corn	1957-1963
Morris, MN, Barnes loam, K = 0.28					
1-2,9	4.05 by 22.13	5.9	U/D	Corn-oat-hay	1962-1971
1-10,13	4.05 by 22.13	6.5	U/D	Fallow	1962-1971
Presque Isle, ME, Caribou gravelly silt loam, K = 0.23					
1-2,14,16	3.66 by 22.13	8.0	U/D	Potato	1961-1965
1-3,8,18	3.66 by 22.13	8.0	U/D	Fallow	1961-1965
1-6,13,17	3.66 by 22.13	8.0	U/D	Potato(RR)	1961-1965

Table 1. continued

Plot	Size m	Slope %	Tillage	Crop	Years
Raleigh, NC, Applying, Vance and Durham series, K = 0.23					
2-5	4.88 by 41.61	4.0	Con	Tobacco	1944-1948
2-6	4.88 by 41.61	4.0	Con	Tobacco-ryegrass	1944-1948
Statesville, NC, Cecil sandy clay loam, K = 0.36					
1-4	1.83 by 22.13	10.0	Con	Fallow	1931-1938
1-10	1.83 by 22.13	10.0	Con	Cotton	1931-1938
1-11	1.83 by 44.26	10.0	Con	Cotton	1931-1938
1-12	1.83 by 11.06	10.0	Con	Cotton	1931-1938
Temple, TX, Austin silty loam, K = 0.29					
1-1	1.83 by 11.06	4.0	U/D	Corn	1931-1945
1-2	1.83 by 44.26	4.0	U/D	Corn	1931-1945
1-3	1.83 by 22.13	4.0	U/D	Corn	1931-1945
1-4	1.83 by 22.13	4.0	U/D	Corn-oat-cotton	1931-1945
1-9	1.83 by 22.13	4.0	U/D	Oat-cotton-corn	1931-1945
1-7	1.83 by 22.13	4.0	U/D	Cotton-corn-oat	1931-1945
Tifton, GA, Tifton loamy sand, K = 0.33					
1-1,2-6	7.99 by 25.320	3.0	Contour	Meadow-meadow-corn-peanut	1952-1966
1-2,2-4	7.99 by 25.320	3.0	Contour	Peanut	1952-1958
1-2,2-4	7.99 by 25.320	3.0	U/D	Fallow	1959-1966
1-3,2-5	7.99 by 25.320	3.0	Contour	Peanut-corn(rye)-oat	1952-1966
1-8,2-1	7.99 by 25.320	3.0	Contour	Meadow	1952-1955
1-8,2-1	7.99 by 25.320	3.0	Contour	Corn	1955-1966
Watkinsville, GA, Cecil sandy loam, K = 0.23					
1-2	6.32 by 21.34	3.0	Con	Cotton	1953-1960
Watkinsville, GA, Cecil sandy clay loam, K = 0.36					
2-24	6.32 by 21.34	7.0	Con	Cotton	1953-1960
3-34	6.32 by 21.34	11.0	Con	Cotton	1953-1960
2-7,9,11	6.32 by 21.34	7.0	Con	Meadow-meadow-corn	1953-1960
3-27,29,30	6.32 by 21.34	11.0	Con	Meadow-meadow-corn	1953-1960
3-25,26,28	6.32 by 10.67	11.0	Con	Meadow-meadow-corn	1953-1960
2-13,19, 21,22	6.32 by 21.34	7.0	Con	Meadow-meadow-corn-cotton	1953-1960

PARAMETER values in kg m ⁻²	Results from RUSLE predictions on annual basis	Results from RUSLE predictions on average annual basis
Number of observations	1638	206
Avg meas soil loss	3.51 ±6.96	3.48 ±5.61
Avg pred soil loss	3.16 ±4.39	3.14 ±4.14
Avg error	-0.35	-0.34
Std. Dev. of the error	4.53	2.90
Regression Slope	0.49	0.64
Intercept	1.44	0.91
Corr. coefficient	0.58	0.75
Nash-Sutcliffe model efficiency	0.58	0.73

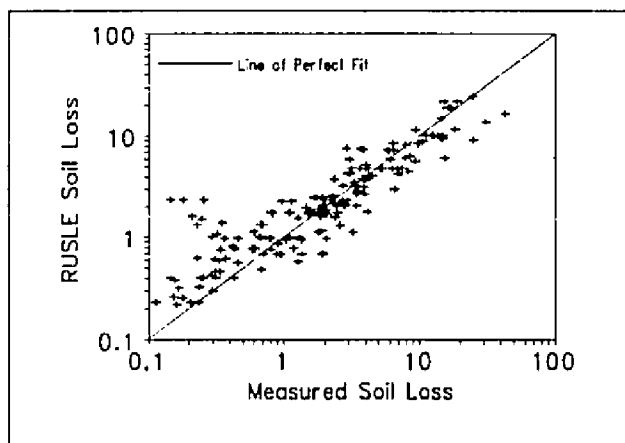
a)

PARAMETER values in kg m ⁻²	Results from USLE predictions on annual basis	Results from USLE predictions on average annual basis
Number of observations	1638	206
Avg meas soil loss	3.51 ±6.96	3.48 ±5.61
Avg pred soil loss	3.22 ± 5.36	3.13 ±5.00
Avg error	-0.28	-0.34
Std. Dev. of the error	4.48	2.83
Regression Slope	0.59	0.77
Intercept	1.16	0.42
Corr. coefficient	0.58	0.75
Nash-Sutcliffe model efficiency	0.55	0.73

b)

Table 2. a) Summary statistics of RUSLE soil losses for both annual and average annual values, b) Summary statistics of USLE soil losses for both annual and average annual values.

a)



b)

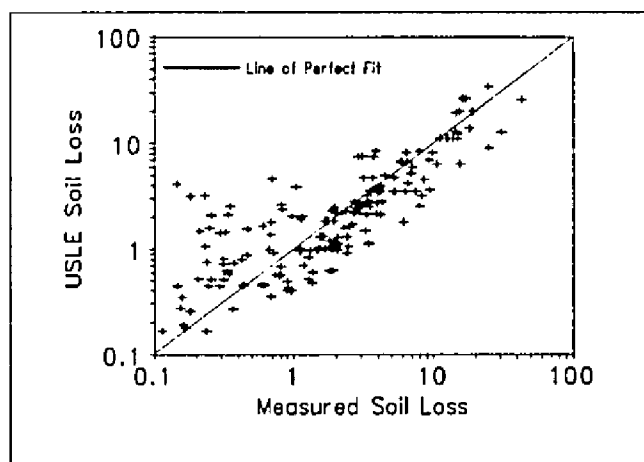
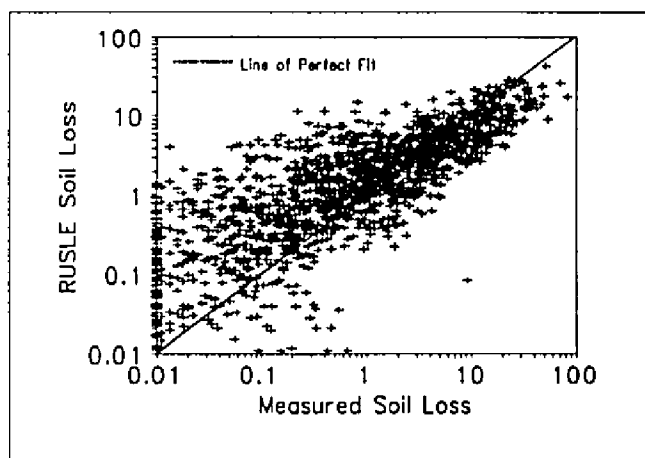


Figure 1. a) Soil loss on an annual average basis measured and predicted by the Revised Universal Soil Loss Equation, b) Soil loss on an annual average basis measured and predicted by the Universal Soil Loss Equation. All values kg m^{-2} for 206 observations.

a)



b)

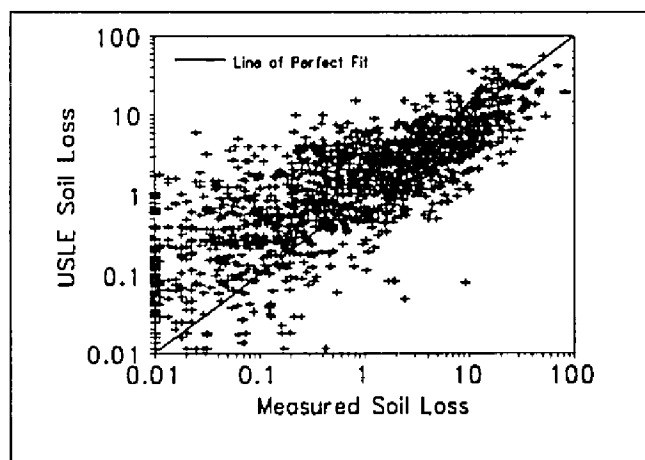


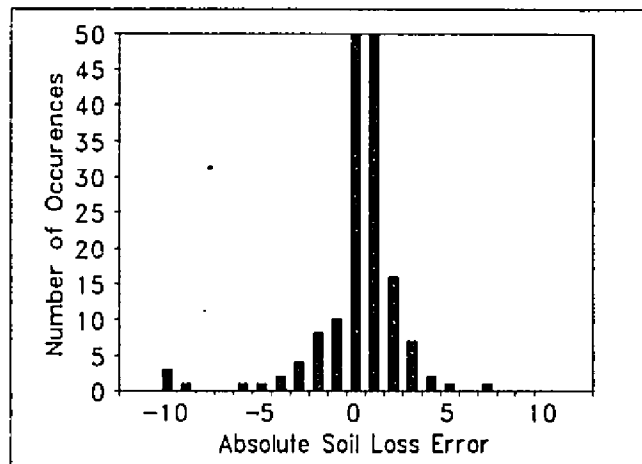
Figure 2. a) Soil loss on an annual basis measured and predicted by the Revised Universal Soil Loss Equation, b) Soil loss on an annual basis measured and predicted by the Universal Soil Loss Equation. All values kg m^{-2} for 1638 observations.

all of the plots.

The distribution of the error term (Figure 3) illustrates that the error term is approximately uniformly distributed about zero (100 plots underestimated and 106 overestimated). Plots that had an annual measured soil loss of $< 1 \text{ kg/m}^2$, over 60% of these were overestimated. On plots with measured values $> 5 \text{ kg/m}^2$, less than 30% were over-estimated. Also the regression analysis seems to support this conclusion; that without forcing the intercept through zero, the y intercept is much greater than zero with a slope less than one for both annual and average annual values. This is consistent with previous studies using USLE that have shown overestimation on plots with relatively low erosion rates and under estimation on plots with higher erosion rates.

Plot data for this study varied not only in the duration of each plot period but also the time frame at which measurements were collected. Many of the sites had plots in which measurements were initiated as early as 1930 (see Table 1). Following the methods of a previous USLE study (Risse et al., 1992) which utilized the identical data set, plots were separated into pre-1960 and post-1960 plots to examine the affect of lower crop yields, less intense tillage practices and different methods of data collection on RUSLE estimates and overall model efficiency. These results are presented in Table 3. The overall correlation coefficient was 0.23 better for the post-1960 plots and the average magnitude of the error was approximately 1.00 kg/m^2 less for the post-1960 plots. RUSLE tended to underpredict erosion (avg. error 0.52 kg/m^2) for the pre-1960 data and overpredict erosion (avg. error of 0.37 kg/m^2) on the post-1960 data. It should be noted that the post-1960 data set was much smaller and therefore it is difficult to make final conclusions about such results. However, there is a decrease in the average measured soil loss from pre-1960 to post-1960 plots. This is most likely due to advancements in agricultural

a)



b)

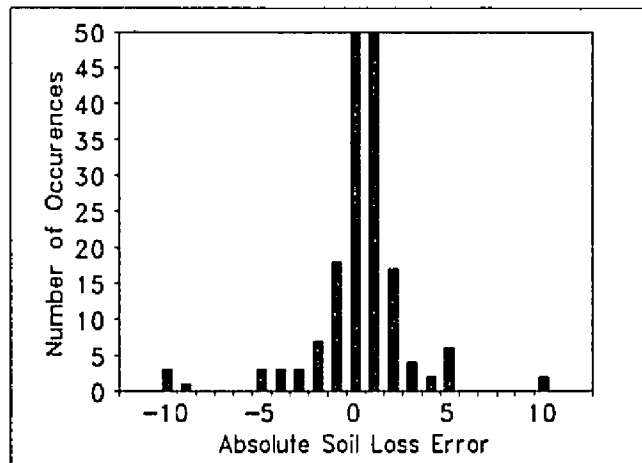


Figure 3. a) Frequency distribution of error for RUSLE soil loss predictions for annual average values, b) Frequency distribution of error for USLE soil loss predictions for annual average values. All values kg m^{-2} for 206 observations.

Parameter values in kg m ⁻²	RUSLE predictions pre-1960 plots	RUSLE predictions post-1960 plots
Number of observations	1325	313
Avg meas soil loss	3.67 ±7.19	2.80 ±5.84
Avg pred soil loss	3.14 ±3.93	3.17 ±5.97
Avg error	0.52 ±4.86	0.37 ±2.54
Regression Slope	0.42	0.93
Intercept	1.60	0.57
Correlation coefficient	0.6	0.83
Nash-Sutcliffe model efficiency	0.54	0.81

a)

Parameter values in kg m ⁻²	USLE predictions pre-1960 plots	USLE predictions post-1960 plots
Number of observations	1325	313
Avg meas soil loss	3.67 ±7.19	2.80 ±5.84
Avg pred soil loss	3.14 ±4.71	3.15 ±5.97
Average error	0.54 ±4.67	0.82 ±3.37
Regression Slope	0.50	1.16
Intercept	1.28	1.70
Correlation coefficient	0.59	0.81
Nash-Sutcliffe model efficiency	0.57	0.65

b)

Table 3. a) Statistical results for pre-1960 and post-1960 plots for measured and RUSLE predicted values, b) Statistical results for pre-1960 and post-1960 plots for measured and USLE predicted values.

technologies that have increased crop yields and produced better management practices. This variability was accounted for by the use of separate crop files for different yields.

Model efficiencies were also used to assess how each RUSLE parameter might affect the total error in RUSLE. Each factor was averaged over the entire data set of 1638 observations. Then each separate factor one at a time was replaced with the average and model efficiencies were calculated for the resulting data sets. The results of this analysis are presented in Table 4. By holding one factor at its average while using the other four factors associated with an individual year's conditions is in effect like removing the importance of the parameter in question. The cover/management factor is the most influential on the value for model efficiency. Model efficiency decreased by 0.55 to 0.18 when the topographic factor was held at its average. However, because of a lack of variability in this factor for the entire data set this should be interpreted with caution. The cover and management factor decreased model efficiency by 0.54 to a low of 0.19. It is also evident that the rainfall and runoff factor is of considerable importance in estimating soil loss from runoff. The P factor actually increased model performance when held at a average value of less than one.

In order to assess the accuracy of each model estimate, 95% confidence intervals were determined for each prediction in the data set. These results are presented graphically in Figure 4. These intervals while only for average annual values using measured EI values on controlled runoff type plots demonstrate important trends applicable to other conditions. The confidence intervals demonstrate that like USLE there is a tendency for over prediction at lower erosion rates and under prediction at higher erosion rates. For a prediction of 1 kg/m^3 , the expected values of actual soil loss can range from 0.00 to 3 kg/m^2 , with an expected soil

Parameter removed	Average value	Efficiency w/ average value	*Lost efficiency
EI rainfall/ runoff factor	173	0.21	0.52
K soil erodibility factor	0.28	0.64	0.09
LS slope/length factor	1.13	0.18	0.55
C cropping factor	0.37	0.19	0.54
P management factor	0.88	0.79	-0.07

a)

Parameter removed	Average value	Efficiency w/ average value	*Lost efficiency
EI rainfall/ runoff factor	178	0.59	0.15
K soil erodibility factor	0.30	0.59	0.16
LS slope/length factor	1.15	-0.01	0.75
C cropping factor	0.34	0.02	0.72
P management factor	0.85	0.80	-0.05

b)

* Loss in efficiency calculated by subtracting model efficiency using average RUSLE factor value from the maximum model efficiency for the data set of average annual values.

Table 4. a) Relative importance of RUSLE parameters based on the analysis of model efficiencies, b) Relative importance of USLE parameters based on the analysis of model efficiencies.

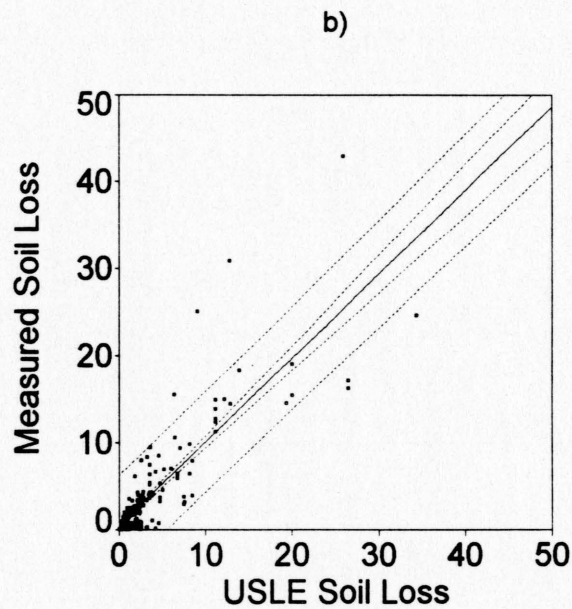
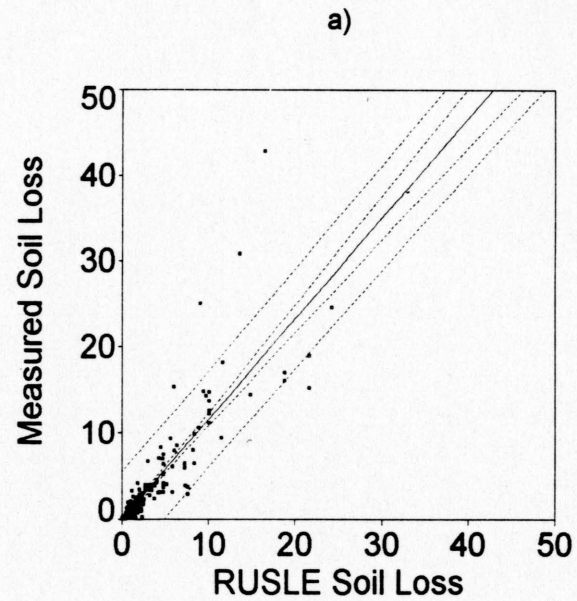


Figure 4. a) Expected and predicted 95% confidence intervals for RUSLE and measured values based on regression analysis for average annual values. b) Expected and predicted 95% confidence intervals for USLE and measured values based on regression analysis for average annual values.

loss of .98 kg/m². As soil loss amounts increase the predicted values tend to be greater than the expected values.

Looking at the 95% confidence intervals, it is easy to see that the upper and lower boundaries do not increase significantly with increasing predicted values. That is the range of expected values based on predicted values does not change significantly between the minimum and maximum values. The percent error for measured soil loss decreases with higher predicted values. The error percentage is calculated by subtracting the predicted value from the expected and dividing this number by the expected. For soil loss amounts of less than 5 kg/m² the expected values might range $\pm 100\%$, while at predictions >50 kg/m² it should be within $\pm 15\%$ of the predicted value. This seems consistent with many other models developed to estimate natural processes, that, as the rate of erosion or whatever is being measured increases, the inverse occurs to the percentage error. This can be considered important information when RUSLE is utilized in determining sediment loading of rivers for an entire watershed or state region.

CONCLUSIONS

1. The RUSLE applied to 206 natural runoff plots with an average of 7.9 years per plot had an average magnitude of error of 1.17 kg/m² and a model efficiency of 0.73 in terms of average annual predictions. Prediction of the 1638 individual annual erosion values had an average magnitude of error of 2.08 kg/m² and a model efficiency of 0.58. These results are nearly identical to the results of a previous study that applied USLE to the same plots (Risse et al., 1992). This implies that when applying these models there is a likelihood of a considerable amount of error.

2. The RUSLE results were consistent with those from previous studies with the USLE in that it tended to overpredict soil loss on plots with low rates of soil erosion and underpredict on plots with high rates of soil erosion.

3. The C-factor is the most significant factor affecting the overall model efficiency. This indicates that further research should improve estimates of this factor.

4. The accuracy of the RUSLE predictions when measured and computed values are compared tends to increase with higher rates of total soil loss.

5. While there seems to be no improvement in the accuracy of RUSLE over USLE for the model efficiencies there is an improvement in the use and formulation of land use strategies when the RUSLE technology is employed as a predictive tool. This is especially true in more complex situations than those found in the data set used in this study.

APPENDIX A
Annual values for 206 site plots
Values presented in english units

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Bethany, MO	1-7	1931	220	0.32	0.89	0.019	1	1.190	0.41	0.38
Bethany, MO	1-7	1932	191	0.34	0.89	0.019	1	1.098	0.01	0.26
Bethany, MO	1-7	1933	280	0.3	0.89	0.05	1	3.738	0.26	0.39
Bethany, MO	1-7	1934	284	0.31	0.89	0.04	1	3.134	0.47	0.49
Bethany, MO	1-7	1935	199	0.33	0.89	0.036	1	2.104	0.13	0.27
Bethany, MO	1-7	1936	65	0.48	0.89	0.046	1	1.277	0.07	0.11
Bethany, MO	1-7	1937	44	0.49	0.89	0.06	1	1.151	0.14	0.08
Bethany, MO	1-7	1938	214	0.32	0.89	0.04	1	2.438	0.02	0.29
Bethany, MO	1-7	1939	182	0.35	0.89	0.041	1	2.324	0.02	0.25
Bethany, MO	1-7	1940	117	0.42	0.89	0.037	1	1.618	0.09	0.16
Bethany, MO	1-9	1931	220	0.32	0.89	0.96	1	60.150	105.42	75.94
Bethany, MO	1-9	1932	191	0.34	0.89	0.952	1	55.022	85.05	65.74
Bethany, MO	1-9	1933	280	0.3	0.89	0.961	1	71.844	144.84	96.44
Bethany, MO	1-9	1934	284	0.31	0.89	0.957	1	74.986	85.15	97.87
Bethany, MO	1-9	1935	199	0.33	0.89	0.948	1	55.407	142.98	68.44
Bethany, MO	1-9	1936	65	0.48	0.89	0.969	1	26.907	19.69	22.5
Bethany, MO	1-9	1937	44	0.49	0.89	0.955	1	18.325	19.51	15.08
Bethany, MO	1-9	1938	214	0.32	0.89	0.961	1	58.570	76.47	73.71
Bethany, MO	1-9	1939	182	0.35	0.89	0.961	1	54.482	102.95	62.81
Bethany, MO	1-9	1940	117	0.42	0.89	0.966	1	42.248	29.88	40.22
Bethany, MO	5-1	1937	41	0.48	1.34	0.068	0.35	0.628	0.28	0.58
Bethany, MO	5-1	1938	214	0.3	1.34	0.11	0.35	3.312	0.06	2.99
Bethany, MO	5-1	1939	182	0.33	1.34	0.07	0.35	2.000	5.2	2.55
Bethany, MO	5-1	1940	117	0.4	1.34	0.086	0.35	1.888	0.25	1.63
Bethany, MO	5-1	1941	152	0.36	1.34	0.070	0.35	1.796	0.69	2.13
Bethany, MO	5-2	1937	44	0.48	1.34	0.303	0.5	4.288	0.88	1.57
Bethany, MO	5-2	1938	214	0.3	1.34	0.103	0.5	4.430	0.58	4.38
Bethany, MO	5-2	1939	182	0.33	1.34	0.013	1	1.048	0.17	0.44
Bethany, MO	5-2	1940	117	0.4	1.34	0.235	0.5	7.369	5.5	4.44
Bethany, MO	5-2	1941	152	0.36	1.34	0.084	0.5	3.080	0.14	3.12
Bethany, MO	5-3	1937	41	0.48	1.34	0.073	0.35	0.674	0.34	0.58
Bethany, MO	5-3	1938	214	0.3	1.34	0.071	0.35	2.138	0.15	2.99
Bethany, MO	5-3	1939	182	0.33	1.34	0.063	0.35	1.775	2.34	2.55
Bethany, MO	5-3	1940	117	0.4	1.34	0.081	0.35	1.778	2.25	1.63
Bethany, MO	5-3	1941	152	0.36	1.34	0.105	0.35	2.695	0.32	2.13
Bethany, MO	5-4	1937	41	0.48	1.34	0.039	1	1.028	0.72	0.1
Bethany, MO	5-4	1938	214	0.3	1.34	0.205	0.5	8.818	0.7	8.14
Bethany, MO	5-4	1939	182	0.33	1.34	0.075	0.5	3.018	1	3.73
Bethany, MO	5-4	1940	117	0.4	1.34	0.009	1	0.564	0.07	0.28
Bethany, MO	5-4	1941	152	0.36	1.34	0.237	0.5	8.689	4.42	5.79
Bethany, MO	5-5	1937	41	0.48	1.34	0.073	0.35	0.674	0.5	0.58
Bethany, MO	5-5	1938	214	0.3	1.34	0.071	0.35	2.138	0.66	2.99
Bethany, MO	5-5	1939	182	0.33	1.34	0.063	0.35	1.775	0.68	2.55
Bethany, MO	5-5	1940	117	0.4	1.34	0.081	0.35	1.778	0.2	1.63
Bethany, MO	5-5	1941	152	0.36	1.34	0.105	0.35	2.695	1.19	2.13
Bethany, MO	5-6	1937	41	0.48	1.34	0.199	0.5	2.624	0.1	0.84
Bethany, MO	5-6	1938	214	0.3	1.34	0.014	1	1.204	0	0.52
Bethany, MO	5-6	1939	182	0.33	1.34	0.247	0.5	9.939	19.39	6.93
Bethany, MO	5-6	1940	117	0.4	1.34	0.154	0.5	4.829	0.43	2.39
Bethany, MO	5-6	1941	152	0.36	1.34	0.018	1	1.320	0.05	0.37

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Castana, IA	1-3	1960	259	0.23	1.82	0.948	1	102.780	77.12	168.61
Castana, IA	1-3	1961	227	0.23	1.82	0.969	1	92.077	85.25	148
Castana, IA	1-3	1962	158	0.28	1.82	0.977	1	78.665	124.44	101.85
Castana, IA	1-3	1963	280	0.24	1.82	0.957	1	117.045	131.25	180.39
Castana, IA	1-3	1964	201	0.24	1.82	0.972	1	85.338	63.88	129.31
Castana, IA	1-3	1965	183	0.25	1.82	0.971	1	80.850	74.85	117.68
Castana, IA	1-3	1966	70	0.41	1.82	0.968	1	50.563	1.8	45.21
Castana, IA	1-3	1967	120	0.33	1.82	0.988	1	71.207	19.25	78.99
Castana, IA	1-3	1968	151	0.29	1.82	0.976	1	77.785	58.3	96.91
Castana, IA	1-3	1969	187	0.25	1.82	0.977	1	83.128	84.38	120.46
Castana, IA	1-4	1960	259	0.23	1.82	0.948	1	102.780	66.15	166.61
Castana, IA	1-4	1961	227	0.23	1.82	0.969	1	92.077	78.5	146
Castana, IA	1-4	1962	158	0.28	1.82	0.977	1	78.665	123.84	101.85
Castana, IA	1-4	1963	280	0.24	1.82	0.957	1	117.045	140.96	180.39
Castana, IA	1-4	1964	201	0.24	1.82	0.972	1	85.338	87.31	129.31
Castana, IA	1-4	1965	183	0.25	1.82	0.971	1	80.850	83.78	117.68
Castana, IA	1-4	1966	70	0.41	1.82	0.968	1	50.563	0.99	45.21
Castana, IA	1-4	1967	120	0.33	1.82	0.988	1	71.207	34.66	76.99
Castana, IA	1-4	1968	151	0.29	1.82	0.976	1	77.785	60.63	96.91
Castana, IA	1-4	1969	187	0.25	1.82	0.977	1	83.128	84.59	120.46
Castana, IA	1-7	1960	259	0.23	1.82	0.36	0.65	25.370	14.69	25.99
Castana, IA	1-7	1961	227	0.23	1.82	0.044	0.65	2.718	0.12	8.54
Castana, IA	1-7	1962	158	0.28	1.82	0.008	1	0.644	0.03	0.41
Castana, IA	1-7	1963	280	0.24	1.82	0.007	1	0.856	0.08	0.72
Castana, IA	1-7	1964	201	0.24	1.82	0.409	0.65	23.341	20.47	20.17
Castana, IA	1-7	1965	183	0.25	1.82	0.065	0.65	3.518	2.42	6.88
Castana, IA	1-7	1966	70	0.41	1.82	0.018	1	0.940	0	0.18
Castana, IA	1-7	1967	120	0.33	1.82	0.018	1	1.297	0.15	0.31
Castana, IA	1-7	1968	151	0.29	1.82	0.35	0.65	18.131	11.27	15.12
Castana, IA	1-7	1969	187	0.25	1.82	0.053	0.65	2.931	0.31	7.05
Castana, IA	1-8	1960	259	0.23	1.82	0.002	1	0.217	0.15	0.67
Castana, IA	1-8	1961	227	0.23	1.82	0.317	0.65	19.579	0.28	22.78
Castana, IA	1-8	1962	158	0.28	1.82	0.033	0.65	1.727	0.17	5.96
Castana, IA	1-8	1963	280	0.24	1.82	0.01	1	1.223	0	0.72
Castana, IA	1-8	1964	201	0.24	1.82	0.01	1	0.878	0.03	0.52
Castana, IA	1-8	1965	183	0.25	1.82	0.4	0.65	21.649	5.77	18.36
Castana, IA	1-8	1966	70	0.41	1.82	0.102	0.65	3.463	0	2.64
Castana, IA	1-8	1967	120	0.33	1.82	0.005	1	0.360	0.08	0.31
Castana, IA	1-8	1968	151	0.29	1.82	0.015	1	1.195	0.07	0.39
Castana, IA	1-8	1969	187	0.25	1.82	0.3	0.65	18.592	4.55	18.79
Clarinda, IA	1-1	1932	186	0.25	0.71	0.551	1	18.191	49.78	15.23
Clarinda, IA	1-1	1933	171	0.26	0.71	0.58	1	18.309	3.27	14.01
Clarinda, IA	1-1	1934	101	0.36	0.71	0.573	1	14.792	20.46	8.28
Clarinda, IA	1-1	1935	105	0.35	0.71	0.614	1	16.021	31.41	8.58
Clarinda, IA	1-1	1936	83	0.39	0.71	0.612	1	14.065	30.5	6.83
Clarinda, IA	1-1	1937	175	0.26	0.71	0.611	1	19.738	90.25	14.31
Clarinda, IA	1-1	1938	111	0.34	0.71	0.647	1	17.337	20.94	9.14
Clarinda, IA	1-1	1939	144	0.29	0.71	0.565	1	16.752	10.62	11.84
Clarinda, IA	1-1	1940	232	0.23	0.71	0.572	1	21.671	33.25	19
Clarinda, IA	1-1	1941	351	0.3	0.71	0.573	1	42.839	93.21	28.82
Clarinda, IA	1-1	1942	278	0.23	0.71	0.566	1	25.695	34.89	22.76
Clarinda, IA	1-1	1943	169	0.27	0.71	0.478	1	15.486	23.33	13.83
Clarinda, IA	1-2	1932	186	0.25	1.4	0.551	1	35.870	47.54	30.24

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Clarinda, IA	1-2	1933	171	0.26	1.4	0.58	1	36.102	4.64	27.82
Clarinda, IA	1-2	1934	101	0.36	1.4	0.573	1	29.168	19.78	16.45
Clarinda, IA	1-2	1935	105	0.35	1.4	0.614	1	31.590	41.97	17.04
Clarinda, IA	1-2	1936	83	0.39	1.4	0.612	1	27.735	45.15	13.56
Clarinda, IA	1-2	1937	175	0.26	1.4	0.611	1	38.921	113.95	28.43
Clarinda, IA	1-2	1938	111	0.34	1.4	0.647	1	34.185	23.53	18.15
Clarinda, IA	1-2	1939	144	0.29	1.4	0.565	1	33.032	15.8	23.51
Clarinda, IA	1-2	1940	232	0.23	1.4	0.572	1	42.731	44.11	37.74
Clarinda, IA	1-2	1941	351	0.3	1.4	0.573	1	84.472	156.62	57.24
Clarinda, IA	1-2	1942	278	0.23	1.4	0.566	1	50.666	38.4	45.2
Clarinda, IA	1-2	1943	169	0.27	1.4	0.478	1	30.536	12.43	27.46
Clarinda, IA	1-3	1932	186	0.25	1	0.551	1	25.622	47.39	21.45
Clarinda, IA	1-3	1933	171	0.26	1	0.58	1	25.787	2.6	19.73
Clarinda, IA	1-3	1934	101	0.36	1	0.573	1	20.834	19.58	11.67
Clarinda, IA	1-3	1935	105	0.35	1	0.614	1	22.565	34.37	12.08
Clarinda, IA	1-3	1936	83	0.39	1	0.612	1	19.810	46.5	9.61
Clarinda, IA	1-3	1937	175	0.26	1	0.611	1	27.801	84.23	20.16
Clarinda, IA	1-3	1938	111	0.34	1	0.647	1	24.418	15.72	12.87
Clarinda, IA	1-3	1939	144	0.29	1	0.565	1	23.594	10.86	18.67
Clarinda, IA	1-3	1940	232	0.23	1	0.572	1	30.522	41.68	26.77
Clarinda, IA	1-3	1941	351	0.3	1	0.573	1	60.337	97.58	40.6
Clarinda, IA	1-3	1942	278	0.23	1	0.566	1	36.190	29.92	32.06
Clarinda, IA	1-3	1943	169	0.27	1	0.478	1	21.811	22.58	19.48
Clarinda, IA	1-4	1932	186	0.25	1	0.258	1	11.997	55.09	9.56
Clarinda, IA	1-4	1933	171	0.26	1	0.364	1	16.183	1.24	5.07
Clarinda, IA	1-4	1934	101	0.36	1	0.012	1	0.436	0.09	0.2
Clarinda, IA	1-4	1935	105	0.35	1	0.314	1	11.540	15.55	5.39
Clarinda, IA	1-4	1936	83	0.39	1	0.382	1	12.365	16.58	2.47
Clarinda, IA	1-4	1937	175	0.26	1	0.008	1	0.364	41.12	0.35
Clarinda, IA	1-4	1938	111	0.34	1	0.256	1	9.661	6.33	5.74
Clarinda, IA	1-4	1939	144	0.29	1	0.172	1	7.183	4.22	4.29
Clarinda, IA	1-4	1940	232	0.23	1	0.009	1	0.480	0.12	0.46
Clarinda, IA	1-4	1941	351	0.3	1	0.257	1	27.062	39.61	18.09
Clarinda, IA	1-4	1942	278	0.23	1	0.193	1	12.340	3.36	8.24
Clarinda, IA	1-4	1943	169	0.27	1	0.006	1	0.274	0.07	0.33
Clarinda, IA	1-5	1932	186	0.25	1	0.398	1	18.507	8.35	5.52
Clarinda, IA	1-5	1933	171	0.26	1	0.009	1	0.400	0.07	0.34
Clarinda, IA	1-5	1934	101	0.36	1	0.27	1	9.817	20.85	5.2
Clarinda, IA	1-5	1935	105	0.35	1	0.157	1	5.770	0.57	3.11
Clarinda, IA	1-5	1936	83	0.39	1	0.01	1	0.324	0	0.16
Clarinda, IA	1-5	1937	175	0.26	1	0.246	1	11.193	18.35	8.99
Clarinda, IA	1-5	1938	111	0.34	1	0.207	1	7.812	6.55	3.31
Clarinda, IA	1-5	1939	144	0.29	1	0.01	1	0.418	0.06	0.29
Clarinda, IA	1-5	1940	232	0.23	1	0.261	1	13.927	32.2	11.93
Clarinda, IA	1-5	1941	351	0.3	1	0.124	1	13.057	15.22	10.44
Clarinda, IA	1-5	1942	278	0.23	1	0.01	1	0.639	1.41	0.55
Clarinda, IA	1-5	1943	169	0.27	1	0.31	1	14.145	2.36	8.68
Clarinda, IA	1-6	1932	186	0.25	1	0.069	1	3.209	7.51	0.37
Clarinda, IA	1-6	1933	171	0.26	1	0.317	1	14.094	3.86	8.79
Clarinda, IA	1-6	1934	101	0.36	1	0.199	1	7.236	6.34	3
Clarinda, IA	1-6	1935	105	0.35	1	0.089	1	3.271	0.1	0.21
Clarinda, IA	1-6	1936	83	0.39	1	0.364	1	11.783	33.96	4.29
Clarinda, IA	1-6	1937	175	0.26	1	0.261	1	11.876	44.59	5.18

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Clarinda, IA	1-6	1938	111	0.34	1	0.036	1	1.359	10.88	0.22
Clarinda, IA	1-6	1939	144	0.29	1	0.283	1	11.818	2.46	7.43
Clarinda, IA	1-6	1940	232	0.23	1	0.197	1	10.512	2.14	6.88
Clarinda, IA	1-6	1941	351	0.3	1	0.006	1	0.632	0.2	0.7
Clarinda, IA	1-6	1942	278	0.23	1	0.274	1	17.520	10.72	14.29
Clarinda, IA	1-6	1943	169	0.27	1	0.337	1	15.377	7.56	5.01
Clarinda, IA	1-7	1932	186	0.25	1	0.021	1	0.977	8.29	0.37
Clarinda, IA	1-7	1933	171	0.26	1	0.008	1	0.356	0.05	0.23
Clarinda, IA	1-7	1934	101	0.36	1	0.012	1	0.436	0.05	0.13
Clarinda, IA	1-7	1935	105	0.35	1	0.021	1	0.772	0.02	0.14
Clarinda, IA	1-7	1936	83	0.39	1	0.008	1	0.259	0.01	0.11
Clarinda, IA	1-7	1937	175	0.26	1	0.012	1	0.546	0.02	0.23
Clarinda, IA	1-7	1938	111	0.34	1	0.007	1	0.264	0	0.15
Clarinda, IA	1-7	1939	144	0.29	1	0.01	1	0.418	0.02	0.19
Clarinda, IA	1-7	1940	232	0.23	1	0.014	1	0.747	0.01	0.31
Clarinda, IA	1-7	1941	351	0.3	1	0.007	1	0.737	0.01	0.46
Clarinda, IA	1-7	1942	278	0.23	1	0.002	1	0.128	0.05	0.37
Clarinda, IA	1-7	1943	169	0.27	1	0.27	0.5	6.160	0.12	6.68
Clarinda, IA	1-8	1932	186	0.25	1	0.101	1	4.697	8.66	0.37
Clarinda, IA	1-8	1933	171	0.26	1	0.004	1	0.178	0.08	0.23
Clarinda, IA	1-8	1934	101	0.36	1	0.004	1	0.145	0.06	0.13
Clarinda, IA	1-8	1935	105	0.35	1	0.172	1	6.321	0.02	0.14
Clarinda, IA	1-8	1936	83	0.39	1	0.003	1	0.097	0	0.11
Clarinda, IA	1-8	1937	175	0.26	1	0.004	1	0.182	0	0.23
Clarinda, IA	1-8	1938	111	0.34	1	0.003	1	0.113	0	0.15
Clarinda, IA	1-8	1939	144	0.29	1	0.001	1	0.042	0	0.19
Clarinda, IA	1-8	1940	232	0.23	1	0.001	1	0.053	0	0.31
Clarinda, IA	1-8	1941	351	0.3	1	0.001	1	0.105	0	0.46
Clarinda, IA	1-8	1942	278	0.23	1	0.001	1	0.064	0.05	0.37
Clarinda, IA	1-8	1943	169	0.27	1	0.234	0.5	5.339	0.11	6.68
Clarinda, IA	2-1	1933	171	0.31	1	0.476	1	25.233	3.49	19.32
Clarinda, IA	2-1	1934	101	0.42	1	0.499	1	21.168	2.17	13.79
Clarinda, IA	2-1	1935	105	0.41	1	0.46	1	19.803	3.12	14.28
Clarinda, IA	2-1	1936	83	0.45	1	0.449	1	16.770	16.12	11.36
Clarinda, IA	2-1	1937	175	0.31	1	0.462	1	25.064	43.92	19.74
Clarinda, IA	2-1	1938	111	0.4	1	0.447	1	19.847	14.99	15.22
Clarinda, IA	2-1	1939	144	0.35	1	0.45	1	22.680	46.38	16.33
Clarinda, IA	2-2	1933	171	0.31	1	0.476	1	25.233	4.07	19.32
Clarinda, IA	2-2	1934	101	0.42	1	0.499	1	21.168	4.6	13.79
Clarinda, IA	2-2	1935	105	0.41	1	0.46	1	19.803	11.12	14.28
Clarinda, IA	2-2	1936	83	0.45	1	0.449	1	16.770	22.45	11.36
Clarinda, IA	2-2	1937	175	0.31	1	0.462	1	25.064	54.66	19.74
Clarinda, IA	2-2	1938	111	0.4	1	0.447	1	19.847	17.73	15.22
Clarinda, IA	2-2	1939	144	0.35	1	0.45	1	22.680	50.78	16.33
Clarinda, IA	2-3	1933	171	0.31	1	0.476	1	25.233	2.89	19.32
Clarinda, IA	2-3	1934	101	0.42	1	0.499	1	21.168	0.82	13.79
Clarinda, IA	2-3	1935	105	0.41	1	0.46	1	19.803	10.47	14.28
Clarinda, IA	2-3	1936	83	0.45	1	0.449	1	16.770	20.58	11.36
Clarinda, IA	2-3	1937	175	0.31	1	0.462	1	25.064	58.95	19.74
Clarinda, IA	2-3	1938	111	0.4	1	0.447	1	19.847	15.95	15.22
Clarinda, IA	2-3	1939	144	0.35	1	0.45	1	22.680	49.46	16.33
Clarinda, IA	2-4	1933	171	0.31	1	0.476	1	25.233	5.03	19.32
Clarinda, IA	2-4	1934	101	0.42	1	0.499	1	21.168	5.89	13.79

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Clarinda, IA	2-4	1935	105	0.41	1	0.46	1	19.803	16.77	14.28
Clarinda, IA	2-4	1936	83	0.45	1	0.449	1	16.770	24.35	11.36
Clarinda, IA	2-4	1937	175	0.31	1	0.462	1	25.064	64.46	19.74
Clarinda, IA	2-4	1938	111	0.4	1	0.447	1	19.847	23.45	15.22
Clarinda, IA	2-4	1939	144	0.35	1	0.45	1	22.680	58.2	16.33
Clarinda, IA	2-5	1933	171	0.31	1	0.476	1	25.233	25.39	19.32
Clarinda, IA	2-5	1934	101	0.42	1	0.499	1	21.168	17.54	13.79
Clarinda, IA	2-5	1935	105	0.41	1	0.46	1	19.803	23.24	14.28
Clarinda, IA	2-5	1936	83	0.45	1	0.449	1	16.770	35.92	11.36
Clarinda, IA	2-5	1937	175	0.31	1	0.462	1	25.064	54.26	19.74
Clarinda, IA	2-5	1938	111	0.4	1	0.447	1	19.847	33.92	15.22
Clarinda, IA	2-5	1939	144	0.35	1	0.45	1	22.680	41.23	16.33
Clarinda, IA	2-6	1933	171	0.31	1	0.969	1	51.367	37.23	66.62
Clarinda, IA	2-6	1934	101	0.42	1	0.971	1	41.190	50.39	39.39
Clarinda, IA	2-6	1935	105	0.41	1	0.973	1	41.888	28.6	40.81
Clarinda, IA	2-6	1936	83	0.45	1	0.967	1	36.117	48.43	32.46
Clarinda, IA	2-6	1937	175	0.31	1	0.974	1	52.840	74.86	68.08
Clarinda, IA	2-6	1938	111	0.4	1	0.97	1	43.068	57.63	43.47
Clarinda, IA	2-6	1939	144	0.35	1	0.971	1	48.938	52.05	56.3
Clarinda, IA	2-7	1933	171	0.31	1	0.969	1	51.367	50.7	66.62
Clarinda, IA	2-7	1934	101	0.42	1	0.971	1	41.190	57.55	39.39
Clarinda, IA	2-7	1935	105	0.41	1	0.973	1	41.888	36.06	40.81
Clarinda, IA	2-7	1936	83	0.45	1	0.967	1	36.117	52.44	32.46
Clarinda, IA	2-7	1937	175	0.31	1	0.974	1	52.840	85.17	68.08
Clarinda, IA	2-7	1938	111	0.4	1	0.97	1	43.068	63.68	43.47
Clarinda, IA	2-7	1939	144	0.35	1	0.971	1	48.938	50.37	56.3
Clarinda, IA	2-8	1933	171	0.31	1	0.969	1	51.367	20.19	68.62
Clarinda, IA	2-8	1934	101	0.42	1	0.971	1	41.190	51.84	39.39
Clarinda, IA	2-8	1935	105	0.41	1	0.973	1	41.888	37.75	40.81
Clarinda, IA	2-8	1936	83	0.45	1	0.967	1	36.117	52.95	32.46
Clarinda, IA	2-8	1937	175	0.31	1	0.974	1	52.840	108.83	68.08
Clarinda, IA	2-8	1938	111	0.4	1	0.97	1	43.068	58.91	43.47
Clarinda, IA	2-8	1939	144	0.35	1	0.971	1	48.938	52.39	56.3
Clarinda, IA	2-9	1933	171	0.31	1	0.969	1	51.367	36.79	66.62
Clarinda, IA	2-9	1934	101	0.42	1	0.971	1	41.190	59.5	39.39
Clarinda, IA	2-9	1935	105	0.41	1	0.973	1	41.888	41.9	40.81
Clarinda, IA	2-9	1936	83	0.45	1	0.967	1	36.117	54.21	32.46
Clarinda, IA	2-9	1937	175	0.31	1	0.974	1	52.840	110.45	68.08
Clarinda, IA	2-9	1938	111	0.4	1	0.97	1	43.068	70.47	43.47
Clarinda, IA	2-9	1939	144	0.35	1	0.971	1	48.938	57.14	56.3
Clarinda, IA	2-10	1933	171	0.31	1	0.969	1	51.367	64.75	66.62
Clarinda, IA	2-10	1934	101	0.42	1	0.971	1	41.190	63.02	39.39
Clarinda, IA	2-10	1935	105	0.41	1	0.973	1	41.888	47.6	40.81
Clarinda, IA	2-10	1936	83	0.45	1	0.967	1	36.117	49.89	32.46
Clarinda, IA	2-10	1937	175	0.31	1	0.974	1	52.840	99.15	68.08
Clarinda, IA	2-10	1938	111	0.4	1	0.97	1	43.068	68.77	43.47
Clarinda, IA	2-10	1939	144	0.35	1	0.971	1	48.938	69.85	56.3
Clarinda, IA	3-1	1933	171	0.31	2.52	0.481	1	64.254	34.5	21.56
Clarinda, IA	3-1	1934	101	0.42	2.52	0.337	1	36.025	1.26	12.75
Clarinda, IA	3-1	1935	105	0.41	2.52	0.299	1	32.437	28.34	13.21
Clarinda, IA	3-1	1936	83	0.45	2.52	0.509	1	47.908	24.2	10.51
Clarinda, IA	3-1	1937	175	0.31	2.52	0.522	1	71.363	128.67	22.04
Clarinda, IA	3-1	1938	111	0.4	2.52	0.447	1	50.014	3.47	14.07

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Clarinda, IA	3-1	1939	144	0.35	2.52	0.439	1	55.757	72.21	18.22
Clarinda, IA	3-2	1933	171	0.31	1.8	0.481	1	45.896	20.07	15.24
Clarinda, IA	3-2	1934	101	0.42	1.8	0.337	1	25.732	0.69	9.01
Clarinda, IA	3-2	1935	105	0.41	1.8	0.299	1	23.170	28.18	9.34
Clarinda, IA	3-2	1936	83	0.45	1.8	0.509	1	34.220	13.76	7.43
Clarinda, IA	3-2	1937	175	0.31	1.8	0.522	1	50.973	111.36	15.58
Clarinda, IA	3-2	1938	111	0.4	1.8	0.447	1	35.724	6.23	8.95
Clarinda, IA	3-2	1939	144	0.35	1.8	0.439	1	39.826	66.93	12.88
Clarinda, IA	3-3	1933	171	0.31	1.29	0.481	1	32.892	11.19	10.74
Clarinda, IA	3-3	1934	101	0.42	1.29	0.337	1	18.441	0.06	6.35
Clarinda, IA	3-3	1935	105	0.41	1.29	0.299	1	16.605	23.5	6.58
Clarinda, IA	3-3	1936	83	0.45	1.29	0.509	1	24.524	8.21	5.23
Clarinda, IA	3-3	1937	175	0.31	1.29	0.522	1	36.531	94.3	10.97
Clarinda, IA	3-3	1938	111	0.4	1.29	0.447	1	25.602	6.51	7.01
Clarinda, IA	3-3	1939	144	0.35	1.29	0.439	1	28.542	44.87	9.08
Clemson, SC	5-1	1940	763.78	0.28	0.41	0.9	1	78.914	51.78	74.85
Clemson, SC	5-1	1941	155.68	0.24	0.41	0.97	1	14.859	15.58	15.26
Clemson, SC	5-1	1942	197.19	0.23	0.41	0.97	1	18.037	17.87	19.32
Clemson, SC	5-12	1940	763.78	0.28	0.41	0.9	1	78.914	84.04	74.85
Clemson, SC	5-12	1941	155.68	0.24	0.41	0.97	1	14.859	21.72	15.26
Clemson, SC	5-12	1942	197.19	0.23	0.41	0.97	1	18.037	25.46	19.32
Dixonspgs, IL	11	1940	141	0.38	0.43	0.043	1	0.991	2.76	1.05
Dixonspgs, IL	11	1941	176	0.36	0.43	0.038	1	1.035	0.3	0.12
Dixonspgs, IL	11	1942	284	0.32	0.43	0.265	0.5	5.178	4.07	2.78
Dixonspgs, IL	11	1943	266	0.32	0.43	0.2	1	7.320	11.07	2.46
Dixonspgs, IL	11	1944	83	0.42	0.43	0.025	1	0.375	0.32	0.06
Dixonspgs, IL	11	1945	521	0.36	0.43	0.2	0.5	8.065	5.58	5.1
Dixonspgs, IL	12	1940	141	0.38	0.57	0.043	1	1.313	7.21	1.52
Dixonspgs, IL	12	1941	176	0.36	0.57	0.038	1	1.372	0.55	0.17
Dixonspgs, IL	12	1942	284	0.32	0.57	0.265	0.5	6.864	6.96	3.99
Dixonspgs, IL	12	1943	266	0.32	0.57	0.2	1	9.704	24.04	3.53
Dixonspgs, IL	12	1944	83	0.42	0.57	0.025	1	0.497	0.73	0.08
Dixonspgs, IL	12	1945	521	0.36	0.57	0.2	0.5	10.691	8.38	7.33
Dixonspgs, IL	13	1940	141	0.38	0.84	0.043	1	1.935	10.02	2.41
Dixonspgs, IL	13	1941	176	0.36	0.84	0.038	1	2.022	0.59	0.28
Dixonspgs, IL	13	1942	284	0.32	0.84	0.265	0.5	10.115	9.97	6.33
Dixonspgs, IL	13	1943	266	0.32	0.84	0.2	1	14.300	24.22	5.6
Dixonspgs, IL	13	1944	83	0.42	0.84	0.025	1	0.732	1.11	0.13
Dixonspgs, IL	13	1945	521	0.36	0.84	0.2	0.5	15.755	8.99	11.63
Dixonspgs, IL	14	1940	141	0.38	0.93	0.043	1	2.143	7.88	2.74
Dixonspgs, IL	14	1941	176	0.36	0.93	0.038	1	2.239	0.22	0.31
Dixonspgs, IL	14	1942	284	0.32	0.93	0.265	0.5	11.199	9.13	7.2
Dixonspgs, IL	14	1943	266	0.32	0.93	0.2	1	15.832	30.95	6.37
Dixonspgs, IL	14	1944	83	0.42	0.93	0.025	1	0.810	0.39	0.15
Dixonspgs, IL	14	1945	521	0.36	0.93	0.2	0.5	17.443	7.03	13.23
Dixonspgs, IL	15	1940	141	0.38	0.47	0.043	1	1.083	4.58	1.19
Dixonspgs, IL	15	1941	176	0.36	0.47	0.038	1	1.132	0.55	0.14
Dixonspgs, IL	15	1942	284	0.32	0.47	0.265	0.5	5.660	4.11	3.12
Dixonspgs, IL	15	1943	266	0.32	0.47	0.2	1	8.001	19.43	2.76
Dixonspgs, IL	15	1944	83	0.42	0.47	0.025	1	0.410	0.3	0.06
Dixonspgs, IL	15	1945	521	0.36	0.47	0.2	0.5	8.815	6.86	5.74
Dixonspgs, IL	17	1940	141	0.38	0.58	0.043	1	1.336	7.24	1.55
Dixonspgs, IL	17	1941	176	0.36	0.58	0.038	1	1.396	0.27	0.18

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Dixonspgs, IL	17	1942	284	0.32	0.58	0.265	0.5	6.984	7.54	4.08
Dixonspgs, IL	17	1943	266	0.32	0.58	0.2	1	9.874	27.6	3.81
Dixonspgs, IL	17	1944	83	0.42	0.58	0.025	1	0.505	0.33	0.08
Dixonspgs, IL	17	1945	521	0.36	0.58	0.2	0.5	10.878	7.68	7.49
Dixonspgs, IL	18	1940	141	0.38	0.79	0.043	1	1.820	8.56	2.24
Dixonspgs, IL	18	1941	176	0.36	0.79	0.038	1	1.902	0.18	0.26
Dixonspgs, IL	18	1942	284	0.32	0.79	0.265	0.5	9.513	7.82	5.9
Dixonspgs, IL	18	1943	266	0.32	0.79	0.2	1	13.449	36.17	5.22
Dixonspgs, IL	18	1944	83	0.42	0.79	0.025	1	0.688	0.31	0.12
Dixonspgs, IL	18	1945	521	0.36	0.79	0.2	0.5	14.817	10.72	10.84
Dixonspgs, IL	19	1940	141	0.38	0.77	0.043	1	1.774	7.18	2.04
Dixonspgs, IL	19	1941	176	0.36	0.77	0.038	1	1.854	0.03	0.24
Dixonspgs, IL	19	1942	284	0.32	0.77	0.265	0.5	9.272	4.39	5.38
Dixonspgs, IL	19	1943	266	0.32	0.77	0.2	1	13.108	15.3	4.76
Dixonspgs, IL	19	1944	83	0.42	0.77	0.025	1	0.671	0.1	0.11
Dixonspgs, IL	19	1945	521	0.36	0.77	0.2	0.5	14.442	6.77	9.88
Dixonspgs, IL	21	1940	141	0.38	0.86	0.043	1	1.981	8.05	2.23
Dixonspgs, IL	21	1941	176	0.36	0.86	0.038	1	2.071	1.3	0.33
Dixonspgs, IL	21	1942	284	0.32	0.86	0.265	0.6	12.427	9.41	9.16
Dixonspgs, IL	21	1943	266	0.32	0.86	0.2	1	14.641	19.99	3.38
Dixonspgs, IL	21	1944	83	0.42	0.86	0.025	1	0.749	0.1	0.16
Dixonspgs, IL	21	1945	521	0.36	0.86	0.2	0.6	19.356	11.05	18.83
Dixonspgs, IL	22	1940	141	0.38	0.97	0.043	1	2.235	7.35	2.46
Dixonspgs, IL	22	1941	176	0.36	0.97	0.038	1	2.335	0.79	0.37
Dixonspgs, IL	22	1942	284	0.32	0.97	0.265	0.6	14.016	13.49	10.1
Dixonspgs, IL	22	1943	266	0.32	0.97	0.2	1	16.513	27.23	3.72
Dixonspgs, IL	22	1944	83	0.42	0.97	0.025	1	0.845	0.24	0.17
Dixonspgs, IL	22	1945	521	0.36	0.97	0.2	0.6	21.832	14.65	18.55
Dixonspgs, IL	23	1940	141	0.38	1.57	0.043	1	3.617	10.27	3.93
Dixonspgs, IL	23	1941	176	0.36	1.57	0.038	1	3.780	0.64	0.59
Dixonspgs, IL	23	1942	284	0.32	1.57	0.265	0.6	22.686	17.99	16.14
Dixonspgs, IL	23	1943	266	0.32	1.57	0.2	1	26.728	42.38	5.95
Dixonspgs, IL	23	1944	83	0.42	1.57	0.025	1	1.368	0.25	0.28
Dixonspgs, IL	23	1945	521	0.36	1.57	0.2	0.6	35.336	16.93	29.64
Dixonspgs, IL	24	1940	141	0.38	1.9	0.043	1	4.377	11.55	4.74
Dixonspgs, IL	24	1941	176	0.36	1.9	0.038	1	4.575	0.48	0.71
Dixonspgs, IL	24	1942	284	0.32	1.9	0.265	0.6	27.455	19.32	19.47
Dixonspgs, IL	24	1943	266	0.32	1.9	0.2	1	32.346	32.32	7.17
Dixonspgs, IL	24	1944	83	0.42	1.9	0.025	1	1.656	0.2	0.34
Dixonspgs, IL	24	1945	521	0.36	1.9	0.2	0.6	42.764	16.13	35.76
Dixonspgs, IL	26	1940	141	0.38	0.76	0.043	1	1.751	6.94	1.93
Dixonspgs, IL	26	1941	176	0.36	0.76	0.038	1	1.830	0.86	0.29
Dixonspgs, IL	26	1942	284	0.32	0.76	0.265	0.6	10.982	9.88	7.91
Dixonspgs, IL	26	1943	266	0.32	0.76	0.2	1	12.938	11.65	2.92
Dixonspgs, IL	26	1944	83	0.42	0.76	0.025	1	0.662	0.13	0.14
Dixonspgs, IL	26	1945	521	0.36	0.76	0.2	0.6	17.105	10.9	14.53
Dixonspgs, IL	27	1940	141	0.38	1.16	0.043	1	2.673	4.43	2.94
Dixonspgs, IL	27	1941	176	0.36	1.16	0.038	1	2.793	0.24	0.44
Dixonspgs, IL	27	1942	284	0.32	1.16	0.265	0.6	16.762	18.11	12.08
Dixonspgs, IL	27	1943	266	0.32	1.16	0.2	1	19.748	25.64	4.45
Dixonspgs, IL	27	1944	83	0.42	1.16	0.025	1	1.011	0.19	0.21
Dixonspgs, IL	27	1945	521	0.36	1.16	0.2	0.6	26.108	12.4	22.18
Dixonspgs, IL	28	1940	141	0.38	1.69	0.043	1	3.894	7.78	4.23

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Dixonspgs, IL	28	1941	176	0.36	1.69	0.038	1	4.069	0.19	0.63
Dixonspgs, IL	28	1942	284	0.32	1.69	0.265	0.6	24.420	18.27	17.39
Dixonspgs, IL	28	1943	266	0.32	1.69	0.2	1	28.771	23.92	6.41
Dixonspgs, IL	28	1944	83	0.42	1.69	0.025	1	1.473	0.08	0.3
Dixonspgs, IL	28	1945	521	0.36	1.69	0.2	0.6	38.037	12.92	31.93
Dixonspgs, IL	29	1940	141	0.38	1.96	0.043	1	4.516	7.81	4.89
Dixonspgs, IL	29	1941	176	0.36	1.96	0.038	1	4.719	0.08	0.73
Dixonspgs, IL	29	1942	284	0.32	1.96	0.265	0.6	28.322	30.25	20.1
Dixonspgs, IL	29	1943	266	0.32	1.96	0.2	1	33.367	29.84	7.4
Dixonspgs, IL	29	1944	83	0.42	1.96	0.025	1	1.708	0.11	0.35
Dixonspgs, IL	29	1945	521	0.36	1.96	0.2	0.6	44.114	13.87	36.91
Geneva, NY	2-1	1938	129	0.47	0.57	0.98	1	33.868	51.76	41
Geneva, NY	2-1	1939	27	0.55	0.57	0.98	1	8.295	5.89	8.66
Geneva, NY	2-1	1940	63	0.55	0.57	0.98	1	19.355	39.19	20.04
Geneva, NY	2-1	1941	71	0.53	0.57	0.98	1	21.020	57.92	22.46
Geneva, NY	2-1	1942	88	0.51	0.57	0.98	1	25.070	33.34	28.06
Geneva, NY	2-1	1943	74	0.53	0.57	0.98	1	21.908	26.67	23.54
Geneva, NY	2-1	1944	42	0.55	0.57	0.98	1	12.904	17.07	13.24
Geneva, NY	2-1	1945	83	0.52	0.57	0.98	1	24.109	29.95	26.22
Geneva, NY	2-1	1946	80	0.52	0.57	0.98	1	23.238	13.84	25.46
Geneva, NY	1-2	1937	50	0.31	0.89	0.536	1	7.394	0.4	3.04
Geneva, NY	1-2	1938	129	0.23	0.89	0.466	1	12.305	14.23	7.91
Geneva, NY	1-2	1939	27	0.31	0.89	0.5	1	3.725	0.61	1.67
Geneva, NY	1-2	1940	63	0.3	0.89	0.456	1	7.670	7.95	3.87
Geneva, NY	1-2	1941	71	0.29	0.89	0.532	1	9.749	17.19	4.33
Geneva, NY	1-2	1942	88	0.27	0.89	0.548	1	11.588	2.48	5.41
Geneva, NY	1-2	1943	74	0.29	0.89	0.499	1	9.531	0.08	4.54
Geneva, NY	1-2	1944	42	0.31	0.89	0.535	1	6.199	4.63	2.55
Geneva, NY	1-2	1945	83	0.27	0.89	0.619	1	12.346	12.69	5.06
Geneva, NY	1-2	1946	80	0.28	0.89	0.589	1	11.742	4.56	4.91
Geneva, NY	1-2	1947	169	0.2	0.89	0.334	0.5	5.024	7.07	5.54
Geneva, NY	1-2	1948	64	0.3	0.89	0.204	0.5	1.743	0.12	2.48
Geneva, NY	1-4	1937	50	0.31	0.89	0.255	1	3.518	0.3	0.39
Geneva, NY	1-4	1938	129	0.23	0.89	0.263	1	6.945	0.17	1.03
Geneva, NY	1-4	1939	27	0.31	0.89	0.223	1	1.661	0.06	0.22
Geneva, NY	1-4	1940	63	0.3	0.89	0.263	1	4.424	4.68	0.5
Geneva, NY	1-4	1941	71	0.29	0.89	0.221	1	4.050	3.55	0.56
Geneva, NY	1-4	1942	88	0.27	0.89	0.188	1	3.976	0.02	0.7
Geneva, NY	1-4	1943	74	0.29	0.89	0.225	1	4.297	0.01	0.59
Geneva, NY	1-4	1944	42	0.31	0.89	0.2	1	2.318	0.12	0.33
Geneva, NY	1-4	1945	83	0.27	0.89	0.283	1	5.644	0.05	0.66
Geneva, NY	1-4	1946	80	0.28	0.89	0.243	1	4.844	1.18	0.64
Geneva, NY	1-4	1947	169	0.2	0.89	0.395	0.5	5.941	7.72	7.65
Geneva, NY	1-4	1948	64	0.3	0.89	0.213	0.5	1.820	0.03	2.48
Geneva, NY	1-5	1937	50	0.31	0.89	0.983	1	13.560	5.67	11.25
Geneva, NY	1-5	1938	129	0.23	0.89	0.985	1	26.010	30.72	29.3
Geneva, NY	1-5	1939	27	0.31	0.89	0.978	1	7.285	4.75	6.19
Geneva, NY	1-5	1940	63	0.3	0.89	0.985	1	16.569	36.95	14.32
Geneva, NY	1-5	1941	71	0.29	0.89	0.978	1	17.922	32.23	16.05
Geneva, NY	1-5	1942	88	0.27	0.89	0.989	1	20.914	23.28	20.05
Geneva, NY	1-5	1943	74	0.29	0.89	0.985	1	18.813	7.12	16.82
Geneva, NY	1-5	1944	42	0.31	0.89	0.981	1	11.368	12.27	9.46
Geneva, NY	1-5	1945	83	0.27	0.89	0.984	1	19.626	16.19	18.74

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Geneva, NY	1-5	1946	80	0.28	0.89	0.989	1	19.717	9.89	18.19
Geneva, NY	1-5	1947	169	0.2	0.89	0.562	0.5	8.453	15.59	8.03
Geneva, NY	1-5	1948	64	0.3	0.89	0.215	0.5	1.837	0.27	2.48
Geneva, NY	1-6	1937	50	0.31	0.89	0.007	1	0.097	0.08	0.11
Geneva, NY	1-6	1938	129	0.23	0.89	0.003	1	0.079	0.05	0.29
Geneva, NY	1-6	1939	27	0.31	0.89	0.003	1	0.022	0	0.06
Geneva, NY	1-6	1940	63	0.3	0.89	0.003	1	0.050	0	0.14
Geneva, NY	1-6	1941	71	0.29	0.89	0.004	1	0.073	0	0.16
Geneva, NY	1-6	1942	88	0.27	0.89	0.001	1	0.021	0	0.2
Geneva, NY	1-6	1943	74	0.29	0.89	0.001	1	0.019	0.01	0.17
Geneva, NY	1-6	1944	42	0.31	0.89	0.001	1	0.012	0.07	0.09
Geneva, NY	1-6	1945	83	0.27	0.89	0.001	1	0.020	0.01	0.19
Geneva, NY	1-6	1946	80	0.28	0.89	0.034	1	0.678	0	0.18
Geneva, NY	1-6	1947	169	0.2	0.89	0.3	0.5	4.512	0.19	3.06
Geneva, NY	1-6	1948	64	0.3	0.89	0.106	0.5	0.906	0.03	2.12
Guthrie, OK	1-1	1930	247	0.17	0.62	0.5	1	13.017	21.25	18.29
Guthrie, OK	1-1	1931	150	0.21	0.62	0.5	1	9.765	7.84	11.06
Guthrie, OK	1-1	1932	338	0.19	0.62	0.5	1	19.908	47.61	24.99
Guthrie, OK	1-1	1933	264	0.16	0.62	0.5	1	13.094	12.99	19.5
Guthrie, OK	1-1	1934	378	0.21	0.62	0.5	1	24.608	16.12	27.95
Guthrie, OK	1-1	1935	280	0.17	0.62	0.5	1	14.756	8.8	20.72
Guthrie, OK	1-1	1936	174	0.19	0.62	0.5	1	10.249	5.35	12.84
Guthrie, OK	1-1	1937	154	0.21	0.62	0.5	1	10.025	1.73	11.36
Guthrie, OK	1-1	1938	180	0.19	0.62	0.5	1	10.602	1.89	13.35
Guthrie, OK	1-1	1939	115	0.24	0.62	0.5	1	8.556	1.35	8.52
Guthrie, OK	1-1	1940	214	0.17	0.62	0.5	1	11.278	2.55	15.83
Guthrie, OK	1-1	1941	296	0.17	0.62	0.5	1	15.599	8.8	21.95
Guthrie, OK	1-1	1942	229	0.17	0.62	0.5	1	12.068	2.98	16.91
Guthrie, OK	1-1	1943	75	0.28	0.62	0.5	1	6.510	2.43	5.57
Guthrie, OK	1-1	1944	175	0.19	0.62	0.5	1	10.308	1.11	12.94
Guthrie, OK	1-1	1945	316	0.18	0.62	0.5	1	17.633	16.28	23.37
Guthrie, OK	1-1	1946	136	0.22	0.62	0.5	1	9.275	1.99	10.05
Guthrie, OK	1-1	1947	174	0.19	0.62	0.5	1	10.249	2.51	12.9
Guthrie, OK	1-1	1948	157	0.2	0.62	0.5	1	9.734	7.39	11.64
Guthrie, OK	1-1	1949	587	0.22	0.62	0.5	1	40.033	240.52	43.4
Guthrie, OK	1-1	1950	157	0.2	0.62	0.5	1	9.734	1.96	11.66
Guthrie, OK	1-1	1951	388	0.22	0.62	0.5	1	26.462	5.55	28.71
Guthrie, OK	1-1	1952	90	0.26	0.62	0.5	1	7.254	0.18	6.7
Guthrie, OK	1-1	1953	198	0.18	0.62	0.5	1	11.048	1.56	14.66
Guthrie, OK	1-1	1954	24	0.29	0.62	0.5	1	2.158	0	1.74
Guthrie, OK	1-1	1955	101	0.25	0.62	0.5	1	7.828	0.4	7.51
Guthrie, OK	1-1	1956	200	0.18	0.62	0.5	1	11.160	2.91	14.77
Guthrie, OK	1-2	1930	247	0.17	1.19	0.5	1	24.984	14.48	38.26
Guthrie, OK	1-2	1931	150	0.21	1.19	0.5	1	18.743	25.37	21.93
Guthrie, OK	1-2	1932	338	0.19	1.19	0.5	1	38.211	87.5	49.54
Guthrie, OK	1-2	1933	264	0.16	1.19	0.5	1	25.133	33.05	38.66
Guthrie, OK	1-2	1934	378	0.21	1.19	0.5	1	47.231	37.69	55.41
Guthrie, OK	1-2	1935	280	0.17	1.19	0.5	1	28.322	48.65	41.08
Guthrie, OK	1-2	1936	174	0.19	1.19	0.5	1	19.671	25.1	25.46
Guthrie, OK	1-2	1937	154	0.21	1.19	0.5	1	19.242	6.08	22.52
Guthrie, OK	1-2	1938	180	0.19	1.19	0.5	1	20.349	20.65	26.46
Guthrie, OK	1-2	1939	115	0.24	1.19	0.5	1	16.422	5.56	16.89
Guthrie, OK	1-2	1940	214	0.17	1.19	0.5	1	21.646	14.84	31.39

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Guthrie, OK	1-2	1941	296	0.17	1.19	0.5	1	29.940	27.43	43.51
Guthrie, OK	1-2	1942	229	0.17	1.19	0.5	1	23.163	10.72	33.53
Guthrie, OK	1-2	1943	75	0.28	1.19	0.5	1	12.495	9.3	11.03
Guthrie, OK	1-2	1944	175	0.19	1.19	0.5	1	19.784	4.42	25.65
Guthrie, OK	1-2	1945	316	0.18	1.19	0.5	1	33.844	110.02	46.33
Guthrie, OK	1-2	1946	136	0.22	1.19	0.5	1	17.802	4.49	19.92
Guthrie, OK	1-2	1947	174	0.19	1.19	0.5	1	19.671	15.45	25.58
Guthrie, OK	1-2	1948	157	0.2	1.19	0.5	1	18.683	93.26	23.07
Guthrie, OK	1-2	1949	587	0.22	1.19	0.5	1	76.838	371.32	86.03
Guthrie, OK	1-2	1950	157	0.2	1.19	0.5	1	18.683	47.86	23.11
Guthrie, OK	1-2	1951	388	0.22	1.19	0.5	1	50.789	48.85	56.91
Guthrie, OK	1-2	1952	90	0.26	1.19	0.5	1	13.923	2.52	13.27
Guthrie, OK	1-2	1953	198	0.18	1.19	0.5	1	21.208	20.29	29.06
Guthrie, OK	1-2	1954	24	0.29	1.19	0.5	1	4.141	0.93	3.45
Guthrie, OK	1-2	1955	101	0.25	1.19	0.5	1	15.024	15.31	14.88
Guthrie, OK	1-2	1956	200	0.18	1.19	0.5	1	21.420	20.37	29.27
Guthrie, OK	1-3	1930	247	0.17	0.86	0.5	1	18.056	17.55	25.67
Guthrie, OK	1-3	1931	150	0.21	0.86	0.5	1	13.545	11.47	15.53
Guthrie, OK	1-3	1932	338	0.19	0.86	0.5	1	27.615	68.24	35.07
Guthrie, OK	1-3	1933	264	0.16	0.86	0.5	1	18.163	14.55	27.37
Guthrie, OK	1-3	1934	378	0.21	0.86	0.5	1	34.133	15.15	39.23
Guthrie, OK	1-3	1935	280	0.17	0.86	0.5	1	20.468	18.41	29.08
Guthrie, OK	1-3	1936	174	0.19	0.86	0.5	1	14.216	12.37	18.02
Guthrie, OK	1-3	1937	154	0.21	0.86	0.5	1	13.908	1.82	15.94
Guthrie, OK	1-3	1938	180	0.19	0.86	0.5	1	14.706	10.43	18.73
Guthrie, OK	1-3	1939	115	0.24	0.86	0.5	1	11.868	0.35	11.96
Guthrie, OK	1-3	1940	214	0.17	0.86	0.5	1	15.643	11.07	22.22
Guthrie, OK	1-3	1941	296	0.17	0.86	0.5	1	21.638	11.47	30.8
Guthrie, OK	1-3	1942	229	0.17	0.86	0.5	1	16.740	4.55	23.74
Guthrie, OK	1-3	1943	75	0.28	0.86	0.5	1	9.030	4.83	7.81
Guthrie, OK	1-3	1944	175	0.19	0.86	0.5	1	14.298	3.04	18.16
Guthrie, OK	1-3	1945	316	0.18	0.86	0.5	1	24.458	50.34	32.8
Guthrie, OK	1-3	1946	136	0.22	0.86	0.5	1	12.866	6.12	14.1
Guthrie, OK	1-3	1947	174	0.19	0.86	0.5	1	14.216	6.73	18.11
Guthrie, OK	1-3	1948	157	0.2	0.86	0.5	1	13.502	40.51	16.33
Guthrie, OK	1-3	1949	587	0.22	0.86	0.5	1	55.530	187.21	60.91
Guthrie, OK	1-3	1950	157	0.2	0.86	0.5	1	13.502	5.59	16.36
Guthrie, OK	1-3	1951	388	0.22	0.86	0.5	1	36.705	17.54	40.29
Guthrie, OK	1-3	1952	90	0.26	0.86	0.5	1	10.062	1.13	9.4
Guthrie, OK	1-3	1953	198	0.18	0.86	0.5	1	15.325	4.03	20.57
Guthrie, OK	1-3	1954	24	0.29	0.86	0.5	1	2.993	1.08	2.44
Guthrie, OK	1-3	1955	101	0.25	0.86	0.5	1	10.858	7.94	10.54
Guthrie, OK	1-3	1956	200	0.18	0.86	0.5	1	15.480	7.28	20.72
Guthrie, OK	1-8	1930	247	0.17	0.86	0.9	1	32.500	18.07	43.51
Guthrie, OK	1-8	1931	150	0.21	0.86	0.9	1	24.381	6.23	26.32
Guthrie, OK	1-8	1932	338	0.19	0.86	0.9	1	49.706	13.69	59.45
Guthrie, OK	1-8	1933	264	0.16	0.86	0.9	1	32.694	19.96	46.38
Guthrie, OK	1-8	1934	378	0.21	0.86	0.9	1	61.440	29.21	66.49
Guthrie, OK	1-8	1935	280	0.17	0.86	0.9	1	36.842	34.22	49.29
Guthrie, OK	1-8	1936	174	0.19	0.86	0.9	1	25.588	15.71	30.55
Guthrie, OK	1-8	1937	154	0.21	0.86	0.9	1	25.031	28.87	27.02
Guthrie, OK	1-8	1938	180	0.19	0.86	0.9	1	26.471	22.87	31.75
Guthrie, OK	1-8	1939	115	0.24	0.86	0.9	1	21.362	10.24	20.27

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Guthrie, OK	1-8	1940	214	0.17	0.86	0.9	1	28.158	41.97	37.67
Guthrie, OK	1-8	1941	296	0.17	0.86	0.9	1	38.948	14	52.21
Guthrie, OK	1-8	1942	229	0.17	0.86	0.9	1	30.132	5.51	40.24
Guthrie, OK	1-8	1943	75	0.28	0.86	0.9	1	16.254	3.27	13.24
Guthrie, OK	1-8	1944	175	0.19	0.86	0.9	1	25.736	1.5	30.78
Guthrie, OK	1-8	1945	316	0.18	0.86	0.9	1	44.025	17.1	55.6
Guthrie, OK	1-8	1946	136	0.22	0.86	0.9	1	23.158	3.26	23.9
Guthrie, OK	1-8	1947	174	0.19	0.86	0.9	1	25.588	8.81	30.7
Guthrie, OK	1-8	1948	157	0.2	0.86	0.9	1	24.304	3.69	27.68
Guthrie, OK	1-8	1949	587	0.22	0.86	0.8	1	99.954	152.91	103.23
Guthrie, OK	1-8	1950	157	0.2	0.86	0.9	1	24.304	2.6	27.73
Guthrie, OK	1-8	1951	388	0.22	0.86	0.9	1	66.069	3.67	68.28
Guthrie, OK	1-8	1952	90	0.26	0.86	0.9	1	18.112	0.23	15.93
Guthrie, OK	1-8	1953	198	0.18	0.86	0.9	1	27.585	1.73	34.07
Guthrie, OK	1-8	1954	24	0.29	0.86	0.9	1	5.387	0.33	4.14
Guthrie, OK	1-8	1955	101	0.25	0.86	0.9	1	19.544	0.64	17.86
Guthrie, OK	1-8	1956	200	0.18	0.86	0.9	1	27.864	3.1	35.13
Guthrie, OK	3-1	1935	280	0.17	0.93	0.174	0.4	3.081	0.27	5.51
Guthrie, OK	3-1	1936	174	0.19	0.93	0.086	0.4	1.058	0.2	3.41
Guthrie, OK	3-1	1937	154	0.21	0.93	0.085	0.4	1.023	0.03	3.02
Guthrie, OK	3-1	1938	180	0.19	0.93	0.081	0.4	1.031	0.07	3.55
Guthrie, OK	3-1	1939	115	0.24	0.93	0.01	0.5	0.128	0	4.75
Guthrie, OK	3-2	1935	280	0.17	0.81	0.172	0.4	2.653	1.8	4.49
Guthrie, OK	3-2	1936	174	0.19	0.81	0.074	0.4	0.793	1.2	2.78
Guthrie, OK	3-2	1937	154	0.21	0.81	0.089	0.4	0.933	0.84	2.46
Guthrie, OK	3-2	1938	180	0.19	0.81	0.097	0.4	1.075	1.44	2.89
Guthrie, OK	3-2	1939	115	0.24	0.81	0.174	0.5	1.945	0	4.12
Guthrie, OK	3-4	1935	280	0.17	0.57	0.172	0.4	1.867	1.54	3.23
Guthrie, OK	3-4	1936	174	0.19	0.57	0.074	0.4	0.558	1.13	2
Guthrie, OK	3-4	1937	154	0.21	0.57	0.089	0.4	0.656	0.64	1.77
Guthrie, OK	3-4	1938	180	0.19	0.57	0.097	0.4	0.756	1.28	2.08
Guthrie, OK	3-4	1939	115	0.24	0.57	0.174	0.5	1.369	0	2.6
Guthrie, OK	5-1	1942	229	0.17	0.93	0.44	0.4	6.372	7.74	3.85
Guthrie, OK	5-1	1943	75	0.19	0.93	0.158	0.4	0.838	0.89	1.27
Guthrie, OK	5-1	1944	175	0.21	0.93	0.253	0.4	3.459	2.45	2.94
Guthrie, OK	5-1	1945	316	0.19	0.93	0.211	0.4	4.713	11.49	5.32
Guthrie, OK	5-1	1946	136	0.24	0.93	0.18	0.4	2.186	3.74	2.29
Guthrie, OK	5-2	1942	229	0.17	0.93	0.45	0.5	8.146	13.93	9.43
Guthrie, OK	5-2	1943	75	0.28	0.93	0.314	0.5	3.066	2.62	3.1
Guthrie, OK	5-2	1944	175	0.19	0.93	0.353	0.5	5.458	6.64	7.21
Guthrie, OK	5-2	1945	316	0.18	0.93	0.35	0.5	9.257	23.41	13.03
Guthrie, OK	5-2	1946	136	0.22	0.93	0.23	0.5	3.200	11.51	5.6
Guthrie, OK	5-3	1942	229	0.17	0.81	0.45	0.5	7.095	19.03	8.17
Guthrie, OK	5-3	1943	75	0.28	0.81	0.314	0.5	2.671	5.34	2.69
Guthrie, OK	5-3	1944	175	0.19	0.81	0.353	0.5	4.754	9.62	6.25
Guthrie, OK	5-3	1945	316	0.18	0.81	0.35	0.5	8.063	24.42	11.29
Guthrie, OK	5-3	1946	136	0.22	0.81	0.23	0.5	2.787	13.8	4.86
Guthrie, OK	5-4	1942	229	0.17	0.81	0.44	0.4	5.550	7.25	3.33
Guthrie, OK	5-4	1943	75	0.19	0.81	0.158	0.4	0.729	1.4	1.1
Guthrie, OK	5-4	1944	175	0.21	0.81	0.253	0.4	3.012	4.77	2.55
Guthrie, OK	5-4	1945	316	0.19	0.81	0.211	0.4	4.105	12.82	4.61
Guthrie, OK	5-4	1946	136	0.24	0.81	0.18	0.4	1.904	3.86	1.98
Guthrie, OK	5-5	1942	229	0.17	0.69	0.44	0.4	4.728	10.72	2.87

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Guthrie, OK	5-5	1943	75	0.19	0.69	0.158	0.4	0.621	0.77	0.95
Guthrie, OK	5-5	1944	175	0.21	0.69	0.253	0.4	2.566	2.58	2.2
Guthrie, OK	5-5	1945	316	0.19	0.69	0.211	0.4	3.496	8.81	3.87
Guthrie, OK	5-5	1946	136	0.24	0.69	0.18	0.4	1.622	5.27	1.71
Guthrie, OK	5-6	1942	229	0.17	0.69	0.45	0.5	6.044	9.31	7.04
Guthrie, OK	5-6	1943	75	0.28	0.69	0.314	0.5	2.275	2.45	2.32
Guthrie, OK	5-6	1944	175	0.19	0.69	0.353	0.5	4.049	8.57	5.39
Guthrie, OK	5-6	1945	316	0.18	0.69	0.35	0.5	6.868	16.66	9.73
Guthrie, OK	5-6	1946	136	0.22	0.69	0.23	0.5	2.374	8.73	4.18
Hayes, KS	1-1	1931	97	0.37	0.43	0.2	1	3.087	0.36	2.53
Hayes, KS	1-1	1932	342	0.27	0.43	0.17	1	6.750	5.83	8.84
Hayes, KS	1-1	1933	60	0.45	0.43	0.2	1	2.322	0.65	1.88
Hayes, KS	1-1	1934	69	0.43	0.43	0.255	1	3.253	1.91	2.18
Hayes, KS	1-1	1935	108	0.35	0.43	0.255	1	4.145	2.04	3.39
Hayes, KS	1-1	1936	66	0.43	0.43	0.3	1	3.661	1.13	2.06
Hayes, KS	1-1	1937	229	0.23	0.43	0.3	1	6.794	13.22	7.19
Hayes, KS	1-1	1938	146	0.29	0.43	0.3	1	5.462	10.04	4.56
Hayes, KS	1-1	1939	87	0.39	0.43	0.3	0.5	2.188	6.49	1.54
Hayes, KS	1-1	1940	83	0.4	0.43	0.3	0.5	2.141	2.16	1.76
Hayes, KS	1-1	1941	113	0.34	0.43	0.3	0.5	2.478	3.08	1.59
Hayes, KS	1-1	1942	198	0.24	0.43	0.352	0.5	3.596	3.88	4.19
Hayes, KS	1-1	1943	61	0.45	0.43	0.3	0.5	1.771	0.99	1.29
Hayes, KS	1-1	1944	95	0.38	0.43	0.3	0.5	2.328	1.81	2
Hayes, KS	1-1	1945	69	0.43	0.43	0.3	0.5	1.914	0.83	1.46
Hayes, KS	1-1	1946	129	0.32	0.43	0.3	0.5	2.663	2.65	2.29
Hayes, KS	1-2	1931	97	0.37	0.75	0.2	1	5.384	0.33	5.06
Hayes, KS	1-2	1932	342	0.27	0.75	0.17	1	11.773	5.98	17.87
Hayes, KS	1-2	1933	60	0.45	0.75	0.2	1	4.050	0.4	3.76
Hayes, KS	1-2	1934	69	0.43	0.75	0.255	1	5.674	2.79	4.35
Hayes, KS	1-2	1935	108	0.35	0.75	0.255	1	7.229	1.94	6.78
Hayes, KS	1-2	1936	66	0.43	0.75	0.3	1	6.386	0.92	4.12
Hayes, KS	1-2	1937	229	0.23	0.75	0.3	1	11.851	14.48	14.38
Hayes, KS	1-2	1938	146	0.29	0.75	0.3	1	9.527	10.02	9.12
Hayes, KS	1-2	1939	87	0.39	0.75	0.3	0.5	3.817	4.41	3.07
Hayes, KS	1-2	1940	83	0.4	0.75	0.3	0.5	3.735	1.48	3.52
Hayes, KS	1-2	1941	113	0.34	0.75	0.3	0.5	4.322	0.97	3.19
Hayes, KS	1-2	1942	198	0.24	0.75	0.352	0.5	6.273	1.66	8.38
Hayes, KS	1-2	1943	61	0.45	0.75	0.3	0.5	3.088	0.39	2.58
Hayes, KS	1-2	1944	95	0.38	0.75	0.3	0.5	4.061	0.19	4.01
Hayes, KS	1-2	1945	69	0.43	0.75	0.3	0.5	3.338	0.45	2.92
Hayes, KS	1-2	1946	129	0.32	0.75	0.3	0.5	4.644	1.96	4.57
Hayes, KS	1-3	1931	97	0.37	0.57	0.2	1	4.091	0.27	3.64
Hayes, KS	1-3	1932	342	0.27	0.57	0.17	1	8.948	5.83	12.85
Hayes, KS	1-3	1933	60	0.45	0.57	0.2	1	3.078	0.24	2.7
Hayes, KS	1-3	1934	69	0.43	0.57	0.25	1	4.228	3.47	3.13
Hayes, KS	1-3	1935	108	0.35	0.57	0.25	1	5.386	1.71	4.87
Hayes, KS	1-3	1936	66	0.43	0.57	0.3	1	4.853	0.68	2.96
Hayes, KS	1-3	1937	229	0.23	0.57	0.3	1	9.007	14.07	10.33
Hayes, KS	1-3	1938	146	0.29	0.57	0.3	1	7.240	7.97	6.56
Hayes, KS	1-3	1939	87	0.39	0.57	0.3	0.5	2.901	4.68	2.21
Hayes, KS	1-3	1940	83	0.4	0.57	0.3	0.5	2.839	1.59	2.53
Hayes, KS	1-3	1941	113	0.34	0.57	0.3	0.5	3.285	0.73	2.29
Hayes, KS	1-3	1942	198	0.24	0.57	0.352	0.5	4.767	1.68	6.03

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Hayes, KS	1-3	1943	61	0.45	0.57	0.3	0.5	2.347	0.69	1.85
Hayes, KS	1-3	1944	95	0.38	0.57	0.3	0.5	3.087	0.48	2.88
Hayes, KS	1-3	1945	69	0.43	0.57	0.3	0.5	2.537	0.43	2.1
Hayes, KS	1-3	1946	129	0.32	0.57	0.3	0.5	3.529	2.39	3.29
Hayes, KS	4-1	1933	60	0.45	1.25	0.02	1	0.675	0	0.07
Hayes, KS	4-1	1934	69	0.43	1.25	0.001	1	0.037	0.05	0.34
Hayes, KS	4-1	1935	108	0.35	1.25	0.001	1	0.047	1.89	1.7
Hayes, KS	4-1	1936	68	0.43	1.25	0.001	1	0.035	0.17	1.03
Hayes, KS	4-1	1937	229	0.23	1.25	0.001	1	0.066	0.04	1.12
Hayes, KS	4-2	1933	60	0.45	1.25	0.02	1	0.675	0.04	0.07
Hayes, KS	4-2	1934	69	0.43	1.25	0.001	1	0.037	0.11	0.34
Hayes, KS	4-2	1935	108	0.35	1.25	0.001	1	0.047	2.93	1.7
Hayes, KS	4-2	1936	68	0.43	1.25	0.001	1	0.035	0.24	1.03
Hayes, KS	4-2	1937	229	0.23	1.25	0.001	1	0.066	0.25	1.12
Hayes, KS	4-3	1933	60	0.45	1.25	0.02	1	0.675	0.03	0.07
Hayes, KS	4-3	1934	69	0.43	1.25	0.001	1	0.037	0.1	0.29
Hayes, KS	4-3	1935	108	0.35	1.25	0.001	1	0.047	0.69	1.3
Hayes, KS	4-3	1936	68	0.43	1.25	0.001	1	0.035	0.1	0.79
Hayes, KS	4-3	1937	229	0.23	1.25	0.001	1	0.066	0.04	0.94
Hayes, KS	4-4	1933	60	0.45	1.25	0.02	1	0.675	0	0.07
Hayes, KS	4-4	1934	69	0.43	1.25	0.001	1	0.037	0.02	0.29
Hayes, KS	4-4	1935	108	0.35	1.25	0.001	1	0.047	0.42	1.3
Hayes, KS	4-4	1936	66	0.43	1.25	0.001	1	0.035	0.04	0.79
Hayes, KS	4-4	1937	229	0.23	1.25	0.001	1	0.066	0.01	0.94
Hollyspgs, MS	3-1	1963	244	0.56	0.57	0.105	1	8.178	1.01	16.29
Hollyspgs, MS	3-1	1964	425	0.57	0.57	0.013	1	1.795	0.95	3.57
Hollyspgs, MS	3-1	1965	384	0.56	0.57	0.003	1	0.368	0.66	1.11
Hollyspgs, MS	3-1	1966	241	0.56	0.57	0.105	1	8.077	7.57	18.08
Hollyspgs, MS	3-1	1967	422	0.57	0.57	0.05	1	6.855	1.94	3.54
Hollyspgs, MS	3-1	1968	323	0.54	0.57	0.007	1	0.696	0.17	0.93
Hollyspgs, MS	3-3	1963	244	0.56	0.57	0.05	1	3.894	0.09	0.7
Hollyspgs, MS	3-3	1964	425	0.57	0.57	0.155	1	21.403	3.74	28.44
Hollyspgs, MS	3-3	1965	384	0.56	0.57	0.011	1	1.348	0.86	3.22
Hollyspgs, MS	3-3	1966	241	0.56	0.57	0.007	1	0.538	0.19	0.69
Hollyspgs, MS	3-3	1967	422	0.57	0.57	0.135	1	18.510	16.89	28.22
Hollyspgs, MS	3-3	1968	323	0.54	0.57	0.006	1	0.597	0.16	2.71
Hollyspgs, MS	3-5	1963	244	0.56	0.57	0.8	1	62.308	51.72	63.88
Hollyspgs, MS	3-5	1964	425	0.57	0.57	0.9	1	124.274	130.37	111.53
Hollyspgs, MS	3-5	1965	384	0.56	0.57	0.9	1	110.316	106.35	100.67
Hollyspgs, MS	3-5	1966	241	0.56	0.57	0.9	1	69.234	50.7	63.07
Hollyspgs, MS	3-5	1967	422	0.57	0.57	0.9	1	123.397	114.78	110.69
Hollyspgs, MS	3-5	1968	323	0.54	0.57	0.9	1	89.477	55.03	84.59
Hollyspgs, MS	3-7	1963	244	0.56	0.57	0.8	1	62.308	35.36	63.88
Hollyspgs, MS	3-7	1964	425	0.57	0.57	0.9	1	124.274	104.88	111.53
Hollyspgs, MS	3-7	1965	384	0.56	0.57	0.9	1	110.316	95.39	100.67
Hollyspgs, MS	3-7	1966	241	0.56	0.57	0.9	1	69.234	47.2	63.07
Hollyspgs, MS	3-7	1967	422	0.57	0.57	0.9	1	123.397	99.22	110.69
Hollyspgs, MS	3-7	1968	323	0.54	0.57	0.9	1	89.477	28.52	84.59
Ithaca, NY	1-5	1935	65	0.02	2.5	0.834	0.8	2.168	4.31	1.06
Ithaca, NY	1-5	1936	123	0.01	2.5	0.763	0.8	1.877	4.34	2.02
Ithaca, NY	1-5	1937	212	0.01	2.5	0.798	0.8	3.384	3.29	3.46
Ithaca, NY	1-5	1938	53	0.02	2.5	0.797	0.8	1.690	2.21	0.87
Ithaca, NY	1-5	1939	52	0.02	2.5	0.801	0.8	1.666	4.9	0.85

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Ithaca, NY	1-5	1940	106	0.02	2.5	0.81	0.8	3.434	1.69	1.72
Ithaca, NY	1-5	1941	47	0.02	2.5	0.782	0.8	1.470	1.49	0.77
Ithaca, NY	1-5	1942	127	0.01	2.5	0.739	0.8	1.877	1.53	2.09
Ithaca, NY	1-5	1943	57	0.02	2.5	0.77	0.8	1.758	0.36	0.83
Ithaca, NY	1-5	1944	123	0.01	2.5	0.755	0.8	1.857	8.33	2.01
Ithaca, NY	1-5	1945	90	0.02	2.5	0.75	0.8	2.700	1.12	1.47
Ithaca, NY	1-7	1935	65	0.05	2.59	0.839	0.8	5.650	8.14	2.8
Ithaca, NY	1-7	1936	123	0.04	2.59	0.765	0.8	7.799	8.83	5.32
Ithaca, NY	1-7	1937	212	0.04	2.59	0.799	0.8	14.039	9.42	9.12
Ithaca, NY	1-7	1938	53	0.05	2.59	0.937	0.8	5.145	11.23	6.71
Ithaca, NY	1-7	1939	52	0.05	2.59	0.973	0.8	5.242	12.35	6.58
Ithaca, NY	1-7	1940	106	0.04	2.59	0.974	0.8	8.557	16.32	13.34
Ithaca, NY	1-8	1935	65	0.02	2.64	0.99	0.8	2.718	8.62	3.37
Ithaca, NY	1-8	1936	123	0.01	2.64	0.99	0.8	2.572	15.11	6.42
Ithaca, NY	1-8	1937	212	0.01	2.64	0.99	0.8	4.433	13.51	11
Ithaca, NY	1-8	1938	53	0.02	2.64	0.99	0.8	2.216	7.28	2.75
Ithaca, NY	1-8	1939	52	0.02	2.64	0.99	0.8	2.175	4.06	2.7
Ithaca, NY	1-8	1940	106	0.02	2.64	0.99	0.8	4.433	2.74	5.47
Ithaca, NY	1-9	1935	65	0.02	2.68	0.124	1	0.432	0.28	0.43
Ithaca, NY	1-9	1936	123	0.01	2.68	0.009	1	0.030	0.03	0.08
Ithaca, NY	1-9	1937	212	0.01	2.68	0.009	1	0.051	0.87	0.08
Ithaca, NY	1-9	1938	53	0.02	2.68	0.009	1	0.026	0	0.01
Ithaca, NY	1-9	1939	52	0.02	2.68	0.009	1	0.025	0	0.02
Ithaca, NY	1-9	1940	106	0.02	2.68	0.009	1	0.051	0	0.03
Ithaca, NY	1-14	1935	65	0.02	2.87	0.526	0.8	1.570	1.2	1.3
Ithaca, NY	1-14	1936	123	0.01	2.87	0.535	0.8	1.511	7.16	2.54
Ithaca, NY	1-14	1937	212	0.01	2.87	0.542	0.8	2.638	0.13	4.24
Ithaca, NY	1-14	1938	53	0.02	2.87	0.6	0.8	1.460	0	1
Ithaca, NY	1-14	1939	52	0.02	2.87	0.536	0.8	1.280	0.05	1.04
Ithaca, NY	1-14	1940	106	0.02	2.87	0.5	0.8	2.434	2.86	1.98
Lacrosse, WI	1-1	1933	80	0.41	1.42	0.47	0.7	15.324	25.67	12.69
Lacrosse, WI	1-1	1934	185	0.26	1.42	0.5	0.7	23.906	42.87	29.44
Lacrosse, WI	1-1	1935	223	0.24	1.42	0.5	0.7	26.599	108.79	35.51
Lacrosse, WI	1-1	1936	128	0.33	1.42	0.6	0.7	25.192	70.32	20.44
Lacrosse, WI	1-1	1937	168	0.28	1.42	0.5	0.7	23.379	56.24	26.82
Lacrosse, WI	1-1	1938	289	0.27	1.42	0.6	0.7	46.537	108.43	46.01
Lacrosse, WI	1-2	1933	80	0.41	3.21	0.47	0.7	34.640	68.26	25.38
Lacrosse, WI	1-2	1934	185	0.26	3.21	0.5	0.7	54.040	85.05	58.89
Lacrosse, WI	1-2	1935	223	0.24	3.21	0.5	0.7	60.130	147.54	71.01
Lacrosse, WI	1-2	1936	128	0.33	3.21	0.6	0.7	56.948	162.06	40.88
Lacrosse, WI	1-2	1937	168	0.28	3.21	0.5	0.7	52.849	150.05	53.64
Lacrosse, WI	1-2	1938	289	0.27	3.21	0.6	0.7	105.200	211.22	92.02
Lacrosse, WI	1-3	1933	80	0.41	2.14	0.47	0.7	23.093	59.83	17.86
Lacrosse, WI	1-3	1934	185	0.26	2.14	0.5	0.7	36.027	62.57	41.67
Lacrosse, WI	1-3	1935	223	0.24	2.14	0.5	0.7	40.086	141.96	50.25
Lacrosse, WI	1-3	1936	128	0.33	2.14	0.6	0.7	37.965	135.79	28.92
Lacrosse, WI	1-3	1937	168	0.28	2.14	0.5	0.7	35.233	109.87	37.96
Lacrosse, WI	1-3	1938	289	0.27	2.14	0.6	0.7	70.133	160.25	65.11
Lacrosse, WI	1-8	1933	80	0.41	2.14	0.978	0.7	48.053	51.61	51.32
Lacrosse, WI	1-8	1934	185	0.26	2.14	0.965	0.7	69.532	180.53	119.05
Lacrosse, WI	1-8	1935	223	0.24	2.14	0.979	0.7	78.489	220.5	143.56
Lacrosse, WI	1-8	1936	128	0.33	2.14	0.974	0.7	61.630	208.03	82.64
Lacrosse, WI	1-8	1937	168	0.28	2.14	0.967	0.7	68.141	168.6	108.45

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Lacrosse, WI	1-8	1938	289	0.27	2.14	0.978	0.7	114.317	316.9	186.04
Lacrosse, WI	1-10	1933	80	0.41	2.14	0.004	1	0.281	0	0.44
Lacrosse, WI	1-10	1934	185	0.26	2.14	0.001	1	0.103	0.08	1.02
Lacrosse, WI	1-10	1935	223	0.24	2.14	0.001	1	0.115	0	1.23
Lacrosse, WI	1-10	1936	128	0.33	2.14	0.001	1	0.090	0.17	0.71
Lacrosse, WI	1-10	1937	168	0.28	2.14	0.001	1	0.101	0.15	0.93
Lacrosse, WI	1-10	1938	289	0.27	2.14	0.001	1	0.167	0.16	1.59
Lacrosse, WI	1-12	1933	80	0.41	2.14	0.004	1	0.281	0.02	1.23
Lacrosse, WI	1-12	1934	185	0.26	2.14	0.003	1	0.309	0.41	2.86
Lacrosse, WI	1-12	1935	223	0.24	2.14	0.002	1	0.229	0	3.45
Lacrosse, WI	1-12	1936	128	0.33	2.14	0.001	1	0.090	0.01	1.98
Lacrosse, WI	1-12	1937	168	0.28	2.14	0.001	1	0.101	0	2.6
Lacrosse, WI	1-12	1938	289	0.27	2.14	0.001	1	0.167	0	4.47
Lacrosse, WI	1-14	1933	80	0.41	4.21	0.47	0.95	61.656	10.71	68.29
Lacrosse, WI	1-14	1934	185	0.26	4.21	0.5	0.95	98.188	47.86	158.43
Lacrosse, WI	1-14	1935	223	0.24	4.21	0.5	0.95	107.027	114.77	191.05
Lacrosse, WI	1-14	1936	128	0.33	4.21	0.6	0.95	101.363	105.54	109.58
Lacrosse, WI	1-14	1937	168	0.28	4.21	0.5	0.95	94.068	151.92	144.32
Lacrosse, WI	1-14	1938	289	0.27	4.21	0.6	0.95	187.249	227.47	247.58
Lacrosse, WI	2-1	1940	191	0.26	2.14	0.011	1	1.169	0.85	1.75
Lacrosse, WI	2-1	1941	125	0.33	2.14	0.035	1	3.090	0.48	1.01
Lacrosse, WI	2-1	1942	229	0.25	2.14	0.615	0.7	52.743	72.09	32.36
Lacrosse, WI	2-1	1943	52	0.46	2.14	0.033	1	1.689	2.77	6.18
Lacrosse, WI	2-1	1944	132	0.32	2.14	0.009	1	0.814	0	1.22
Lacrosse, WI	2-1	1945	151	0.3	2.14	0.037	1	3.587	0.04	0.97
Lacrosse, WI	2-1	1946	126	0.33	2.14	0.315	0.7	19.620	1.55	17.86
Lacrosse, WI	2-1	1947	94	0.39	2.14	0.065	1	5.099	5.49	11.24
Lacrosse, WI	2-1	1948	35	0.46	2.14	0.015	1	0.517	0.01	0.19
Lacrosse, WI	2-1	1949	60	0.46	2.14	0.043	1	2.540	0	0.33
Lacrosse, WI	2-1	1950	186	0.26	2.14	0.356	0.7	25.790	60.34	26.37
Lacrosse, WI	2-1	1951	155	0.29	2.14	0.08	1	7.695	2.39	18.58
Lacrosse, WI	2-2	1940	191	0.26	2.14	0.011	1	1.169	0.98	1.75
Lacrosse, WI	2-2	1941	125	0.33	2.14	0.035	1	3.090	0.45	1.01
Lacrosse, WI	2-2	1942	229	0.25	2.14	0.615	0.7	52.743	56.85	32.36
Lacrosse, WI	2-2	1943	52	0.46	2.14	0.033	1	1.689	0.83	6.18
Lacrosse, WI	2-2	1944	132	0.32	2.14	0.009	1	0.814	0	1.22
Lacrosse, WI	2-2	1945	151	0.3	2.14	0.037	1	3.587	0.05	0.97
Lacrosse, WI	2-2	1946	126	0.33	2.14	0.315	0.7	19.620	1.44	17.86
Lacrosse, WI	2-2	1947	94	0.39	2.14	0.065	1	5.099	1.49	11.24
Lacrosse, WI	2-2	1948	35	0.46	2.14	0.015	1	0.517	0	0.19
Lacrosse, WI	2-2	1949	60	0.46	2.14	0.043	1	2.540	0.01	0.33
Lacrosse, WI	2-2	1950	186	0.26	2.14	0.356	0.7	25.790	42.23	26.37
Lacrosse, WI	2-2	1951	155	0.29	2.14	0.08	1	7.695	1.35	18.58
Lacrosse, WI	2-4	1940	191	0.26	2.14	0.011	1	1.169	1.53	1.75
Lacrosse, WI	2-4	1941	125	0.33	2.14	0.035	1	3.090	0.28	1.01
Lacrosse, WI	2-4	1942	229	0.25	2.14	0.615	0.7	52.743	68.53	32.36
Lacrosse, WI	2-4	1943	52	0.46	2.14	0.033	1	1.689	3.82	6.18
Lacrosse, WI	2-4	1944	132	0.32	2.14	0.009	1	0.814	0	1.22
Lacrosse, WI	2-4	1945	151	0.3	2.14	0.037	1	3.587	0.09	0.97
Lacrosse, WI	2-4	1946	126	0.33	2.14	0.315	0.7	19.620	0.48	17.86
Lacrosse, WI	2-4	1947	94	0.39	2.14	0.065	1	5.099	0.9	11.24
Lacrosse, WI	2-4	1948	35	0.46	2.14	0.015	1	0.517	0.01	0.19
Lacrosse, WI	2-4	1949	60	0.46	2.14	0.043	1	2.540	0.01	0.33

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Lacrosse, WI	2-4	1950	186	0.26	2.14	0.356	0.7	25.790	32.2	26.37
Lacrosse, WI	2-4	1951	155	0.29	2.14	0.08	1	7.695	1.07	18.58
Lacrosse, WI	2-6	1940	191	0.26	2.14	0.011	1	1.169	1.67	1.75
Lacrosse, WI	2-6	1941	125	0.33	2.14	0.035	1	3.090	0.32	1.01
Lacrosse, WI	2-6	1942	229	0.25	2.14	0.615	0.7	52.743	70.57	32.36
Lacrosse, WI	2-6	1943	52	0.46	2.14	0.033	1	1.689	1.89	6.18
Lacrosse, WI	2-6	1944	132	0.32	2.14	0.009	1	0.814	0	1.22
Lacrosse, WI	2-6	1945	151	0.3	2.14	0.037	1	3.587	0.08	0.97
Lacrosse, WI	2-6	1946	126	0.33	2.14	0.315	0.7	19.620	0.26	17.86
Lacrosse, WI	2-6	1947	94	0.39	2.14	0.065	1	5.099	2.22	11.24
Lacrosse, WI	2-6	1948	35	0.46	2.14	0.015	1	0.517	0.02	0.19
Lacrosse, WI	2-6	1949	60	0.46	2.14	0.043	1	2.540	0	0.33
Lacrosse, WI	2-6	1950	186	0.26	2.14	0.356	0.7	25.790	38	26.37
Lacrosse, WI	2-6	1951	155	0.29	2.14	0.08	1	7.695	1.37	18.58
Lacrosse, WI	2-9	1940	191	0.26	2.14	0.011	1	1.169	0.96	1.75
Lacrosse, WI	2-9	1941	125	0.33	2.14	0.035	1	3.090	0.27	1.01
Lacrosse, WI	2-9	1942	229	0.25	2.14	0.615	0.7	52.743	88.25	32.36
Lacrosse, WI	2-9	1943	52	0.46	2.14	0.033	1	1.689	4.52	6.18
Lacrosse, WI	2-9	1944	132	0.32	2.14	0.009	1	0.814	0	1.22
Lacrosse, WI	2-9	1945	151	0.3	2.14	0.037	1	3.587	0.07	0.97
Lacrosse, WI	2-9	1946	126	0.33	2.14	0.315	0.7	19.620	0.35	17.86
Lacrosse, WI	2-9	1947	94	0.39	2.14	0.065	1	5.099	5.28	11.24
Lacrosse, WI	2-9	1948	35	0.46	2.14	0.015	1	0.517	0.02	0.19
Lacrosse, WI	2-9	1949	60	0.46	2.14	0.043	1	2.540	0	0.33
Lacrosse, WI	2-9	1950	186	0.26	2.14	0.356	0.7	25.790	54.93	26.37
Lacrosse, WI	2-9	1951	155	0.29	2.14	0.08	1	7.695	1.9	18.58
Lacrosse, WI	2-10	1940	191	0.26	2.14	0.011	1	1.169	1.05	1.75
Lacrosse, WI	2-10	1941	125	0.33	2.14	0.035	1	3.090	0.32	1.01
Lacrosse, WI	2-10	1942	229	0.25	2.14	0.615	0.7	52.743	62.41	32.36
Lacrosse, WI	2-10	1943	52	0.46	2.14	0.033	1	1.689	6.45	6.18
Lacrosse, WI	2-10	1944	132	0.32	2.14	0.009	1	0.814	0	1.22
Lacrosse, WI	2-10	1945	151	0.3	2.14	0.037	1	3.587	0.08	0.97
Lacrosse, WI	2-10	1946	126	0.33	2.14	0.315	0.7	19.620	1.18	17.86
Lacrosse, WI	2-10	1947	94	0.39	2.14	0.065	1	5.099	1.3	11.24
Lacrosse, WI	2-10	1948	35	0.46	2.14	0.015	1	0.517	0.05	0.19
Lacrosse, WI	2-10	1949	60	0.46	2.14	0.043	1	2.540	0	0.33
Lacrosse, WI	2-10	1950	186	0.26	2.14	0.356	0.7	25.790	42.96	26.37
Lacrosse, WI	2-10	1951	155	0.29	2.14	0.08	1	7.695	1.23	18.58
Lacrosse, WI	3S1	1939	85	0.41	0.28	0.241	1	2.352	0.24	1.42
Lacrosse, WI	3S1	1940	191	0.26	0.28	0.402	1	5.590	2.83	3.2
Lacrosse, WI	3S1	1941	125	0.33	0.28	0.416	1	4.805	15.38	4.67
Lacrosse, WI	3S1	1942	229	0.25	0.28	0.23	1	3.687	2.16	3.83
Lacrosse, WI	3S1	1943	52	0.46	0.28	0.3	1	2.009	0.74	0.62
Lacrosse, WI	3S1	1944	132	0.32	0.28	0.06	1	0.710	0	0.06
Lacrosse, WI	3S1	1945	151	0.3	0.28	0.461	0.5	2.924	0.33	1.32
Lacrosse, WI	3S1	1946	126	0.33	0.28	0.484	1	5.635	0.04	1.31
Lacrosse, WI	3S2	1939	85	0.41	0.28	0.241	1	2.352	0.15	1.42
Lacrosse, WI	3S2	1940	191	0.26	0.28	0.402	1	5.590	1.67	3.2
Lacrosse, WI	3S2	1941	125	0.33	0.28	0.416	1	4.805	10.05	4.67
Lacrosse, WI	3S2	1942	229	0.25	0.28	0.23	1	3.687	1.89	3.83
Lacrosse, WI	3S2	1943	52	0.46	0.28	0.3	1	2.009	0.74	0.62
Lacrosse, WI	3S2	1944	132	0.32	0.28	0.06	1	0.710	0	0.06
Lacrosse, WI	3S2	1945	151	0.3	0.28	0.461	0.5	2.924	0.67	1.32

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Lacrosse, WI	3S2	1946	126	0.33	0.28	0.484	1	5.635	0.18	1.31
Lacrosse, WI	3S3	1939	85	0.41	0.28	0.241	1	2.352	0.08	1.42
Lacrosse, WI	3S3	1940	191	0.26	0.28	0.402	1	5.590	2.91	3.2
Lacrosse, WI	3S3	1941	125	0.33	0.28	0.416	1	4.805	14.47	4.67
Lacrosse, WI	3S3	1942	229	0.25	0.28	0.23	1	3.687	2.22	3.83
Lacrosse, WI	3S3	1943	52	0.46	0.28	0.3	1	2.009	0.86	0.62
Lacrosse, WI	3S3	1944	132	0.32	0.28	0.06	1	0.710	0	0.06
Lacrosse, WI	3S3	1945	151	0.3	0.28	0.481	0.5	2.924	0.32	1.32
Lacrosse, WI	3S3	1946	126	0.33	0.28	0.484	1	5.635	0.03	1.31
Lacrosse, WI	8S1	1939	85	0.41	0.64	0.241	1	5.375	0.35	4.05
Lacrosse, WI	8S1	1940	191	0.26	0.64	0.402	1	12.777	5.68	9.13
Lacrosse, WI	8S1	1941	125	0.33	0.64	0.416	1	10.982	41.25	13.33
Lacrosse, WI	8S1	1942	229	0.25	0.64	0.23	1	8.427	6.6	10.94
Lacrosse, WI	8S1	1943	52	0.46	0.64	0.3	1	4.593	2.27	1.77
Lacrosse, WI	8S1	1944	132	0.32	0.64	0.06	1	1.622	0	0.18
Lacrosse, WI	8S1	1945	151	0.3	0.64	0.461	0.5	6.683	1.02	3.78
Lacrosse, WI	8S1	1946	126	0.33	0.64	0.484	1	12.880	0.54	3.74
Lacrosse, WI	8S2	1939	85	0.41	0.64	0.241	1	5.375	0.23	4.05
Lacrosse, WI	8S2	1940	191	0.26	0.64	0.402	1	12.777	5.69	9.13
Lacrosse, WI	8S2	1941	125	0.33	0.64	0.416	1	10.982	40.77	13.33
Lacrosse, WI	8S2	1942	229	0.25	0.64	0.23	1	8.427	5.1	10.84
Lacrosse, WI	8S2	1943	52	0.46	0.64	0.3	1	4.593	1.8	1.77
Lacrosse, WI	8S2	1944	132	0.32	0.64	0.06	1	1.622	0	0.18
Lacrosse, WI	8S2	1945	151	0.3	0.64	0.461	0.5	6.683	1.48	3.78
Lacrosse, WI	8S2	1946	126	0.33	0.64	0.484	1	12.880	0.63	3.74
Lacrosse, WI	8S3	1939	85	0.41	0.64	0.241	1	5.375	0.33	4.05
Lacrosse, WI	8S3	1940	191	0.26	0.64	0.402	1	12.777	4.86	9.13
Lacrosse, WI	8S3	1941	125	0.33	0.64	0.416	1	10.982	39.79	13.33
Lacrosse, WI	8S3	1942	229	0.25	0.64	0.23	1	8.427	5.72	10.94
Lacrosse, WI	8S3	1943	52	0.46	0.64	0.3	1	4.593	1.65	1.77
Lacrosse, WI	8S3	1944	132	0.32	0.64	0.06	1	1.622	0	0.18
Lacrosse, WI	8S3	1945	151	0.3	0.64	0.461	0.5	6.683	1.63	3.78
Lacrosse, WI	8S3	1946	126	0.33	0.64	0.484	1	12.880	0.36	3.74
Lacrosse, WI	13S1	1939	85	0.41	1.13	0.241	1	9.491	0.94	8.3
Lacrosse, WI	13S1	1940	191	0.26	1.13	0.402	1	22.559	16.59	18.72
Lacrosse, WI	13S1	1941	125	0.33	1.13	0.416	1	19.391	67.37	27.33
Lacrosse, WI	13S1	1942	229	0.25	1.13	0.23	1	14.879	15.39	22.43
Lacrosse, WI	13S1	1943	52	0.46	1.13	0.3	1	8.109	3.77	3.62
Lacrosse, WI	13S1	1944	132	0.32	1.13	0.06	1	2.864	0	0.37
Lacrosse, WI	13S1	1945	151	0.3	1.13	0.461	0.7	16.519	14.46	10.84
Lacrosse, WI	13S1	1946	126	0.33	1.13	0.484	1	22.741	1.04	7.66
Lacrosse, WI	13S2	1939	85	0.41	1.13	0.241	1	9.491	1.53	8.3
Lacrosse, WI	13S2	1940	191	0.26	1.13	0.402	1	22.559	21.73	18.72
Lacrosse, WI	13S2	1941	125	0.33	1.13	0.416	1	19.391	70.67	27.33
Lacrosse, WI	13S2	1942	229	0.25	1.13	0.23	1	14.879	16.27	22.43
Lacrosse, WI	13S2	1943	52	0.46	1.13	0.3	1	8.109	1.69	3.62
Lacrosse, WI	13S2	1944	132	0.32	1.13	0.06	1	2.864	0	0.37
Lacrosse, WI	13S2	1945	151	0.3	1.13	0.461	0.7	16.519	11.01	10.84
Lacrosse, WI	13S2	1946	126	0.33	1.13	0.484	1	22.741	0.61	7.66
Lacrosse, WI	13S3	1939	85	0.41	1.13	0.241	1	9.491	0.78	8.3
Lacrosse, WI	13S3	1940	191	0.26	1.13	0.402	1	22.559	14.7	18.72
Lacrosse, WI	13S3	1941	125	0.33	1.13	0.416	1	19.391	63.35	27.33
Lacrosse, WI	13S3	1942	229	0.25	1.13	0.23	1	14.879	12.66	22.43

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Lacrosse, WI	13S3	1943	52	0.46	1.13	0.3	1	8.109	1.18	3.62
Lacrosse, WI	13S3	1944	132	0.32	1.13	0.06	1	2.864	0	0.37
Lacrosse, WI	13S3	1945	151	0.3	1.13	0.461	0.7	18.519	4.05	10.84
Lacrosse, WI	13S3	1946	126	0.33	1.13	0.484	1	22.741	0.42	7.66
Lacrosse, WI	18S1	1939	85	0.41	1.62	0.241	1	13.606	3.52	13.87
Lacrosse, WI	18S1	1940	191	0.26	1.62	0.402	1	32.341	29.99	31.5
Lacrosse, WI	18S1	1941	125	0.33	1.62	0.416	1	27.799	95.69	48
Lacrosse, WI	18S1	1942	229	0.25	1.62	0.23	1	21.331	30.78	37.75
Lacrosse, WI	18S1	1943	52	0.46	1.62	0.3	1	11.625	9.17	6.1
Lacrosse, WI	18S1	1944	132	0.32	1.62	0.06	1	4.106	0	0.62
Lacrosse, WI	18S1	1945	151	0.3	1.62	0.461	0.8	27.065	15.4	20.85
Lacrosse, WI	18S1	1946	126	0.33	1.62	0.484	1	32.602	2.54	12.9
Lacrosse, WI	18S2	1939	85	0.41	1.62	0.241	1	13.606	1.85	13.87
Lacrosse, WI	18S2	1940	191	0.26	1.62	0.402	1	32.341	22.87	31.5
Lacrosse, WI	18S2	1941	125	0.33	1.62	0.416	1	27.799	75.26	48
Lacrosse, WI	18S2	1942	229	0.25	1.62	0.23	1	21.331	18.06	37.75
Lacrosse, WI	18S2	1943	52	0.46	1.62	0.3	1	11.625	3.46	6.1
Lacrosse, WI	18S2	1944	132	0.32	1.62	0.06	1	4.106	0	0.62
Lacrosse, WI	18S2	1945	151	0.3	1.62	0.461	0.8	27.065	5.82	20.85
Lacrosse, WI	18S2	1946	126	0.33	1.62	0.484	1	32.602	2.02	12.9
Lacrosse, WI	18S3	1939	85	0.41	1.62	0.241	1	13.606	0.4	13.87
Lacrosse, WI	18S3	1940	191	0.26	1.62	0.402	1	32.341	17.32	31.5
Lacrosse, WI	18S3	1941	125	0.33	1.62	0.416	1	27.799	69.98	46
Lacrosse, WI	18S3	1942	229	0.25	1.62	0.23	1	21.331	15.88	37.75
Lacrosse, WI	18S3	1943	52	0.46	1.62	0.3	1	11.625	1.84	6.1
Lacrosse, WI	18S3	1944	132	0.32	1.62	0.06	1	4.106	0	0.62
Lacrosse, WI	18S3	1945	151	0.3	1.62	0.461	0.8	27.065	4.06	20.85
Lacrosse, WI	18S3	1946	126	0.33	1.62	0.484	1	32.602	1.9	12.9
Lacrosse, WI	3L1	1939	85	0.41	0.35	0.241	1	2.940	0.1	1.76
Lacrosse, WI	3L1	1940	191	0.26	0.35	0.402	1	6.987	1.29	3.96
Lacrosse, WI	3L1	1941	125	0.33	0.35	0.416	1	6.006	22.49	5.78
Lacrosse, WI	3L1	1942	229	0.25	0.35	0.23	1	4.609	3.17	4.74
Lacrosse, WI	3L1	1943	52	0.46	0.35	0.3	1	2.512	0.58	0.77
Lacrosse, WI	3L1	1944	132	0.32	0.35	0.06	1	0.887	0	0.08
Lacrosse, WI	3L1	1945	151	0.3	0.35	0.461	0.5	3.655	0.14	1.64
Lacrosse, WI	3L1	1946	126	0.33	0.35	0.484	1	7.044	0.11	1.62
Lacrosse, WI	3L2	1939	85	0.41	0.35	0.241	1	2.940	0.08	1.76
Lacrosse, WI	3L2	1940	191	0.26	0.35	0.402	1	6.987	1.32	3.96
Lacrosse, WI	3L2	1941	125	0.33	0.35	0.416	1	6.006	23.05	5.78
Lacrosse, WI	3L2	1942	229	0.25	0.35	0.23	1	4.609	3.32	4.74
Lacrosse, WI	3L2	1943	52	0.46	0.35	0.3	1	2.512	0.64	0.77
Lacrosse, WI	3L2	1944	132	0.32	0.35	0.06	1	0.887	0	0.08
Lacrosse, WI	3L2	1945	151	0.3	0.35	0.461	0.5	3.655	0.09	1.64
Lacrosse, WI	3L2	1946	126	0.33	0.35	0.484	1	7.044	0.2	1.62
Lacrosse, WI	3L3	1939	85	0.41	0.35	0.241	1	2.940	0.06	1.76
Lacrosse, WI	3L3	1940	191	0.26	0.35	0.402	1	6.987	1.37	3.96
Lacrosse, WI	3L3	1941	125	0.33	0.35	0.416	1	6.006	21.15	5.78
Lacrosse, WI	3L3	1942	229	0.25	0.35	0.23	1	4.609	2.77	4.74
Lacrosse, WI	3L3	1943	52	0.46	0.35	0.3	1	2.512	0.54	0.77
Lacrosse, WI	3L3	1944	132	0.32	0.35	0.06	1	0.887	0	0.08
Lacrosse, WI	3L3	1945	151	0.3	0.35	0.461	0.5	3.655	0.1	1.64
Lacrosse, WI	3L3	1946	126	0.33	0.35	0.484	1	7.044	0.28	1.62
Lacrosse, WI	8L1	1939	85	0.41	0.89	0.241	1	7.475	0.55	5.67

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Lacrosse, WI	8L1	1940	191	0.26	0.89	0.402	1	17.767	9.12	12.78
Lacrosse, WI	8L1	1941	125	0.33	0.89	0.416	1	15.272	45.63	18.67
Lacrosse, WI	8L1	1942	229	0.25	0.89	0.23	1	11.719	9.54	15.32
Lacrosse, WI	8L1	1943	52	0.46	0.89	0.3	1	6.387	1.19	2.47
Lacrosse, WI	8L1	1944	132	0.32	0.89	0.06	1	2.256	0	0.25
Lacrosse, WI	8L1	1945	151	0.3	0.89	0.461	0.5	9.293	0.95	5.29
Lacrosse, WI	8L1	1946	126	0.33	0.89	0.484	1	17.911	1.34	5.23
Lacrosse, WI	8L2	1939	85	0.41	0.89	0.241	1	7.475	0.29	5.67
Lacrosse, WI	8L2	1940	191	0.26	0.89	0.402	1	17.767	6.01	12.78
Lacrosse, WI	8L2	1941	125	0.33	0.89	0.416	1	15.272	44.01	18.67
Lacrosse, WI	8L2	1942	229	0.25	0.89	0.23	1	11.719	6.6	15.32
Lacrosse, WI	8L2	1943	52	0.46	0.89	0.3	1	6.387	1.14	2.47
Lacrosse, WI	8L2	1944	132	0.32	0.89	0.06	1	2.256	0	0.25
Lacrosse, WI	8L2	1945	151	0.3	0.89	0.481	0.5	9.293	0.17	5.29
Lacrosse, WI	8L2	1946	126	0.33	0.89	0.484	1	17.911	0.85	5.23
Lacrosse, WI	8L3	1939	85	0.41	0.89	0.241	1	7.475	0.18	5.67
Lacrosse, WI	8L3	1940	191	0.26	0.89	0.402	1	17.767	4.46	12.78
Lacrosse, WI	8L3	1941	125	0.33	0.89	0.416	1	15.272	44.27	18.67
Lacrosse, WI	8L3	1942	229	0.25	0.89	0.23	1	11.719	10.27	15.32
Lacrosse, WI	8L3	1943	52	0.46	0.89	0.3	1	6.387	0.99	2.47
Lacrosse, WI	8L3	1944	132	0.32	0.89	0.06	1	2.256	0	0.25
Lacrosse, WI	8L3	1945	151	0.3	0.89	0.461	0.5	9.293	1.15	5.29
Lacrosse, WI	8L3	1946	126	0.33	0.89	0.484	1	17.911	1.04	5.23
Lacrosse, WI	13L1	1939	85	0.41	1.66	0.241	1	13.942	1.63	11.75
Lacrosse, WI	13L1	1940	191	0.26	1.66	0.402	1	33.139	18.1	26.47
Lacrosse, WI	13L1	1941	125	0.33	1.66	0.416	1	28.486	87.12	38.66
Lacrosse, WI	13L1	1942	229	0.25	1.66	0.23	1	21.858	34.03	31.73
Lacrosse, WI	13L1	1943	52	0.46	1.66	0.3	1	11.912	4.19	5.13
Lacrosse, WI	13L1	1944	132	0.32	1.66	0.06	1	4.207	0	0.53
Lacrosse, WI	13L1	1945	151	0.3	1.66	0.461	0.7	24.266	2.12	15.34
Lacrosse, WI	13L1	1946	126	0.33	1.66	0.484	1	33.407	2.68	10.84
Lacrosse, WI	13L2	1939	85	0.41	1.66	0.241	1	13.942	0.49	11.75
Lacrosse, WI	13L2	1940	191	0.26	1.66	0.402	1	33.139	14.95	26.47
Lacrosse, WI	13L2	1941	125	0.33	1.66	0.416	1	28.486	83.33	38.66
Lacrosse, WI	13L2	1942	229	0.25	1.66	0.23	1	21.858	29.62	31.73
Lacrosse, WI	13L2	1943	52	0.46	1.66	0.3	1	11.912	4.48	5.13
Lacrosse, WI	13L2	1944	132	0.32	1.66	0.06	1	4.207	0	0.53
Lacrosse, WI	13L2	1945	151	0.3	1.66	0.461	0.7	24.266	7.55	15.34
Lacrosse, WI	13L2	1946	126	0.33	1.66	0.484	1	33.407	1.55	10.84
Lacrosse, WI	13L3	1939	85	0.41	1.66	0.241	1	13.942	0.33	11.75
Lacrosse, WI	13L3	1940	191	0.26	1.66	0.402	1	33.139	18.83	26.47
Lacrosse, WI	13L3	1941	125	0.33	1.66	0.416	1	28.486	79.56	38.66
Lacrosse, WI	13L3	1942	229	0.25	1.66	0.23	1	21.858	32.84	31.73
Lacrosse, WI	13L3	1943	52	0.46	1.66	0.3	1	11.912	7.9	5.13
Lacrosse, WI	13L3	1944	132	0.32	1.66	0.06	1	4.207	0	0.53
Lacrosse, WI	13L3	1945	151	0.3	1.66	0.461	0.7	24.266	7.6	15.34
Lacrosse, WI	13L3	1946	126	0.33	1.66	0.484	1	33.407	2.51	10.84
Lacrosse, WI	18L1	1939	85	0.41	2.45	0.241	1	20.577	7.59	19.78
Lacrosse, WI	18L1	1940	191	0.26	2.45	0.402	1	48.910	44.08	44.58
Lacrosse, WI	18L1	1941	125	0.33	2.45	0.416	1	42.042	99.62	65.11
Lacrosse, WI	18L1	1942	229	0.25	2.45	0.23	1	32.260	41.45	53.43
Lacrosse, WI	18L1	1943	52	0.46	2.45	0.3	1	17.581	9.89	8.63
Lacrosse, WI	18L1	1944	132	0.32	2.45	0.06	1	6.209	0	0.88

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Lacrosse, WI	18L1	1945	151	0.3	2.45	0.461	0.8	40.931	18.48	29.52
Lacrosse, WI	18L1	1946	126	0.33	2.45	0.484	1	49.306	6.74	18.26
Lacrosse, WI	18L2	1939	85	0.41	2.45	0.241	1	20.577	3.51	19.78
Lacrosse, WI	18L2	1940	191	0.26	2.45	0.402	1	48.910	35.96	44.58
Lacrosse, WI	18L2	1941	125	0.33	2.45	0.416	1	42.042	90.81	65.11
Lacrosse, WI	18L2	1942	229	0.25	2.45	0.23	1	32.260	42.51	53.43
Lacrosse, WI	18L2	1943	52	0.46	2.45	0.3	1	17.581	9.91	8.63
Lacrosse, WI	18L2	1944	132	0.32	2.45	0.06	1	6.209	0	0.88
Lacrosse, WI	18L2	1945	151	0.3	2.45	0.461	0.8	40.931	18.79	29.52
Lacrosse, WI	18L2	1946	126	0.33	2.45	0.484	1	49.306	6.74	18.26
Lacrosse, WI	18L3	1939	85	0.41	2.45	0.241	1	20.577	2.48	19.78
Lacrosse, WI	18L3	1940	191	0.26	2.45	0.402	1	48.910	40.14	44.58
Lacrosse, WI	18L3	1941	125	0.33	2.45	0.416	1	42.042	89.43	65.11
Lacrosse, WI	18L3	1942	229	0.25	2.45	0.23	1	32.260	40.91	53.43
Lacrosse, WI	18L3	1943	52	0.46	2.45	0.3	1	17.581	11.32	8.63
Lacrosse, WI	18L3	1944	132	0.32	2.45	0.06	1	6.209	0	0.88
Lacrosse, WI	18L3	1945	151	0.3	2.45	0.461	0.8	40.931	21.78	29.52
Lacrosse, WI	18L3	1946	126	0.33	2.45	0.484	1	49.306	8.85	18.26
Madison, SD	1-2	1962	121	0.18	0.65	0.31	1	4.389	18.1	2.2
Madison, SD	1-2	1963	159	0.16	0.65	0.275	1	4.547	3.62	2.88
Madison, SD	1-2	1964	119	0.19	0.65	0.279	1	4.100	3.33	2.16
Madison, SD	1-2	1965	43	0.26	0.65	0.244	1	1.773	1.28	0.79
Madison, SD	1-2	1966	56	0.26	0.65	0.218	1	2.063	0.35	1.02
Madison, SD	1-2	1967	119	0.19	0.65	0.19	1	2.792	5.31	2.15
Madison, SD	1-2	1968	63	0.25	0.65	0.201	1	2.058	1.28	1.15
Madison, SD	1-2	1969	162	0.15	0.65	0.205	1	3.238	3.12	2.93
Madison, SD	1-2	1970	58	0.26	0.65	0.252	1	2.470	0.95	1.05
Madison, SD	1-6	1962	121	0.18	0.65	0.31	1	4.389	18.4	2.2
Madison, SD	1-6	1963	159	0.16	0.65	0.275	1	4.547	4	2.88
Madison, SD	1-6	1964	119	0.19	0.65	0.279	1	4.100	3.7	2.16
Madison, SD	1-6	1965	43	0.26	0.65	0.244	1	1.773	1.38	0.79
Madison, SD	1-6	1966	56	0.26	0.65	0.218	1	2.063	0.34	1.02
Madison, SD	1-6	1967	119	0.19	0.65	0.19	1	2.792	4.79	2.15
Madison, SD	1-6	1968	63	0.25	0.65	0.201	1	2.058	0.89	1.15
Madison, SD	1-6	1969	162	0.15	0.65	0.205	1	3.238	1.29	2.93
Madison, SD	1-6	1970	58	0.26	0.65	0.252	1	2.470	0.78	1.05
Madison, SD	1-9	1962	121	0.18	0.65	0.31	1	4.389	21.8	2.2
Madison, SD	1-9	1963	159	0.16	0.65	0.275	1	4.547	4.69	2.88
Madison, SD	1-9	1964	119	0.19	0.65	0.279	1	4.100	3.9	2.16
Madison, SD	1-9	1965	43	0.26	0.65	0.244	1	1.773	1.1	0.79
Madison, SD	1-9	1966	56	0.26	0.65	0.218	1	2.063	0.23	1.02
Madison, SD	1-9	1967	119	0.19	0.65	0.19	1	2.792	3.37	2.15
Madison, SD	1-9	1968	63	0.25	0.65	0.201	1	2.058	0.84	1.15
Madison, SD	1-9	1969	162	0.15	0.65	0.205	1	3.238	1.59	2.93
Madison, SD	1-9	1970	58	0.26	0.65	0.252	1	2.470	0.81	1.05
Madison, SD	1-4	1962	121	0.18	0.65	0.509	1	7.206	20.9	5.29
Madison, SD	1-4	1963	159	0.16	0.65	0.35	1	5.788	3.65	6.92
Madison, SD	1-4	1964	119	0.19	0.65	0.33	1	4.850	4.95	5.18
Madison, SD	1-4	1965	43	0.26	0.65	0.3	1	2.180	2.13	1.89
Madison, SD	1-4	1966	56	0.26	0.65	0.34	1	3.218	0.29	2.45
Madison, SD	1-4	1967	119	0.19	0.65	0.32	1	4.703	5.52	5.17
Madison, SD	1-4	1968	63	0.25	0.65	0.33	1	3.378	1.5	2.75
Madison, SD	1-4	1969	162	0.15	0.65	0.33	1	5.212	2.64	7.04

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Madison, SD	1-4	1970	58	0.26	0.65	0.3	1	2.941	2.33	2.51
Madison, SD	1-7	1962	121	0.18	0.65	0.509	1	7.206	19.6	5.29
Madison, SD	1-7	1963	159	0.16	0.65	0.35	1	5.788	6.55	6.92
Madison, SD	1-7	1964	119	0.19	0.65	0.33	1	4.850	7.35	5.18
Madison, SD	1-7	1965	43	0.26	0.65	0.3	1	2.180	2.91	1.89
Madison, SD	1-7	1966	56	0.26	0.65	0.34	1	3.218	0.67	2.45
Madison, SD	1-7	1967	119	0.19	0.65	0.32	1	4.703	7.65	5.17
Madison, SD	1-7	1968	63	0.25	0.65	0.33	1	3.378	1.91	2.75
Madison, SD	1-7	1969	162	0.15	0.65	0.33	1	5.212	2.78	7.04
Madison, SD	1-7	1970	58	0.26	0.65	0.3	1	2.941	2.68	2.51
Madison, SD	1-10	1962	121	0.18	0.65	0.509	1	7.206	15.79	5.29
Madison, SD	1-10	1963	159	0.16	0.65	0.35	1	5.788	4.37	6.92
Madison, SD	1-10	1964	119	0.19	0.65	0.33	1	4.850	8.88	5.18
Madison, SD	1-10	1965	43	0.26	0.65	0.3	1	2.180	1.86	1.89
Madison, SD	1-10	1966	56	0.26	0.65	0.34	1	3.218	0.54	2.45
Madison, SD	1-10	1967	119	0.19	0.65	0.32	1	4.703	5.01	5.17
Madison, SD	1-10	1968	63	0.25	0.65	0.33	1	3.378	1.91	2.75
Madison, SD	1-10	1969	162	0.15	0.65	0.33	1	5.212	3.38	7.04
Madison, SD	1-10	1970	58	0.26	0.65	0.3	1	2.941	2.66	2.51
Madison, SD	1-5	1962	121	0.18	0.65	0.948	1	13.421	35.5	14.7
Madison, SD	1-5	1963	159	0.16	0.65	0.957	1	15.825	49.8	19.23
Madison, SD	1-5	1964	119	0.19	0.65	0.959	1	14.094	6.49	14.38
Madison, SD	1-5	1965	43	0.26	0.65	0.958	1	6.962	2.35	5.25
Madison, SD	1-5	1966	56	0.26	0.65	0.955	1	9.038	3.71	6.8
Madison, SD	1-5	1967	119	0.19	0.65	0.954	1	14.020	17.2	14.35
Madison, SD	1-5	1968	63	0.25	0.65	0.953	1	9.756	5.13	7.64
Madison, SD	1-5	1969	162	0.15	0.65	0.955	1	15.084	14.9	19.57
Madison, SD	1-5	1970	58	0.26	0.65	0.957	1	9.381	3.14	6.98
Madison, SD	1-12	1962	121	0.18	0.65	0.948	1	13.421	40.53	14.7
Madison, SD	1-12	1963	159	0.16	0.65	0.957	1	15.825	62.75	19.23
Madison, SD	1-12	1964	119	0.19	0.65	0.959	1	14.094	8.18	14.38
Madison, SD	1-12	1965	43	0.26	0.65	0.958	1	6.962	2.77	5.25
Madison, SD	1-12	1966	56	0.26	0.65	0.955	1	9.038	5.67	6.8
Madison, SD	1-12	1967	119	0.19	0.65	0.954	1	14.020	12.56	14.35
Madison, SD	1-12	1968	63	0.25	0.65	0.953	1	9.756	3.57	7.64
Madison, SD	1-12	1969	162	0.15	0.65	0.955	1	15.084	17.8	19.57
Madison, SD	1-12	1970	58	0.26	0.65	0.957	1	9.381	4.02	6.98
Marcellus, NY	A-1	1940	47	0.27	2.59	0.004	1	0.131	0.1	0.5
Marcellus, NY	A-1	1941	114	0.21	2.59	0.003	1	0.186	0.12	1.02
Marcellus, NY	A-1	1942	73	0.25	2.59	0.003	1	0.142	0.26	0.64
Marcellus, NY	A-1	1943	65	0.27	2.59	0.156	0.8	5.673	0	7.81
Marcellus, NY	A-2	1940	47	0.27	2.52	0.95	1	30.380	24.27	40.15
Marcellus, NY	A-2	1941	114	0.21	2.52	0.97	1	58.519	153.26	97.09
Marcellus, NY	A-2	1942	73	0.25	2.52	0.97	1	44.610	54.78	61.64
Marcellus, NY	A-2	1943	65	0.27	2.52	0.97	0.8	34.319	33.4	18.02
Marcellus, NY	A-3	1940	47	0.27	2.61	0.95	1	31.465	21.9	42.4
Marcellus, NY	A-3	1941	114	0.21	2.61	0.97	1	60.609	156.96	102.54
Marcellus, NY	A-3	1942	73	0.25	2.61	0.97	1	46.204	49.04	65.09
Marcellus, NY	A-3	1943	65	0.27	2.61	0.97	0.8	35.545	28.04	19.03
Marcellus, NY	A-4	1940	47	0.27	2.45	0.004	1	0.124	0.08	0.47
Marcellus, NY	A-4	1941	114	0.21	2.45	0.003	1	0.176	0.08	0.94
Marcellus, NY	A-4	1942	73	0.25	2.45	0.003	1	0.134	0.21	0.6
Marcellus, NY	A-4	1943	65	0.27	2.45	0.156	0.8	5.366	0.07	7.22

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Marcellus, NY	B-2	1957	92	0.23	2.27	0.083	0.75	2.990	0.14	14.75
Marcellus, NY	B-2	1958	54	0.27	2.27	0.079	0.75	1.961	0.72	8.62
Marcellus, NY	B-2	1959	83	0.24	2.27	0.081	0.75	2.747	1.89	13.3
Marcellus, NY	B-2	1960	42	0.27	2.27	0.086	0.75	1.660	1.31	6.63
Marcellus, NY	B-2	1961	37	0.27	2.27	0.083	0.75	1.412	4.85	5.85
Marcellus, NY	B-2	1962	52	0.27	2.27	0.08	0.75	1.912	1.13	8.32
Marcellus, NY	B-2	1963	51	0.27	2.27	0.083	0.75	1.946	0.45	8.13
Marcellus, NY	B-3	1957	92	0.23	4.51	0.083	0.75	5.841	0.11	27.02
Marcellus, NY	B-3	1958	54	0.27	4.51	0.079	0.75	3.896	1.55	15.79
Marcellus, NY	B-3	1959	83	0.24	4.51	0.081	0.75	5.458	4.85	24.36
Marcellus, NY	B-3	1960	42	0.27	4.51	0.086	0.75	3.299	0.25	12.15
Marcellus, NY	B-3	1961	37	0.27	4.51	0.083	0.75	2.805	18.74	10.71
Marcellus, NY	B-3	1962	52	0.27	4.51	0.08	0.75	3.799	2.58	15.24
Marcellus, NY	B-3	1963	51	0.27	4.51	0.083	0.75	3.866	4.28	14.89
Marcellus, NY	B-5	1957	92	0.23	1.46	0.083	0.75	1.923	0.28	10.02
Marcellus, NY	B-5	1958	54	0.27	1.46	0.079	0.75	1.261	1.03	5.86
Marcellus, NY	B-5	1959	83	0.24	1.46	0.081	0.75	1.767	1.91	9.03
Marcellus, NY	B-5	1960	42	0.27	1.46	0.086	0.75	1.068	0.92	4.51
Marcellus, NY	B-5	1961	37	0.27	1.46	0.083	0.75	0.908	4.19	3.97
Marcellus, NY	B-5	1962	52	0.27	1.46	0.08	0.75	1.230	0.63	5.65
Marcellus, NY	B-5	1963	51	0.27	1.46	0.083	0.75	1.251	0.22	5.52
Marcellus, NY	C-2	1957	92	0.23	0.45	0.074	0.5	0.352	0.01	1.28
Marcellus, NY	C-2	1958	54	0.27	0.45	0.098	0.5	0.321	0	0.75
Marcellus, NY	C-2	1959	83	0.24	0.45	0.082	0.5	0.368	0.1	1.15
Marcellus, NY	C-2	1960	42	0.27	0.45	0.096	0.5	0.245	0.02	0.57
Marcellus, NY	C-2	1961	37	0.27	0.45	0.079	0.5	0.178	0.18	0.51
Marcellus, NY	C-2	1962	52	0.27	0.45	0.078	0.5	0.246	0	0.72
Marcellus, NY	C-2	1963	51	0.27	0.45	0.085	0.5	0.263	0	0.7
Marcellus, NY	C-7	1957	92	0.23	0.87	0.074	0.5	0.681	0	2.83
Marcellus, NY	C-7	1958	54	0.27	0.87	0.098	0.5	0.622	0	1.71
Marcellus, NY	C-7	1959	83	0.24	0.87	0.082	0.5	0.711	0.15	2.64
Marcellus, NY	C-7	1960	42	0.27	0.87	0.096	0.5	0.474	0.03	1.32
Marcellus, NY	C-7	1961	37	0.27	0.87	0.079	0.5	0.343	0.62	1.16
Marcellus, NY	C-7	1962	52	0.27	0.87	0.078	0.5	0.476	0	1.65
Marcellus, NY	C-7	1963	51	0.27	0.87	0.085	0.5	0.509	0.01	1.61
Marcellus, NY	C-9	1957	92	0.23	0.69	0.074	0.5	0.540	0.02	1.13
Marcellus, NY	C-9	1958	54	0.27	0.69	0.098	0.5	0.493	0	0.66
Marcellus, NY	C-9	1959	83	0.24	0.69	0.082	0.5	0.564	0.04	1.01
Marcellus, NY	C-9	1960	42	0.27	0.69	0.096	0.5	0.376	0	0.51
Marcellus, NY	C-9	1961	37	0.27	0.69	0.079	0.5	0.272	0.29	0.45
Marcellus, NY	C-9	1962	52	0.27	0.69	0.078	0.5	0.378	0.03	0.63
Marcellus, NY	C-9	1963	51	0.27	0.69	0.085	0.5	0.404	0	0.62
Marcellus, NY	D-2	1957	92	0.23	1.07	0.074	0.6	1.005	0.04	4.77
Marcellus, NY	D-2	1958	54	0.27	1.07	0.096	0.6	0.899	0	2.79
Marcellus, NY	D-2	1959	83	0.24	1.07	0.083	0.6	1.061	0.32	4.3
Marcellus, NY	D-2	1960	42	0.27	1.07	0.091	0.6	0.663	0.09	2.15
Marcellus, NY	D-2	1961	37	0.27	1.07	0.082	0.6	0.526	0.34	1.89
Marcellus, NY	D-2	1962	52	0.27	1.07	0.079	0.6	0.712	0.1	2.69
Marcellus, NY	D-2	1963	51	0.27	1.07	0.083	0.6	0.734	0.03	2.63
Marcellus, NY	D-3	1957	92	0.23	1.84	0.074	0.6	1.729	0.05	8.15
Marcellus, NY	D-3	1958	54	0.27	1.84	0.096	0.6	1.545	0	4.76
Marcellus, NY	D-3	1959	83	0.24	1.84	0.083	0.6	1.825	0.64	7.35
Marcellus, NY	D-3	1960	42	0.27	1.84	0.091	0.6	1.139	0.09	3.67

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Marcellus, NY	D-3	1961	37	0.27	1.84	0.082	0.6	0.904	0.25	3.23
Marcellus, NY	D-3	1962	52	0.27	1.84	0.079	0.6	1.225	0.22	4.6
Marcellus, NY	D-3	1963	51	0.27	1.84	0.083	0.6	1.262	0.4	4.49
Marcellus, NY	D-9	1957	92	0.23	0.69	0.074	0.6	0.648	0	3.06
Marcellus, NY	D-9	1958	54	0.27	0.69	0.096	0.6	0.579	0	1.79
Marcellus, NY	D-9	1959	83	0.24	0.69	0.083	0.6	0.684	0.41	2.76
Marcellus, NY	D-9	1960	42	0.27	0.69	0.091	0.6	0.427	0.03	1.38
Marcellus, NY	D-9	1961	37	0.27	0.69	0.082	0.6	0.339	0.13	1.21
Marcellus, NY	D-9	1962	52	0.27	0.69	0.079	0.8	0.459	0.23	1.73
Marcellus, NY	D-9	1963	51	0.27	0.69	0.083	0.5	0.473	0.03	1.69
Morris, MN	1-2	1962	274	0.19	0.67	0.002	1	0.070	0	0.26
Morris, MN	1-2	1963	52	0.31	0.67	0.25	1	2.700	0.4	1.97
Morris, MN	1-2	1964	141	0.2	0.67	0.062	1	1.171	0.14	2.87
Morris, MN	1-2	1965	78	0.28	0.67	0.005	1	0.073	0	0.07
Morris, MN	1-2	1966	74	0.29	0.67	0.25	1	3.595	0.14	2.79
Morris, MN	1-2	1967	66	0.3	0.67	0.015	1	0.199	0.22	1.14
Morris, MN	1-2	1968	49	0.31	0.67	0.005	1	0.051	0	0.05
Morris, MN	1-2	1969	58	0.31	0.67	0.25	1	3.012	0.18	2.19
Morris, MN	1-2	1970	62	0.31	0.67	0.062	1	0.798	0.2	1.06
Morris, MN	1-2	1971	75	0.28	0.67	0.011	1	0.155	0.08	0.07
Morris, MN	1-9	1962	274	0.19	0.71	0.002	1	0.074	0	0.28
Morris, MN	1-9	1963	52	0.31	0.71	0.25	1	2.861	0.43	2.15
Morris, MN	1-9	1964	141	0.2	0.71	0.062	1	1.241	0.14	3.13
Morris, MN	1-9	1965	78	0.28	0.71	0.005	1	0.078	0	0.08
Morris, MN	1-9	1966	74	0.29	0.71	0.25	1	3.809	0.31	3.04
Morris, MN	1-9	1967	66	0.3	0.71	0.015	1	0.211	0.16	1.24
Morris, MN	1-9	1968	49	0.31	0.71	0.005	1	0.054	0	0.05
Morris, MN	1-9	1969	58	0.31	0.71	0.25	1	3.191	0.19	2.38
Morris, MN	1-9	1970	62	0.31	0.71	0.062	1	0.846	0.42	1.16
Morris, MN	1-9	1971	75	0.28	0.71	0.011	1	0.164	0.09	0.08
Morris, MN	1-10	1962	274	0.2	0.73	0.98	1	39.204	85.59	49.07
Morris, MN	1-10	1963	52	0.31	0.73	0.98	1	11.532	0.93	9.4
Morris, MN	1-10	1964	141	0.2	0.73	0.98	1	20.174	36.27	25.54
Morris, MN	1-10	1965	78	0.3	0.73	0.98	1	16.740	9.4	13.97
Morris, MN	1-10	1966	74	0.3	0.73	0.98	1	15.882	5.78	13.29
Morris, MN	1-10	1967	66	0.3	0.73	0.98	1	14.165	14.23	11.81
Morris, MN	1-10	1968	49	0.31	0.73	0.98	1	10.867	1.5	8.8
Morris, MN	1-10	1969	58	0.31	0.73	0.98	1	12.863	2.48	10.42
Morris, MN	1-10	1970	62	0.31	0.73	0.98	1	13.750	6.89	11.05
Morris, MN	1-10	1971	75	0.3	0.73	0.98	1	16.097	6.88	13.43
Morris, MN	1-13	1962	274	0.19	0.65	0.963	1	32.587	82.76	42.17
Morris, MN	1-13	1963	52	0.31	0.65	0.962	1	10.080	0.99	8.08
Morris, MN	1-13	1964	141	0.2	0.65	0.963	1	17.652	32.56	21.69
Morris, MN	1-13	1965	78	0.28	0.65	0.935	1	13.273	5.72	12.01
Morris, MN	1-13	1966	74	0.29	0.65	0.962	1	13.419	1.14	11.42
Morris, MN	1-13	1967	66	0.3	0.65	0.966	1	12.432	11.34	10.15
Morris, MN	1-13	1968	49	0.31	0.65	0.964	1	9.518	1.03	7.57
Morris, MN	1-13	1969	58	0.31	0.65	0.962	1	11.243	1.33	8.96
Morris, MN	1-13	1970	62	0.31	0.65	0.96	1	11.993	3.86	9.49
Morris, MN	1-13	1971	75	0.28	0.65	0.963	1	13.145	7.8	11.54
Pendleton, OR	1-1	1978	34	0.39	2.73	0.095	1	3.439	0.11	13.04
Pendleton, OR	1-1	1979	34	0.39	2.73	0.147	1	5.321	0	13.04
Pendleton, OR	1-1	1980	34	0.39	2.73	0.131	1	4.742	0.05	13.04

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Pendleton, OR	1-1	1981	34	0.39	2.73	0.174	1	6.299	0.08	13.04
Pendleton, OR	1-1	1982	34	0.39	2.73	0.173	1	6.263	0.44	13.04
Pendleton, OR	1-1	1983	34	0.39	2.73	0.114	1	4.127	0	13.04
Pendleton, OR	1-1	1984	34	0.39	2.73	0.088	1	3.186	9.42	13.04
Pendleton, OR	1-1	1985	34	0.39	2.73	0.141	1	5.104	0	16.72
Pendleton, OR	1-1	1986	34	0.39	2.73	0.105	1	3.801	1.11	16.72
Pendleton, OR	1-1	1987	34	0.39	2.73	0.426	1	15.421	0.02	16.72
Pendleton, OR	1-1	1988	34	0.39	2.73	0.222	1	8.036	0.04	16.72
Pendleton, OR	1-4	1978	34	0.39	2.73	0.095	1	3.439	0.86	13.04
Pendleton, OR	1-4	1979	34	0.39	2.73	0.147	1	5.321	0	13.04
Pendleton, OR	1-4	1980	34	0.39	2.73	0.131	1	4.742	0.04	13.04
Pendleton, OR	1-4	1981	34	0.39	2.73	0.174	1	6.299	2.97	13.04
Pendleton, OR	1-4	1982	34	0.39	2.73	0.173	1	6.263	3.29	13.04
Pendleton, OR	1-4	1983	34	0.39	2.73	0.114	1	4.127	0	13.04
Pendleton, OR	1-4	1984	34	0.39	2.73	0.088	1	3.186	22.11	13.04
Pendleton, OR	1-4	1985	34	0.39	2.73	0.141	1	5.104	0.03	33.44
Pendleton, OR	1-4	1986	34	0.39	2.73	0.105	1	3.801	3.43	33.44
Pendleton, OR	1-4	1987	34	0.39	2.73	0.426	1	15.421	1.57	33.44
Pendleton, OR	1-4	1988	34	0.39	2.73	0.222	1	8.036	0	33.44
Pendleton, OR	1-2	1978	34	0.39	2.73	0.216	1	7.819	0.85	13.04
Pendleton, OR	1-2	1979	34	0.39	2.73	0.187	1	6.769	0	13.04
Pendleton, OR	1-2	1980	34	0.39	2.73	0.171	1	6.190	0.22	13.04
Pendleton, OR	1-2	1981	34	0.39	2.73	0.185	1	6.697	1.83	13.04
Pendleton, OR	1-2	1982	34	0.39	2.73	0.149	1	5.394	0	13.04
Pendleton, OR	1-2	1983	34	0.39	2.73	0.256	1	9.267	0.33	13.04
Pendleton, OR	1-2	1984	34	0.39	2.73	0.102	1	3.692	2.79	13.04
Pendleton, OR	1-2	1985	34	0.39	2.73	0.166	1	6.009	0.01	13.04
Pendleton, OR	1-2	1986	34	0.39	2.73	0.342	1	12.380	0.04	33.44
Pendleton, OR	1-2	1987	34	0.39	2.73	0.645	1	23.349	1.09	33.44
Pendleton, OR	1-2	1988	34	0.39	2.73	0.759	1	27.476	0.01	33.44
Pendleton, OR	1-6	1978	34	0.39	2.73	0.216	1	7.819	0.74	13.04
Pendleton, OR	1-6	1979	34	0.39	2.73	0.187	1	6.769	0	13.04
Pendleton, OR	1-6	1980	34	0.39	2.73	0.171	1	6.190	0.68	13.04
Pendleton, OR	1-6	1981	34	0.39	2.73	0.185	1	6.697	0.47	13.04
Pendleton, OR	1-6	1982	34	0.39	2.73	0.149	1	5.394	0	13.04
Pendleton, OR	1-6	1983	34	0.39	2.73	0.256	1	9.267	0.67	13.04
Pendleton, OR	1-6	1984	34	0.39	2.73	0.102	1	3.692	5.44	13.04
Pendleton, OR	1-6	1985	34	0.39	2.73	0.166	1	6.009	0.8	13.04
Pendleton, OR	1-6	1986	34	0.39	2.73	0.342	1	12.380	0.03	16.72
Pendleton, OR	1-6	1987	34	0.39	2.73	0.645	1	23.349	0	16.72
Pendleton, OR	1-6	1988	34	0.39	2.73	0.759	1	27.476	0	16.72
Pendleton, OR	1-3	1978	34	0.39	2.73	0.936	1	33.883	2.04	33.44
Pendleton, OR	1-3	1979	34	0.39	2.73	0.947	1	34.281	0	33.44
Pendleton, OR	1-3	1980	34	0.39	2.73	0.951	1	34.426	2.17	33.44
Pendleton, OR	1-3	1981	34	0.39	2.73	0.942	1	34.100	26.96	33.44
Pendleton, OR	1-3	1982	34	0.39	2.73	0.964	1	34.897	23.59	33.44
Pendleton, OR	1-3	1983	34	0.39	2.73	0.924	1	33.449	28.02	33.44
Pendleton, OR	1-3	1984	34	0.39	2.73	0.926	1	33.521	30.35	33.44
Pendleton, OR	1-3	1985	34	0.39	2.73	0.943	1	34.136	0.4	33.44
Pendleton, OR	1-3	1986	34	0.39	2.73	0.937	1	33.919	23.62	33.44
Pendleton, OR	1-3	1987	34	0.39	2.73	0.923	1	33.412	3.26	33.44
Pendleton, OR	1-3	1988	34	0.39	2.73	0.923	1	33.412	1.4	33.44
Pendleton, OR	1-5	1978	34	0.39	2.73	0.936	1	33.883	1.59	33.44

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Pendleton, OR	1-5	1979	34	0.39	2.73	0.947	1	34.281	0	33.44
Pendleton, OR	1-5	1980	34	0.39	2.73	0.951	1	34.426	1.63	33.44
Pendleton, OR	1-5	1981	34	0.39	2.73	0.942	1	34.100	23.71	33.44
Pendleton, OR	1-5	1982	34	0.39	2.73	0.964	1	34.897	23.08	33.44
Pendleton, OR	1-5	1983	34	0.39	2.73	0.924	1	33.449	26.72	33.44
Pendleton, OR	1-5	1984	34	0.39	2.73	0.926	1	33.521	78.32	33.44
Pendleton, OR	1-5	1985	34	0.39	2.73	0.943	1	34.136	0.11	33.44
Pendleton, OR	1-5	1986	34	0.39	2.73	0.937	1	33.919	25.55	33.44
Pendleton, OR	1-5	1987	34	0.39	2.73	0.923	1	33.412	0.11	33.44
Pendleton, OR	1-5	1988	34	0.39	2.73	0.923	1	33.412	0.03	33.44
Presqueisle, ME	13	1961	101	0.17	0.89	0.792	1	12.103	19.2	8.3
Presqueisle, ME	13	1962	60	0.21	0.89	0.767	1	8.601	8.5	4.9
Presqueisle, ME	13	1963	35	0.21	0.89	0.789	1	5.161	8.0	2.9
Presqueisle, ME	13	1964	58	0.21	0.89	0.811	1	8.791	7.3	4.8
Presqueisle, ME	13	1965	29	0.22	0.89	0.747	1	4.242	3.2	2.4
Presqueisle, ME	18	1961	101	0.17	0.89	0.893	1	13.646	30.3	19.5
Presqueisle, ME	18	1962	60	0.21	0.89	0.969	1	10.866	4.79	11.55
Presqueisle, ME	18	1963	35	0.21	0.89	0.976	1	6.385	6.54	6.85
Presqueisle, ME	18	1964	58	0.21	0.89	0.94	1	10.190	15.9	11.27
Presqueisle, ME	18	1965	29	0.21	0.89	0.934	1	5.062	4.19	5.58
Presqueisle, ME	3	1961	101	0.17	0.89	0.893	1	13.646	22.97	19.5
Presqueisle, ME	3	1962	60	0.21	0.89	0.969	1	10.866	2.71	11.55
Presqueisle, ME	3	1963	35	0.21	0.89	0.976	1	6.385	4.47	6.85
Presqueisle, ME	3	1964	58	0.21	0.89	0.94	1	10.190	11.42	11.27
Presqueisle, ME	3	1965	29	0.21	0.89	0.934	1	5.062	1.79	5.58
Presqueisle, ME	2	1961	101	0.17	0.89	0.792	1	12.103	7.2	7.99
Presqueisle, ME	2	1962	60	0.21	0.89	0.767	1	8.601	6.98	4.73
Presqueisle, ME	2	1963	35	0.21	0.89	0.789	1	5.161	2.49	2.81
Presqueisle, ME	2	1964	58	0.21	0.89	0.811	1	8.791	4.56	4.62
Presqueisle, ME	2	1965	29	0.21	0.89	0.747	1	4.049	2.98	2.29
Presqueisle, ME	6	1961	101	0.17	0.89	0.792	1	12.103	15.13	8.34
Presqueisle, ME	6	1962	60	0.21	0.89	0.767	1	8.601	8.28	4.94
Presqueisle, ME	6	1963	35	0.21	0.89	0.789	1	5.161	5.52	2.93
Presqueisle, ME	6	1964	58	0.21	0.89	0.811	1	8.791	7.01	4.82
Presqueisle, ME	6	1965	29	0.22	0.89	0.747	1	4.242	4.16	2.39
Presqueisle, ME	8	1961	101	0.17	0.89	0.893	1	13.646	29.97	19.5
Presqueisle, ME	8	1962	60	0.21	0.89	0.969	1	10.866	4.9	11.55
Presqueisle, ME	8	1963	35	0.21	0.89	0.976	1	6.385	9.89	6.85
Presqueisle, ME	8	1964	58	0.21	0.89	0.94	1	10.190	13.9	11.27
Presqueisle, ME	8	1965	29	0.21	0.89	0.934	1	5.062	3.99	5.58
Presqueisle, ME	14	1961	101	0.17	0.89	0.792	1	12.103	16.59	7.99
Presqueisle, ME	14	1962	60	0.21	0.89	0.767	1	8.601	6.8	4.73
Presqueisle, ME	14	1963	35	0.21	0.89	0.789	1	5.161	4.5	2.81
Presqueisle, ME	14	1964	58	0.21	0.89	0.811	1	8.791	5.93	4.62
Presqueisle, ME	14	1965	29	0.21	0.89	0.747	1	4.049	3.23	2.29
Presqueisle, ME	16	1961	101	0.17	0.89	0.792	1	12.103	19.66	7.99
Presqueisle, ME	16	1962	60	0.21	0.89	0.767	1	8.601	7.25	4.73
Presqueisle, ME	16	1963	35	0.21	0.89	0.789	1	5.161	4.51	2.81
Presqueisle, ME	16	1964	58	0.21	0.89	0.811	1	8.791	7.01	4.62
Presqueisle, ME	16	1965	29	0.21	0.89	0.747	1	4.049	3.23	2.29
Presqueisle, ME	17	1961	101	0.17	0.89	0.792	1	12.103	17.88	8.34
Presqueisle, ME	17	1962	60	0.21	0.89	0.767	1	8.601	7.14	4.94
Presqueisle, ME	17	1963	35	0.21	0.89	0.789	1	5.161	5.46	2.93

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Presqueisle, ME	17	1964	58	0.21	0.89	0.811	1	8.791	8.4	4.82
Presqueisle, ME	17	1965	29	0.22	0.89	0.747	1	4.242	4.8	2.39
Raleigh, NC	2-5	1944	172	0.18	0.58	0.338	0.85	5.128	2.59	7.77
Raleigh, NC	2-5	1945	297	0.18	0.58	0.318	0.85	8.381	4.54	13.43
Raleigh, NC	2-5	1946	323	0.19	0.58	0.341	0.85	10.317	7.11	14.62
Raleigh, NC	2-5	1947	332	0.2	0.58	0.354	0.85	11.588	3.48	15.01
Raleigh, NC	2-5	1948	159	0.19	0.58	0.321	0.85	4.781	0.44	7.23
Raleigh, NC	2-6	1944	172	0.18	0.58	0.221	0.85	3.373	1.71	4.93
Raleigh, NC	2-6	1945	297	0.18	0.58	0.159	0.85	4.191	3.7	8.52
Raleigh, NC	2-6	1946	323	0.19	0.58	0.248	0.85	7.443	5.18	9.27
Raleigh, NC	2-6	1947	332	0.2	0.58	0.229	0.85	7.496	2.58	9.52
Raleigh, NC	2-6	1948	159	0.19	0.58	0.174	0.85	2.591	0.41	4.58
Statesville, NC	4	1931	298	0.23	1.17	0.979	1	78.508	65.14	97.57
Statesville, NC	4	1932	214	0.23	1.17	0.975	1	56.148	57.37	69.96
Statesville, NC	4	1933	215	0.23	1.17	0.967	1	55.947	70.17	70.11
Statesville, NC	4	1934	249	0.22	1.17	0.971	1	62.234	51.4	81.42
Statesville, NC	4	1935	257	0.22	1.17	0.969	1	64.101	75.24	84.26
Statesville, NC	4	1936	269	0.22	1.17	0.973	1	67.371	57.73	88.19
Statesville, NC	4	1937	269	0.22	1.17	0.972	1	67.302	66.42	88.17
Statesville, NC	4	1938	275	0.25	1.17	0.973	1	78.266	73.19	109.12
Statesville, NC	10	1931	298	0.23	1.17	0.438	0.65	22.831	11.91	30.25
Statesville, NC	10	1932	214	0.23	1.17	0.459	0.65	17.181	4.95	21.69
Statesville, NC	10	1933	215	0.23	1.17	0.422	0.65	15.870	24.2	21.74
Statesville, NC	10	1934	249	0.22	1.17	0.426	0.65	17.747	19.37	25.24
Statesville, NC	10	1935	257	0.22	1.17	0.441	0.65	18.962	50.18	28.13
Statesville, NC	10	1936	269	0.22	1.17	0.412	0.65	18.543	26.37	27.34
Statesville, NC	10	1937	269	0.22	1.17	0.413	0.65	18.588	45.53	27.34
Statesville, NC	10	1938	275	0.25	1.17	0.423	0.65	22.116	66.42	33.83
Statesville, NC	11	1931	298	0.23	1.67	0.438	0.65	32.587	18.3	42.66
Statesville, NC	11	1932	214	0.23	1.67	0.459	0.65	24.524	5.96	30.59
Statesville, NC	11	1933	215	0.23	1.67	0.422	0.65	22.652	20.06	30.66
Statesville, NC	11	1934	249	0.22	1.67	0.426	0.65	25.332	22.03	35.6
Statesville, NC	11	1935	257	0.22	1.67	0.441	0.65	27.066	56.83	36.84
Statesville, NC	11	1936	269	0.22	1.67	0.412	0.65	26.467	23.64	38.56
Statesville, NC	11	1937	269	0.22	1.67	0.413	0.65	26.531	47.01	38.55
Statesville, NC	11	1938	275	0.25	1.67	0.423	0.65	31.568	87	47.71
Statesville, NC	12	1931	298	0.23	0.82	0.438	0.65	16.001	13.79	21.2
Statesville, NC	12	1932	214	0.23	0.82	0.459	0.65	12.042	8.21	15.2
Statesville, NC	12	1933	215	0.23	0.82	0.422	0.65	11.123	19.68	15.24
Statesville, NC	12	1934	249	0.22	0.82	0.426	0.65	12.438	21.02	17.69
Statesville, NC	12	1935	257	0.22	0.82	0.441	0.65	13.290	50.71	18.31
Statesville, NC	12	1936	269	0.22	0.82	0.412	0.65	12.996	22.02	19.16
Statesville, NC	12	1937	269	0.22	0.82	0.413	0.65	13.027	42.83	19.16
Statesville, NC	12	1938	275	0.25	0.82	0.423	0.65	15.500	56.86	23.71
Temple, TX	1-1	1931	79	0.37	0.36	0.573	1	6.030	4.92	2.94
Temple, TX	1-1	1932	217	0.22	0.36	0.569	1	9.779	19.78	8.04
Temple, TX	1-1	1933	243	0.21	0.36	0.586	1	10.765	19.89	9.05
Temple, TX	1-1	1934	175	0.24	0.36	0.572	1	8.649	33.81	6.51
Temple, TX	1-1	1935	416	0.29	0.36	0.573	1	24.886	43.71	15.49
Temple, TX	1-1	1936	499	0.29	0.36	0.589	1	30.684	38.54	18.57
Temple, TX	1-1	1937	201	0.23	0.36	0.573	1	9.536	4.39	6.7
Temple, TX	1-1	1938	186	0.24	0.36	0.574	1	9.224	7.47	6.9
Temple, TX	1-1	1939	185	0.24	0.36	0.599	1	9.574	11.09	5.02

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Temple, TX	1-1	1940	297	0.22	0.36	0.573	1	13.478	7.82	11.06
Temple, TX	1-1	1941	334	0.25	0.36	0.581	1	17.465	33.92	12.44
Temple, TX	1-1	1942	314	0.23	0.36	0.612	1	15.912	12.5	11.69
Temple, TX	1-1	1943	153	0.26	0.36	0.555	1	7.948	3.74	5.71
Temple, TX	1-1	1944	388	0.29	0.36	0.584	1	23.656	14.34	14.42
Temple, TX	1-1	1945	298	0.22	0.36	0.583	1	13.760	5.34	11.08
Temple, TX	1-2	1931	79	0.37	0.59	0.573	1	9.882	1.58	5
Temple, TX	1-2	1932	217	0.22	0.59	0.569	1	16.027	20.48	13.7
Temple, TX	1-2	1933	243	0.21	0.59	0.586	1	17.643	11.85	15.43
Temple, TX	1-2	1934	175	0.24	0.59	0.572	1	14.174	27.31	11.1
Temple, TX	1-2	1935	416	0.29	0.59	0.573	1	40.785	30.7	26.39
Temple, TX	1-2	1936	499	0.29	0.59	0.589	1	50.288	37.12	31.63
Temple, TX	1-2	1937	201	0.23	0.59	0.573	1	15.629	3.01	12.76
Temple, TX	1-2	1938	186	0.24	0.59	0.574	1	15.118	9.43	11.75
Temple, TX	1-2	1939	185	0.24	0.59	0.599	1	15.691	6.27	8.56
Temple, TX	1-2	1940	297	0.22	0.59	0.573	1	22.089	14.61	18.84
Temple, TX	1-2	1941	334	0.25	0.59	0.581	1	28.623	43.56	21.19
Temple, TX	1-2	1942	314	0.23	0.59	0.612	1	26.077	22.33	19.921
Temple, TX	1-2	1943	153	0.26	0.59	0.555	1	13.026	4.13	9.72
Temple, TX	1-2	1944	388	0.29	0.59	0.584	1	38.770	27.71	24.56
Temple, TX	1-2	1945	298	0.22	0.59	0.583	1	22.551	7.73	18.88
Temple, TX	1-3	1931	79	0.37	0.46	0.573	1	7.704	2.45	3.41
Temple, TX	1-3	1932	217	0.22	0.46	0.569	1	12.495	18.94	10.42
Temple, TX	1-3	1933	243	0.21	0.46	0.586	1	13.756	14.73	11.74
Temple, TX	1-3	1934	175	0.24	0.46	0.572	1	11.051	39.17	8.44
Temple, TX	1-3	1935	416	0.29	0.46	0.573	1	31.798	28.22	20.08
Temple, TX	1-3	1936	499	0.29	0.46	0.589	1	39.208	37.96	21.53
Temple, TX	1-3	1937	201	0.23	0.46	0.573	1	12.185	4.1	9.71
Temple, TX	1-3	1938	186	0.24	0.46	0.574	1	11.787	12.62	8.94
Temple, TX	1-3	1939	185	0.24	0.46	0.599	1	12.234	14.2	5.83
Temple, TX	1-3	1940	297	0.22	0.46	0.573	1	17.222	13.72	14.34
Temple, TX	1-3	1941	334	0.25	0.46	0.581	1	22.316	38.75	16.12
Temple, TX	1-3	1942	314	0.23	0.46	0.612	1	20.331	21.99	15.16
Temple, TX	1-3	1943	153	0.26	0.46	0.555	1	10.156	4.54	7.4
Temple, TX	1-3	1944	388	0.29	0.46	0.584	1	30.227	24.75	18.69
Temple, TX	1-3	1945	298	0.22	0.46	0.583	1	17.582	7.51	14.36
Temple, TX	1-4	1931	79	0.37	0.46	0.21	1	2.824	0.83	3.41
Temple, TX	1-4	1932	217	0.22	0.46	0.081	1	1.779	0.04	3.29
Temple, TX	1-4	1933	243	0.21	0.46	0.368	1	8.638	4.9	14.83
Temple, TX	1-4	1934	175	0.24	0.46	0.214	1	4.134	22.63	8
Temple, TX	1-4	1935	416	0.29	0.46	0.098	1	5.438	0.35	8.45
Temple, TX	1-4	1936	499	0.29	0.46	0.455	1	30.288	52.37	27.87
Temple, TX	1-4	1937	201	0.23	0.46	0.153	1	3.254	5.46	8.69
Temple, TX	1-4	1938	186	0.24	0.46	0.076	1	1.561	0.07	3.39
Temple, TX	1-4	1939	185	0.24	0.46	0.368	1	7.516	4.91	8.23
Temple, TX	1-4	1940	297	0.22	0.46	0.221	1	6.642	13.66	13.58
Temple, TX	1-4	1941	334	0.25	0.46	0.081	1	3.111	0.33	6.79
Temple, TX	1-4	1942	314	0.23	0.46	0.372	1	12.358	11.9	19.15
Temple, TX	1-4	1943	153	0.26	0.46	0.223	1	4.081	2.64	6.62
Temple, TX	1-4	1944	388	0.29	0.46	0.129	1	6.677	0.06	7.08
Temple, TX	1-4	1945	298	0.22	0.46	0.33	1	9.952	3.77	16.63
Temple, TX	1-7	1931	79	0.37	0.46	0.5	1	6.723	1	4.81
Temple, TX	1-7	1932	217	0.22	0.46	0.286	1	6.281	19.85	9.87

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Temple, TX	1-7	1933	243	0.21	0.46	0.404	1	9.483	0.33	4.84
Temple, TX	1-7	1934	175	0.24	0.46	0.485	1	9.370	19.26	9.78
Temple, TX	1-7	1935	416	0.29	0.46	0.237	1	13.152	38.51	17.97
Temple, TX	1-7	1936	499	0.29	0.46	0.318	1	21.168	3.55	9.12
Temple, TX	1-7	1937	201	0.23	0.46	0.402	1	8.549	5.08	11.24
Temple, TX	1-7	1938	188	0.24	0.46	0.237	1	4.867	14.38	8.47
Temple, TX	1-7	1939	185	0.24	0.46	0.243	1	4.963	0.21	2.47
Temple, TX	1-7	1940	297	0.22	0.46	0.5	1	15.028	13.2	18.11
Temple, TX	1-7	1941	334	0.25	0.46	0.268	1	10.294	28.02	15.27
Temple, TX	1-7	1942	314	0.23	0.46	0.246	1	8.172	0.12	5.74
Temple, TX	1-7	1943	153	0.26	0.46	0.457	1	8.363	3.29	8.58
Temple, TX	1-7	1944	388	0.29	0.46	0.307	1	15.890	35.56	16.72
Temple, TX	1-7	1945	298	0.22	0.46	0.235	1	7.097	0.45	5.44
Temple, TX	1-9	1931	79	0.37	0.46	0.158	1	2.124	0.21	1.6
Temple, TX	1-9	1932	217	0.22	0.46	0.662	1	14.538	9.16	13.16
Temple, TX	1-9	1933	243	0.21	0.46	0.368	1	8.638	11.53	11.12
Temple, TX	1-9	1934	175	0.24	0.46	0.31	1	5.989	0.99	3.56
Temple, TX	1-9	1935	416	0.29	0.46	0.42	1	23.308	26.35	23.25
Temple, TX	1-9	1936	499	0.29	0.46	0.275	1	18.306	51.86	21.53
Temple, TX	1-9	1937	201	0.23	0.46	0.31	1	6.592	2.94	3.07
Temple, TX	1-9	1938	186	0.24	0.46	0.464	1	9.528	15.88	11.3
Temple, TX	1-9	1939	185	0.24	0.46	0.348	1	7.108	11.74	5.83
Temple, TX	1-9	1940	297	0.22	0.46	0.208	1	6.252	13.49	4.53
Temple, TX	1-9	1941	334	0.25	0.46	0.679	1	26.080	30.35	16.97
Temple, TX	1-9	1942	314	0.23	0.46	0.359	1	11.926	20.7	14.36
Temple, TX	1-9	1943	153	0.26	0.46	0.204	1	3.733	0.03	3.11
Temple, TX	1-9	1944	388	0.29	0.46	0.681	1	34.213	35.87	21.64
Temple, TX	1-9	1945	298	0.22	0.46	0.368	1	11.098	1.19	12.09
Tifton, GA	1-1	1952	263	0.09	0.37	0.141	1	1.235	1.89	0.05
Tifton, GA	1-1	1953	574	0.1	0.37	0.2	0.5	2.124	0.54	2.4
Tifton, GA	1-1	1954	156	0.1	0.37	0.45	0.5	1.299	0.95	0.8
Tifton, GA	1-1	1955	273	0.09	0.37	0.01	1	0.091	2.08	0.02
Tifton, GA	1-1	1956	248	0.09	0.37	0.031	1	0.256	0.9	0.02
Tifton, GA	1-1	1957	245	0.09	0.37	0.224	0.5	0.914	0.92	1.02
Tifton, GA	1-1	1958	298	0.09	0.37	0.45	0.5	2.233	2.16	1.53
Tifton, GA	1-1	1959	408	0.1	0.37	0.008	1	0.121	1.3	0.03
Tifton, GA	1-1	1960	285	0.09	0.37	0.051	1	0.484	0.24	0.02
Tifton, GA	1-1	1961	452	0.1	0.37	0.292	0.5	2.442	2.24	1.89
Tifton, GA	1-1	1962	233	0.09	0.37	0.4	0.5	1.552	0.82	1.19
Tifton, GA	1-1	1963	511	0.1	0.37	0.009	1	0.170	0.56	0.04
Tifton, GA	1-1	1964	568	0.1	0.37	0.037	1	0.778	0.11	0.05
Tifton, GA	1-1	1965	268	0.09	0.37	0.152	0.5	0.678	0.16	1.12
Tifton, GA	1-1	1966	170	0.1	0.37	0.4	0.5	1.258	0.89	0.87
Tifton, GA	1-2	1952	263	0.09	0.37	0.45	0.5	1.971	1.19	2.05
Tifton, GA	1-2	1953	574	0.1	0.37	0.35	0.5	3.717	1.28	4.49
Tifton, GA	1-2	1954	156	0.1	0.37	0.35	0.5	1.010	0.72	1.22
Tifton, GA	1-2	1955	273	0.09	0.37	0.35	0.5	1.591	1.69	2.14
Tifton, GA	1-2	1956	248	0.09	0.37	0.35	0.5	1.445	2.08	1.94
Tifton, GA	1-2	1957	245	0.09	0.37	0.35	0.5	1.428	0.91	1.92
Tifton, GA	1-2	1958	298	0.09	0.37	0.35	0.5	1.737	1.86	2.34
Tifton, GA	1-2	1959	408	0.1	0.37	0.35	1	5.284	1.99	5.5
Tifton, GA	1-2	1960	285	0.09	0.37	0.85	1	8.067	4.88	7.7
Tifton, GA	1-2	1961	452	0.1	0.37	0.85	1	14.215	8.55	12.21

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Tifton, GA	1-2	1962	233	0.09	0.37	0.85	1	6.595	3.55	6.28
Tifton, GA	1-2	1963	511	0.1	0.37	0.85	1	16.071	5.28	13.81
Tifton, GA	1-2	1964	568	0.1	0.37	0.85	1	17.864	9.82	15.34
Tifton, GA	1-2	1965	268	0.09	0.37	0.85	1	7.586	2.47	7.23
Tifton, GA	1-2	1966	170	0.1	0.37	0.85	1	5.347	3.94	4.6
Tifton, GA	1-3	1952	263	0.09	0.37	0.135	0.5	0.591	0.55	0.46
Tifton, GA	1-3	1953	574	0.1	0.37	0.35	0.5	3.717	2.24	2.94
Tifton, GA	1-3	1954	156	0.1	0.37	0.35	0.5	1.010	0.71	0.76
Tifton, GA	1-3	1955	273	0.09	0.37	0.118	0.5	0.536	1.24	0.48
Tifton, GA	1-3	1956	248	0.09	0.37	0.35	0.5	1.445	0.83	1.27
Tifton, GA	1-3	1957	245	0.09	0.37	0.35	0.5	1.428	0.74	1.02
Tifton, GA	1-3	1958	298	0.09	0.37	0.081	0.5	0.402	0.4	0.52
Tifton, GA	1-3	1959	408	0.1	0.37	0.3	0.5	2.264	0.5	2.09
Tifton, GA	1-3	1960	285	0.09	0.37	0.19	0.5	0.902	0.78	1.19
Tifton, GA	1-3	1961	452	0.1	0.37	0.073	0.5	0.610	0.3	0.79
Tifton, GA	1-3	1962	233	0.09	0.37	0.25	0.5	0.970	0.51	1.19
Tifton, GA	1-3	1963	511	0.1	0.37	0.126	0.5	1.191	0.66	2.49
Tifton, GA	1-3	1964	568	0.1	0.37	0.066	0.5	0.694	0.26	1
Tifton, GA	1-3	1965	268	0.09	0.37	0.3	0.5	1.339	0.34	1.37
Tifton, GA	1-3	1966	170	0.1	0.37	0.16	0.5	0.503	0.18	0.71
Tifton, GA	1-8	1952	263	0.09	0.37	0.002	1	0.018	0.37	0.02
Tifton, GA	1-8	1953	574	0.1	0.37	0.002	1	0.042	0.13	0.05
Tifton, GA	1-8	1954	156	0.1	0.37	0.003	0.5	0.009	0.2	0.01
Tifton, GA	1-8	1955	273	0.09	0.37	0.2	0.5	0.909	0.5	1.22
Tifton, GA	1-8	1956	248	0.09	0.37	0.2	0.5	0.826	0.52	1.11
Tifton, GA	1-8	1957	245	0.09	0.37	0.197	0.5	0.804	0.75	1.09
Tifton, GA	1-8	1958	298	0.09	0.37	0.17	0.5	0.843	0.49	1.33
Tifton, GA	1-8	1959	408	0.1	0.37	0.18	0.5	1.359	0.42	1.82
Tifton, GA	1-8	1960	285	0.09	0.37	0.212	0.5	1.006	1.25	1.27
Tifton, GA	1-8	1961	452	0.1	0.37	0.4	0.5	3.345	5.25	2.01
Tifton, GA	1-8	1962	233	0.09	0.37	0.4	0.5	1.552	0.17	1.13
Tifton, GA	1-8	1963	511	0.1	0.37	0.2	0.5	1.891	0.5	2.28
Tifton, GA	1-8	1964	568	0.1	0.37	0.2	0.5	2.102	1.19	2.53
Tifton, GA	1-8	1965	268	0.09	0.37	0.183	0.5	0.817	0.06	1.19
Tifton, GA	1-8	1966	170	0.1	0.37	0.5	0.5	1.573	0.28	0.076
Tifton, GA	2-1	1952	263	0.09	0.37	0.002	1	0.018	0.31	0.02
Tifton, GA	2-1	1953	574	0.1	0.37	0.002	1	0.042	0.14	0.05
Tifton, GA	2-1	1954	156	0.1	0.37	0.003	0.5	0.009	0.09	0.01
Tifton, GA	2-1	1955	273	0.09	0.37	0.2	0.5	0.909	0.23	1.22
Tifton, GA	2-1	1956	248	0.09	0.37	0.2	0.5	0.826	0.21	1.11
Tifton, GA	2-1	1957	245	0.09	0.37	0.197	0.5	0.804	0.44	1.09
Tifton, GA	2-1	1958	298	0.09	0.37	0.17	0.5	0.843	0.4	1.33
Tifton, GA	2-1	1959	408	0.1	0.37	0.18	0.5	1.359	0.32	1.82
Tifton, GA	2-1	1960	285	0.09	0.37	0.212	0.5	1.006	0.78	1.27
Tifton, GA	2-1	1961	452	0.1	0.37	0.4	0.5	3.345	1.92	2.01
Tifton, GA	2-1	1962	233	0.09	0.37	0.4	0.5	1.552	0.34	1.13
Tifton, GA	2-1	1963	511	0.1	0.37	0.2	0.5	1.891	1.07	2.28
Tifton, GA	2-1	1964	568	0.1	0.37	0.2	0.5	2.102	0.95	2.53
Tifton, GA	2-1	1965	268	0.09	0.37	0.183	0.5	0.817	0.1	1.19
Tifton, GA	2-1	1966	170	0.1	0.37	0.5	0.5	1.573	0.14	0.076
Tifton, GA	2-4	1952	263	0.09	0.37	0.45	0.5	1.971	0.68	2.05
Tifton, GA	2-4	1953	574	0.1	0.37	0.35	0.5	3.717	1.41	4.49
Tifton, GA	2-4	1954	156	0.1	0.37	0.35	0.5	1.010	0.89	1.22

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Tifton, GA	2-4	1955	273	0.09	0.37	0.35	0.5	1.591	2.27	2.14
Tifton, GA	2-4	1956	248	0.09	0.37	0.35	0.5	1.445	1.15	1.94
Tifton, GA	2-4	1957	245	0.09	0.37	0.35	0.5	1.428	0.6	1.92
Tifton, GA	2-4	1958	298	0.09	0.37	0.35	0.5	1.737	0.89	2.34
Tifton, GA	2-4	1959	408	0.1	0.37	0.35	1	5.284	0.88	5.5
Tifton, GA	2-4	1960	285	0.09	0.37	0.85	1	8.067	3.95	7.7
Tifton, GA	2-4	1961	452	0.1	0.37	0.85	1	14.215	7.01	12.21
Tifton, GA	2-4	1962	233	0.09	0.37	0.85	1	6.595	3.63	6.28
Tifton, GA	2-4	1963	511	0.1	0.37	0.85	1	16.071	4.5	13.81
Tifton, GA	2-4	1964	568	0.1	0.37	0.85	1	17.864	9.71	15.34
Tifton, GA	2-4	1965	268	0.09	0.37	0.85	1	7.586	1.94	7.23
Tifton, GA	2-4	1966	170	0.1	0.37	0.85	1	5.347	2.74	4.6
Tifton, GA	2-5	1952	263	0.09	0.37	0.135	0.5	0.591	0.42	0.46
Tifton, GA	2-5	1953	574	0.1	0.37	0.35	0.5	3.717	0.96	2.94
Tifton, GA	2-5	1954	156	0.1	0.37	0.35	0.5	1.010	0.23	0.76
Tifton, GA	2-5	1955	273	0.09	0.37	0.118	0.5	0.536	0.33	0.48
Tifton, GA	2-5	1956	248	0.09	0.37	0.35	0.5	1.445	0.44	1.27
Tifton, GA	2-5	1957	245	0.09	0.37	0.35	0.5	1.428	0.42	1.02
Tifton, GA	2-5	1958	298	0.09	0.37	0.081	0.5	0.402	0.35	0.52
Tifton, GA	2-5	1959	408	0.1	0.37	0.3	0.5	2.264	0.46	2.09
Tifton, GA	2-5	1960	285	0.09	0.37	0.19	0.5	0.902	0.32	1.19
Tifton, GA	2-5	1961	452	0.1	0.37	0.073	0.5	0.610	0.08	0.79
Tifton, GA	2-5	1962	233	0.09	0.37	0.25	0.5	0.970	0.26	1.19
Tifton, GA	2-5	1963	511	0.1	0.37	0.126	0.5	1.191	0.47	2.49
Tifton, GA	2-5	1964	568	0.1	0.37	0.066	0.5	0.694	0.09	1
Tifton, GA	2-5	1965	268	0.09	0.37	0.3	0.5	1.339	0.24	1.37
Tifton, GA	2-5	1966	170	0.1	0.37	0.16	0.5	0.503	0.22	0.71
Tifton, GA	2-6	1952	263	0.09	0.37	0.141	1	1.235	0.75	0.05
Tifton, GA	2-6	1953	574	0.1	0.37	0.2	0.5	2.124	0.53	2.4
Tifton, GA	2-6	1954	156	0.1	0.37	0.45	0.5	1.299	0.85	0.8
Tifton, GA	2-6	1955	273	0.09	0.37	0.01	1	0.091	1.49	0.02
Tifton, GA	2-6	1956	248	0.09	0.37	0.031	1	0.256	0.29	0.02
Tifton, GA	2-6	1957	245	0.09	0.37	0.224	0.5	0.914	0.44	1.02
Tifton, GA	2-6	1958	298	0.09	0.37	0.45	0.5	2.233	0.67	1.53
Tifton, GA	2-6	1959	408	0.1	0.37	0.008	1	0.121	0.36	0.03
Tifton, GA	2-6	1960	285	0.09	0.37	0.051	1	0.484	0.25	0.02
Tifton, GA	2-6	1961	452	0.1	0.37	0.292	0.5	2.442	0.54	1.89
Tifton, GA	2-6	1962	233	0.09	0.37	0.4	0.5	1.552	0.14	1.19
Tifton, GA	2-6	1963	511	0.1	0.37	0.009	1	0.170	0.48	0.04
Tifton, GA	2-6	1964	568	0.1	0.37	0.037	1	0.778	0.09	0.05
Tifton, GA	2-6	1965	268	0.09	0.37	0.152	0.5	0.678	0.14	1.12
Tifton, GA	2-6	1966	170	0.1	0.37	0.4	0.5	1.258	0.57	0.87
Watkinsville, GA	1-2	1953	223	0.22	0.35	0.44	0.5	3.778	1.85	2.81
Watkinsville, GA	1-2	1954	377	0.22	0.35	0.436	0.5	6.328	3.17	5.41
Watkinsville, GA	1-2	1955	195	0.22	0.35	0.435	0.5	3.266	1.54	2.8
Watkinsville, GA	1-2	1956	242	0.2	0.35	0.399	0.5	3.380	2.22	3.47
Watkinsville, GA	1-2	1957	260	0.2	0.35	0.332	0.5	3.021	1.23	3.27
Watkinsville, GA	1-2	1958	160	0.23	0.35	0.389	0.5	2.505	0.58	2.3
Watkinsville, GA	1-2	1959	266	0.21	0.35	0.302	0.5	2.952	1.84	3.81
Watkinsville, GA	1-2	1960	311	0.2	0.35	0.37	0.5	4.027	2.49	4.46
Watkinsville, GA	2-24	1953	223	0.22	0.77	0.44	0.5	8.311	15.7	7.45
Watkinsville, GA	2-24	1954	377	0.22	0.77	0.436	0.5	13.922	31.01	14.35
Watkinsville, GA	2-24	1955	195	0.22	0.77	0.435	0.5	7.185	26.53	7.44

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Watkinsville, GA	2-24	1956	242	0.2	0.77	0.399	0.5	7.435	21.2	9.21
Watkinsville, GA	2-24	1957	260	0.2	0.77	0.332	0.5	6.647	7.33	8.67
Watkinsville, GA	2-24	1958	160	0.23	0.77	0.389	0.5	5.511	14.83	6.09
Watkinsville, GA	2-24	1959	268	0.21	0.77	0.302	0.5	6.495	13.03	10.12
Watkinsville, GA	2-24	1960	311	0.2	0.77	0.37	0.5	8.860	18.87	11.84
Watkinsville, GA	3-34	1953	223	0.34	1.31	0.44	0.6	28.222	5.25	28.78
Watkinsville, GA	3-34	1954	377	0.35	1.31	0.436	0.6	45.219	29.83	51.55
Watkinsville, GA	3-34	1955	195	0.34	1.31	0.435	0.6	22.669	22.78	28.73
Watkinsville, GA	3-34	1956	242	0.33	1.31	0.399	0.6	25.045	11.53	33.11
Watkinsville, GA	3-34	1957	260	0.33	1.31	0.332	0.6	22.390	2.75	31.14
Watkinsville, GA	3-34	1958	160	0.37	1.31	0.389	0.6	18.101	10.94	21.89
Watkinsville, GA	3-34	1959	268	0.32	1.31	0.302	0.6	20.205	9.43	38.38
Watkinsville, GA	3-34	1960	311	0.32	1.31	0.37	0.6	28.942	17.16	42.53
Watkinsville, GA	2-7	1953	223	0.22	0.77	0.035	1	1.322	0.56	0.48
Watkinsville, GA	2-7	1954	377	0.22	0.77	0.004	1	0.255	0	0.42
Watkinsville, GA	2-7	1955	195	0.22	0.77	0.181	0.5	2.989	0.92	4.81
Watkinsville, GA	2-7	1956	242	0.2	0.77	0.013	1	0.484	0.22	0.38
Watkinsville, GA	2-7	1957	260	0.2	0.77	0.004	1	0.160	0	0.41
Watkinsville, GA	2-7	1958	160	0.23	0.77	0.141	0.5	1.998	0.28	3.93
Watkinsville, GA	2-7	1959	268	0.21	0.77	0.002	1	0.086	0.06	0.13
Watkinsville, GA	2-7	1960	311	0.2	0.77	0.003	1	0.144	0	0.25
Watkinsville, GA	2-9	1953	223	0.22	0.77	0.061	1	2.304	2.96	1.49
Watkinsville, GA	2-9	1954	377	0.22	0.77	0.21	0.5	6.706	3.24	9.27
Watkinsville, GA	2-9	1955	195	0.22	0.77	0.025	1	0.826	1	0.4
Watkinsville, GA	2-9	1956	242	0.2	0.77	0.018	1	0.871	0	0.19
Watkinsville, GA	2-9	1957	260	0.2	0.77	0.129	0.5	2.583	2.6	8.4
Watkinsville, GA	2-9	1958	160	0.23	0.77	0.003	1	0.085	0.55	0.18
Watkinsville, GA	2-9	1959	268	0.21	0.77	0.004	1	0.172	0	0.13
Watkinsville, GA	2-9	1960	311	0.2	0.77	0.132	0.5	3.161	0.82	7.64
Watkinsville, GA	2-11	1953	223	0.22	0.77	0.185	0.5	3.683	7.88	8.03
Watkinsville, GA	2-11	1954	377	0.22	0.77	0.04	1	2.555	0.75	0.8
Watkinsville, GA	2-11	1955	195	0.22	0.77	0.018	1	0.595	0	0.4
Watkinsville, GA	2-11	1956	242	0.2	0.77	0.358	0.5	6.671	1.47	6.53
Watkinsville, GA	2-11	1957	260	0.2	0.77	0.003	1	0.120	0.02	0.12
Watkinsville, GA	2-11	1958	160	0.23	0.77	0.029	1	0.822	0	0.13
Watkinsville, GA	2-11	1959	268	0.21	0.77	0.576	0.5	12.388	1.47	6.54
Watkinsville, GA	2-11	1960	311	0.2	0.77	0.002	1	0.096	0.51	0.49
Watkinsville, GA	2-13	1953	223	0.34	0.77	0.079	1	4.812	2.11	0.56
Watkinsville, GA	2-13	1954	377	0.35	0.77	0.019	1	1.930	0	0.94
Watkinsville, GA	2-13	1955	195	0.34	0.77	0.18	0.5	4.595	0.92	8.25
Watkinsville, GA	2-13	1956	242	0.33	0.77	0.087	0.5	2.675	2.65	13.52
Watkinsville, GA	2-13	1957	260	0.33	0.77	0.005	1	0.330	0.57	0.19
Watkinsville, GA	2-13	1958	160	0.37	0.77	0.005	1	0.228	0	0.2
Watkinsville, GA	2-13	1959	268	0.32	0.77	0.099	0.5	3.244	1.73	10.23
Watkinsville, GA	2-13	1960	311	0.32	0.77	0.535	0.5	20.499	3.47	17.37
Watkinsville, GA	2-19	1953	223	0.22	0.77	0.24	0.5	4.533	5.99	7.98
Watkinsville, GA	2-19	1954	377	0.22	0.77	0.014	1	0.894	1.55	0.42
Watkinsville, GA	2-19	1955	195	0.22	0.77	0.024	1	0.793	0	0.31
Watkinsville, GA	2-19	1956	242	0.2	0.77	0.371	0.5	6.913	1.94	5.95
Watkinsville, GA	2-19	1957	260	0.2	0.77	0.182	0.5	3.644	4.32	8.67
Watkinsville, GA	2-19	1958	160	0.23	0.77	0.006	1	0.170	0.57	0.13
Watkinsville, GA	2-19	1959	268	0.21	0.77	0.004	1	0.172	0	0.21
Watkinsville, GA	2-19	1960	311	0.2	0.77	0.129	0.5	3.089	1.93	7.64

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Watkinsville, GA	2-21	1953	223	0.34	0.77	0.023	1	1.343	3.35	0.72
Watkinsville, GA	2-21	1954	377	0.35	0.77	0.238	0.5	11.989	1.19	15.81
Watkinsville, GA	2-21	1955	195	0.34	0.77	0.194	0.5	4.952	3.18	10.82
Watkinsville, GA	2-21	1956	242	0.33	0.77	0.065	1	3.897	0.88	0.42
Watkinsville, GA	2-21	1957	260	0.33	0.77	0.012	1	0.793	0	0.19
Watkinsville, GA	2-21	1958	160	0.37	0.77	0.192	0.5	4.376	0.16	6.75
Watkinsville, GA	2-21	1959	266	0.32	0.77	0.1	0.5	3.277	1.05	14.86
Watkinsville, GA	2-21	1960	311	0.32	0.77	0.075	1	5.747	0.69	0.54
Watkinsville, GA	2-22	1953	223	0.22	0.77	0.181	0.5	3.419	3.22	6.03
Watkinsville, GA	2-22	1954	377	0.22	0.77	0.233	0.5	7.440	14.88	13.45
Watkinsville, GA	2-22	1955	195	0.22	0.77	0.083	1	2.742	1.13	0.4
Watkinsville, GA	2-22	1956	242	0.2	0.77	0.025	1	0.932	0.36	0.19
Watkinsville, GA	2-22	1957	260	0.2	0.77	0.372	0.5	7.447	0.91	7.02
Watkinsville, GA	2-22	1958	160	0.23	0.77	0.186	0.5	2.635	4	5.33
Watkinsville, GA	2-22	1959	266	0.21	0.77	0.004	1	0.172	0.95	0.13
Watkinsville, GA	2-22	1960	311	0.2	0.77	0.003	1	0.144	0.01	0.35
Watkinsville, GA	3-27	1953	223	0.34	1.31	0.195	0.6	11.621	1.8	21.67
Watkinsville, GA	3-27	1954	377	0.35	1.31	0.04	1	6.914	0.87	1.79
Watkinsville, GA	3-27	1955	195	0.34	1.31	0.018	1	1.563	0.03	1.21
Watkinsville, GA	3-27	1956	242	0.33	1.31	0.358	0.6	22.472	1.23	23.45
Watkinsville, GA	3-27	1957	260	0.33	1.31	0.003	1	0.337	0.19	0.37
Watkinsville, GA	3-27	1958	160	0.37	1.31	0.029	1	2.249	0.01	0.33
Watkinsville, GA	3-27	1959	266	0.32	1.31	0.576	0.6	38.537	3.79	23.49
Watkinsville, GA	3-27	1960	311	0.32	1.31	0.002	1	0.261	1.19	1.48
Watkinsville, GA	3-29	1953	223	0.34	1.31	0.035	1	3.476	6.04	1.38
Watkinsville, GA	3-29	1954	377	0.35	1.31	0.004	1	0.691	0	1.25
Watkinsville, GA	3-29	1955	195	0.34	1.31	0.181	0.6	9.432	1.18	17.27
Watkinsville, GA	3-29	1956	242	0.33	1.31	0.013	1	1.360	0.38	1.15
Watkinsville, GA	3-29	1957	260	0.33	1.31	0.004	1	0.450	0.18	1.24
Watkinsville, GA	3-29	1958	160	0.37	1.31	0.141	0.6	6.561	0.02	14.14
Watkinsville, GA	3-29	1959	266	0.32	1.31	0.002	1	0.223	0.38	0.38
Watkinsville, GA	3-29	1960	311	0.32	1.31	0.003	1	0.391	0.01	0.74
Watkinsville, GA	3-30	1953	223	0.34	1.31	0.104	1	10.330	4.35	4.46
Watkinsville, GA	3-30	1954	377	0.35	1.31	0.061	0.6	6.326	2.42	33.29
Watkinsville, GA	3-30	1955	195	0.34	1.31	0.21	1	18.239	0.8	1.21
Watkinsville, GA	3-30	1956	242	0.33	1.31	0.025	1	2.615	0	0.57
Watkinsville, GA	3-30	1957	260	0.33	1.31	0.018	0.6	1.214	2.98	22.99
Watkinsville, GA	3-30	1958	160	0.37	1.31	0.129	1	10.004	0.8	0.53
Watkinsville, GA	3-30	1959	266	0.32	1.31	0.003	1	0.335	0.06	0.38
Watkinsville, GA	3-30	1960	311	0.32	1.31	0.004	0.6	0.313	0.96	27.47
Watkinsville, GA	3-25	1953	223	0.34	0.9	0.132	1	9.007	5.5	0.97
Watkinsville, GA	3-25	1954	377	0.35	0.9	0.004	1	0.475	0	0.88
Watkinsville, GA	3-25	1955	195	0.34	0.9	0.181	0.6	6.480	1.99	12.16
Watkinsville, GA	3-25	1956	242	0.33	0.9	0.013	1	0.934	2.06	0.81
Watkinsville, GA	3-25	1957	260	0.33	0.9	0.004	1	0.309	0.8	0.87
Watkinsville, GA	3-25	1958	160	0.37	0.9	0.141	0.6	4.507	0.04	9.96
Watkinsville, GA	3-25	1959	266	0.32	0.9	0.002	1	0.153	2.43	0.27
Watkinsville, GA	3-25	1960	311	0.32	0.9	0.003	1	0.269	0.39	0.52
Watkinsville, GA	3-28	1953	223	0.34	0.9	0.061	1	4.163	10.51	3.14
Watkinsville, GA	3-28	1954	377	0.35	0.9	0.21	0.6	14.963	3.39	23.46
Watkinsville, GA	3-28	1955	195	0.34	0.9	0.025	1	1.492	1.75	0.85
Watkinsville, GA	3-28	1956	242	0.33	0.9	0.018	1	1.294	0	0.4
Watkinsville, GA	3-28	1957	260	0.33	0.9	0.129	0.6	5.977	5.45	16.19

Site	Plot	Yr	R	K	LS	C	P	RUSLE	Measured	USLE
Watksnvile, GA	3-28	1958	160	0.37	0.9	0.003	1	0.160	1.46	0.37
Watksnvile, GA	3-28	1959	266	0.32	0.9	0.004	1	0.306	0.3	0.27
Watksnvile, GA	3-28	1960	311	0.32	0.9	0.132	0.6	7.094	1.48	19.35
Watksnvile, GA	3-26	1953	223	0.34	0.9	0.195	0.6	7.884	1.02	15.26
Watksnvile, GA	3-26	1954	377	0.35	0.9	0.04	1	4.750	0.71	1.26
Watksnvile, GA	3-26	1955	195	0.34	0.9	0.018	1	1.074	0	0.85
Watksnvile, GA	3-26	1956	242	0.33	0.9	0.358	0.6	15.439	2.43	16.52
Watksnvile, GA	3-26	1957	260	0.33	0.9	0.003	1	0.232	0.32	0.26
Watksnvile, GA	3-26	1958	160	0.37	0.9	0.029	1	1.545	0	0.27
Watksnvile, GA	3-26	1959	266	0.32	0.9	0.576	0.6	26.476	1.64	18.55
Watksnvile, GA	3-26	1960	311	0.32	0.9	0.002	1	0.179	1.4	1.04

LITERATURE CITED

- USDA Agriculture Handbook, No. 703, 1994 United States Department of Agriculture.
- USDA, ERS, Agricultural Resources: Cropland, Water, and Conservation Situation and Outlook Report, Washington, D.C., September 1989.
- Anscombe, F.J., Tukey, J.W. (1963) The Examination and analysis of residuals. *Technometrics* 5(2), 141-160.
- Blakely, B.D., Coyle, J.J., and Steele, J.G. 1957. Erosion on cultivated land. *Soil, Yearbook of Agriculture*, PP 290-306.
- Browning, G.M., C.L. Parish, and J.A. Glass. 1947. A method for determining the use and limitation of rotation and conservation practices in control of soil erosion in Iowa. *Soil Sci. Soc. Am. Proc.* 23:264-249.
- Brown, L.C., and G.R. Foster. 1987. Storm erosivity using idealized intensity distributions. *Trans. ASAE* 30(2):379-386.
- Cook, H.L. 1936. The nature and controlling variables of the water erosion process. *Soil Sci. Am. Proc.* 1:60-64.
- Foster, G.R., and L.J. Lane. 1987. User requirements. USDA-Water Erosion Prediction Project (WEPP). Overland flow profile version. Draft 6.3. NSERL Report No. 1 USDA 44pp.
- Green, I.R.A., D. Stephenson. 1986. Criteria for comparison of single event models. *Journal of Hydrological Sciences*, 31(3):395-408.
- Hudson, N.W. 1981. *Soil Conservation*. Cornell University Press, Ithaca, New York, 324 pp.
- Knisel, W.G. and A.D. Nicks. 1980. CREAMS: a field scale model for chemicals, runoff, and erosion from agricultural management systems. Vol. 1. Model documentation. Conservation research report number 26. USDA.
- Lloyd, C.H. and G.W. Eley. 1952. Graphical solution of probable soil loss formula for Northeastern Region. *J. Soil and Water Cons.* 7:189-191.
- McCool, D.K., R.I. Papenick, F.L. Brooks. 1976. The Universal Soil Loss Equation as adapted to the Pacific Northwest. 3rd Federal Inter-agency Sedimentation Conference Proceedings 2:135-147.
- Musgrave, G.W. 1947. The quantitative evaluation of factors in water erosion, a first approximation. *Journal of Soil and Water Conservation* 2(3):133-138.
- Nash J.E., Sutcliffe, J.V. 1970 River flow forecasting through conceptual models: Part 1 - a discussion of principles. *J. Hydrol.* 10, 282-290.

- Nearing, M.A., L.J. Lane, E.E. Alberts, and J.M. Laflen. 1990. Prediction technology for soil erosion by water: status and research needs. *Soil Sci. of America. J.* Vol. 54, pp. 1700-1710.
- Renard, K.G. 1992. Computerized calculations for conservation planning. *Agricultural Engineering.* July 1992: 16-17.
- Renard, K.G., G.R. Foster, D.C. Yoder, D.K. McCool. 1994. RUSLE revisited: Status, questions, answers, and the future. *Journal of Soil and Water Conservation.* 213-220.
- Renard, K.G., V.A. Ferreira. 1993. RUSLE Model Description and Database Sensitivity. *Journal of Environmental Quality.* 22(3):458-466.
- Risse, L.M., M.A. Nearing, A.D. Nicks, and J.M. Laflen. 1993. Error Assessment in the Universal Soil Loss Equation. *Soil Sci. Soc. Am. Jour.* 57(3):825-833.
- Simanton, J.R., H.B. Osborn, and K.G. Renard. 1980. Application of the USLE to Southwestern rangelands. *Proc. of the 1980 meet Ariz. sec American Water Res Assoc. Hydr. sec. Ariz.-Nev. Acad. of Sci.* April 11 - 12, 1980, Las Vegas, NV.
- Smith, D.D. 1941. Interpretation of soil conservation data for field use. *Agric. Engr.* 22:173-175.
- Smith, D.D., D.M. Whitt. 1947. Estimating soil losses from field areas of claypan soil. *Soil Sci. Soc. Am.* 12(5)485-490.
- Tiscareño-Lopez, M. 1991. Sensitivity analysis of the WEPP watershed model. M.S. thesis. Univ. Arizona, Tucson.
- U.S. Weather Bureau. 1958. Rainfall Intensity-Frequency Regime. Technical Paper No. 29, 5 parts.
- Van Doren, C.A, and L.J. Bartelli. 1956. A Method of forecasting soil losses. *Agr. Eng.* 37:335-341.
- Wischmeier, W.H. 1959. A Rainfall Erosion Index For the Universal Soil Loss Equation. *Soil Sci. Soc. Am. Proc.* 23:246-249.
- Wischmeier, W.H., and Smith, D.D. 1965. Predicting rainfall erosion losses from Cropland East of the Rocky Mountains. USDA Agricultural Handbook 282. U.S. Gov. Print. Office, Washington D.C.
- Wischmeier, W.H., Johnson C.B., and B.V. Cross. 1971. A soil erodibility nomograph for farmland and construction sites. *J. Soil Water Conserv.* 26:189-193.
- Wischmeier, W.H. 1976. Use and misuse of the Universal Soil Loss Equation. pp. 371-378. In: *Soil Erosion: Prediction and Control.* Soil Conservation Society of America, Special Publication no. 21.
- Wischmeier, W.H. and D.D. Smith. 1978. Predicting rainfall erosion losses - a guide to conservation planning. USDA Agricultural Handbook No. 537. 58 pp.

Young, R.A., and J.W. Wiersma. 1973. The role of rainfall impact on soil detachment and transport. *Water Resources Research*, 9:1629-1636.

Zingg, R.W. 1949. Degree and length of land slope as it affects soil loss in runoff. *Agric. Eng.* Vo. 21, pp. 59-64.